

## Quantitative Analysis Sample Based Report

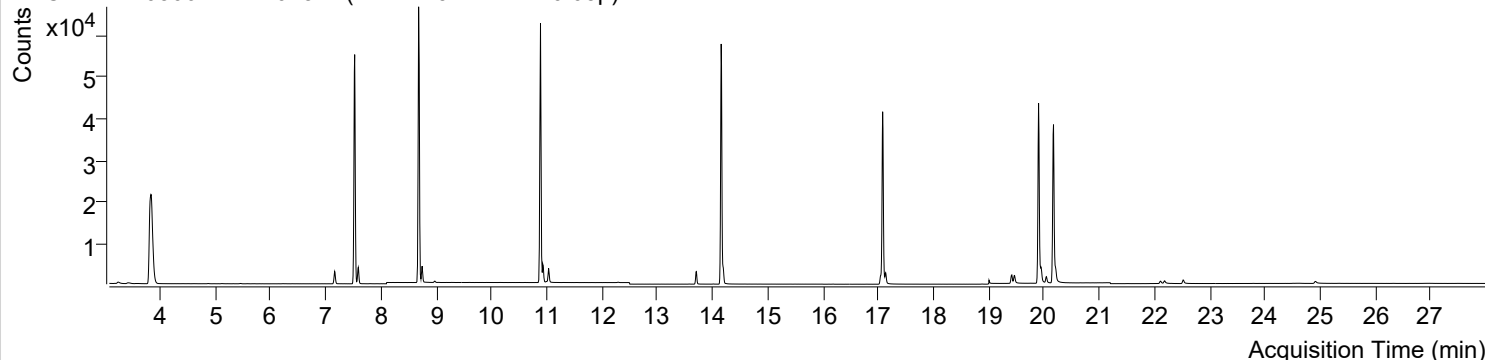


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-06 오후 11:11:08	Data File	220506-PAHs-025.D
Type	Sample	Name	PAHs-19mix-STD-0.05p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

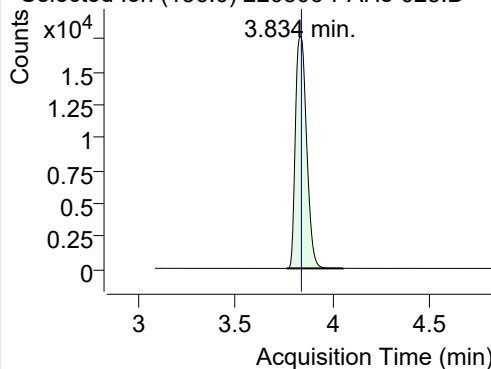
+ TIC SIM 220506-PAHs-025.D (PAHs-19mix-STD-0.05p)



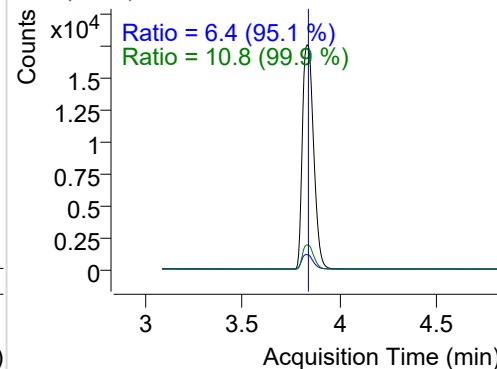
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.834	136.0	70567	17604.09	ND ng/ml	10.8
Naphthalene	3.872	128.0	4999	1247.13	ND ng/ml	13.8
Acenaphthylene	7.165	152.0	3840	2191.31	ND ng/ml	19.5
IS-D10-Acenaphthene	7.526	164.0	42649	26455.37	ND ng/ml	96.1
Acenaphthene	7.591	154.0	2310	1391.12	ND ng/ml	106.4
LSS-D10-Fluorene	8.684	176.0	48031	29675.57	ND ng/ml	92.1
Fluorene	8.747	166.0	2750	1820.52	ND ng/ml	92.6
IS-D10-Phenanthrene	10.889	188.0	74806	50331.72	ND ng/ml	15.0
Phenanthrene	10.931	178.0	4011	2465.07	ND ng/ml	18.8
Anthracene	11.036	178.0	3534	2234.07	ND ng/ml	18.2
Fluoranthene	13.710	202.0	3745	2341.06	ND ng/ml	17.2
LSS-D10-Pyrene	14.159	212.0	66573	42956.38	ND ng/ml	17.0
Pyrene	14.197	202.0	4274	2601.30	ND ng/ml	16.2
Benz(a)anthracene	17.043	228.0	2543	1382.00	ND ng/ml	25.1
IS-D12-Chrysene	17.081	240.0	52128	31262.04	ND ng/ml	18.9
Chrysene	17.135	228.0	2843	1584.69	ND ng/ml	28.7
Benzo(b)fluoranthene	19.419	252.0	2244	1198.34	ND ng/ml	21.7
Benzo(k)fluoranthene	19.469	252.0	2337	1089.23	ND ng/ml	22.8
SS-D12-Benzo(e)pyrene	19.903	264.0	49973	29253.21	ND ng/ml	25.2
Benzo(e)pyrene	19.953	252.0	3054	1564.26	ND ng/ml	21.8
Benzo(a)pyrene	20.045	252.0	1518	826.85	ND ng/ml	22.8
IS-D12-Perylene	20.173	264.0	47881	26042.73	ND ng/ml	23.4
Perylene	20.209	252.0	2352	1172.89	ND ng/ml	25.2
Indeno(1,2,3-c,d)pyrene	22.106	276.0	1009	447.37	ND ng/ml	18.6
Dibenz(a,h)anthracene	22.183	278.0	941	356.40	ND ng/ml	27.0
Benzo(g,h,i)perylene	22.519	276.0	1626	682.40	ND ng/ml	21.1
Coronene	24.916	300.0	1071	302.82	ND ng/ml	25.4

## IS-D8-Naphthalene

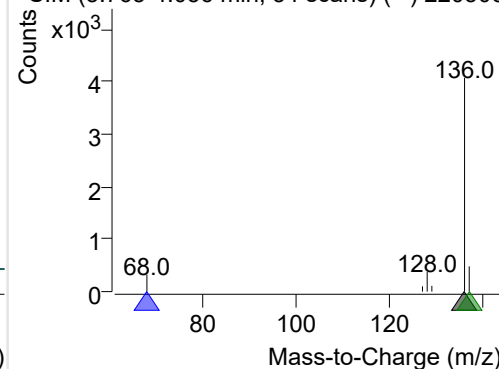
+ Selected Ion (136.0) 220506-PAHs-025.D



136.0, 68.0, 137.0

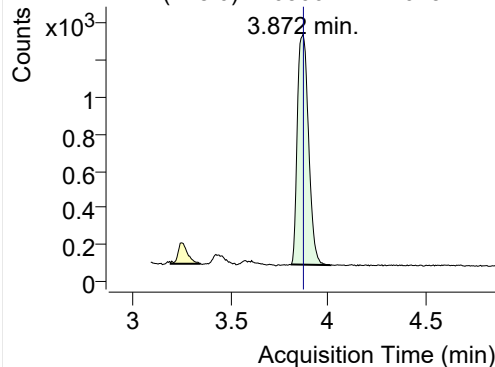


+ SIM (3.765-4.056 min, 54 scans) (\*\*) 220506

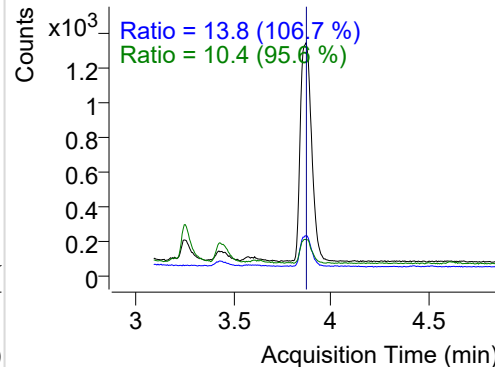


**Naphthalene**

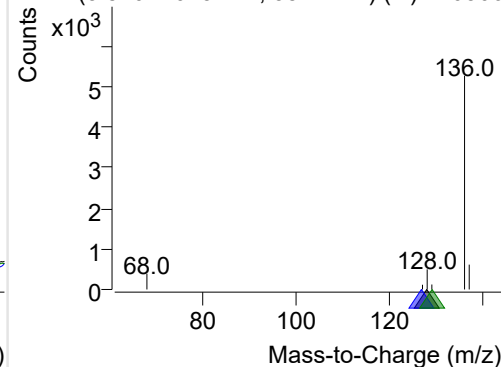
+ Selected Ion (128.0) 220506-PAHs-025.D



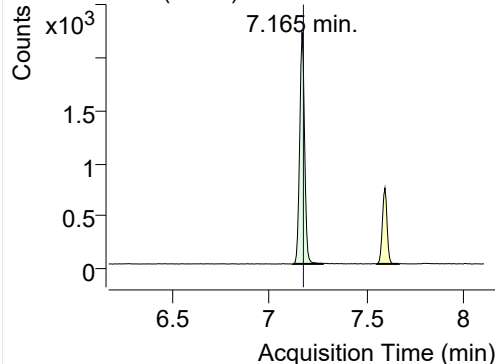
128.0, 127.0, 129.0



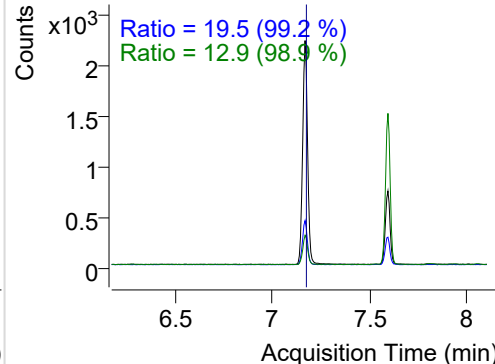
+ SIM (3.810-4.013 min, 38 scans) (\*\*) 220506

**Acenaphthylene**

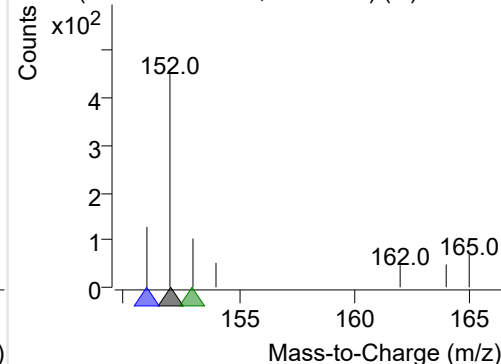
+ Selected Ion (152.0) 220506-PAHs-025.D



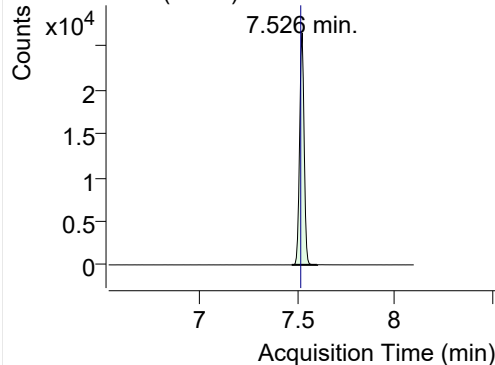
152.0, 151.0, 153.0



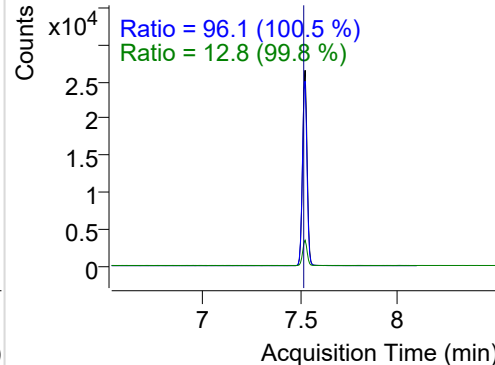
+ SIM (7.118-7.272 min, 27 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

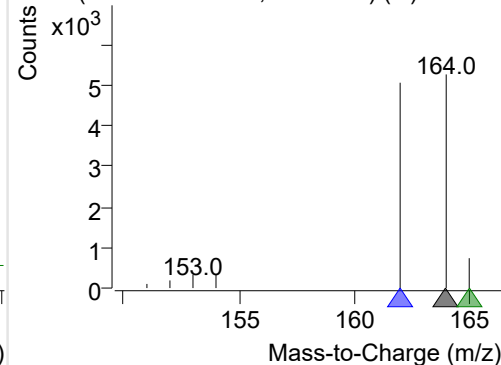
+ Selected Ion (164.0) 220506-PAHs-025.D



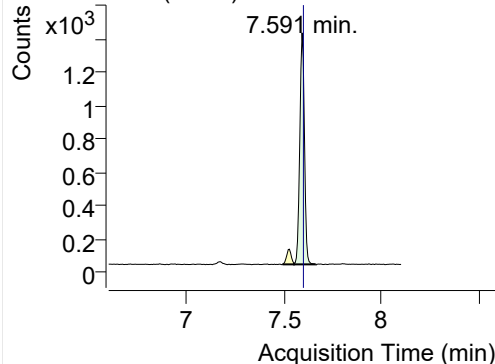
164.0, 162.0, 165.0



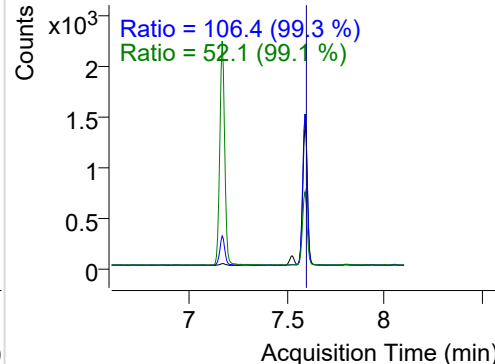
+ SIM (7.473-7.603 min, 23 scans) (\*\*) 220506

**Acenaphthene**

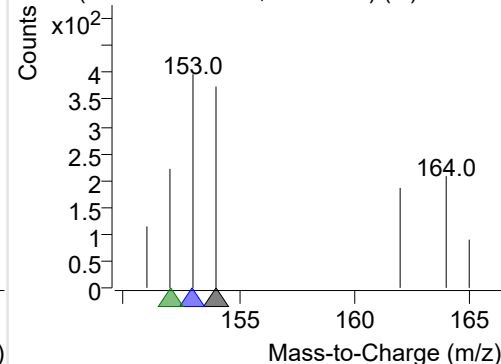
+ Selected Ion (154.0) 220506-PAHs-025.D



154.0, 153.0, 152.0

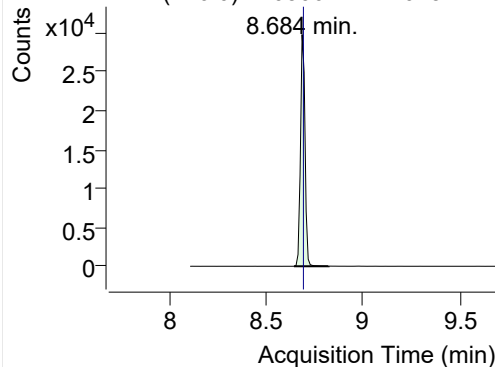


+ SIM (7.550-7.662 min, 20 scans) (\*\*) 220506

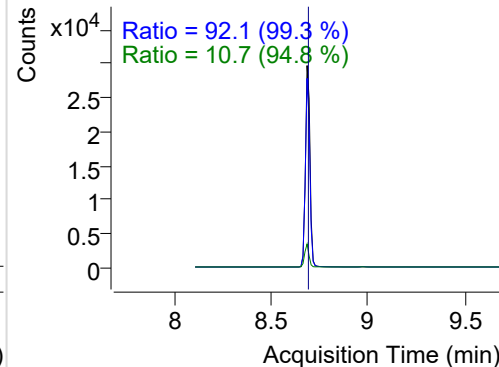


## LSS-D10-Fluorene

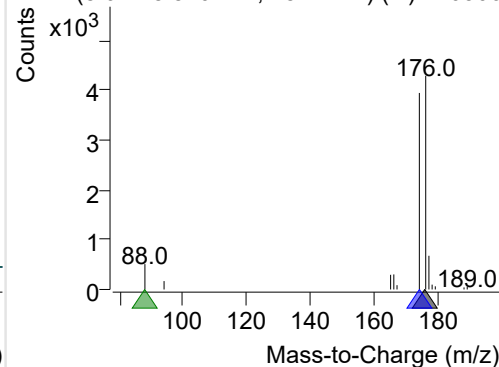
+ Selected Ion (176.0) 220506-PAHs-025.D



176.0, 174.0, 88.0

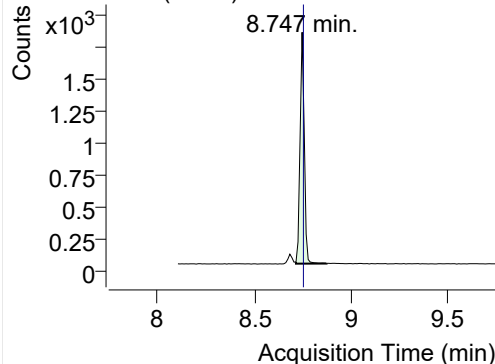


+ SIM (8.642-8.820 min, 18 scans) (\*\*) 220506

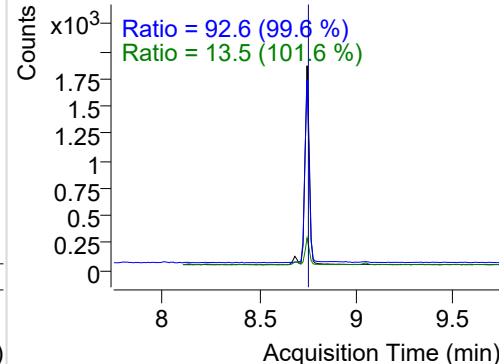


## Fluorene

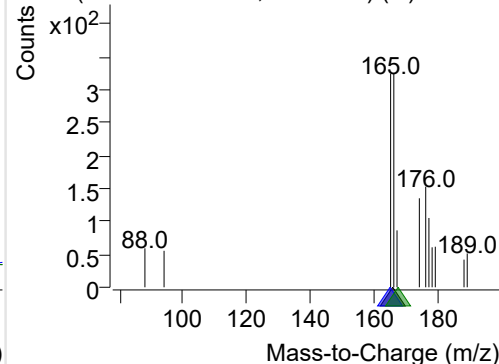
+ Selected Ion (166.0) 220506-PAHs-025.D



166.0, 165.0, 167.0

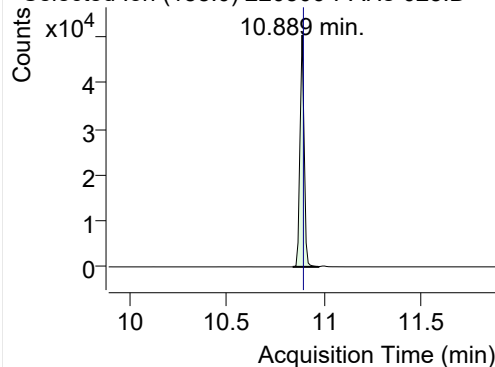


+ SIM (8.715-8.873 min, 16 scans) (\*\*) 220506

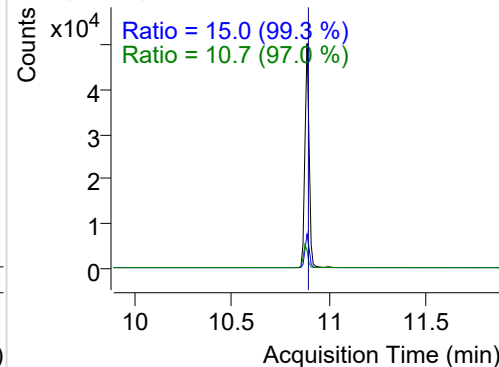


## IS-D10-Phenanthrene

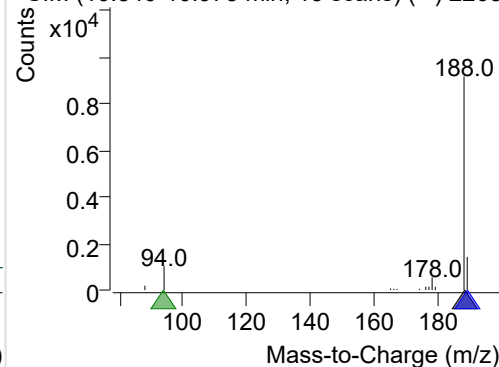
+ Selected Ion (188.0) 220506-PAHs-025.D



188.0, 189.0, 94.0

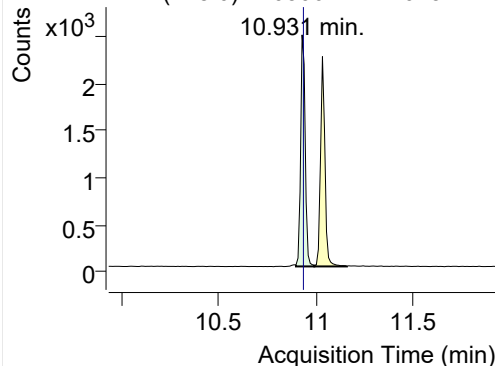


+ SIM (10.840-10.973 min, 13 scans) (\*\*) 2205

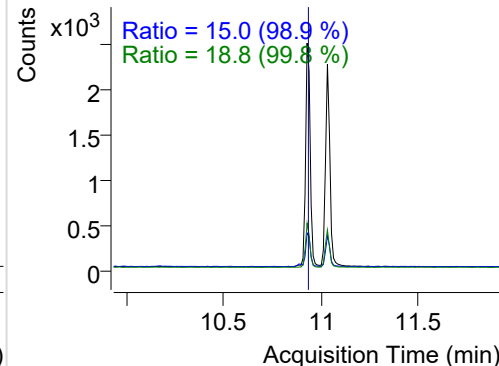


## Phenanthrene

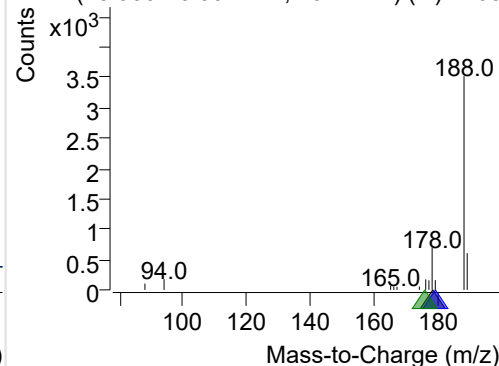
+ Selected Ion (178.0) 220506-PAHs-025.D



178.0, 179.0, 176.0

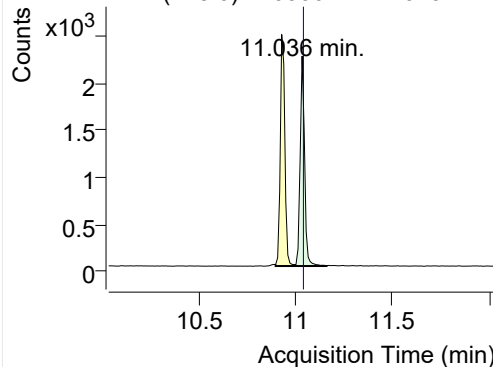


+ SIM (10.900-10.994 min, 10 scans) (\*\*) 2205

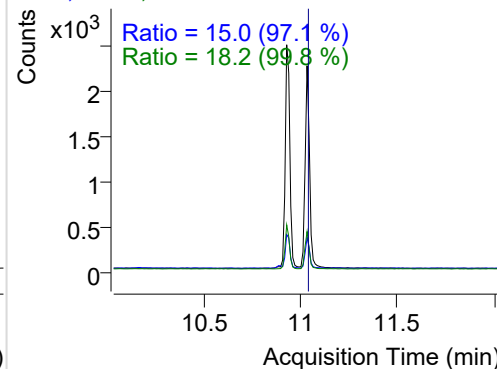


**Anthracene**

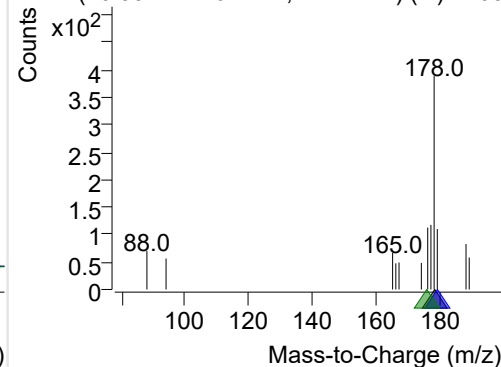
+ Selected Ion (178.0) 220506-PAHs-025.D



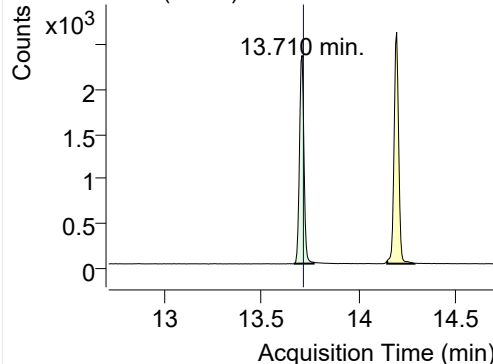
178.0, 179.0, 176.0



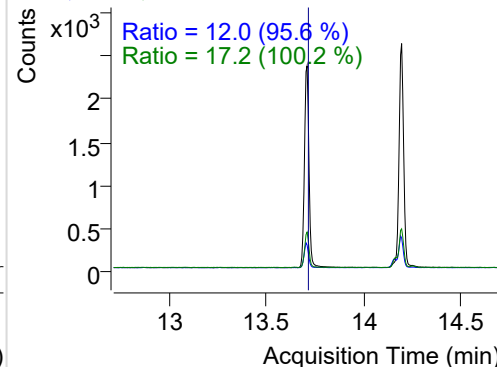
+ SIM (10.994-11.162 min, 17 scans) (\*\*) 2205

**Fluoranthene**

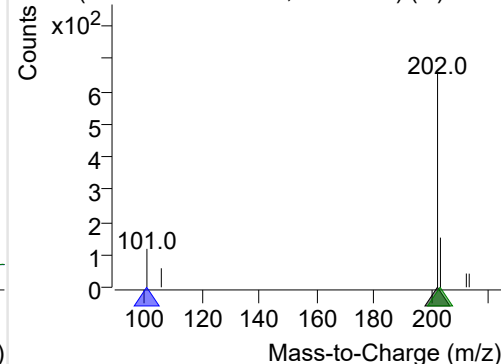
+ Selected Ion (202.0) 220506-PAHs-025.D



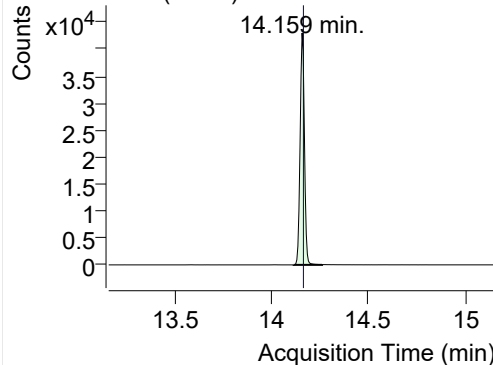
202.0, 101.0, 203.0



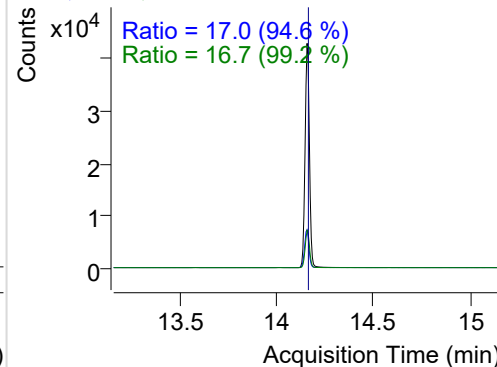
+ SIM (13.667-13.769 min, 19 scans) (\*\*) 2205

**LSS-D10-Pyrene**

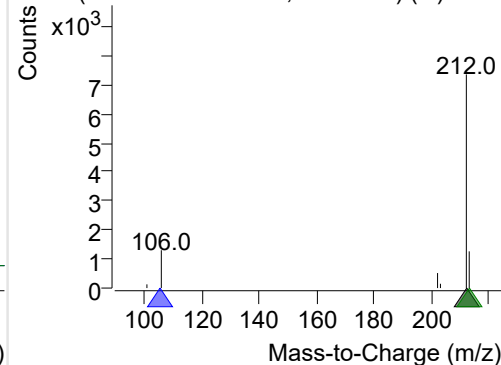
+ Selected Ion (212.0) 220506-PAHs-025.D



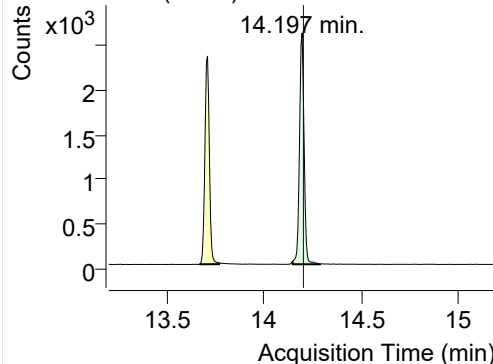
212.0, 106.0, 213.0



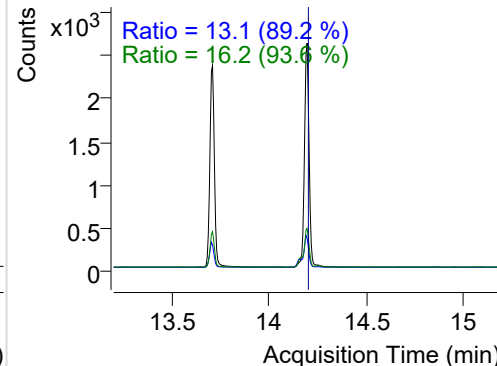
+ SIM (14.116-14.262 min, 28 scans) (\*\*) 2205

**Pyrene**

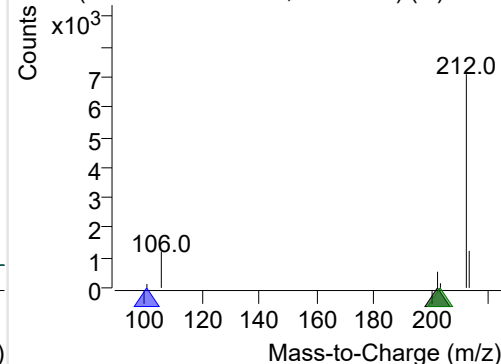
+ Selected Ion (202.0) 220506-PAHs-025.D



202.0, 101.0, 203.0

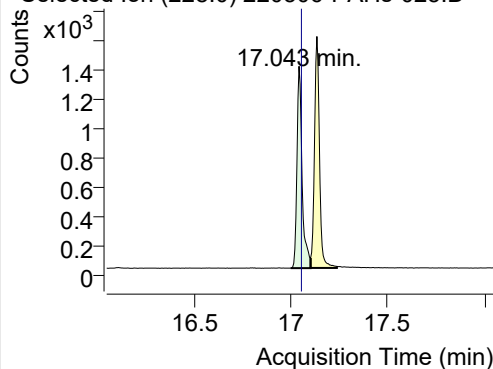


+ SIM (14.149-14.290 min, 27 scans) (\*\*) 2205

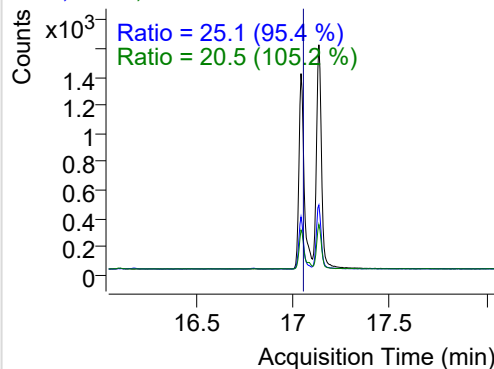


**Benz(a)anthracene**

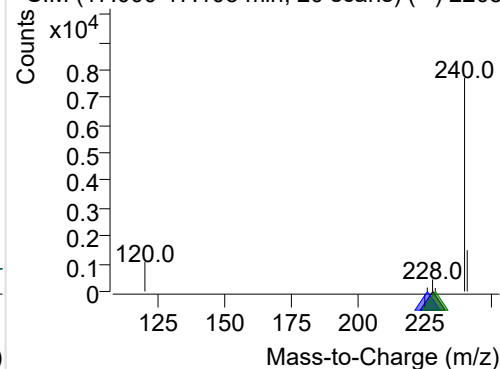
+ Selected Ion (228.0) 220506-PAHs-025.D



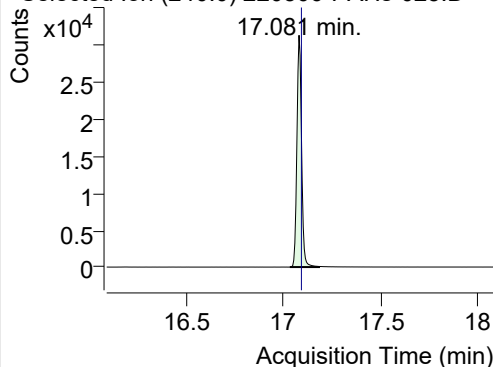
228.0, 226.0, 229.0



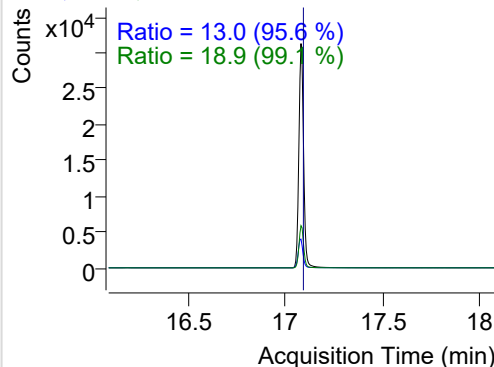
+ SIM (17.000-17.103 min, 20 scans) (\*\*) 2205

**IS-D12-Chrysene**

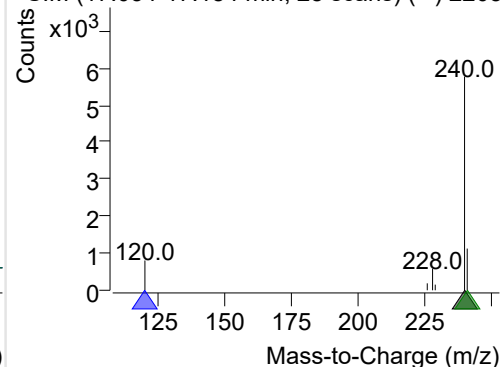
+ Selected Ion (240.0) 220506-PAHs-025.D



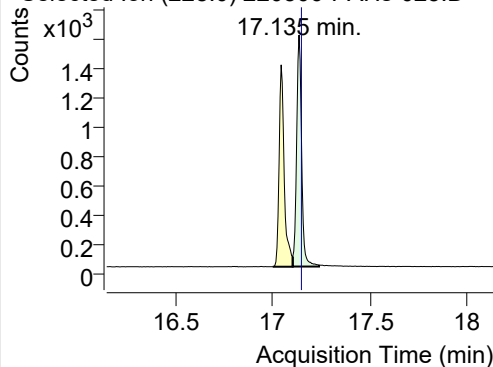
240.0, 120.0, 241.0



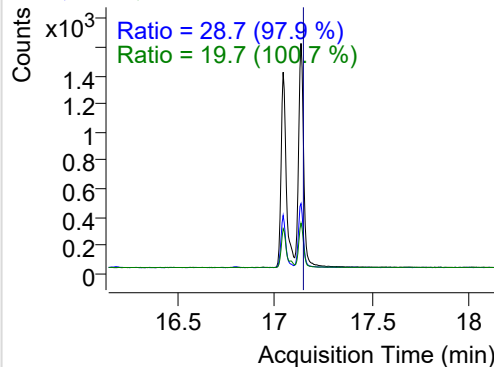
+ SIM (17.034-17.184 min, 28 scans) (\*\*) 2205

**Chrysene**

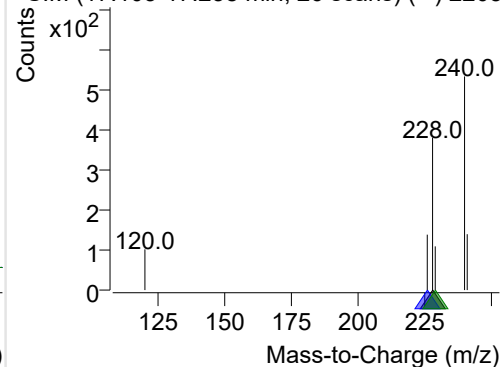
+ Selected Ion (228.0) 220506-PAHs-025.D



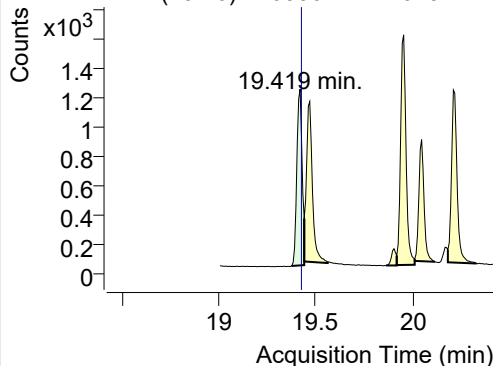
228.0, 226.0, 229.0



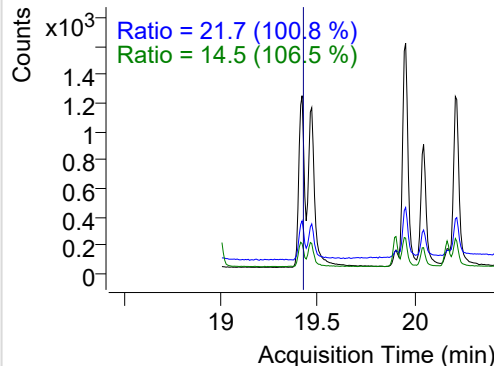
+ SIM (17.103-17.238 min, 26 scans) (\*\*) 2205

**Benzo(b)fluoranthene**

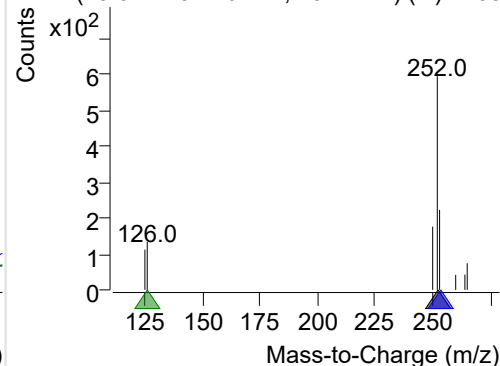
+ Selected Ion (252.0) 220506-PAHs-025.D



252.0, 253.0, 126.0

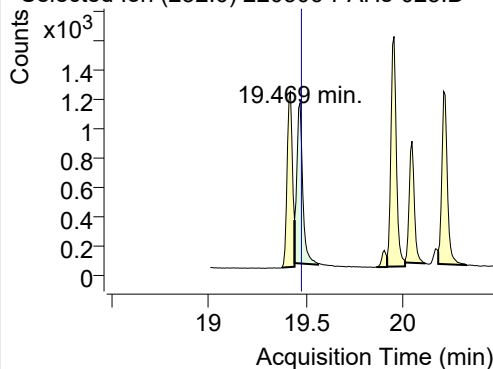


+ SIM (19.374-19.440 min, 10 scans) (\*\*) 2205

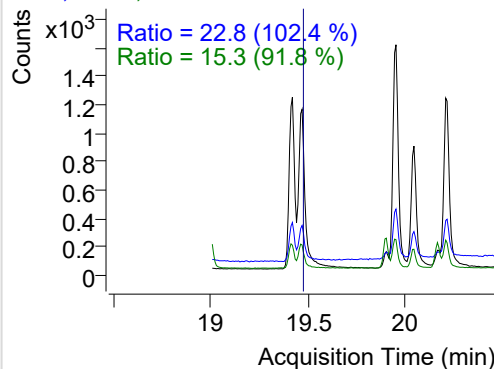


**Benzo(k)fluoranthene**

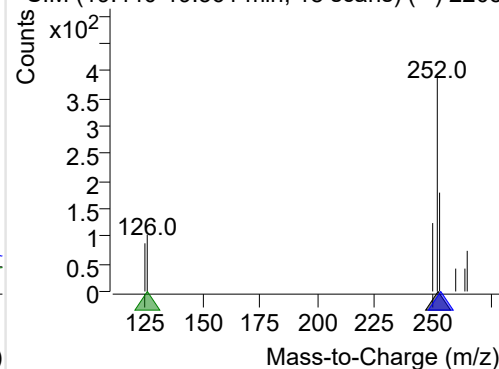
+ Selected Ion (252.0) 220506-PAHs-025.D



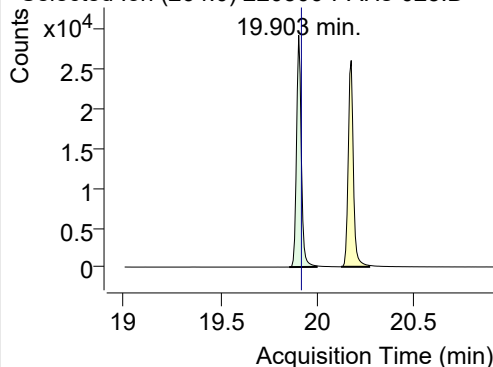
252.0, 253.0, 126.0



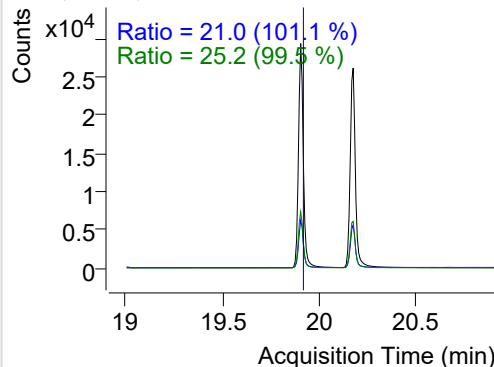
+ SIM (19.440-19.561 min, 18 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

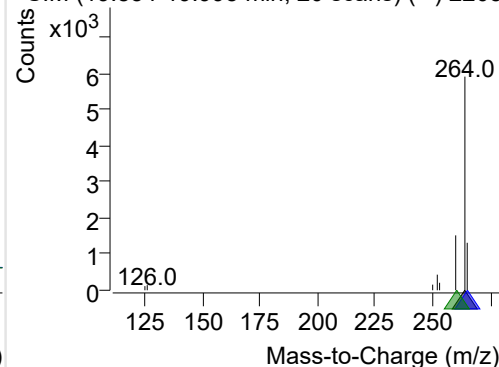
+ Selected Ion (264.0) 220506-PAHs-025.D



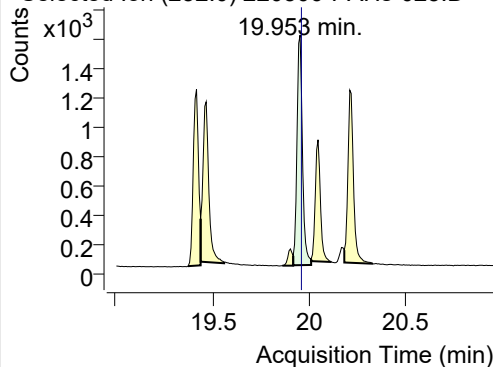
264.0, 265.0, 260.0



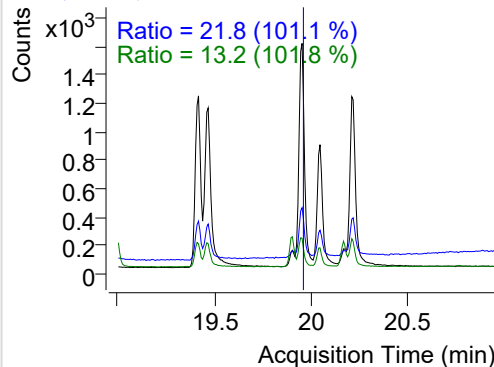
+ SIM (19.854-19.995 min, 20 scans) (\*\*) 2205

**Benzo(e)pyrene**

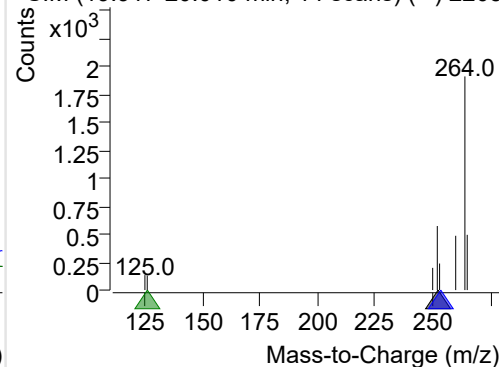
+ Selected Ion (252.0) 220506-PAHs-025.D



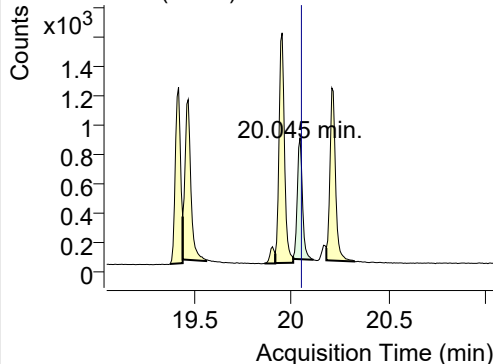
252.0, 253.0, 126.0



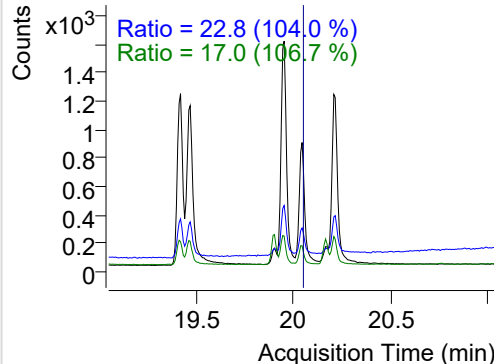
+ SIM (19.917-20.010 min, 14 scans) (\*\*) 2205

**Benzo(a)pyrene**

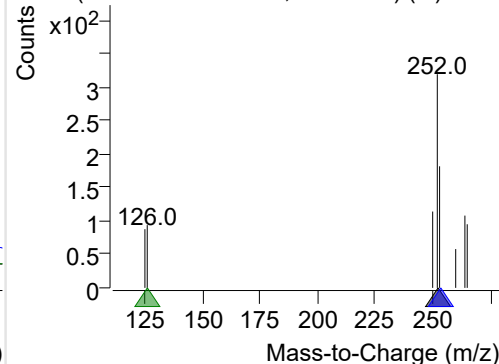
+ Selected Ion (252.0) 220506-PAHs-025.D



252.0, 253.0, 126.0

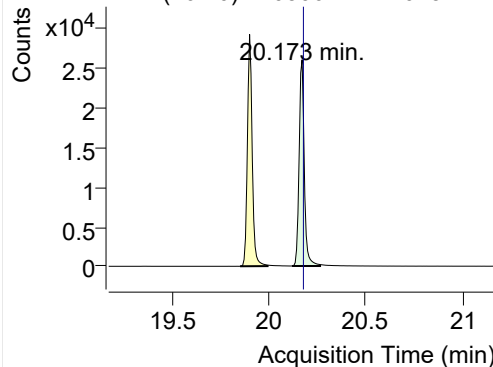


+ SIM (20.010-20.114 min, 15 scans) (\*\*) 2205

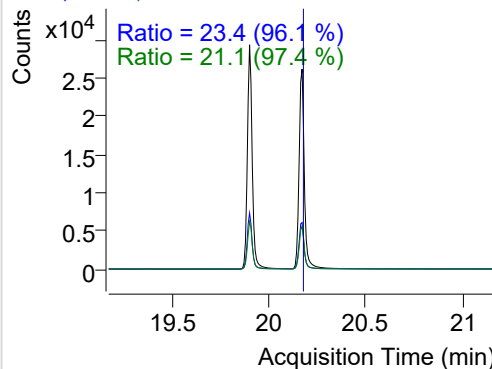


## IS-D12-Perylene

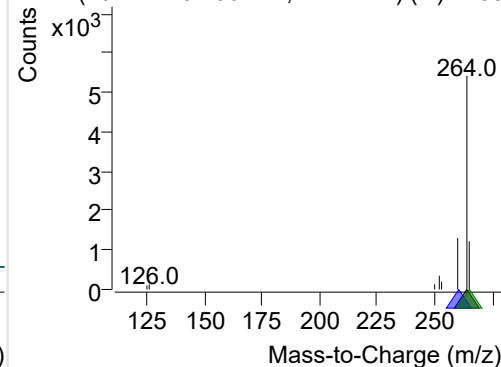
+ Selected Ion (264.0) 220506-PAHs-025.D



264.0, 260.0, 265.0

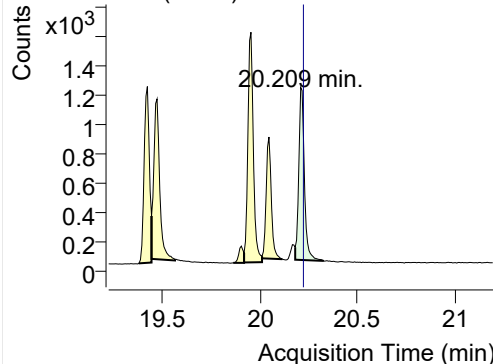


+ SIM (20.121-20.266 min, 21 scans) (\*\*) 2205

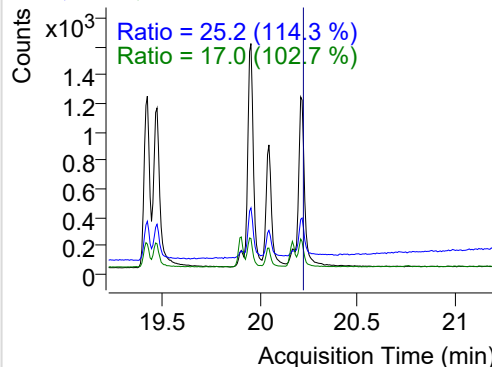


## Perylene

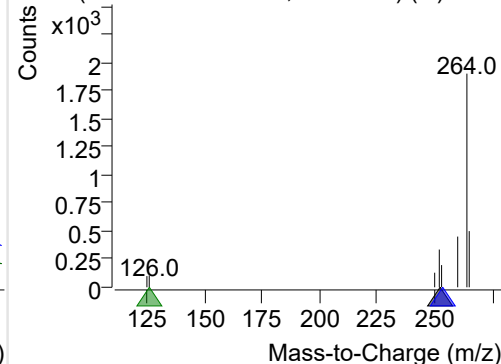
+ Selected Ion (252.0) 220506-PAHs-025.D



252.0, 253.0, 126.0

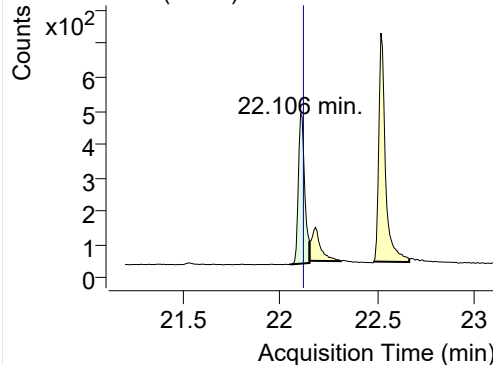


+ SIM (20.180-20.328 min, 21 scans) (\*\*) 2205

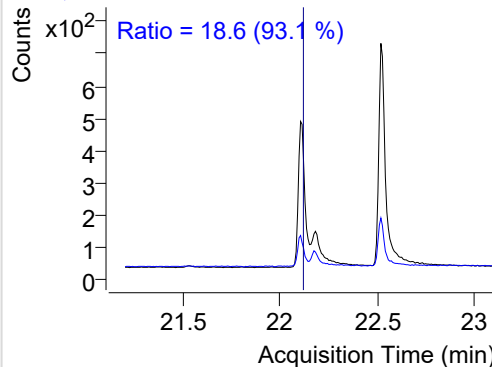


## Indeno(1,2,3-c,d)pyrene

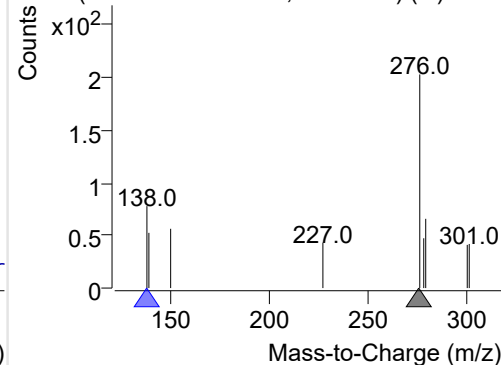
+ Selected Ion (276.0) 220506-PAHs-025.D



276.0, 138.0

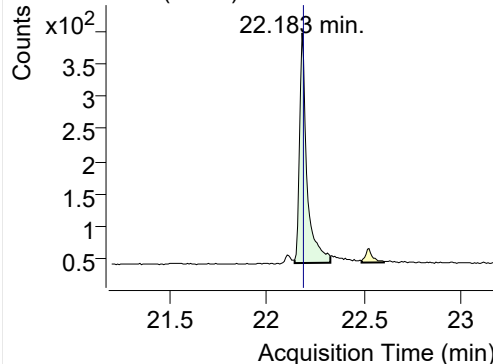


+ SIM (22.053-22.152 min, 14 scans) (\*\*) 2205

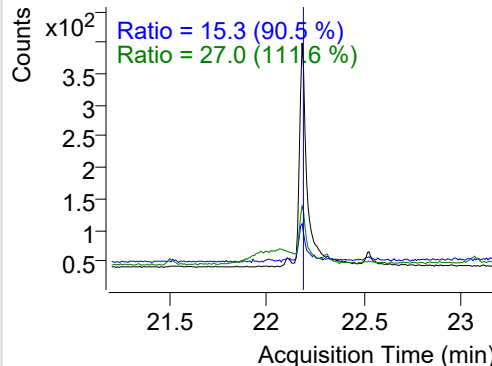


## Dibenz(a,h)anthracene

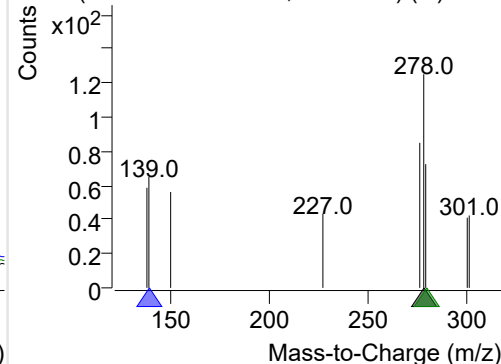
+ Selected Ion (278.0) 220506-PAHs-025.D



278.0, 139.0, 279.0

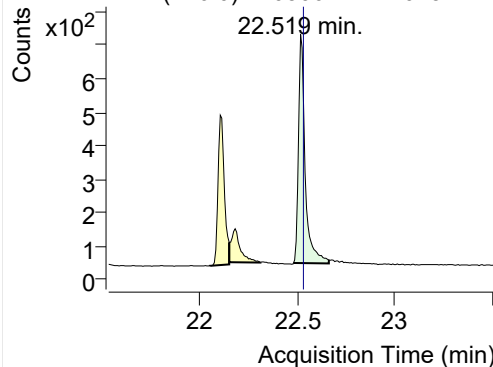


+ SIM (22.145-22.328 min, 25 scans) (\*\*) 2205

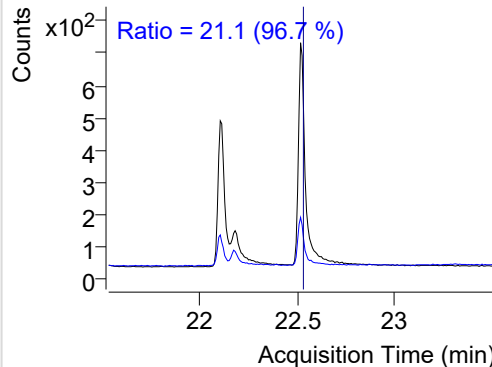


**Benzo(g,h,i)perylene**

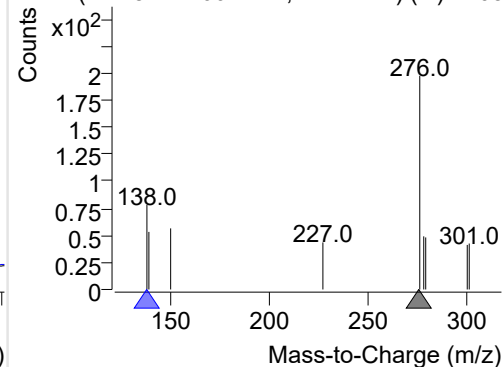
+ Selected Ion (276.0) 220506-PAHs-025.D



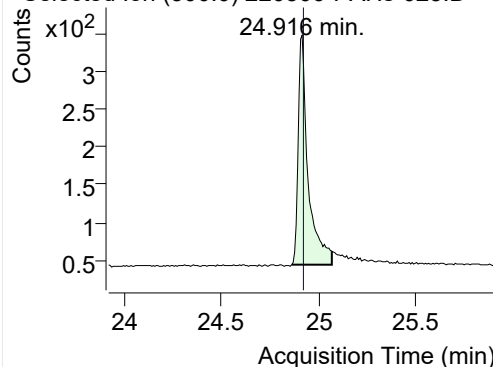
276.0, 138.0



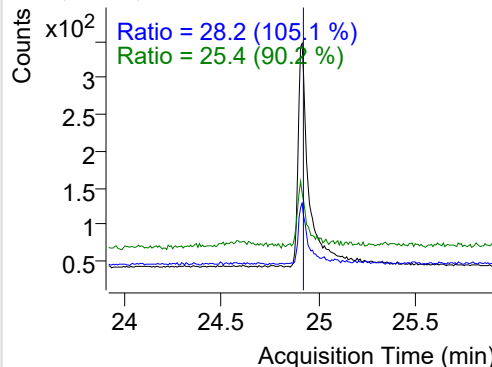
+ SIM (22.482-22.664 min, 24 scans) (\*\*) 2205

**Coronene**

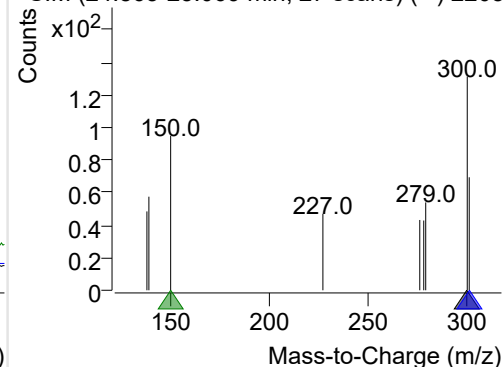
+ Selected Ion (300.0) 220506-PAHs-025.D



300.0, 301.0, 150.0



+ SIM (24.863-25.069 min, 27 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

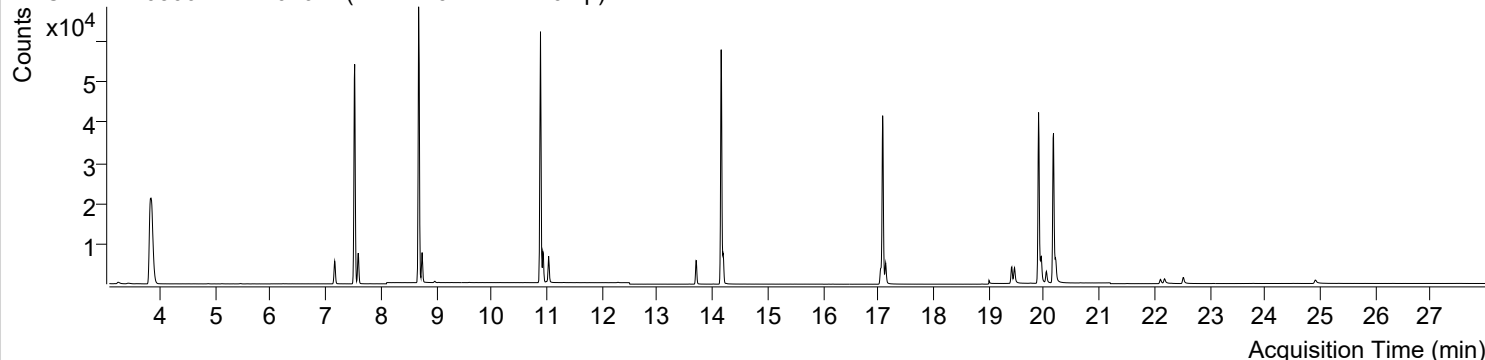


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-06 오후 11:42:17	Data File	220506-PAHs-026.D
Type	Sample	Name	PAHs-19mix-STD-0.1p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

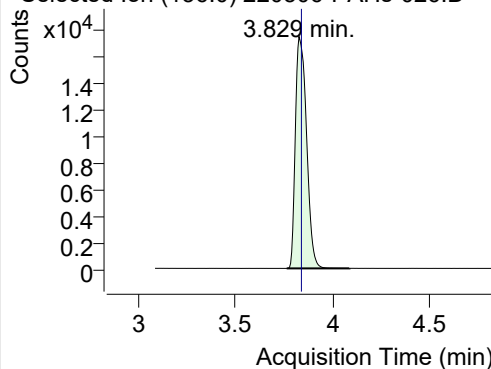
+ TIC SIM 220506-PAHs-026.D (PAHs-19mix-STD-0.1p)



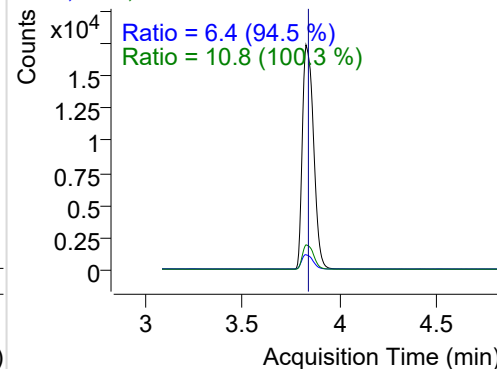
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	69524	17382.28	ND ng/ml	10.8
Naphthalene	3.861	128.0	8927	2208.95	ND ng/ml	13.5
Acenaphthylene	7.165	152.0	7496	4149.75	ND ng/ml	19.7
IS-D10-Acenaphthene	7.526	164.0	42530	25824.14	ND ng/ml	96.3
Acenaphthene	7.591	154.0	4515	2701.78	ND ng/ml	106.9
LSS-D10-Fluorene	8.684	176.0	48379	30396.43	ND ng/ml	92.2
Fluorene	8.747	166.0	5386	3481.81	ND ng/ml	92.7
IS-D10-Phenanthrene	10.889	188.0	75021	49650.57	ND ng/ml	15.0
Phenanthrene	10.931	178.0	7903	4608.56	ND ng/ml	19.0
Anthracene	11.036	178.0	6931	4299.56	ND ng/ml	18.0
Fluoranthene	13.704	202.0	7414	4496.56	ND ng/ml	17.1
LSS-D10-Pyrene	14.159	212.0	66623	42988.78	ND ng/ml	16.9
Pyrene	14.197	202.0	8472	5116.63	ND ng/ml	19.0
Benz(a)anthracene	17.043	228.0	4814	2601.40	ND ng/ml	25.9
IS-D12-Chrysene	17.081	240.0	52532	31158.22	ND ng/ml	18.9
Chrysene	17.135	228.0	5635	3218.54	ND ng/ml	28.9
Benzo(b)fluoranthene	19.419	252.0	4407	2418.91	ND ng/ml	21.3
Benzo(k)fluoranthene	19.468	252.0	4936	2250.98	ND ng/ml	20.7
SS-D12-Benzo(e)pyrene	19.903	264.0	49735	28400.77	ND ng/ml	25.1
Benzo(e)pyrene	19.952	252.0	6035	3156.08	ND ng/ml	21.9
Benzo(a)pyrene	20.045	252.0	3159	1618.80	ND ng/ml	22.7
IS-D12-Perylene	20.173	264.0	47239	25190.50	ND ng/ml	23.7
Perylene	20.216	252.0	4857	2308.54	ND ng/ml	23.3
Indeno(1,2,3-c,d)pyrene	22.106	276.0	1866	850.39	ND ng/ml	18.1
Dibenz(a,h)anthracene	22.183	278.0	1753	643.50	ND ng/ml	22.3
Benzo(g,h,i)perylene	22.526	276.0	3008	1193.22	ND ng/ml	20.9
Coronene	24.916	300.0	1932	538.81	ND ng/ml	28.0

## IS-D8-Naphthalene

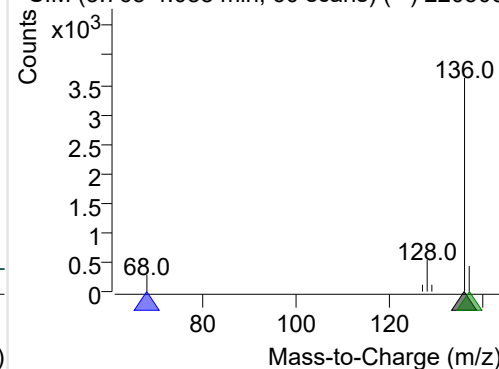
+ Selected Ion (136.0) 220506-PAHs-026.D



136.0, 68.0, 137.0

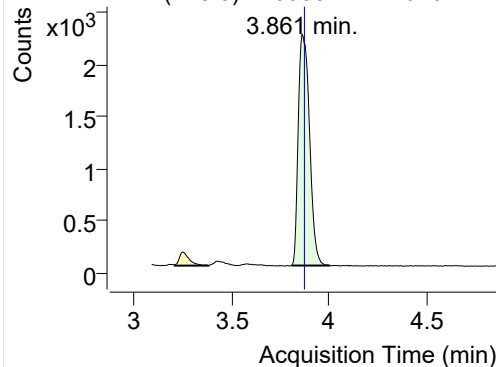


+ SIM (3.765-4.088 min, 60 scans) (\*\*) 220506

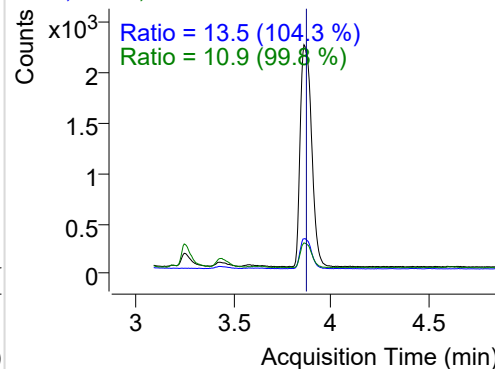


**Naphthalene**

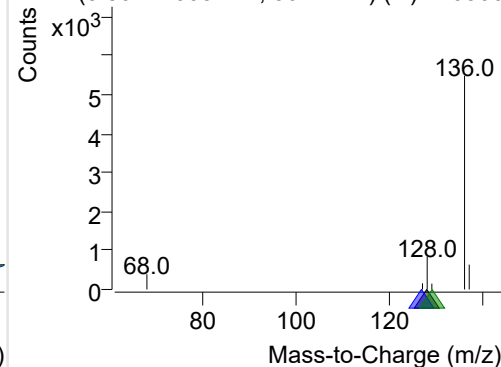
+ Selected Ion (128.0) 220506-PAHs-026.D



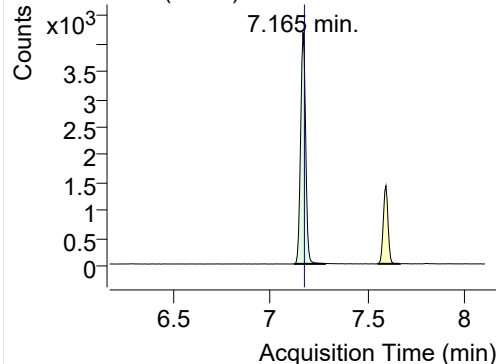
128.0, 127.0, 129.0



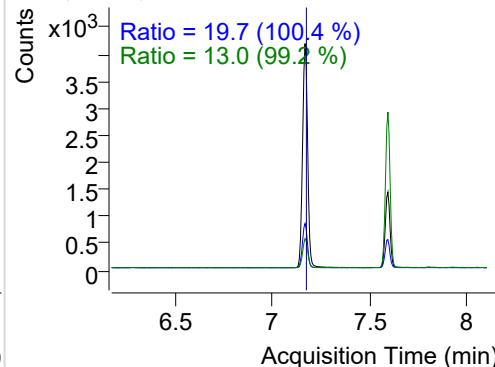
+ SIM (3.807-4.005 min, 36 scans) (\*\*) 220506

**Acenaphthylene**

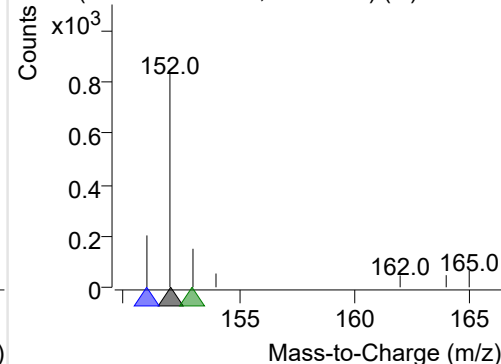
+ Selected Ion (152.0) 220506-PAHs-026.D



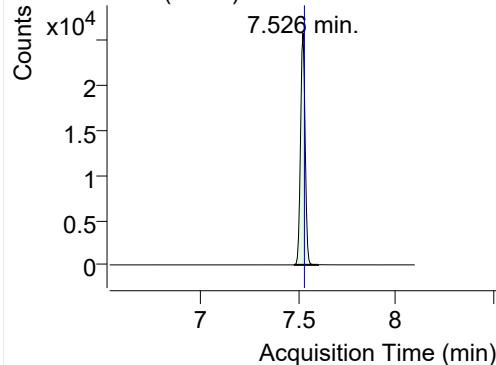
152.0, 151.0, 153.0



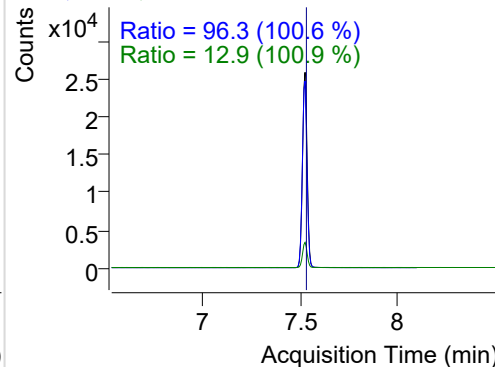
+ SIM (7.118-7.277 min, 27 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

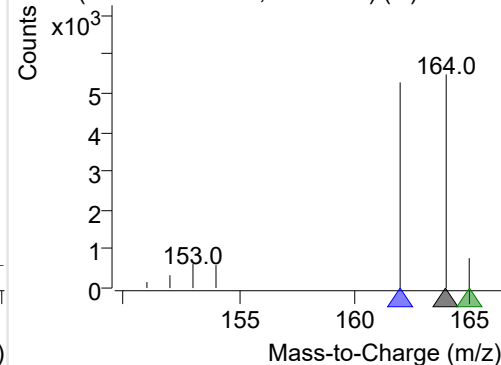
+ Selected Ion (164.0) 220506-PAHs-026.D



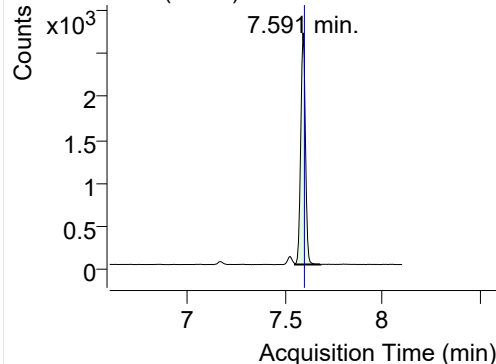
164.0, 162.0, 165.0



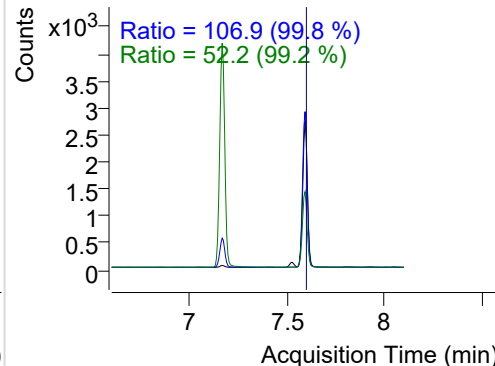
+ SIM (7.479-7.603 min, 22 scans) (\*\*) 220506

**Acenaphthene**

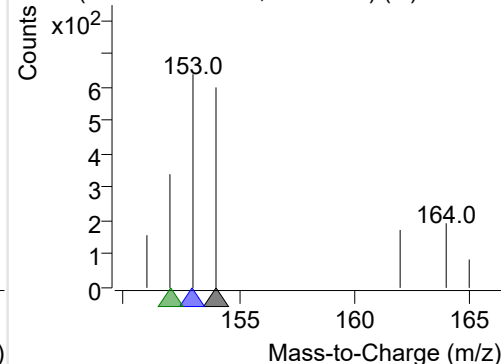
+ Selected Ion (154.0) 220506-PAHs-026.D



154.0, 153.0, 152.0

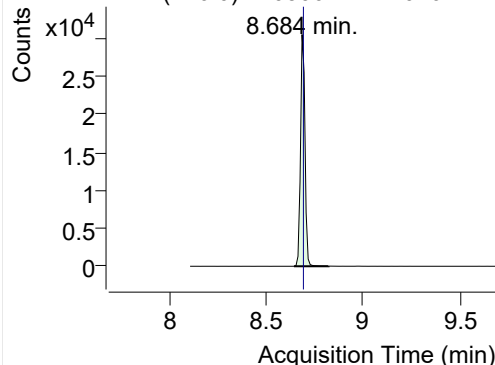


+ SIM (7.550-7.680 min, 23 scans) (\*\*) 220506

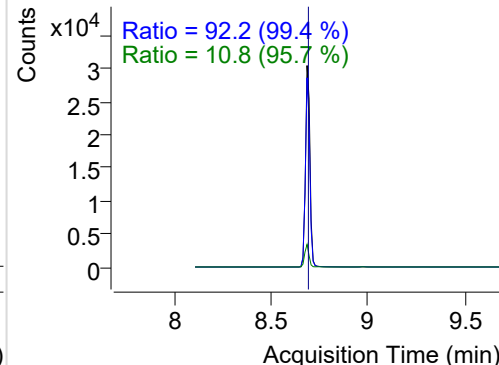


## LSS-D10-Fluorene

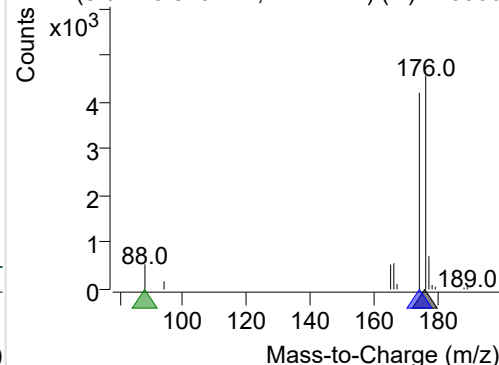
+ Selected Ion (176.0) 220506-PAHs-026.D



176.0, 174.0, 88.0

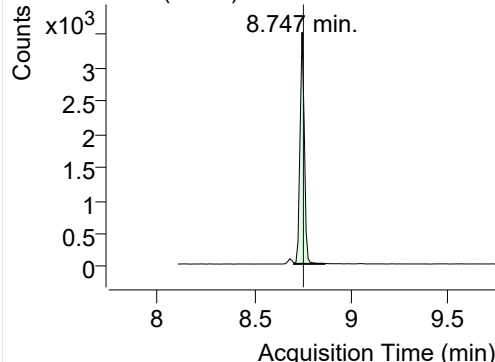


+ SIM (8.642-8.820 min, 17 scans) (\*\*) 220506

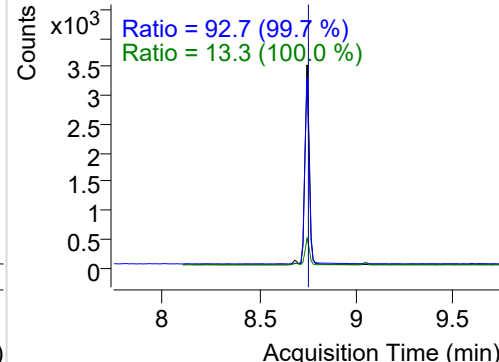


## Fluorene

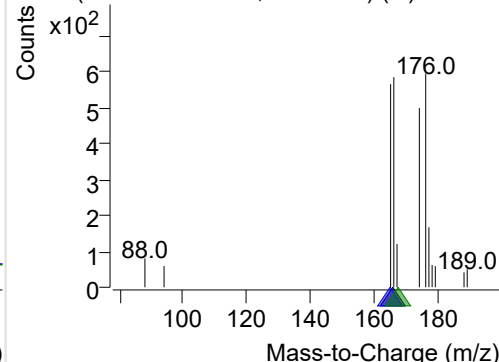
+ Selected Ion (166.0) 220506-PAHs-026.D



166.0, 165.0, 167.0

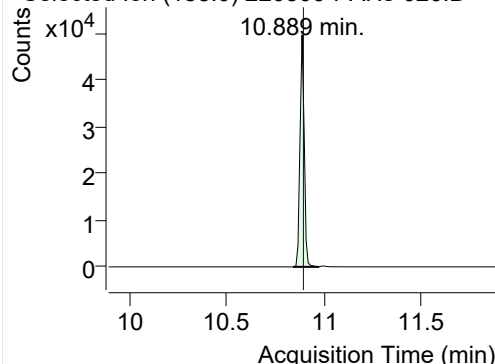


+ SIM (8.705-8.862 min, 16 scans) (\*\*) 220506

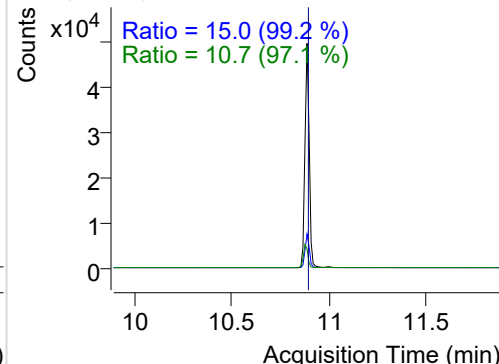


## IS-D10-Phenanthrene

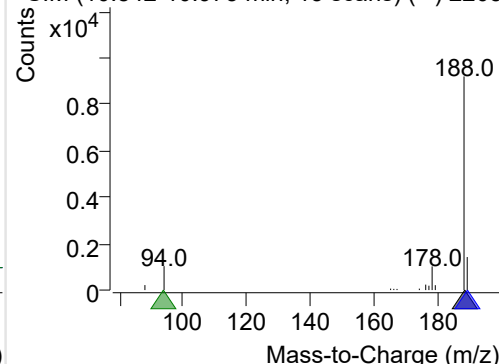
+ Selected Ion (188.0) 220506-PAHs-026.D



188.0, 189.0, 94.0

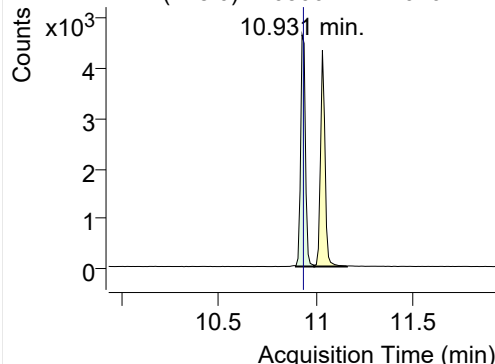


+ SIM (10.842-10.973 min, 13 scans) (\*\*) 2205

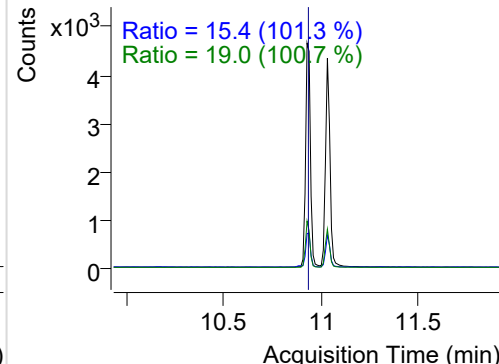


## Phenanthrene

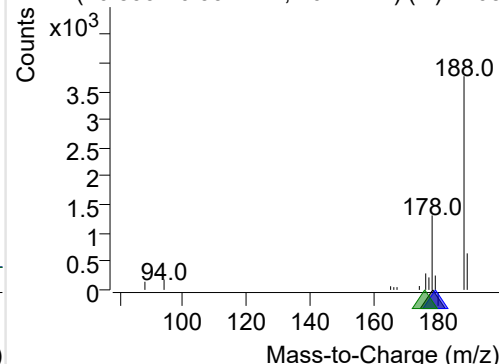
+ Selected Ion (178.0) 220506-PAHs-026.D



178.0, 179.0, 176.0

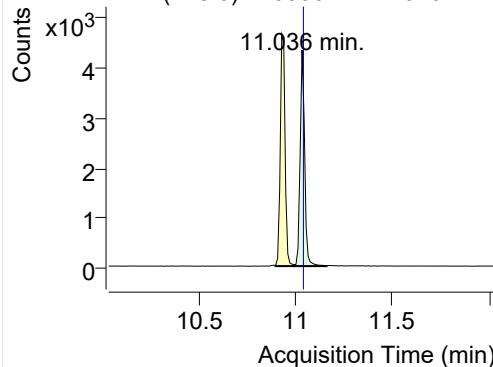


+ SIM (10.899-10.994 min, 10 scans) (\*\*) 2205

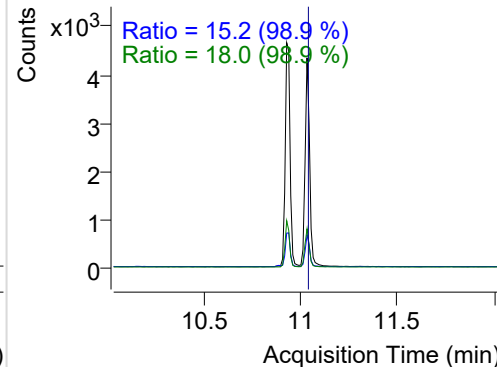


**Anthracene**

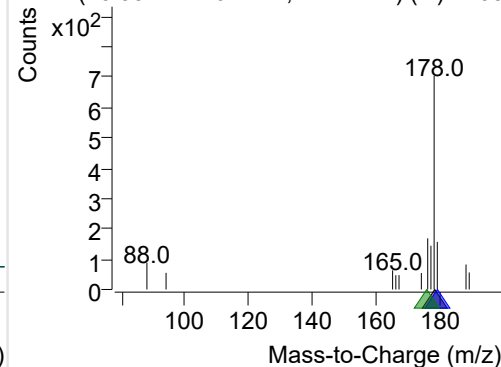
+ Selected Ion (178.0) 220506-PAHs-026.D



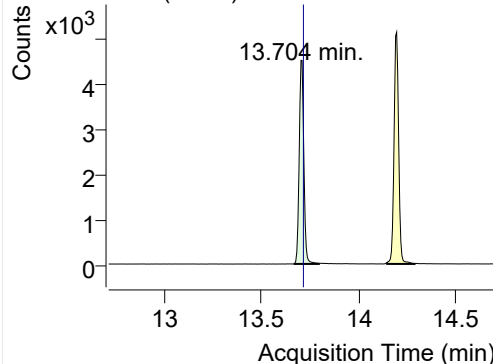
178.0, 179.0, 176.0



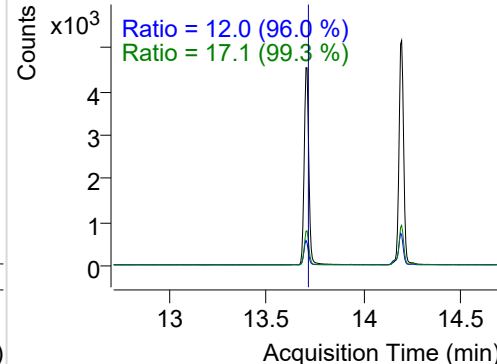
+ SIM (10.994-11.162 min, 17 scans) (\*\*) 2205

**Fluoranthene**

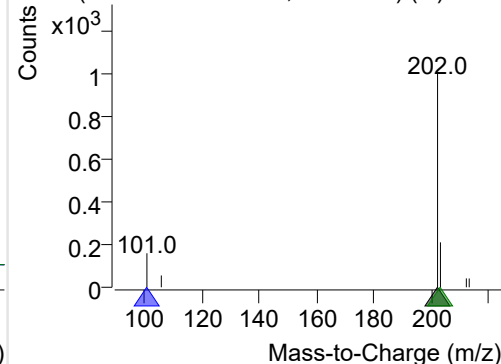
+ Selected Ion (202.0) 220506-PAHs-026.D



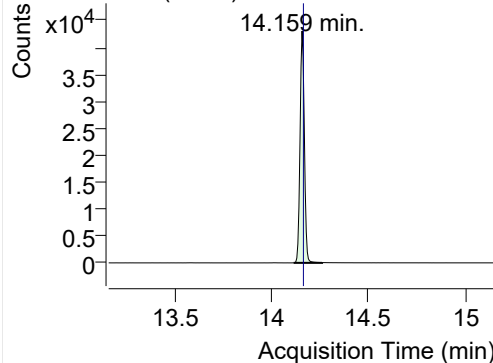
202.0, 101.0, 203.0



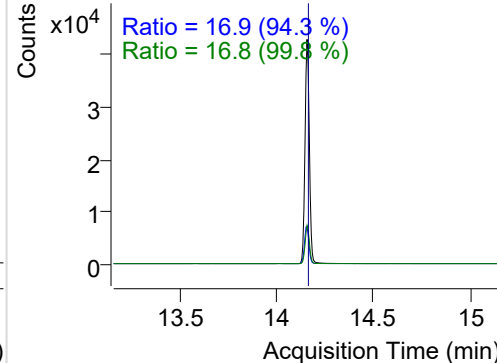
+ SIM (13.666-13.796 min, 24 scans) (\*\*) 2205

**LSS-D10-Pyrene**

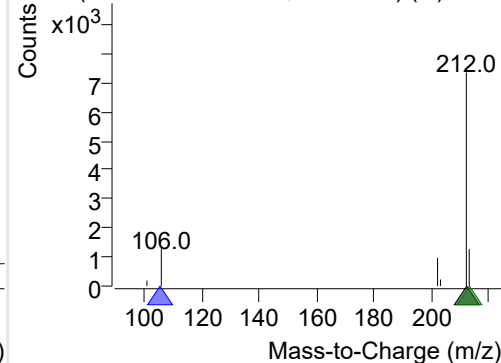
+ Selected Ion (212.0) 220506-PAHs-026.D



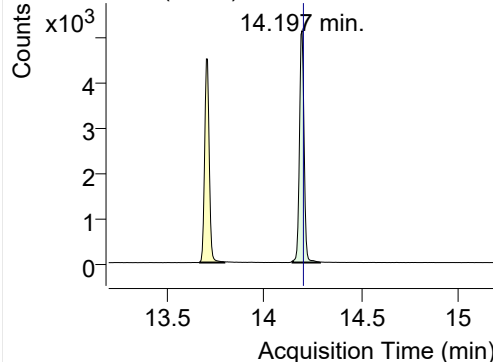
212.0, 106.0, 213.0



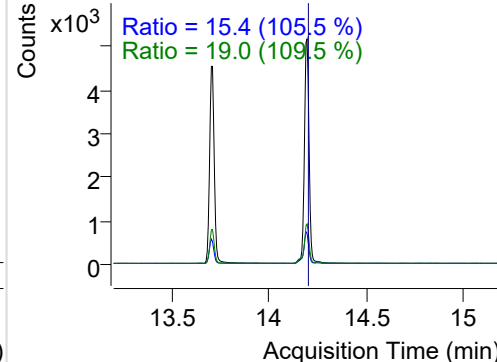
+ SIM (14.116-14.262 min, 28 scans) (\*\*) 2205

**Pyrene**

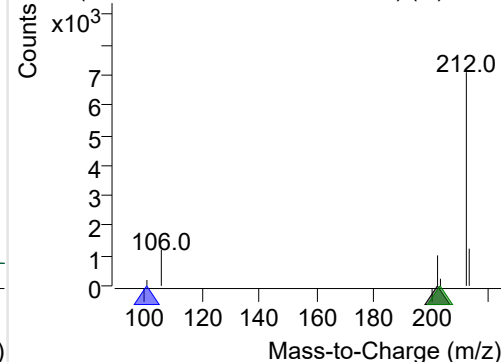
+ Selected Ion (202.0) 220506-PAHs-026.D



202.0, 101.0, 203.0

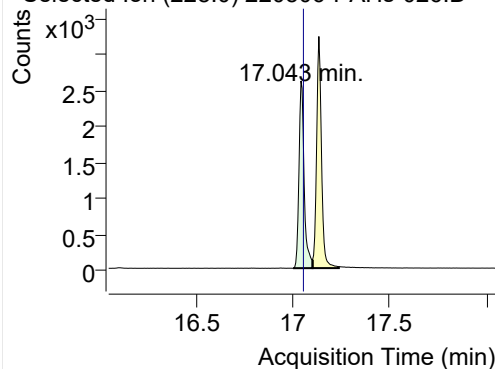


+ SIM (14.149-14.289 min, 27 scans) (\*\*) 2205

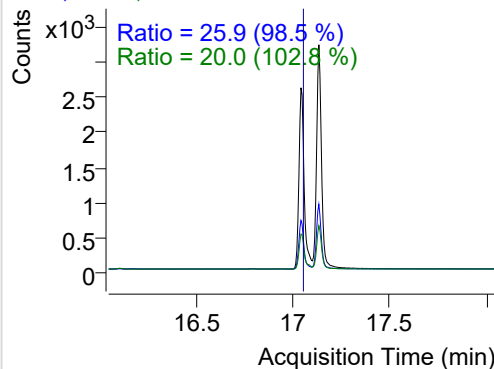


**Benz(a)anthracene**

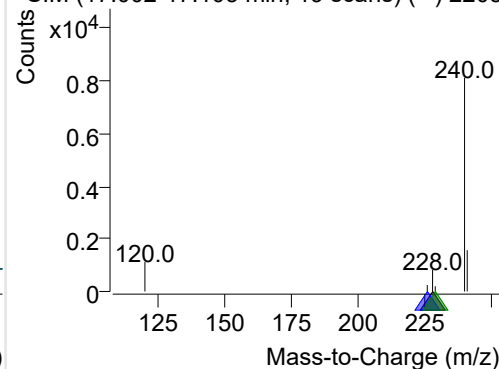
+ Selected Ion (228.0) 220506-PAHs-026.D



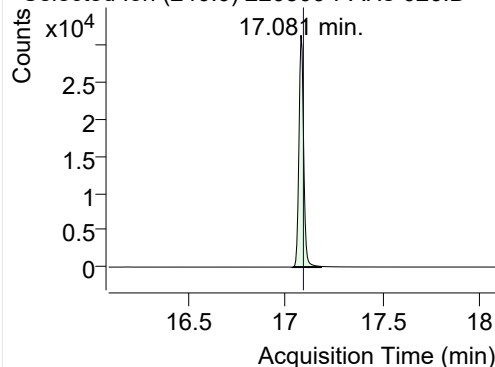
228.0, 226.0, 229.0



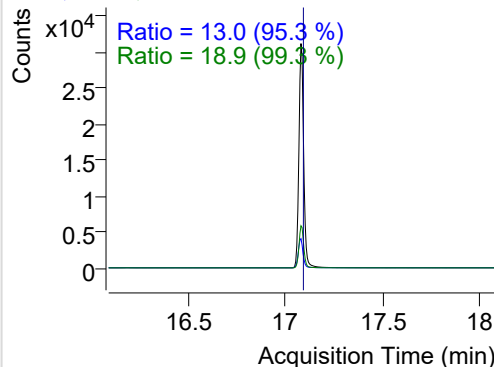
+ SIM (17.002-17.103 min, 19 scans) (\*\*) 2205

**IS-D12-Chrysene**

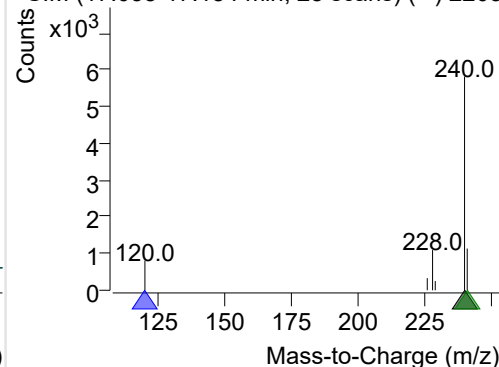
+ Selected Ion (240.0) 220506-PAHs-026.D



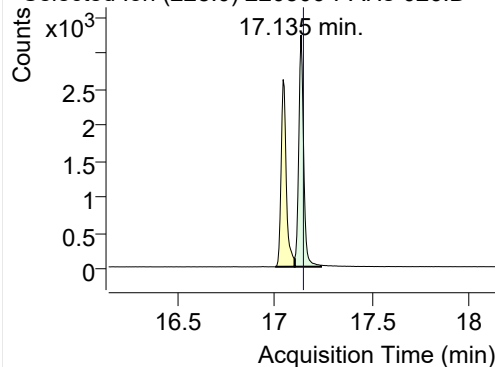
240.0, 120.0, 241.0



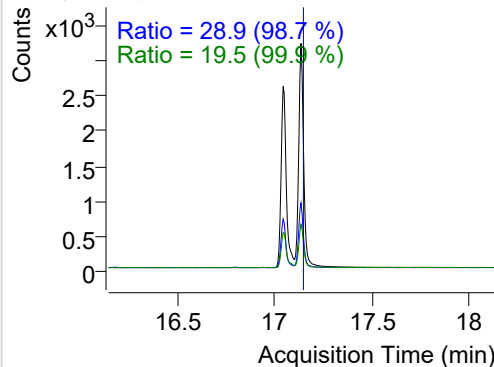
+ SIM (17.038-17.184 min, 28 scans) (\*\*) 2205

**Chrysene**

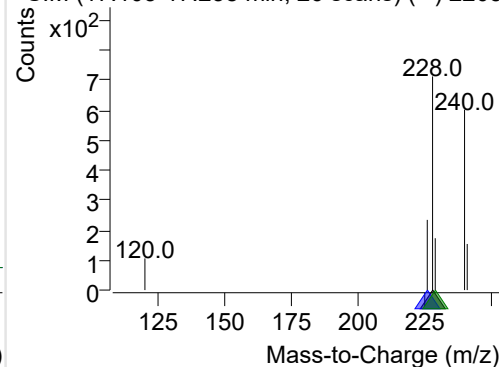
+ Selected Ion (228.0) 220506-PAHs-026.D



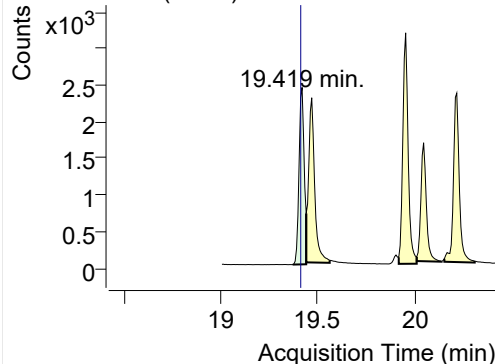
228.0, 226.0, 229.0



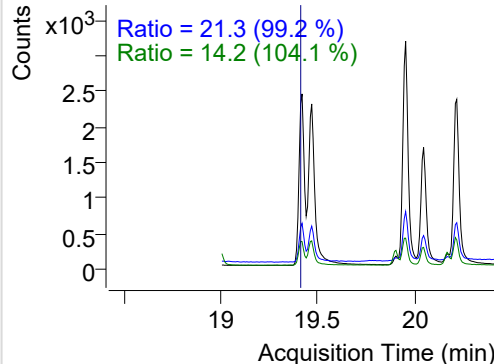
+ SIM (17.103-17.238 min, 26 scans) (\*\*) 2205

**Benzo(b)fluoranthene**

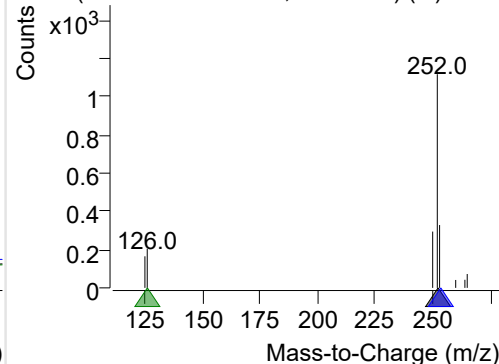
+ Selected Ion (252.0) 220506-PAHs-026.D



252.0, 253.0, 126.0

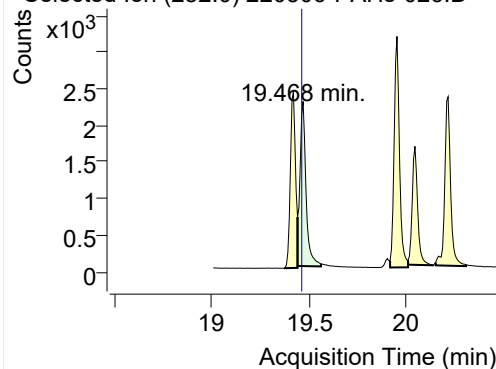


+ SIM (19.370-19.440 min, 10 scans) (\*\*) 2205

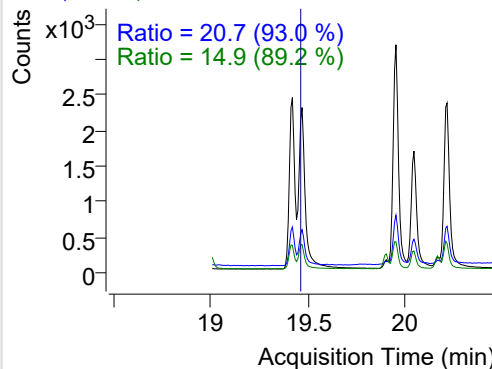


**Benzo(k)fluoranthene**

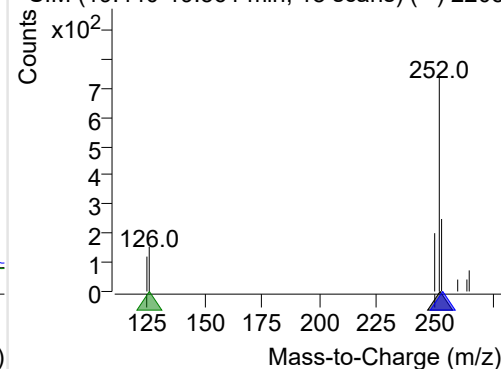
+ Selected Ion (252.0) 220506-PAHs-026.D



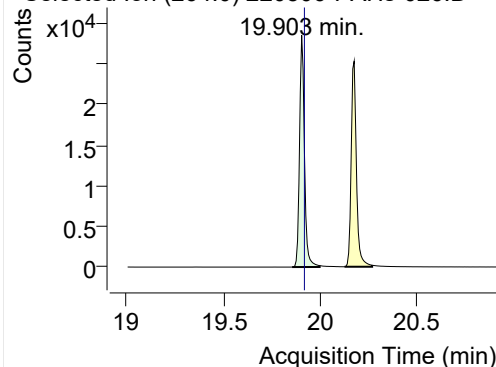
252.0, 253.0, 126.0



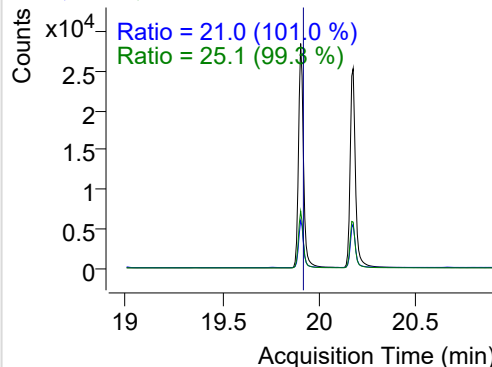
+ SIM (19.440-19.561 min, 18 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

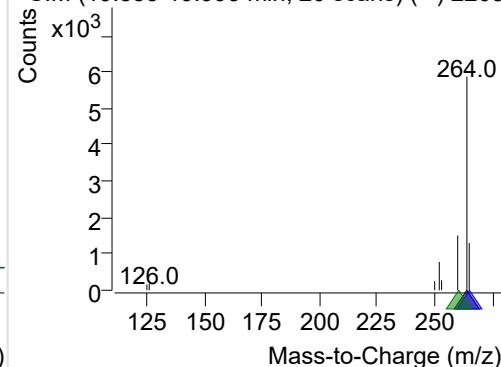
+ Selected Ion (264.0) 220506-PAHs-026.D



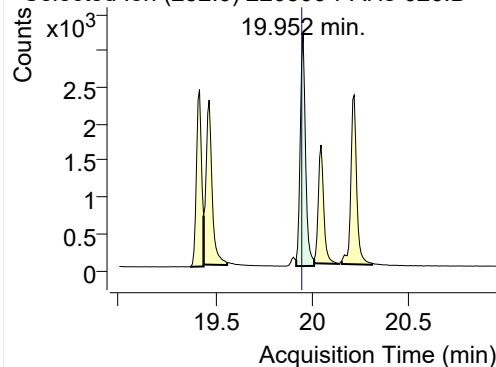
264.0, 265.0, 260.0



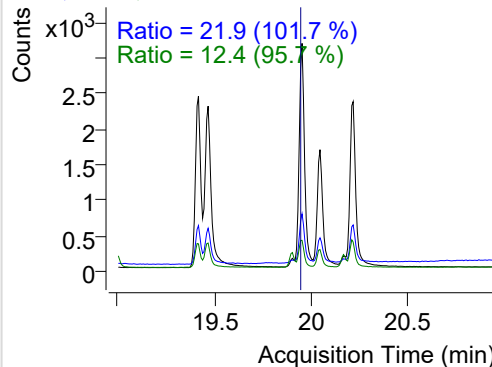
+ SIM (19.853-19.995 min, 20 scans) (\*\*) 2205

**Benzo(e)pyrene**

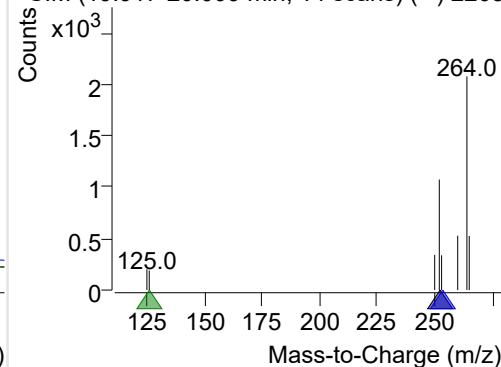
+ Selected Ion (252.0) 220506-PAHs-026.D



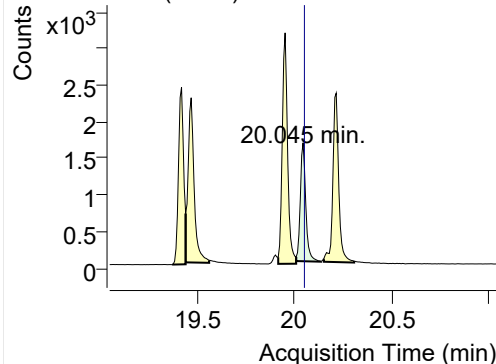
252.0, 253.0, 126.0



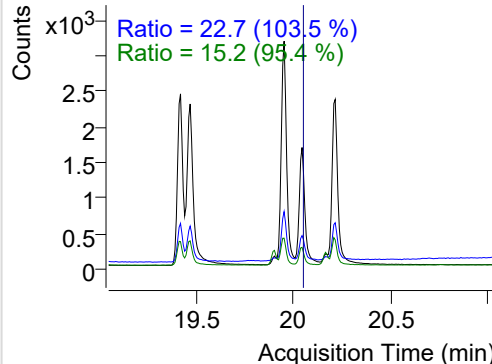
+ SIM (19.917-20.009 min, 14 scans) (\*\*) 2205

**Benzo(a)pyrene**

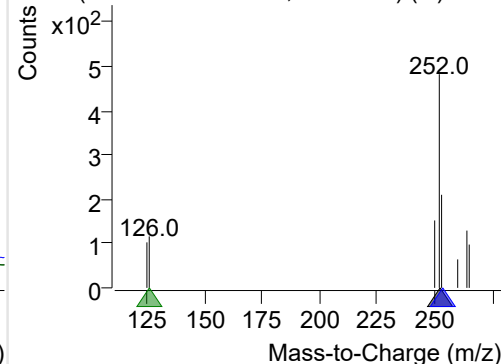
+ Selected Ion (252.0) 220506-PAHs-026.D



252.0, 253.0, 126.0

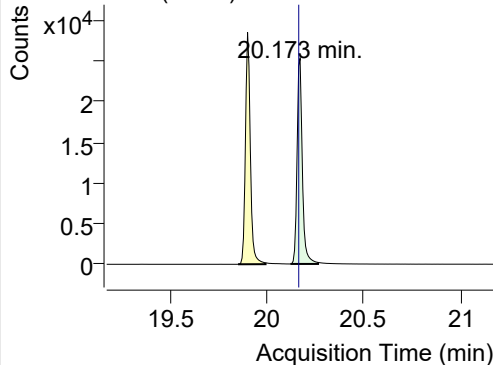


+ SIM (20.009-20.138 min, 19 scans) (\*\*) 2205

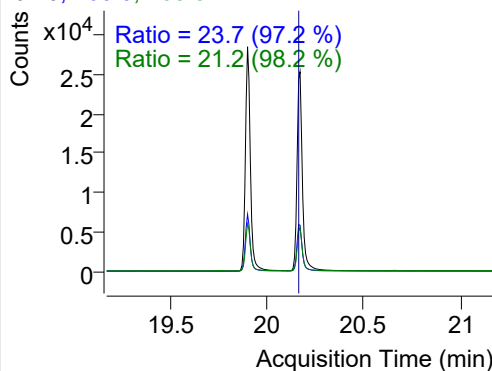


## IS-D12-Perylene

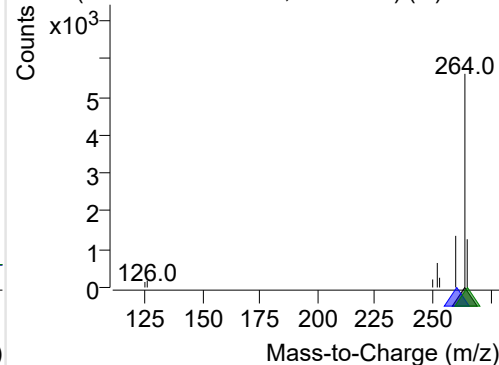
+ Selected Ion (264.0) 220506-PAHs-026.D



264.0, 260.0, 265.0

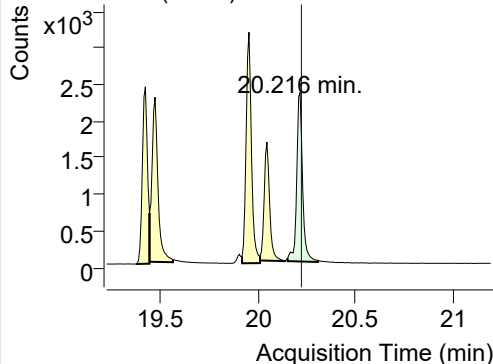


+ SIM (20.124-20.266 min, 20 scans) (\*\*) 2205

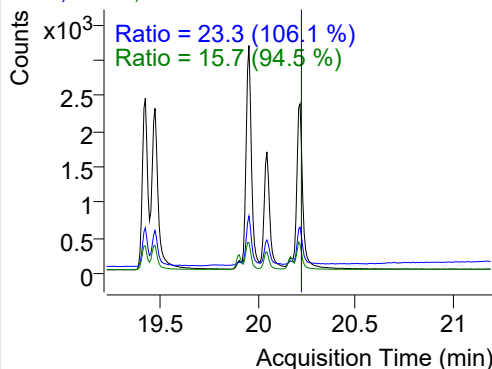


## Perylene

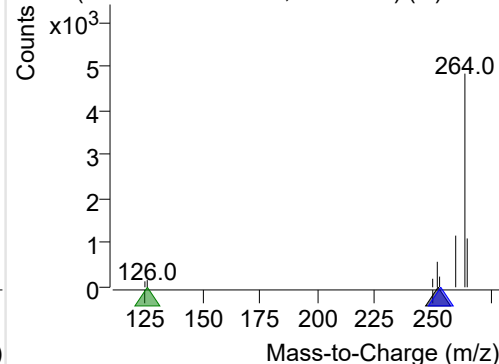
+ Selected Ion (252.0) 220506-PAHs-026.D



252.0, 253.0, 126.0

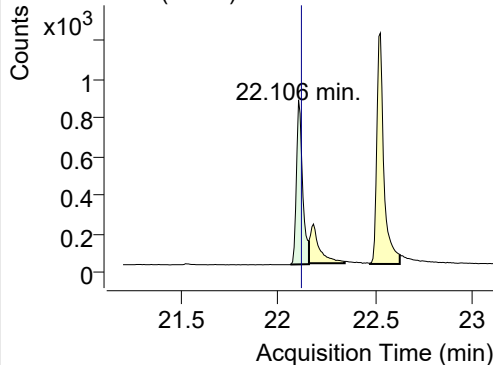


+ SIM (20.152-20.308 min, 23 scans) (\*\*) 2205

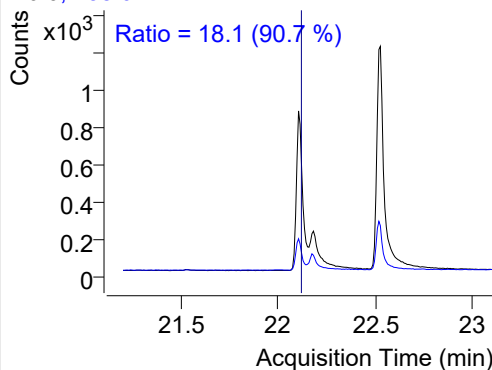


## Indeno(1,2,3-c,d)pyrene

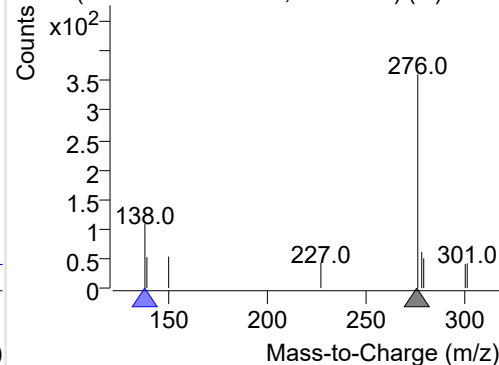
+ Selected Ion (276.0) 220506-PAHs-026.D



276.0, 138.0

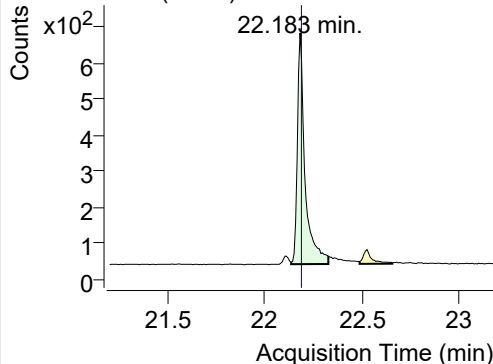


+ SIM (22.064-22.160 min, 13 scans) (\*\*) 2205

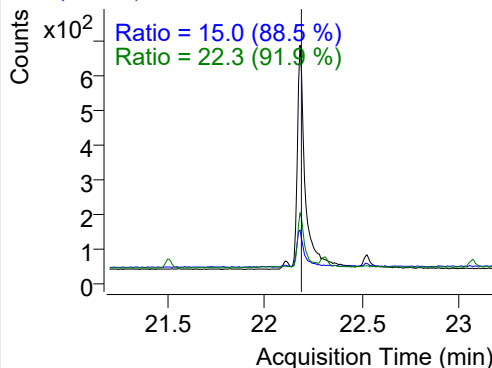


## Dibenz(a,h)anthracene

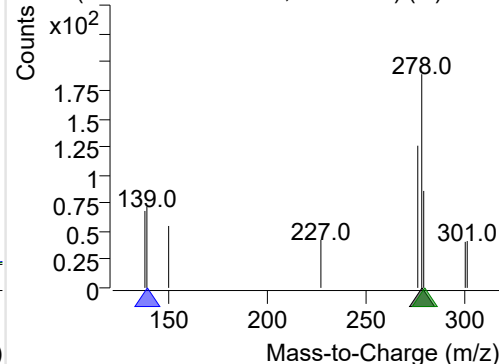
+ Selected Ion (278.0) 220506-PAHs-026.D



278.0, 139.0, 279.0

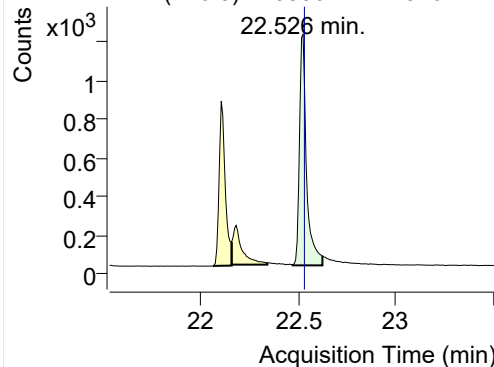


+ SIM (22.137-22.328 min, 26 scans) (\*\*) 2205

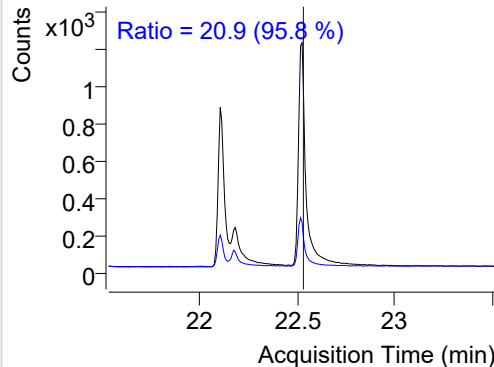


**Benzo(g,h,i)perylene**

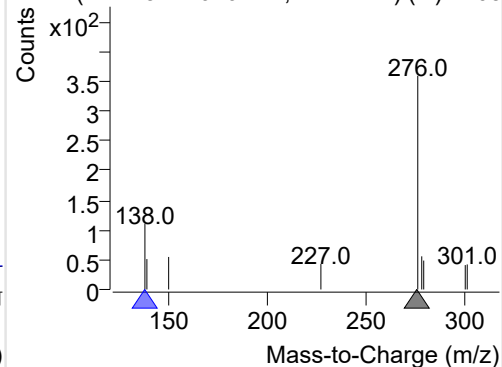
+ Selected Ion (276.0) 220506-PAHs-026.D



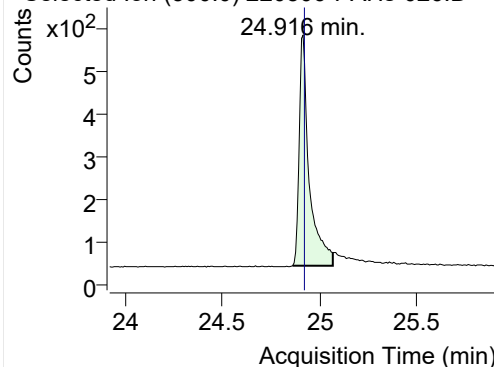
276.0, 138.0



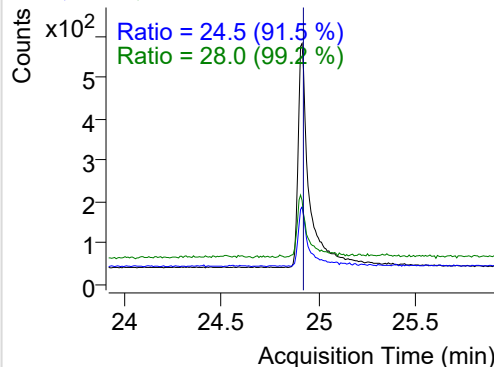
+ SIM (22.473-22.626 min, 21 scans) (\*\*) 2205

**Coronene**

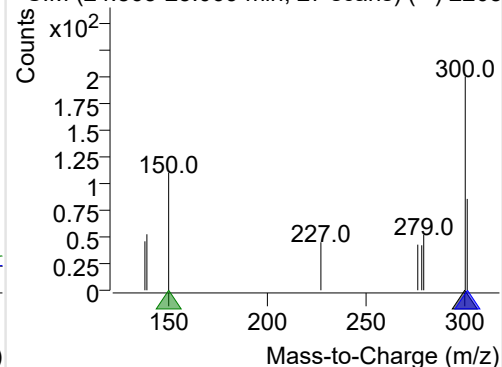
+ Selected Ion (300.0) 220506-PAHs-026.D



300.0, 301.0, 150.0



+ SIM (24.863-25.069 min, 27 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

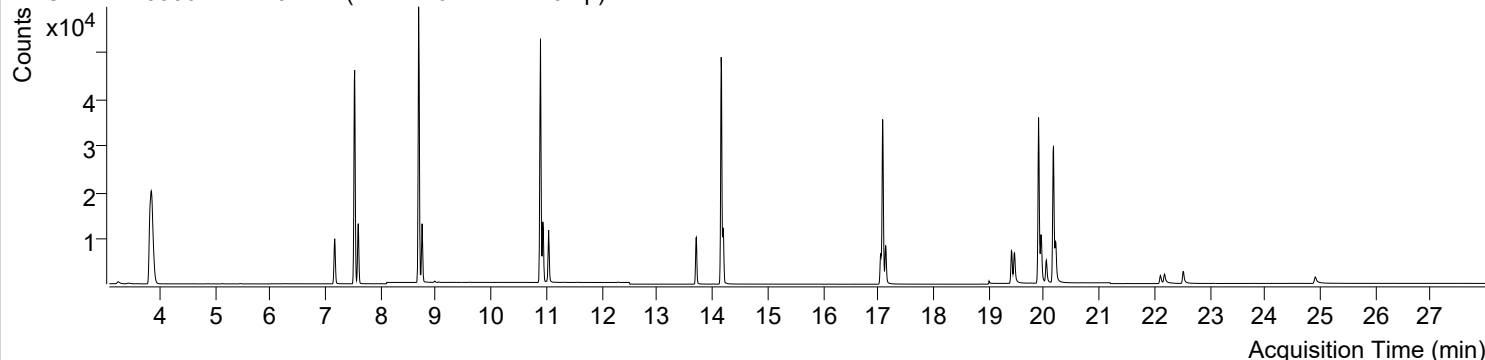


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 12:13:31	Data File	220506-PAHs-027.D
Type	Sample	Name	PAHs-19mix-STD-0.2p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

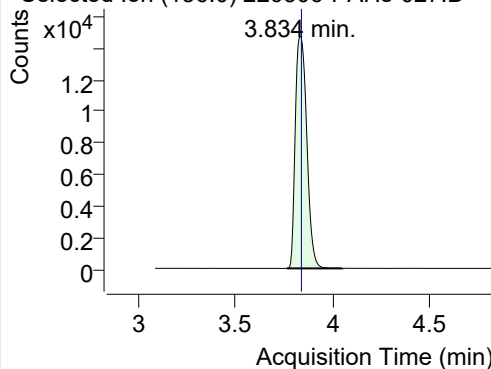
+ TIC SIM 220506-PAHs-027.D (PAHs-19mix-STD-0.2p)



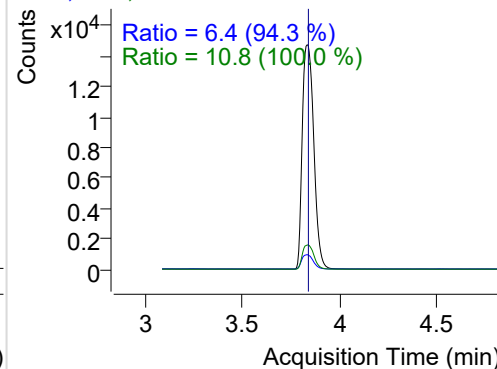
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.834	136.0	60493	14678.21	ND ng/ml	10.8
Naphthalene	3.867	128.0	14883	3661.94	ND ng/ml	13.2
Acenaphthylene	7.165	152.0	12840	7257.01	ND ng/ml	19.7
IS-D10-Acenaphthene	7.526	164.0	36440	22137.27	ND ng/ml	96.0
Acenaphthene	7.591	154.0	7602	4645.39	ND ng/ml	106.6
LSS-D10-Fluorene	8.684	176.0	40975	26533.04	ND ng/ml	93.0
Fluorene	8.747	166.0	9231	6011.27	ND ng/ml	92.1
IS-D10-Phenanthrene	10.889	188.0	64380	42436.46	ND ng/ml	14.9
Phenanthrene	10.931	178.0	13482	8076.88	ND ng/ml	19.1
Anthracene	11.036	178.0	11705	7473.28	ND ng/ml	18.8
Fluoranthene	13.710	202.0	12765	7810.89	ND ng/ml	17.2
LSS-D10-Pyrene	14.160	212.0	56293	36125.37	ND ng/ml	16.9
Pyrene	14.198	202.0	14317	8852.51	ND ng/ml	18.0
Benz(a)anthracene	17.043	228.0	8167	4446.52	ND ng/ml	26.1
IS-D12-Chrysene	17.081	240.0	44955	26547.36	ND ng/ml	18.9
Chrysene	17.136	228.0	9747	5269.04	ND ng/ml	28.9
Benzo(b)fluoranthene	19.412	252.0	7641	4115.18	ND ng/ml	21.2
Benzo(k)fluoranthene	19.469	252.0	8694	3812.46	ND ng/ml	20.5
SS-D12-Benzo(e)pyrene	19.903	264.0	41608	24135.21	ND ng/ml	25.2
Benzo(e)pyrene	19.953	252.0	10358	5270.09	ND ng/ml	21.5
Benzo(a)pyrene	20.045	252.0	5484	2751.02	ND ng/ml	21.4
IS-D12-Perylene	20.173	264.0	38969	20066.99	ND ng/ml	23.6
Perylene	20.216	252.0	8123	4028.85	ND ng/ml	22.0
Indeno(1,2,3-c,d)pyrene	22.107	276.0	3107	1407.00	ND ng/ml	19.9
Dibenz(a,h)anthracene	22.183	278.0	3021	1089.70	ND ng/ml	22.3
Benzo(g,h,i)perylene	22.519	276.0	5365	2025.97	ND ng/ml	21.0
Coronene	24.909	300.0	3282	907.63	ND ng/ml	30.2

## IS-D8-Naphthalene

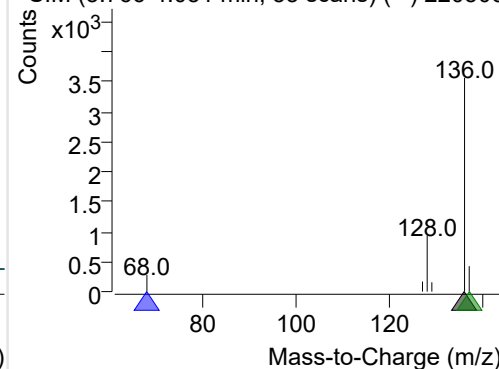
+ Selected Ion (136.0) 220506-PAHs-027.D



136.0, 68.0, 137.0

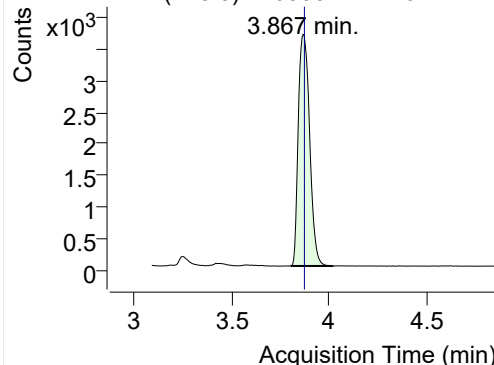


+ SIM (3.766-4.051 min, 53 scans) (\*\*) 220506

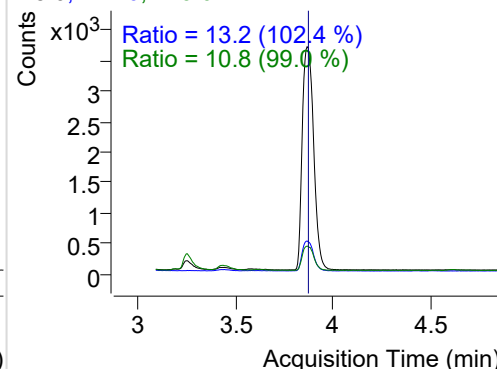


**Naphthalene**

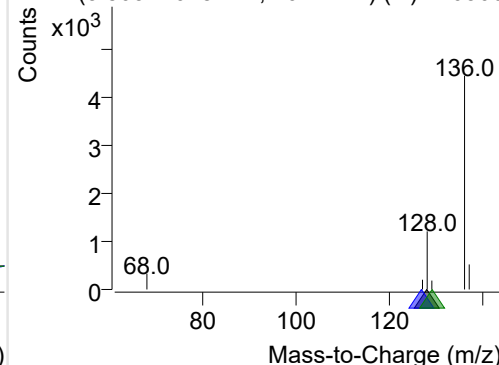
+ Selected Ion (128.0) 220506-PAHs-027.D



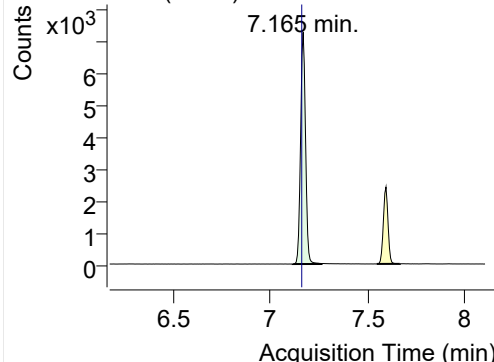
128.0, 127.0, 129.0



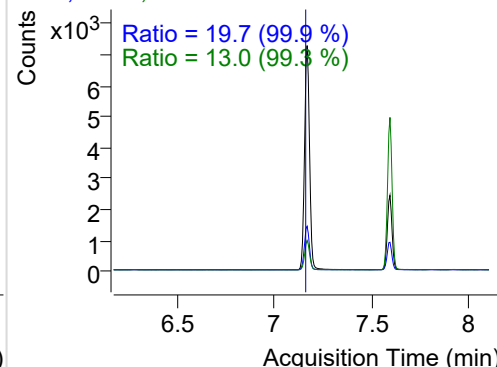
+ SIM (3.803-4.018 min, 40 scans) (\*\*) 220506

**Acenaphthylene**

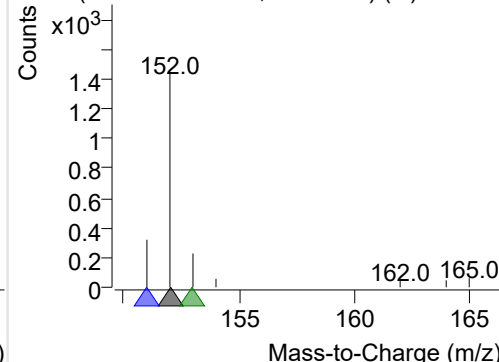
+ Selected Ion (152.0) 220506-PAHs-027.D



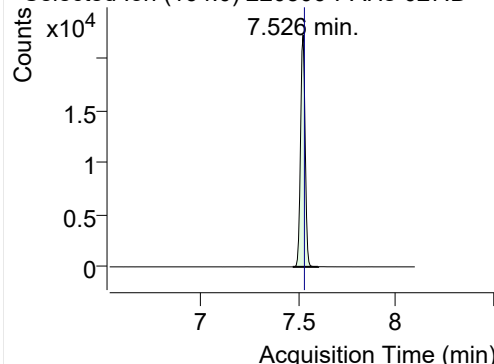
152.0, 151.0, 153.0



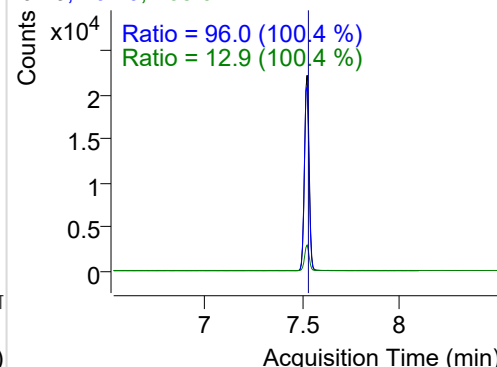
+ SIM (7.112-7.260 min, 26 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

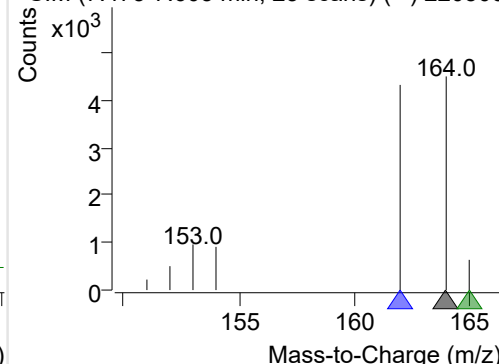
+ Selected Ion (164.0) 220506-PAHs-027.D



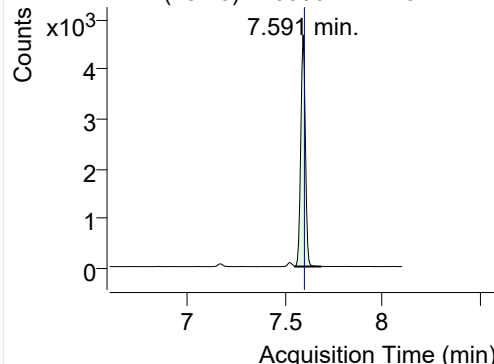
164.0, 162.0, 165.0



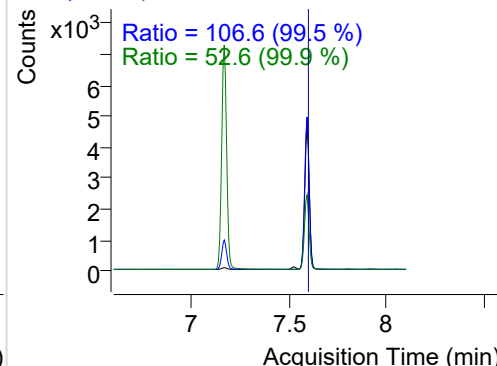
+ SIM (7.473-7.603 min, 23 scans) (\*\*) 220506

**Acenaphthene**

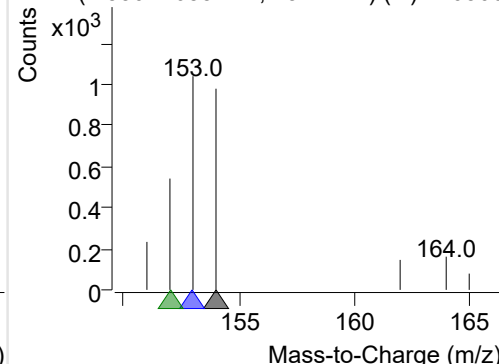
+ Selected Ion (154.0) 220506-PAHs-027.D



154.0, 153.0, 152.0

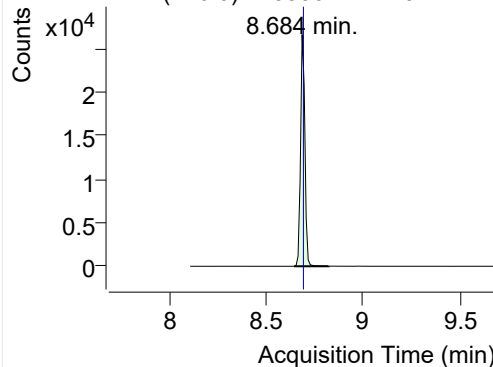


+ SIM (7.550-7.685 min, 23 scans) (\*\*) 220506

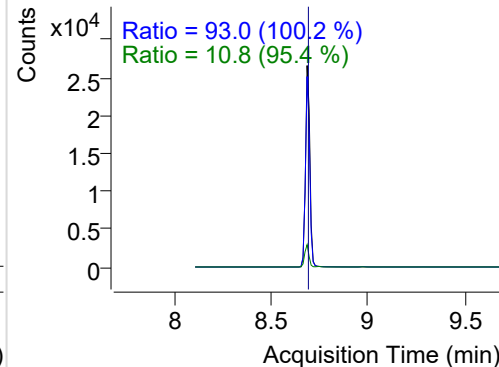


## LSS-D10-Fluorene

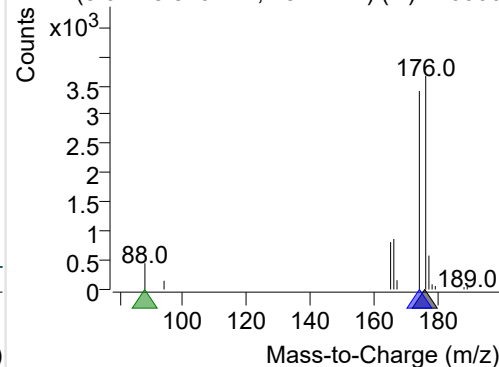
+ Selected Ion (176.0) 220506-PAHs-027.D



176.0, 174.0, 88.0

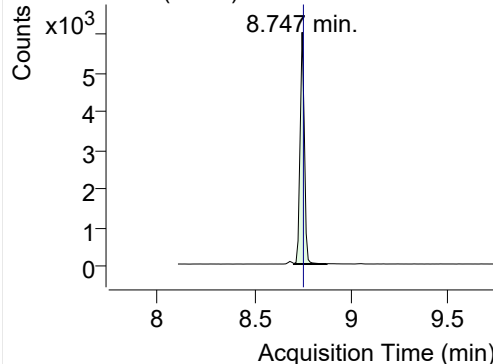


+ SIM (8.642-8.820 min, 18 scans) (\*\*) 220506

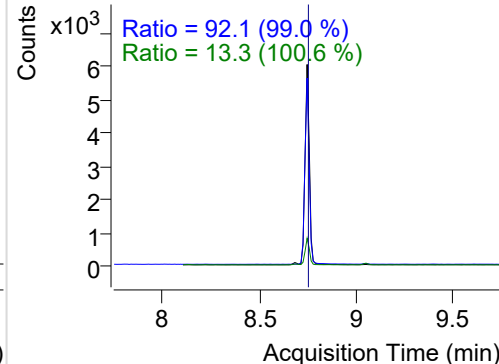


## Fluorene

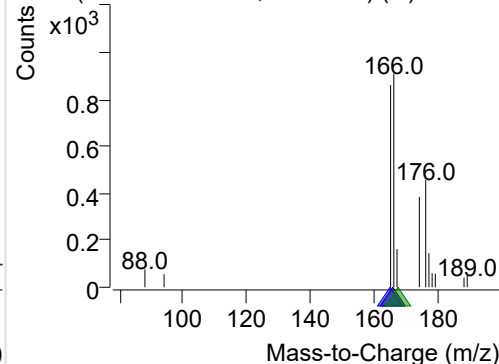
+ Selected Ion (166.0) 220506-PAHs-027.D



166.0, 165.0, 167.0

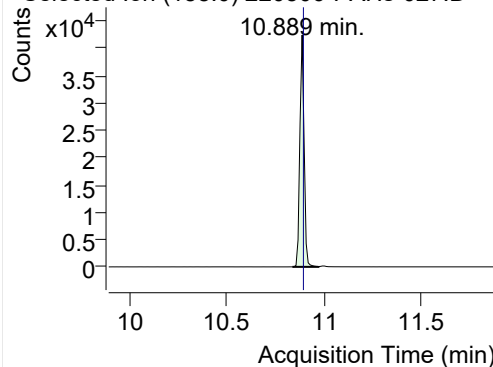


+ SIM (8.705-8.873 min, 17 scans) (\*\*) 220506

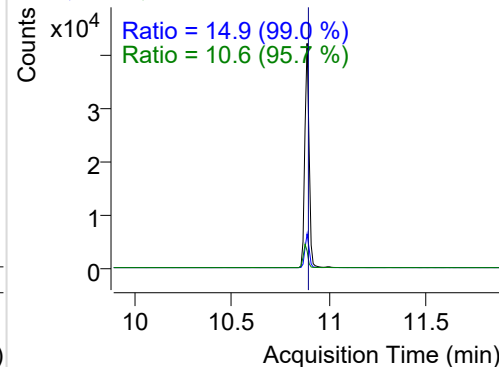


## IS-D10-Phenanthrene

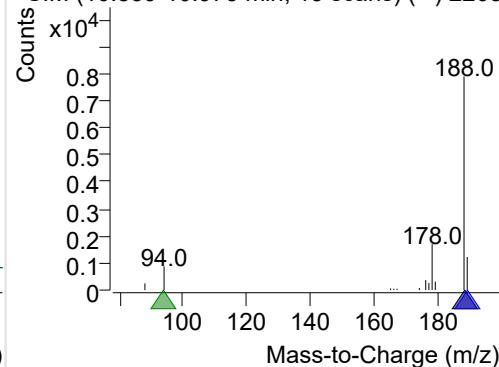
+ Selected Ion (188.0) 220506-PAHs-027.D



188.0, 189.0, 94.0

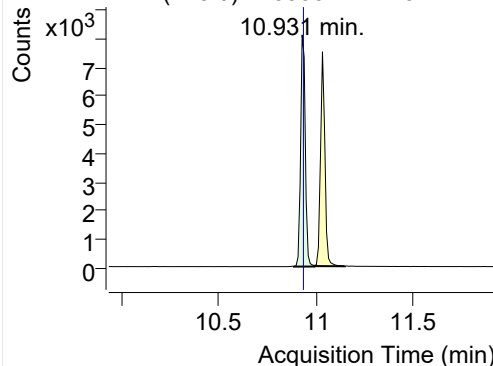


+ SIM (10.839-10.973 min, 13 scans) (\*\*) 2205

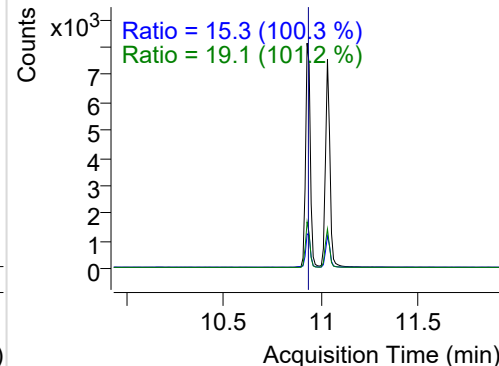


## Phenanthrene

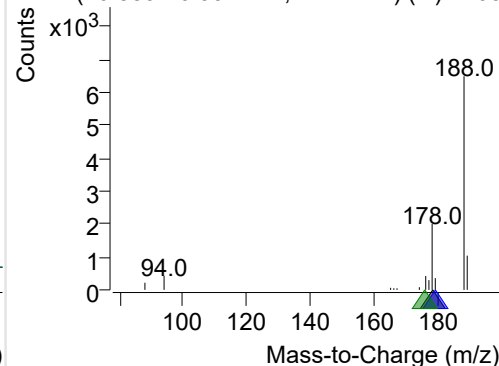
+ Selected Ion (178.0) 220506-PAHs-027.D



178.0, 179.0, 176.0

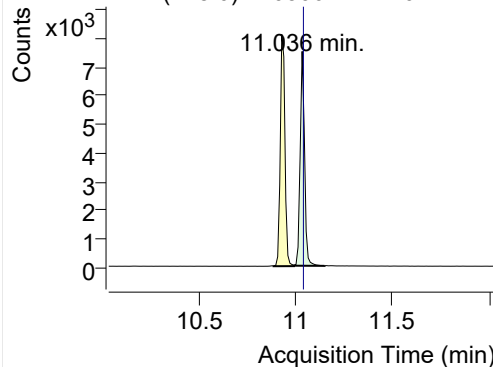


+ SIM (10.889-10.994 min, 11 scans) (\*\*) 2205

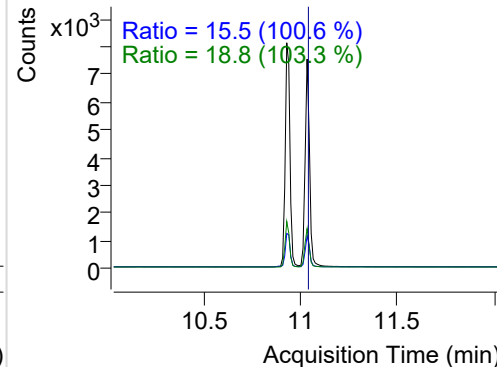


**Anthracene**

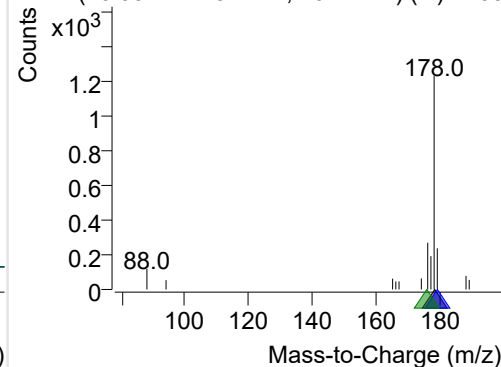
+ Selected Ion (178.0) 220506-PAHs-027.D



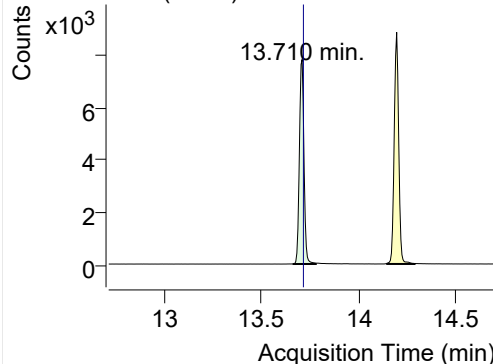
178.0, 179.0, 176.0



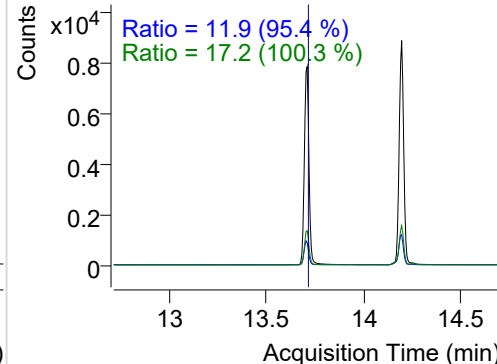
+ SIM (10.994-11.152 min, 16 scans) (\*\*) 2205

**Fluoranthene**

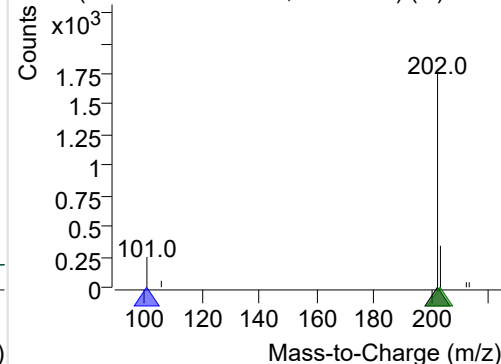
+ Selected Ion (202.0) 220506-PAHs-027.D



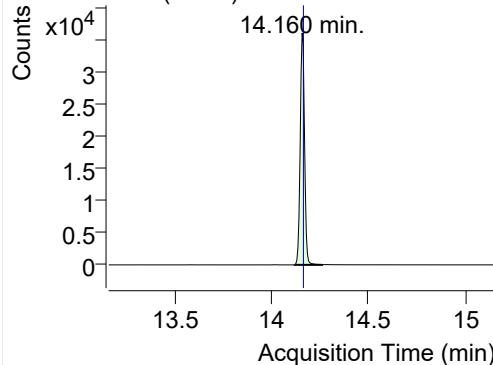
202.0, 101.0, 203.0



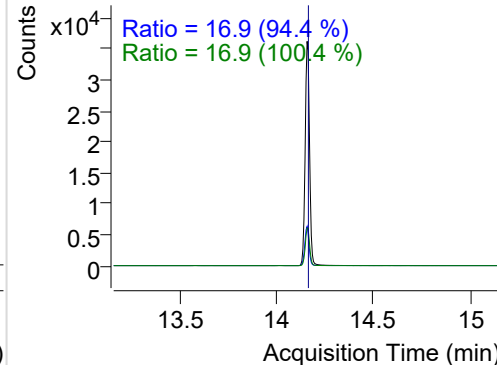
+ SIM (13.661-13.780 min, 23 scans) (\*\*) 2205

**LSS-D10-Pyrene**

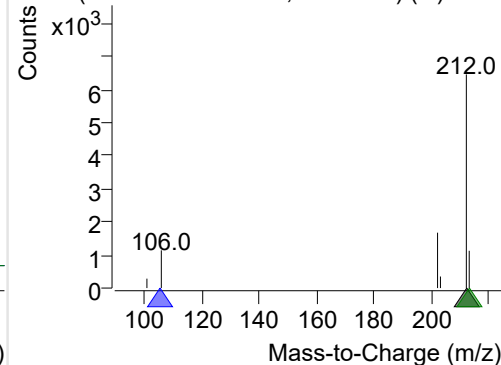
+ Selected Ion (212.0) 220506-PAHs-027.D



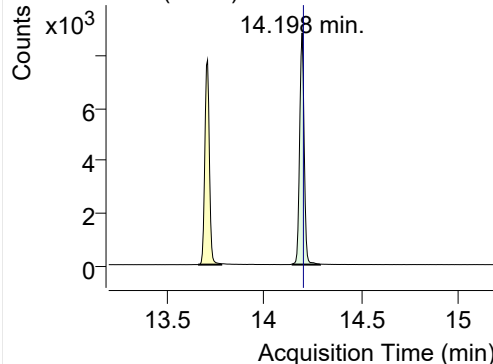
212.0, 106.0, 213.0



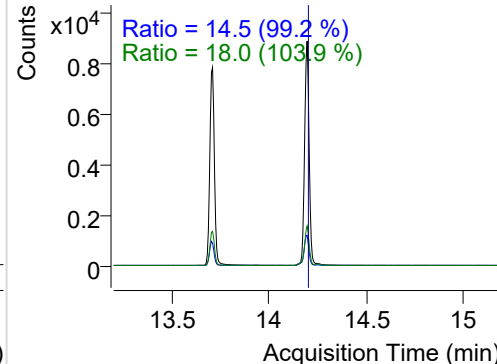
+ SIM (14.122-14.263 min, 27 scans) (\*\*) 2205

**Pyrene**

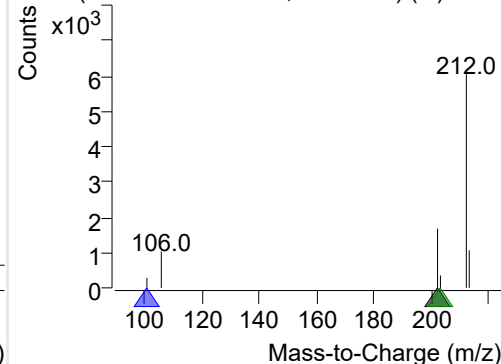
+ Selected Ion (202.0) 220506-PAHs-027.D



202.0, 101.0, 203.0

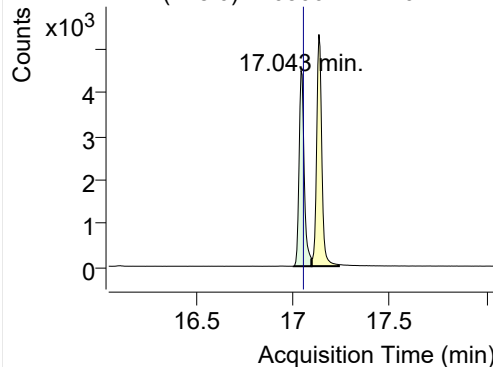


+ SIM (14.149-14.290 min, 27 scans) (\*\*) 2205

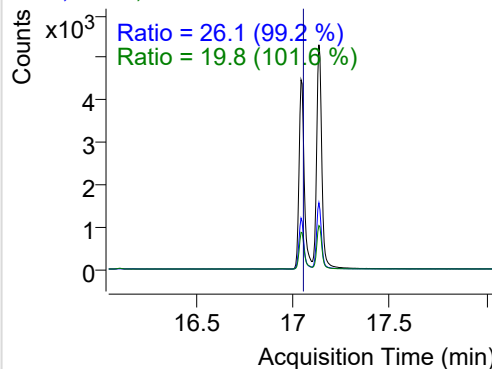


**Benz(a)anthracene**

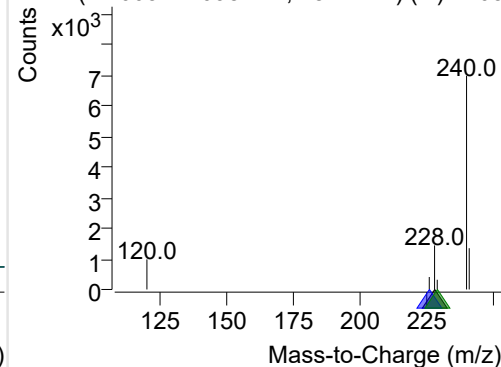
+ Selected Ion (228.0) 220506-PAHs-027.D



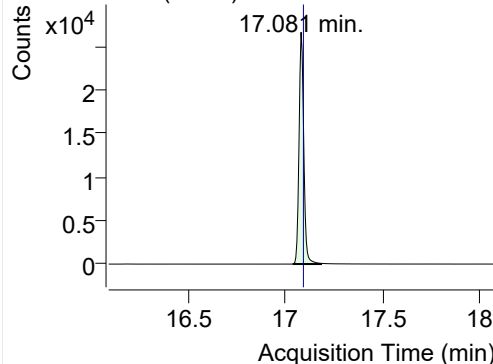
228.0, 226.0, 229.0



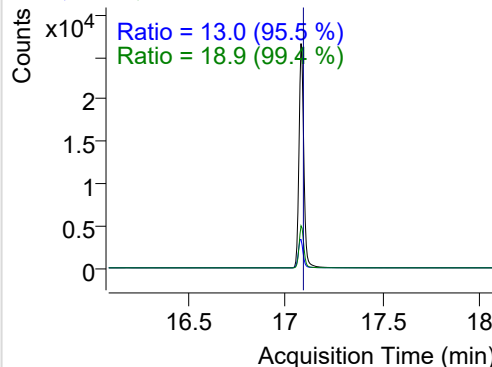
+ SIM (17.005-17.098 min, 18 scans) (\*\*) 2205

**IS-D12-Chrysene**

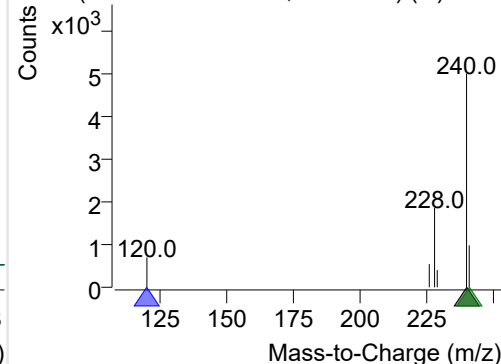
+ Selected Ion (240.0) 220506-PAHs-027.D



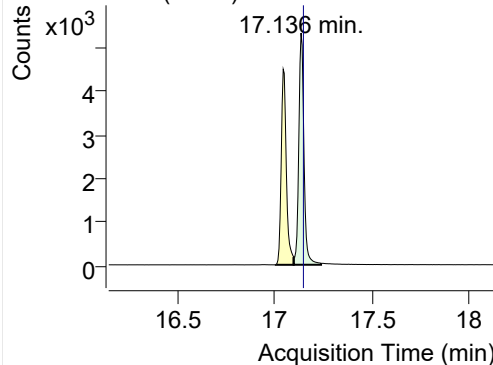
240.0, 120.0, 241.0



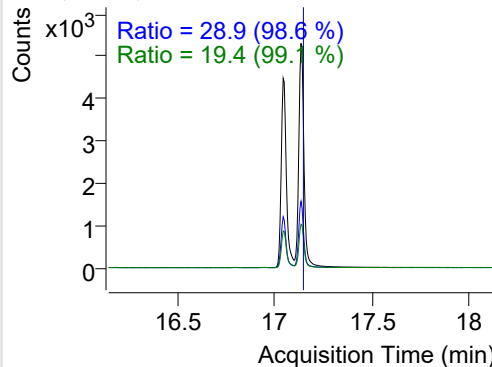
+ SIM (17.038-17.184 min, 28 scans) (\*\*) 2205

**Chrysene**

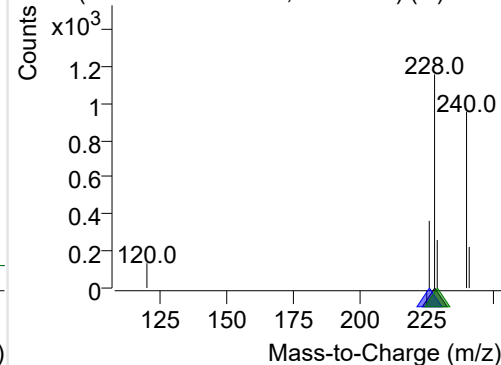
+ Selected Ion (228.0) 220506-PAHs-027.D



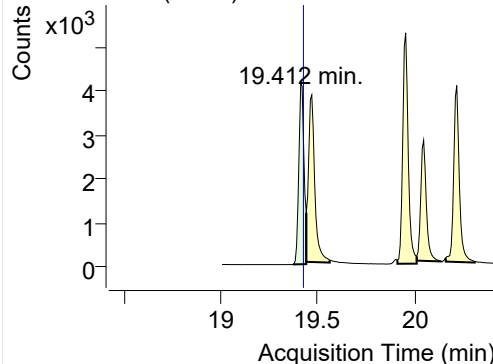
228.0, 226.0, 229.0



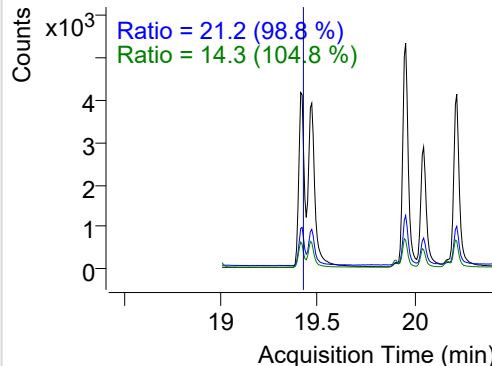
+ SIM (17.098-17.239 min, 27 scans) (\*\*) 2205

**Benzo(b)fluoranthene**

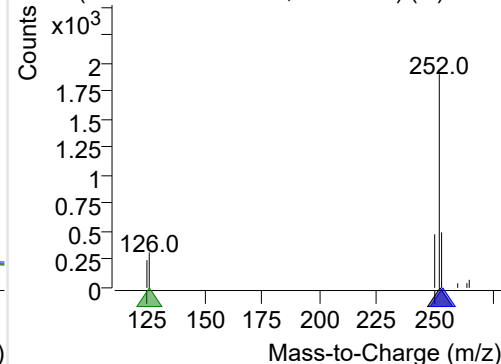
+ Selected Ion (252.0) 220506-PAHs-027.D



252.0, 253.0, 126.0

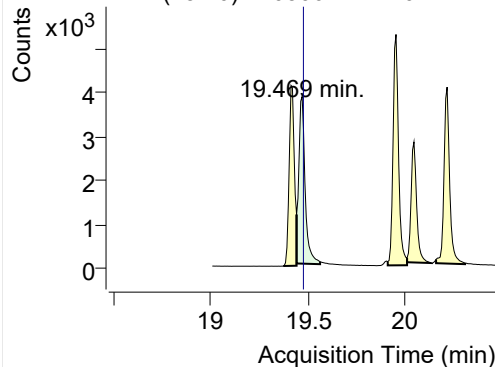


+ SIM (19.371-19.440 min, 10 scans) (\*\*) 2205

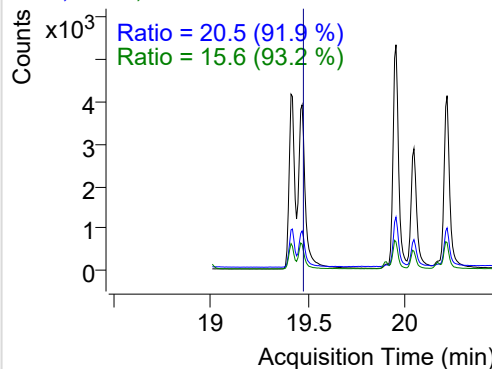


**Benzo(k)fluoranthene**

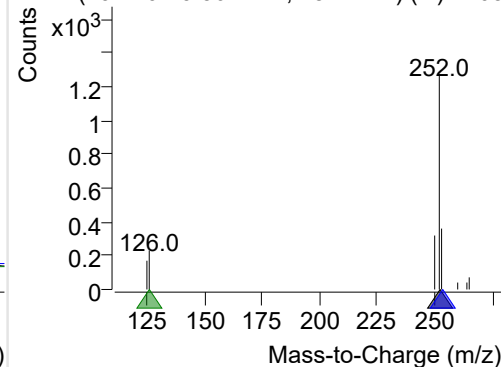
+ Selected Ion (252.0) 220506-PAHs-027.D



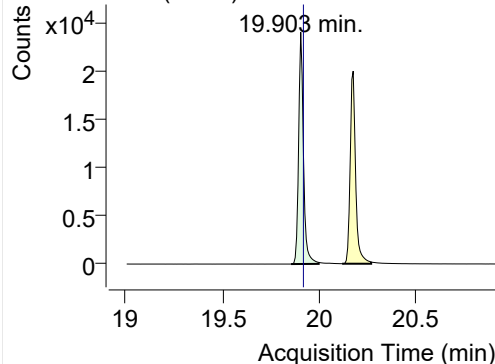
252.0, 253.0, 126.0



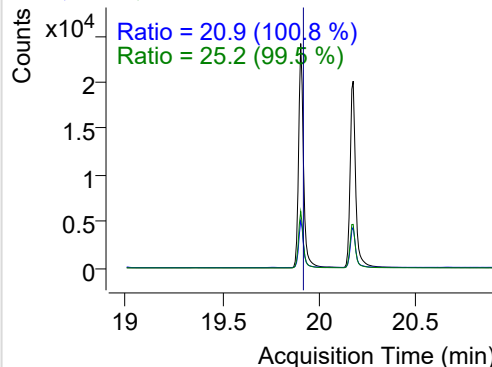
+ SIM (19.440-19.561 min, 18 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

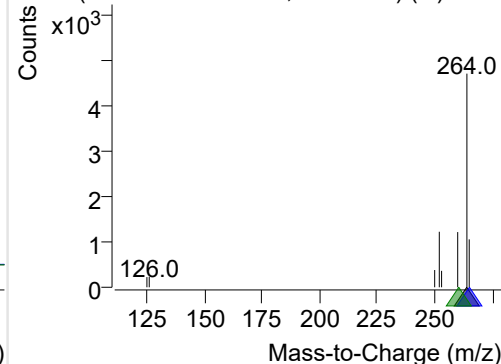
+ Selected Ion (264.0) 220506-PAHs-027.D



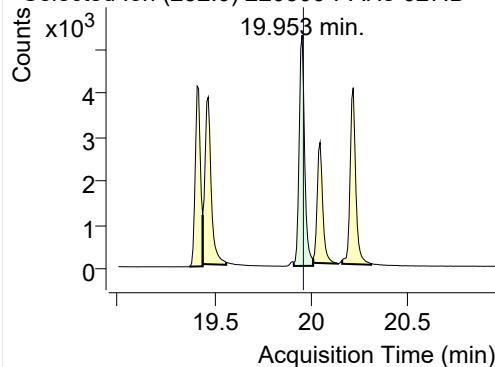
264.0, 265.0, 260.0



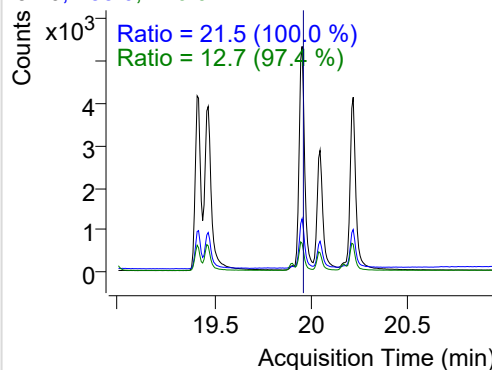
+ SIM (19.853-19.995 min, 21 scans) (\*\*) 2205

**Benzo(e)pyrene**

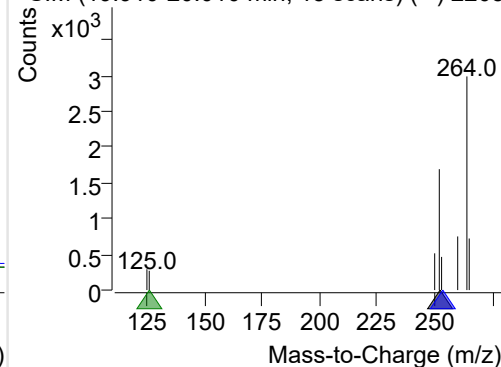
+ Selected Ion (252.0) 220506-PAHs-027.D



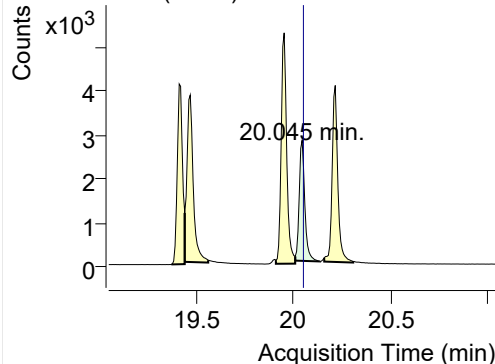
252.0, 253.0, 126.0



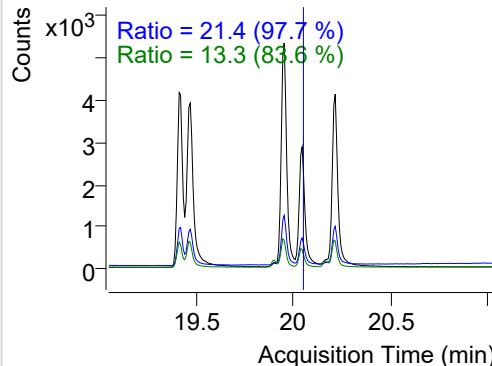
+ SIM (19.910-20.010 min, 15 scans) (\*\*) 2205

**Benzo(a)pyrene**

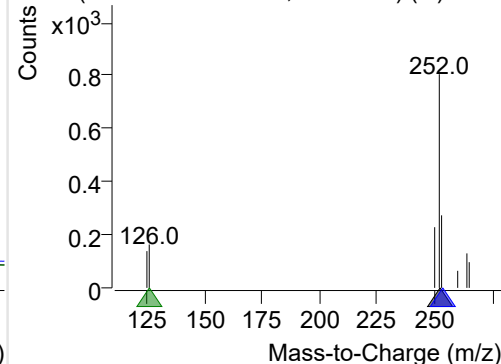
+ Selected Ion (252.0) 220506-PAHs-027.D



252.0, 253.0, 126.0

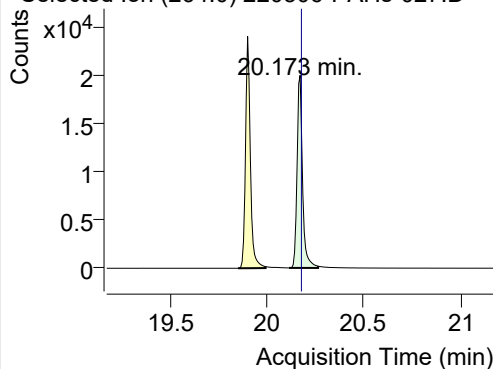


+ SIM (20.010-20.138 min, 19 scans) (\*\*) 2205

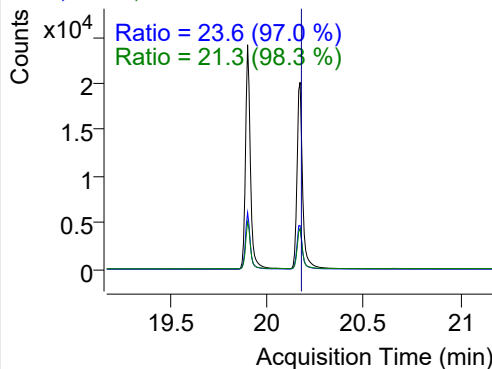


## IS-D12-Perylene

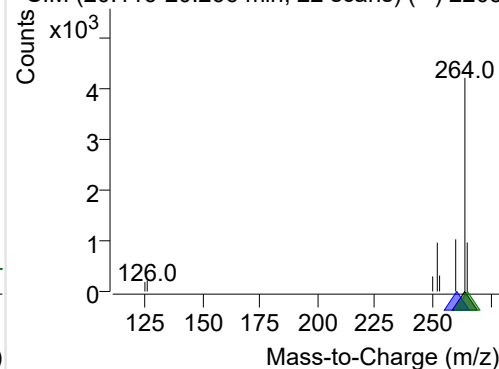
+ Selected Ion (264.0) 220506-PAHs-027.D



264.0, 260.0, 265.0

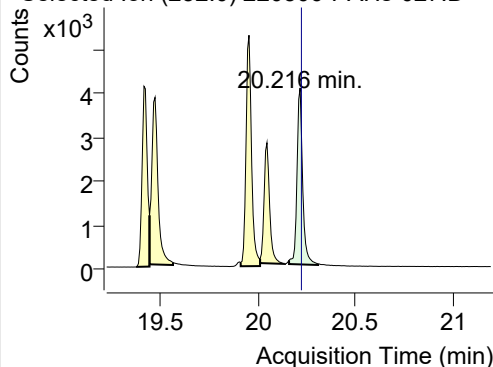


+ SIM (20.116-20.266 min, 22 scans) (\*\*) 2205

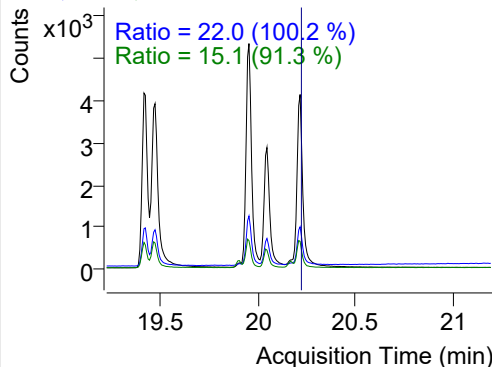


## Perylene

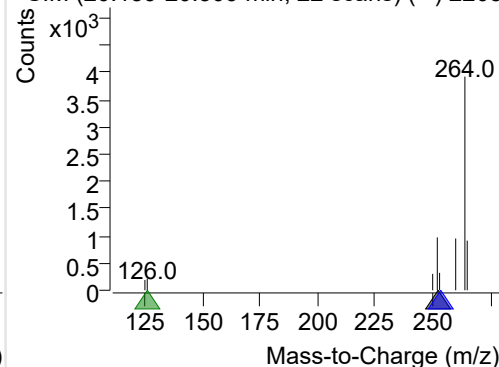
+ Selected Ion (252.0) 220506-PAHs-027.D



252.0, 253.0, 126.0

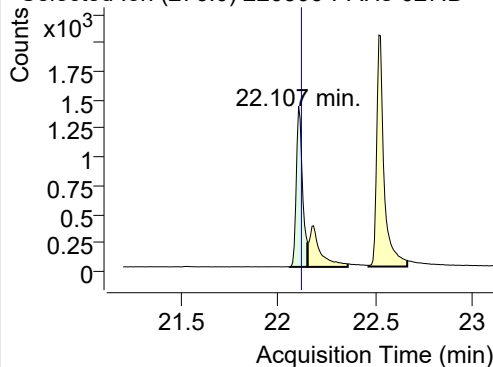


+ SIM (20.159-20.309 min, 22 scans) (\*\*) 2205

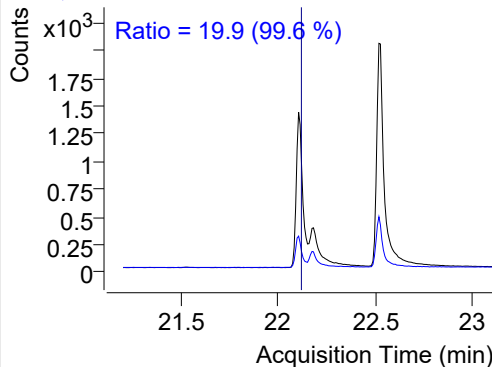


## Indeno(1,2,3-c,d)pyrene

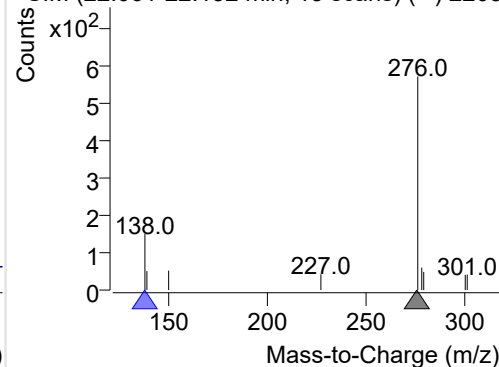
+ Selected Ion (276.0) 220506-PAHs-027.D



276.0, 138.0

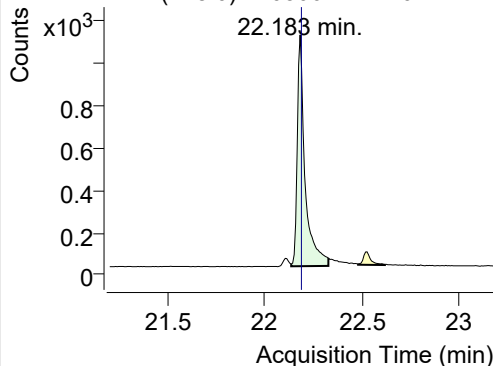


+ SIM (22.061-22.152 min, 13 scans) (\*\*) 2205

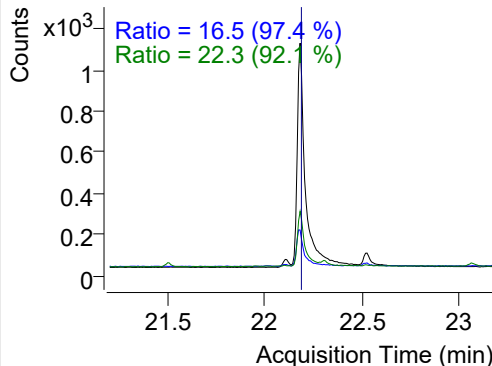


## Dibenz(a,h)anthracene

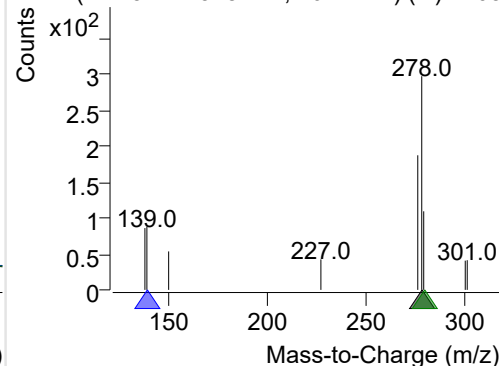
+ Selected Ion (278.0) 220506-PAHs-027.D



278.0, 139.0, 279.0

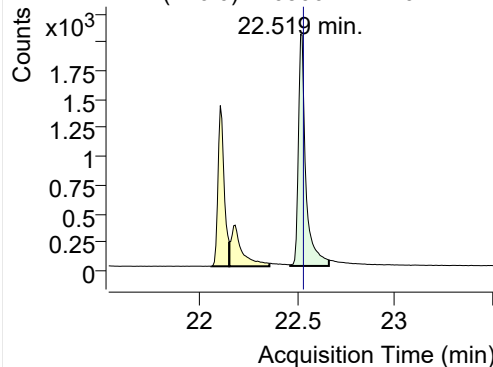


+ SIM (22.137-22.328 min, 26 scans) (\*\*) 2205

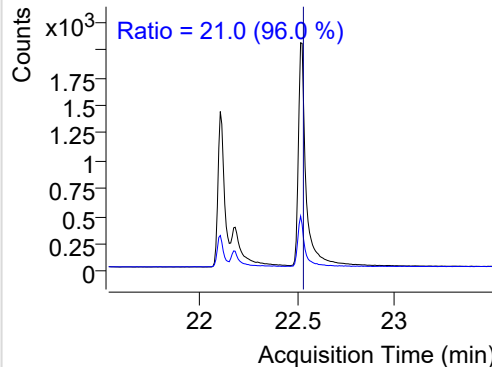


**Benzo(g,h,i)perylene**

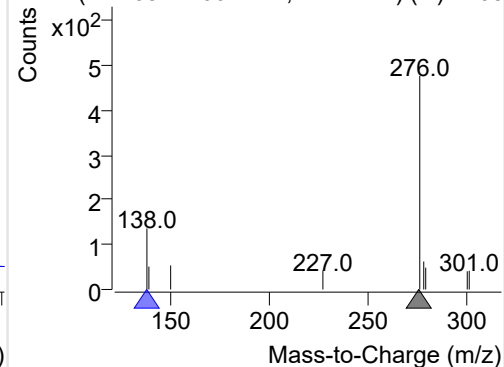
+ Selected Ion (276.0) 220506-PAHs-027.D



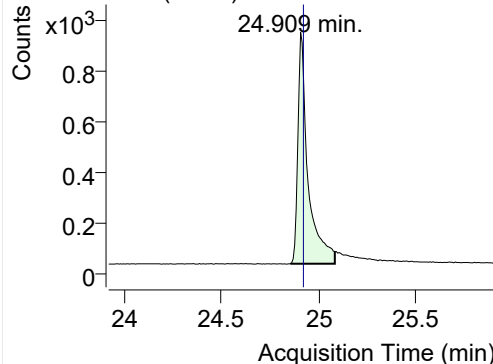
276.0, 138.0



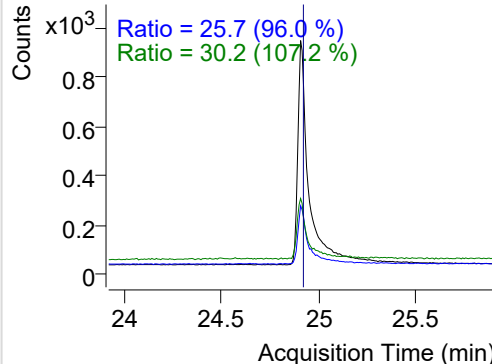
+ SIM (22.465-22.664 min, 27 scans) (\*\*) 2205

**Coronene**

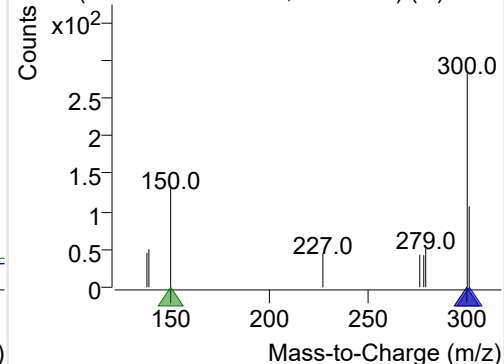
+ Selected Ion (300.0) 220506-PAHs-027.D



300.0, 301.0, 150.0



+ SIM (24.856-25.084 min, 30 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

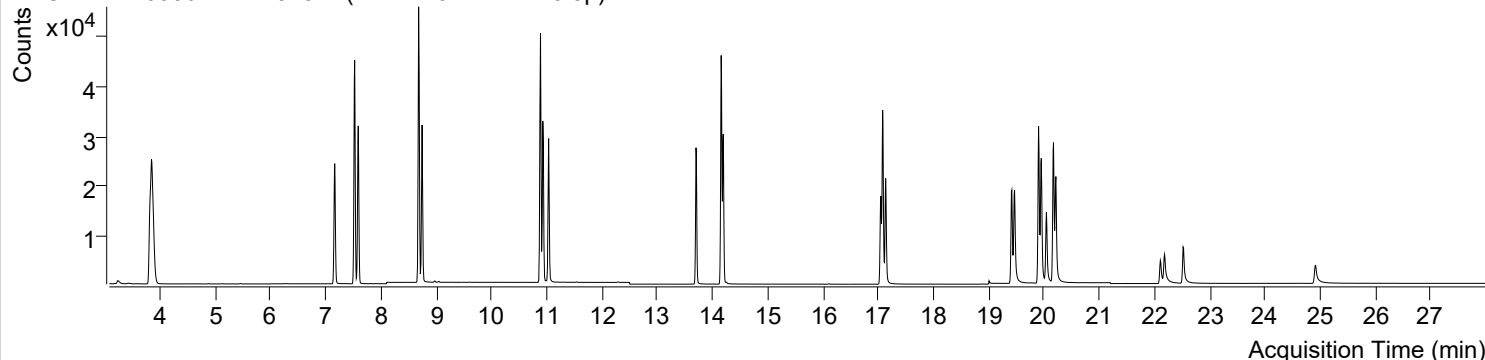


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 12:44:42	Data File	220506-PAHs-028.D
Type	Sample	Name	PAHs-19mix-STD-0.5p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

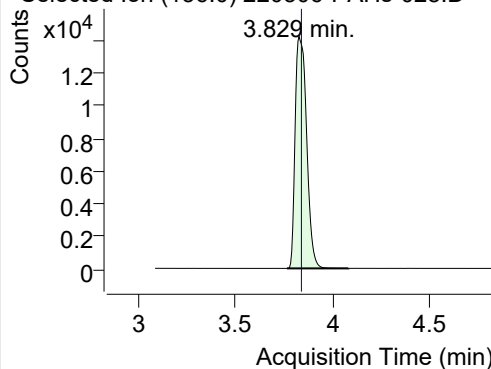
+ TIC SIM 220506-PAHs-028.D (PAHs-19mix-STD-0.5p)



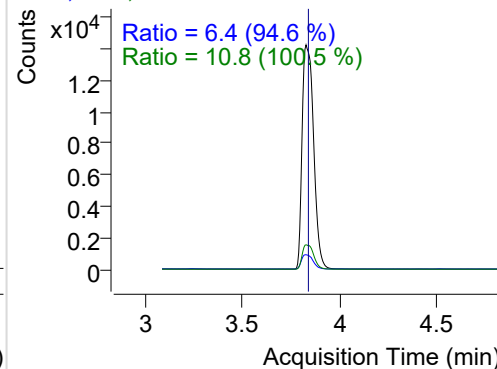
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	58177	14167.11	ND ng/ml	10.8
Naphthalene	3.867	128.0	34905	8515.52	ND ng/ml	13.0
Acenaphthylene	7.165	152.0	31497	18103.81	ND ng/ml	19.6
IS-D10-Acenaphthene	7.526	164.0	34614	21568.38	ND ng/ml	96.0
Acenaphthene	7.591	154.0	18511	11422.80	ND ng/ml	107.0
LSS-D10-Fluorene	8.684	176.0	38549	24781.93	ND ng/ml	92.8
Fluorene	8.747	166.0	22561	15253.05	ND ng/ml	92.9
IS-D10-Phenanthrene	10.889	188.0	61261	40553.97	ND ng/ml	15.1
Phenanthrene	10.931	178.0	33107	20622.05	ND ng/ml	18.9
Anthracene	11.036	178.0	29339	19224.40	ND ng/ml	18.5
Fluoranthene	13.704	202.0	32170	21242.79	ND ng/ml	17.1
LSS-D10-Pyrene	14.160	212.0	52557	34213.69	ND ng/ml	17.0
Pyrene	14.197	202.0	34949	22729.03	ND ng/ml	17.4
Benz(a)anthracene	17.049	228.0	21451	12006.61	ND ng/ml	26.2
IS-D12-Chrysene	17.081	240.0	43570	25724.75	ND ng/ml	18.9
Chrysene	17.135	228.0	24401	13962.91	ND ng/ml	28.8
Benzo(b)fluoranthene	19.419	252.0	20365	11188.94	ND ng/ml	21.4
Benzo(k)fluoranthene	19.469	252.0	25083	11131.50	ND ng/ml	21.6
SS-D12-Benzo(e)pyrene	19.903	264.0	39357	21308.89	ND ng/ml	25.0
Benzo(e)pyrene	19.953	252.0	26027	13494.31	ND ng/ml	21.6
Benzo(a)pyrene	20.045	252.0	16916	8304.05	ND ng/ml	19.9
IS-D12-Perylene	20.173	264.0	37599	18987.66	ND ng/ml	23.6
Perylene	20.216	252.0	21988	10981.08	ND ng/ml	21.1
Indeno(1,2,3-c,d)pyrene	22.107	276.0	8903	3742.00	ND ng/ml	19.3
Dibenz(a,h)anthracene	22.183	278.0	8837	3137.55	ND ng/ml	23.5
Benzo(g,h,i)perylene	22.519	276.0	14978	5797.04	ND ng/ml	20.9
Coronene	24.916	300.0	8838	2405.81	ND ng/ml	26.5

## IS-D8-Naphthalene

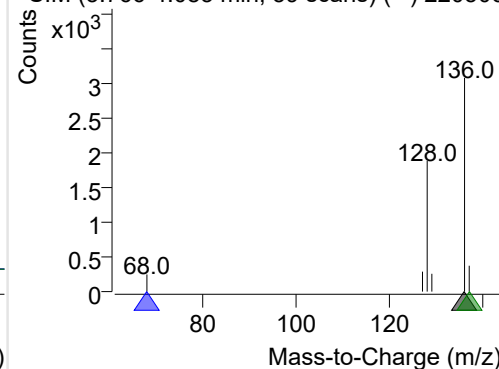
+ Selected Ion (136.0) 220506-PAHs-028.D



136.0, 68.0, 137.0

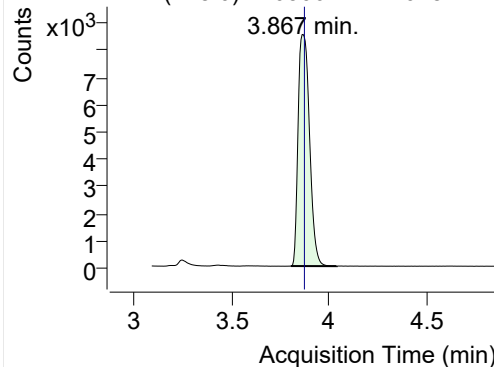


+ SIM (3.766-4.083 min, 59 scans) (\*\*) 220506

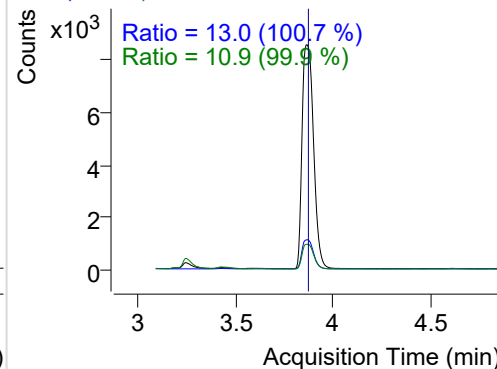


**Naphthalene**

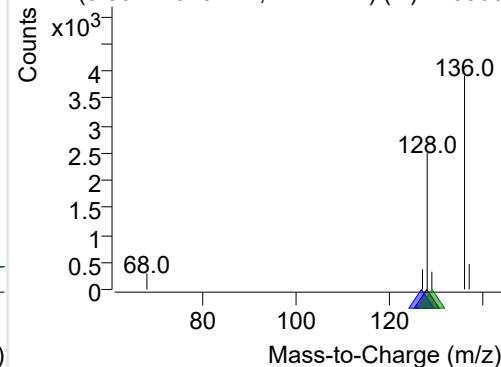
+ Selected Ion (128.0) 220506-PAHs-028.D



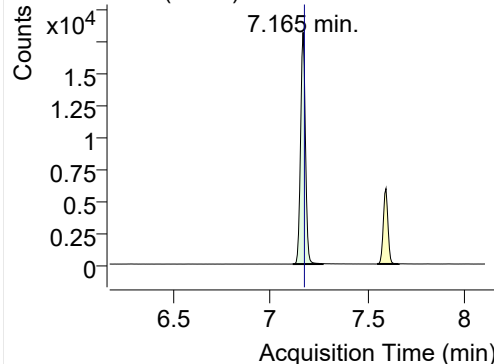
128.0, 127.0, 129.0



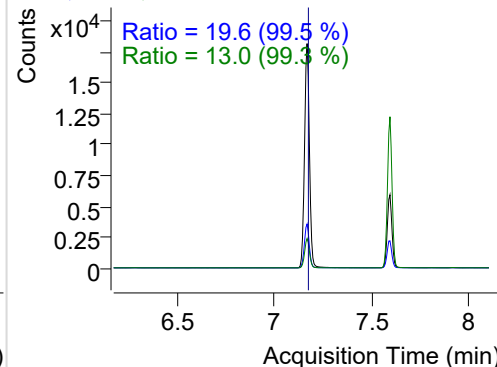
+ SIM (3.804-4.040 min, 44 scans) (\*\*) 220506

**Acenaphthylene**

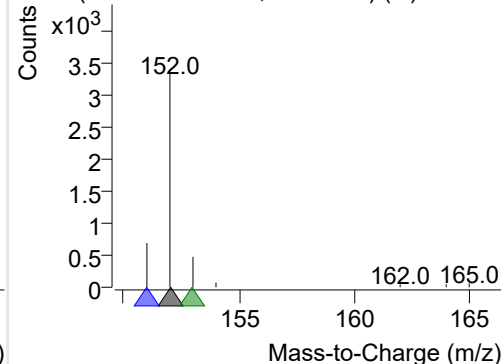
+ Selected Ion (152.0) 220506-PAHs-028.D



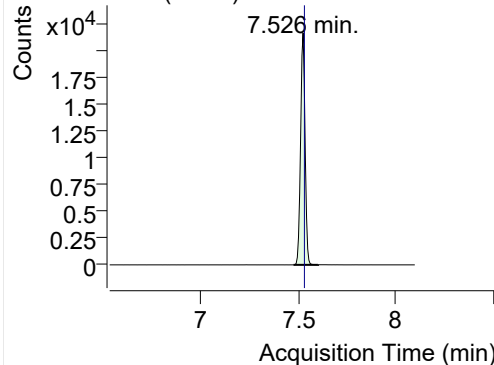
152.0, 151.0, 153.0



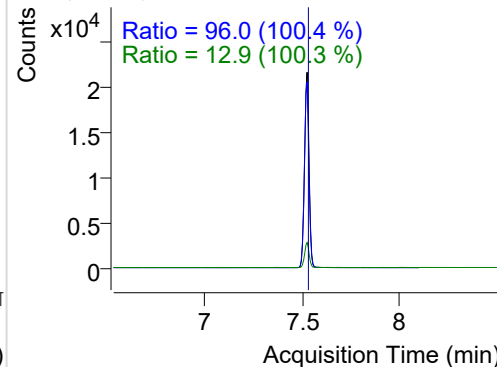
+ SIM (7.112-7.266 min, 27 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

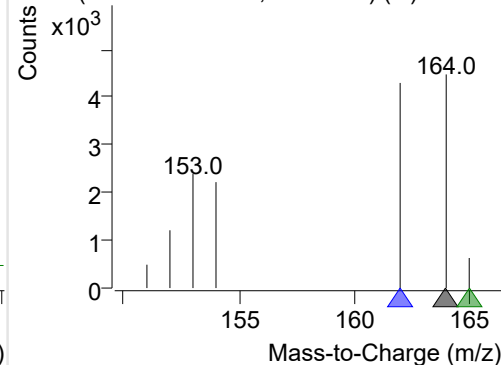
+ Selected Ion (164.0) 220506-PAHs-028.D



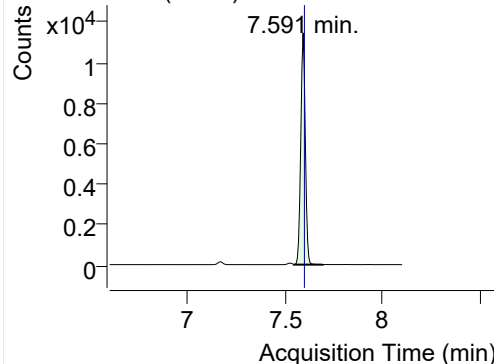
164.0, 162.0, 165.0



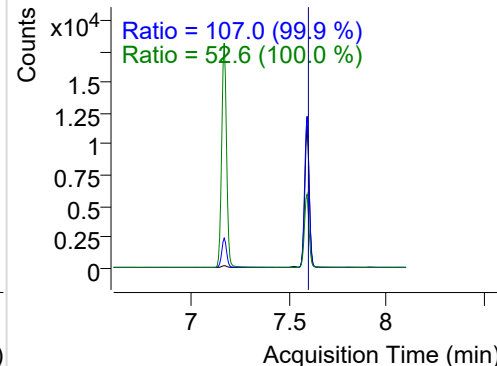
+ SIM (7.477-7.603 min, 22 scans) (\*\*) 220506

**Acenaphthene**

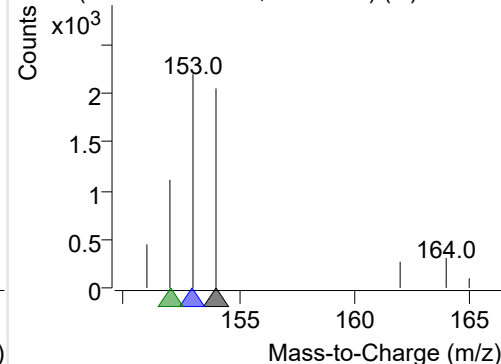
+ Selected Ion (154.0) 220506-PAHs-028.D



154.0, 153.0, 152.0

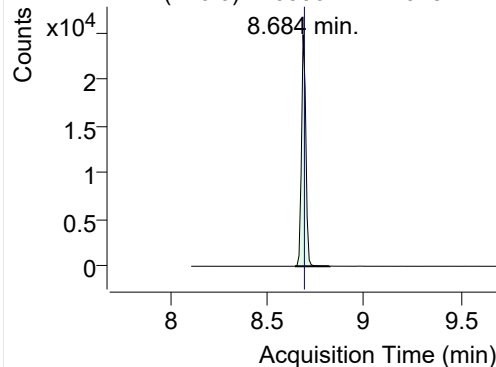


+ SIM (7.544-7.692 min, 26 scans) (\*\*) 220506

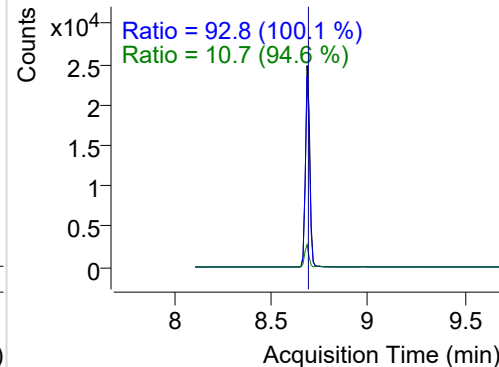


## LSS-D10-Fluorene

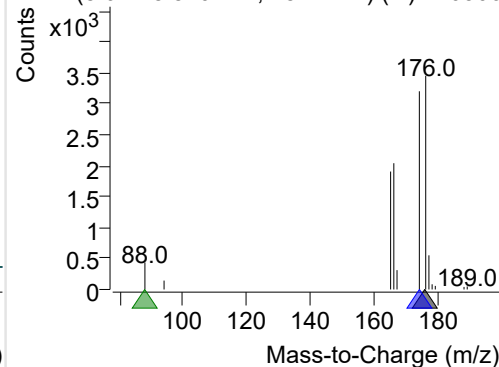
+ Selected Ion (176.0) 220506-PAHs-028.D



176.0, 174.0, 88.0

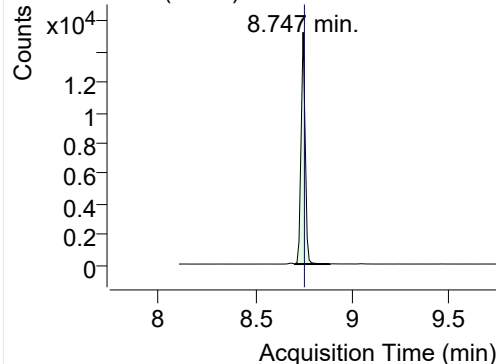


+ SIM (8.642-8.820 min, 18 scans) (\*\*) 220506

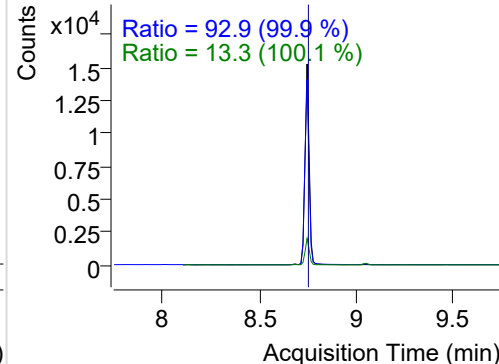


## Fluorene

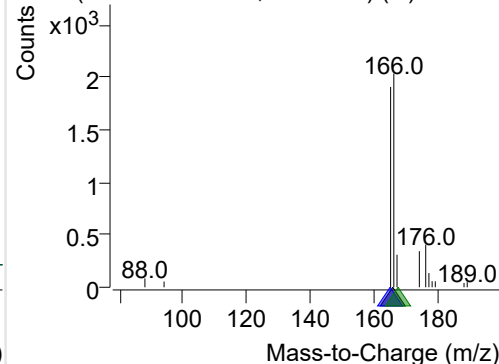
+ Selected Ion (166.0) 220506-PAHs-028.D



166.0, 165.0, 167.0

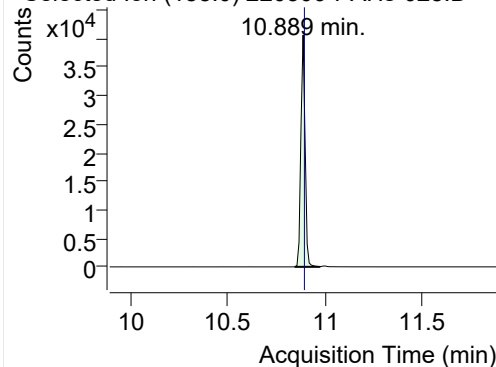


+ SIM (8.705-8.883 min, 18 scans) (\*\*) 220506

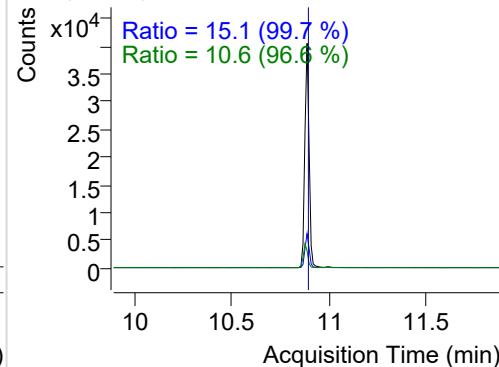


## IS-D10-Phenanthrene

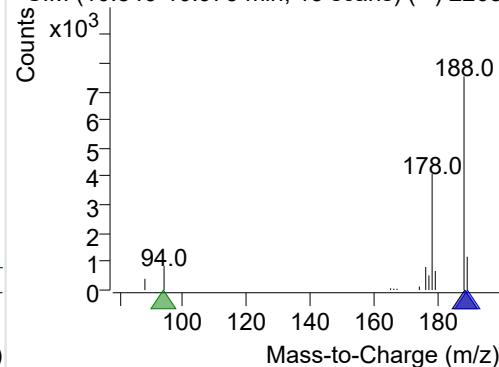
+ Selected Ion (188.0) 220506-PAHs-028.D



188.0, 189.0, 94.0

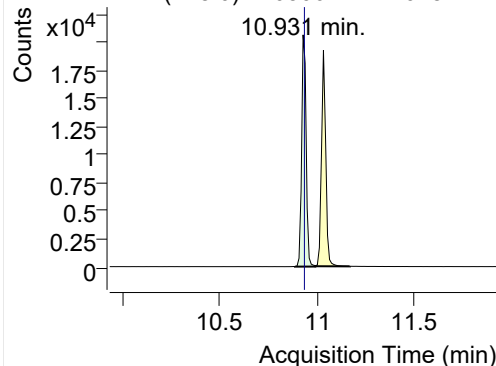


+ SIM (10.846-10.973 min, 13 scans) (\*\*) 2205

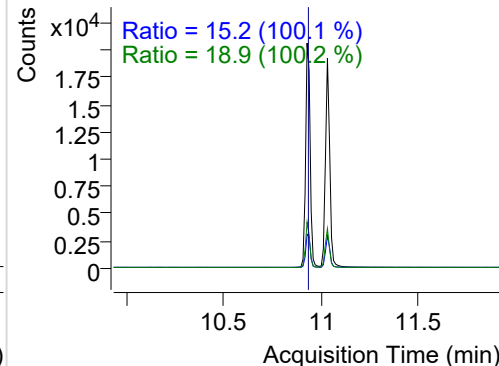


## Phenanthrene

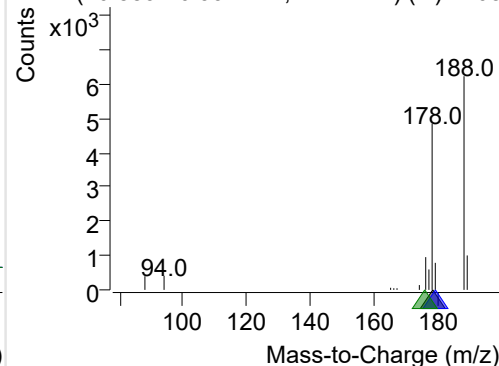
+ Selected Ion (178.0) 220506-PAHs-028.D



178.0, 179.0, 176.0

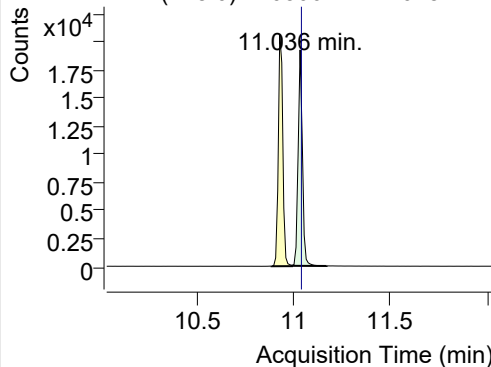


+ SIM (10.889-10.994 min, 11 scans) (\*\*) 2205

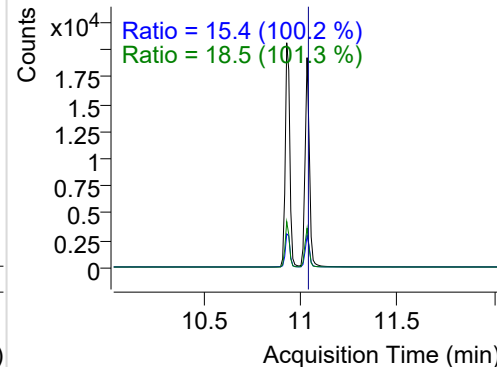


**Anthracene**

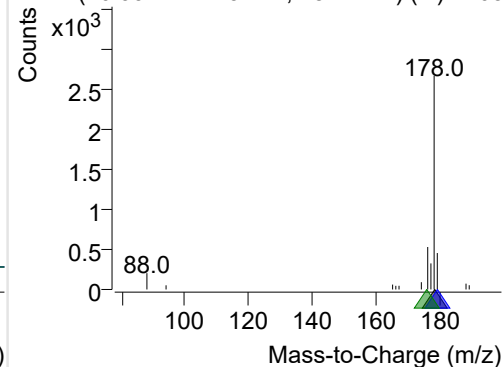
+ Selected Ion (178.0) 220506-PAHs-028.D



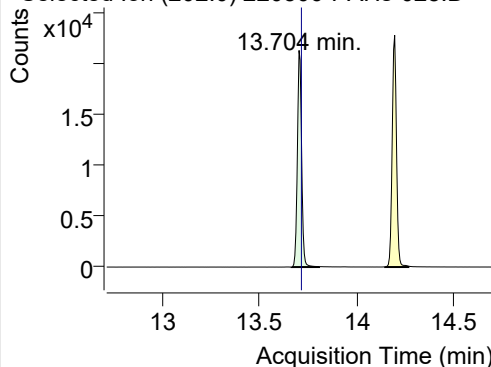
178.0, 179.0, 176.0



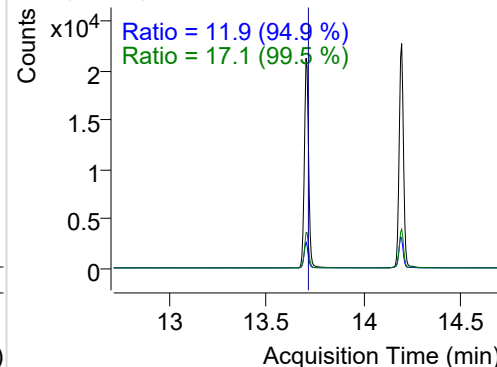
+ SIM (10.994-11.173 min, 18 scans) (\*\*) 2205

**Fluoranthene**

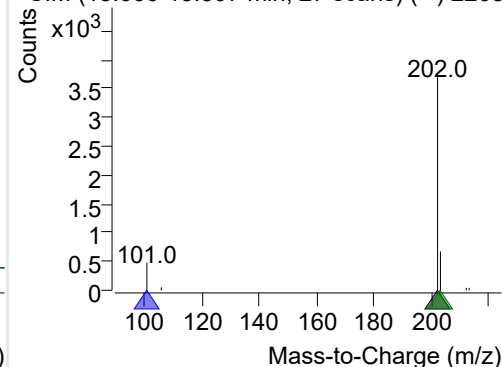
+ Selected Ion (202.0) 220506-PAHs-028.D



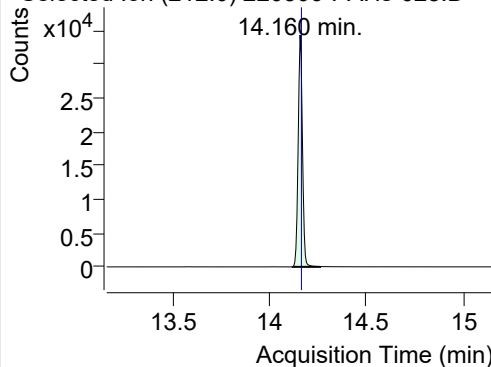
202.0, 101.0, 203.0



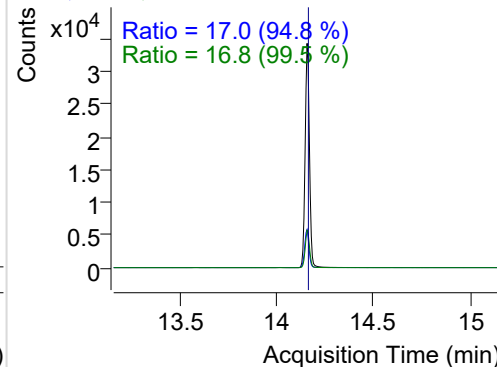
+ SIM (13.666-13.807 min, 27 scans) (\*\*) 2205

**LSS-D10-Pyrene**

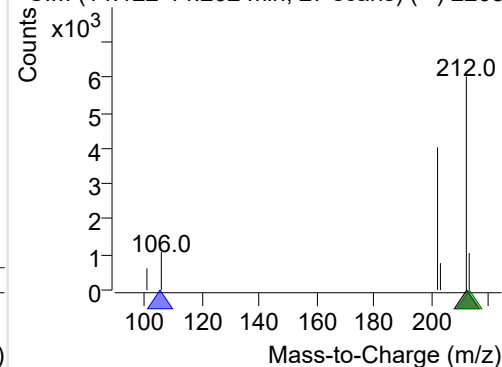
+ Selected Ion (212.0) 220506-PAHs-028.D



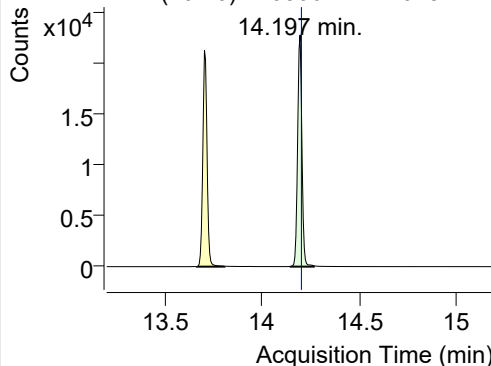
212.0, 106.0, 213.0



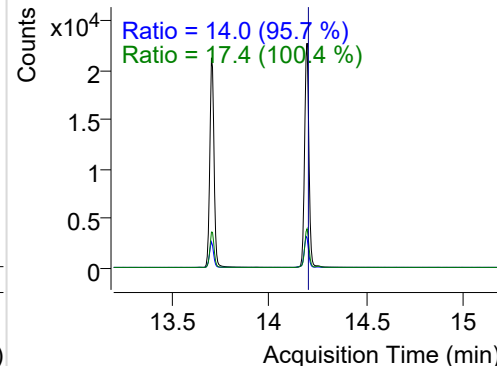
+ SIM (14.122-14.262 min, 27 scans) (\*\*) 2205

**Pyrene**

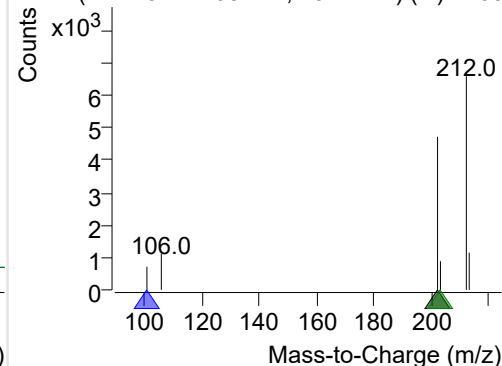
+ Selected Ion (202.0) 220506-PAHs-028.D



202.0, 101.0, 203.0

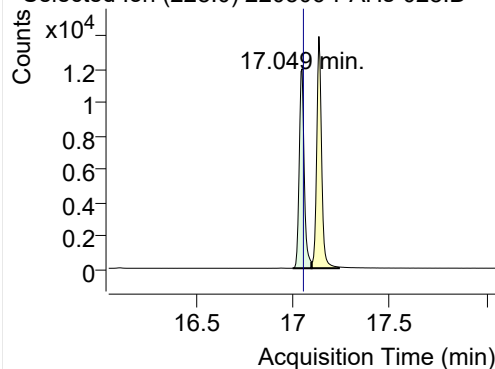


+ SIM (14.149-14.268 min, 23 scans) (\*\*) 2205

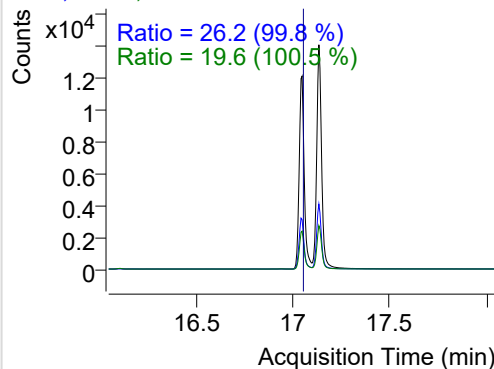


**Benz(a)anthracene**

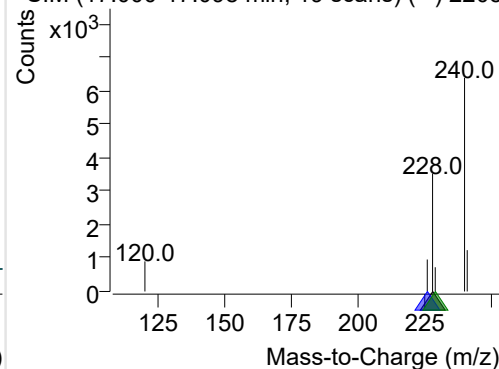
+ Selected Ion (228.0) 220506-PAHs-028.D



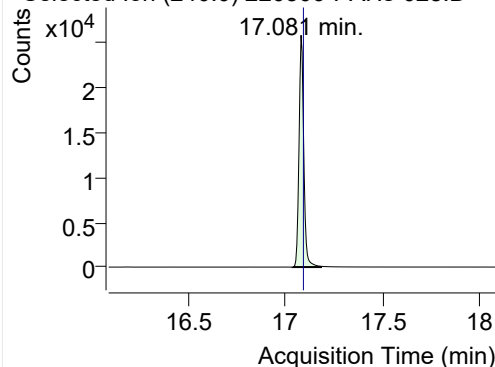
228.0, 226.0, 229.0



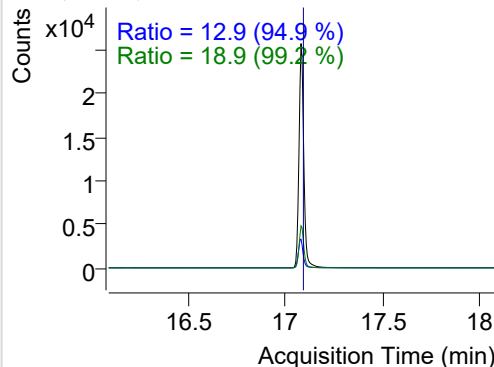
+ SIM (17.000-17.098 min, 19 scans) (\*\*) 2205

**IS-D12-Chrysene**

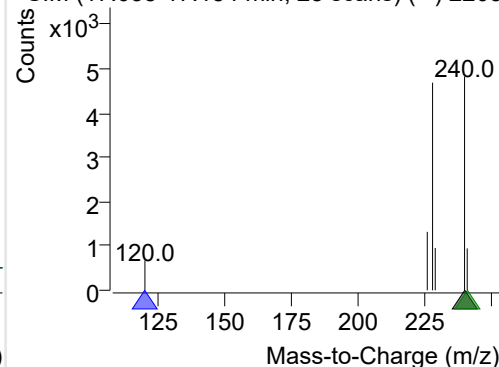
+ Selected Ion (240.0) 220506-PAHs-028.D



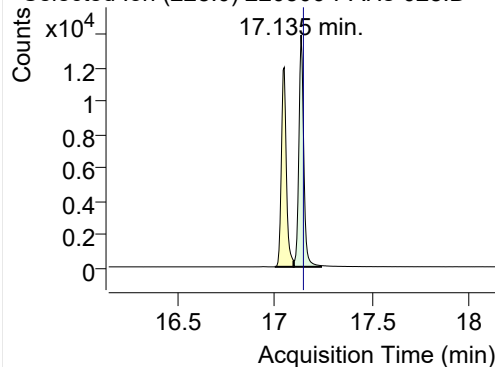
240.0, 120.0, 241.0



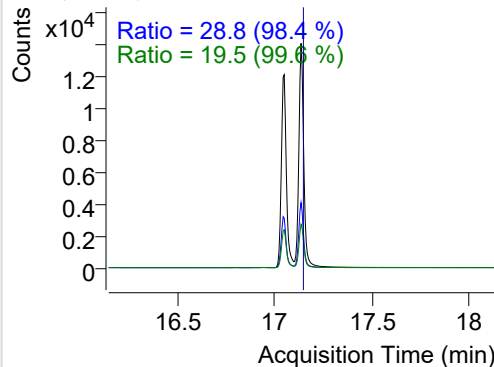
+ SIM (17.038-17.184 min, 28 scans) (\*\*) 2205

**Chrysene**

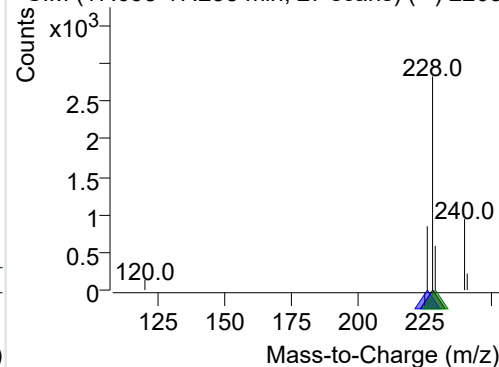
+ Selected Ion (228.0) 220506-PAHs-028.D



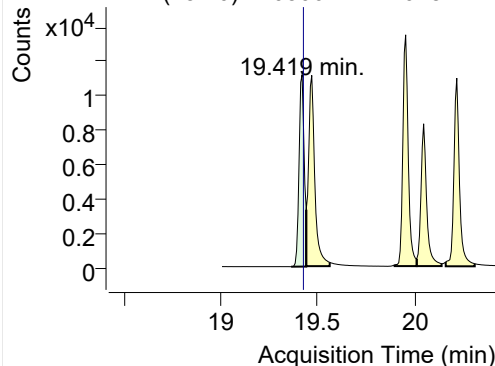
228.0, 226.0, 229.0



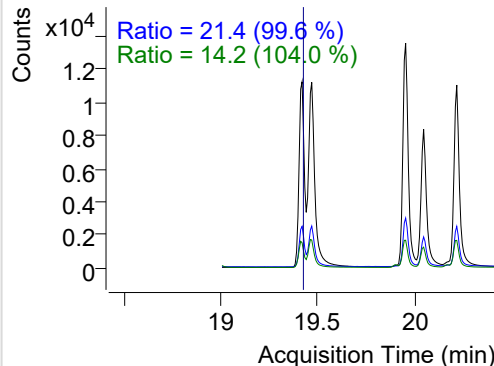
+ SIM (17.098-17.238 min, 27 scans) (\*\*) 2205

**Benzo(b)fluoranthene**

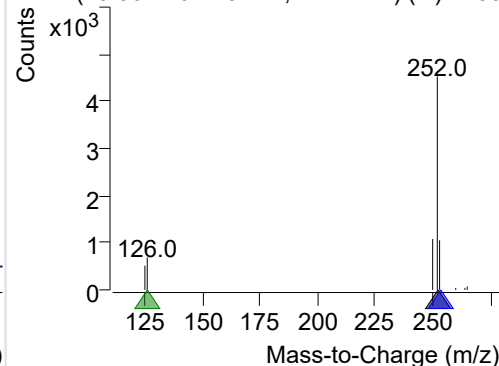
+ Selected Ion (252.0) 220506-PAHs-028.D



252.0, 253.0, 126.0

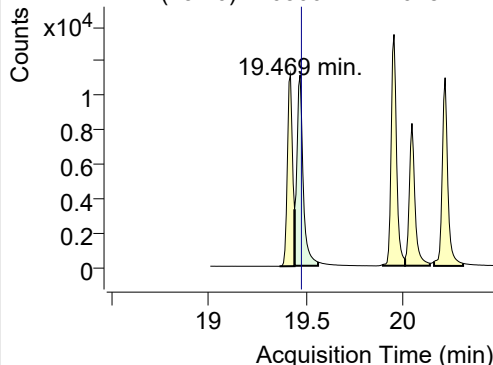


+ SIM (19.362-19.440 min, 11 scans) (\*\*) 2205

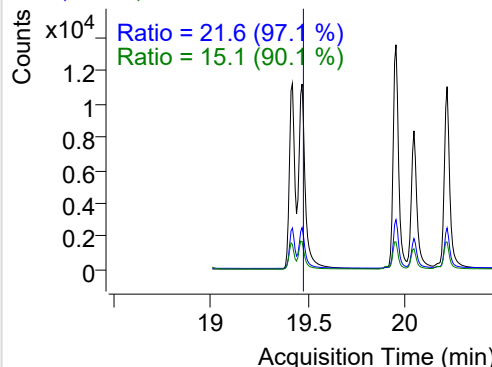


**Benzo(k)fluoranthene**

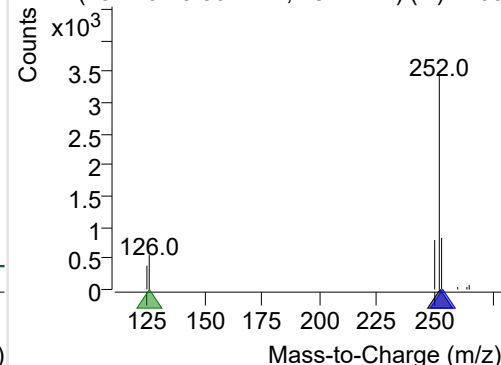
+ Selected Ion (252.0) 220506-PAHs-028.D



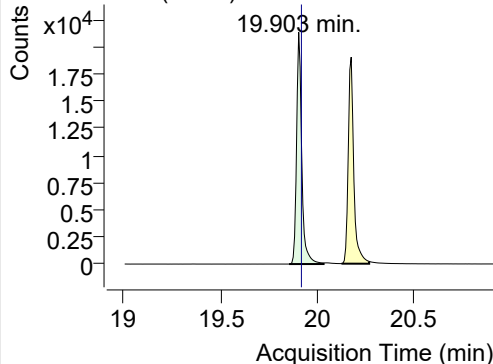
252.0, 253.0, 126.0



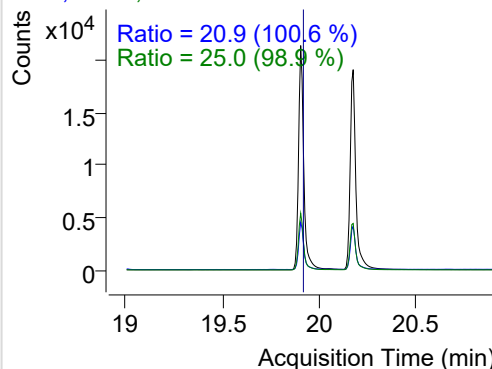
+ SIM (19.440-19.561 min, 18 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

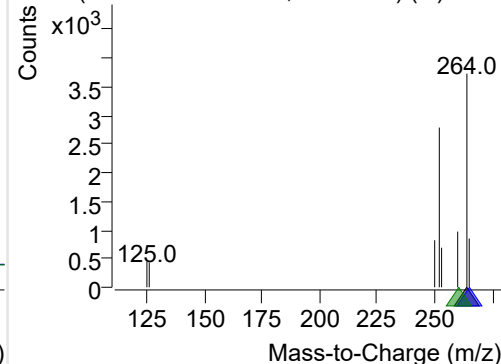
+ Selected Ion (264.0) 220506-PAHs-028.D



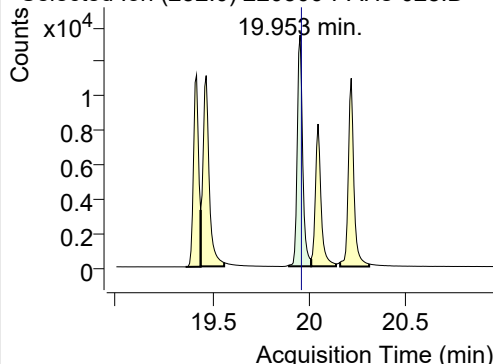
264.0, 265.0, 260.0



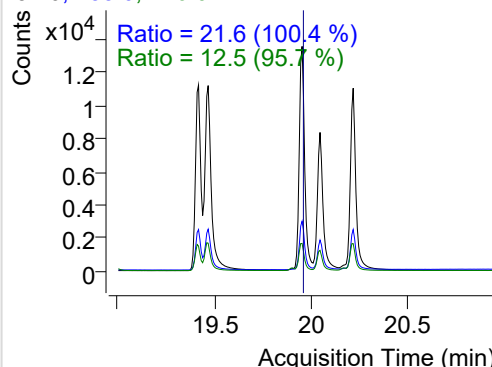
+ SIM (19.853-20.031 min, 25 scans) (\*\*) 2205

**Benzo(e)pyrene**

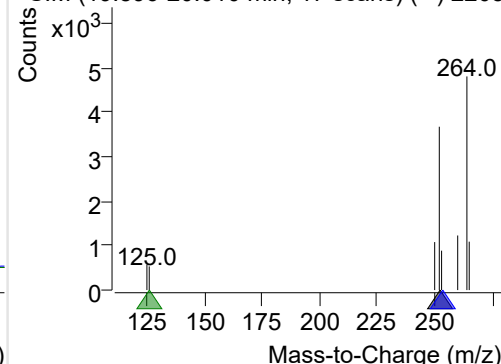
+ Selected Ion (252.0) 220506-PAHs-028.D



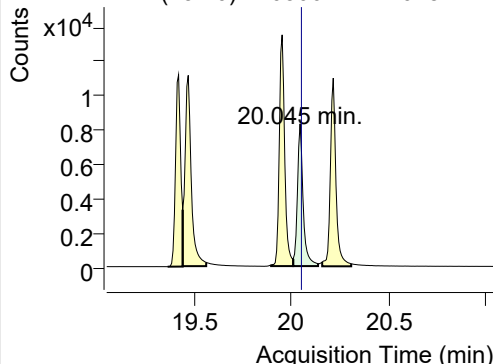
252.0, 253.0, 126.0



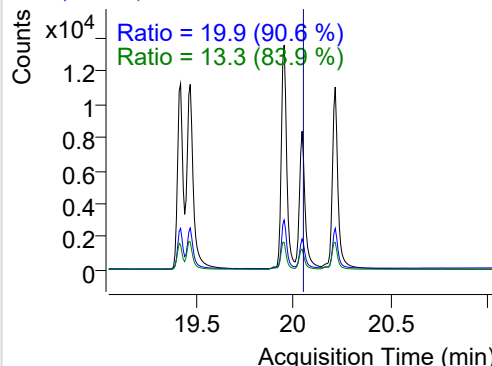
+ SIM (19.896-20.010 min, 17 scans) (\*\*) 2205

**Benzo(a)pyrene**

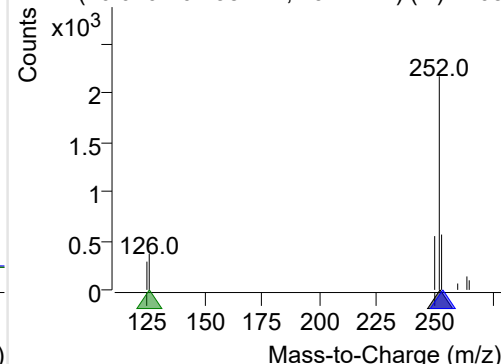
+ Selected Ion (252.0) 220506-PAHs-028.D



252.0, 253.0, 126.0

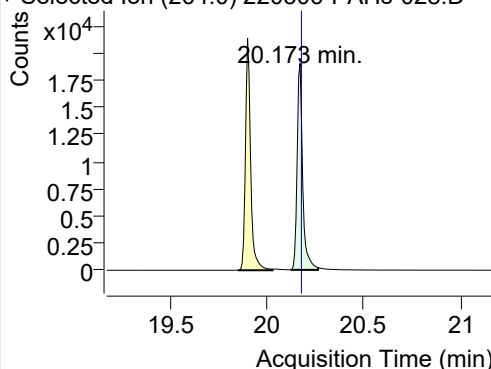


+ SIM (20.010-20.138 min, 19 scans) (\*\*) 2205

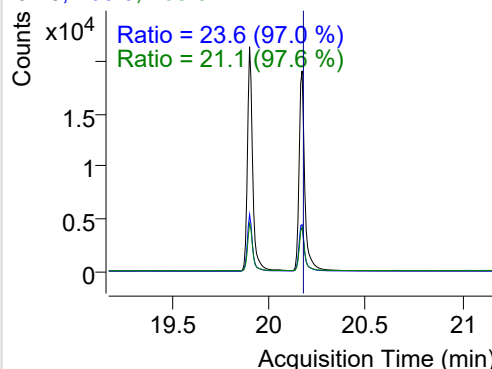


## IS-D12-Perylene

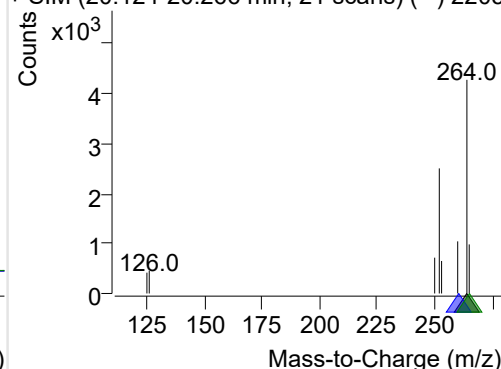
+ Selected Ion (264.0) 220506-PAHs-028.D



264.0, 260.0, 265.0

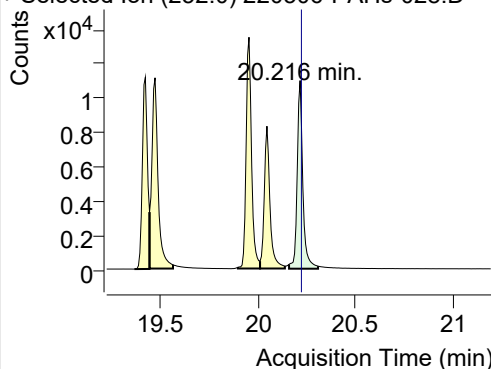


+ SIM (20.124-20.266 min, 21 scans) (\*\*) 2205

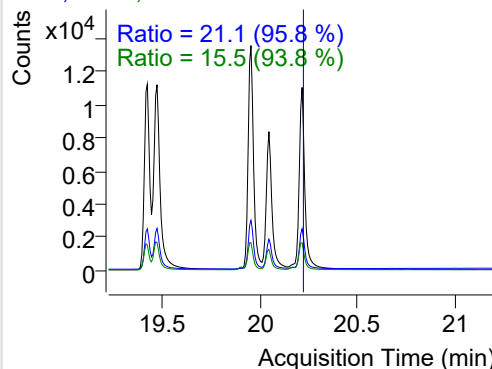


## Perylene

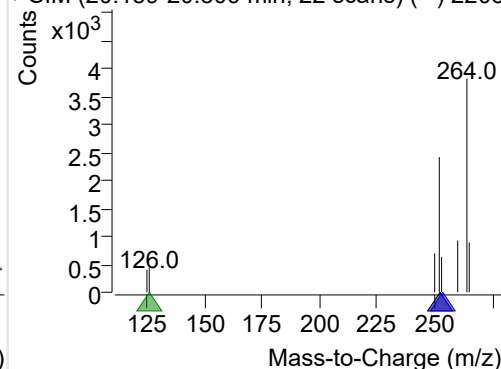
+ Selected Ion (252.0) 220506-PAHs-028.D



252.0, 253.0, 126.0

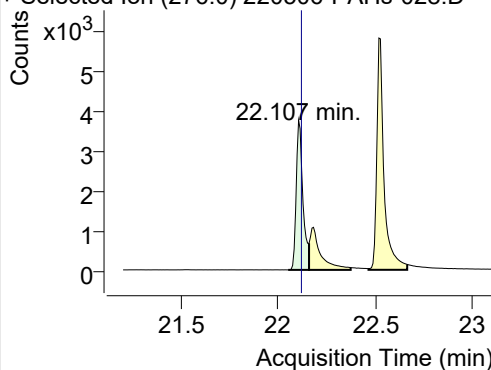


+ SIM (20.159-20.309 min, 22 scans) (\*\*) 2205

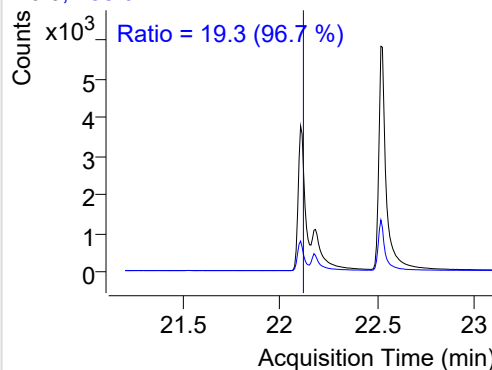


## Indeno(1,2,3-c,d)pyrene

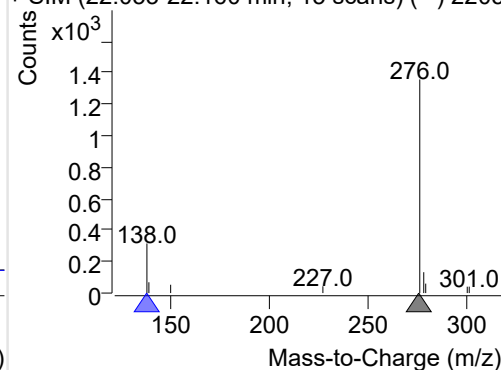
+ Selected Ion (276.0) 220506-PAHs-028.D



276.0, 138.0

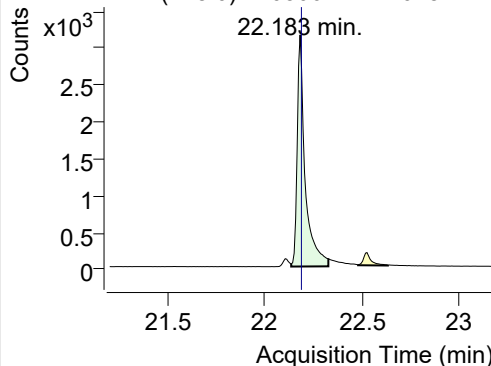


+ SIM (22.053-22.160 min, 15 scans) (\*\*) 2205

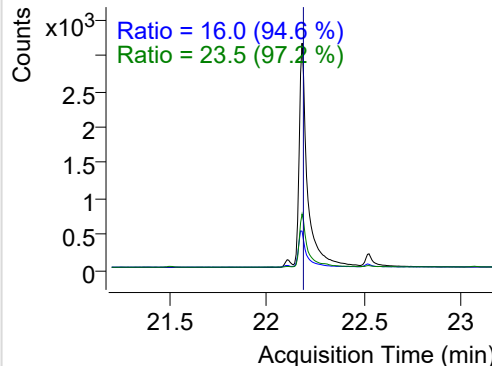


## Dibenz(a,h)anthracene

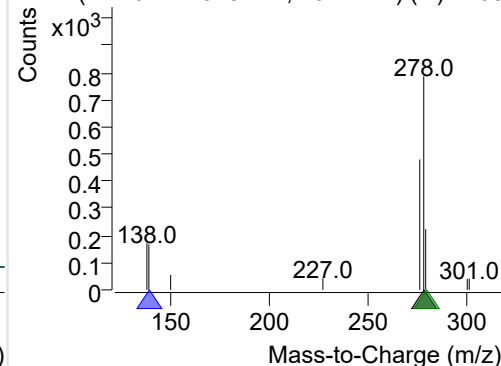
+ Selected Ion (278.0) 220506-PAHs-028.D



278.0, 139.0, 279.0

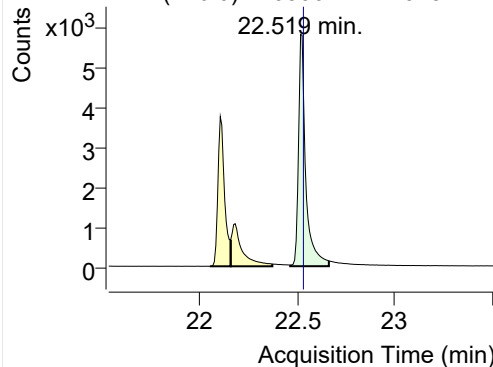


+ SIM (22.137-22.328 min, 26 scans) (\*\*) 2205

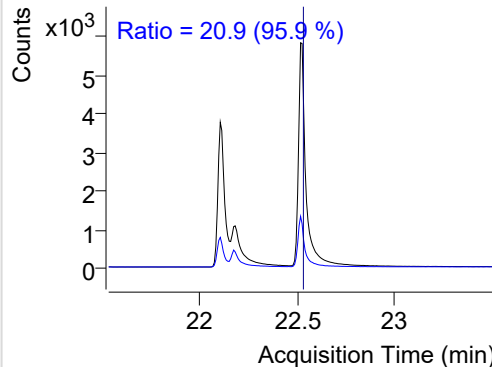


**Benzo(g,h,i)perylene**

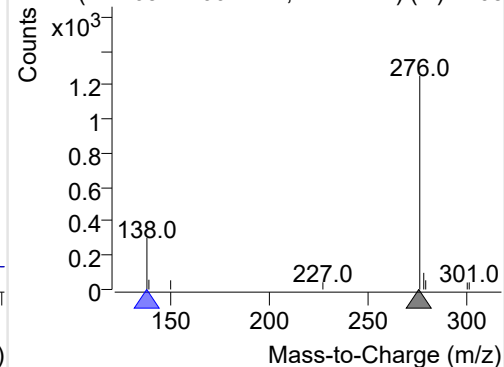
+ Selected Ion (276.0) 220506-PAHs-028.D



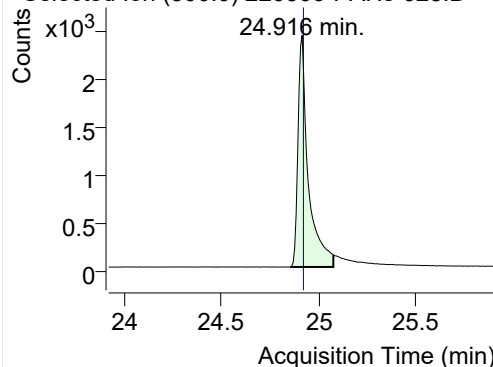
276.0, 138.0



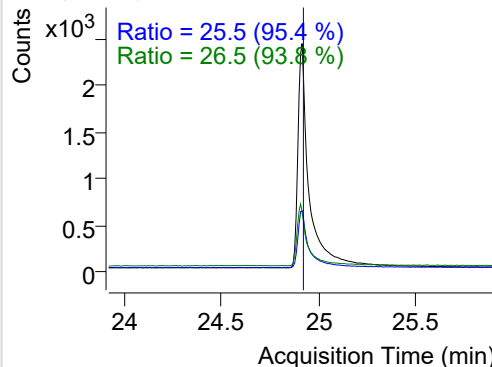
+ SIM (22.465-22.664 min, 27 scans) (\*\*) 2205

**Coronene**

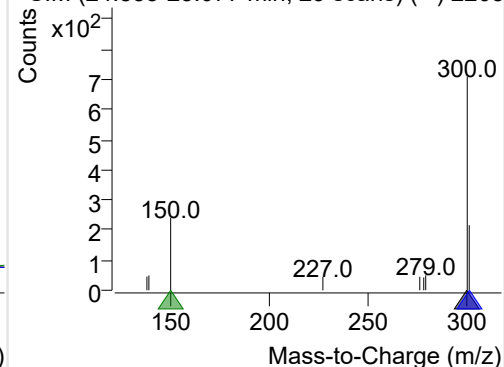
+ Selected Ion (300.0) 220506-PAHs-028.D



300.0, 301.0, 150.0



+ SIM (24.855-25.077 min, 29 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

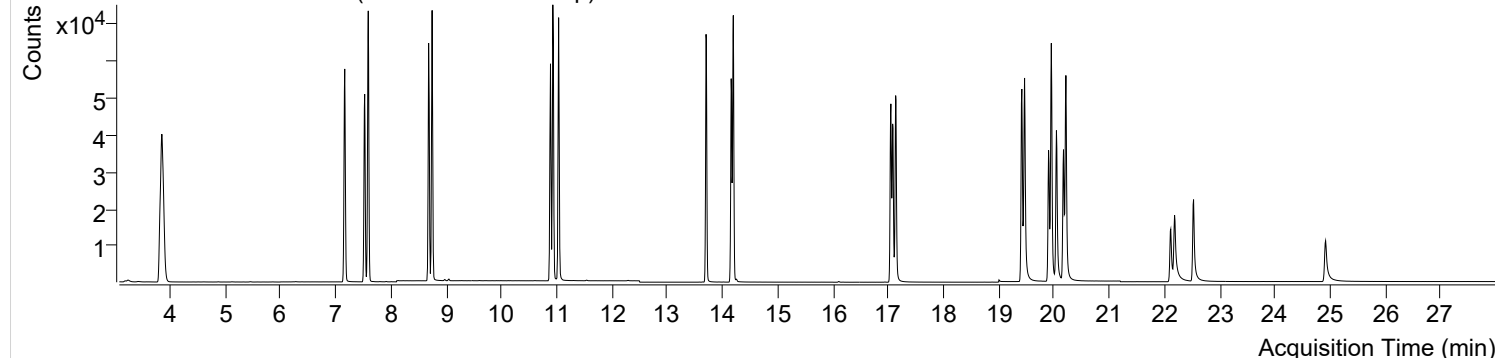


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 1:15:46	Data File	220506-PAHs-029.D
Type	Sample	Name	PAHs-19mix-STD-1p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

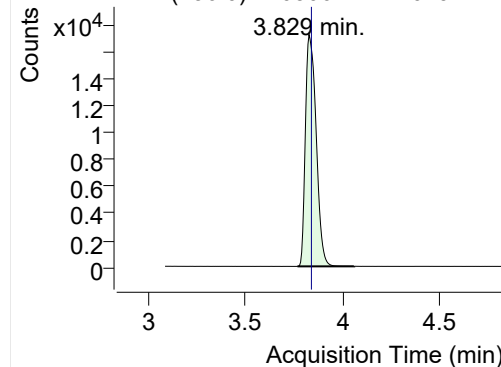
+ TIC SIM 220506-PAHs-029.D (PAHs-19mix-STD-1p)



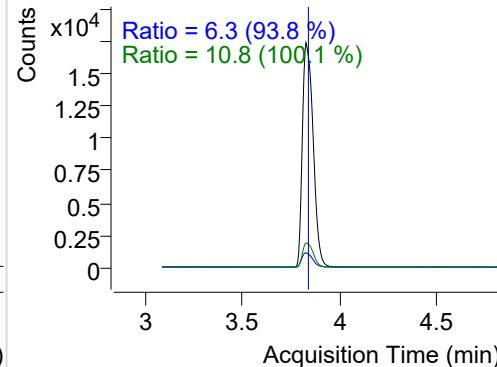
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	66636	17340.62	ND ng/ml	10.8
Naphthalene	3.861	128.0	78335	20288.75	ND ng/ml	13.0
Acenaphthylene	7.165	152.0	73360	43119.88	ND ng/ml	19.7
IS-D10-Acenaphthene	7.526	164.0	39363	24344.41	ND ng/ml	96.3
Acenaphthene	7.591	154.0	42569	26383.90	ND ng/ml	107.1
LSS-D10-Fluorene	8.684	176.0	44410	28699.58	ND ng/ml	93.1
Fluorene	8.747	166.0	52624	35330.03	ND ng/ml	92.7
IS-D10-Phenanthrene	10.889	188.0	70239	47437.27	ND ng/ml	14.9
Phenanthrene	10.931	178.0	76738	47694.16	ND ng/ml	19.0
Anthracene	11.036	178.0	71274	47432.41	ND ng/ml	18.5
Fluoranthene	13.704	202.0	78888	51817.32	ND ng/ml	17.2
LSS-D10-Pyrene	14.159	212.0	61677	40821.27	ND ng/ml	17.0
Pyrene	14.197	202.0	82629	54581.94	ND ng/ml	17.4
Benz(a)anthracene	17.049	228.0	57000	32908.14	ND ng/ml	26.3
IS-D12-Chrysene	17.087	240.0	52437	30293.65	ND ng/ml	18.9
Chrysene	17.135	228.0	60216	33402.78	ND ng/ml	28.8
Benzo(b)fluoranthene	19.419	252.0	54289	31087.53	ND ng/ml	21.5
Benzo(k)fluoranthene	19.468	252.0	68342	32576.24	ND ng/ml	22.3
SS-D12-Benzo(e)pyrene	19.903	264.0	46864	23924.32	ND ng/ml	25.1
Benzo(e)pyrene	19.953	252.0	64744	35251.48	ND ng/ml	21.7
Benzo(a)pyrene	20.045	252.0	47604	23538.59	ND ng/ml	21.7
IS-D12-Perylene	20.173	264.0	46466	23680.53	ND ng/ml	23.7
Perylene	20.216	252.0	56300	29294.42	ND ng/ml	22.0
Indeno(1,2,3-c,d)pyrene	22.114	276.0	26855	11649.00	ND ng/ml	19.4
Dibenz(a,h)anthracene	22.183	278.0	27467	9385.04	ND ng/ml	23.4
Benzo(g,h,i)perylene	22.526	276.0	42370	17908.00	ND ng/ml	21.4
Coronene	24.916	300.0	26082	7307.52	ND ng/ml	25.8

## IS-D8-Naphthalene

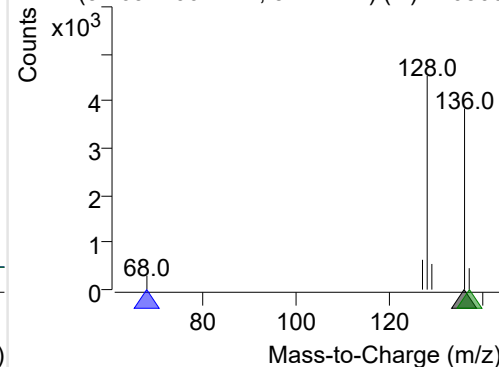
+ Selected Ion (136.0) 220506-PAHs-029.D



136.0, 68.0, 137.0

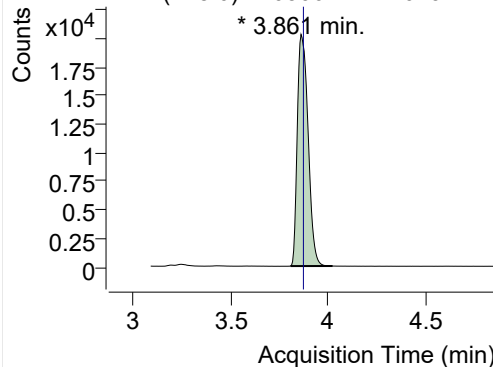


+ SIM (3.769-4.061 min, 54 scans) (\*\*) 220506

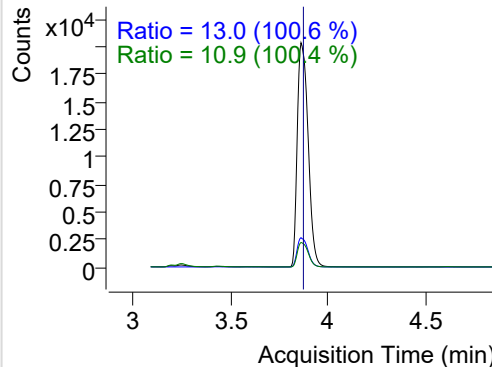


**Naphthalene**

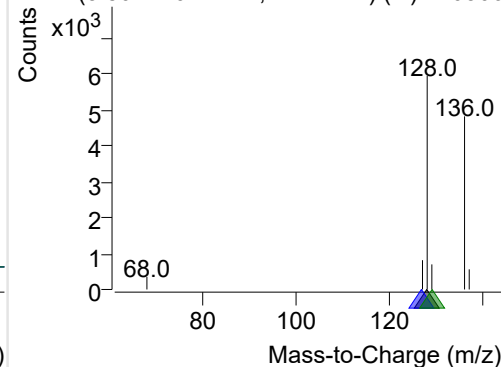
+ Selected Ion (128.0) 220506-PAHs-029.D



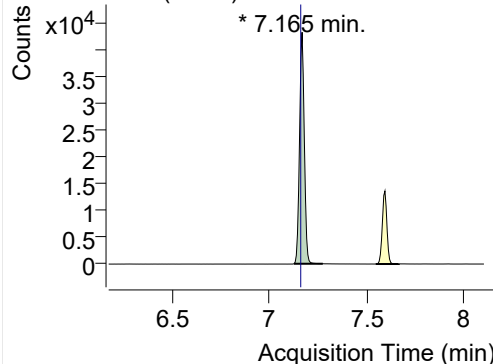
128.0, 127.0, 129.0



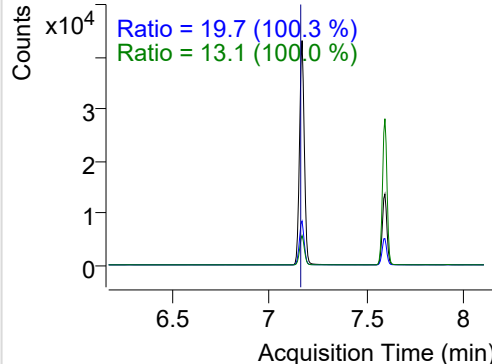
+ SIM (3.807-4.024 min, 41 scans) (\*\*) 220506

**Acenaphthylene**

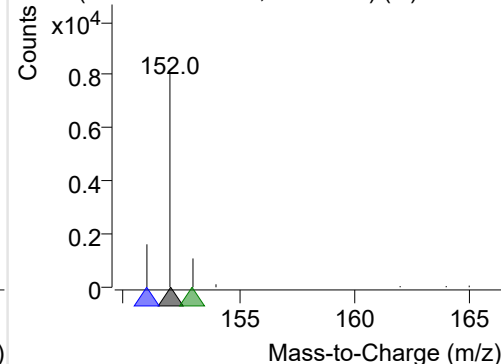
+ Selected Ion (152.0) 220506-PAHs-029.D



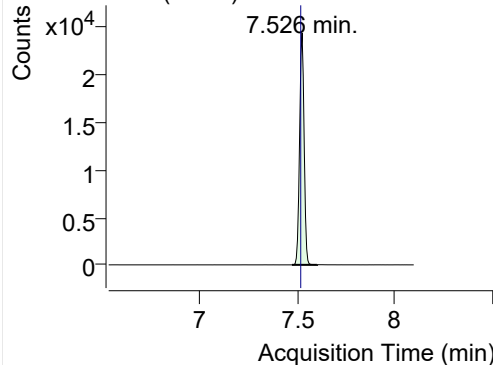
152.0, 151.0, 153.0



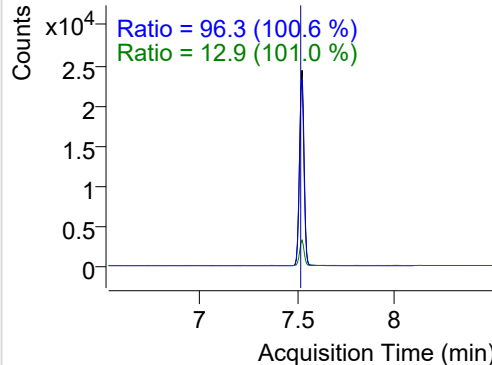
+ SIM (7.124-7.272 min, 26 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

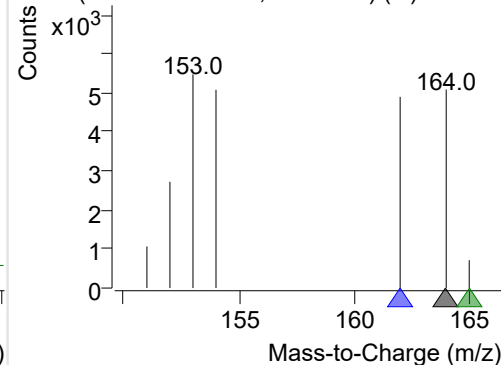
+ Selected Ion (164.0) 220506-PAHs-029.D



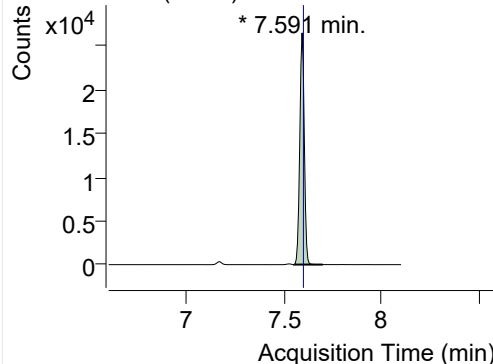
164.0, 162.0, 165.0



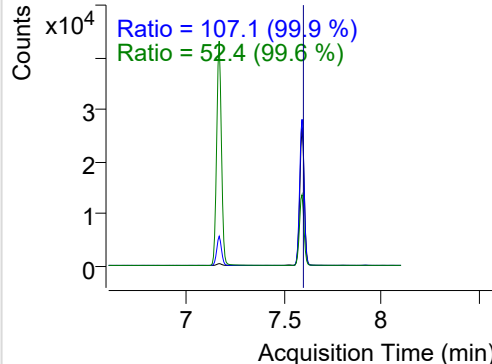
+ SIM (7.474-7.603 min, 22 scans) (\*\*) 220506

**Acenaphthene**

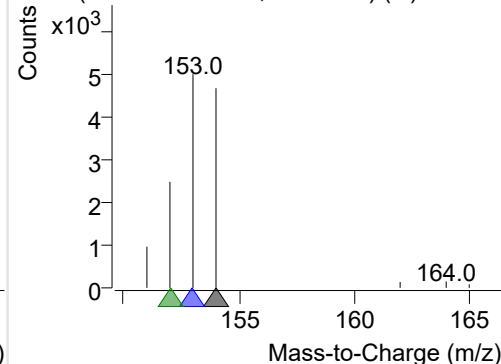
+ Selected Ion (154.0) 220506-PAHs-029.D



154.0, 153.0, 152.0

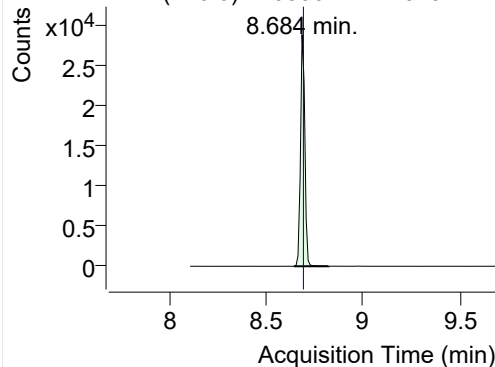


+ SIM (7.550-7.698 min, 26 scans) (\*\*) 220506

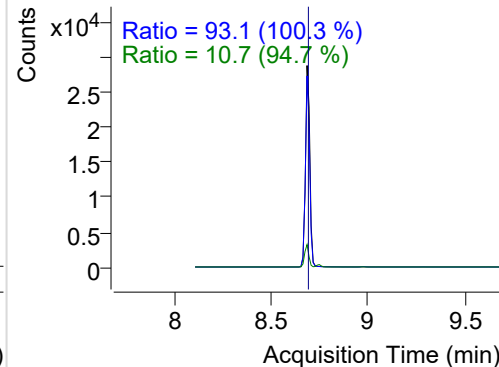


## LSS-D10-Fluorene

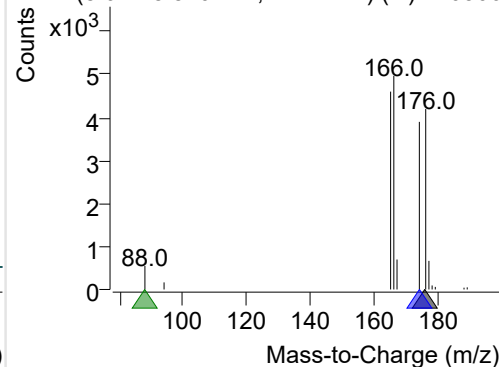
+ Selected Ion (176.0) 220506-PAHs-029.D



176.0, 174.0, 88.0

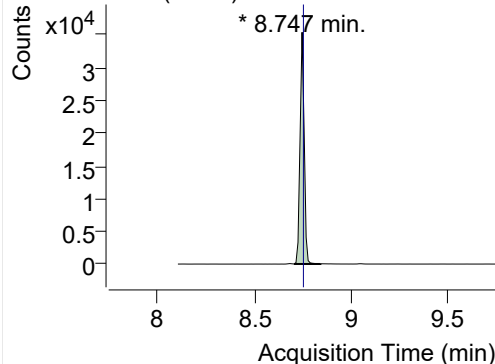


+ SIM (8.642-8.820 min, 17 scans) (\*\*) 220506

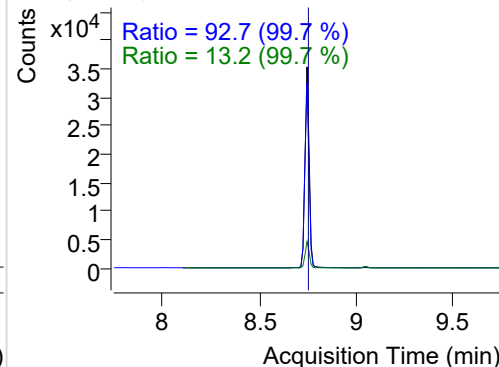


## Fluorene

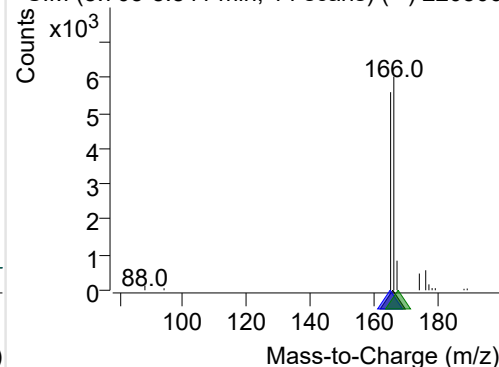
+ Selected Ion (166.0) 220506-PAHs-029.D



166.0, 165.0, 167.0

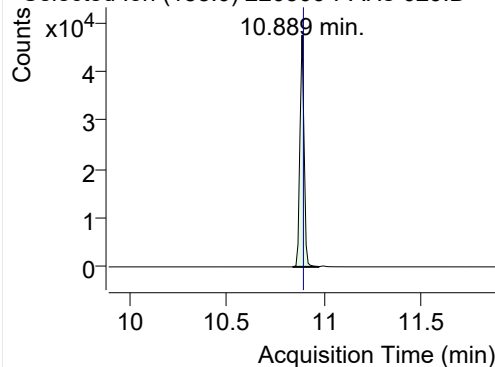


+ SIM (8.705-8.841 min, 14 scans) (\*\*) 220506

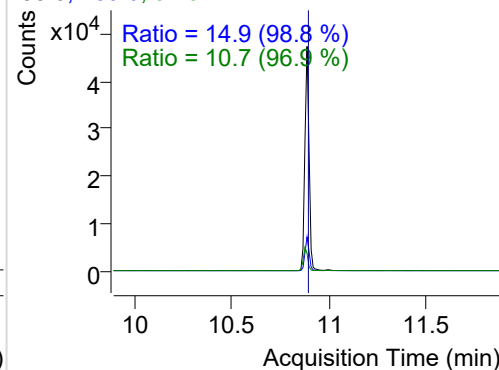


## IS-D10-Phenanthrene

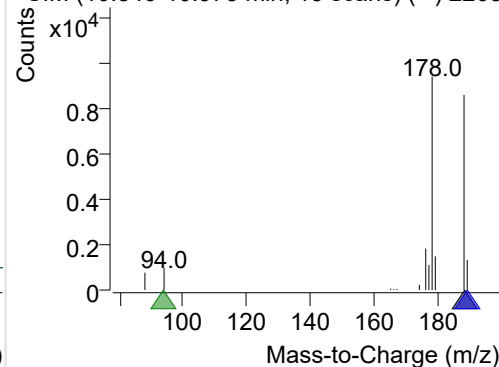
+ Selected Ion (188.0) 220506-PAHs-029.D



188.0, 189.0, 94.0

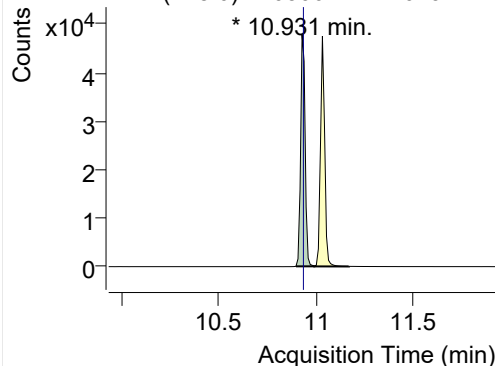


+ SIM (10.840-10.973 min, 13 scans) (\*\*) 2205

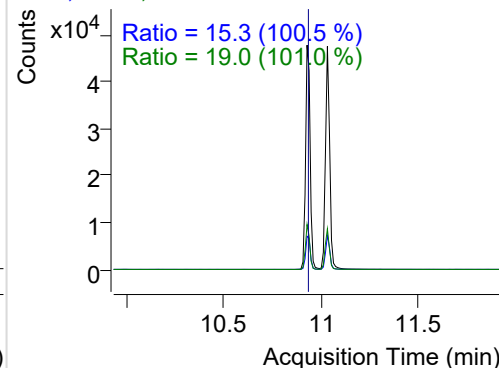


## Phenanthrene

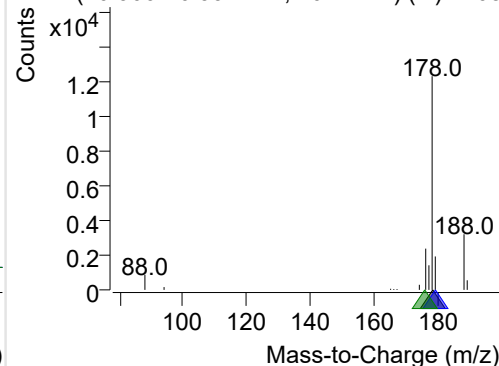
+ Selected Ion (178.0) 220506-PAHs-029.D



178.0, 179.0, 176.0

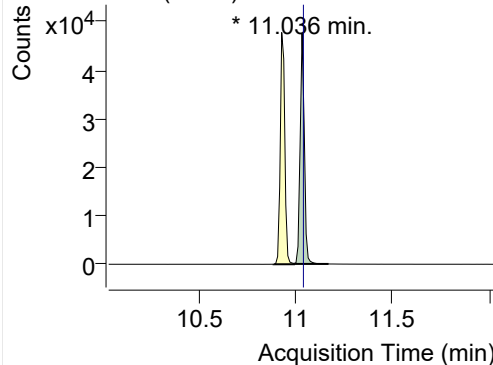


+ SIM (10.900-10.994 min, 10 scans) (\*\*) 2205

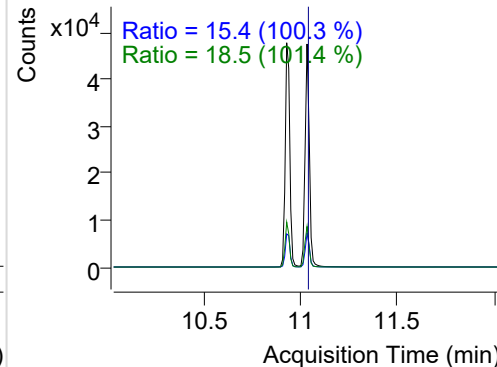


**Anthracene**

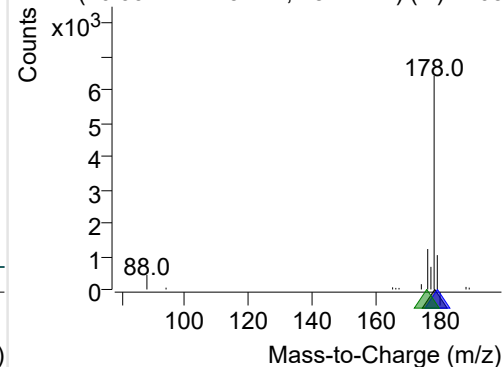
+ Selected Ion (178.0) 220506-PAHs-029.D



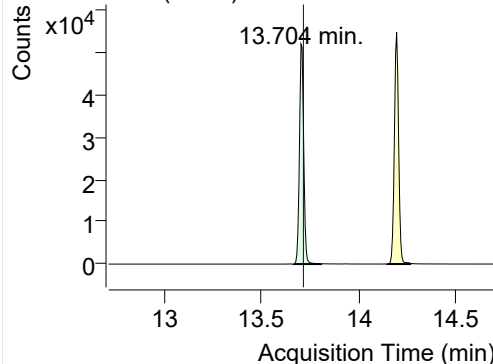
178.0, 179.0, 176.0



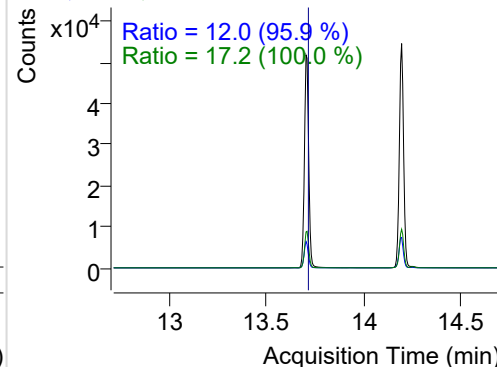
+ SIM (10.994-11.173 min, 18 scans) (\*\*) 2205

**Fluoranthene**

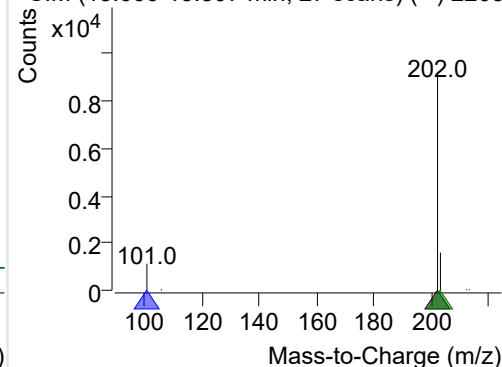
+ Selected Ion (202.0) 220506-PAHs-029.D



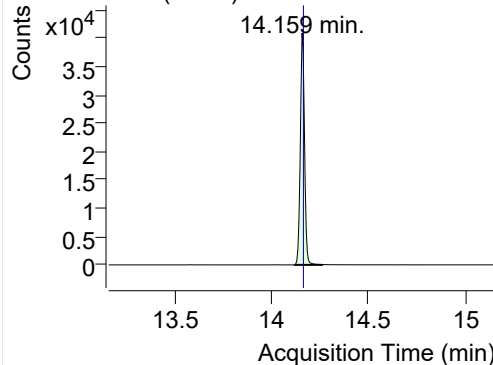
202.0, 101.0, 203.0



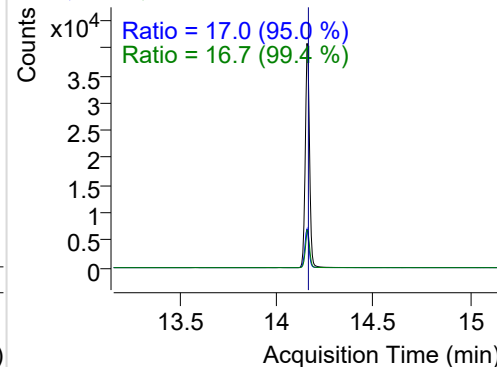
+ SIM (13.666-13.807 min, 27 scans) (\*\*) 2205

**LSS-D10-Pyrene**

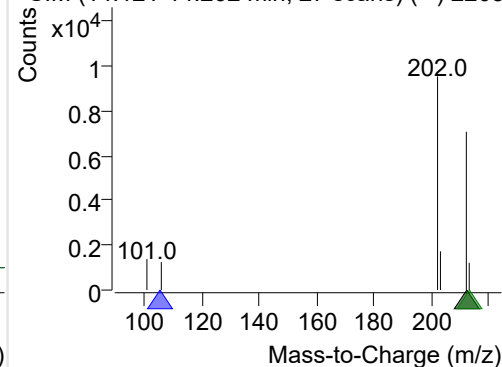
+ Selected Ion (212.0) 220506-PAHs-029.D



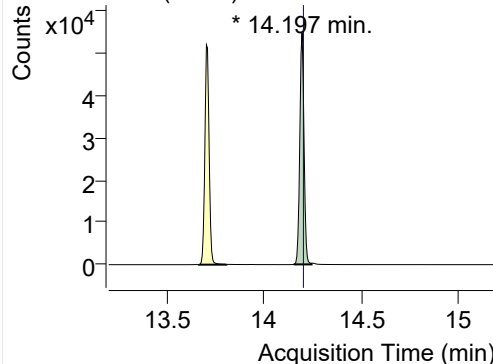
212.0, 106.0, 213.0



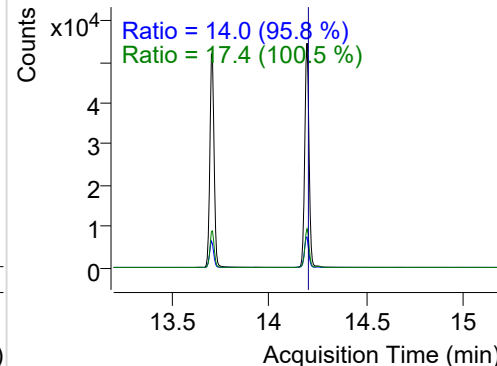
+ SIM (14.121-14.262 min, 27 scans) (\*\*) 2205

**Pyrene**

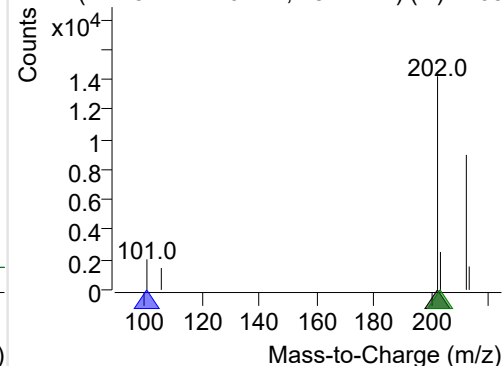
+ Selected Ion (202.0) 220506-PAHs-029.D



202.0, 101.0, 203.0

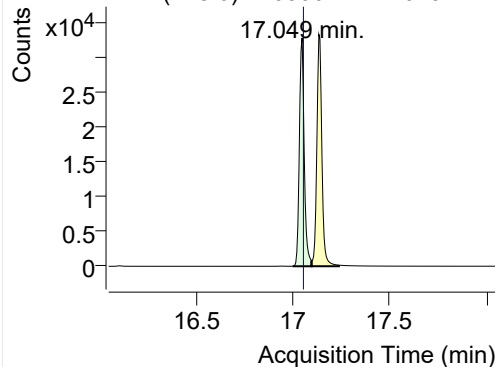


+ SIM (14.154-14.246 min, 18 scans) (\*\*) 2205

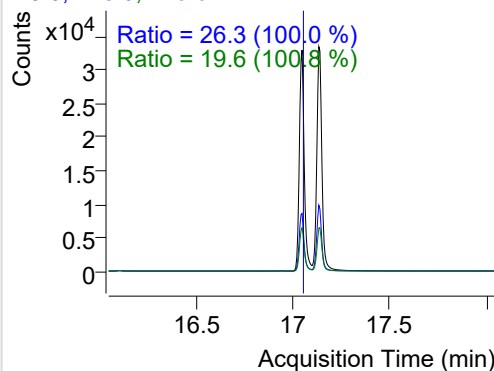


**Benz(a)anthracene**

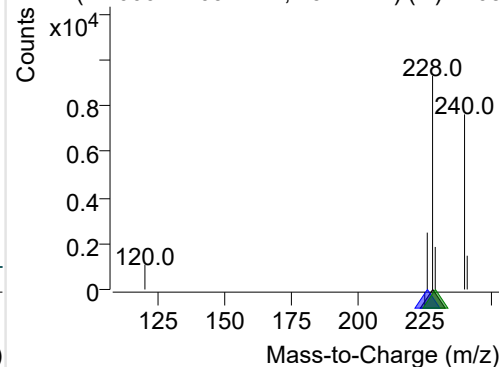
+ Selected Ion (228.0) 220506-PAHs-029.D



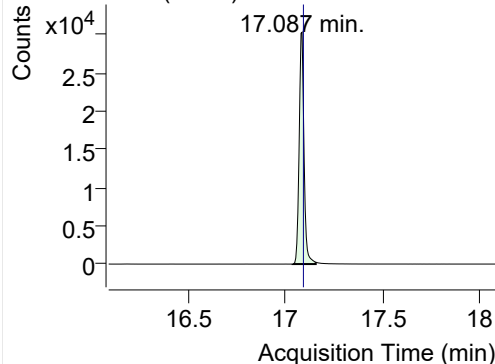
228.0, 226.0, 229.0



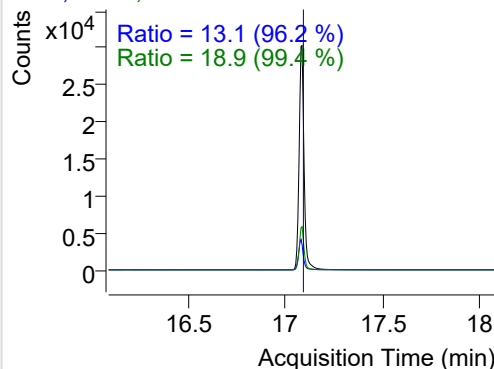
+ SIM (17.000-17.097 min, 19 scans) (\*\*) 2205

**IS-D12-Chrysene**

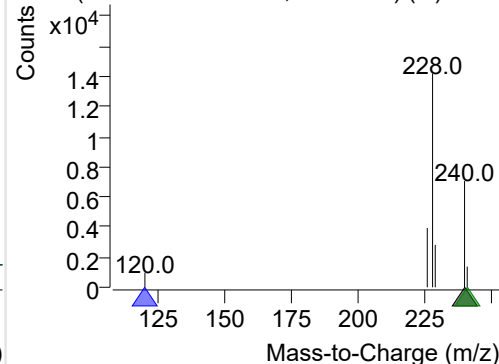
+ Selected Ion (240.0) 220506-PAHs-029.D



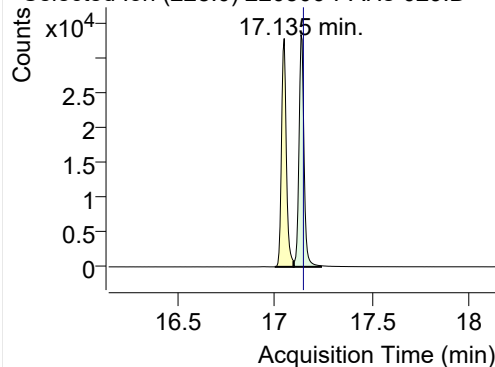
240.0, 120.0, 241.0



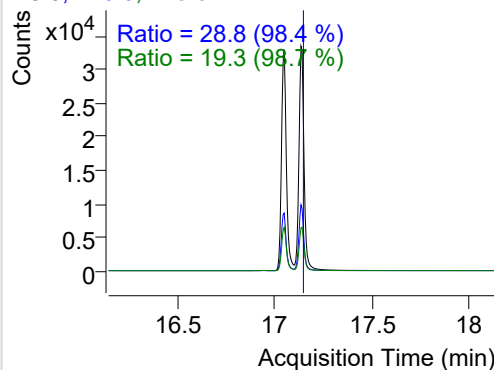
+ SIM (17.038-17.157 min, 23 scans) (\*\*) 2205

**Chrysene**

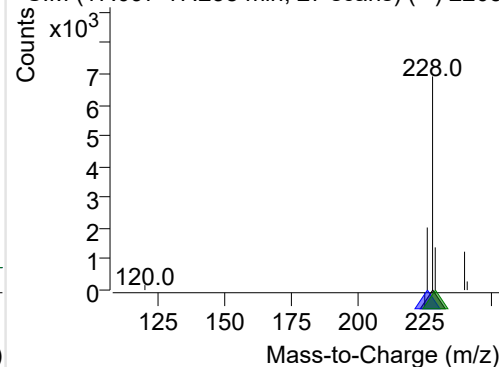
+ Selected Ion (228.0) 220506-PAHs-029.D



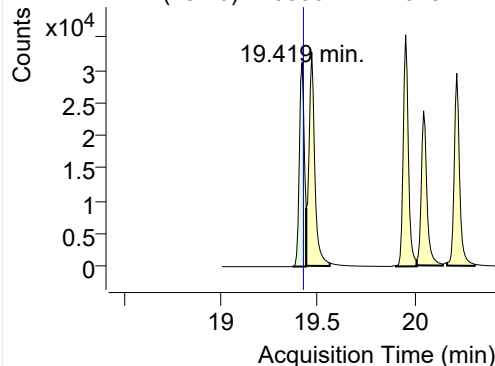
228.0, 226.0, 229.0



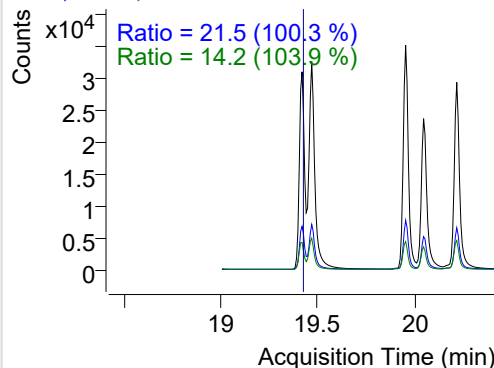
+ SIM (17.097-17.238 min, 27 scans) (\*\*) 2205

**Benzo(b)fluoranthene**

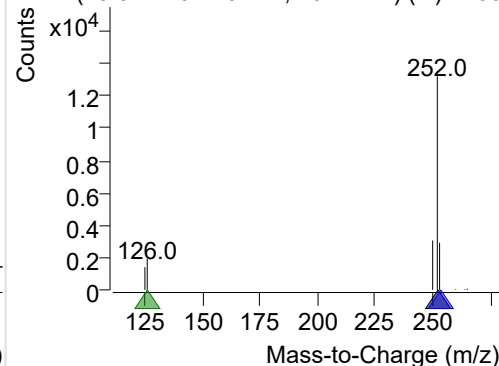
+ Selected Ion (252.0) 220506-PAHs-029.D



252.0, 253.0, 126.0

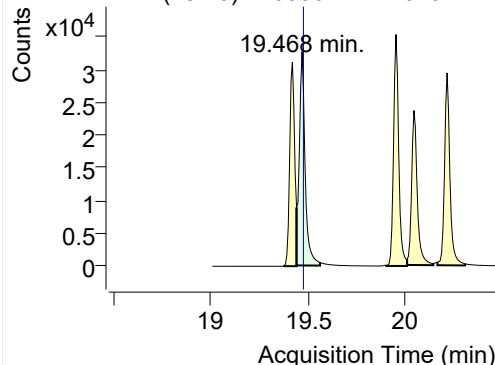


+ SIM (19.371-19.440 min, 10 scans) (\*\*) 2205

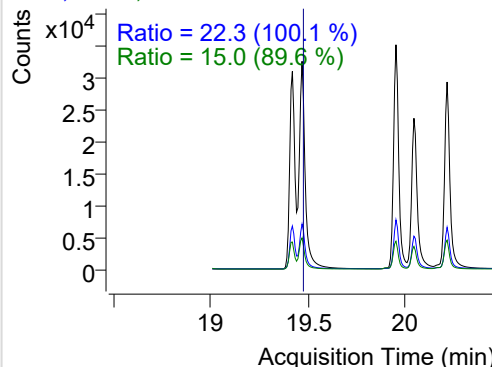


**Benzo(k)fluoranthene**

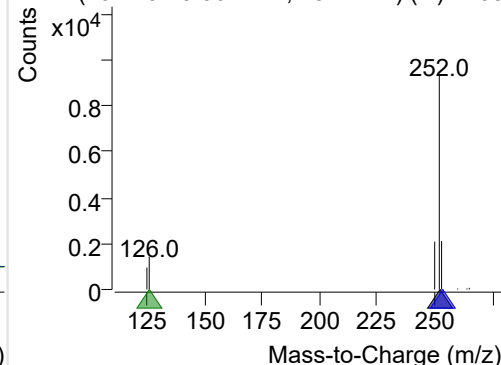
+ Selected Ion (252.0) 220506-PAHs-029.D



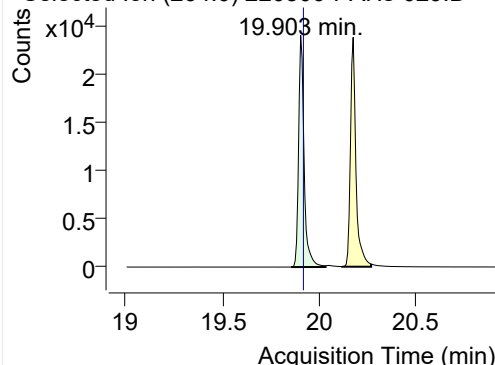
252.0, 253.0, 126.0



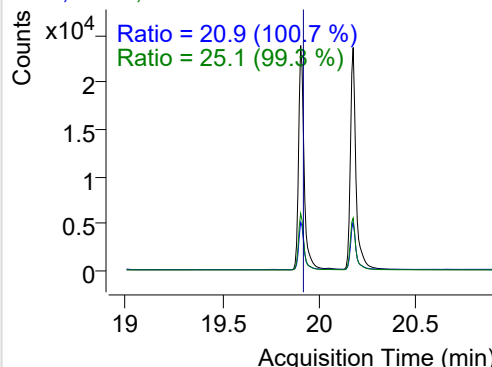
+ SIM (19.440-19.561 min, 18 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

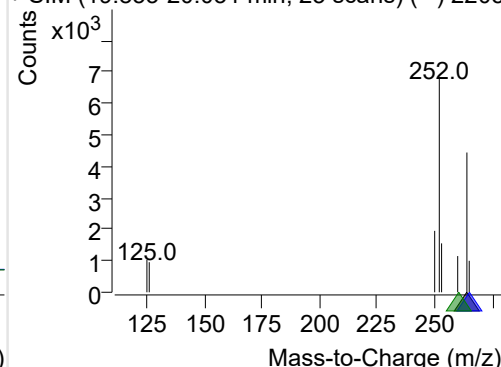
+ Selected Ion (264.0) 220506-PAHs-029.D



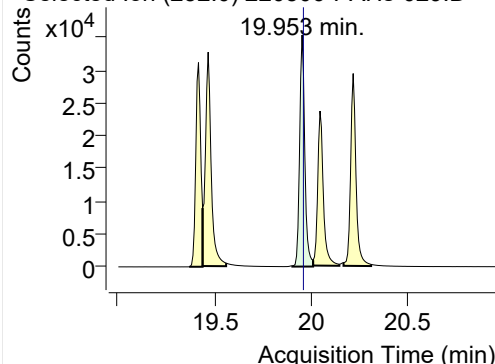
264.0, 265.0, 260.0



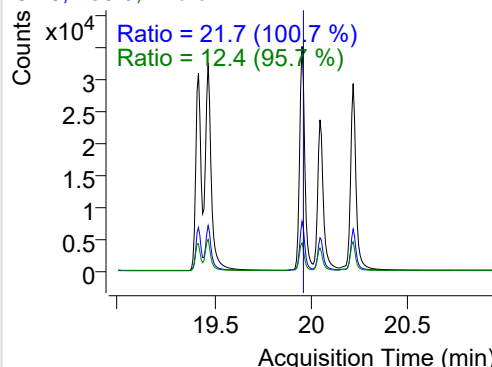
+ SIM (19.853-20.031 min, 25 scans) (\*\*) 2205

**Benzo(e)pyrene**

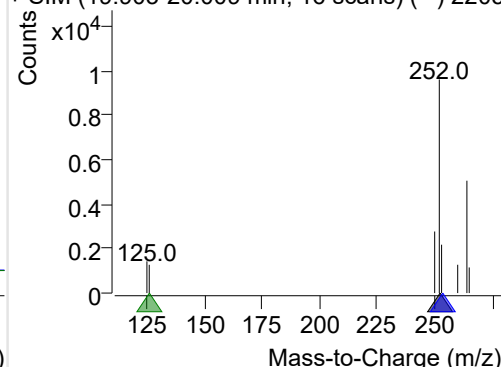
+ Selected Ion (252.0) 220506-PAHs-029.D



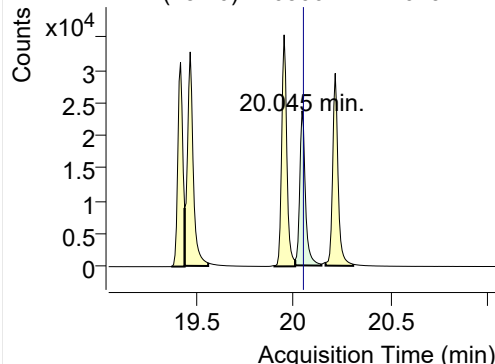
252.0, 253.0, 126.0



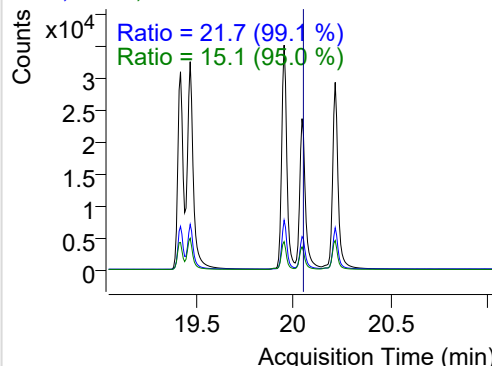
+ SIM (19.903-20.009 min, 16 scans) (\*\*) 2205

**Benzo(a)pyrene**

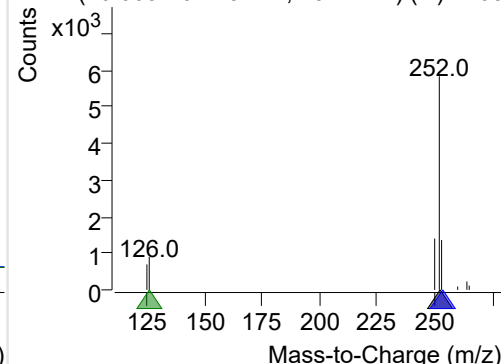
+ Selected Ion (252.0) 220506-PAHs-029.D



252.0, 253.0, 126.0

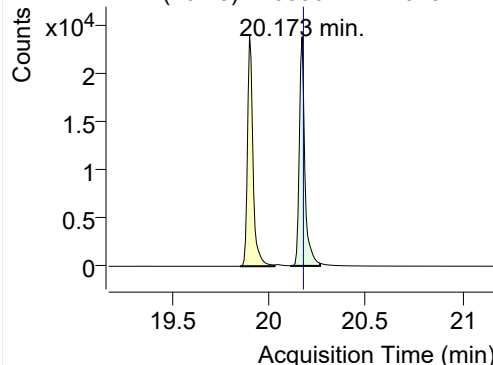


+ SIM (20.009-20.145 min, 20 scans) (\*\*) 2205

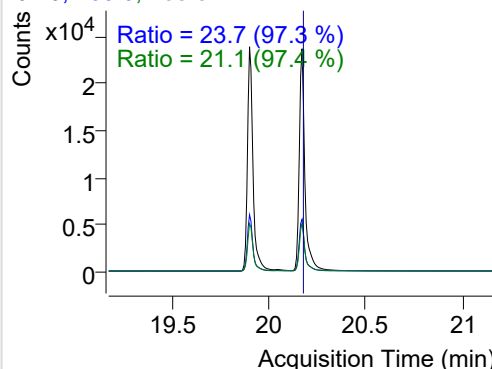


## IS-D12-Perylene

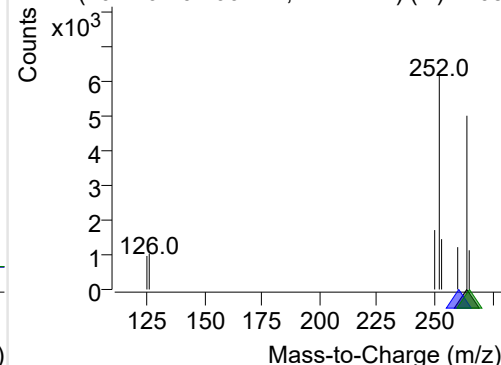
+ Selected Ion (264.0) 220506-PAHs-029.D



264.0, 260.0, 265.0

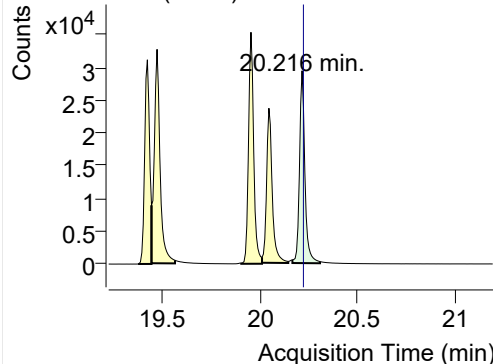


+ SIM (20.116-20.266 min, 22 scans) (\*\*) 2205

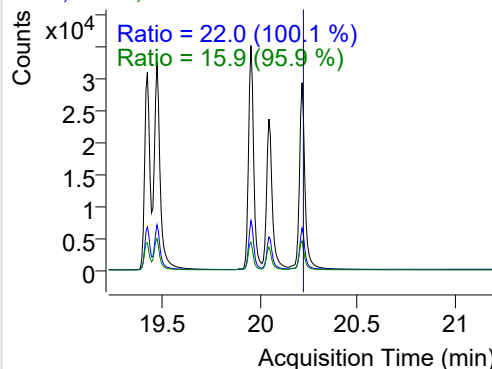


## Perylene

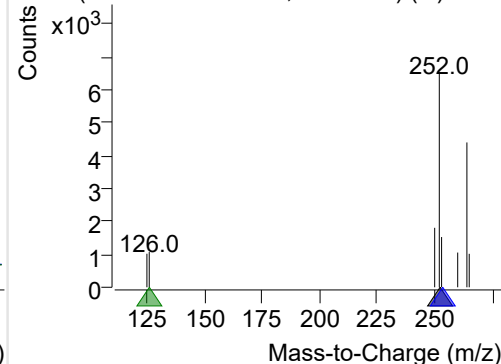
+ Selected Ion (252.0) 220506-PAHs-029.D



252.0, 253.0, 126.0

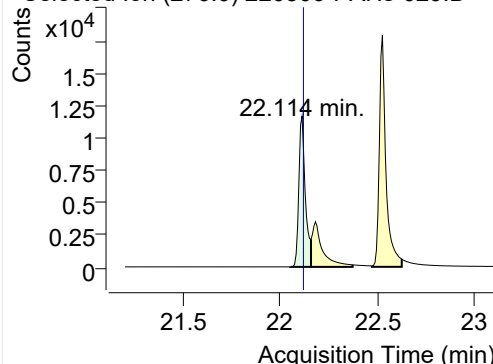


+ SIM (20.166-20.308 min, 21 scans) (\*\*) 2205

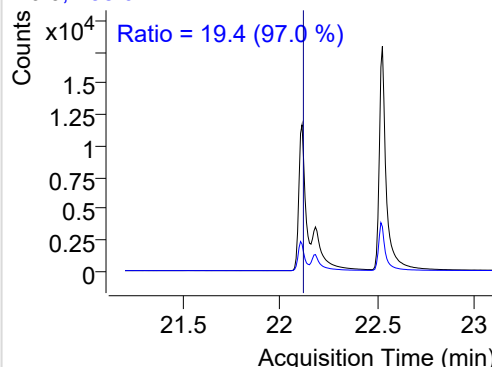


## Indeno(1,2,3-c,d)pyrene

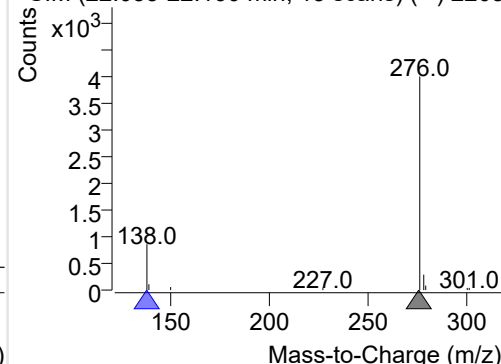
+ Selected Ion (276.0) 220506-PAHs-029.D



276.0, 138.0

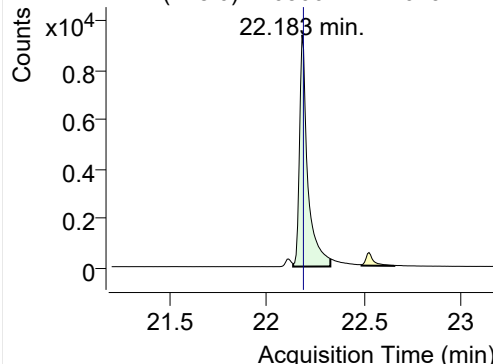


+ SIM (22.053-22.160 min, 15 scans) (\*\*) 2205

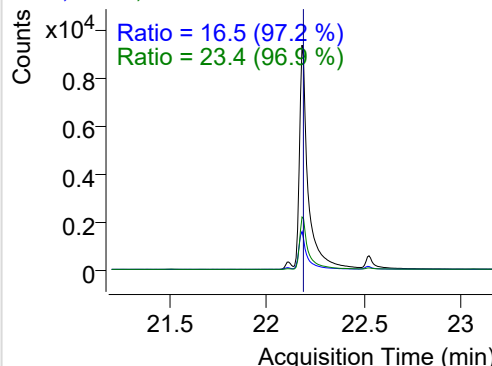


## Dibenz(a,h)anthracene

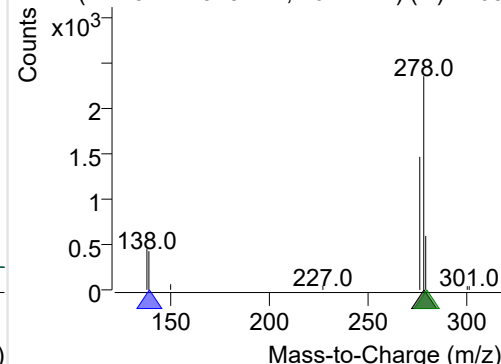
+ Selected Ion (278.0) 220506-PAHs-029.D



278.0, 139.0, 279.0

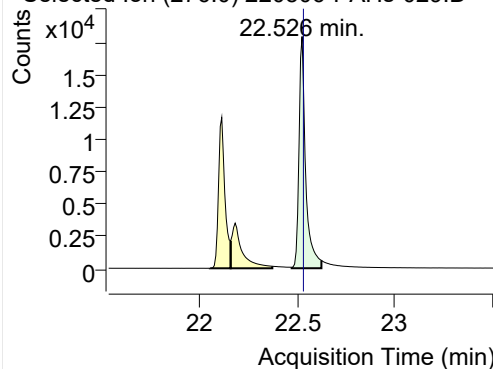


+ SIM (22.137-22.328 min, 26 scans) (\*\*) 2205

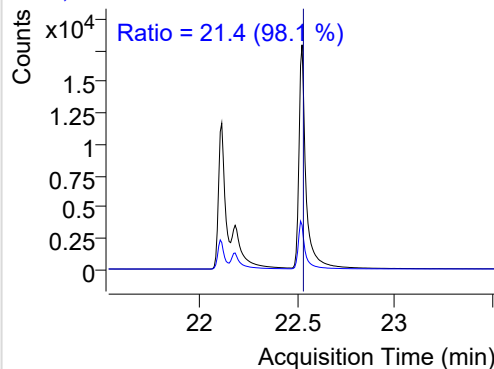


**Benzo(g,h,i)perylene**

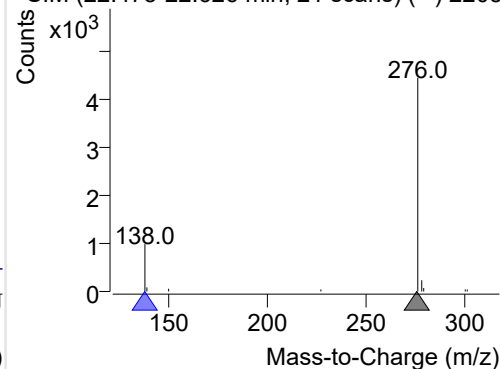
+ Selected Ion (276.0) 220506-PAHs-029.D



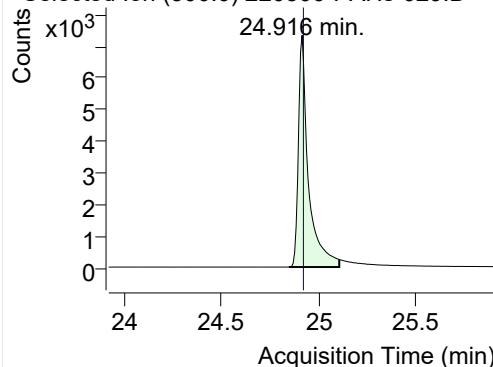
276.0, 138.0



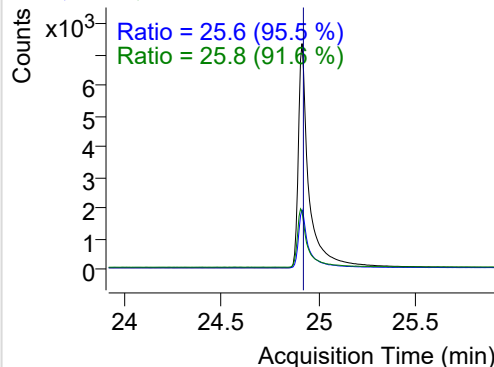
+ SIM (22.473-22.626 min, 21 scans) (\*\*) 2205

**Coronene**

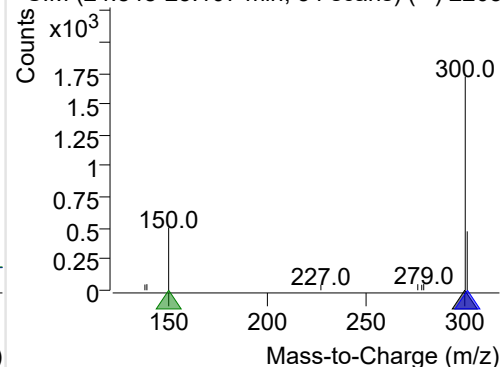
+ Selected Ion (300.0) 220506-PAHs-029.D



300.0, 301.0, 150.0



+ SIM (24.848-25.107 min, 34 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

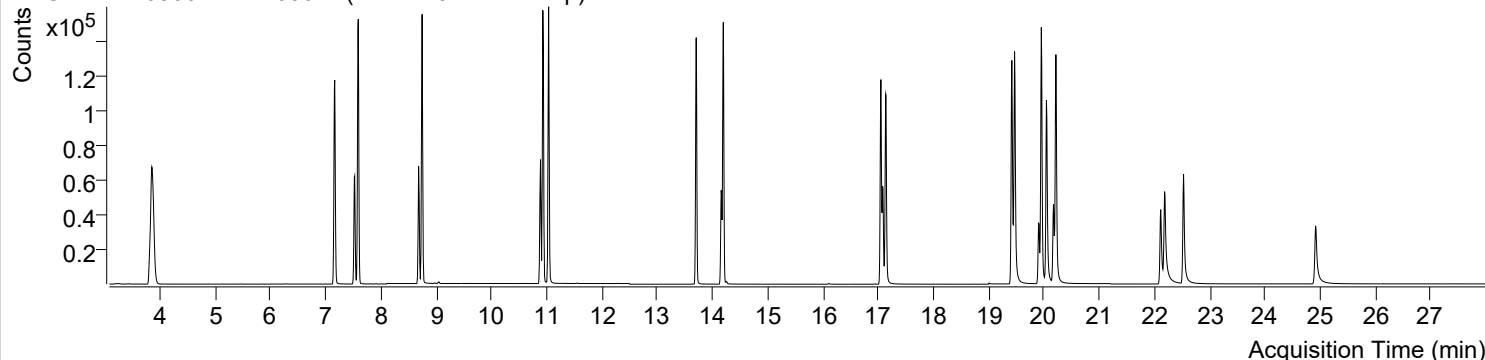


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 1:47:00	Data File	220506-PAHs-030.D
Type	Sample	Name	PAHs-19mix-STD-2p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

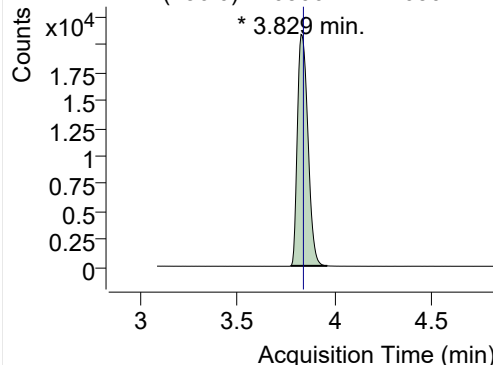
+ TIC SIM 220506-PAHs-030.D (PAHs-19mix-STD-2p)



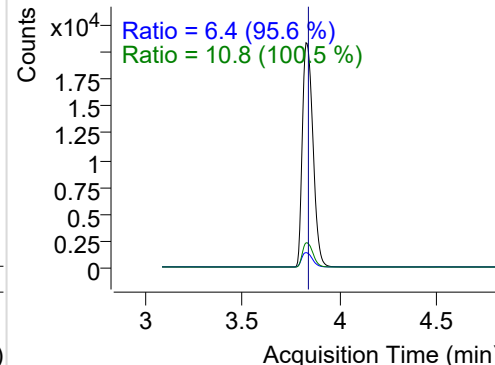
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	78922	20865.21	ND ng/ml	10.8
Naphthalene	3.861	128.0	157222	41081.84	ND ng/ml	12.9
Acenaphthylene	7.165	152.0	153394	88149.95	ND ng/ml	19.6
IS-D10-Acenaphthene	7.526	164.0	48390	29911.00	ND ng/ml	96.3
Acenaphthene	7.591	154.0	90535	55492.73	ND ng/ml	106.8
LSS-D10-Fluorene	8.684	176.0	45443	30268.15	ND ng/ml	93.1
Fluorene	8.747	166.0	112309	75188.55	ND ng/ml	92.0
IS-D10-Phenanthrene	10.889	188.0	84620	57802.13	ND ng/ml	15.1
Phenanthrene	10.931	178.0	163270	101553.8	ND ng/ml	18.8
Anthracene	11.036	178.0	156219	106768.6	ND ng/ml	18.1
Fluoranthene	13.710	202.0	170450	109949.6	ND ng/ml	17.3
LSS-D10-Pyrene	14.159	212.0	62539	39813.62	ND ng/ml	17.1
Pyrene	14.197	202.0	177661	114503.2	ND ng/ml	17.2
Benz(a)anthracene	17.049	228.0	133334	80515.20	ND ng/ml	26.3
IS-D12-Chrysene	17.087	240.0	65907	38091.79	ND ng/ml	19.0
Chrysene	17.135	228.0	131638	72689.55	ND ng/ml	28.9
Benzo(b)fluoranthene	19.419	252.0	135414	76810.56	ND ng/ml	21.5
Benzo(k)fluoranthene	19.468	252.0	155556	78997.95	ND ng/ml	21.7
SS-D12-Benzo(e)pyrene	19.903	264.0	48339	23462.04	ND ng/ml	25.2
Benzo(e)pyrene	19.953	252.0	143880	81445.73	ND ng/ml	21.6
Benzo(a)pyrene	20.045	252.0	121754	61394.63	ND ng/ml	20.6
IS-D12-Perylene	20.173	264.0	60237	29875.25	ND ng/ml	24.1
Perylene	20.216	252.0	134825	70818.40	ND ng/ml	21.1
Indeno(1,2,3-c,d)pyrene	22.114	276.0	75536	35094.44	ND ng/ml	19.4
Dibenz(a,h)anthracene	22.183	278.0	76820	27575.34	ND ng/ml	23.8
Benzo(g,h,i)perylene	22.526	276.0	113101	50480.72	ND ng/ml	21.0
Coronene	24.916	300.0	71576	21989.86	ND ng/ml	25.6

## IS-D8-Naphthalene

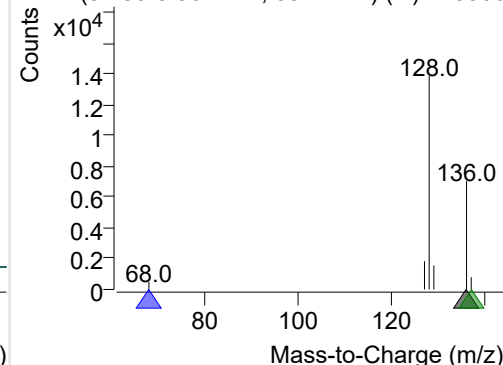
+ Selected Ion (136.0) 220506-PAHs-030.D



136.0, 68.0, 137.0

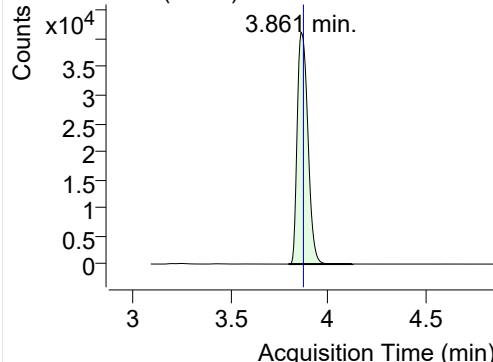


+ SIM (3.780-3.964 min, 35 scans) (\*\*) 220506

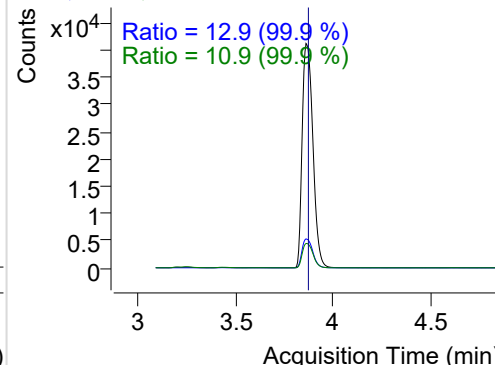


## Naphthalene

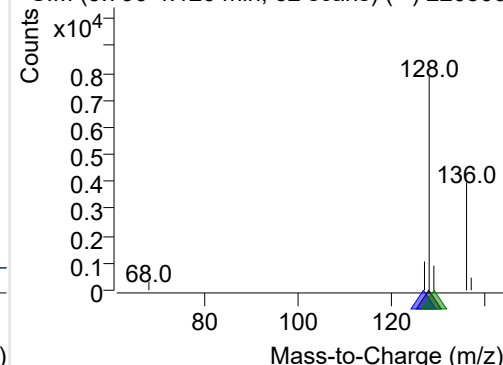
+ Selected Ion (128.0) 220506-PAHs-030.D



128.0, 127.0, 129.0

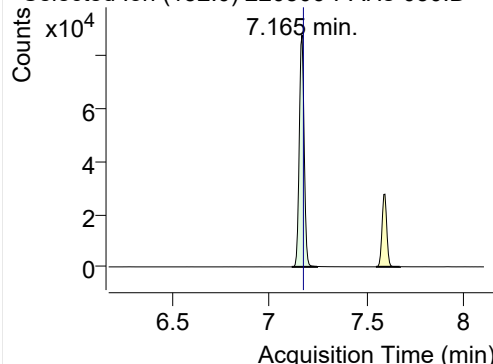


+ SIM (3.796-4.126 min, 62 scans) (\*\*) 220506

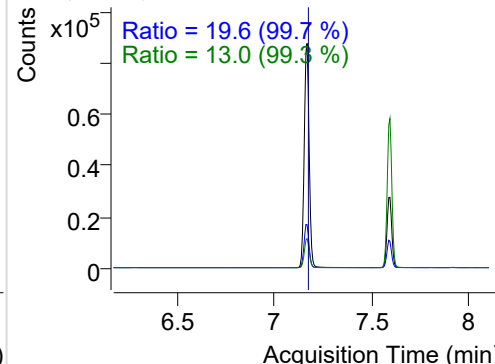


## Acenaphthylene

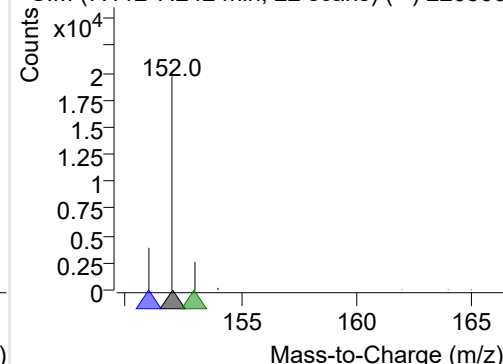
+ Selected Ion (152.0) 220506-PAHs-030.D



152.0, 151.0, 153.0

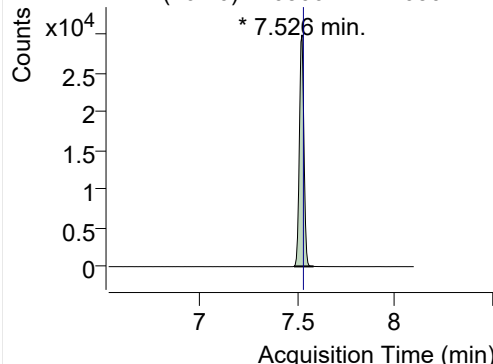


+ SIM (7.112-7.242 min, 22 scans) (\*\*) 220506

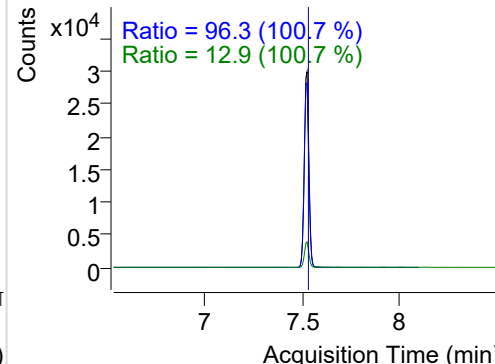


## IS-D10-Acenaphthene

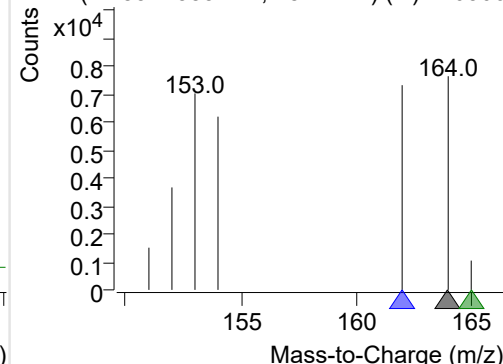
+ Selected Ion (164.0) 220506-PAHs-030.D



164.0, 162.0, 165.0

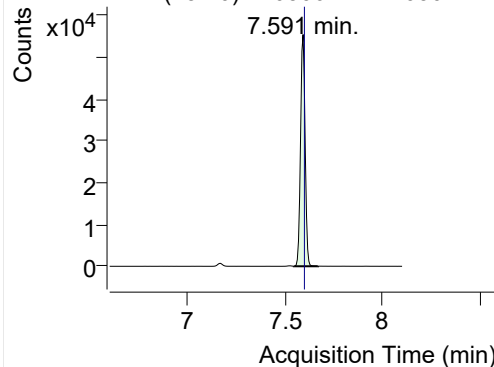


+ SIM (7.485-7.585 min, 18 scans) (\*\*) 220506

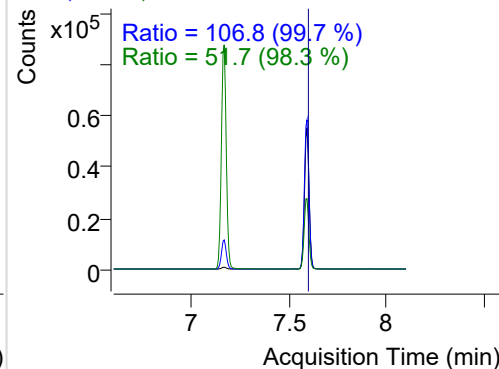


**Acenaphthene**

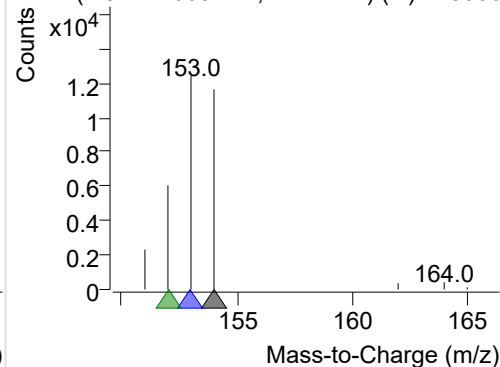
+ Selected Ion (154.0) 220506-PAHs-030.D



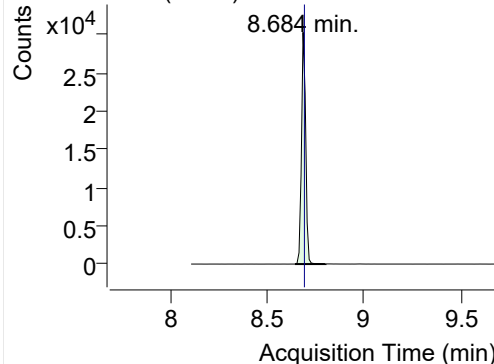
154.0, 153.0, 152.0



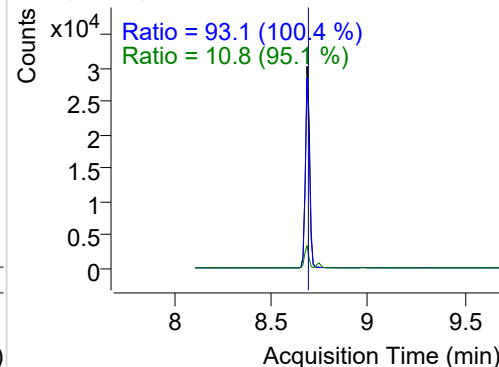
+ SIM (7.544-7.668 min, 22 scans) (\*\*) 220506

**LSS-D10-Fluorene**

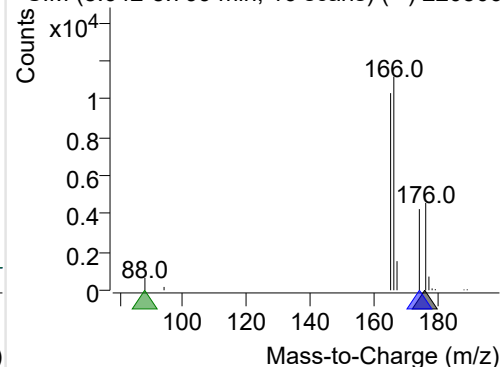
+ Selected Ion (176.0) 220506-PAHs-030.D



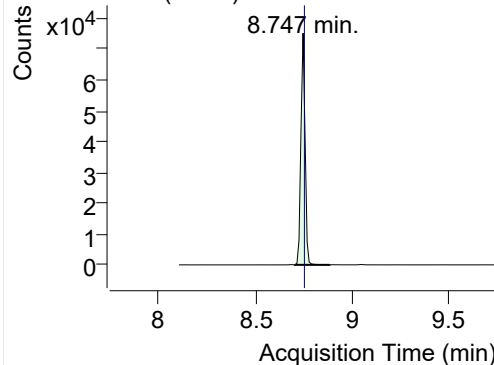
176.0, 174.0, 88.0



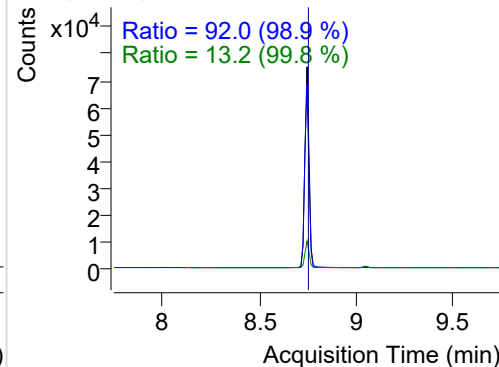
+ SIM (8.642-8.799 min, 16 scans) (\*\*) 220506

**Fluorene**

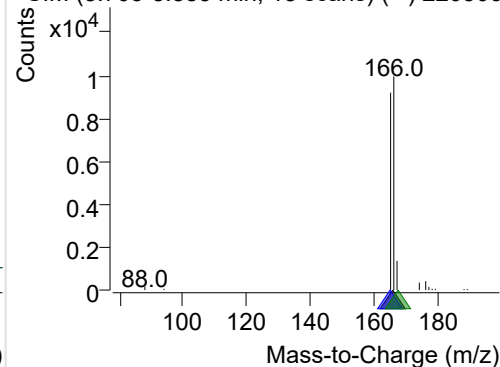
+ Selected Ion (166.0) 220506-PAHs-030.D



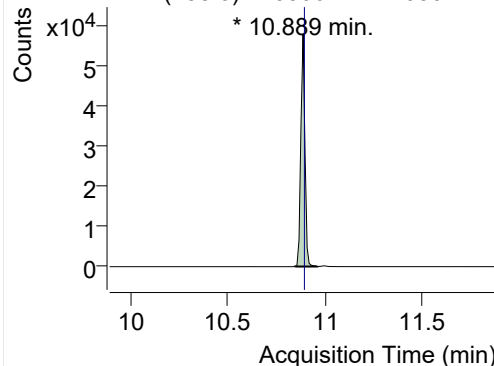
166.0, 165.0, 167.0



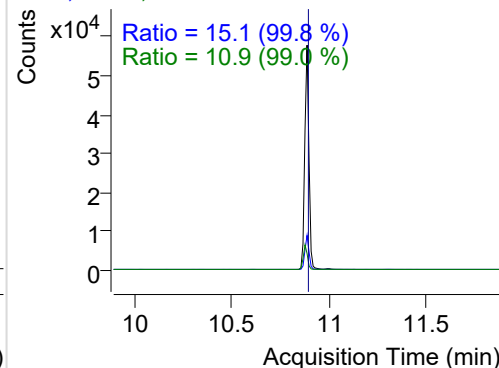
+ SIM (8.705-8.883 min, 18 scans) (\*\*) 220506

**IS-D10-Phenanthrene**

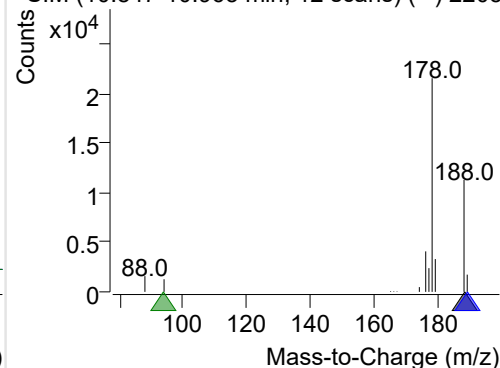
+ Selected Ion (188.0) 220506-PAHs-030.D



188.0, 189.0, 94.0

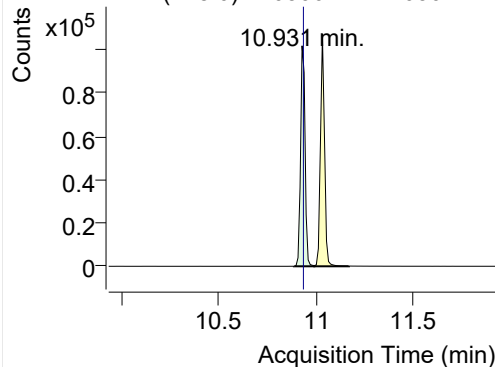


+ SIM (10.847-10.963 min, 12 scans) (\*\*) 2205

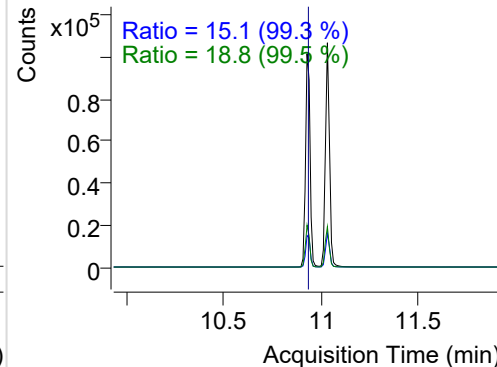


**Phenanthrene**

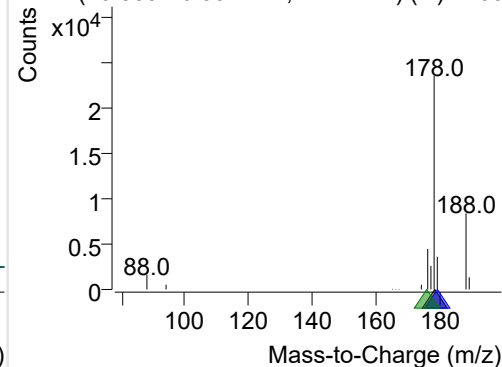
+ Selected Ion (178.0) 220506-PAHs-030.D



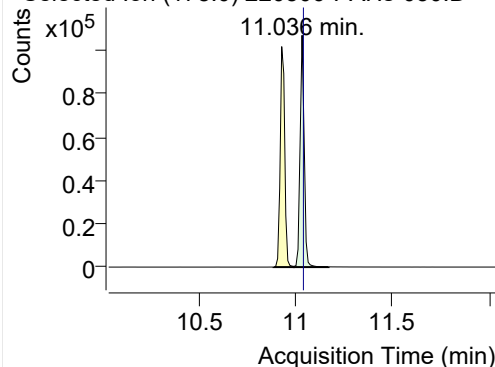
178.0, 179.0, 176.0



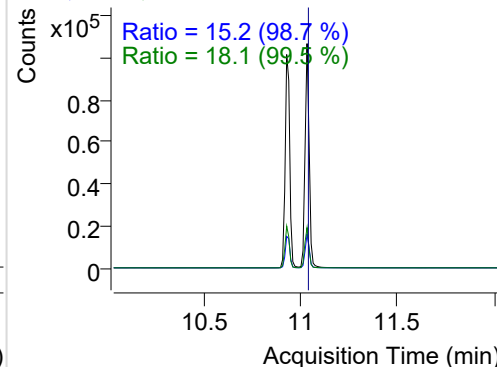
+ SIM (10.889-10.994 min, 11 scans) (\*\*) 2205

**Anthracene**

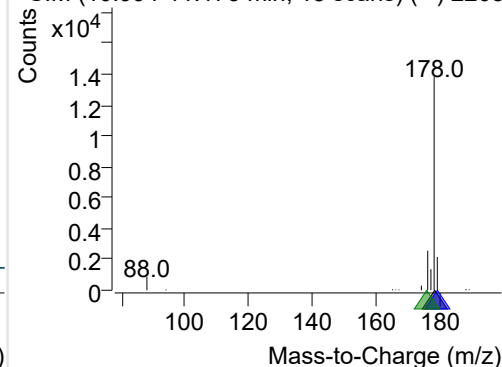
+ Selected Ion (178.0) 220506-PAHs-030.D



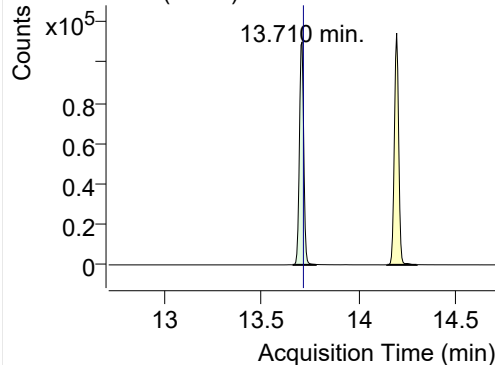
178.0, 179.0, 176.0



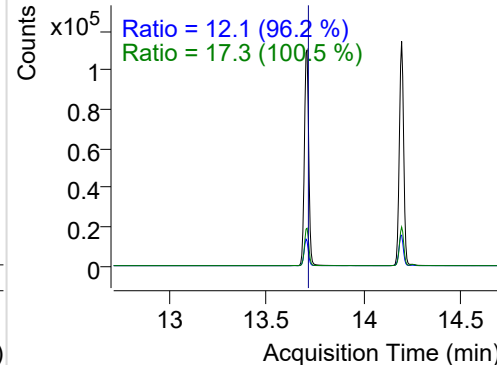
+ SIM (10.994-11.173 min, 18 scans) (\*\*) 2205

**Fluoranthene**

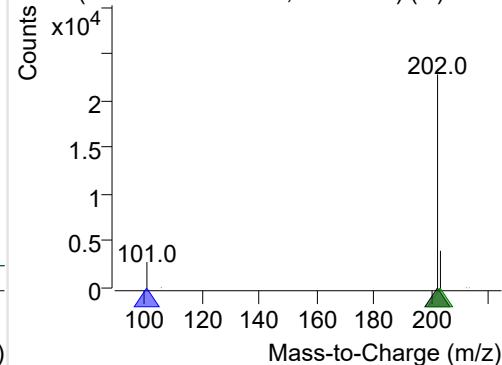
+ Selected Ion (202.0) 220506-PAHs-030.D



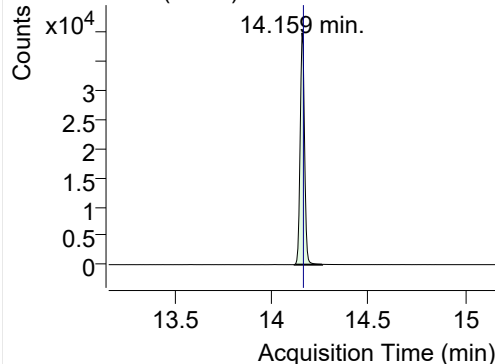
202.0, 101.0, 203.0



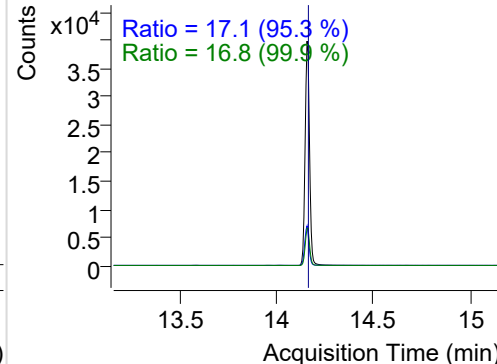
+ SIM (13.661-13.780 min, 23 scans) (\*\*) 2205

**LSS-D10-Pyrene**

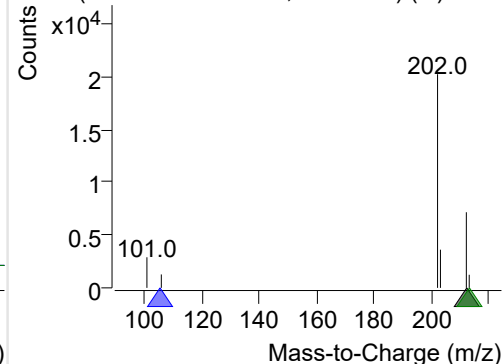
+ Selected Ion (212.0) 220506-PAHs-030.D



212.0, 106.0, 213.0

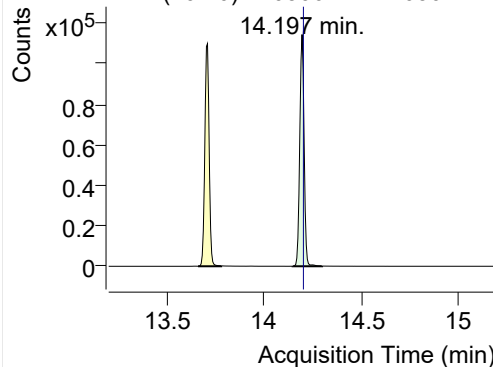


+ SIM (14.121-14.262 min, 27 scans) (\*\*) 2205

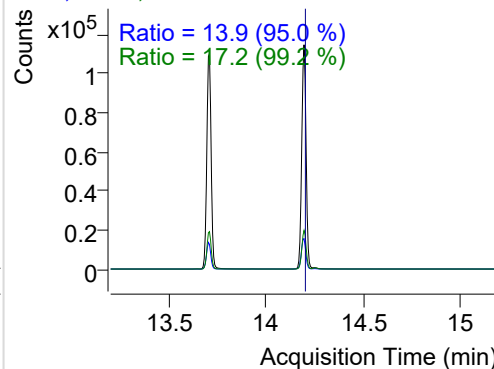


**Pyrene**

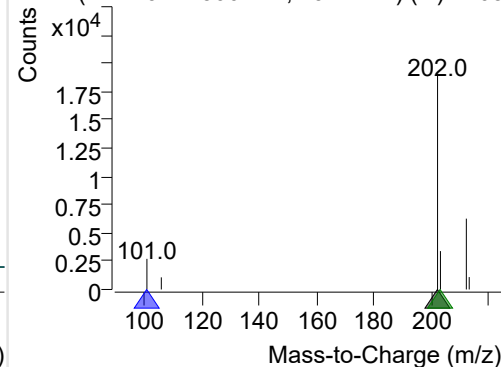
+ Selected Ion (202.0) 220506-PAHs-030.D



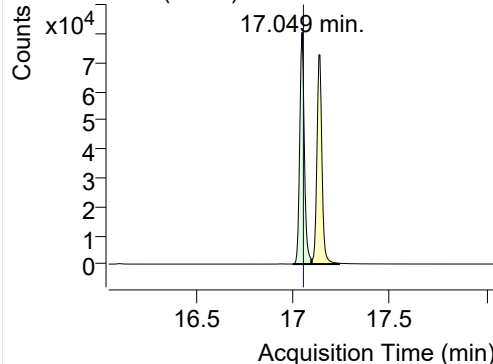
202.0, 101.0, 203.0



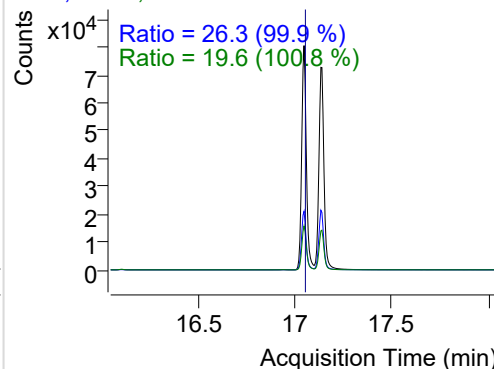
+ SIM (14.149-14.300 min, 29 scans) (\*\*) 2205

**Benz(a)anthracene**

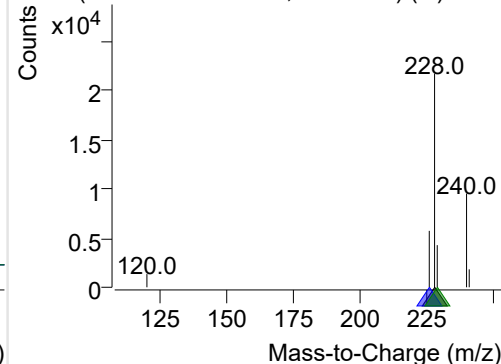
+ Selected Ion (228.0) 220506-PAHs-030.D



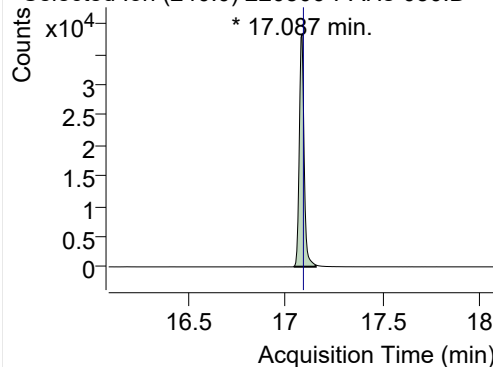
228.0, 226.0, 229.0



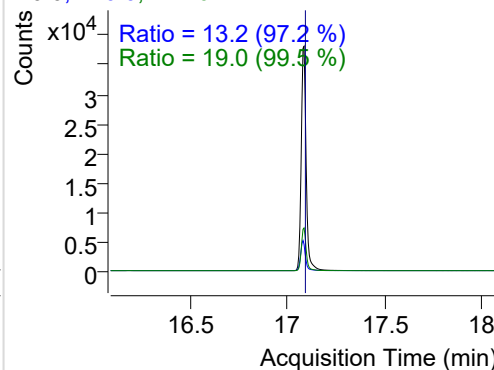
+ SIM (17.000-17.097 min, 19 scans) (\*\*) 2205

**IS-D12-Chrysene**

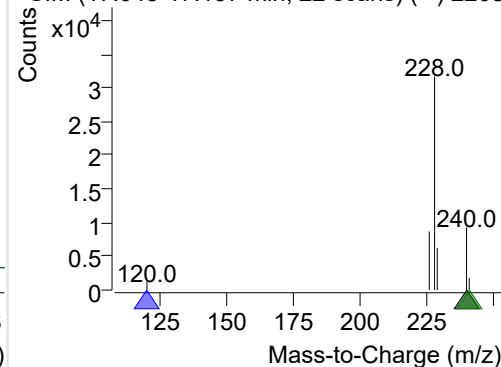
+ Selected Ion (240.0) 220506-PAHs-030.D



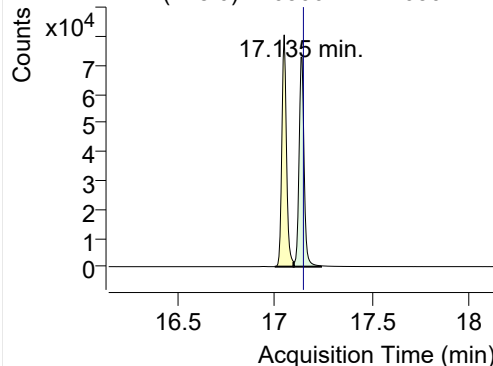
240.0, 120.0, 241.0



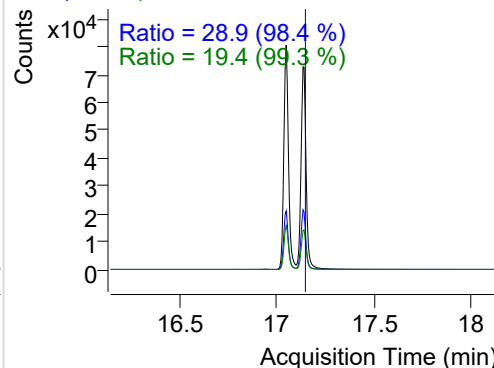
+ SIM (17.043-17.157 min, 22 scans) (\*\*) 2205

**Chrysene**

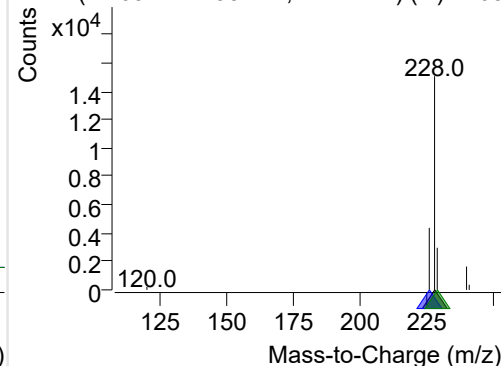
+ Selected Ion (228.0) 220506-PAHs-030.D



228.0, 226.0, 229.0

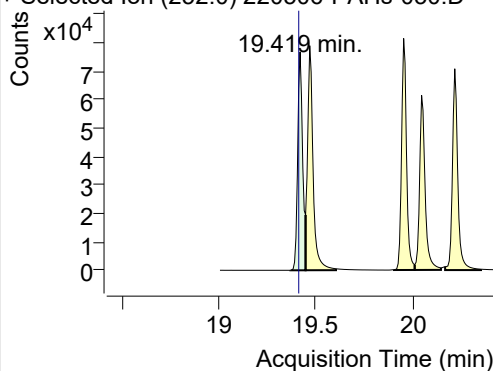


+ SIM (17.097-17.238 min, 27 scans) (\*\*) 2205

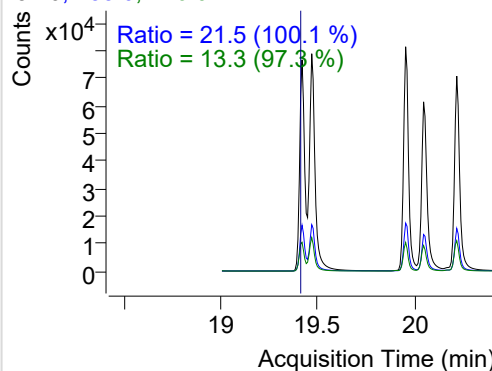


**Benzo(b)fluoranthene**

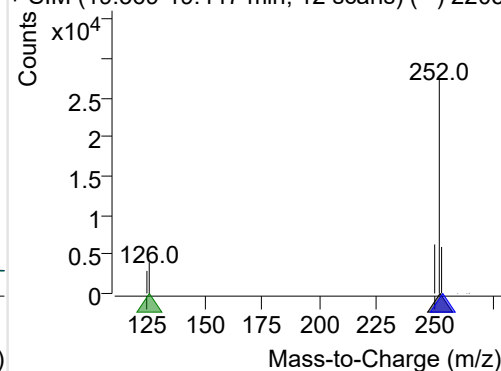
+ Selected Ion (252.0) 220506-PAHs-030.D



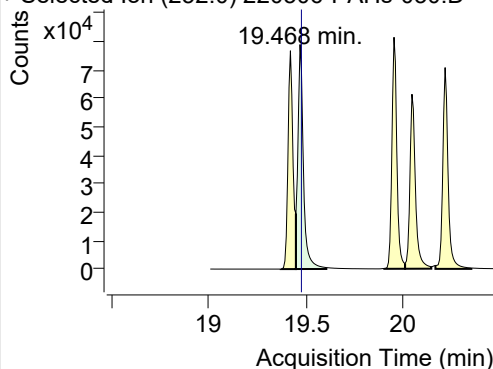
252.0, 253.0, 126.0



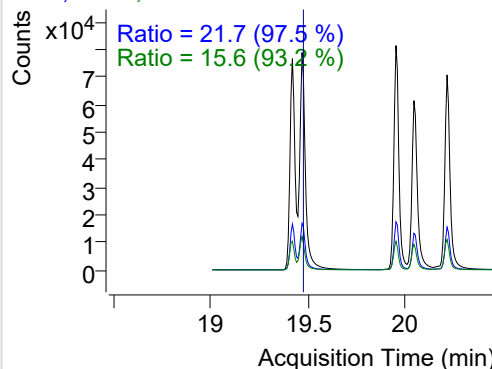
+ SIM (19.369-19.447 min, 12 scans) (\*\*) 2205

**Benzo(k)fluoranthene**

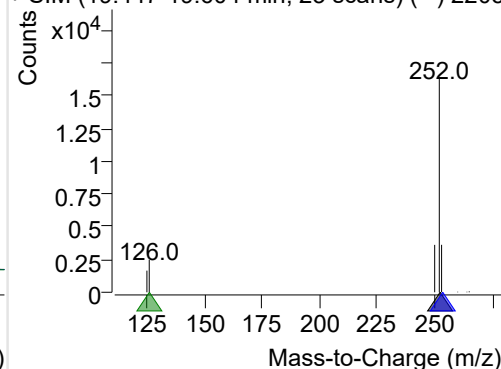
+ Selected Ion (252.0) 220506-PAHs-030.D



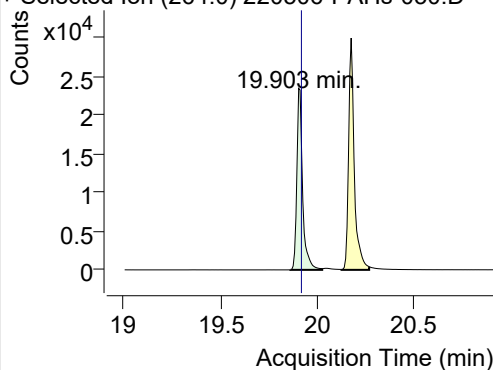
252.0, 253.0, 126.0



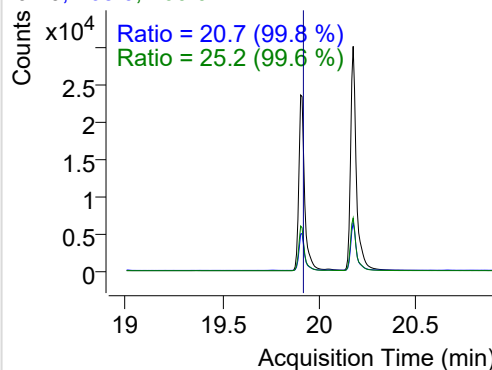
+ SIM (19.447-19.604 min, 23 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

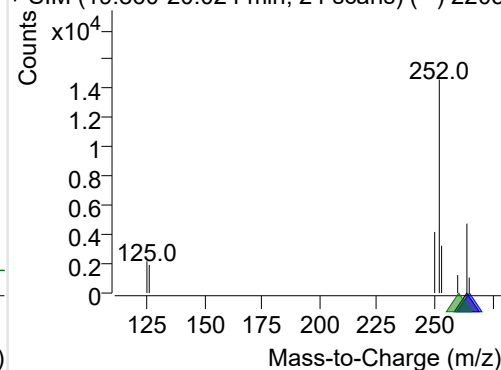
+ Selected Ion (264.0) 220506-PAHs-030.D



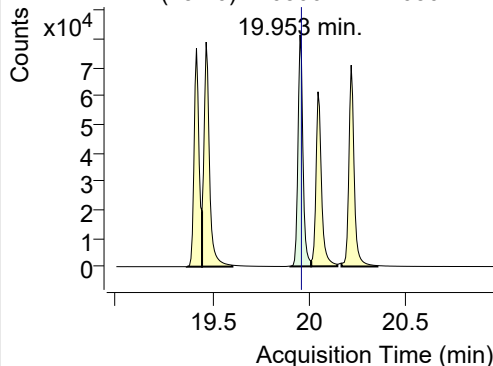
264.0, 265.0, 260.0



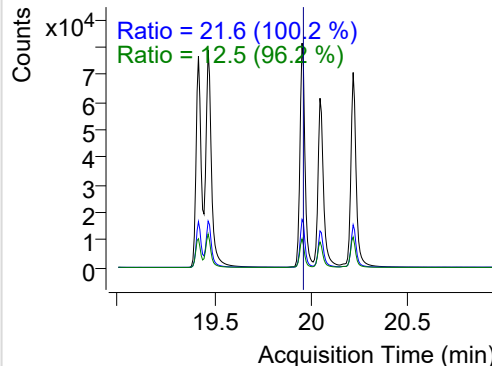
+ SIM (19.860-20.024 min, 24 scans) (\*\*) 2205

**Benzo(e)pyrene**

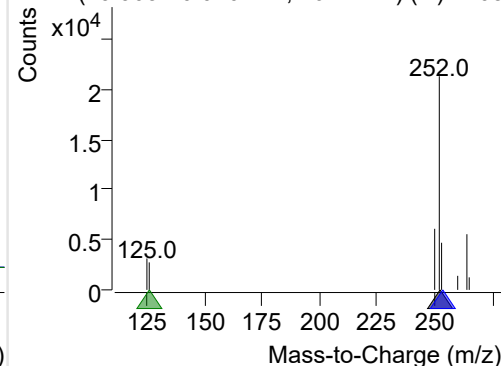
+ Selected Ion (252.0) 220506-PAHs-030.D



252.0, 253.0, 126.0

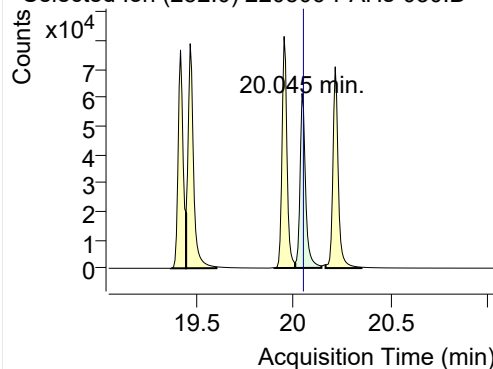


+ SIM (19.903-20.010 min, 16 scans) (\*\*) 2205

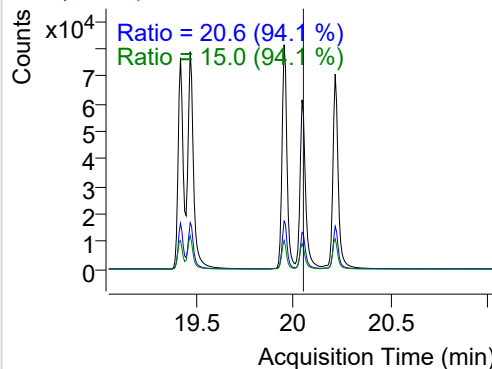


**Benzo(a)pyrene**

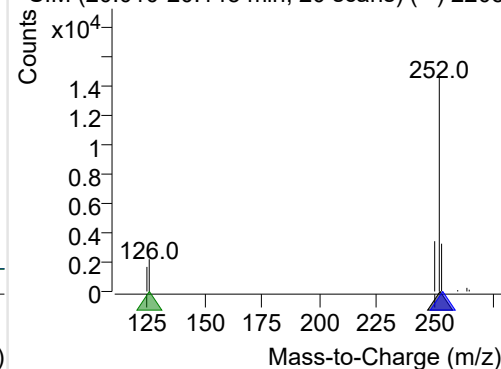
+ Selected Ion (252.0) 220506-PAHs-030.D



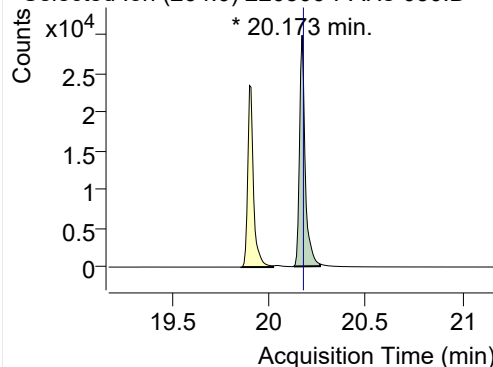
252.0, 253.0, 126.0



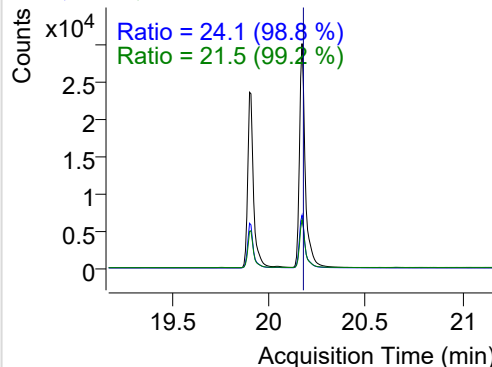
+ SIM (20.010-20.145 min, 20 scans) (\*\*) 2205

**IS-D12-Perylene**

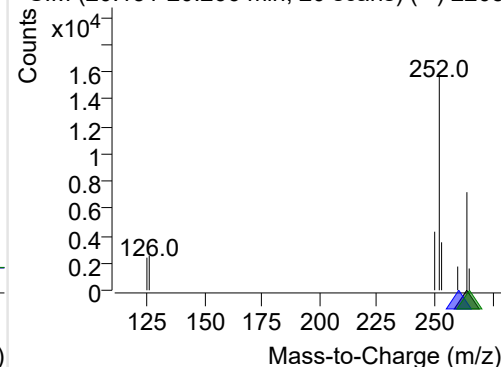
+ Selected Ion (264.0) 220506-PAHs-030.D



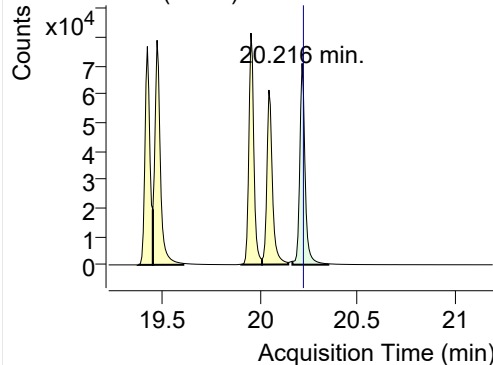
264.0, 260.0, 265.0



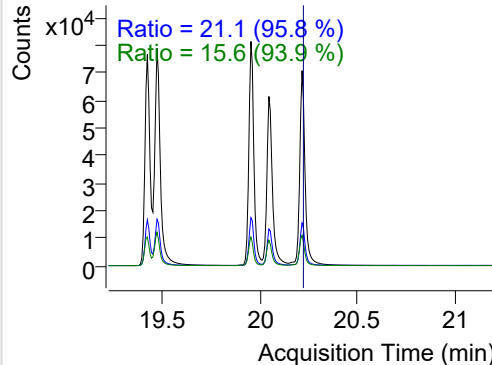
+ SIM (20.131-20.266 min, 20 scans) (\*\*) 2205

**Perylene**

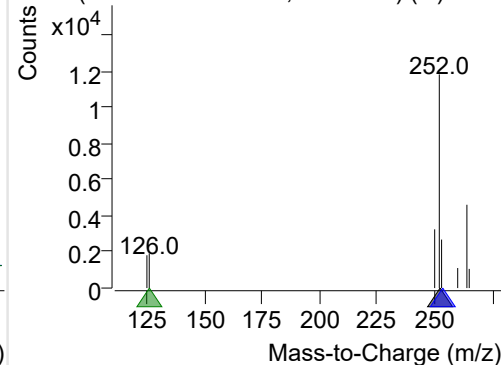
+ Selected Ion (252.0) 220506-PAHs-030.D



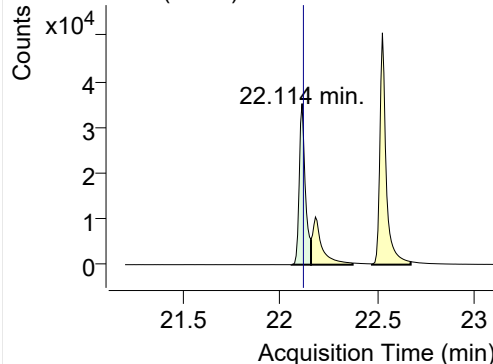
252.0, 253.0, 126.0



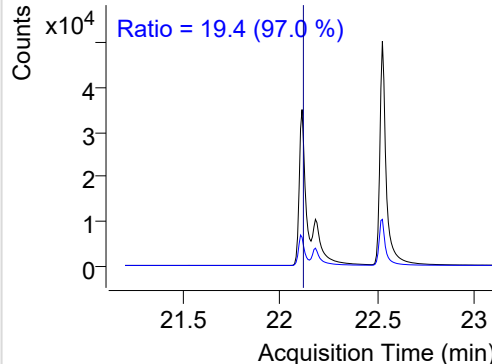
+ SIM (20.166-20.351 min, 27 scans) (\*\*) 2205

**Indeno(1,2,3-c,d)pyrene**

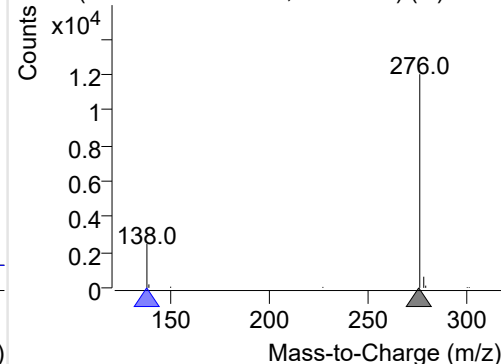
+ Selected Ion (276.0) 220506-PAHs-030.D



276.0, 138.0

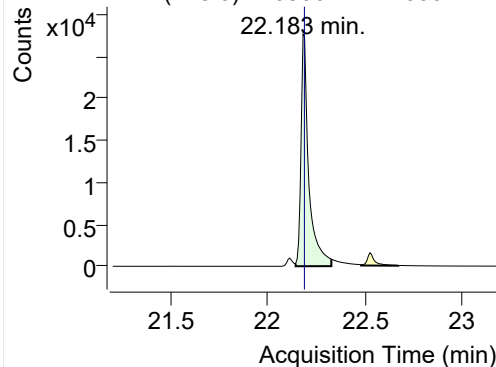


+ SIM (22.061-22.160 min, 14 scans) (\*\*) 2205

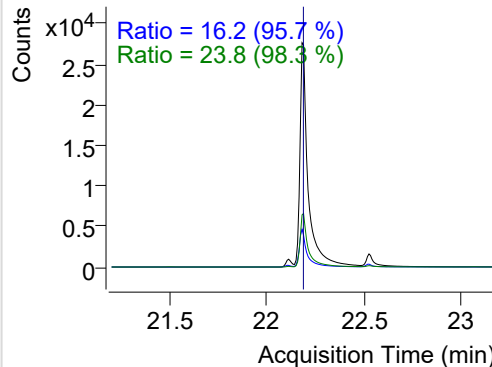


**Dibenz(a,h)anthracene**

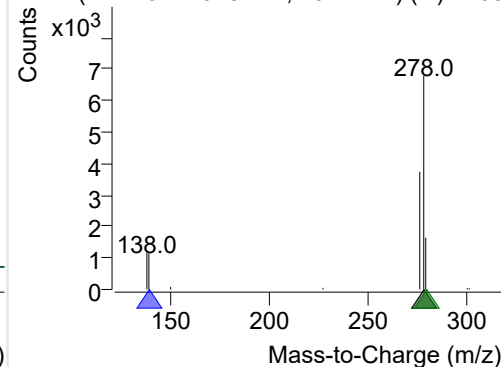
+ Selected Ion (278.0) 220506-PAHs-030.D



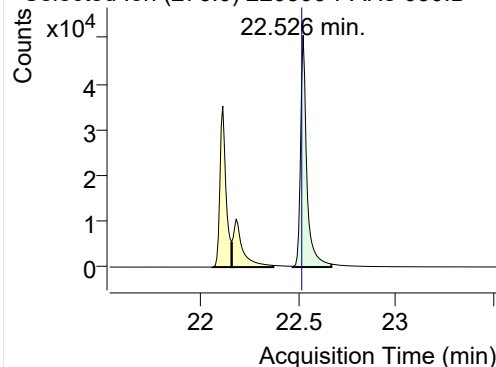
278.0, 139.0, 279.0



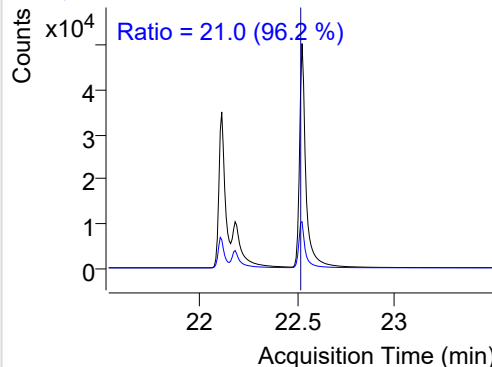
+ SIM (22.145-22.328 min, 25 scans) (\*\*) 2205

**Benzo(g,h,i)perylene**

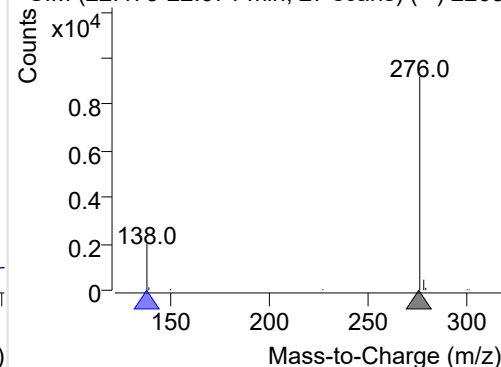
+ Selected Ion (276.0) 220506-PAHs-030.D



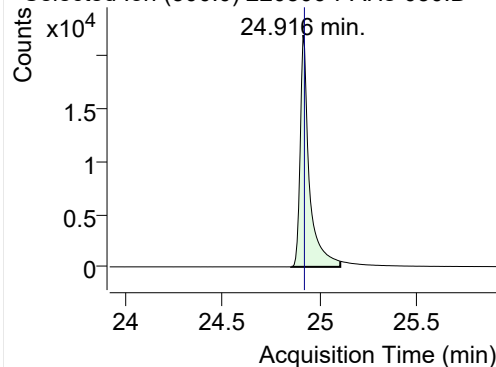
276.0, 138.0



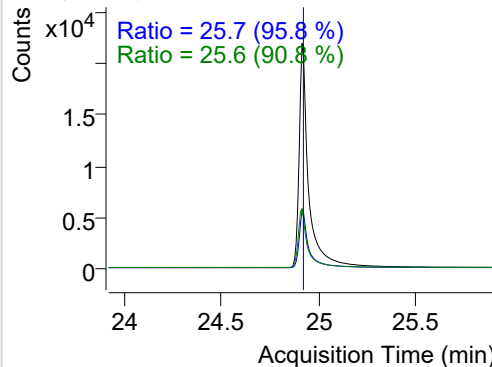
+ SIM (22.473-22.671 min, 27 scans) (\*\*) 2205

**Coronene**

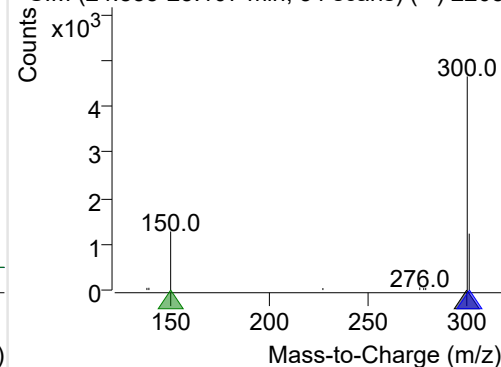
+ Selected Ion (300.0) 220506-PAHs-030.D



300.0, 301.0, 150.0



+ SIM (24.855-25.107 min, 34 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

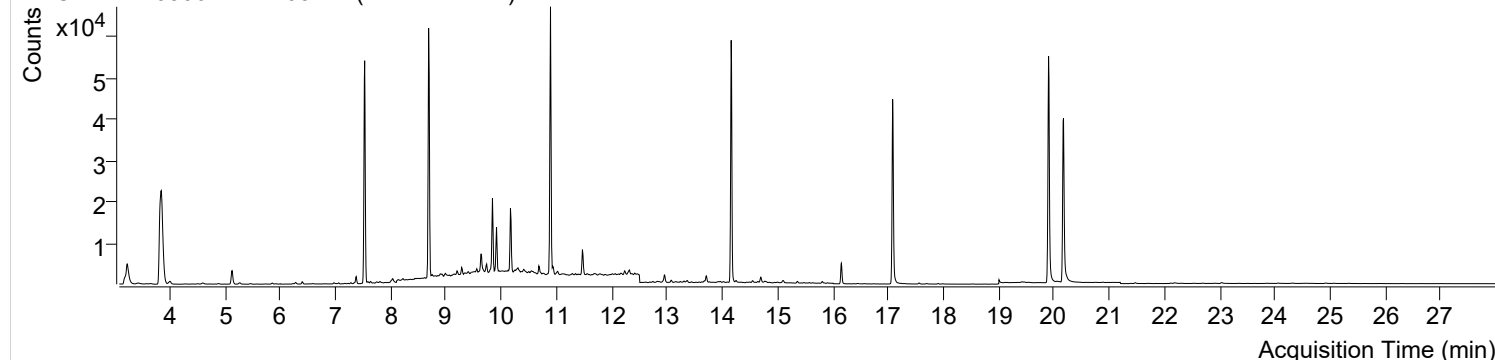


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 2:49:16	Data File	220506-PAHs-032.D
Type	Sample	Name	Method blank
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

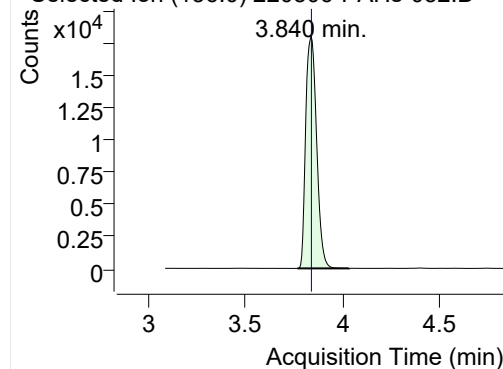
+ TIC SIM 220506-PAHs-032.D (Method blank)



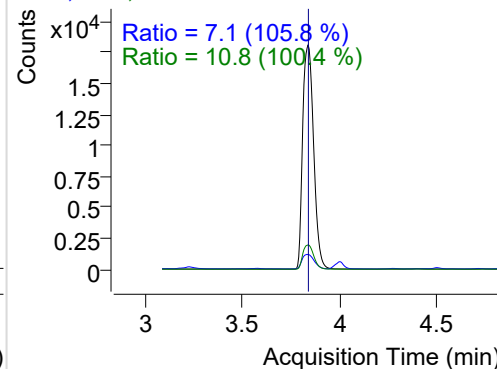
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.840	136.0	70395	18020.97	ND ng/ml	10.8
Naphthalene	3.872	128.0	8294	2107.48	ND ng/ml	26.1
Acenaphthylene	7.165	152.0	108	64.13	ND ng/ml	15.3
IS-D10-Acenaphthene	7.526	164.0	41368	25832.22	ND ng/ml	96.4
Acenaphthene	7.591	154.0	196	129.54	ND ng/ml	105.1
LSS-D10-Fluorene	8.684	176.0	43935	26917.64	ND ng/ml	93.1
Fluorene	8.747	166.0	341	238.96	ND ng/ml	115.1
IS-D10-Phenanthrene	10.889	188.0	76454	51995.30	ND ng/ml	15.1
Phenanthrene	10.942	178.0	1630	988.59	ND ng/ml	21.7
Anthracene	11.015	178.0	317	194.03	ND ng/ml	23.6
Fluoranthene	13.710	202.0	732	452.86	ND ng/ml	49.8
LSS-D10-Pyrene	14.160	212.0	66409	43342.79	ND ng/ml	17.5
Pyrene	14.198	202.0	801	351.39	ND ng/ml	42.1
Benz(a)anthracene	17.081	228.0	266	101.56	ND ng/ml	15.1
IS-D12-Chrysene	17.081	240.0	57291	33739.22	ND ng/ml	18.8
Chrysene	17.136	228.0	162	66.18	ND ng/ml	36.8
Benzo(b)fluoranthene	19.419	252.0	113	53.08	ND ng/ml	61.3
Benzo(k)fluoranthene	19.469	252.0	181	64.08	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.903	264.0	69442	37280.39	ND ng/ml	24.0
Benzo(e)pyrene	19.953	252.0	103	42.08	ND ng/ml	
Benzo(a)pyrene	20.052	252.0	171	54.08	ND ng/ml	
IS-D12-Perylene	20.173	264.0	54315	27121.50	ND ng/ml	24.7
Perylene	20.216	252.0	167	50.08	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	22.114	276.0	178	71.12	ND ng/ml	33.0
Dibenz(a,h)anthracene	22.183	278.0	378	86.58	ND ng/ml	18.3
Benzo(g,h,i)perylene	22.527	276.0	152	48.26	ND ng/ml	19.0
Coronene	24.917	300.0	333	70.69	ND ng/ml	16.0

## IS-D8-Naphthalene

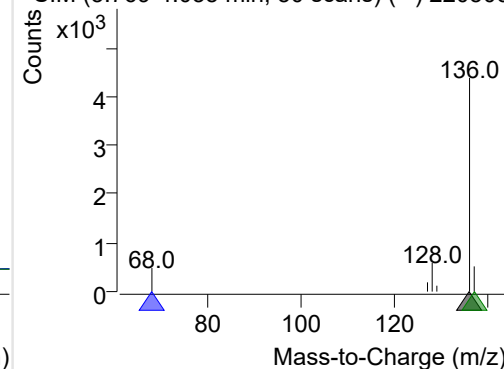
+ Selected Ion (136.0) 220506-PAHs-032.D



136.0, 68.0, 137.0

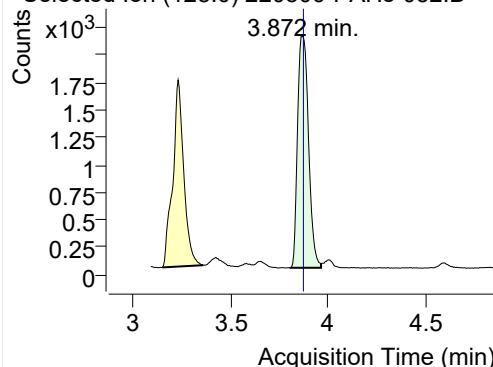


+ SIM (3.769-4.035 min, 50 scans) (\*\*) 220506

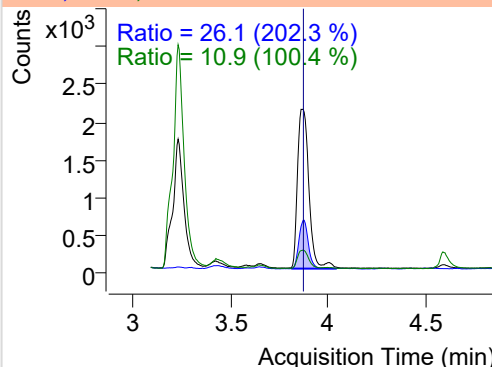


**Naphthalene**

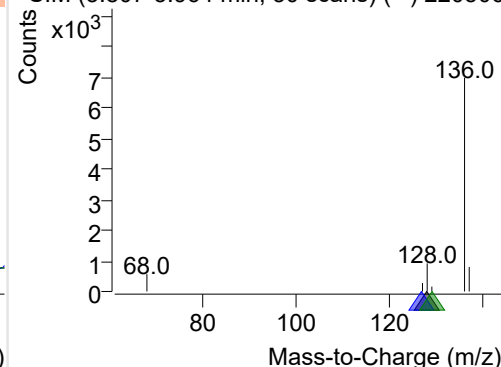
+ Selected Ion (128.0) 220506-PAHs-032.D



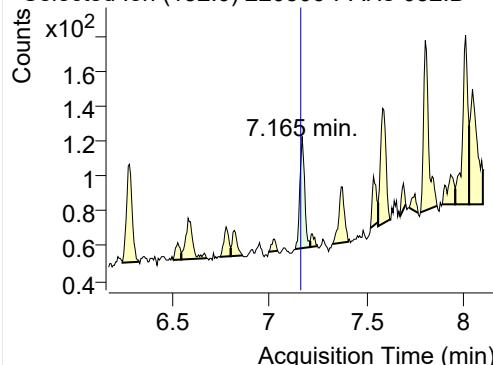
128.0, 127.0, 129.0



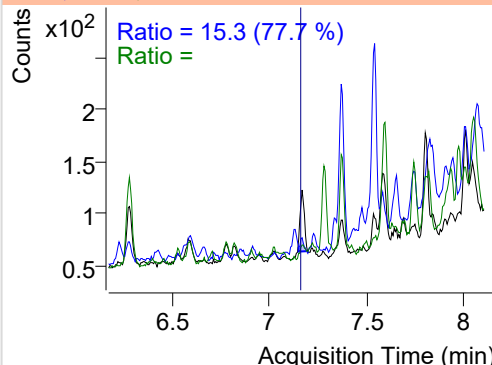
+ SIM (3.807-3.964 min, 30 scans) (\*\*) 220506

**Acenaphthylene**

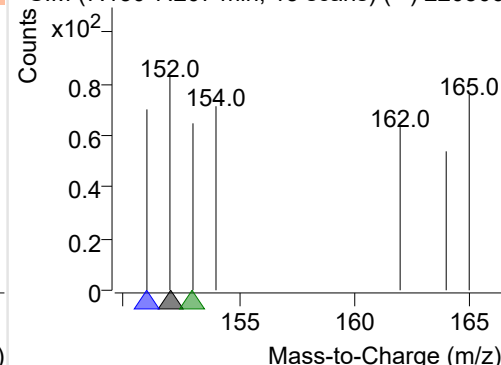
+ Selected Ion (152.0) 220506-PAHs-032.D



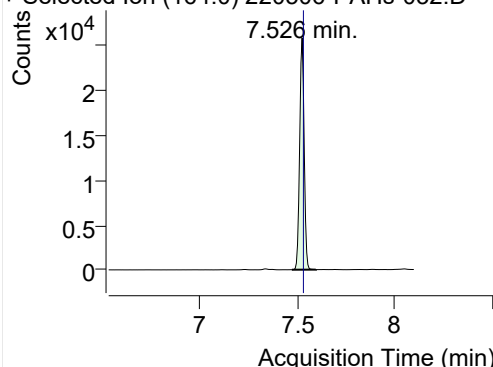
152.0, 151.0, 153.0



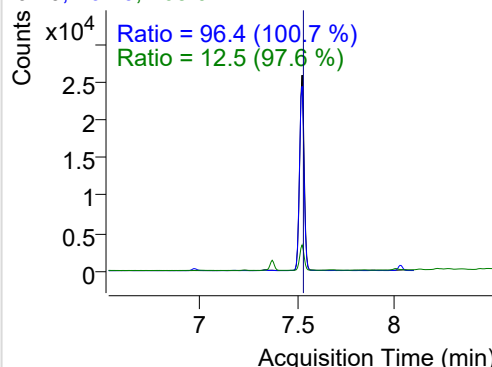
+ SIM (7.130-7.207 min, 13 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

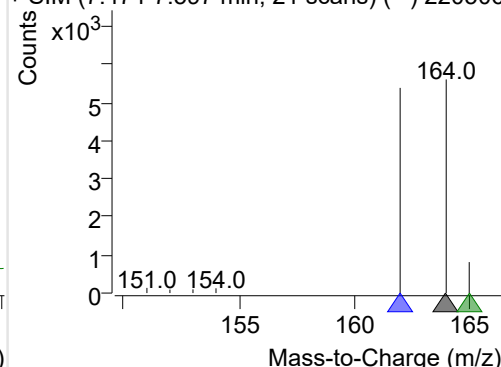
+ Selected Ion (164.0) 220506-PAHs-032.D



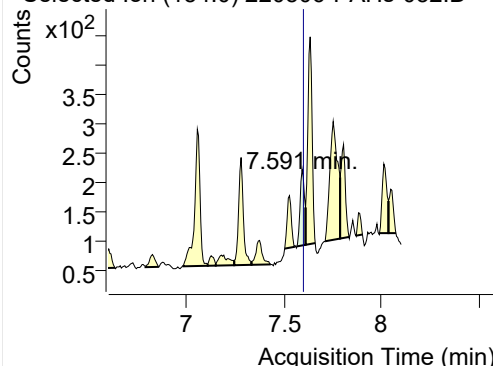
164.0, 162.0, 165.0



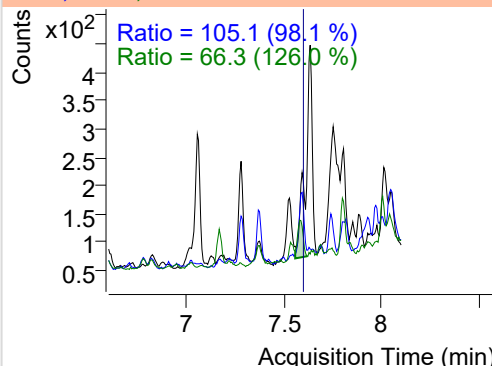
+ SIM (7.474-7.597 min, 21 scans) (\*\*) 220506

**Acenaphthene**

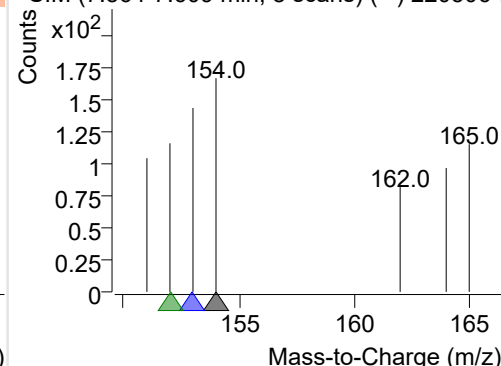
+ Selected Ion (154.0) 220506-PAHs-032.D



154.0, 153.0, 152.0

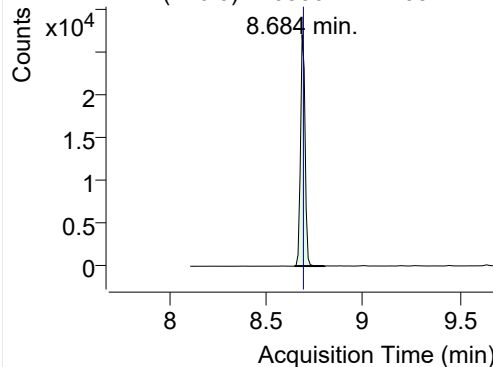


+ SIM (7.564-7.609 min, 8 scans) (\*\*) 220506-I

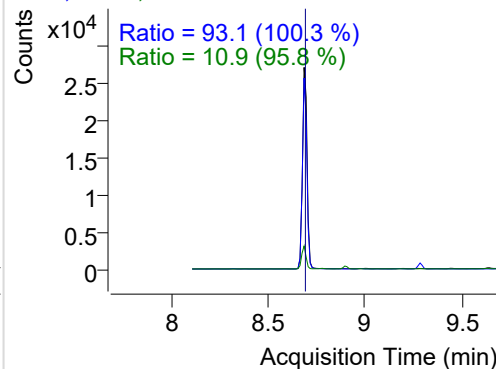


## LSS-D10-Fluorene

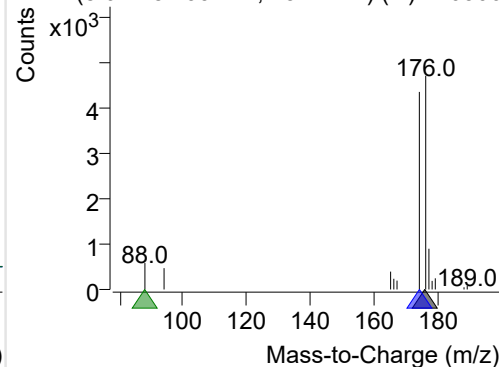
+ Selected Ion (176.0) 220506-PAHs-032.D



176.0, 174.0, 88.0

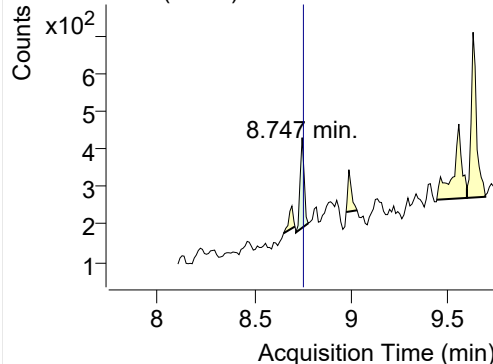


+ SIM (8.644-8.799 min, 15 scans) (\*\*) 220506

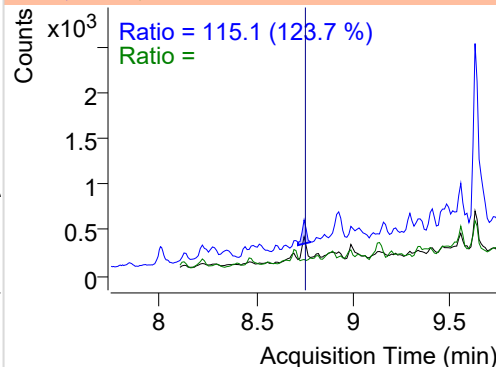


## Fluorene

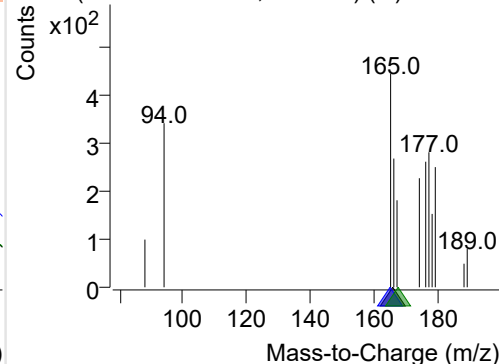
+ Selected Ion (166.0) 220506-PAHs-032.D



166.0, 165.0, 167.0

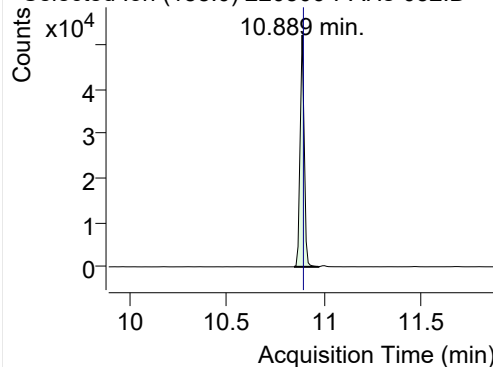


+ SIM (8.715-8.778 min, 7 scans) (\*\*) 220506-I

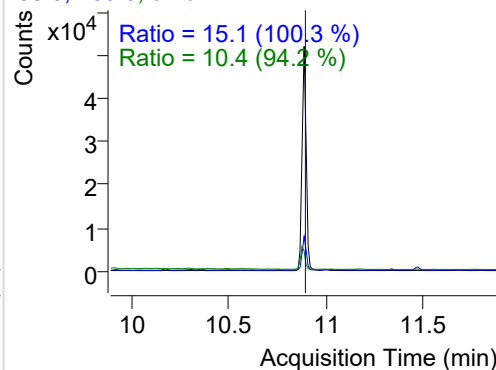


## IS-D10-Phenanthrene

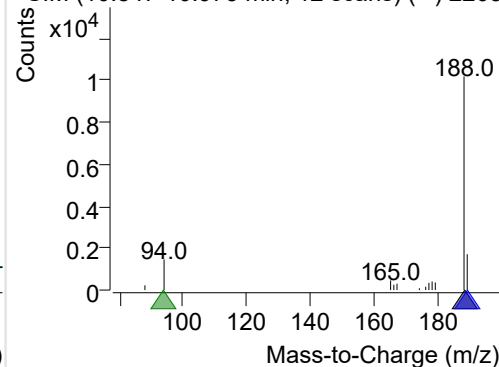
+ Selected Ion (188.0) 220506-PAHs-032.D



188.0, 189.0, 94.0

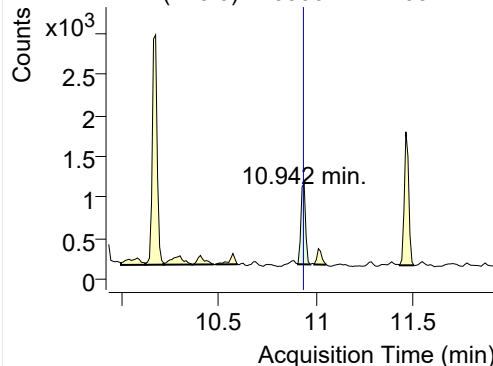


+ SIM (10.847-10.973 min, 12 scans) (\*\*) 2205

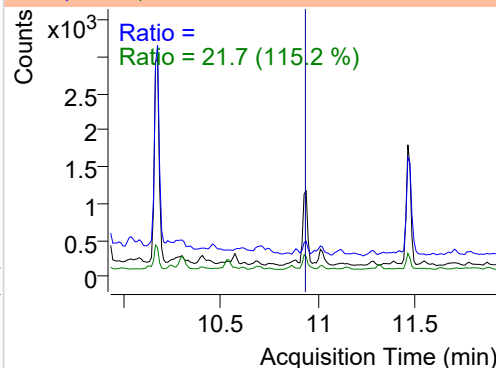


## Phenanthrene

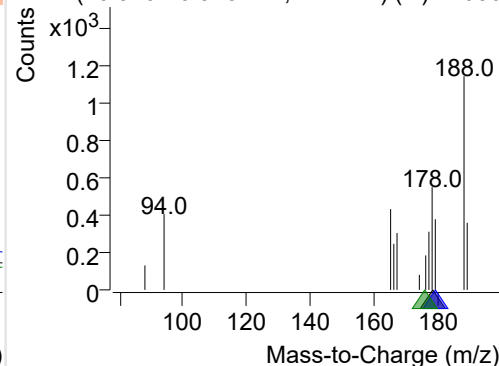
+ Selected Ion (178.0) 220506-PAHs-032.D



178.0, 179.0, 176.0

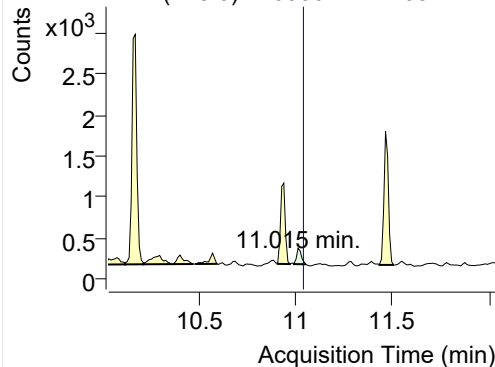


+ SIM (10.910-10.973 min, 7 scans) (\*\*) 22050

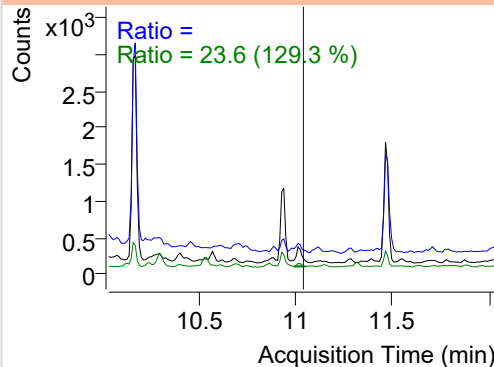


**Anthracene**

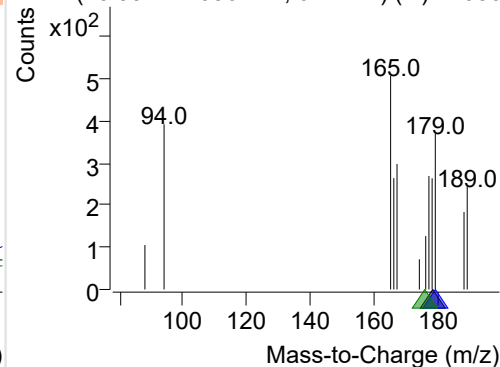
+ Selected Ion (178.0) 220506-PAHs-032.D



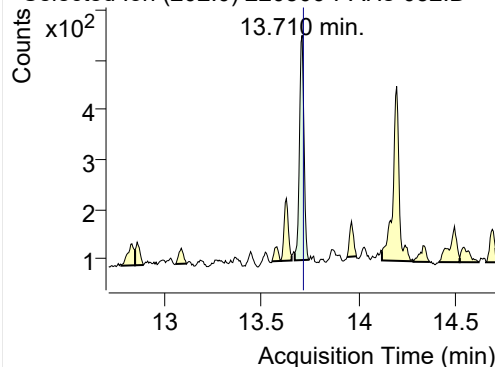
178.0, 179.0, 176.0



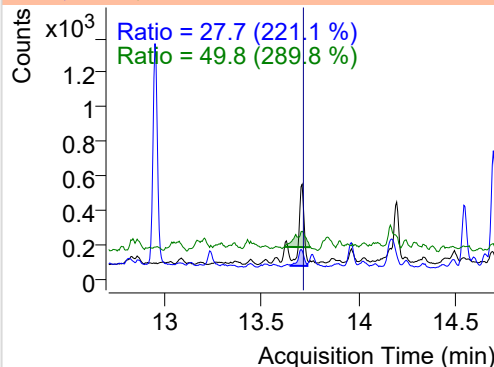
+ SIM (10.994-11.056 min, 6 scans) (\*\*) 22050

**Fluoranthene**

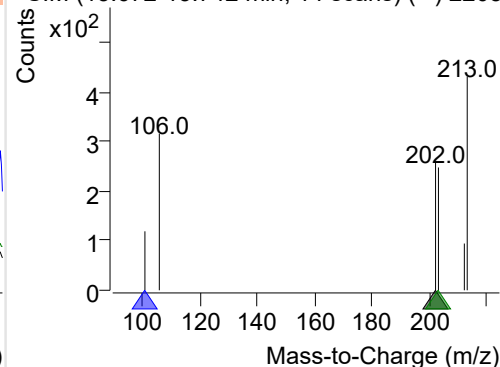
+ Selected Ion (202.0) 220506-PAHs-032.D



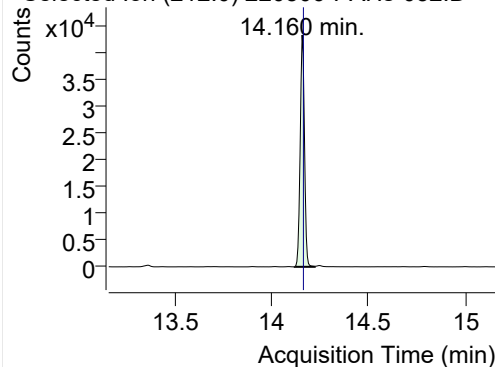
202.0, 101.0, 203.0



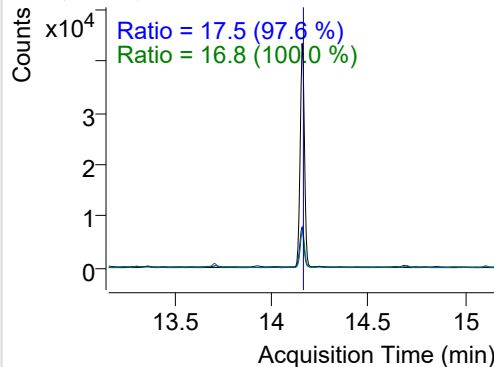
+ SIM (13.672-13.742 min, 14 scans) (\*\*) 2205

**LSS-D10-Pyrene**

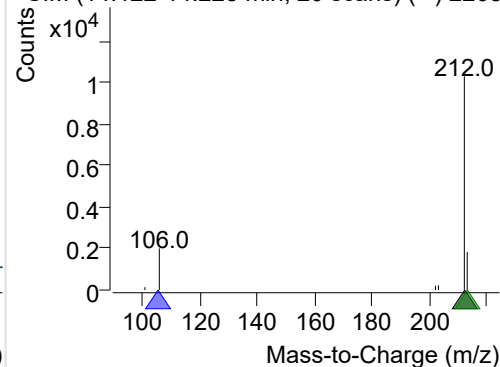
+ Selected Ion (212.0) 220506-PAHs-032.D



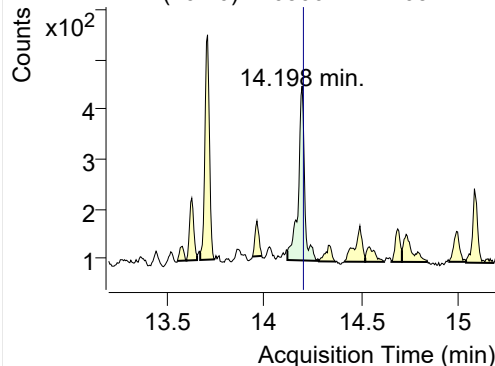
212.0, 106.0, 213.0



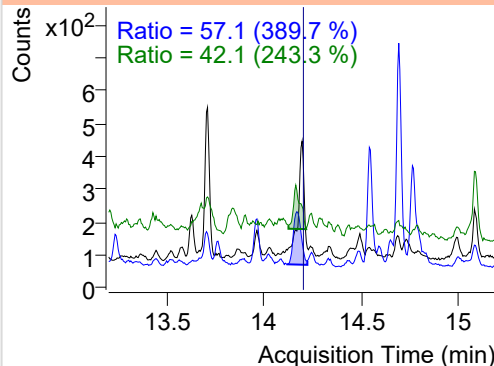
+ SIM (14.122-14.225 min, 20 scans) (\*\*) 2205

**Pyrene**

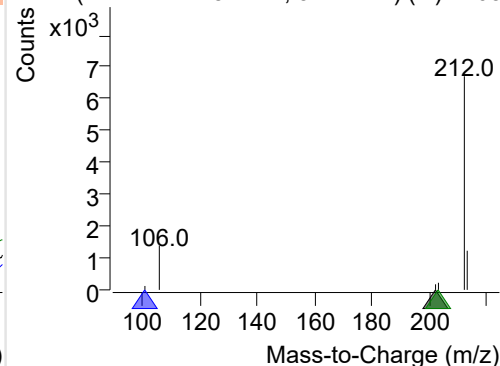
+ Selected Ion (202.0) 220506-PAHs-032.D



202.0, 101.0, 203.0



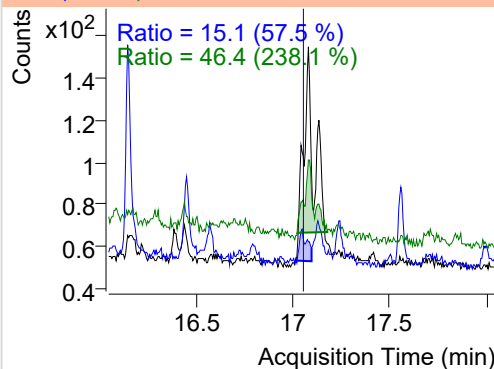
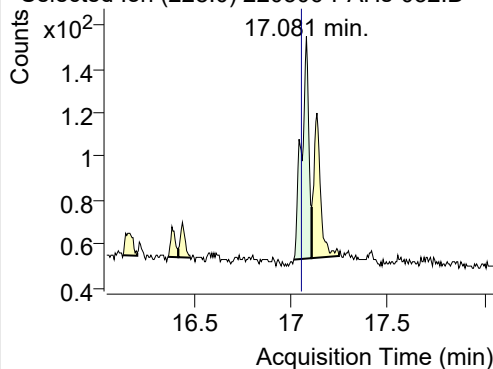
+ SIM (14.122-14.284 min, 31 scans) (\*\*) 2205



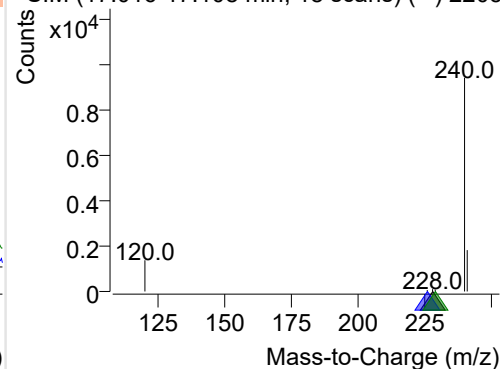
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-032.D

228.0, 226.0, 229.0

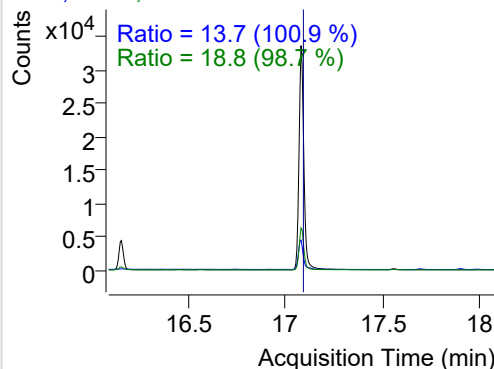
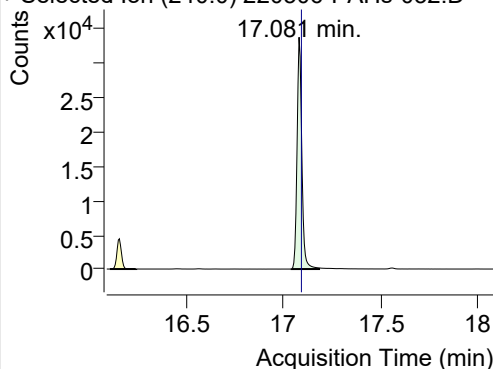


+ SIM (17.016-17.108 min, 18 scans) (\*\*) 2205

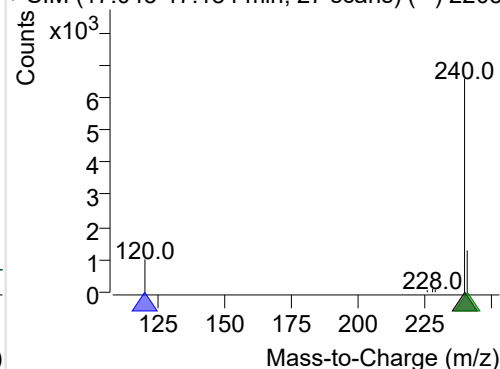
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-032.D

240.0, 120.0, 241.0

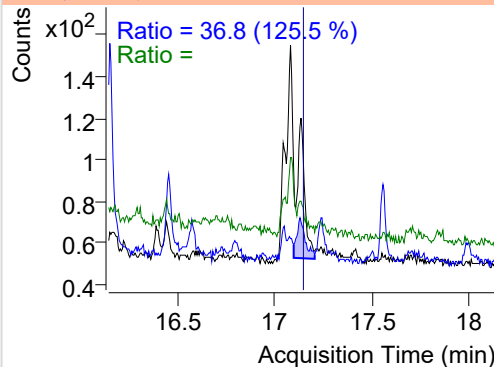
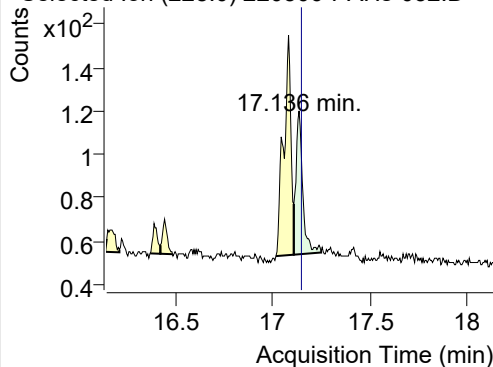


+ SIM (17.043-17.184 min, 27 scans) (\*\*) 2205

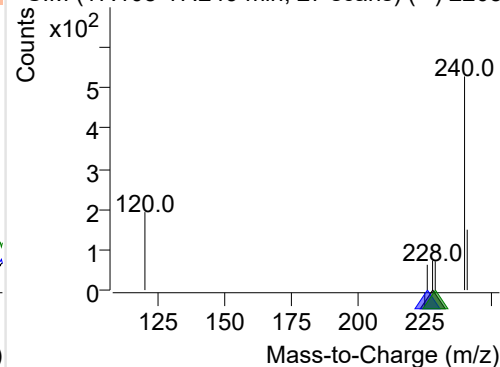
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-032.D

228.0, 226.0, 229.0

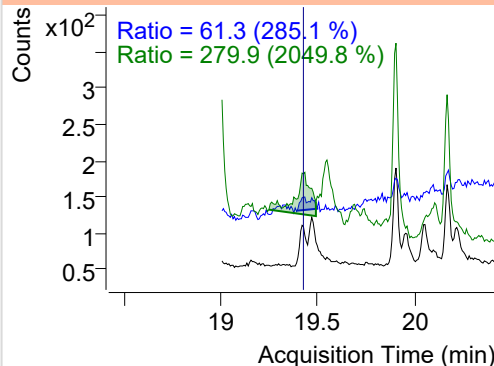
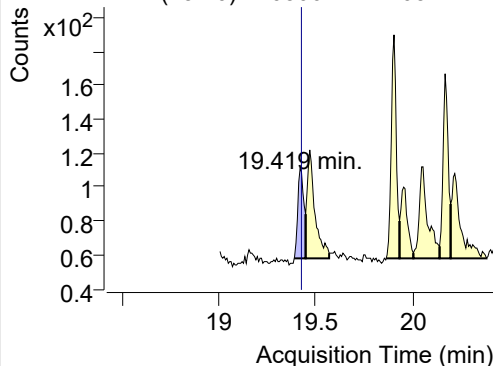


+ SIM (17.108-17.249 min, 27 scans) (\*\*) 2205

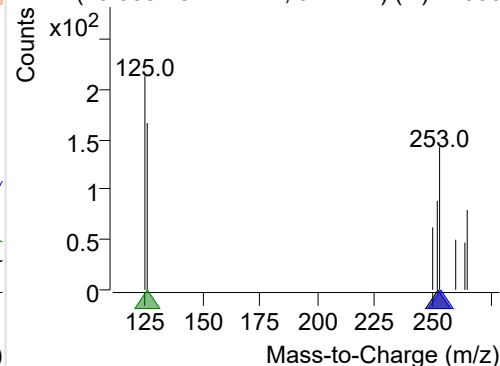
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-032.D

252.0, 253.0, 126.0



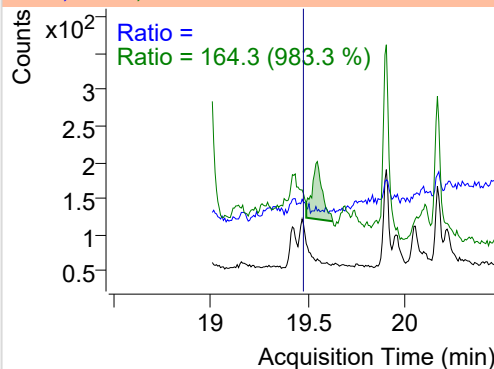
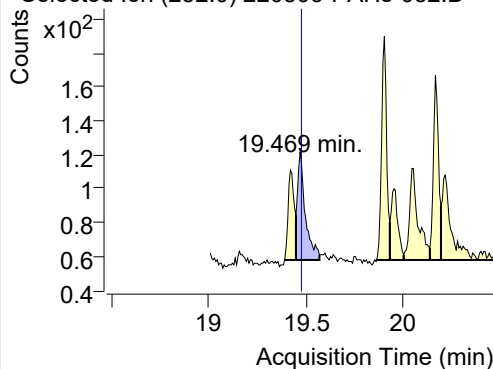
+ SIM (19.388-19.447 min, 9 scans) (\*\*) 22050



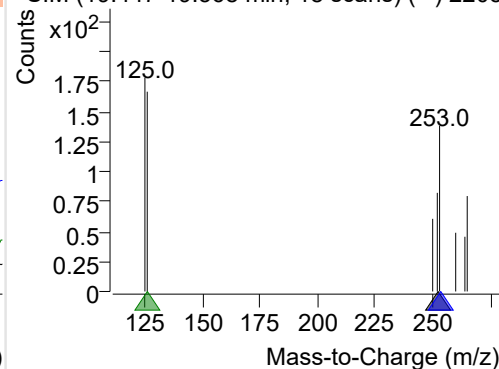
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-032.D

252.0, 253.0, 126.0

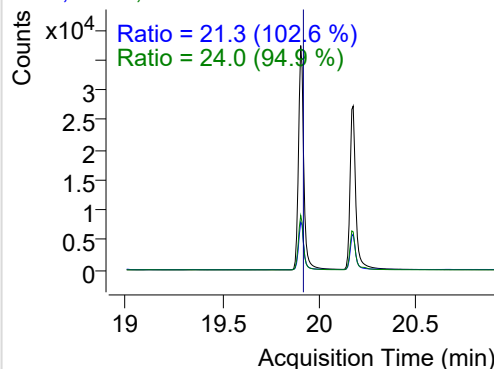
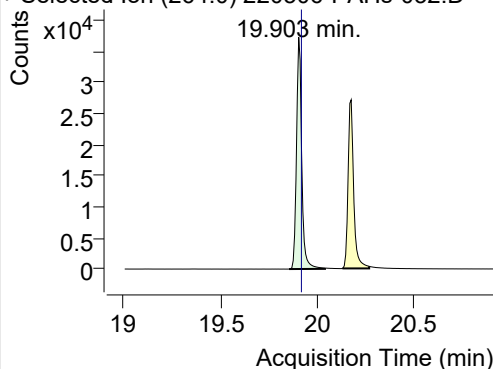


+ SIM (19.447-19.568 min, 18 scans) (\*\*) 2205

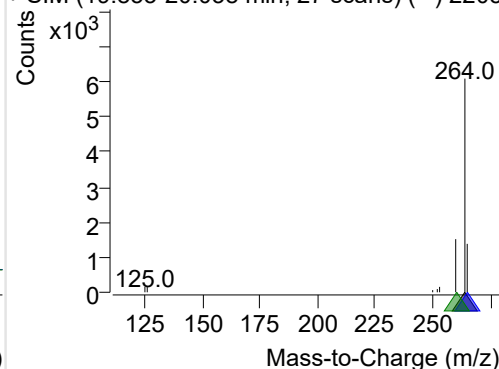
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-032.D

264.0, 265.0, 260.0

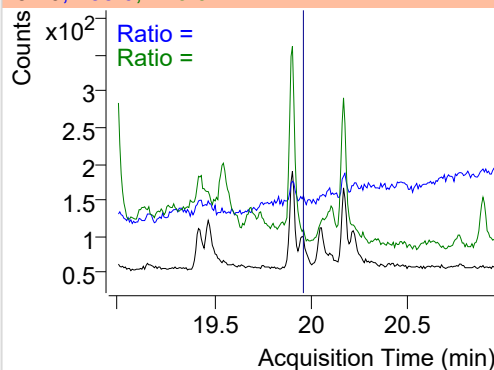
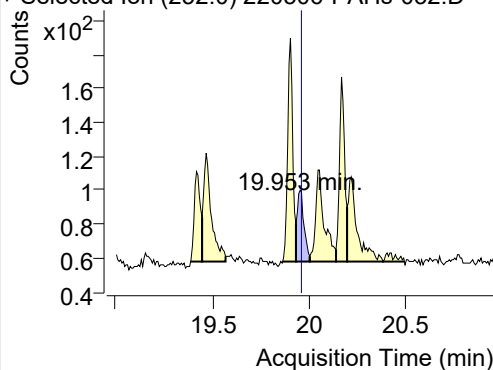


+ SIM (19.853-20.038 min, 27 scans) (\*\*) 2205

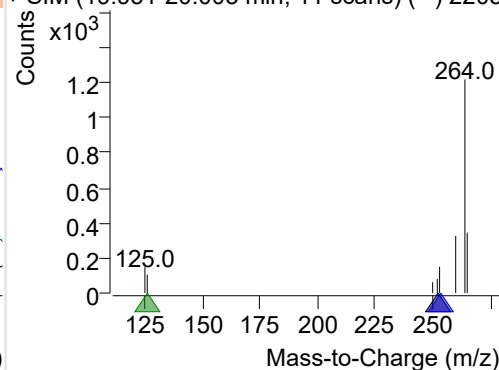
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-032.D

252.0, 253.0, 126.0

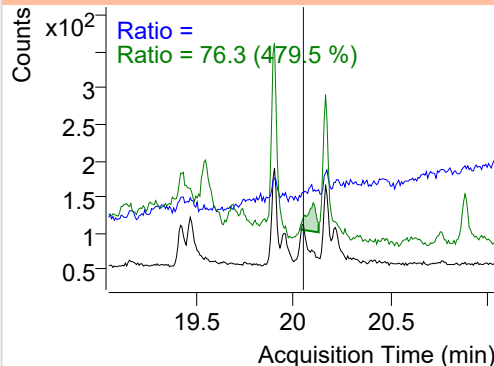
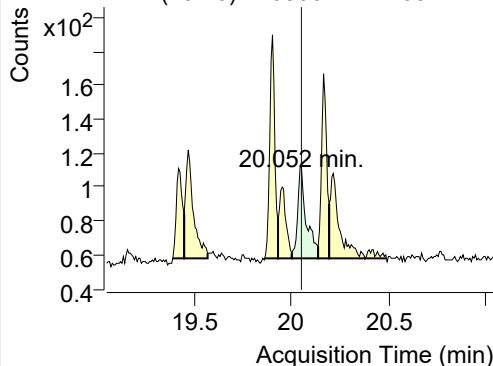


+ SIM (19.931-20.003 min, 11 scans) (\*\*) 2205

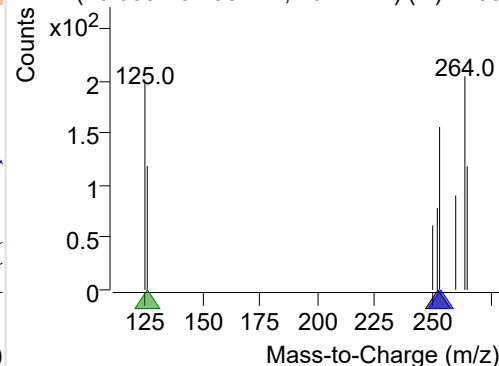
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-032.D

252.0, 253.0, 126.0

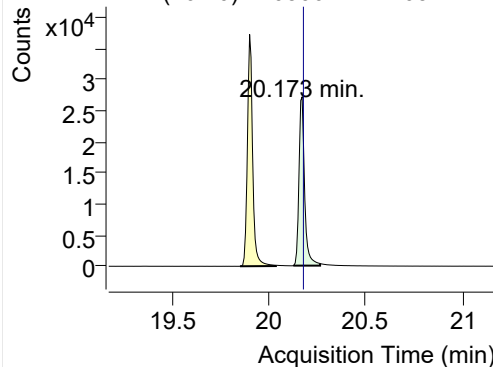


+ SIM (20.003-20.138 min, 20 scans) (\*\*) 2205

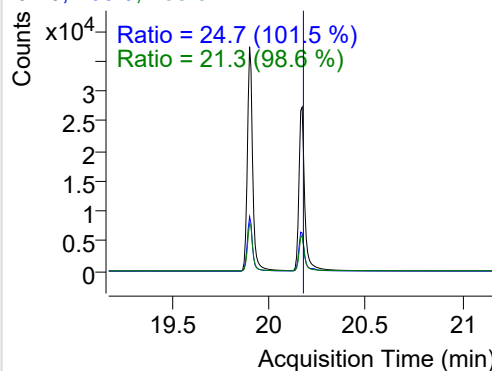


## IS-D12-Perylene

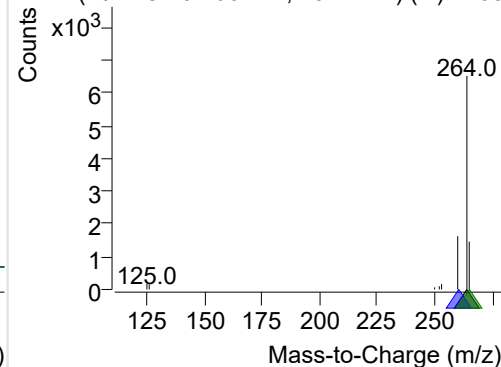
+ Selected Ion (264.0) 220506-PAHs-032.D



264.0, 260.0, 265.0

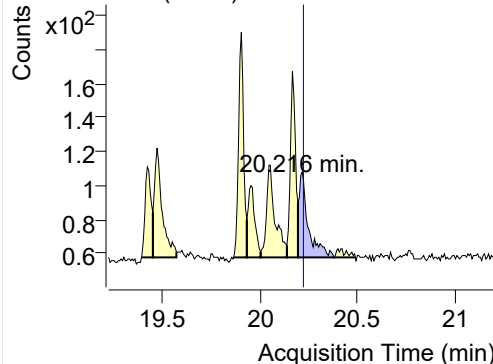


+ SIM (20.128-20.266 min, 20 scans) (\*\*) 2205

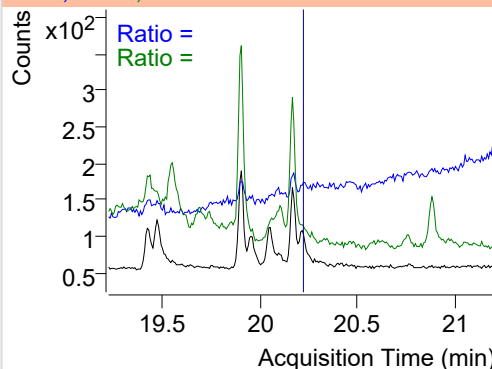


## Perylene

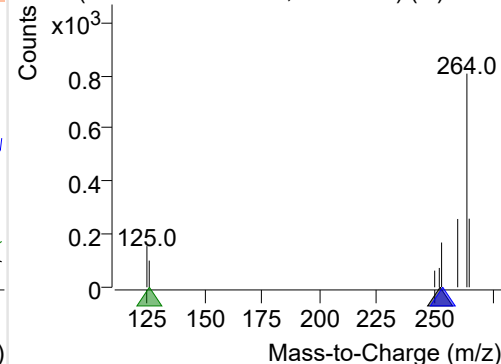
+ Selected Ion (252.0) 220506-PAHs-032.D



252.0, 253.0, 126.0

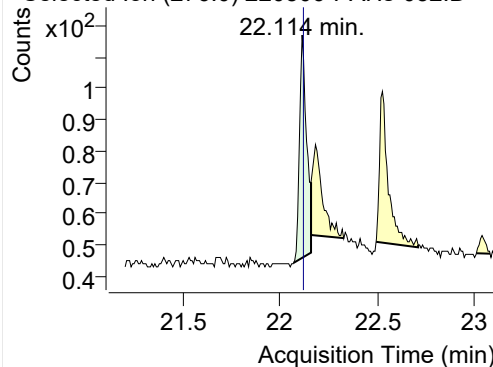


+ SIM (20.195-20.380 min, 27 scans) (\*\*) 2205

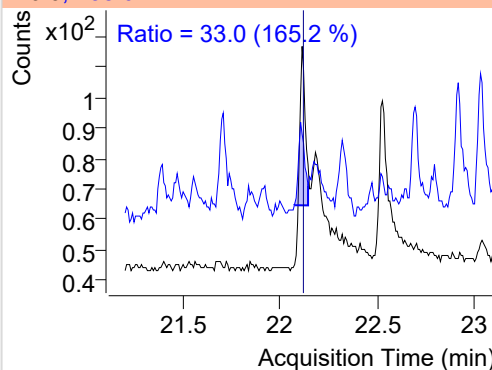


## Indeno(1,2,3-c,d)pyrene

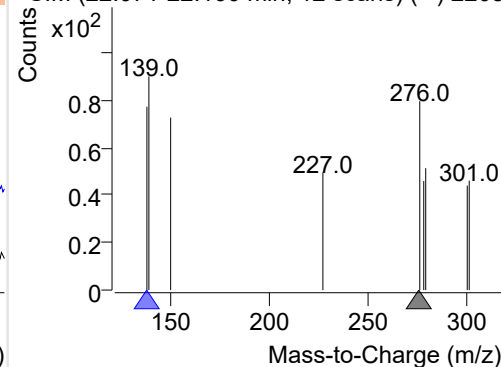
+ Selected Ion (276.0) 220506-PAHs-032.D



276.0, 138.0

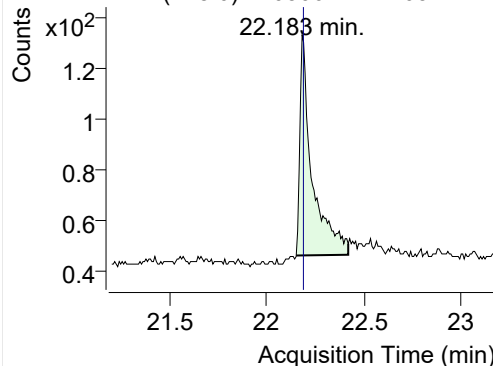


+ SIM (22.071-22.160 min, 12 scans) (\*\*) 2205

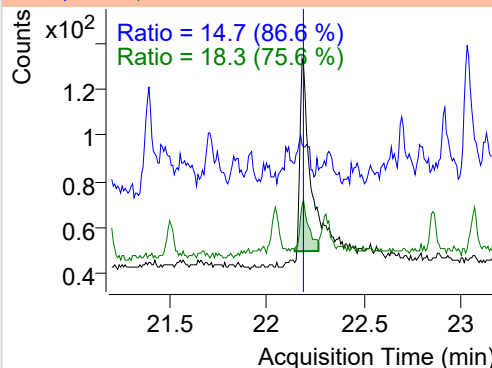


## Dibenz(a,h)anthracene

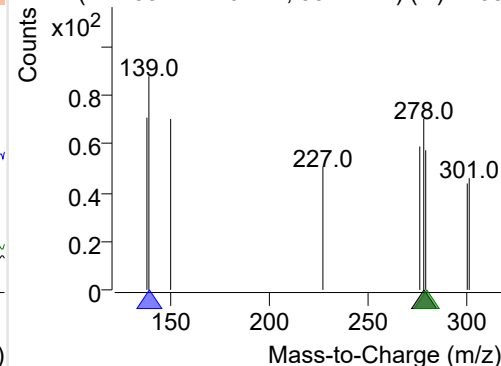
+ Selected Ion (278.0) 220506-PAHs-032.D



278.0, 139.0, 279.0

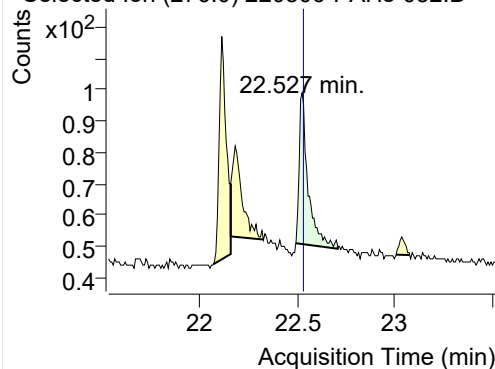


+ SIM (22.153-22.420 min, 35 scans) (\*\*) 2205

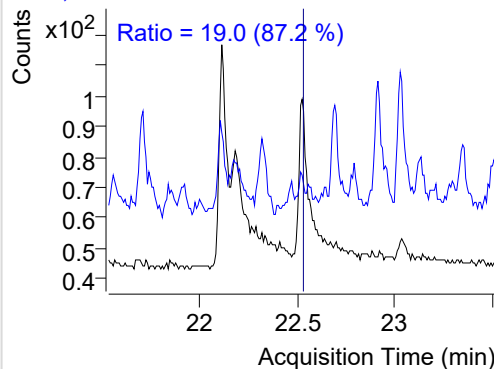


**Benzo(g,h,i)perylene**

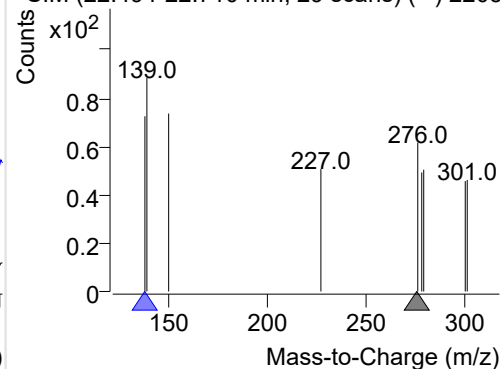
+ Selected Ion (276.0) 220506-PAHs-032.D



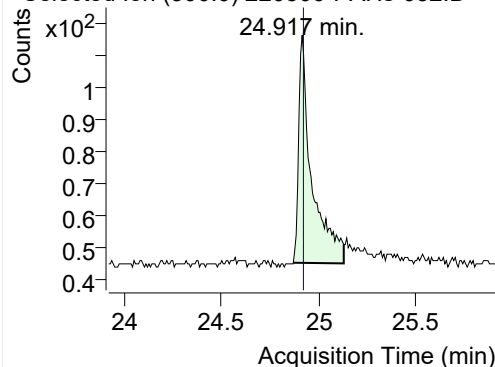
276.0, 138.0



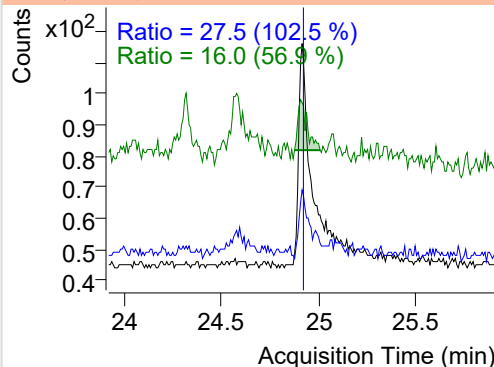
+ SIM (22.494-22.710 min, 29 scans) (\*\*) 2205

**Coronene**

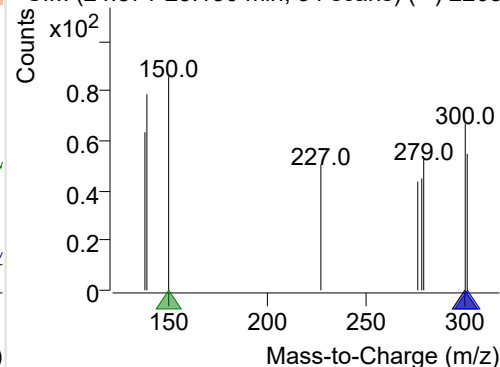
+ Selected Ion (300.0) 220506-PAHs-032.D



300.0, 301.0, 150.0



+ SIM (24.871-25.130 min, 34 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

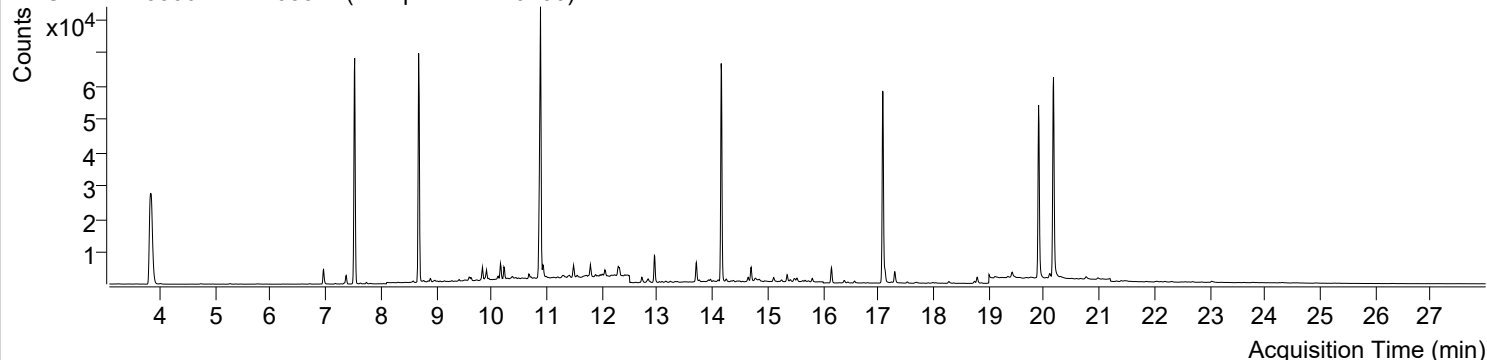


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 3:20:23	Data File	220506-PAHs-033.D
Type	Sample	Name	Sample-PM-220406
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

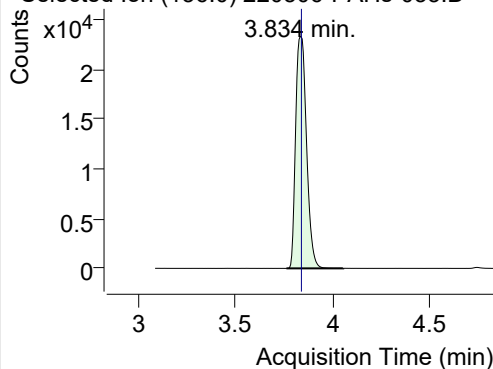
+ TIC SIM 220506-PAHs-033.D (Sample-PM-220406)



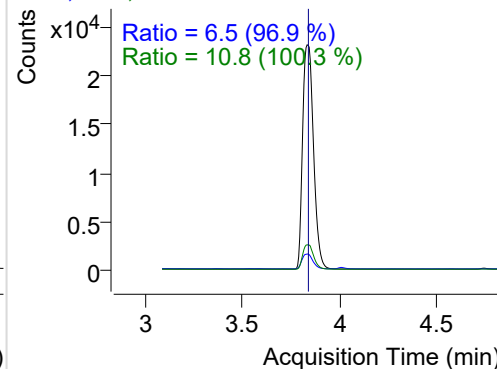
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.834	136.0	90461	23217.17	ND ng/ml	10.8
Naphthalene	3.872	128.0	201	46.39	ND ng/ml	28.5
Acenaphthylene	7.171	152.0	25	12.65	ND ng/ml	
IS-D10-Acenaphthene	7.526	164.0	53086	32648.52	ND ng/ml	96.1
Acenaphthene	7.520	154.0	186	115.11	ND ng/ml	
LSS-D10-Fluorene	8.684	176.0	50526	30785.82	ND ng/ml	92.6
Fluorene	8.747	166.0	91	63.44	ND ng/ml	76.4
IS-D10-Phenanthrene	10.889	188.0	95404	64319.32	ND ng/ml	15.0
Phenanthrene	10.942	178.0	4093	2332.36	ND ng/ml	18.1
Anthracene	10.942	178.0	4093	2332.36	ND ng/ml	18.1
Fluoranthene	13.710	202.0	2977	1806.70	ND ng/ml	27.8
LSS-D10-Pyrene	14.160	212.0	76515	48643.84	ND ng/ml	17.6
Pyrene	14.165	202.0	207	71.11	ND ng/ml	239.9
Benz(a)anthracene	17.081	228.0	252	134.60	ND ng/ml	10.6
IS-D12-Chrysene	17.087	240.0	74618	43640.31	ND ng/ml	19.1
Chrysene	17.125	228.0	3009	1746.86	ND ng/ml	31.5
Benzo(b)fluoranthene	19.419	252.0	721	341.07	ND ng/ml	69.6
Benzo(k)fluoranthene	19.469	252.0	224	117.27	ND ng/ml	21.9
SS-D12-Benzo(e)pyrene	19.903	264.0	62223	35236.80	ND ng/ml	25.0
Benzo(e)pyrene	19.903	252.0	419	154.29	ND ng/ml	29.5
Benzo(a)pyrene	20.045	252.0	90	43.53	ND ng/ml	
IS-D12-Perylene	20.173	264.0	79113	41489.10	ND ng/ml	23.5
Perylene	20.216	252.0	89	43.02	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	22.114	276.0	169	68.38	ND ng/ml	63.1
Dibenz(a,h)anthracene	22.183	278.0	336	97.73	ND ng/ml	17.2
Benzo(g,h,i)perylene	22.527	276.0	141	51.19	ND ng/ml	42.2
Coronene	24.916	300.0	248	62.07	ND ng/ml	17.7

## IS-D8-Naphthalene

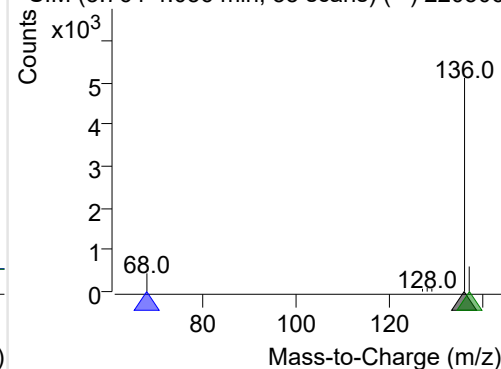
+ Selected Ion (136.0) 220506-PAHs-033.D



136.0, 68.0, 137.0

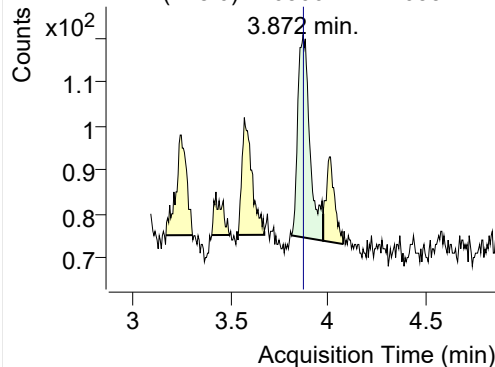


+ SIM (3.764-4.056 min, 55 scans) (\*\*) 220506

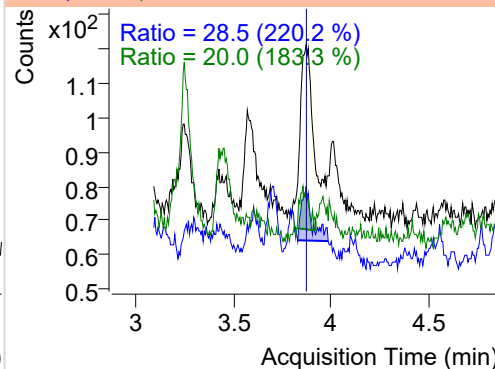


**Naphthalene**

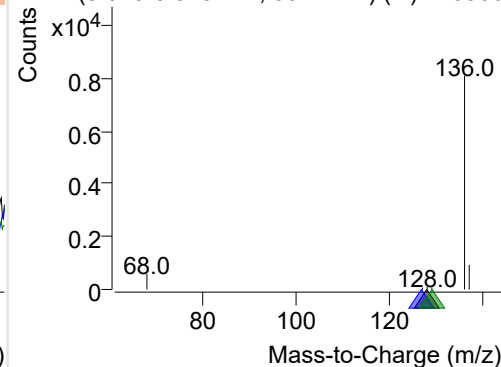
+ Selected Ion (128.0) 220506-PAHs-033.D



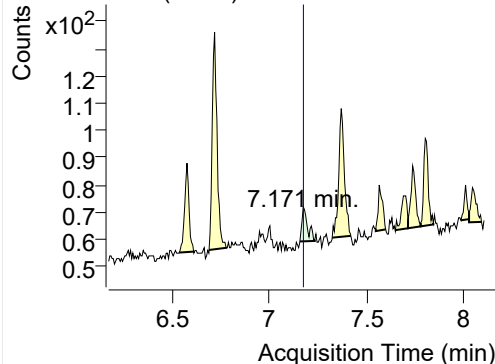
128.0, 127.0, 129.0



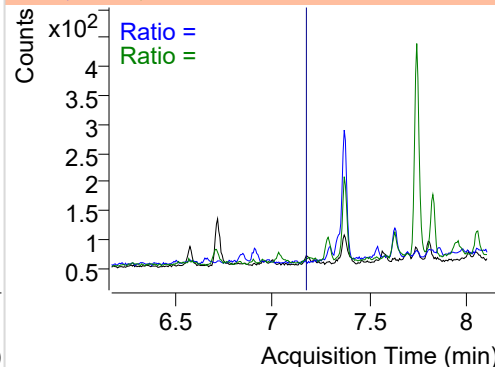
+ SIM (3.813-3.975 min, 30 scans) (\*\*) 220506

**Acenaphthylene**

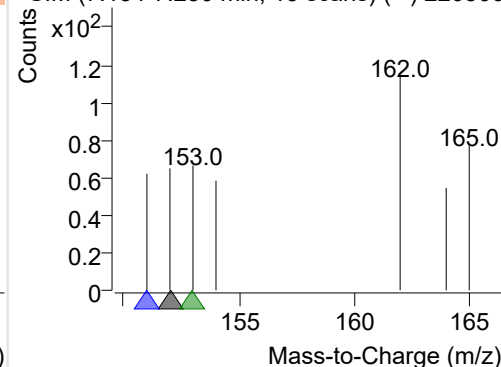
+ Selected Ion (152.0) 220506-PAHs-033.D



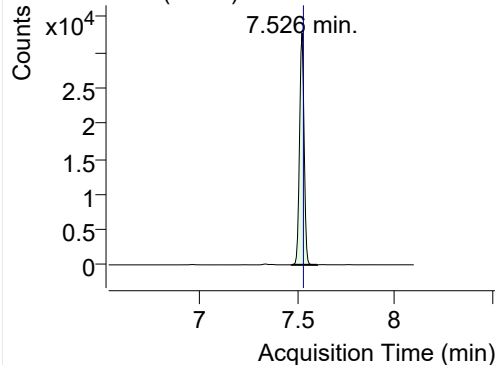
152.0, 151.0, 153.0



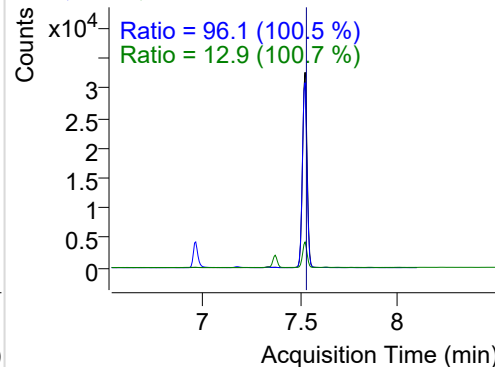
+ SIM (7.154-7.230 min, 13 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

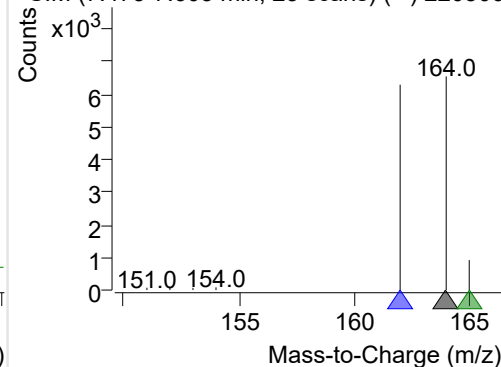
+ Selected Ion (164.0) 220506-PAHs-033.D



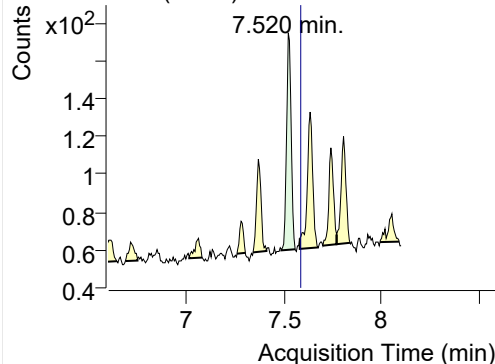
164.0, 162.0, 165.0



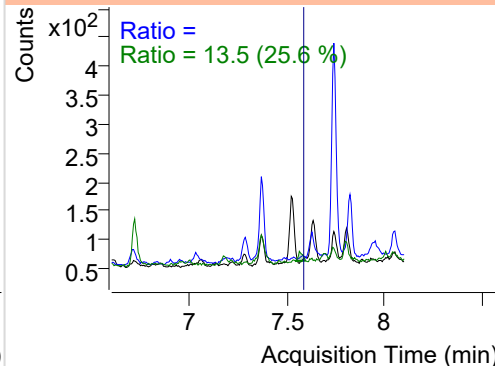
+ SIM (7.473-7.603 min, 23 scans) (\*\*) 220506

**Acenaphthene**

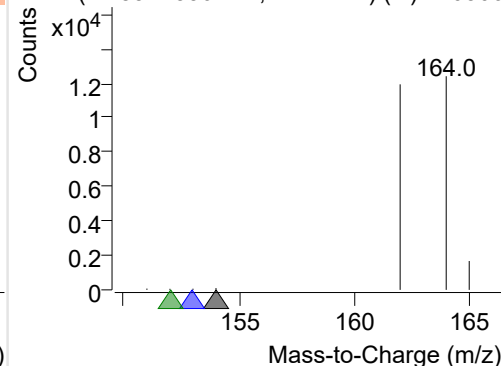
+ Selected Ion (154.0) 220506-PAHs-033.D



154.0, 153.0, 152.0

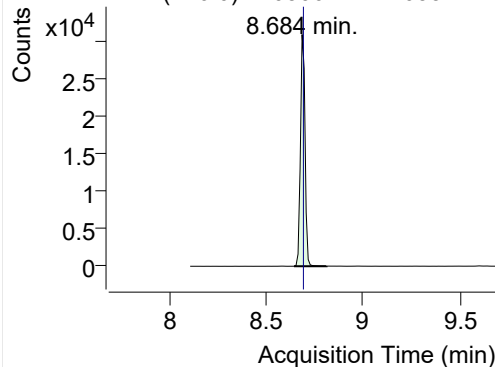


+ SIM (7.485-7.556 min, 12 scans) (\*\*) 220506

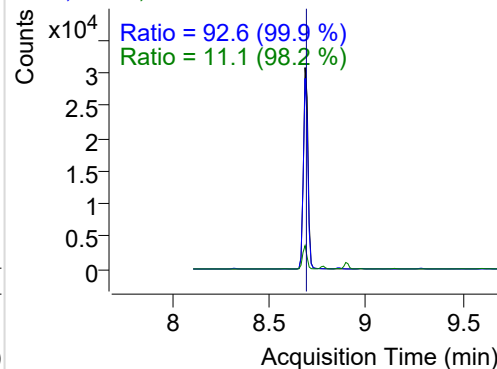


## LSS-D10-Fluorene

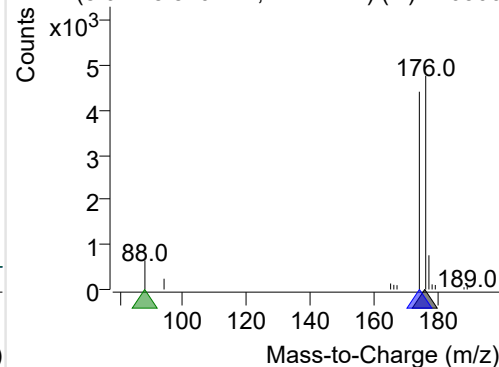
+ Selected Ion (176.0) 220506-PAHs-033.D



176.0, 174.0, 88.0

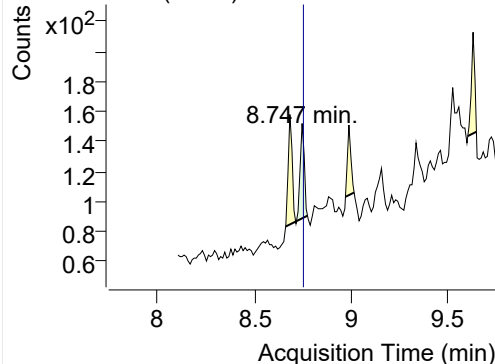


+ SIM (8.642-8.810 min, 17 scans) (\*\*) 220506

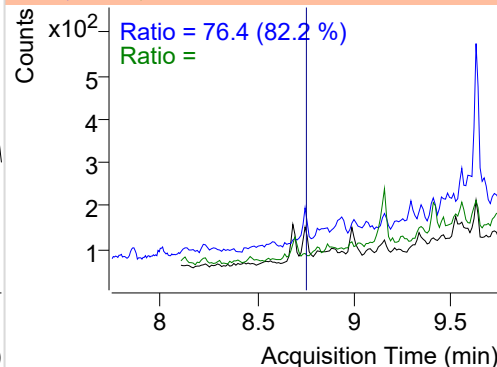


## Fluorene

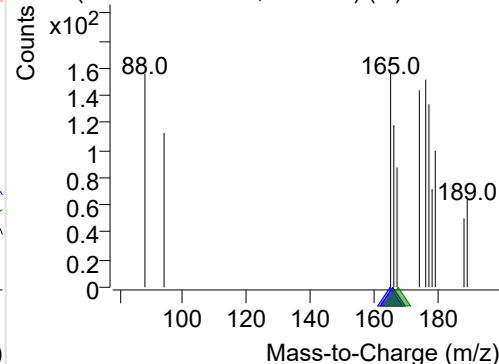
+ Selected Ion (166.0) 220506-PAHs-033.D



166.0, 165.0, 167.0

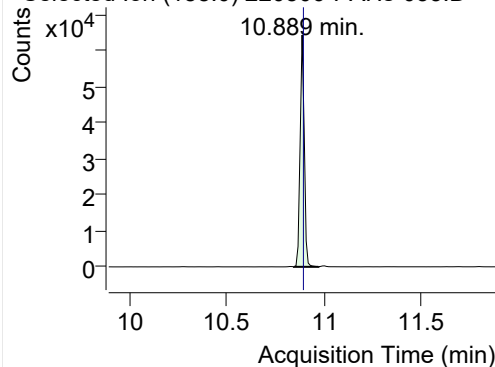


+ SIM (8.718-8.775 min, 5 scans) (\*\*) 220506-I

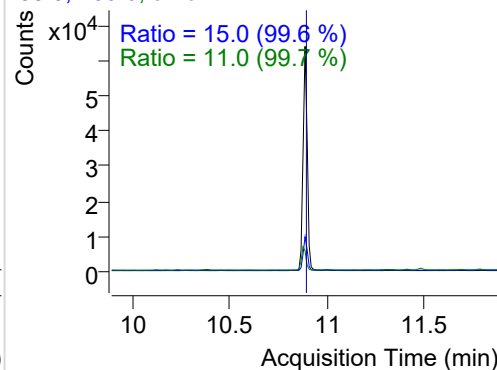


## IS-D10-Phenanthrene

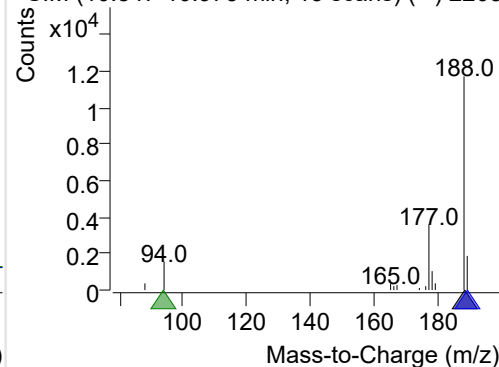
+ Selected Ion (188.0) 220506-PAHs-033.D



188.0, 189.0, 94.0

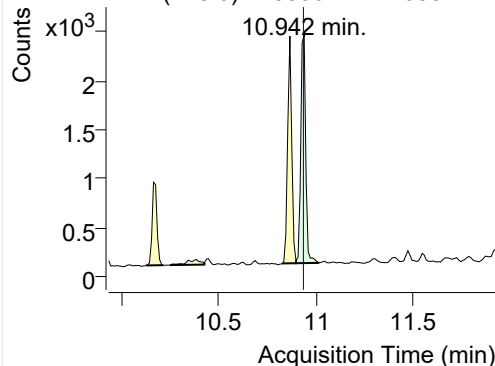


+ SIM (10.847-10.973 min, 13 scans) (\*\*) 2205

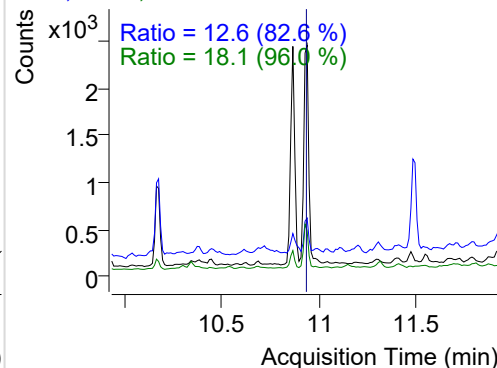


## Phenanthrene

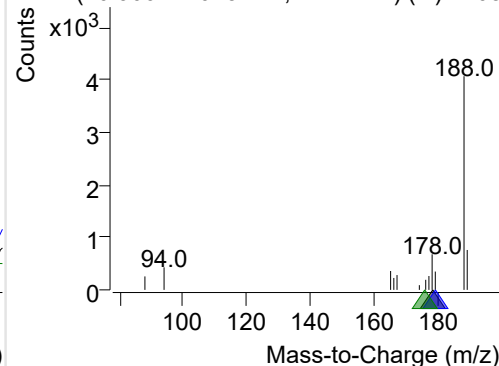
+ Selected Ion (178.0) 220506-PAHs-033.D



178.0, 179.0, 176.0

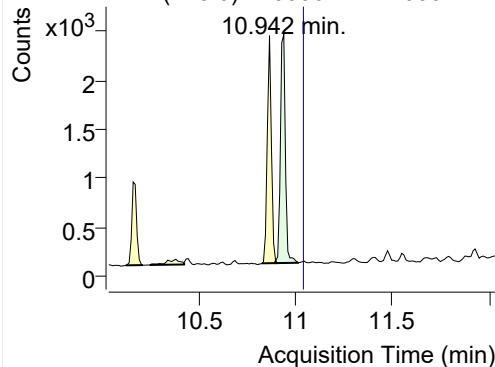


+ SIM (10.900-11.015 min, 12 scans) (\*\*) 2205

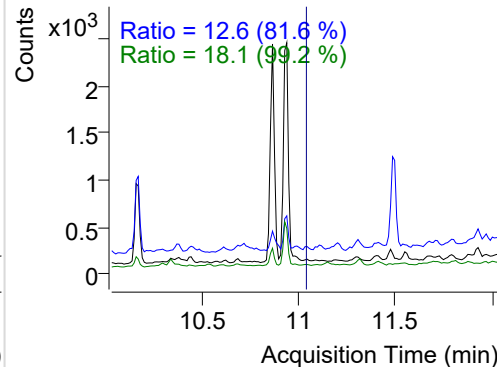


**Anthracene**

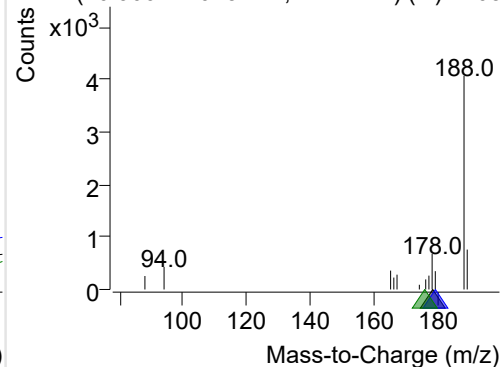
+ Selected Ion (178.0) 220506-PAHs-033.D



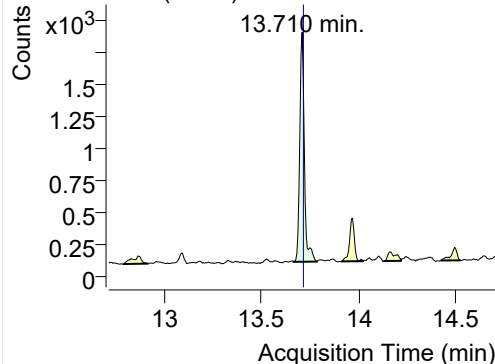
178.0, 179.0, 176.0



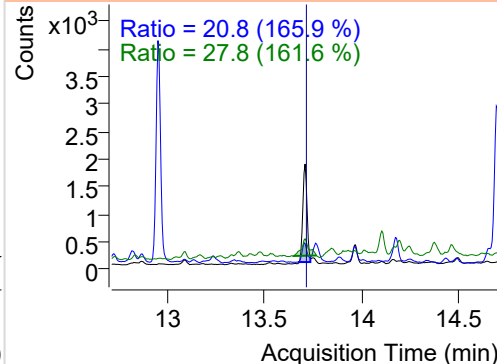
+ SIM (10.900-11.015 min, 12 scans) (\*\*) 2205

**Fluoranthene**

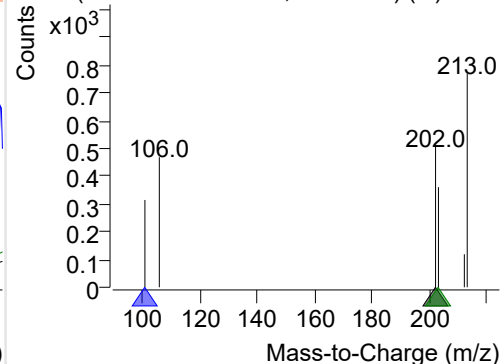
+ Selected Ion (202.0) 220506-PAHs-033.D



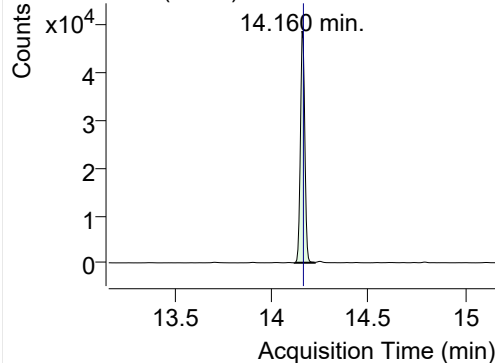
202.0, 101.0, 203.0



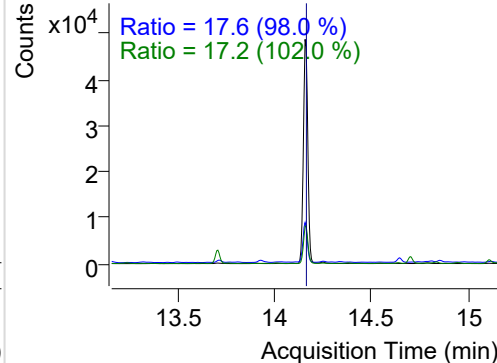
+ SIM (13.666-13.786 min, 23 scans) (\*\*) 2205

**LSS-D10-Pyrene**

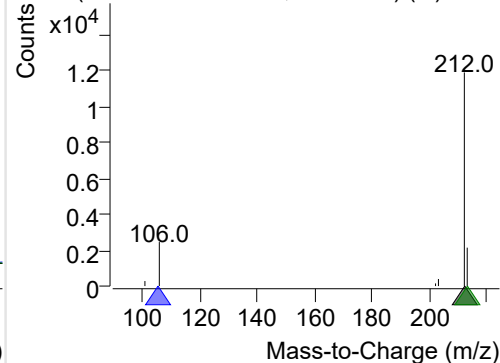
+ Selected Ion (212.0) 220506-PAHs-033.D



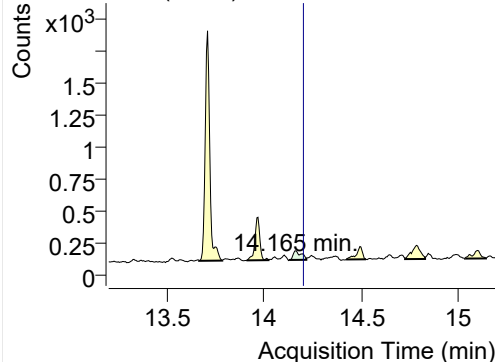
212.0, 106.0, 213.0



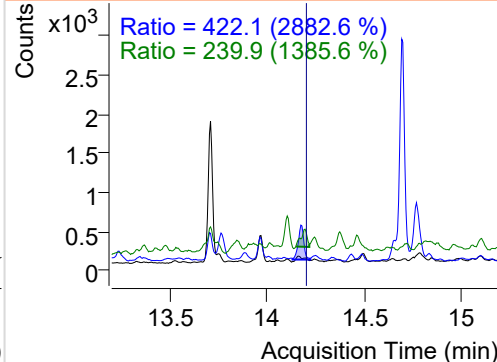
+ SIM (14.122-14.225 min, 20 scans) (\*\*) 2205

**Pyrene**

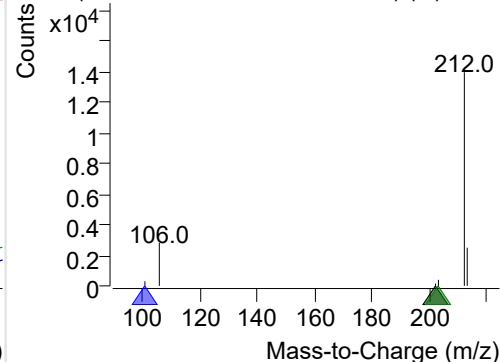
+ Selected Ion (202.0) 220506-PAHs-033.D



202.0, 101.0, 203.0



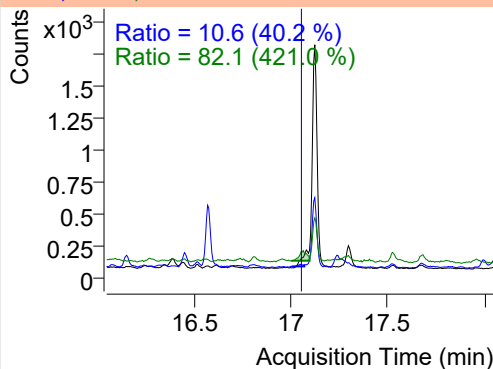
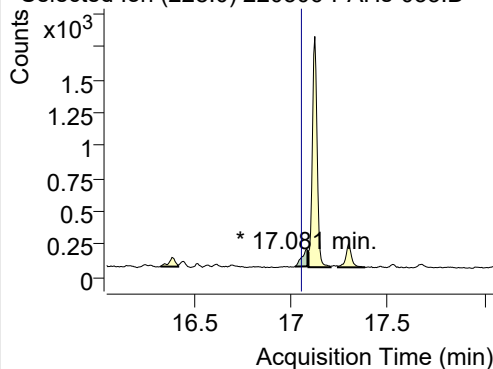
+ SIM (14.130-14.219 min, 17 scans) (\*\*) 2205



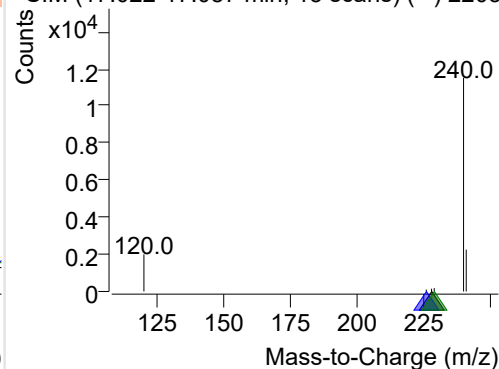
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-033.D

228.0, 226.0, 229.0

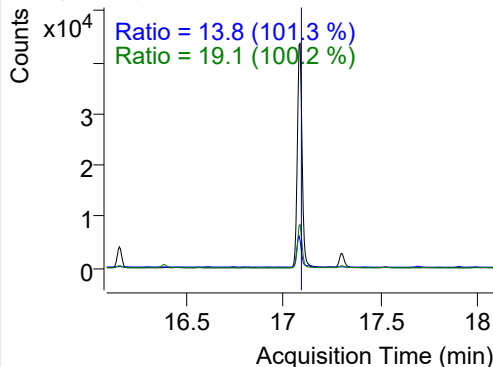
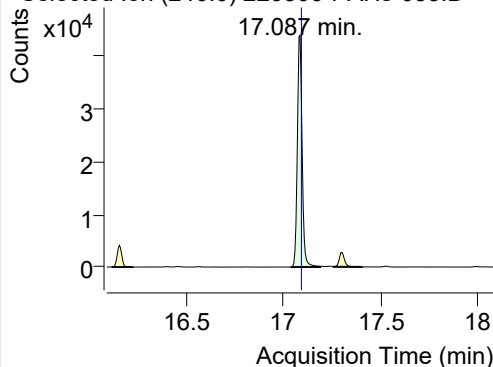


+ SIM (17.022-17.087 min, 13 scans) (\*\*) 2205

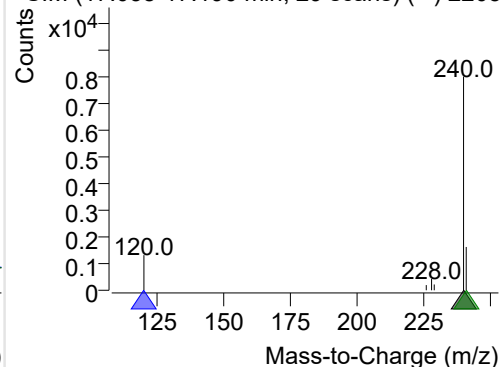
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-033.D

240.0, 120.0, 241.0

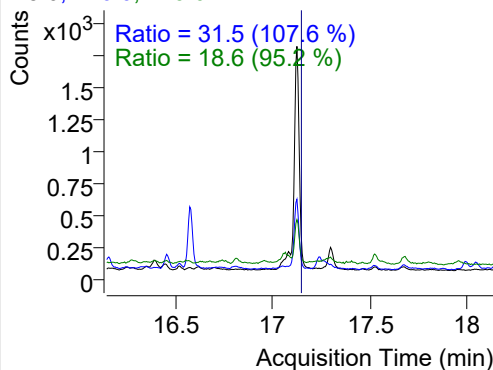
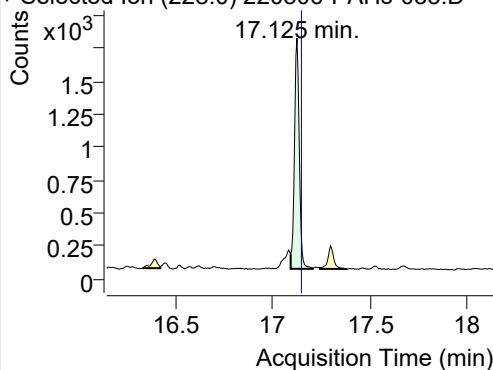


+ SIM (17.038-17.190 min, 29 scans) (\*\*) 2205

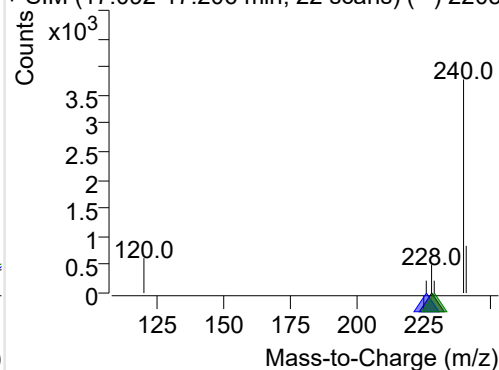
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-033.D

228.0, 226.0, 229.0

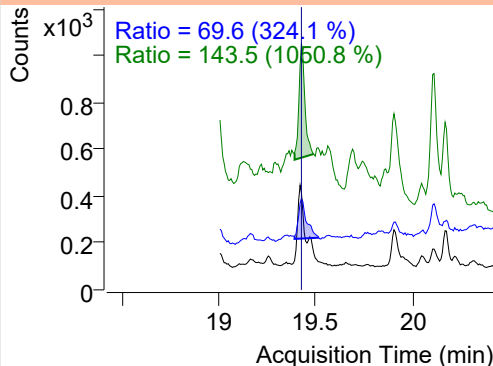
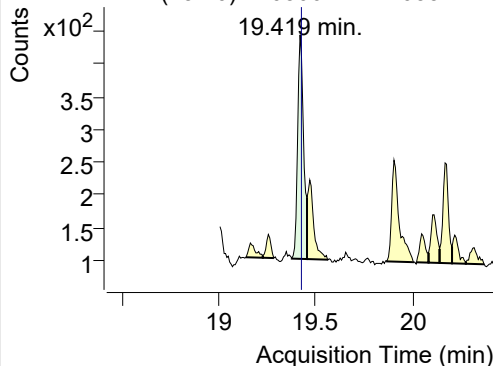


+ SIM (17.092-17.206 min, 22 scans) (\*\*) 2205

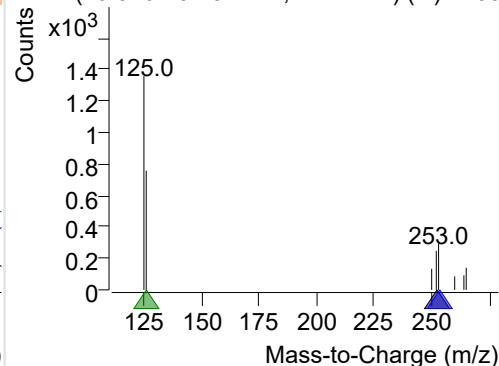
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-033.D

252.0, 253.0, 126.0



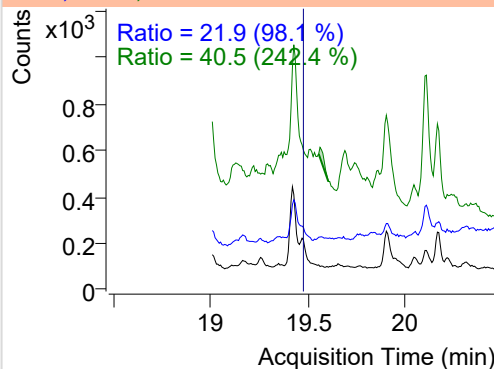
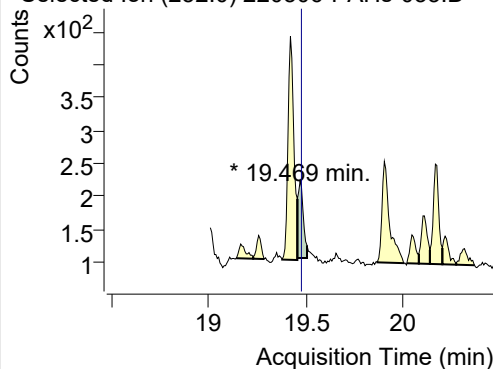
+ SIM (19.376-19.454 min, 12 scans) (\*\*) 2205



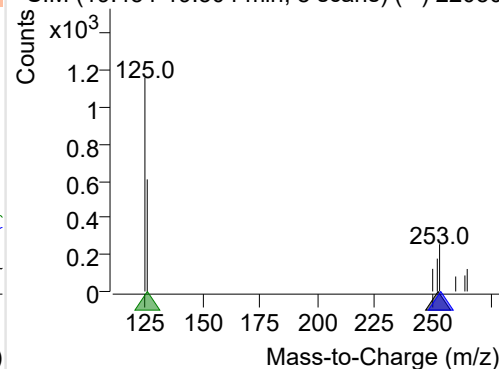
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-033.D

252.0, 253.0, 126.0

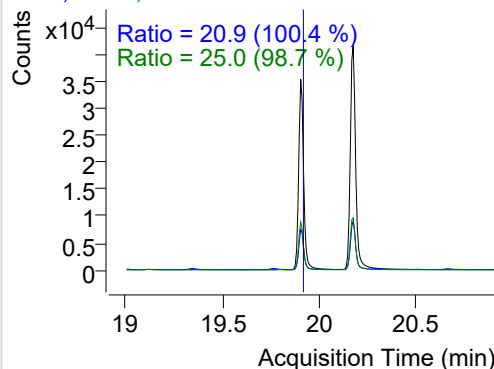
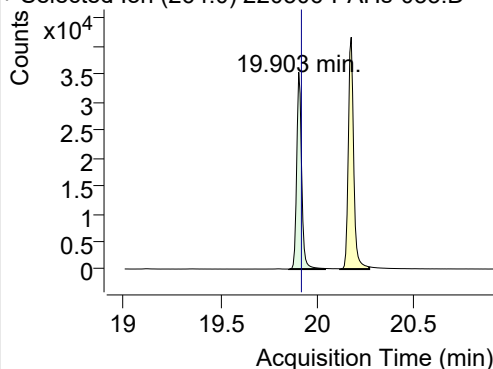


+ SIM (19.454-19.504 min, 8 scans) (\*\*) 22050

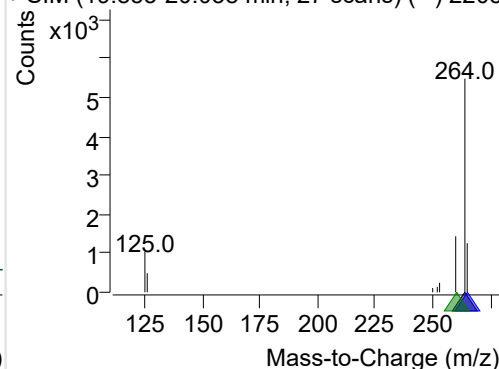
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-033.D

264.0, 265.0, 260.0

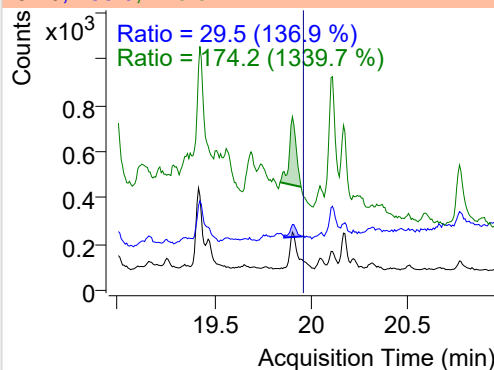
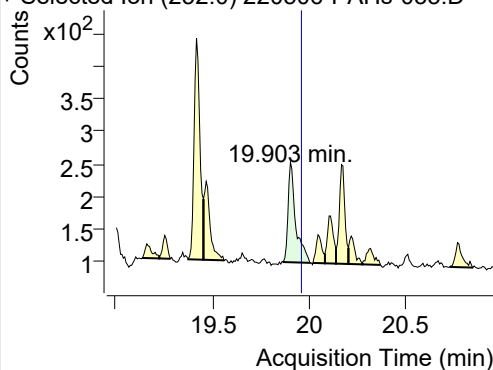


+ SIM (19.853-20.038 min, 27 scans) (\*\*) 2205

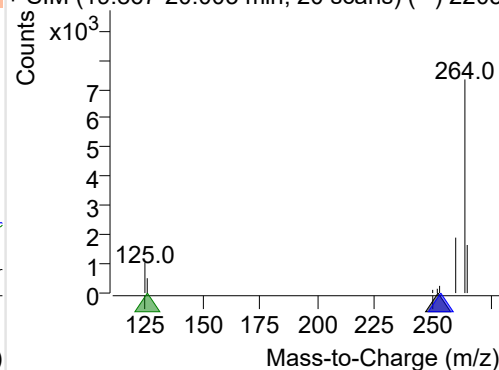
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-033.D

252.0, 253.0, 126.0

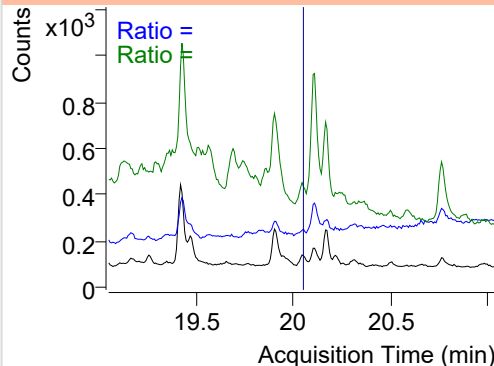
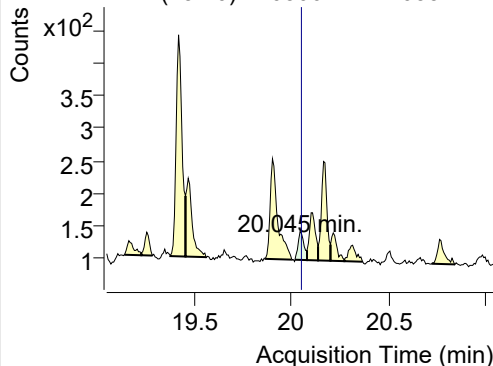


+ SIM (19.867-20.003 min, 20 scans) (\*\*) 2205

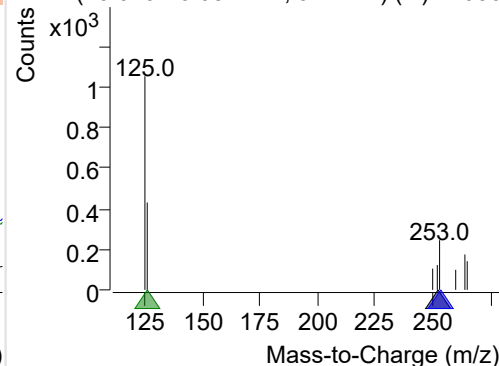
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-033.D

252.0, 253.0, 126.0

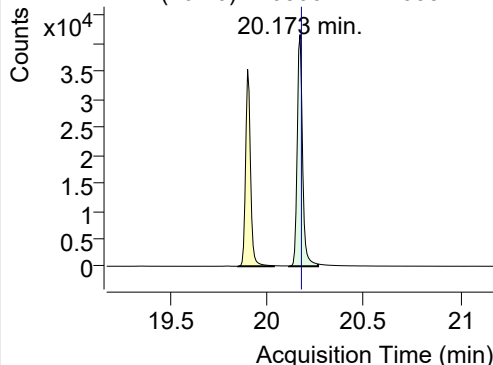


+ SIM (20.019-20.081 min, 9 scans) (\*\*) 22050

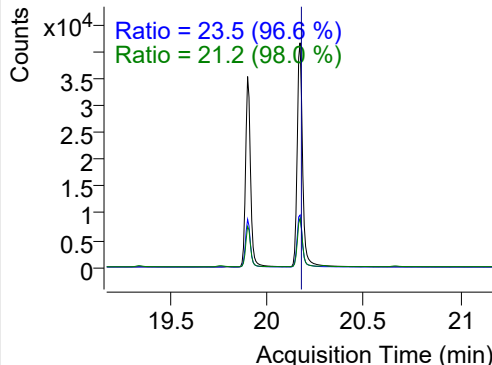


## IS-D12-Perylene

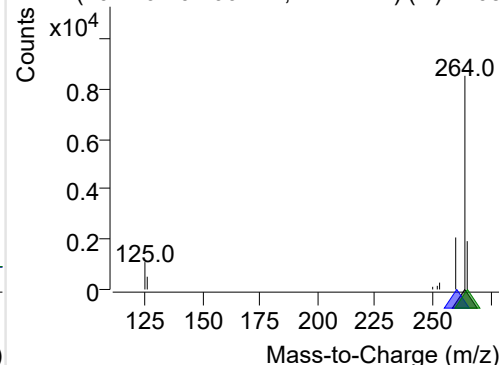
+ Selected Ion (264.0) 220506-PAHs-033.D



264.0, 260.0, 265.0

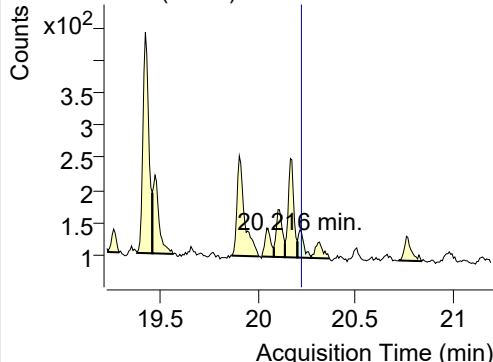


+ SIM (20.116-20.266 min, 22 scans) (\*\*) 2205

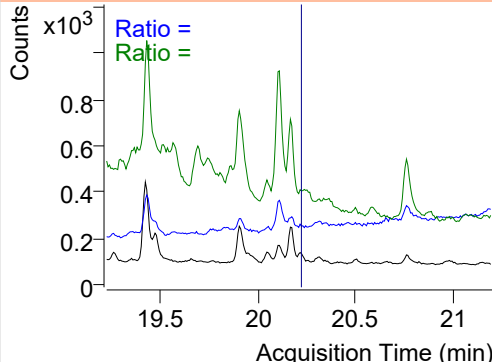


## Perylene

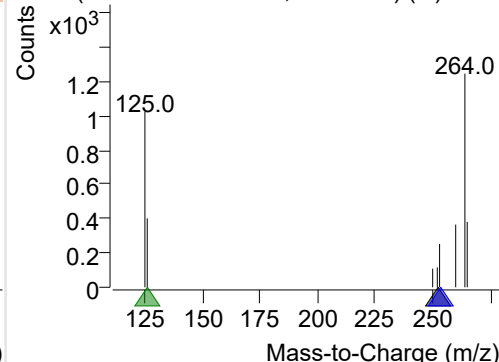
+ Selected Ion (252.0) 220506-PAHs-033.D



252.0, 253.0, 126.0

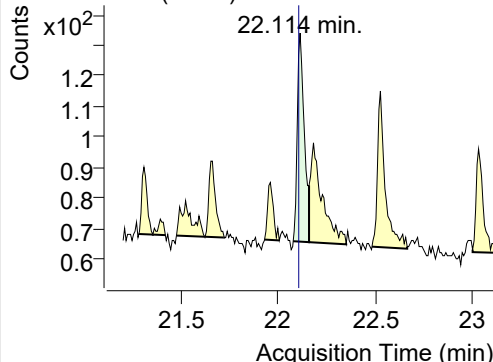


+ SIM (20.202-20.273 min, 11 scans) (\*\*) 2205

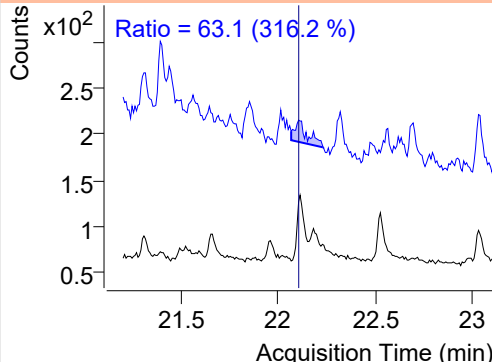


## Indeno(1,2,3-c,d)pyrene

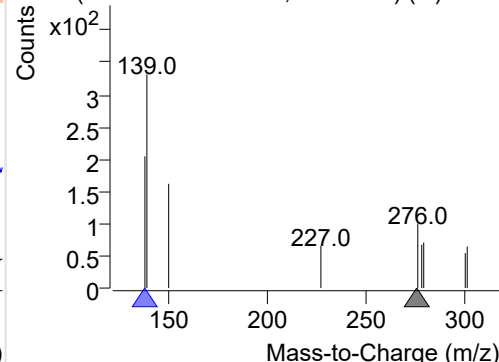
+ Selected Ion (276.0) 220506-PAHs-033.D



276.0, 138.0

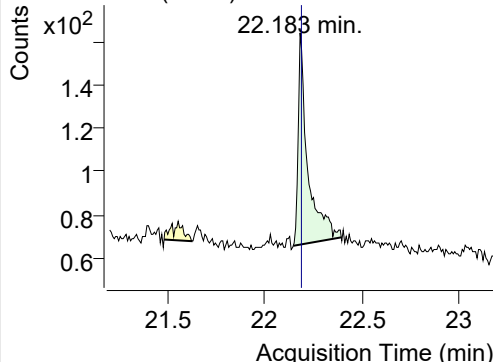


+ SIM (22.079-22.160 min, 11 scans) (\*\*) 2205

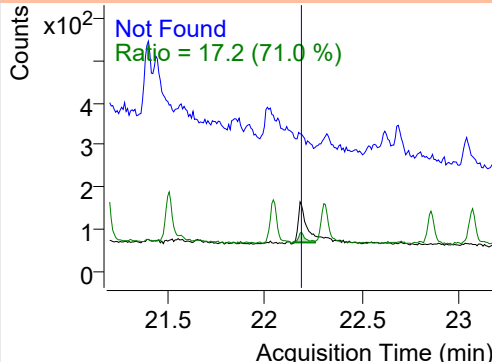


## Dibenz(a,h)anthracene

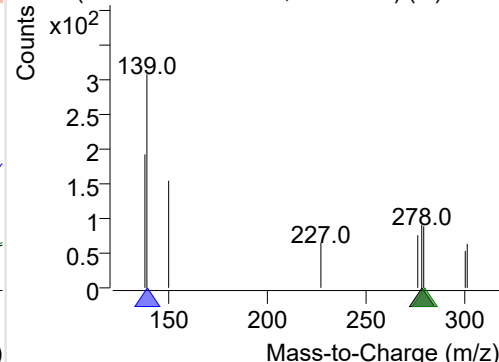
+ Selected Ion (278.0) 220506-PAHs-033.D



278.0, 139.0, 279.0



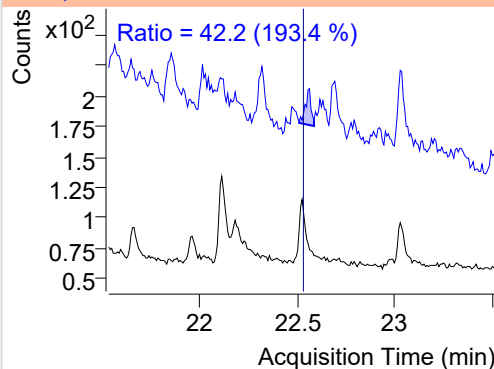
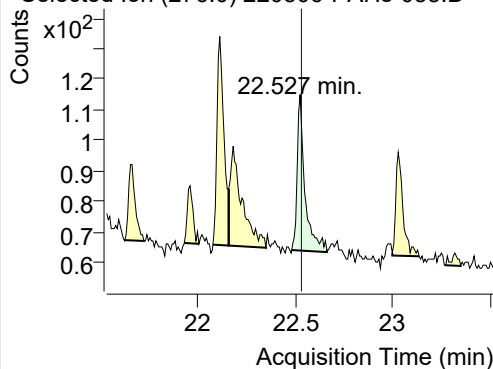
+ SIM (22.147-22.394 min, 32 scans) (\*\*) 2205



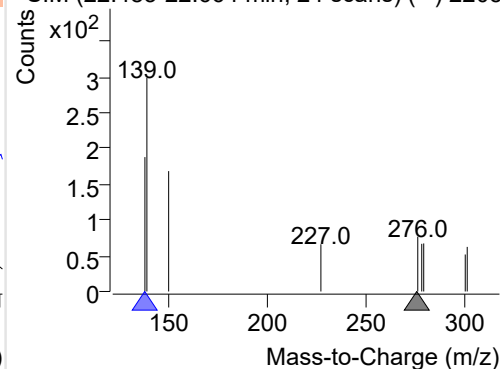
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-033.D

276.0, 138.0

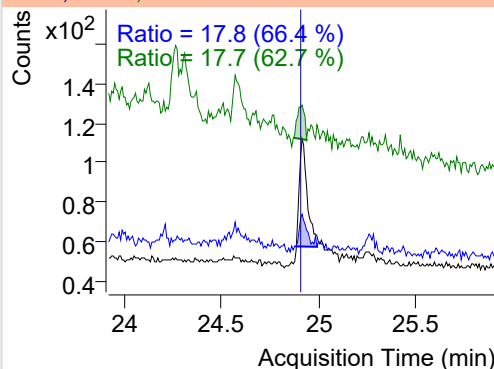
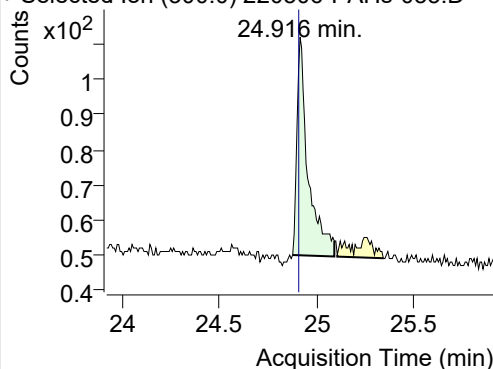


+ SIM (22.483-22.664 min, 24 scans) (\*\*) 2205

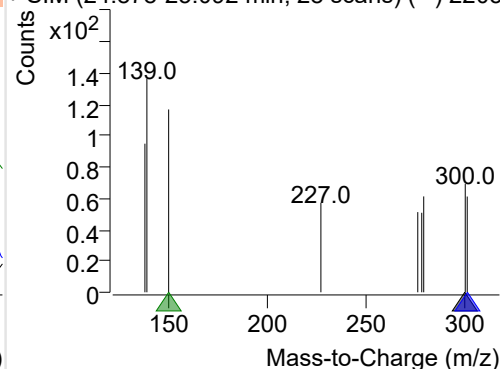
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-033.D

300.0, 301.0, 150.0



+ SIM (24.878-25.092 min, 28 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

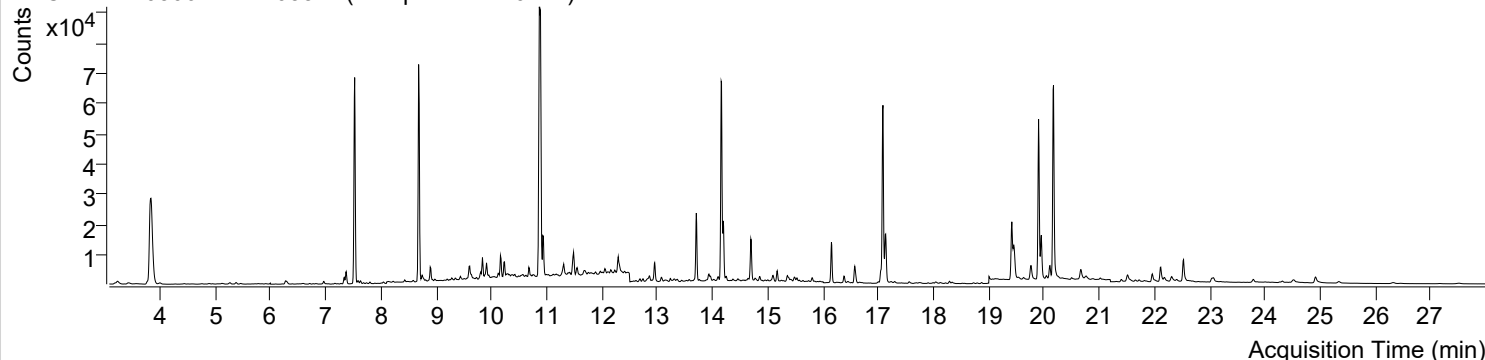


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 4:22:39	Data File	220506-PAHs-035.D
Type	Sample	Name	Sample-PM-220417
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

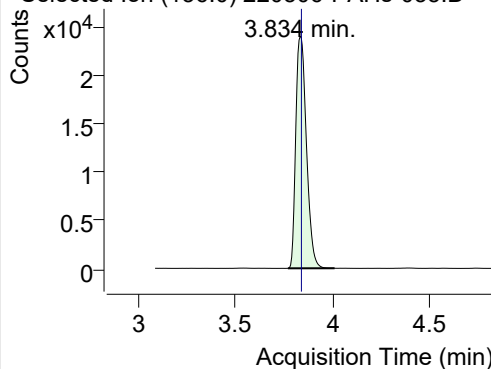
+ TIC SIM 220506-PAHs-035.D (Sample-PM-220417)



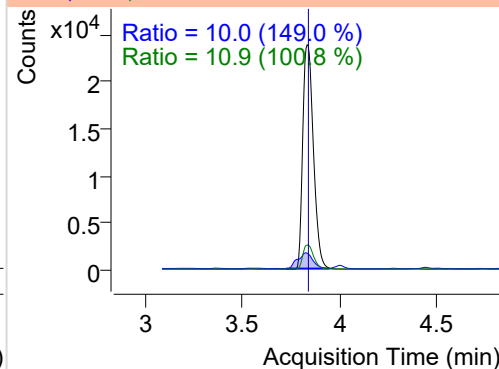
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.834	136.0	91034	23892.76	ND ng/ml	10.9
Naphthalene	3.872	128.0	2249	591.07	ND ng/ml	20.6
Acenaphthylene	7.165	152.0	242	128.78	ND ng/ml	
IS-D10-Acenaphthene	7.526	164.0	52999	32631.81	ND ng/ml	96.2
Acenaphthene	7.591	154.0	546	321.40	ND ng/ml	129.8
LSS-D10-Fluorene	8.684	176.0	52025	31858.72	ND ng/ml	92.5
Fluorene	8.747	166.0	1447	841.96	ND ng/ml	73.4
IS-D10-Phenanthrene	10.889	188.0	94567	64601.03	ND ng/ml	14.9
Phenanthrene	10.942	178.0	14305	8518.35	ND ng/ml	19.4
Anthracene	10.942	178.0	14305	8518.35	ND ng/ml	19.4
Fluoranthene	13.710	202.0	25368	16876.23	ND ng/ml	17.6
LSS-D10-Pyrene	14.159	212.0	78511	48366.57	ND ng/ml	17.6
Pyrene	14.197	202.0	21438	13692.34	ND ng/ml	20.5
Benz(a)anthracene	17.049	228.0	5023	2826.12	ND ng/ml	26.3
IS-D12-Chrysene	17.087	240.0	74683	44509.52	ND ng/ml	19.0
Chrysene	17.135	228.0	21225	10415.06	ND ng/ml	30.0
Benzo(b)fluoranthene	19.419	252.0	18904	10382.99	ND ng/ml	22.5
Benzo(k)fluoranthene	19.454	252.0	15090	6285.06	ND ng/ml	21.7
SS-D12-Benzo(e)pyrene	19.903	264.0	60827	35911.66	ND ng/ml	25.2
Benzo(e)pyrene	19.953	252.0	13782	7614.79	ND ng/ml	20.9
Benzo(a)pyrene	20.045	252.0	1477	688.79	ND ng/ml	65.5
IS-D12-Perylene	20.173	264.0	80636	43871.21	ND ng/ml	23.9
Perylene	20.045	252.0	1477	688.79	ND ng/ml	65.5
Indeno(1,2,3-c,d)pyrene	22.114	276.0	10115	3869.08	ND ng/ml	20.5
Dibenz(a,h)anthracene	22.183	278.0	1432	558.39	ND ng/ml	28.5
Benzo(g,h,i)perylene	22.526	276.0	13104	5772.32	ND ng/ml	21.2
Coronene	24.916	300.0	4254	1260.52	ND ng/ml	28.5

## IS-D8-Naphthalene

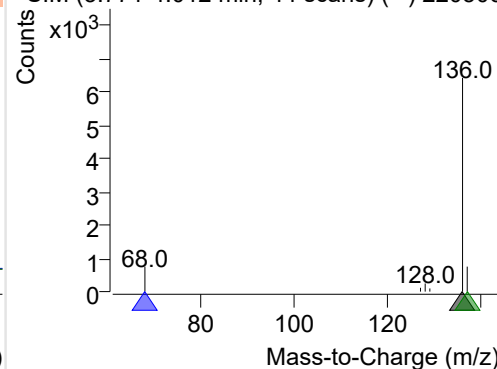
+ Selected Ion (136.0) 220506-PAHs-035.D



136.0, 68.0, 137.0

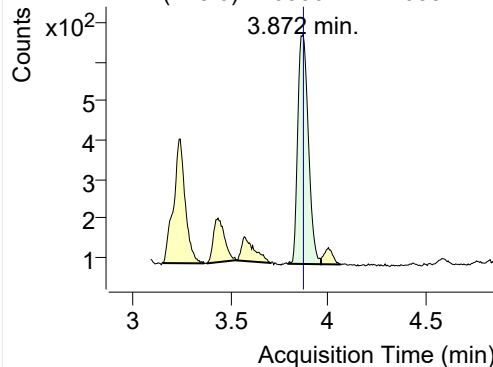


+ SIM (3.771-4.012 min, 44 scans) (\*\*) 220506

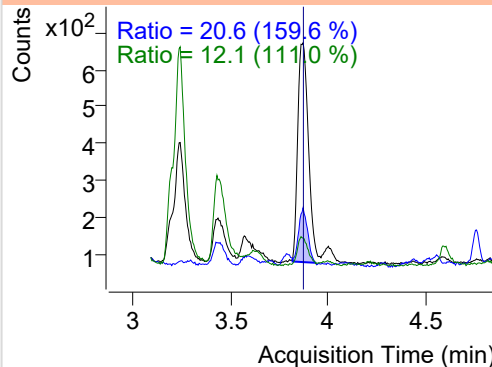


**Naphthalene**

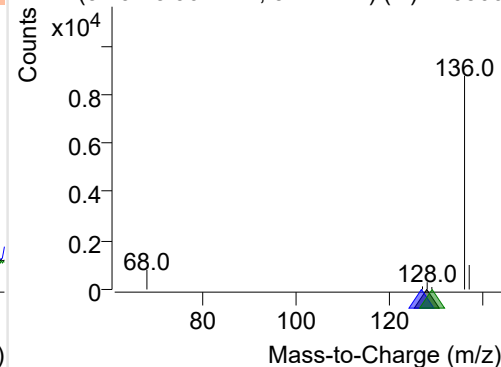
+ Selected Ion (128.0) 220506-PAHs-035.D



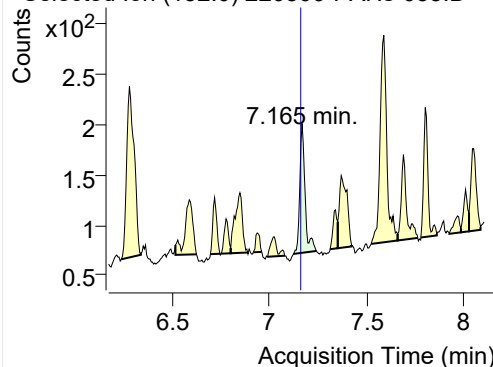
128.0, 127.0, 129.0



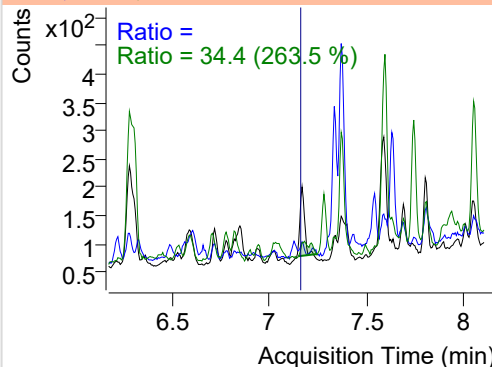
+ SIM (3.792-3.964 min, 32 scans) (\*\*) 220506

**Acenaphthylene**

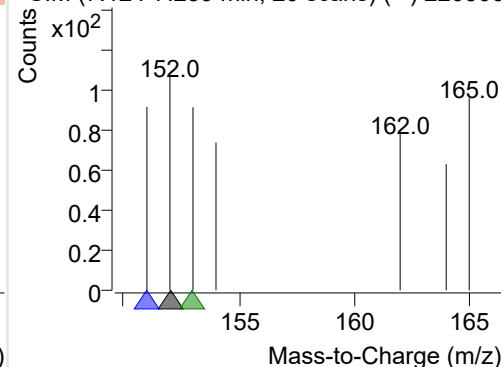
+ Selected Ion (152.0) 220506-PAHs-035.D



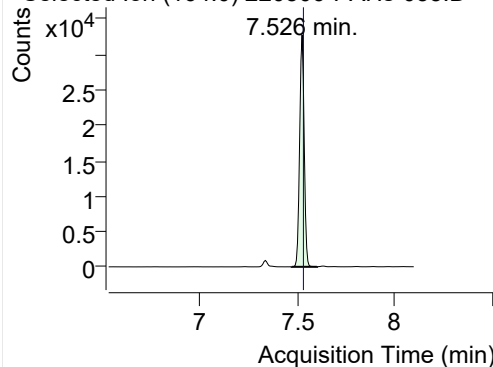
152.0, 151.0, 153.0



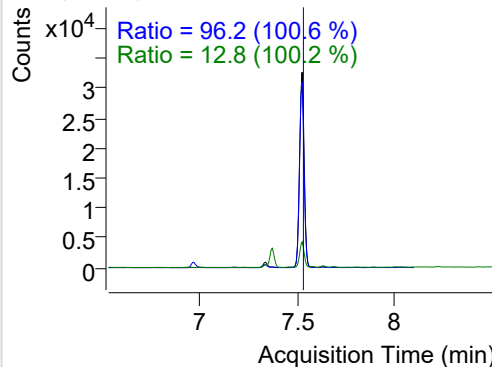
+ SIM (7.124-7.239 min, 20 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

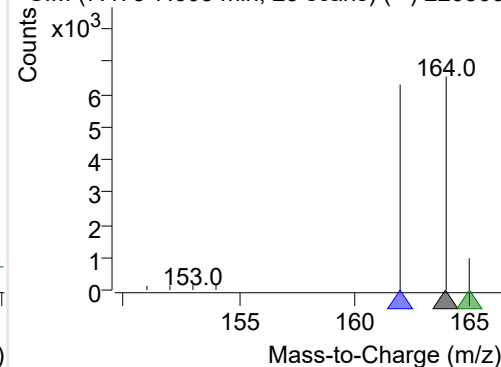
+ Selected Ion (164.0) 220506-PAHs-035.D



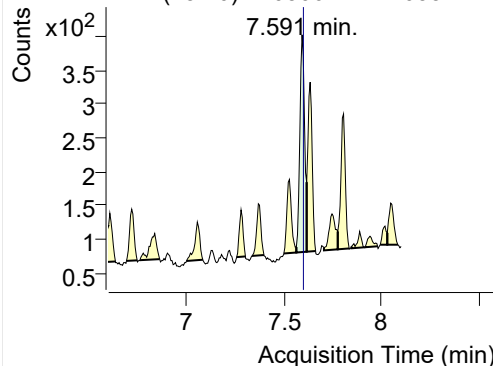
164.0, 162.0, 165.0



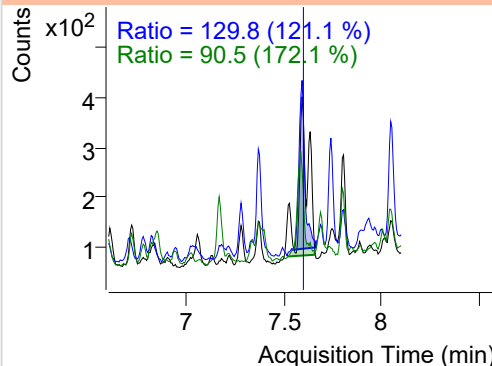
+ SIM (7.473-7.603 min, 23 scans) (\*\*) 220506

**Acenaphthene**

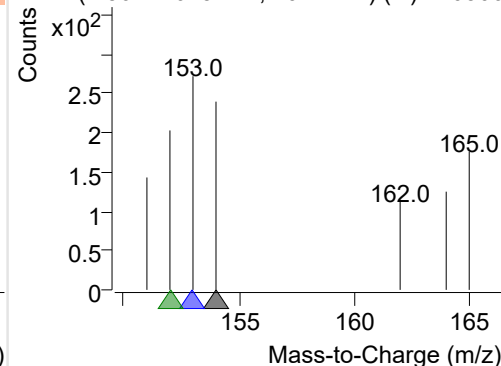
+ Selected Ion (154.0) 220506-PAHs-035.D



154.0, 153.0, 152.0

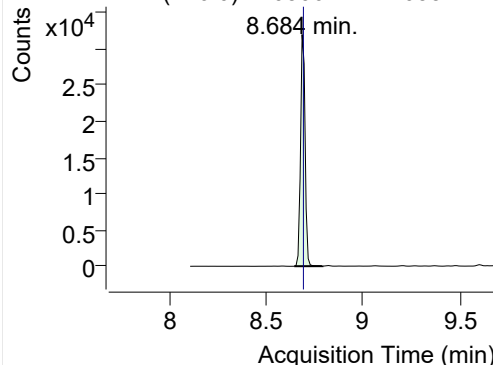


+ SIM (7.562-7.615 min, 10 scans) (\*\*) 220506

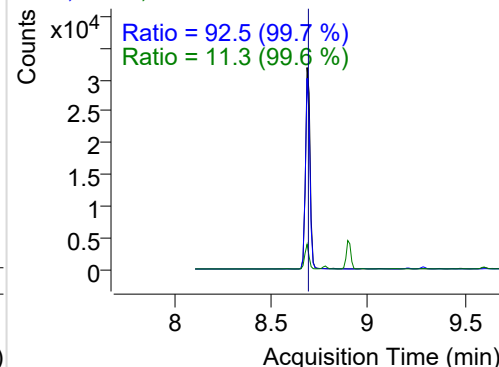


## LSS-D10-Fluorene

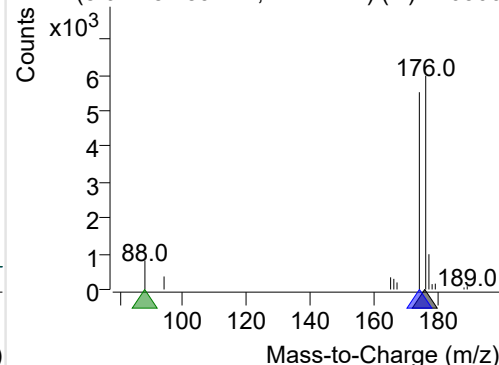
+ Selected Ion (176.0) 220506-PAHs-035.D



176.0, 174.0, 88.0

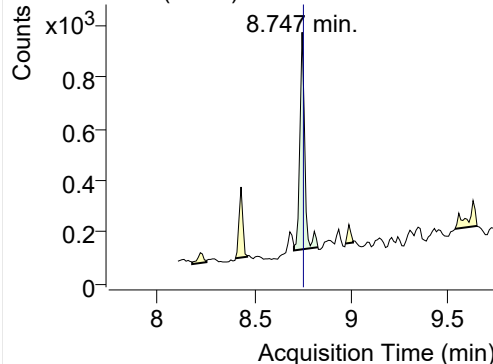


+ SIM (8.644-8.789 min, 14 scans) (\*\*) 220506

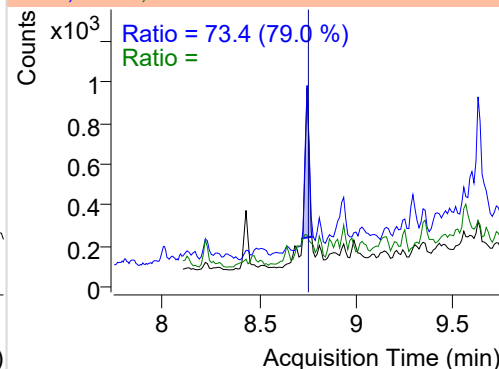


## Fluorene

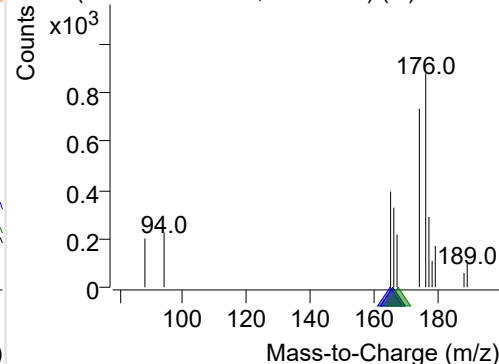
+ Selected Ion (166.0) 220506-PAHs-035.D



166.0, 165.0, 167.0

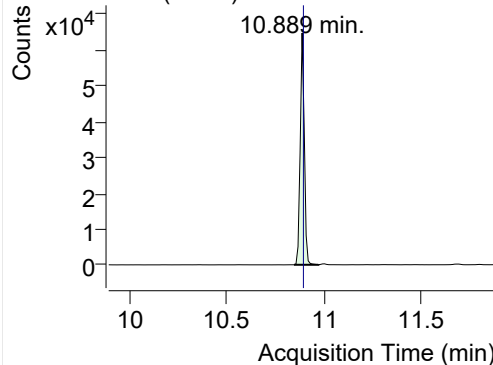


+ SIM (8.705-8.829 min, 12 scans) (\*\*) 220506

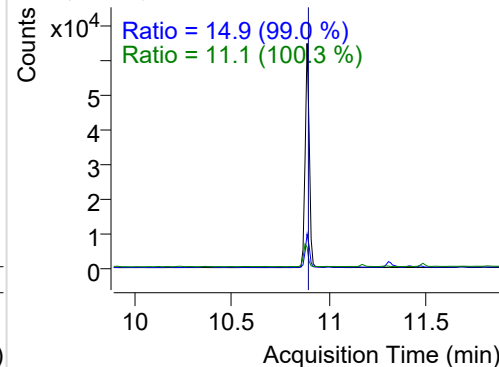


## IS-D10-Phenanthrene

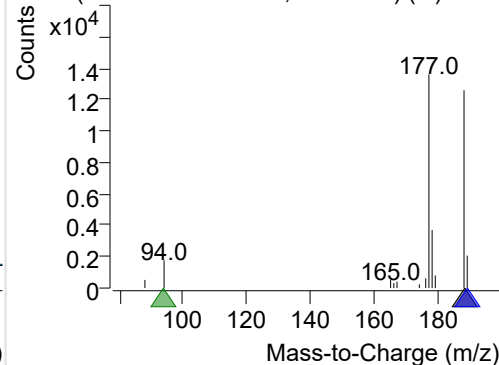
+ Selected Ion (188.0) 220506-PAHs-035.D



188.0, 189.0, 94.0

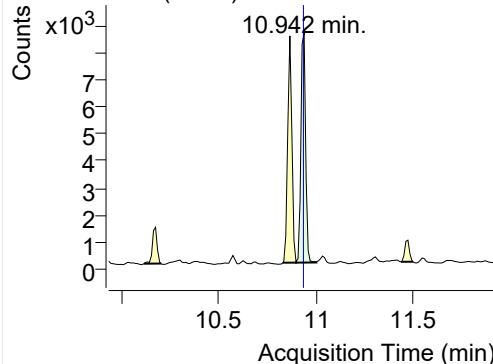


+ SIM (10.847-10.973 min, 12 scans) (\*\*) 2205

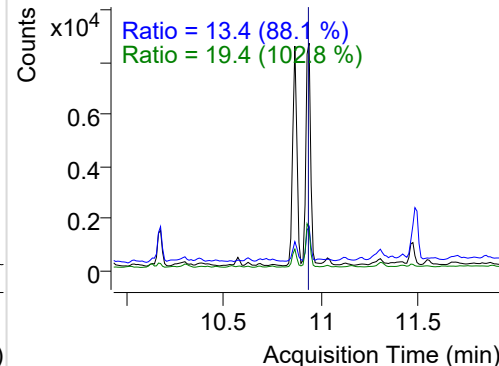


## Phenanthrene

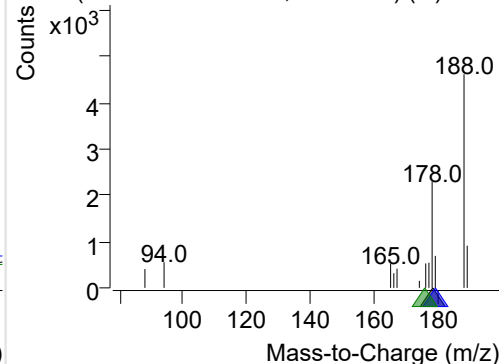
+ Selected Ion (178.0) 220506-PAHs-035.D



178.0, 179.0, 176.0

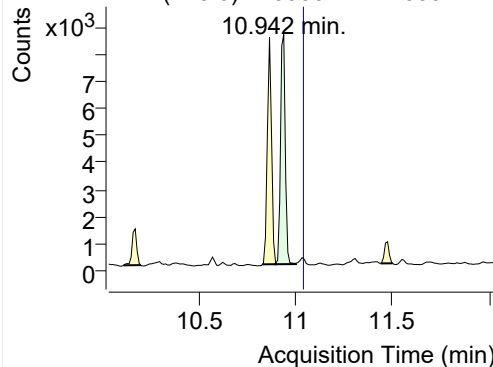


+ SIM (10.900-11.005 min, 11 scans) (\*\*) 2205

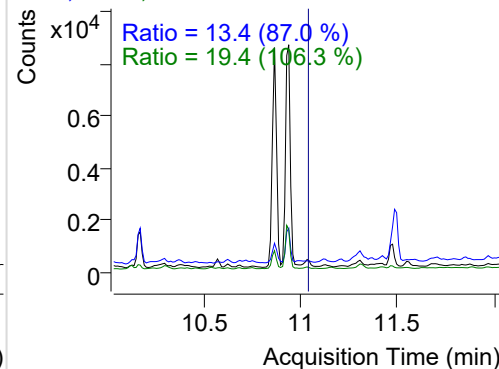


**Anthracene**

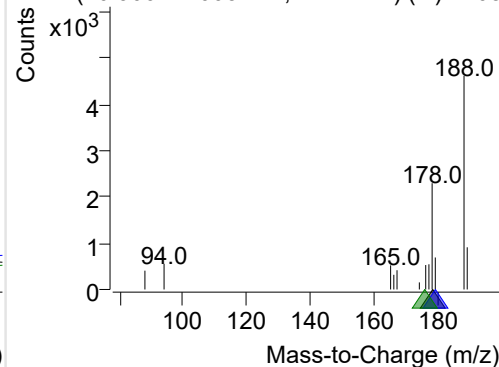
+ Selected Ion (178.0) 220506-PAHs-035.D



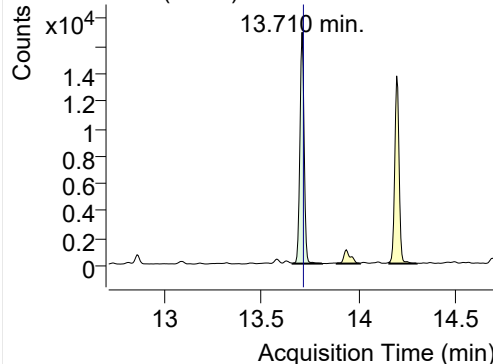
178.0, 179.0, 176.0



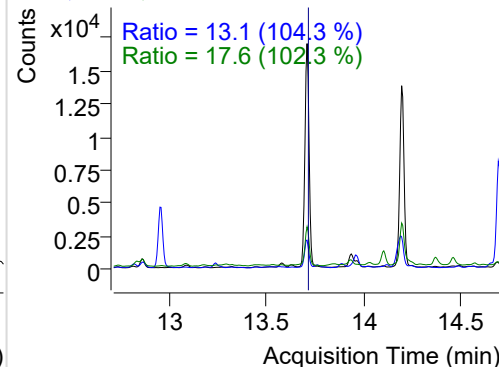
+ SIM (10.900-11.005 min, 11 scans) (\*\*) 2205

**Fluoranthene**

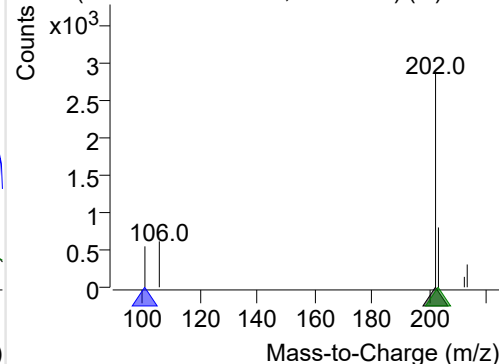
+ Selected Ion (202.0) 220506-PAHs-035.D



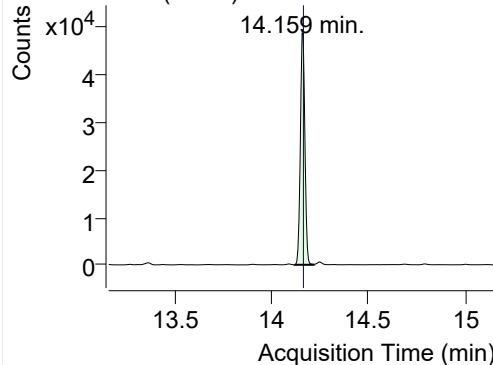
202.0, 101.0, 203.0



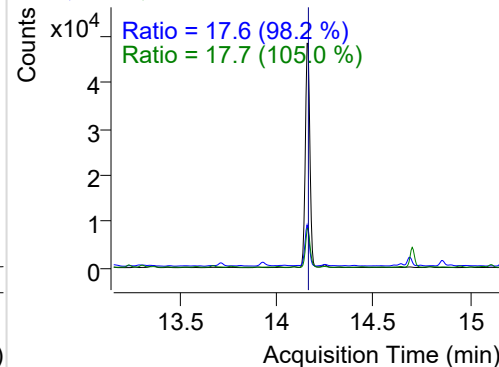
+ SIM (13.661-13.813 min, 29 scans) (\*\*) 2205

**LSS-D10-Pyrene**

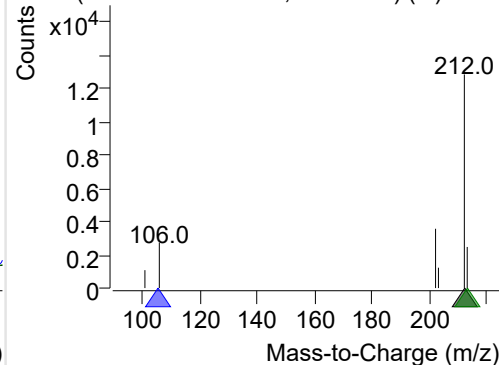
+ Selected Ion (212.0) 220506-PAHs-035.D



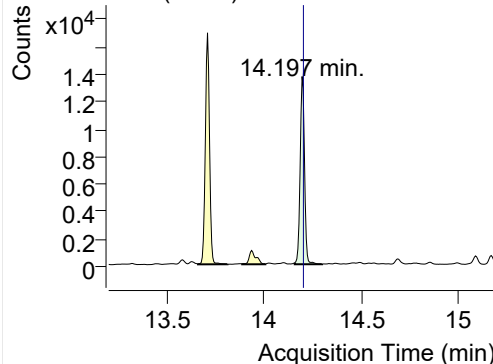
212.0, 106.0, 213.0



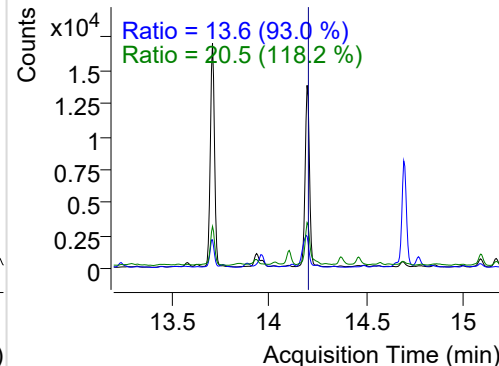
+ SIM (14.122-14.219 min, 19 scans) (\*\*) 2205

**Pyrene**

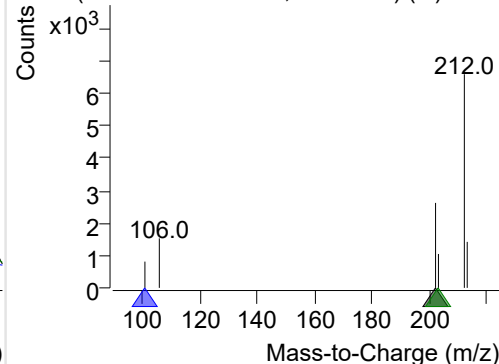
+ Selected Ion (202.0) 220506-PAHs-035.D



202.0, 101.0, 203.0

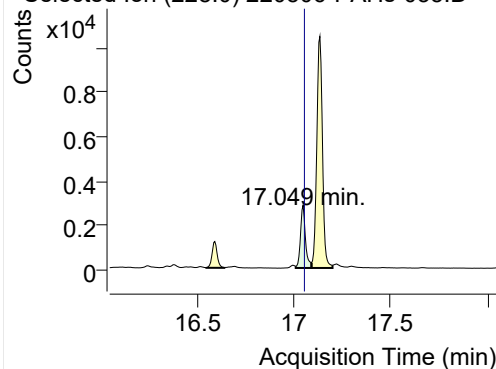


+ SIM (14.159-14.300 min, 27 scans) (\*\*) 2205

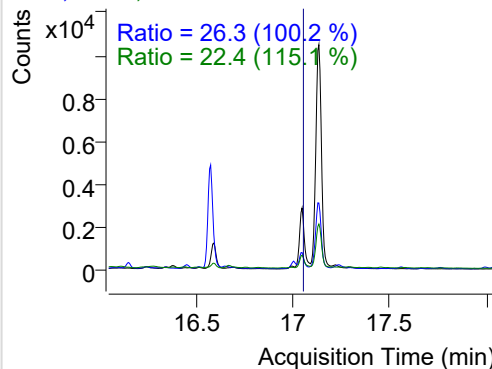


**Benz(a)anthracene**

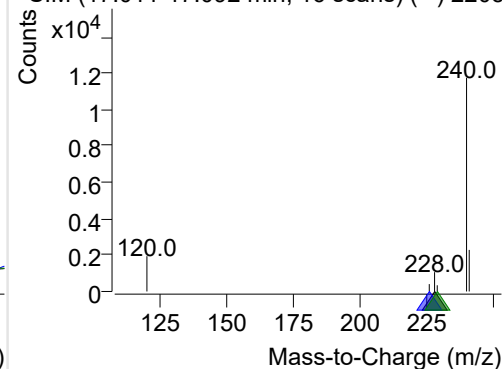
+ Selected Ion (228.0) 220506-PAHs-035.D



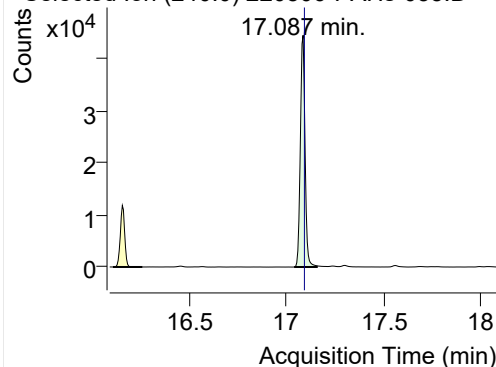
228.0, 226.0, 229.0



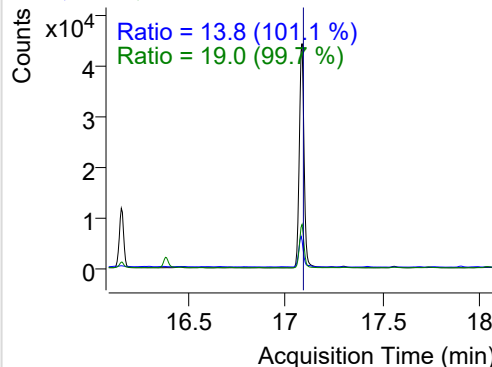
+ SIM (17.011-17.092 min, 16 scans) (\*\*) 2205

**IS-D12-Chrysene**

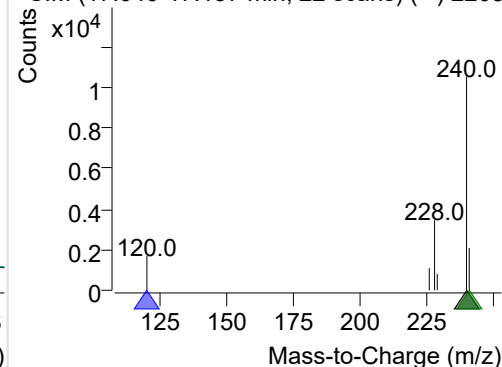
+ Selected Ion (240.0) 220506-PAHs-035.D



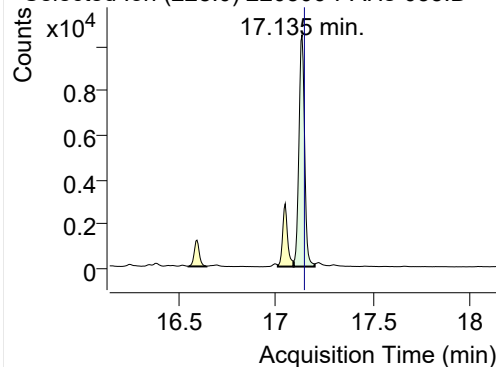
240.0, 120.0, 241.0



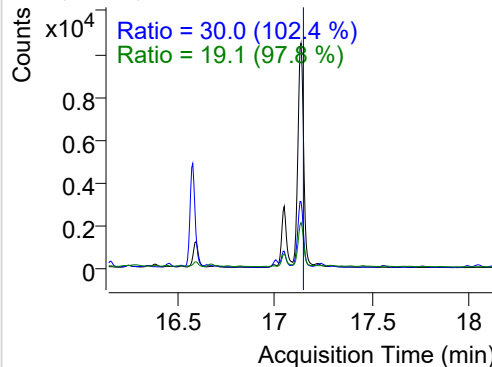
+ SIM (17.040-17.157 min, 22 scans) (\*\*) 2205

**Chrysene**

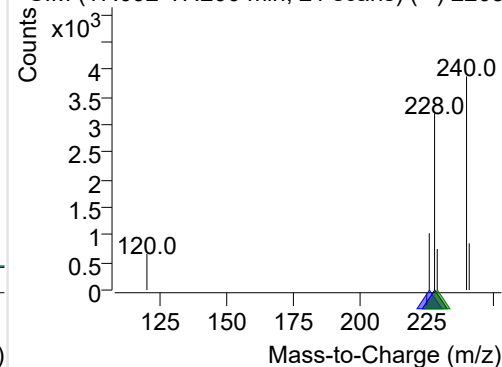
+ Selected Ion (228.0) 220506-PAHs-035.D



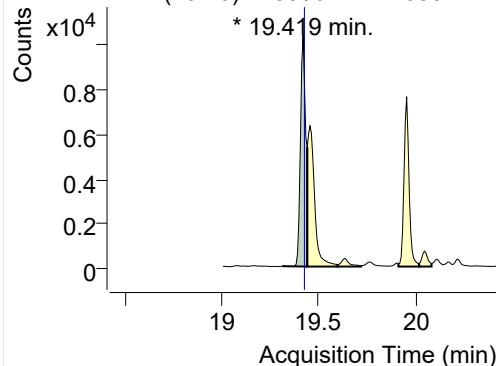
228.0, 226.0, 229.0



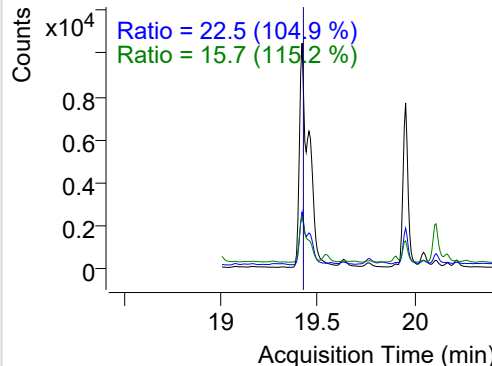
+ SIM (17.092-17.200 min, 21 scans) (\*\*) 2205

**Benzo(b)fluoranthene**

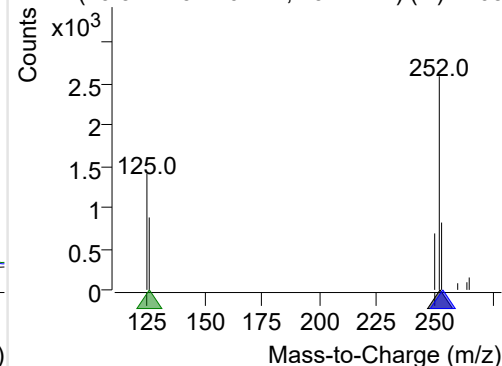
+ Selected Ion (252.0) 220506-PAHs-035.D



252.0, 253.0, 126.0

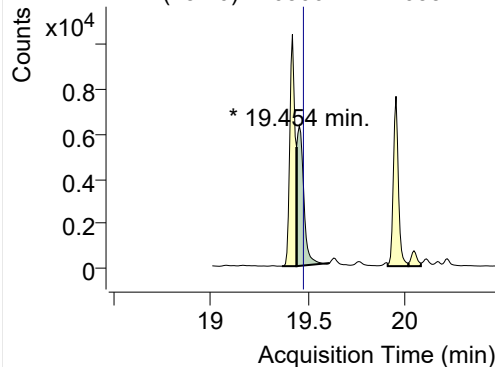


+ SIM (19.312-19.440 min, 19 scans) (\*\*) 2205

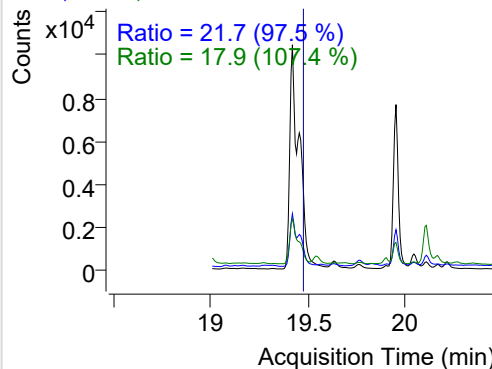


**Benzo(k)fluoranthene**

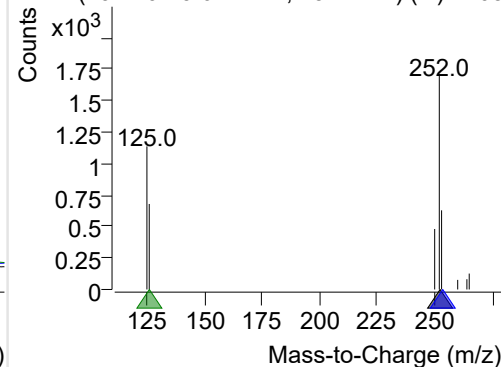
+ Selected Ion (252.0) 220506-PAHs-035.D



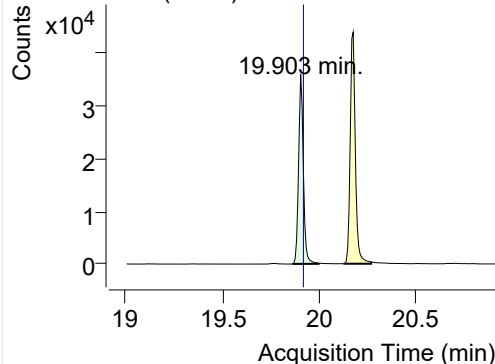
252.0, 253.0, 126.0



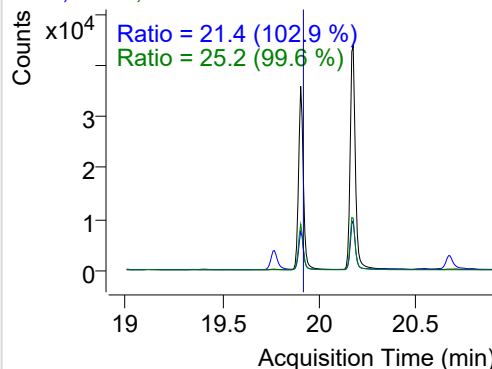
+ SIM (19.440-19.611 min, 25 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

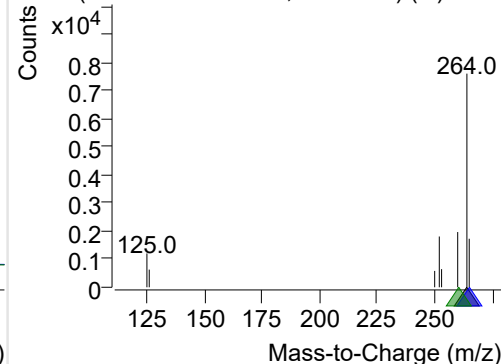
+ Selected Ion (264.0) 220506-PAHs-035.D



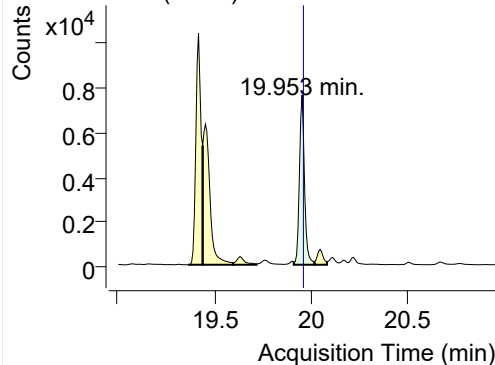
264.0, 265.0, 260.0



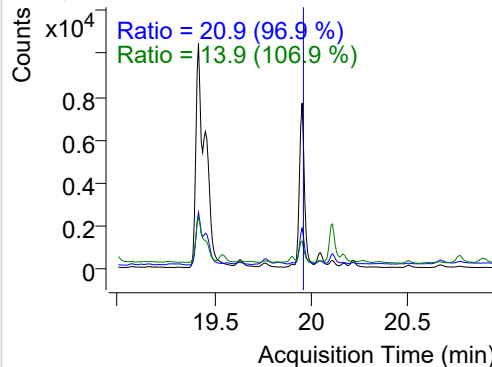
+ SIM (19.860-19.995 min, 19 scans) (\*\*) 2205

**Benzo(e)pyrene**

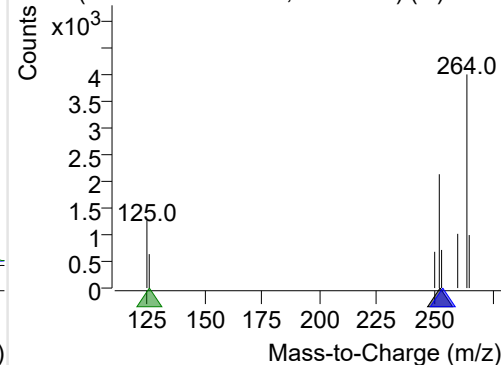
+ Selected Ion (252.0) 220506-PAHs-035.D



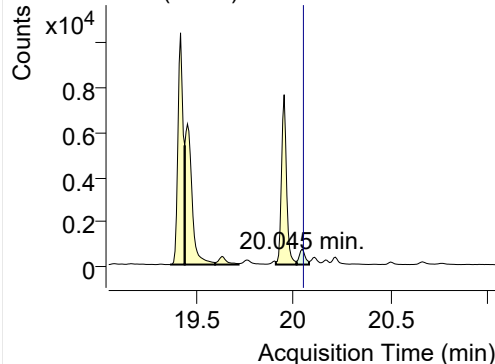
252.0, 253.0, 126.0



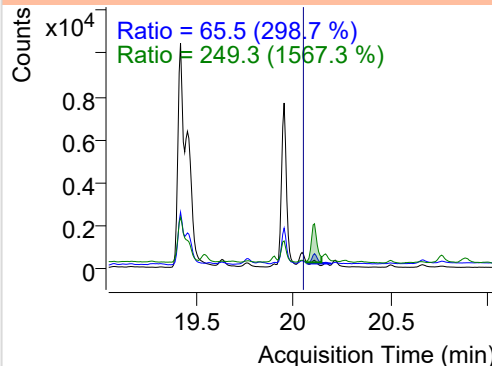
+ SIM (19.910-20.017 min, 16 scans) (\*\*) 2205

**Benzo(a)pyrene**

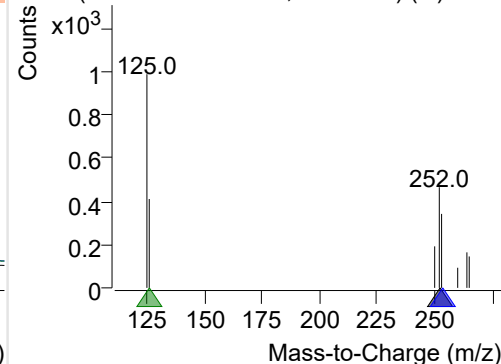
+ Selected Ion (252.0) 220506-PAHs-035.D



252.0, 253.0, 126.0

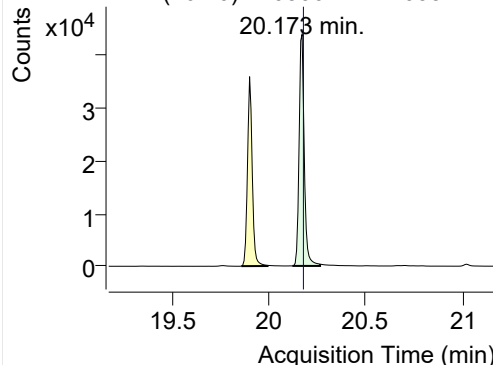


+ SIM (20.017-20.081 min, 10 scans) (\*\*) 2205

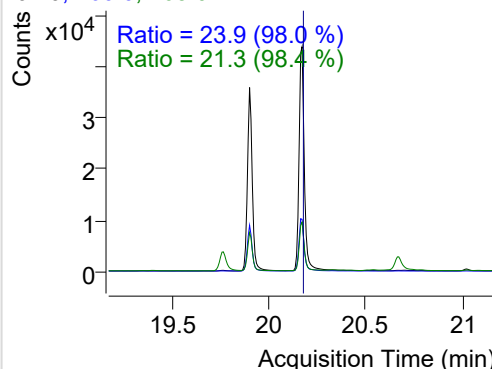


## IS-D12-Perylene

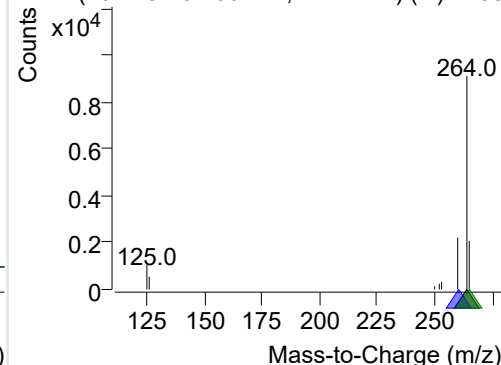
+ Selected Ion (264.0) 220506-PAHs-035.D



264.0, 260.0, 265.0

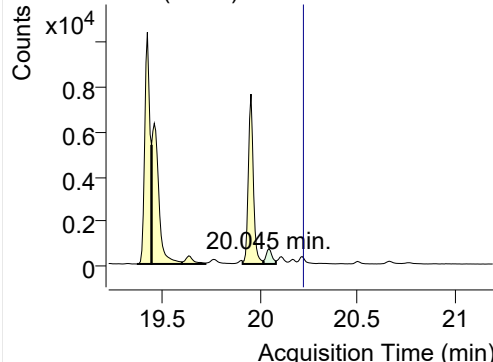


+ SIM (20.123-20.266 min, 21 scans) (\*\*) 2205

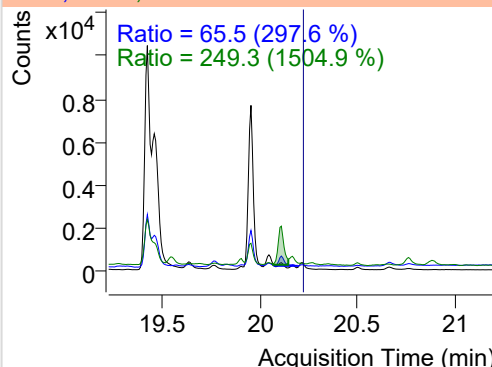


## Perylene

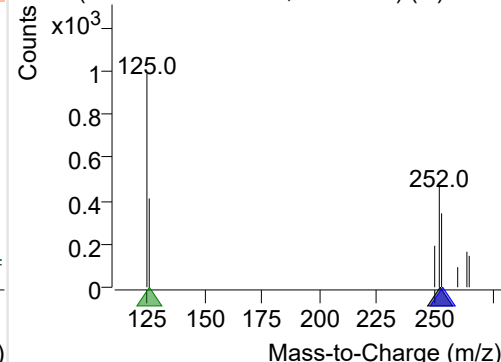
+ Selected Ion (252.0) 220506-PAHs-035.D



252.0, 253.0, 126.0

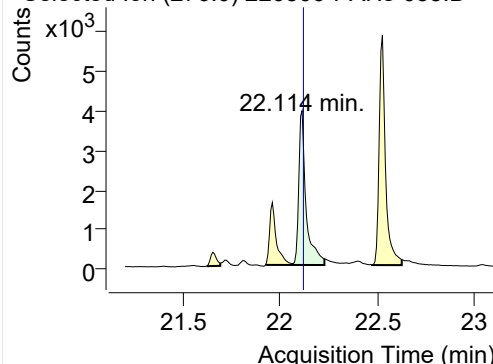


+ SIM (20.017-20.081 min, 10 scans) (\*\*) 2205

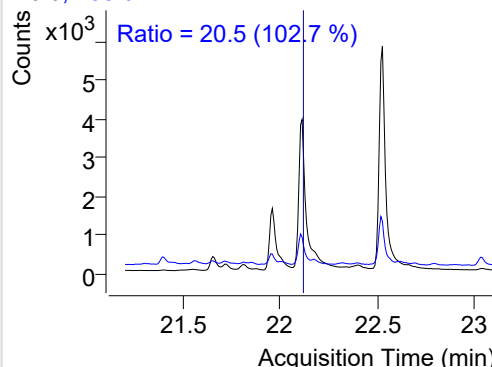


## Indeno(1,2,3-c,d)pyrene

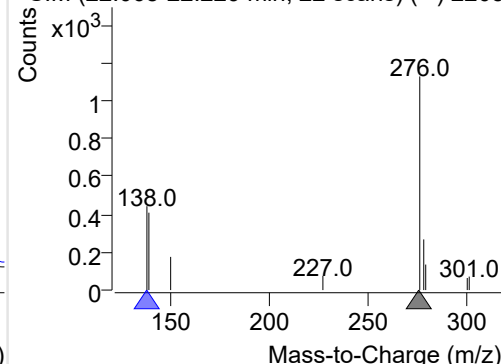
+ Selected Ion (276.0) 220506-PAHs-035.D



276.0, 138.0

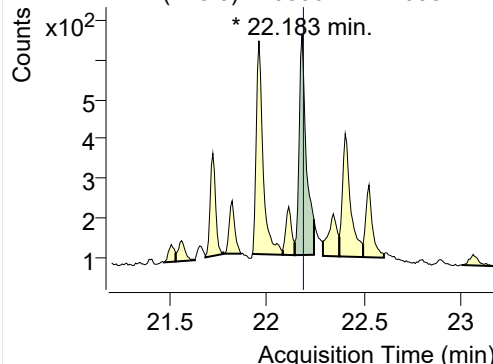


+ SIM (22.068-22.229 min, 22 scans) (\*\*) 2205

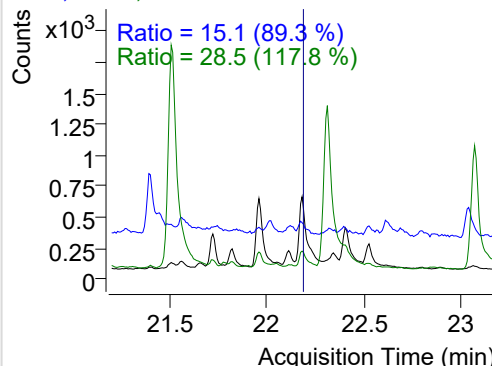


## Dibenz(a,h)anthracene

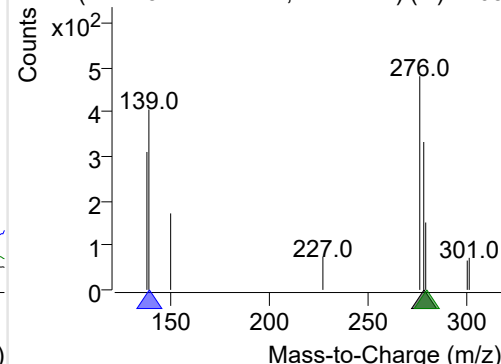
+ Selected Ion (278.0) 220506-PAHs-035.D



278.0, 139.0, 279.0

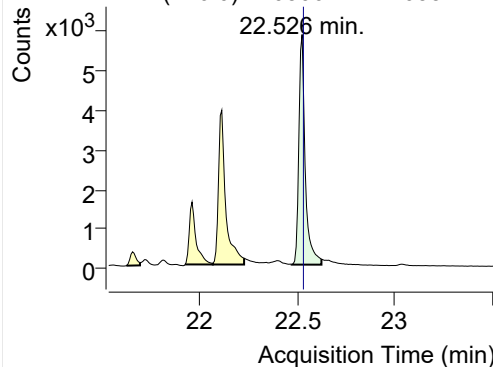


+ SIM (22.145-22.244 min, 14 scans) (\*\*) 2205

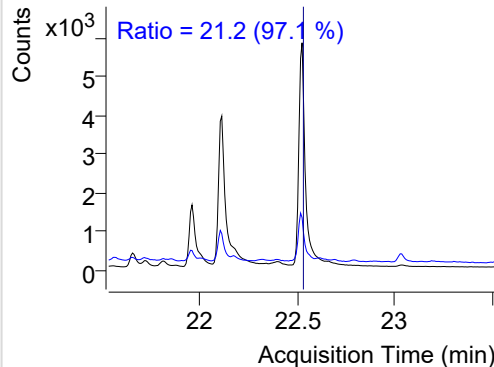


**Benzo(g,h,i)perylene**

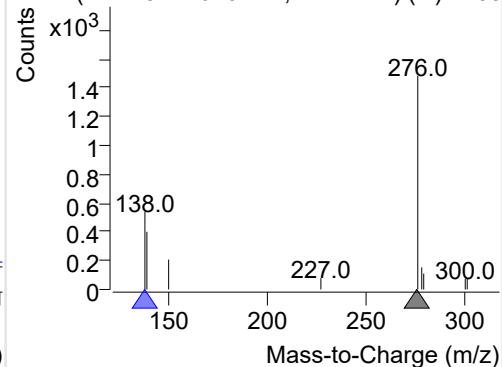
+ Selected Ion (276.0) 220506-PAHs-035.D



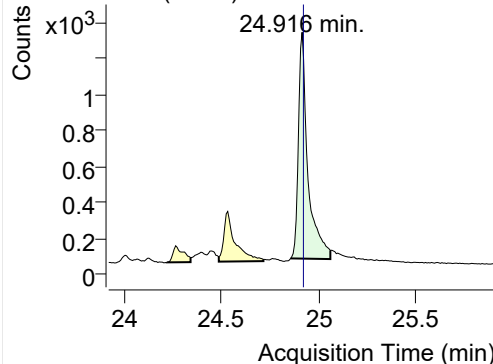
276.0, 138.0



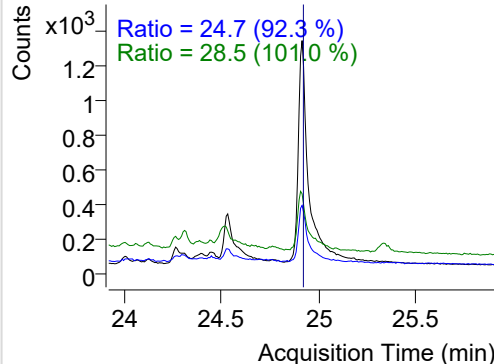
+ SIM (22.473-22.626 min, 21 scans) (\*\*) 2205

**Coronene**

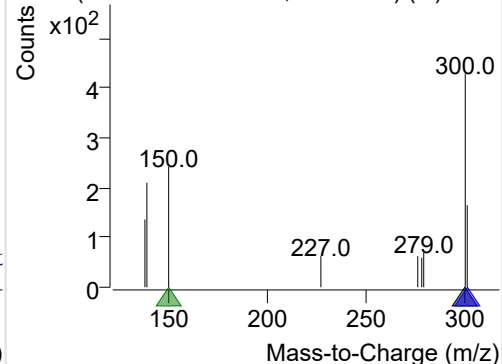
+ Selected Ion (300.0) 220506-PAHs-035.D



300.0, 301.0, 150.0



+ SIM (24.858-25.061 min, 27 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

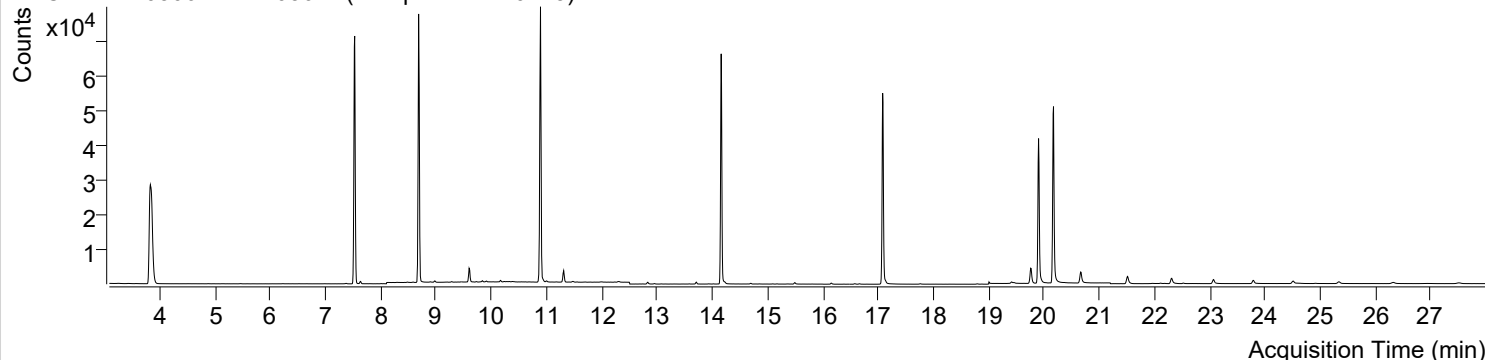


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 4:53:50	Data File	220506-PAHs-036.D
Type	Sample	Name	Sample-PM-220423
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

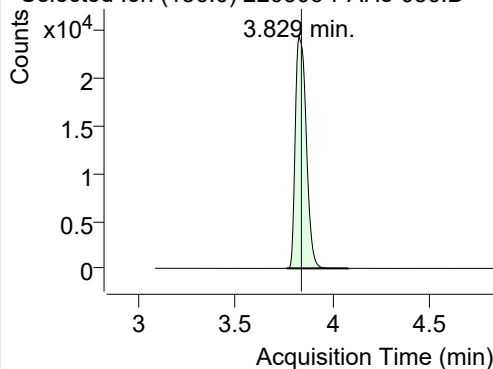
+ TIC SIM 220506-PAHs-036.D (Sample-PM-220423)



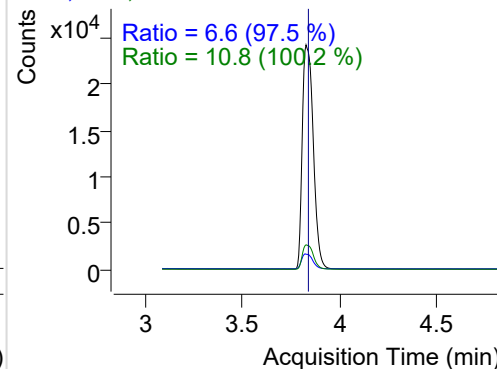
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	94975	24183.25	ND ng/ml	10.8
Naphthalene	3.861	128.0	179	48.03	ND ng/ml	24.0
Acenaphthylene	7.627	152.0	28	18.26	ND ng/ml	893.2
IS-D10-Acenaphthene	7.526	164.0	56054	34202.19	ND ng/ml	96.1
Acenaphthene	7.633	154.0	234	140.73	ND ng/ml	13.0
LSS-D10-Fluorene	8.684	176.0	53432	34428.79	ND ng/ml	93.2
Fluorene	8.747	166.0	20	15.11	ND ng/ml	130.4
IS-D10-Phenanthrene	10.889	188.0	97728	63538.86	ND ng/ml	15.0
Phenanthrene	10.931	178.0	399	233.20	ND ng/ml	18.4
Anthracene	10.931	178.0	399	233.20	ND ng/ml	18.4
Fluoranthene	13.710	202.0	672	413.39	ND ng/ml	16.8
LSS-D10-Pyrene	14.160	212.0	75876	49104.90	ND ng/ml	17.4
Pyrene	14.198	202.0	739	367.39	ND ng/ml	91.0
Benz(a)anthracene	17.043	228.0	106	71.36	ND ng/ml	15.2
IS-D12-Chrysene	17.081	240.0	69589	41306.95	ND ng/ml	18.9
Chrysene	17.136	228.0	604	285.00	ND ng/ml	24.2
Benzo(b)fluoranthene	19.419	252.0	775	210.58	ND ng/ml	25.1
Benzo(k)fluoranthene	19.419	252.0	775	210.58	ND ng/ml	25.1
SS-D12-Benzo(e)pyrene	19.903	264.0	50387	28093.32	ND ng/ml	25.4
Benzo(e)pyrene	19.953	252.0	377	189.94	ND ng/ml	24.1
Benzo(a)pyrene	20.045	252.0	48	23.89	ND ng/ml	
IS-D12-Perylene	20.173	264.0	62468	34749.60	ND ng/ml	23.7
Perylene	20.166	252.0	248	128.17	ND ng/ml	27.9
Indeno(1,2,3-c,d)pyrene	22.107	276.0	240	82.15	ND ng/ml	15.7
Dibenz(a,h)anthracene	22.183	278.0	88	29.12	ND ng/ml	
Benzo(g,h,i)perylene	22.519	276.0	278	115.64	ND ng/ml	19.8
Coronene	24.917	300.0	131	41.99	ND ng/ml	25.9

## IS-D8-Naphthalene

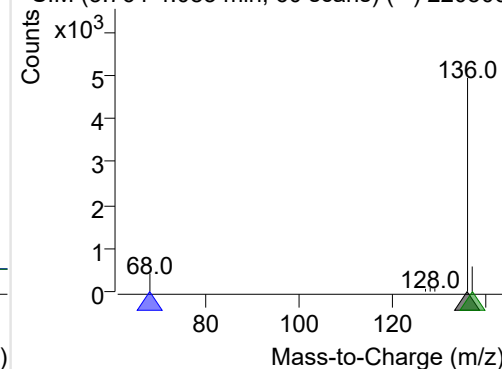
+ Selected Ion (136.0) 220506-PAHs-036.D



136.0, 68.0, 137.0

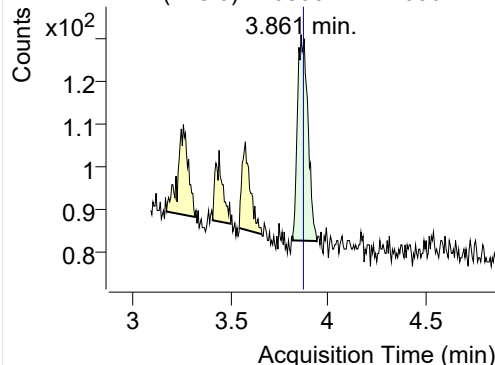


+ SIM (3.764-4.083 min, 60 scans) (\*\*) 220506

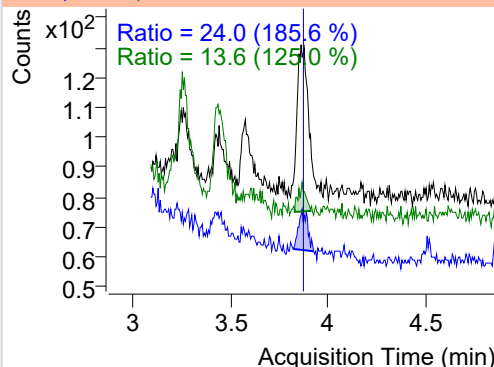


**Naphthalene**

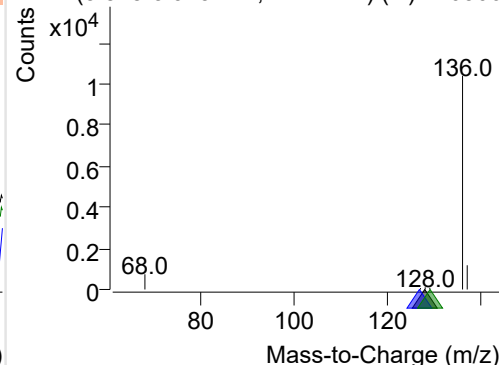
+ Selected Ion (128.0) 220506-PAHs-036.D



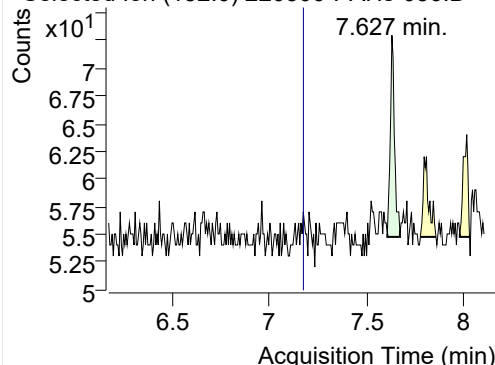
128.0, 127.0, 129.0



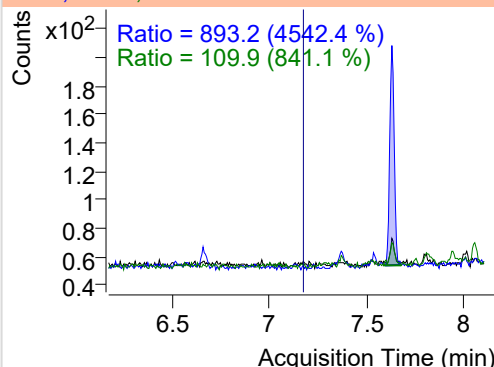
+ SIM (3.818-3.943 min, 24 scans) (\*\*) 220506

**Acenaphthylene**

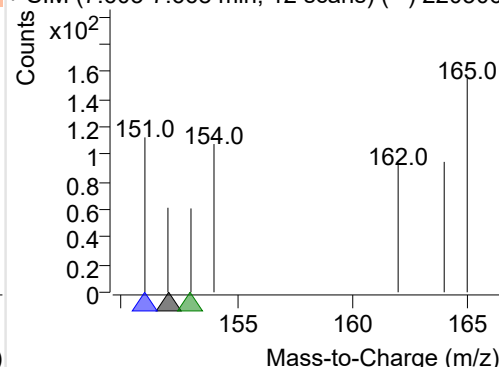
+ Selected Ion (152.0) 220506-PAHs-036.D



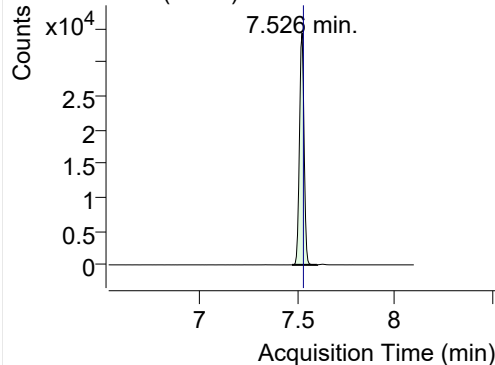
152.0, 151.0, 153.0



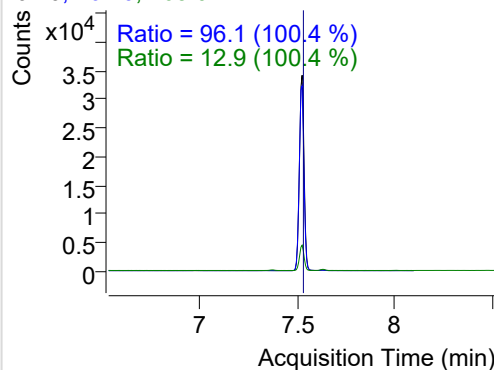
+ SIM (7.603-7.668 min, 12 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

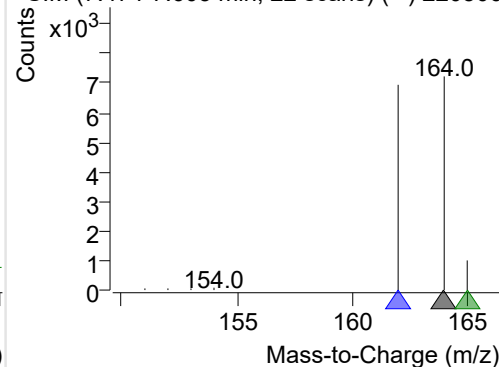
+ Selected Ion (164.0) 220506-PAHs-036.D



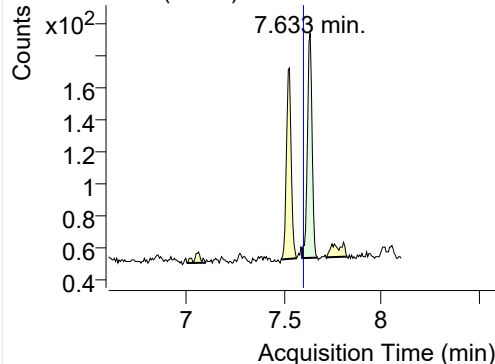
164.0, 162.0, 165.0



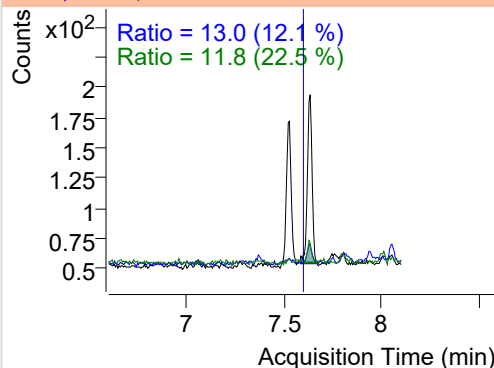
+ SIM (7.474-7.603 min, 22 scans) (\*\*) 220506

**Acenaphthene**

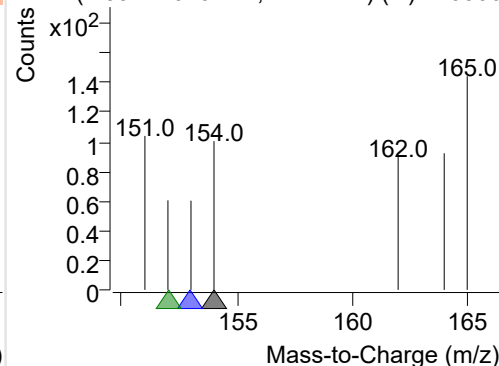
+ Selected Ion (154.0) 220506-PAHs-036.D



154.0, 153.0, 152.0

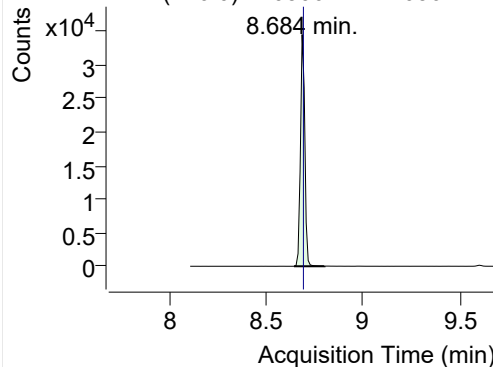


+ SIM (7.591-7.670 min, 14 scans) (\*\*) 220506

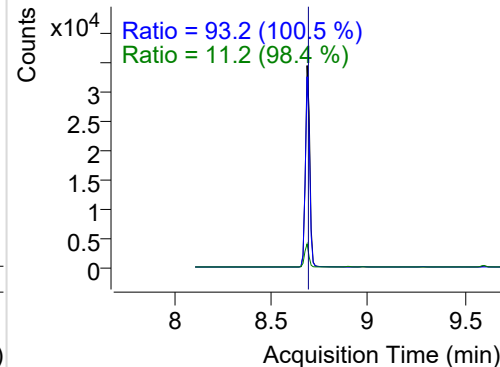


## LSS-D10-Fluorene

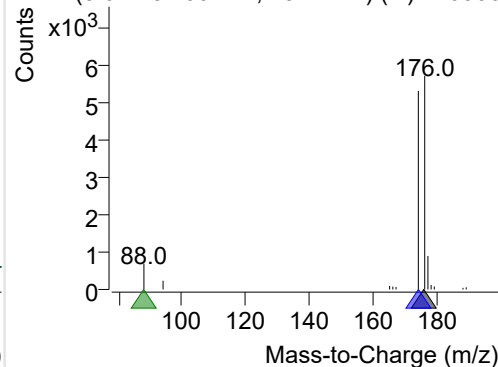
+ Selected Ion (176.0) 220506-PAHs-036.D



176.0, 174.0, 88.0

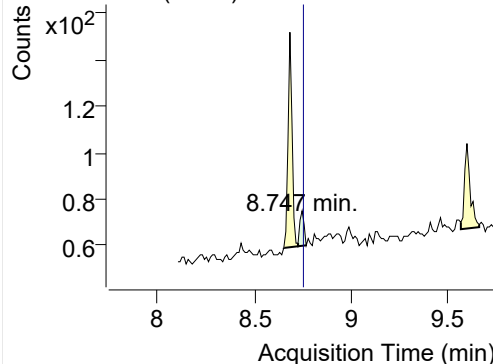


+ SIM (8.642-8.799 min, 15 scans) (\*\*) 220506

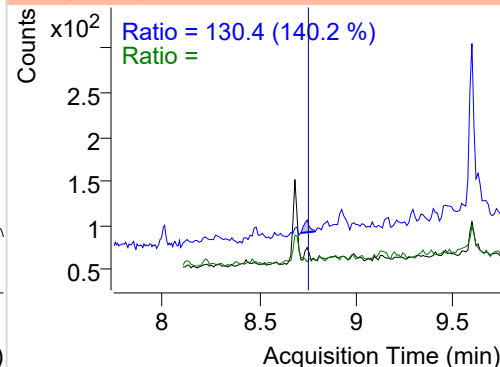


## Fluorene

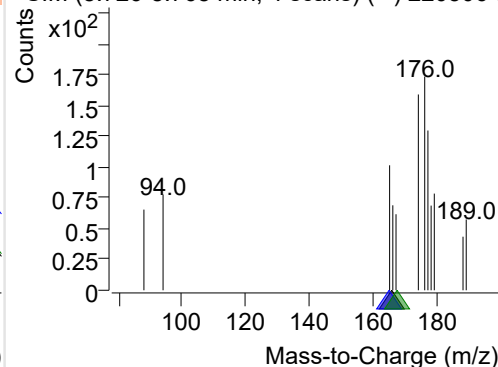
+ Selected Ion (166.0) 220506-PAHs-036.D



166.0, 165.0, 167.0

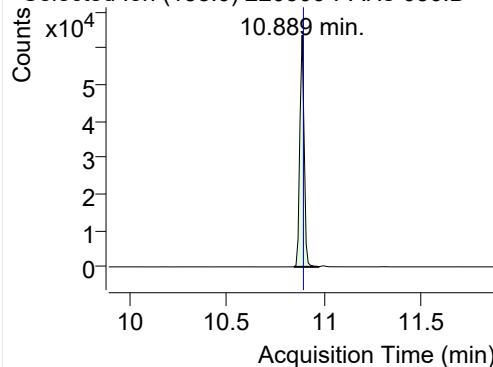


+ SIM (8.726-8.768 min, 4 scans) (\*\*) 220506-I

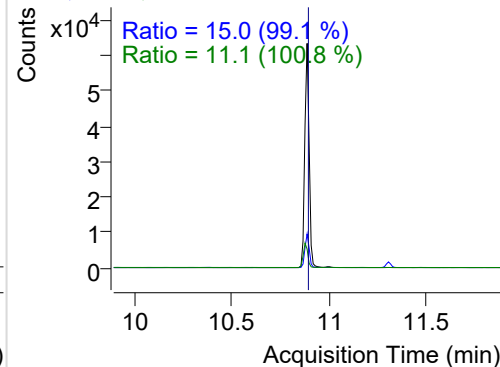


## IS-D10-Phenanthrene

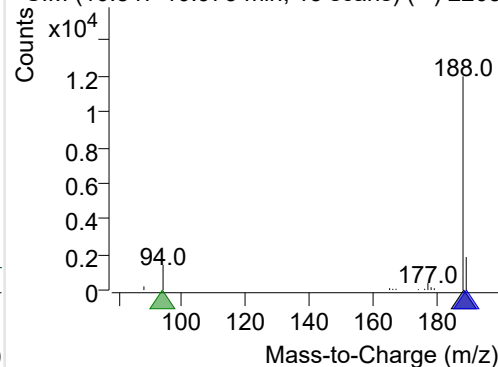
+ Selected Ion (188.0) 220506-PAHs-036.D



188.0, 189.0, 94.0

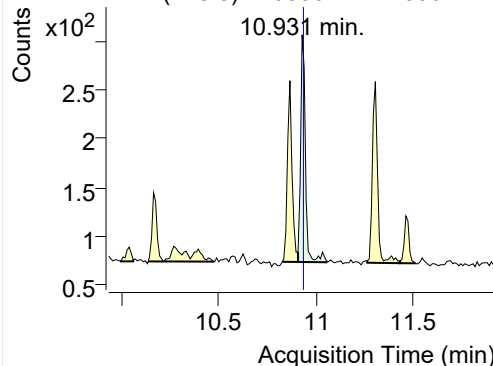


+ SIM (10.847-10.973 min, 13 scans) (\*\*) 2205

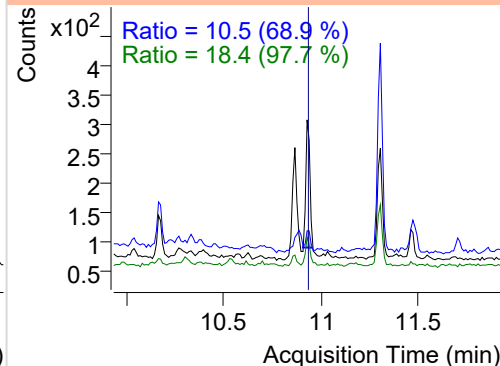


## Phenanthrene

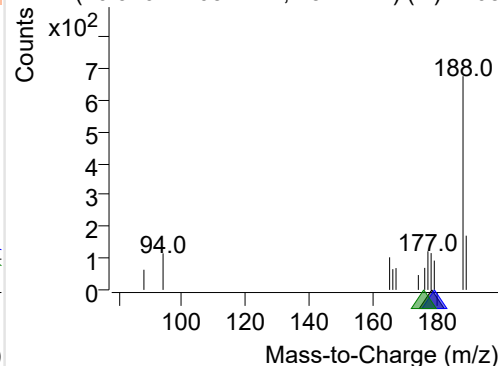
+ Selected Ion (178.0) 220506-PAHs-036.D



178.0, 179.0, 176.0

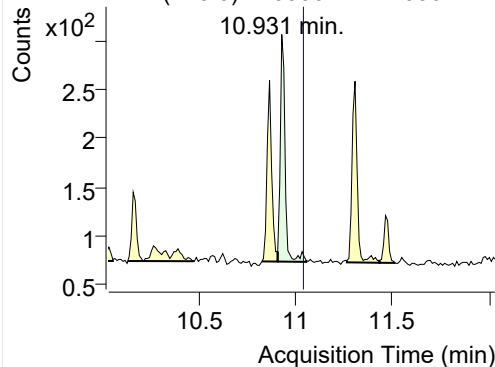


+ SIM (10.910-11.057 min, 15 scans) (\*\*) 2205

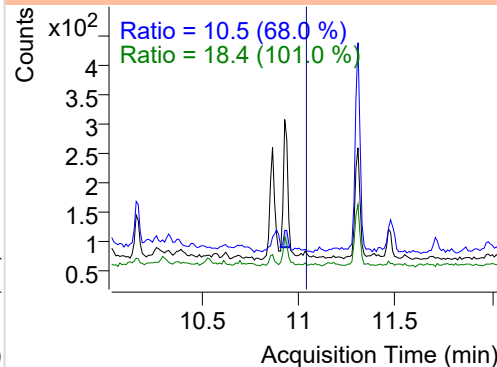


**Anthracene**

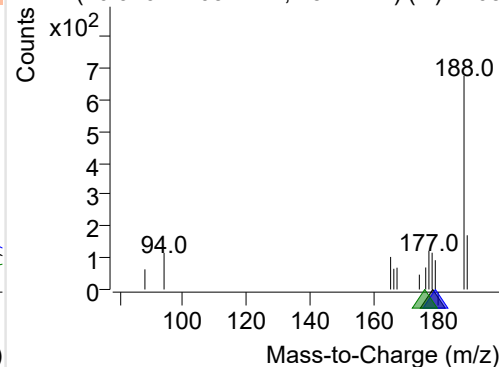
+ Selected Ion (178.0) 220506-PAHs-036.D



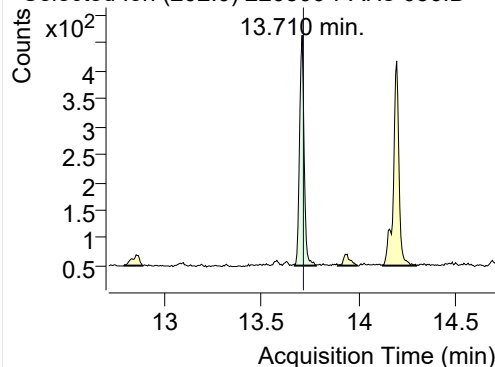
178.0, 179.0, 176.0



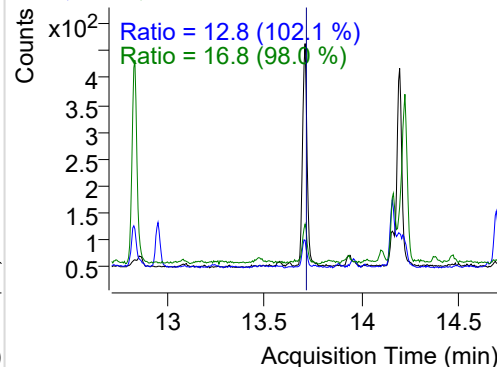
+ SIM (10.910-11.057 min, 15 scans) (\*\*) 2205

**Fluoranthene**

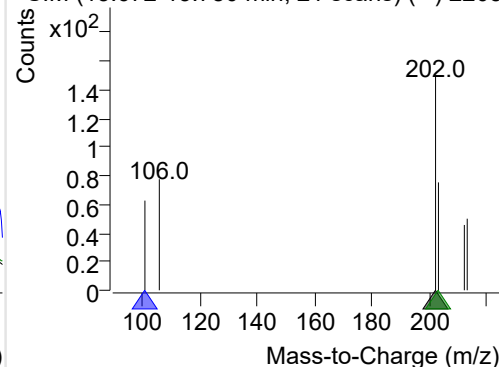
+ Selected Ion (202.0) 220506-PAHs-036.D



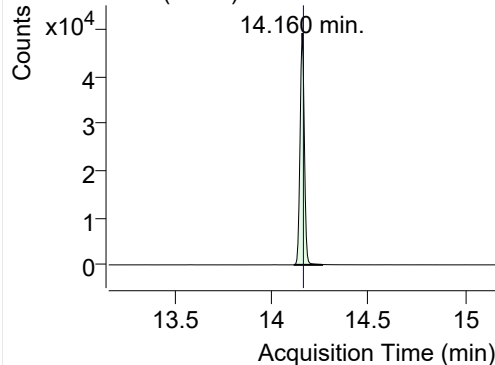
202.0, 101.0, 203.0



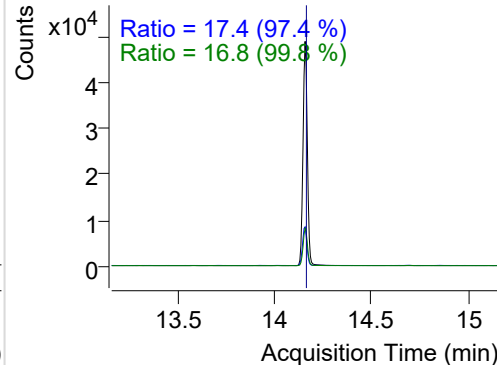
+ SIM (13.672-13.780 min, 21 scans) (\*\*) 2205

**LSS-D10-Pyrene**

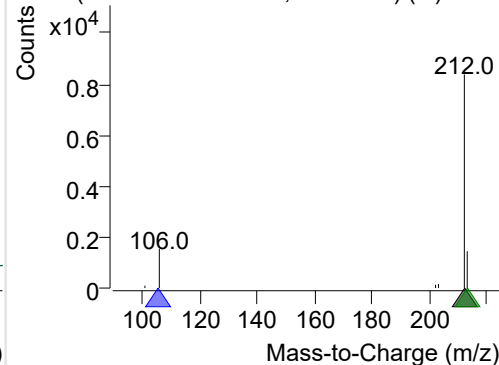
+ Selected Ion (212.0) 220506-PAHs-036.D



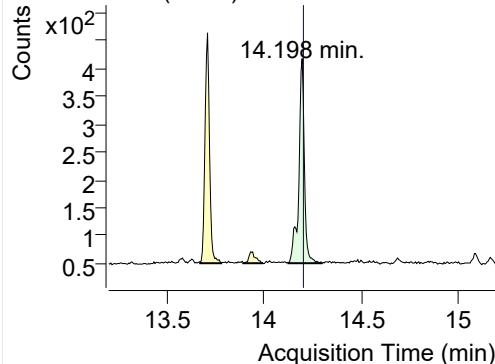
212.0, 106.0, 213.0



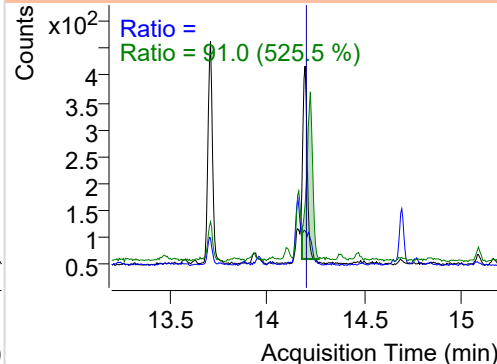
+ SIM (14.116-14.263 min, 28 scans) (\*\*) 2205

**Pyrene**

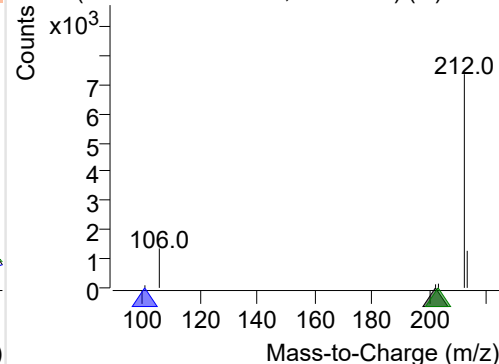
+ Selected Ion (202.0) 220506-PAHs-036.D



202.0, 101.0, 203.0



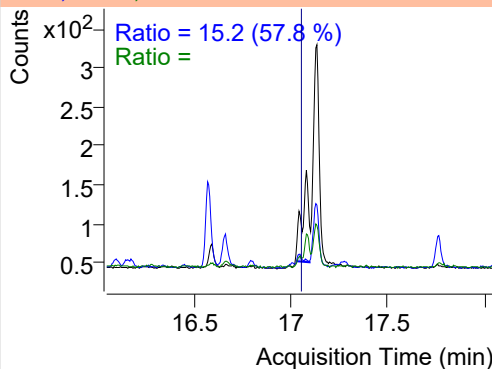
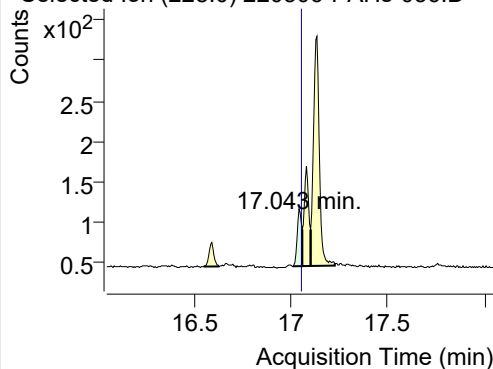
+ SIM (14.127-14.299 min, 32 scans) (\*\*) 2205



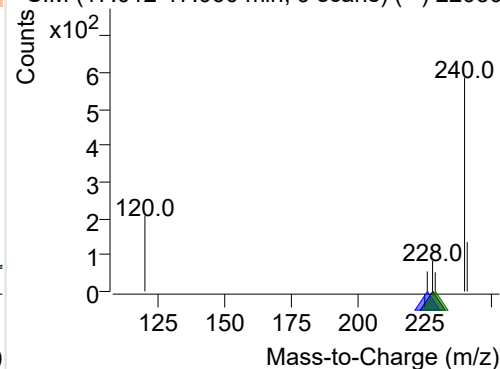
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-036.D

228.0, 226.0, 229.0

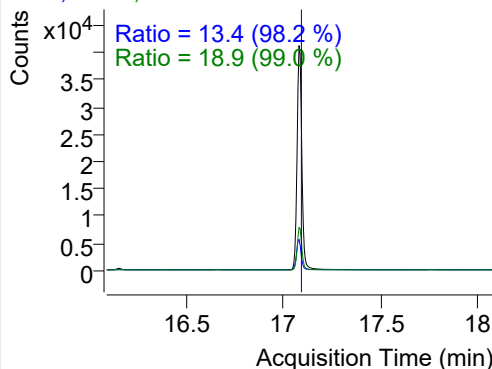
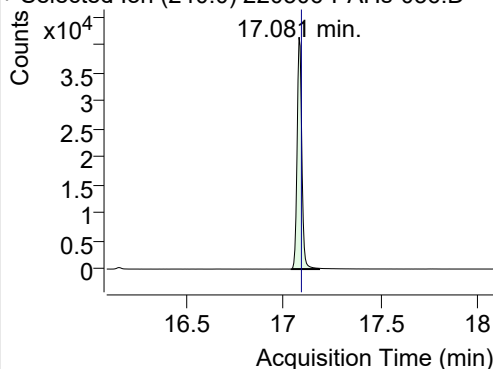


+ SIM (17.012-17.060 min, 9 scans) (\*\*) 22050

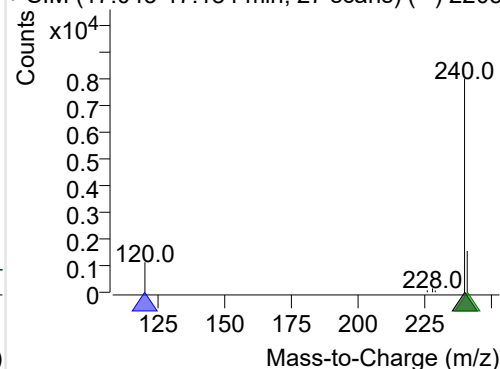
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-036.D

240.0, 120.0, 241.0

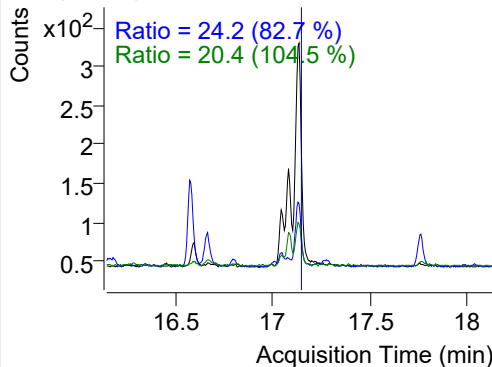
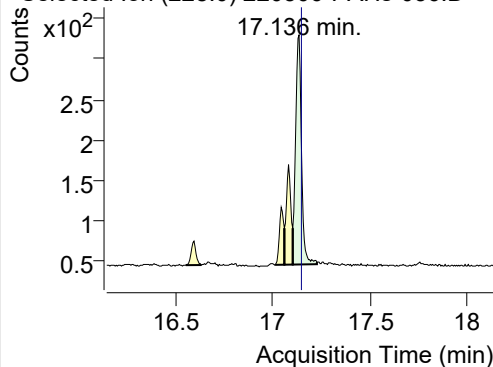


+ SIM (17.043-17.184 min, 27 scans) (\*\*) 2205

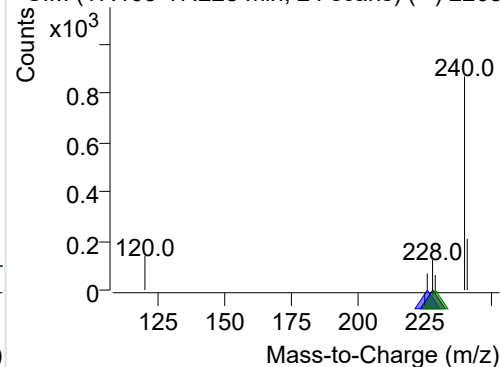
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-036.D

228.0, 226.0, 229.0

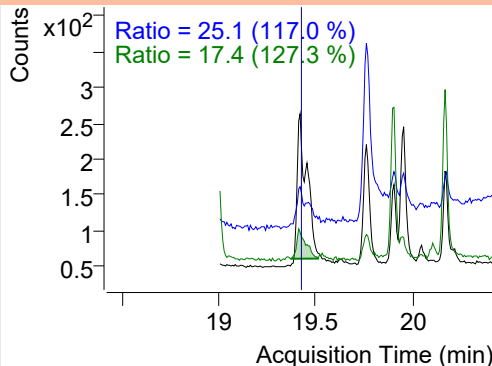
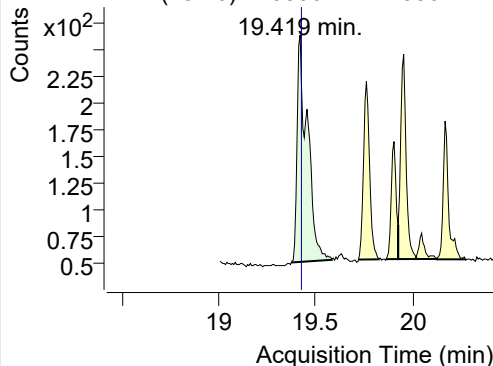


+ SIM (17.103-17.228 min, 24 scans) (\*\*) 2205

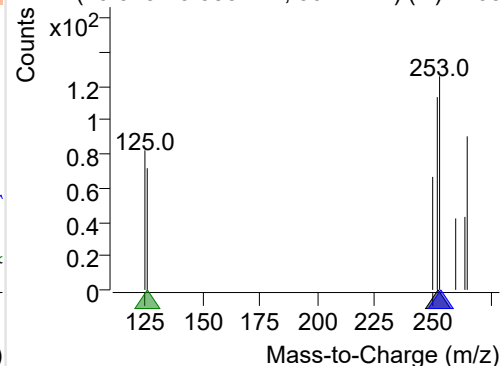
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-036.D

252.0, 253.0, 126.0

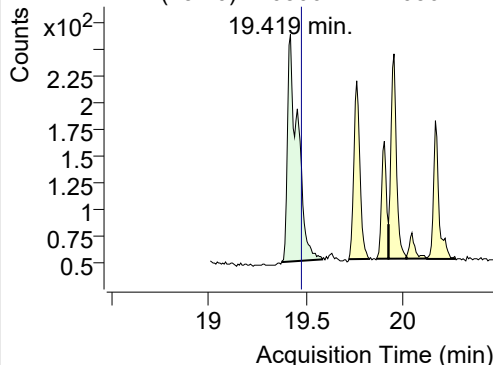


+ SIM (19.373-19.583 min, 30 scans) (\*\*) 2205

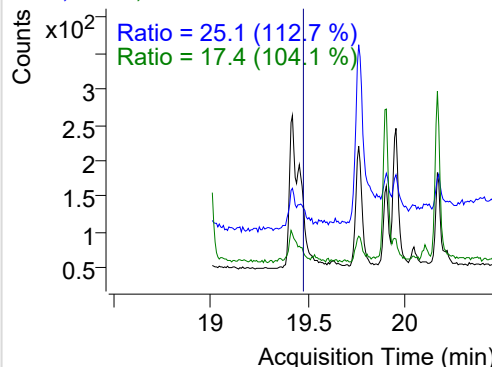


**Benzo(k)fluoranthene**

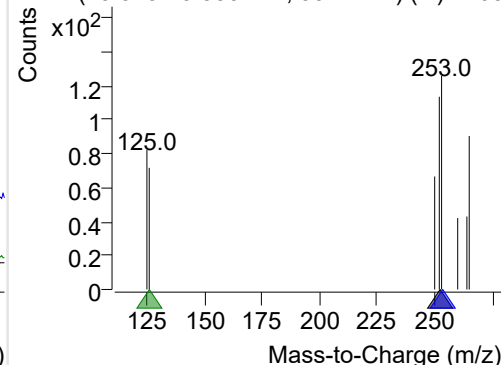
+ Selected Ion (252.0) 220506-PAHs-036.D



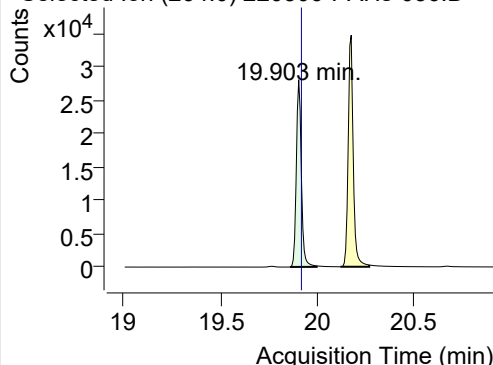
252.0, 253.0, 126.0



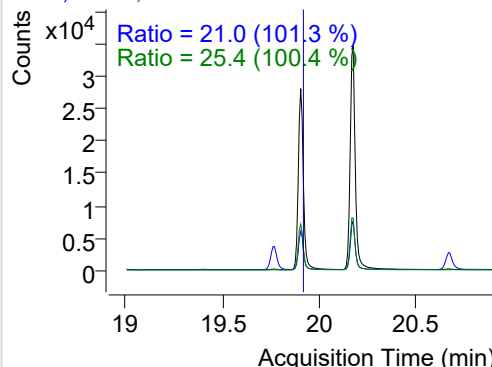
+ SIM (19.373-19.583 min, 30 scans) (\*\*) 2205

**SS-D12-Benzo(e)pyrene**

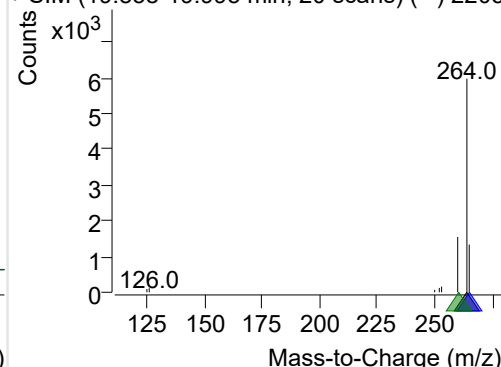
+ Selected Ion (264.0) 220506-PAHs-036.D



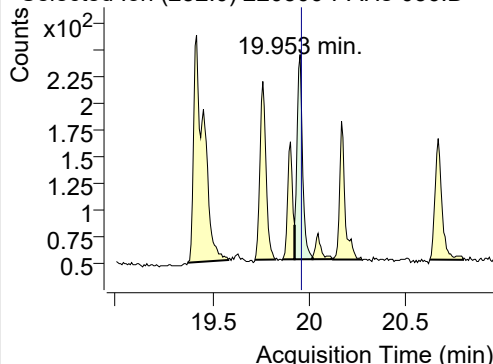
264.0, 265.0, 260.0



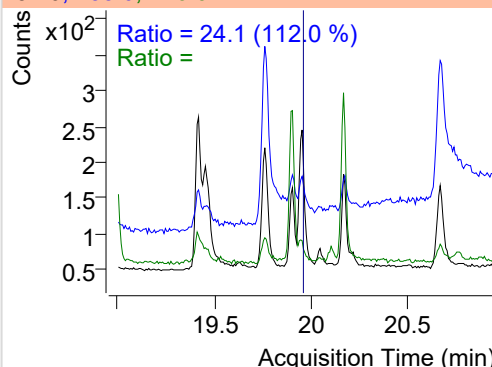
+ SIM (19.858-19.995 min, 20 scans) (\*\*) 2205

**Benzo(e)pyrene**

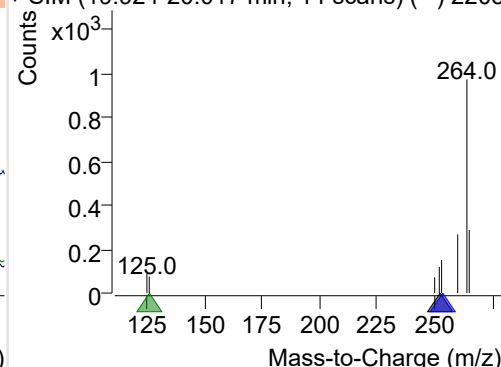
+ Selected Ion (252.0) 220506-PAHs-036.D



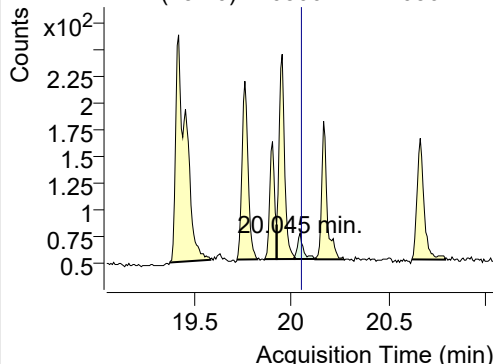
252.0, 253.0, 126.0



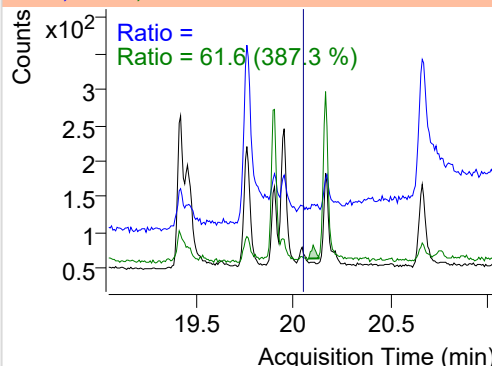
+ SIM (19.924-20.017 min, 14 scans) (\*\*) 2205

**Benzo(a)pyrene**

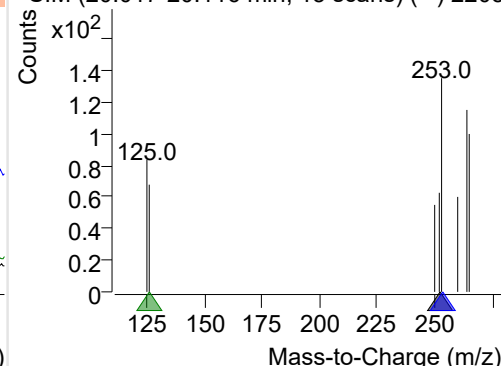
+ Selected Ion (252.0) 220506-PAHs-036.D



252.0, 253.0, 126.0

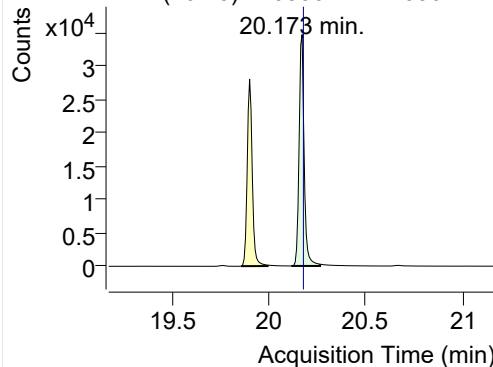


+ SIM (20.017-20.116 min, 15 scans) (\*\*) 2205

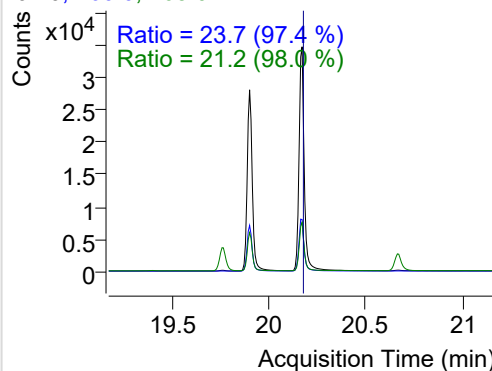


## IS-D12-Perylene

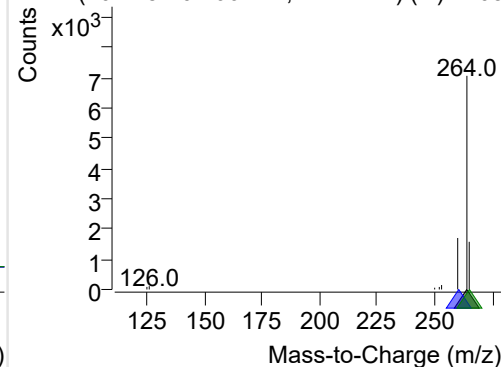
+ Selected Ion (264.0) 220506-PAHs-036.D



264.0, 260.0, 265.0

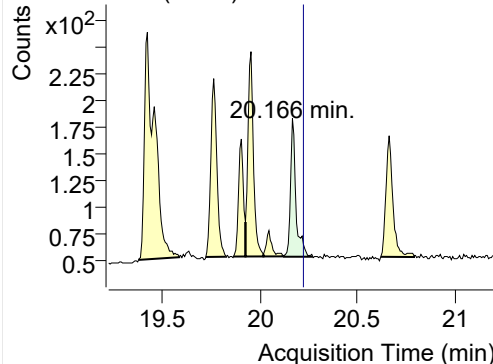


+ SIM (20.118-20.266 min, 21 scans) (\*\*) 2205

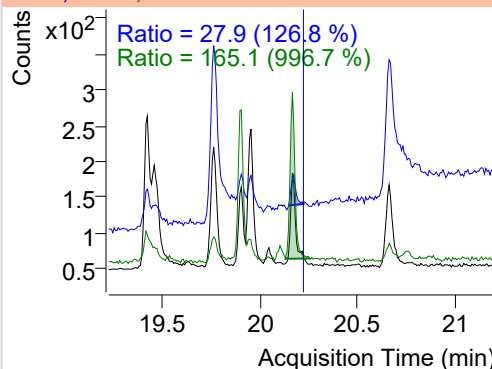


## Perylene

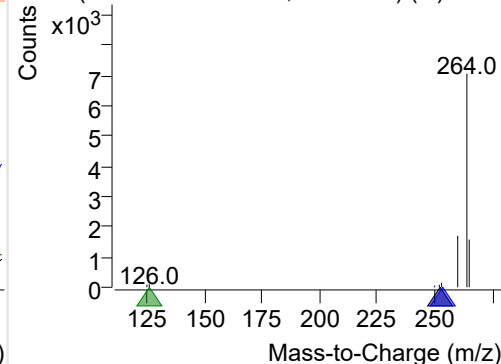
+ Selected Ion (252.0) 220506-PAHs-036.D



252.0, 253.0, 126.0

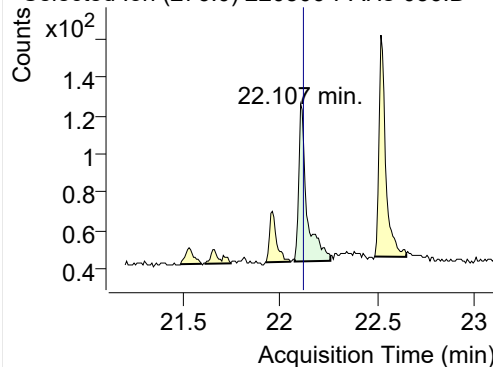


+ SIM (20.124-20.271 min, 21 scans) (\*\*) 2205

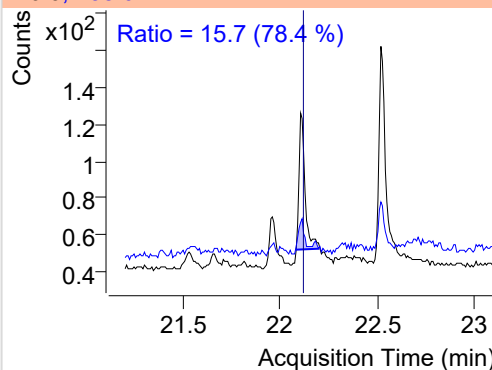


## Indeno(1,2,3-c,d)pyrene

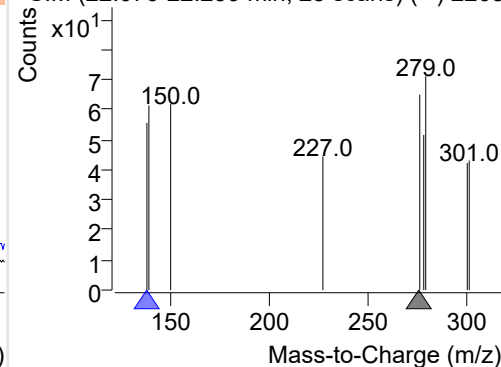
+ Selected Ion (276.0) 220506-PAHs-036.D



276.0, 138.0

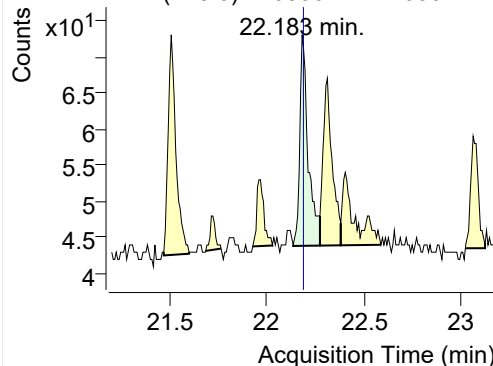


+ SIM (22.076-22.259 min, 25 scans) (\*\*) 2205

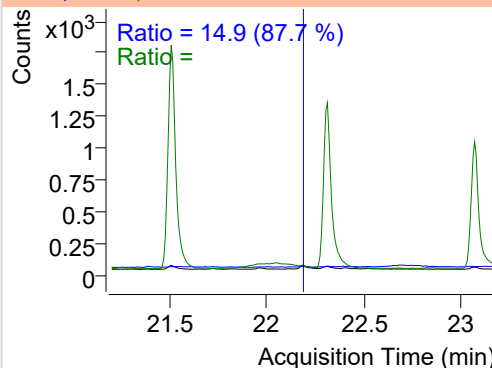


## Dibenz(a,h)anthracene

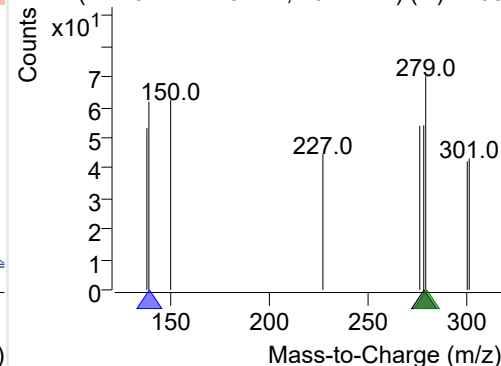
+ Selected Ion (278.0) 220506-PAHs-036.D



278.0, 139.0, 279.0

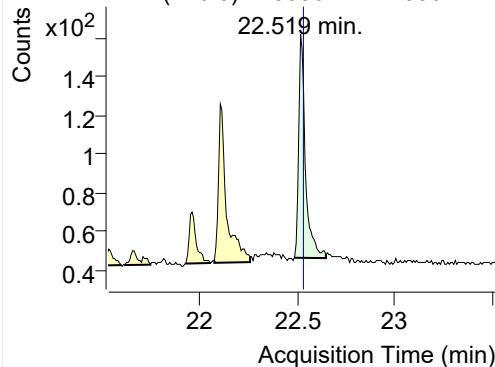


+ SIM (22.137-22.275 min, 19 scans) (\*\*) 2205

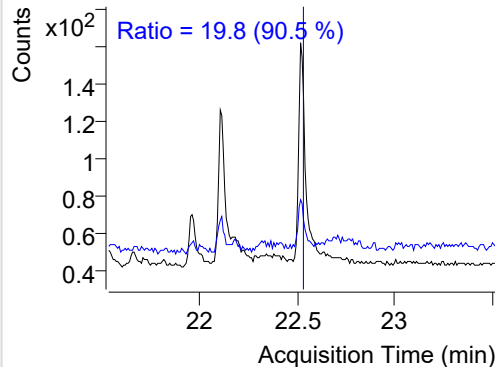


**Benzo(g,h,i)perylene**

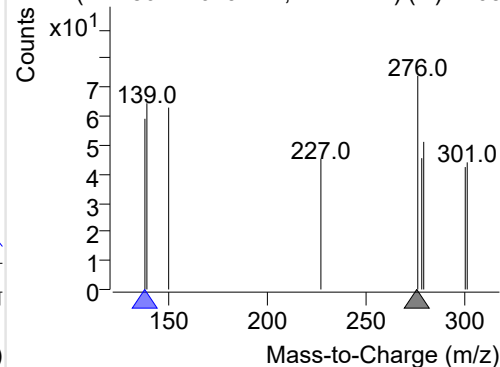
+ Selected Ion (276.0) 220506-PAHs-036.D



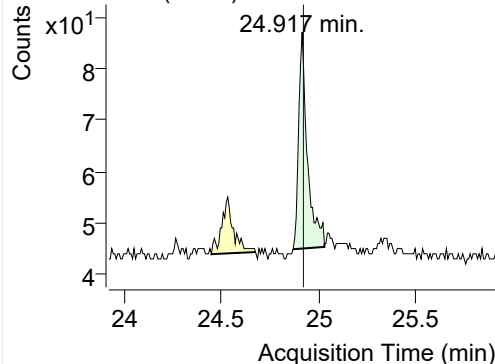
276.0, 138.0



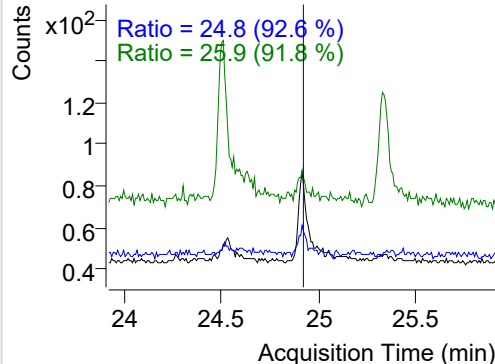
+ SIM (22.486-22.649 min, 22 scans) (\*\*) 2205

**Coronene**

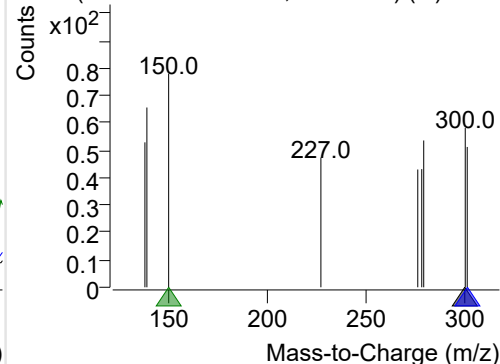
+ Selected Ion (300.0) 220506-PAHs-036.D



300.0, 301.0, 150.0



+ SIM (24.870-25.031 min, 22 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

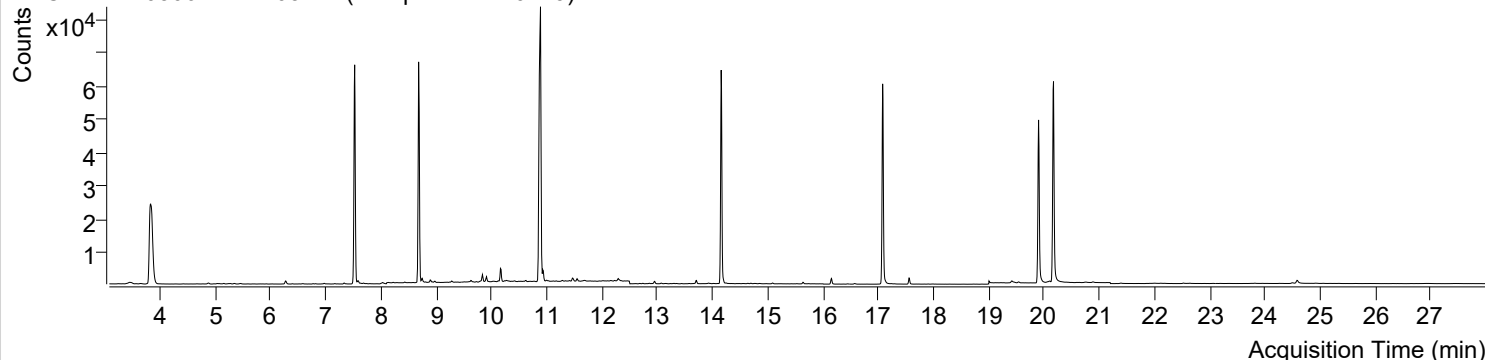


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 5:24:54	Data File	220506-PAHs-037.D
Type	Sample	Name	Sample-PM-220429
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

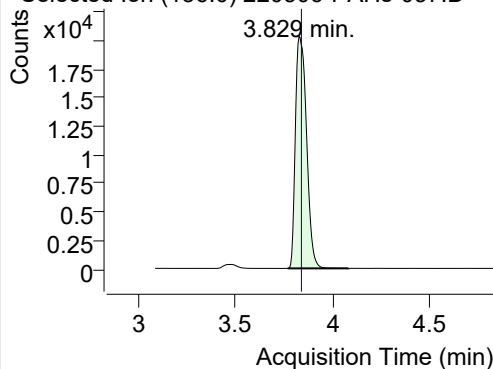
+ TIC SIM 220506-PAHs-037.D (Sample-PM-220429)



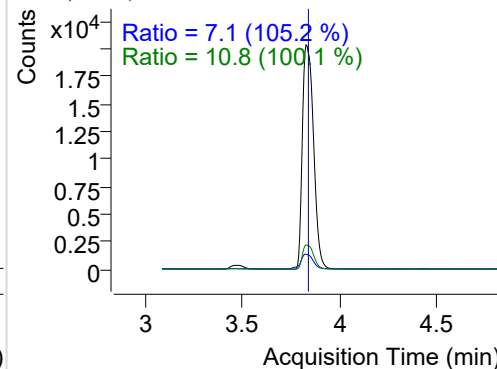
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	81083	20313.72	ND ng/ml	10.8
Naphthalene	3.867	128.0	4252	1045.29	ND ng/ml	17.2
Acenaphthylene	7.165	152.0	120	67.94	ND ng/ml	16.8
IS-D10-Acenaphthene	7.526	164.0	51323	31532.12	ND ng/ml	98.6
Acenaphthene	7.591	154.0	460	258.23	ND ng/ml	153.7
LSS-D10-Fluorene	8.684	176.0	47580	29686.52	ND ng/ml	92.9
Fluorene	8.747	166.0	838	519.66	ND ng/ml	91.8
IS-D10-Phenanthrene	10.889	188.0	96126	64355.11	ND ng/ml	15.1
Phenanthrene	10.931	178.0	3065	1835.98	ND ng/ml	19.1
Anthracene	10.931	178.0	3065	1835.98	ND ng/ml	19.1
Fluoranthene	13.710	202.0	1094	670.80	ND ng/ml	25.7
LSS-D10-Pyrene	14.159	212.0	75392	47845.80	ND ng/ml	17.2
Pyrene	14.197	202.0	1192	718.99	ND ng/ml	15.8
Benz(a)anthracene	17.049	228.0	135	85.83	ND ng/ml	49.1
IS-D12-Chrysene	17.081	240.0	74857	45656.75	ND ng/ml	19.0
Chrysene	17.130	228.0	404	181.83	ND ng/ml	28.9
Benzo(b)fluoranthene	19.419	252.0	729	232.99	ND ng/ml	23.5
Benzo(k)fluoranthene	19.419	252.0	729	232.99	ND ng/ml	23.5
SS-D12-Benzo(e)pyrene	19.903	264.0	59323	33353.57	ND ng/ml	25.1
Benzo(e)pyrene	19.953	252.0	359	174.37	ND ng/ml	17.9
Benzo(a)pyrene	20.045	252.0	53	28.18	ND ng/ml	
IS-D12-Perylene	20.173	264.0	76700	41642.81	ND ng/ml	23.7
Perylene	20.166	252.0	295	144.38	ND ng/ml	36.4
Indeno(1,2,3-c,d)pyrene	22.114	276.0	118	35.33	ND ng/ml	46.0
Dibenz(a,h)anthracene	22.191	278.0	72	23.49	ND ng/ml	
Benzo(g,h,i)perylene	22.526	276.0	309	115.35	ND ng/ml	19.5
Coronene	24.924	300.0	143	36.11	ND ng/ml	

## IS-D8-Naphthalene

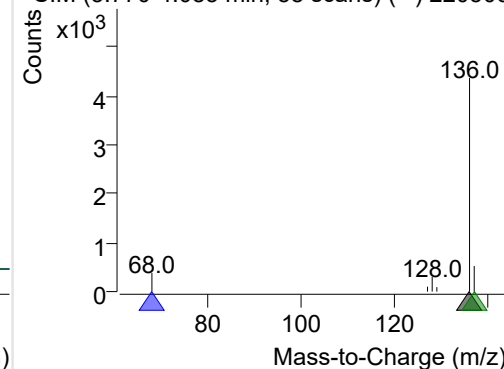
+ Selected Ion (136.0) 220506-PAHs-037.D



136.0, 68.0, 137.0

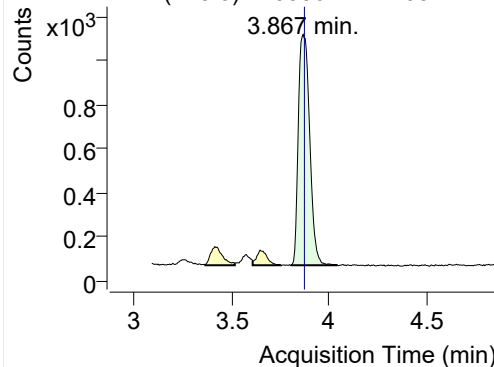


+ SIM (3.770-4.083 min, 58 scans) (\*\*) 220506

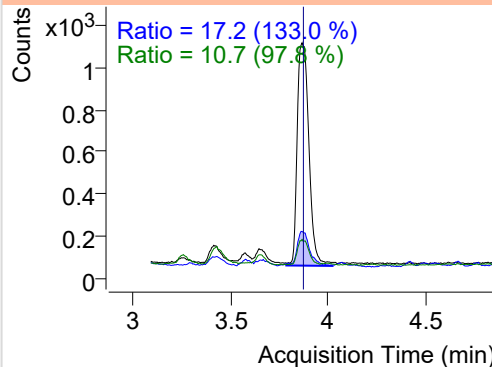


**Naphthalene**

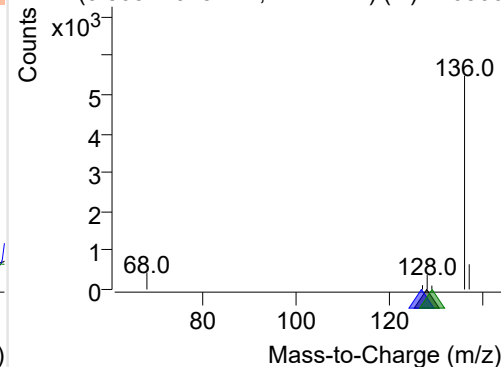
+ Selected Ion (128.0) 220506-PAHs-037.D



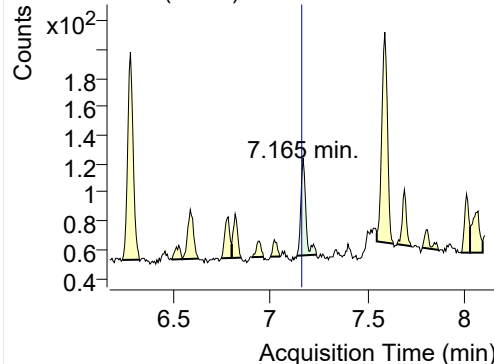
128.0, 127.0, 129.0



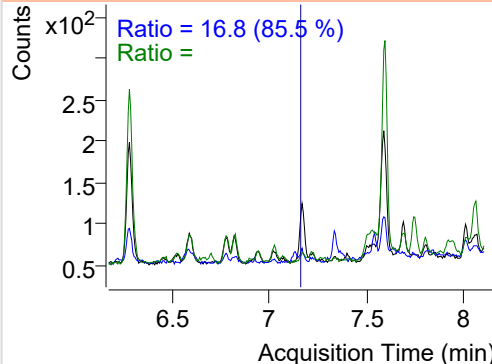
+ SIM (3.803-4.043 min, 44 scans) (\*\*) 220506

**Acenaphthylene**

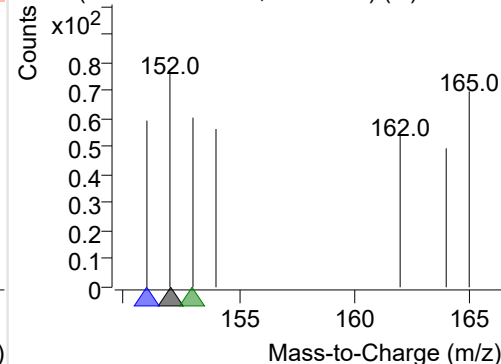
+ Selected Ion (152.0) 220506-PAHs-037.D



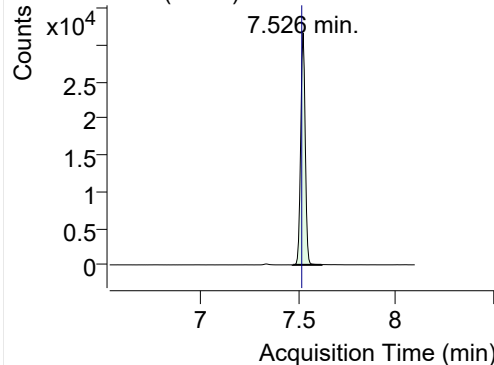
152.0, 151.0, 153.0



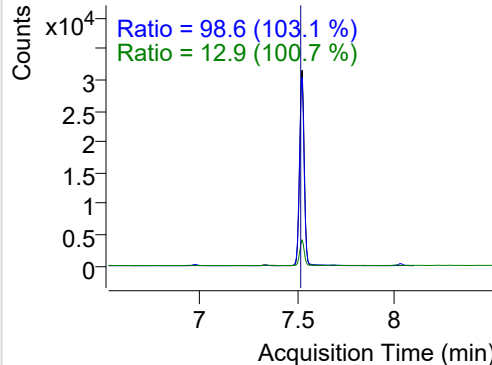
+ SIM (7.133-7.234 min, 17 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

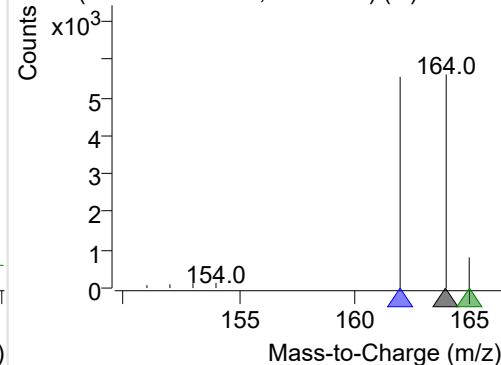
+ Selected Ion (164.0) 220506-PAHs-037.D



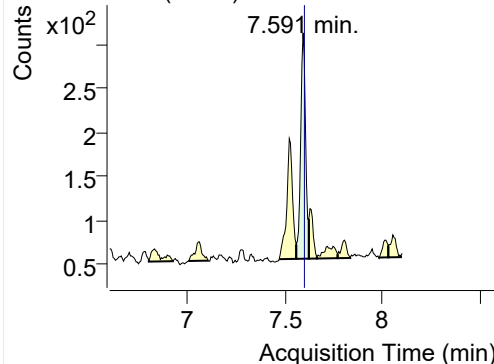
164.0, 162.0, 165.0



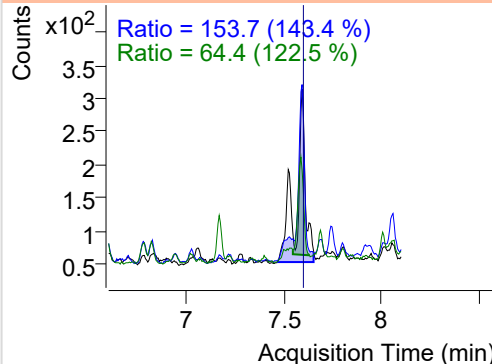
+ SIM (7.473-7.621 min, 26 scans) (\*\*) 220506

**Acenaphthene**

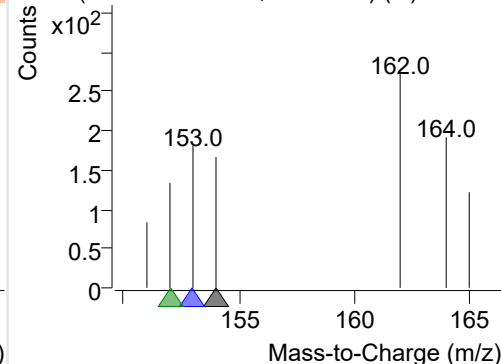
+ Selected Ion (154.0) 220506-PAHs-037.D



154.0, 153.0, 152.0

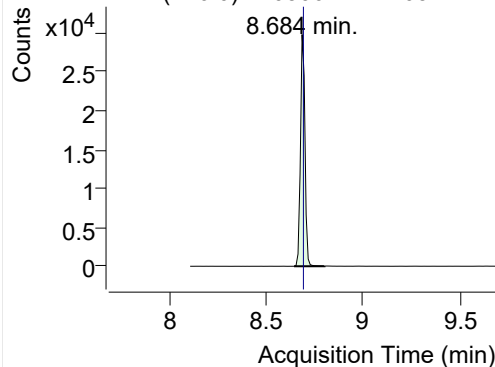


+ SIM (7.556-7.621 min, 12 scans) (\*\*) 220506

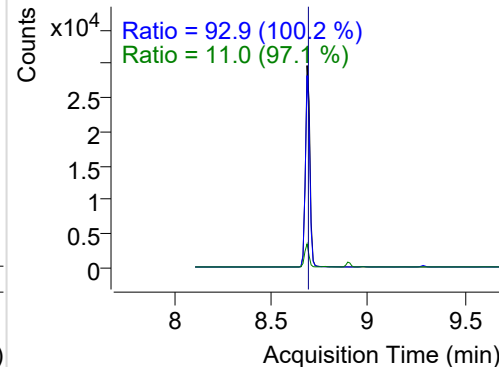


## LSS-D10-Fluorene

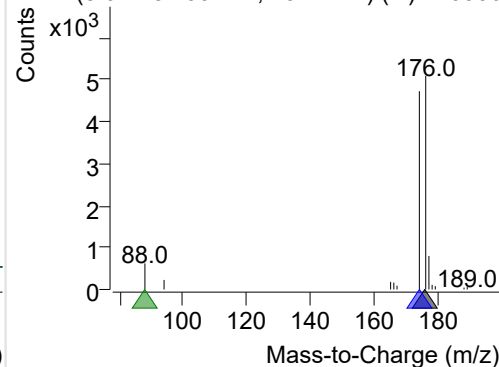
+ Selected Ion (176.0) 220506-PAHs-037.D



176.0, 174.0, 88.0

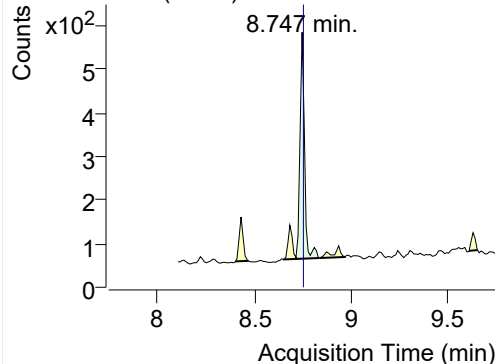


+ SIM (8.642-8.799 min, 15 scans) (\*\*) 220506

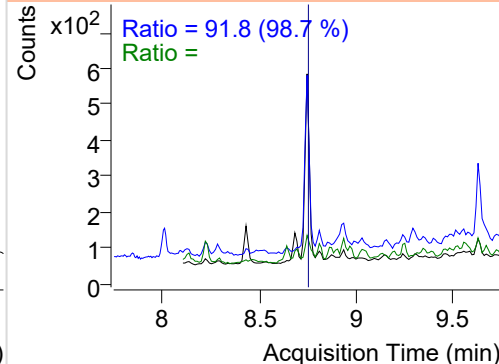


## Fluorene

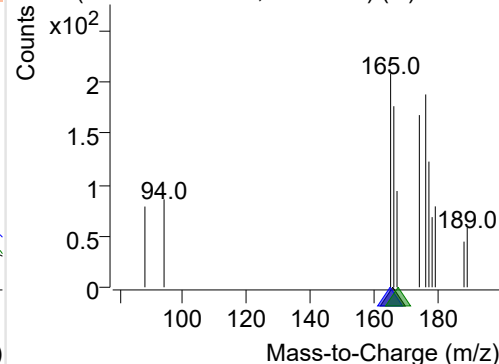
+ Selected Ion (166.0) 220506-PAHs-037.D



166.0, 165.0, 167.0

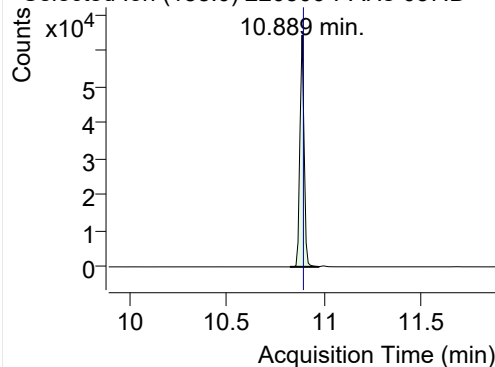


+ SIM (8.715-8.831 min, 12 scans) (\*\*) 220506

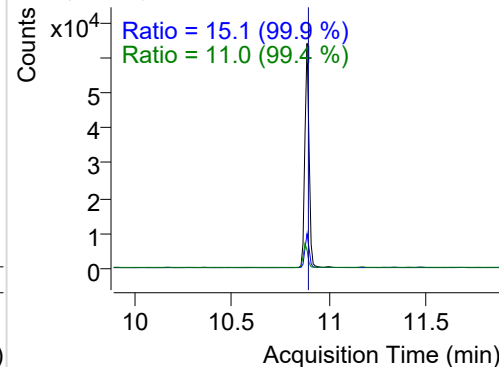


## IS-D10-Phenanthrene

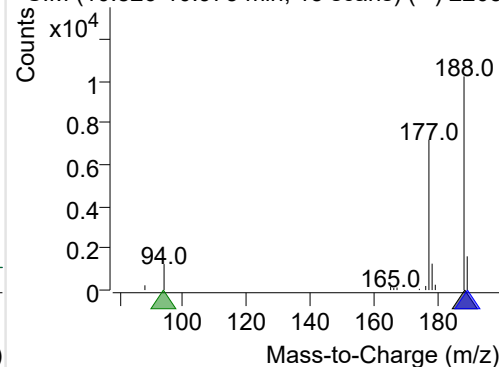
+ Selected Ion (188.0) 220506-PAHs-037.D



188.0, 189.0, 94.0

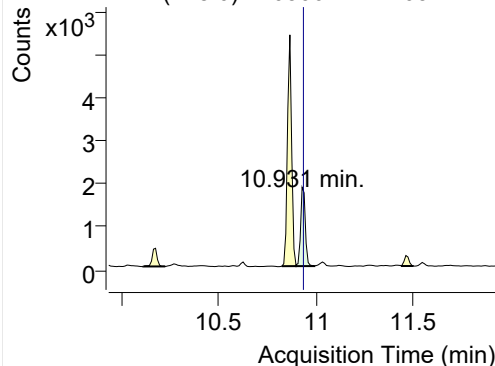


+ SIM (10.826-10.973 min, 15 scans) (\*\*) 2205

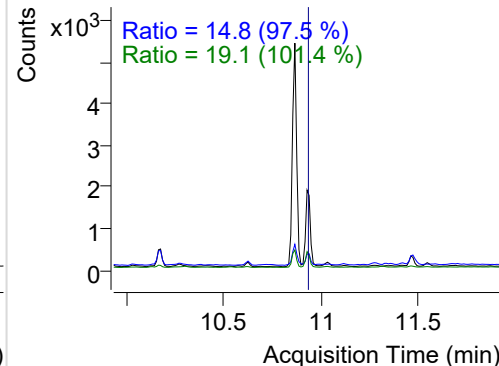


## Phenanthrene

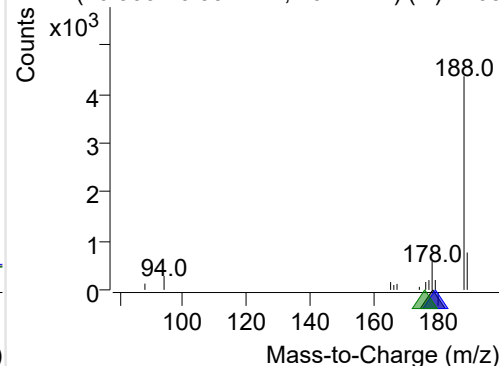
+ Selected Ion (178.0) 220506-PAHs-037.D



178.0, 179.0, 176.0

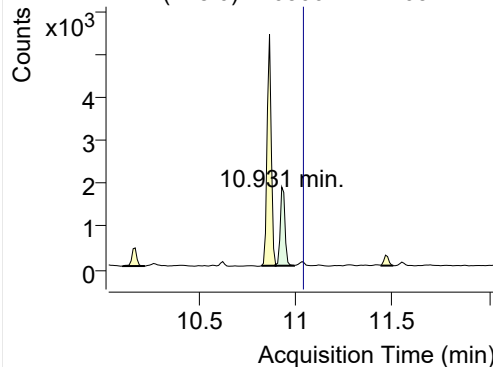


+ SIM (10.900-10.994 min, 10 scans) (\*\*) 2205

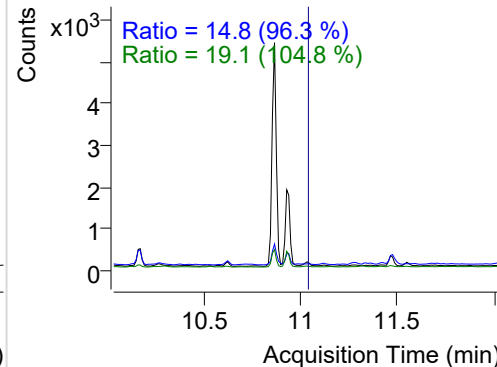


**Anthracene**

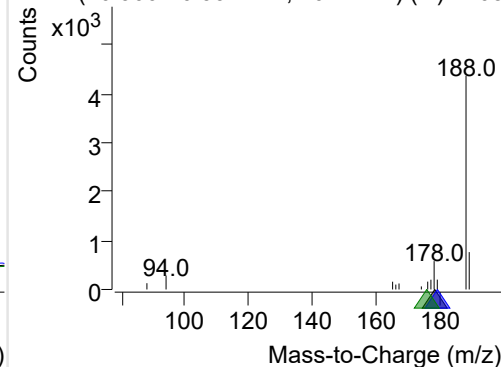
+ Selected Ion (178.0) 220506-PAHs-037.D



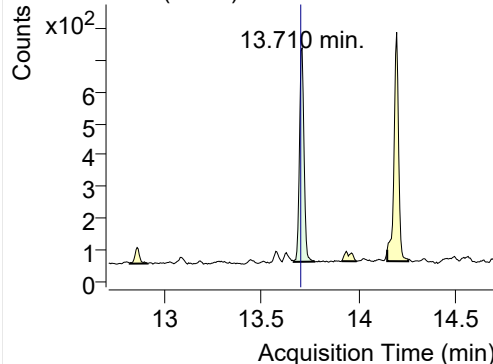
178.0, 179.0, 176.0



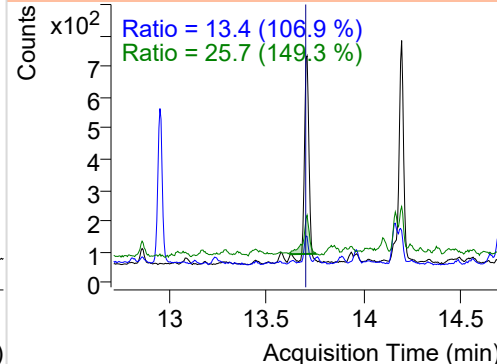
+ SIM (10.900-10.994 min, 10 scans) (\*\*) 2205

**Fluoranthene**

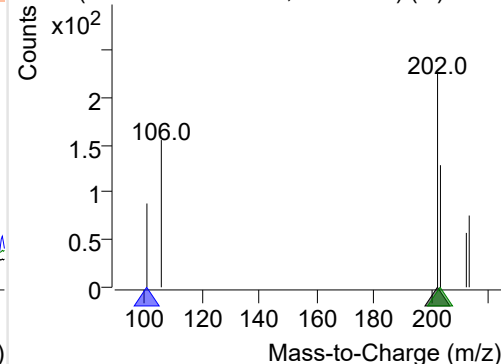
+ Selected Ion (202.0) 220506-PAHs-037.D



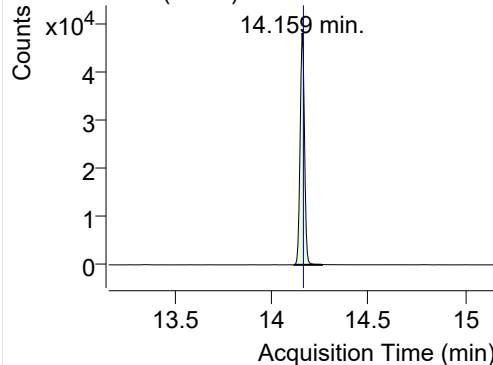
202.0, 101.0, 203.0



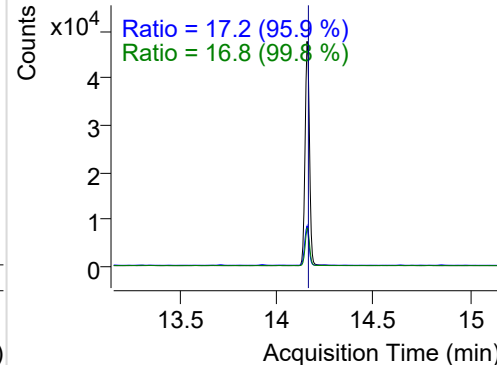
+ SIM (13.666-13.776 min, 21 scans) (\*\*) 2205

**LSS-D10-Pyrene**

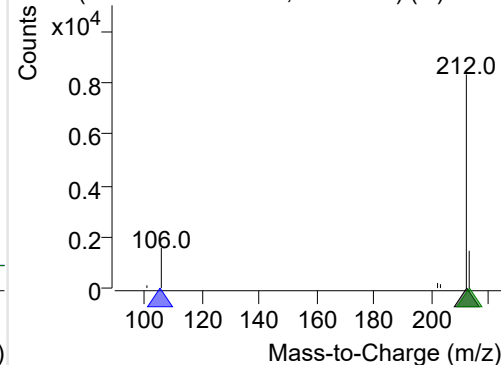
+ Selected Ion (212.0) 220506-PAHs-037.D



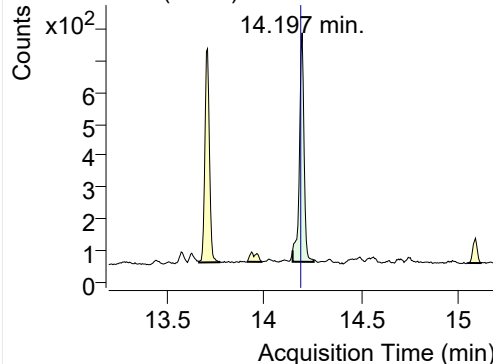
212.0, 106.0, 213.0



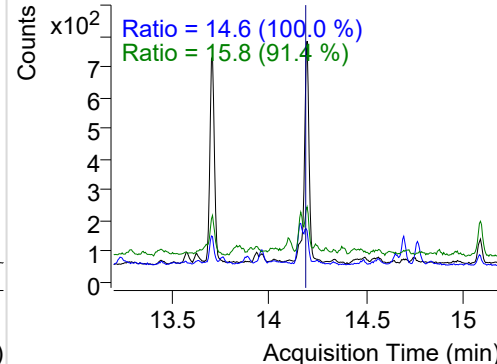
+ SIM (14.116-14.262 min, 28 scans) (\*\*) 2205

**Pyrene**

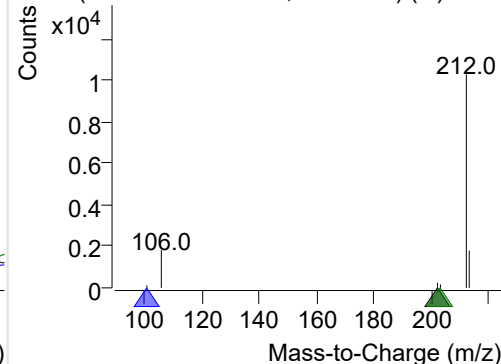
+ Selected Ion (202.0) 220506-PAHs-037.D



202.0, 101.0, 203.0



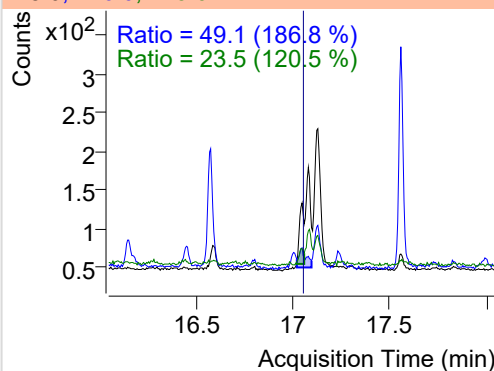
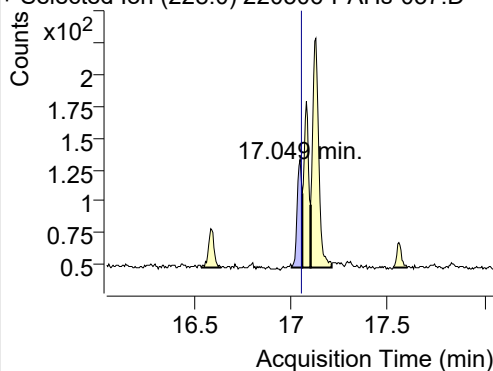
+ SIM (14.149-14.257 min, 21 scans) (\*\*) 2205



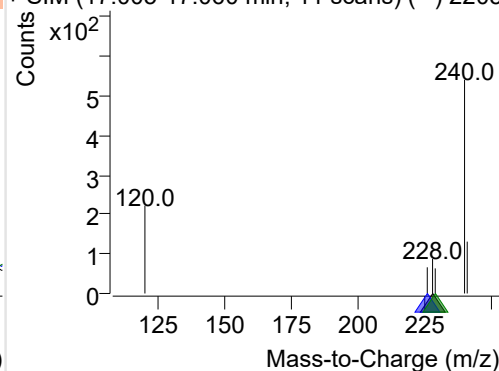
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-037.D

228.0, 226.0, 229.0

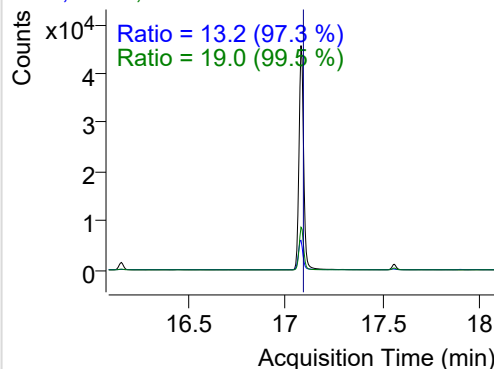
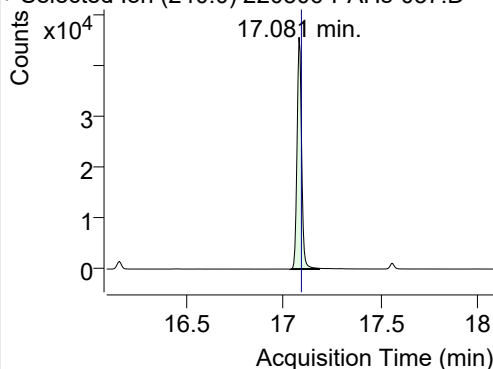


+ SIM (17.005-17.060 min, 11 scans) (\*\*) 2205

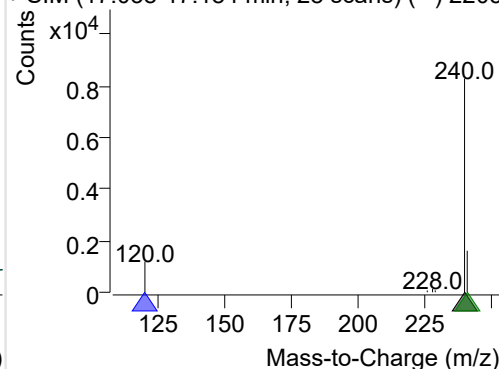
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-037.D

240.0, 120.0, 241.0

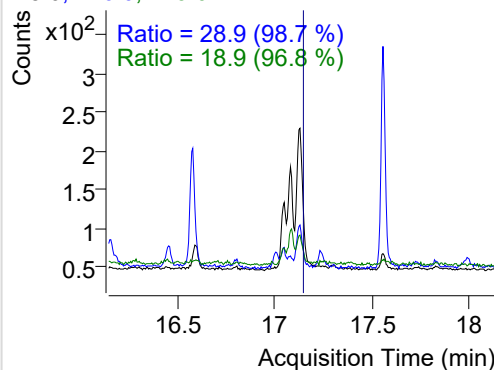
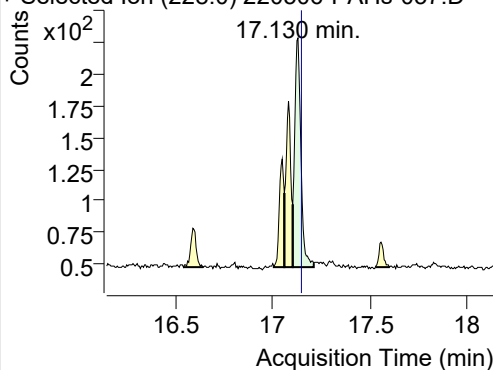


+ SIM (17.038-17.184 min, 28 scans) (\*\*) 2205

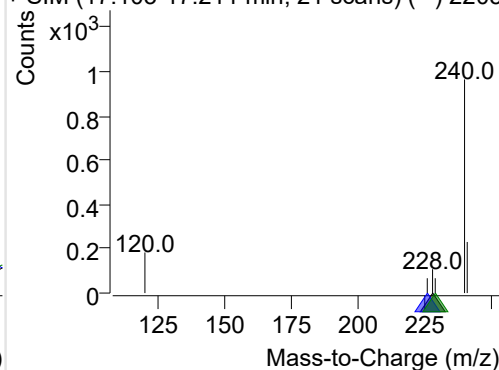
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-037.D

228.0, 226.0, 229.0

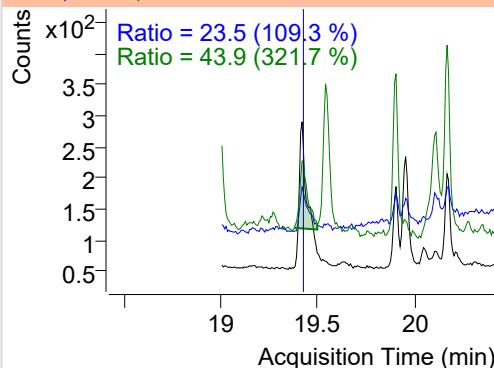
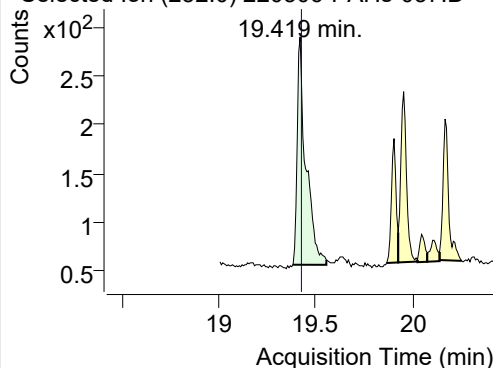


+ SIM (17.103-17.211 min, 21 scans) (\*\*) 2205

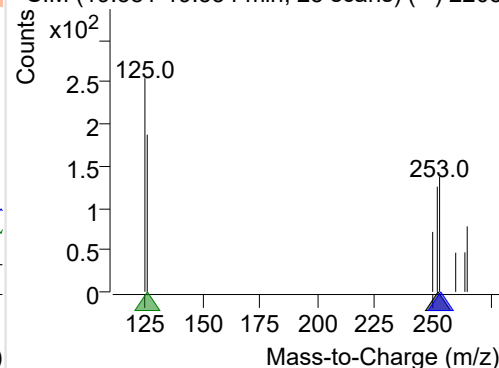
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-037.D

252.0, 253.0, 126.0



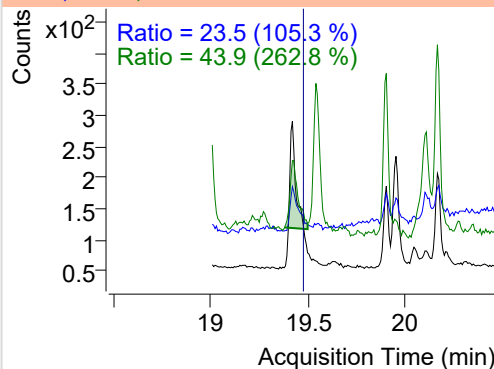
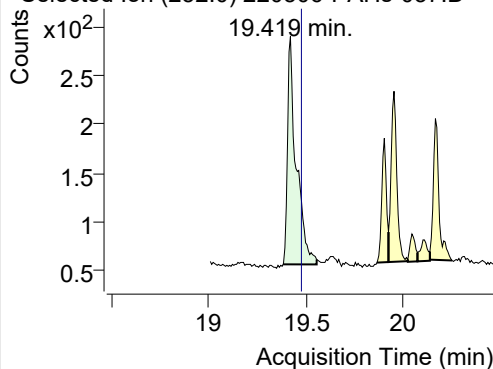
+ SIM (19.381-19.554 min, 25 scans) (\*\*) 2205



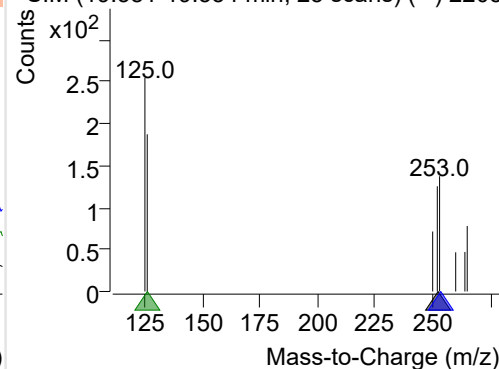
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-037.D

252.0, 253.0, 126.0

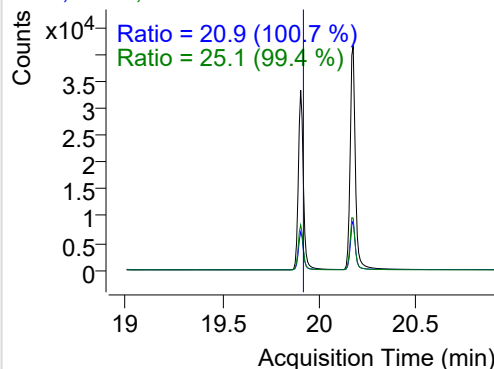
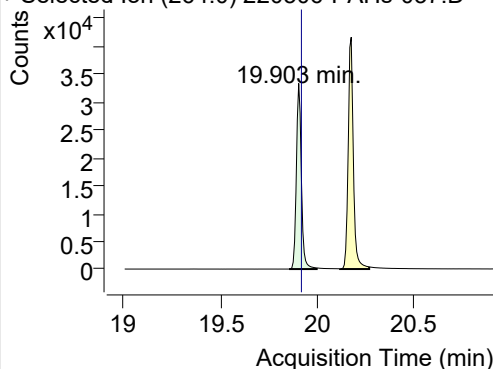


+ SIM (19.381-19.554 min, 25 scans) (\*\*) 2205

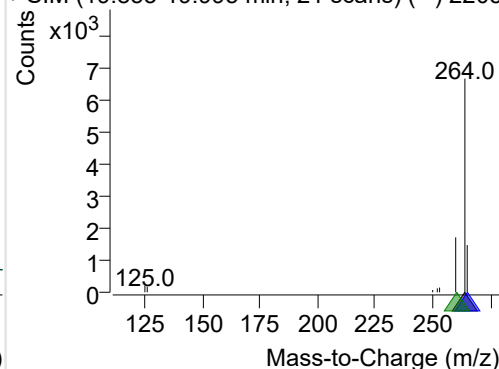
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-037.D

264.0, 265.0, 260.0

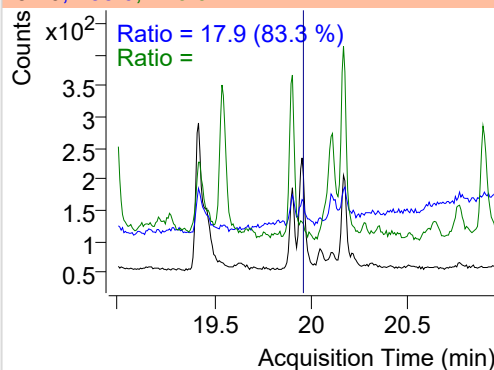
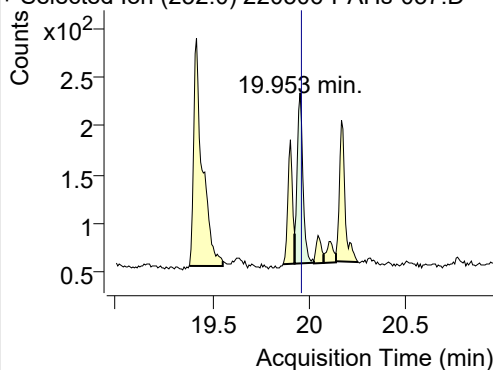


+ SIM (19.853-19.995 min, 21 scans) (\*\*) 2205

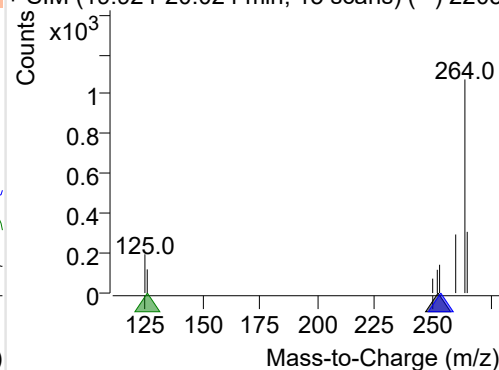
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-037.D

252.0, 253.0, 126.0

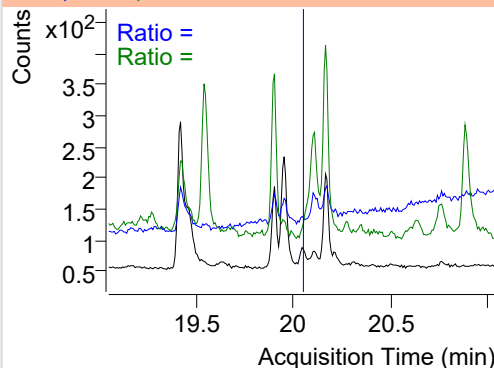
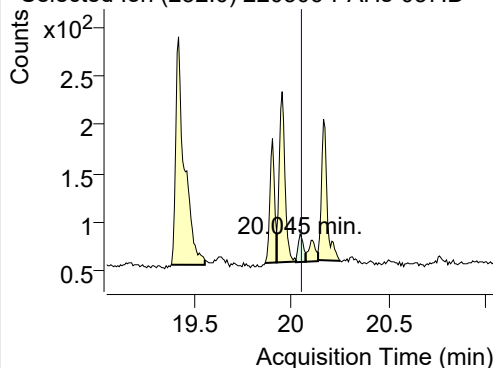


+ SIM (19.924-20.024 min, 15 scans) (\*\*) 2205

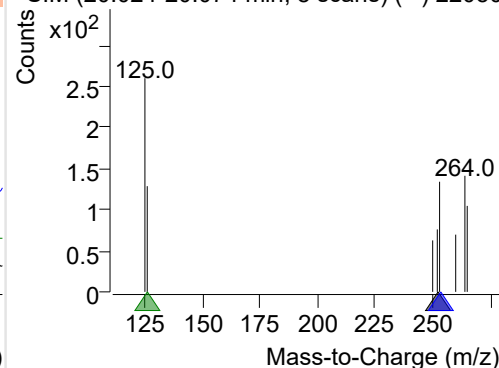
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-037.D

252.0, 253.0, 126.0

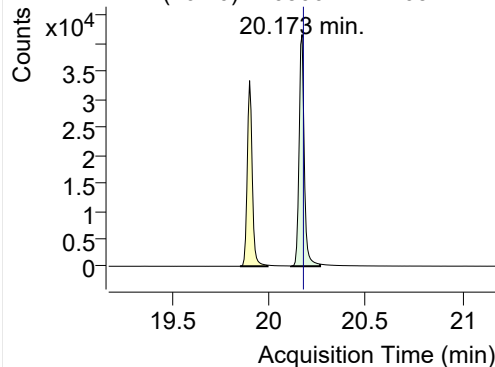


+ SIM (20.024-20.074 min, 8 scans) (\*\*) 22050

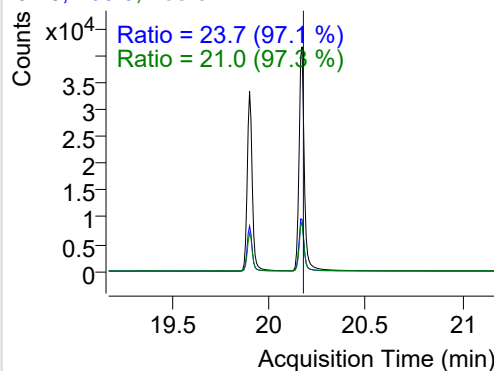


## IS-D12-Perylene

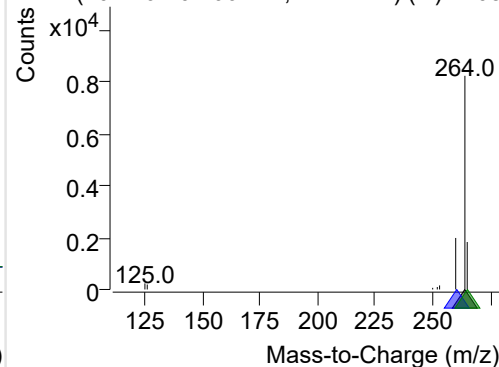
+ Selected Ion (264.0) 220506-PAHs-037.D



264.0, 260.0, 265.0

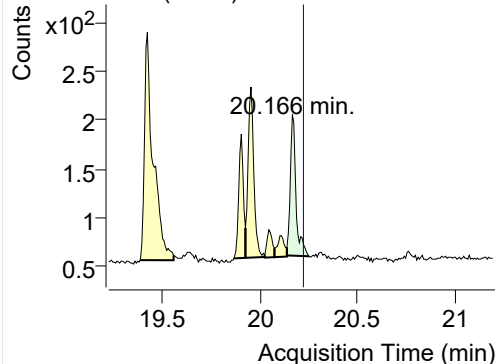


+ SIM (20.116-20.266 min, 22 scans) (\*\*) 2205

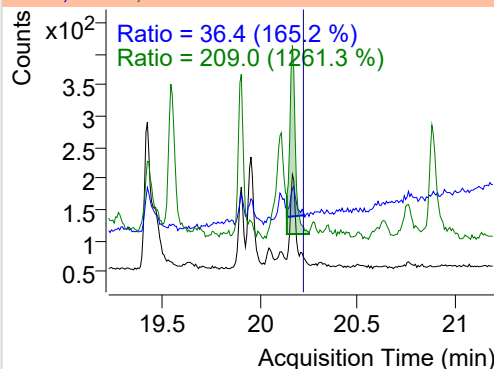


## Perylene

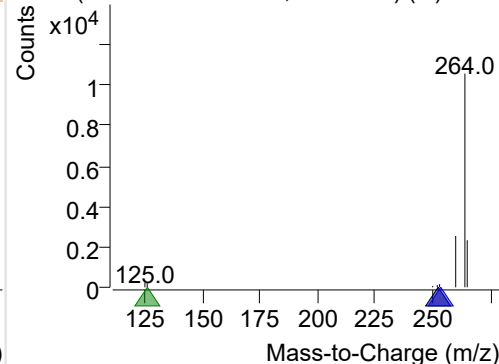
+ Selected Ion (252.0) 220506-PAHs-037.D



252.0, 253.0, 126.0

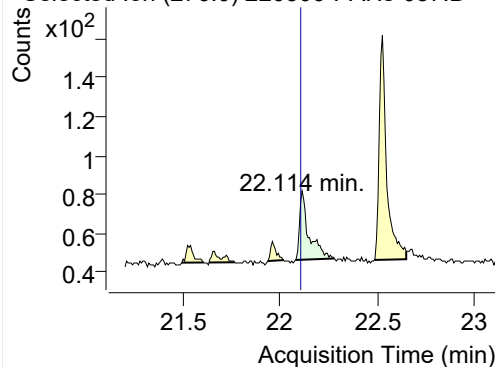


+ SIM (20.138-20.252 min, 17 scans) (\*\*) 2205

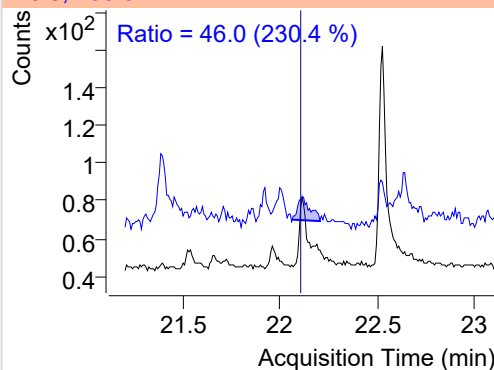


## Indeno(1,2,3-c,d)pyrene

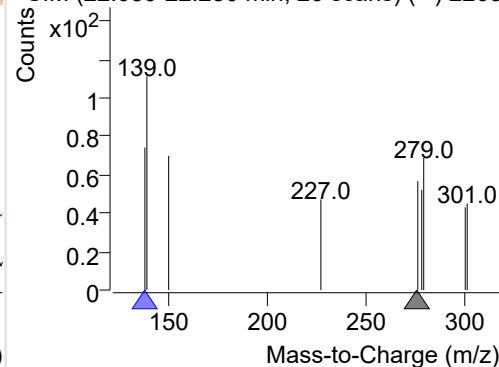
+ Selected Ion (276.0) 220506-PAHs-037.D



276.0, 138.0

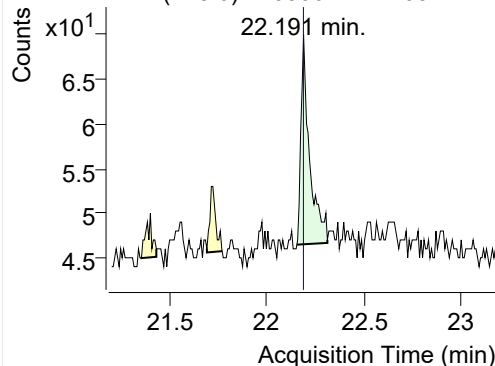


+ SIM (22.080-22.280 min, 26 scans) (\*\*) 2205

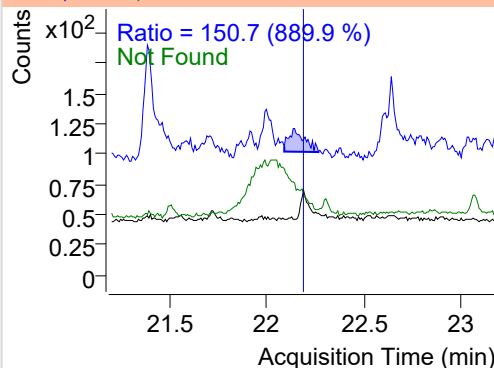


## Dibenz(a,h)anthracene

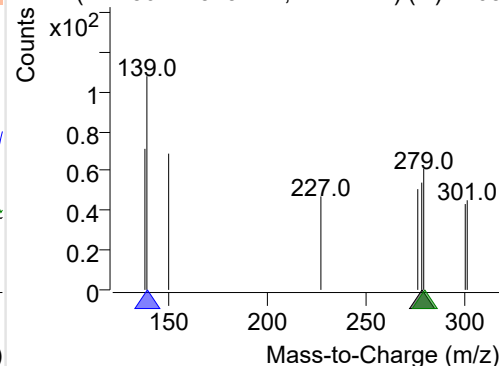
+ Selected Ion (278.0) 220506-PAHs-037.D



278.0, 139.0, 279.0

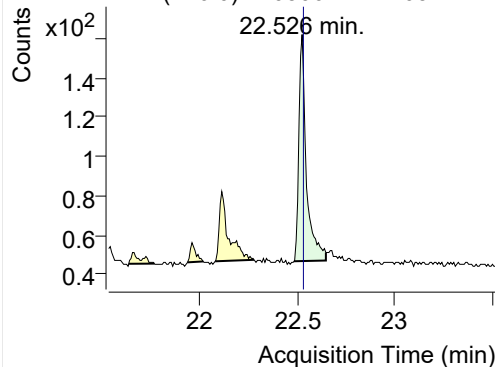


+ SIM (22.156-22.313 min, 21 scans) (\*\*) 2205

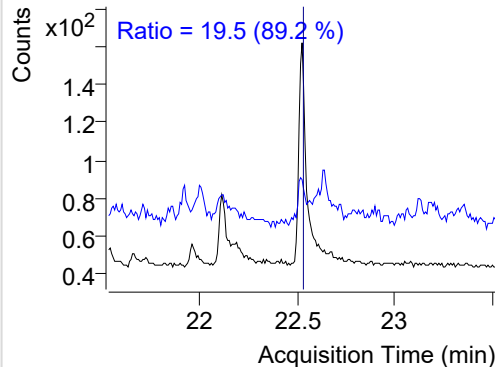


**Benzo(g,h,i)perylene**

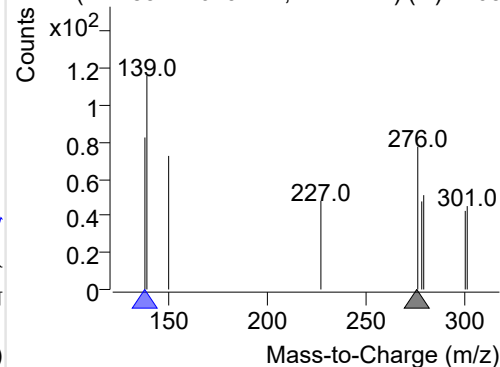
+ Selected Ion (276.0) 220506-PAHs-037.D



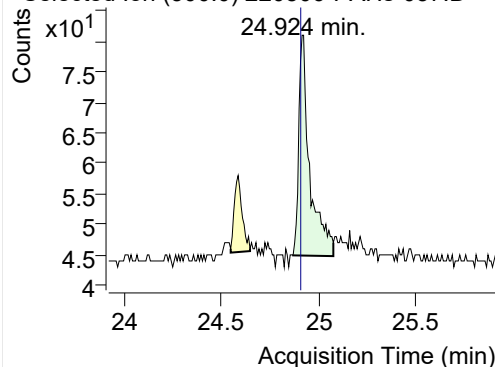
276.0, 138.0



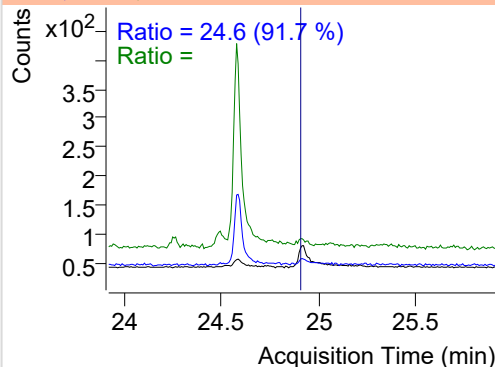
+ SIM (22.485-22.649 min, 22 scans) (\*\*) 2205

**Coronene**

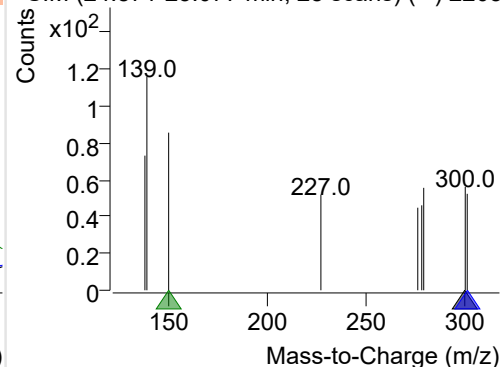
+ Selected Ion (300.0) 220506-PAHs-037.D



300.0, 301.0, 150.0



+ SIM (24.871-25.077 min, 28 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

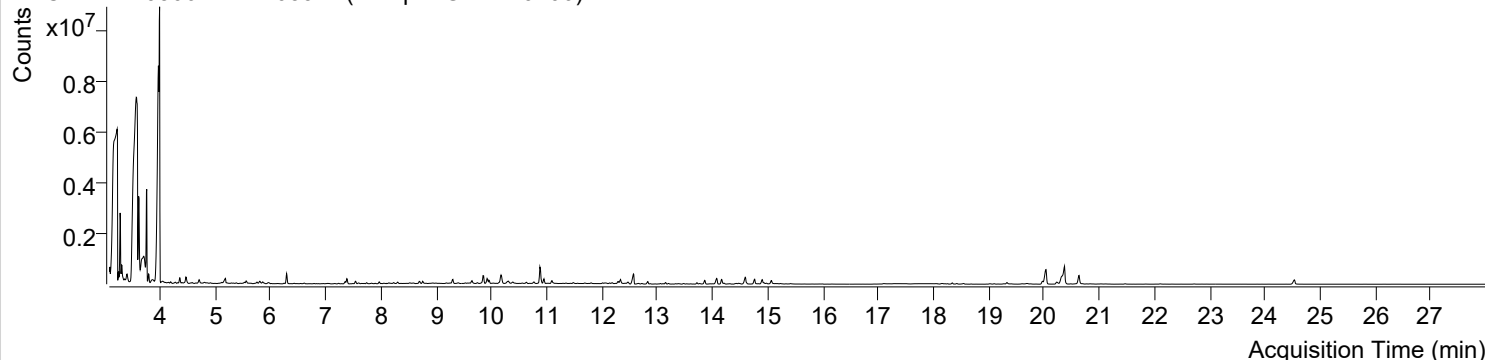


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 6:27:08	Data File	220506-PAHs-039.D
Type	Sample	Name	Sample-Gas-220406
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

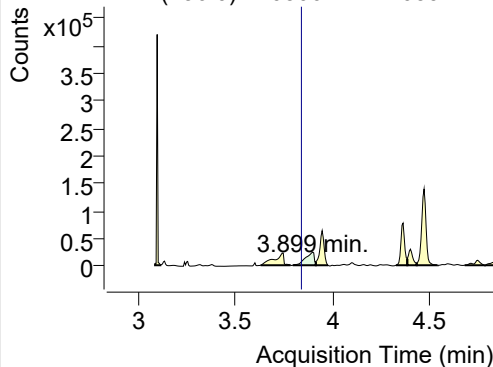
+ TIC SIM 220506-PAHs-039.D (Sample-Gas-220406)



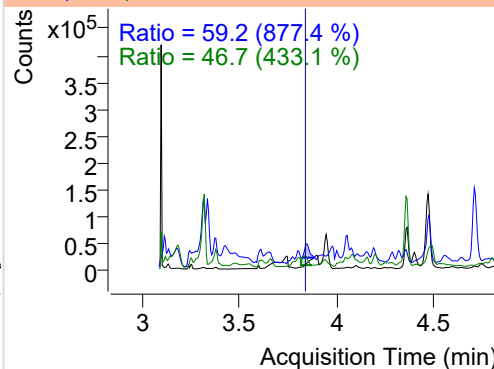
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.899	136.0	73541	23977.44	ND ng/ml	46.7
Naphthalene	3.758	128.0	1135704	1125452.61	ND ng/ml	46.3
Acenaphthylene	7.177	152.0	3724	2765.43	ND ng/ml	
IS-D10-Acenaphthene	7.538	164.0	62633	41650.20	ND ng/ml	100.9
Acenaphthene	7.609	154.0	14469	9557.51	ND ng/ml	126.1
LSS-D10-Fluorene	8.694	176.0	59262	36331.13	ND ng/ml	95.5
Fluorene	8.757	166.0	63041	42335.54	ND ng/ml	93.0
IS-D10-Phenanthrene	10.900	188.0	111446	72416.95	ND ng/ml	13.8
Phenanthrene	10.952	178.0	175699	120549.12	ND ng/ml	19.8
Anthracene	11.047	178.0	3603	2331.49	ND ng/ml	
Fluoranthene	13.720	202.0	55056	37320.39	ND ng/ml	16.3
LSS-D10-Pyrene	14.176	212.0	88678	57642.55	ND ng/ml	19.8
Pyrene	14.208	202.0	39690	23538.39	ND ng/ml	17.0
Benz(a)anthracene	17.022	228.0	97	50.25	ND ng/ml	309.9
IS-D12-Chrysene	17.103	240.0	49115	13034.94	ND ng/ml	18.2
Chrysene	17.146	228.0	382	107.11	ND ng/ml	
Benzo(b)fluoranthene	19.412	252.0	1275	787.01	ND ng/ml	21.8
Benzo(k)fluoranthene	20.038	252.0	1131083	460330.00	ND ng/ml	19.2
SS-D12-Benzo(e)pyrene	19.974	264.0	174494	74222.48	ND ng/ml	26.7
Benzo(e)pyrene	20.038	252.0	1131083	460330.00	ND ng/ml	19.2
Benzo(a)pyrene	20.038	252.0	1131083	460330.00	ND ng/ml	19.2
IS-D12-Perylene	20.230	264.0	116736	47548.55	ND ng/ml	27.0
Perylene	20.373	252.0	1047339	519167.10	ND ng/ml	19.3
Indeno(1,2,3-c,d)pyrene	22.114	276.0	2486	1119.00	ND ng/ml	18.6
Dibenz(a,h)anthracene	22.190	278.0	3328	1333.04	ND ng/ml	27.2
Benzo(g,h,i)perylene	22.542	276.0	203	100.84	ND ng/ml	
Coronene	24.924	300.0	232	45.61	ND ng/ml	

## IS-D8-Naphthalene

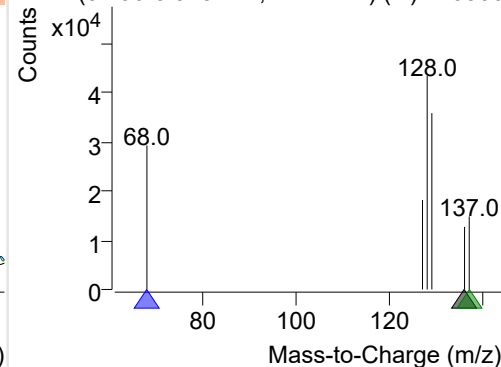
+ Selected Ion (136.0) 220506-PAHs-039.D



136.0, 68.0, 137.0

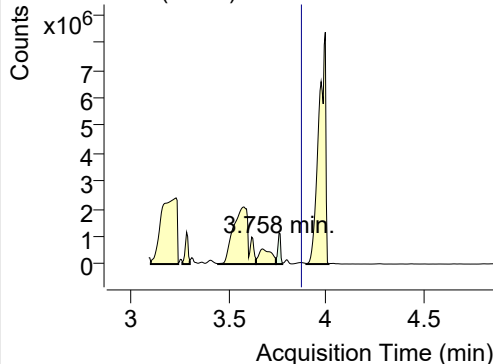


+ SIM (3.796-3.915 min, 22 scans) (\*\*) 220506

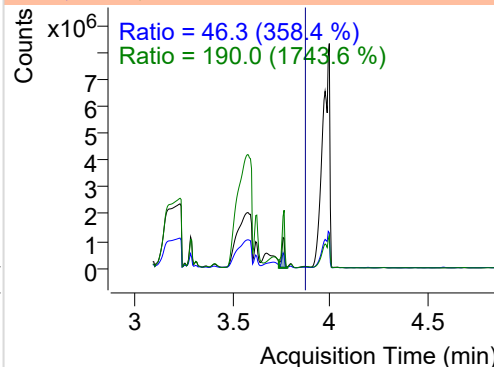


## Naphthalene

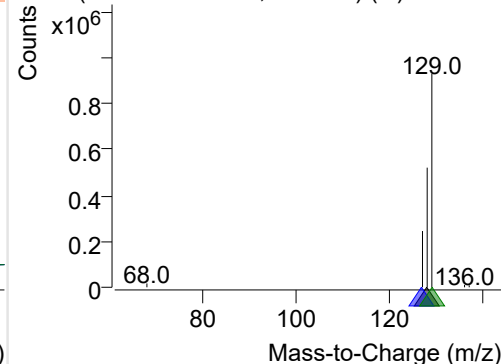
+ Selected Ion (128.0) 220506-PAHs-039.D



128.0, 127.0, 129.0

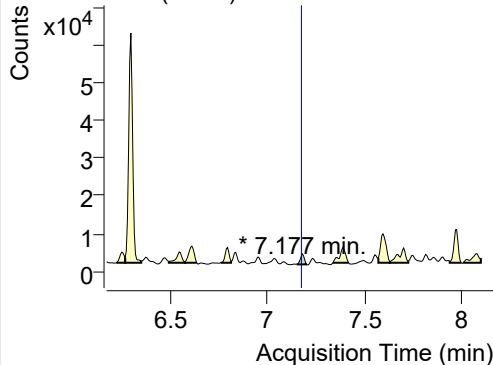


+ SIM (3.742-3.775 min, 7 scans) (\*\*) 220506-I

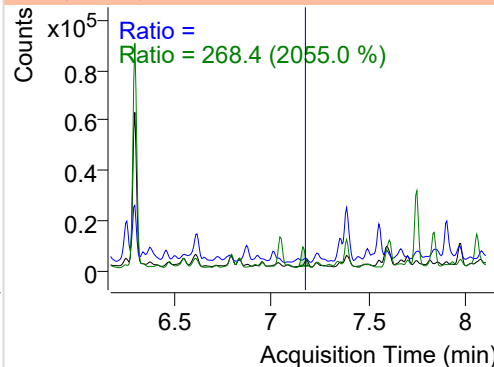


## Acenaphthylene

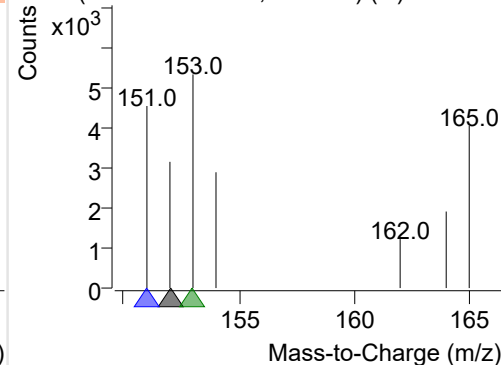
+ Selected Ion (152.0) 220506-PAHs-039.D



152.0, 151.0, 153.0

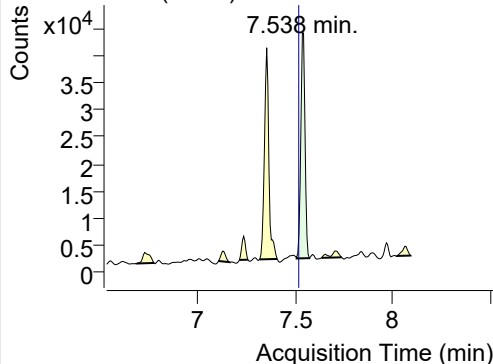


+ SIM (7.153-7.195 min, 8 scans) (\*\*) 220506-I

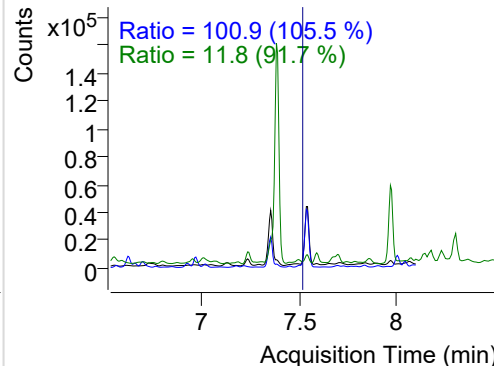


## IS-D10-Acenaphthene

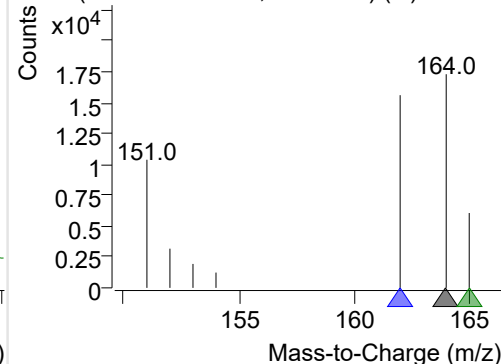
+ Selected Ion (164.0) 220506-PAHs-039.D



164.0, 162.0, 165.0

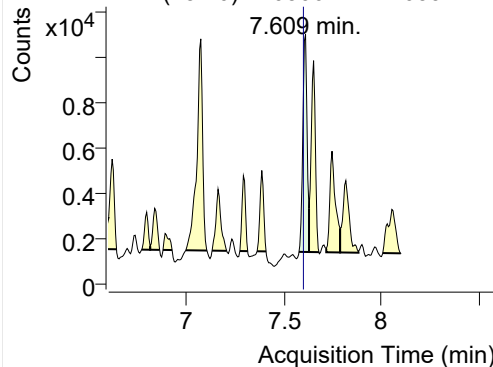


+ SIM (7.508-7.574 min, 12 scans) (\*\*) 220506

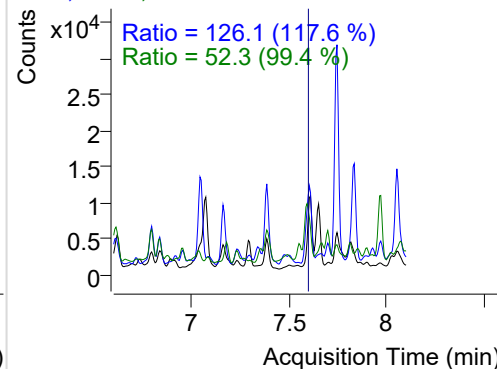


**Acenaphthene**

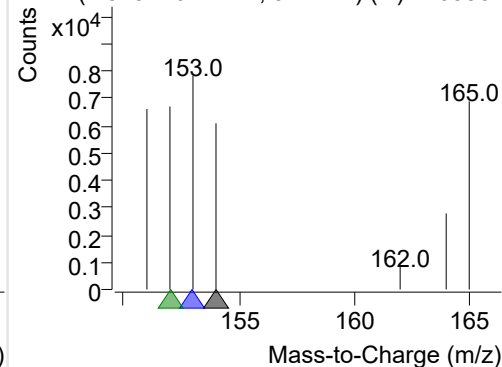
+ Selected Ion (154.0) 220506-PAHs-039.D



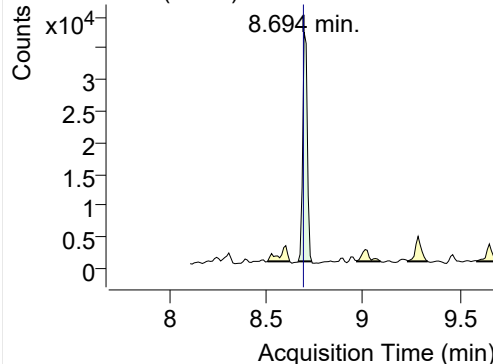
154.0, 153.0, 152.0



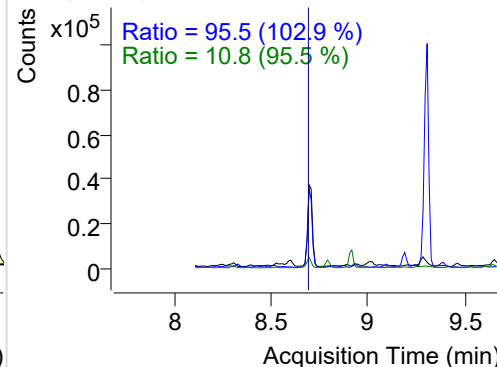
+ SIM (7.575-7.627 min, 9 scans) (\*\*) 220506-I

**LSS-D10-Fluorene**

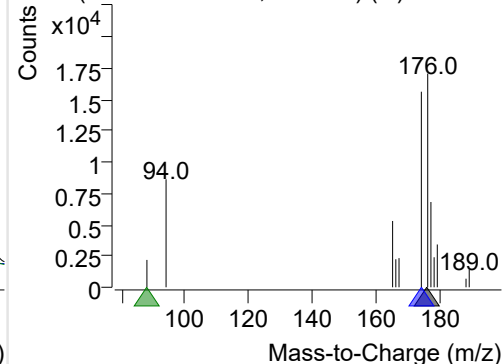
+ Selected Ion (176.0) 220506-PAHs-039.D



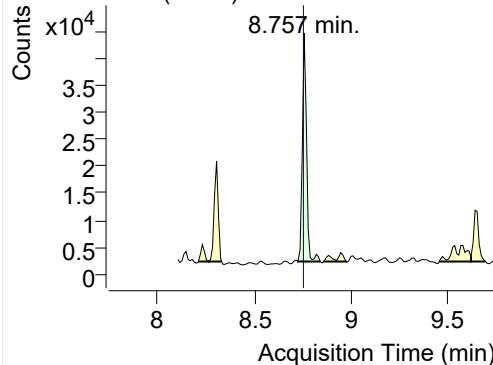
176.0, 174.0, 88.0



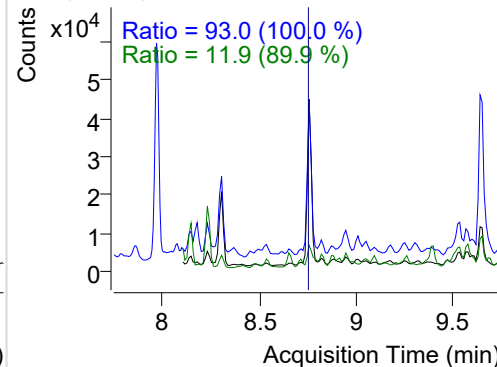
+ SIM (8.664-8.734 min, 6 scans) (\*\*) 220506-I

**Fluorene**

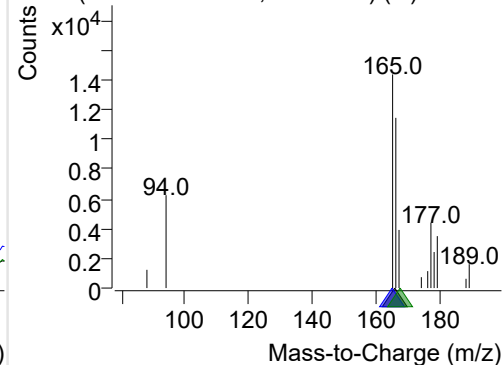
+ Selected Ion (166.0) 220506-PAHs-039.D



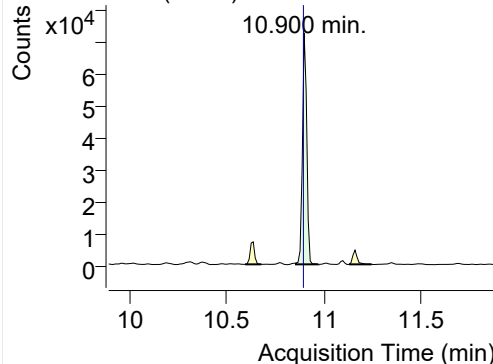
166.0, 165.0, 167.0



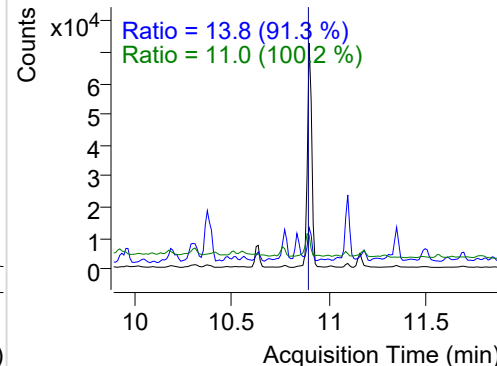
+ SIM (8.726-8.841 min, 11 scans) (\*\*) 220506-I

**IS-D10-Phenanthrene**

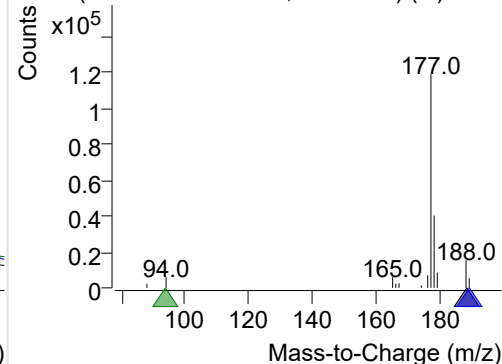
+ Selected Ion (188.0) 220506-PAHs-039.D



188.0, 189.0, 94.0

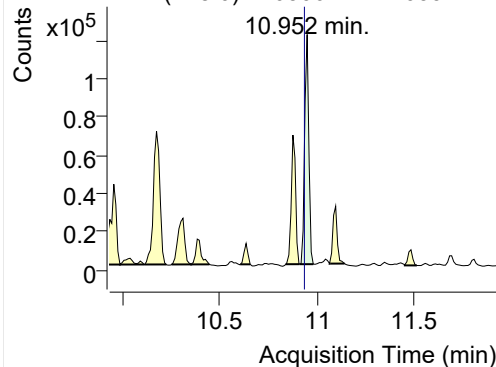


+ SIM (10.858-10.973 min, 12 scans) (\*\*) 220506-I

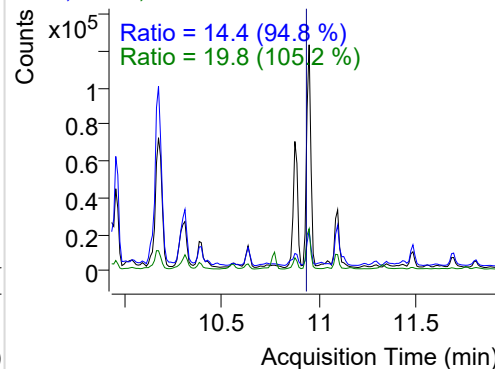


**Phenanthrene**

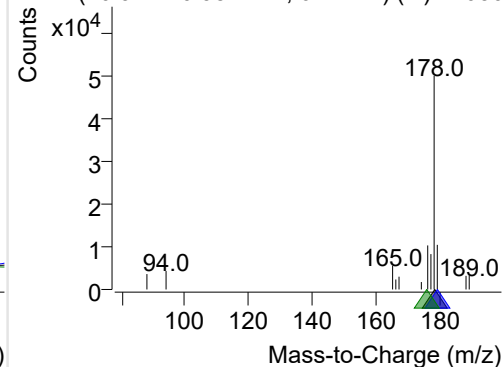
+ Selected Ion (178.0) 220506-PAHs-039.D



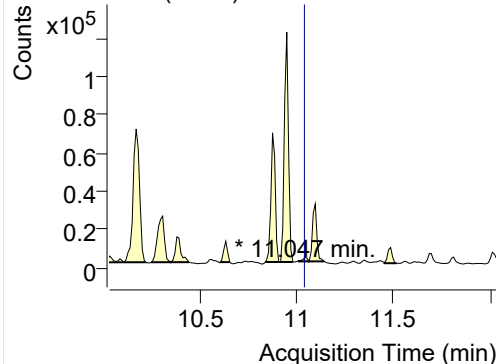
178.0, 179.0, 176.0



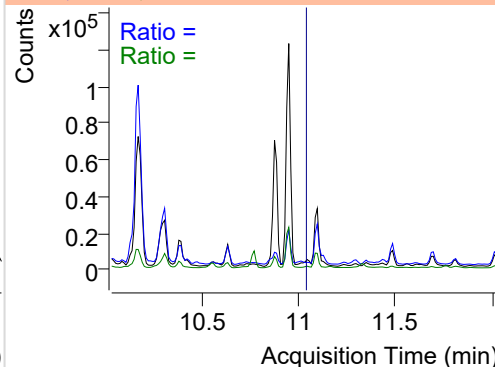
+ SIM (10.912-10.984 min, 6 scans) (\*\*) 22050

**Anthracene**

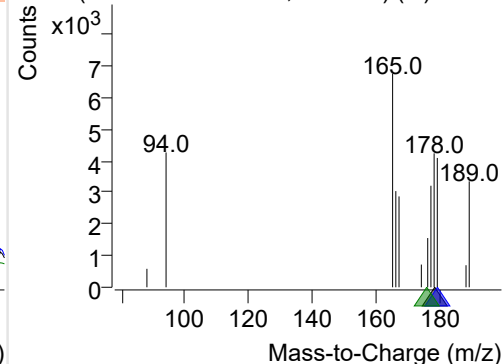
+ Selected Ion (178.0) 220506-PAHs-039.D



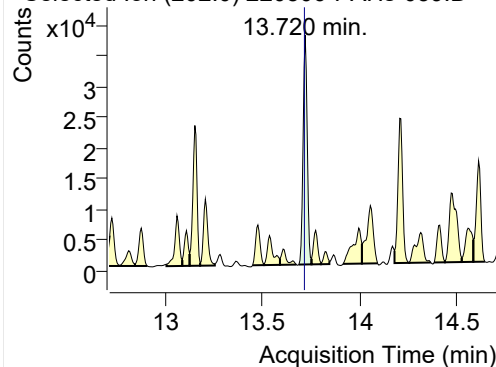
178.0, 179.0, 176.0



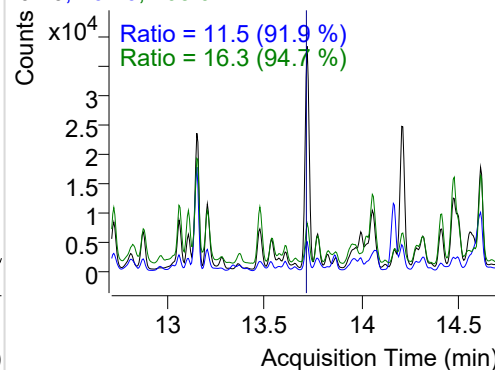
+ SIM (11.015-11.068 min, 6 scans) (\*\*) 22050

**Fluoranthene**

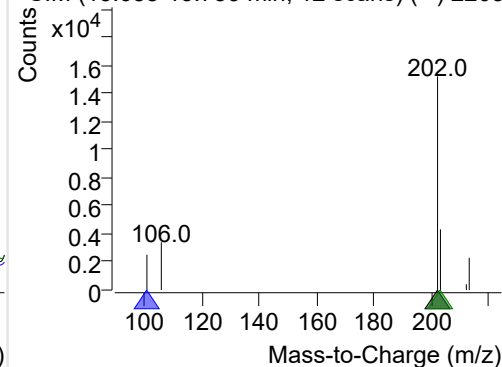
+ Selected Ion (202.0) 220506-PAHs-039.D



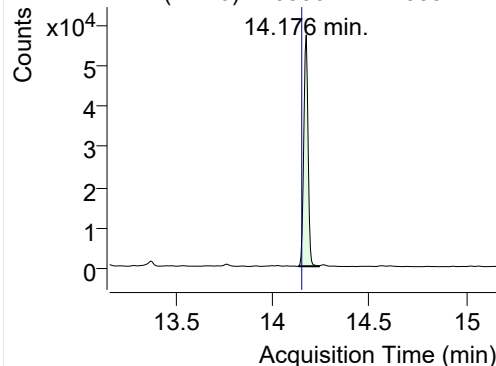
202.0, 101.0, 203.0



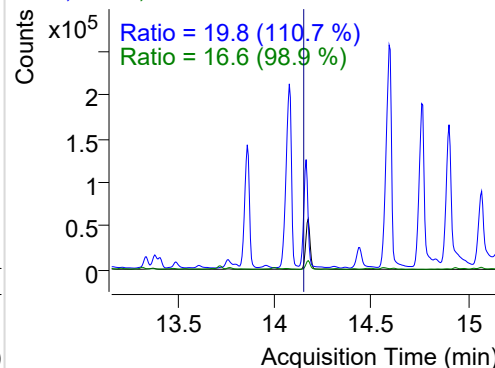
+ SIM (13.688-13.753 min, 12 scans) (\*\*) 2205

**LSS-D10-Pyrene**

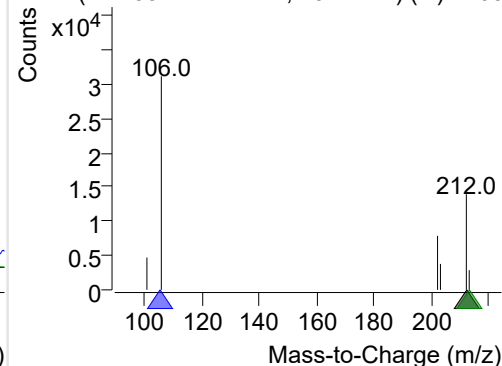
+ Selected Ion (212.0) 220506-PAHs-039.D



212.0, 106.0, 213.0

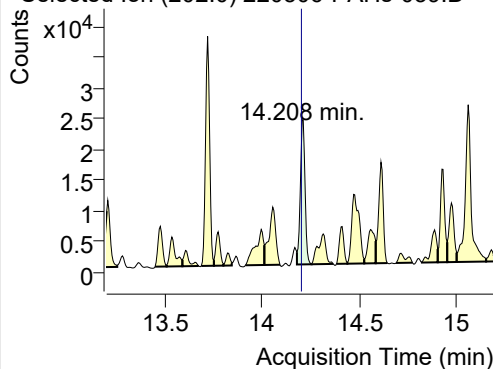


+ SIM (14.135-14.241 min, 20 scans) (\*\*) 2205

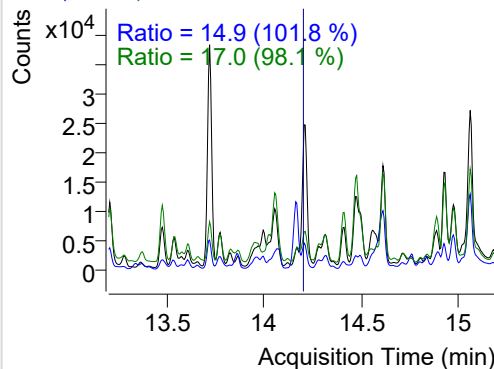


**Pyrene**

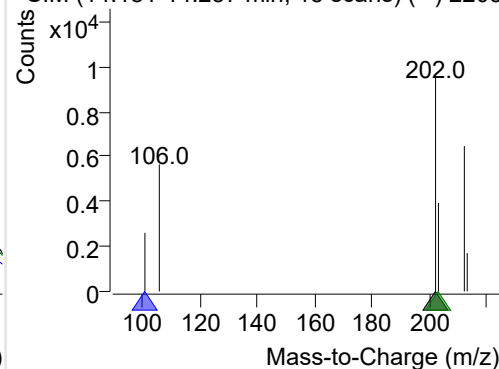
+ Selected Ion (202.0) 220506-PAHs-039.D



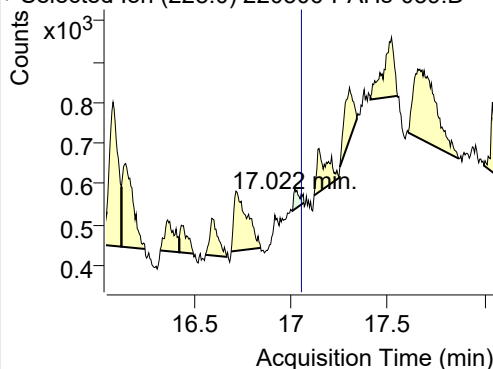
202.0, 101.0, 203.0



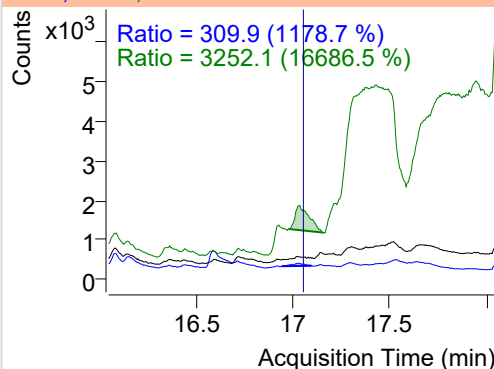
+ SIM (14.181-14.257 min, 15 scans) (\*\*) 2205

**Benz(a)anthracene**

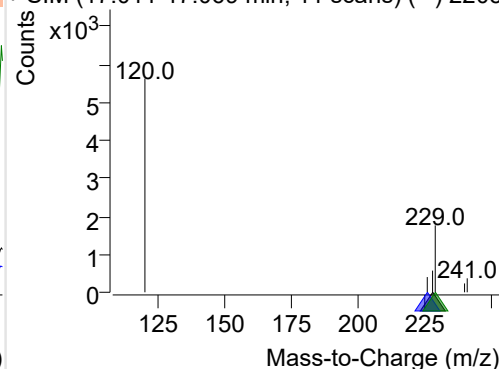
+ Selected Ion (228.0) 220506-PAHs-039.D



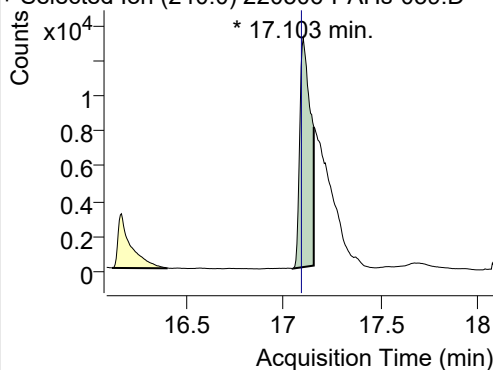
228.0, 226.0, 229.0



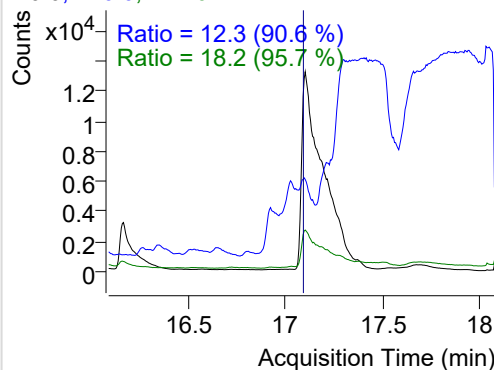
+ SIM (17.011-17.069 min, 11 scans) (\*\*) 2205

**IS-D12-Chrysene**

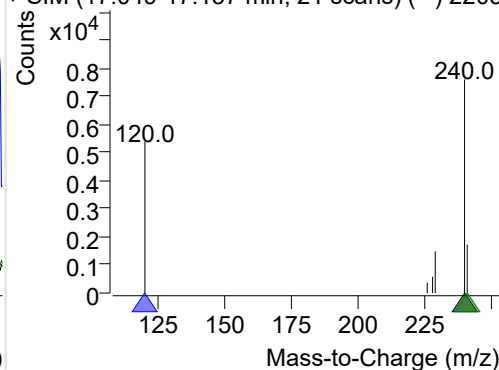
+ Selected Ion (240.0) 220506-PAHs-039.D



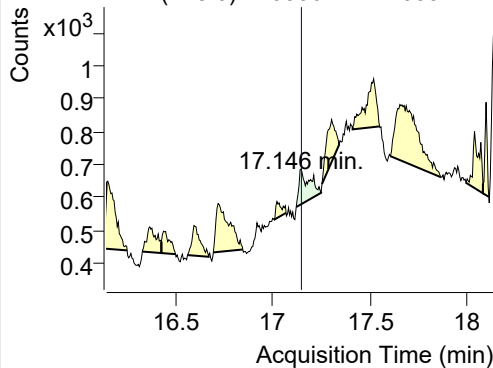
240.0, 120.0, 241.0



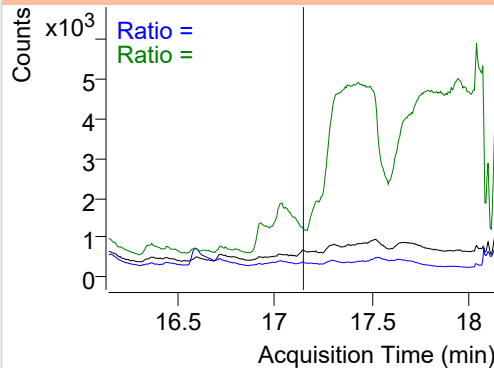
+ SIM (17.049-17.157 min, 21 scans) (\*\*) 2205

**Chrysene**

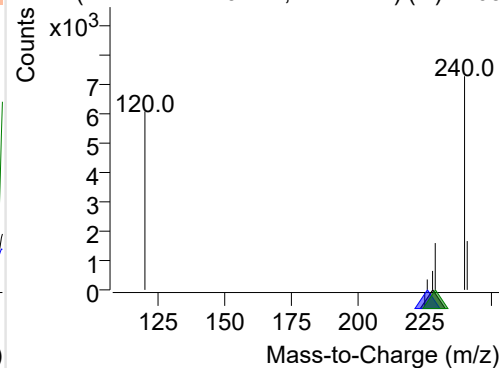
+ Selected Ion (228.0) 220506-PAHs-039.D



228.0, 226.0, 229.0



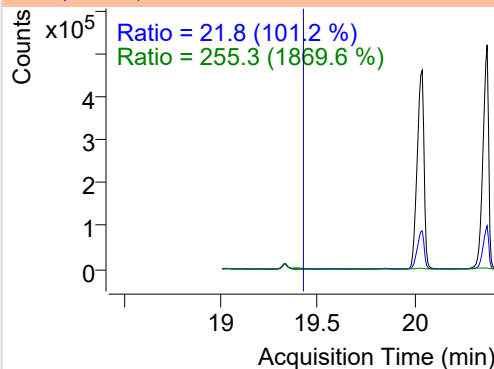
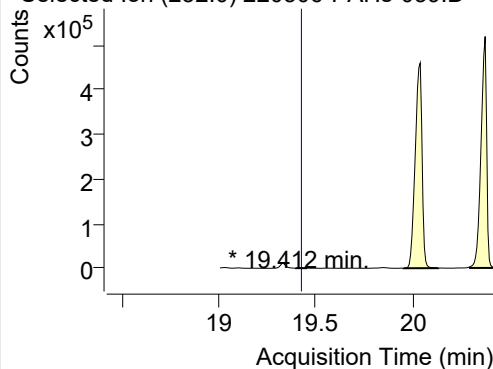
+ SIM (17.121-17.249 min, 24 scans) (\*\*) 2205



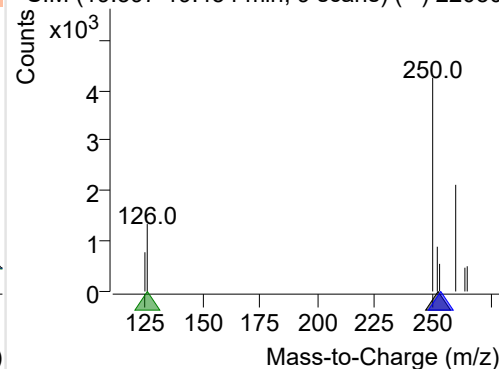
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-039.D

252.0, 253.0, 126.0

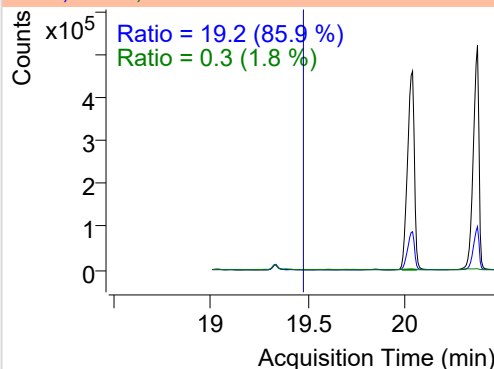
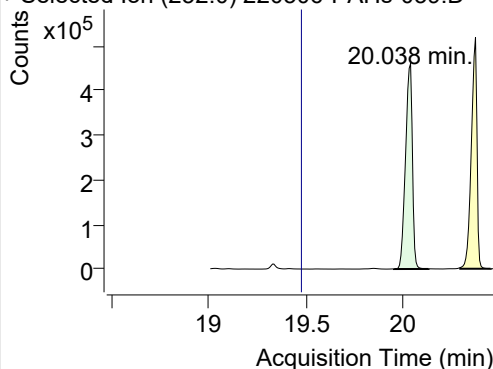


+ SIM (19.397-19.454 min, 9 scans) (\*\*) 22050

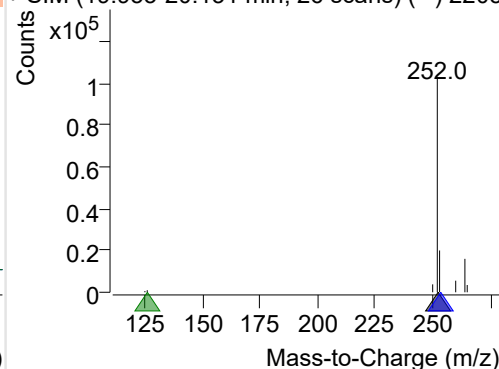
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-039.D

252.0, 253.0, 126.0

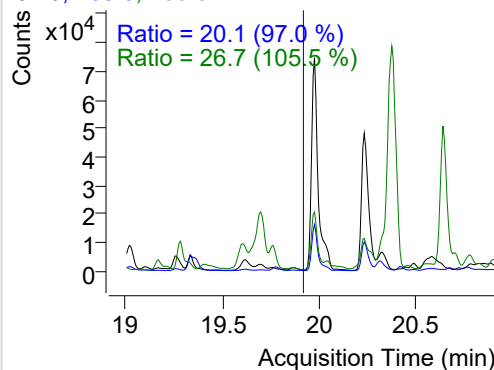
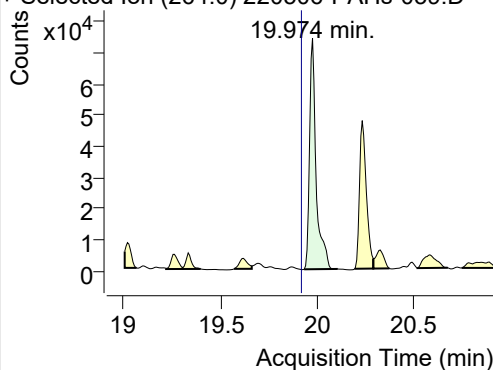


+ SIM (19.953-20.131 min, 26 scans) (\*\*) 2205

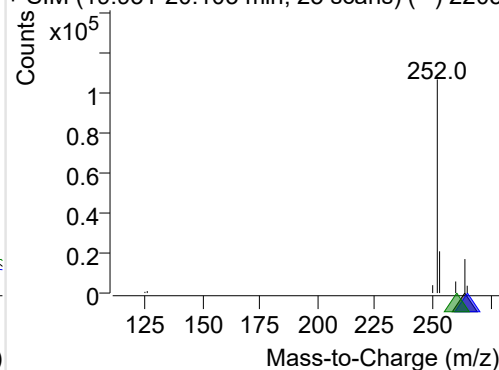
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-039.D

264.0, 265.0, 260.0

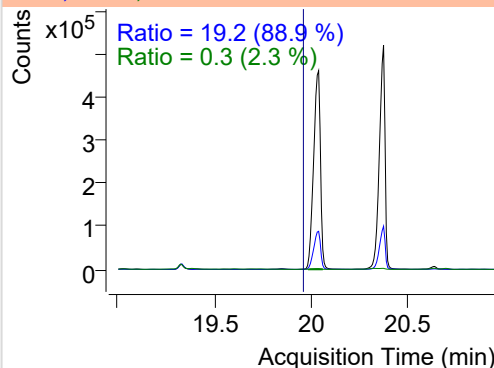
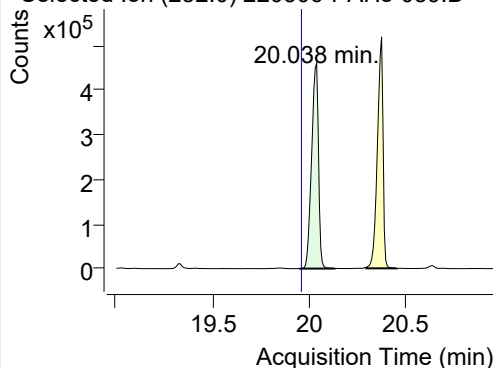


+ SIM (19.931-20.103 min, 25 scans) (\*\*) 2205

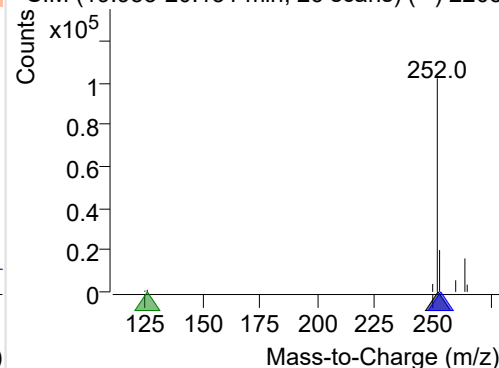
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-039.D

252.0, 253.0, 126.0



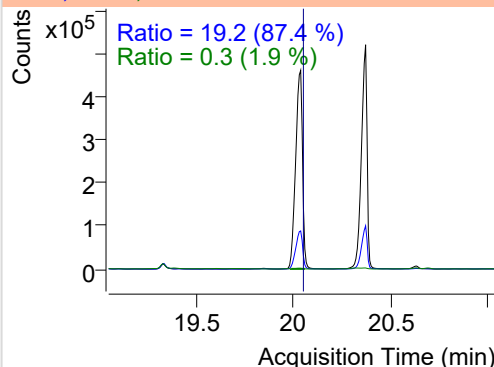
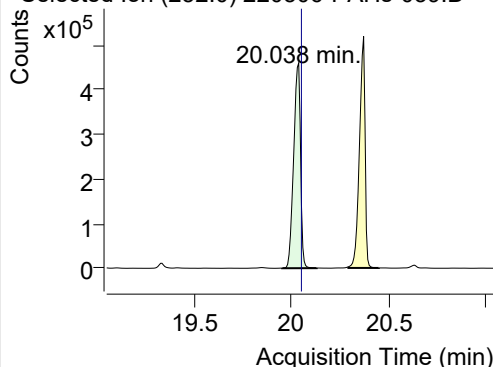
+ SIM (19.953-20.131 min, 26 scans) (\*\*) 2205



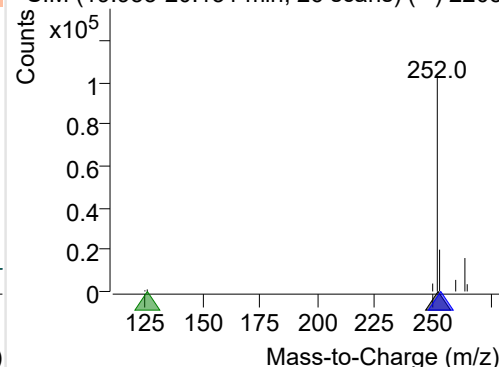
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-039.D

252.0, 253.0, 126.0

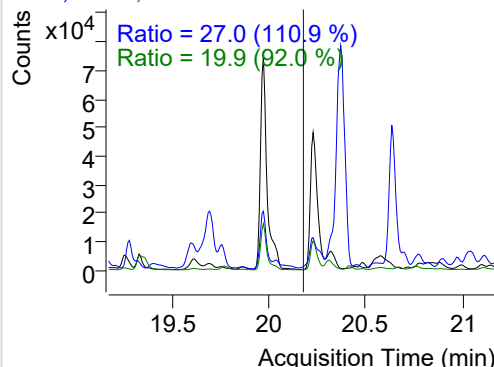
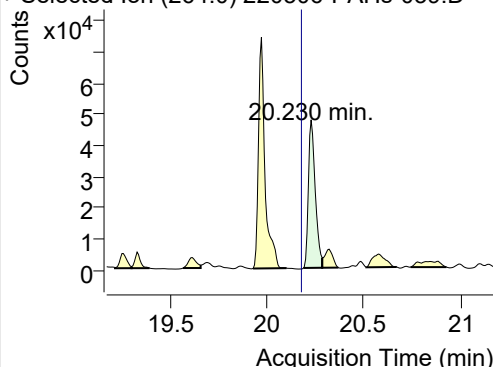


+ SIM (19.953-20.131 min, 26 scans) (\*\*) 2205

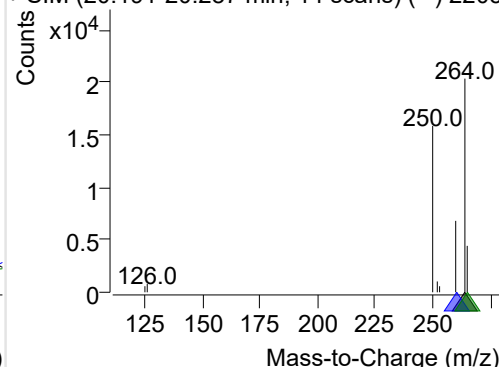
**IS-D12-Perylene**

+ Selected Ion (264.0) 220506-PAHs-039.D

264.0, 260.0, 265.0

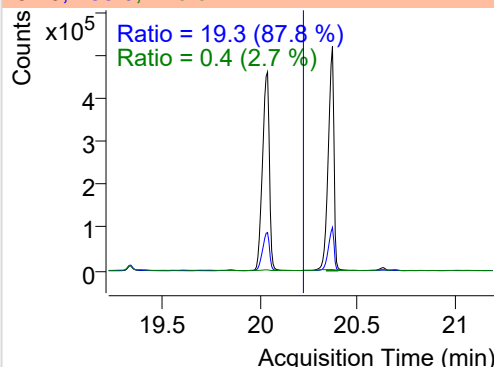
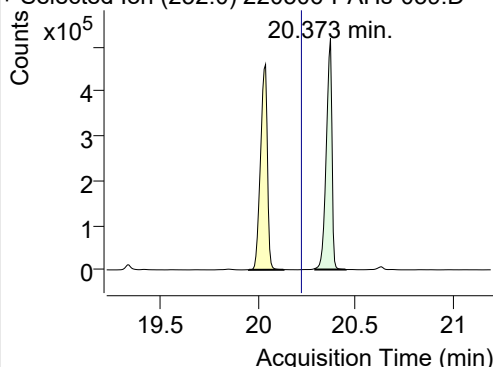


+ SIM (20.191-20.287 min, 14 scans) (\*\*) 2205

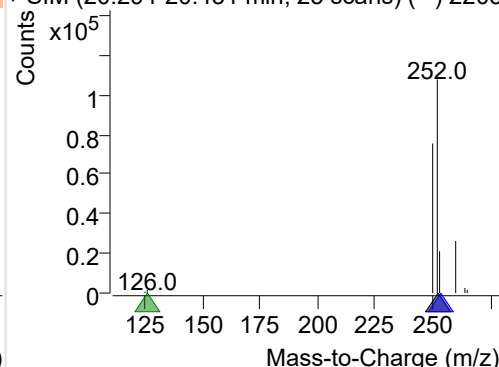
**Perylene**

+ Selected Ion (252.0) 220506-PAHs-039.D

252.0, 253.0, 126.0

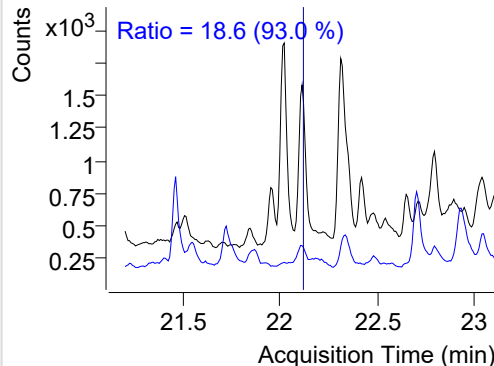
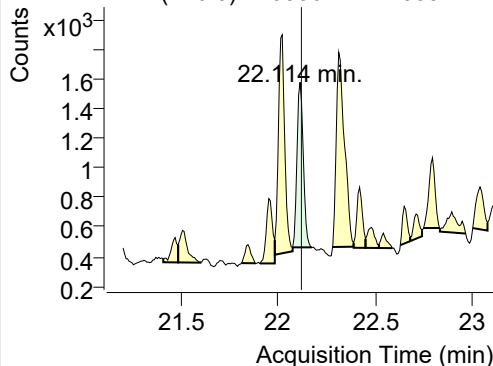


+ SIM (20.294-20.451 min, 23 scans) (\*\*) 2205

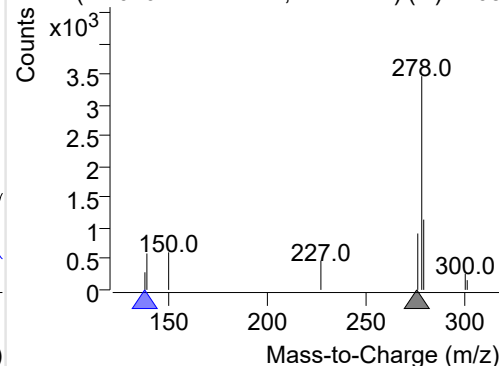
**Indeno(1,2,3-c,d)pyrene**

+ Selected Ion (276.0) 220506-PAHs-039.D

276.0, 138.0

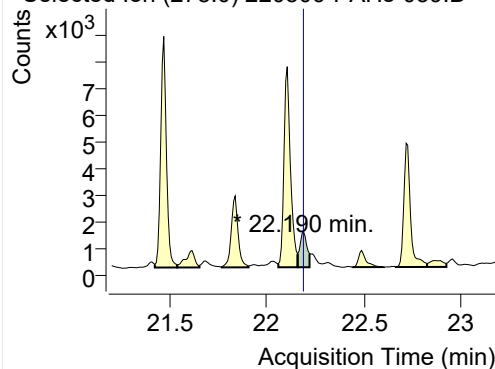


+ SIM (22.076-22.174 min, 12 scans) (\*\*) 2205

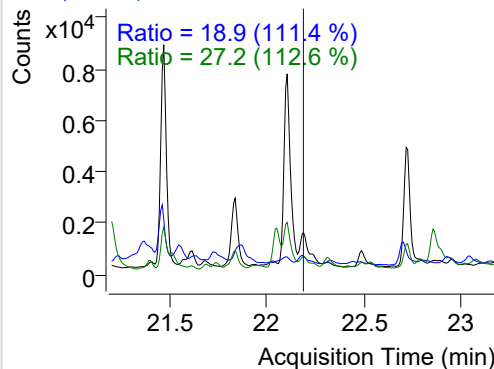


**Dibenz(a,h)anthracene**

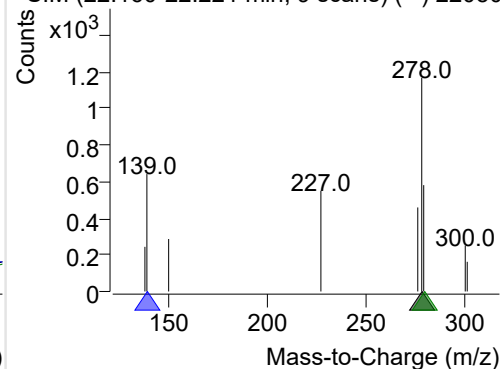
+ Selected Ion (278.0) 220506-PAHs-039.D



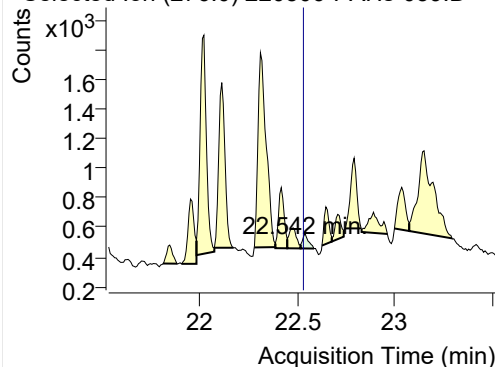
278.0, 139.0, 279.0



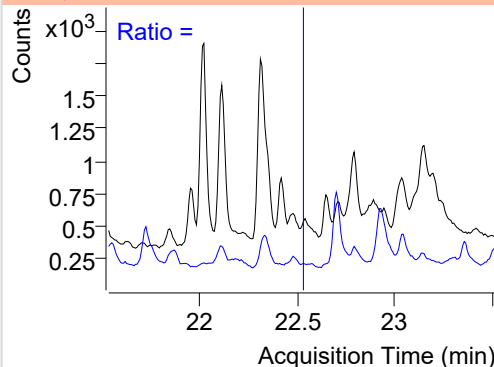
+ SIM (22.160-22.221 min, 9 scans) (\*\*) 22050

**Benzo(g,h,i)perylene**

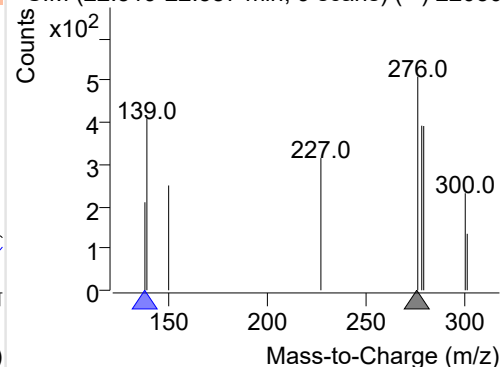
+ Selected Ion (276.0) 220506-PAHs-039.D



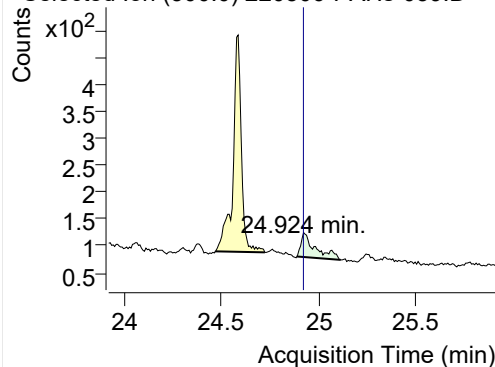
276.0, 138.0



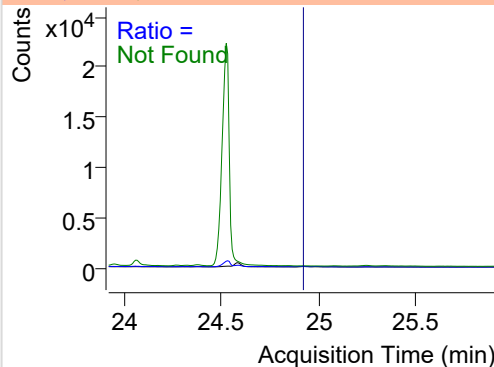
+ SIM (22.519-22.587 min, 9 scans) (\*\*) 22050

**Coronene**

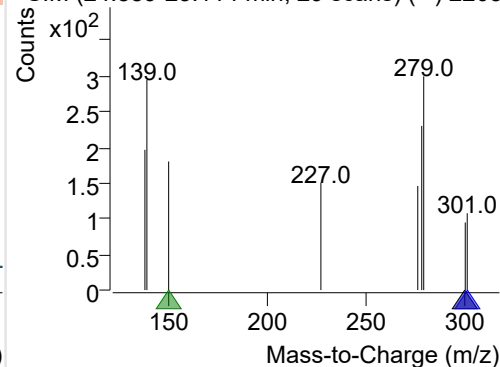
+ Selected Ion (300.0) 220506-PAHs-039.D



300.0, 301.0, 150.0



+ SIM (24.889-25.114 min, 29 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

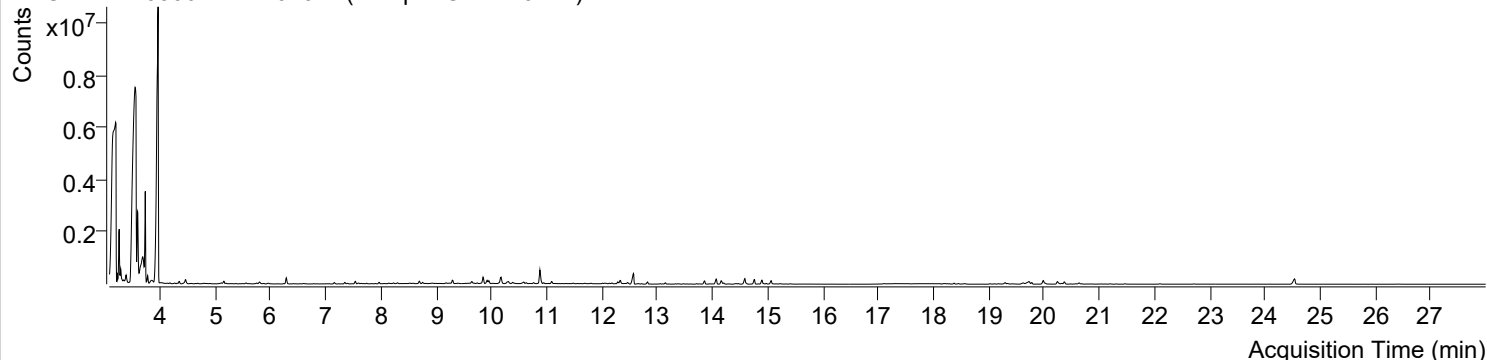


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 6:58:14	Data File	220506-PAHs-040.D
Type	Sample	Name	Sample-Gas-220411
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

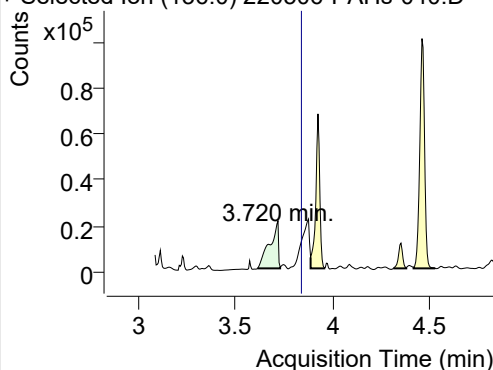
+ TIC SIM 220506-PAHs-040.D (Sample-Gas-220411)



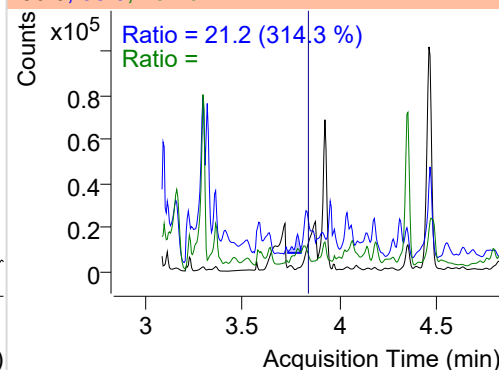
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.720	136.0	63963	20739.06	ND ng/ml	
Naphthalene	3.969	128.0	16966333	8149033.70	ND ng/ml	15.2
Acenaphthylene	7.177	152.0	5141	3488.79	ND ng/ml	19.2
IS-D10-Acenaphthene	7.538	164.0	62018	42920.88	ND ng/ml	99.0
Acenaphthene	7.603	154.0	15449	10162.02	ND ng/ml	118.7
LSS-D10-Fluorene	8.694	176.0	59588	39877.71	ND ng/ml	95.2
Fluorene	8.757	166.0	34749	23413.56	ND ng/ml	87.8
IS-D10-Phenanthrene	10.900	188.0	110391	74649.15	ND ng/ml	14.2
Phenanthrene	10.952	178.0	30600	20248.52	ND ng/ml	20.2
Anthracene	11.047	178.0	2543	1851.54	ND ng/ml	
Fluoranthene	13.715	202.0	18125	12918.67	ND ng/ml	19.3
LSS-D10-Pyrene	14.170	212.0	89013	55760.14	ND ng/ml	19.0
Pyrene	14.208	202.0	51534	30835.83	ND ng/ml	20.0
Benz(a)anthracene	17.054	228.0	172	53.52	ND ng/ml	139.1
IS-D12-Chrysene	17.097	240.0	46523	10415.61	ND ng/ml	16.5
Chrysene	17.054	228.0	172	53.52	ND ng/ml	139.1
Benzo(b)fluoranthene	19.426	252.0	1617	584.41	ND ng/ml	17.0
Benzo(k)fluoranthene	19.426	252.0	1617	584.41	ND ng/ml	17.0
SS-D12-Benzo(e)pyrene	19.988	264.0	191905	91320.85	ND ng/ml	28.8
Benzo(e)pyrene	20.024	252.0	7835	3748.41	ND ng/ml	20.1
Benzo(a)pyrene	20.024	252.0	7485	3752.51	ND ng/ml	21.0
IS-D12-Perylene	20.244	264.0	119468	56771.15	ND ng/ml	29.1
Perylene	20.123	252.0	1699	826.41	ND ng/ml	32.9
Indeno(1,2,3-c,d)pyrene	22.137	276.0	1986	615.51	ND ng/ml	34.4
Dibenz(a,h)anthracene	22.236	278.0	1013	407.28	ND ng/ml	17.3
Benzo(g,h,i)perylene	22.542	276.0	3169	1313.64	ND ng/ml	31.2
Coronene	24.924	300.0	241	95.24	ND ng/ml	

## IS-D8-Naphthalene

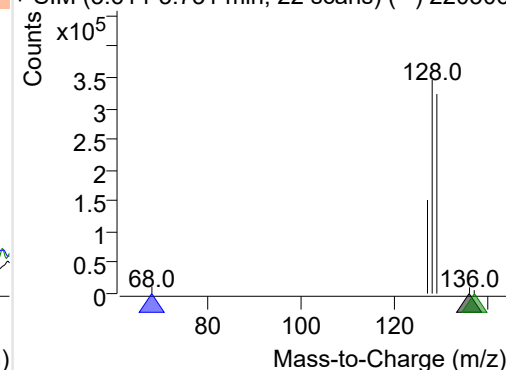
+ Selected Ion (136.0) 220506-PAHs-040.D



136.0, 68.0, 137.0

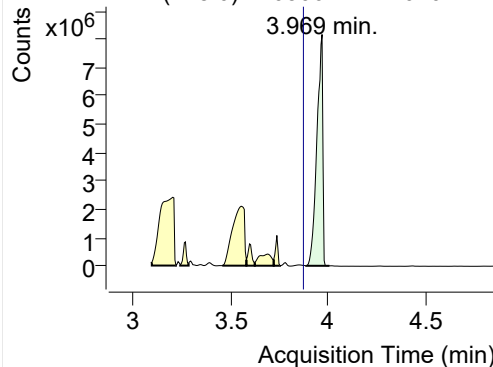


+ SIM (3.614-3.731 min, 22 scans) (\*\*) 220506

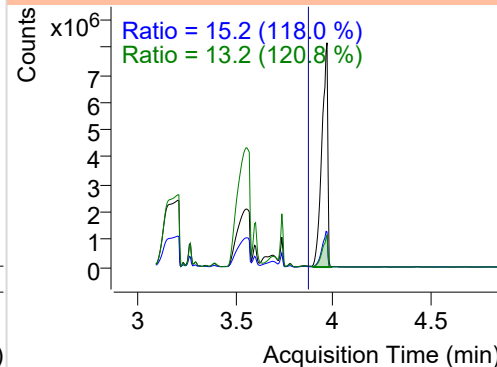


**Naphthalene**

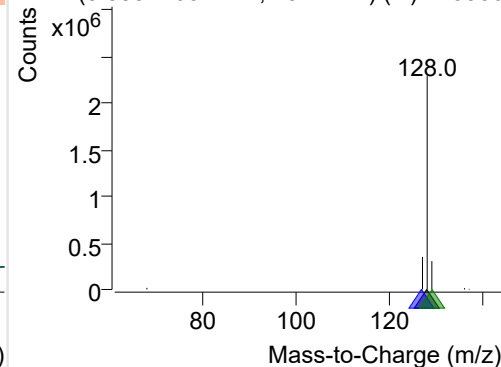
+ Selected Ion (128.0) 220506-PAHs-040.D



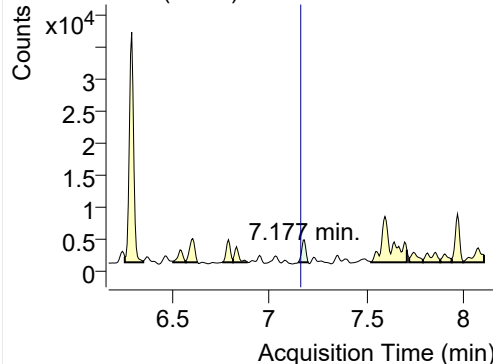
128.0, 127.0, 129.0



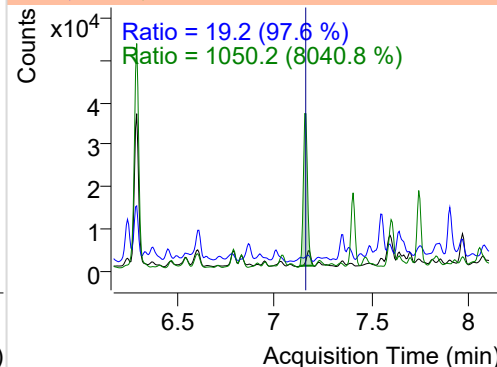
+ SIM (3.888-4.007 min, 23 scans) (\*\*) 220506

**Acenaphthylene**

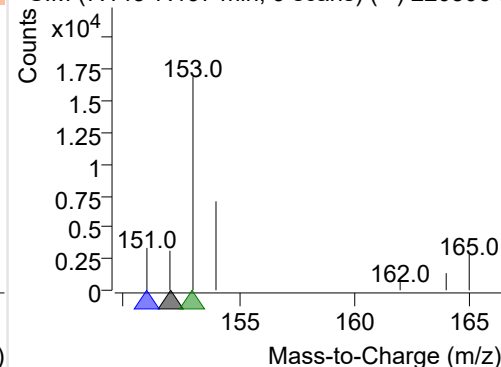
+ Selected Ion (152.0) 220506-PAHs-040.D



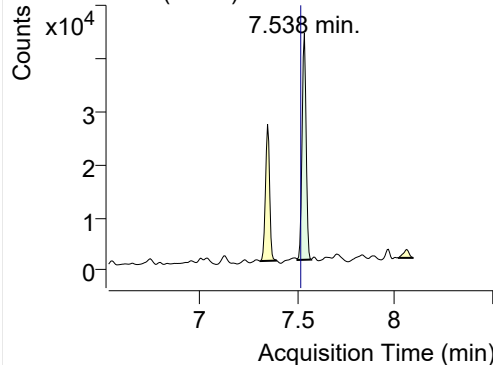
152.0, 151.0, 153.0



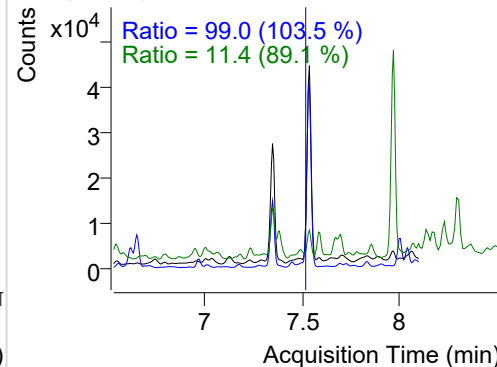
+ SIM (7.145-7.197 min, 9 scans) (\*\*) 220506-I

**IS-D10-Acenaphthene**

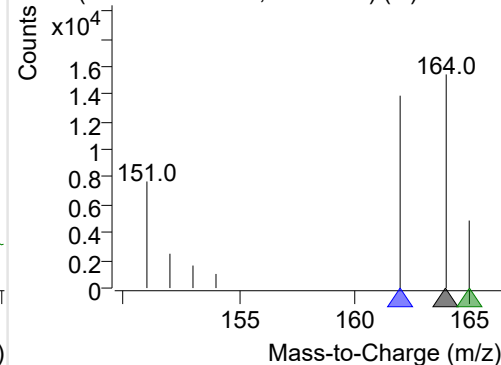
+ Selected Ion (164.0) 220506-PAHs-040.D



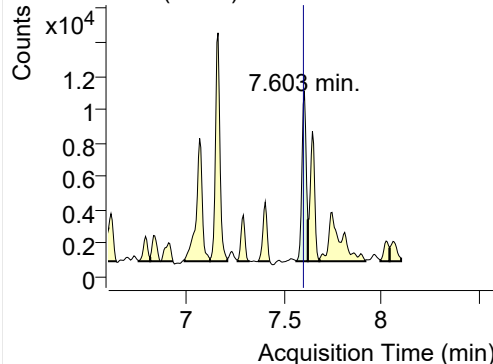
164.0, 162.0, 165.0



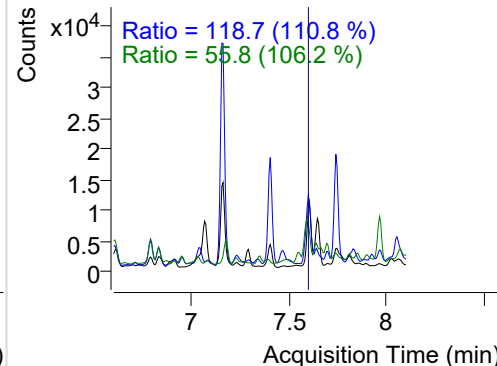
+ SIM (7.503-7.574 min, 13 scans) (\*\*) 220506

**Acenaphthene**

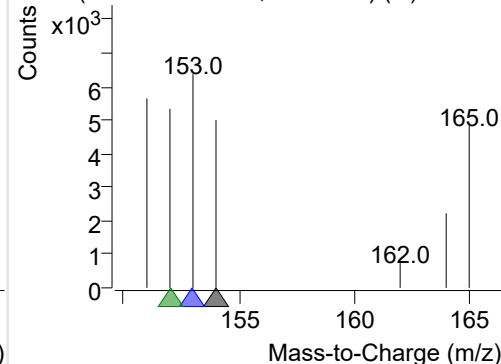
+ Selected Ion (154.0) 220506-PAHs-040.D



154.0, 153.0, 152.0

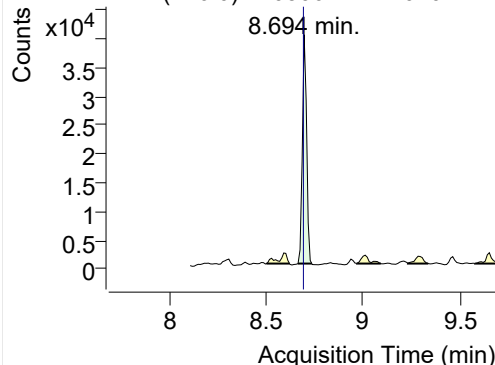


+ SIM (7.562-7.621 min, 11 scans) (\*\*) 220506

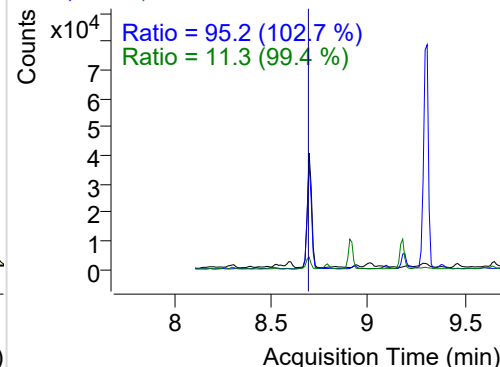


## LSS-D10-Fluorene

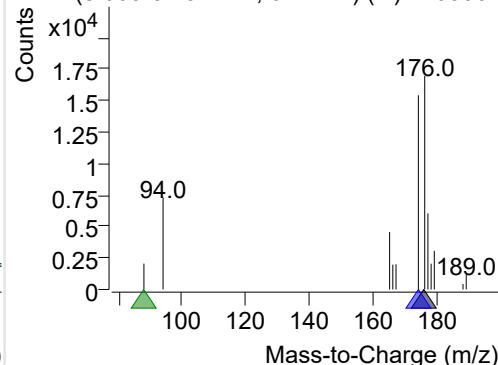
+ Selected Ion (176.0) 220506-PAHs-040.D



176.0, 174.0, 88.0

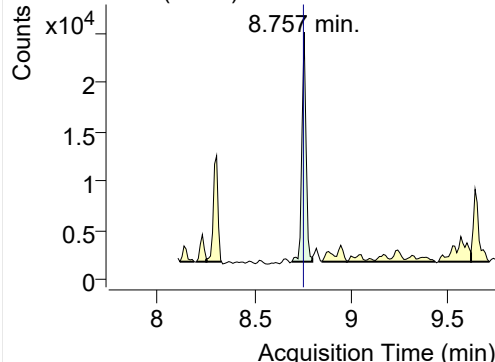


+ SIM (8.663-8.734 min, 6 scans) (\*\*) 220506-I

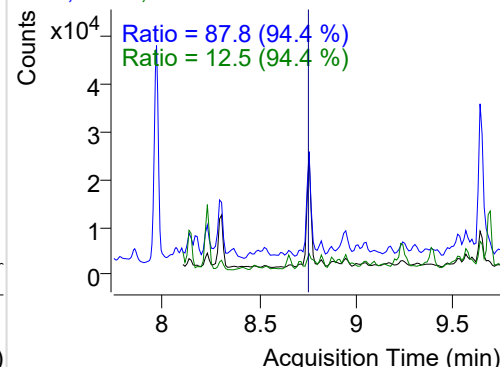


## Fluorene

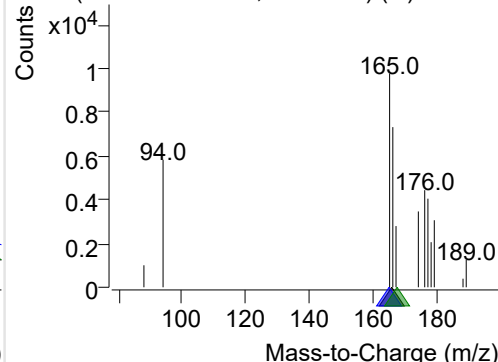
+ Selected Ion (166.0) 220506-PAHs-040.D



166.0, 165.0, 167.0

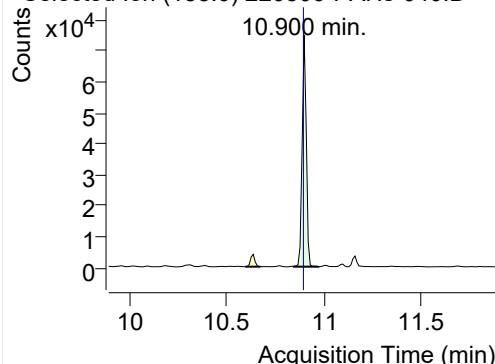


+ SIM (8.694-8.799 min, 10 scans) (\*\*) 220506

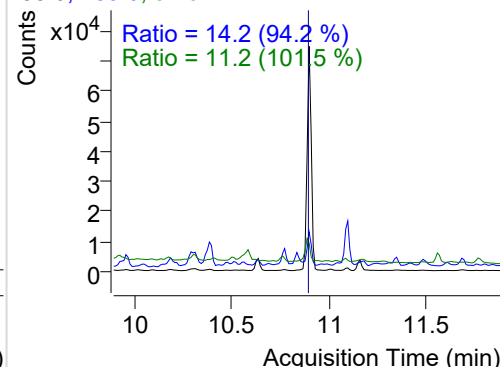


## IS-D10-Phenanthrene

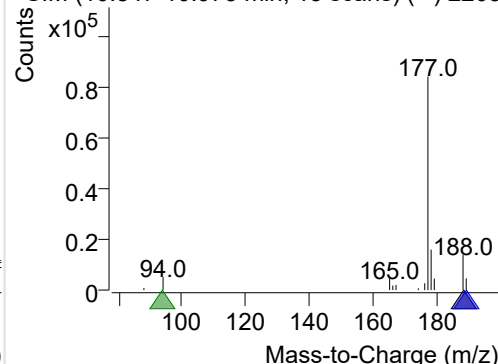
+ Selected Ion (188.0) 220506-PAHs-040.D



188.0, 189.0, 94.0

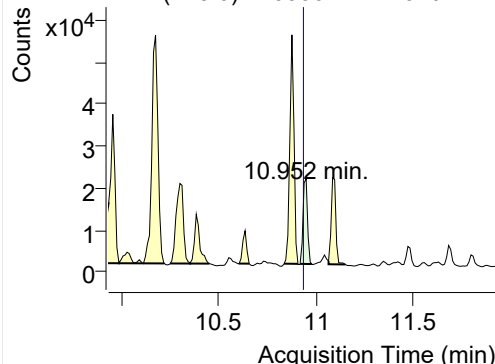


+ SIM (10.847-10.973 min, 13 scans) (\*\*) 2205

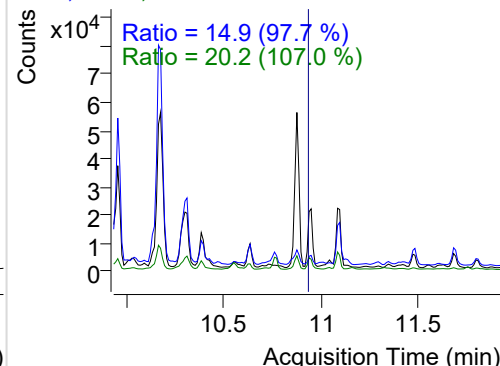


## Phenanthrene

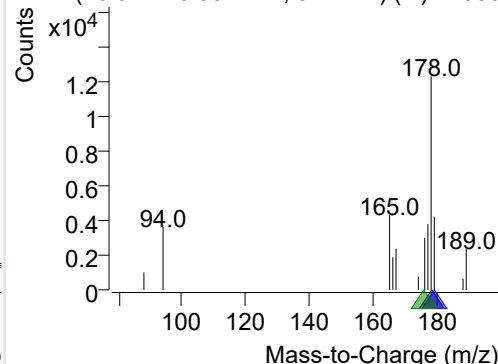
+ Selected Ion (178.0) 220506-PAHs-040.D



178.0, 179.0, 176.0

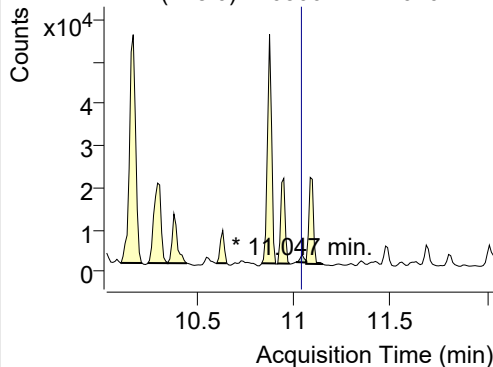


+ SIM (10.921-10.981 min, 5 scans) (\*\*) 22050

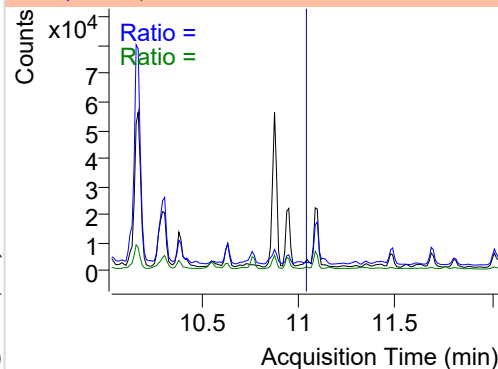


**Anthracene**

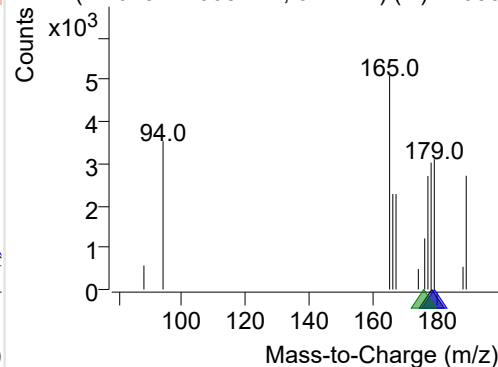
+ Selected Ion (178.0) 220506-PAHs-040.D



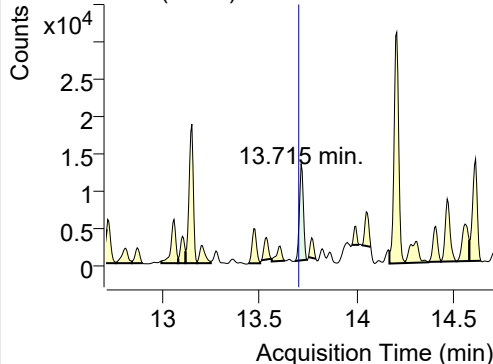
178.0, 179.0, 176.0



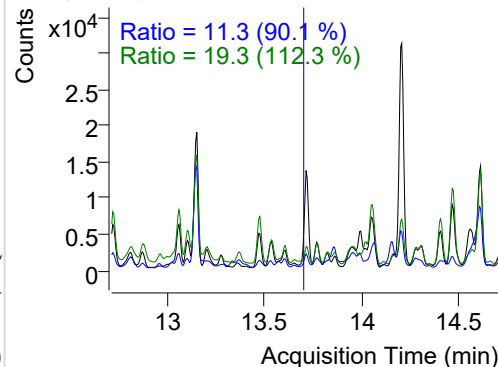
+ SIM (11.015-11.068 min, 6 scans) (\*\*) 22050

**Fluoranthene**

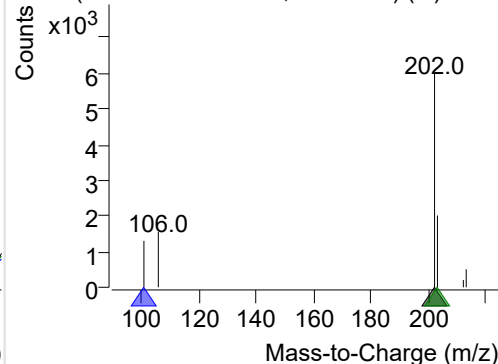
+ Selected Ion (202.0) 220506-PAHs-040.D



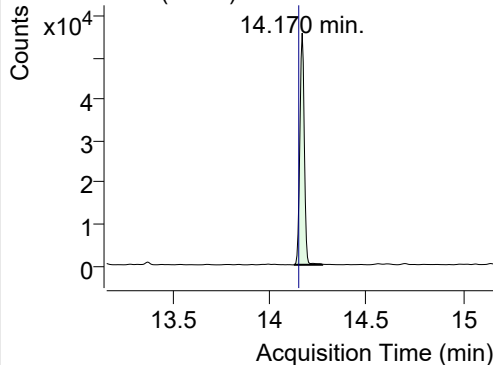
202.0, 101.0, 203.0



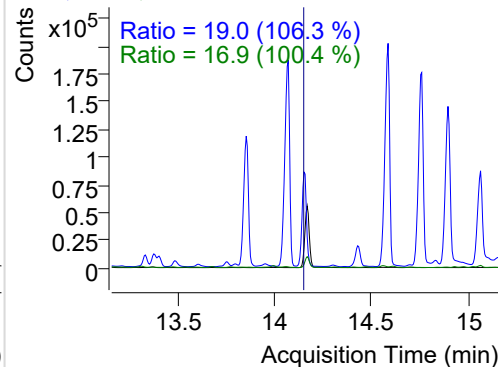
+ SIM (13.683-13.745 min, 11 scans) (\*\*) 2205

**LSS-D10-Pyrene**

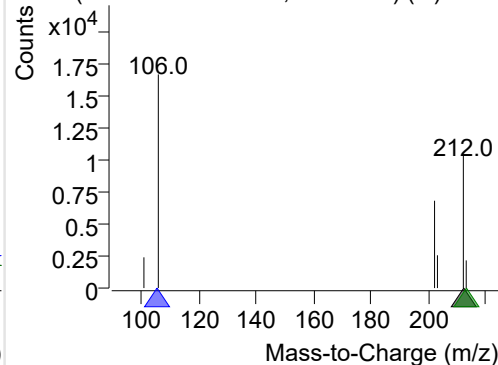
+ Selected Ion (212.0) 220506-PAHs-040.D



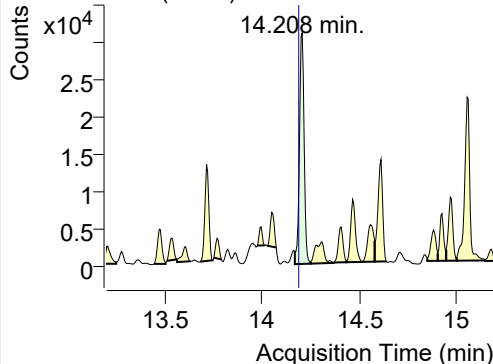
212.0, 106.0, 213.0



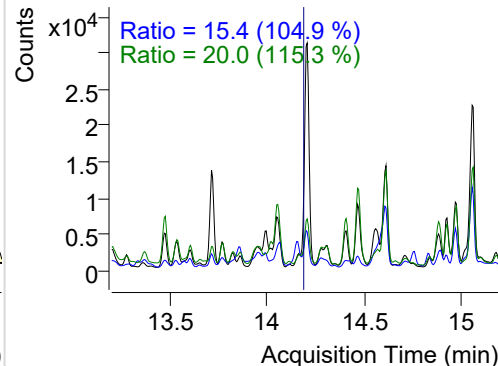
+ SIM (14.127-14.273 min, 27 scans) (\*\*) 2205

**Pyrene**

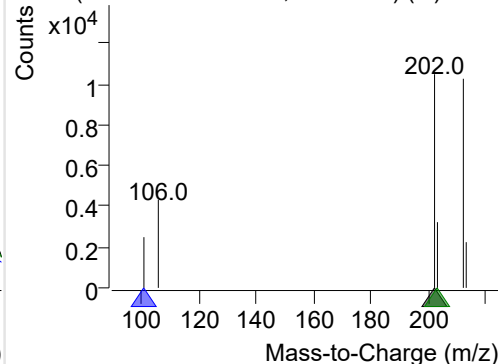
+ Selected Ion (202.0) 220506-PAHs-040.D



202.0, 101.0, 203.0



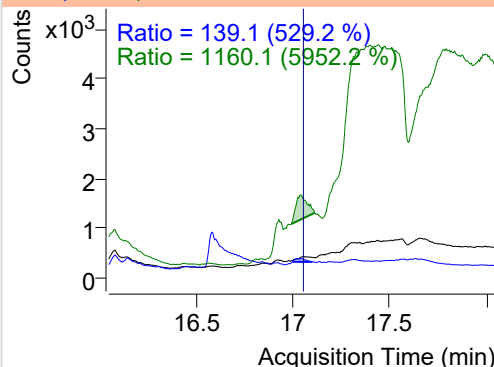
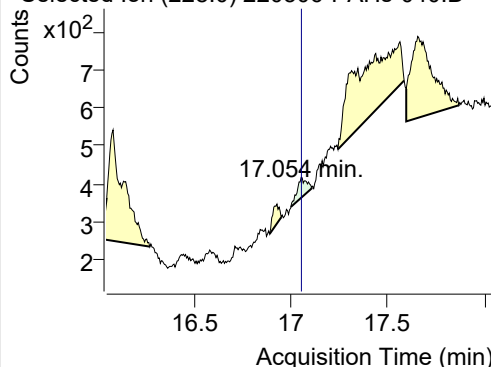
+ SIM (14.170-14.252 min, 16 scans) (\*\*) 2205



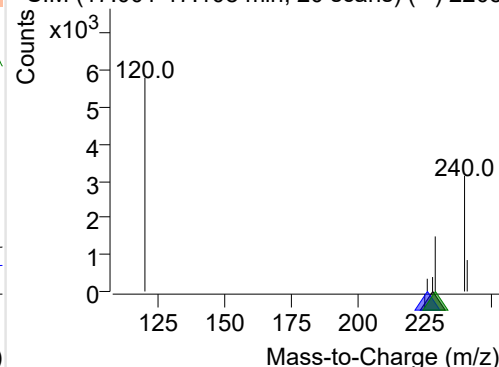
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-040.D

228.0, 226.0, 229.0

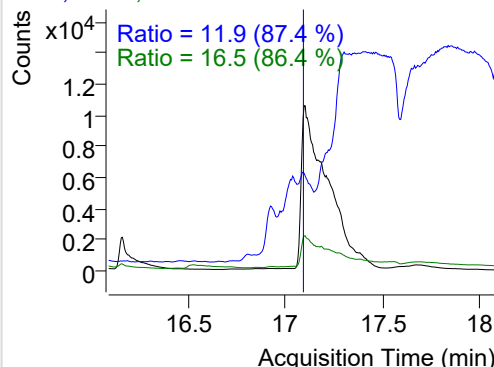
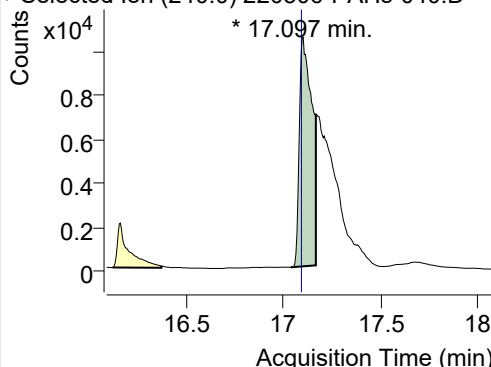


+ SIM (17.001-17.108 min, 20 scans) (\*\*) 2205

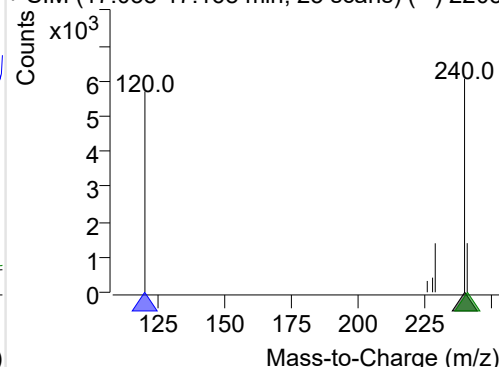
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-040.D

240.0, 120.0, 241.0

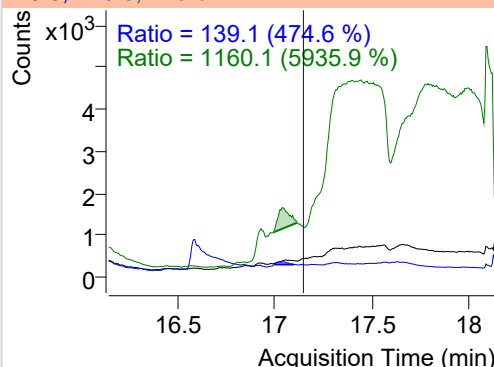
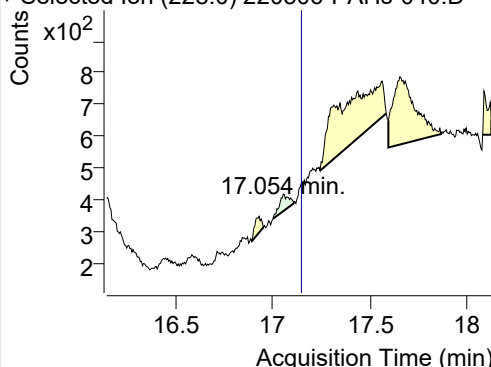


+ SIM (17.038-17.168 min, 25 scans) (\*\*) 2205

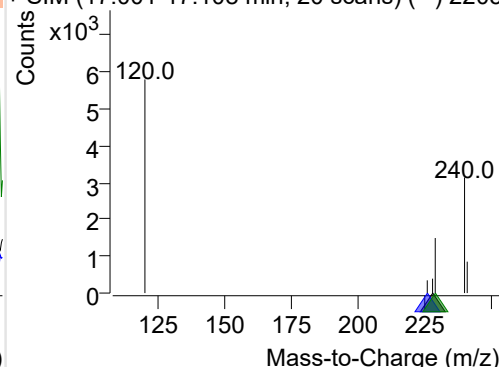
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-040.D

228.0, 226.0, 229.0

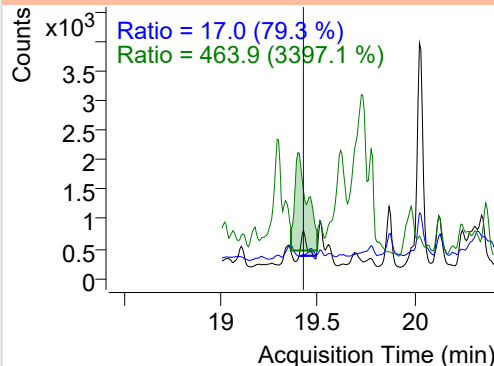
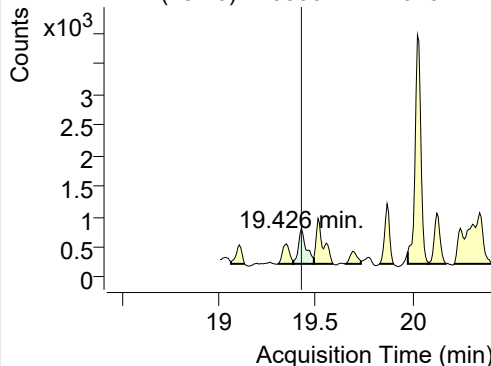


+ SIM (17.001-17.108 min, 20 scans) (\*\*) 2205

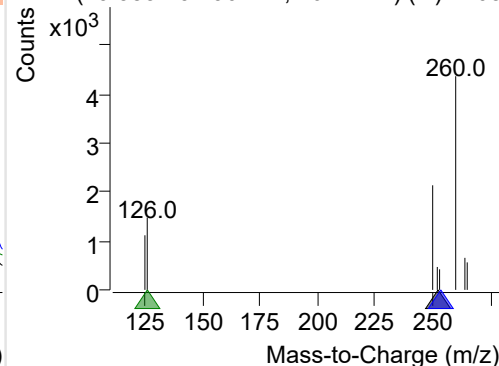
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-040.D

252.0, 253.0, 126.0



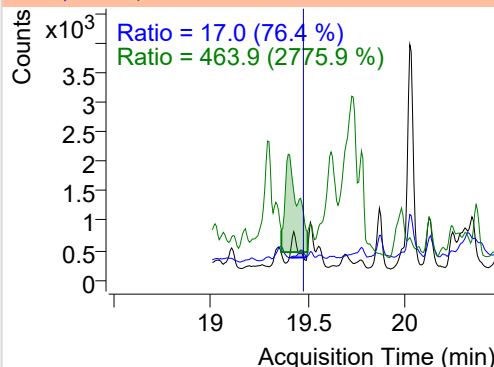
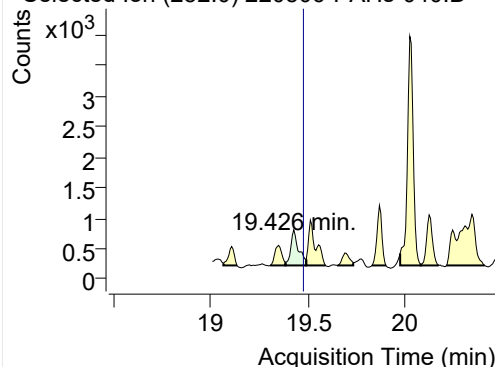
+ SIM (19.383-19.490 min, 16 scans) (\*\*) 2205



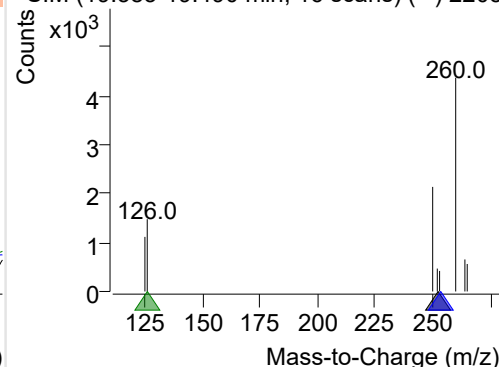
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-040.D

252.0, 253.0, 126.0

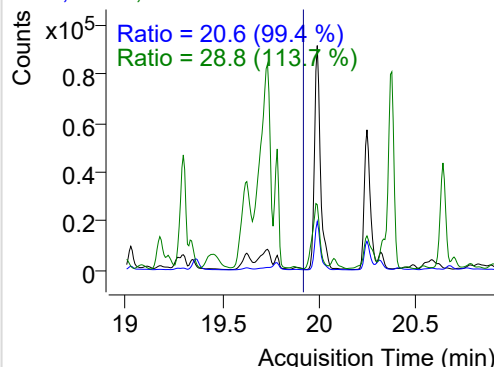
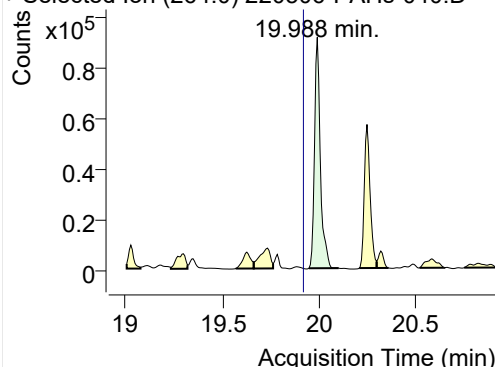


+ SIM (19.383-19.490 min, 16 scans) (\*\*) 2205

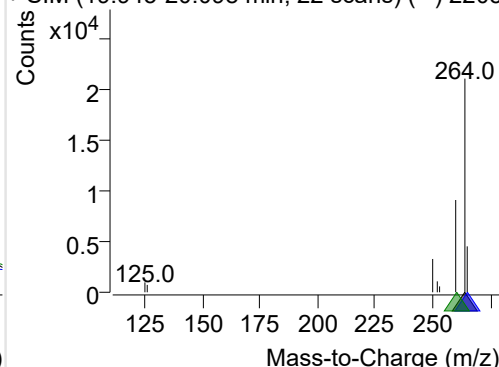
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-040.D

264.0, 265.0, 260.0

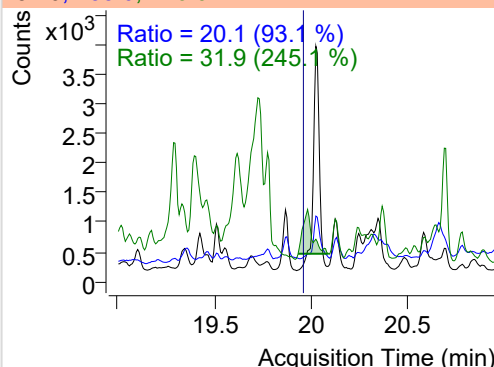
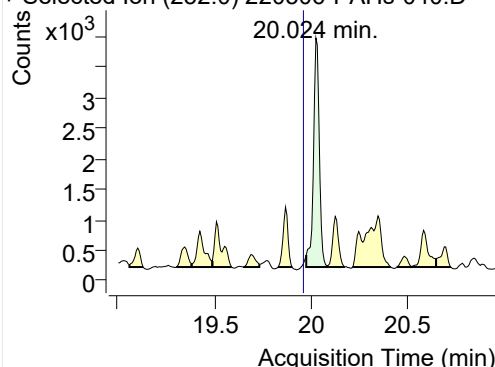


+ SIM (19.945-20.098 min, 22 scans) (\*\*) 2205

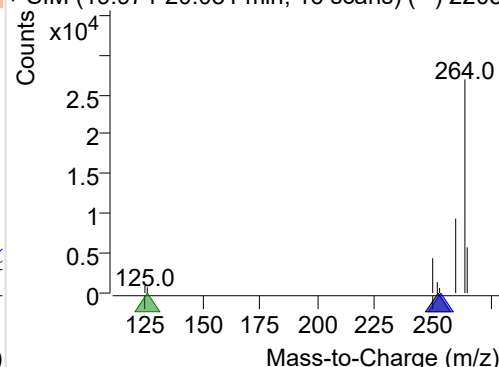
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-040.D

252.0, 253.0, 126.0

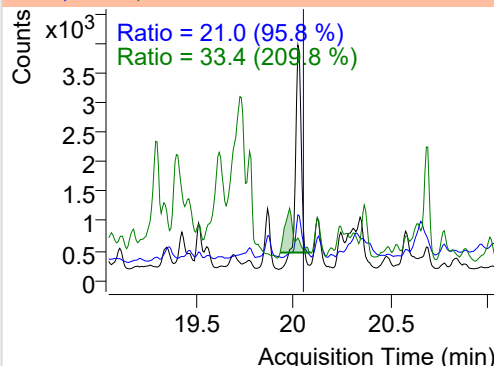
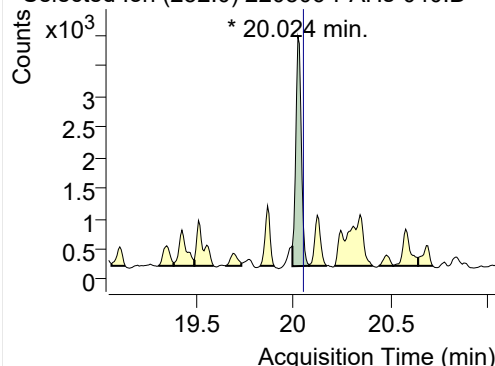


+ SIM (19.974-20.081 min, 16 scans) (\*\*) 2205

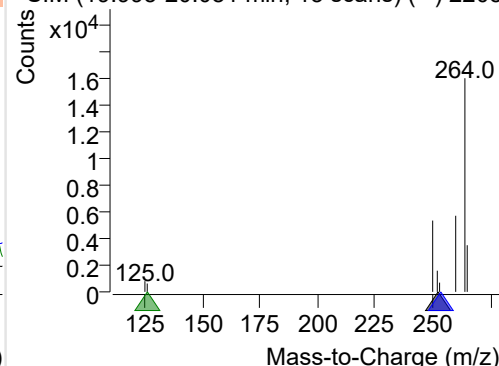
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-040.D

252.0, 253.0, 126.0

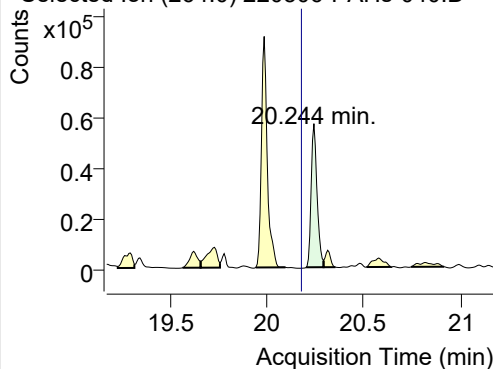


+ SIM (19.995-20.081 min, 13 scans) (\*\*) 2205

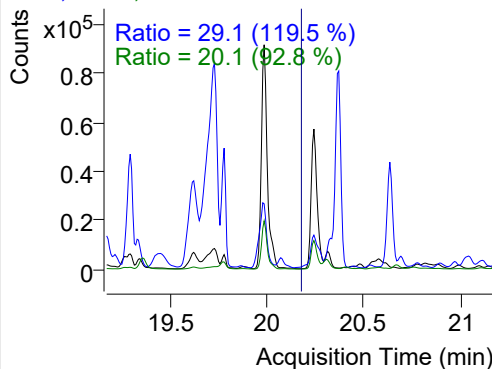


## IS-D12-Perylene

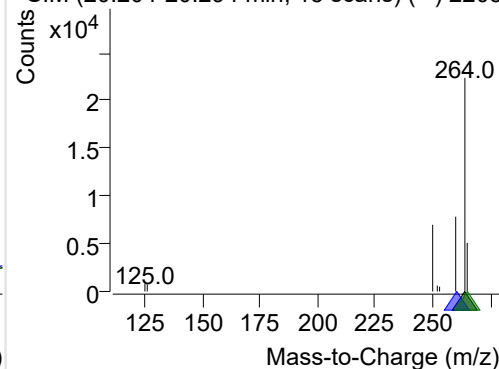
+ Selected Ion (264.0) 220506-PAHs-040.D



264.0, 260.0, 265.0

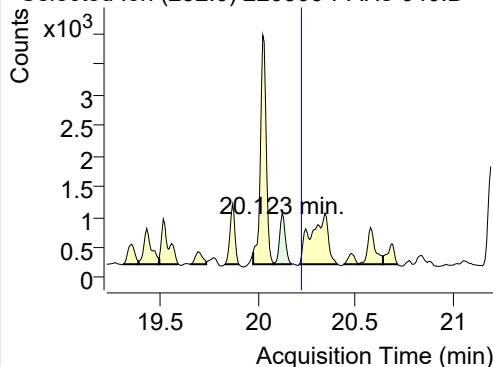


+ SIM (20.204-20.294 min, 13 scans) (\*\*) 2205

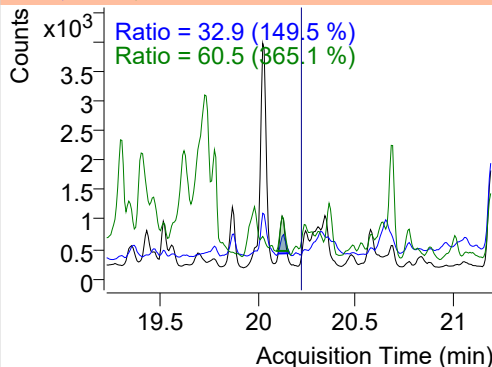


## Perylene

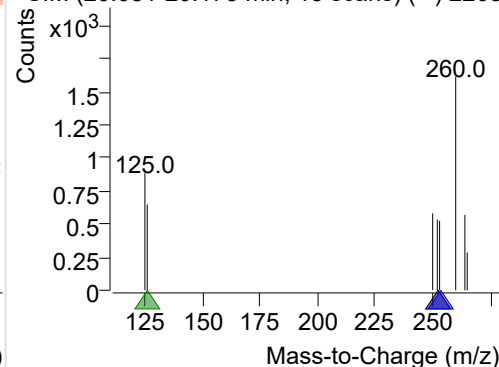
+ Selected Ion (252.0) 220506-PAHs-040.D



252.0, 253.0, 126.0

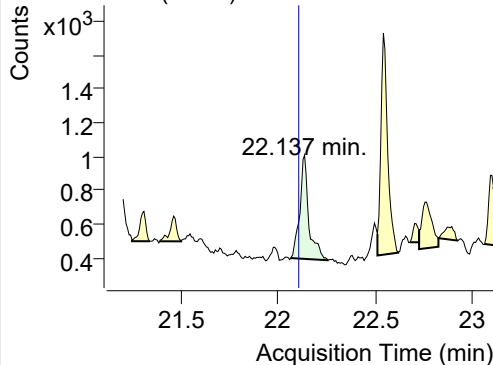


+ SIM (20.081-20.173 min, 13 scans) (\*\*) 2205

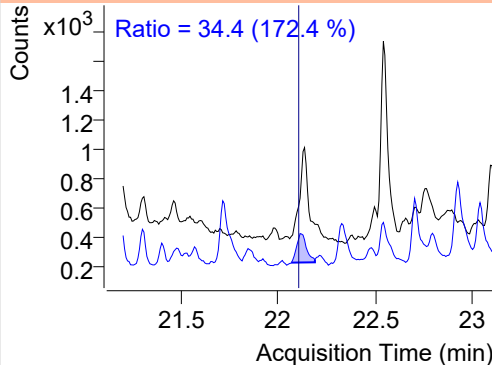


## Indeno(1,2,3-c,d)pyrene

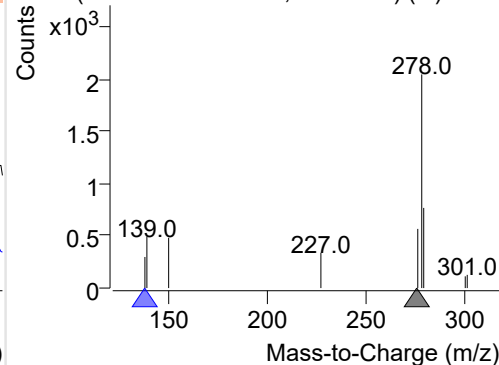
+ Selected Ion (276.0) 220506-PAHs-040.D



276.0, 138.0

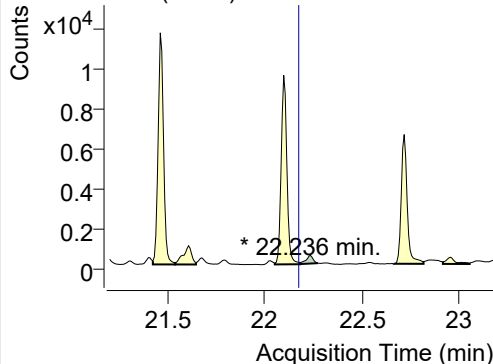


+ SIM (22.065-22.259 min, 25 scans) (\*\*) 2205

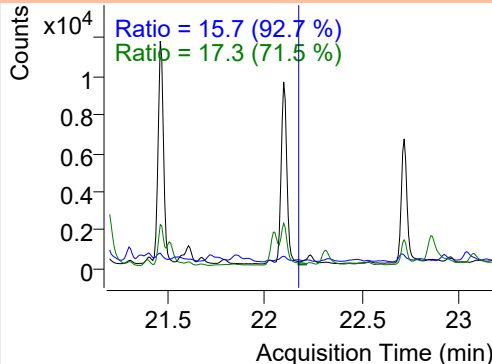


## Dibenz(a,h)anthracene

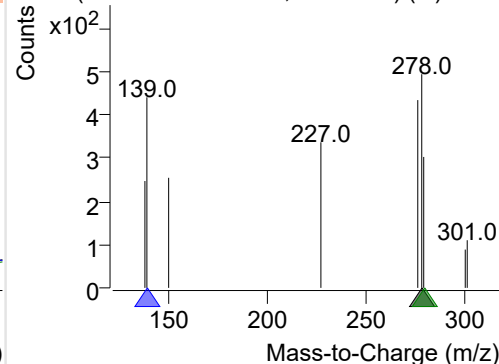
+ Selected Ion (278.0) 220506-PAHs-040.D



278.0, 139.0, 279.0



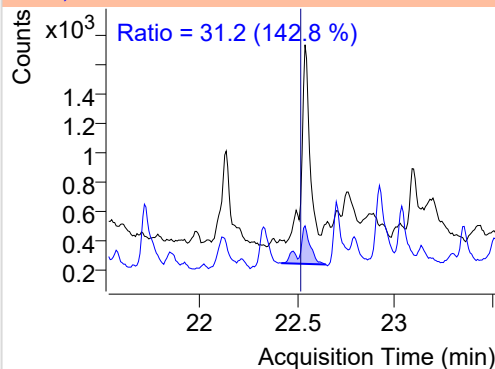
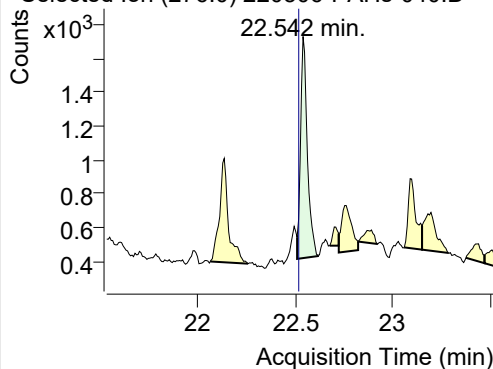
+ SIM (22.183-22.274 min, 13 scans) (\*\*) 2205



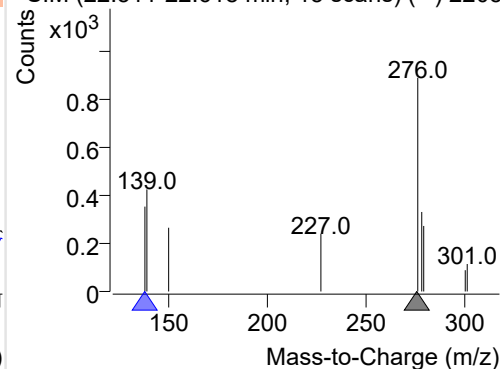
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-040.D

276.0, 138.0

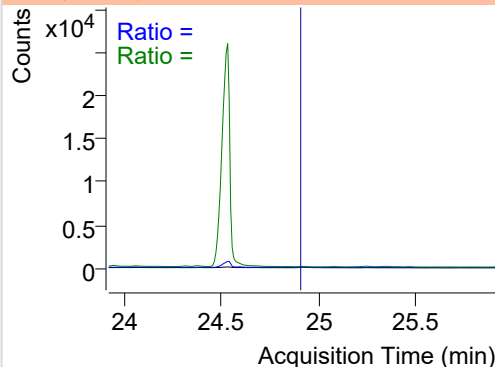
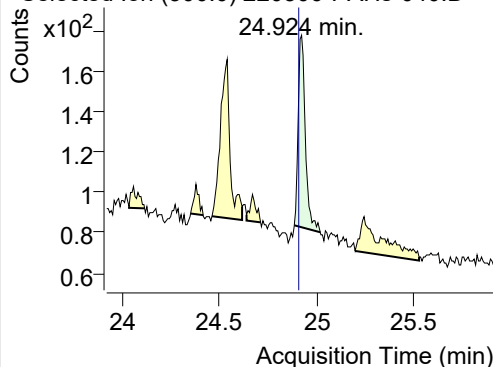


+ SIM (22.511-22.618 min, 15 scans) (\*\*) 2205

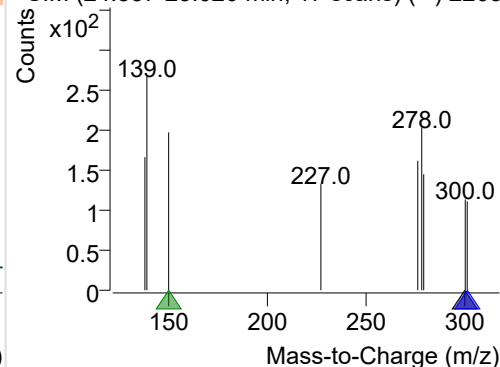
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-040.D

300.0, 301.0, 150.0



+ SIM (24.887-25.020 min, 17 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

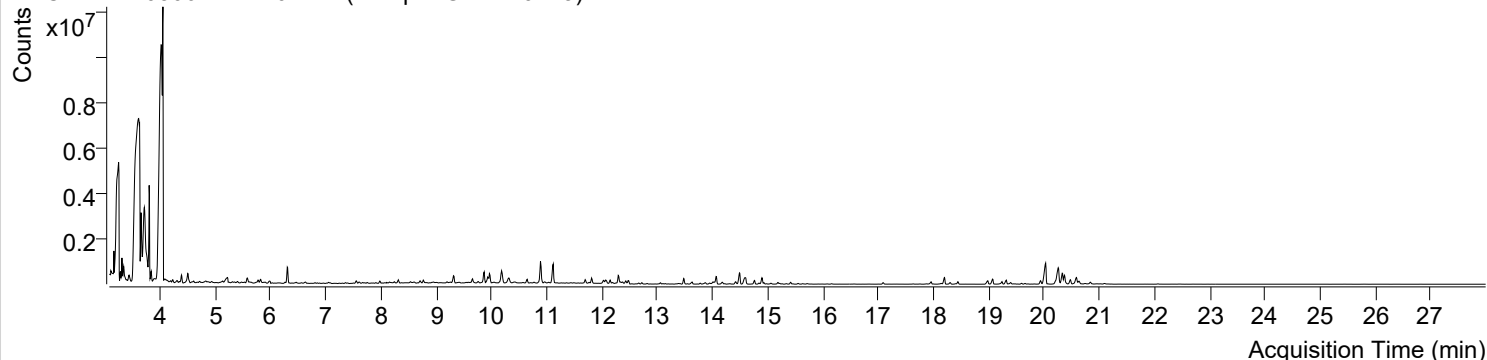


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 8:00:24	Data File	220506-PAHs-042.D
Type	Sample	Name	Sample-Gas-220423
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

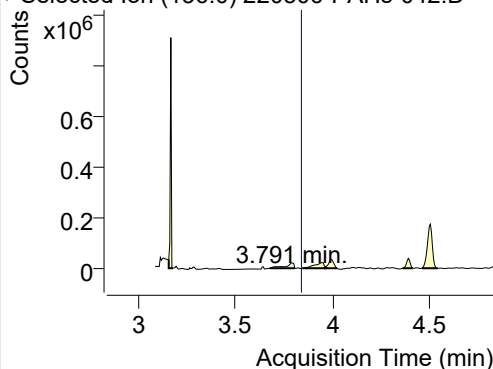
+ TIC SIM 220506-PAHs-042.D (Sample-Gas-220423)



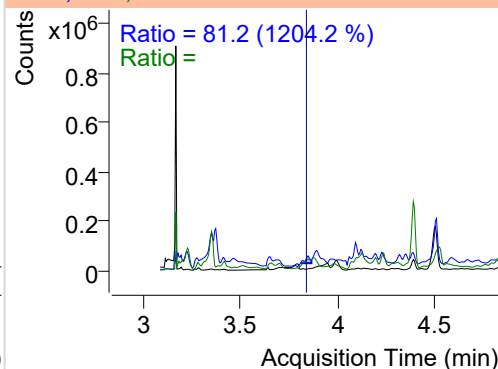
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.791	136.0	60746	20912.50	ND ng/ml	
Naphthalene	3.720	128.0	8405963	2272568.31	ND ng/ml	20.7
Acenaphthylene	6.851	152.0	12710	8027.90	ND ng/ml	111.4
IS-D10-Acenaphthene	7.550	164.0	59707	39973.09	ND ng/ml	113.9
Acenaphthene	7.615	154.0	27009	17151.18	ND ng/ml	112.9
LSS-D10-Fluorene	8.715	176.0	60683	36684.90	ND ng/ml	96.7
Fluorene	8.768	166.0	95030	60345.44	ND ng/ml	101.4
IS-D10-Phenanthrene	10.910	188.0	106326	69957.31	ND ng/ml	14.3
Phenanthrene	10.963	178.0	42562	27066.26	ND ng/ml	21.1
Anthracene	11.036	178.0	5574	3007.85	ND ng/ml	
Fluoranthene	13.726	202.0	3742	2265.09	ND ng/ml	
LSS-D10-Pyrene	14.181	212.0	88473	54694.15	ND ng/ml	19.7
Pyrene	14.225	202.0	5872	4907.10	ND ng/ml	
Benz(a)anthracene	17.005	228.0	1430	738.94	ND ng/ml	98.0
IS-D12-Chrysene	17.092	240.0	85974	49392.57	ND ng/ml	18.8
Chrysene	17.141	228.0	886	518.20	ND ng/ml	
Benzo(b)fluoranthene	19.397	252.0	16318	8843.64	ND ng/ml	9.7
Benzo(k)fluoranthene	19.397	252.0	16318	8843.64	ND ng/ml	10.1
SS-D12-Benzo(e)pyrene	19.938	264.0	184213	101136.95	ND ng/ml	22.6
Benzo(e)pyrene	20.024	252.0	34531	14418.64	ND ng/ml	16.7
Benzo(a)pyrene	20.024	252.0	34531	14418.64	ND ng/ml	18.8
IS-D12-Perylene	20.209	264.0	95287	66259.40	ND ng/ml	21.0
Perylene	20.259	252.0	29369	10352.64	ND ng/ml	9.6
Indeno(1,2,3-c,d)pyrene	22.122	276.0	542	250.78	ND ng/ml	42.2
Dibenz(a,h)anthracene	22.190	278.0	318	157.57	ND ng/ml	39.9
Benzo(g,h,i)perylene	22.534	276.0	298	168.98	ND ng/ml	
Coronene	24.916	300.0	205	48.84	ND ng/ml	

## IS-D8-Naphthalene

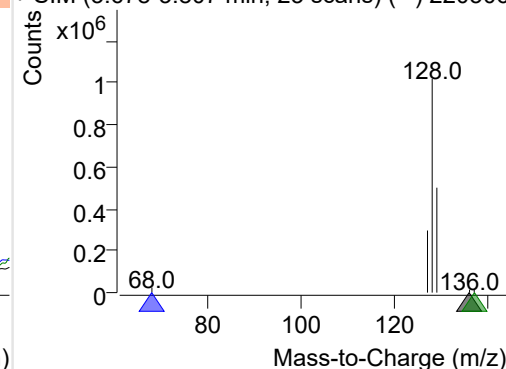
+ Selected Ion (136.0) 220506-PAHs-042.D



136.0, 68.0, 137.0

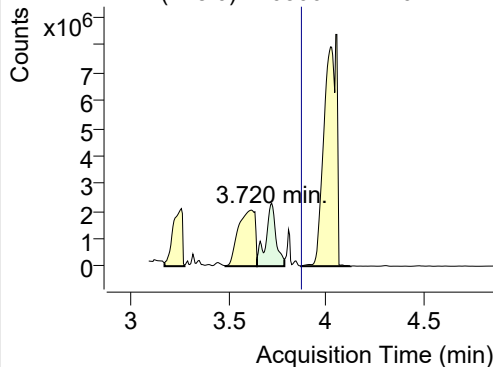


+ SIM (3.678-3.807 min, 23 scans) (\*\*) 220506

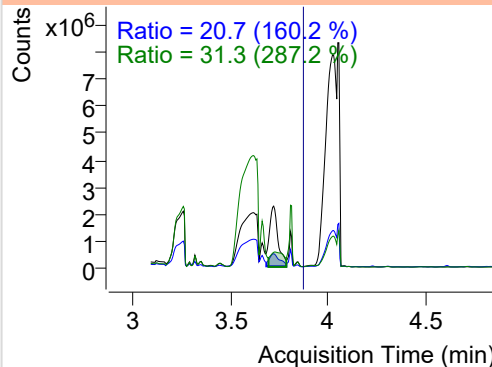


**Naphthalene**

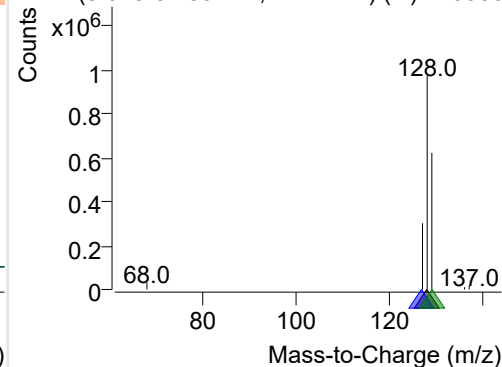
+ Selected Ion (128.0) 220506-PAHs-042.D



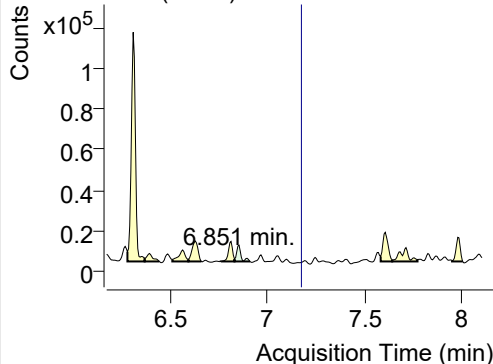
128.0, 127.0, 129.0



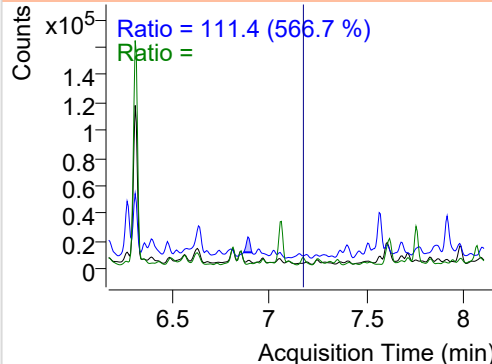
+ SIM (3.645-3.785 min, 27 scans) (\*\*) 220506

**Acenaphthylene**

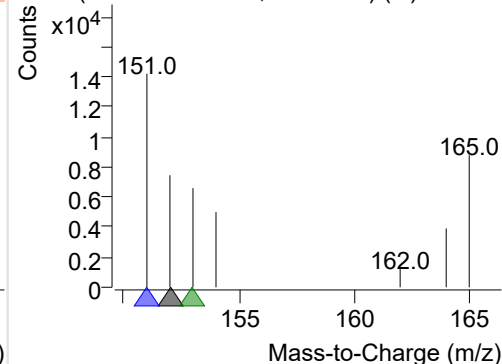
+ Selected Ion (152.0) 220506-PAHs-042.D



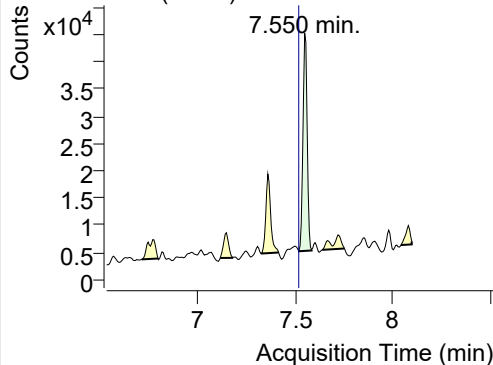
152.0, 151.0, 153.0



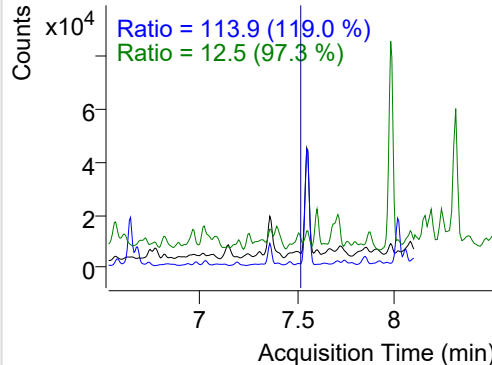
+ SIM (6.828-6.908 min, 14 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

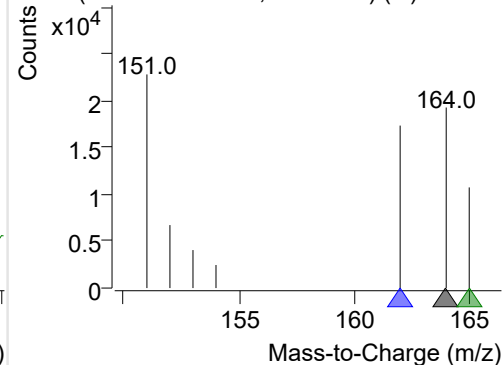
+ Selected Ion (164.0) 220506-PAHs-042.D



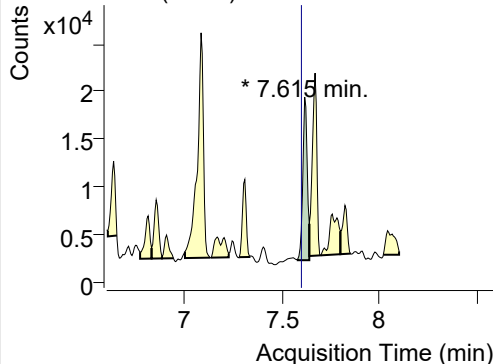
164.0, 162.0, 165.0



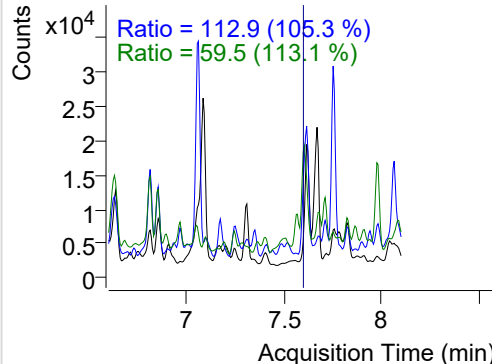
+ SIM (7.520-7.585 min, 12 scans) (\*\*) 220506

**Acenaphthene**

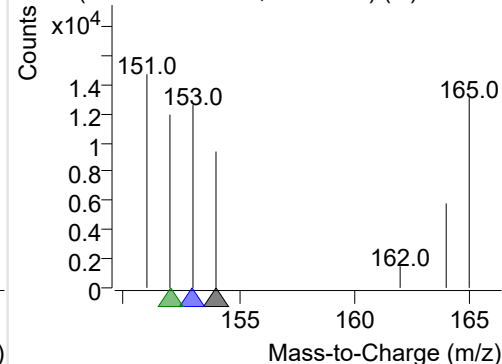
+ Selected Ion (154.0) 220506-PAHs-042.D



154.0, 153.0, 152.0

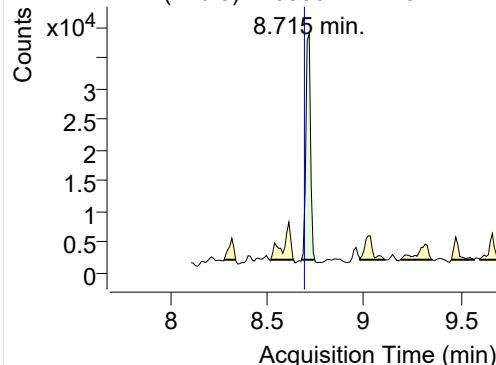


+ SIM (7.579-7.639 min, 11 scans) (\*\*) 220506

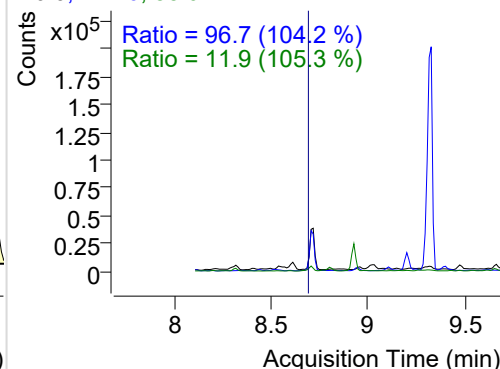


## LSS-D10-Fluorene

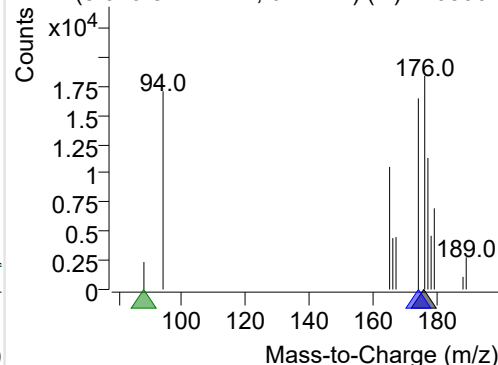
+ Selected Ion (176.0) 220506-PAHs-042.D



176.0, 174.0, 88.0

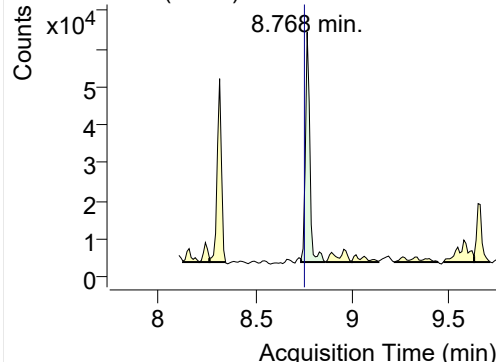


+ SIM (8.676-8.744 min, 6 scans) (\*\*) 220506-I

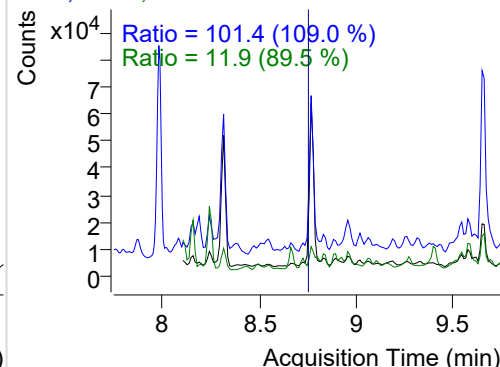


## Fluorene

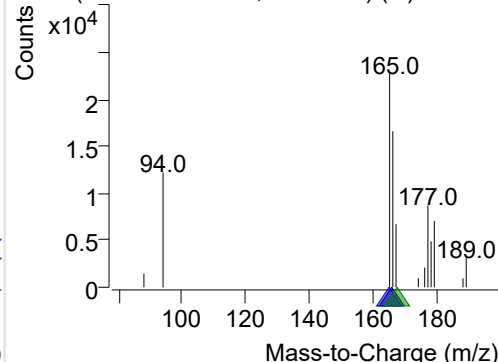
+ Selected Ion (166.0) 220506-PAHs-042.D



166.0, 165.0, 167.0

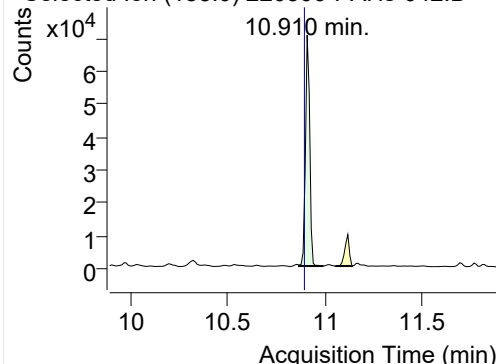


+ SIM (8.736-8.861 min, 12 scans) (\*\*) 220506

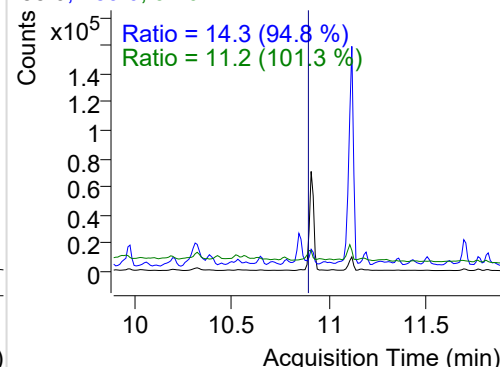


## IS-D10-Phenanthrene

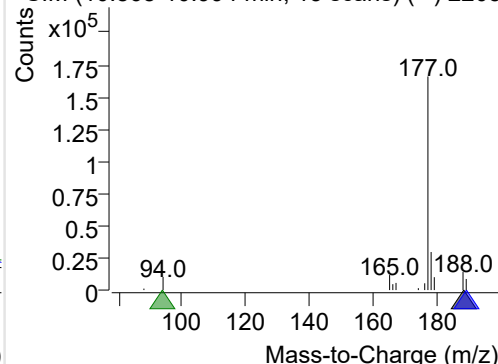
+ Selected Ion (188.0) 220506-PAHs-042.D



188.0, 189.0, 94.0

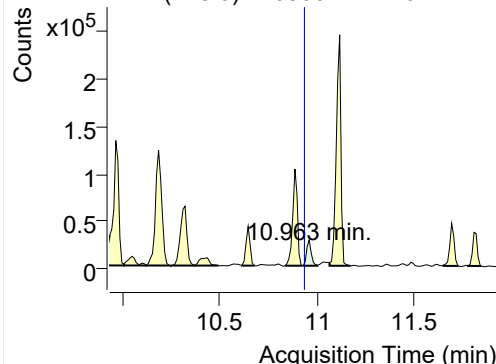


+ SIM (10.868-10.994 min, 13 scans) (\*\*) 2205

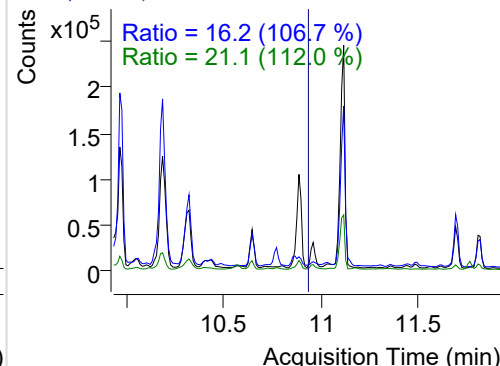


## Phenanthrene

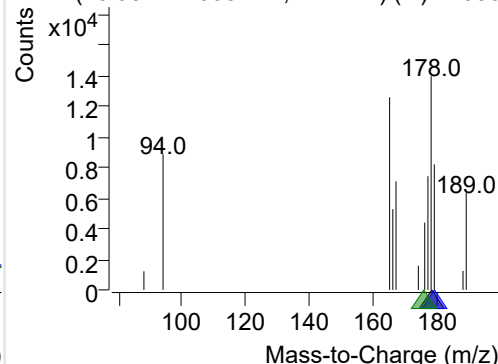
+ Selected Ion (178.0) 220506-PAHs-042.D



178.0, 179.0, 176.0

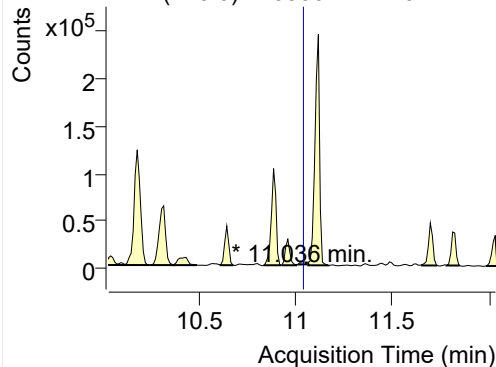


+ SIM (10.932-11.005 min, 7 scans) (\*\*) 22050

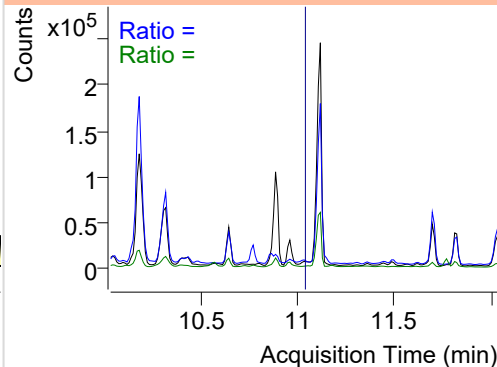


**Anthracene**

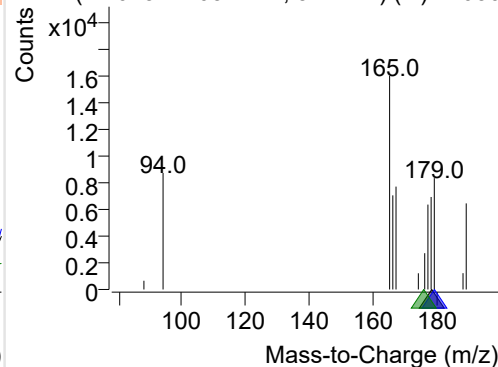
+ Selected Ion (178.0) 220506-PAHs-042.D



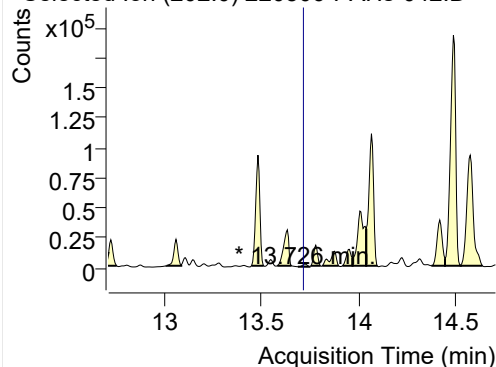
178.0, 179.0, 176.0



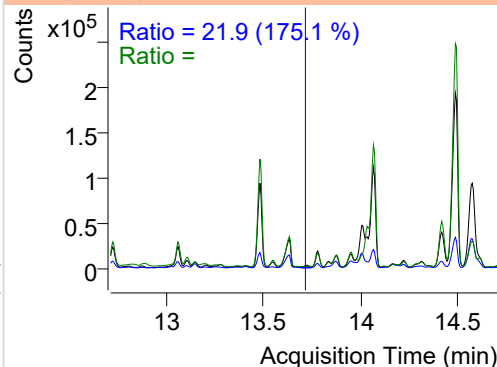
+ SIM (11.015-11.057 min, 5 scans) (\*\*) 22050

**Fluoranthene**

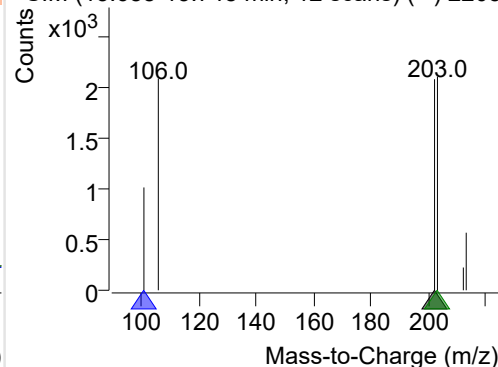
+ Selected Ion (202.0) 220506-PAHs-042.D



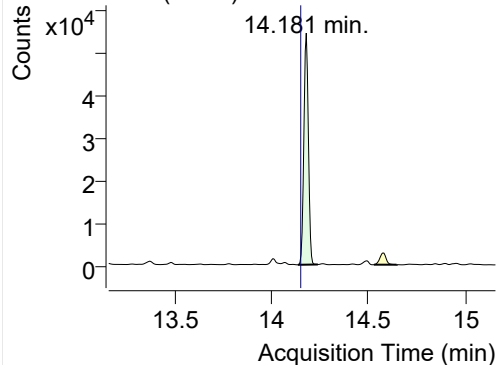
202.0, 101.0, 203.0



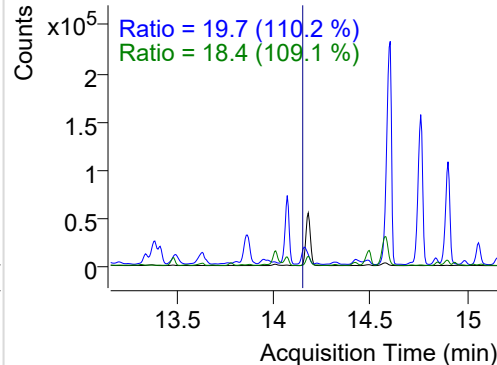
+ SIM (13.688-13.748 min, 12 scans) (\*\*) 2205

**LSS-D10-Pyrene**

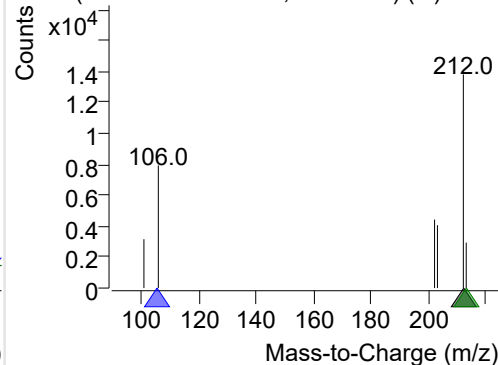
+ Selected Ion (212.0) 220506-PAHs-042.D



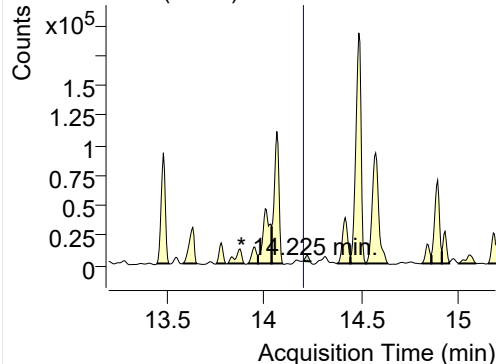
212.0, 106.0, 213.0



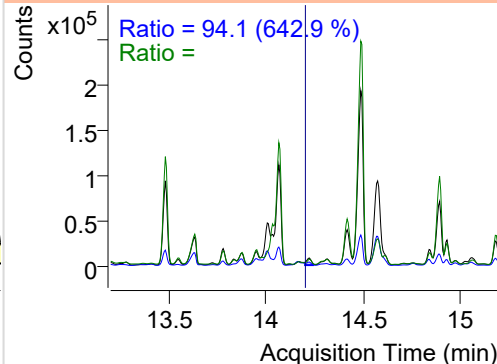
+ SIM (14.138-14.241 min, 20 scans) (\*\*) 2205

**Pyrene**

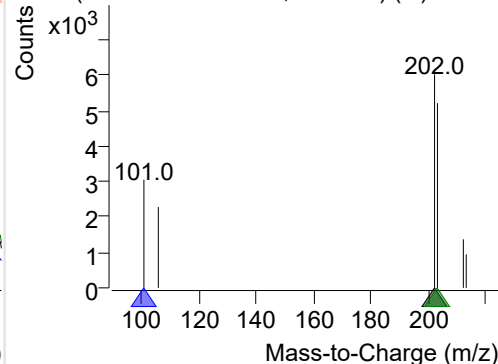
+ Selected Ion (202.0) 220506-PAHs-042.D



202.0, 101.0, 203.0



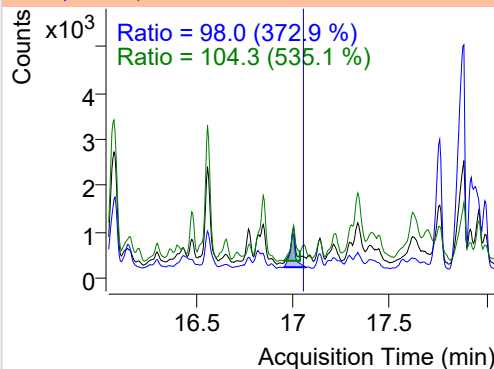
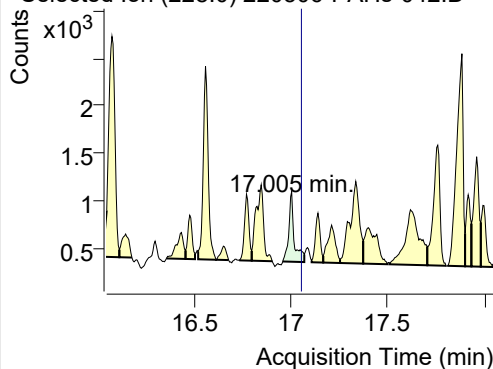
+ SIM (14.203-14.241 min, 8 scans) (\*\*) 22050



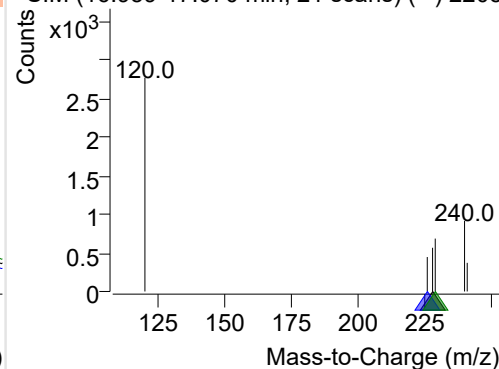
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-042.D

228.0, 226.0, 229.0

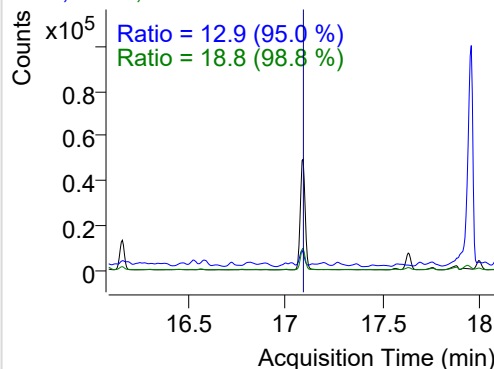
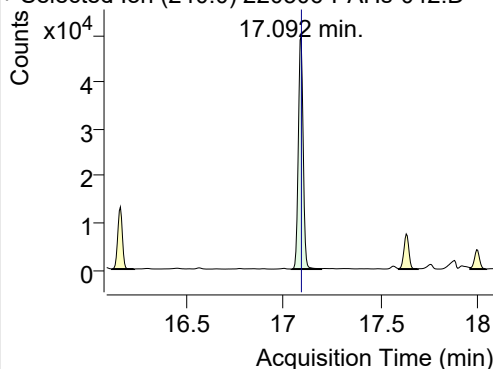


+ SIM (16.959-17.070 min, 21 scans) (\*\*) 2205

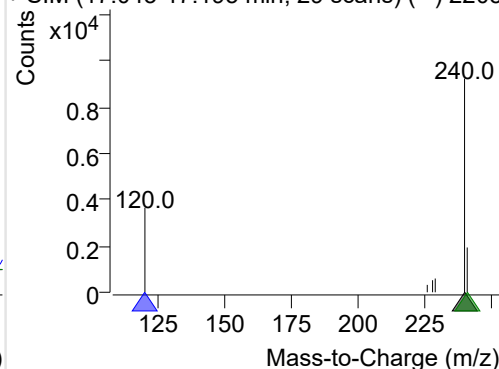
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-042.D

240.0, 120.0, 241.0

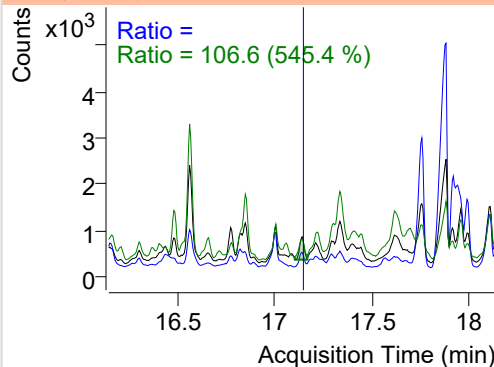
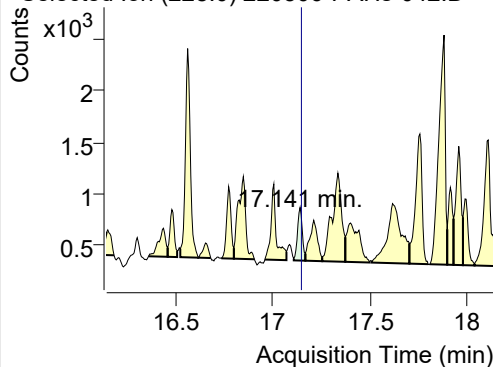


+ SIM (17.043-17.195 min, 29 scans) (\*\*) 2205

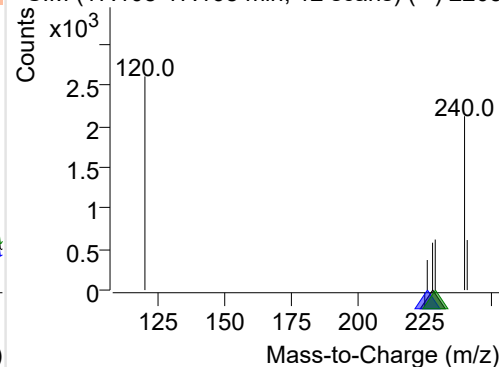
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-042.D

228.0, 226.0, 229.0

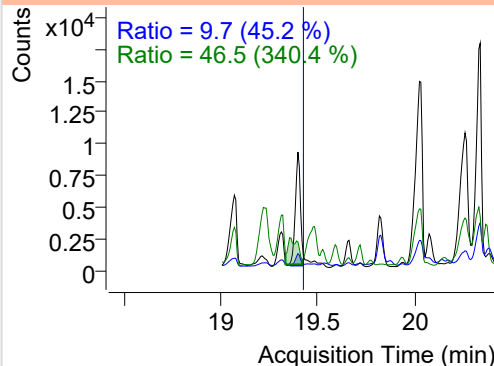
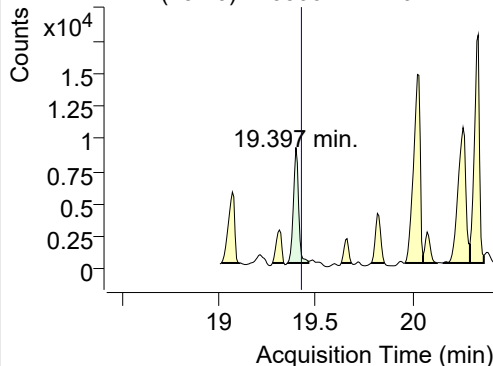


+ SIM (17.108-17.168 min, 12 scans) (\*\*) 2205

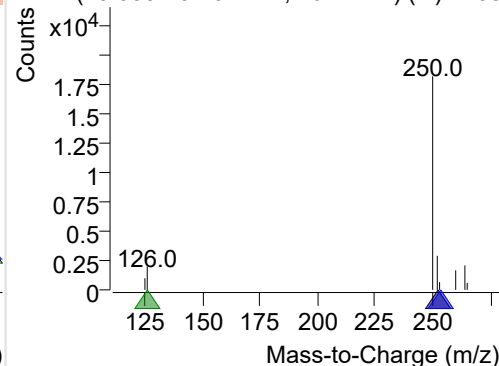
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-042.D

252.0, 253.0, 126.0



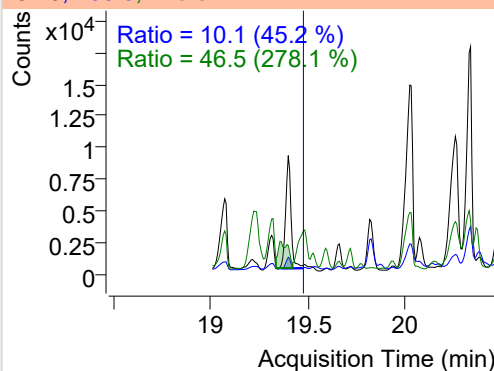
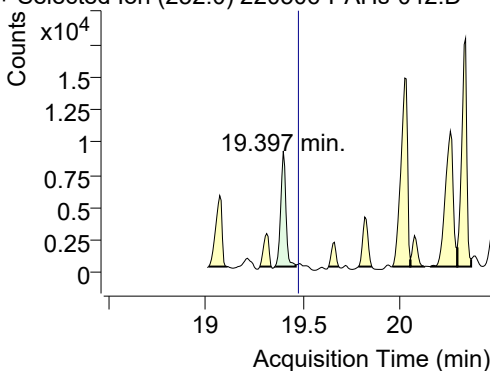
+ SIM (19.355-19.461 min, 16 scans) (\*\*) 2205



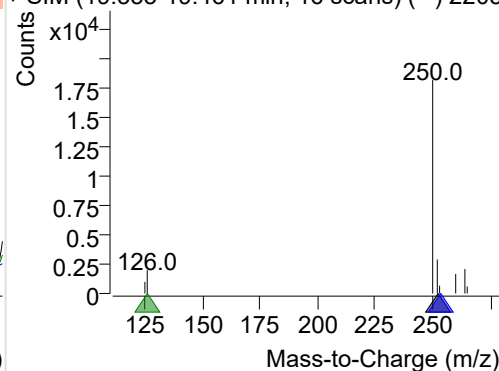
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-042.D

252.0, 253.0, 126.0

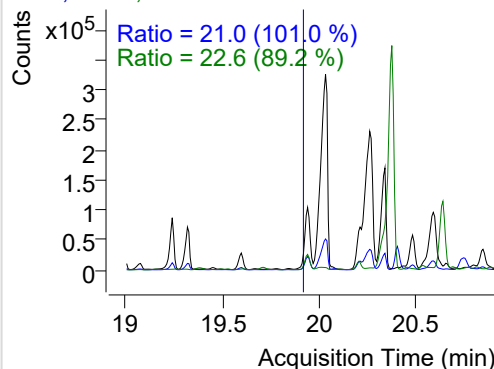
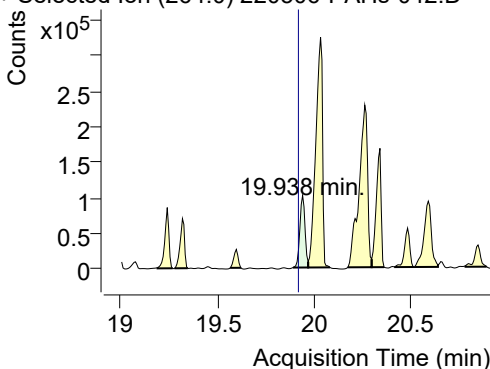


+ SIM (19.355-19.461 min, 16 scans) (\*\*) 2205

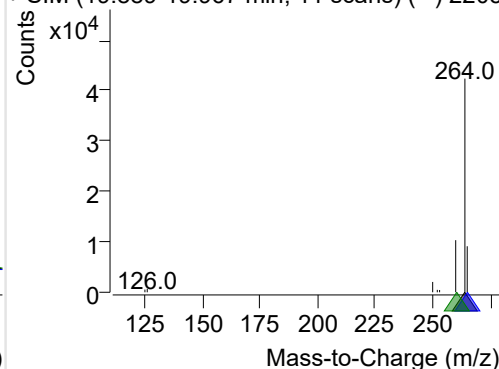
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-042.D

264.0, 265.0, 260.0

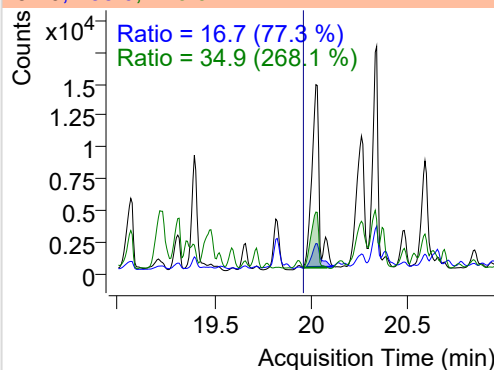
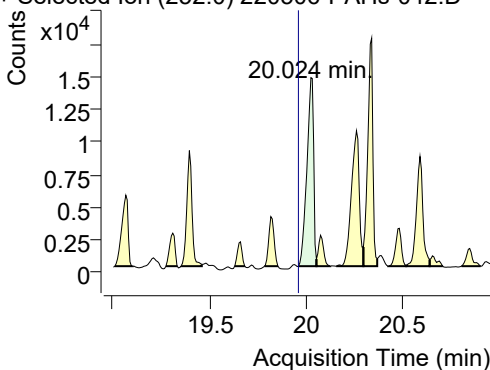


+ SIM (19.889-19.967 min, 11 scans) (\*\*) 2205

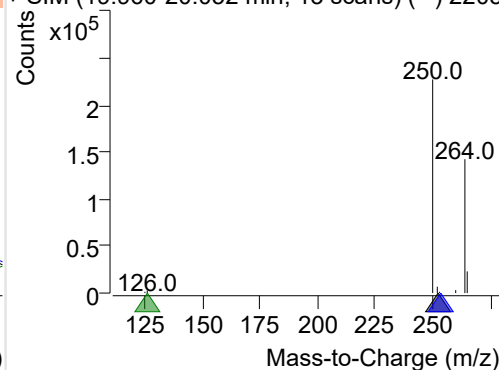
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-042.D

252.0, 253.0, 126.0

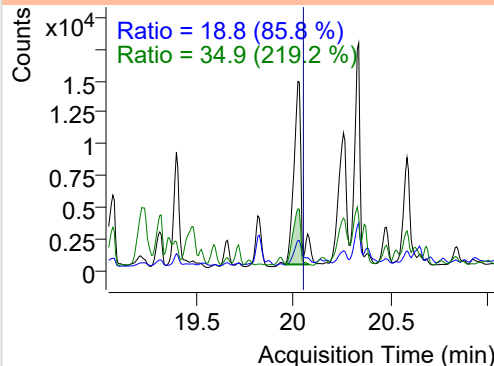
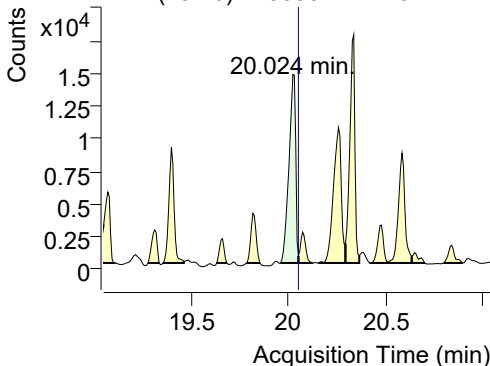


+ SIM (19.960-20.052 min, 13 scans) (\*\*) 2205

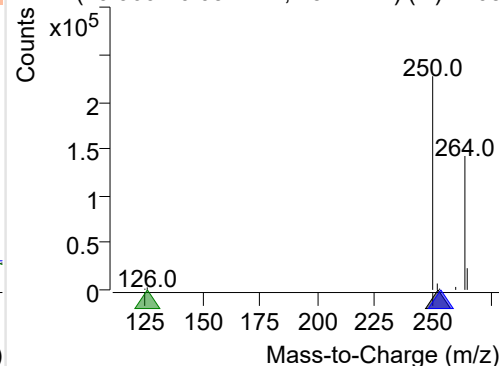
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-042.D

252.0, 253.0, 126.0

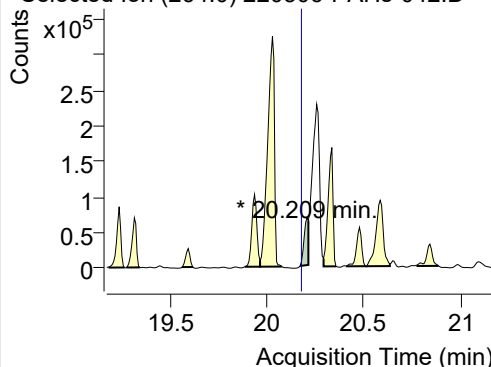


+ SIM (19.960-20.052 min, 13 scans) (\*\*) 2205

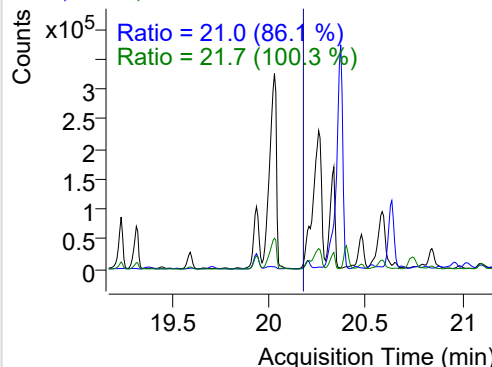


## IS-D12-Perylene

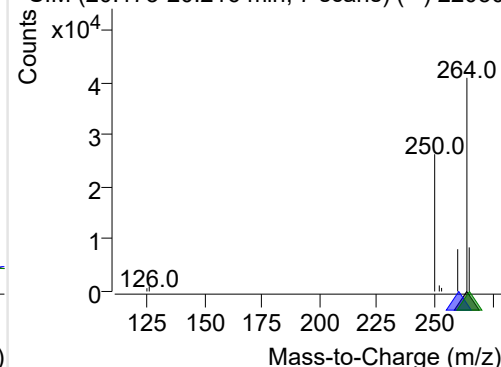
+ Selected Ion (264.0) 220506-PAHs-042.D



264.0, 260.0, 265.0

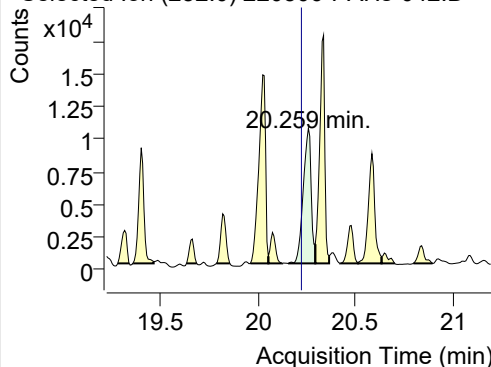


+ SIM (20.173-20.216 min, 7 scans) (\*\*) 22050

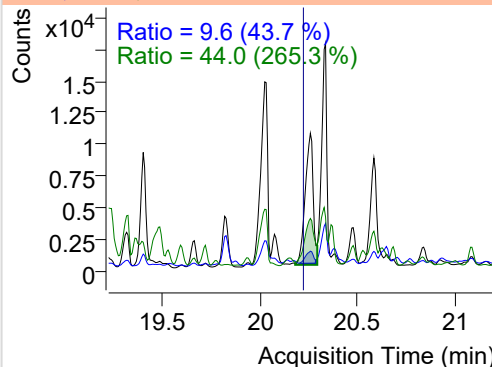


## Perylene

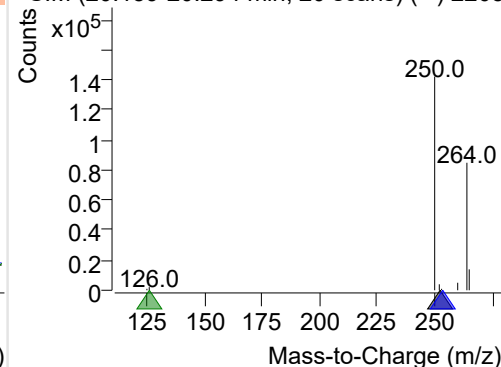
+ Selected Ion (252.0) 220506-PAHs-042.D



252.0, 253.0, 126.0

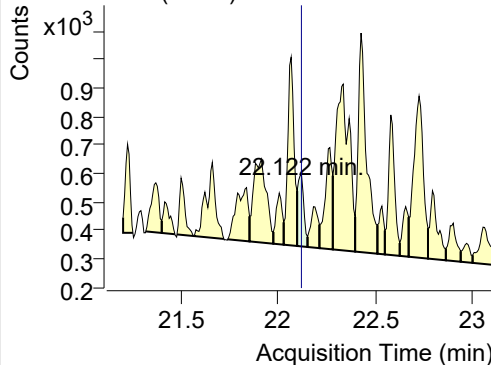


+ SIM (20.159-20.294 min, 20 scans) (\*\*) 2205

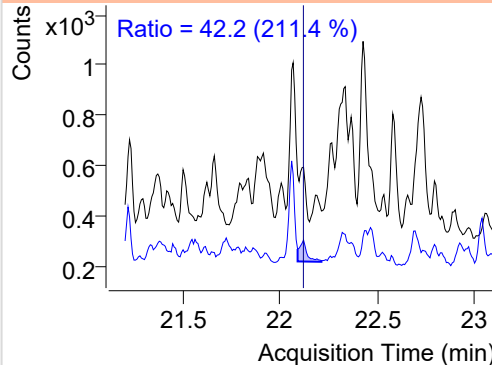


## Indeno(1,2,3-c,d)pyrene

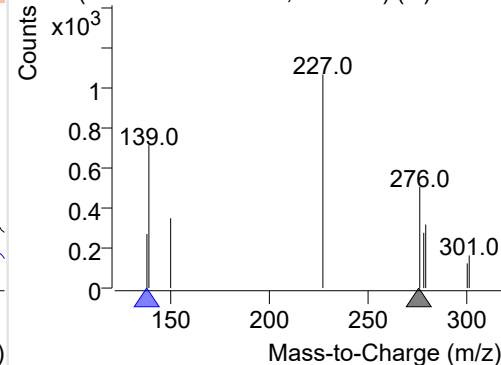
+ Selected Ion (276.0) 220506-PAHs-042.D



276.0, 138.0

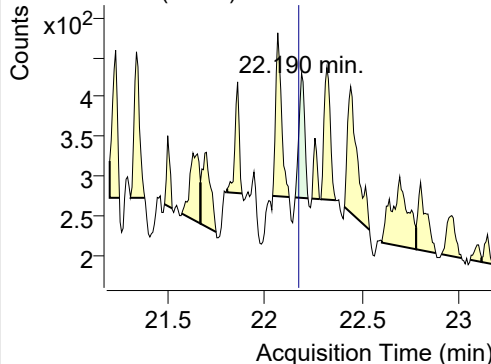


+ SIM (22.099-22.152 min, 8 scans) (\*\*) 22050

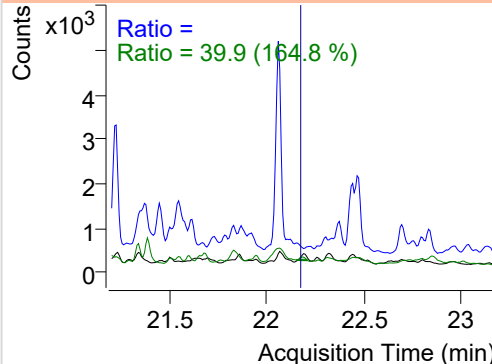


## Dibenz(a,h)anthracene

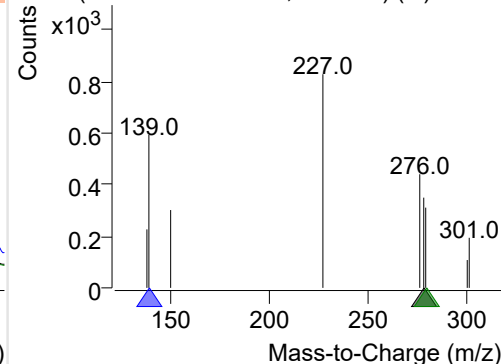
+ Selected Ion (278.0) 220506-PAHs-042.D



278.0, 139.0, 279.0



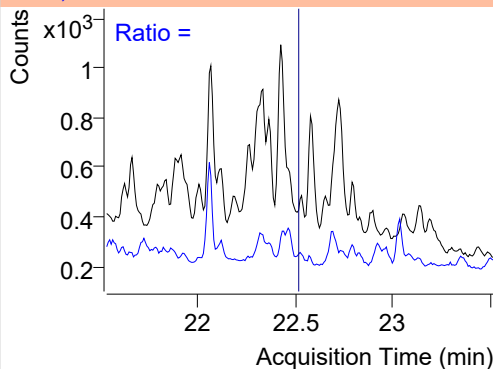
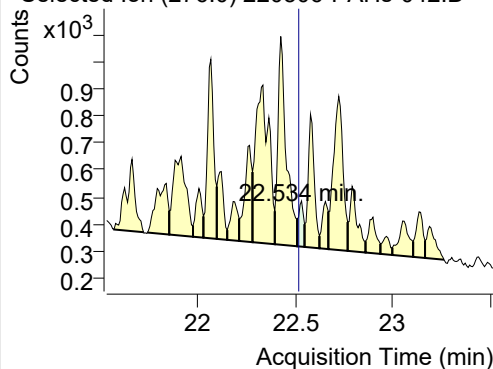
+ SIM (22.157-22.224 min, 9 scans) (\*\*) 22050



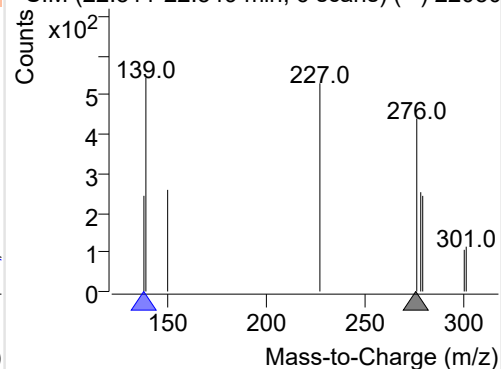
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-042.D

276.0, 138.0

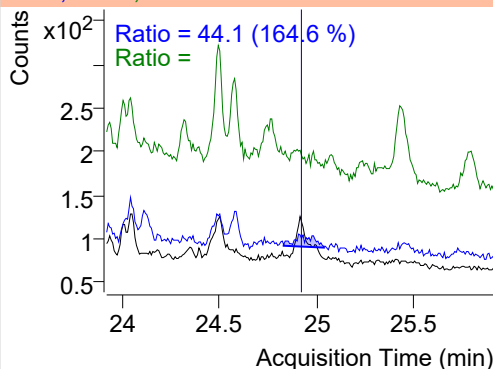
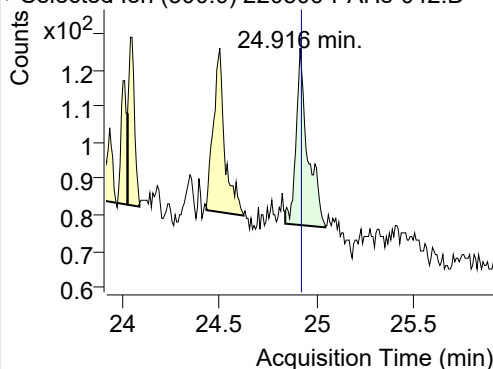


+ SIM (22.511-22.549 min, 6 scans) (\*\*) 22050

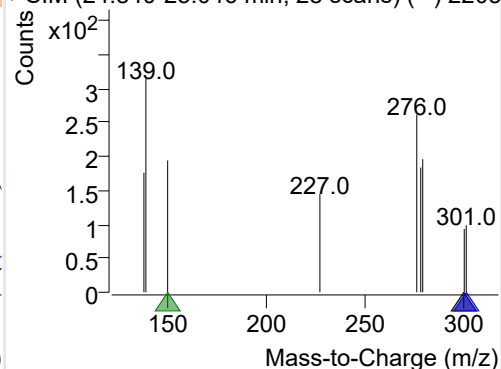
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-042.D

300.0, 301.0, 150.0



+ SIM (24.840-25.046 min, 28 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

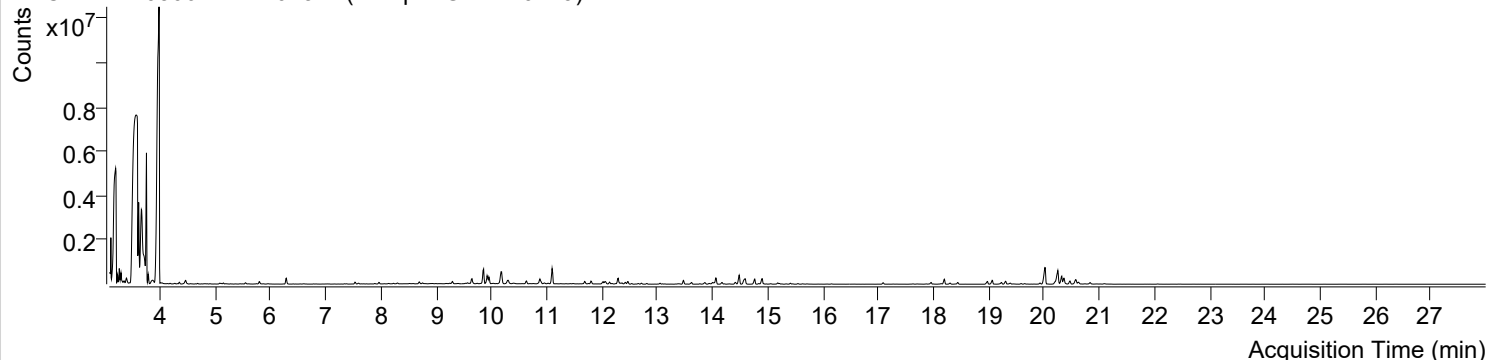


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 8:31:25	Data File	220506-PAHs-043.D
Type	Sample	Name	Sample-Gas-220429
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

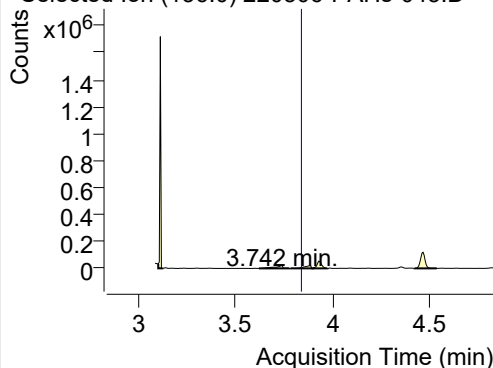
+ TIC SIM 220506-PAHs-043.D (Sample-Gas-220429)



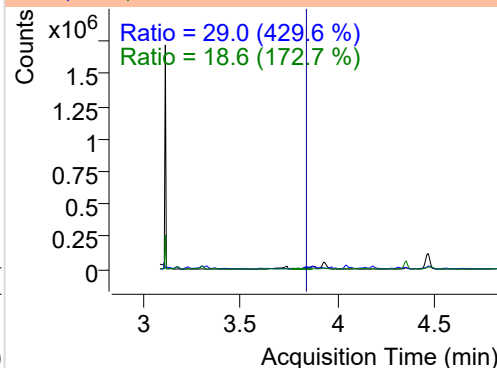
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.742	136.0	59643	21217.52	ND ng/ml	18.6
Naphthalene	3.758	128.0	1708850	1795776.39	ND ng/ml	47.5
Acenaphthylene	6.828	152.0	3970	2446.08	ND ng/ml	72.6
IS-D10-Acenaphthene	7.532	164.0	57158	39105.82	ND ng/ml	99.9
Acenaphthene	7.597	154.0	18695	12291.17	ND ng/ml	121.7
LSS-D10-Fluorene	8.694	176.0	56128	38342.30	ND ng/ml	92.7
Fluorene	8.757	166.0	32153	19030.68	ND ng/ml	74.9
IS-D10-Phenanthrene	10.900	188.0	102107	70250.10	ND ng/ml	15.6
Phenanthrene	10.952	178.0	19090	9063.79	ND ng/ml	18.8
Anthracene	11.036	178.0	6144	2868.51	ND ng/ml	13.3
Fluoranthene	13.715	202.0	2310	1383.33	ND ng/ml	12.2
LSS-D10-Pyrene	14.176	212.0	80562	50955.87	ND ng/ml	19.9
Pyrene	14.219	202.0	8085	4751.69	ND ng/ml	
Benz(a)anthracene	17.087	228.0	299	171.65	ND ng/ml	
IS-D12-Chrysene	17.092	240.0	82369	48859.90	ND ng/ml	18.8
Chrysene	17.135	228.0	790	440.65	ND ng/ml	
Benzo(b)fluoranthene	19.390	252.0	12184	6149.11	ND ng/ml	11.6
Benzo(k)fluoranthene	19.390	252.0	12184	6149.11	ND ng/ml	11.6
SS-D12-Benzo(e)pyrene	19.931	264.0	64522	33845.49	ND ng/ml	21.5
Benzo(e)pyrene	20.017	252.0	25250	11226.11	ND ng/ml	16.3
Benzo(a)pyrene	20.017	252.0	25250	11226.11	ND ng/ml	15.0
IS-D12-Perylene	20.195	264.0	84459	56003.96	ND ng/ml	25.5
Perylene	20.252	252.0	21502	8973.11	ND ng/ml	10.2
Indeno(1,2,3-c,d)pyrene	22.191	276.0	276	90.70	ND ng/ml	23.7
Dibenz(a,h)anthracene	22.191	278.0	366	139.58	ND ng/ml	21.6
Benzo(g,h,i)perylene	22.534	276.0	173	87.12	ND ng/ml	
Coronene	24.916	300.0	129	35.64	ND ng/ml	

## IS-D8-Naphthalene

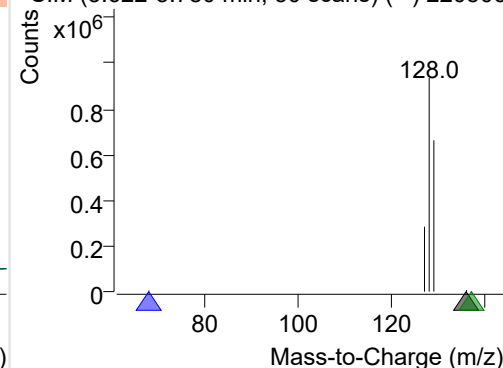
+ Selected Ion (136.0) 220506-PAHs-043.D



136.0, 68.0, 137.0

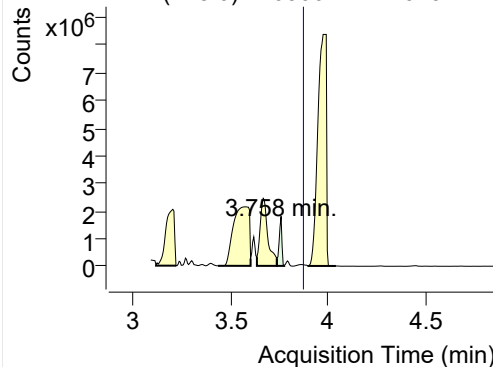


+ SIM (3.622-3.780 min, 30 scans) (\*\*) 220506

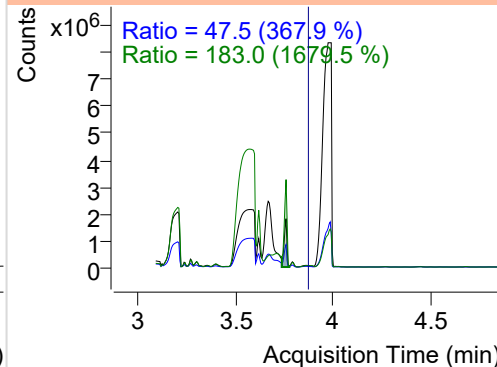


**Naphthalene**

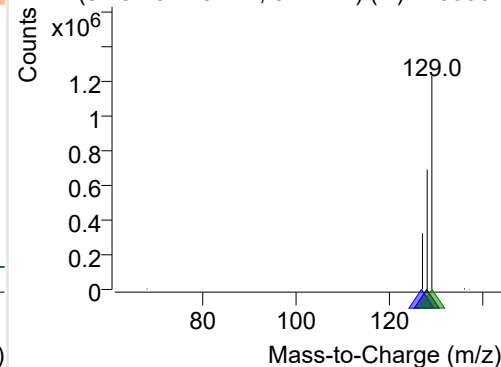
+ Selected Ion (128.0) 220506-PAHs-043.D



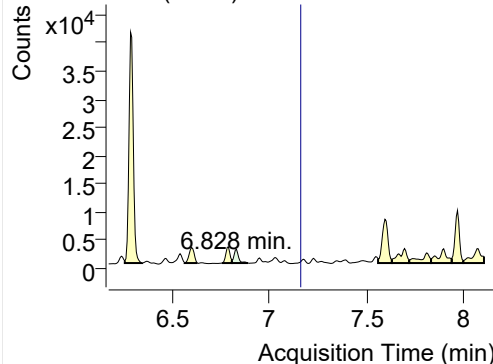
128.0, 127.0, 129.0



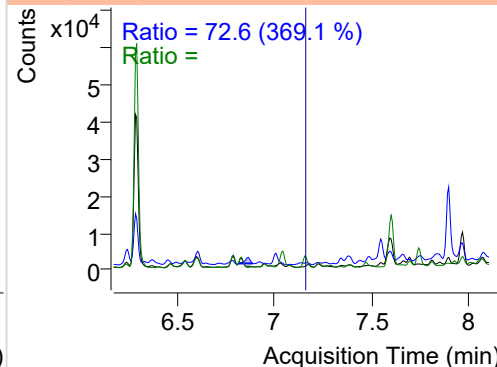
+ SIM (3.737-3.775 min, 8 scans) (\*\*) 220506-I

**Acenaphthylene**

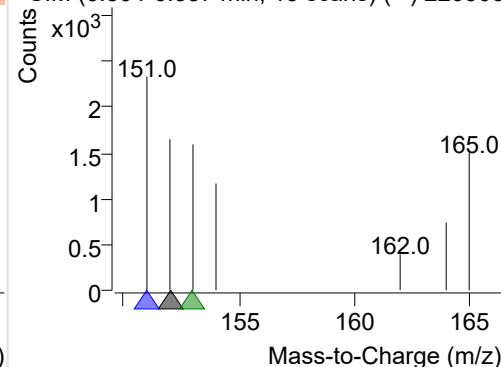
+ Selected Ion (152.0) 220506-PAHs-043.D



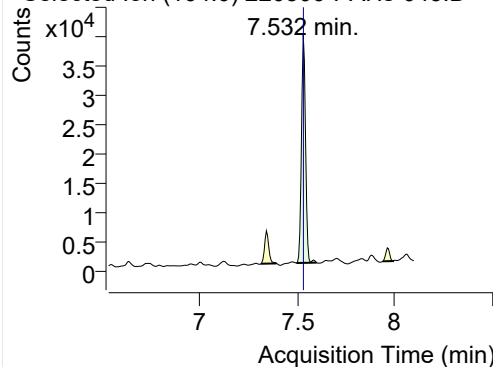
152.0, 151.0, 153.0



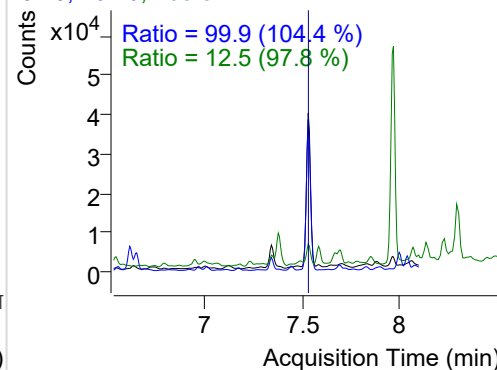
+ SIM (6.804-6.887 min, 15 scans) (\*\*) 220506-I

**IS-D10-Acenaphthene**

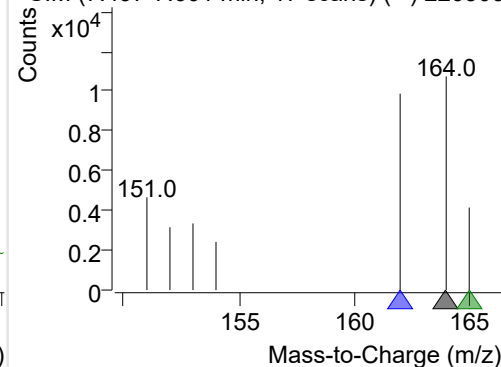
+ Selected Ion (164.0) 220506-PAHs-043.D



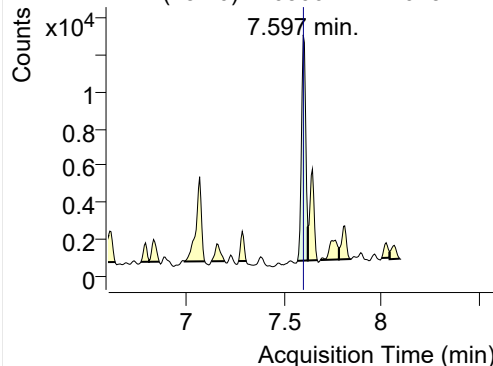
164.0, 162.0, 165.0



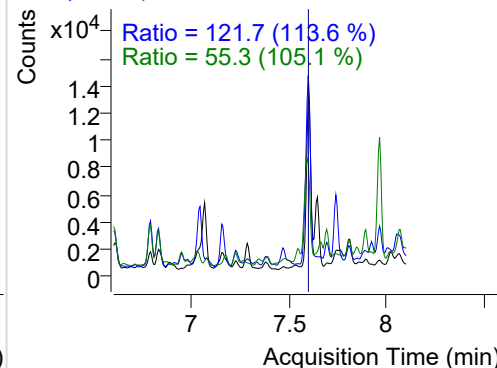
+ SIM (7.497-7.601 min, 17 scans) (\*\*) 220506-I

**Acenaphthene**

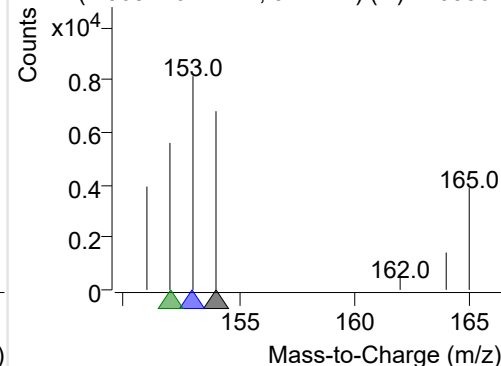
+ Selected Ion (154.0) 220506-PAHs-043.D



154.0, 153.0, 152.0

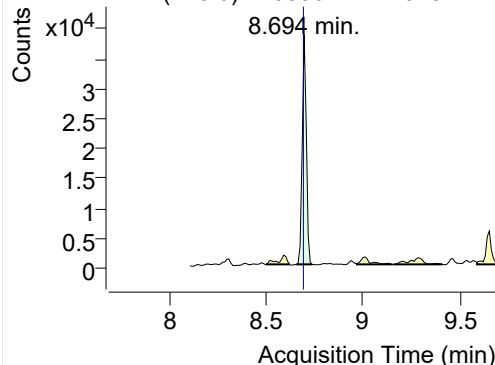


+ SIM (7.568-7.621 min, 9 scans) (\*\*) 220506-I

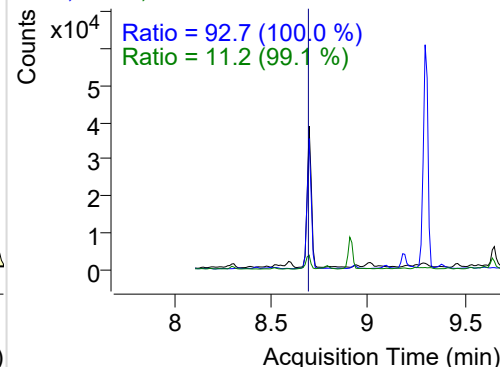


## LSS-D10-Fluorene

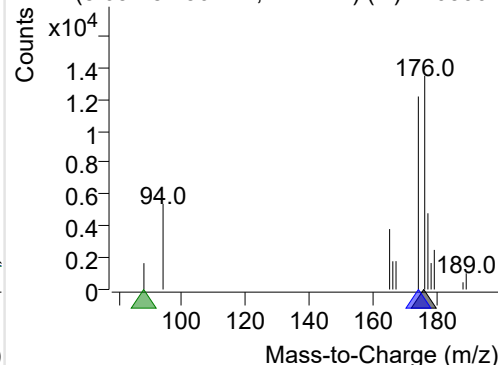
+ Selected Ion (176.0) 220506-PAHs-043.D



176.0, 174.0, 88.0

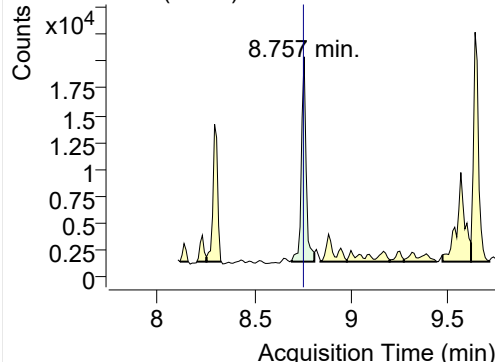


+ SIM (8.654-8.736 min, 7 scans) (\*\*) 220506-I

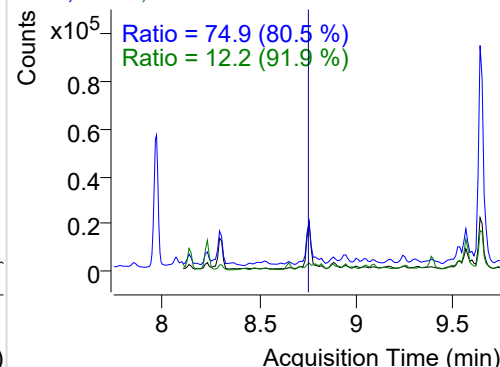


## Fluorene

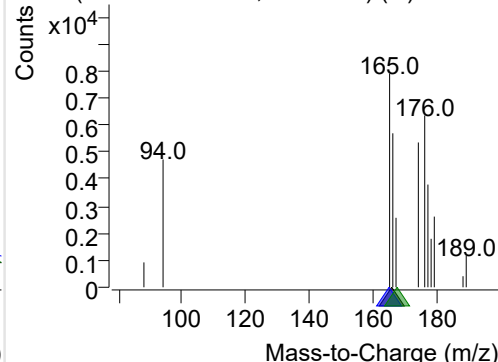
+ Selected Ion (166.0) 220506-PAHs-043.D



166.0, 165.0, 167.0

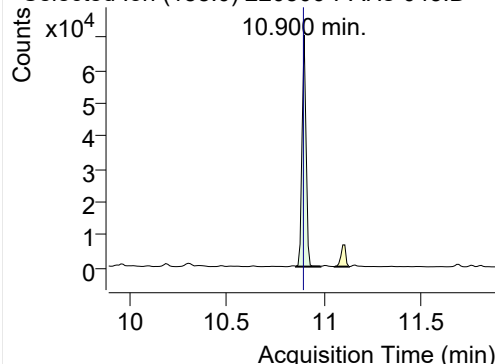


+ SIM (8.694-8.810 min, 12 scans) (\*\*) 220506

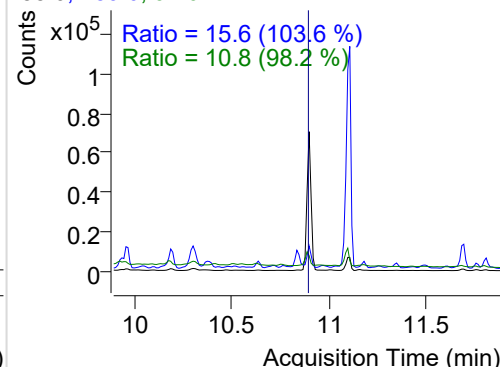


## IS-D10-Phenanthrene

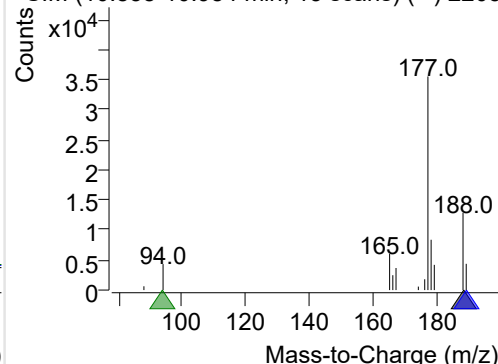
+ Selected Ion (188.0) 220506-PAHs-043.D



188.0, 189.0, 94.0

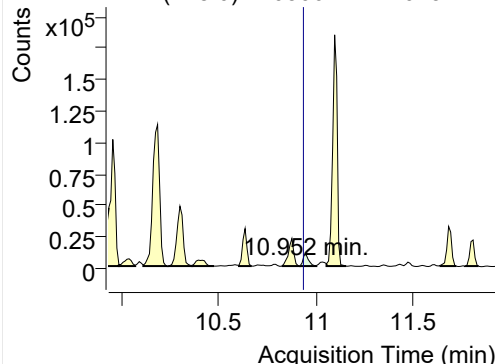


+ SIM (10.858-10.984 min, 13 scans) (\*\*) 2205

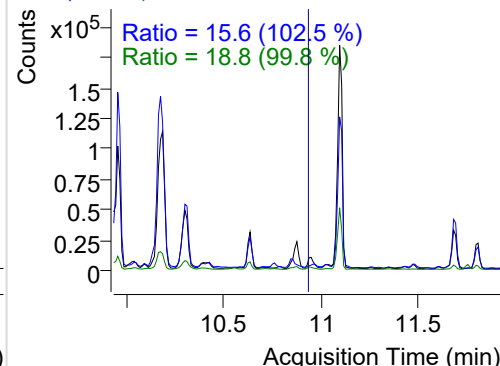


## Phenanthrene

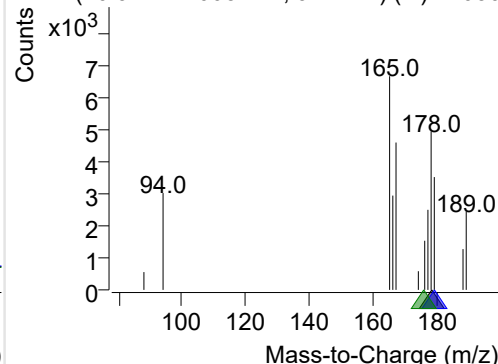
+ Selected Ion (178.0) 220506-PAHs-043.D



178.0, 179.0, 176.0

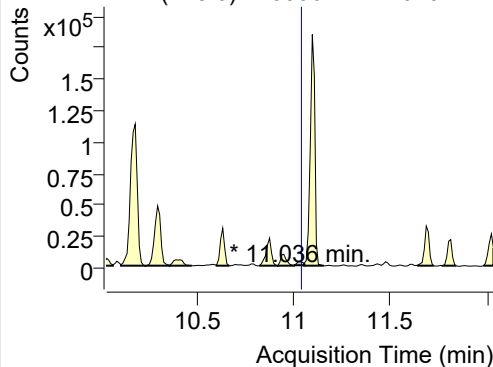


+ SIM (10.921-11.005 min, 9 scans) (\*\*) 22050

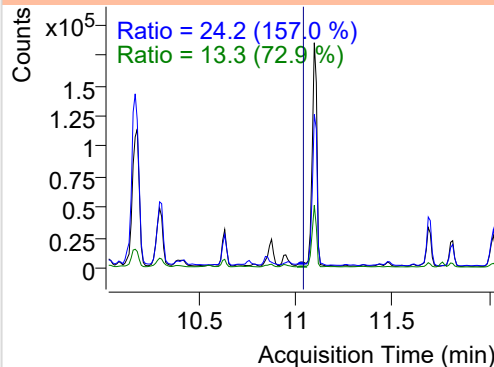


**Anthracene**

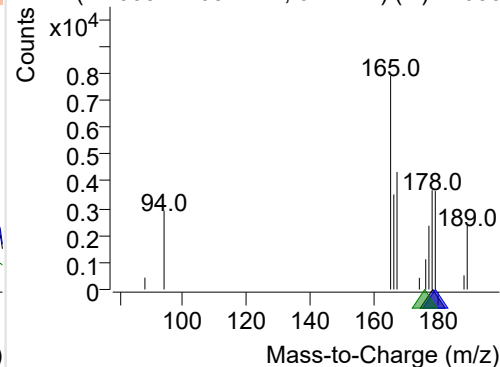
+ Selected Ion (178.0) 220506-PAHs-043.D



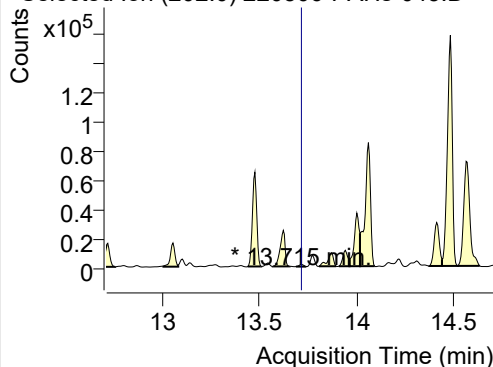
178.0, 179.0, 176.0



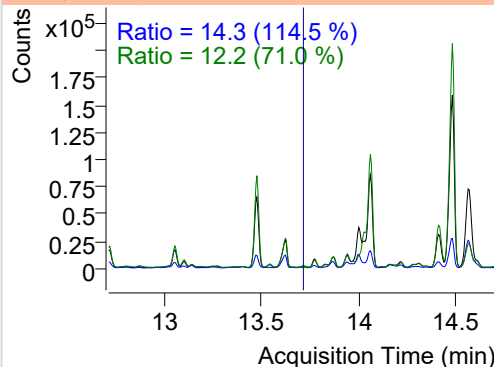
+ SIM (11.005-11.057 min, 6 scans) (\*\*) 22050

**Fluoranthene**

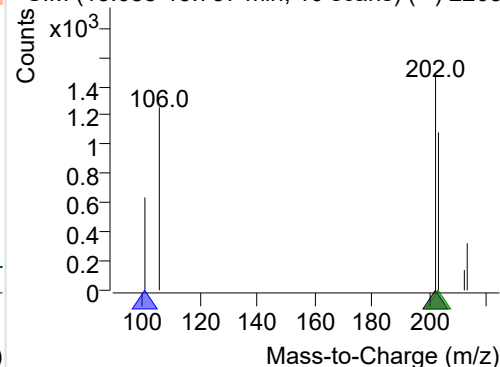
+ Selected Ion (202.0) 220506-PAHs-043.D



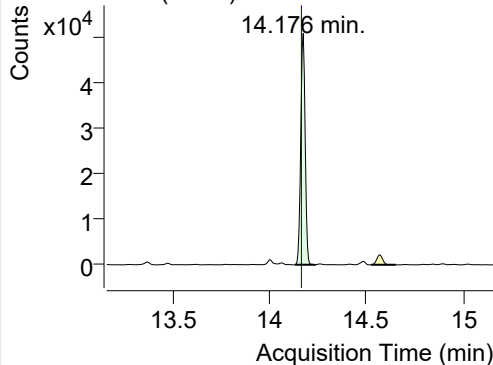
202.0, 101.0, 203.0



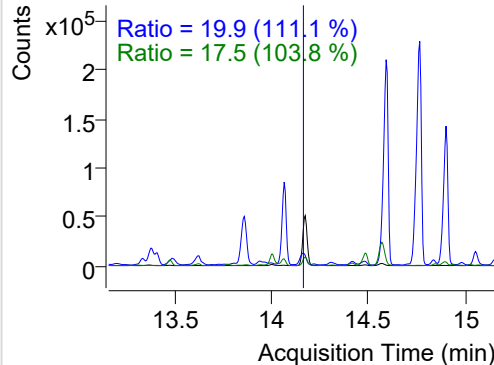
+ SIM (13.688-13.737 min, 10 scans) (\*\*) 2205

**LSS-D10-Pyrene**

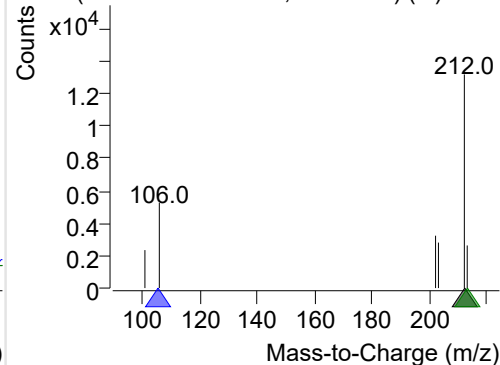
+ Selected Ion (212.0) 220506-PAHs-043.D



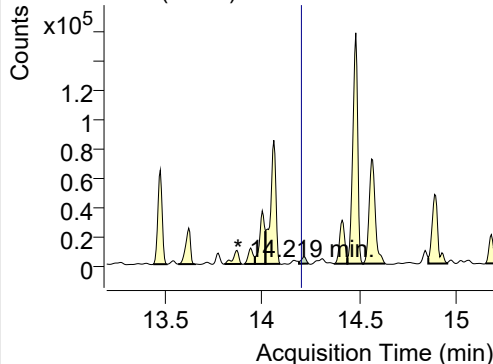
212.0, 106.0, 213.0



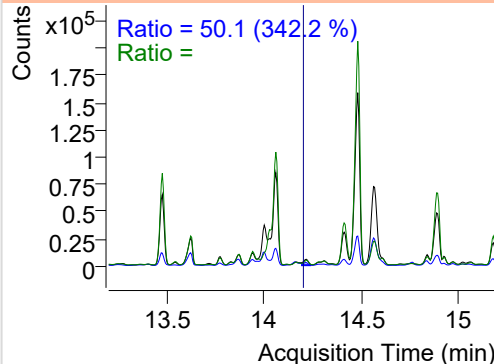
+ SIM (14.133-14.235 min, 19 scans) (\*\*) 2205

**Pyrene**

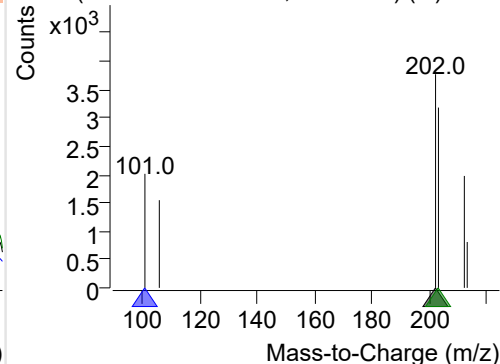
+ Selected Ion (202.0) 220506-PAHs-043.D



202.0, 101.0, 203.0



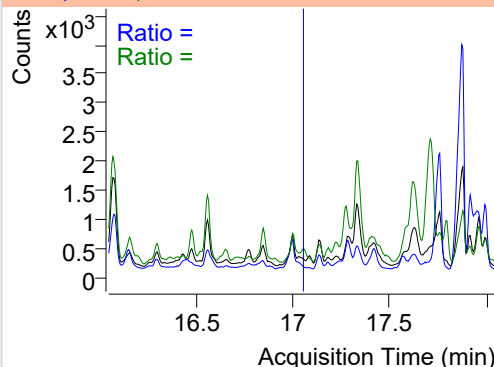
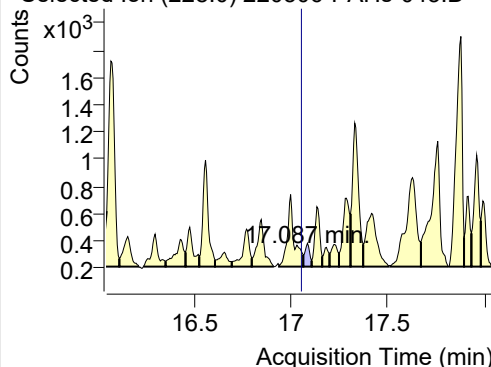
+ SIM (14.192-14.241 min, 10 scans) (\*\*) 2205



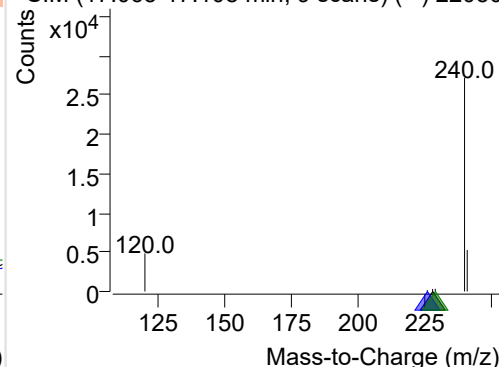
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-043.D

228.0, 226.0, 229.0

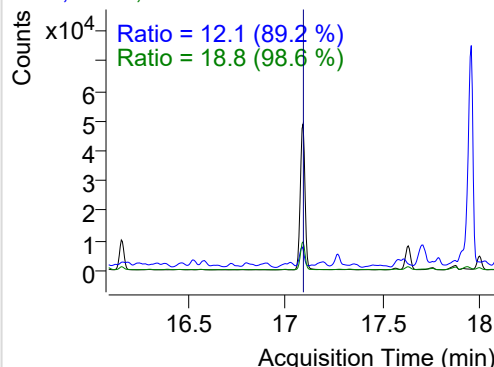
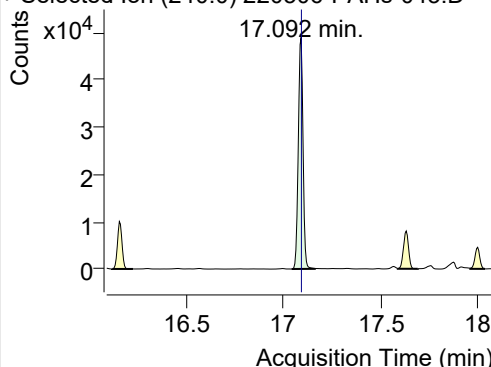


+ SIM (17.065-17.108 min, 9 scans) (\*\*) 22050

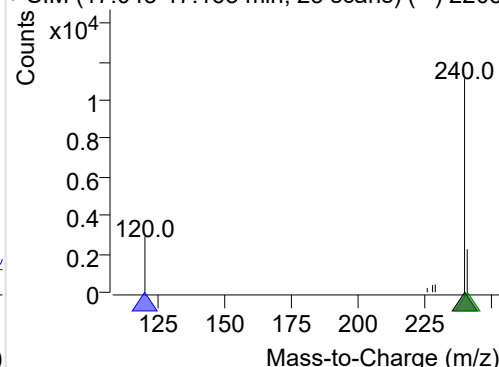
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-043.D

240.0, 120.0, 241.0

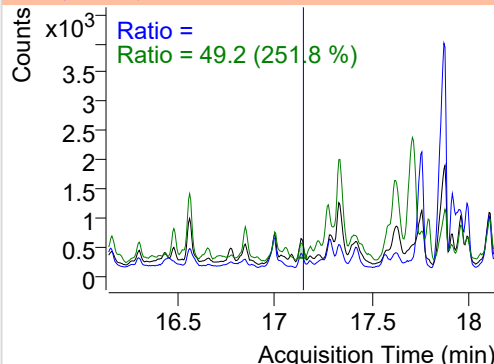
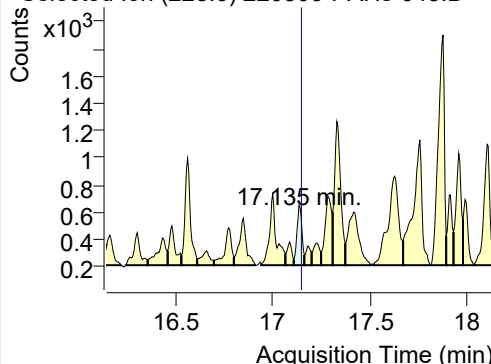


+ SIM (17.043-17.163 min, 23 scans) (\*\*) 2205

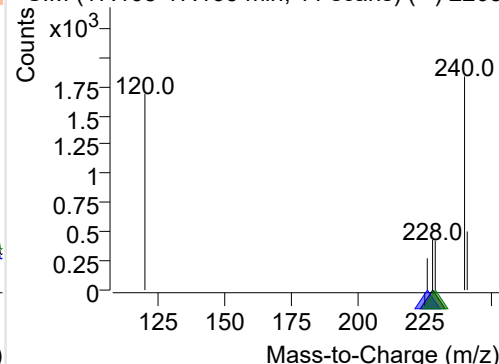
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-043.D

228.0, 226.0, 229.0

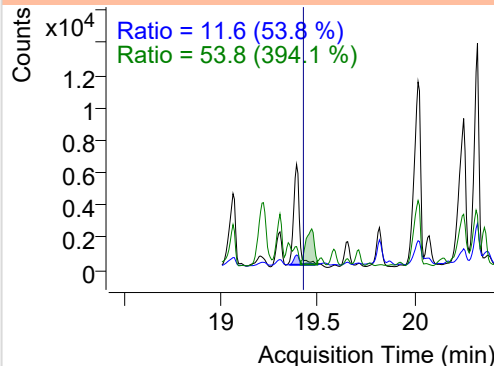
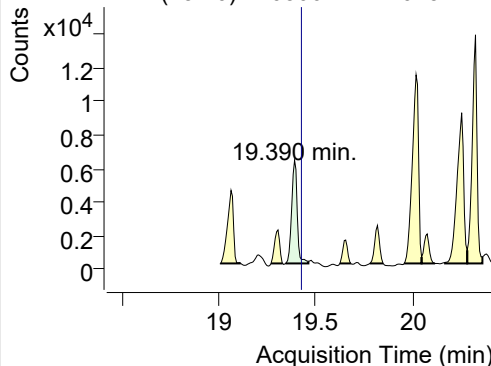


+ SIM (17.108-17.163 min, 11 scans) (\*\*) 2205

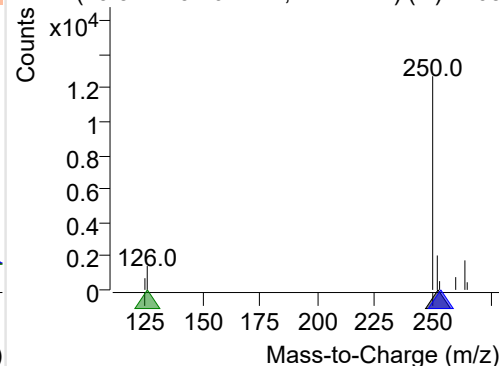
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-043.D

252.0, 253.0, 126.0



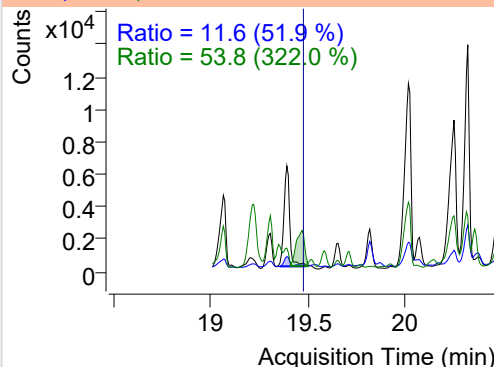
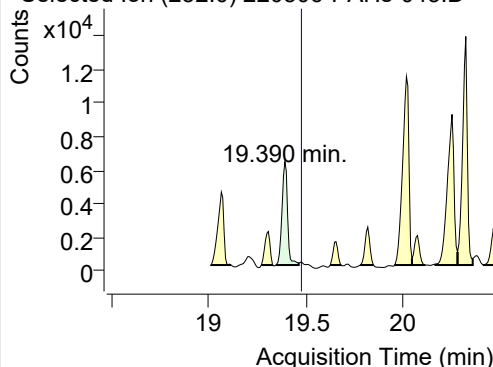
+ SIM (19.344-19.461 min, 17 scans) (\*\*) 2205



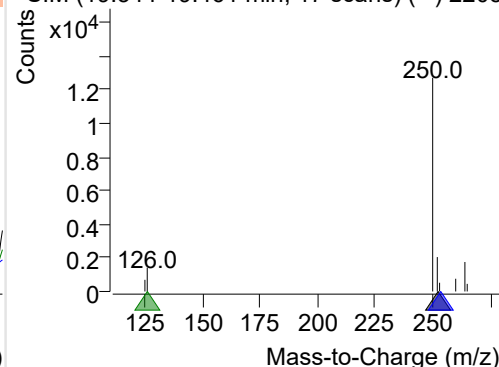
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-043.D

252.0, 253.0, 126.0

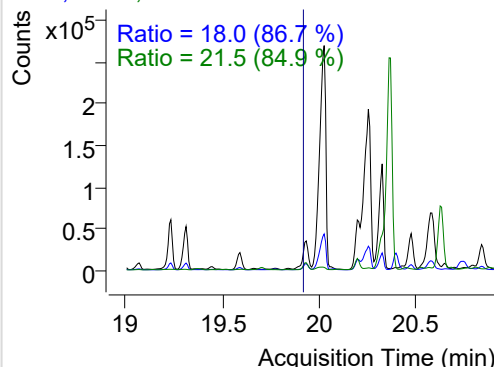
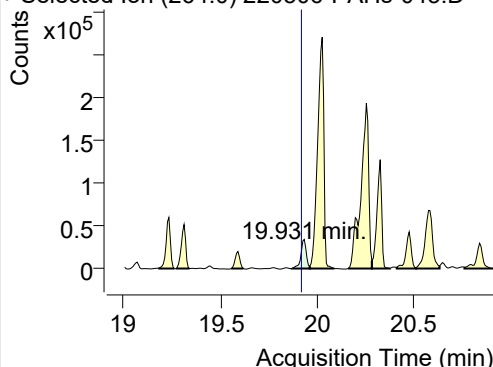


+ SIM (19.344-19.461 min, 17 scans) (\*\*) 2205

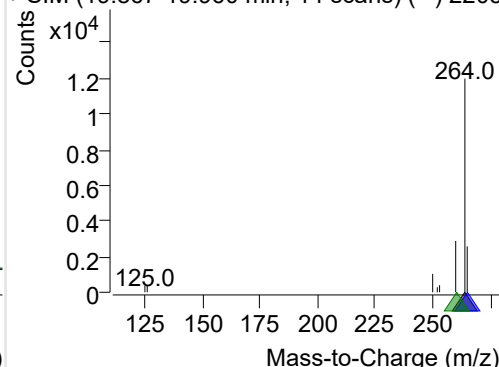
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-043.D

264.0, 265.0, 260.0

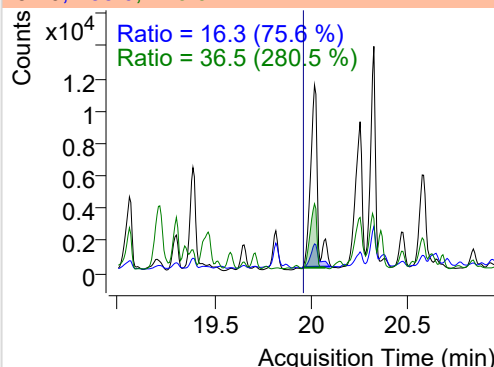
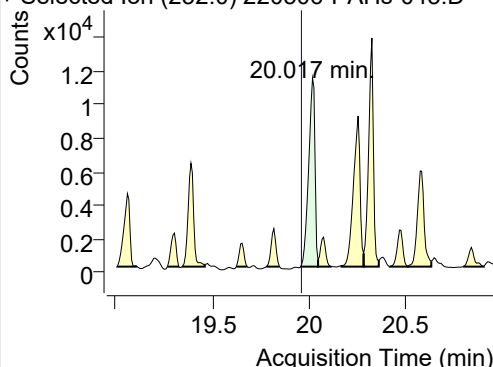


+ SIM (19.867-19.960 min, 14 scans) (\*\*) 2205

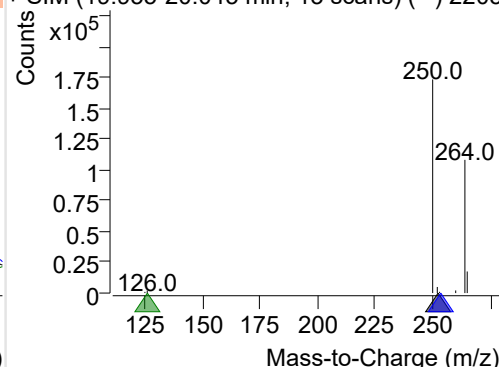
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-043.D

252.0, 253.0, 126.0

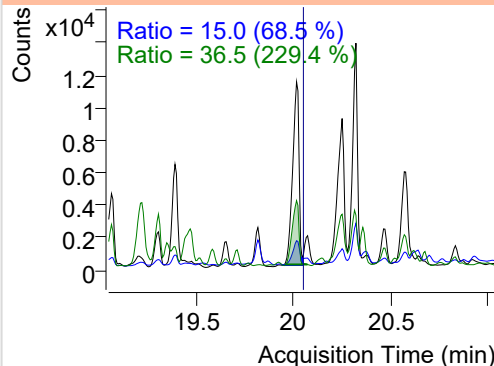
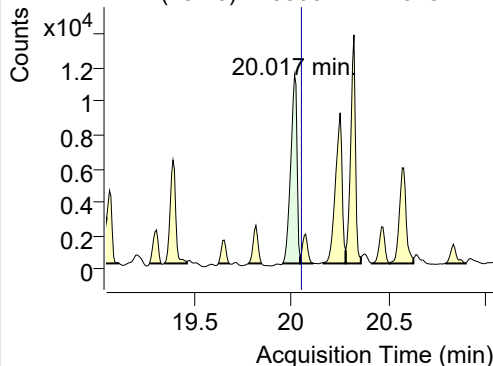


+ SIM (19.955-20.045 min, 13 scans) (\*\*) 2205

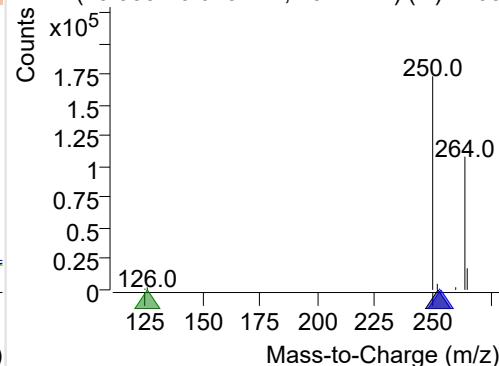
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-043.D

252.0, 253.0, 126.0

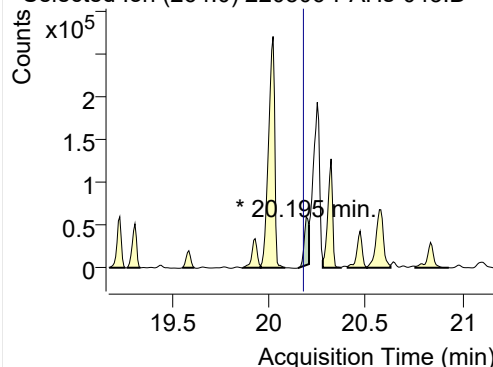


+ SIM (19.955-20.045 min, 13 scans) (\*\*) 2205

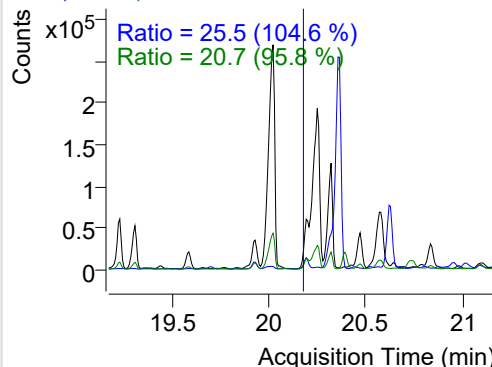


## IS-D12-Perylene

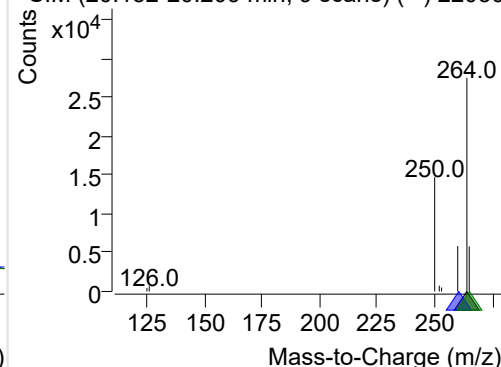
+ Selected Ion (264.0) 220506-PAHs-043.D



264.0, 260.0, 265.0

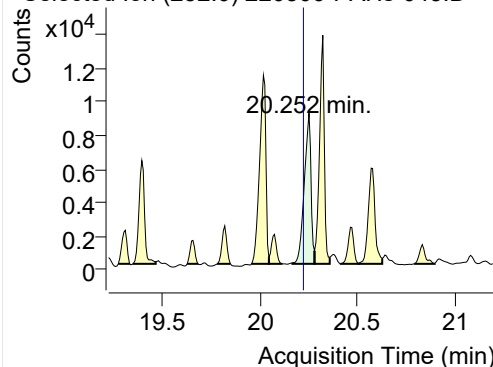


+ SIM (20.152-20.209 min, 9 scans) (\*\*) 22050

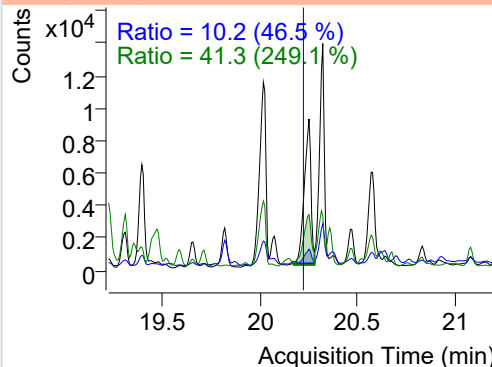


## Perylene

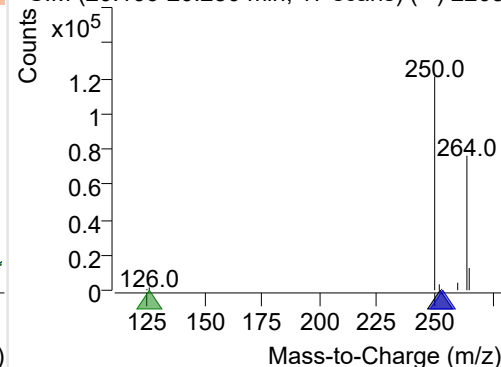
+ Selected Ion (252.0) 220506-PAHs-043.D



252.0, 253.0, 126.0

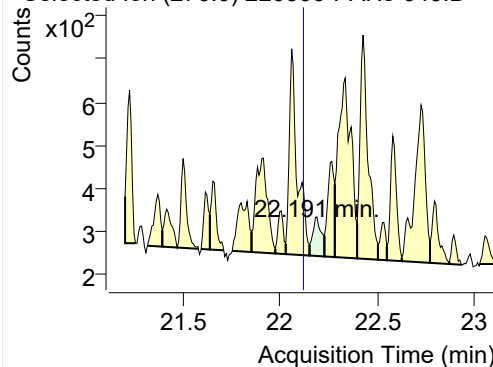


+ SIM (20.166-20.280 min, 17 scans) (\*\*) 2205

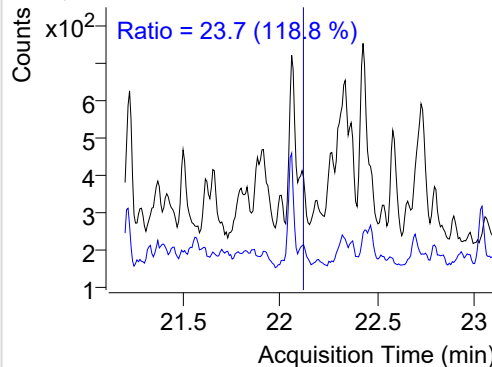


## Indeno(1,2,3-c,d)pyrene

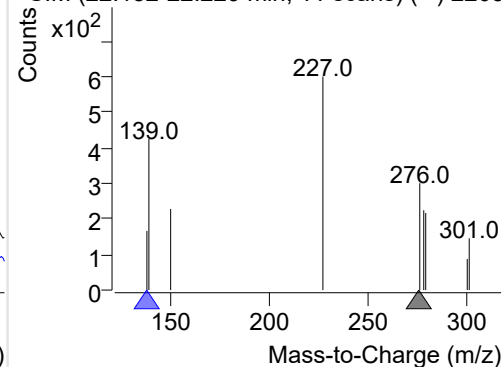
+ Selected Ion (276.0) 220506-PAHs-043.D



276.0, 138.0

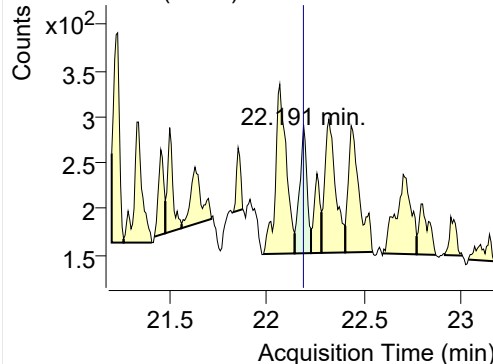


+ SIM (22.152-22.229 min, 11 scans) (\*\*) 2205

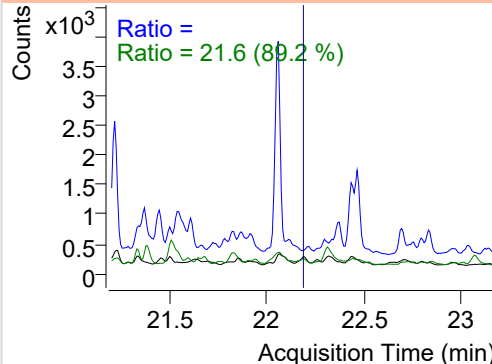


## Dibenz(a,h)anthracene

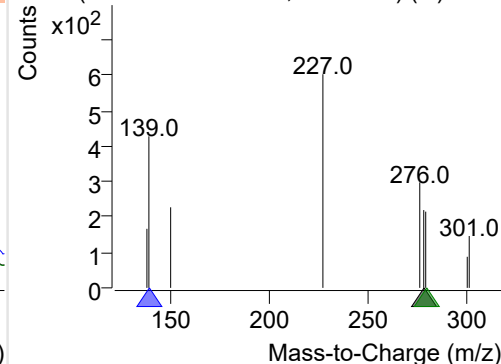
+ Selected Ion (278.0) 220506-PAHs-043.D



278.0, 139.0, 279.0



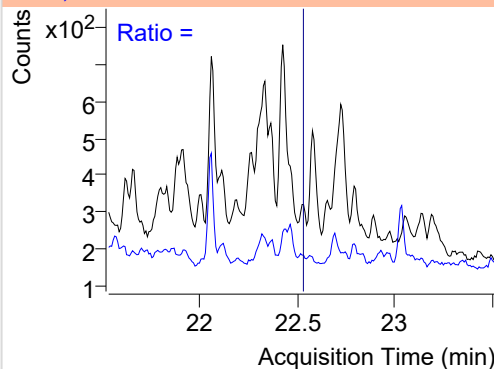
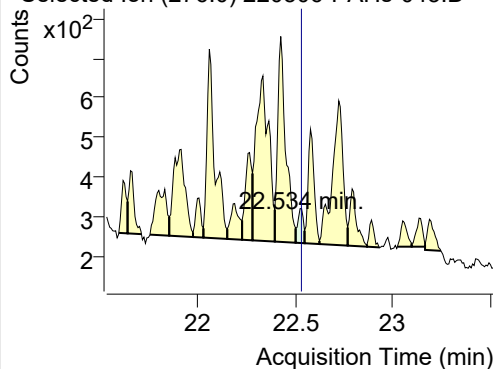
+ SIM (22.145-22.229 min, 12 scans) (\*\*) 2205



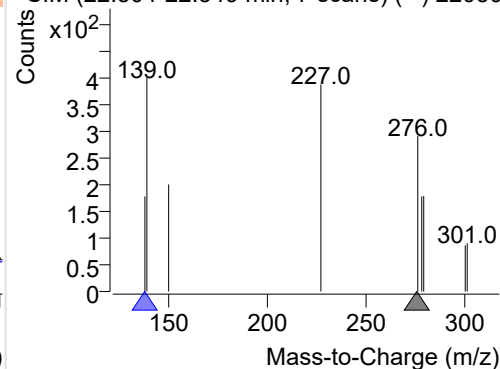
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-043.D

276.0, 138.0

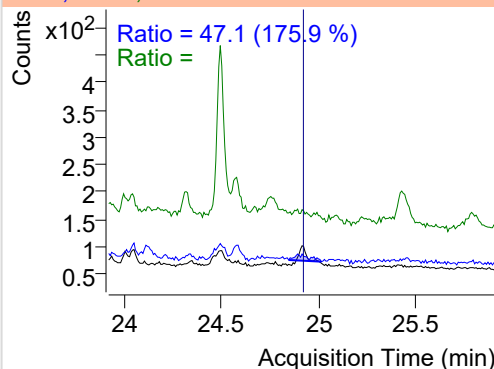
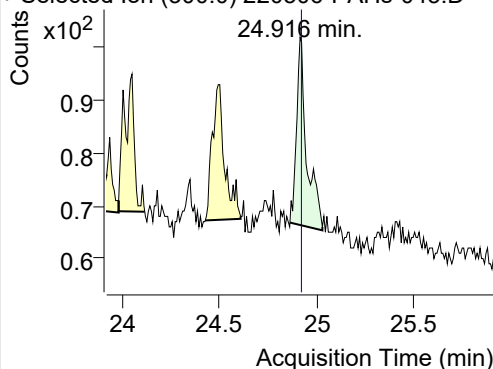


+ SIM (22.504-22.549 min, 7 scans) (\*\*) 22050

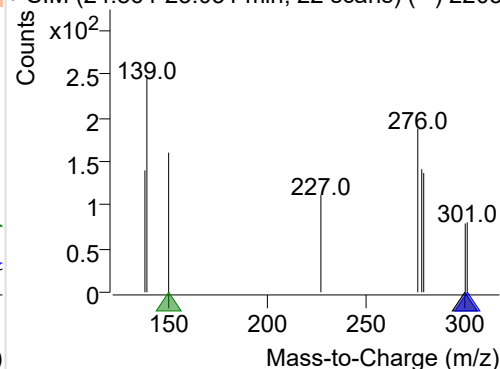
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-043.D

300.0, 301.0, 150.0



+ SIM (24.864-25.031 min, 22 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

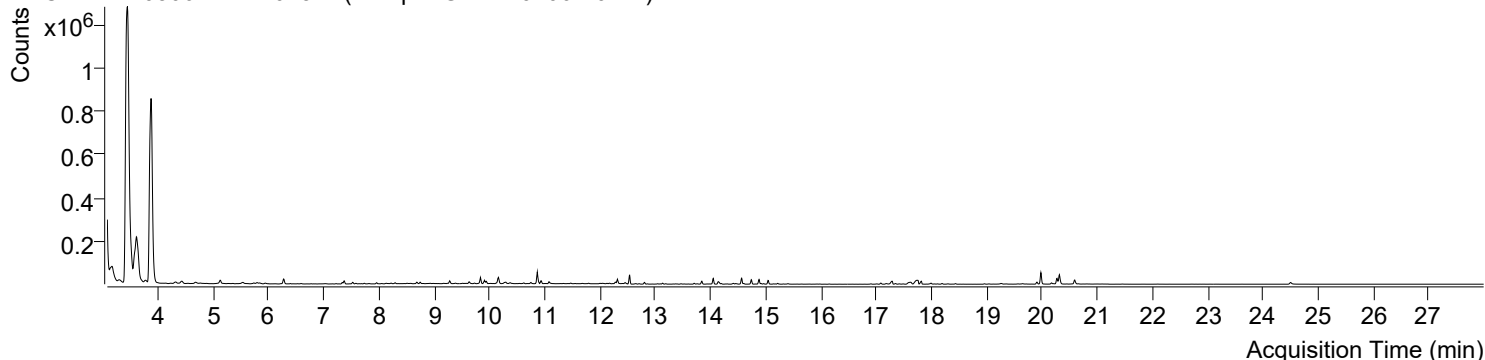


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 9:33:32	Data File	220506-PAHs-045.D
Type	Sample	Name	Sample-Gas-220406-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

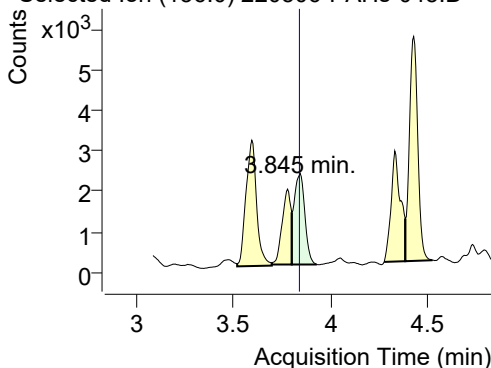
+ TIC SIM 220506-PAHs-045.D (Sample-Gas-220406-10DIL)



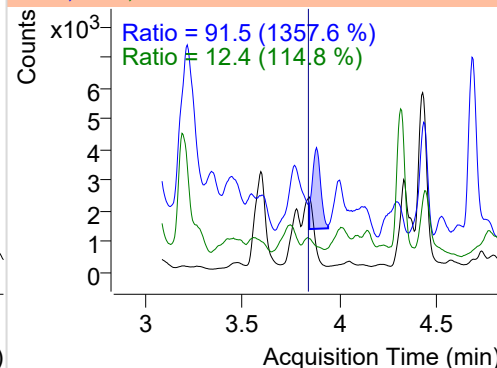
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.845	136.0	8687	2259.50	ND ng/ml	12.4
Naphthalene	3.877	128.0	2485626	684229.29	ND ng/ml	13.4
Acenaphthylene	7.372	152.0	747	288.94	ND ng/ml	340.3
IS-D10-Acenaphthene	7.526	164.0	4826	3171.81	ND ng/ml	110.2
Acenaphthene	7.591	154.0	1251	739.57	ND ng/ml	118.2
LSS-D10-Fluorene	8.684	176.0	4620	2860.90	ND ng/ml	97.0
Fluorene	8.747	166.0	5078	3321.56	ND ng/ml	89.1
IS-D10-Phenanthrene	10.889	188.0	8890	6020.65	ND ng/ml	14.2
Phenanthrene	10.942	178.0	14646	8639.51	ND ng/ml	18.9
Anthracene	11.078	178.0	3976	2373.51	ND ng/ml	27.8
Fluoranthene	13.704	202.0	4174	2745.83	ND ng/ml	16.7
LSS-D10-Pyrene	14.159	212.0	6963	4492.20	ND ng/ml	217.7
Pyrene	14.197	202.0	3155	2083.83	ND ng/ml	29.5
Benz(a)anthracene	17.130	228.0	104	61.25	ND ng/ml	
IS-D12-Chrysene	17.087	240.0	6795	3829.44	ND ng/ml	18.7
Chrysene	17.130	228.0	104	61.25	ND ng/ml	
Benzo(b)fluoranthene	19.981	252.0	70912	42460.86	ND ng/ml	18.9
Benzo(k)fluoranthene	19.981	252.0	70912	42460.86	ND ng/ml	18.9
SS-D12-Benzo(e)pyrene	19.910	264.0	10761	6314.63	ND ng/ml	25.7
Benzo(e)pyrene	19.981	252.0	70912	42460.86	ND ng/ml	18.9
Benzo(a)pyrene	19.981	252.0	70912	42460.86	ND ng/ml	18.9
IS-D12-Perylene	20.173	264.0	7649	3728.63	ND ng/ml	19.9
Perylene	20.316	252.0	56491	32057.77	ND ng/ml	19.1
Indeno(1,2,3-c,d)pyrene	22.099	276.0	116	42.20	ND ng/ml	32.1
Dibenz(a,h)anthracene	22.168	278.0	205	49.71	ND ng/ml	
Benzo(g,h,i)perylene	22.404	276.0	11	9.20	ND ng/ml	
Coronene	24.924	300.0	35	11.23	ND ng/ml	

## IS-D8-Naphthalene

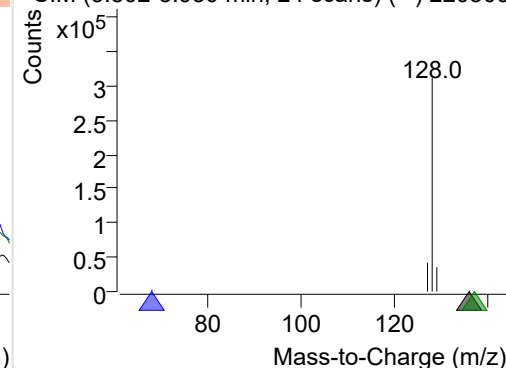
+ Selected Ion (136.0) 220506-PAHs-045.D



136.0, 68.0, 137.0

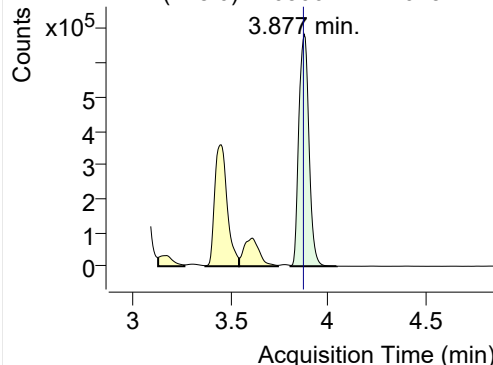


+ SIM (3.802-3.930 min, 24 scans) (\*\*) 220506

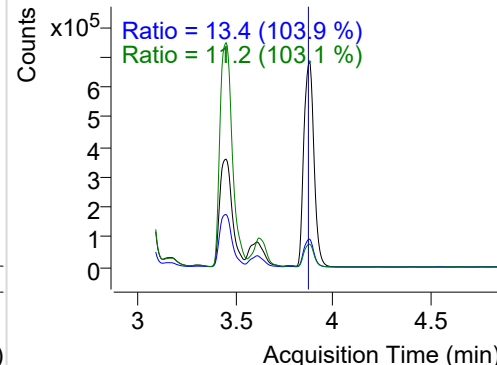


**Naphthalene**

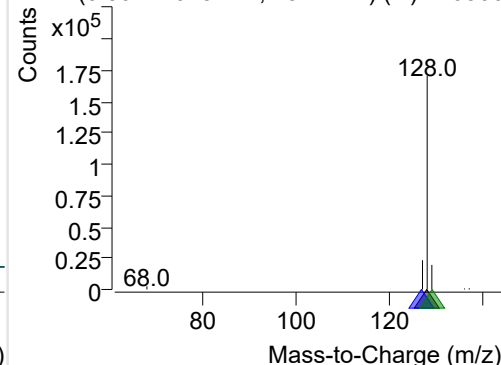
+ Selected Ion (128.0) 220506-PAHs-045.D



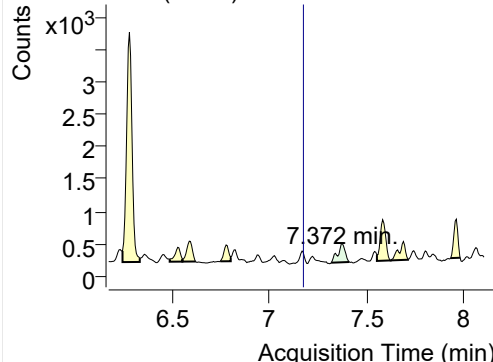
128.0, 127.0, 129.0



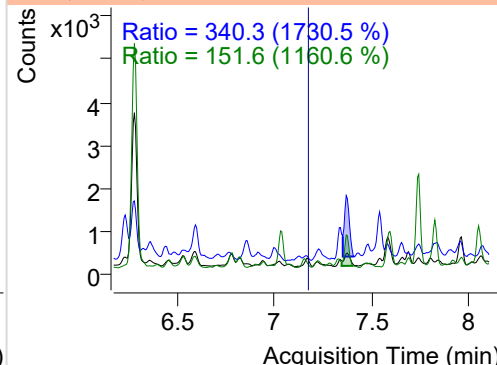
+ SIM (3.807-4.045 min, 45 scans) (\*\*) 220506

**Acenaphthylene**

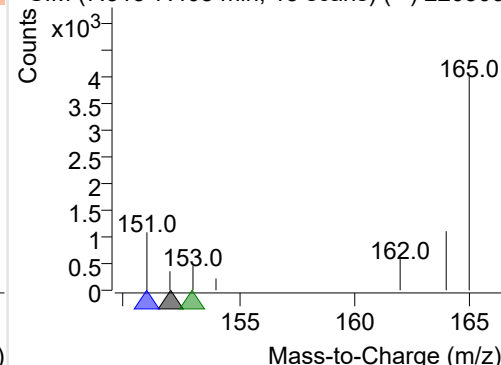
+ Selected Ion (152.0) 220506-PAHs-045.D



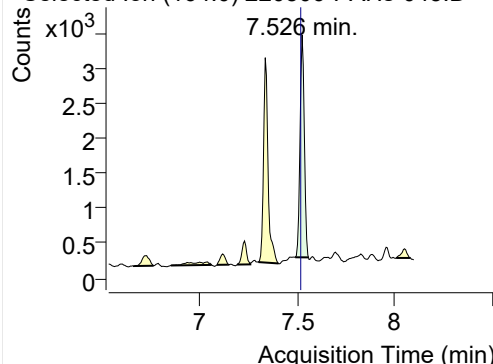
152.0, 151.0, 153.0



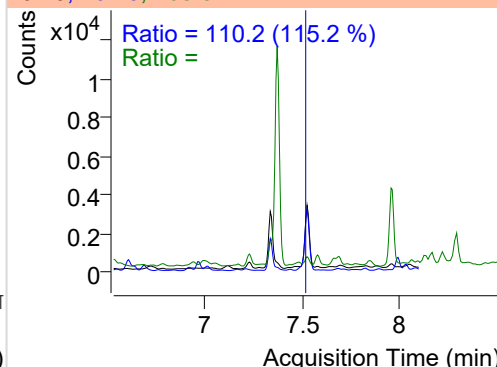
+ SIM (7.315-7.408 min, 15 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

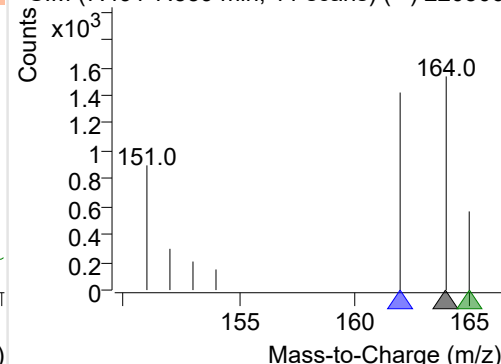
+ Selected Ion (164.0) 220506-PAHs-045.D



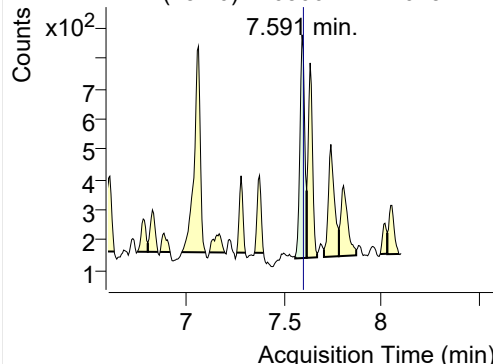
164.0, 162.0, 165.0



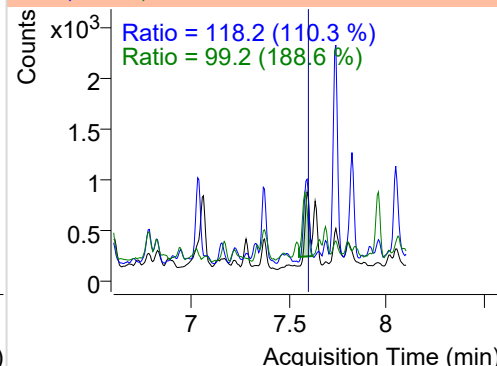
+ SIM (7.491-7.559 min, 11 scans) (\*\*) 220506

**Acenaphthene**

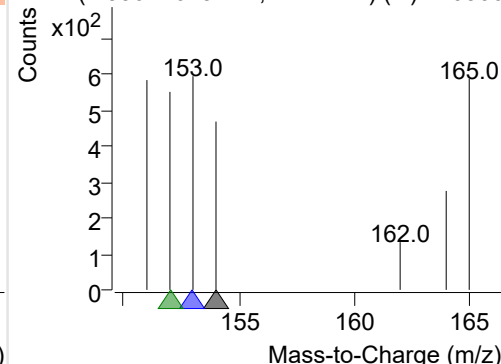
+ Selected Ion (154.0) 220506-PAHs-045.D



154.0, 153.0, 152.0

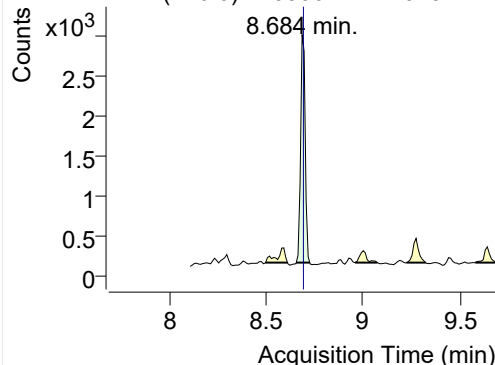


+ SIM (7.556-7.615 min, 11 scans) (\*\*) 220506

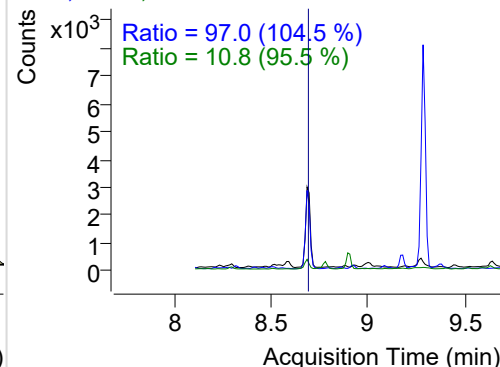


## LSS-D10-Fluorene

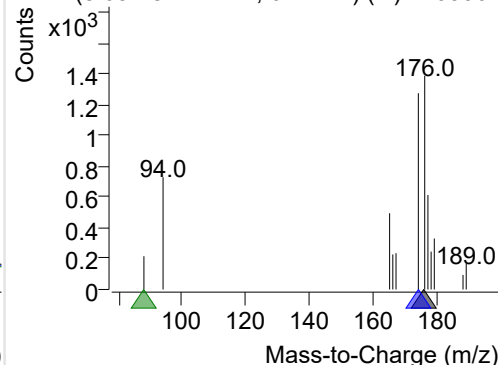
+ Selected Ion (176.0) 220506-PAHs-045.D



176.0, 174.0, 88.0

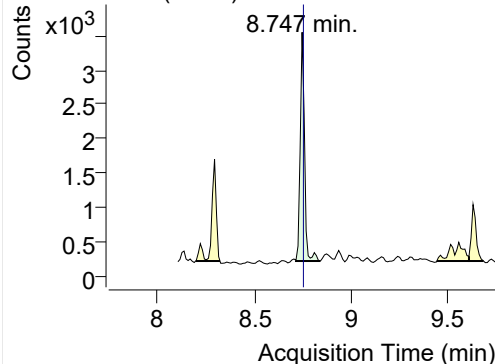


+ SIM (8.654-8.724 min, 6 scans) (\*\*) 220506-I

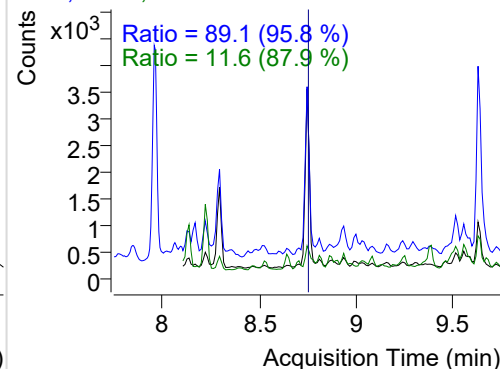


## Fluorene

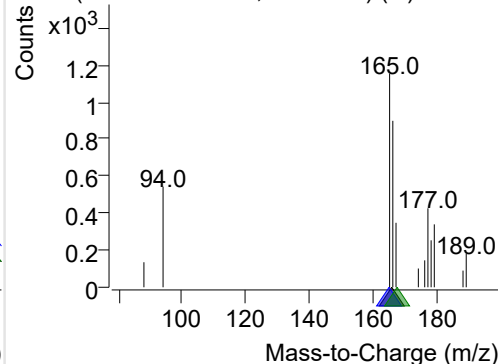
+ Selected Ion (166.0) 220506-PAHs-045.D



166.0, 165.0, 167.0

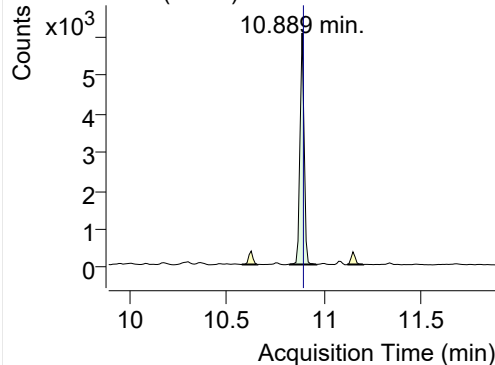


+ SIM (8.715-8.840 min, 12 scans) (\*\*) 220506

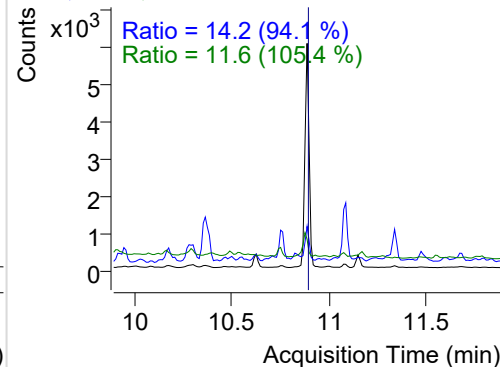


## IS-D10-Phenanthrene

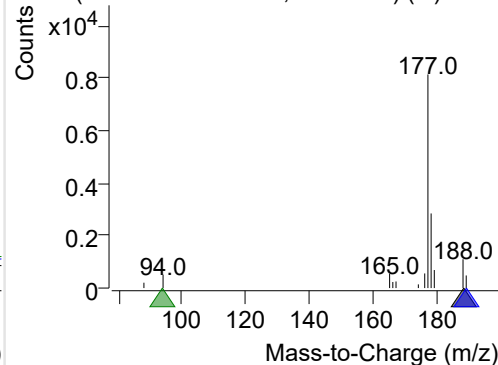
+ Selected Ion (188.0) 220506-PAHs-045.D



188.0, 189.0, 94.0

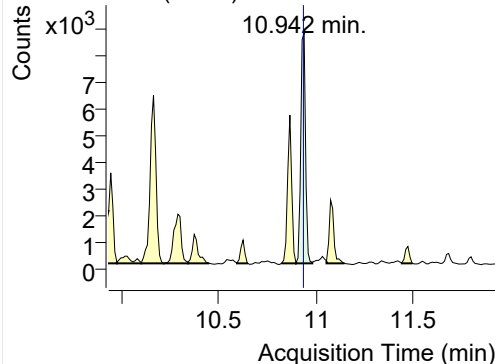


+ SIM (10.826-10.963 min, 14 scans) (\*\*) 2205

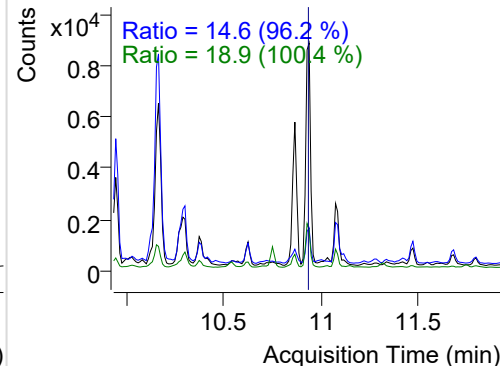


## Phenanthrene

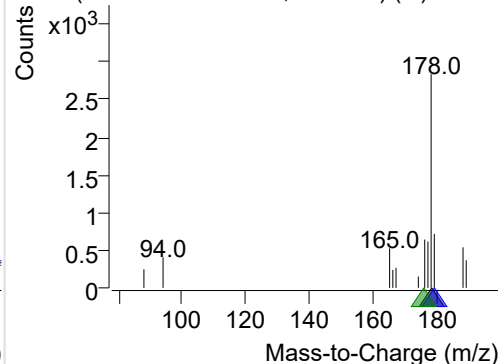
+ Selected Ion (178.0) 220506-PAHs-045.D



178.0, 179.0, 176.0

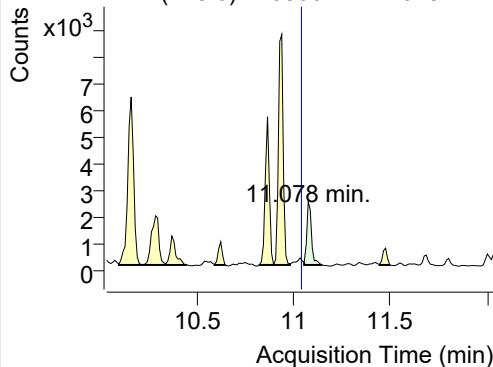


+ SIM (10.900-10.984 min, 9 scans) (\*\*) 22050

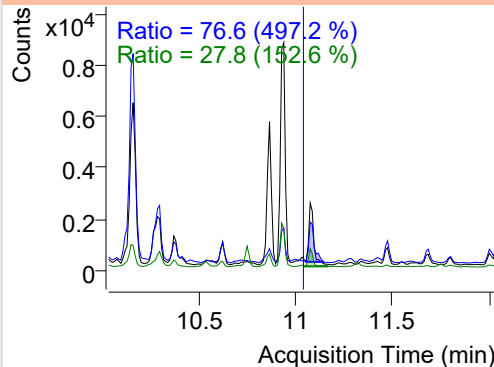


**Anthracene**

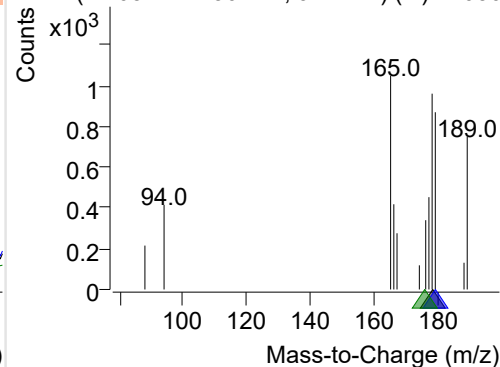
+ Selected Ion (178.0) 220506-PAHs-045.D



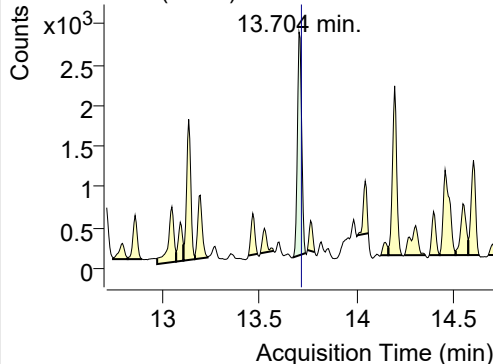
178.0, 179.0, 176.0



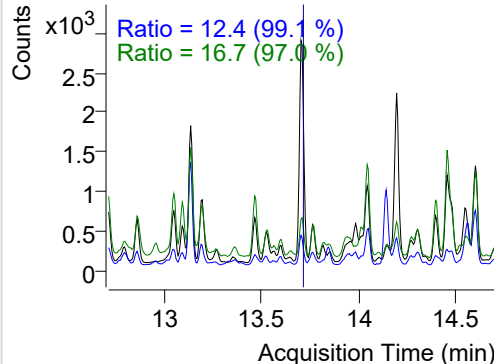
+ SIM (11.057-11.150 min, 9 scans) (\*\*) 22050

**Fluoranthene**

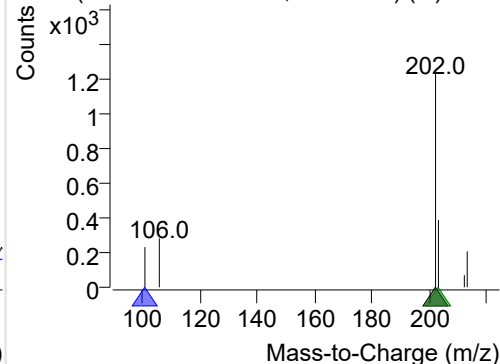
+ Selected Ion (202.0) 220506-PAHs-045.D



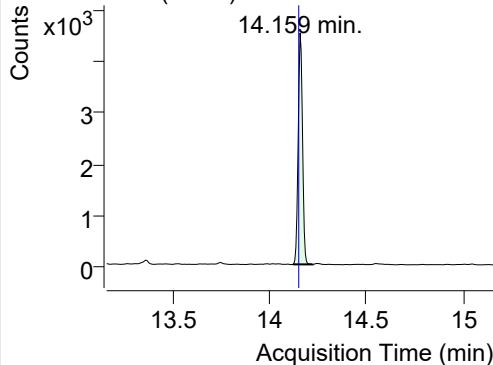
202.0, 101.0, 203.0



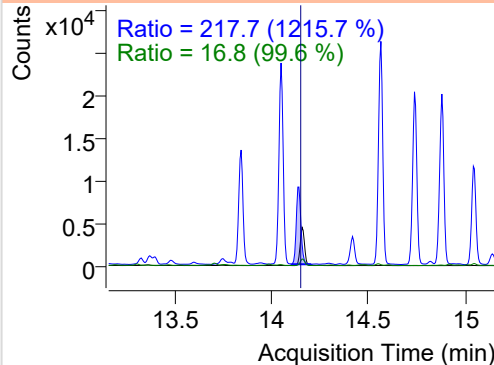
+ SIM (13.673-13.738 min, 12 scans) (\*\*) 2205

**LSS-D10-Pyrene**

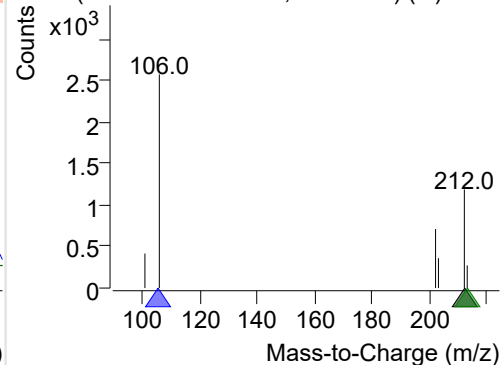
+ Selected Ion (212.0) 220506-PAHs-045.D



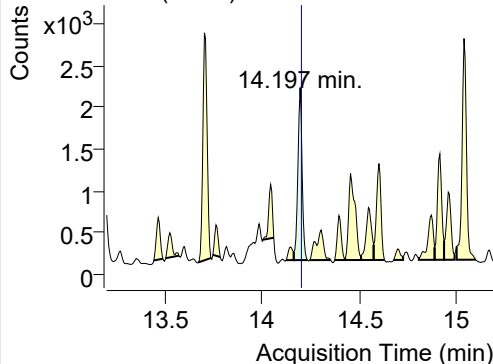
212.0, 106.0, 213.0



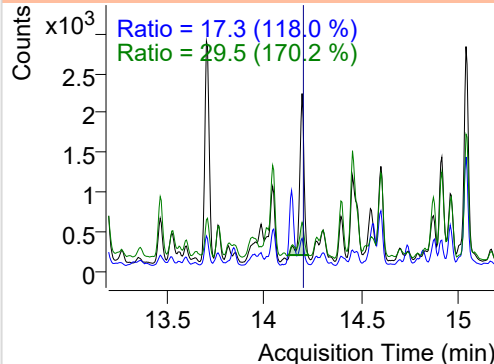
+ SIM (14.122-14.224 min, 19 scans) (\*\*) 2205

**Pyrene**

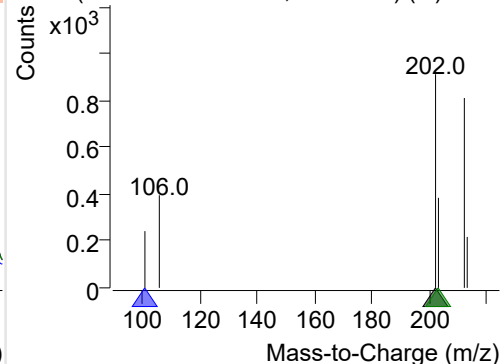
+ Selected Ion (202.0) 220506-PAHs-045.D



202.0, 101.0, 203.0



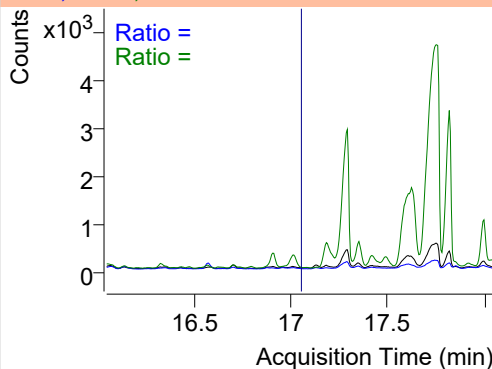
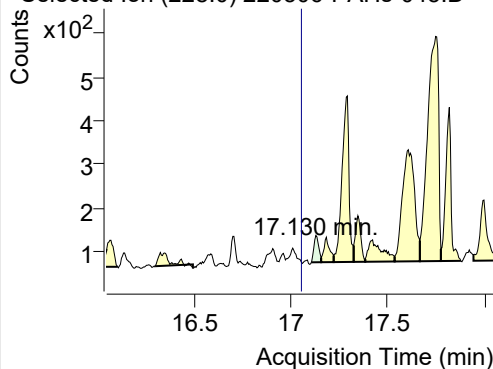
+ SIM (14.165-14.235 min, 13 scans) (\*\*) 2205



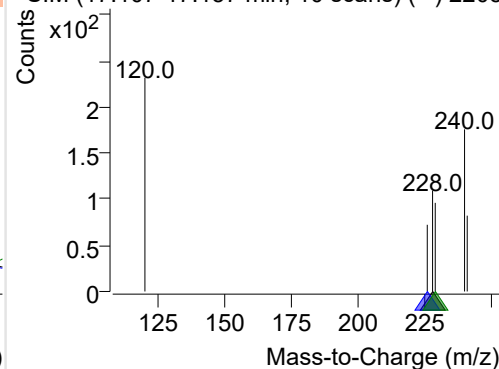
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-045.D

228.0, 226.0, 229.0

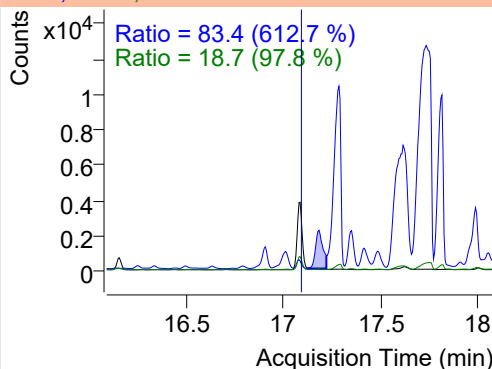
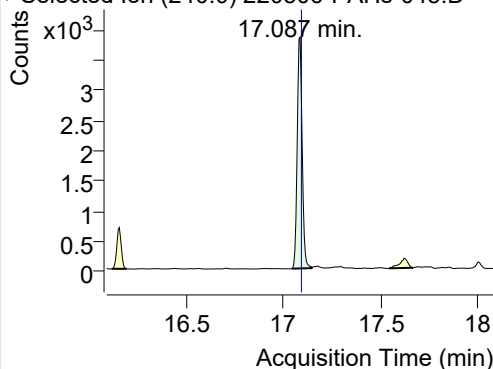


+ SIM (17.107-17.157 min, 10 scans) (\*\*) 2205

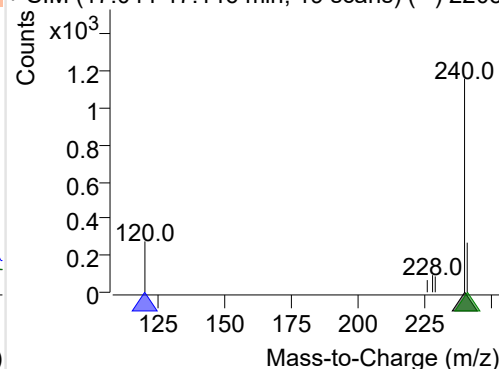
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-045.D

240.0, 120.0, 241.0

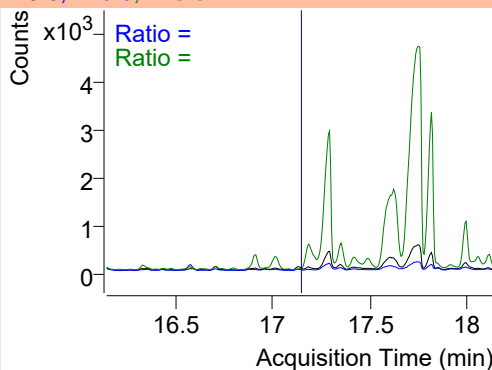
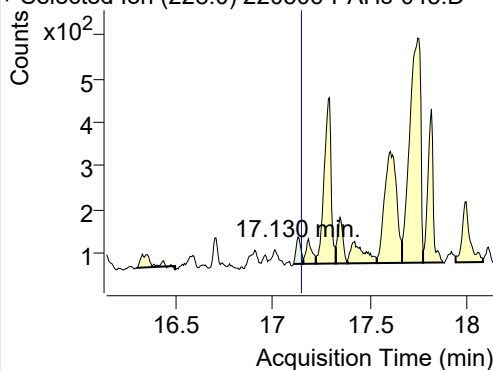


+ SIM (17.044-17.146 min, 19 scans) (\*\*) 2205

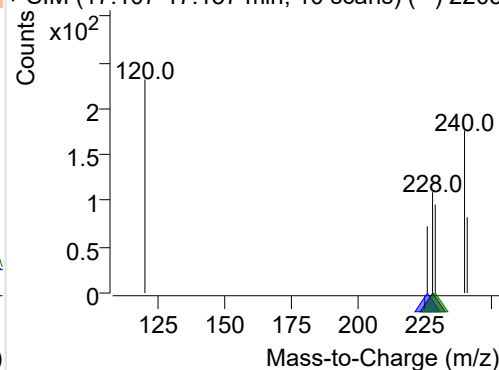
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-045.D

228.0, 226.0, 229.0

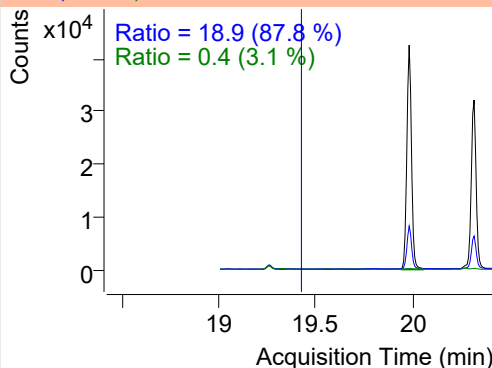
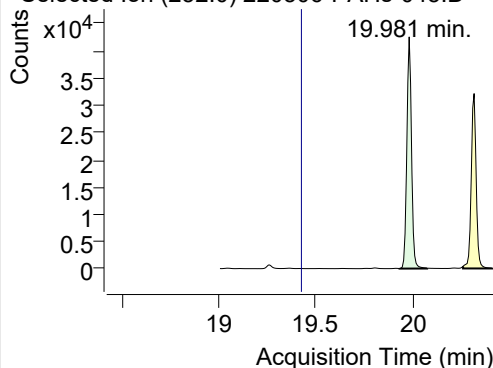


+ SIM (17.107-17.157 min, 10 scans) (\*\*) 2205

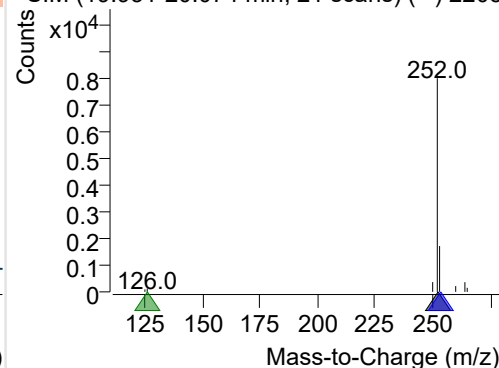
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-045.D

252.0, 253.0, 126.0



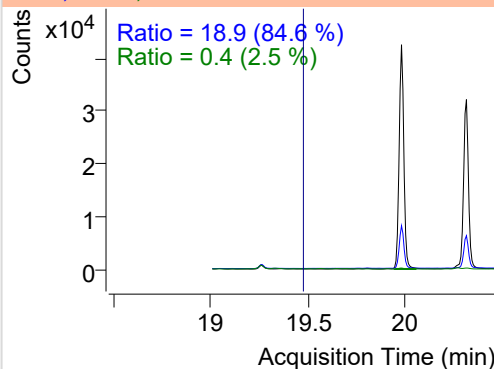
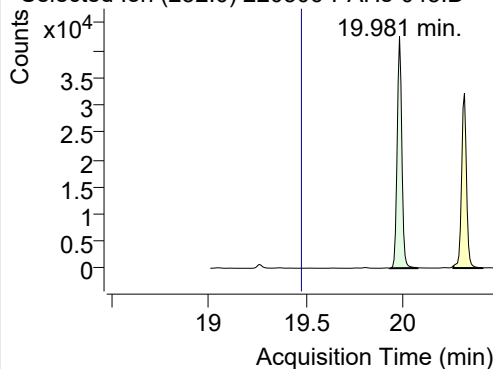
+ SIM (19.931-20.074 min, 21 scans) (\*\*) 2205



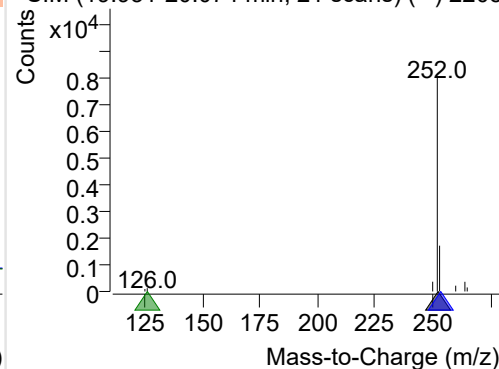
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-045.D

252.0, 253.0, 126.0

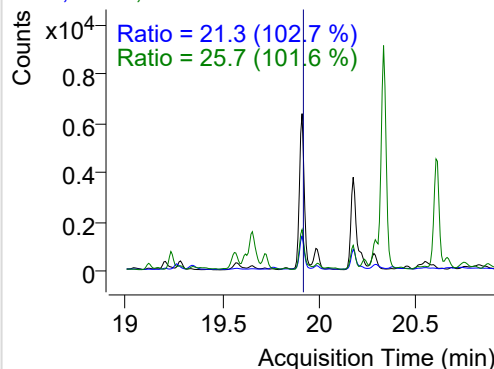
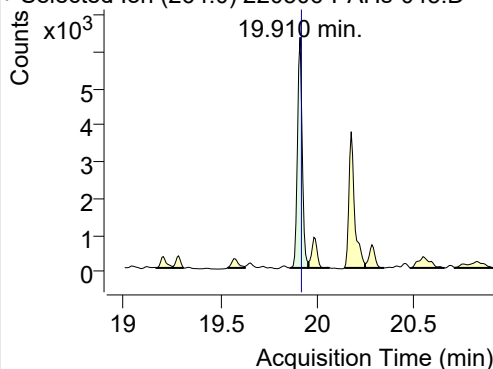


+ SIM (19.931-20.074 min, 21 scans) (\*\*) 2205

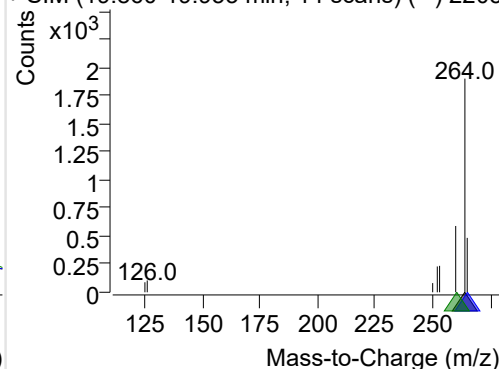
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-045.D

264.0, 265.0, 260.0

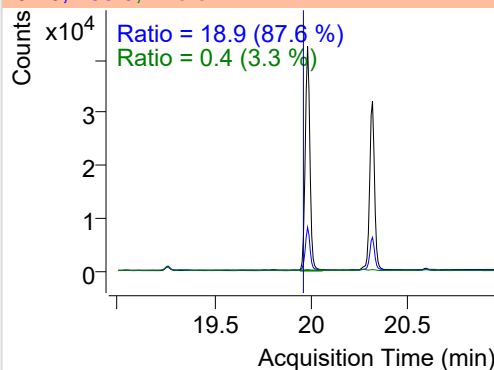
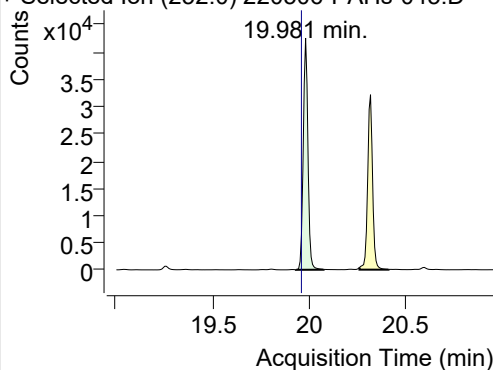


+ SIM (19.860-19.953 min, 14 scans) (\*\*) 2205

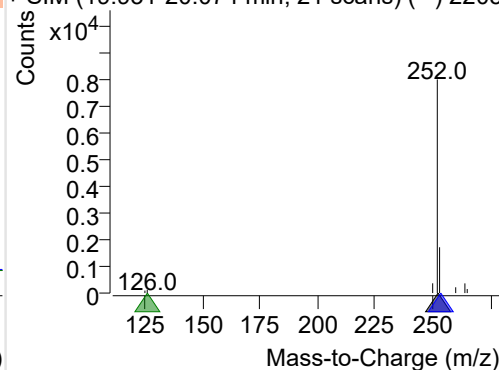
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-045.D

252.0, 253.0, 126.0

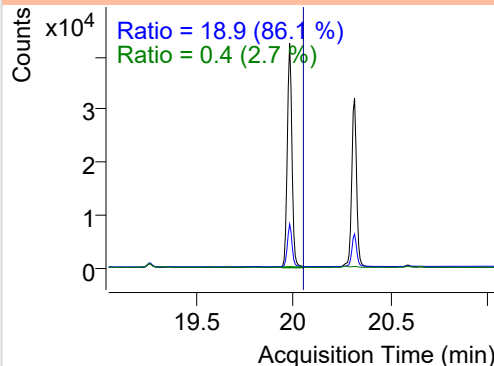
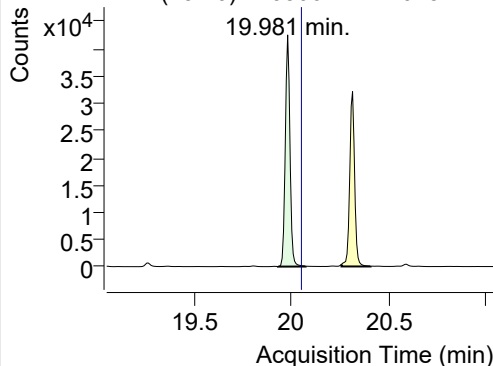


+ SIM (19.931-20.074 min, 21 scans) (\*\*) 2205

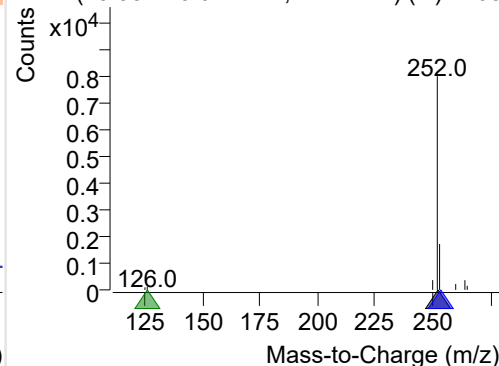
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-045.D

252.0, 253.0, 126.0

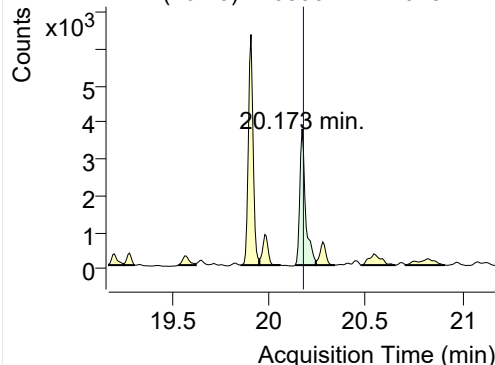


+ SIM (19.931-20.074 min, 21 scans) (\*\*) 2205

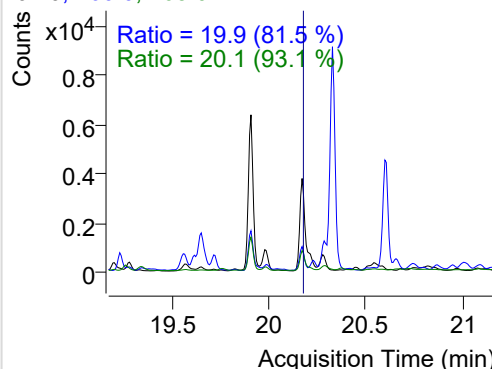


## IS-D12-Perylene

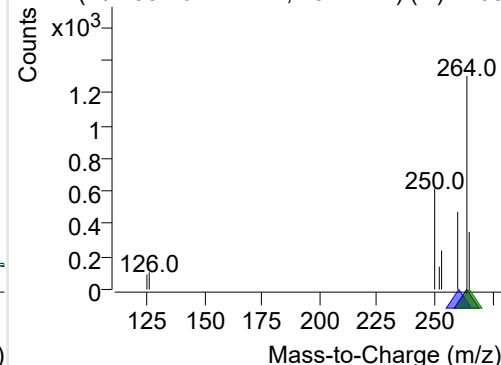
+ Selected Ion (264.0) 220506-PAHs-045.D



264.0, 260.0, 265.0

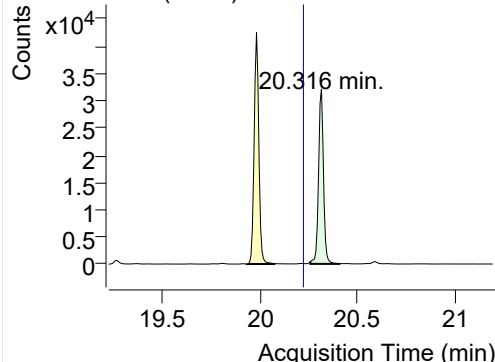


+ SIM (20.138-20.244 min, 15 scans) (\*\*) 2205

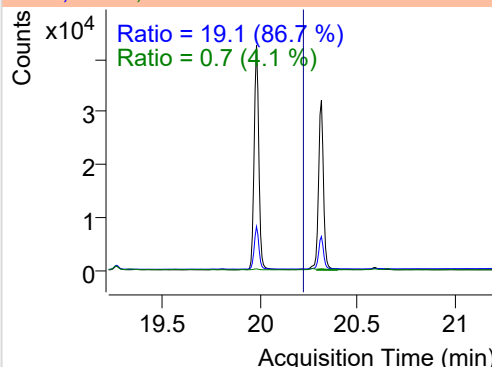


## Perylene

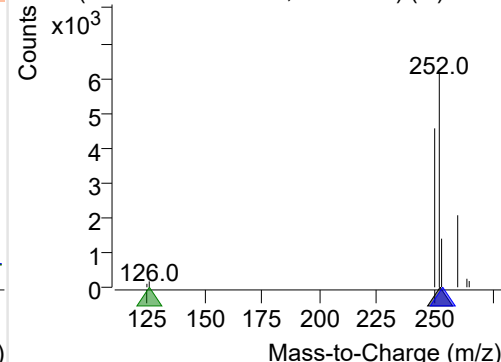
+ Selected Ion (252.0) 220506-PAHs-045.D



252.0, 253.0, 126.0

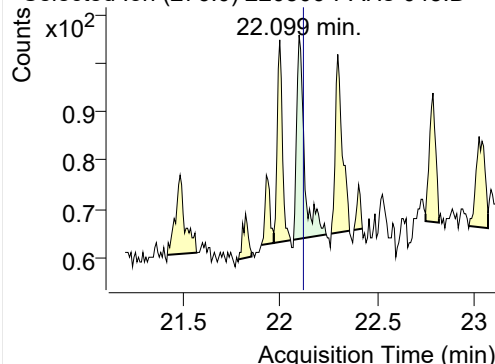


+ SIM (20.259-20.408 min, 22 scans) (\*\*) 2205

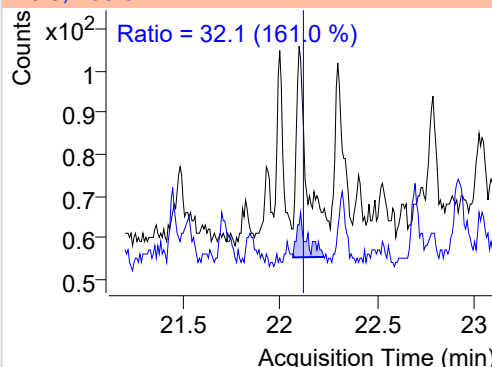


## Indeno(1,2,3-c,d)pyrene

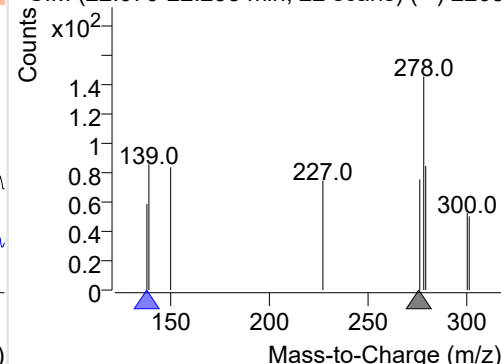
+ Selected Ion (276.0) 220506-PAHs-045.D



276.0, 138.0

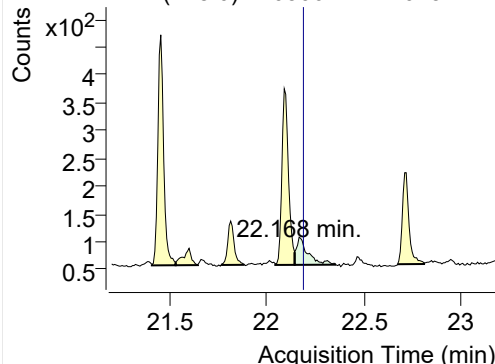


+ SIM (22.070-22.238 min, 22 scans) (\*\*) 2205

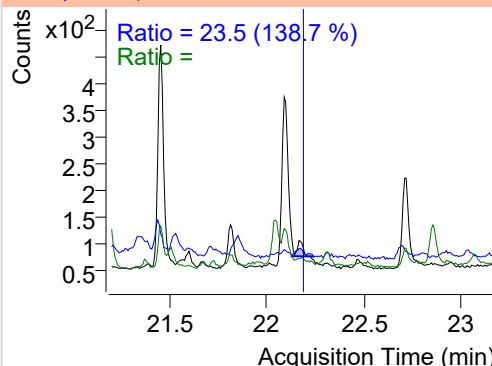


## Dibenz(a,h)anthracene

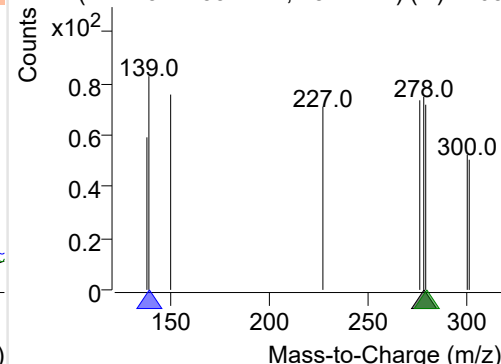
+ Selected Ion (278.0) 220506-PAHs-045.D



278.0, 139.0, 279.0



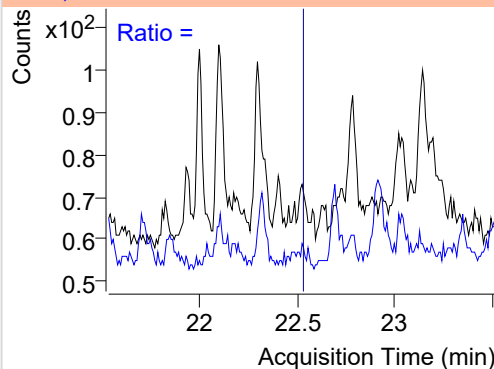
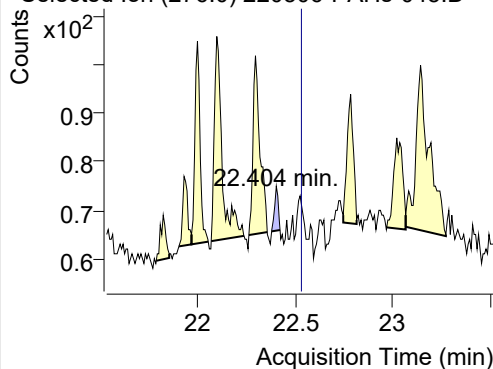
+ SIM (22.145-22.357 min, 28 scans) (\*\*) 2205



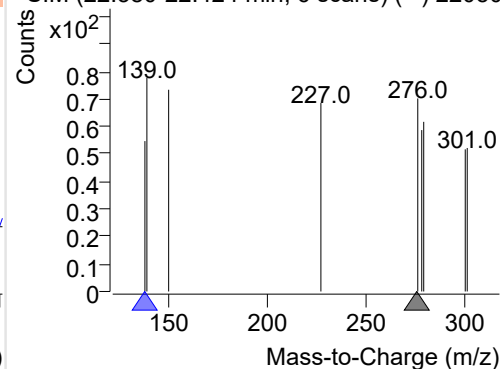
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-045.D

276.0, 138.0

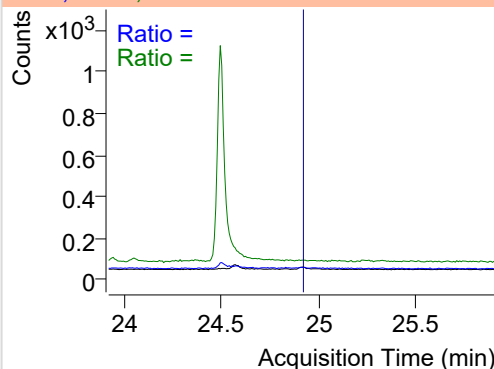
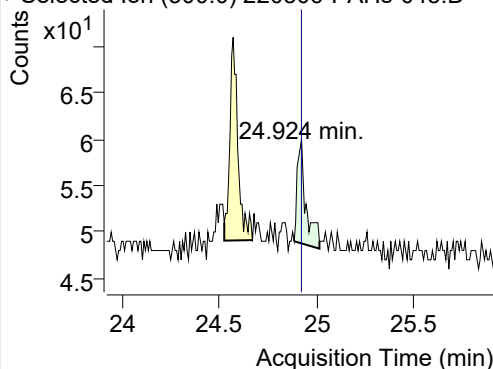


+ SIM (22.380-22.424 min, 6 scans) (\*\*) 22050

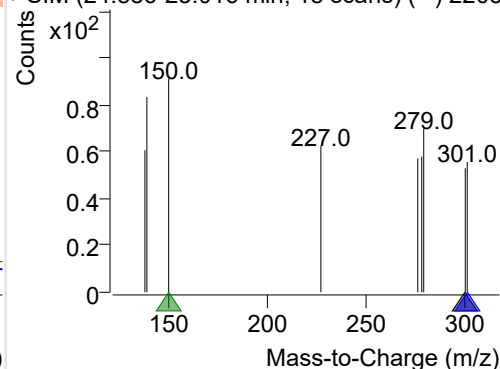
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-045.D

300.0, 301.0, 150.0



+ SIM (24.886-25.016 min, 18 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

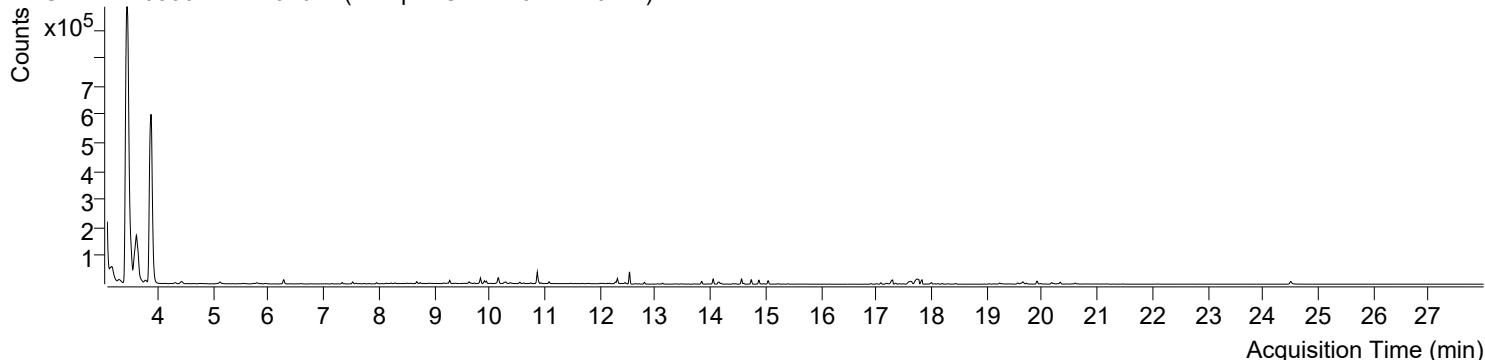


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 10:04:39	Data File	220506-PAHs-046.D
Type	Sample	Name	Sample-Gas-220411-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

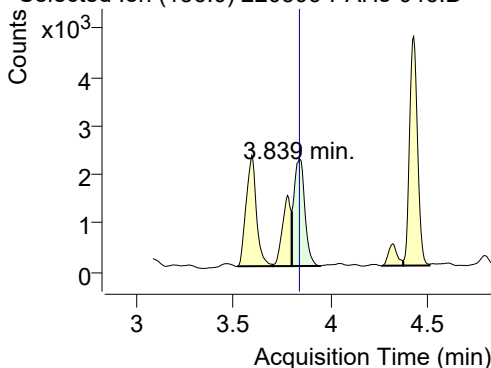
+ TIC SIM 220506-PAHs-046.D (Sample-Gas-220411-10DIL)



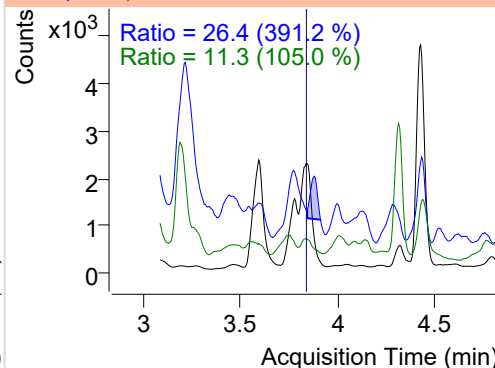
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.839	136.0	8527	2190.33	ND ng/ml	11.3
Naphthalene	3.877	128.0	1769027	479767.62	ND ng/ml	13.2
Acenaphthylene	7.165	152.0	380	251.41	ND ng/ml	44.8
IS-D10-Acenaphthene	7.526	164.0	4897	3100.52	ND ng/ml	101.4
Acenaphthene	7.591	154.0	1267	766.25	ND ng/ml	111.2
LSS-D10-Fluorene	8.684	176.0	4653	2931.30	ND ng/ml	96.7
Fluorene	8.747	166.0	2690	1783.45	ND ng/ml	100.9
IS-D10-Phenanthrene	10.889	188.0	8817	5984.80	ND ng/ml	13.5
Phenanthrene	10.931	178.0	2607	1582.24	ND ng/ml	20.0
Anthracene	11.078	178.0	2681	1674.24	ND ng/ml	27.3
Fluoranthene	13.710	202.0	1437	914.92	ND ng/ml	15.9
LSS-D10-Pyrene	14.159	212.0	7005	4446.47	ND ng/ml	138.6
Pyrene	14.197	202.0	4025	2526.55	ND ng/ml	24.3
Benz(a)anthracene	17.022	228.0	208	39.71	ND ng/ml	48.9
IS-D12-Chrysene	17.087	240.0	6616	3822.76	ND ng/ml	18.4
Chrysene	17.190	228.0	236	75.71	ND ng/ml	
Benzo(b)fluoranthene	19.426	252.0	195	63.19	ND ng/ml	
Benzo(k)fluoranthene	19.426	252.0	195	63.19	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.910	264.0	12177	6932.77	ND ng/ml	37.5
Benzo(e)pyrene	19.981	252.0	505	212.48	ND ng/ml	20.0
Benzo(a)pyrene	20.052	252.0	111	62.01	ND ng/ml	
IS-D12-Perylene	20.173	264.0	7331	3405.77	ND ng/ml	21.5
Perylene	20.216	252.0	223	88.92	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	22.114	276.0	119	38.80	ND ng/ml	35.0
Dibenz(a,h)anthracene	22.091	278.0	755	337.85	ND ng/ml	23.1
Benzo(g,h,i)perylene	22.526	276.0	164	69.19	ND ng/ml	23.7
Coronene	24.916	300.0	46	12.00	ND ng/ml	

## IS-D8-Naphthalene

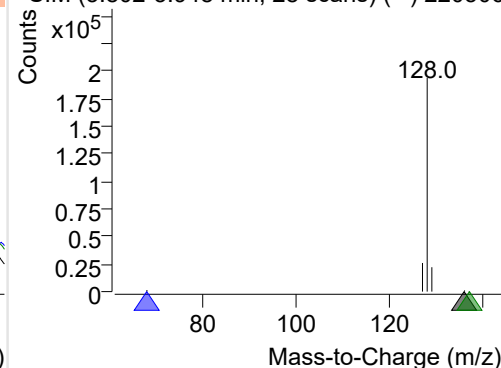
+ Selected Ion (136.0) 220506-PAHs-046.D



136.0, 68.0, 137.0

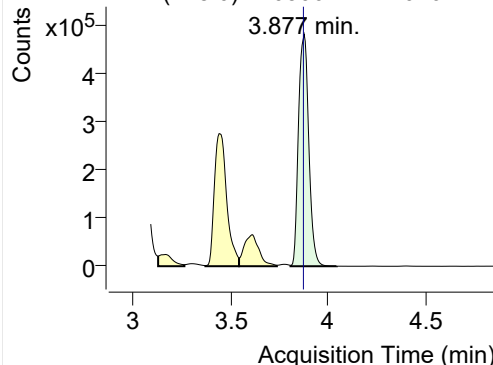


+ SIM (3.802-3.948 min, 28 scans) (\*\*) 220506

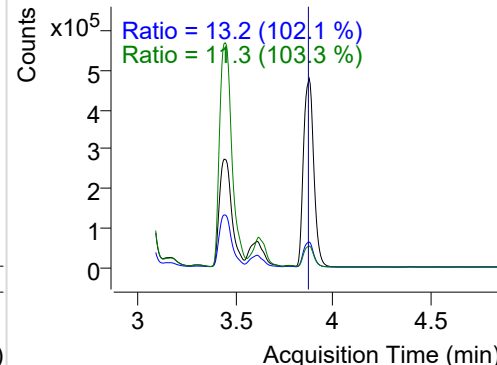


**Naphthalene**

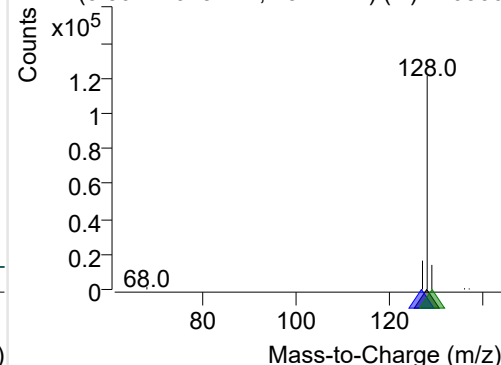
+ Selected Ion (128.0) 220506-PAHs-046.D



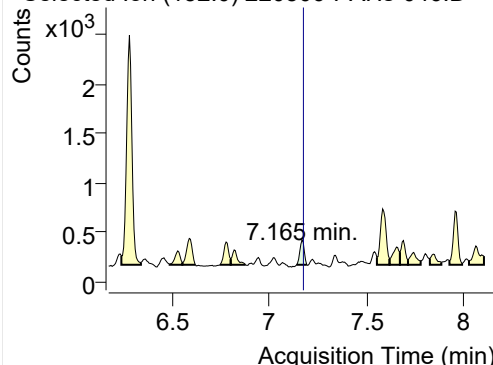
128.0, 127.0, 129.0



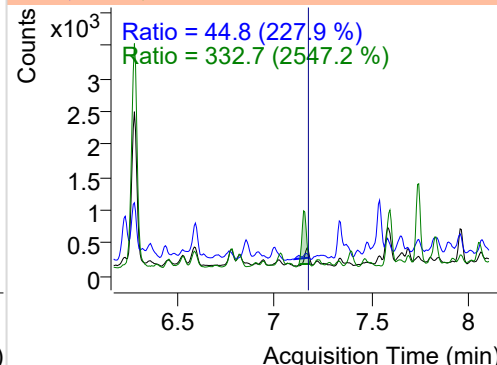
+ SIM (3.807-4.045 min, 45 scans) (\*\*) 220506

**Acenaphthylene**

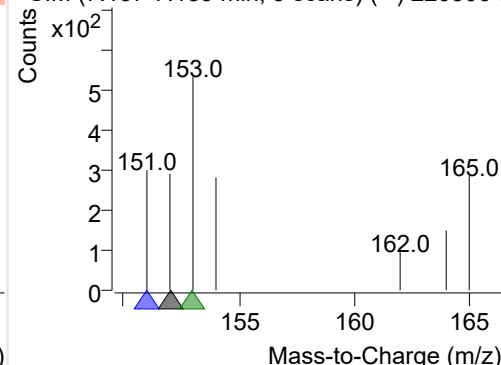
+ Selected Ion (152.0) 220506-PAHs-046.D



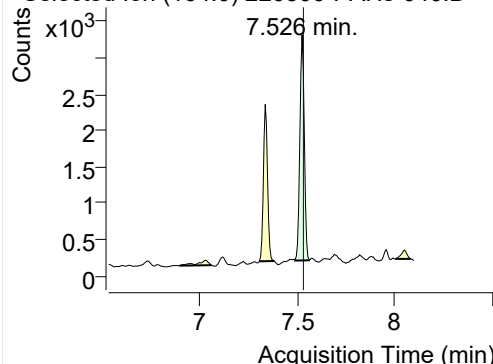
152.0, 151.0, 153.0



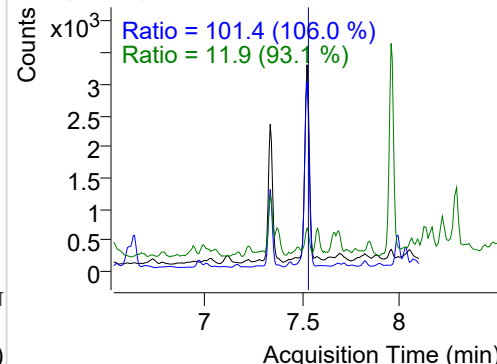
+ SIM (7.137-7.189 min, 9 scans) (\*\*) 220506-I

**IS-D10-Acenaphthene**

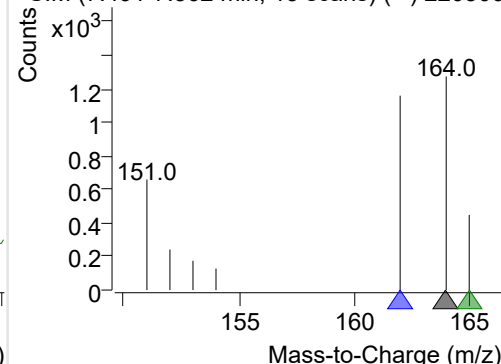
+ Selected Ion (164.0) 220506-PAHs-046.D



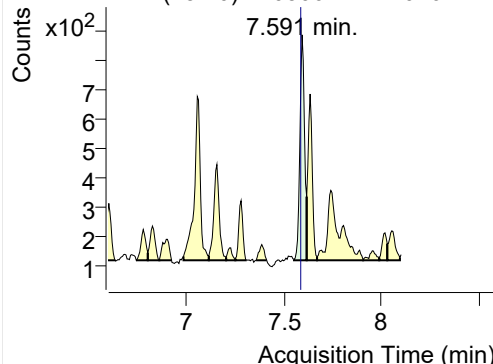
164.0, 162.0, 165.0



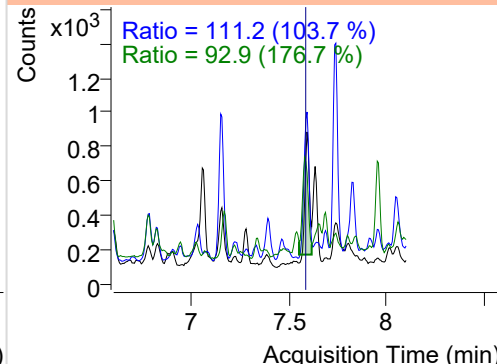
+ SIM (7.491-7.562 min, 13 scans) (\*\*) 220506

**Acenaphthene**

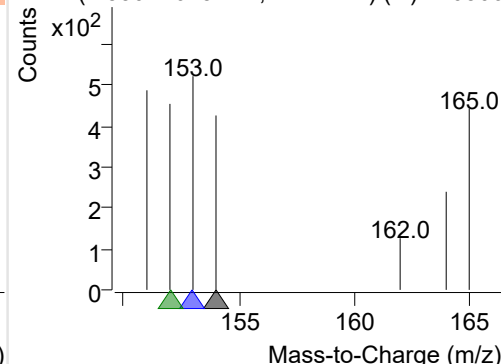
+ Selected Ion (154.0) 220506-PAHs-046.D



154.0, 153.0, 152.0

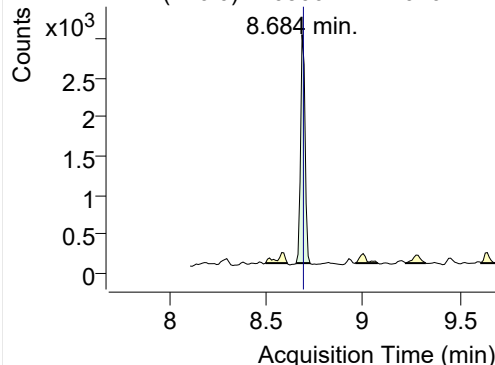


+ SIM (7.550-7.615 min, 12 scans) (\*\*) 220506

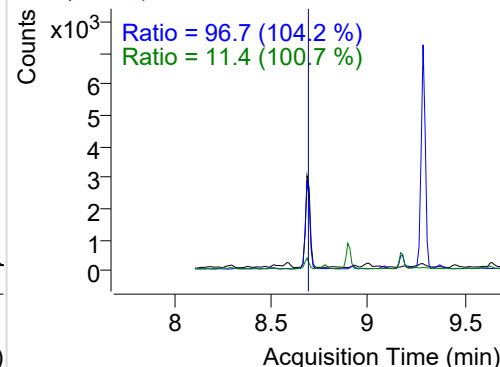


## LSS-D10-Fluorene

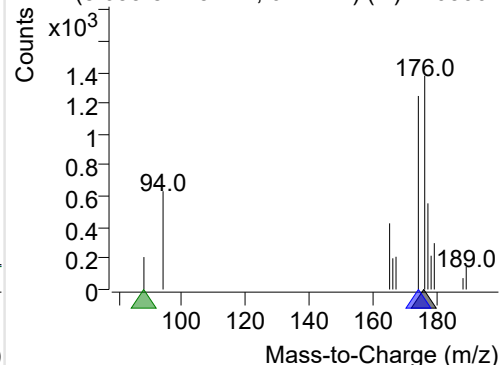
+ Selected Ion (176.0) 220506-PAHs-046.D



176.0, 174.0, 88.0

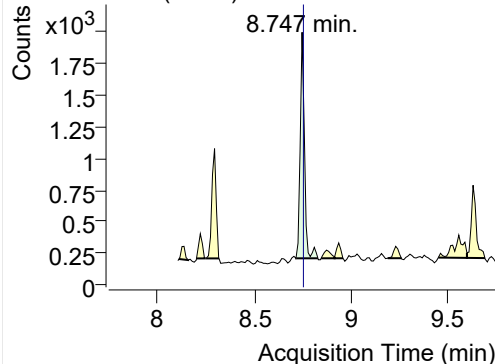


+ SIM (8.653-8.725 min, 6 scans) (\*\*) 220506-I

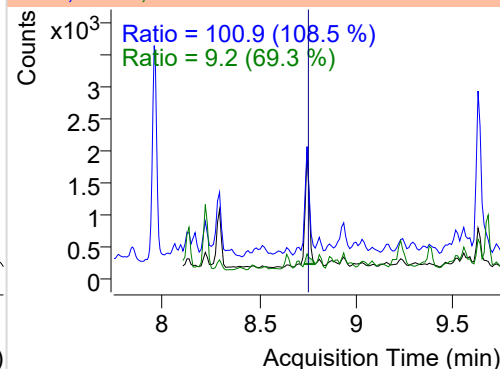


## Fluorene

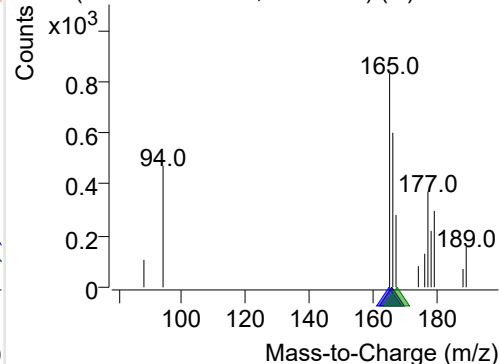
+ Selected Ion (166.0) 220506-PAHs-046.D



166.0, 165.0, 167.0

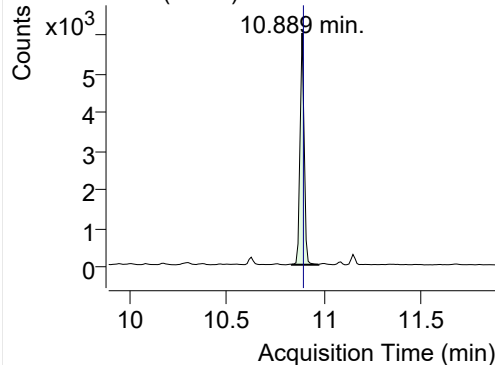


+ SIM (8.715-8.829 min, 11 scans) (\*\*) 220506

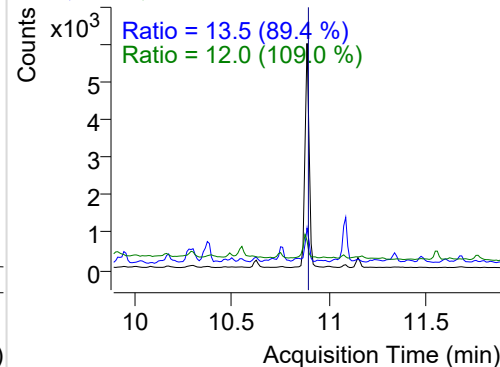


## IS-D10-Phenanthrene

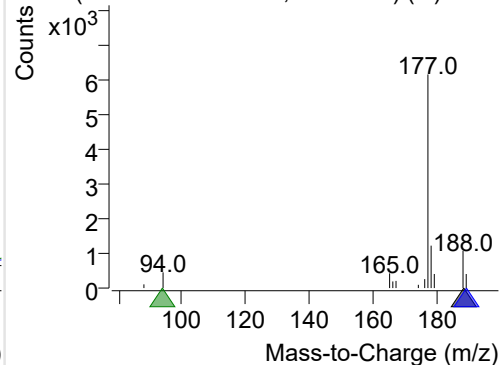
+ Selected Ion (188.0) 220506-PAHs-046.D



188.0, 189.0, 94.0

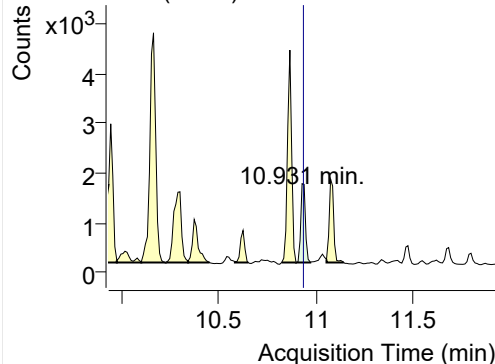


+ SIM (10.837-10.973 min, 14 scans) (\*\*) 2205

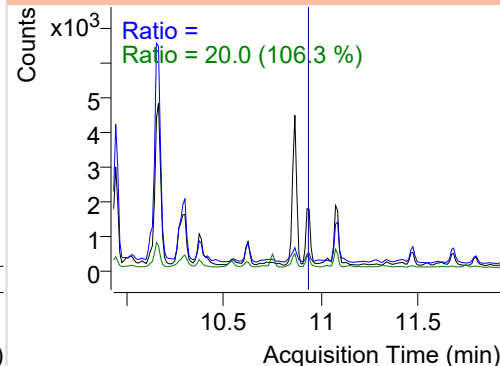


## Phenanthrene

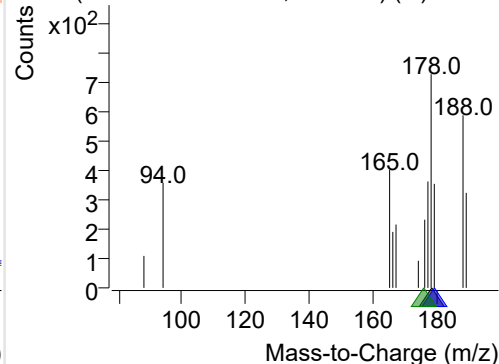
+ Selected Ion (178.0) 220506-PAHs-046.D



178.0, 179.0, 176.0

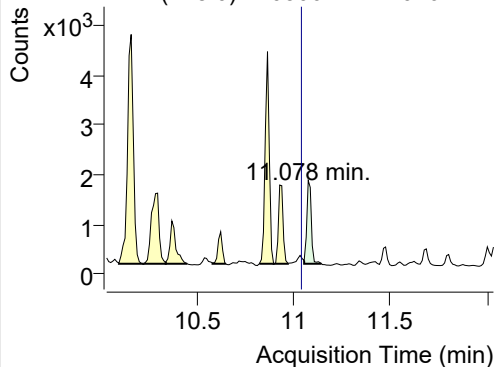


+ SIM (10.900-10.973 min, 8 scans) (\*\*) 22050

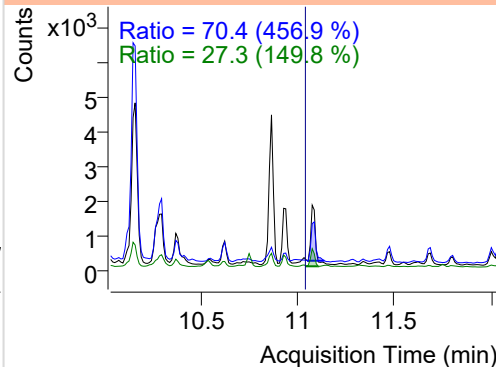


**Anthracene**

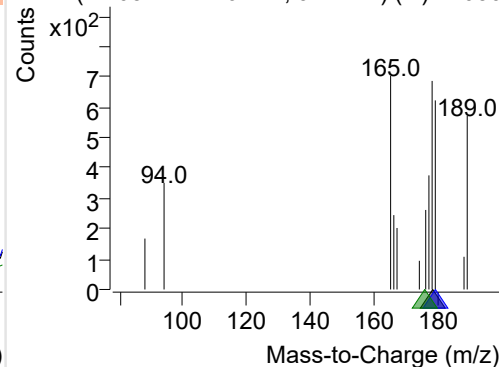
+ Selected Ion (178.0) 220506-PAHs-046.D



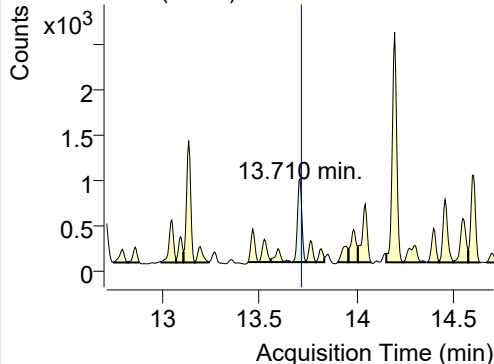
178.0, 179.0, 176.0



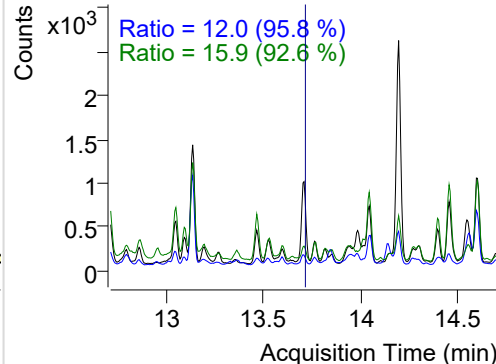
+ SIM (11.057-11.146 min, 9 scans) (\*\*) 22050

**Fluoranthene**

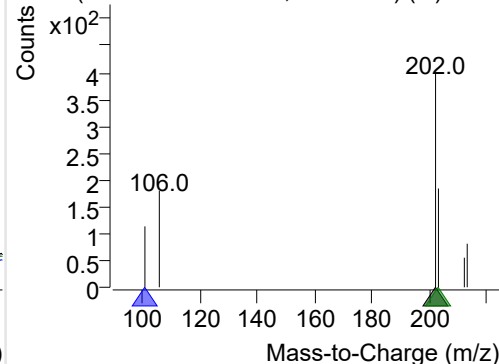
+ Selected Ion (202.0) 220506-PAHs-046.D



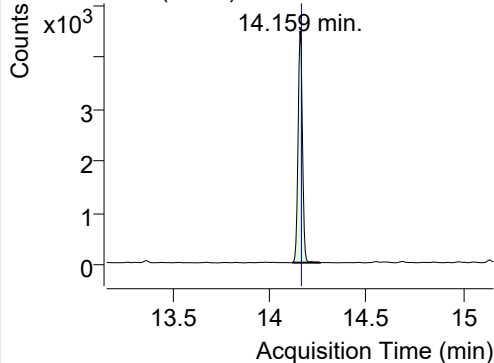
202.0, 101.0, 203.0



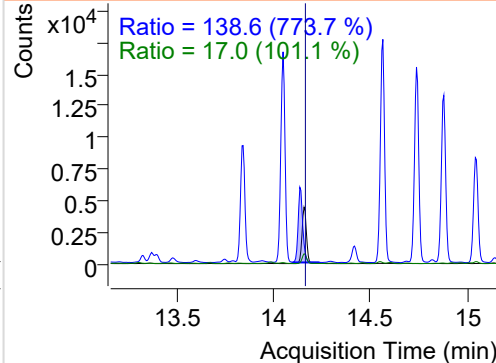
+ SIM (13.666-13.742 min, 15 scans) (\*\*) 2205

**LSS-D10-Pyrene**

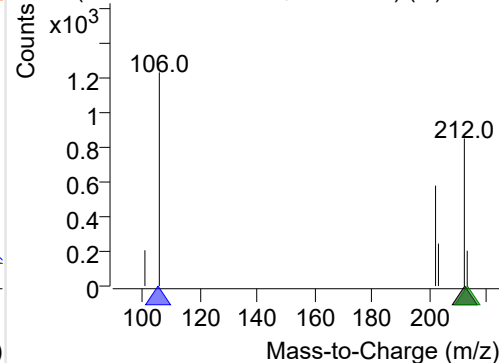
+ Selected Ion (212.0) 220506-PAHs-046.D



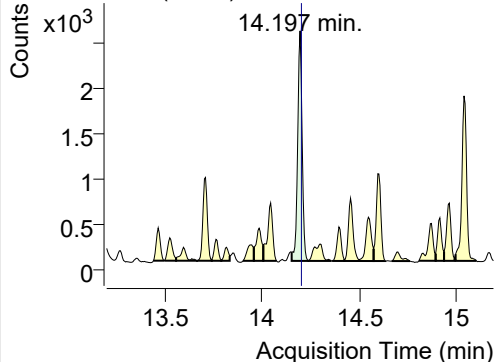
212.0, 106.0, 213.0



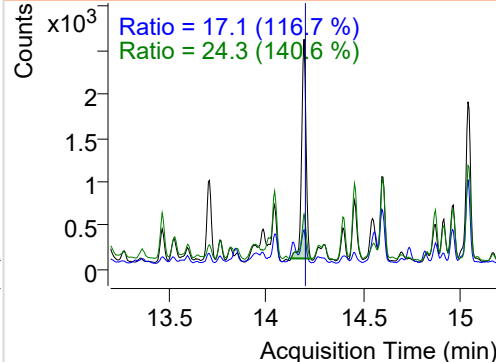
+ SIM (14.119-14.262 min, 27 scans) (\*\*) 2205

**Pyrene**

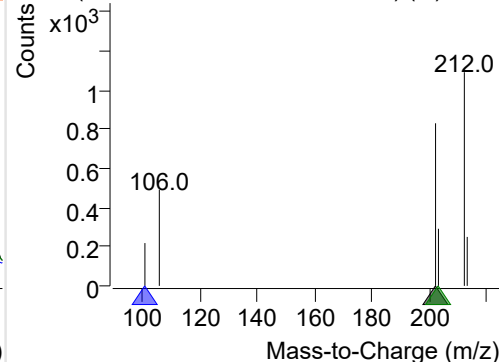
+ Selected Ion (202.0) 220506-PAHs-046.D



202.0, 101.0, 203.0



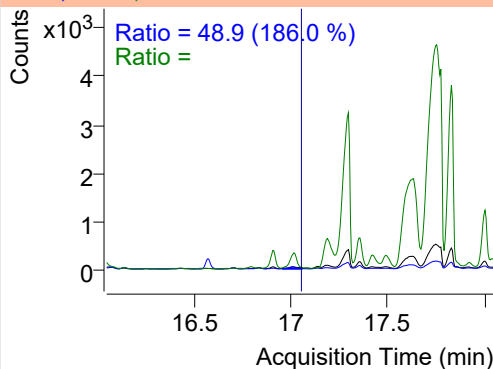
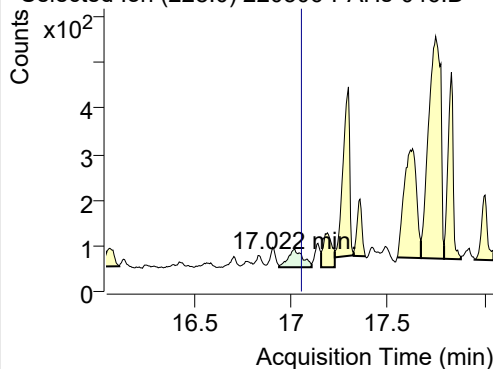
+ SIM (14.154-14.241 min, 17 scans) (\*\*) 2205



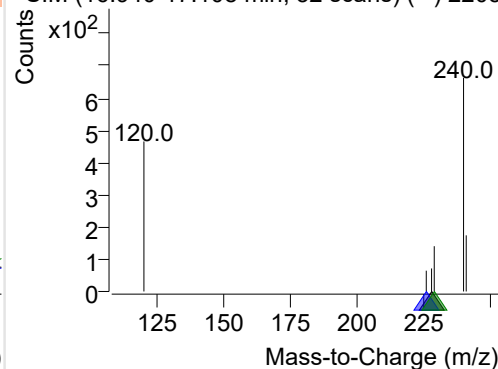
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-046.D

228.0, 226.0, 229.0

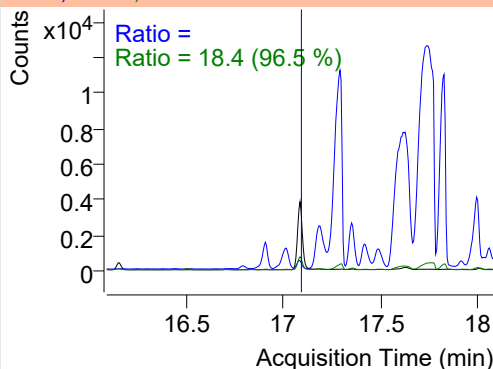
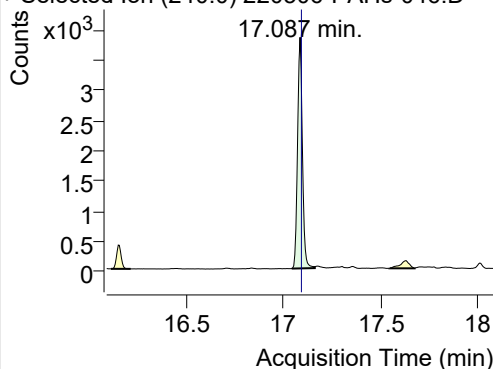


+ SIM (16.940-17.108 min, 32 scans) (\*\*) 2205

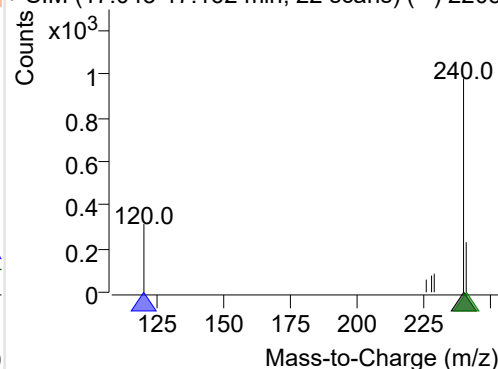
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-046.D

240.0, 120.0, 241.0

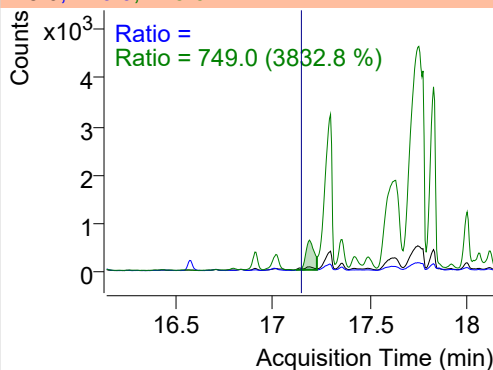
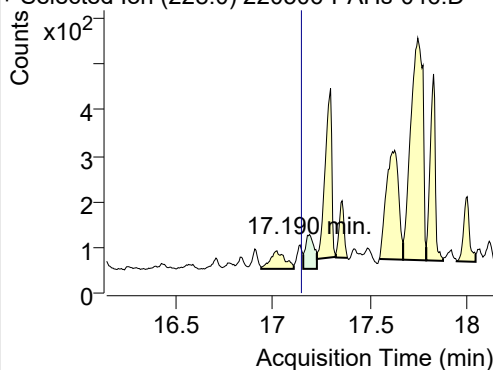


+ SIM (17.043-17.162 min, 22 scans) (\*\*) 2205

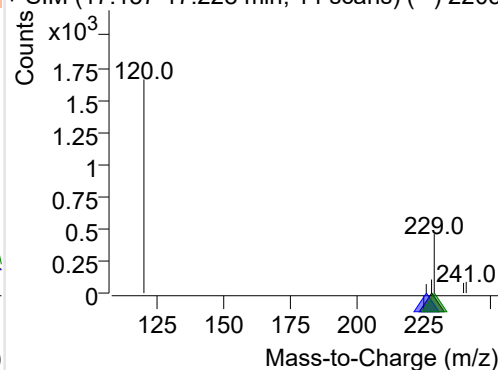
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-046.D

228.0, 226.0, 229.0

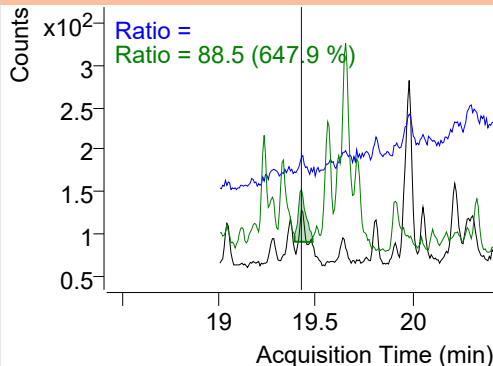
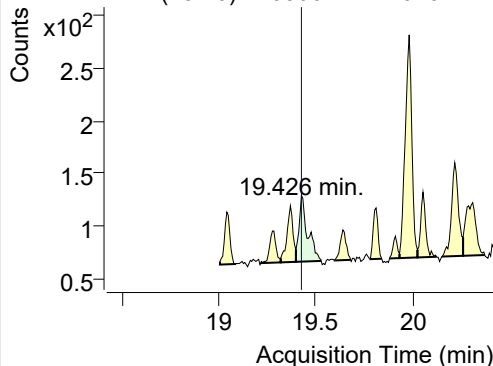


+ SIM (17.157-17.228 min, 14 scans) (\*\*) 2205

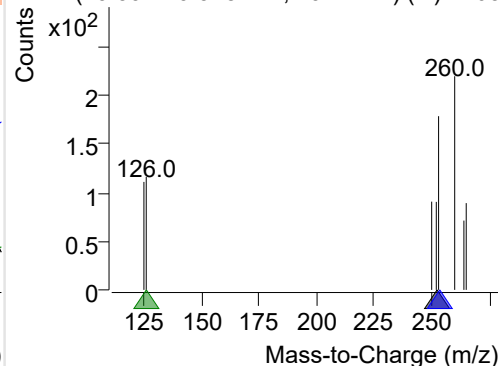
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-046.D

252.0, 253.0, 126.0



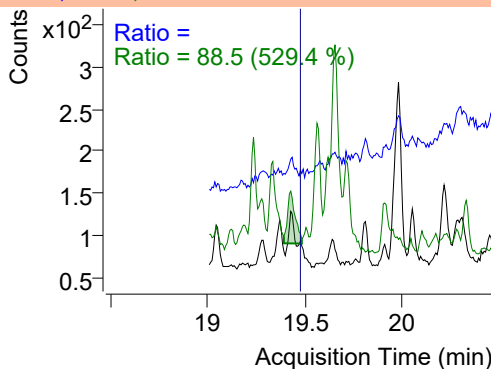
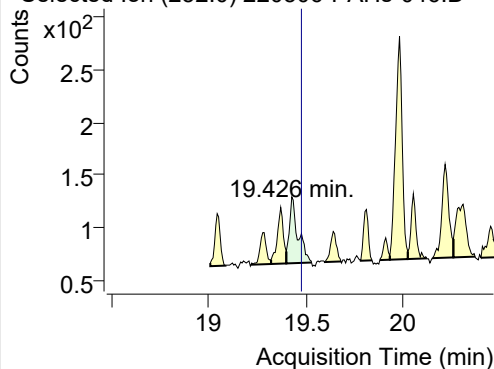
+ SIM (19.397-19.528 min, 19 scans) (\*\*) 2205



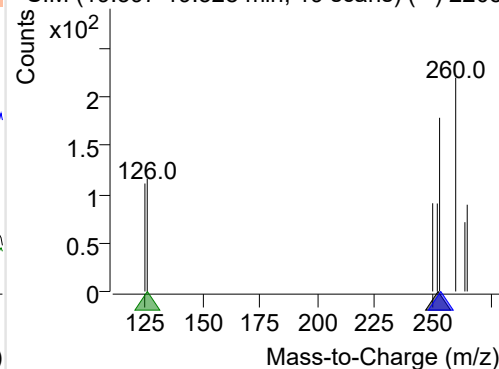
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-046.D

252.0, 253.0, 126.0

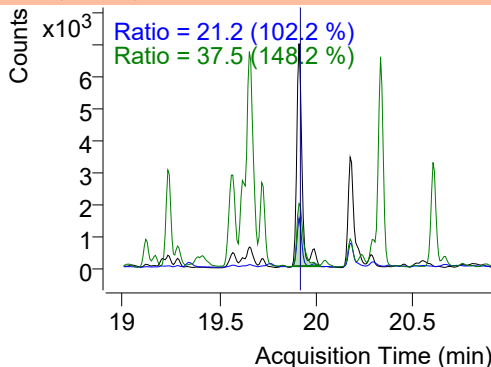
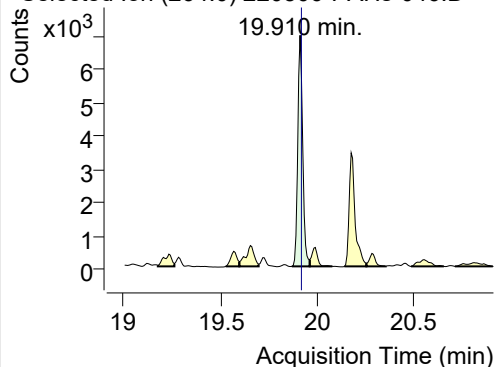


+ SIM (19.397-19.528 min, 19 scans) (\*\*) 2205

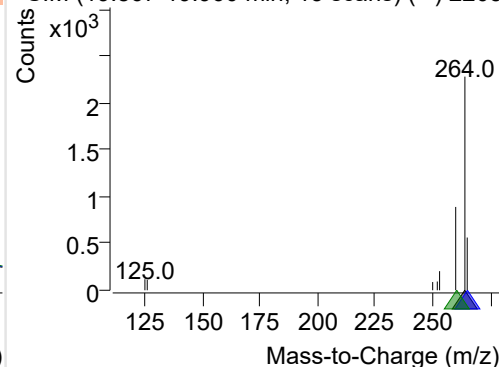
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-046.D

264.0, 265.0, 260.0

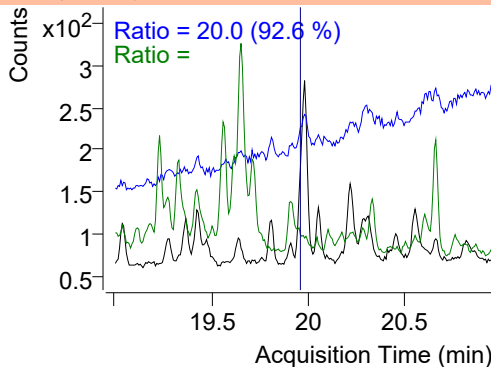
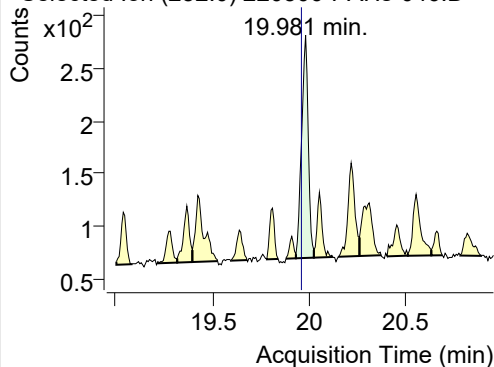


+ SIM (19.867-19.960 min, 13 scans) (\*\*) 2205

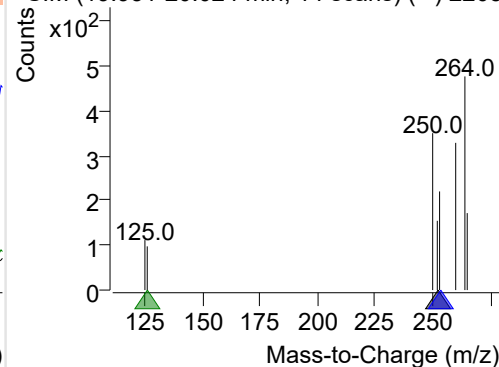
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-046.D

252.0, 253.0, 126.0

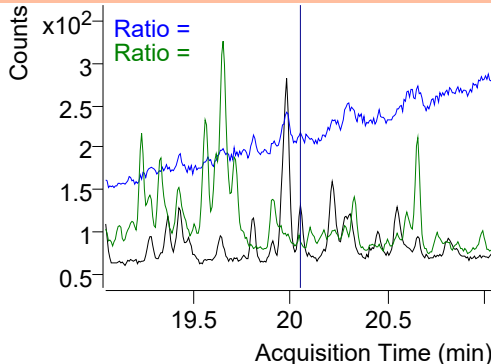
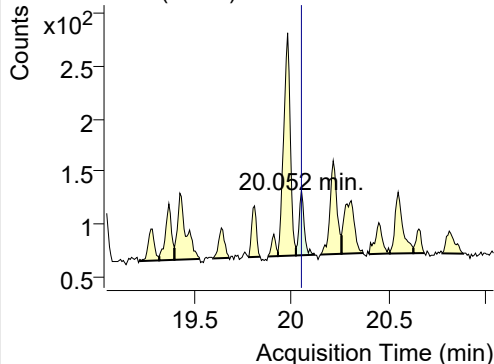


+ SIM (19.931-20.024 min, 14 scans) (\*\*) 2205

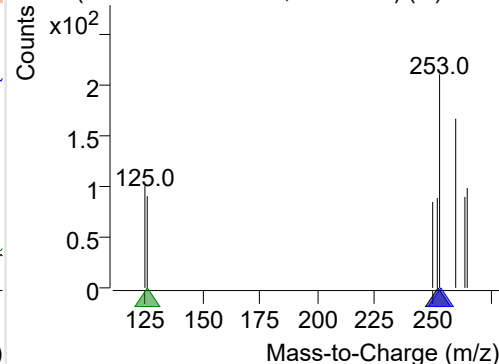
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-046.D

252.0, 253.0, 126.0

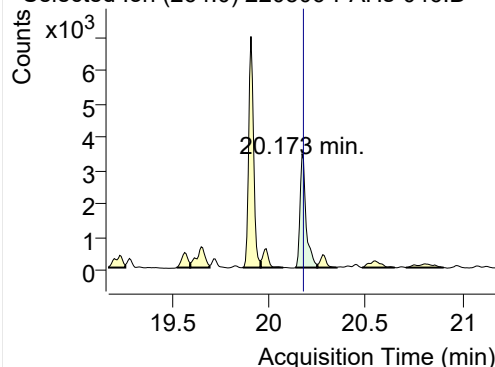


+ SIM (20.024-20.122 min, 14 scans) (\*\*) 2205

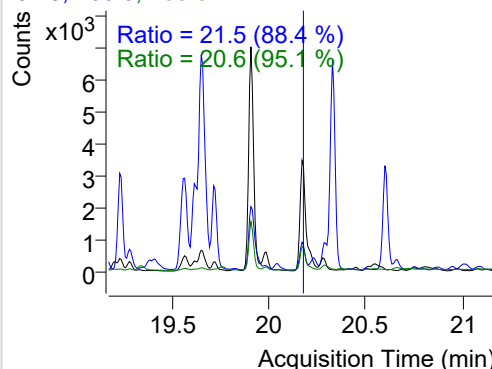


## IS-D12-Perylene

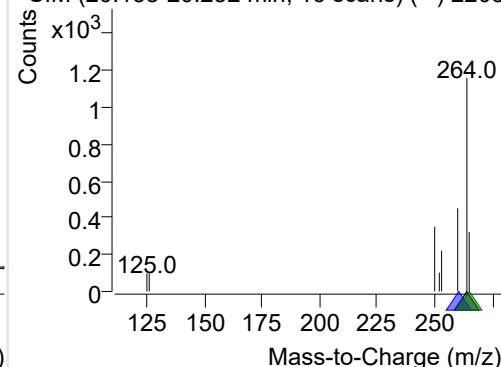
+ Selected Ion (264.0) 220506-PAHs-046.D



264.0, 260.0, 265.0

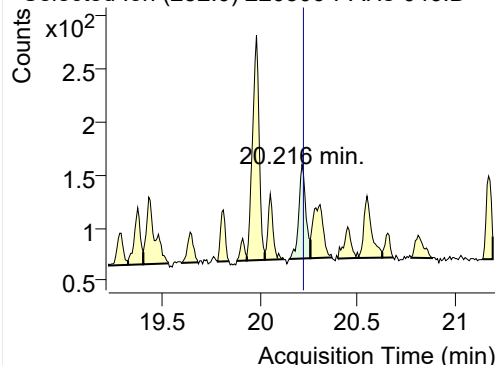


+ SIM (20.138-20.252 min, 16 scans) (\*\*) 2205

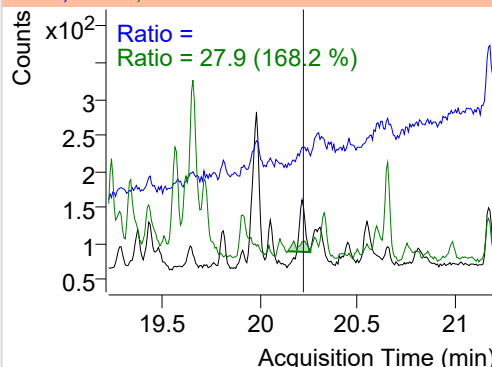


## Perylene

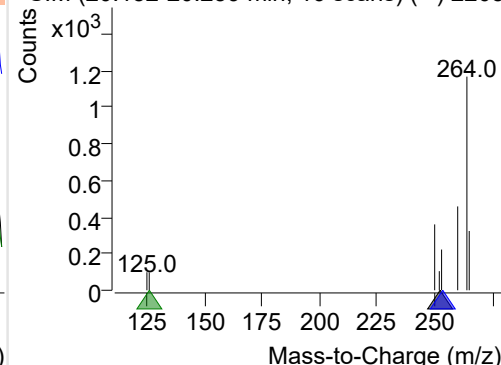
+ Selected Ion (252.0) 220506-PAHs-046.D



252.0, 253.0, 126.0

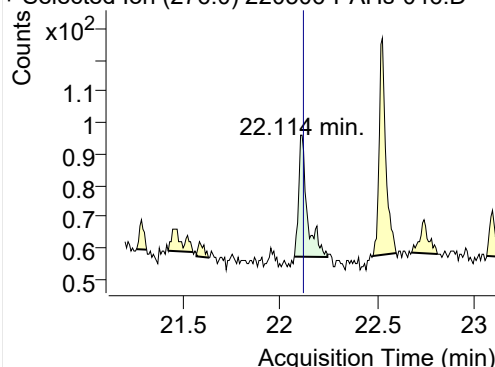


+ SIM (20.152-20.259 min, 16 scans) (\*\*) 2205

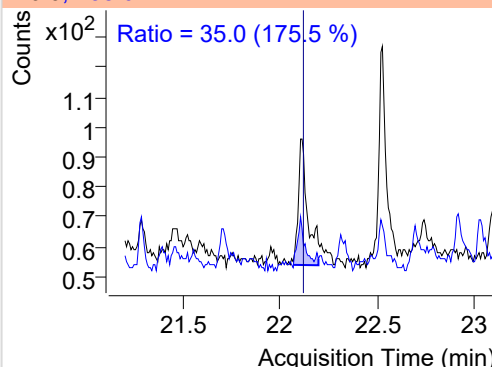


## Indeno(1,2,3-c,d)pyrene

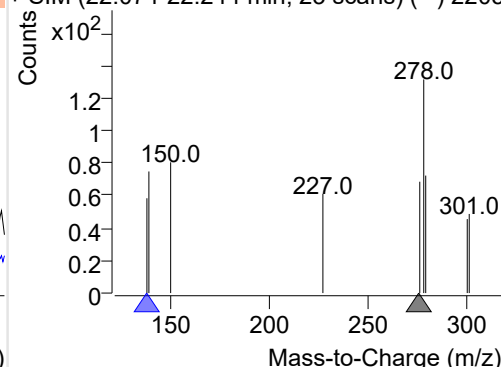
+ Selected Ion (276.0) 220506-PAHs-046.D



276.0, 138.0

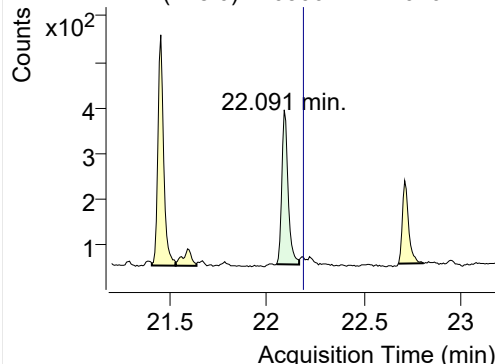


+ SIM (22.074-22.244 min, 23 scans) (\*\*) 2205

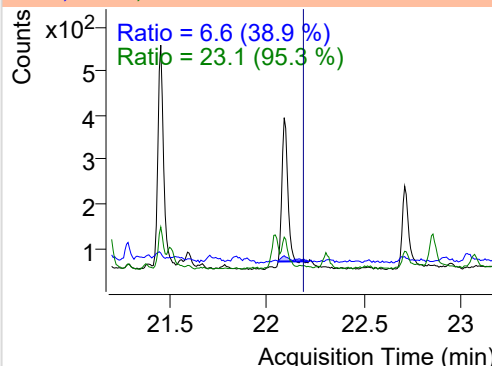


## Dibenz(a,h)anthracene

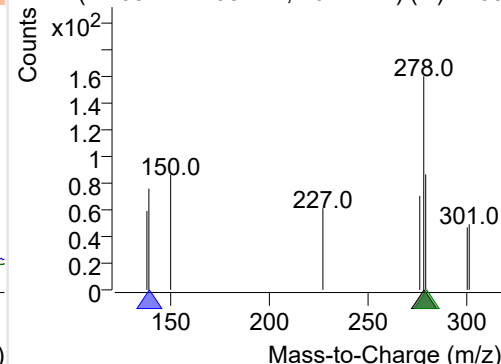
+ Selected Ion (278.0) 220506-PAHs-046.D



278.0, 139.0, 279.0

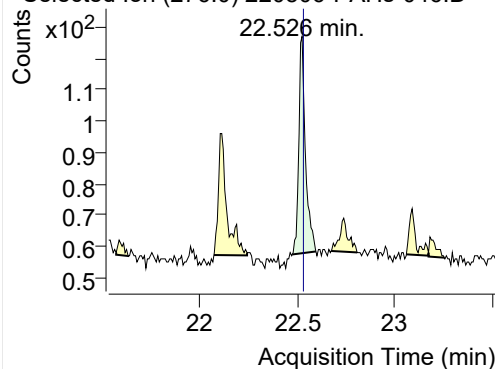


+ SIM (22.051-22.168 min, 16 scans) (\*\*) 2205

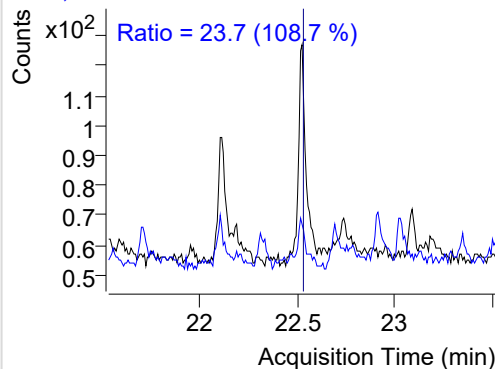


**Benzo(g,h,i)perylene**

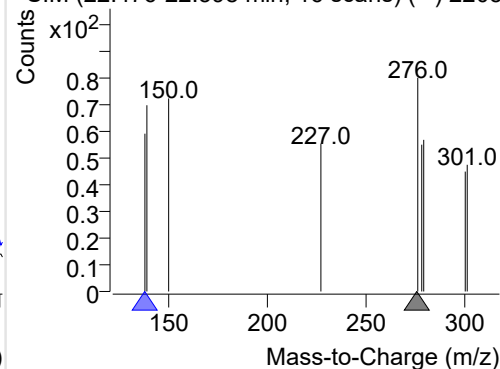
+ Selected Ion (276.0) 220506-PAHs-046.D



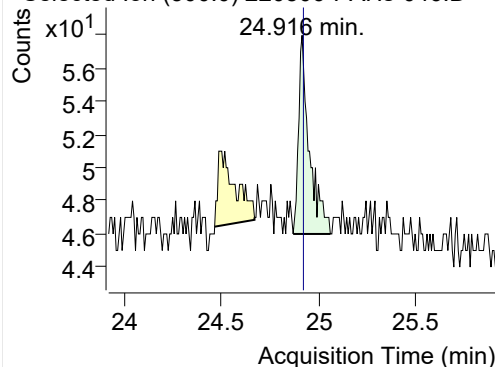
276.0, 138.0



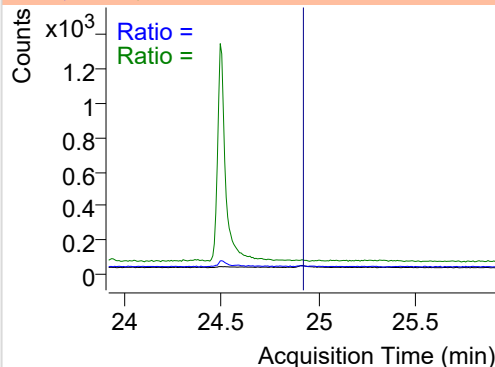
+ SIM (22.476-22.598 min, 16 scans) (\*\*) 2205

**Coronene**

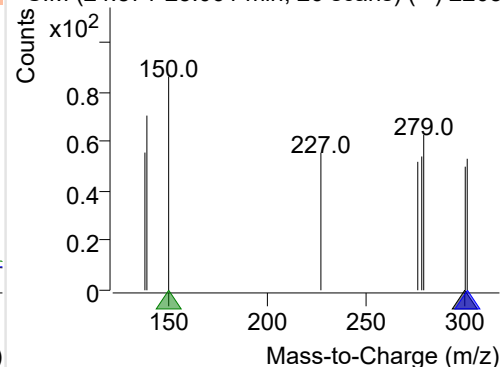
+ Selected Ion (300.0) 220506-PAHs-046.D



300.0, 301.0, 150.0



+ SIM (24.871-25.061 min, 26 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

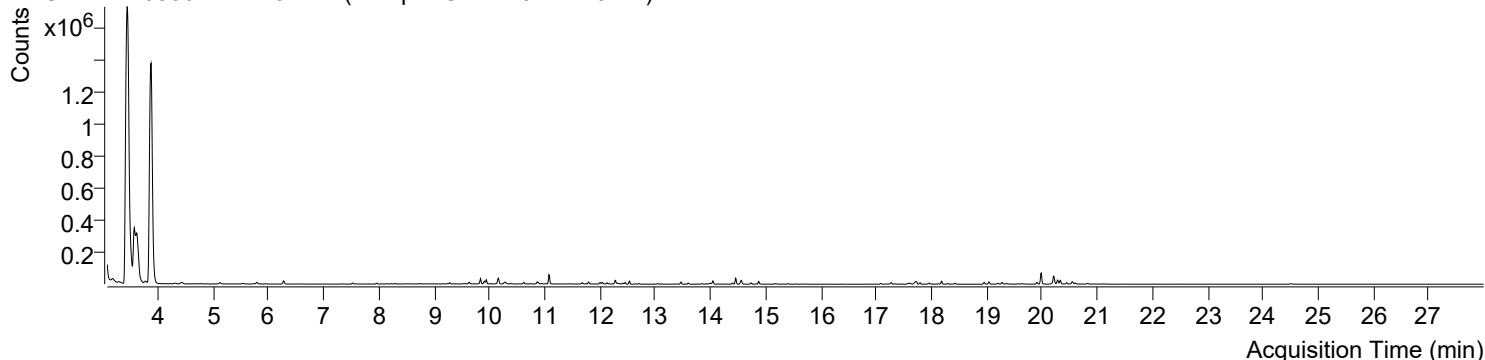


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 10:35:40	Data File	220506-PAHs-047.D
Type	Sample	Name	Sample-Gas-220417-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

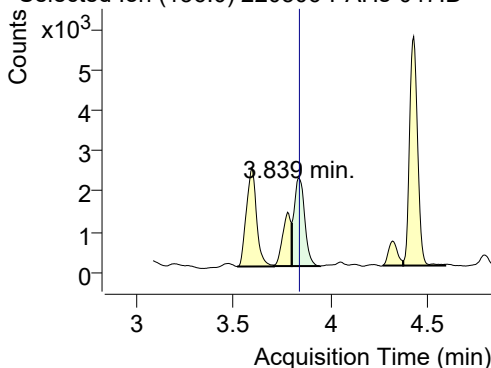
+ TIC SIM 220506-PAHs-047.D (Sample-Gas-220417-10DIL)



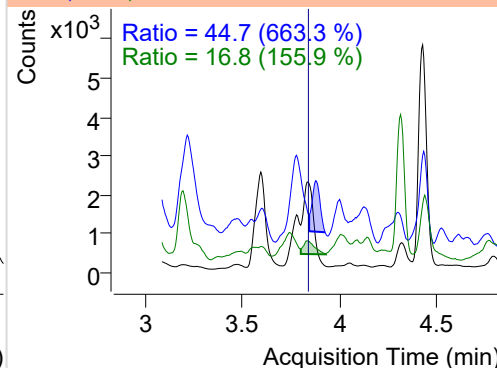
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.839	136.0	8299	2180.00	ND ng/ml	16.8
Naphthalene	3.874	128.0	3960188	1093708.11	ND ng/ml	13.0
Acenaphthylene	7.579	152.0	743	372.71	ND ng/ml	36.2
IS-D10-Acenaphthene	7.526	164.0	4816	3007.25	ND ng/ml	104.2
Acenaphthene	7.591	154.0	780	473.41	ND ng/ml	109.5
LSS-D10-Fluorene	8.579	176.0	347	120.80	ND ng/ml	
Fluorene	8.747	166.0	2030	1185.52	ND ng/ml	88.9
IS-D10-Phenanthrene	10.889	188.0	8448	5748.79	ND ng/ml	15.8
Phenanthrene	10.942	178.0	1890	962.76	ND ng/ml	21.8
Anthracene	11.078	178.0	24415	14961.76	ND ng/ml	27.3
Fluoranthene	13.601	202.0	3392	2195.80	ND ng/ml	102.2
LSS-D10-Pyrene	14.165	212.0	31	20.97	ND ng/ml	
Pyrene	14.203	202.0	1320	461.80	ND ng/ml	
Benz(a)anthracene	17.000	228.0	173	37.18	ND ng/ml	63.1
IS-D12-Chrysene	17.081	240.0	6218	3519.38	ND ng/ml	18.2
Chrysene	17.179	228.0	122	41.18	ND ng/ml	
Benzo(b)fluoranthene	19.369	252.0	1073	551.00	ND ng/ml	13.6
Benzo(k)fluoranthene	19.369	252.0	1073	551.00	ND ng/ml	13.6
SS-D12-Benzo(e)pyrene	19.910	264.0	12758	7182.40	ND ng/ml	22.8
Benzo(e)pyrene	19.981	252.0	2680	1345.28	ND ng/ml	16.4
Benzo(a)pyrene	20.052	252.0	323	142.84	ND ng/ml	
IS-D12-Perylene	20.216	264.0	38049	16628.57	ND ng/ml	
Perylene	20.209	252.0	2260	1023.33	ND ng/ml	15.1
Indeno(1,2,3-c,d)pyrene	22.106	276.0	39	15.48	ND ng/ml	
Dibenz(a,h)anthracene	22.183	278.0	55	14.41	ND ng/ml	
Benzo(g,h,i)perylene	22.519	276.0	6	4.93	ND ng/ml	
Coronene	24.924	300.0	37	8.26	ND ng/ml	

## IS-D8-Naphthalene

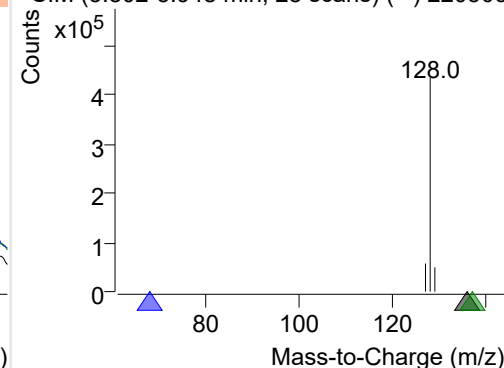
+ Selected Ion (136.0) 220506-PAHs-047.D



136.0, 68.0, 137.0

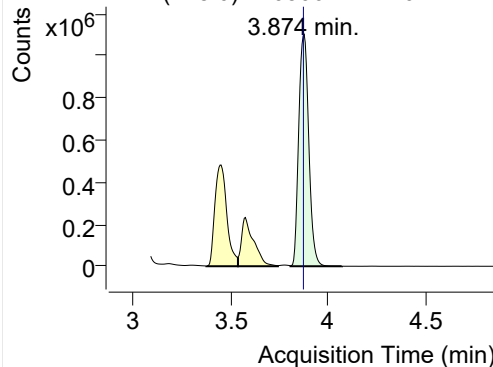


+ SIM (3.802-3.948 min, 28 scans) (\*\*) 220506

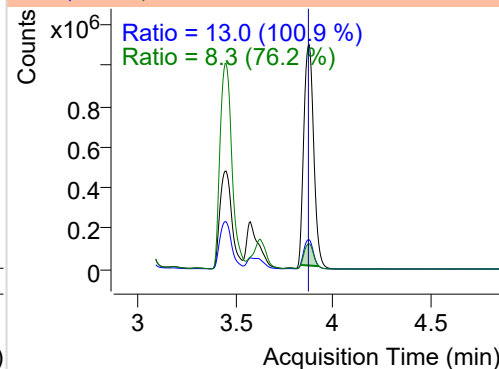


**Naphthalene**

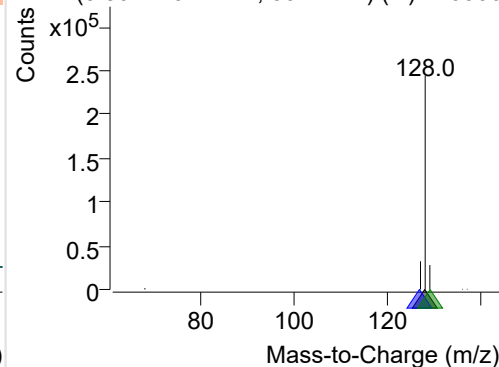
+ Selected Ion (128.0) 220506-PAHs-047.D



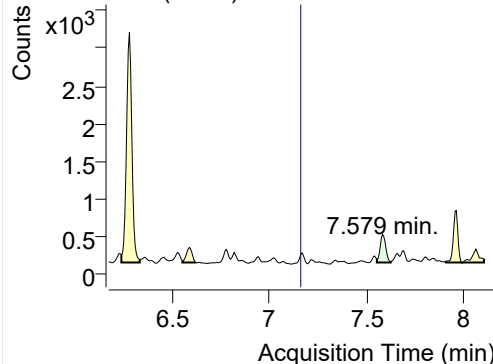
128.0, 127.0, 129.0



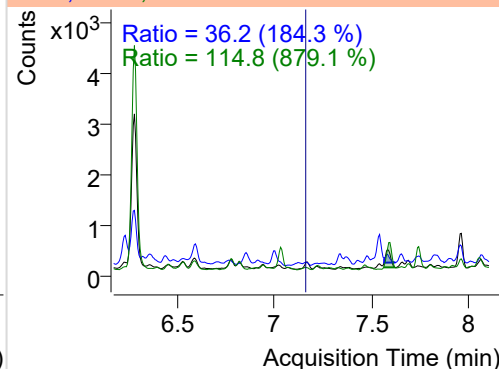
+ SIM (3.807-4.072 min, 50 scans) (\*\*) 220506

**Acenaphthylene**

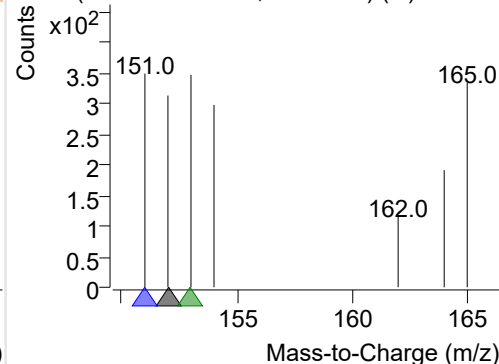
+ Selected Ion (152.0) 220506-PAHs-047.D



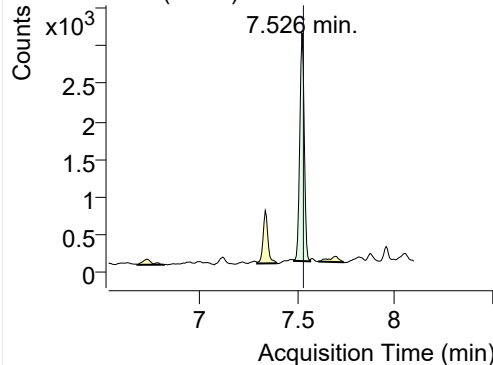
152.0, 151.0, 153.0



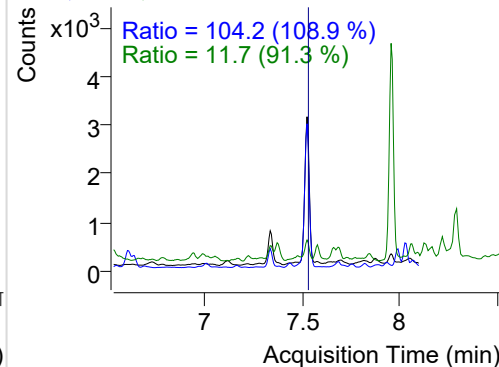
+ SIM (7.550-7.621 min, 13 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

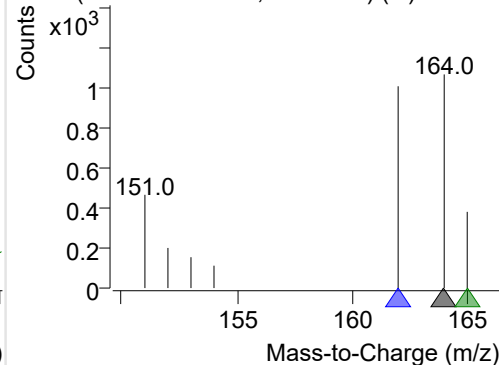
+ Selected Ion (164.0) 220506-PAHs-047.D



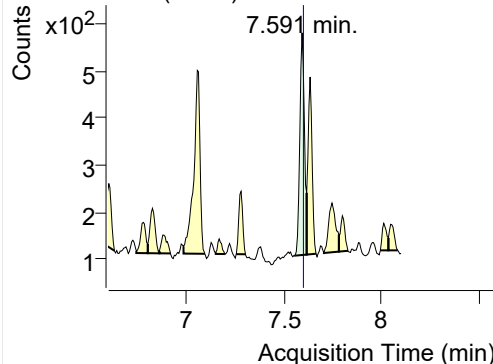
164.0, 162.0, 165.0



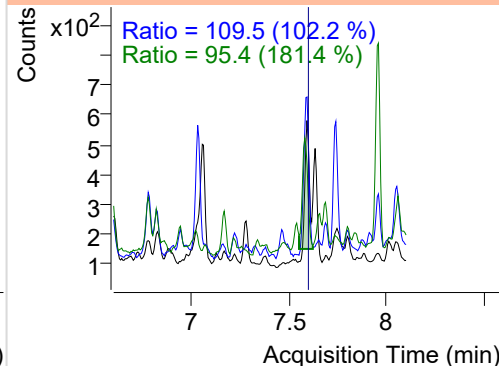
+ SIM (7.485-7.568 min, 15 scans) (\*\*) 220506

**Acenaphthene**

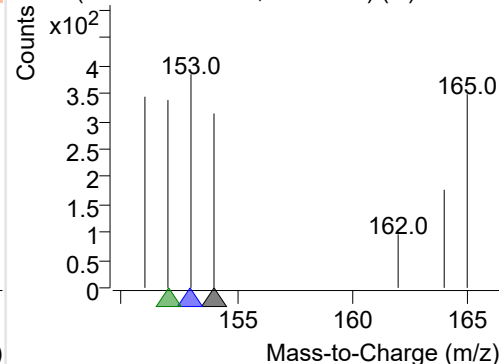
+ Selected Ion (154.0) 220506-PAHs-047.D



154.0, 153.0, 152.0

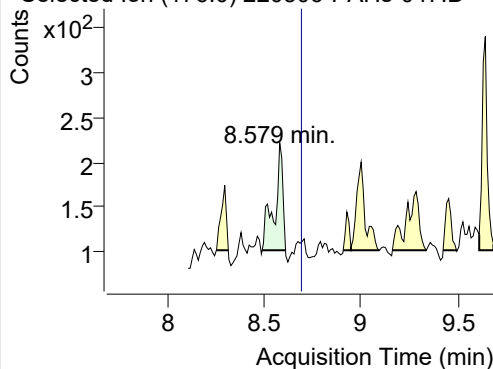


+ SIM (7.556-7.615 min, 11 scans) (\*\*) 220506

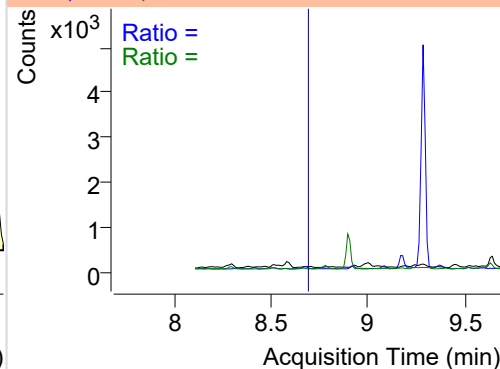


## LSS-D10-Fluorene

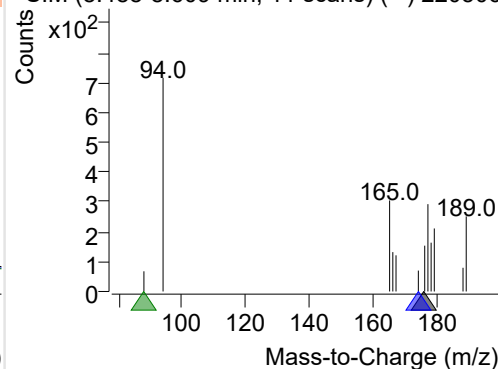
+ Selected Ion (176.0) 220506-PAHs-047.D



176.0, 174.0, 88.0

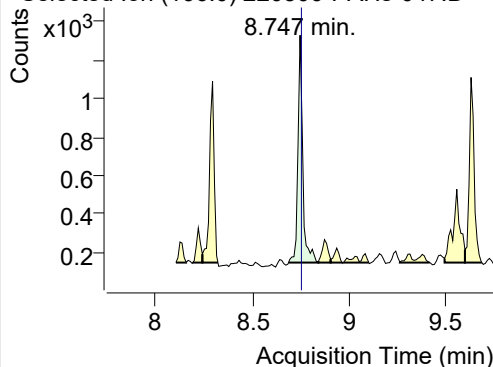


+ SIM (8.488-8.609 min, 11 scans) (\*\*) 220506

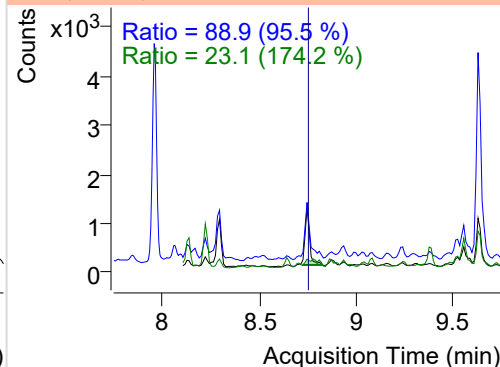


## Fluorene

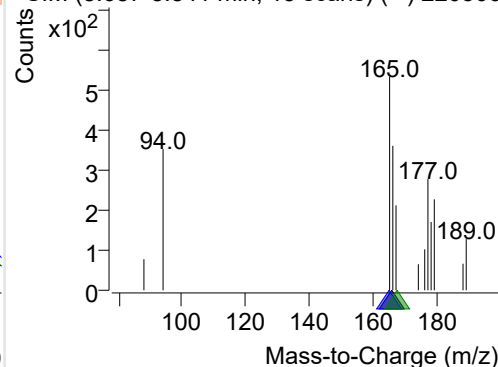
+ Selected Ion (166.0) 220506-PAHs-047.D



166.0, 165.0, 167.0

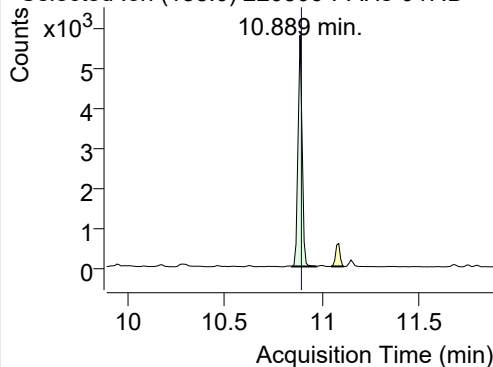


+ SIM (8.687-8.841 min, 15 scans) (\*\*) 220506

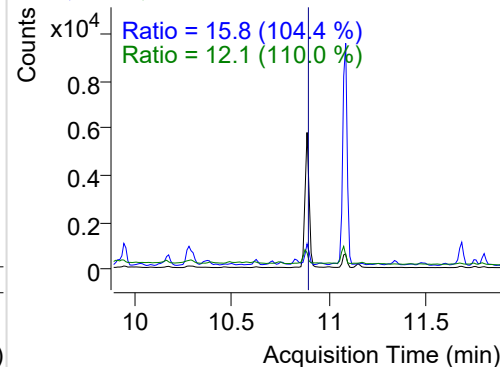


## IS-D10-Phenanthrene

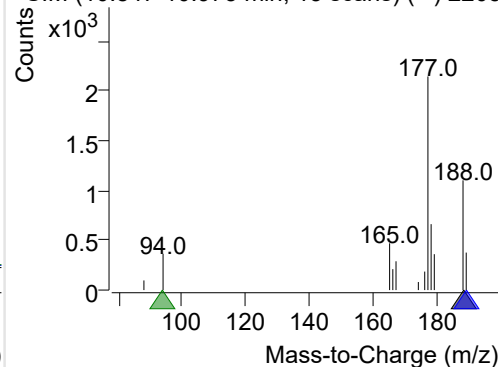
+ Selected Ion (188.0) 220506-PAHs-047.D



188.0, 189.0, 94.0

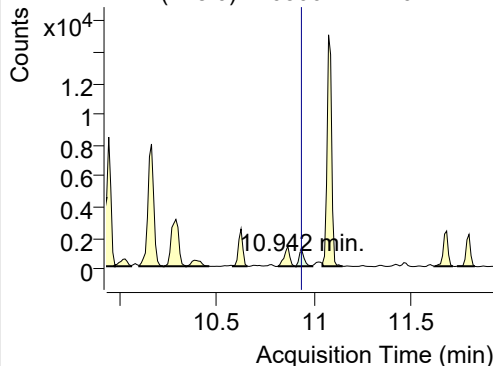


+ SIM (10.847-10.973 min, 13 scans) (\*\*) 2205

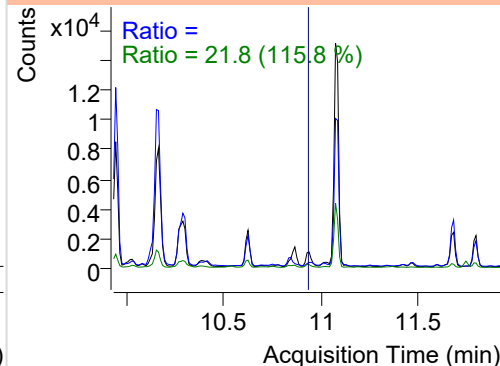


## Phenanthrene

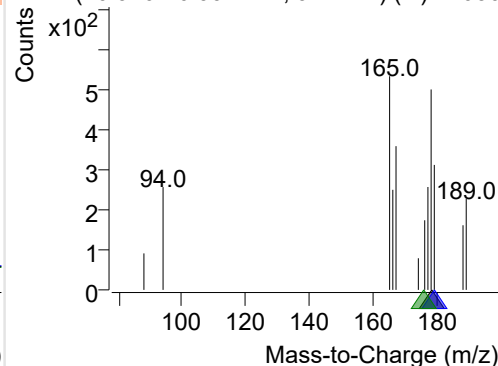
+ Selected Ion (178.0) 220506-PAHs-047.D



178.0, 179.0, 176.0

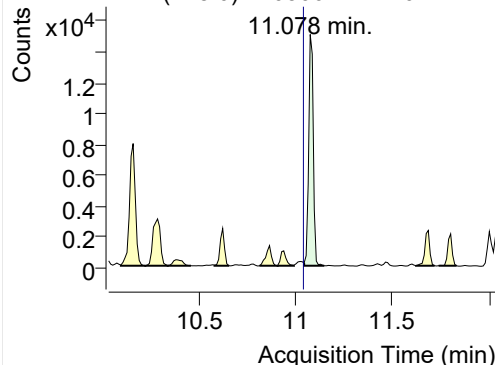


+ SIM (10.910-10.994 min, 9 scans) (\*\*) 22050

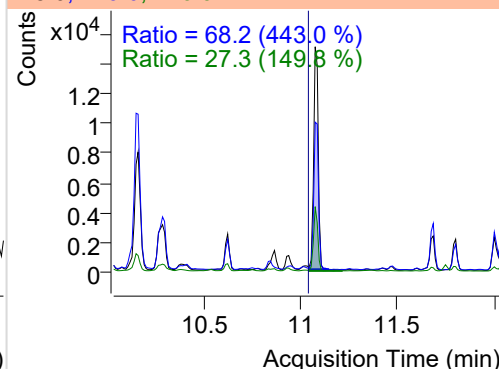


**Anthracene**

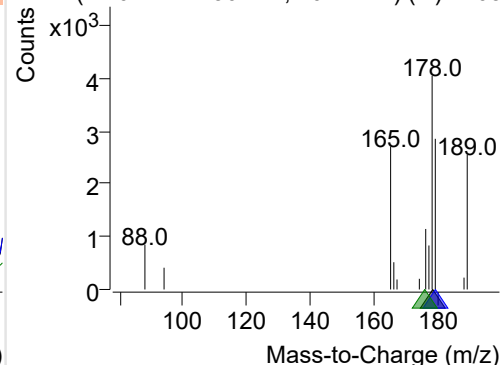
+ Selected Ion (178.0) 220506-PAHs-047.D



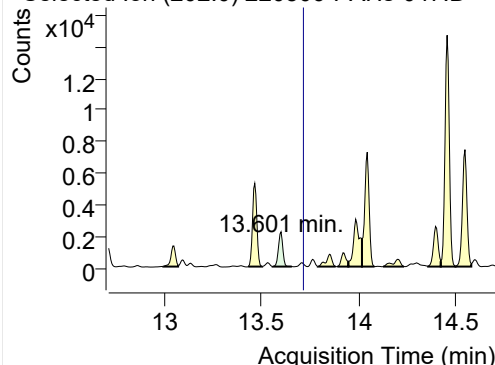
178.0, 179.0, 176.0



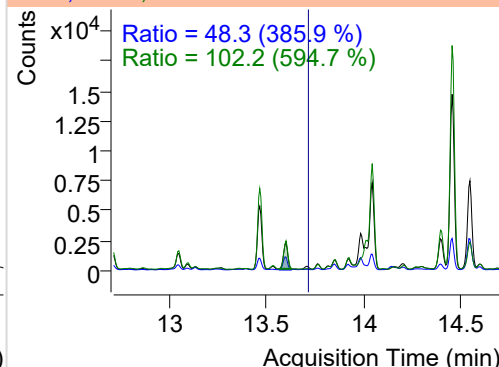
+ SIM (11.047-11.150 min, 10 scans) (\*\*) 2205

**Fluoranthene**

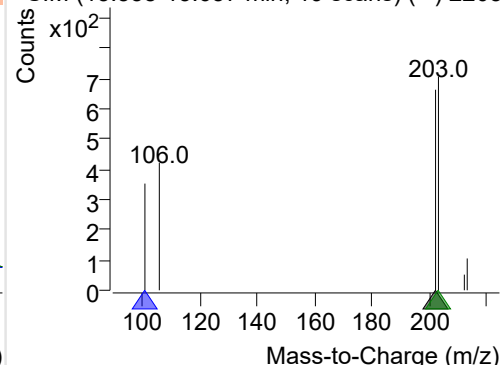
+ Selected Ion (202.0) 220506-PAHs-047.D



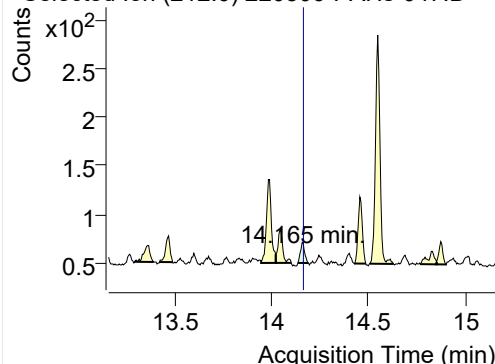
202.0, 101.0, 203.0



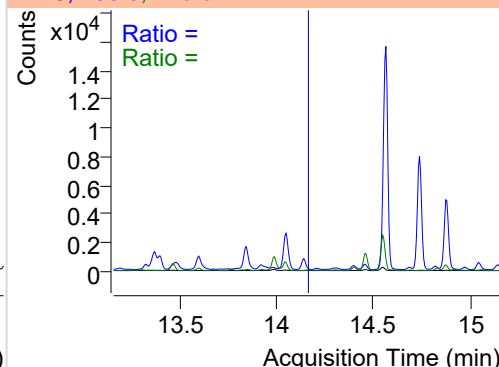
+ SIM (13.558-13.657 min, 19 scans) (\*\*) 2205

**LSS-D10-Pyrene**

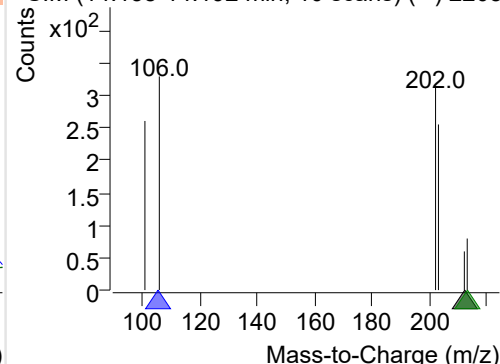
+ Selected Ion (212.0) 220506-PAHs-047.D



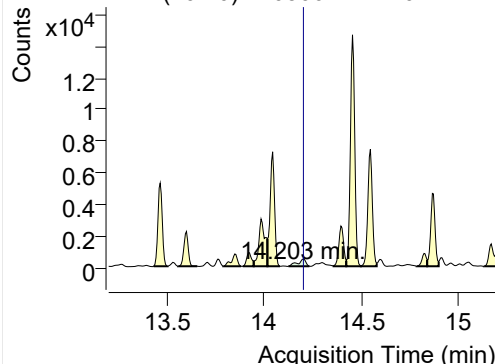
212.0, 106.0, 213.0



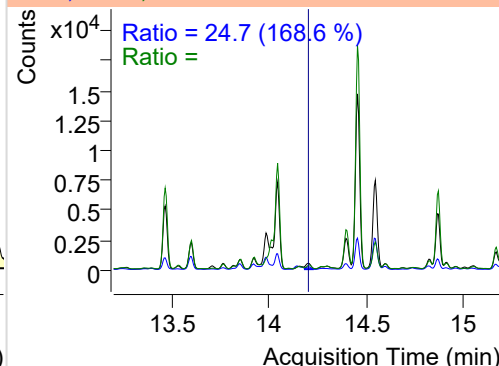
+ SIM (14.138-14.192 min, 10 scans) (\*\*) 2205

**Pyrene**

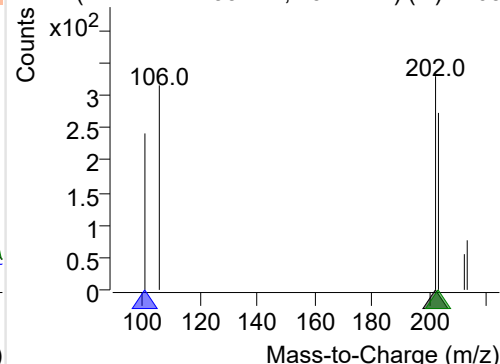
+ Selected Ion (202.0) 220506-PAHs-047.D



202.0, 101.0, 203.0



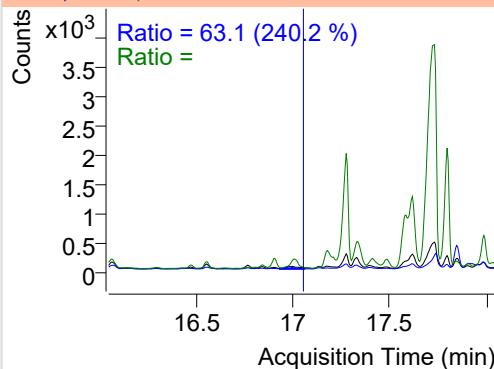
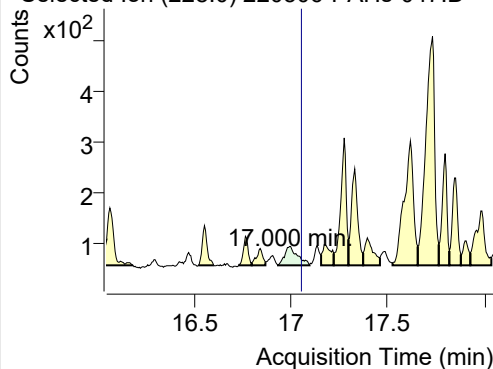
+ SIM (14.127-14.235 min, 19 scans) (\*\*) 2205



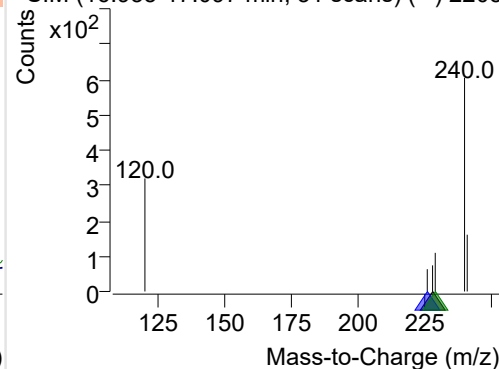
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-047.D

228.0, 226.0, 229.0

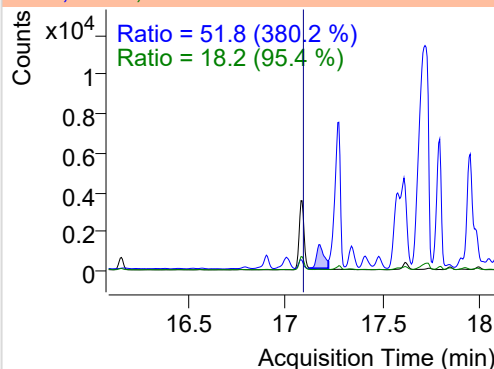
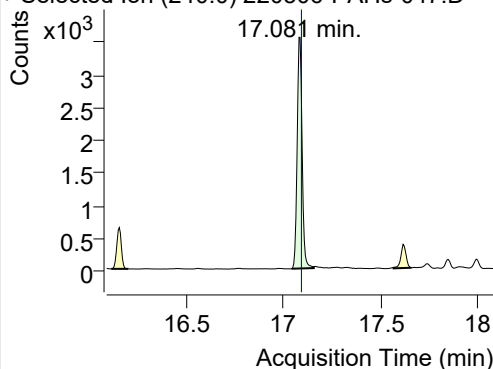


+ SIM (16.935-17.097 min, 31 scans) (\*\*) 2205

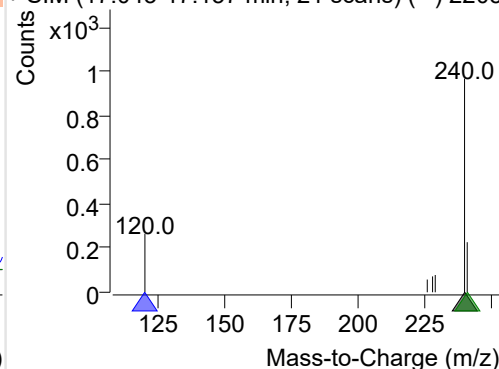
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-047.D

240.0, 120.0, 241.0

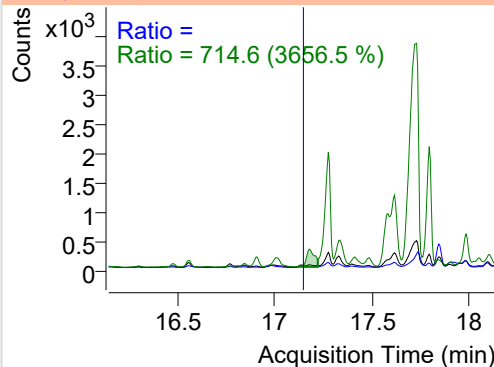
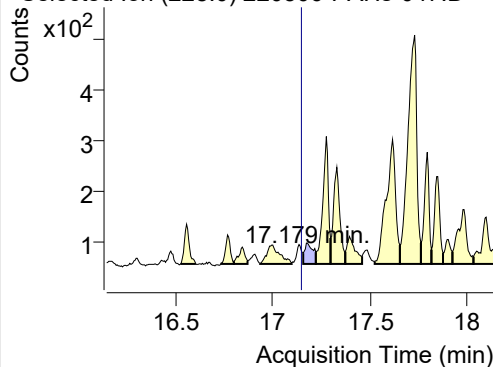


+ SIM (17.043-17.157 min, 21 scans) (\*\*) 2205

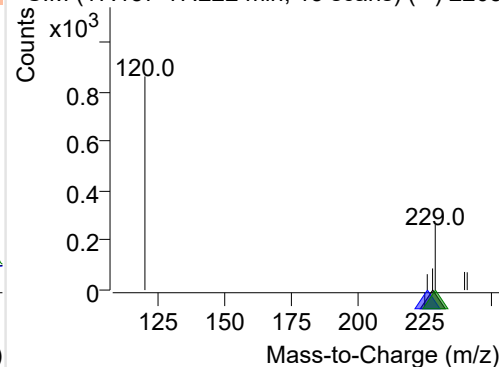
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-047.D

228.0, 226.0, 229.0

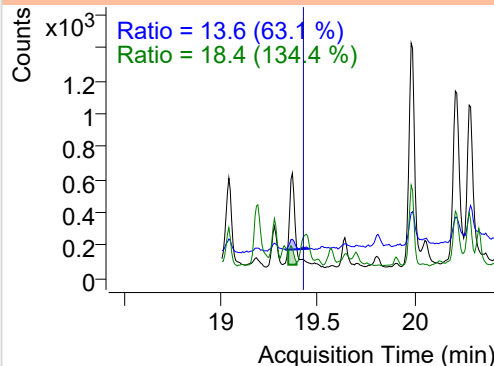
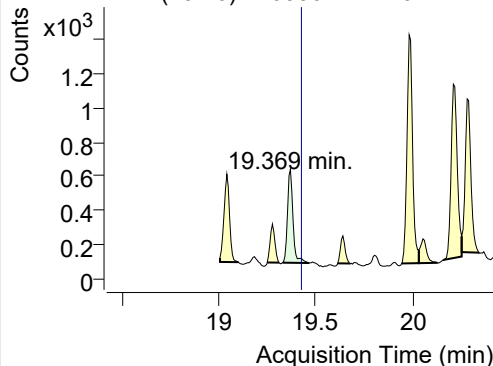


+ SIM (17.157-17.222 min, 13 scans) (\*\*) 2205

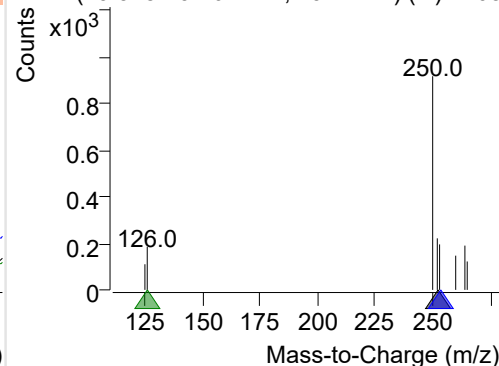
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-047.D

252.0, 253.0, 126.0



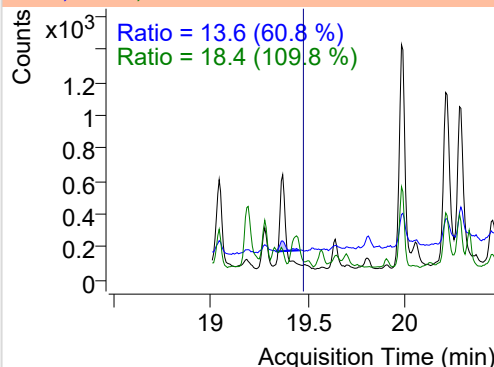
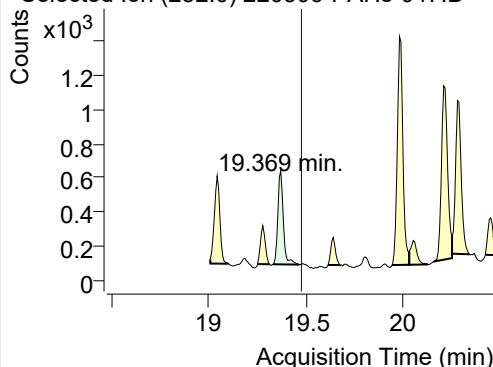
+ SIM (19.328-19.461 min, 19 scans) (\*\*) 2205



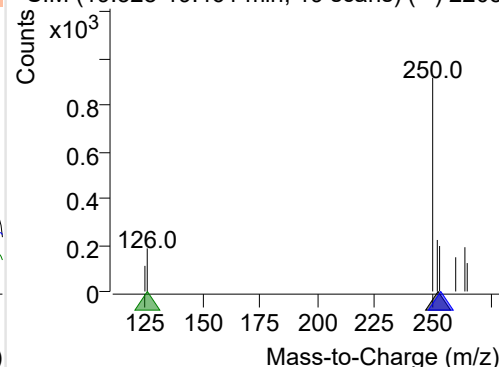
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-047.D

252.0, 253.0, 126.0

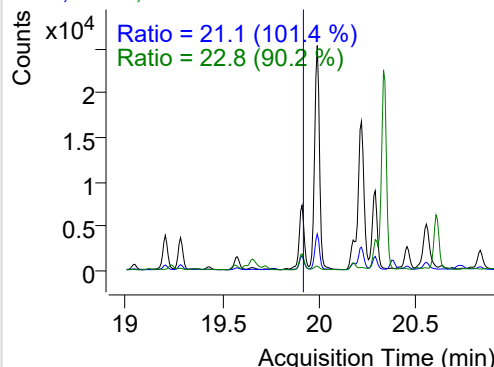
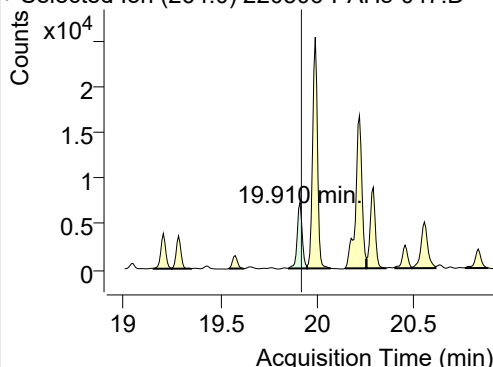


+ SIM (19.328-19.461 min, 19 scans) (\*\*) 2205

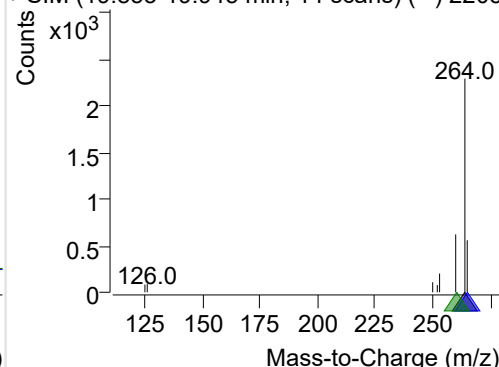
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-047.D

264.0, 265.0, 260.0

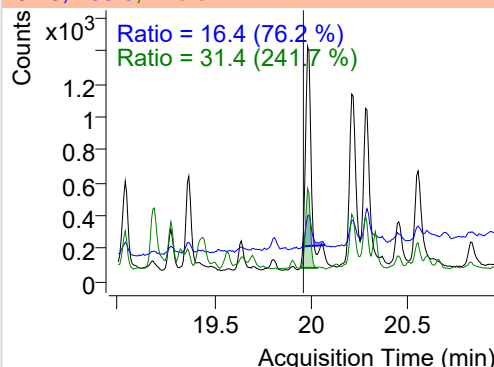
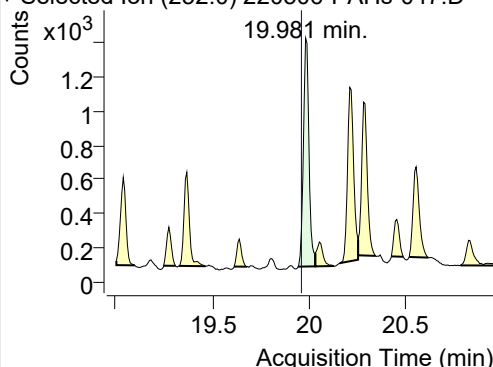


+ SIM (19.853-19.945 min, 14 scans) (\*\*) 2205

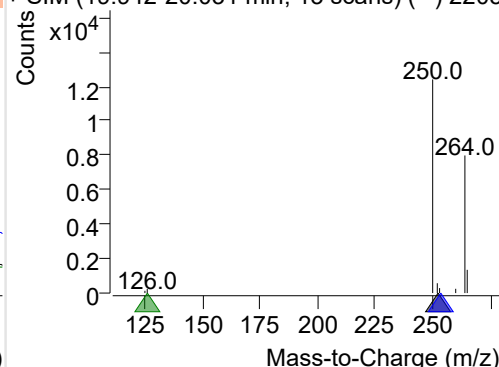
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-047.D

252.0, 253.0, 126.0

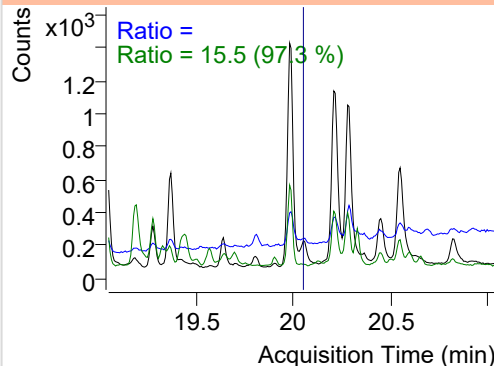
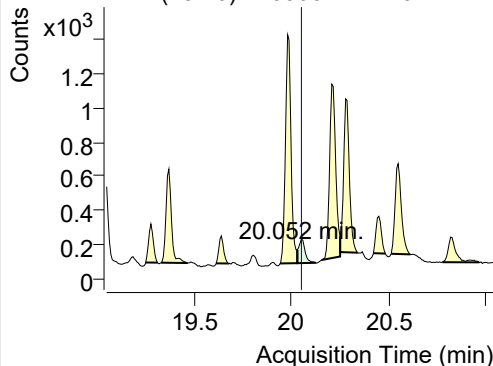


+ SIM (19.942-20.031 min, 13 scans) (\*\*) 2205

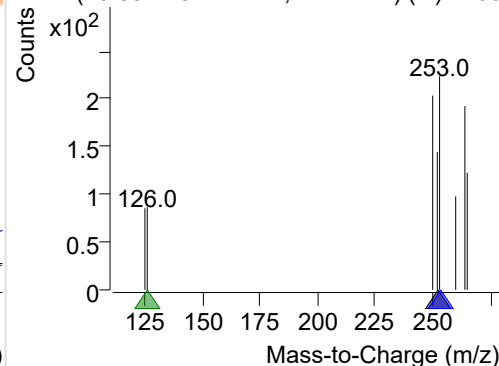
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-047.D

252.0, 253.0, 126.0



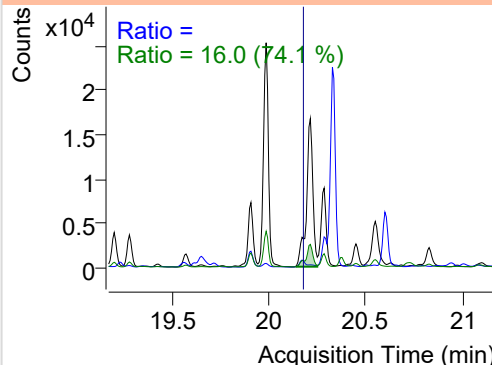
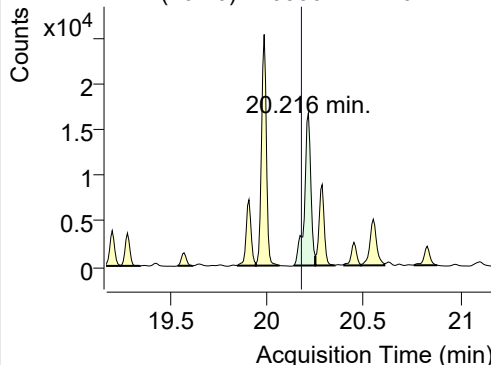
+ SIM (20.031-20.127 min, 14 scans) (\*\*) 2205



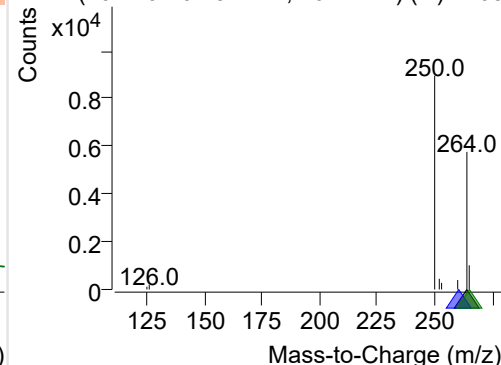
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-047.D

264.0, 260.0, 265.0



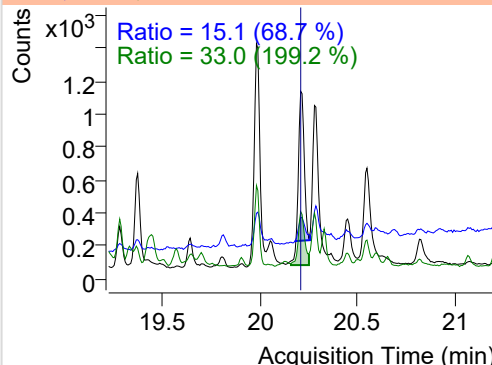
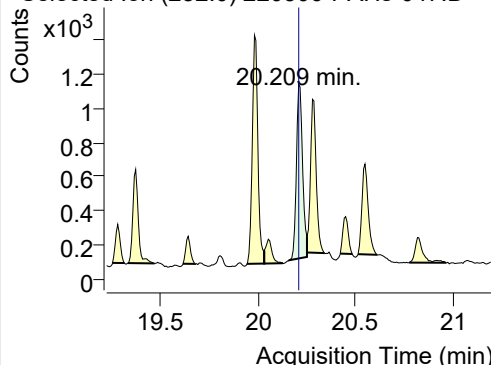
+ SIM (20.140-20.252 min, 16 scans) (\*\*) 2205



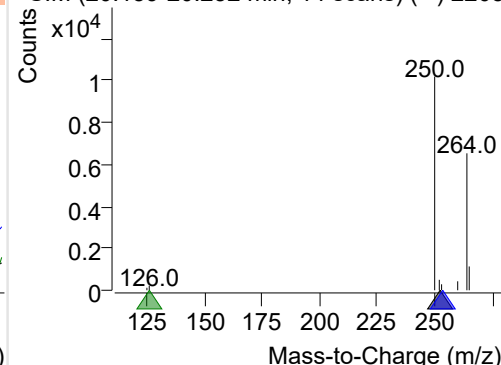
## Perylene

+ Selected Ion (252.0) 220506-PAHs-047.D

252.0, 253.0, 126.0



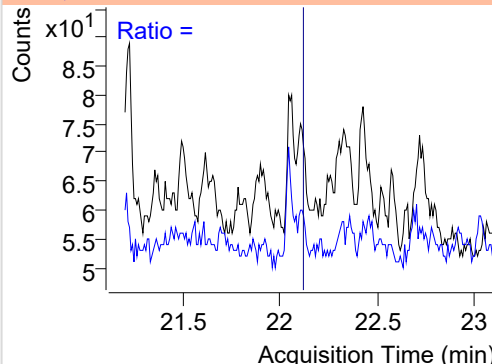
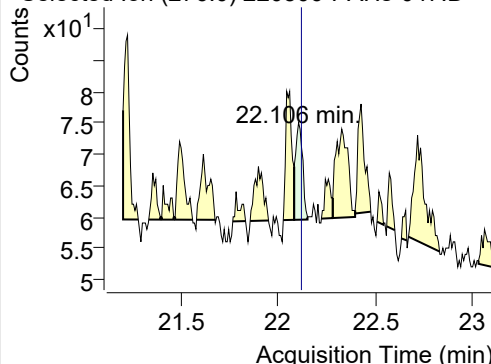
+ SIM (20.159-20.252 min, 14 scans) (\*\*) 2205



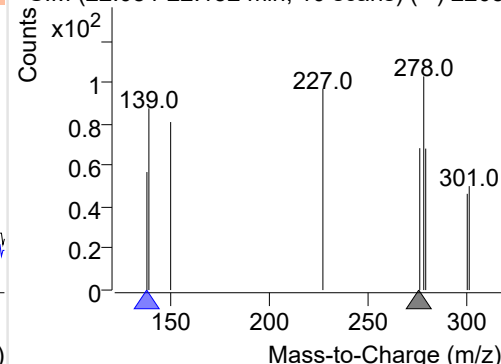
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-047.D

276.0, 138.0



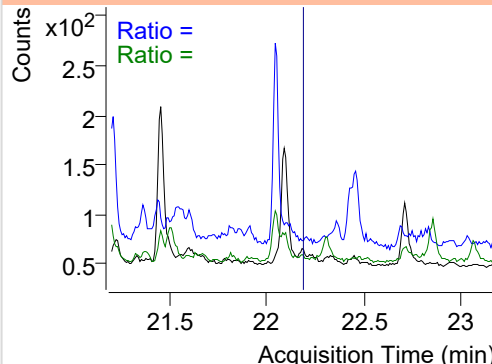
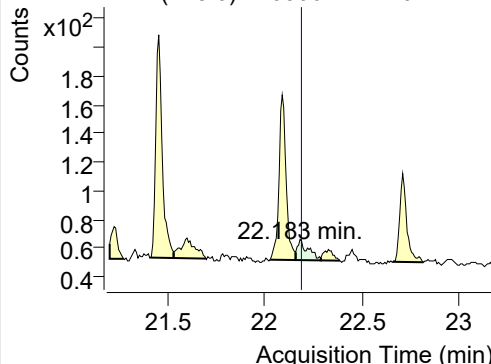
+ SIM (22.084-22.152 min, 10 scans) (\*\*) 2205



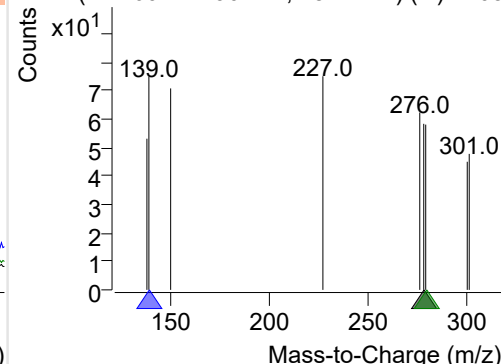
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-047.D

278.0, 139.0, 279.0



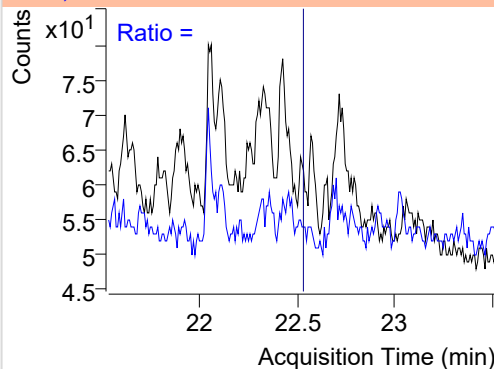
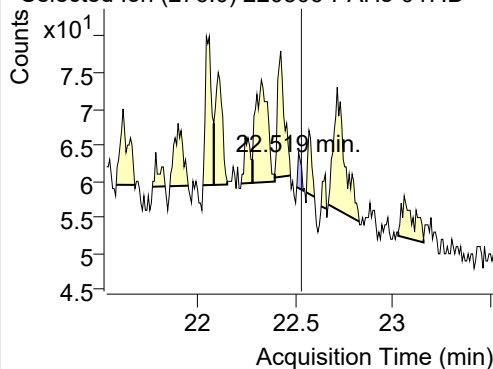
+ SIM (22.160-22.290 min, 18 scans) (\*\*) 2205



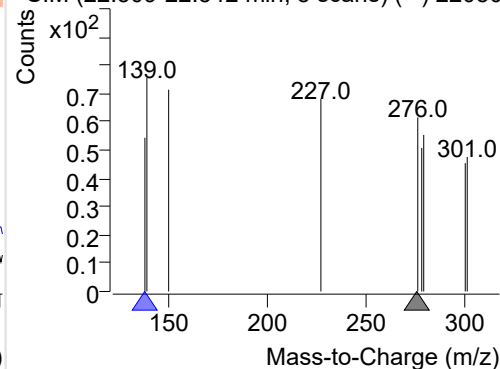
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-047.D

276.0, 138.0

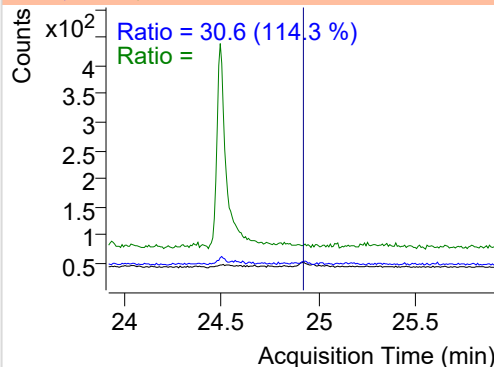
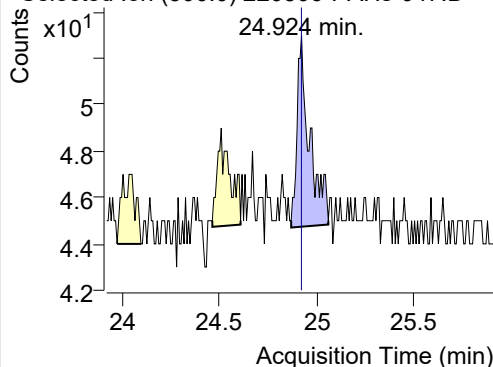


+ SIM (22.509-22.542 min, 5 scans) (\*\*) 22050

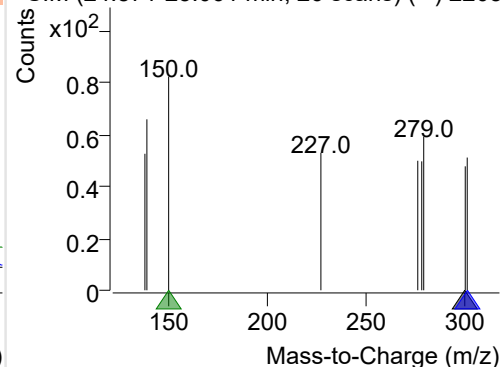
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-047.D

300.0, 301.0, 150.0



+ SIM (24.871-25.061 min, 26 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

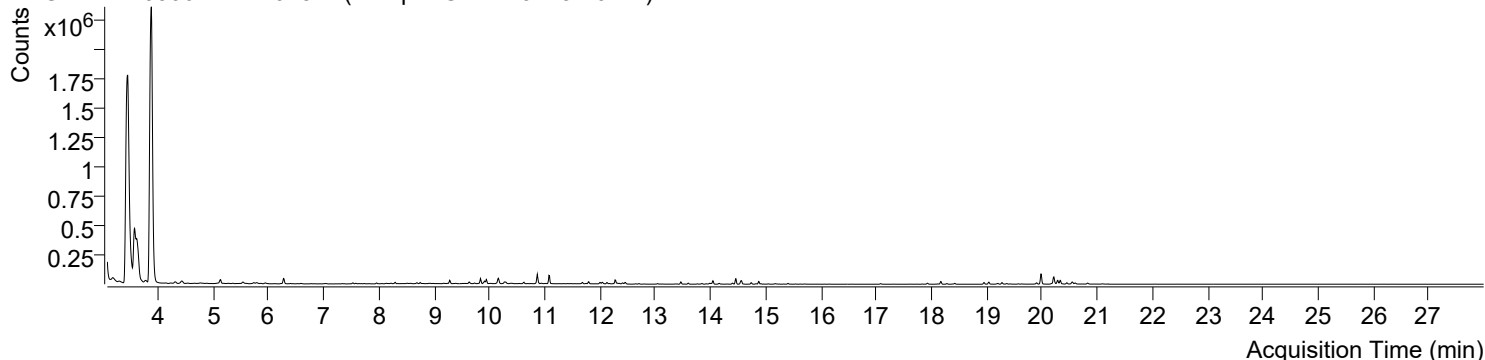


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 11:06:44	Data File	220506-PAHs-048.D
Type	Sample	Name	Sample-Gas-220423-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

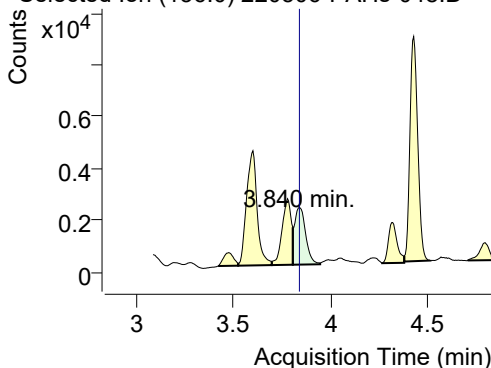
+ TIC SIM 220506-PAHs-048.D (Sample-Gas-220423-10DIL)



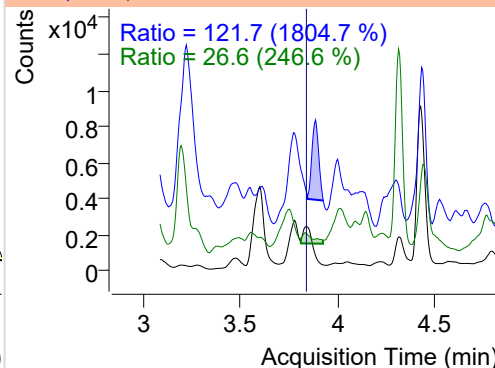
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.840	136.0	8801	2214.74	ND ng/ml	26.6
Naphthalene	3.878	128.0	6586515	1855698.27	ND ng/ml	13.4
Acenaphthylene	6.816	152.0	992	502.63	ND ng/ml	110.2
IS-D10-Acenaphthene	7.526	164.0	5160	3028.06	ND ng/ml	107.5
Acenaphthene	7.591	154.0	2151	1259.05	ND ng/ml	121.8
LSS-D10-Fluorene	8.684	176.0	4732	2831.90	ND ng/ml	98.5
Fluorene	8.747	166.0	6816	4551.70	ND ng/ml	97.5
IS-D10-Phenanthrene	10.889	188.0	8300	5518.42	ND ng/ml	21.8
Phenanthrene	10.942	178.0	3166	1970.11	ND ng/ml	27.5
Anthracene	11.089	178.0	31180	19239.11	ND ng/ml	27.2
Fluoranthene	13.764	202.0	1818	1220.16	ND ng/ml	
LSS-D10-Pyrene	14.159	212.0	6836	4343.85	ND ng/ml	40.1
Pyrene	14.046	202.0	17828	9861.16	ND ng/ml	133.0
Benz(a)anthracene	16.989	228.0	88	39.00	ND ng/ml	120.7
IS-D12-Chrysene	17.081	240.0	6039	3535.06	ND ng/ml	18.6
Chrysene	17.135	228.0	53	39.52	ND ng/ml	
Benzo(b)fluoranthene	19.362	252.0	1390	703.80	ND ng/ml	15.4
Benzo(k)fluoranthene	19.362	252.0	1390	703.80	ND ng/ml	15.4
SS-D12-Benzo(e)pyrene	19.903	264.0	14969	7423.84	ND ng/ml	21.3
Benzo(e)pyrene	19.981	252.0	3390	1757.35	ND ng/ml	17.1
Benzo(a)pyrene	20.052	252.0	380	183.02	ND ng/ml	
IS-D12-Perylene	20.216	264.0	45371	20526.48	ND ng/ml	
Perylene	20.216	252.0	2710	1229.59	ND ng/ml	14.6
Indeno(1,2,3-c,d)pyrene	22.114	276.0	25	14.78	ND ng/ml	43.4
Dibenz(a,h)anthracene	22.191	278.0	30	12.35	ND ng/ml	
Benzo(g,h,i)perylene	22.526	276.0	8	4.76	ND ng/ml	
Coronene	24.916	300.0	41	7.14	ND ng/ml	

## IS-D8-Naphthalene

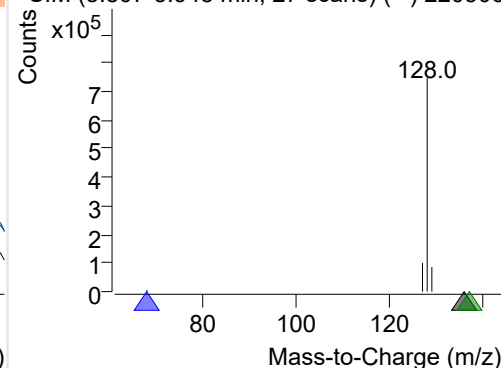
+ Selected Ion (136.0) 220506-PAHs-048.D



136.0, 68.0, 137.0

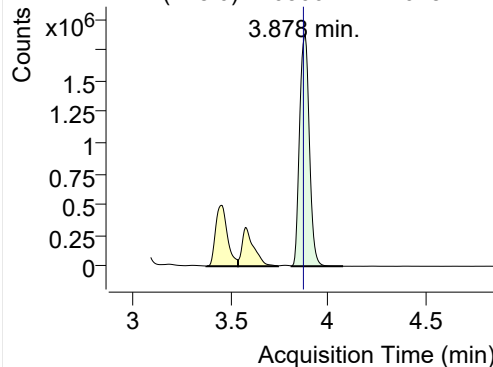


+ SIM (3.807-3.948 min, 27 scans) (\*\*) 220506

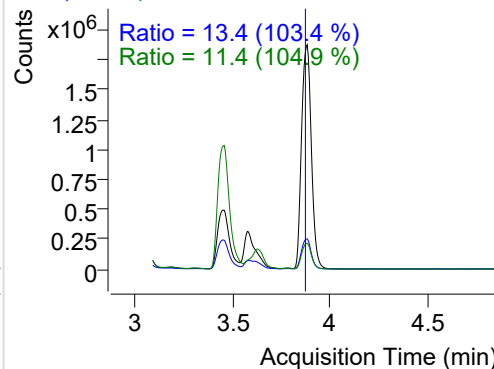


**Naphthalene**

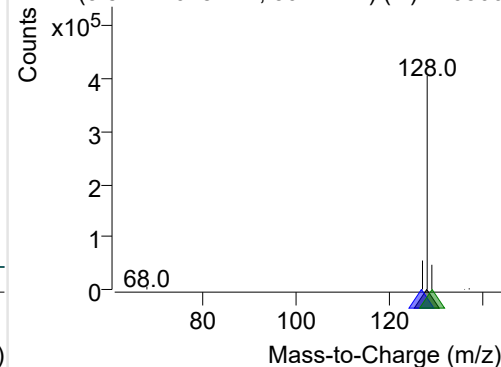
+ Selected Ion (128.0) 220506-PAHs-048.D



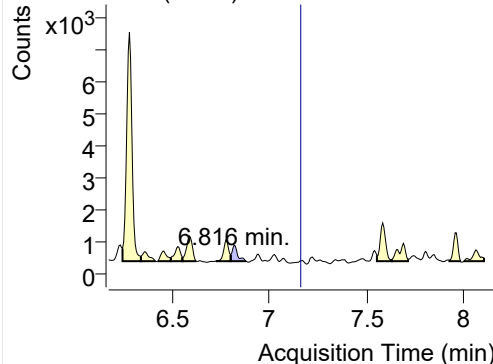
128.0, 127.0, 129.0



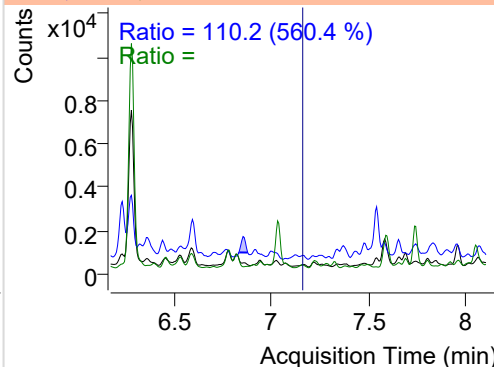
+ SIM (3.812-4.078 min, 50 scans) (\*\*) 220506

**Acenaphthylene**

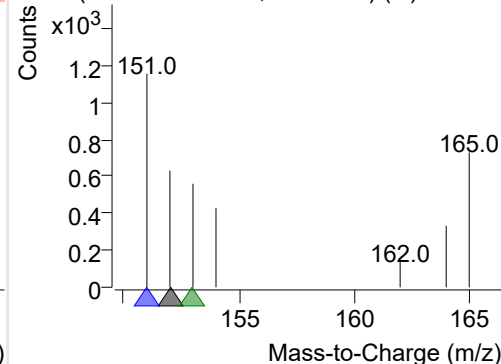
+ Selected Ion (152.0) 220506-PAHs-048.D



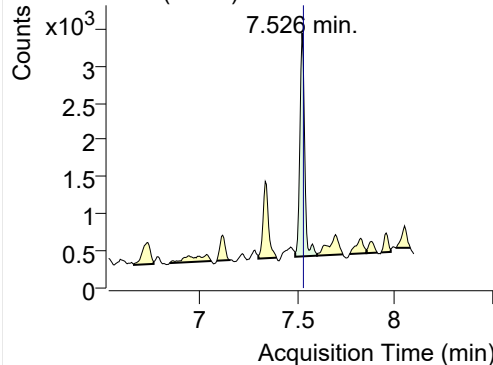
152.0, 151.0, 153.0



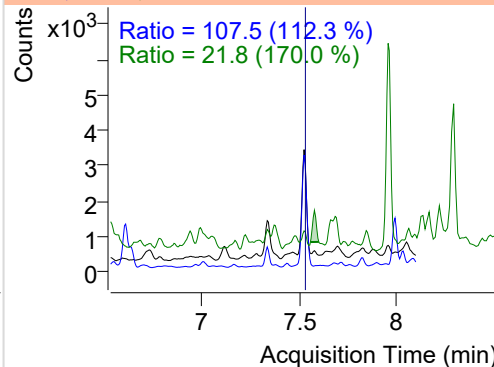
+ SIM (6.798-6.877 min, 14 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

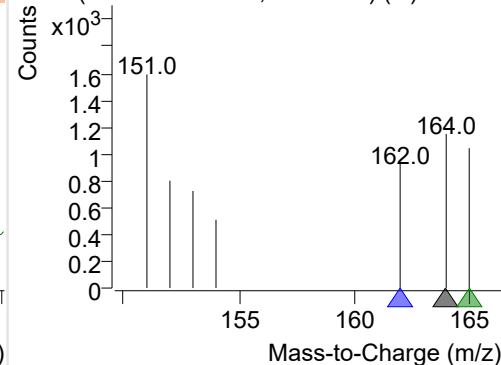
+ Selected Ion (164.0) 220506-PAHs-048.D



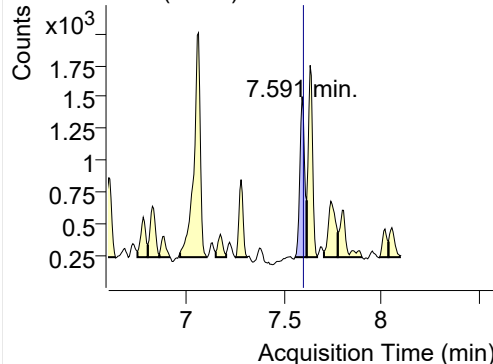
164.0, 162.0, 165.0



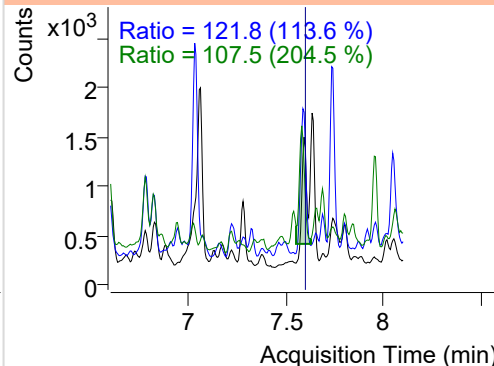
+ SIM (7.491-7.603 min, 20 scans) (\*\*) 220506

**Acenaphthene**

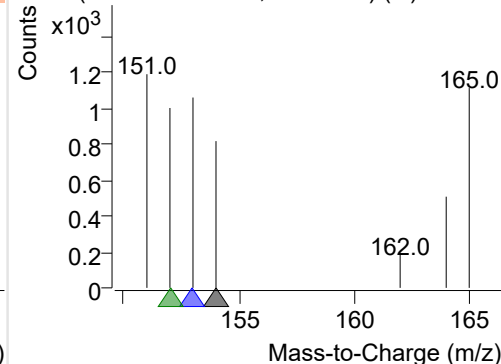
+ Selected Ion (154.0) 220506-PAHs-048.D



154.0, 153.0, 152.0

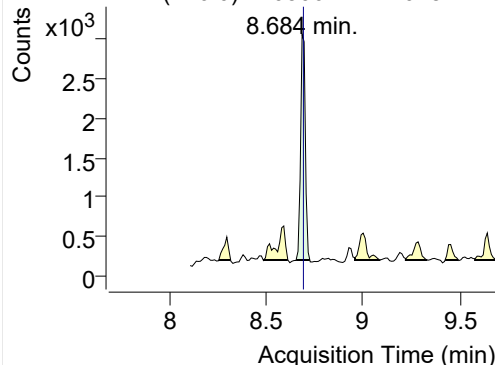


+ SIM (7.555-7.615 min, 11 scans) (\*\*) 220506

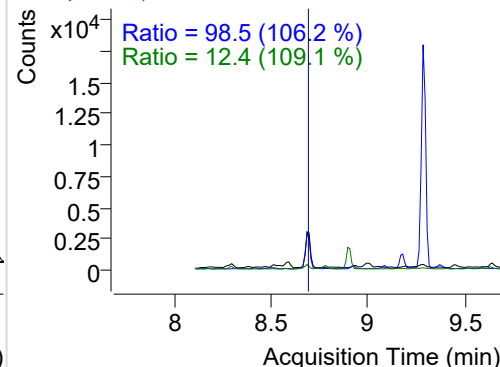


## LSS-D10-Fluorene

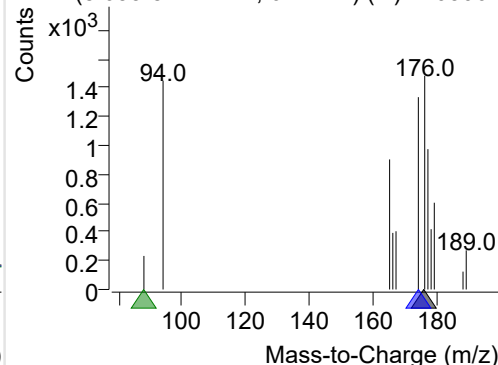
+ Selected Ion (176.0) 220506-PAHs-048.D



176.0, 174.0, 88.0

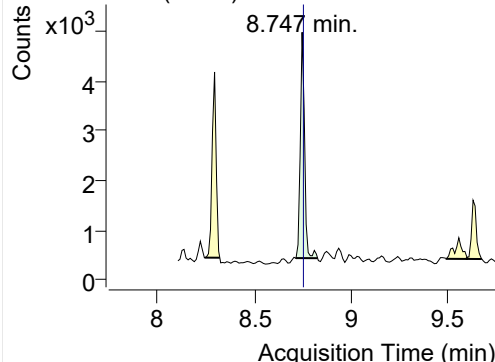


+ SIM (8.653-8.724 min, 6 scans) (\*\*) 220506-I

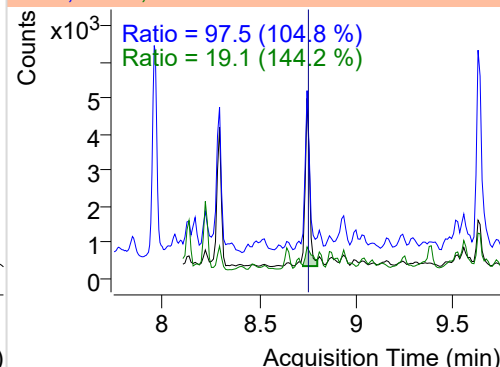


## Fluorene

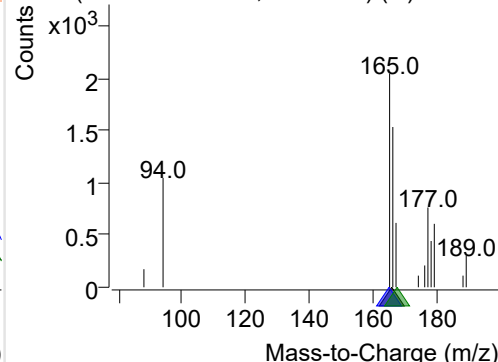
+ Selected Ion (166.0) 220506-PAHs-048.D



166.0, 165.0, 167.0

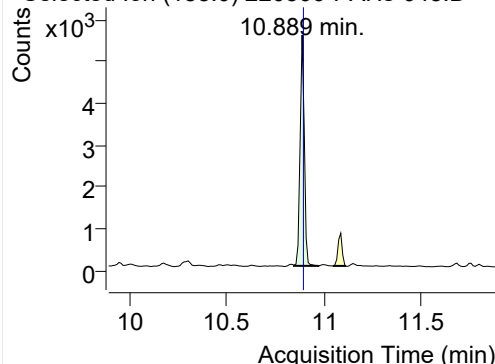


+ SIM (8.716-8.827 min, 10 scans) (\*\*) 220506

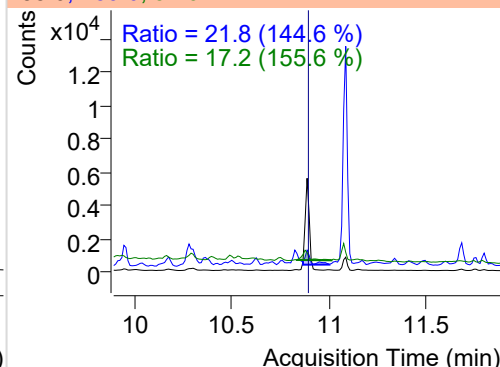


## IS-D10-Phenanthrene

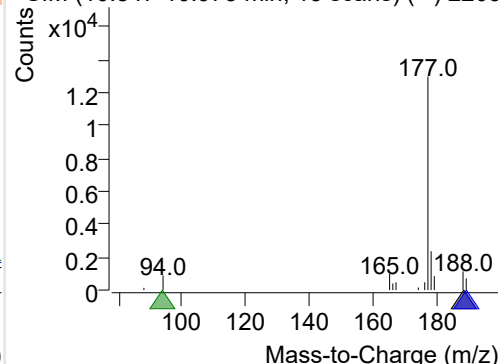
+ Selected Ion (188.0) 220506-PAHs-048.D



188.0, 189.0, 94.0

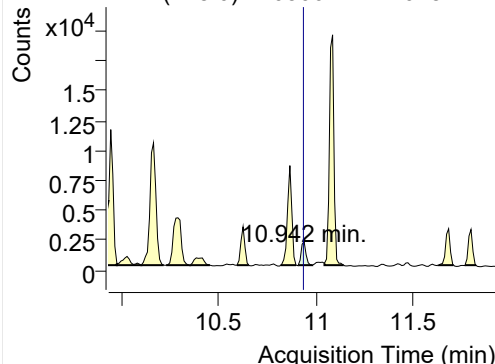


+ SIM (10.847-10.973 min, 13 scans) (\*\*) 2205

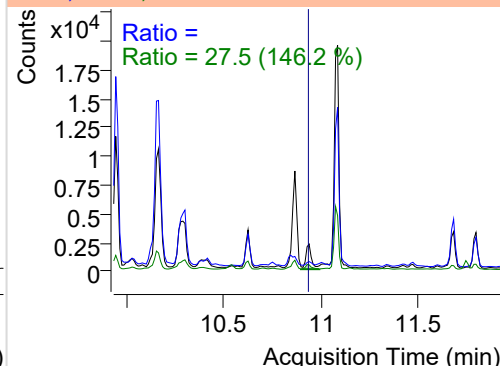


## Phenanthrene

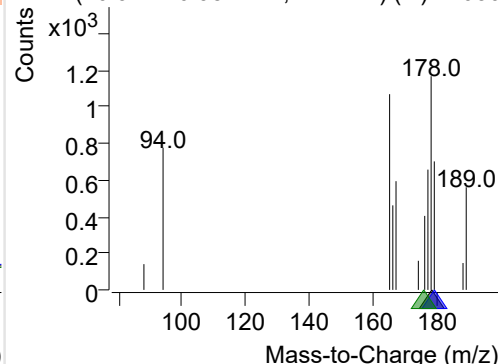
+ Selected Ion (178.0) 220506-PAHs-048.D



178.0, 179.0, 176.0

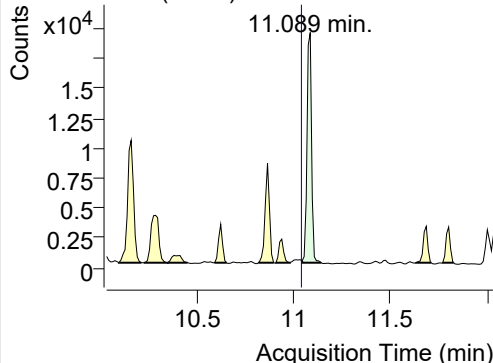


+ SIM (10.911-10.984 min, 7 scans) (\*\*) 22050

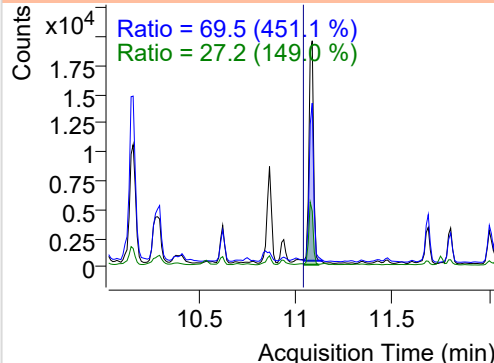


**Anthracene**

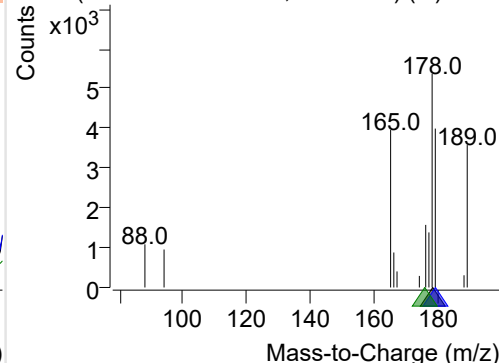
+ Selected Ion (178.0) 220506-PAHs-048.D



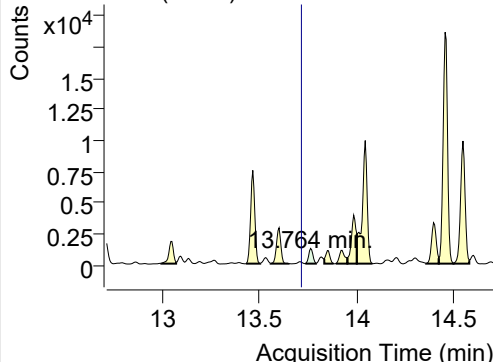
178.0, 179.0, 176.0



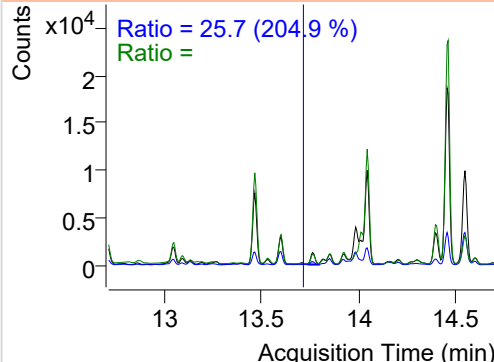
+ SIM (11.047-11.146 min, 10 scans) (\*\*) 2205

**Fluoranthene**

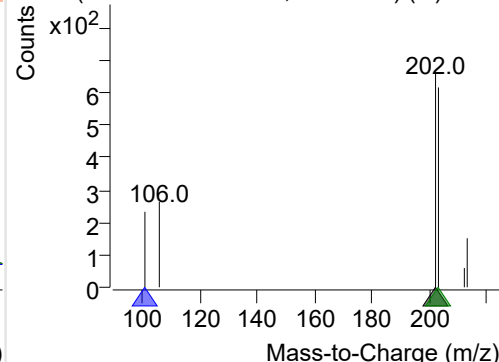
+ Selected Ion (202.0) 220506-PAHs-048.D



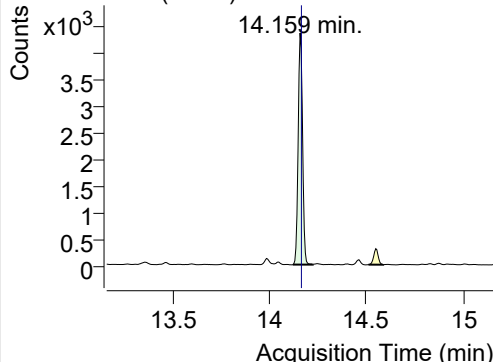
202.0, 101.0, 203.0



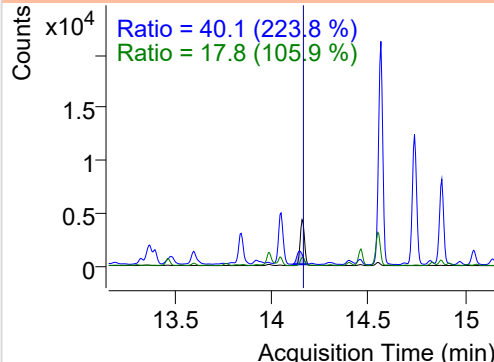
+ SIM (13.737-13.791 min, 11 scans) (\*\*) 2205

**LSS-D10-Pyrene**

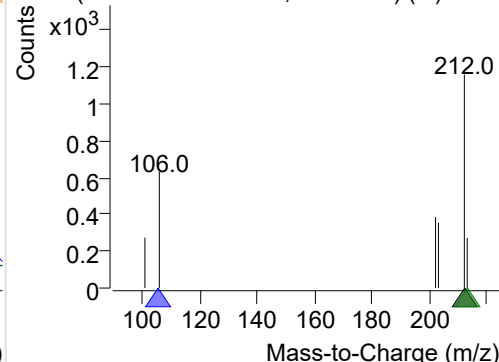
+ Selected Ion (212.0) 220506-PAHs-048.D



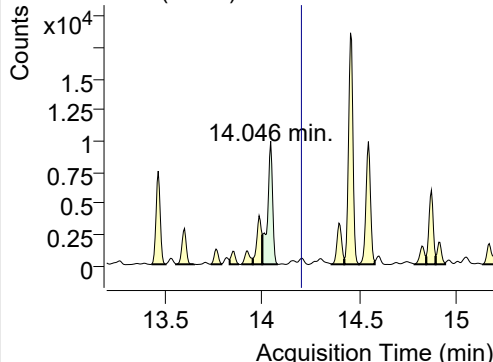
212.0, 106.0, 213.0



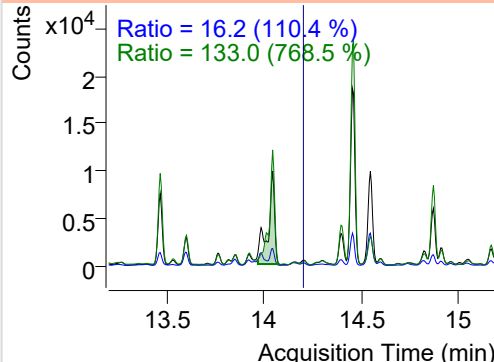
+ SIM (14.123-14.225 min, 19 scans) (\*\*) 2205

**Pyrene**

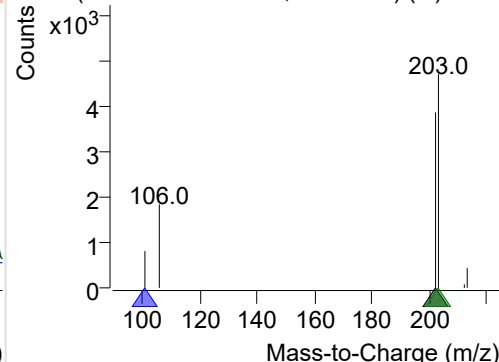
+ Selected Ion (202.0) 220506-PAHs-048.D



202.0, 101.0, 203.0



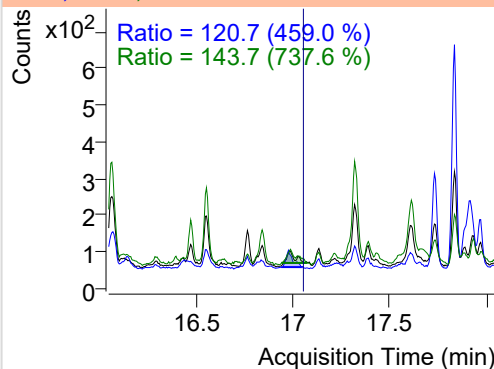
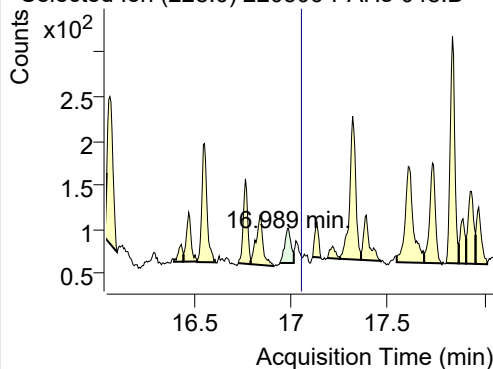
+ SIM (14.002-14.083 min, 15 scans) (\*\*) 2205



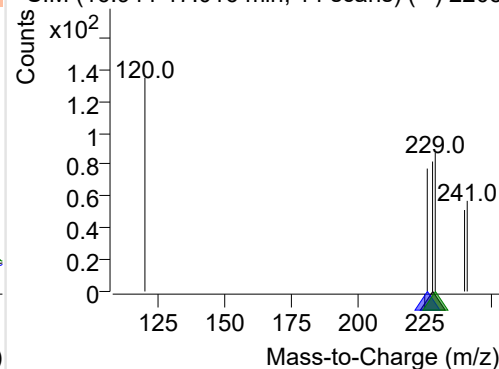
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-048.D

228.0, 226.0, 229.0

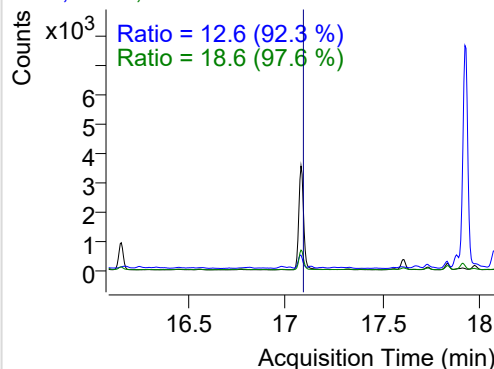
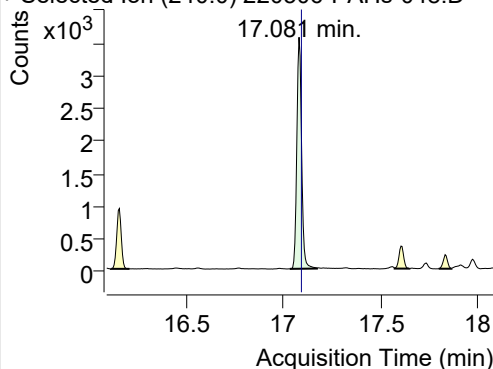


+ SIM (16.944-17.016 min, 14 scans) (\*\*) 2205

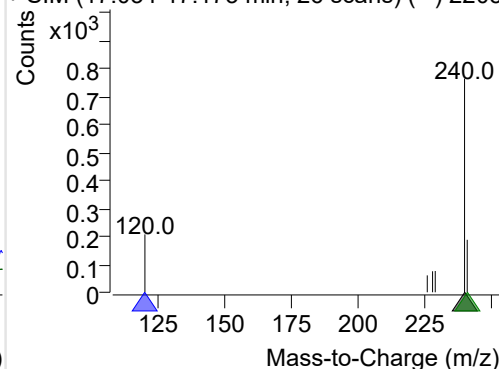
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-048.D

240.0, 120.0, 241.0

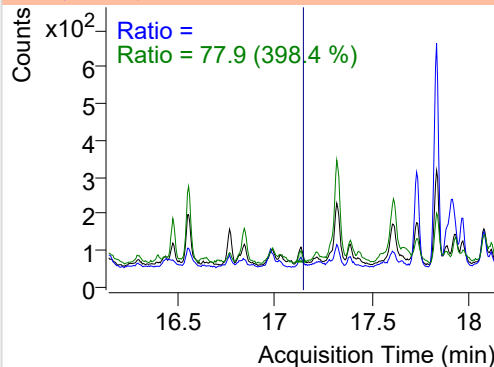
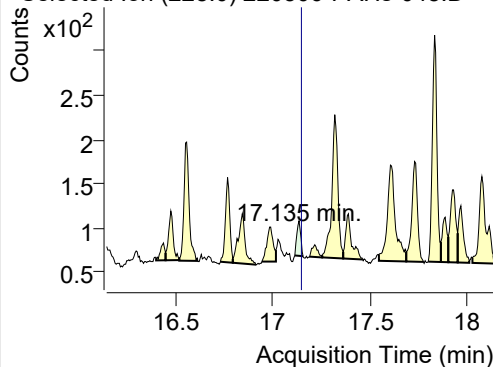


+ SIM (17.034-17.173 min, 26 scans) (\*\*) 2205

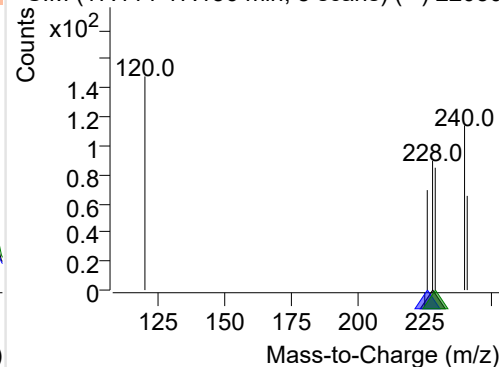
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-048.D

228.0, 226.0, 229.0

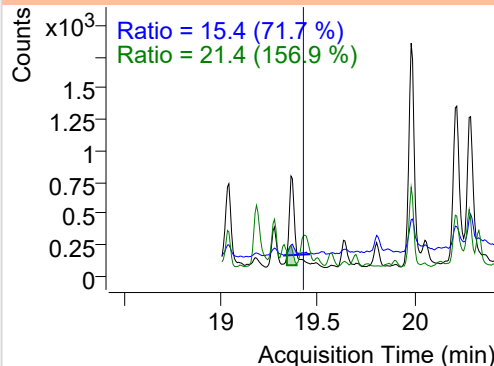
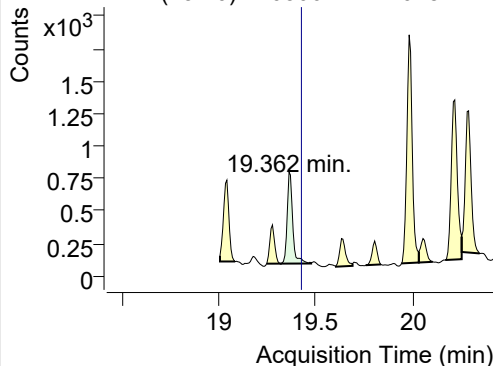


+ SIM (17.114-17.156 min, 8 scans) (\*\*) 22050

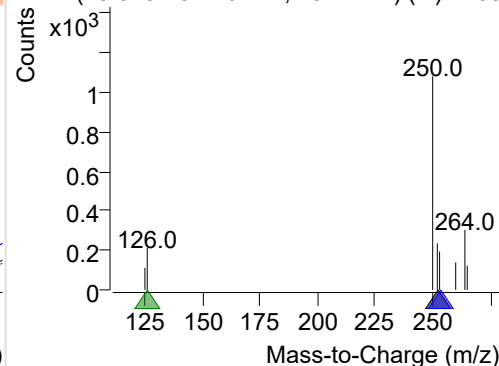
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-048.D

252.0, 253.0, 126.0



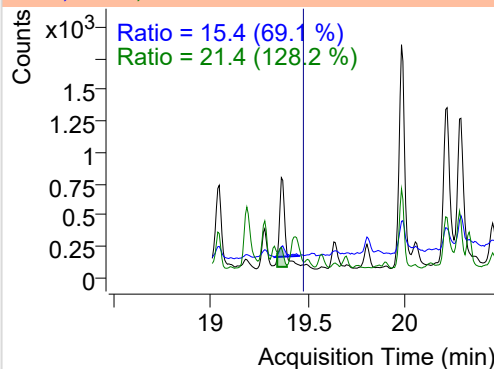
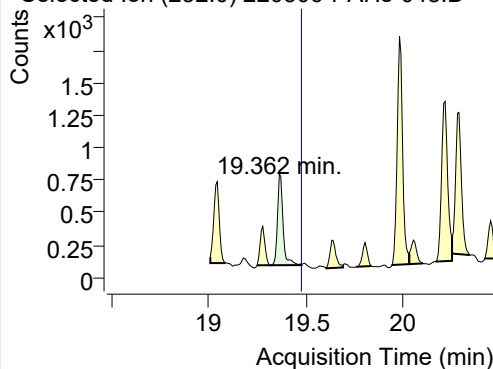
+ SIM (19.319-19.476 min, 23 scans) (\*\*) 2205



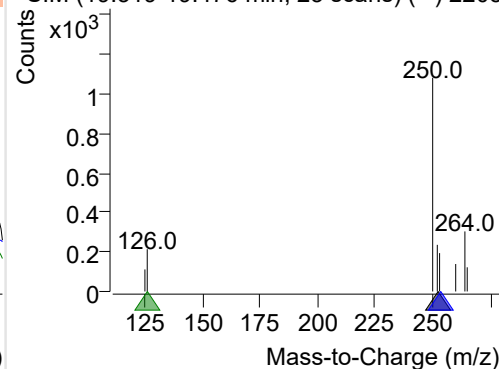
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-048.D

252.0, 253.0, 126.0

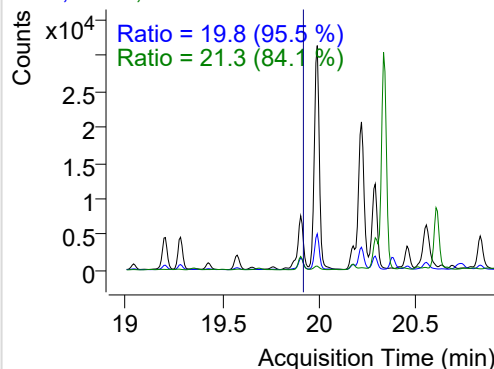
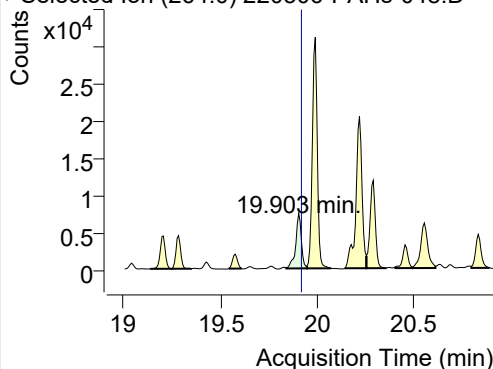


+ SIM (19.319-19.476 min, 23 scans) (\*\*) 2205

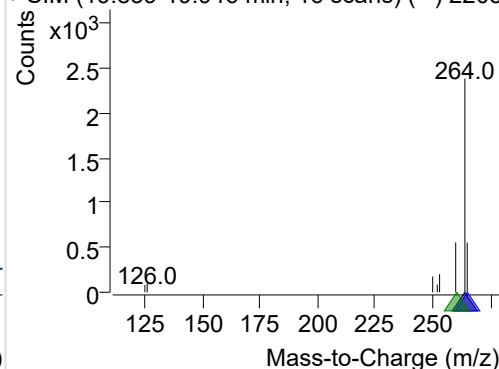
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-048.D

264.0, 265.0, 260.0

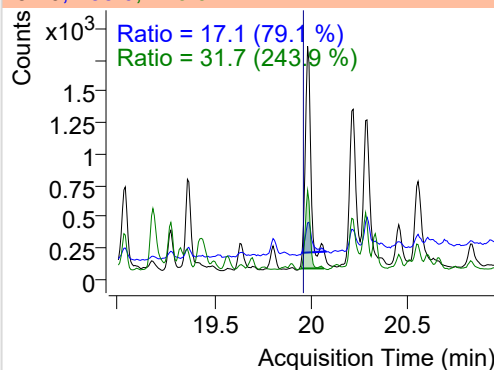
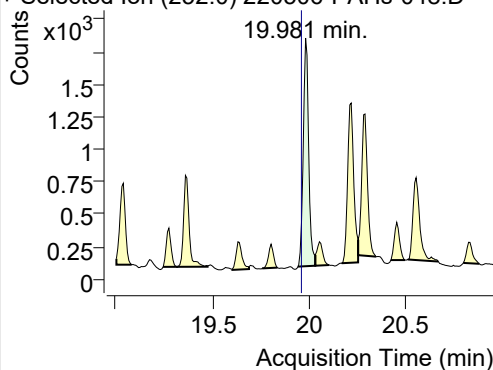


+ SIM (19.839-19.946 min, 16 scans) (\*\*) 2205

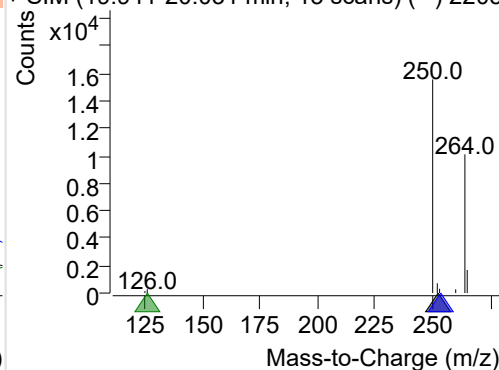
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-048.D

252.0, 253.0, 126.0

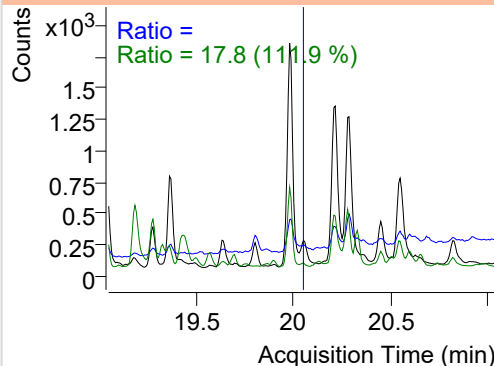
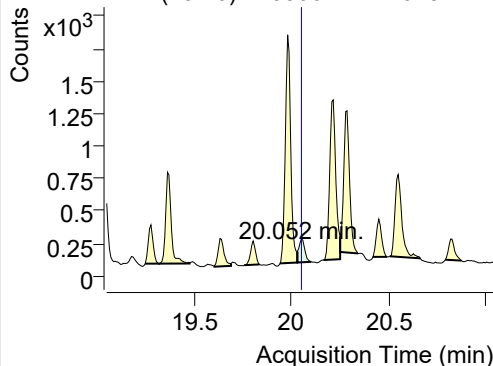


+ SIM (19.941-20.031 min, 13 scans) (\*\*) 2205

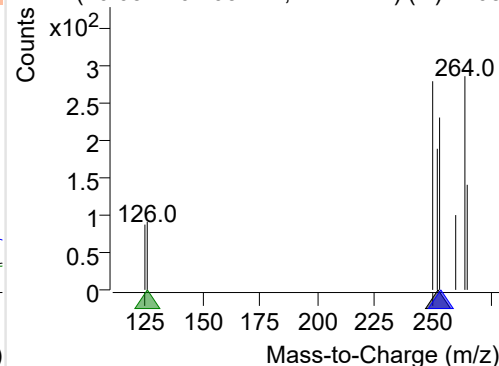
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-048.D

252.0, 253.0, 126.0



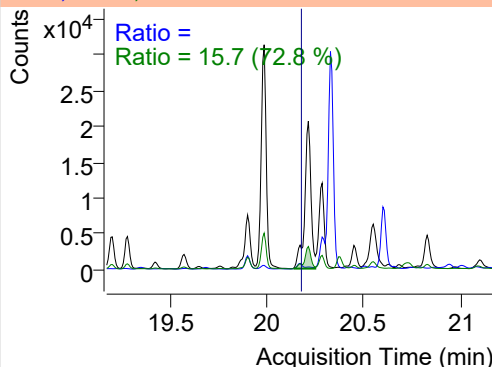
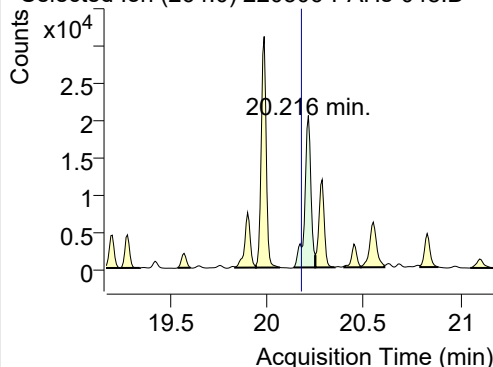
+ SIM (20.031-20.103 min, 11 scans) (\*\*) 2205



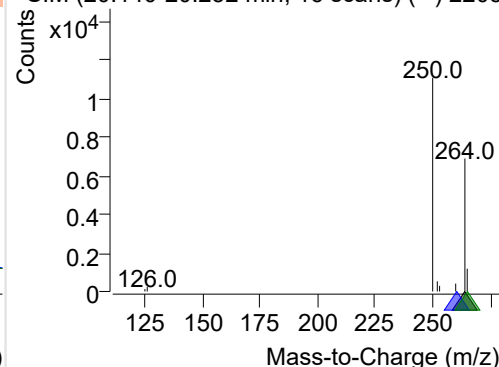
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-048.D

264.0, 260.0, 265.0



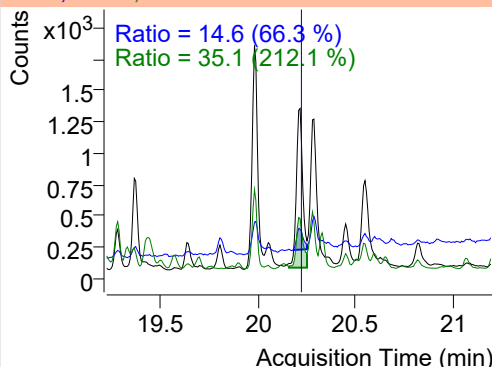
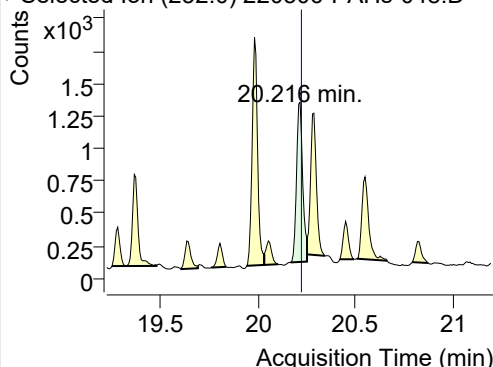
+ SIM (20.140-20.252 min, 16 scans) (\*\*) 2205



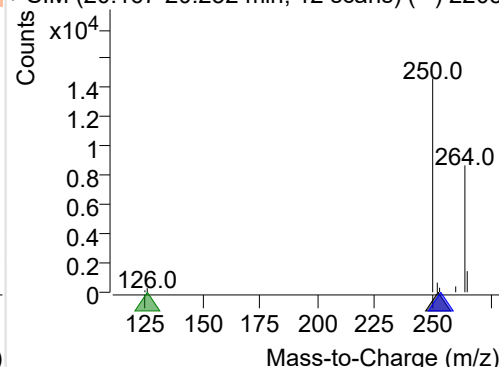
## Perylene

+ Selected Ion (252.0) 220506-PAHs-048.D

252.0, 253.0, 126.0



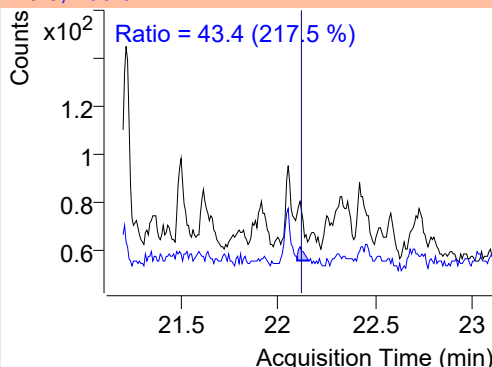
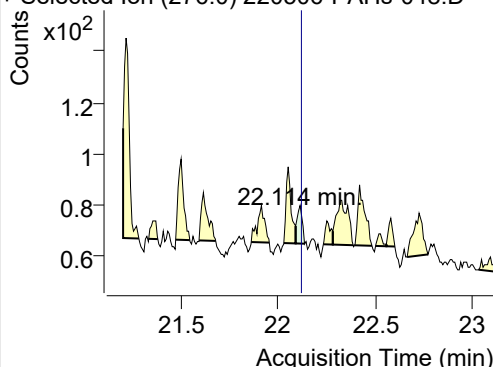
+ SIM (20.167-20.252 min, 12 scans) (\*\*) 2205



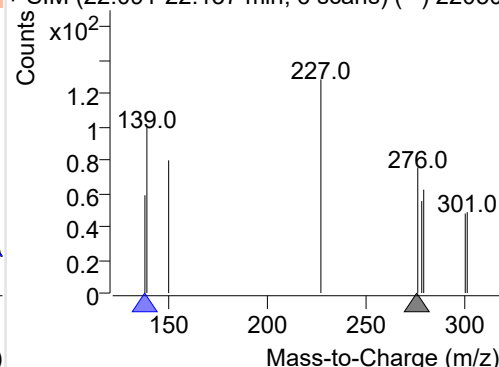
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-048.D

276.0, 138.0



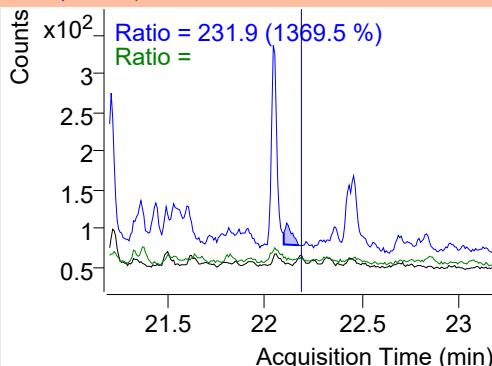
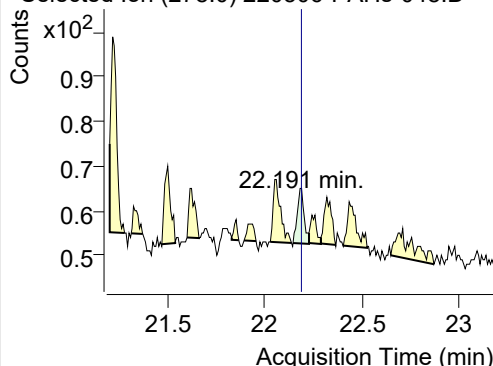
+ SIM (22.091-22.137 min, 6 scans) (\*\*) 22050



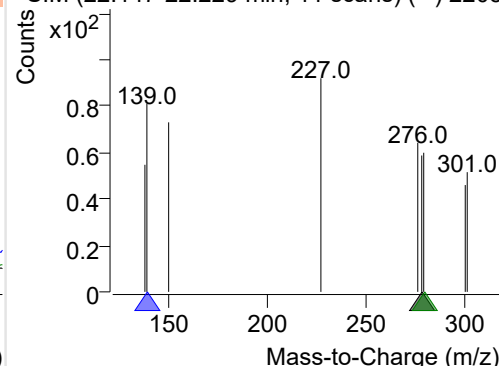
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-048.D

278.0, 139.0, 279.0



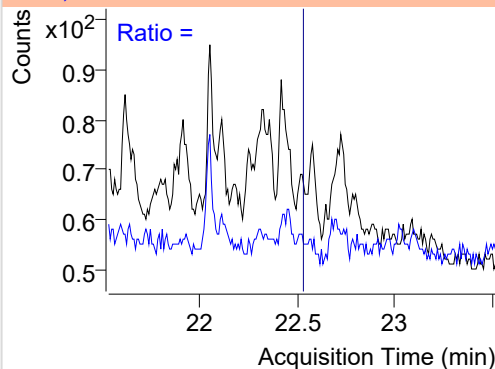
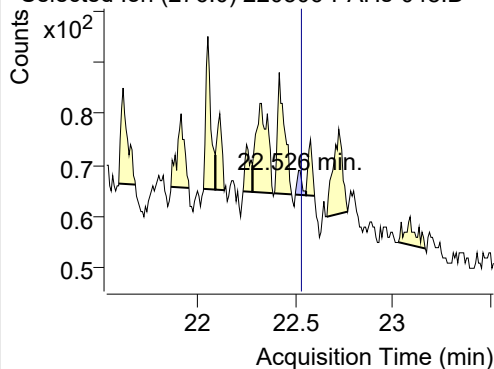
+ SIM (22.147-22.229 min, 11 scans) (\*\*) 2205



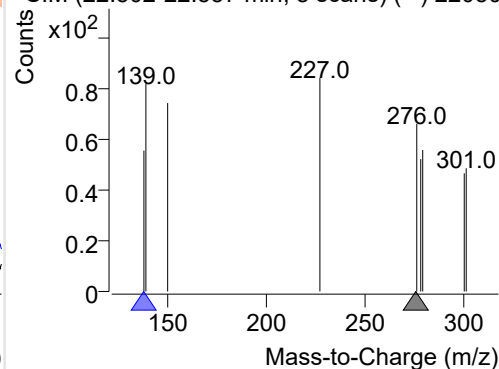
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-048.D

276.0, 138.0

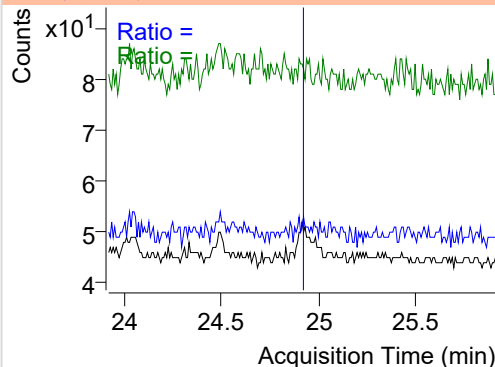
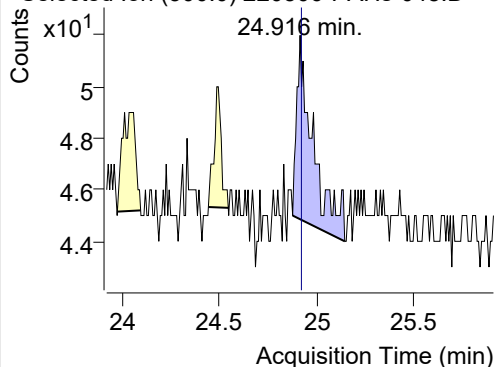


+ SIM (22.502-22.557 min, 8 scans) (\*\*) 22050

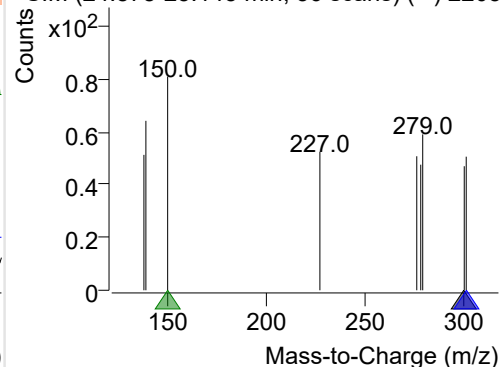
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-048.D

300.0, 301.0, 150.0



+ SIM (24.878-25.145 min, 36 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

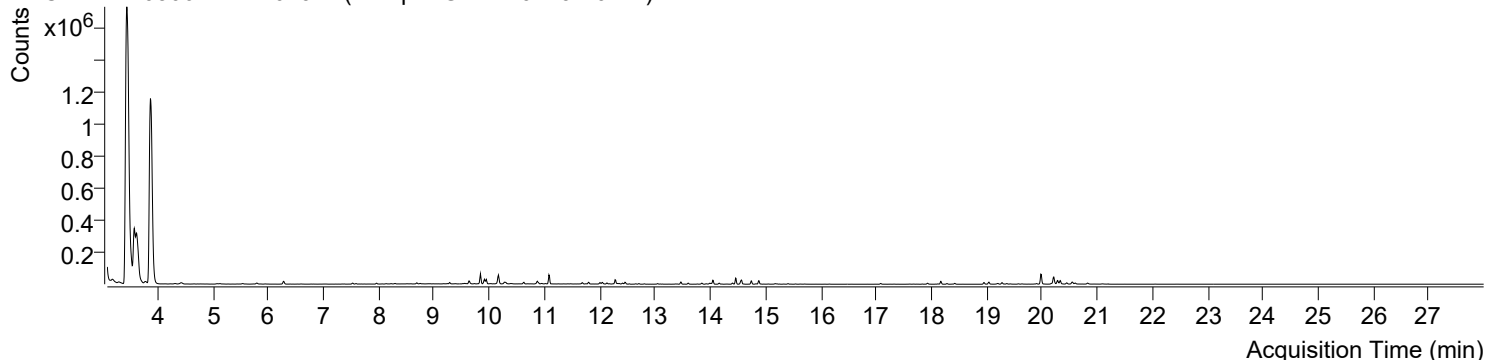


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오전 11:37:44	Data File	220506-PAHs-049.D
Type	Sample	Name	Sample-Gas-220429-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

+ TIC SIM 220506-PAHs-049.D (Sample-Gas-220429-10DIL)

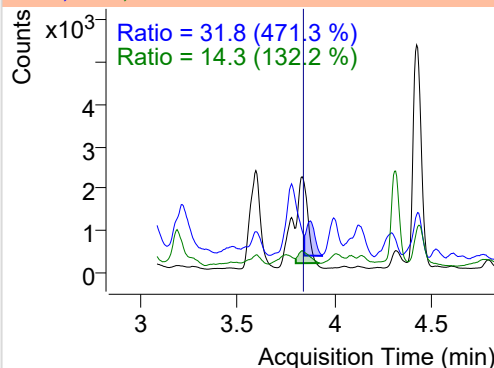
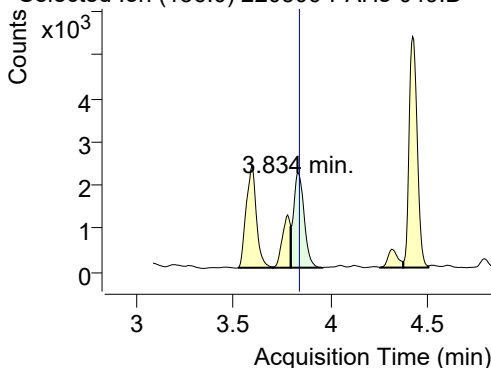


Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.834	136.0	8310	2185.21	ND ng/ml	14.3
Naphthalene	3.867	128.0	3345831	925196.46	ND ng/ml	13.1
Acenaphthylene	6.775	152.0	319	183.64	ND ng/ml	34.6
IS-D10-Acenaphthene	7.526	164.0	4603	2765.88	ND ng/ml	100.8
Acenaphthene	7.591	154.0	1592	968.28	ND ng/ml	111.9
LSS-D10-Fluorene	8.684	176.0	4412	2810.46	ND ng/ml	94.5
Fluorene	8.747	166.0	2607	1494.61	ND ng/ml	104.9
IS-D10-Phenanthrene	10.889	188.0	8101	5394.08	ND ng/ml	19.0
Phenanthrene	10.942	178.0	1543	774.28	ND ng/ml	22.3
Anthracene	11.078	178.0	24279	14894.28	ND ng/ml	27.0
Fluoranthene	13.601	202.0	3210	2090.15	ND ng/ml	104.7
LSS-D10-Pyrene	14.160	212.0	6417	4157.02	ND ng/ml	28.0
Pyrene	14.046	202.0	11971	7514.15	ND ng/ml	154.5
Benz(a)anthracene	17.027	228.0	44	21.80	ND ng/ml	
IS-D12-Chrysene	17.081	240.0	5795	3396.10	ND ng/ml	18.8
Chrysene	17.130	228.0	51	32.57	ND ng/ml	
Benzo(b)fluoranthene	19.369	252.0	1116	516.46	ND ng/ml	9.2
Benzo(k)fluoranthene	19.369	252.0	1116	516.46	ND ng/ml	9.2
SS-D12-Benzo(e)pyrene	19.903	264.0	5354	2293.76	ND ng/ml	
Benzo(e)pyrene	19.981	252.0	2621	1310.68	ND ng/ml	21.2
Benzo(a)pyrene	20.052	252.0	269	127.38	ND ng/ml	
IS-D12-Perylene	20.216	264.0	34276	14847.50	ND ng/ml	
Perylene	20.209	252.0	2206	977.32	ND ng/ml	17.1
Indeno(1,2,3-c,d)pyrene	22.107	276.0	35	12.81	ND ng/ml	
Dibenz(a,h)anthracene	22.191	278.0	30	9.37	ND ng/ml	
Benzo(g,h,i)perylene	22.534	276.0	7	4.20	ND ng/ml	
Coronene	24.932	300.0	25	5.94	ND ng/ml	

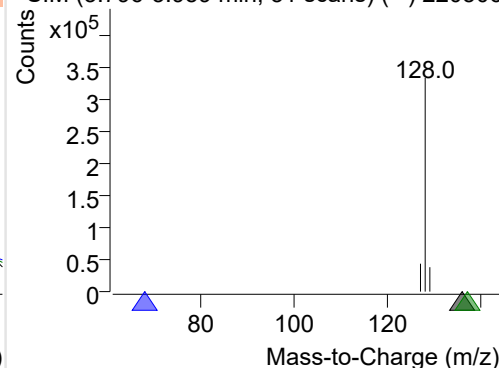
## IS-D8-Naphthalene

+ Selected Ion (136.0) 220506-PAHs-049.D

136.0, 68.0, 137.0

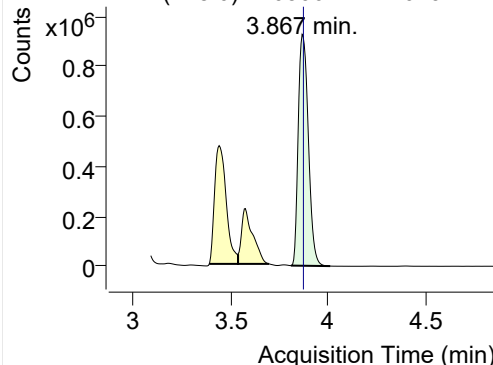


+ SIM (3.796-3.959 min, 31 scans) (\*\*) 220506

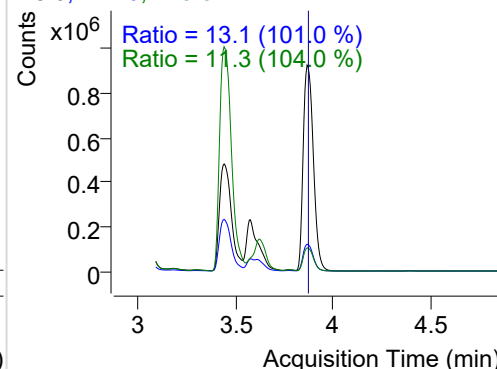


**Naphthalene**

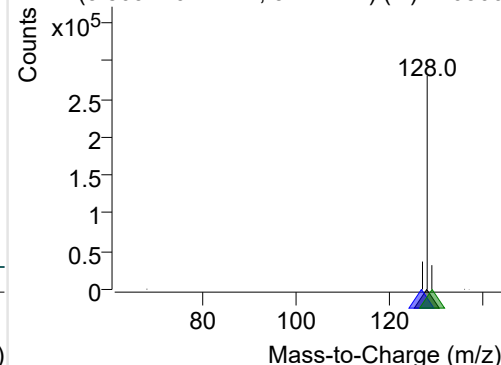
+ Selected Ion (128.0) 220506-PAHs-049.D



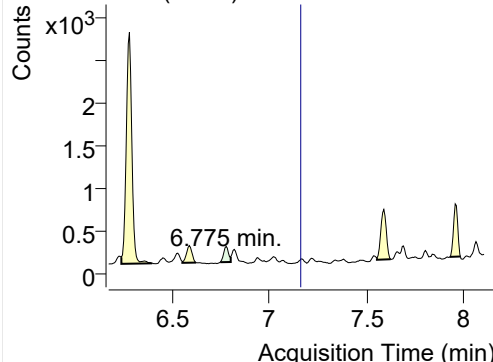
128.0, 127.0, 129.0



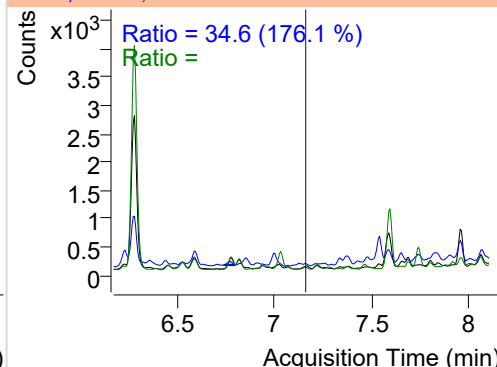
+ SIM (3.809-4.011 min, 37 scans) (\*\*) 220506

**Acenaphthylene**

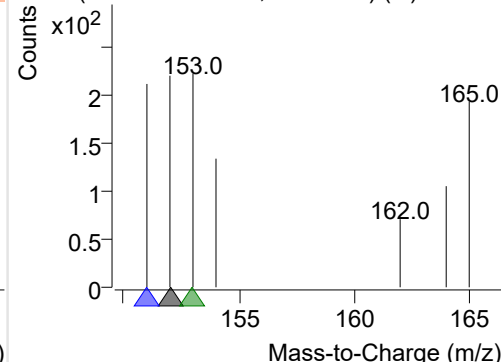
+ Selected Ion (152.0) 220506-PAHs-049.D



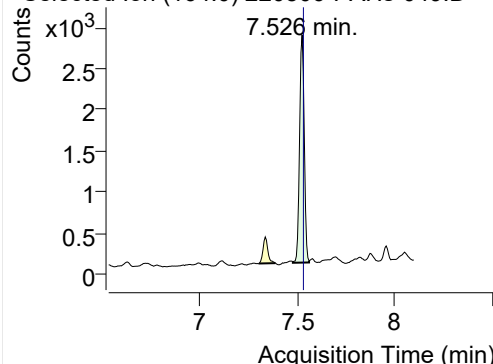
152.0, 151.0, 153.0



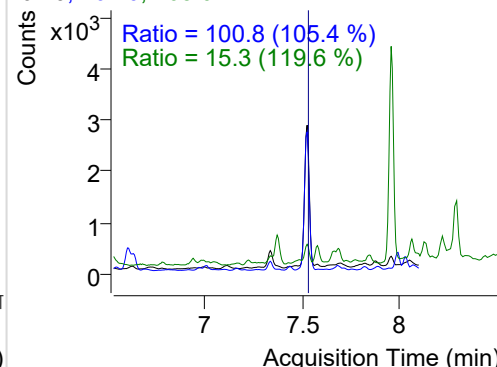
+ SIM (6.744-6.798 min, 10 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

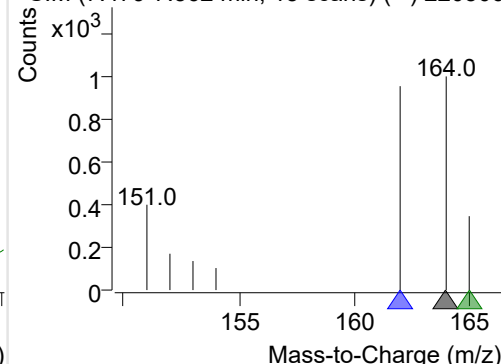
+ Selected Ion (164.0) 220506-PAHs-049.D



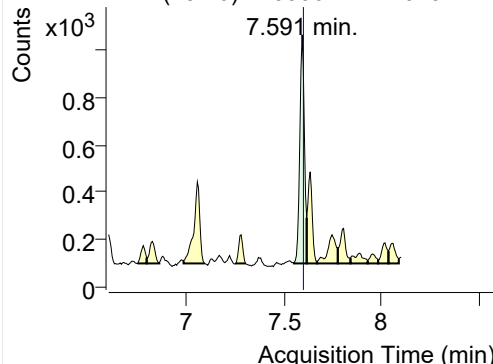
164.0, 162.0, 165.0



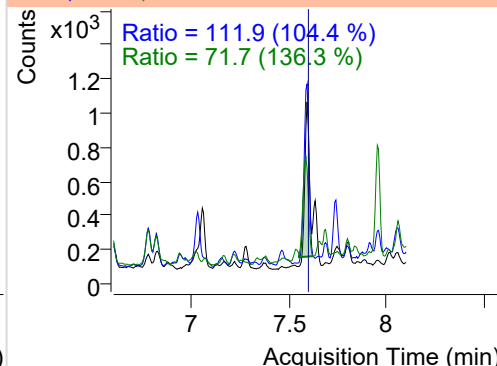
+ SIM (7.479-7.562 min, 15 scans) (\*\*) 220506

**Acenaphthene**

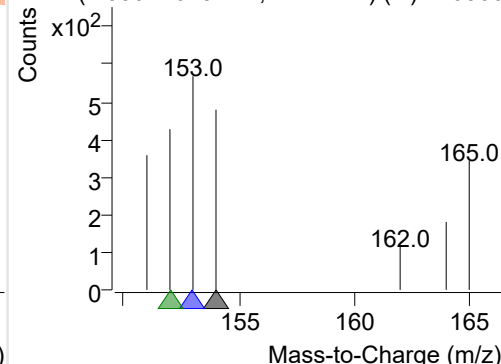
+ Selected Ion (154.0) 220506-PAHs-049.D



154.0, 153.0, 152.0

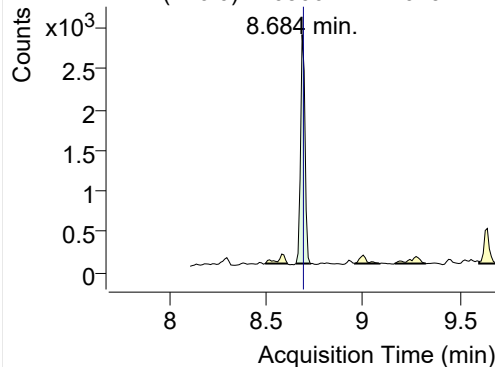


+ SIM (7.550-7.615 min, 12 scans) (\*\*) 220506

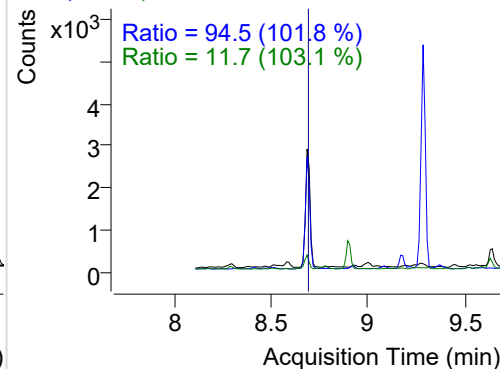


## LSS-D10-Fluorene

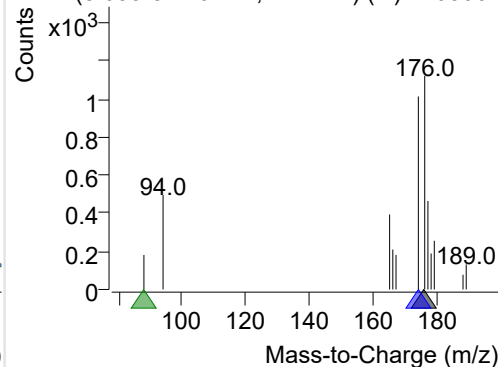
+ Selected Ion (176.0) 220506-PAHs-049.D



176.0, 174.0, 88.0

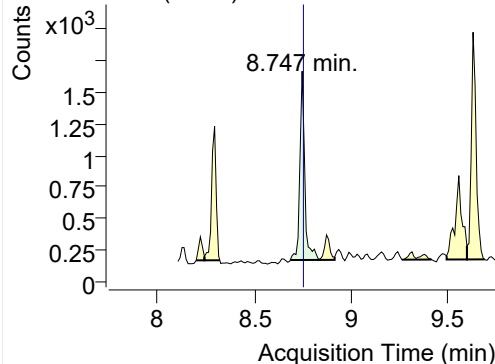


+ SIM (8.653-8.726 min, 7 scans) (\*\*) 220506-I

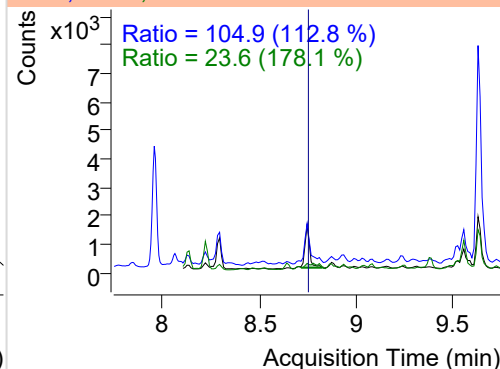


## Fluorene

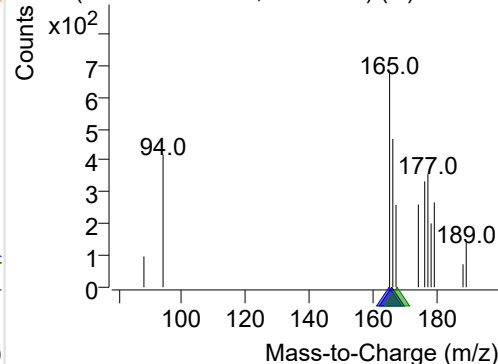
+ Selected Ion (166.0) 220506-PAHs-049.D



166.0, 165.0, 167.0

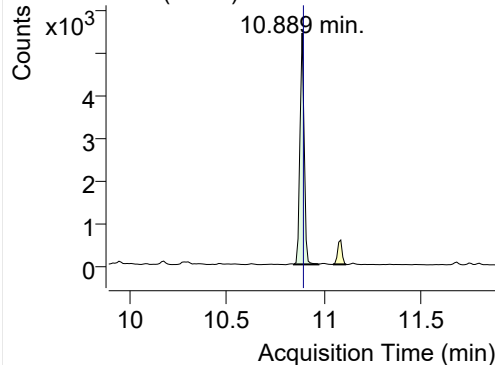


+ SIM (8.686-8.831 min, 14 scans) (\*\*) 220506

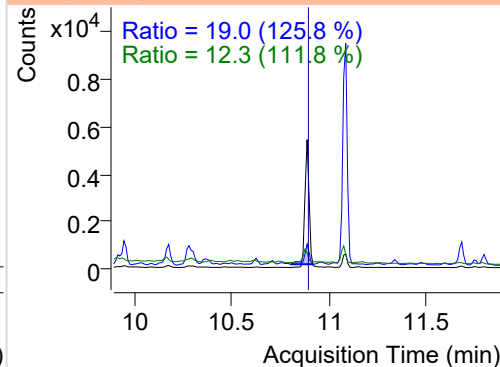


## IS-D10-Phenanthrene

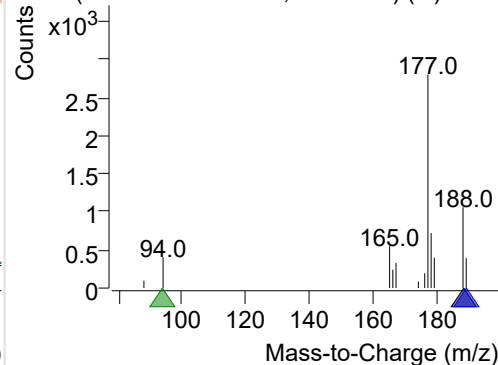
+ Selected Ion (188.0) 220506-PAHs-049.D



188.0, 189.0, 94.0

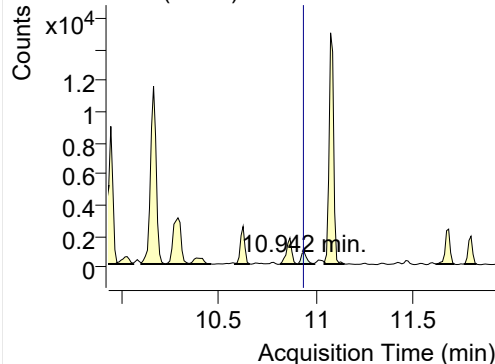


+ SIM (10.847-10.973 min, 13 scans) (\*\*) 2205

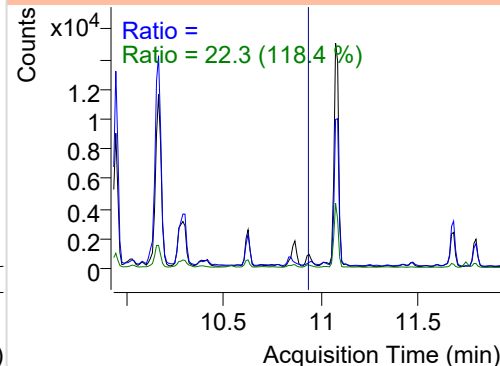


## Phenanthrene

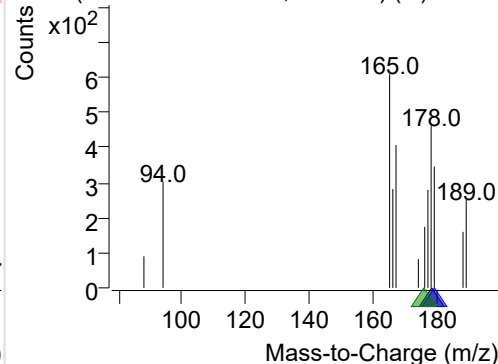
+ Selected Ion (178.0) 220506-PAHs-049.D



178.0, 179.0, 176.0

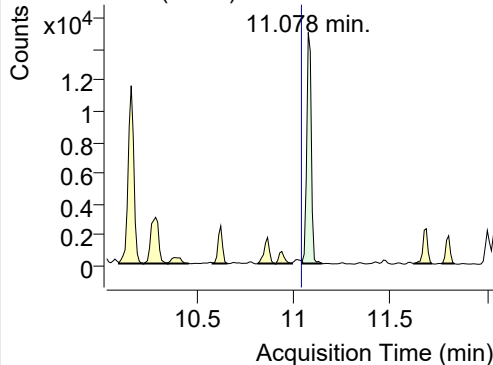


+ SIM (10.910-10.994 min, 9 scans) (\*\*) 22050

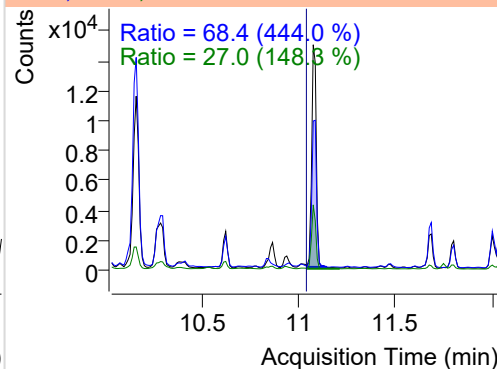


**Anthracene**

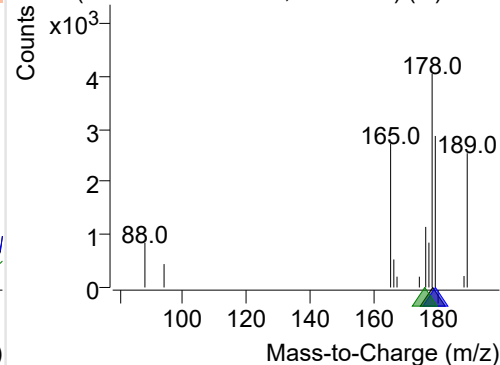
+ Selected Ion (178.0) 220506-PAHs-049.D



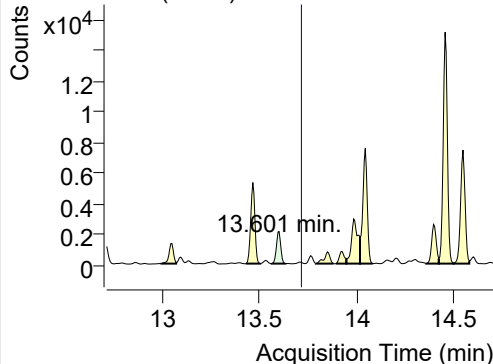
178.0, 179.0, 176.0



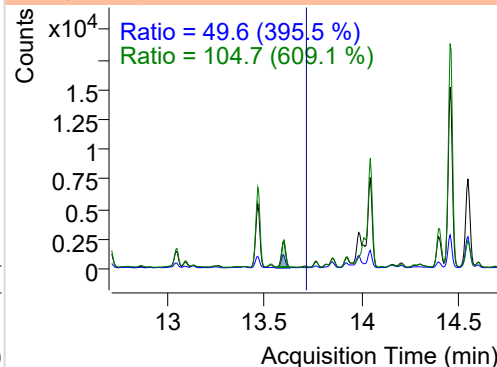
+ SIM (11.047-11.150 min, 10 scans) (\*\*) 2205

**Fluoranthene**

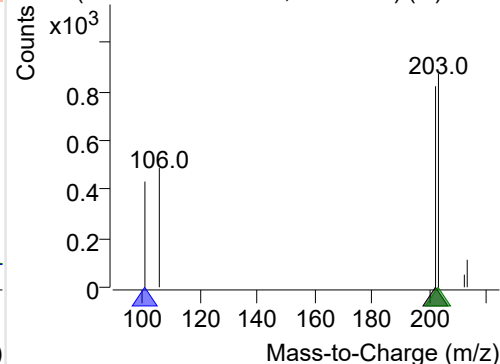
+ Selected Ion (202.0) 220506-PAHs-049.D



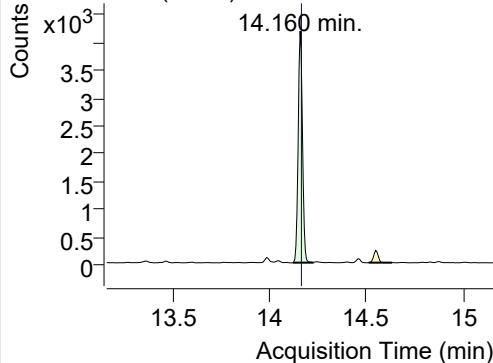
202.0, 101.0, 203.0



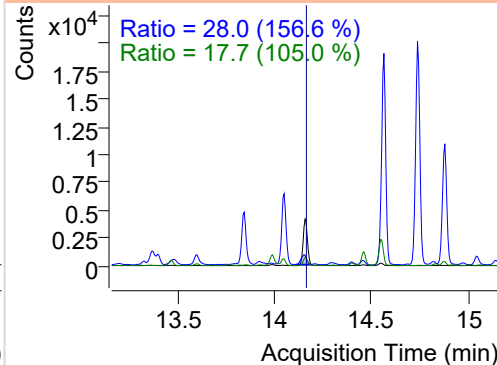
+ SIM (13.563-13.634 min, 14 scans) (\*\*) 2205

**LSS-D10-Pyrene**

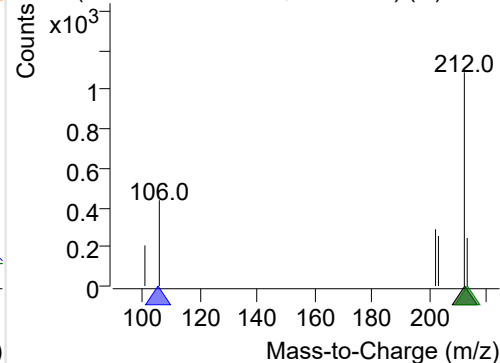
+ Selected Ion (212.0) 220506-PAHs-049.D



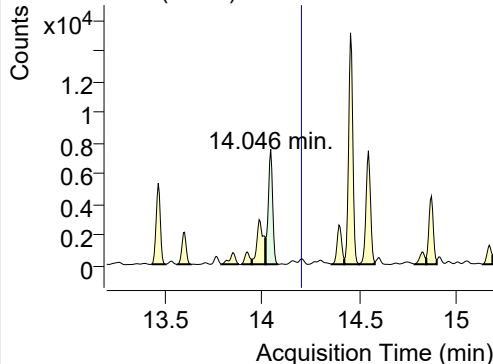
212.0, 106.0, 213.0



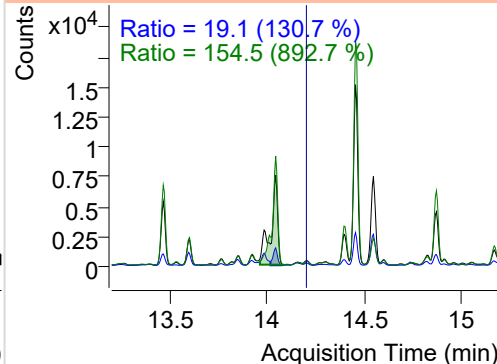
+ SIM (14.122-14.225 min, 19 scans) (\*\*) 2205

**Pyrene**

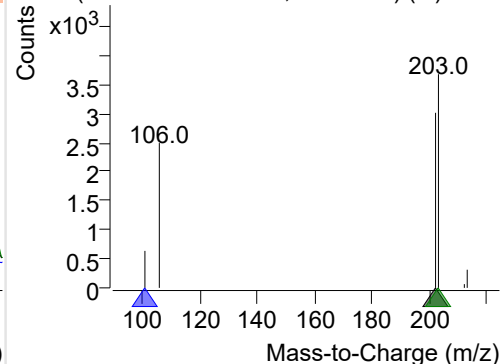
+ Selected Ion (202.0) 220506-PAHs-049.D



202.0, 101.0, 203.0



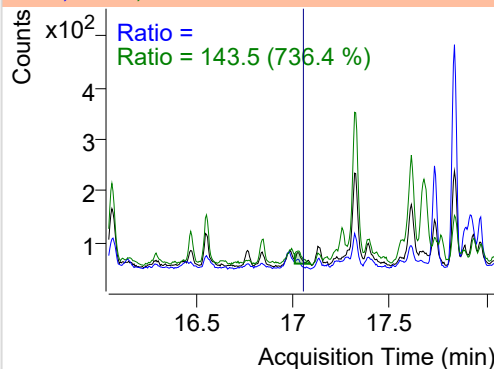
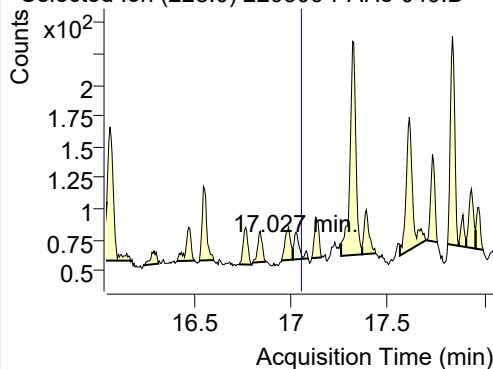
+ SIM (14.019-14.085 min, 13 scans) (\*\*) 2205



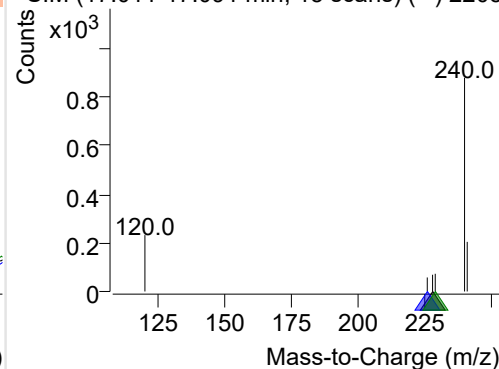
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-049.D

228.0, 226.0, 229.0

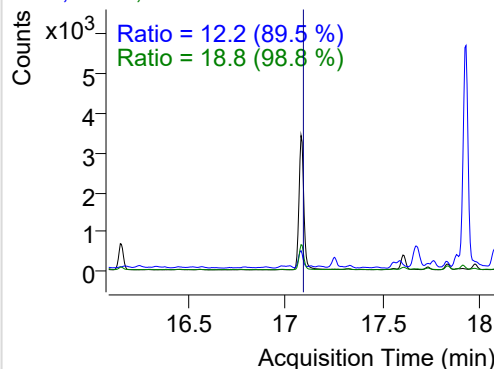
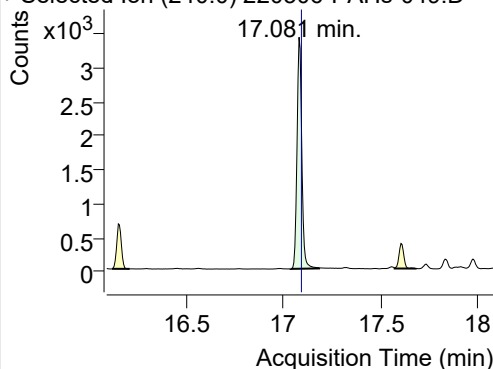


+ SIM (17.011-17.091 min, 15 scans) (\*\*) 2205

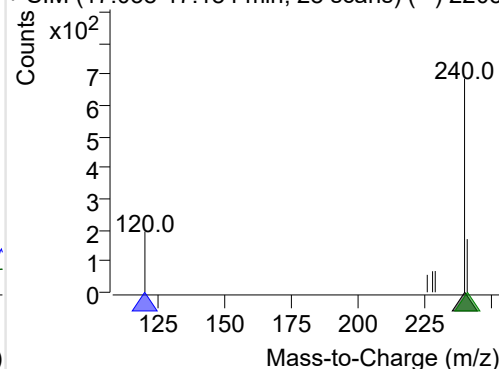
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-049.D

240.0, 120.0, 241.0

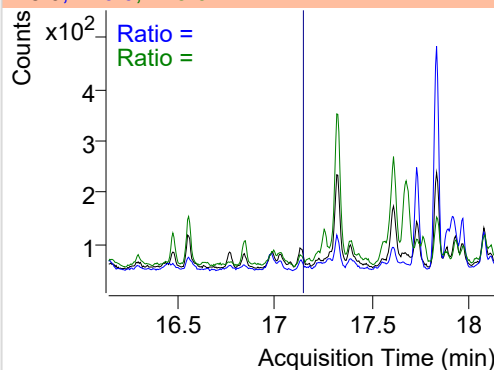
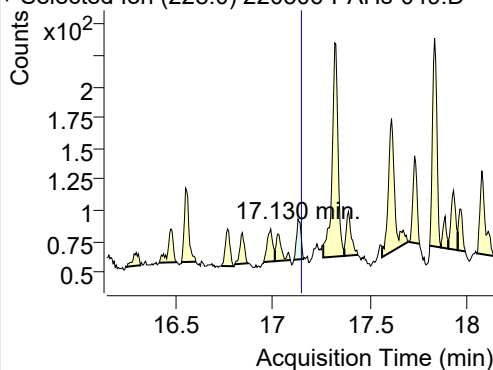


+ SIM (17.038-17.184 min, 28 scans) (\*\*) 2205

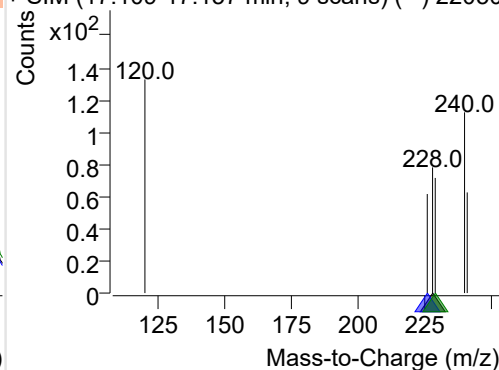
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-049.D

228.0, 226.0, 229.0

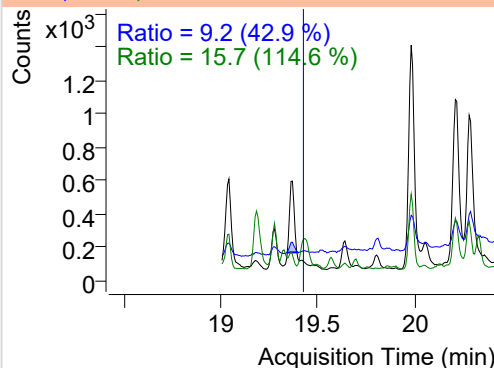
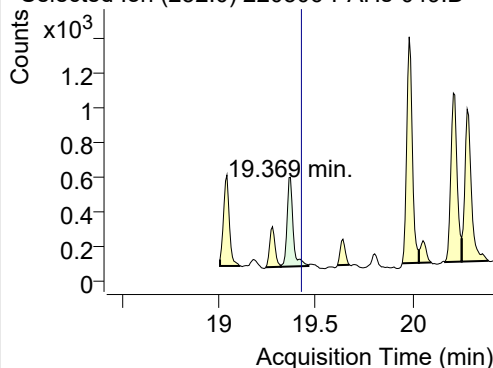


+ SIM (17.109-17.157 min, 9 scans) (\*\*) 22050

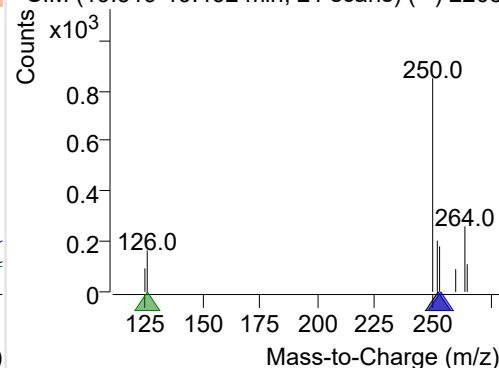
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-049.D

252.0, 253.0, 126.0



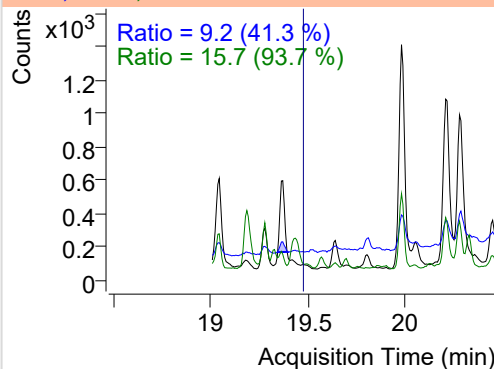
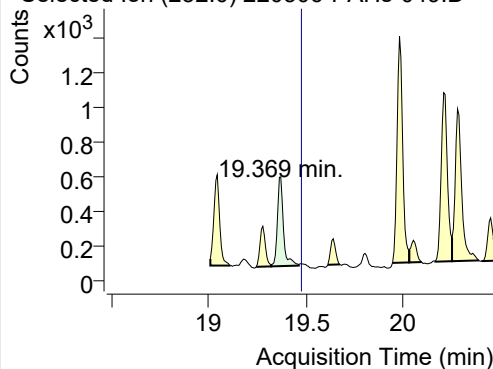
+ SIM (19.319-19.462 min, 21 scans) (\*\*) 2205



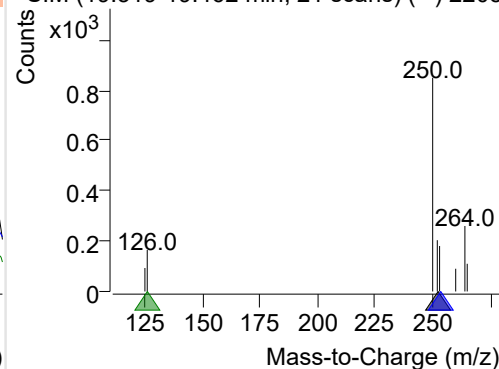
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-049.D

252.0, 253.0, 126.0

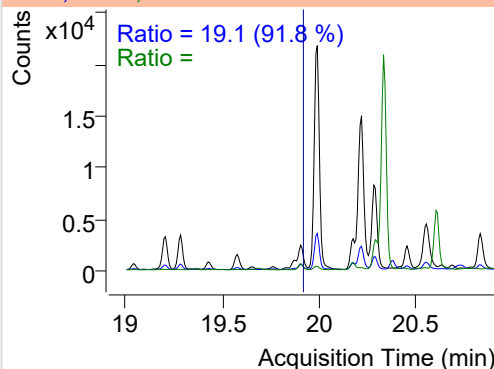
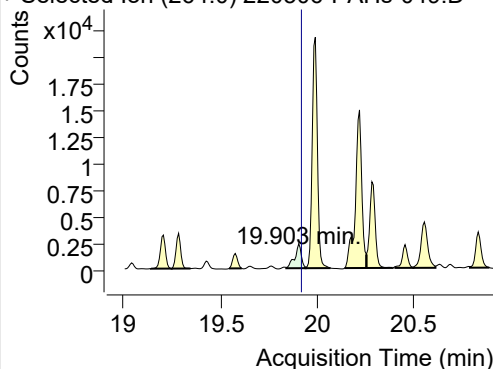


+ SIM (19.319-19.462 min, 21 scans) (\*\*) 2205

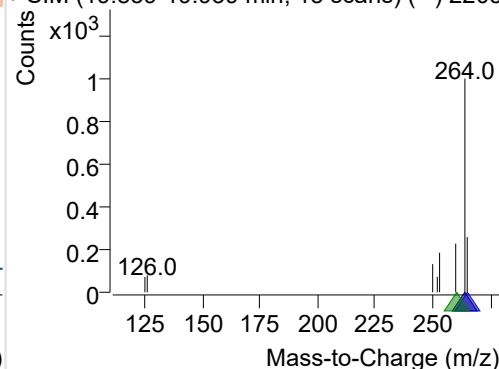
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-049.D

264.0, 265.0, 260.0

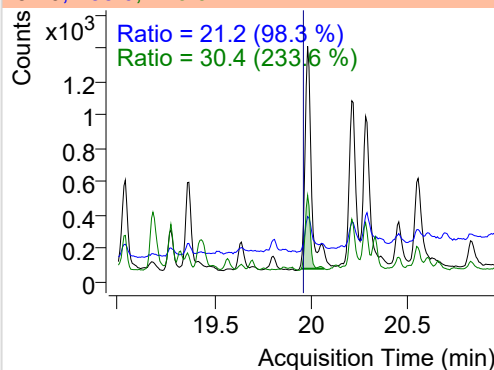
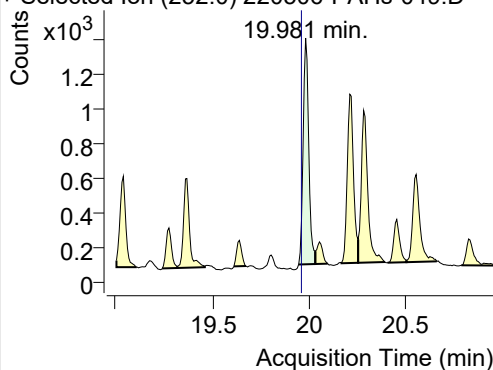


+ SIM (19.839-19.939 min, 15 scans) (\*\*) 2205

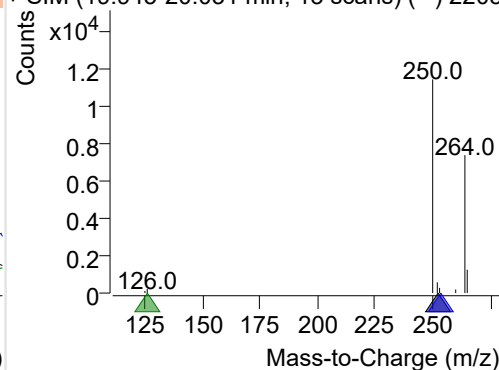
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-049.D

252.0, 253.0, 126.0

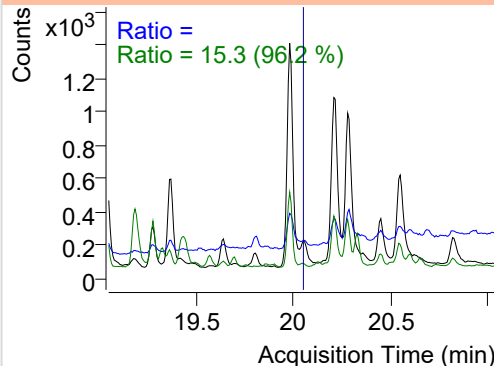
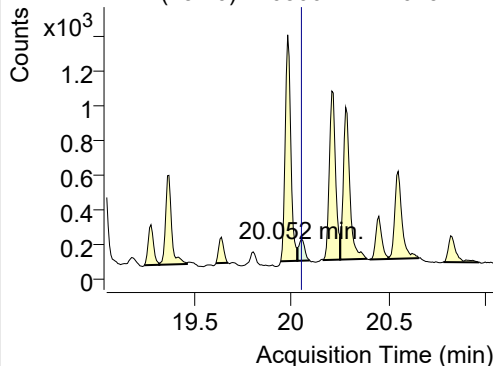


+ SIM (19.945-20.031 min, 13 scans) (\*\*) 2205

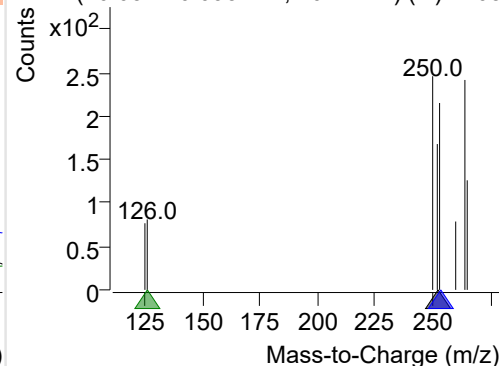
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-049.D

252.0, 253.0, 126.0



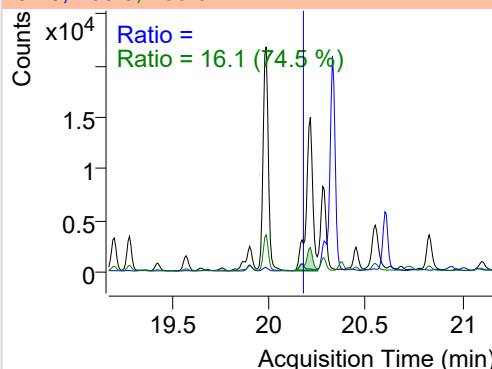
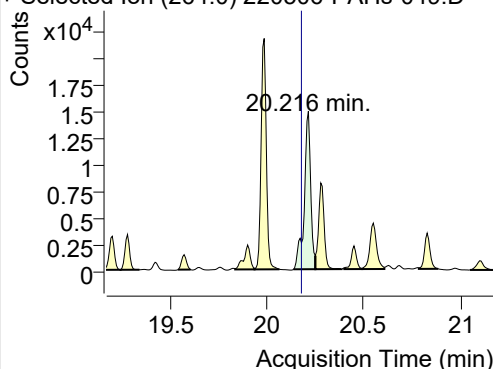
+ SIM (20.031-20.095 min, 10 scans) (\*\*) 2205



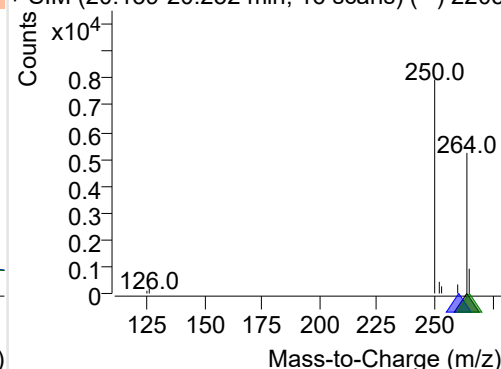
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-049.D

264.0, 260.0, 265.0



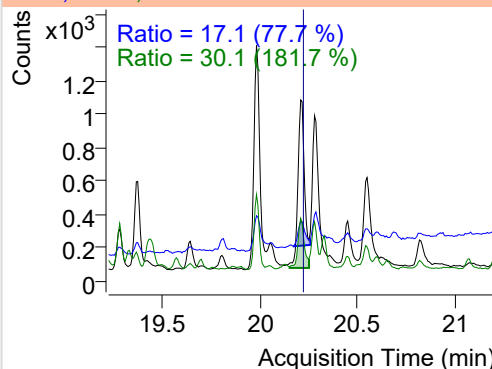
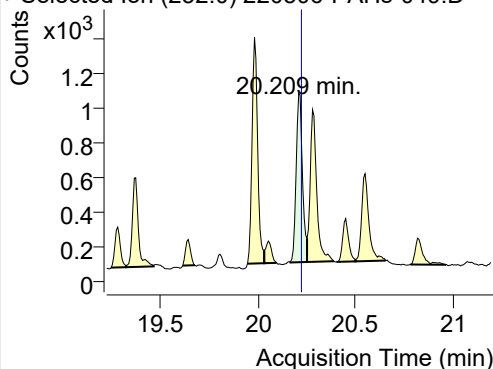
+ SIM (20.139-20.252 min, 16 scans) (\*\*) 2205



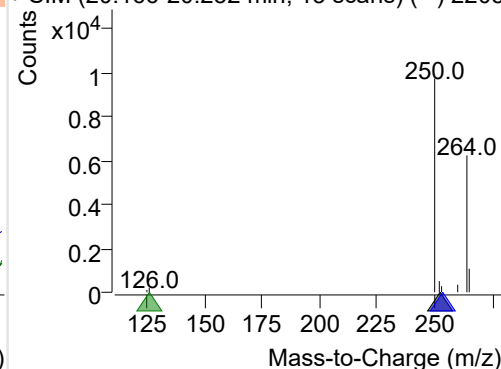
## Perylene

+ Selected Ion (252.0) 220506-PAHs-049.D

252.0, 253.0, 126.0



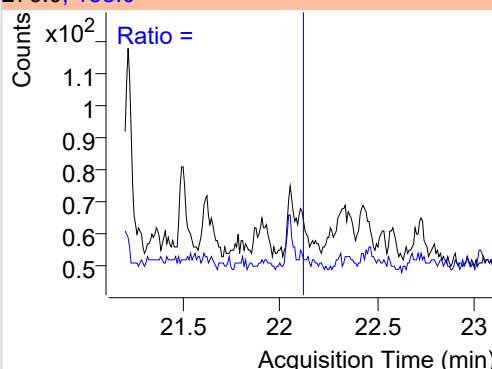
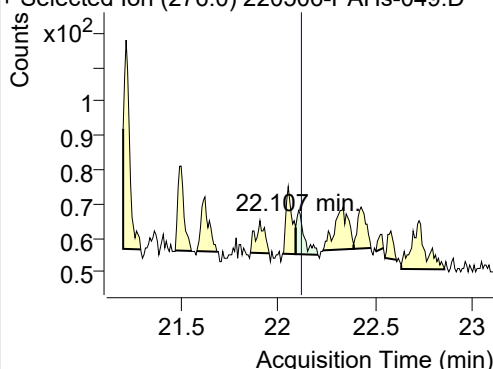
+ SIM (20.166-20.252 min, 13 scans) (\*\*) 2205



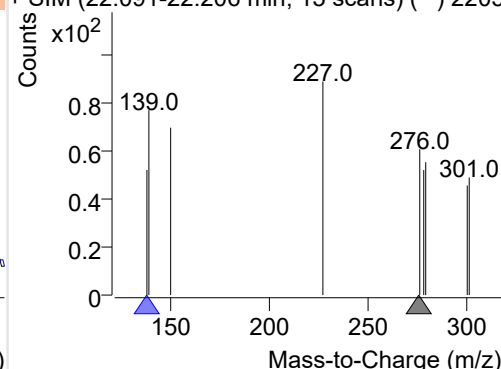
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-049.D

276.0, 138.0



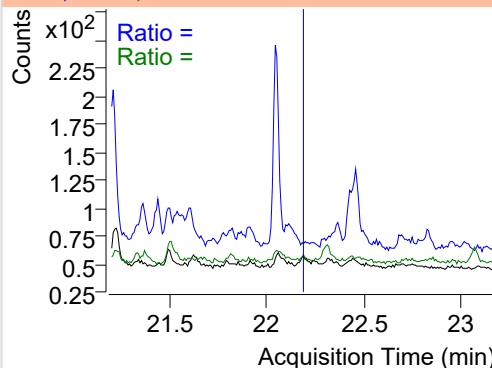
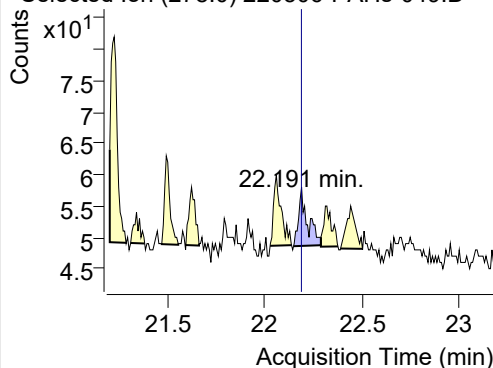
+ SIM (22.091-22.206 min, 15 scans) (\*\*) 2205



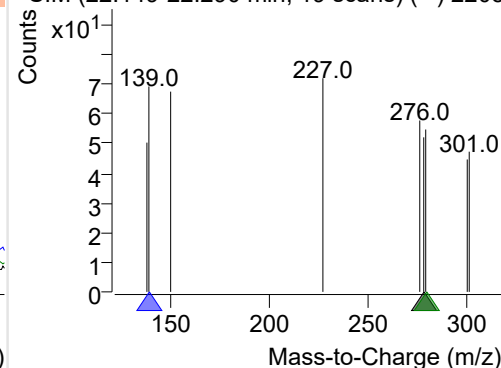
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-049.D

278.0, 139.0, 279.0



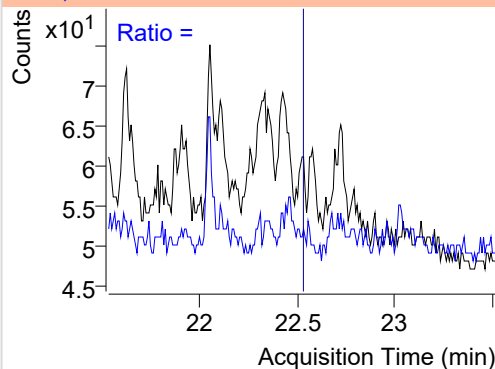
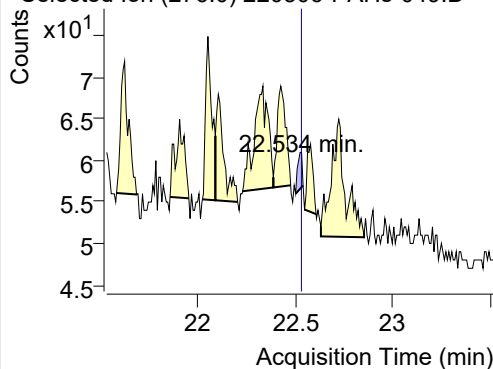
+ SIM (22.149-22.290 min, 19 scans) (\*\*) 2205



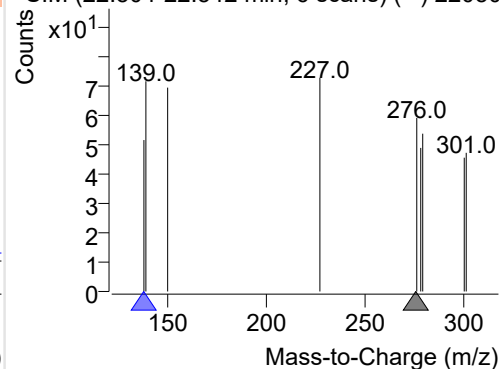
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-049.D

276.0, 138.0

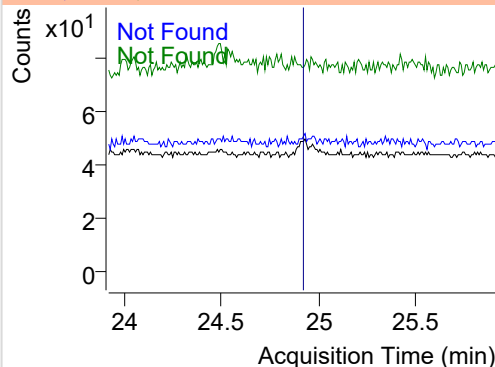
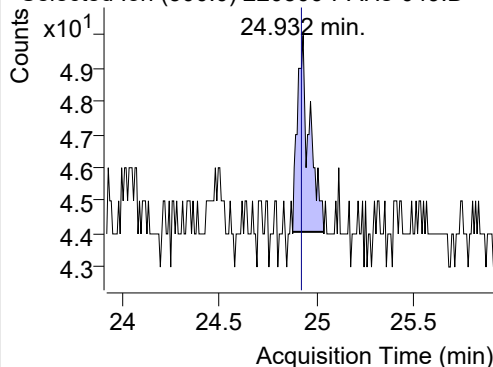


+ SIM (22.504-22.542 min, 6 scans) (\*\*) 22050

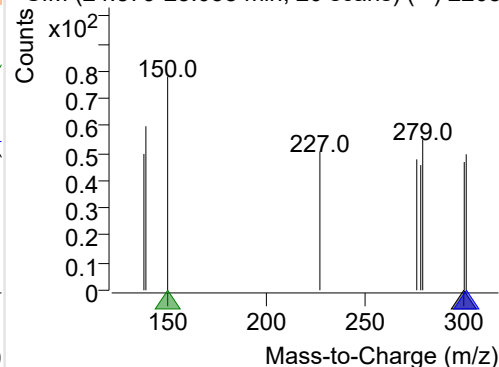
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-049.D

300.0, 301.0, 150.0



+ SIM (24.879-25.038 min, 20 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

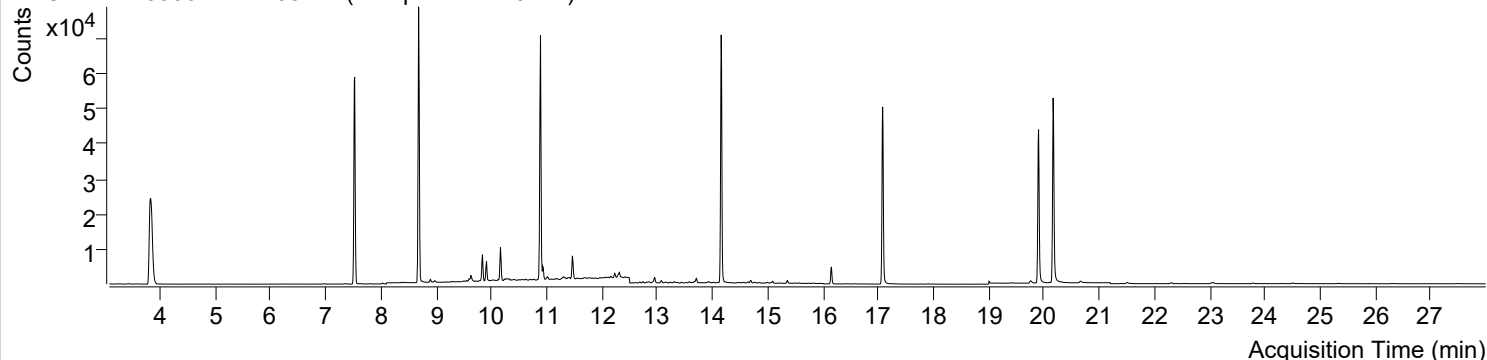


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 12:40:10	Data File	220506-PAHs-051.D
Type	Sample	Name	Sample-PM-220411
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

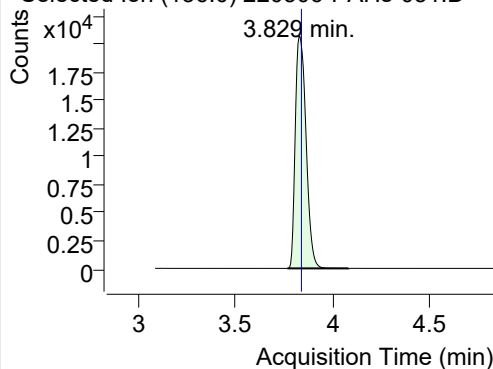
+ TIC SIM 220506-PAHs-051.D (Sample-PM-220411)



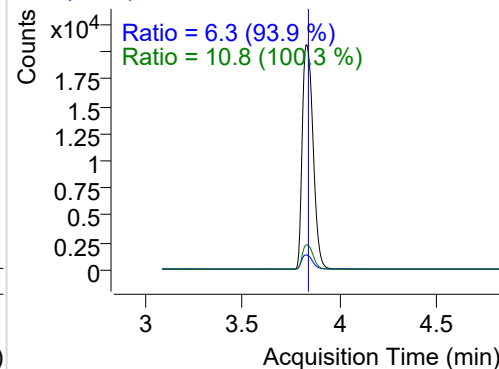
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.829	136.0	79775	20638.36	ND ng/ml	10.8
Naphthalene	3.872	128.0	267	72.18	ND ng/ml	17.7
Acenaphthylene	7.574	152.0	17	10.45	ND ng/ml	78.4
IS-D10-Acenaphthene	7.526	164.0	46467	28237.90	ND ng/ml	96.3
Acenaphthene	7.591	154.0	27	16.72	ND ng/ml	77.1
LSS-D10-Fluorene	8.684	176.0	54040	35167.59	ND ng/ml	92.8
Fluorene	8.747	166.0	189	114.93	ND ng/ml	77.5
IS-D10-Phenanthrene	10.889	188.0	84879	56081.05	ND ng/ml	15.1
Phenanthrene	10.931	178.0	3295	2014.41	ND ng/ml	19.0
Anthracene	11.026	178.0	409	181.30	ND ng/ml	22.7
Fluoranthene	13.710	202.0	1192	754.98	ND ng/ml	18.0
LSS-D10-Pyrene	14.159	212.0	82059	52262.60	ND ng/ml	16.9
Pyrene	14.197	202.0	1061	569.81	ND ng/ml	26.8
Benz(a)anthracene	17.081	228.0	204	105.11	ND ng/ml	10.3
IS-D12-Chrysene	17.081	240.0	64880	38012.33	ND ng/ml	18.9
Chrysene	17.125	228.0	62	30.18	ND ng/ml	26.8
Benzo(b)fluoranthene	19.419	252.0	37	13.84	ND ng/ml	
Benzo(k)fluoranthene	19.419	252.0	37	13.84	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.903	264.0	52265	29468.57	ND ng/ml	25.2
Benzo(e)pyrene	19.953	252.0	19	10.26	ND ng/ml	538.2
Benzo(a)pyrene	20.052	252.0	6	6.14	ND ng/ml	
IS-D12-Perylene	20.166	264.0	65096	35830.15	ND ng/ml	23.7
Perylene	20.166	252.0	231	123.84	ND ng/ml	30.5
Indeno(1,2,3-c,d)pyrene	22.114	276.0	36	6.86	ND ng/ml	
Dibenz(a,h)anthracene	22.190	278.0	26	8.98	ND ng/ml	
Benzo(g,h,i)perylene	22.534	276.0	31	9.86	ND ng/ml	77.3
Coronene	24.924	300.0	25	6.17	ND ng/ml	

## IS-D8-Naphthalene

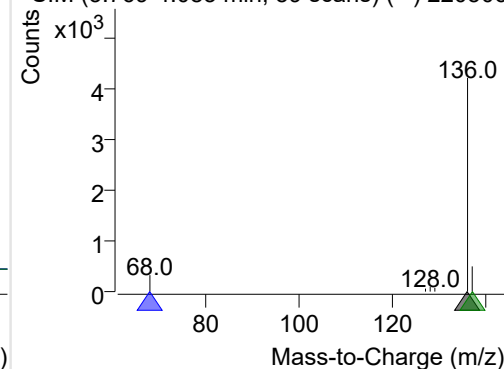
+ Selected Ion (136.0) 220506-PAHs-051.D



136.0, 68.0, 137.0

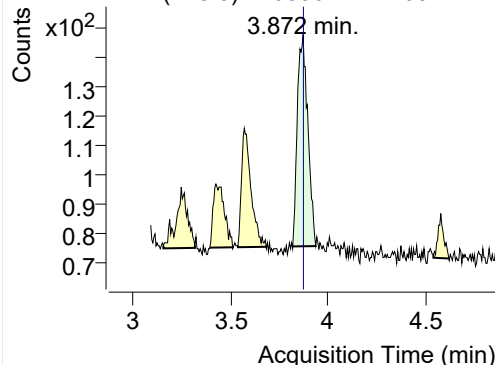


+ SIM (3.769-4.083 min, 59 scans) (\*\*) 220506

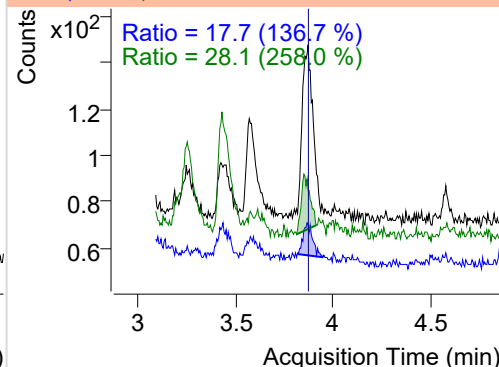


**Naphthalene**

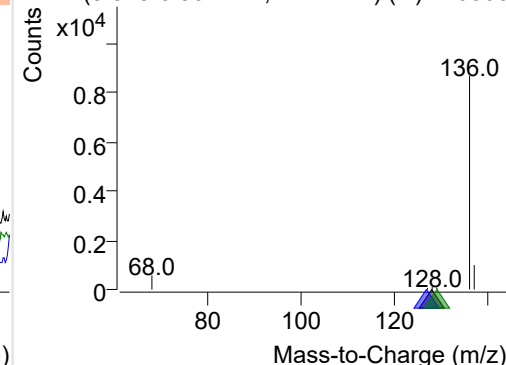
+ Selected Ion (128.0) 220506-PAHs-051.D



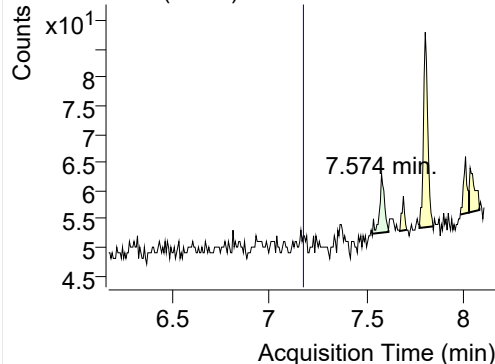
128.0, 127.0, 129.0



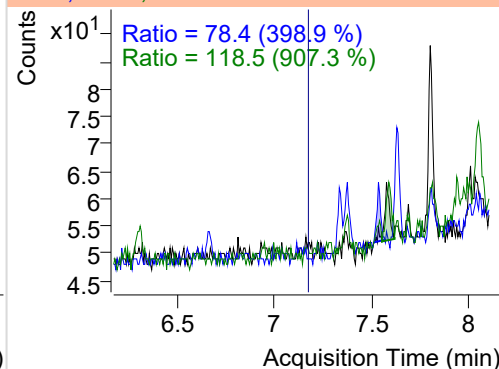
+ SIM (3.818-3.937 min, 22 scans) (\*\*) 220506

**Acenaphthylene**

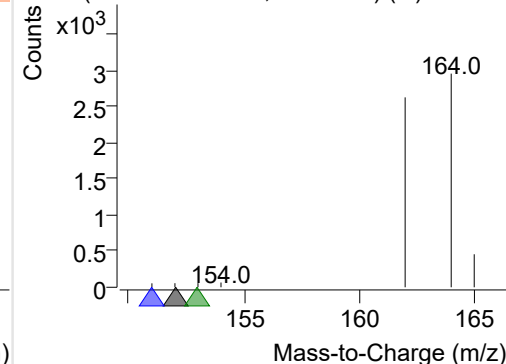
+ Selected Ion (152.0) 220506-PAHs-051.D



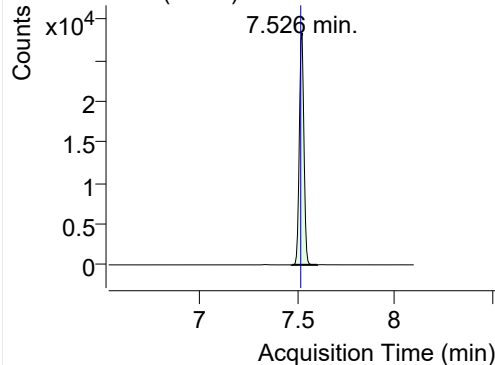
152.0, 151.0, 153.0



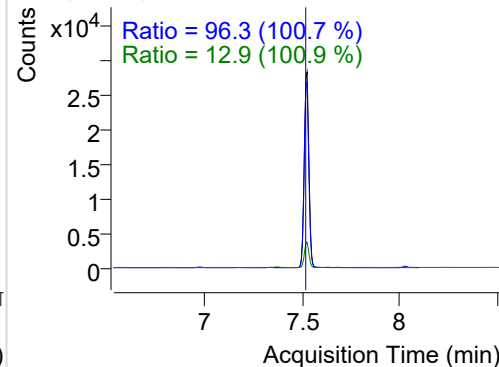
+ SIM (7.527-7.609 min, 14 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

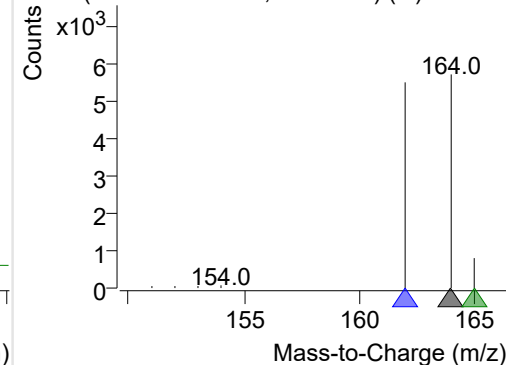
+ Selected Ion (164.0) 220506-PAHs-051.D



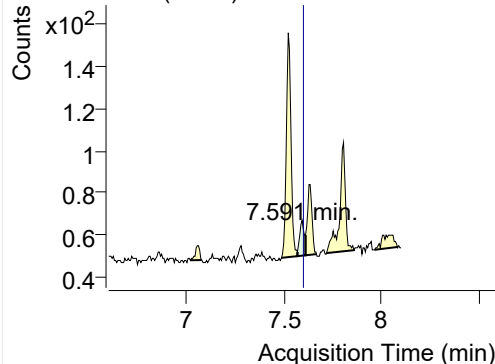
164.0, 162.0, 165.0



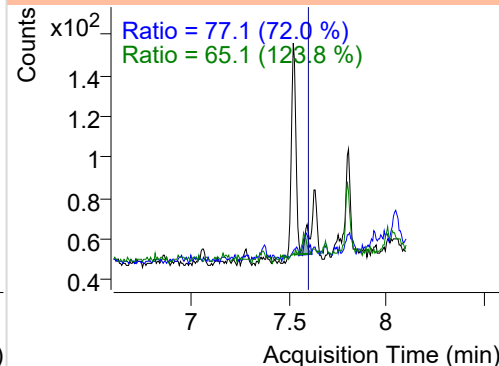
+ SIM (7.473-7.603 min, 23 scans) (\*\*) 220506

**Acenaphthene**

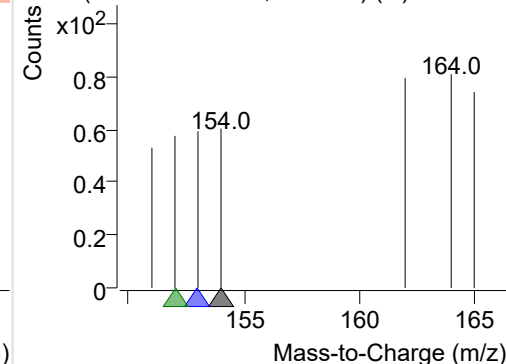
+ Selected Ion (154.0) 220506-PAHs-051.D



154.0, 153.0, 152.0

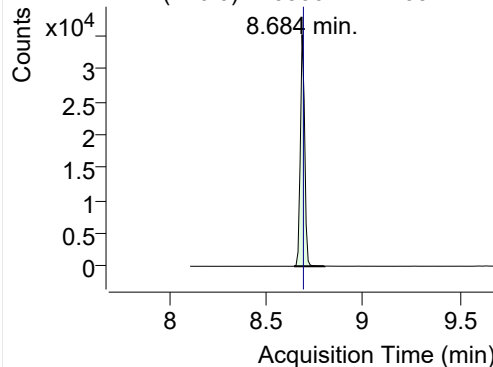


+ SIM (7.568-7.609 min, 8 scans) (\*\*) 220506-I

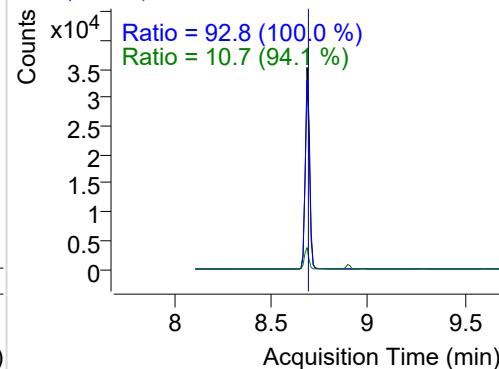


## LSS-D10-Fluorene

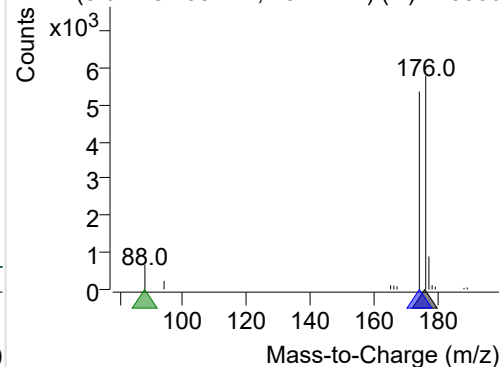
+ Selected Ion (176.0) 220506-PAHs-051.D



176.0, 174.0, 88.0

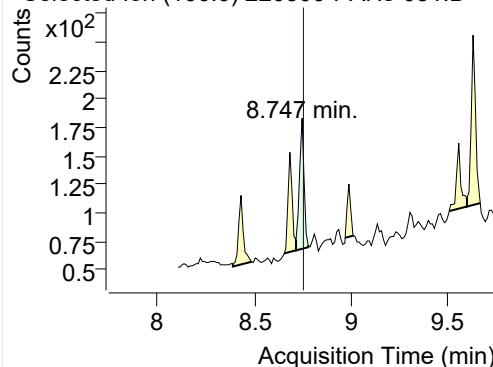


+ SIM (8.642-8.799 min, 15 scans) (\*\*) 220506

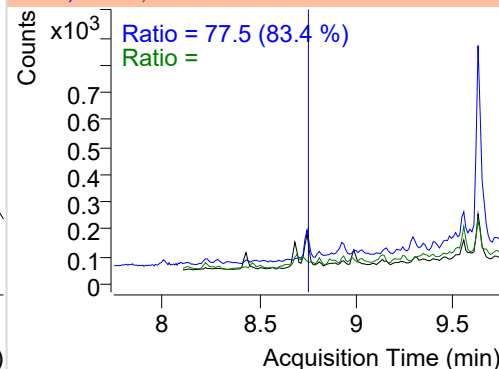


## Fluorene

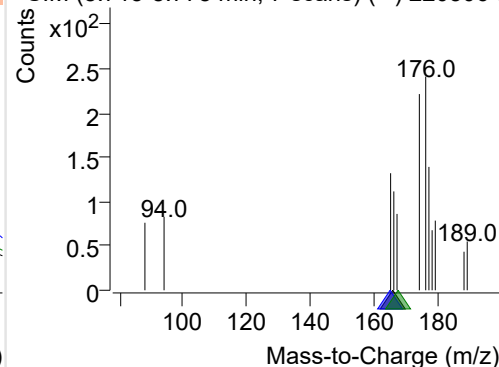
+ Selected Ion (166.0) 220506-PAHs-051.D



166.0, 165.0, 167.0

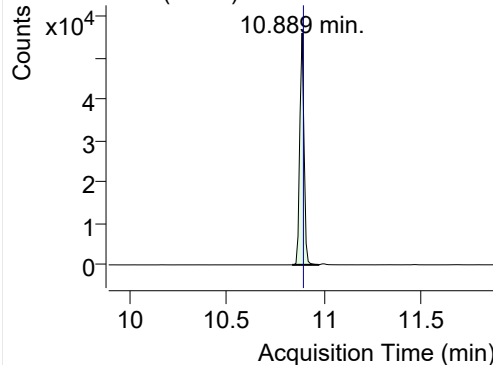


+ SIM (8.715-8.778 min, 7 scans) (\*\*) 220506-I

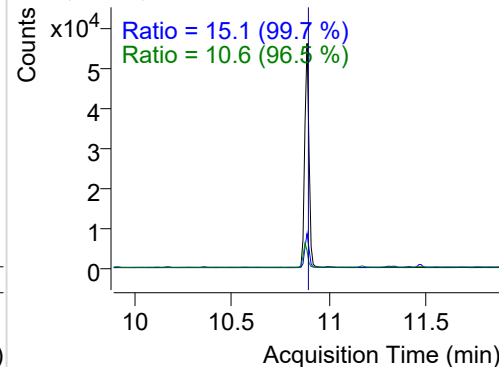


## IS-D10-Phenanthrene

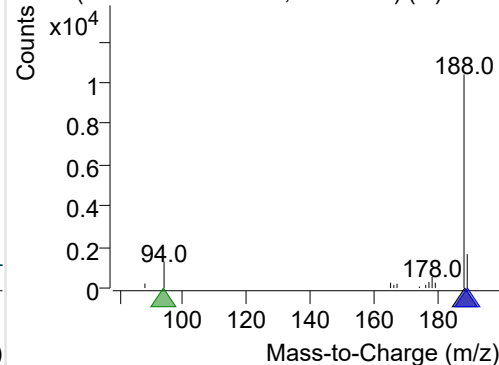
+ Selected Ion (188.0) 220506-PAHs-051.D



188.0, 189.0, 94.0

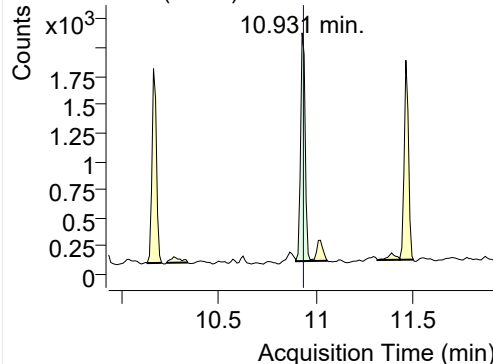


+ SIM (10.838-10.973 min, 13 scans) (\*\*) 2205

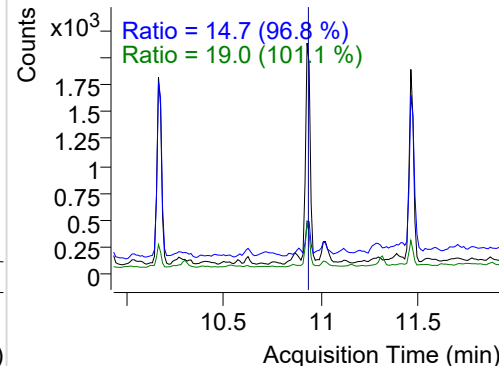


## Phenanthrene

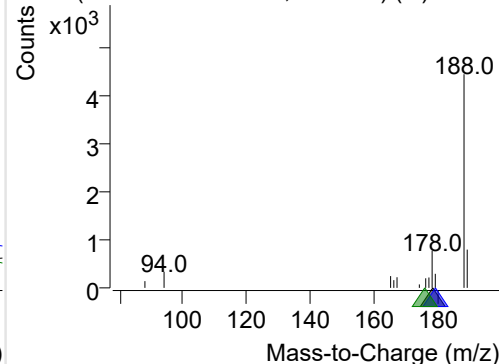
+ Selected Ion (178.0) 220506-PAHs-051.D



178.0, 179.0, 176.0

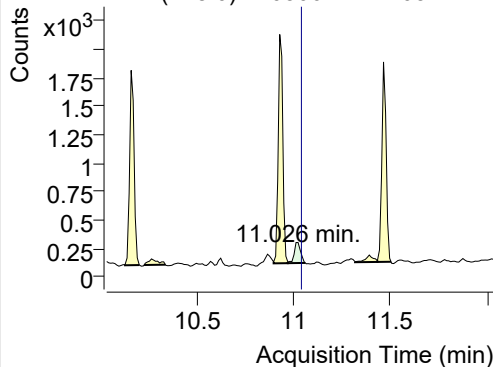


+ SIM (10.900-10.973 min, 8 scans) (\*\*) 22050

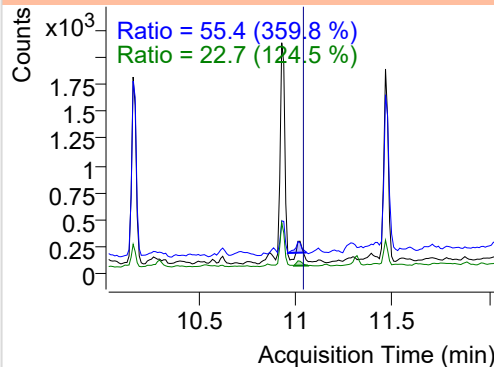


**Anthracene**

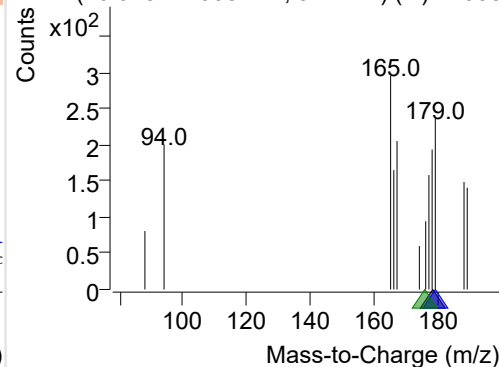
+ Selected Ion (178.0) 220506-PAHs-051.D



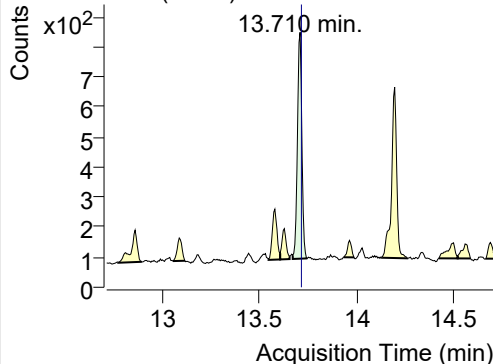
178.0, 179.0, 176.0



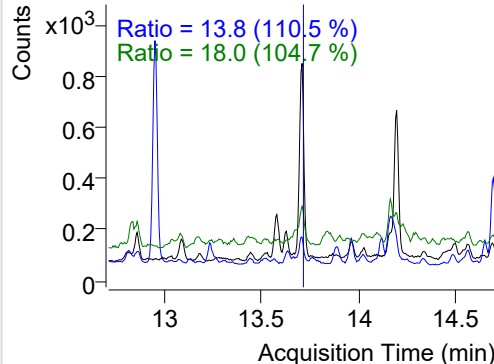
+ SIM (10.973-11.063 min, 9 scans) (\*\*) 22050

**Fluoranthene**

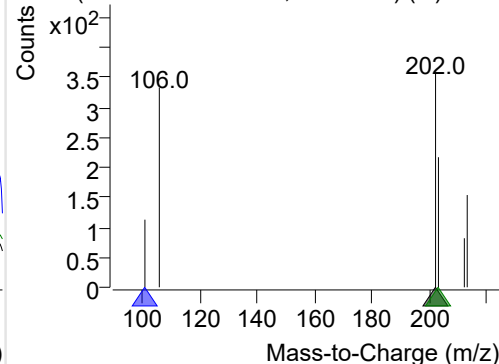
+ Selected Ion (202.0) 220506-PAHs-051.D



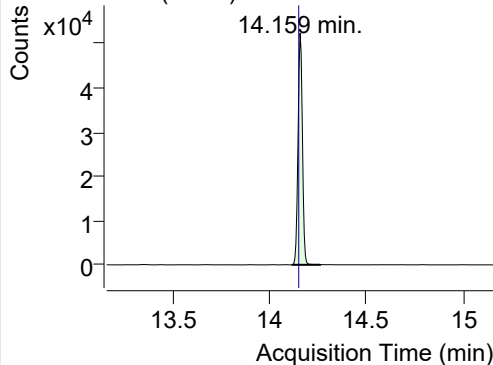
202.0, 101.0, 203.0



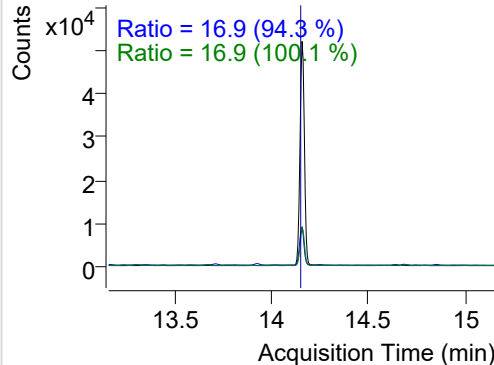
+ SIM (13.672-13.742 min, 14 scans) (\*\*) 2205

**LSS-D10-Pyrene**

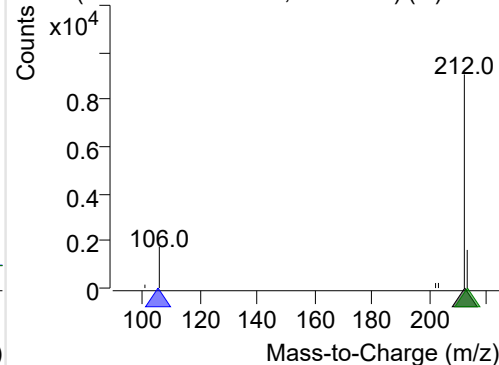
+ Selected Ion (212.0) 220506-PAHs-051.D



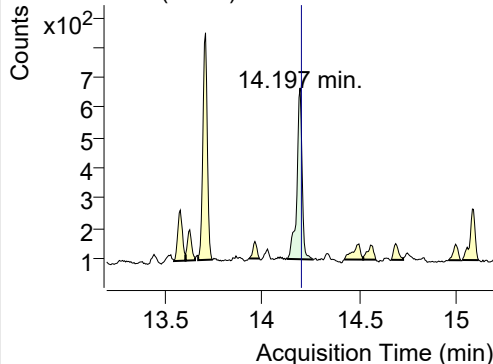
212.0, 106.0, 213.0



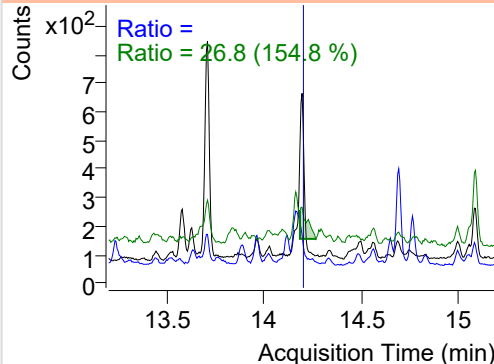
+ SIM (14.116-14.262 min, 28 scans) (\*\*) 2205

**Pyrene**

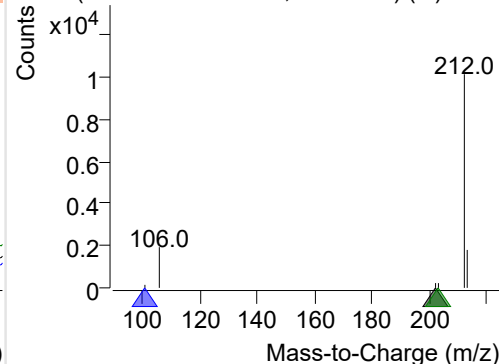
+ Selected Ion (202.0) 220506-PAHs-051.D



202.0, 101.0, 203.0



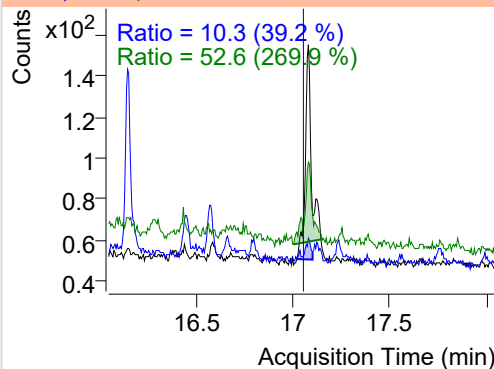
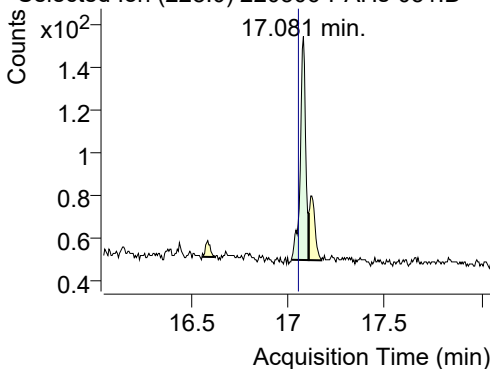
+ SIM (14.132-14.262 min, 25 scans) (\*\*) 2205



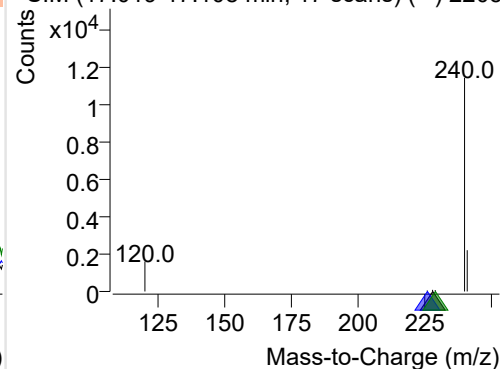
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-051.D

228.0, 226.0, 229.0

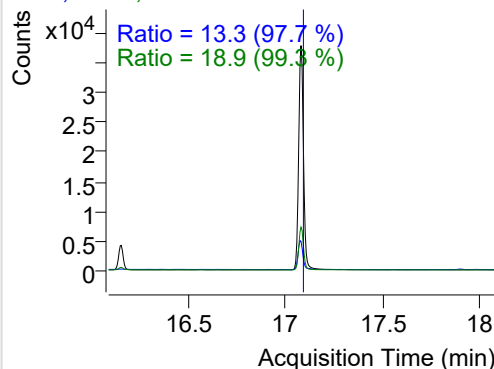
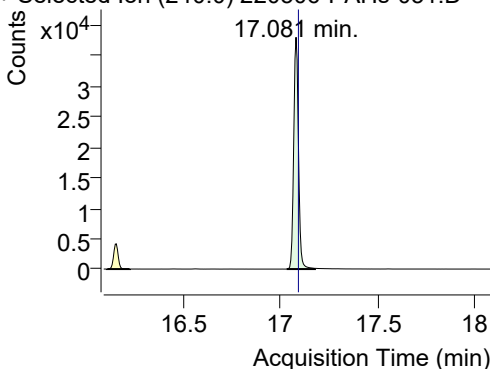


+ SIM (17.019-17.108 min, 17 scans) (\*\*) 2205

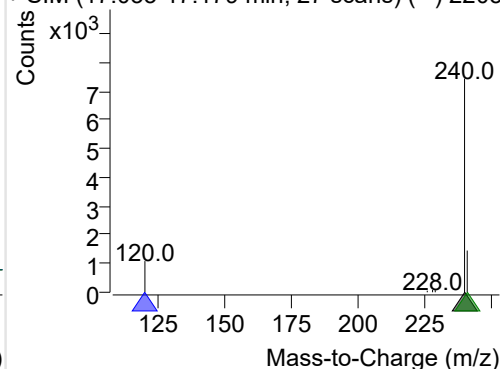
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-051.D

240.0, 120.0, 241.0

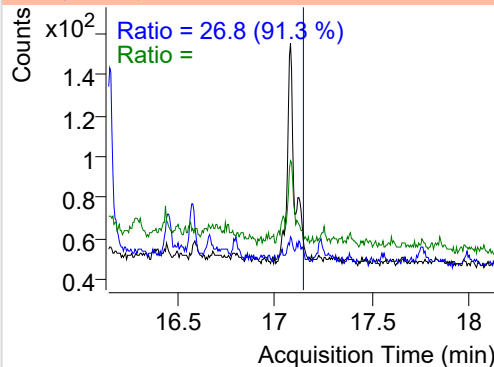
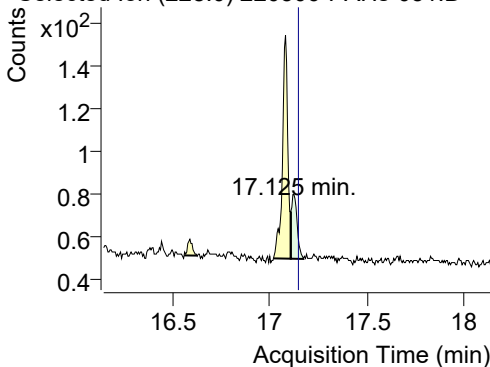


+ SIM (17.033-17.179 min, 27 scans) (\*\*) 2205

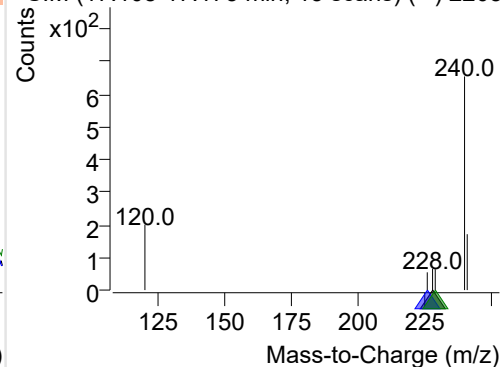
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-051.D

228.0, 226.0, 229.0

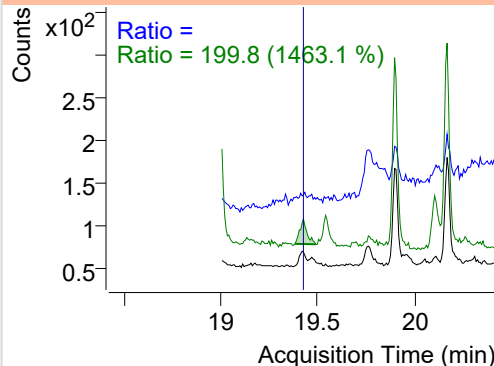
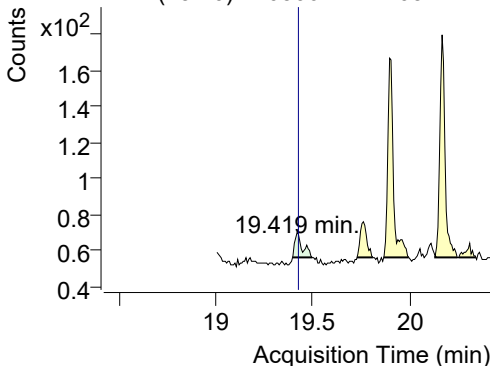


+ SIM (17.108-17.173 min, 13 scans) (\*\*) 2205

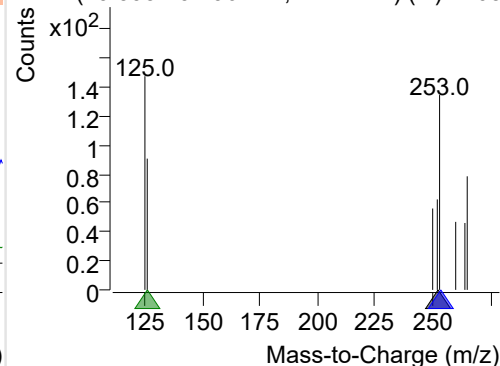
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-051.D

252.0, 253.0, 126.0



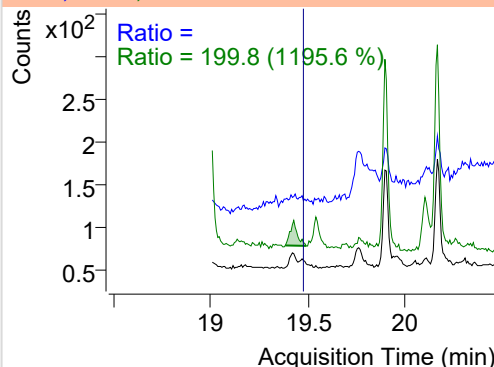
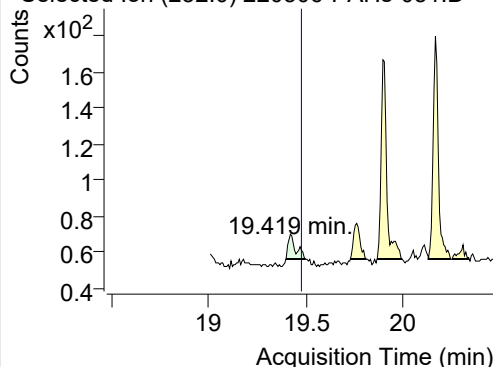
+ SIM (19.395-19.496 min, 14 scans) (\*\*) 2205



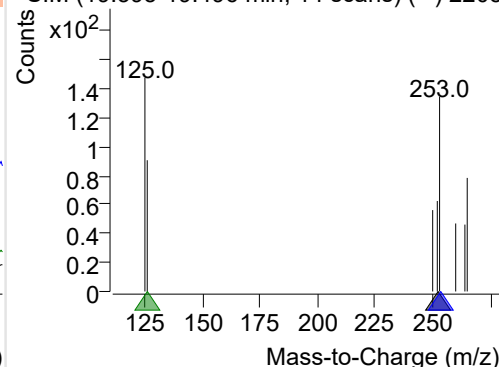
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-051.D

252.0, 253.0, 126.0

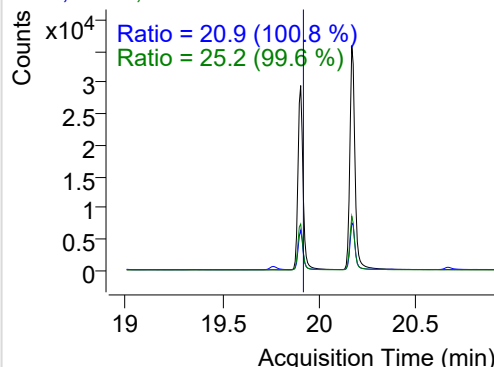
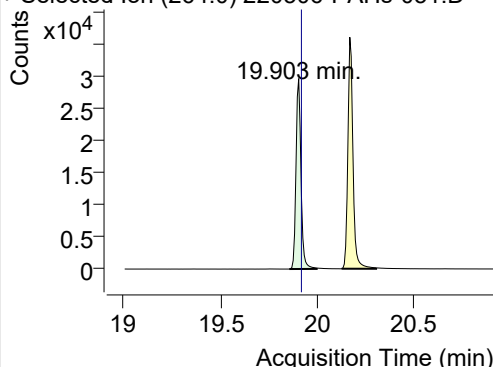


+ SIM (19.395-19.496 min, 14 scans) (\*\*) 2205

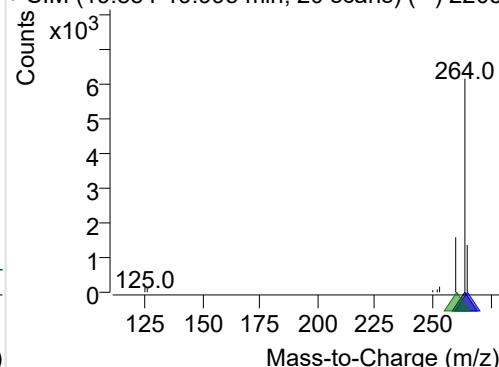
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-051.D

264.0, 265.0, 260.0

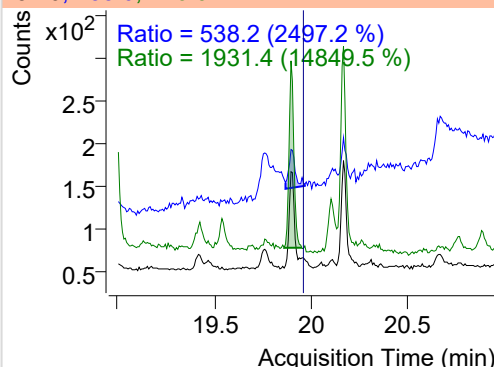
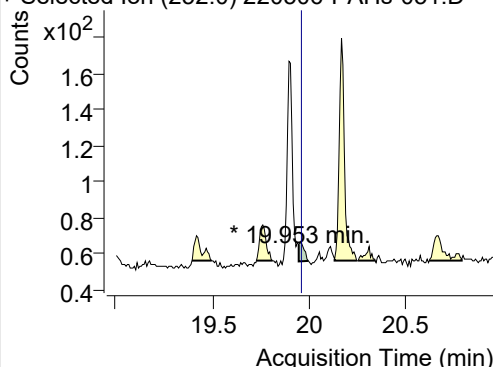


+ SIM (19.854-19.995 min, 20 scans) (\*\*) 2205

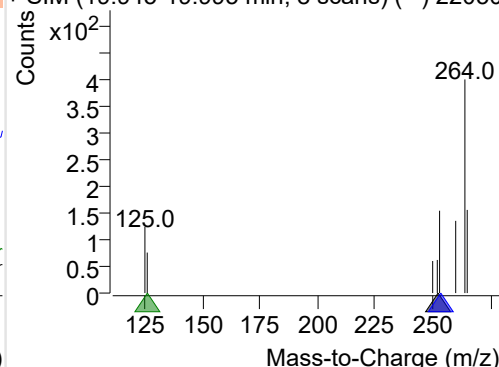
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-051.D

252.0, 253.0, 126.0

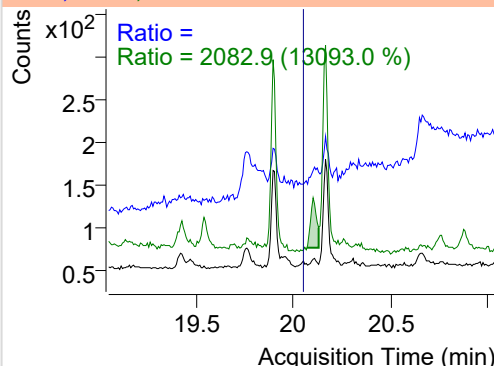
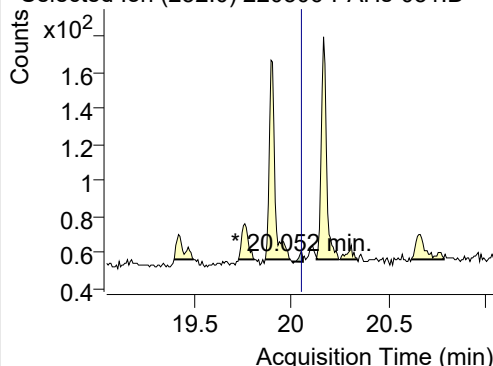


+ SIM (19.945-19.995 min, 8 scans) (\*\*) 22050

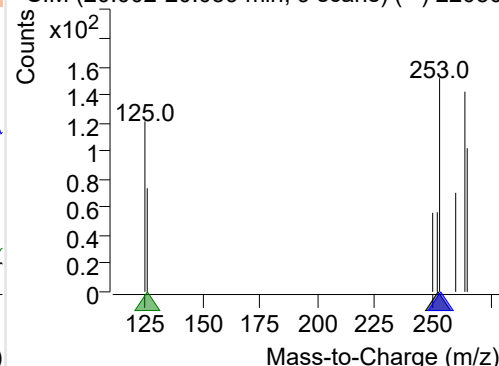
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-051.D

252.0, 253.0, 126.0

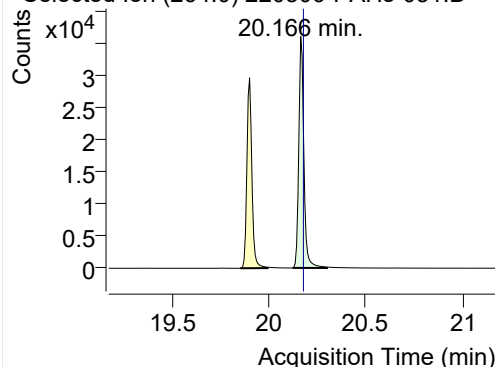


+ SIM (20.002-20.059 min, 9 scans) (\*\*) 22050

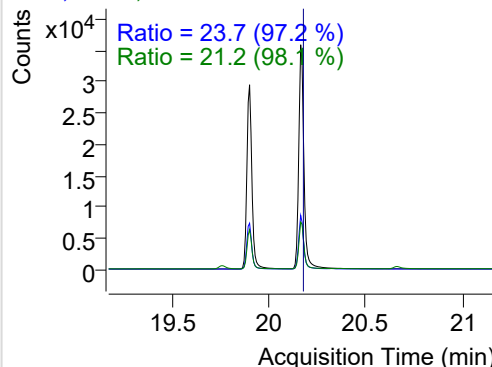


## IS-D12-Perylene

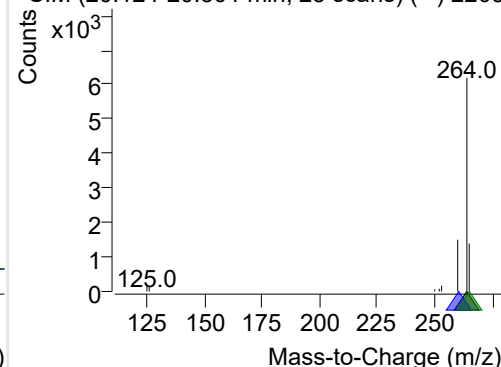
+ Selected Ion (264.0) 220506-PAHs-051.D



264.0, 260.0, 265.0

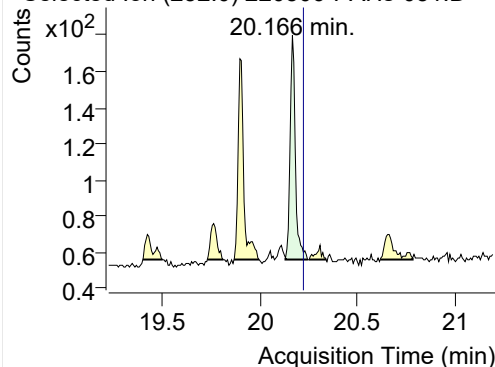


+ SIM (20.124-20.301 min, 25 scans) (\*\*) 2205

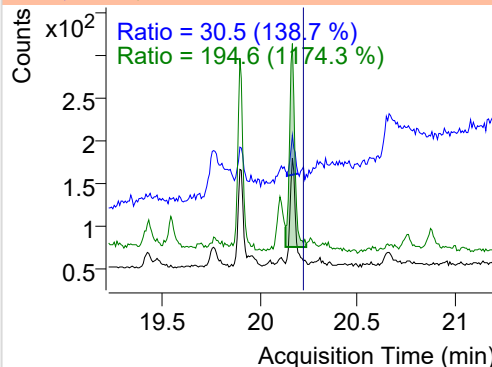


## Perylene

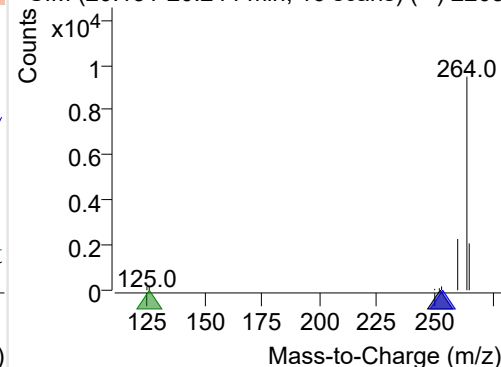
+ Selected Ion (252.0) 220506-PAHs-051.D



252.0, 253.0, 126.0

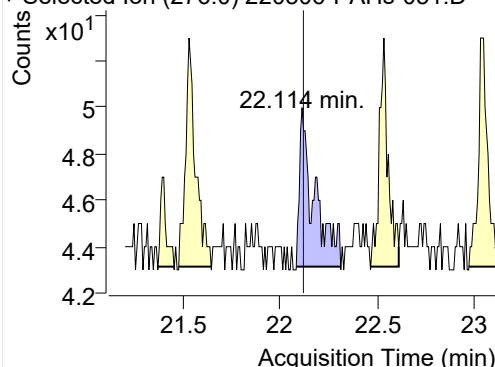


+ SIM (20.131-20.244 min, 16 scans) (\*\*) 2205

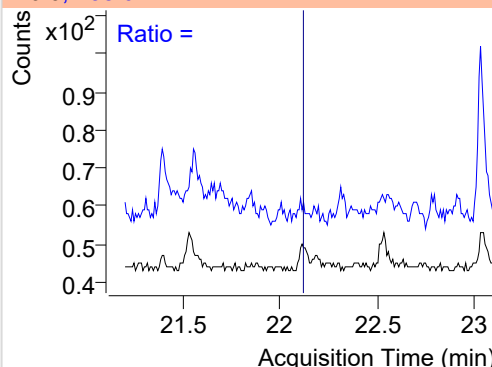


## Indeno(1,2,3-c,d)pyrene

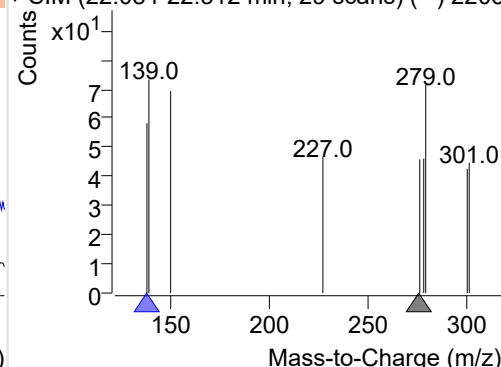
+ Selected Ion (276.0) 220506-PAHs-051.D



276.0, 138.0

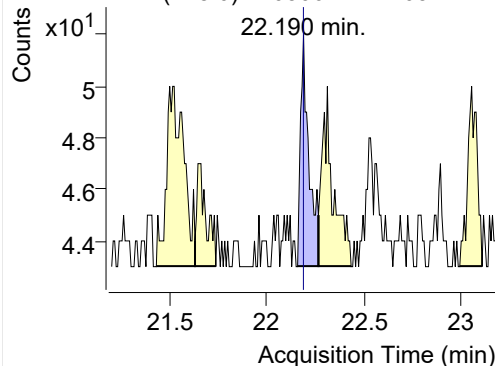


+ SIM (22.084-22.312 min, 29 scans) (\*\*) 2205

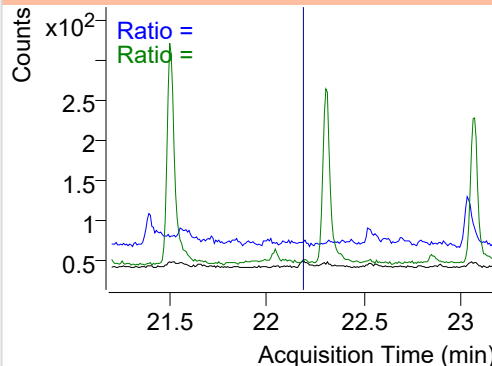


## Dibenz(a,h)anthracene

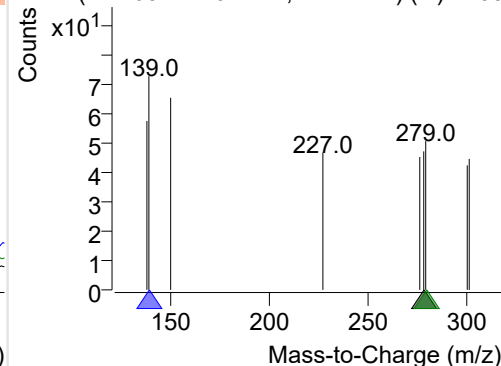
+ Selected Ion (278.0) 220506-PAHs-051.D



278.0, 139.0, 279.0



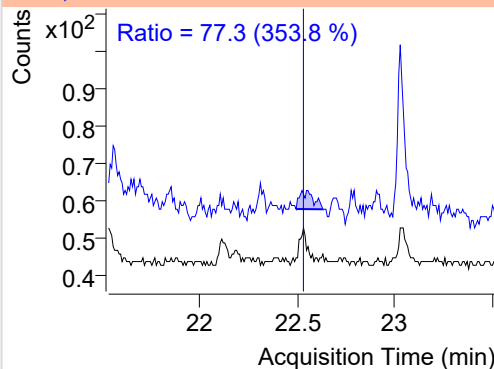
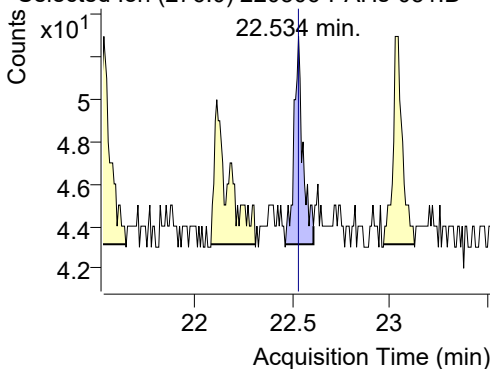
+ SIM (22.160-22.267 min, 14 scans) (\*\*) 2205



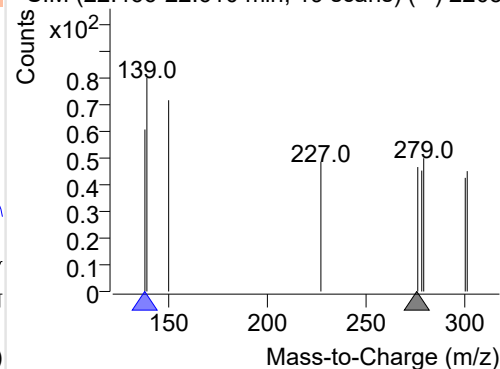
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-051.D

276.0, 138.0

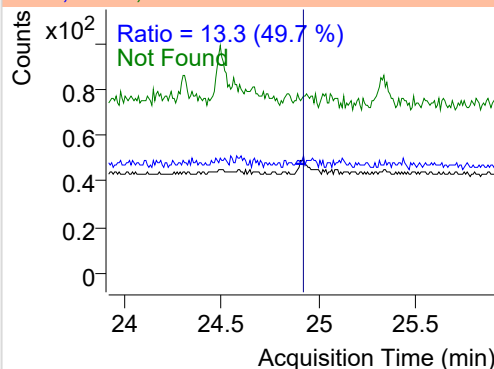
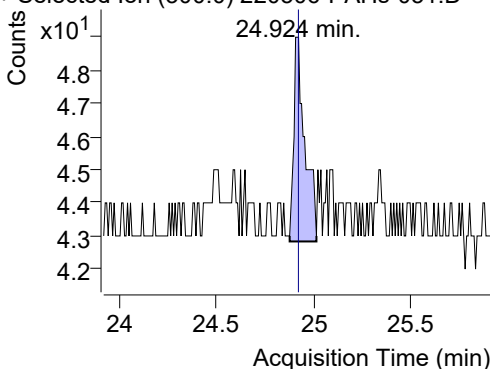


+ SIM (22.466-22.610 min, 19 scans) (\*\*) 2205

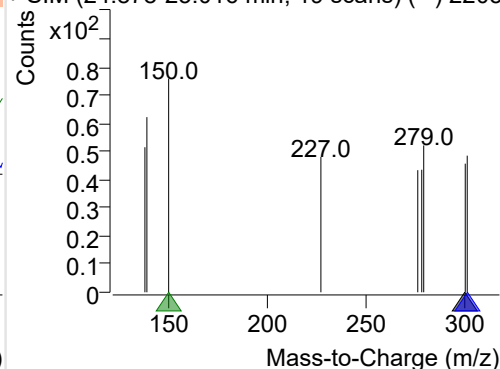
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-051.D

300.0, 301.0, 150.0



+ SIM (24.878-25.016 min, 19 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

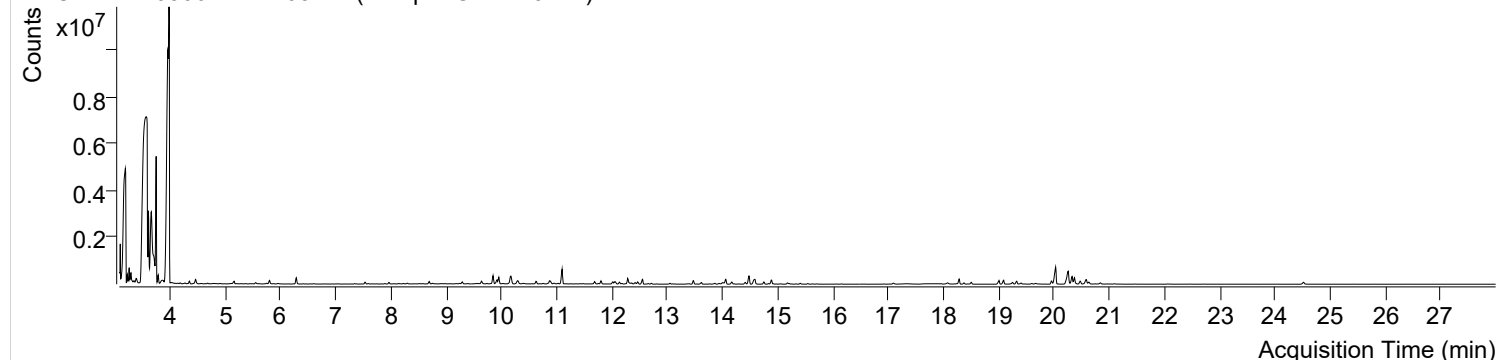


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 1:11:19	Data File	220506-PAHs-052.D
Type	Sample	Name	Sample-Gas-220417
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

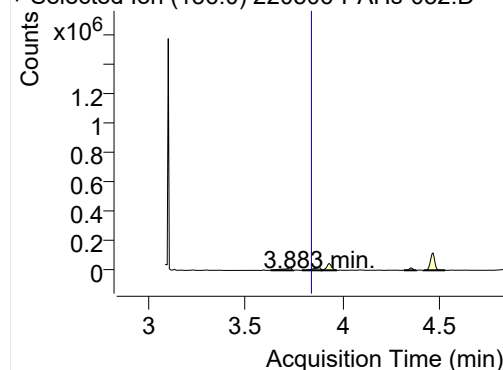
+ TIC SIM 220506-PAHs-052.D (Sample-Gas-220417)



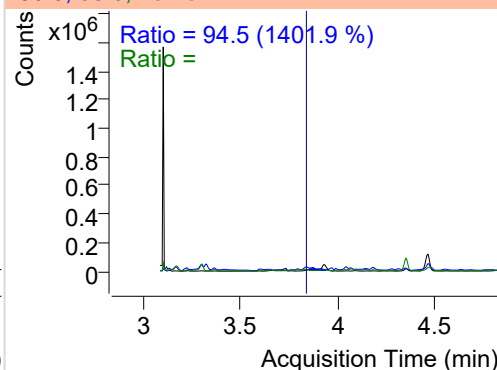
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.883	136.0	45507	17715.32	ND ng/ml	
Naphthalene	3.753	128.0	1590426	1658103.96	ND ng/ml	46.6
Acenaphthylene	7.585	152.0	7789	4073.97	ND ng/ml	164.5
IS-D10-Acenaphthene	7.532	164.0	52503	36223.33	ND ng/ml	100.9
Acenaphthene	7.597	154.0	8499	5451.10	ND ng/ml	120.1
LSS-D10-Fluorene	8.694	176.0	66089	45740.74	ND ng/ml	93.3
Fluorene	8.757	166.0	19476	11927.74	ND ng/ml	86.1
IS-D10-Phenanthrene	10.900	188.0	92404	58323.77	ND ng/ml	16.7
Phenanthrene	10.942	178.0	19529	10971.17	ND ng/ml	22.5
Anthracene	11.036	178.0	5833	2680.15	ND ng/ml	18.1
Fluoranthene	13.623	202.0	38860	22649.67	ND ng/ml	103.4
LSS-D10-Pyrene	14.170	212.0	96813	60872.21	ND ng/ml	20.6
Pyrene	14.214	202.0	7677	5013.14	ND ng/ml	88.9
Benz(a)anthracene	17.005	228.0	1420	271.37	ND ng/ml	47.0
IS-D12-Chrysene	17.092	240.0	77151	31431.72	ND ng/ml	17.6
Chrysene	17.005	228.0	1420	271.37	ND ng/ml	47.0
Benzo(b)fluoranthene	19.405	252.0	11617	6045.69	ND ng/ml	9.8
Benzo(k)fluoranthene	19.405	252.0	11617	6045.69	ND ng/ml	7.6
SS-D12-Benzo(e)pyrene	19.953	264.0	156073	90259.31	ND ng/ml	27.1
Benzo(e)pyrene	20.031	252.0	23513	10866.69	ND ng/ml	16.4
Benzo(a)pyrene	20.031	252.0	23513	10866.69	ND ng/ml	16.4
IS-D12-Perylene	20.230	264.0	123318	91027.82	ND ng/ml	20.0
Perylene	20.259	252.0	21275	8432.69	ND ng/ml	12.6
Indeno(1,2,3-c,d)pyrene	22.061	276.0	1024	380.44	ND ng/ml	69.5
Dibenz(a,h)anthracene	22.099	278.0	7066	3276.43	ND ng/ml	24.8
Benzo(g,h,i)perylene	22.580	276.0	308	167.96	ND ng/ml	20.1
Coronene	24.924	300.0	79	23.67	ND ng/ml	

## IS-D8-Naphthalene

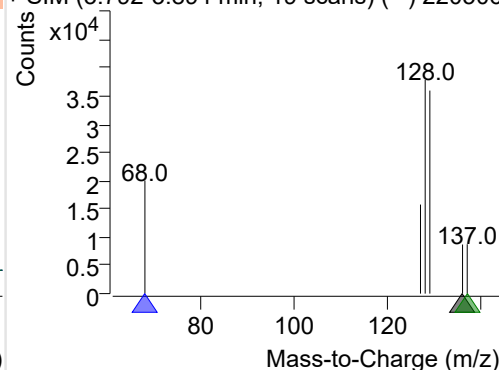
+ Selected Ion (136.0) 220506-PAHs-052.D



136.0, 68.0, 137.0

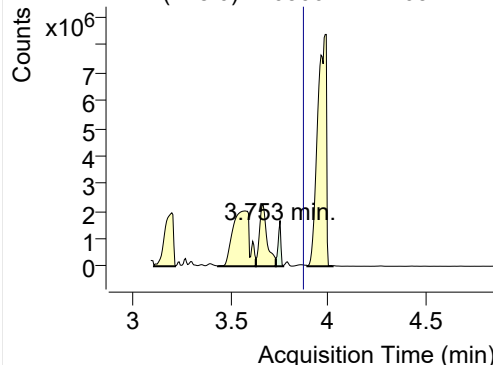


+ SIM (3.792-3.894 min, 19 scans) (\*\*) 220506

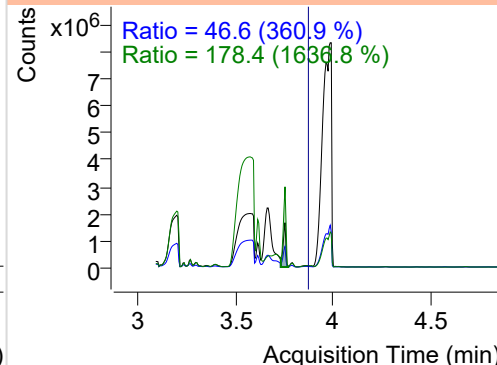


**Naphthalene**

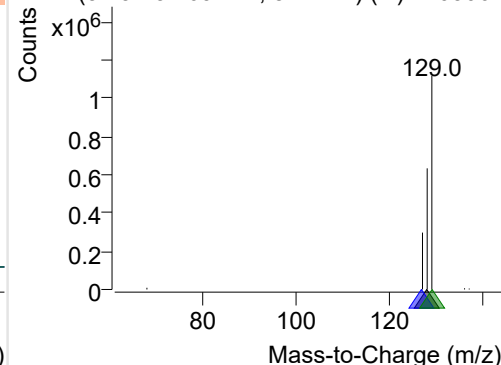
+ Selected Ion (128.0) 220506-PAHs-052.D



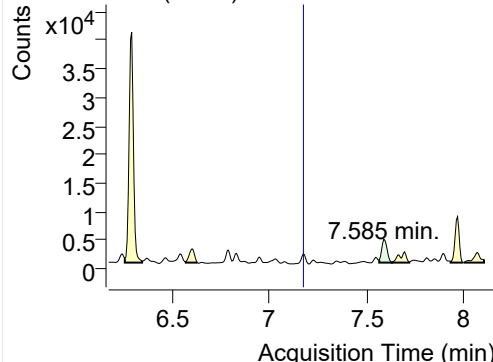
128.0, 127.0, 129.0



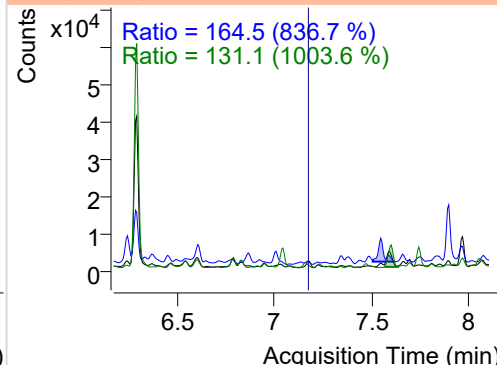
+ SIM (3.731-3.769 min, 8 scans) (\*\*) 220506-I

**Acenaphthylene**

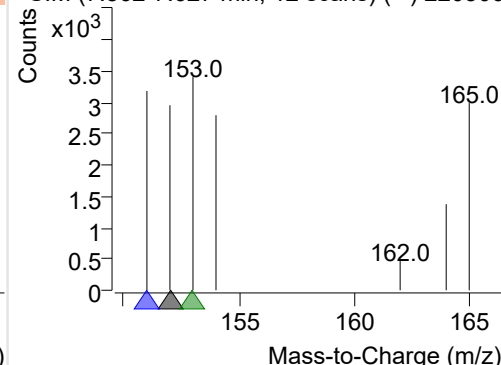
+ Selected Ion (152.0) 220506-PAHs-052.D



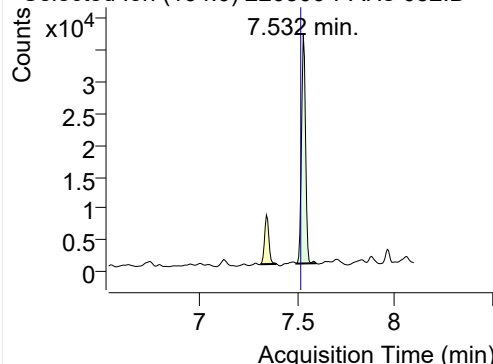
152.0, 151.0, 153.0



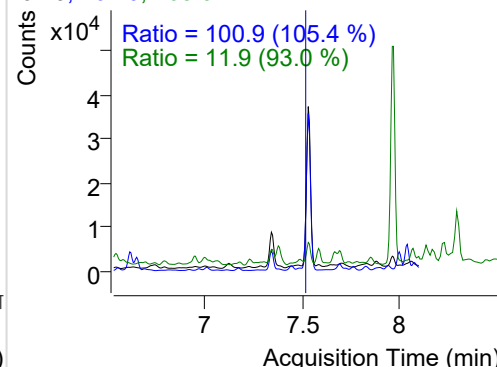
+ SIM (7.562-7.627 min, 12 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

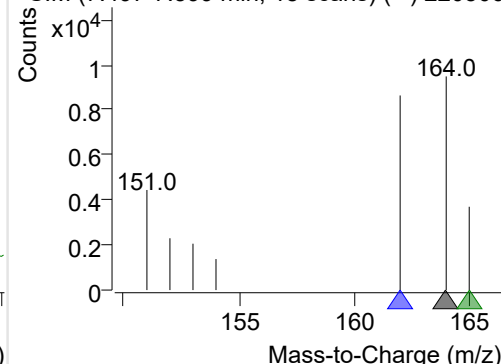
+ Selected Ion (164.0) 220506-PAHs-052.D



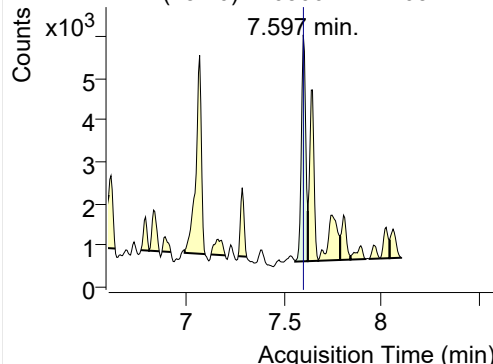
164.0, 162.0, 165.0



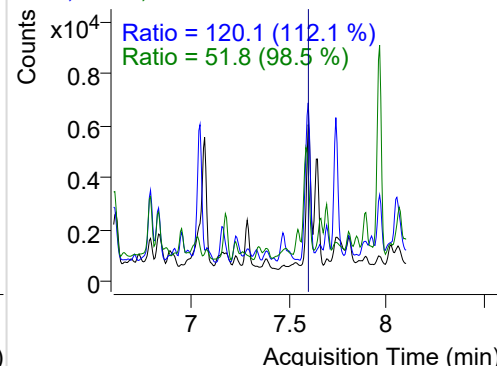
+ SIM (7.497-7.599 min, 18 scans) (\*\*) 220506

**Acenaphthene**

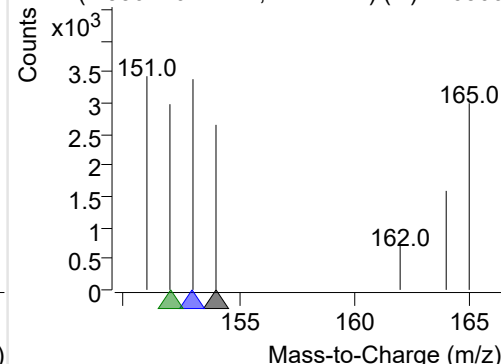
+ Selected Ion (154.0) 220506-PAHs-052.D



154.0, 153.0, 152.0

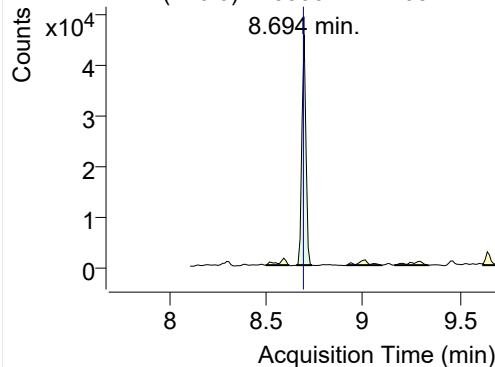


+ SIM (7.556-7.621 min, 12 scans) (\*\*) 220506

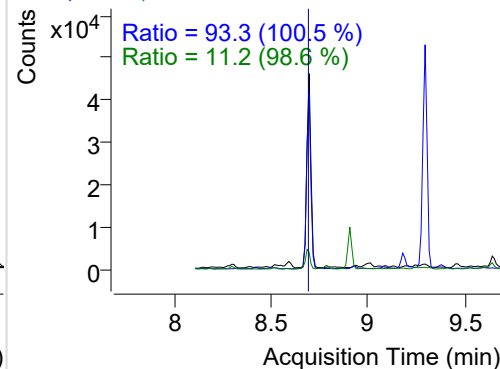


## LSS-D10-Fluorene

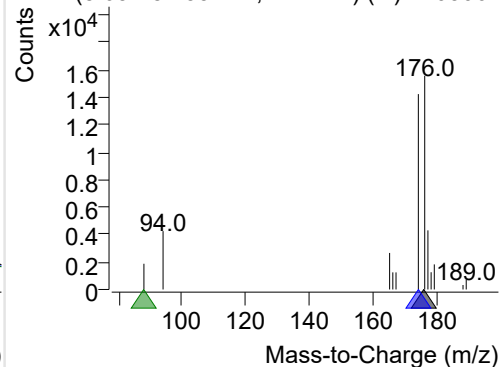
+ Selected Ion (176.0) 220506-PAHs-052.D



176.0, 174.0, 88.0

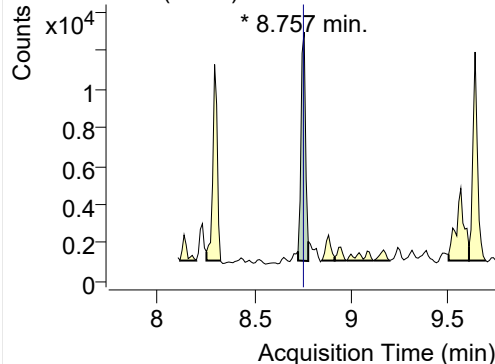


+ SIM (8.654-8.735 min, 7 scans) (\*\*) 220506-I

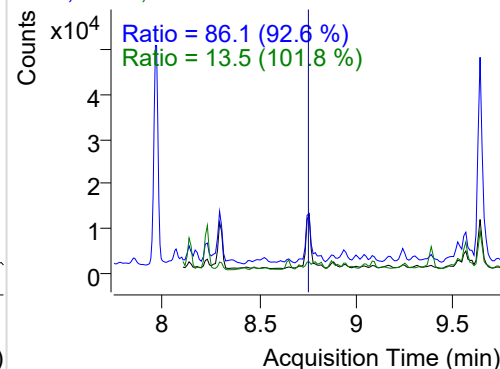


## Fluorene

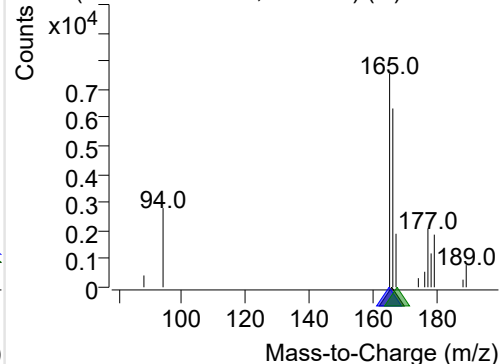
+ Selected Ion (166.0) 220506-PAHs-052.D



166.0, 165.0, 167.0

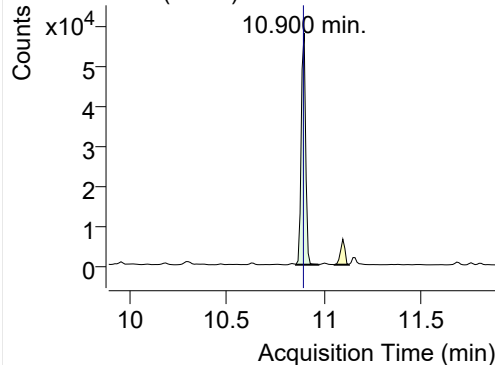


+ SIM (8.726-8.778 min, 6 scans) (\*\*) 220506-I

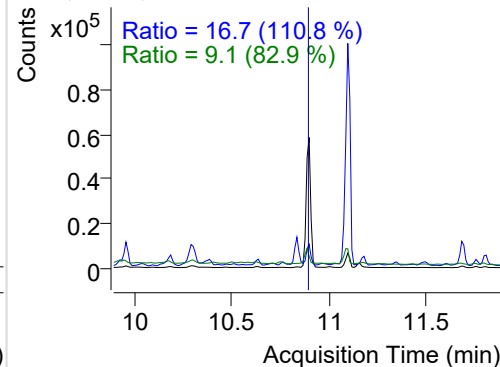


## IS-D10-Phenanthrene

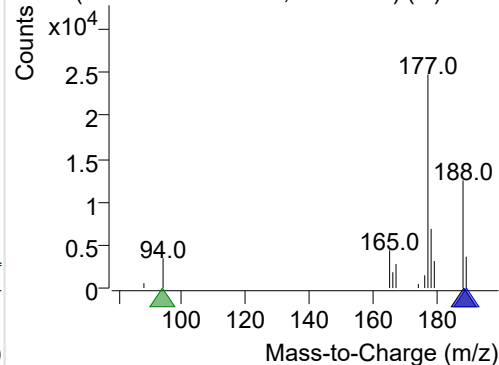
+ Selected Ion (188.0) 220506-PAHs-052.D



188.0, 189.0, 94.0

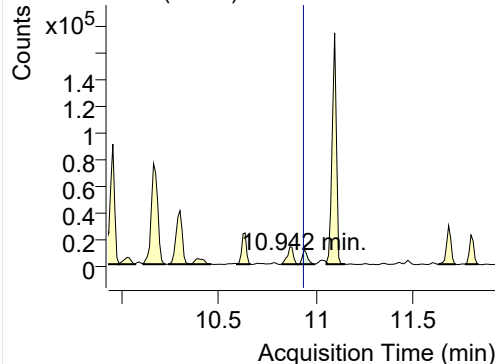


+ SIM (10.858-10.973 min, 12 scans) (\*\*) 2205

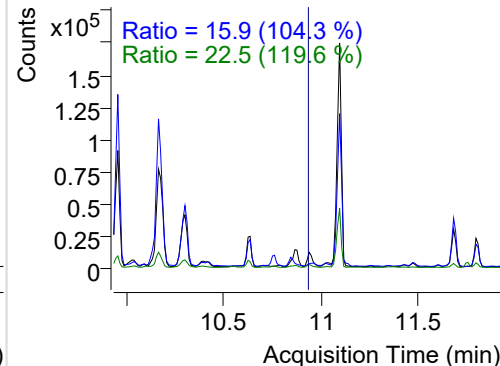


## Phenanthrene

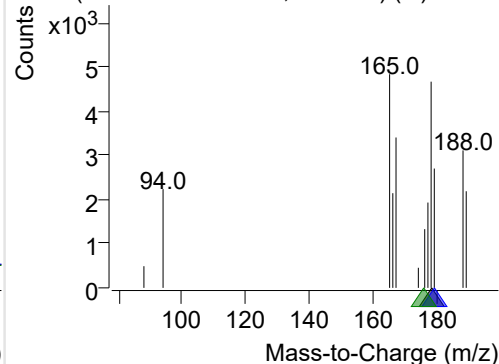
+ Selected Ion (178.0) 220506-PAHs-052.D



178.0, 179.0, 176.0

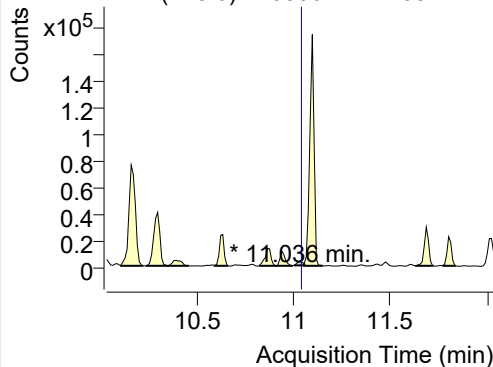


+ SIM (10.910-10.994 min, 9 scans) (\*\*) 22050

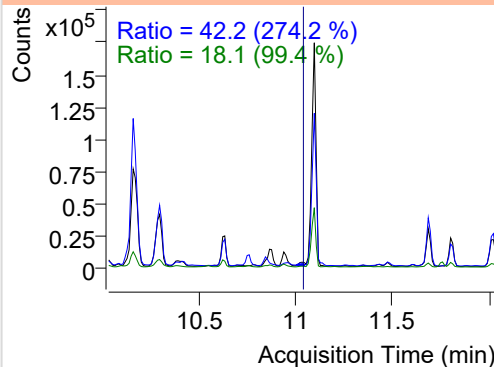


**Anthracene**

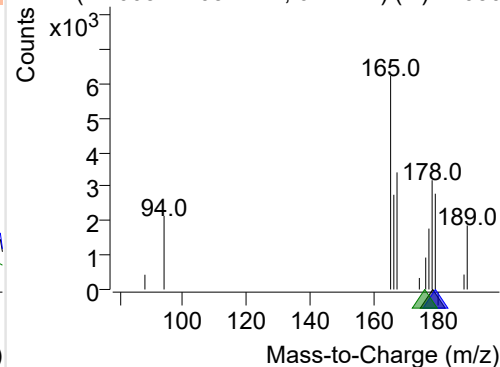
+ Selected Ion (178.0) 220506-PAHs-052.D



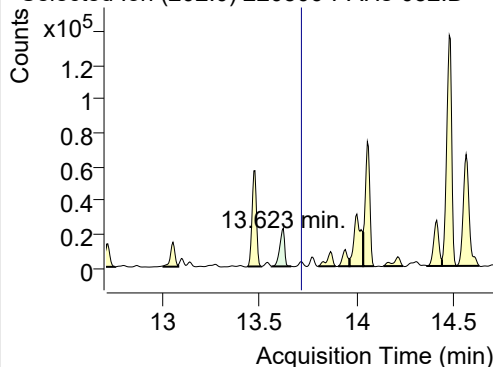
178.0, 179.0, 176.0



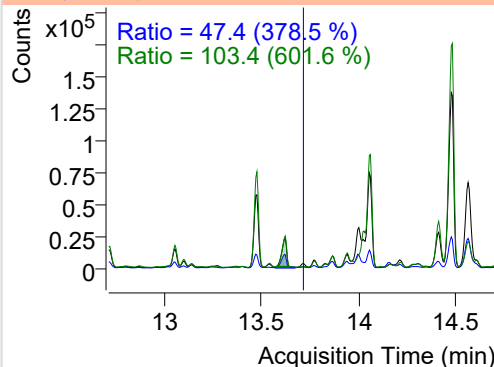
+ SIM (11.005-11.057 min, 6 scans) (\*\*) 22050

**Fluoranthene**

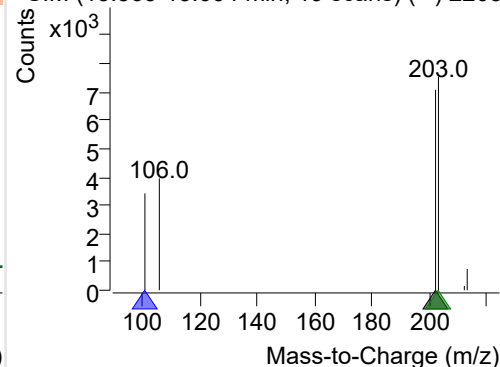
+ Selected Ion (202.0) 220506-PAHs-052.D



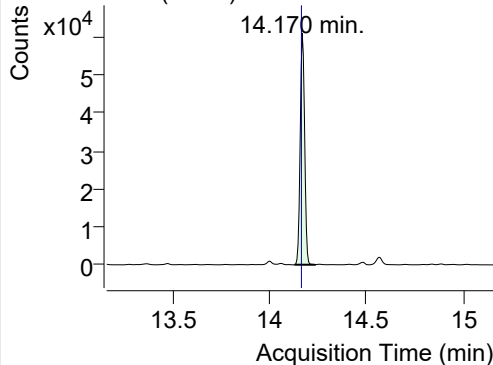
202.0, 101.0, 203.0



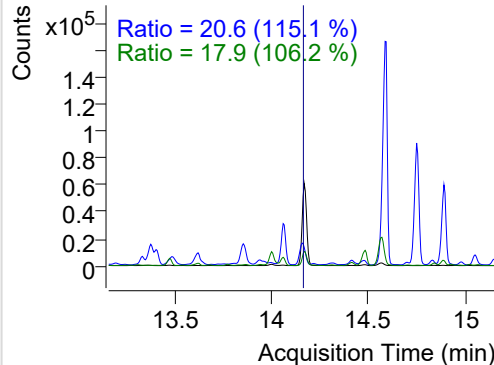
+ SIM (13.563-13.664 min, 19 scans) (\*\*) 2205

**LSS-D10-Pyrene**

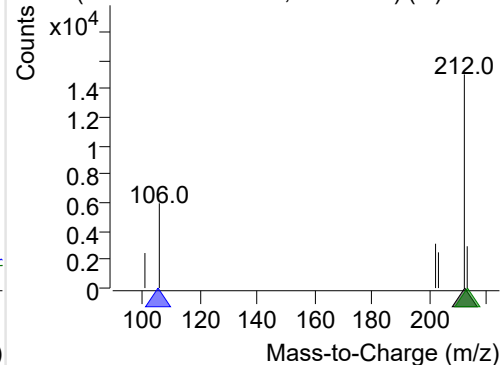
+ Selected Ion (212.0) 220506-PAHs-052.D



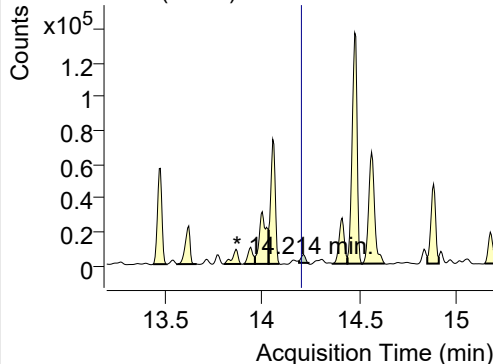
212.0, 106.0, 213.0



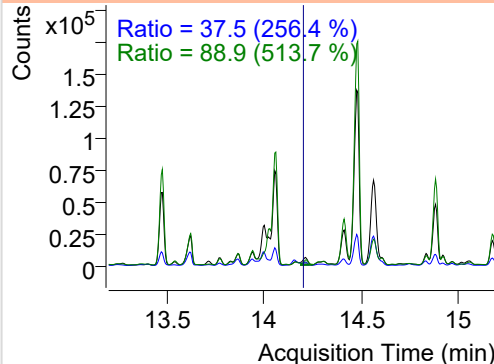
+ SIM (14.131-14.235 min, 20 scans) (\*\*) 2205

**Pyrene**

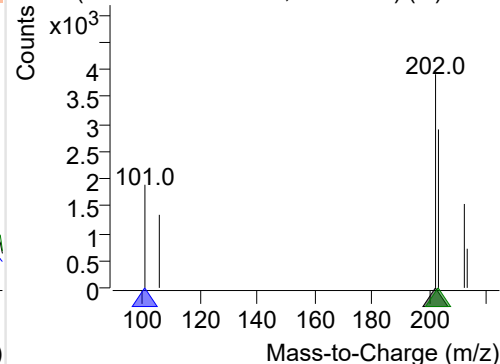
+ Selected Ion (202.0) 220506-PAHs-052.D



202.0, 101.0, 203.0



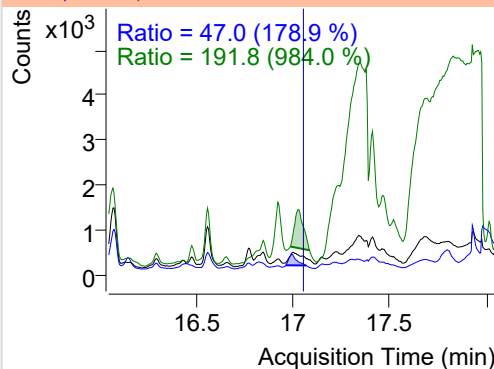
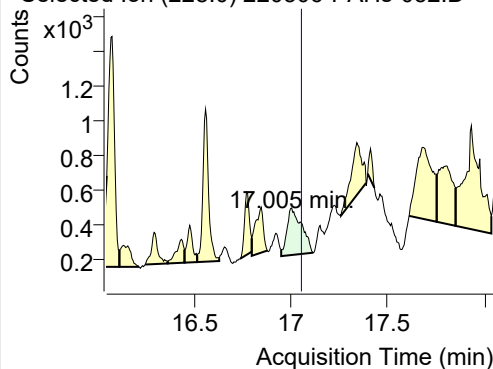
+ SIM (14.192-14.241 min, 10 scans) (\*\*) 2205



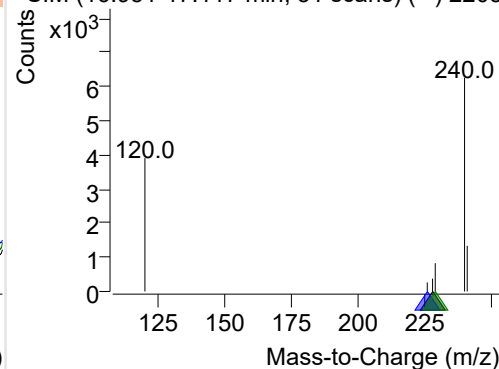
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-052.D

228.0, 226.0, 229.0

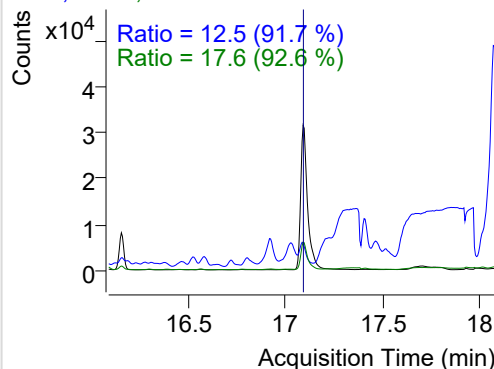
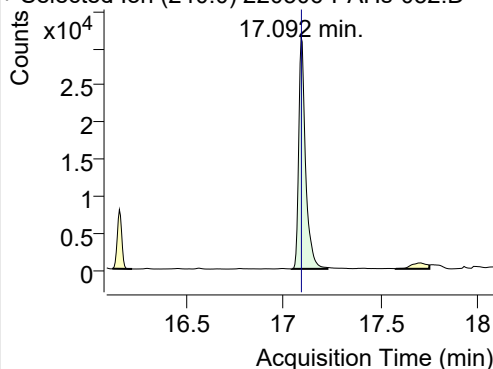


+ SIM (16.951-17.117 min, 31 scans) (\*\*) 2205

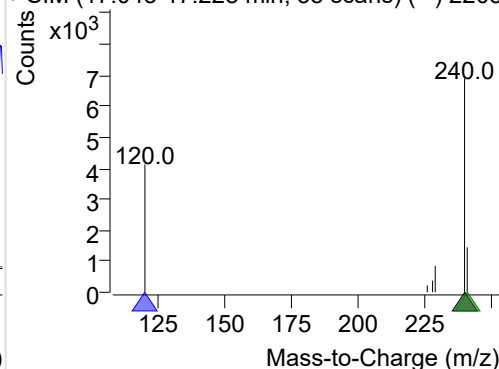
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-052.D

240.0, 120.0, 241.0

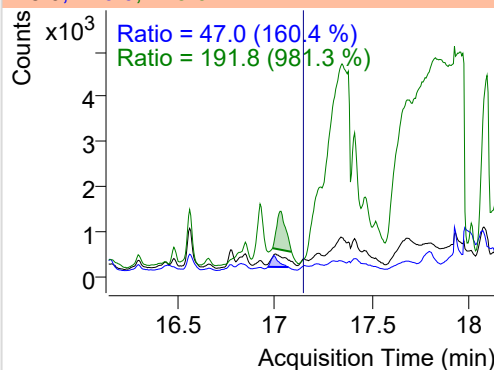
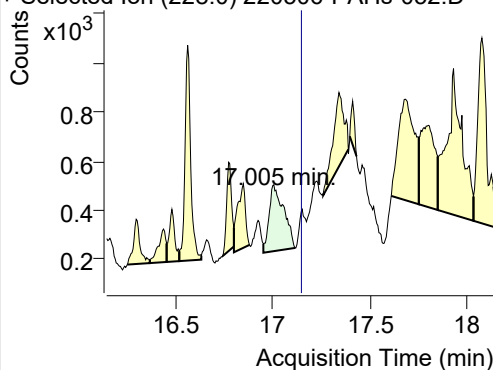


+ SIM (17.043-17.228 min, 35 scans) (\*\*) 2205

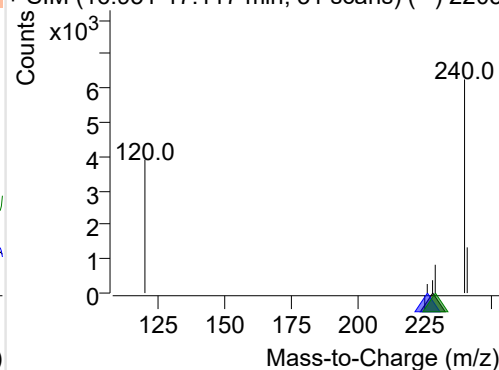
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-052.D

228.0, 226.0, 229.0

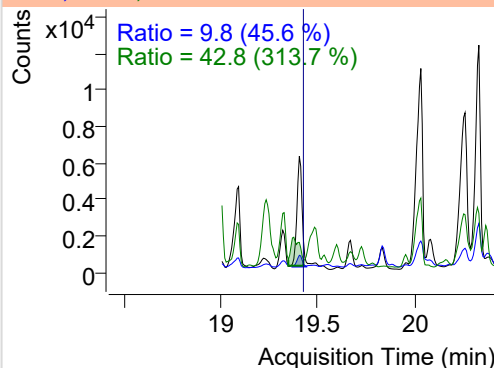
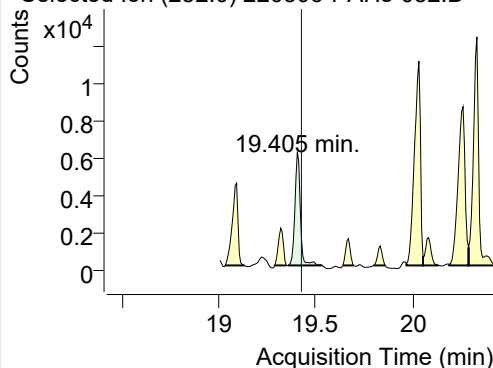


+ SIM (16.951-17.117 min, 31 scans) (\*\*) 2205

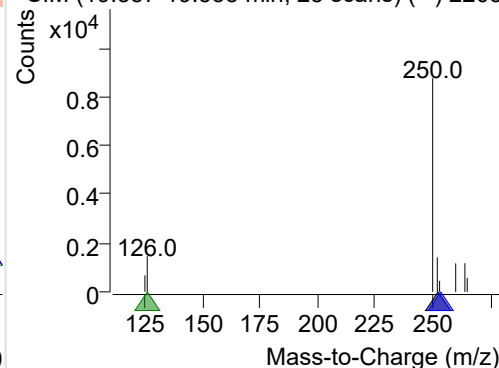
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-052.D

252.0, 253.0, 126.0



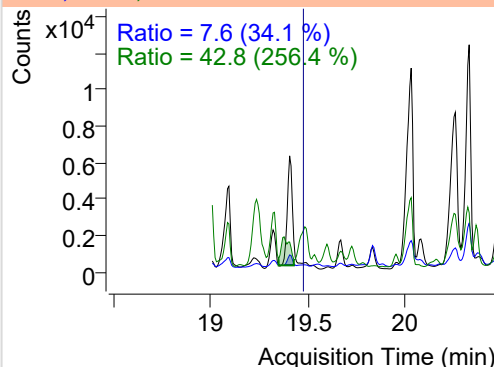
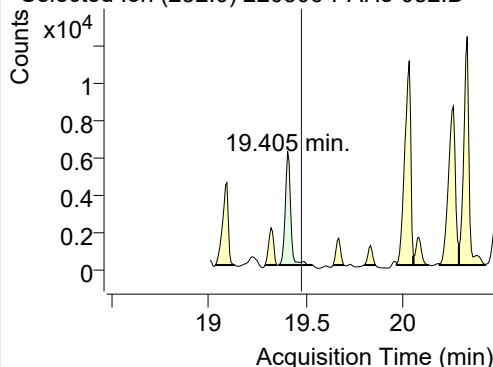
+ SIM (19.357-19.533 min, 25 scans) (\*\*) 2205



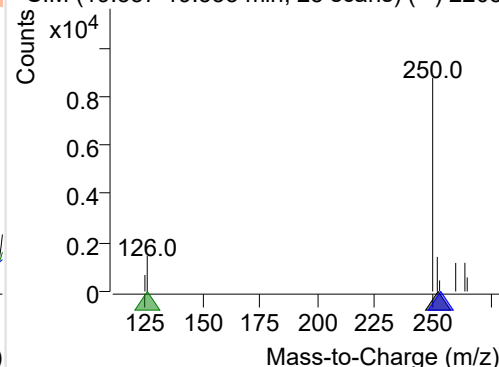
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-052.D

252.0, 253.0, 126.0

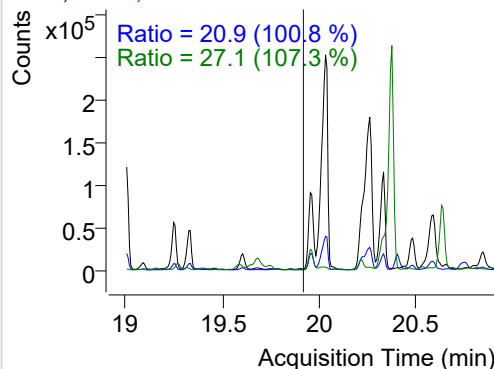
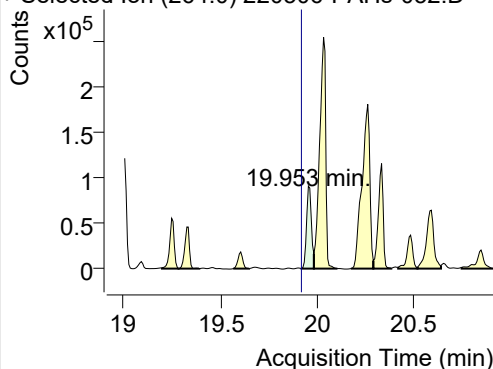


+ SIM (19.357-19.533 min, 25 scans) (\*\*) 2205

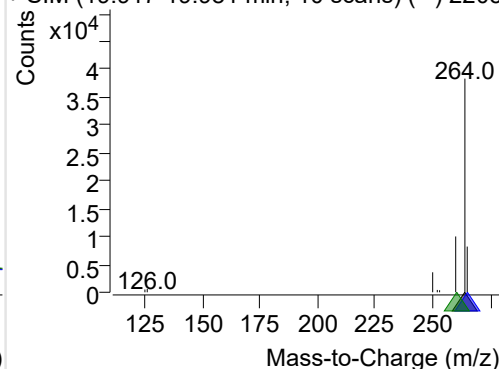
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-052.D

264.0, 265.0, 260.0

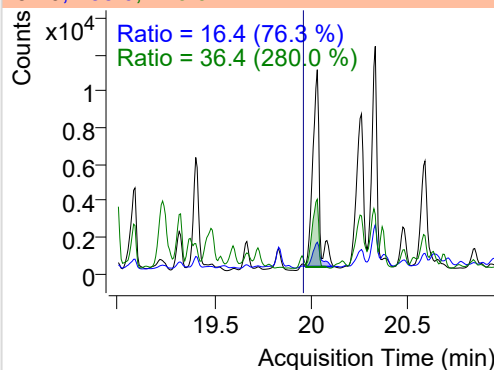
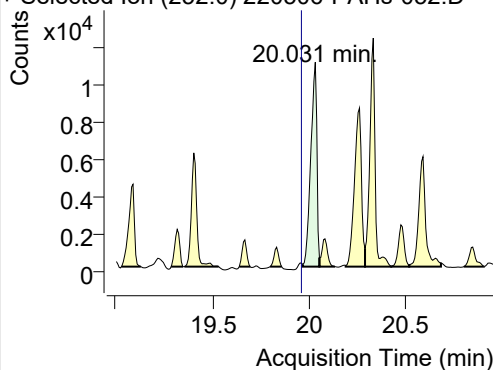


+ SIM (19.917-19.981 min, 10 scans) (\*\*) 2205

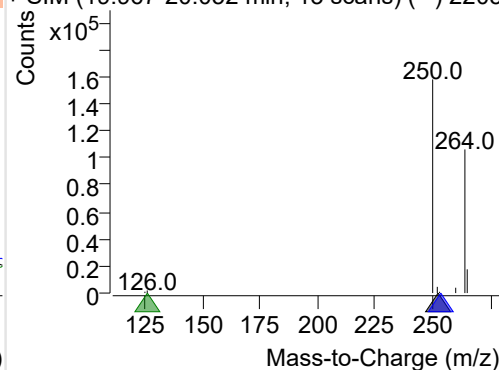
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-052.D

252.0, 253.0, 126.0

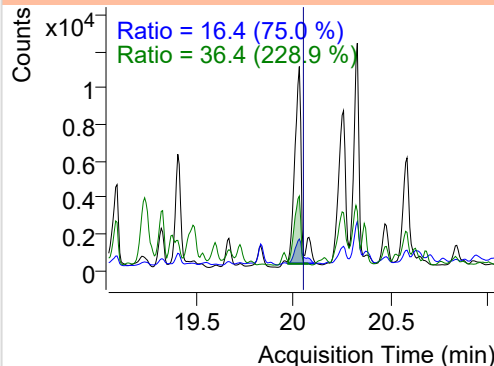
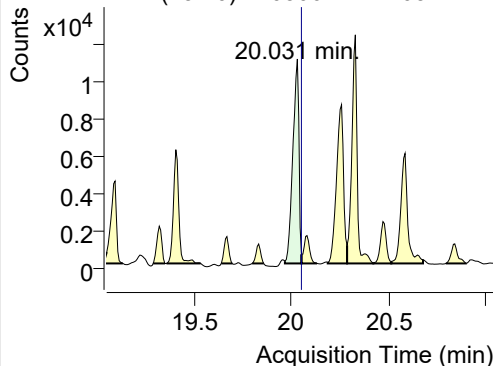


+ SIM (19.967-20.052 min, 13 scans) (\*\*) 2205

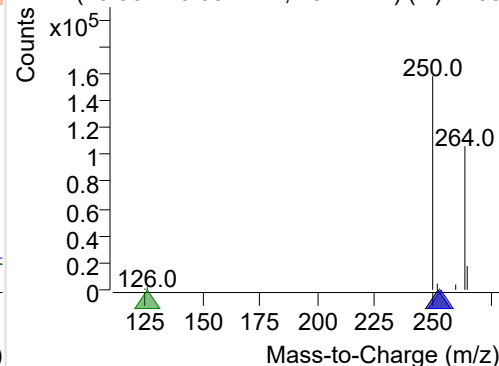
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-052.D

252.0, 253.0, 126.0

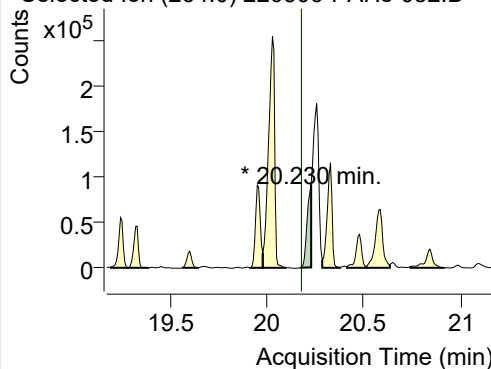


+ SIM (19.967-20.052 min, 13 scans) (\*\*) 2205

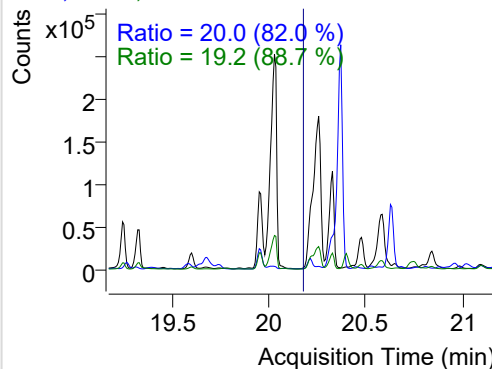


## IS-D12-Perylene

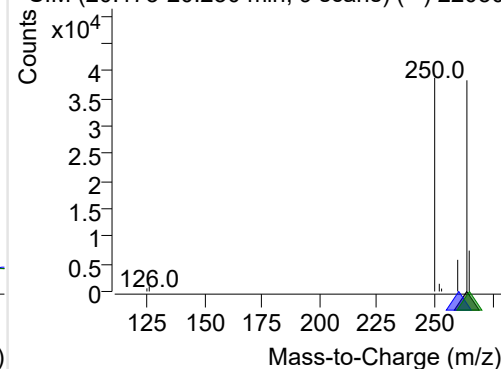
+ Selected Ion (264.0) 220506-PAHs-052.D



264.0, 260.0, 265.0

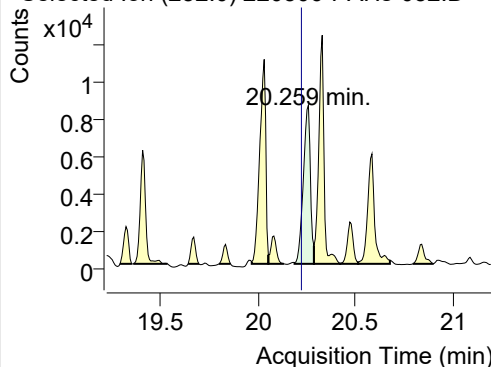


+ SIM (20.173-20.230 min, 9 scans) (\*\*) 22050

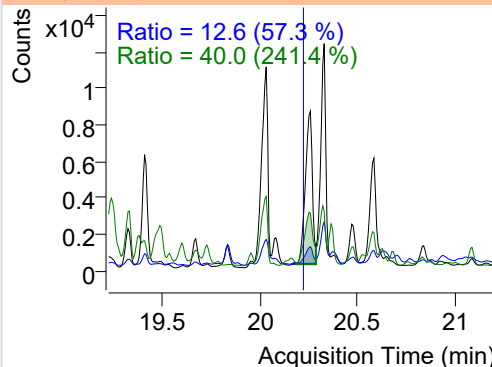


## Perylene

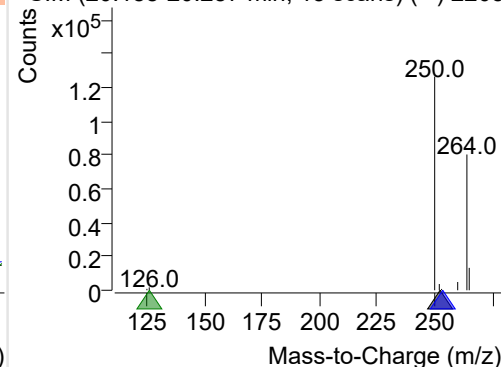
+ Selected Ion (252.0) 220506-PAHs-052.D



252.0, 253.0, 126.0

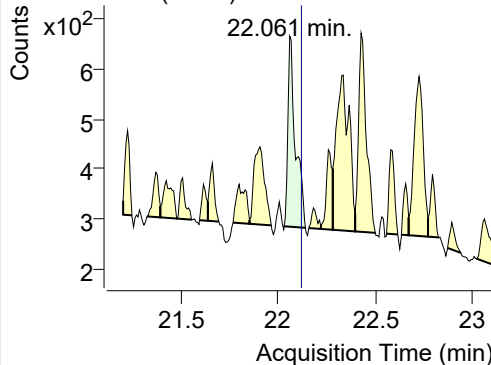


+ SIM (20.188-20.287 min, 15 scans) (\*\*) 2205

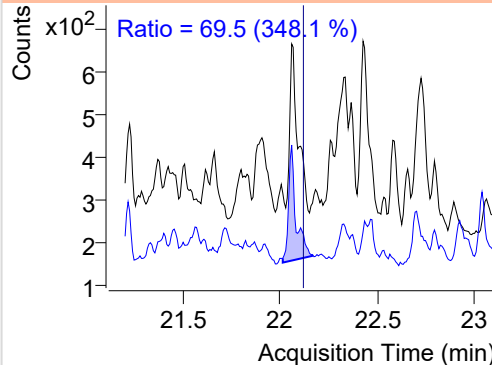


## Indeno(1,2,3-c,d)pyrene

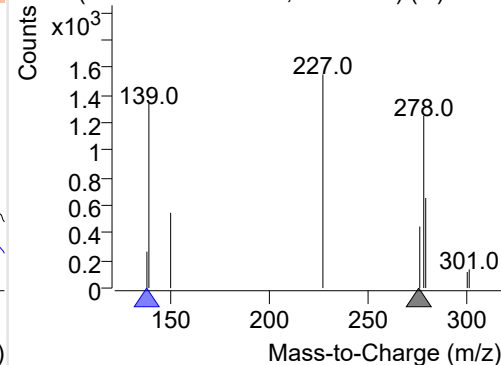
+ Selected Ion (276.0) 220506-PAHs-052.D



276.0, 138.0

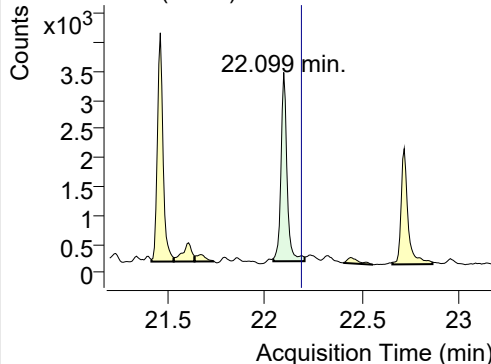


+ SIM (22.032-22.142 min, 14 scans) (\*\*) 2205

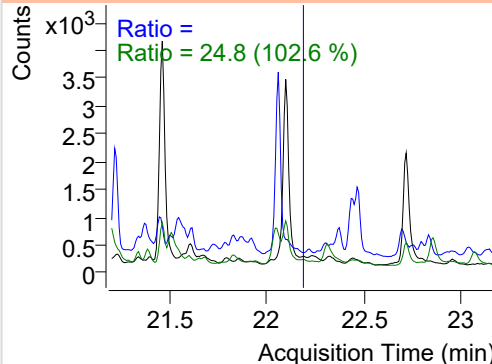


## Dibenz(a,h)anthracene

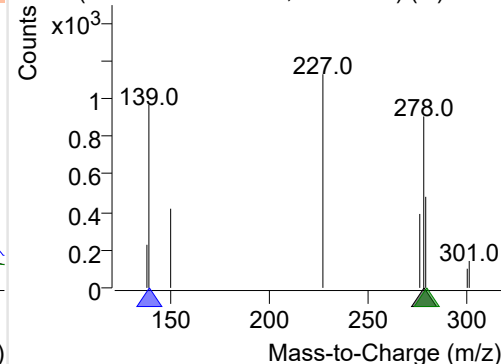
+ Selected Ion (278.0) 220506-PAHs-052.D



278.0, 139.0, 279.0

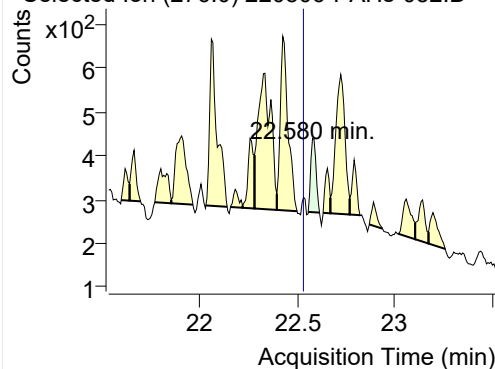


+ SIM (22.046-22.206 min, 22 scans) (\*\*) 2205

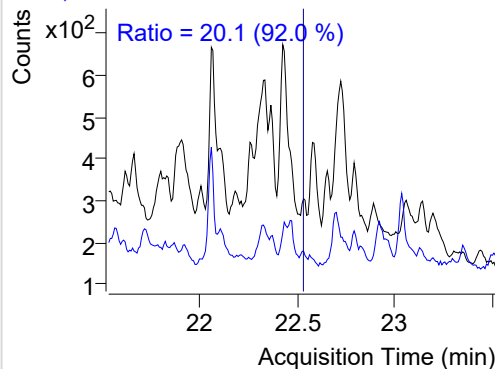


**Benzo(g,h,i)perylene**

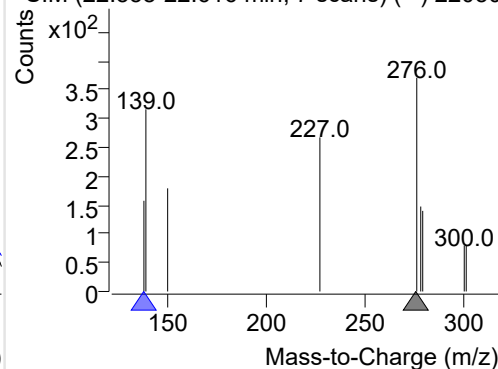
+ Selected Ion (276.0) 220506-PAHs-052.D



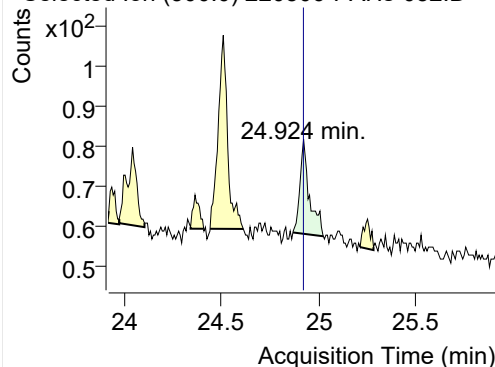
276.0, 138.0



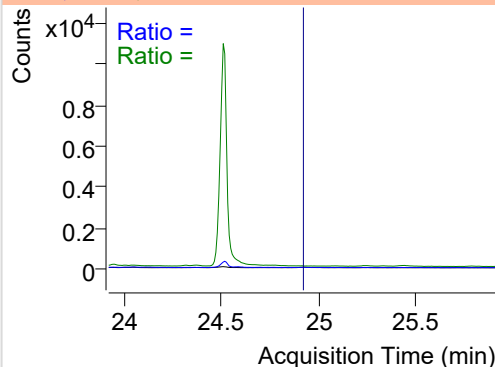
+ SIM (22.558-22.616 min, 7 scans) (\*\*) 22050

**Coronene**

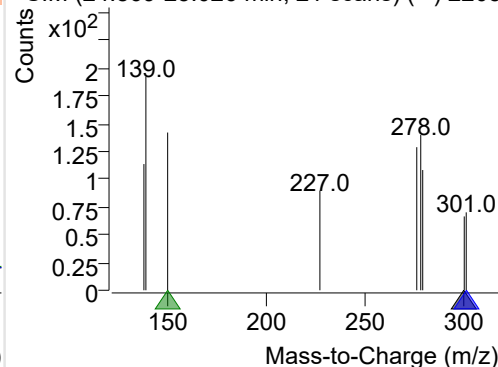
+ Selected Ion (300.0) 220506-PAHs-052.D



300.0, 301.0, 150.0



+ SIM (24.869-25.026 min, 21 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

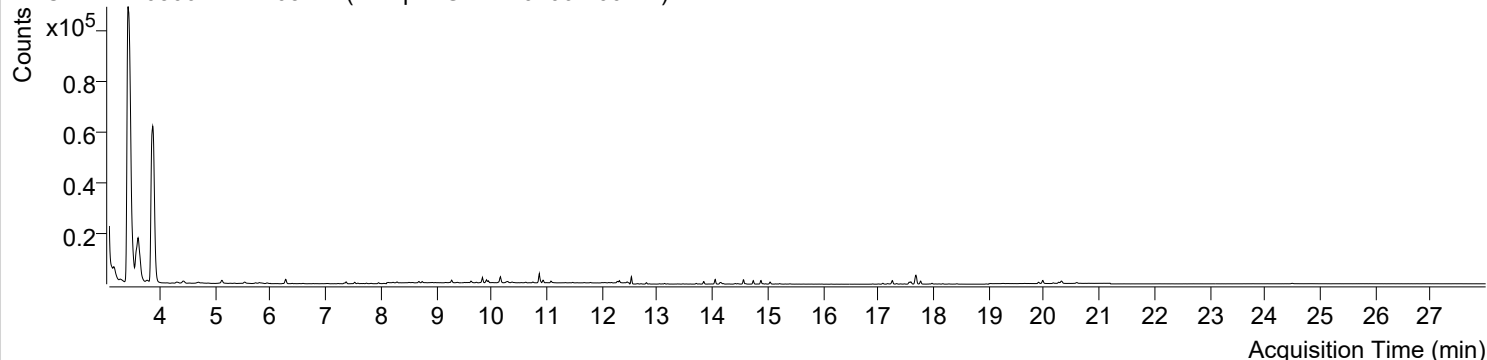


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 2:13:33	Data File	220506-PAHs-054.D
Type	Sample	Name	Sample-Gas-220406-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

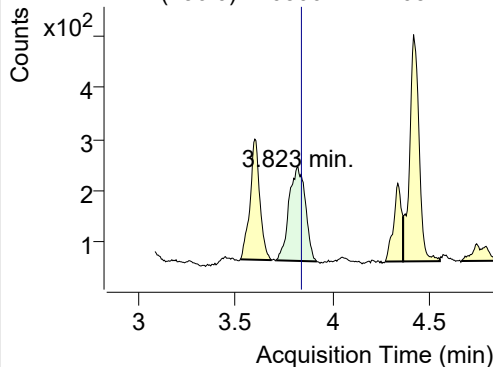
+ TIC SIM 220506-PAHs-054.D (Sample-Gas-220406-100DIL)



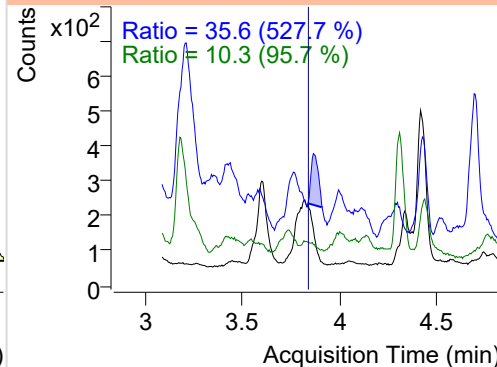
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.823	136.0	1067	182.32	ND ng/ml	10.3
Naphthalene	3.872	128.0	206029	49107.58	ND ng/ml	13.3
Acenaphthylene	7.366	152.0	38	14.53	ND ng/ml	501.0
IS-D10-Acenaphthene	7.526	164.0	400	242.63	ND ng/ml	101.6
Acenaphthene	7.591	154.0	96	55.87	ND ng/ml	117.0
LSS-D10-Fluorene	8.684	176.0	351	207.89	ND ng/ml	95.9
Fluorene	8.747	166.0	394	234.12	ND ng/ml	96.6
IS-D10-Phenanthrene	10.889	188.0	682	448.45	ND ng/ml	13.7
Phenanthrene	10.942	178.0	1110	644.92	ND ng/ml	19.9
Anthracene	11.078	178.0	315	178.92	ND ng/ml	26.7
Fluoranthene	13.710	202.0	288	189.96	ND ng/ml	15.0
LSS-D10-Pyrene	14.159	212.0	525	323.82	ND ng/ml	165.8
Pyrene	14.197	202.0	218	132.86	ND ng/ml	31.0
Benz(a)anthracene	17.260	228.0	58	29.49	ND ng/ml	42.4
IS-D12-Chrysene	17.087	240.0	471	265.25	ND ng/ml	17.8
Chrysene	17.260	228.0	58	29.49	ND ng/ml	42.4
Benzo(b)fluoranthene	19.981	252.0	1771	930.57	ND ng/ml	18.9
Benzo(k)fluoranthene	19.981	252.0	1771	930.57	ND ng/ml	18.9
SS-D12-Benzo(e)pyrene	19.903	264.0	684	350.83	ND ng/ml	28.5
Benzo(e)pyrene	19.981	252.0	1771	930.57	ND ng/ml	18.9
Benzo(a)pyrene	19.981	252.0	1771	930.57	ND ng/ml	18.9
IS-D12-Perylene	20.173	264.0	380	168.56	ND ng/ml	21.1
Perylene	20.308	252.0	1116	560.53	ND ng/ml	23.3
Indeno(1,2,3-c,d)pyrene	22.122	276.0	11	3.67	ND ng/ml	
Dibenz(a,h)anthracene	22.183	278.0	14	4.19	ND ng/ml	
Benzo(g,h,i)perylene	22.526	276.0	8	3.67	ND ng/ml	
Coronene	24.909	300.0	41	5.00	ND ng/ml	

## IS-D8-Naphthalene

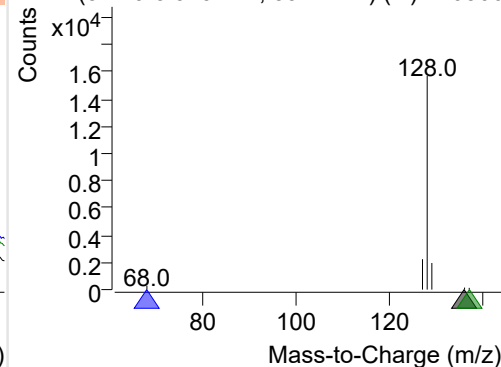
+ Selected Ion (136.0) 220506-PAHs-054.D



136.0, 68.0, 137.0

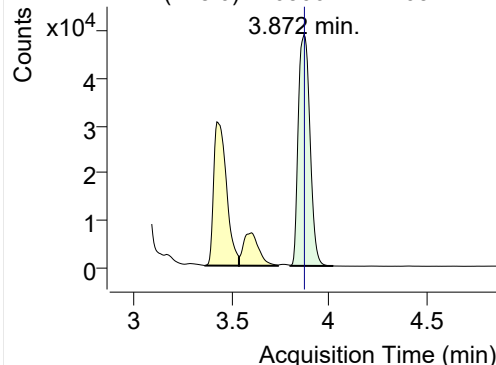


+ SIM (3.710-3.919 min, 39 scans) (\*\*) 220506

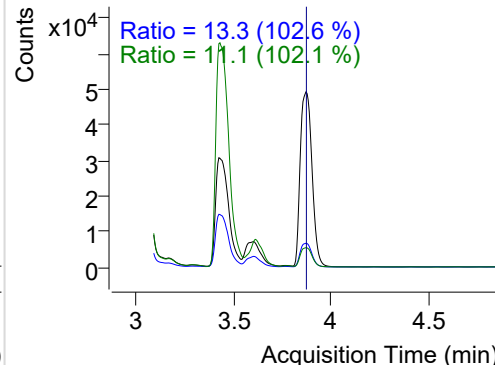


**Naphthalene**

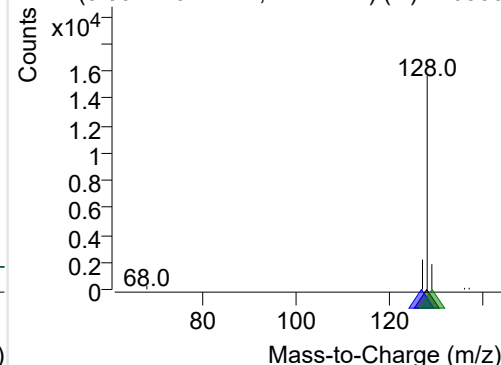
+ Selected Ion (128.0) 220506-PAHs-054.D



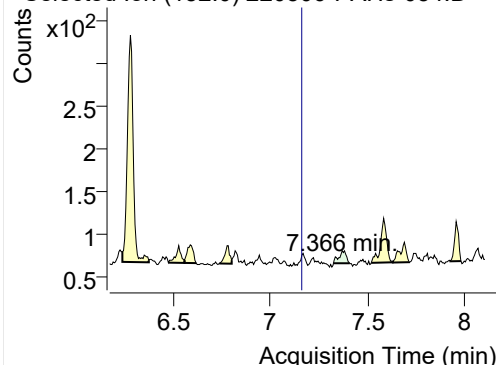
128.0, 127.0, 129.0



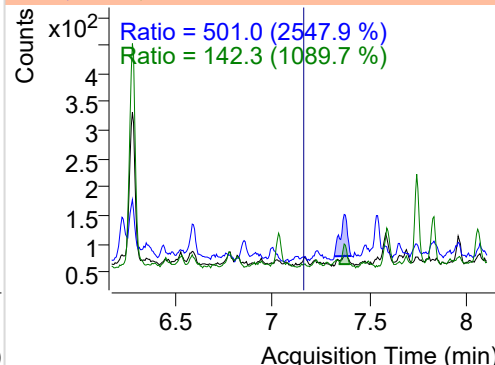
+ SIM (3.802-4.022 min, 41 scans) (\*\*) 220506

**Acenaphthylene**

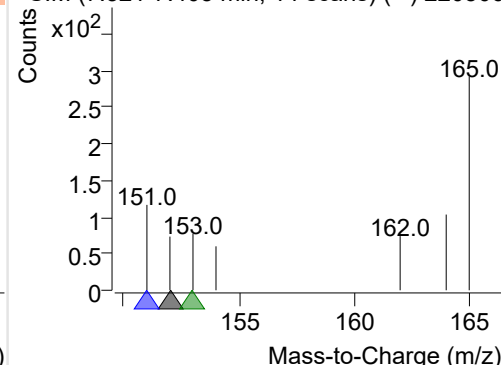
+ Selected Ion (152.0) 220506-PAHs-054.D



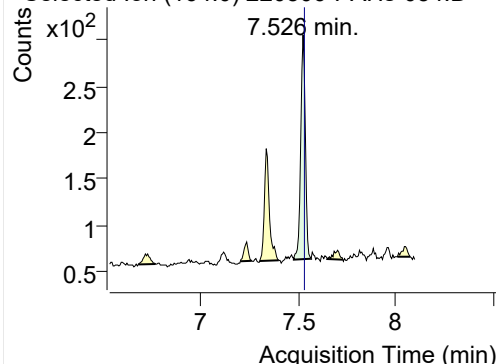
152.0, 151.0, 153.0



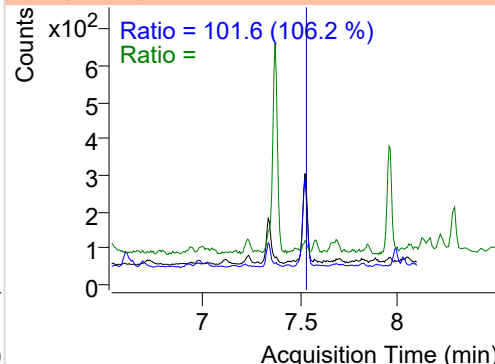
+ SIM (7.321-7.405 min, 14 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

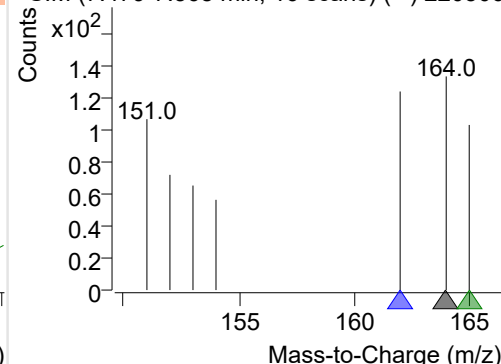
+ Selected Ion (164.0) 220506-PAHs-054.D



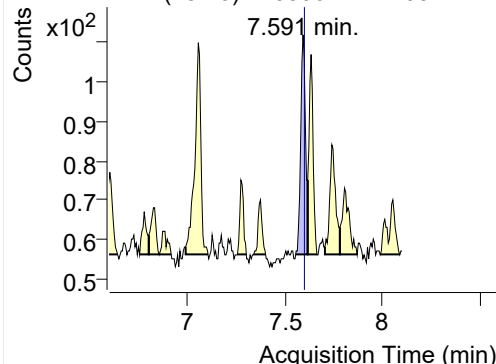
164.0, 162.0, 165.0



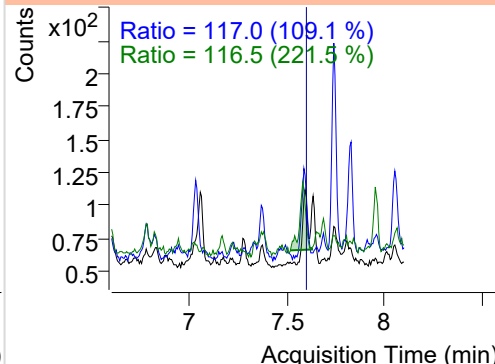
+ SIM (7.479-7.568 min, 16 scans) (\*\*) 220506

**Acenaphthene**

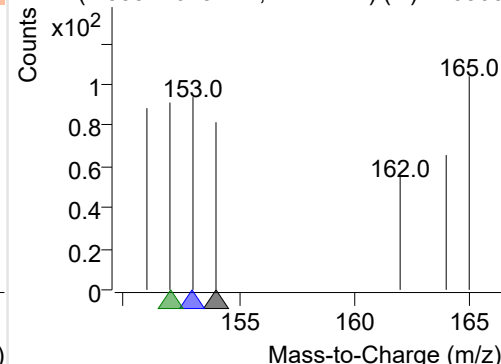
+ Selected Ion (154.0) 220506-PAHs-054.D



154.0, 153.0, 152.0

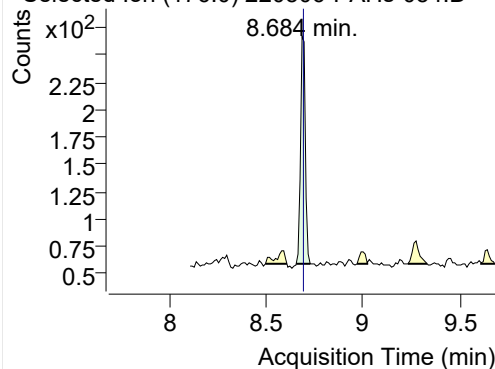


+ SIM (7.553-7.615 min, 11 scans) (\*\*) 220506

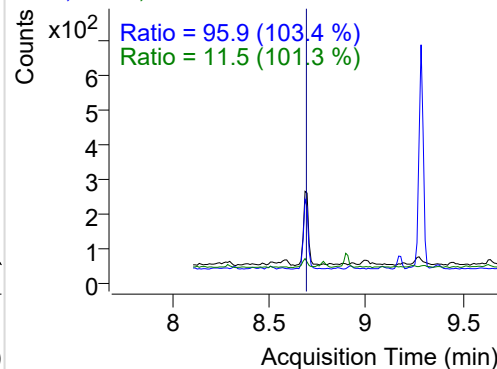


## LSS-D10-Fluorene

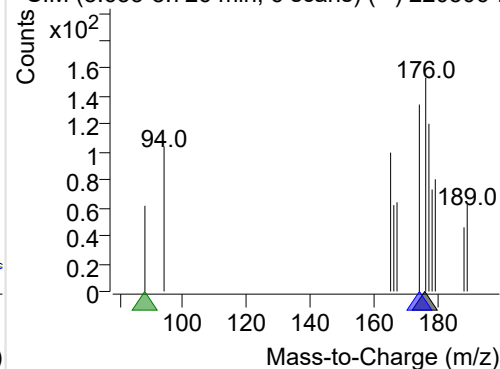
+ Selected Ion (176.0) 220506-PAHs-054.D



176.0, 174.0, 88.0

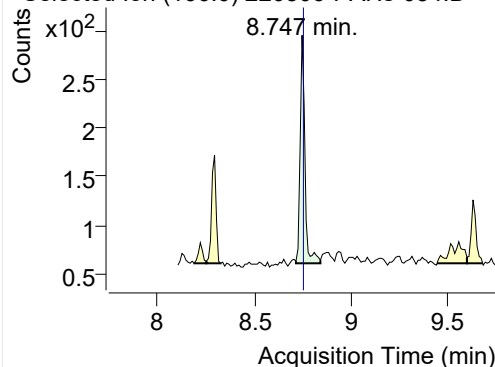


+ SIM (8.653-8.726 min, 6 scans) (\*\*) 220506-I

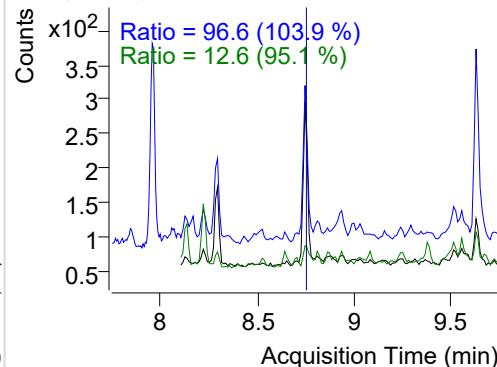


## Fluorene

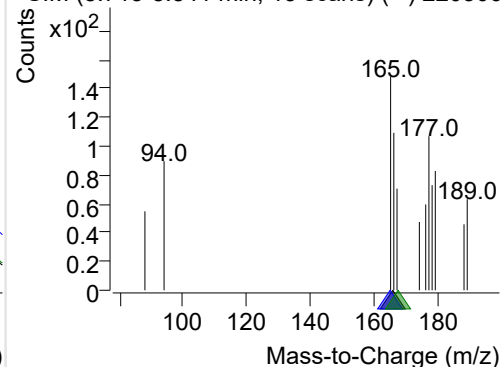
+ Selected Ion (166.0) 220506-PAHs-054.D



166.0, 165.0, 167.0

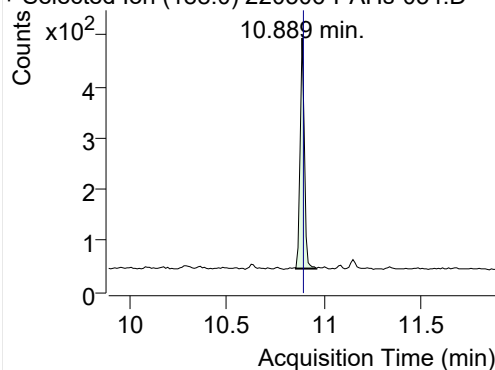


+ SIM (8.715-8.841 min, 13 scans) (\*\*) 220506

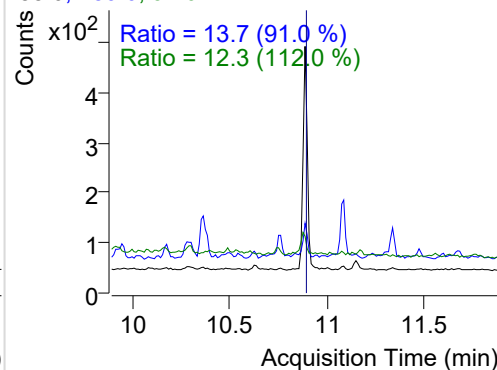


## IS-D10-Phenanthrene

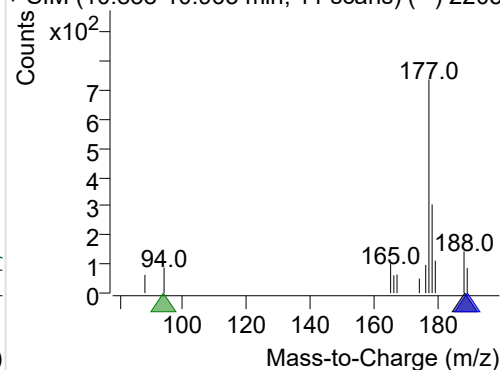
+ Selected Ion (188.0) 220506-PAHs-054.D



188.0, 189.0, 94.0

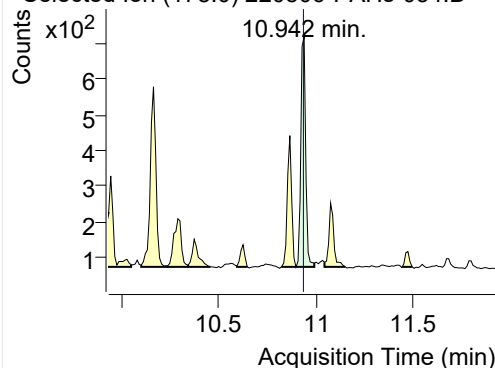


+ SIM (10.858-10.963 min, 11 scans) (\*\*) 2205

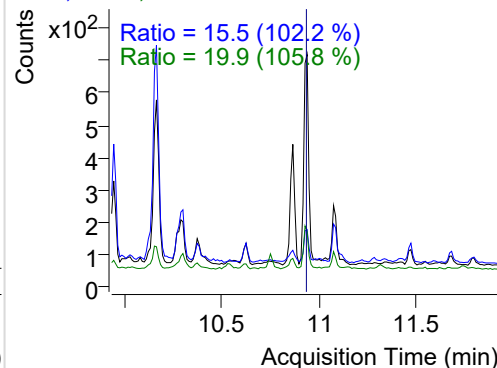


## Phenanthrene

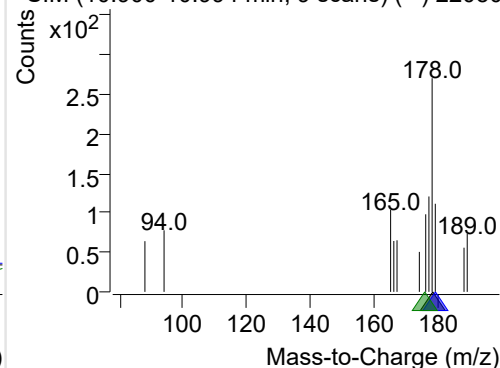
+ Selected Ion (178.0) 220506-PAHs-054.D



178.0, 179.0, 176.0

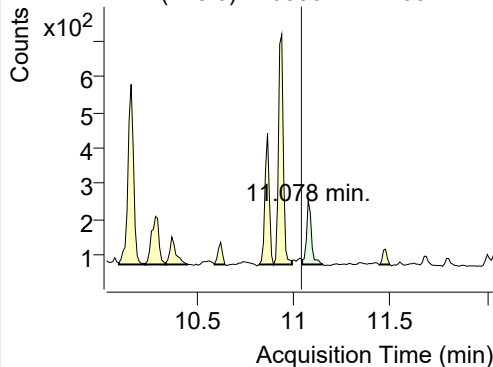


+ SIM (10.900-10.994 min, 9 scans) (\*\*) 22050

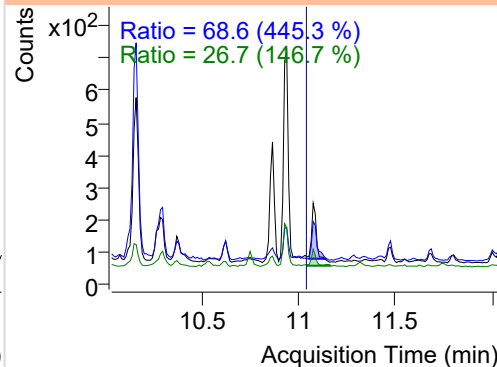


**Anthracene**

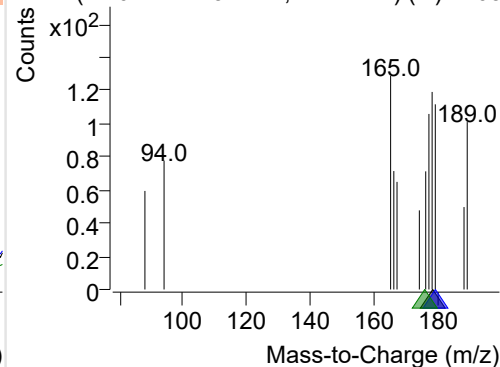
+ Selected Ion (178.0) 220506-PAHs-054.D



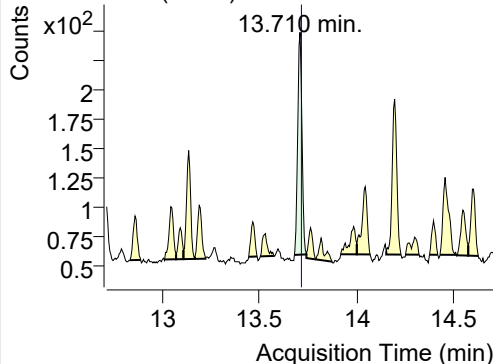
178.0, 179.0, 176.0



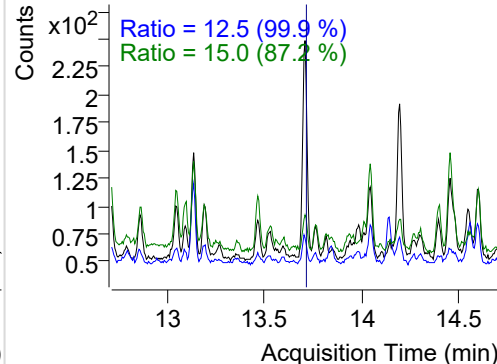
+ SIM (11.047-11.154 min, 11 scans) (\*\*) 2205

**Fluoranthene**

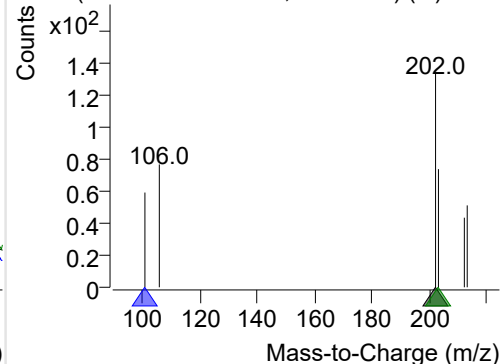
+ Selected Ion (202.0) 220506-PAHs-054.D



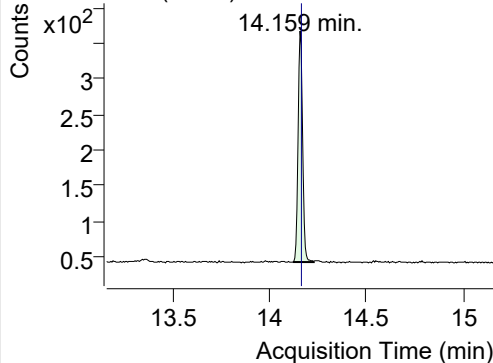
202.0, 101.0, 203.0



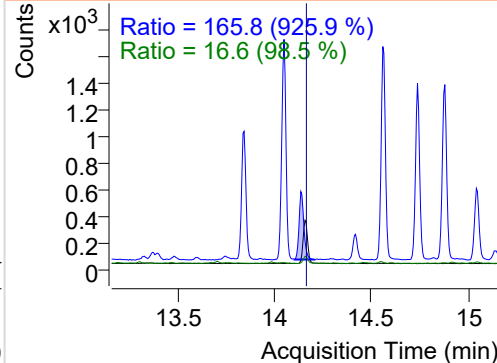
+ SIM (13.680-13.742 min, 12 scans) (\*\*) 2205

**LSS-D10-Pyrene**

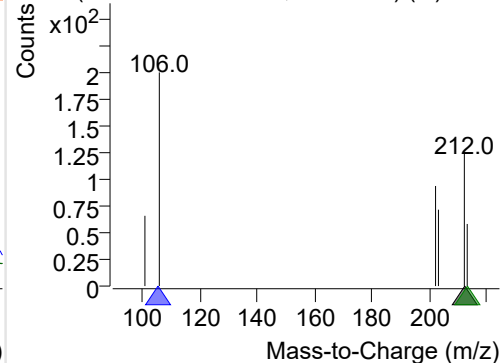
+ Selected Ion (212.0) 220506-PAHs-054.D



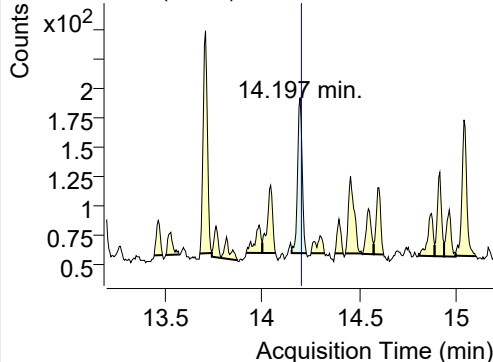
212.0, 106.0, 213.0



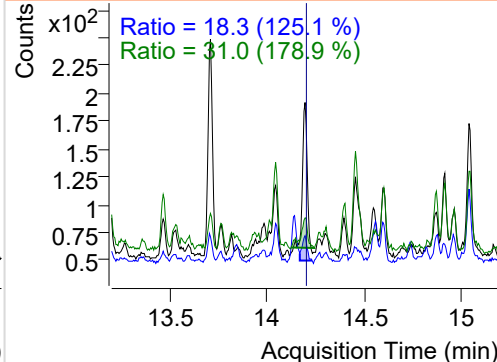
+ SIM (14.123-14.230 min, 20 scans) (\*\*) 2205

**Pyrene**

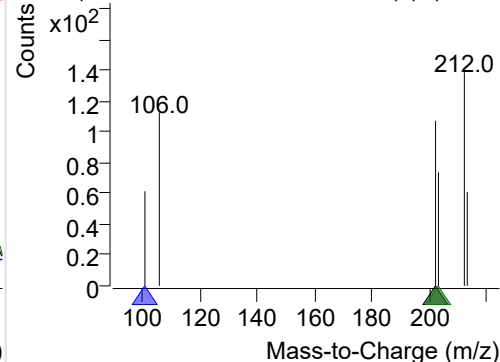
+ Selected Ion (202.0) 220506-PAHs-054.D



202.0, 101.0, 203.0



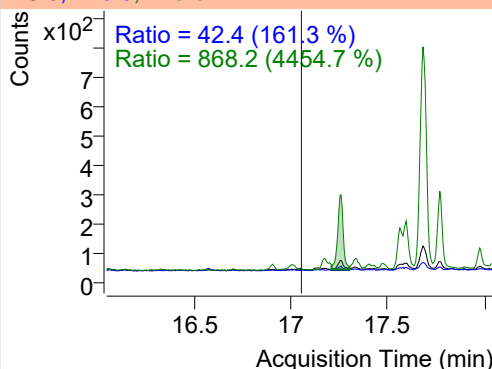
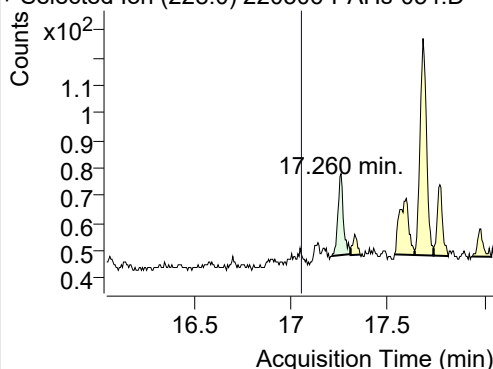
+ SIM (14.154-14.230 min, 14 scans) (\*\*) 2205



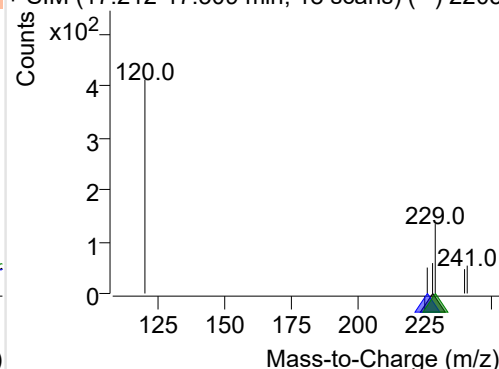
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-054.D

228.0, 226.0, 229.0

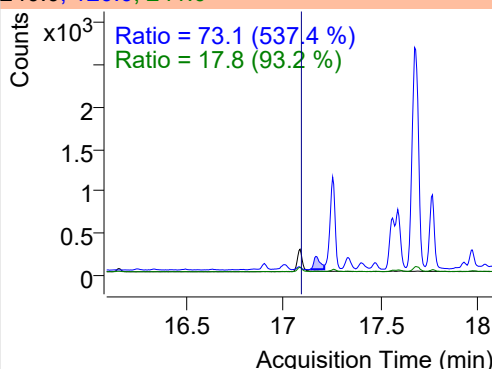
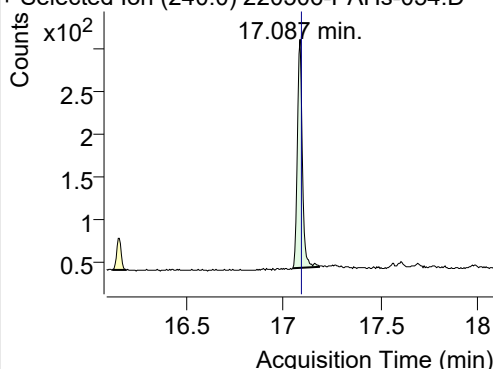


+ SIM (17.212-17.309 min, 18 scans) (\*\*) 2205

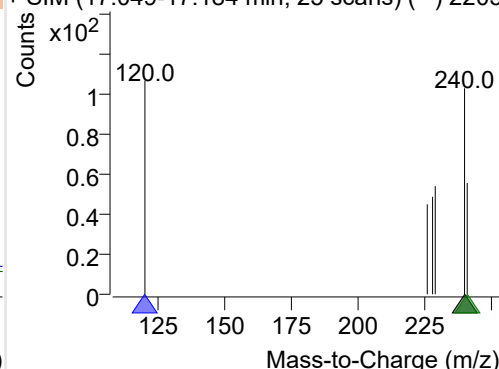
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-054.D

240.0, 120.0, 241.0

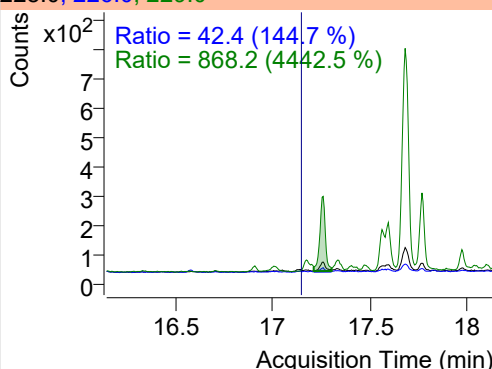
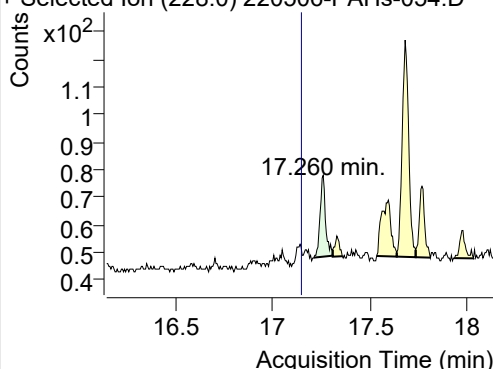


+ SIM (17.049-17.184 min, 25 scans) (\*\*) 2205

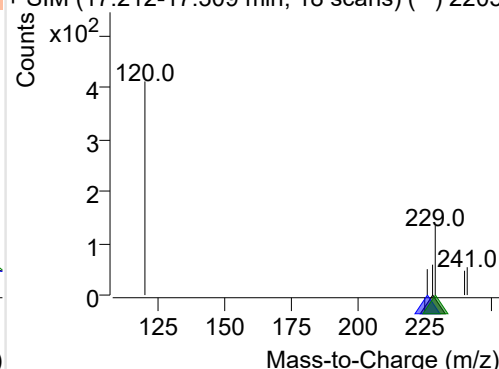
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-054.D

228.0, 226.0, 229.0

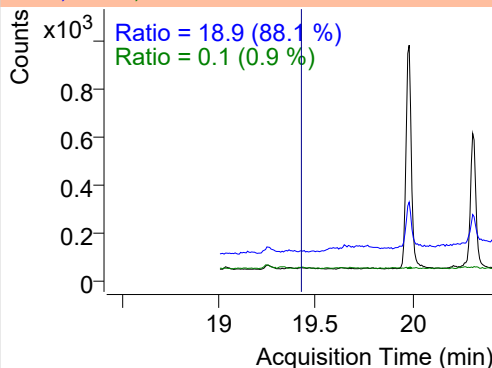
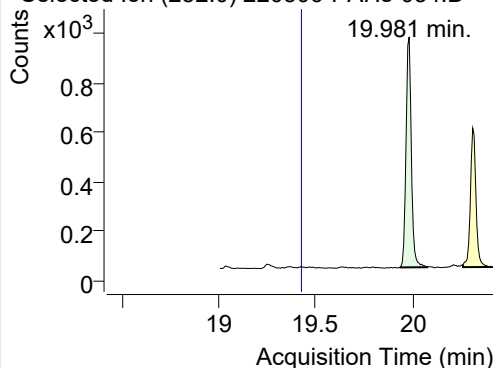


+ SIM (17.212-17.309 min, 18 scans) (\*\*) 2205

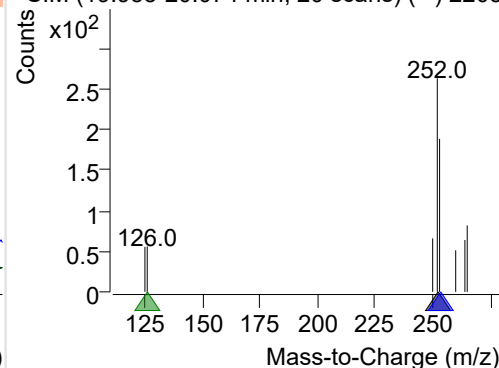
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-054.D

252.0, 253.0, 126.0



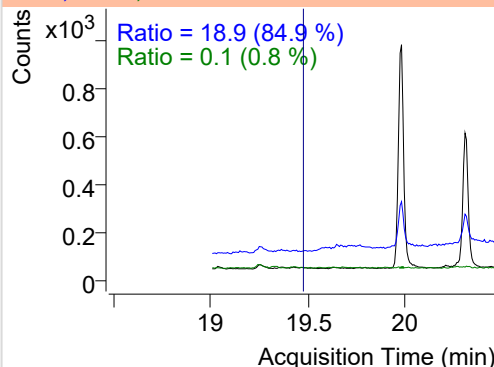
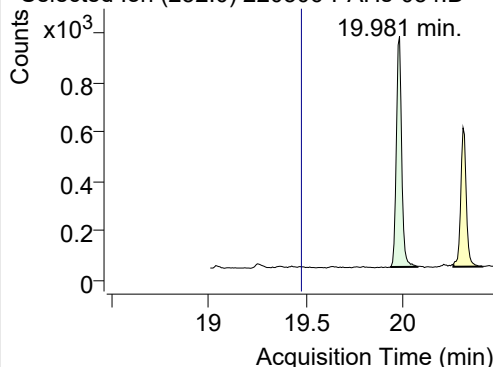
+ SIM (19.933-20.074 min, 20 scans) (\*\*) 2205



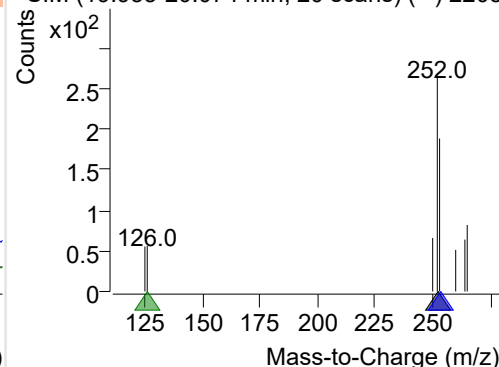
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-054.D

252.0, 253.0, 126.0

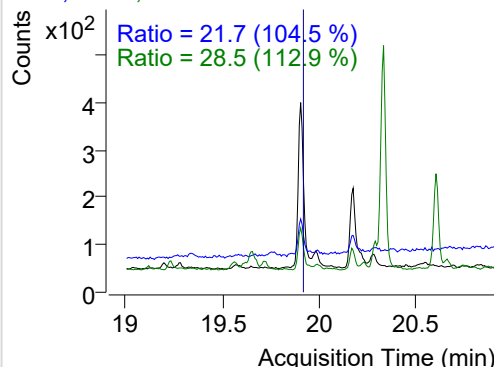
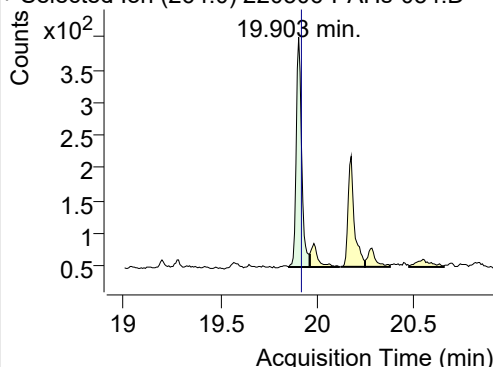


+ SIM (19.933-20.074 min, 20 scans) (\*\*) 2205

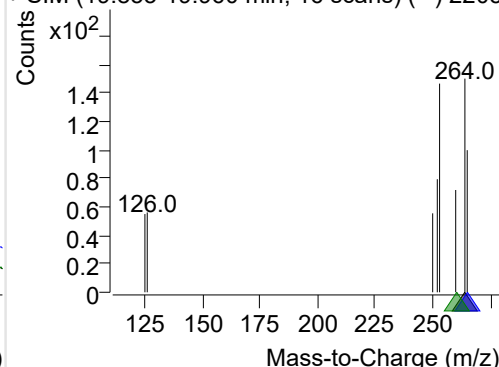
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-054.D

264.0, 265.0, 260.0

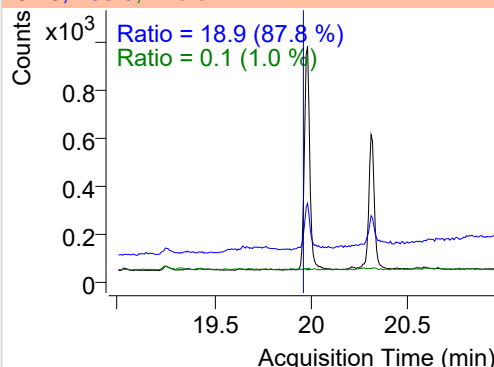
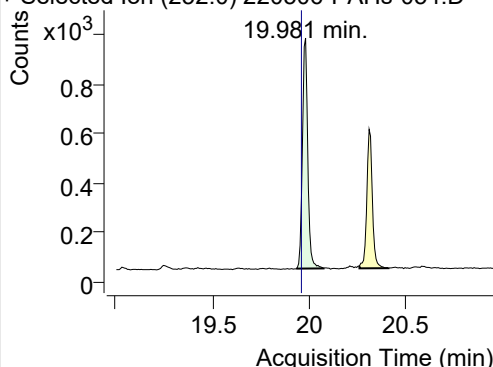


+ SIM (19.853-19.960 min, 16 scans) (\*\*) 2205

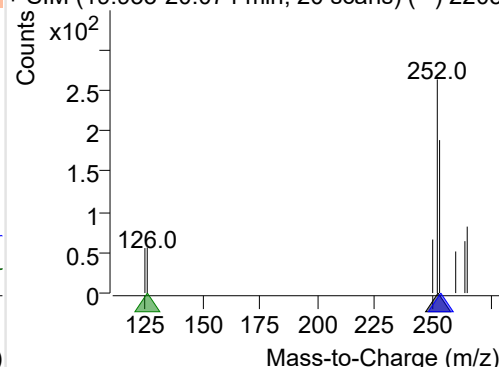
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-054.D

252.0, 253.0, 126.0

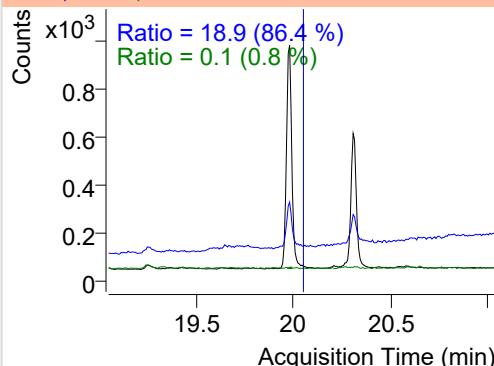
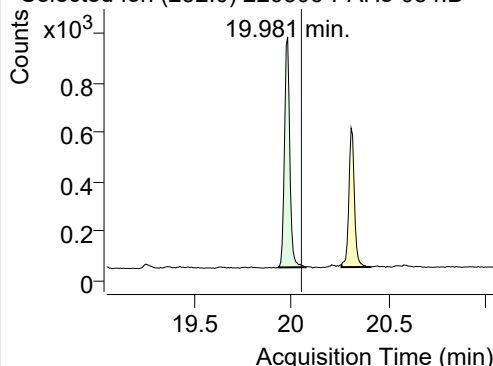


+ SIM (19.933-20.074 min, 20 scans) (\*\*) 2205

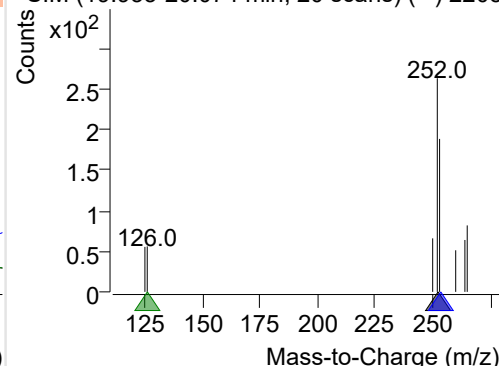
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-054.D

252.0, 253.0, 126.0



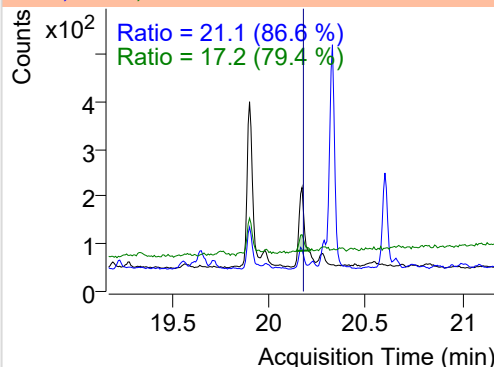
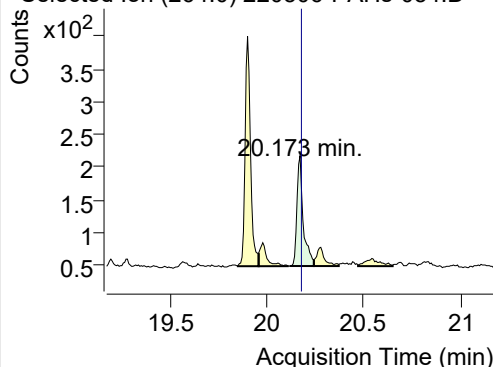
+ SIM (19.933-20.074 min, 20 scans) (\*\*) 2205



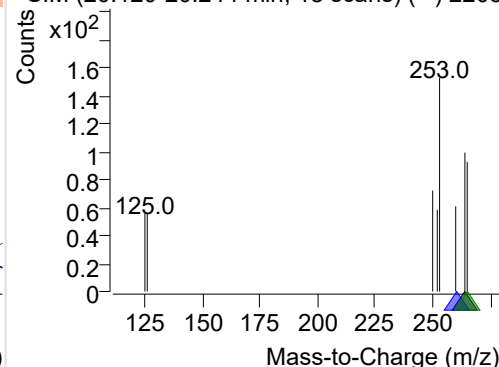
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-054.D

264.0, 260.0, 265.0



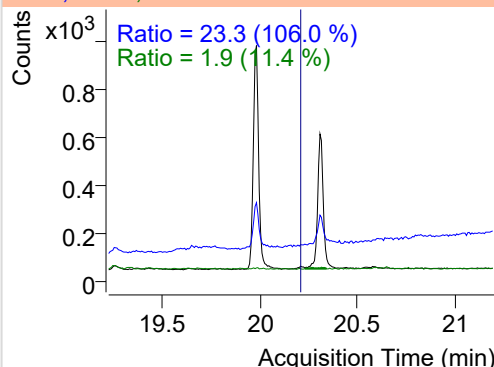
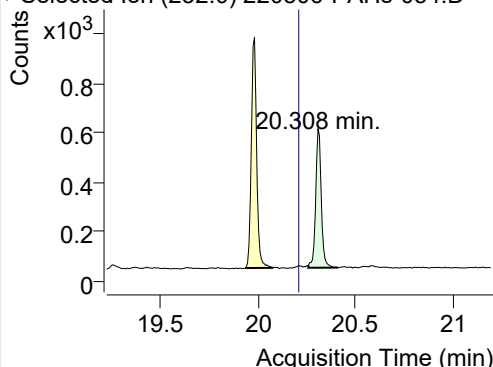
+ SIM (20.120-20.244 min, 18 scans) (\*\*) 2205



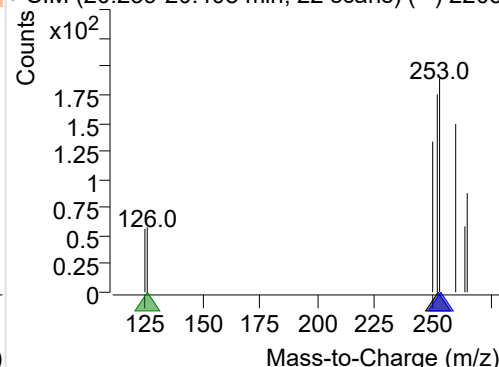
## Perylene

+ Selected Ion (252.0) 220506-PAHs-054.D

252.0, 253.0, 126.0



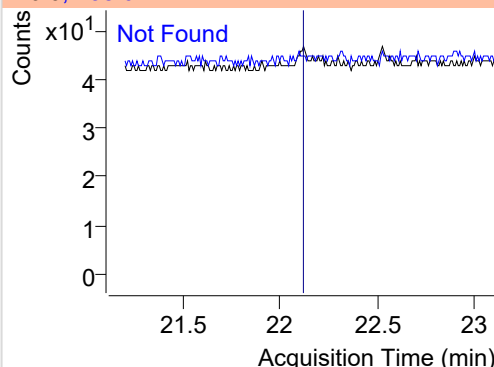
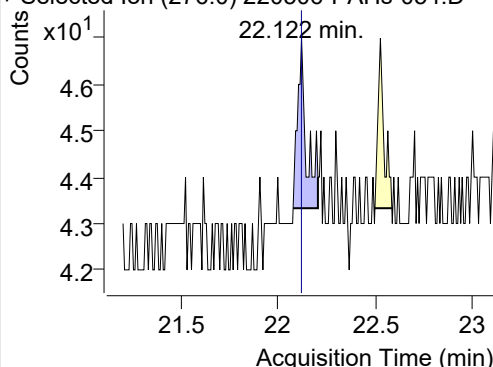
+ SIM (20.259-20.408 min, 22 scans) (\*\*) 2205



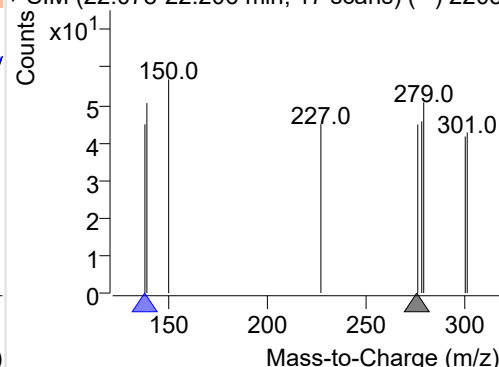
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-054.D

276.0, 138.0



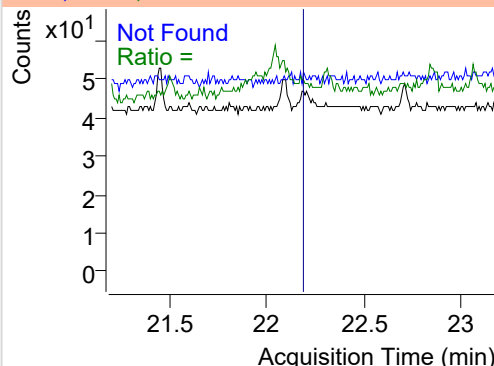
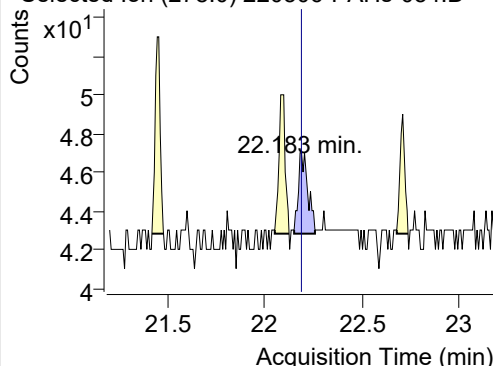
+ SIM (22.078-22.206 min, 17 scans) (\*\*) 2205



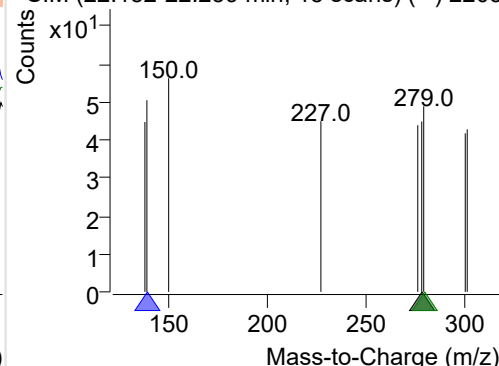
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-054.D

278.0, 139.0, 279.0



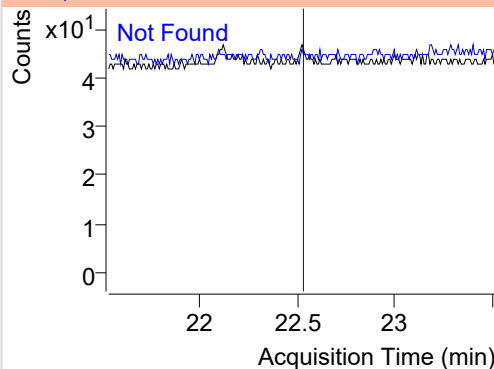
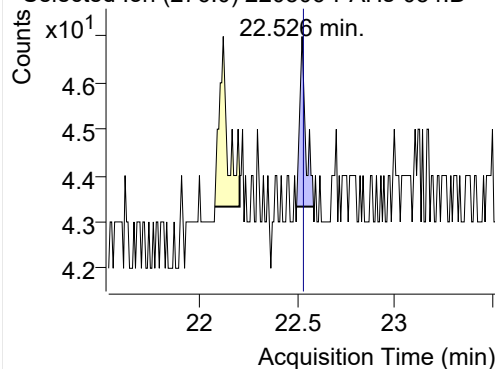
+ SIM (22.152-22.259 min, 15 scans) (\*\*) 2205



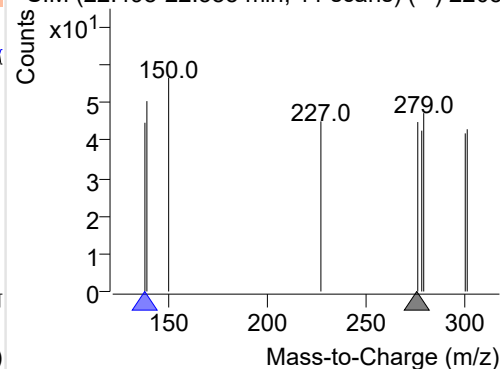
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-054.D

276.0, 138.0

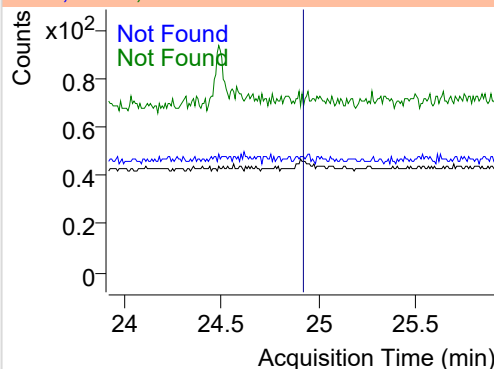
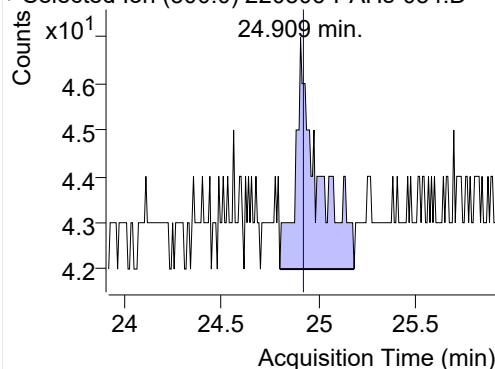


+ SIM (22.498-22.585 min, 11 scans) (\*\*) 2205

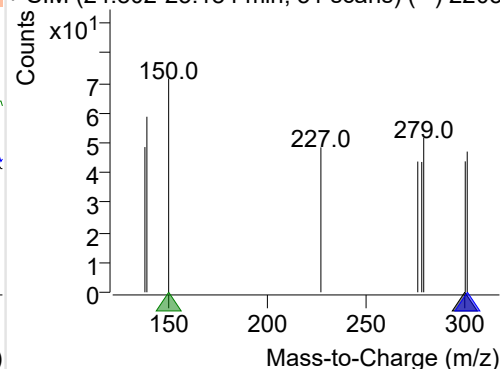
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-054.D

300.0, 301.0, 150.0



+ SIM (24.802-25.184 min, 51 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

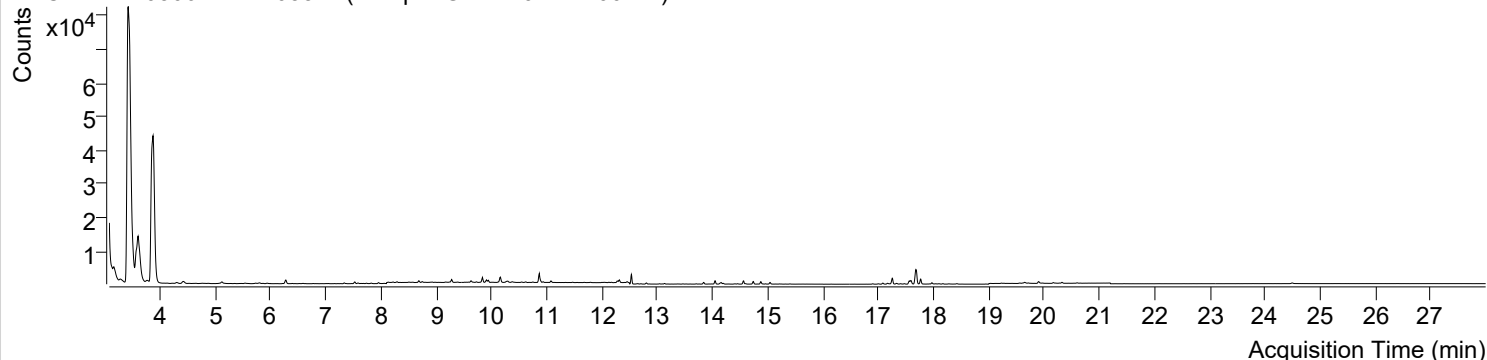


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 2:44:36	Data File	220506-PAHs-055.D
Type	Sample	Name	Sample-Gas-220411-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

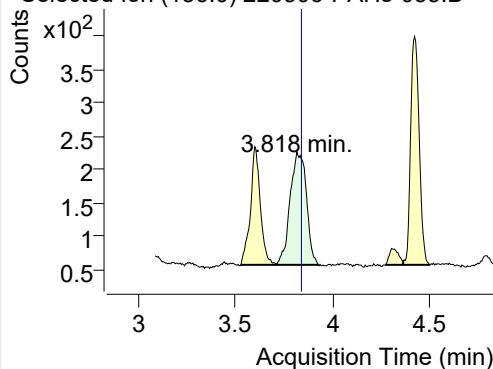
+ TIC SIM 220506-PAHs-055.D (Sample-Gas-220411-100DIL)



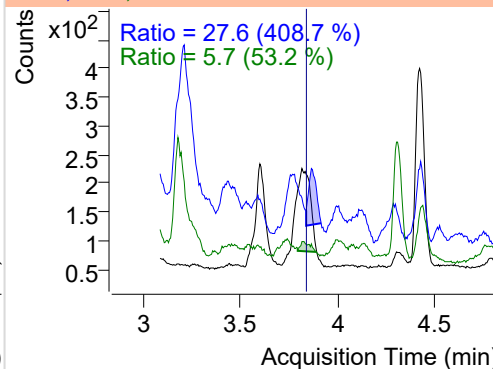
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.818	136.0	988	169.62	ND ng/ml	5.7
Naphthalene	3.878	128.0	148805	35104.00	ND ng/ml	13.0
Acenaphthylene	7.165	152.0	23	16.64	ND ng/ml	
IS-D10-Acenaphthene	7.526	164.0	377	224.11	ND ng/ml	100.7
Acenaphthene	7.591	154.0	94	56.61	ND ng/ml	113.6
LSS-D10-Fluorene	8.684	176.0	347	212.11	ND ng/ml	96.4
Fluorene	8.747	166.0	225	122.92	ND ng/ml	87.9
IS-D10-Phenanthrene	10.889	188.0	679	440.13	ND ng/ml	14.3
Phenanthrene	10.942	178.0	209	119.63	ND ng/ml	19.9
Anthracene	11.078	178.0	197	125.63	ND ng/ml	28.8
Fluoranthene	13.710	202.0	98	60.01	ND ng/ml	13.4
LSS-D10-Pyrene	14.160	212.0	495	302.56	ND ng/ml	90.6
Pyrene	14.197	202.0	274	161.45	ND ng/ml	21.5
Benz(a)anthracene	17.173	228.0	16	4.87	ND ng/ml	
IS-D12-Chrysene	17.087	240.0	439	234.85	ND ng/ml	17.7
Chrysene	17.173	228.0	16	4.87	ND ng/ml	
Benzo(b)fluoranthene	19.419	252.0	22	7.37	ND ng/ml	
Benzo(k)fluoranthene	19.419	252.0	22	7.37	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.903	264.0	710	354.61	ND ng/ml	30.2
Benzo(e)pyrene	19.981	252.0	27	12.21	ND ng/ml	
Benzo(a)pyrene	20.052	252.0	6	3.64	ND ng/ml	
IS-D12-Perylene	20.173	264.0	324	145.35	ND ng/ml	19.8
Perylene	20.216	252.0	12	7.56	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	22.114	276.0	4	3.03	ND ng/ml	
Dibenz(a,h)anthracene	22.091	278.0	17	9.07	ND ng/ml	89.3
Benzo(g,h,i)perylene	22.534	276.0	9	5.03	ND ng/ml	
Coronene	24.924	300.0	17	4.00	ND ng/ml	

## IS-D8-Naphthalene

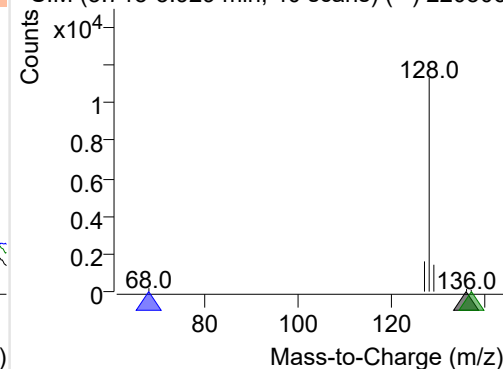
+ Selected Ion (136.0) 220506-PAHs-055.D



136.0, 68.0, 137.0

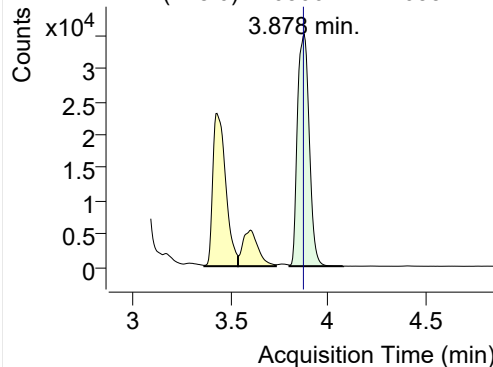


+ SIM (3.715-3.929 min, 40 scans) (\*\*) 220506

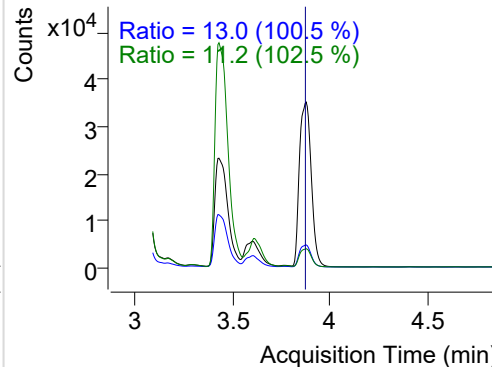


**Naphthalene**

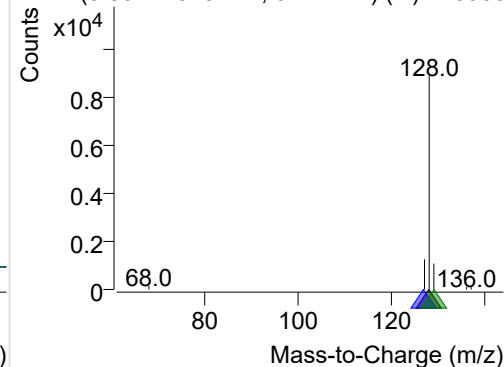
+ Selected Ion (128.0) 220506-PAHs-055.D



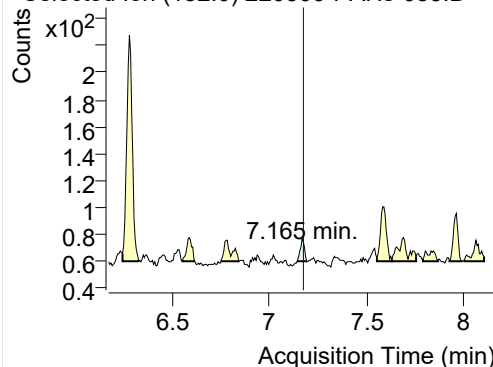
128.0, 127.0, 129.0



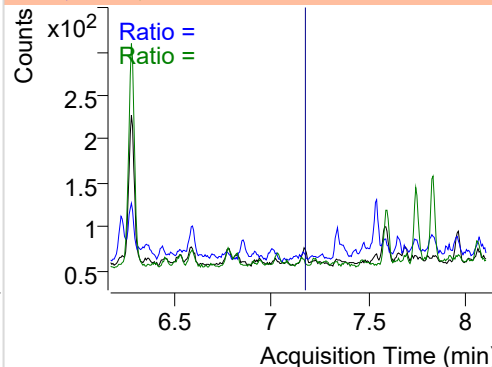
+ SIM (3.802-4.078 min, 52 scans) (\*\*) 220506

**Acenaphthylene**

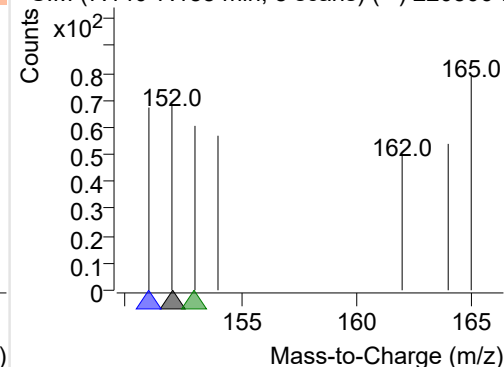
+ Selected Ion (152.0) 220506-PAHs-055.D



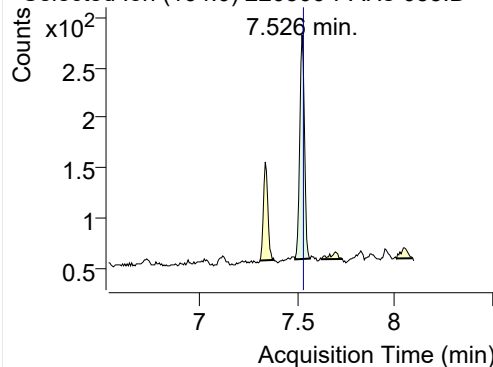
152.0, 151.0, 153.0



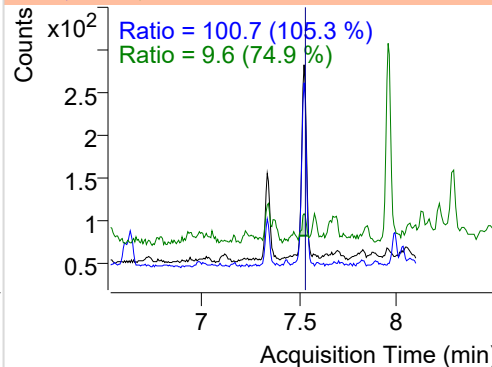
+ SIM (7.140-7.188 min, 8 scans) (\*\*) 220506-I

**IS-D10-Acenaphthene**

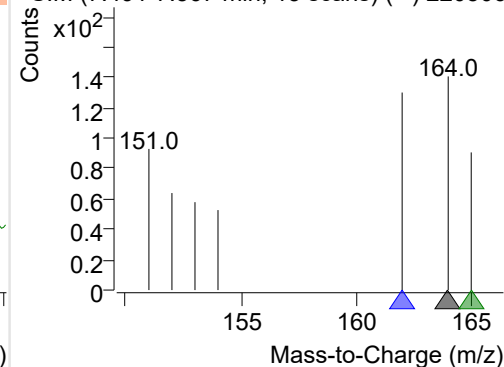
+ Selected Ion (164.0) 220506-PAHs-055.D



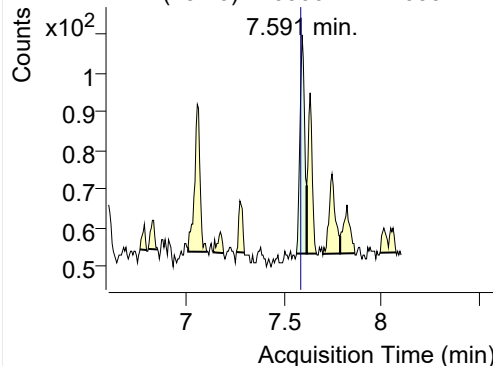
164.0, 162.0, 165.0



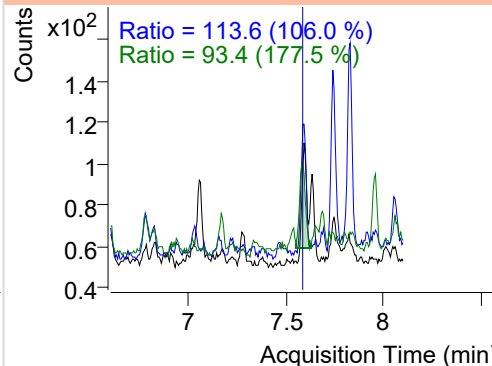
+ SIM (7.491-7.567 min, 13 scans) (\*\*) 220506

**Acenaphthene**

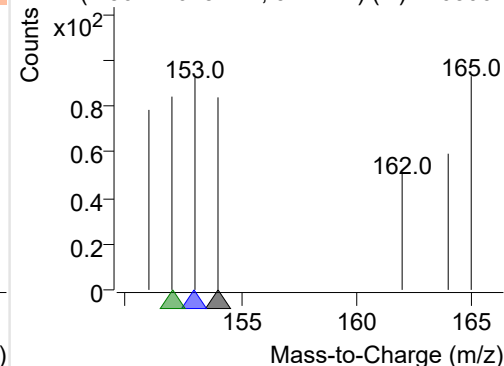
+ Selected Ion (154.0) 220506-PAHs-055.D



154.0, 153.0, 152.0

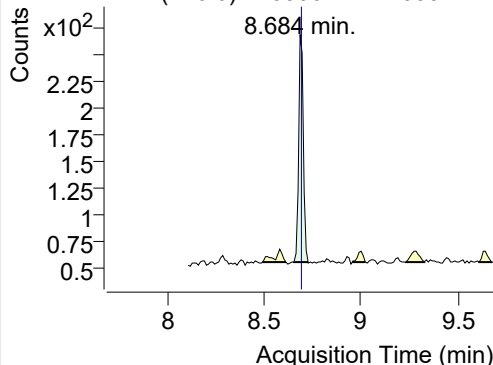


+ SIM (7.562-7.615 min, 9 scans) (\*\*) 220506-I

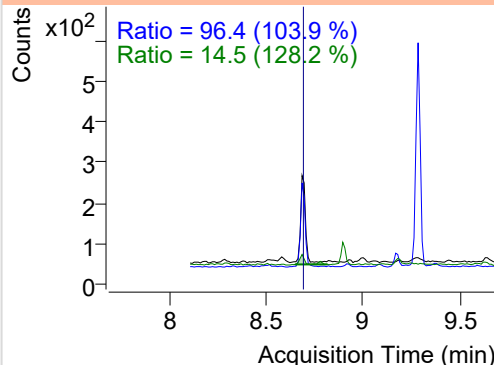


## LSS-D10-Fluorene

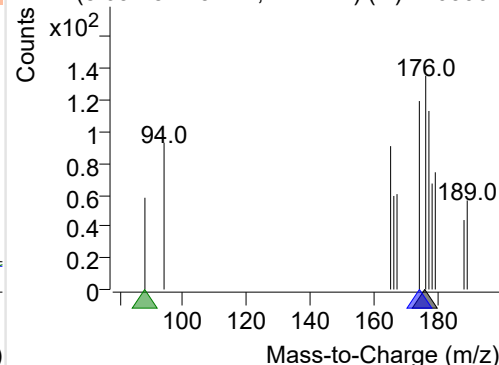
+ Selected Ion (176.0) 220506-PAHs-055.D



176.0, 174.0, 88.0

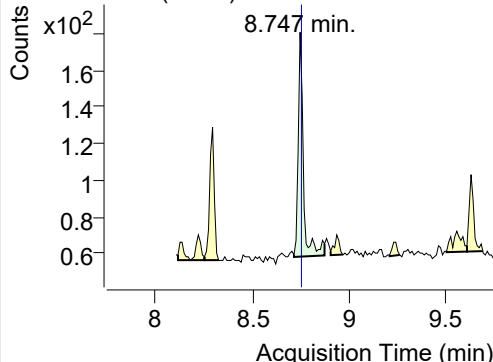


+ SIM (8.652-8.725 min, 7 scans) (\*\*) 220506-I

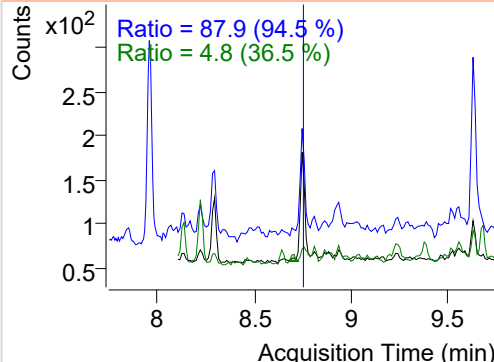


## Fluorene

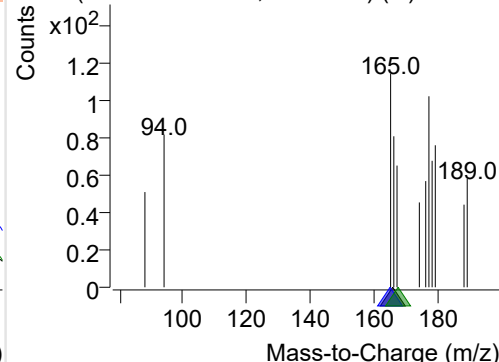
+ Selected Ion (166.0) 220506-PAHs-055.D



166.0, 165.0, 167.0

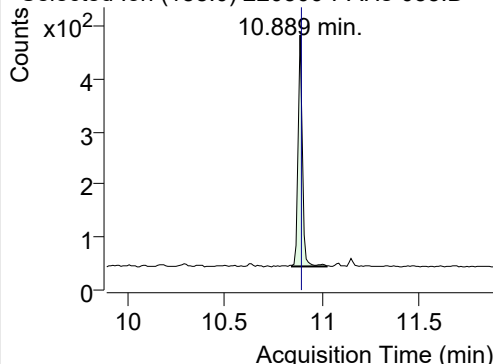


+ SIM (8.715-8.873 min, 16 scans) (\*\*) 220506

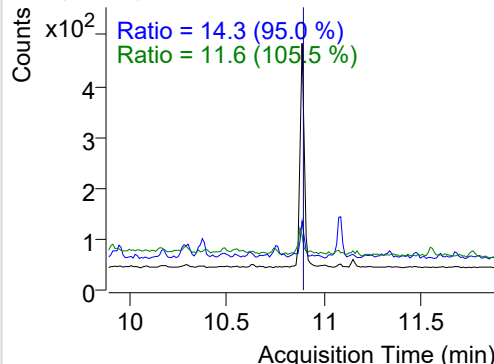


## IS-D10-Phenanthrene

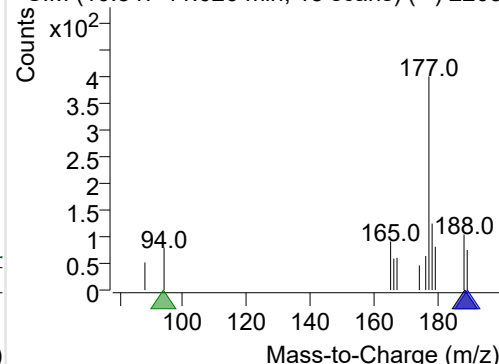
+ Selected Ion (188.0) 220506-PAHs-055.D



188.0, 189.0, 94.0

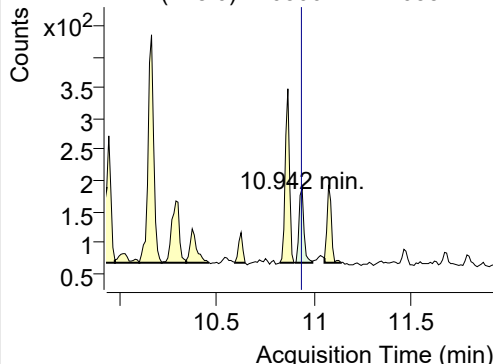


+ SIM (10.847-11.026 min, 18 scans) (\*\*) 2205

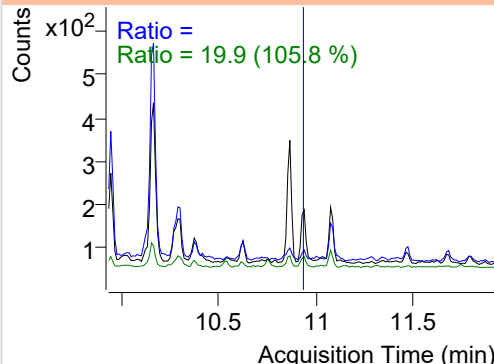


## Phenanthrene

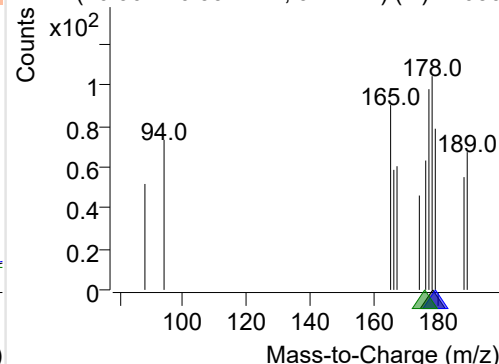
+ Selected Ion (178.0) 220506-PAHs-055.D



178.0, 179.0, 176.0

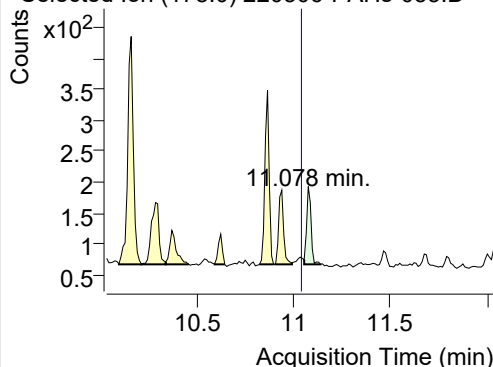


+ SIM (10.904-10.994 min, 9 scans) (\*\*) 22050

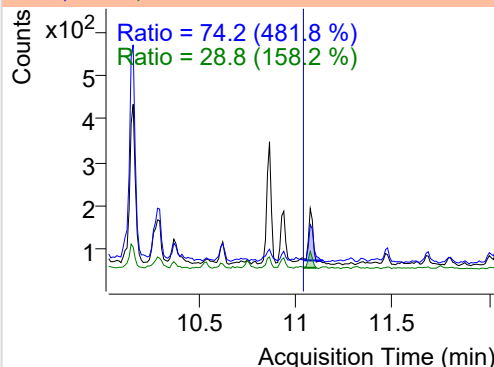


**Anthracene**

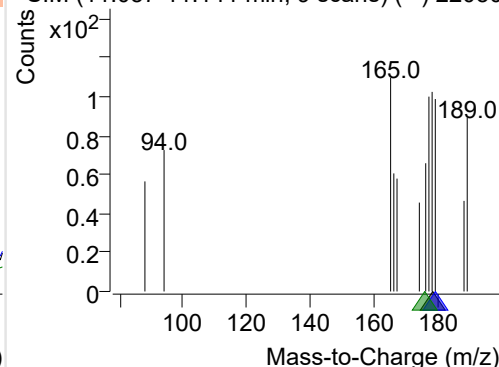
+ Selected Ion (178.0) 220506-PAHs-055.D



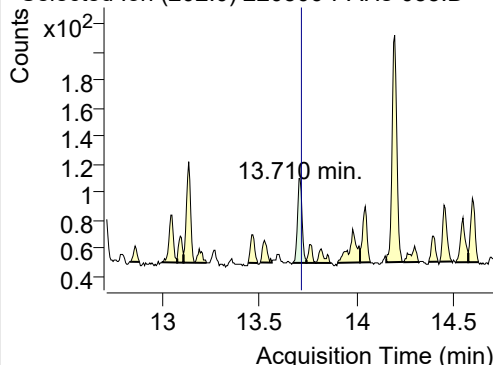
178.0, 179.0, 176.0



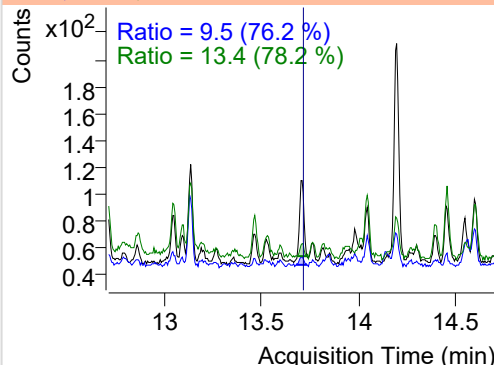
+ SIM (11.057-11.141 min, 9 scans) (\*\*) 22050

**Fluoranthene**

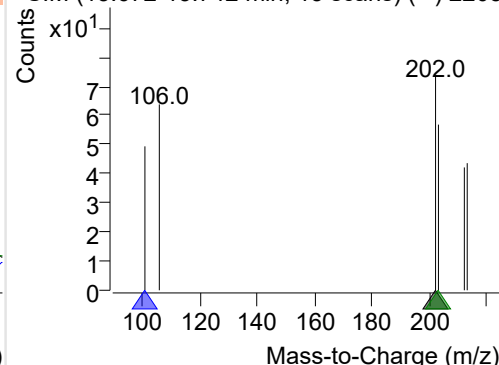
+ Selected Ion (202.0) 220506-PAHs-055.D



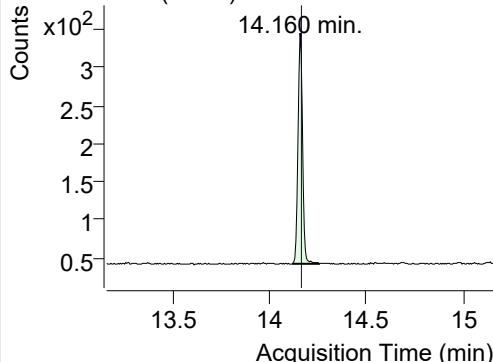
202.0, 101.0, 203.0



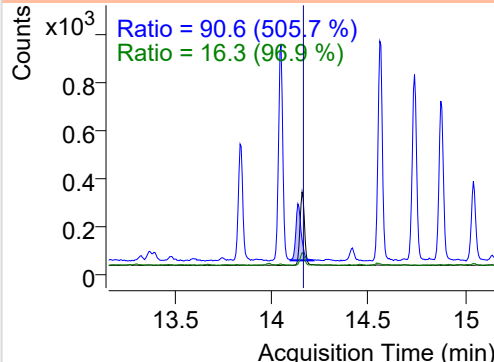
+ SIM (13.672-13.742 min, 13 scans) (\*\*) 2205

**LSS-D10-Pyrene**

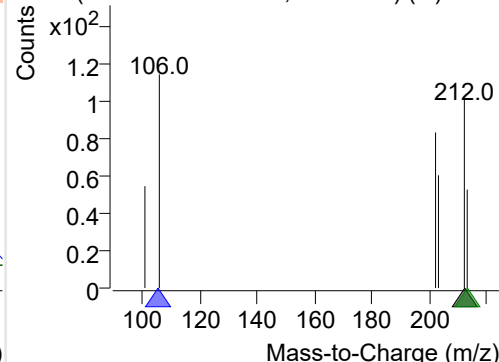
+ Selected Ion (212.0) 220506-PAHs-055.D



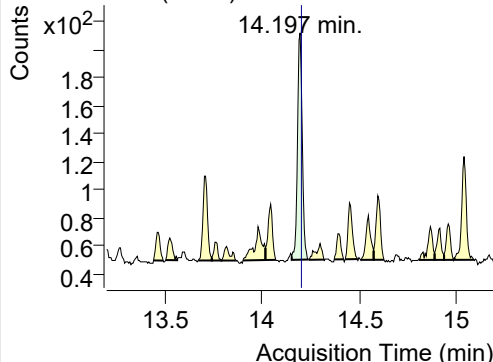
212.0, 106.0, 213.0



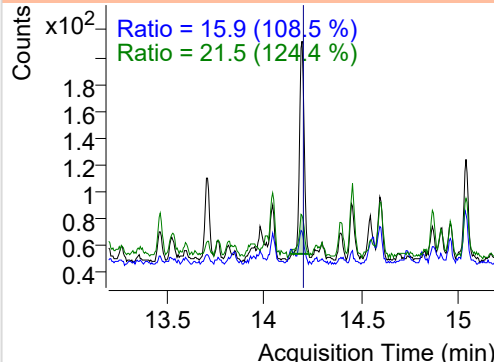
+ SIM (14.119-14.257 min, 26 scans) (\*\*) 2205

**Pyrene**

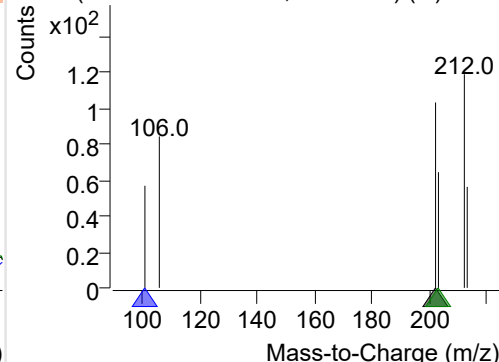
+ Selected Ion (202.0) 220506-PAHs-055.D



202.0, 101.0, 203.0



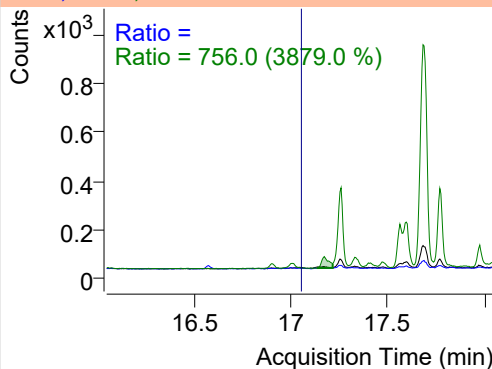
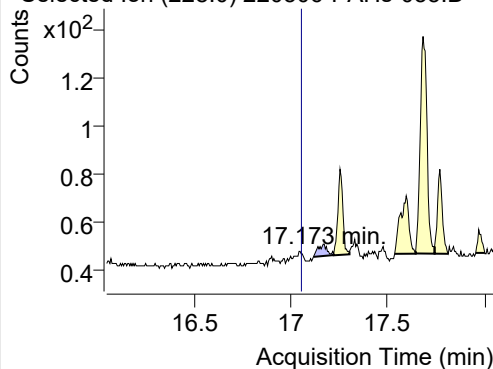
+ SIM (14.154-14.235 min, 16 scans) (\*\*) 2205



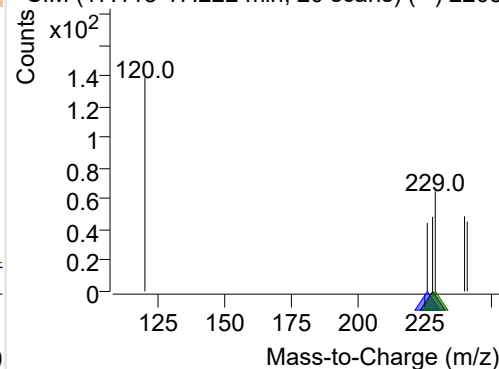
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-055.D

228.0, 226.0, 229.0

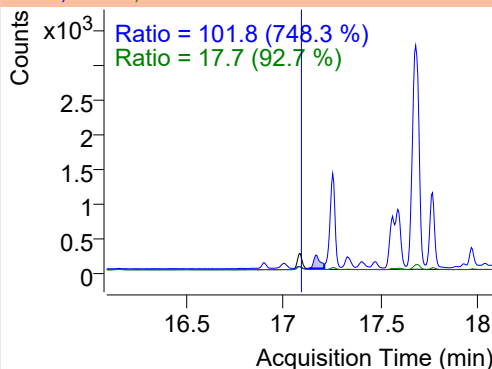
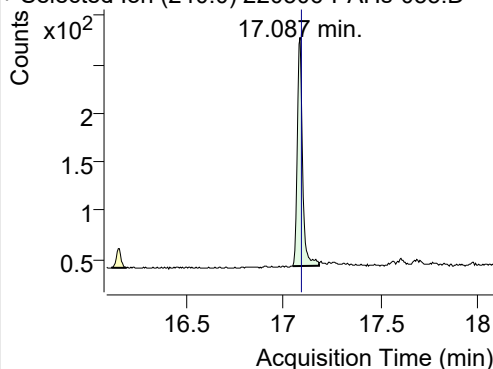


+ SIM (17.118-17.222 min, 20 scans) (\*\*) 2205

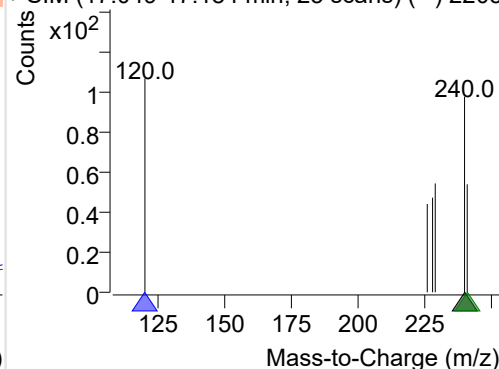
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-055.D

240.0, 120.0, 241.0

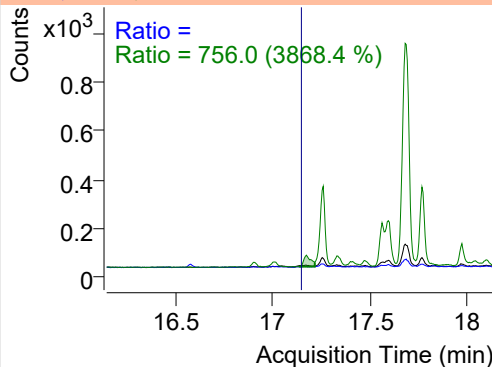
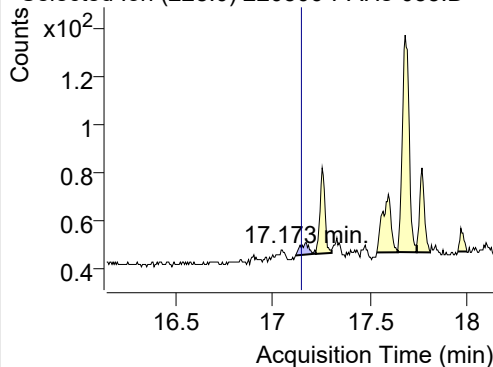


+ SIM (17.049-17.184 min, 25 scans) (\*\*) 2205

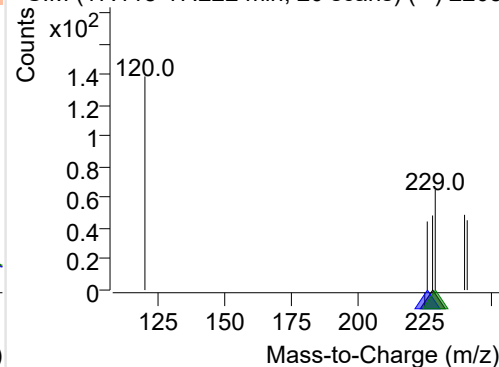
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-055.D

228.0, 226.0, 229.0

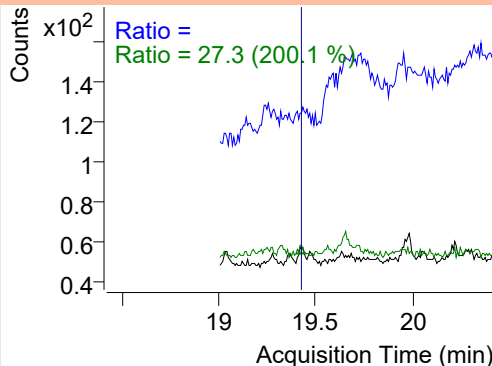
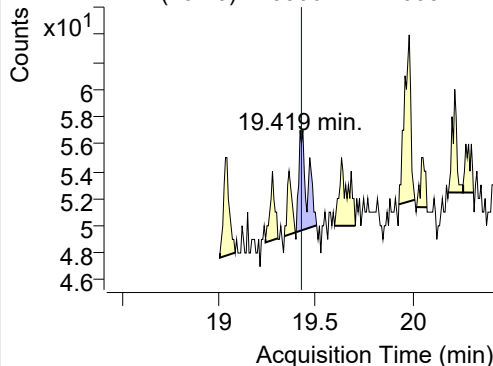


+ SIM (17.118-17.222 min, 20 scans) (\*\*) 2205

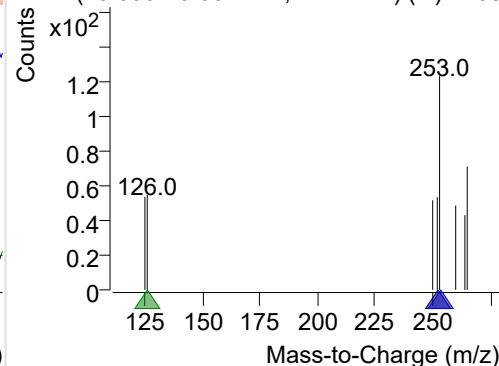
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-055.D

252.0, 253.0, 126.0



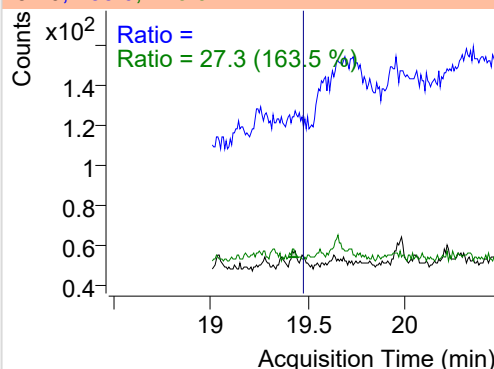
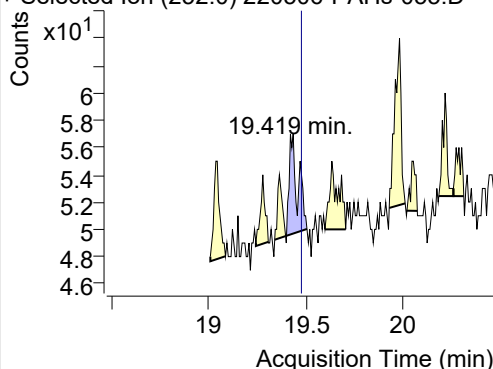
+ SIM (19.399-19.504 min, 14 scans) (\*\*) 2205



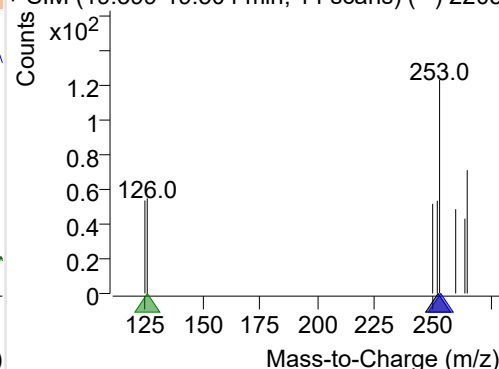
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-055.D

252.0, 253.0, 126.0

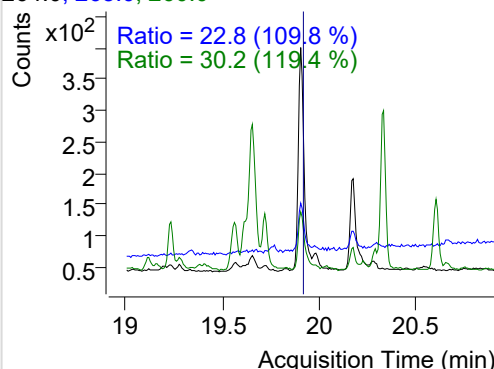
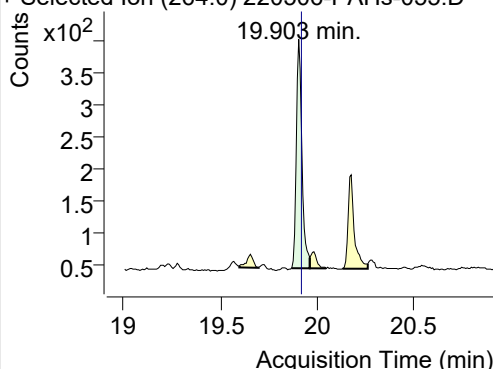


+ SIM (19.399-19.504 min, 14 scans) (\*\*) 2205

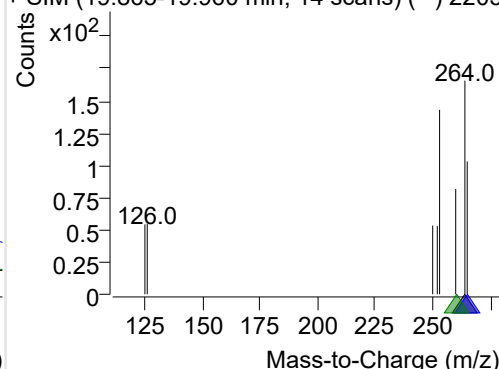
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-055.D

264.0, 265.0, 260.0

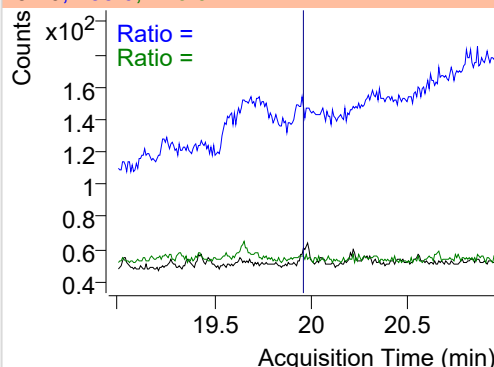
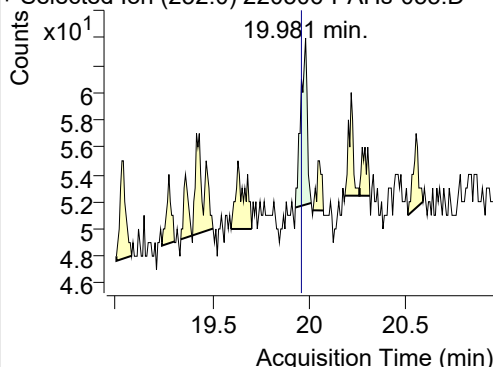


+ SIM (19.865-19.960 min, 14 scans) (\*\*) 2205

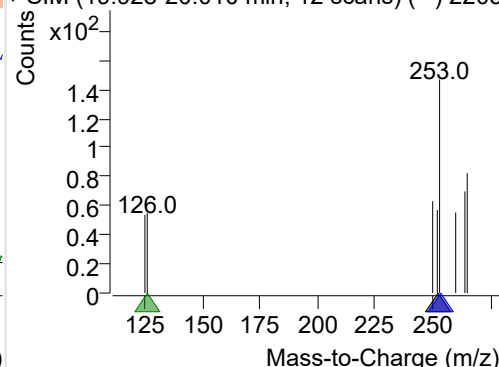
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-055.D

252.0, 253.0, 126.0

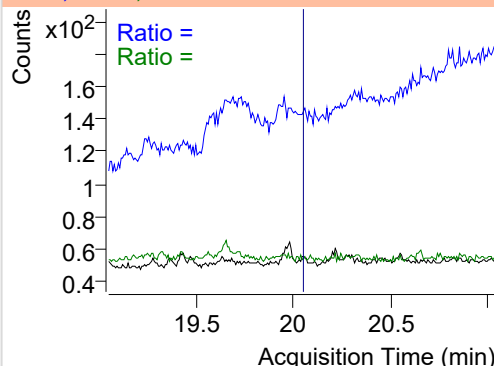
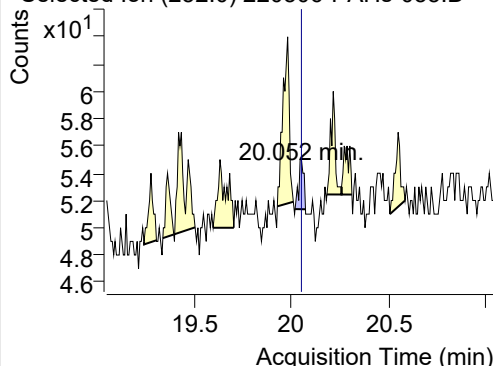


+ SIM (19.928-20.010 min, 12 scans) (\*\*) 2205

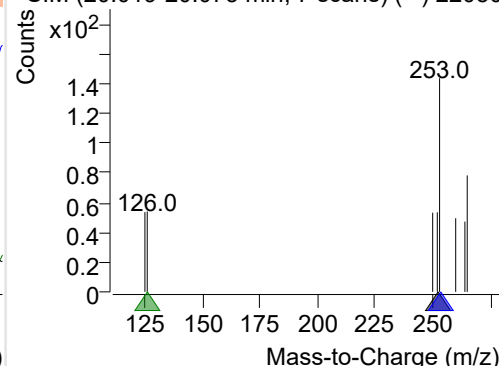
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-055.D

252.0, 253.0, 126.0



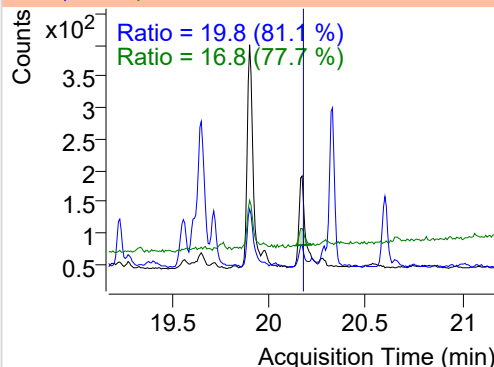
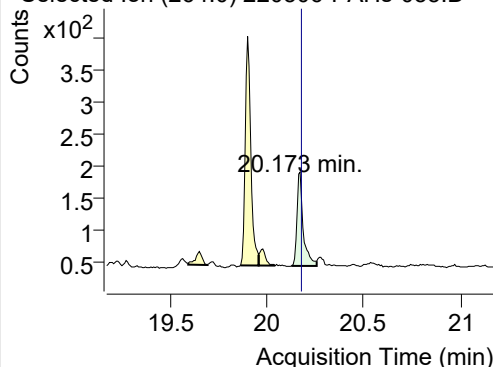
+ SIM (20.019-20.073 min, 7 scans) (\*\*) 22050



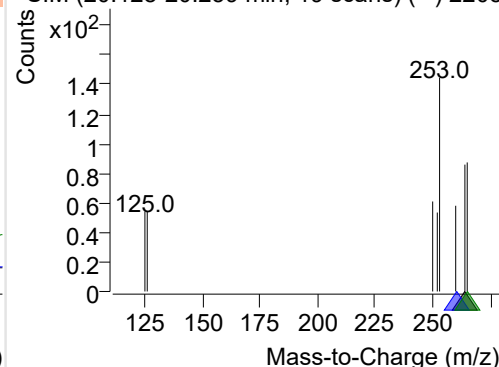
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-055.D

264.0, 260.0, 265.0



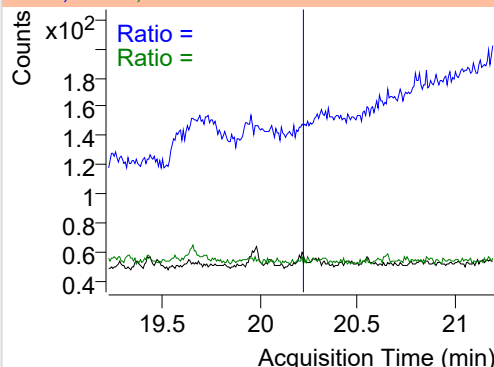
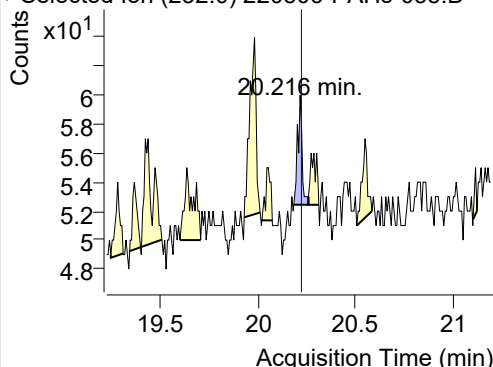
+ SIM (20.128-20.259 min, 19 scans) (\*\*) 2205



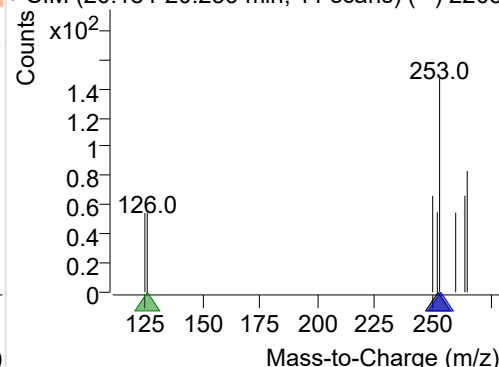
## Perylene

+ Selected Ion (252.0) 220506-PAHs-055.D

252.0, 253.0, 126.0



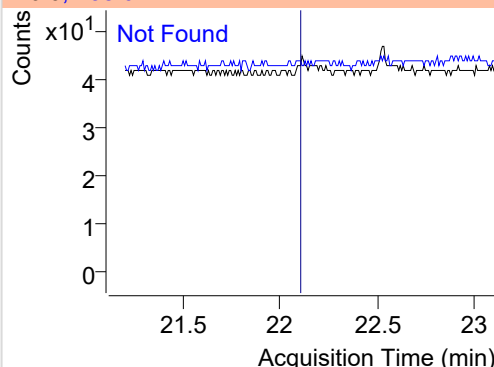
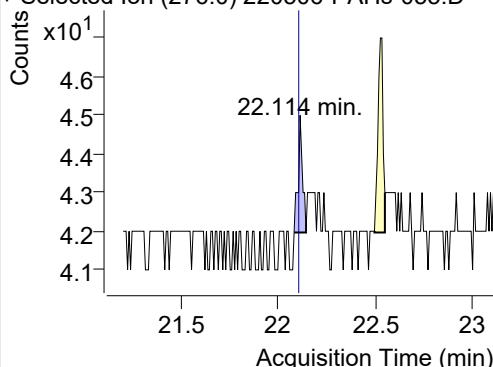
+ SIM (20.184-20.259 min, 11 scans) (\*\*) 2205



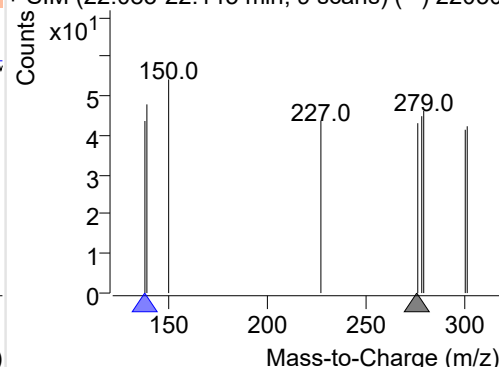
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-055.D

276.0, 138.0



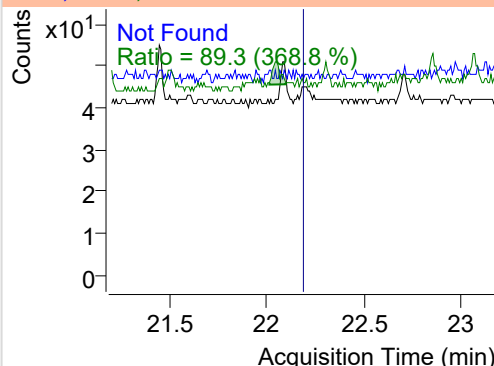
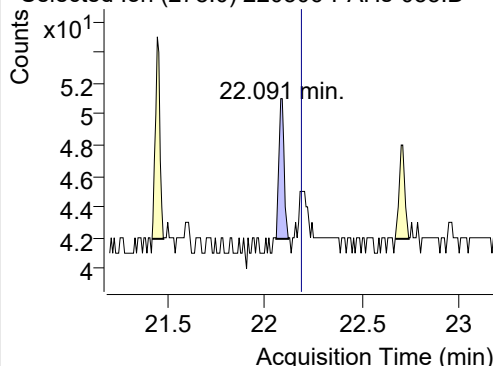
+ SIM (22.083-22.145 min, 9 scans) (\*\*) 22050



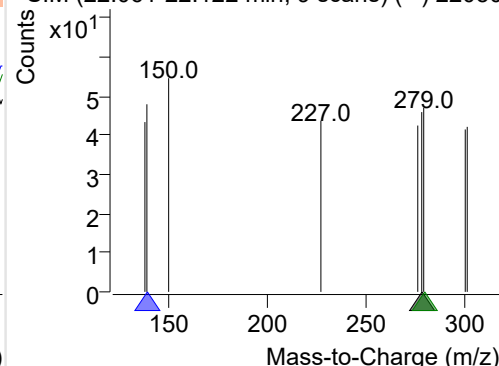
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-055.D

278.0, 139.0, 279.0



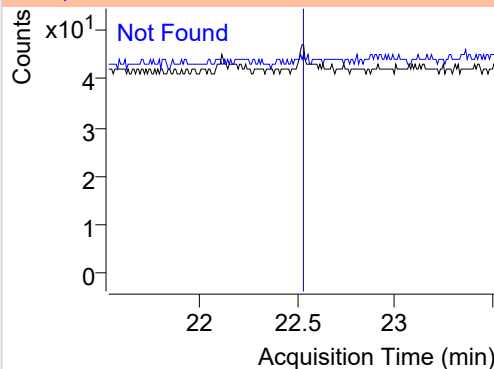
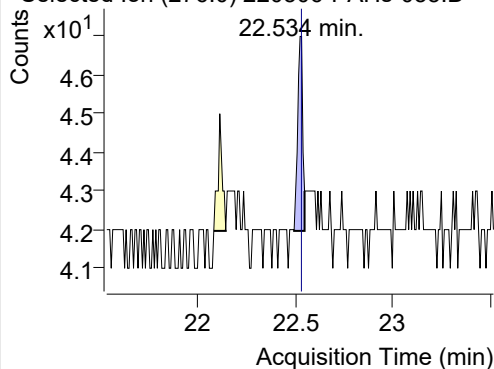
+ SIM (22.061-22.122 min, 9 scans) (\*\*) 22050



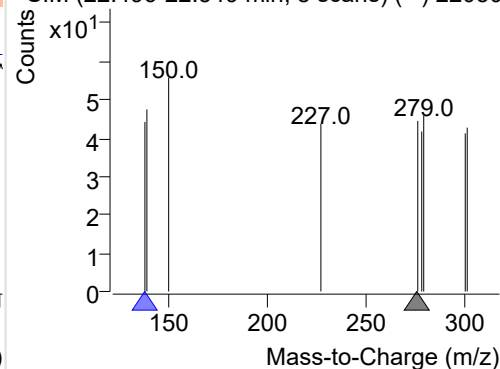
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-055.D

276.0, 138.0

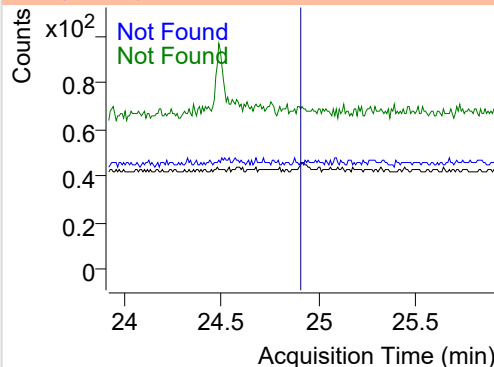
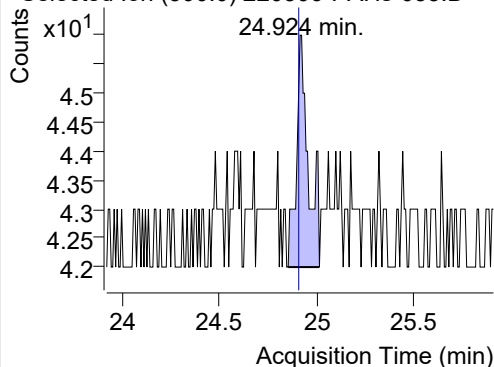


+ SIM (22.496-22.549 min, 8 scans) (\*\*) 22050

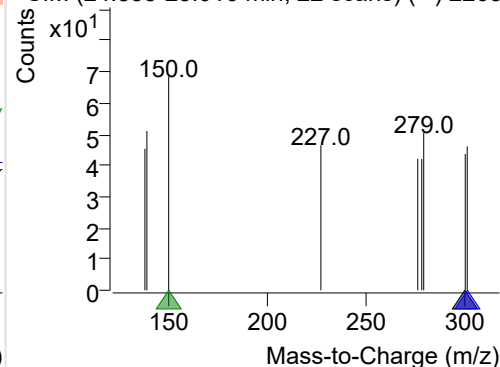
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-055.D

300.0, 301.0, 150.0



+ SIM (24.855-25.016 min, 22 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

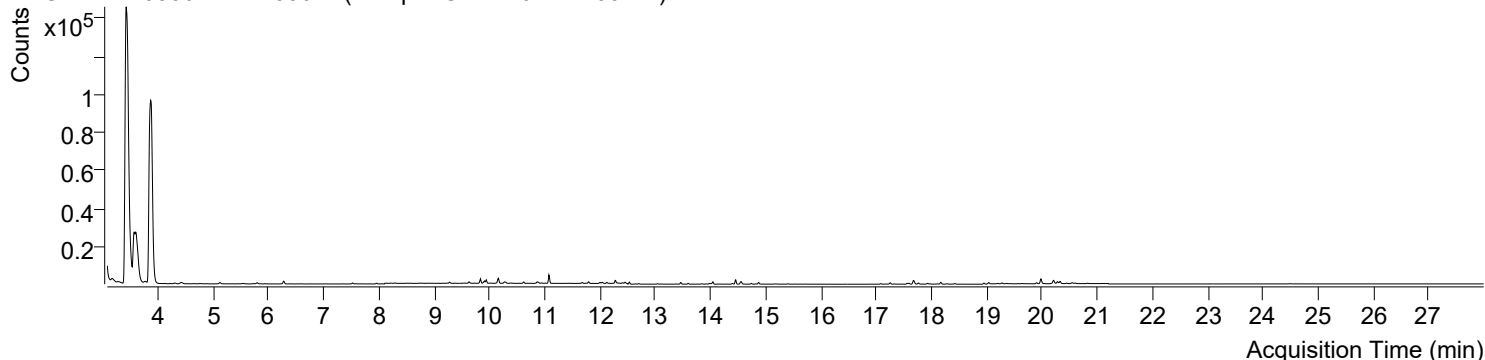


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 3:15:43	Data File	220506-PAHs-056.D
Type	Sample	Name	Sample-Gas-220417-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

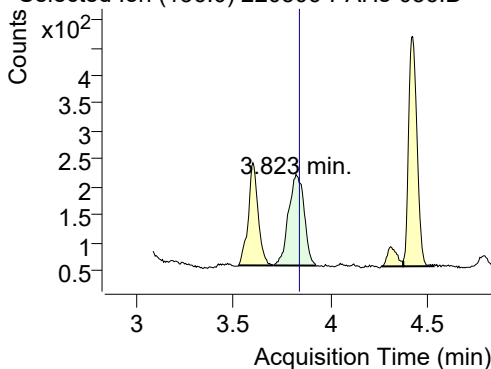
+ TIC SIM 220506-PAHs-056.D (Sample-Gas-220417-100DIL)



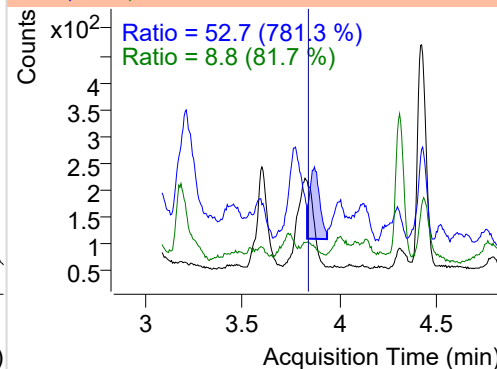
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.823	136.0	912	163.80	ND ng/ml	8.8
Naphthalene	3.872	128.0	329086	77408.50	ND ng/ml	13.1
Acenaphthylene	6.774	152.0	24	12.10	ND ng/ml	94.5
IS-D10-Acenaphthene	7.526	164.0	363	222.50	ND ng/ml	103.1
Acenaphthene	7.591	154.0	59	36.99	ND ng/ml	120.6
LSS-D10-Fluorene	8.589	176.0	26	9.00	ND ng/ml	
Fluorene	8.747	166.0	174	77.54	ND ng/ml	94.6
IS-D10-Phenanthrene	10.889	188.0	633	403.72	ND ng/ml	13.1
Phenanthrene	10.942	178.0	153	73.58	ND ng/ml	17.1
Anthracene	11.078	178.0	1778	1175.58	ND ng/ml	26.9
Fluoranthene	13.596	202.0	184	128.77	ND ng/ml	105.5
LSS-D10-Pyrene	13.986	212.0	10	6.12	ND ng/ml	
Pyrene	14.046	202.0	749	455.78	ND ng/ml	149.2
Benz(a)anthracene	17.135	228.0	11	4.45	ND ng/ml	
IS-D12-Chrysene	17.087	240.0	397	210.41	ND ng/ml	16.7
Chrysene	17.135	228.0	11	4.45	ND ng/ml	
Benzo(b)fluoranthene	19.362	252.0	128	49.65	ND ng/ml	
Benzo(k)fluoranthene	19.362	252.0	128	49.65	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.903	264.0	732	361.57	ND ng/ml	23.2
Benzo(e)pyrene	19.981	252.0	476	171.12	ND ng/ml	17.5
Benzo(a)pyrene	19.981	252.0	476	171.12	ND ng/ml	17.5
IS-D12-Perylene	20.209	264.0	1410	523.57	ND ng/ml	
Perylene	20.209	252.0	332	131.93	ND ng/ml	15.9
Indeno(1,2,3-c,d)pyrene	22.122	276.0	13	2.52	ND ng/ml	
Dibenz(a,h)anthracene	22.084	278.0	9	5.57	ND ng/ml	80.5
Benzo(g,h,i)perylene	22.534	276.0	6	2.52	ND ng/ml	
Coronene	24.909	300.0	10	3.30	ND ng/ml	

## IS-D8-Naphthalene

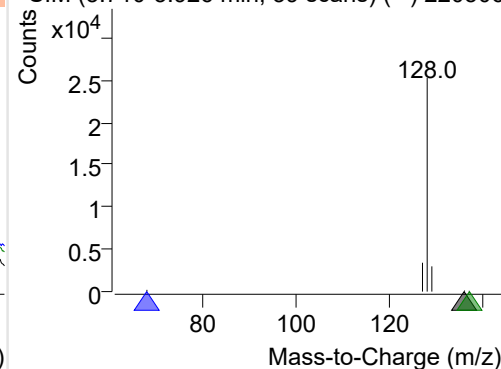
+ Selected Ion (136.0) 220506-PAHs-056.D



136.0, 68.0, 137.0

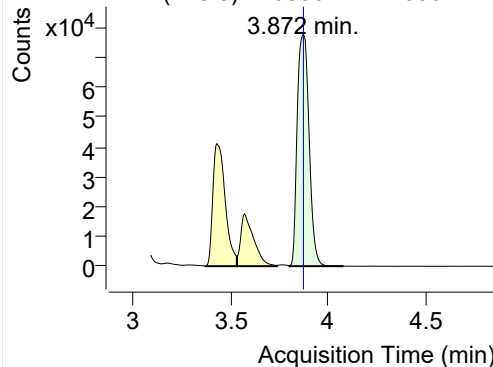


+ SIM (3.710-3.926 min, 39 scans) (\*\*) 220506

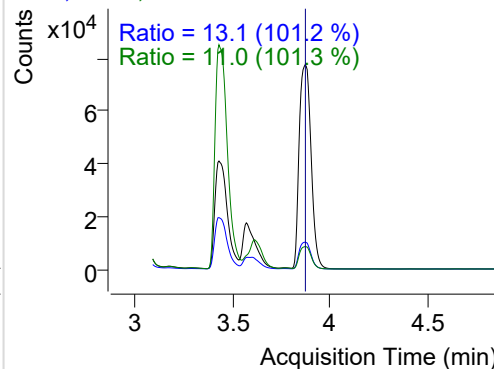


**Naphthalene**

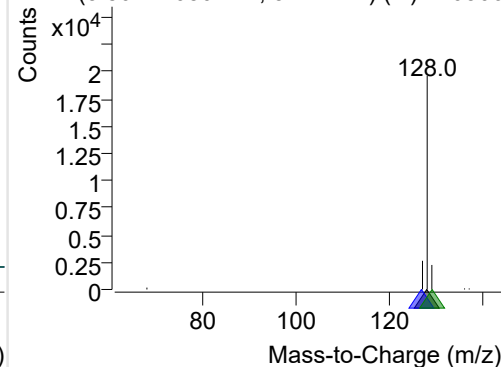
+ Selected Ion (128.0) 220506-PAHs-056.D



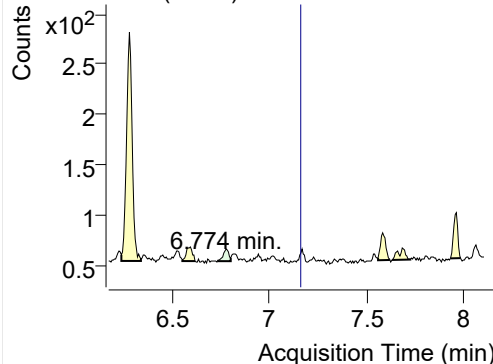
128.0, 127.0, 129.0



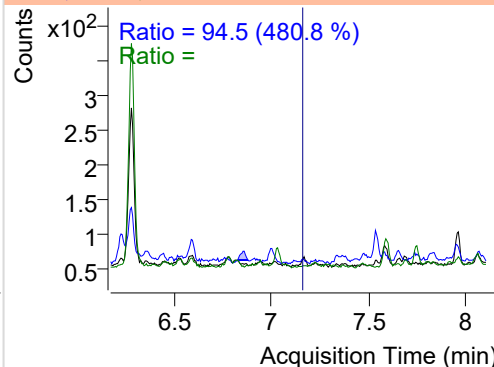
+ SIM (3.802-4.080 min, 52 scans) (\*\*) 220506

**Acenaphthylene**

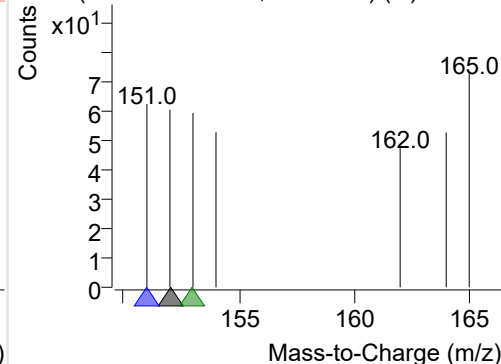
+ Selected Ion (152.0) 220506-PAHs-056.D



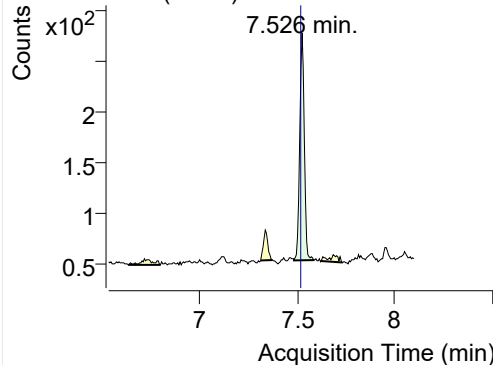
152.0, 151.0, 153.0



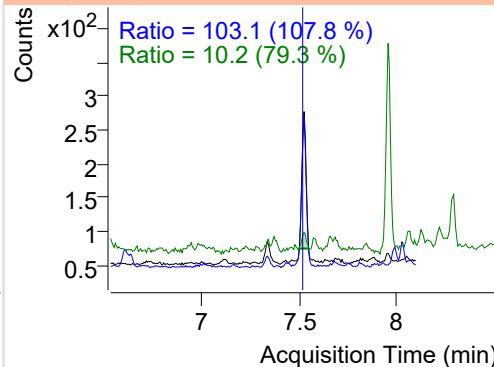
+ SIM (6.730-6.798 min, 12 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

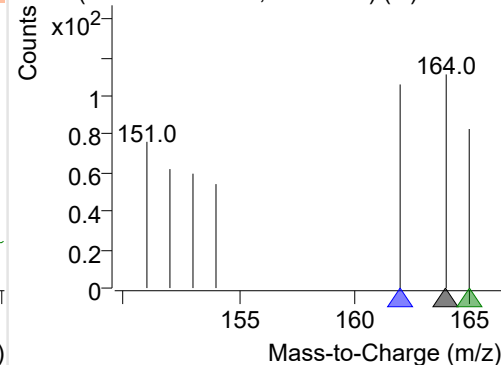
+ Selected Ion (164.0) 220506-PAHs-056.D



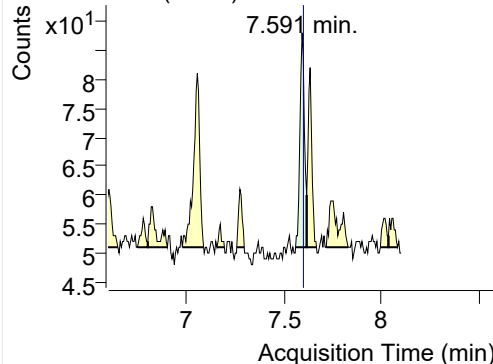
164.0, 162.0, 165.0



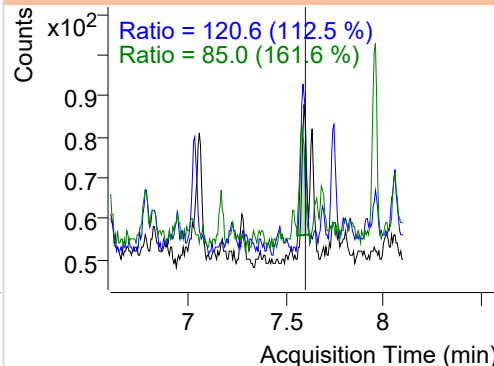
+ SIM (7.485-7.585 min, 18 scans) (\*\*) 220506

**Acenaphthene**

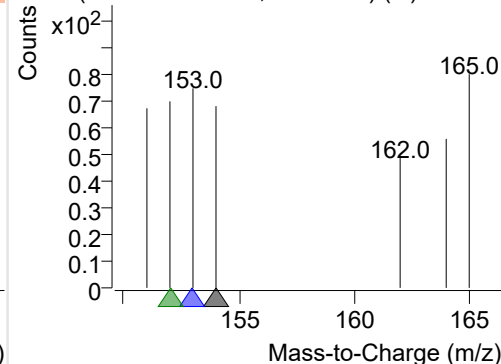
+ Selected Ion (154.0) 220506-PAHs-056.D



154.0, 153.0, 152.0

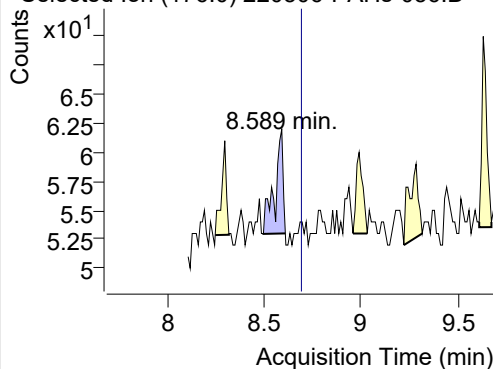


+ SIM (7.558-7.615 min, 10 scans) (\*\*) 220506

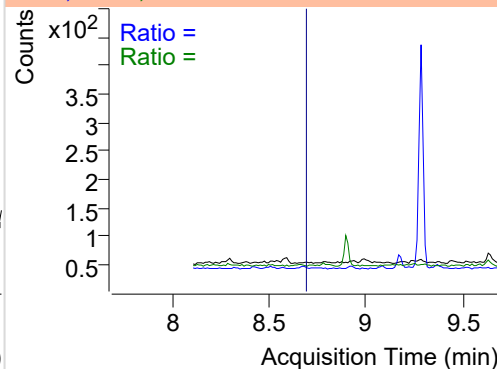


## LSS-D10-Fluorene

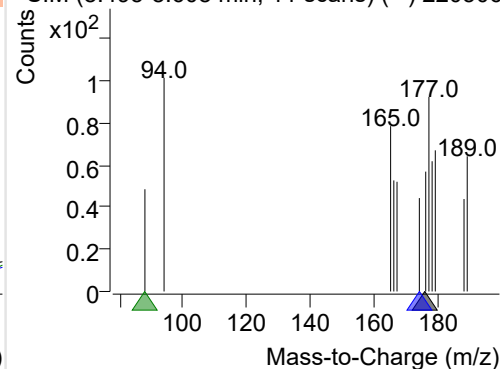
+ Selected Ion (176.0) 220506-PAHs-056.D



176.0, 174.0, 88.0

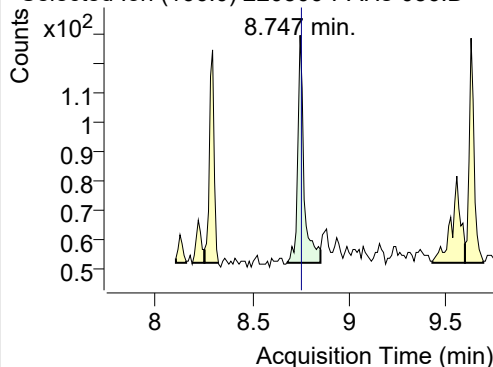


+ SIM (8.495-8.608 min, 11 scans) (\*\*) 220506

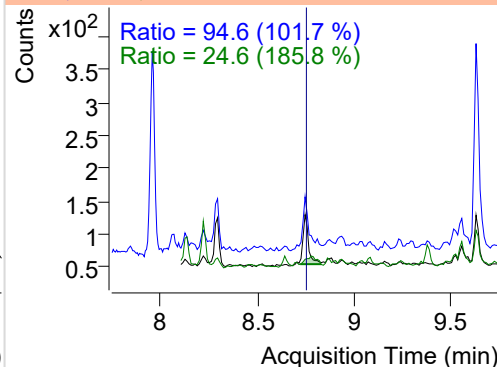


## Fluorene

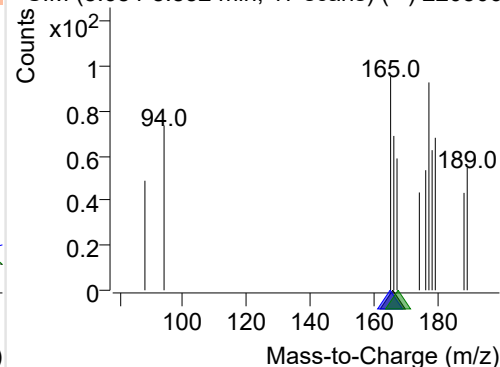
+ Selected Ion (166.0) 220506-PAHs-056.D



166.0, 165.0, 167.0

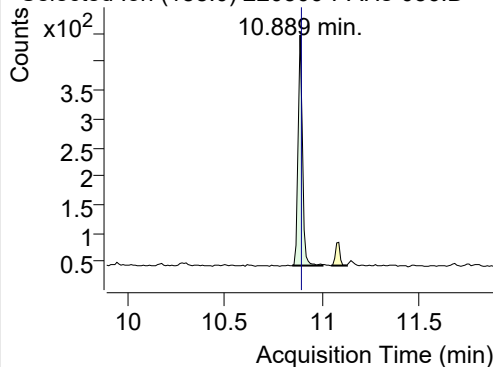


+ SIM (8.684-8.852 min, 17 scans) (\*\*) 220506

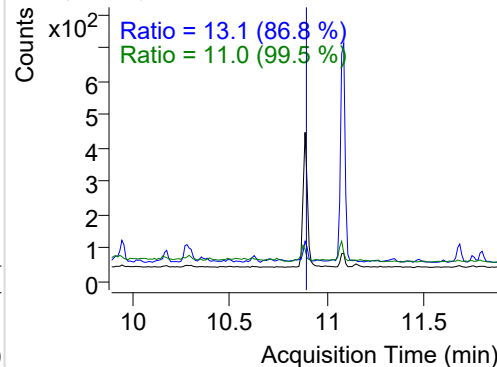


## IS-D10-Phenanthrene

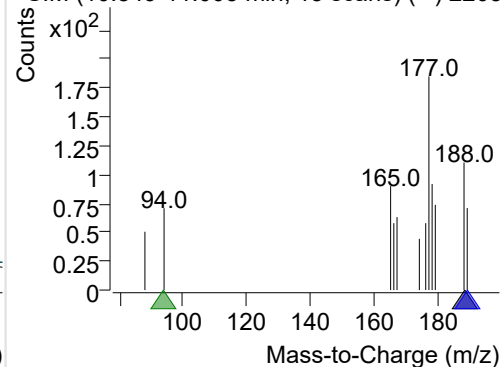
+ Selected Ion (188.0) 220506-PAHs-056.D



188.0, 189.0, 94.0

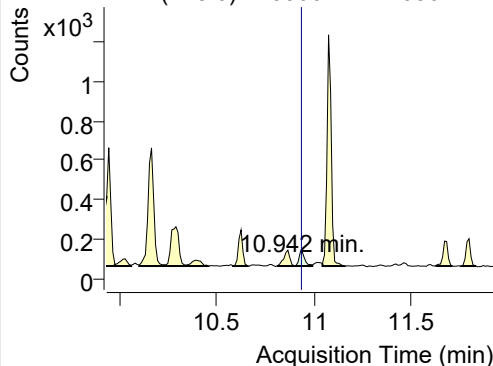


+ SIM (10.849-11.005 min, 15 scans) (\*\*) 2205

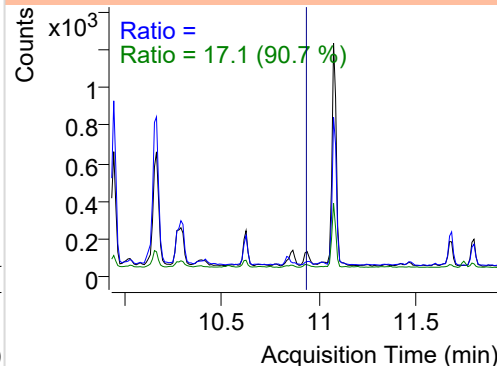


## Phenanthrene

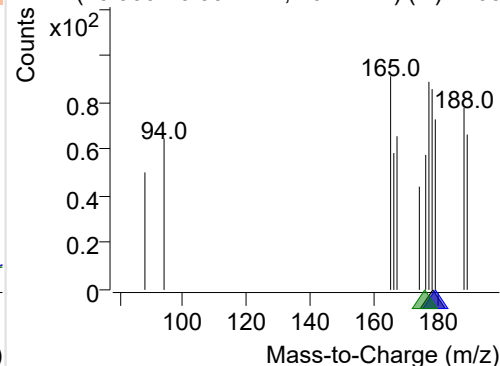
+ Selected Ion (178.0) 220506-PAHs-056.D



178.0, 179.0, 176.0

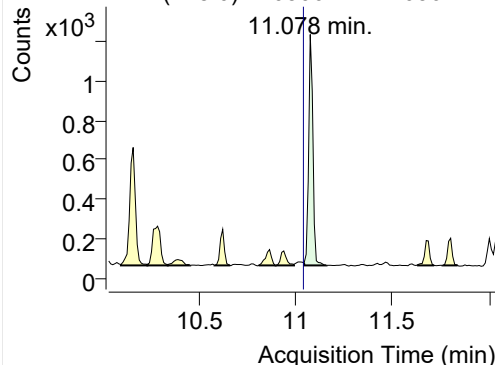


+ SIM (10.900-10.994 min, 10 scans) (\*\*) 2205

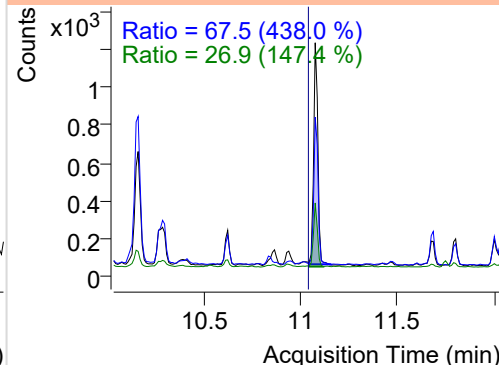


**Anthracene**

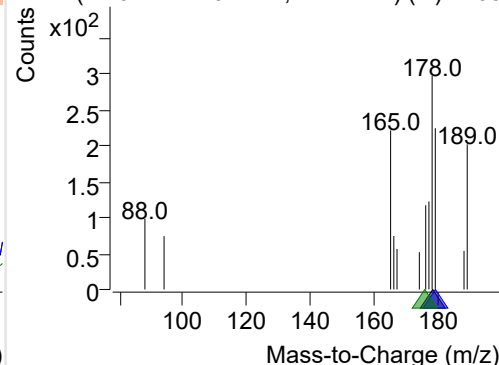
+ Selected Ion (178.0) 220506-PAHs-056.D



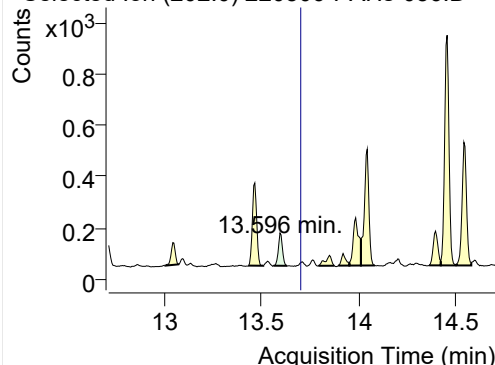
178.0, 179.0, 176.0



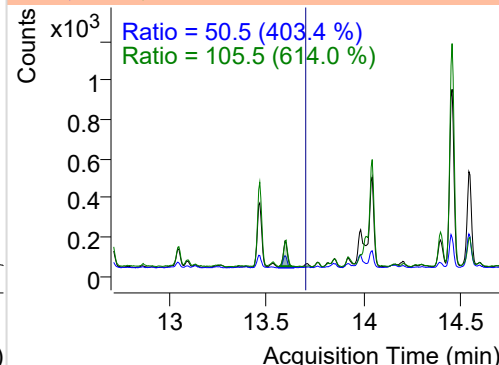
+ SIM (11.047-11.162 min, 12 scans) (\*\*) 2205

**Fluoranthene**

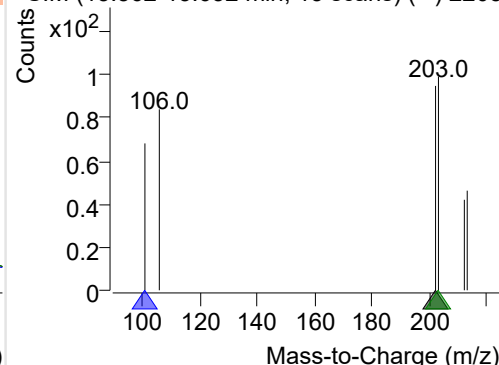
+ Selected Ion (202.0) 220506-PAHs-056.D



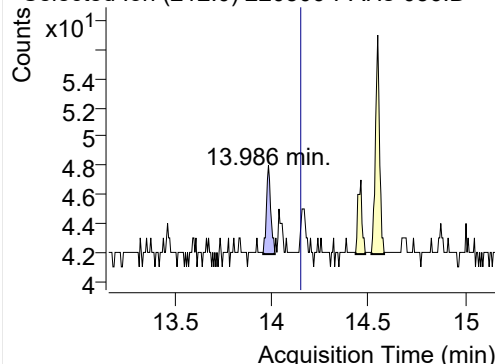
202.0, 101.0, 203.0



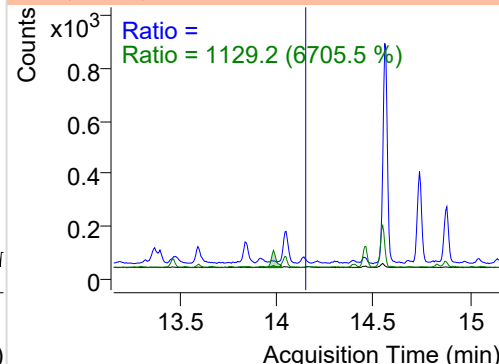
+ SIM (13.562-13.632 min, 13 scans) (\*\*) 2205

**LSS-D10-Pyrene**

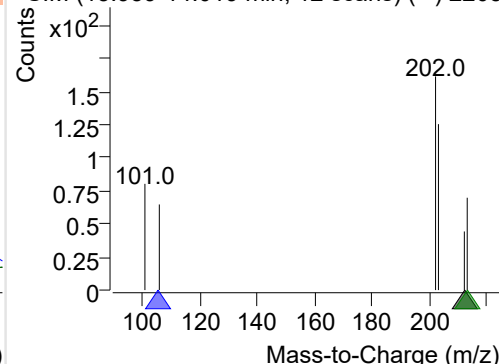
+ Selected Ion (212.0) 220506-PAHs-056.D



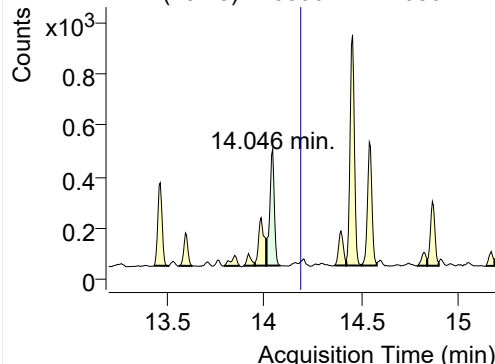
212.0, 106.0, 213.0



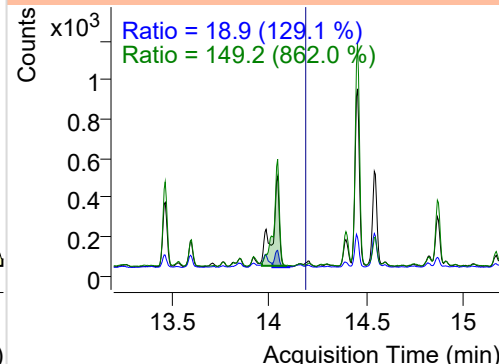
+ SIM (13.959-14.019 min, 12 scans) (\*\*) 2205

**Pyrene**

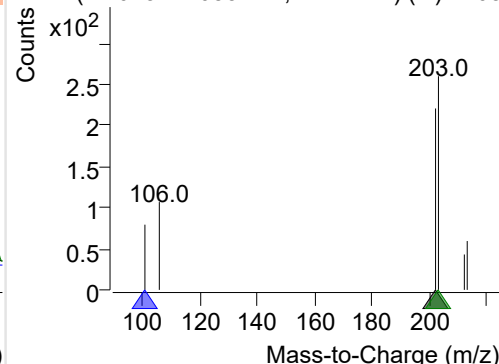
+ Selected Ion (202.0) 220506-PAHs-056.D



202.0, 101.0, 203.0



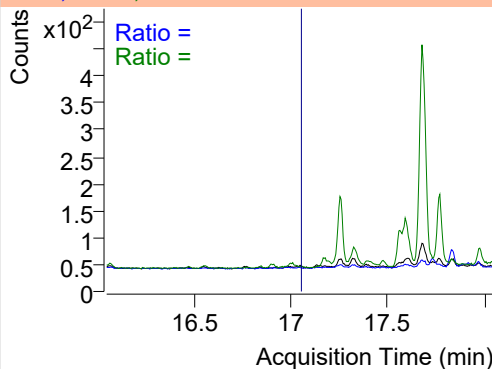
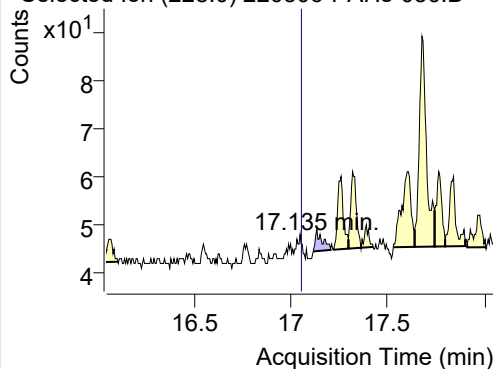
+ SIM (14.013-14.085 min, 14 scans) (\*\*) 2205



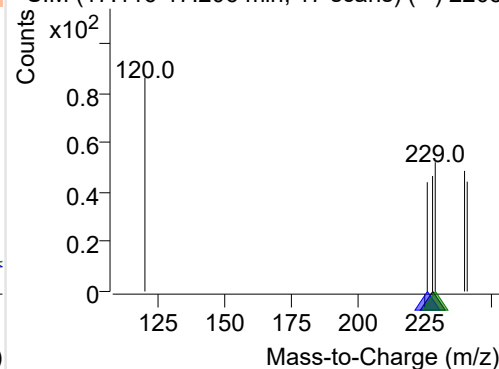
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-056.D

228.0, 226.0, 229.0

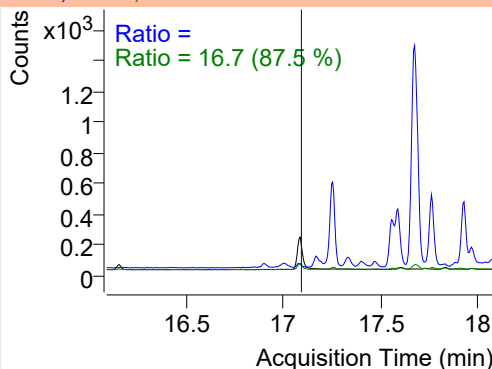
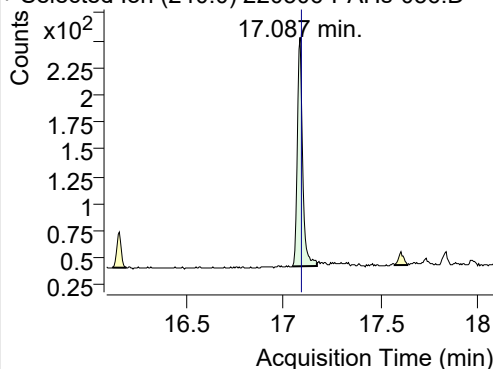


+ SIM (17.116-17.206 min, 17 scans) (\*\*) 2205

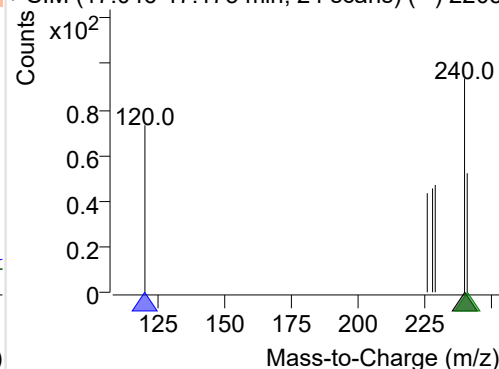
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-056.D

240.0, 120.0, 241.0

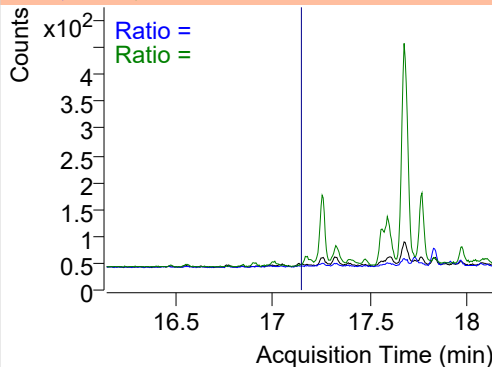
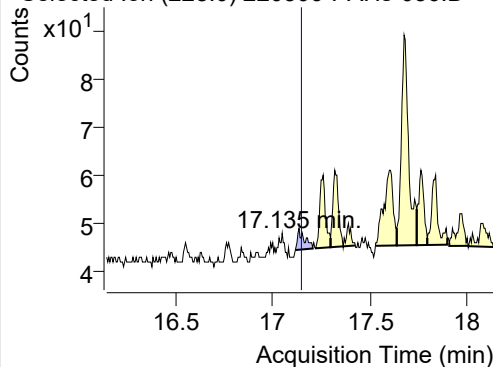


+ SIM (17.046-17.173 min, 24 scans) (\*\*) 2205

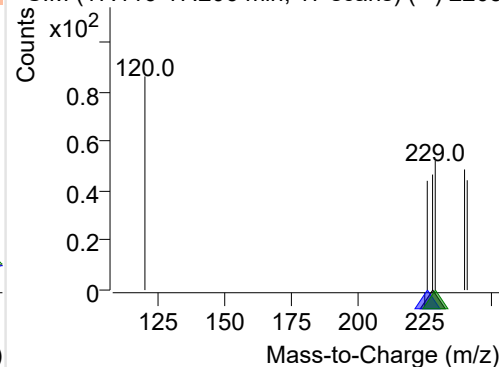
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-056.D

228.0, 226.0, 229.0

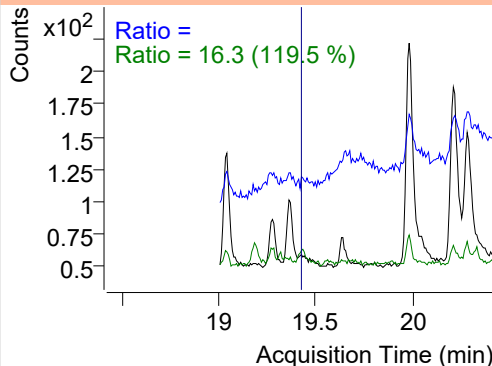
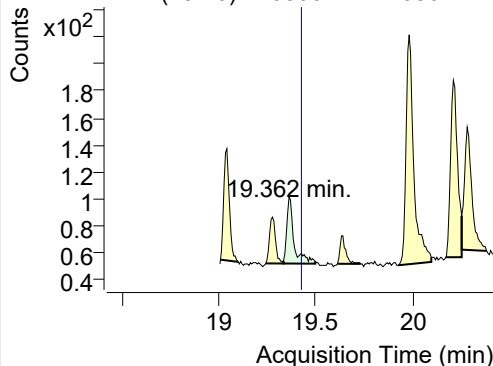


+ SIM (17.116-17.206 min, 17 scans) (\*\*) 2205

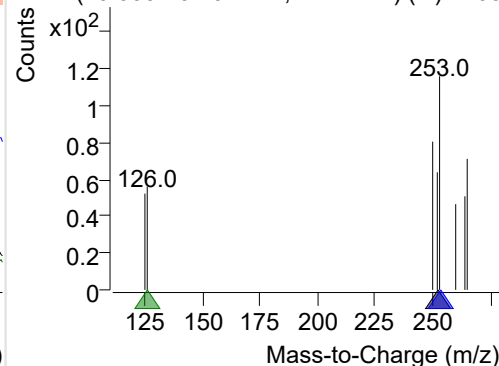
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-056.D

252.0, 253.0, 126.0



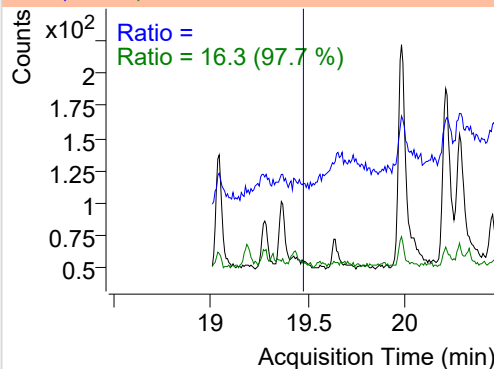
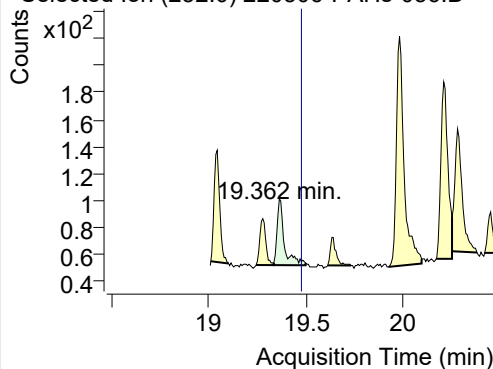
+ SIM (19.333-19.497 min, 24 scans) (\*\*) 2205



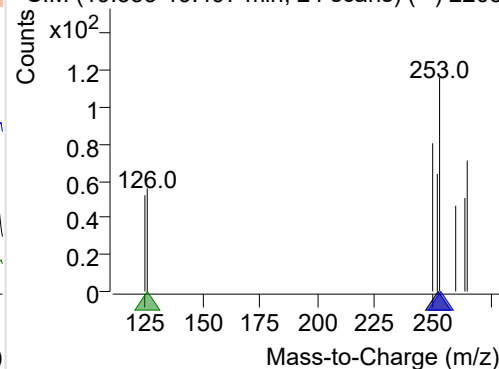
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-056.D

252.0, 253.0, 126.0

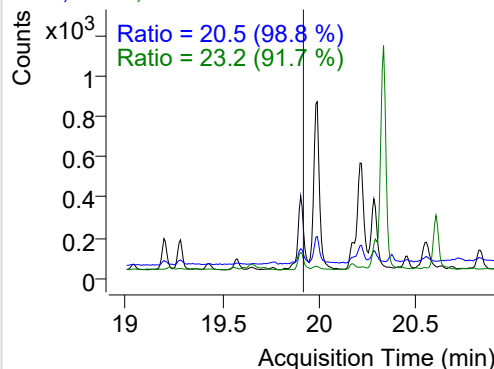
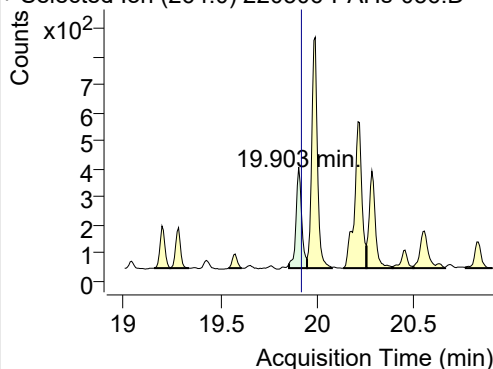


+ SIM (19.333-19.497 min, 24 scans) (\*\*) 2205

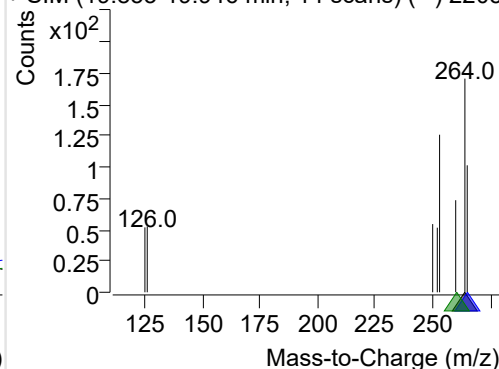
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-056.D

264.0, 265.0, 260.0

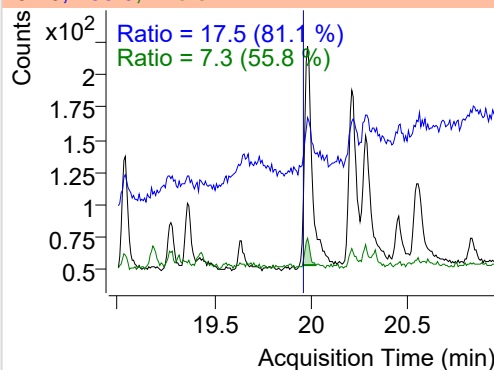
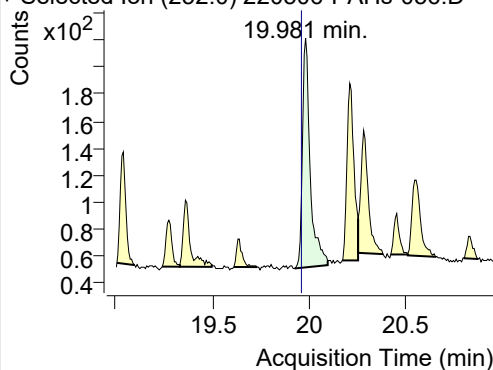


+ SIM (19.853-19.946 min, 14 scans) (\*\*) 2205

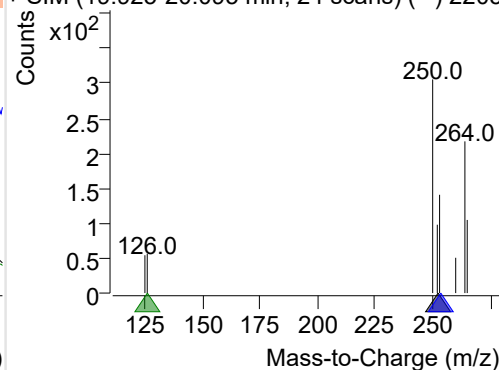
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-056.D

252.0, 253.0, 126.0

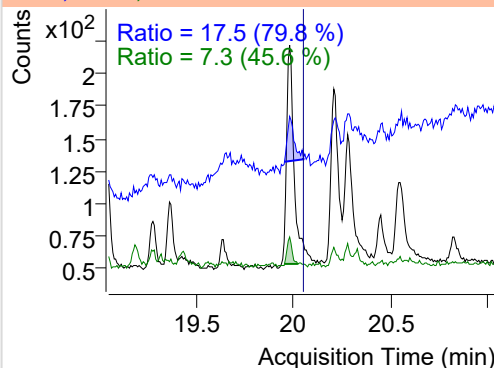
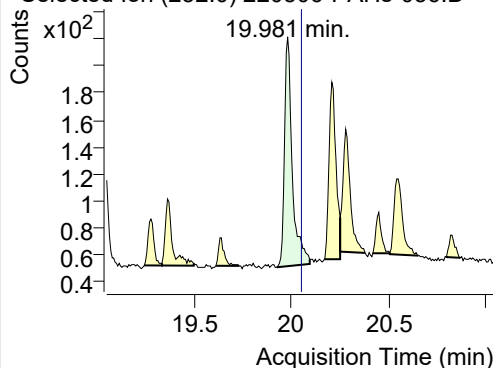


+ SIM (19.925-20.095 min, 24 scans) (\*\*) 2205

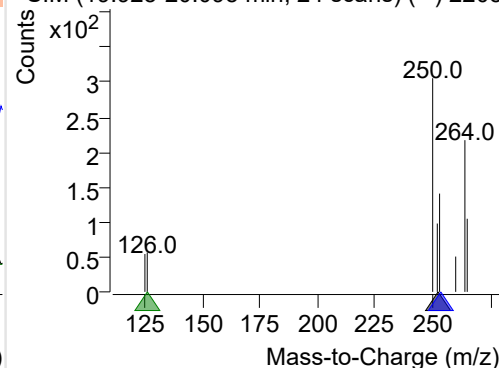
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-056.D

252.0, 253.0, 126.0



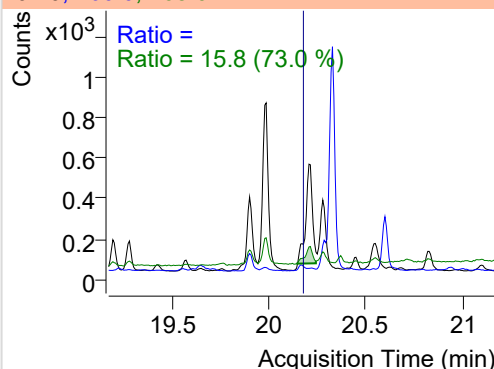
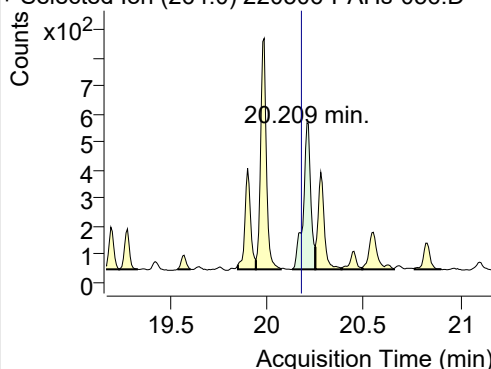
+ SIM (19.925-20.095 min, 24 scans) (\*\*) 2205



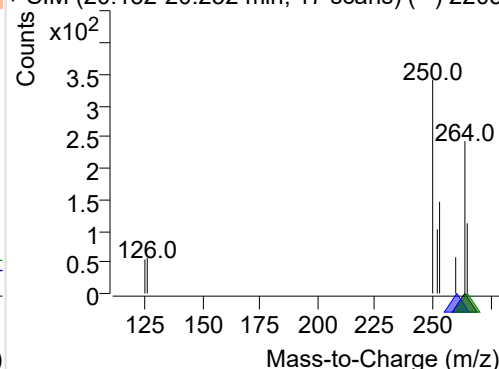
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-056.D

264.0, 260.0, 265.0



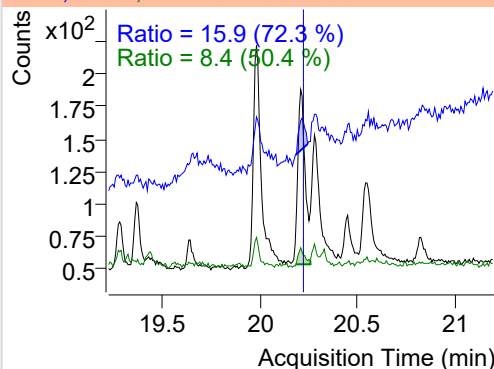
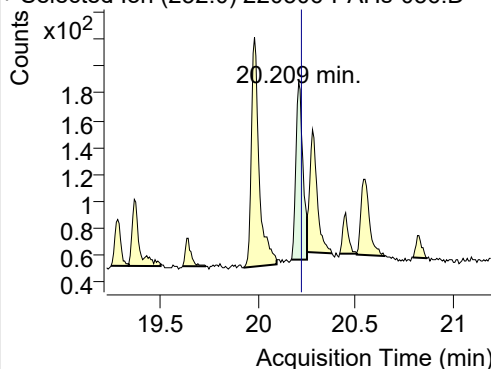
+ SIM (20.132-20.252 min, 17 scans) (\*\*) 2205



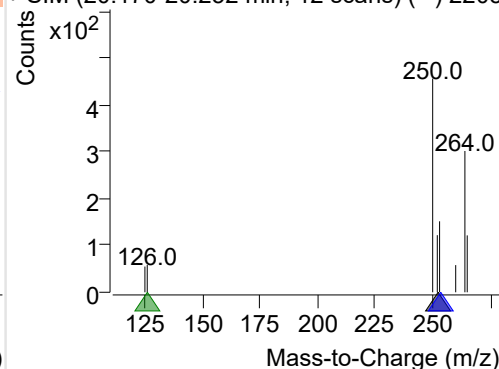
## Perylene

+ Selected Ion (252.0) 220506-PAHs-056.D

252.0, 253.0, 126.0



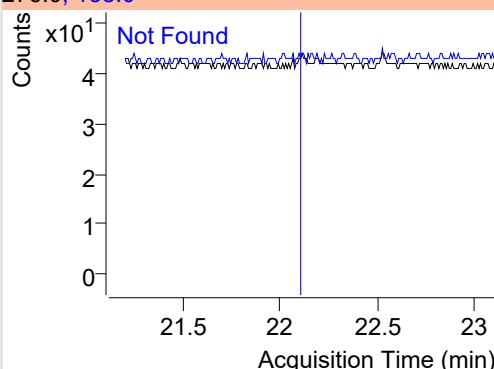
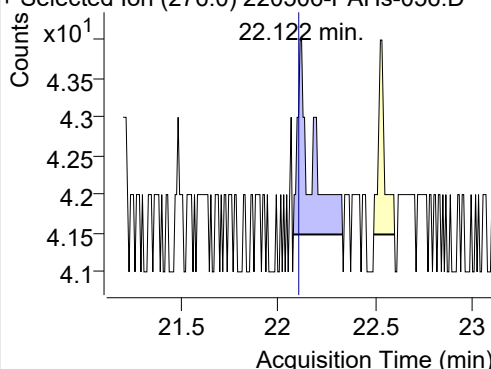
+ SIM (20.170-20.252 min, 12 scans) (\*\*) 2205



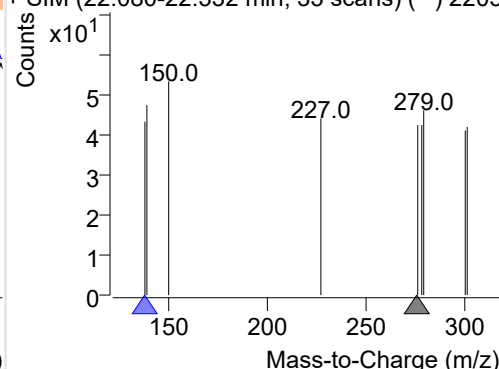
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-056.D

276.0, 138.0



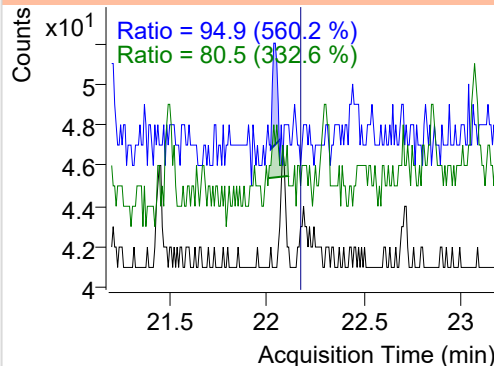
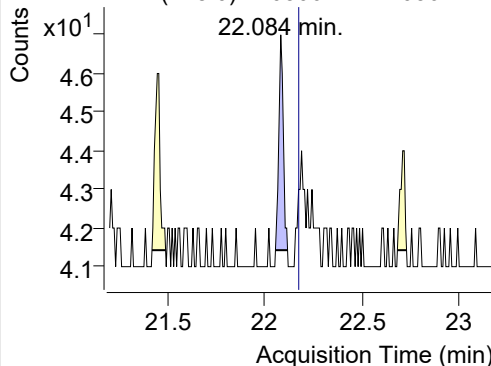
+ SIM (22.080-22.332 min, 33 scans) (\*\*) 2205



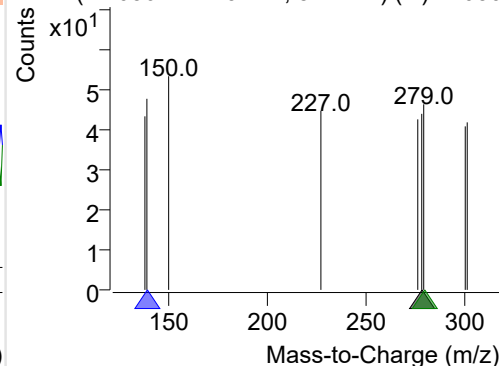
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-056.D

278.0, 139.0, 279.0



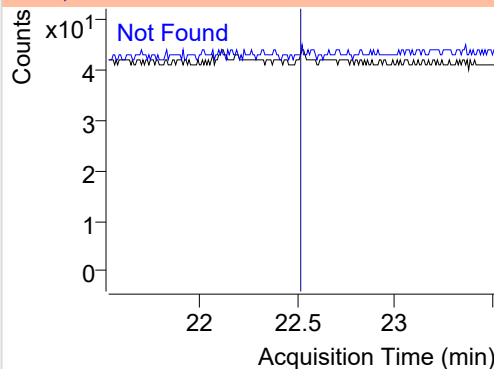
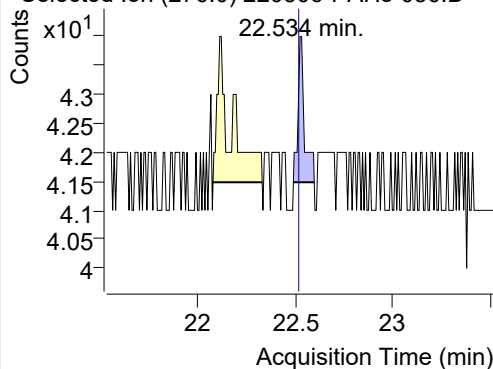
+ SIM (22.056-22.119 min, 8 scans) (\*\*) 22050



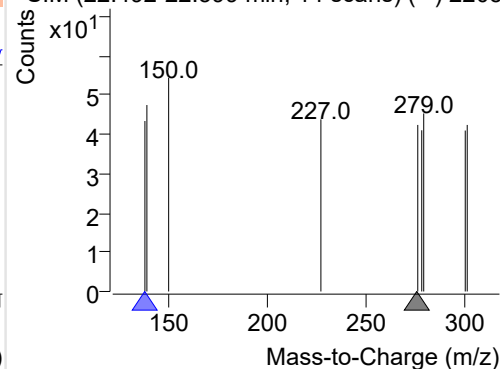
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-056.D

276.0, 138.0

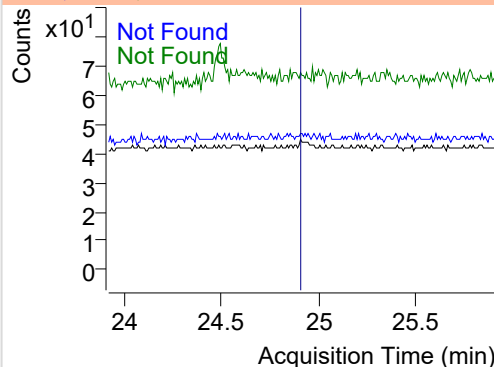
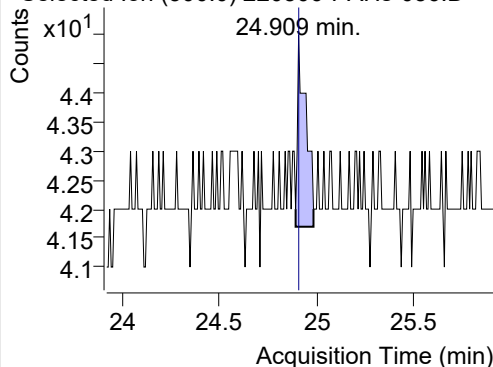


+ SIM (22.492-22.599 min, 14 scans) (\*\*) 2205

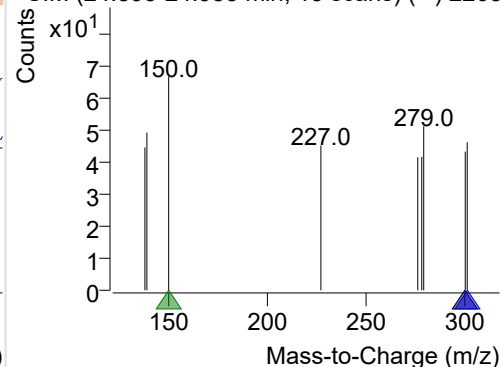
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-056.D

300.0, 301.0, 150.0



+ SIM (24.893-24.985 min, 13 scans) (\*\*) 2205





## Quantitative Analysis Sample Based Report

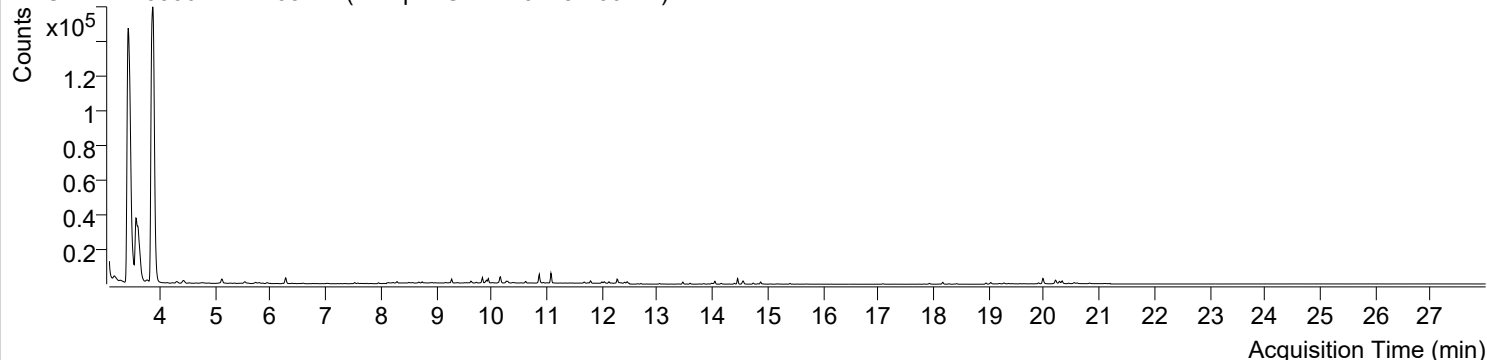


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 3:46:47	Data File	220506-PAHs-057.D
Type	Sample	Name	Sample-Gas-220423-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

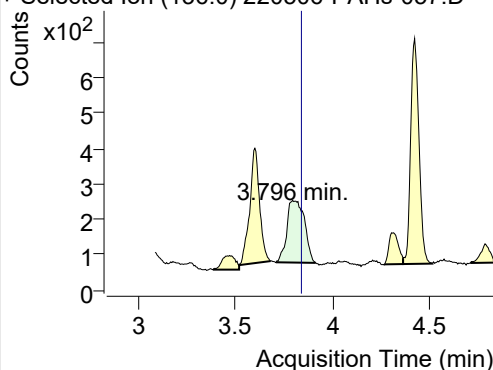
+ TIC SIM 220506-PAHs-057.D (Sample-Gas-220423-100DIL)



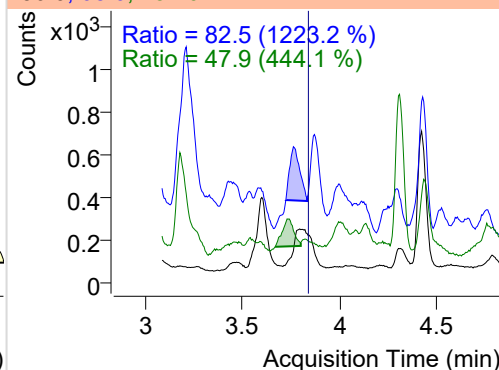
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.796	136.0	1101	174.77	ND ng/ml	47.9
Naphthalene	3.872	128.0	537314	127852.77	ND ng/ml	13.1
Acenaphthylene	6.816	152.0	64	32.84	ND ng/ml	177.1
IS-D10-Acenaphthene	7.526	164.0	367	226.38	ND ng/ml	114.2
Acenaphthene	7.591	154.0	150	93.43	ND ng/ml	146.2
LSS-D10-Fluorene	8.684	176.0	344	208.55	ND ng/ml	99.4
Fluorene	8.747	166.0	508	332.87	ND ng/ml	98.6
IS-D10-Phenanthrene	10.889	188.0	645	417.46	ND ng/ml	17.1
Phenanthrene	10.942	178.0	264	150.07	ND ng/ml	23.5
Anthracene	11.078	178.0	2343	1510.75	ND ng/ml	27.4
Fluoranthene	13.596	202.0	250	167.59	ND ng/ml	104.7
LSS-D10-Pyrene	14.159	212.0	481	303.72	ND ng/ml	27.1
Pyrene	14.046	202.0	1124	591.36	ND ng/ml	133.5
Benz(a)anthracene	17.141	228.0	27	5.71	ND ng/ml	
IS-D12-Chrysene	17.087	240.0	361	186.48	ND ng/ml	17.5
Chrysene	17.141	228.0	27	5.71	ND ng/ml	
Benzo(b)fluoranthene	19.362	252.0	154	57.90	ND ng/ml	
Benzo(k)fluoranthene	19.362	252.0	154	57.90	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.903	264.0	808	359.41	ND ng/ml	19.8
Benzo(e)pyrene	19.981	252.0	577	215.86	ND ng/ml	16.4
Benzo(a)pyrene	19.981	252.0	577	215.86	ND ng/ml	16.4
IS-D12-Perylene	20.209	264.0	1653	632.41	ND ng/ml	
Perylene	20.209	252.0	399	157.33	ND ng/ml	18.3
Indeno(1,2,3-c,d)pyrene	22.129	276.0	21	3.00	ND ng/ml	
Dibenz(a,h)anthracene		278.0			ND ng/ml	
Benzo(g,h,i)perylene	22.129	276.0	21	3.00	ND ng/ml	
Coronene		300.0			ND ng/ml	

## IS-D8-Naphthalene

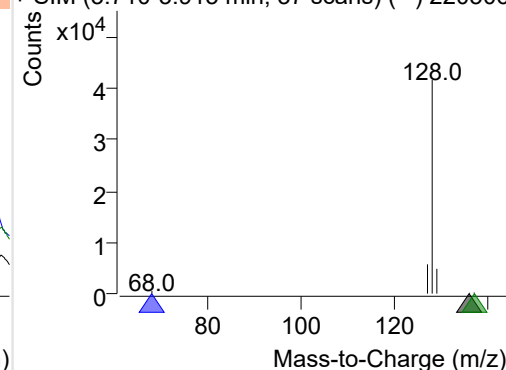
+ Selected Ion (136.0) 220506-PAHs-057.D



136.0, 68.0, 137.0

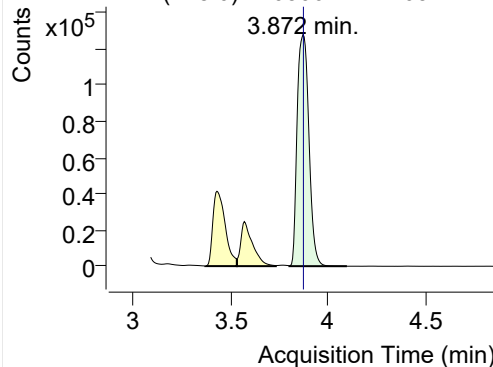


+ SIM (3.710-3.915 min, 37 scans) (\*\*) 220506

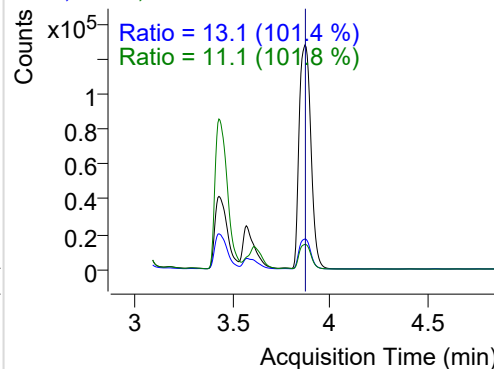


**Naphthalene**

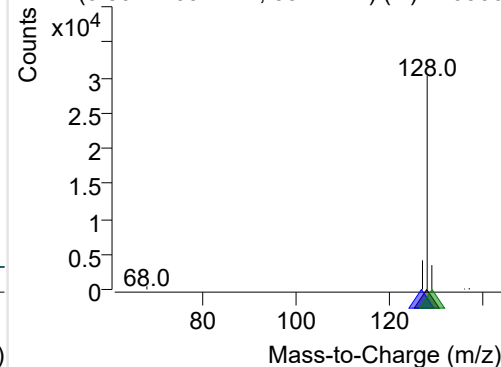
+ Selected Ion (128.0) 220506-PAHs-057.D



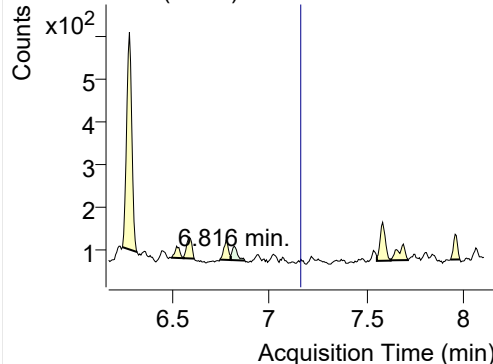
128.0, 127.0, 129.0



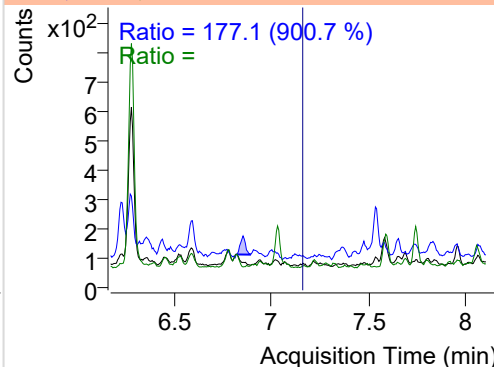
+ SIM (3.802-4.097 min, 55 scans) (\*\*) 220506

**Acenaphthylene**

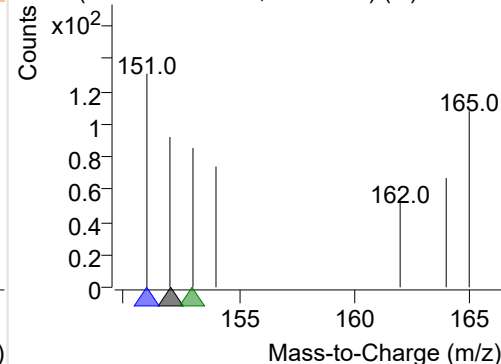
+ Selected Ion (152.0) 220506-PAHs-057.D



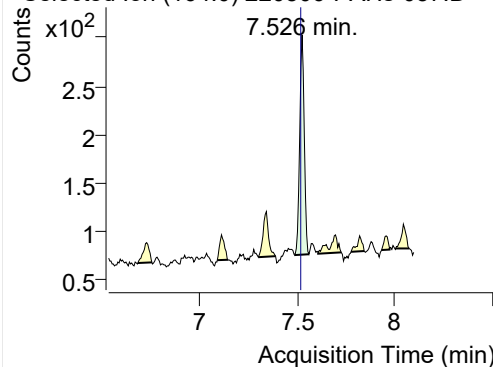
152.0, 151.0, 153.0



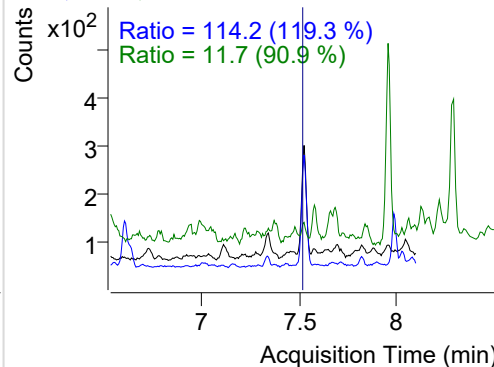
+ SIM (6.798-6.871 min, 13 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

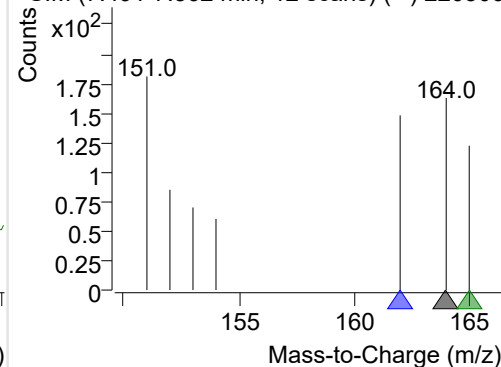
+ Selected Ion (164.0) 220506-PAHs-057.D



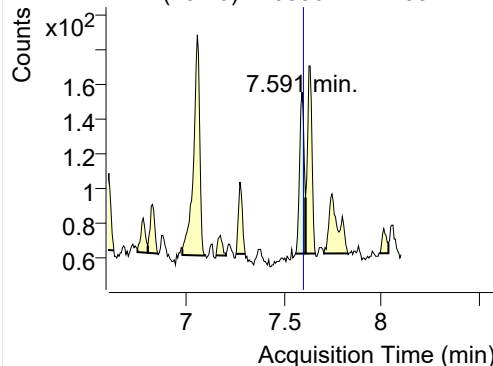
164.0, 162.0, 165.0



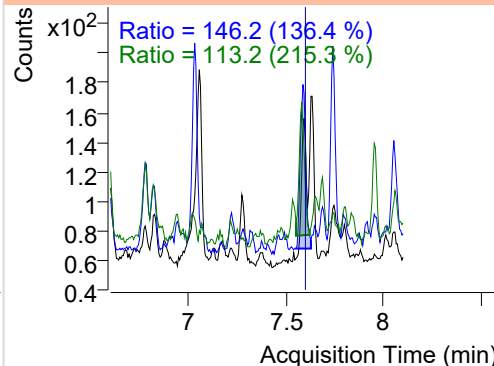
+ SIM (7.491-7.562 min, 12 scans) (\*\*) 220506

**Acenaphthene**

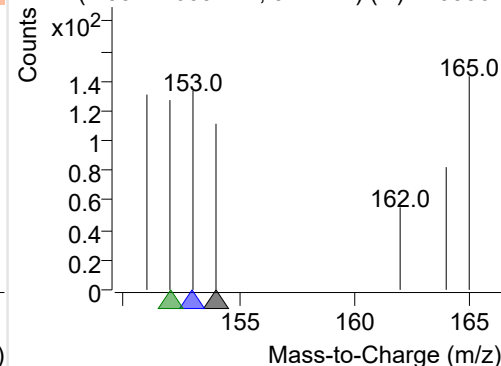
+ Selected Ion (154.0) 220506-PAHs-057.D



154.0, 153.0, 152.0

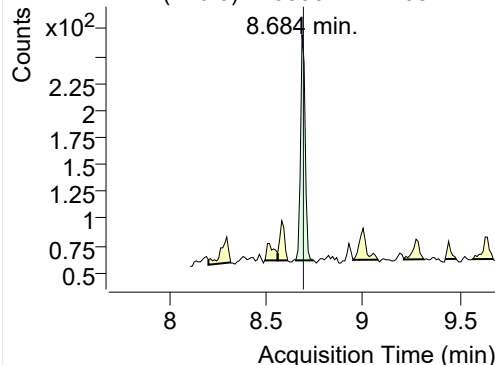


+ SIM (7.557-7.609 min, 9 scans) (\*\*) 220506-I

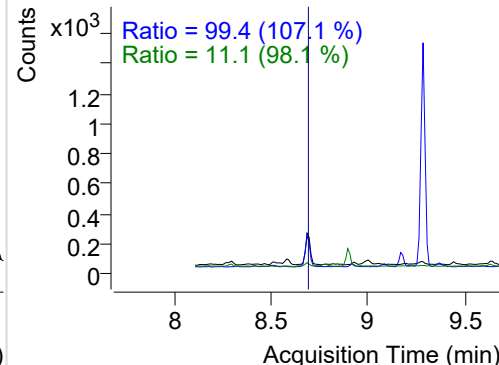


## LSS-D10-Fluorene

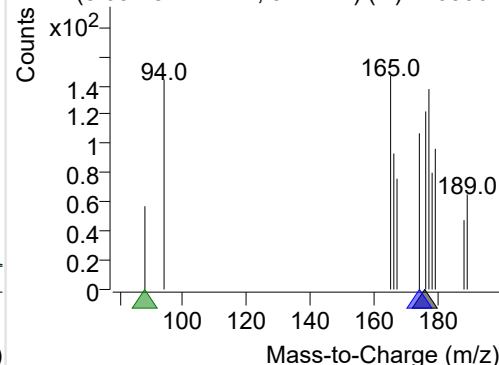
+ Selected Ion (176.0) 220506-PAHs-057.D



176.0, 174.0, 88.0

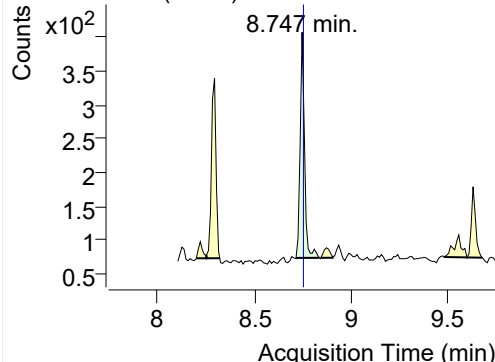


+ SIM (8.652-8.742 min, 9 scans) (\*\*) 220506-I

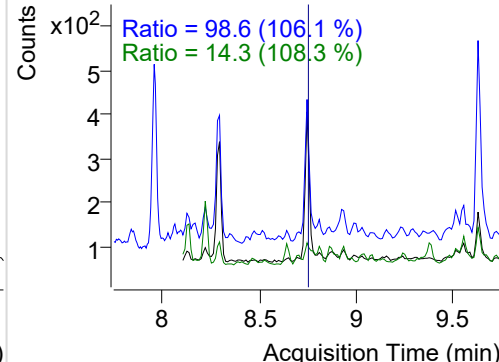


## Fluorene

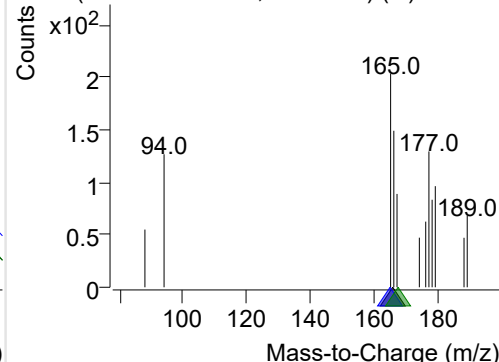
+ Selected Ion (166.0) 220506-PAHs-057.D



166.0, 165.0, 167.0

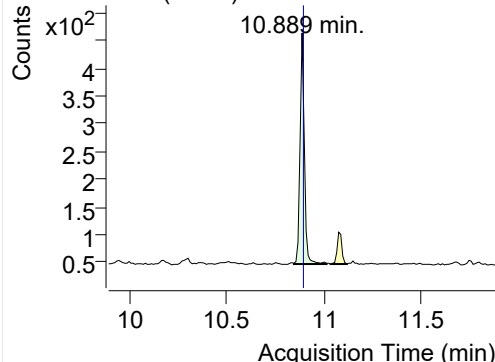


+ SIM (8.716-8.837 min, 11 scans) (\*\*) 220506

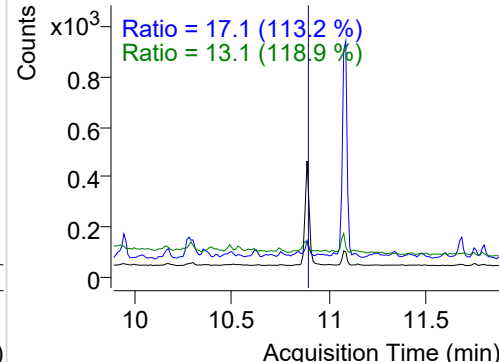


## IS-D10-Phenanthrene

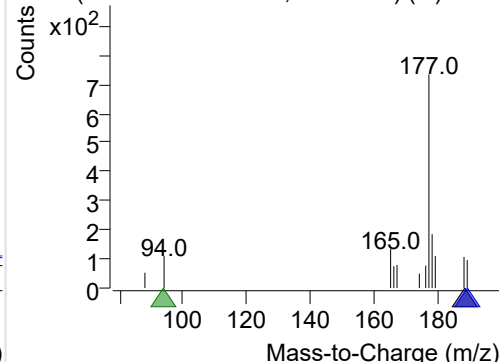
+ Selected Ion (188.0) 220506-PAHs-057.D



188.0, 189.0, 94.0

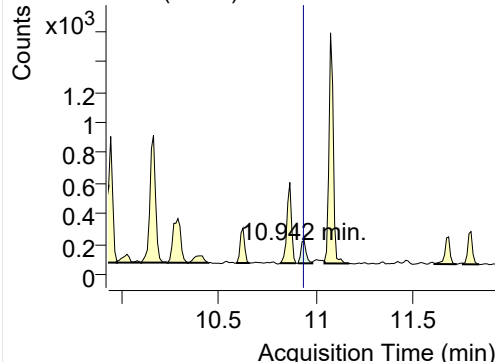


+ SIM (10.847-11.015 min, 17 scans) (\*\*) 2205

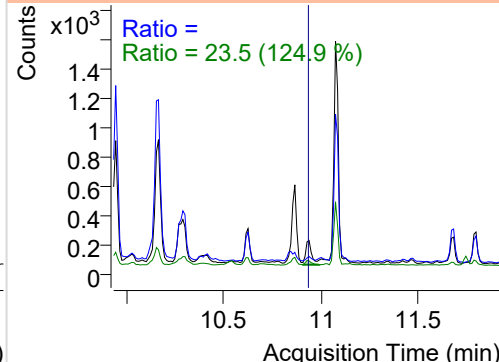


## Phenanthrene

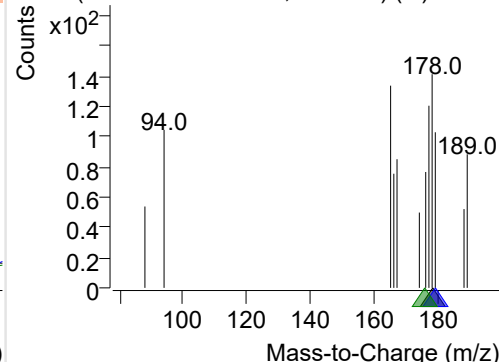
+ Selected Ion (178.0) 220506-PAHs-057.D



178.0, 179.0, 176.0

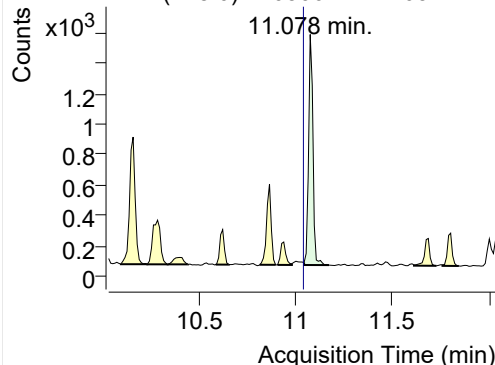


+ SIM (10.910-10.984 min, 7 scans) (\*\*) 22050

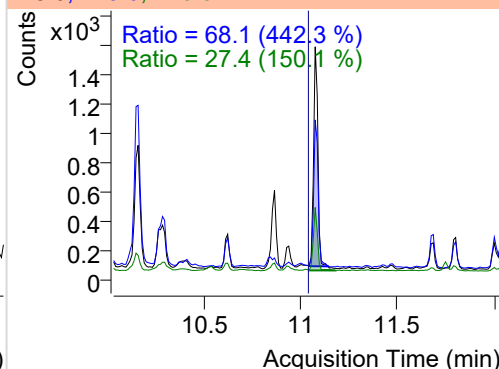


**Anthracene**

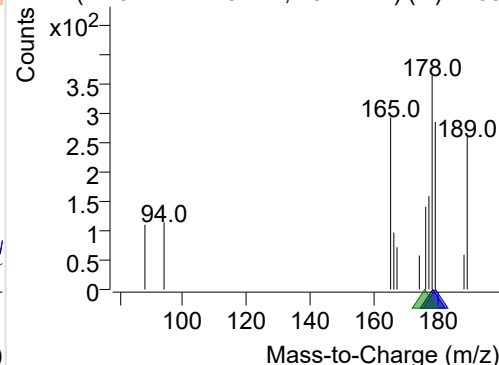
+ Selected Ion (178.0) 220506-PAHs-057.D



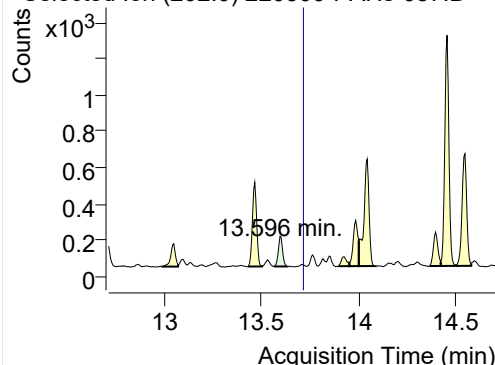
178.0, 179.0, 176.0



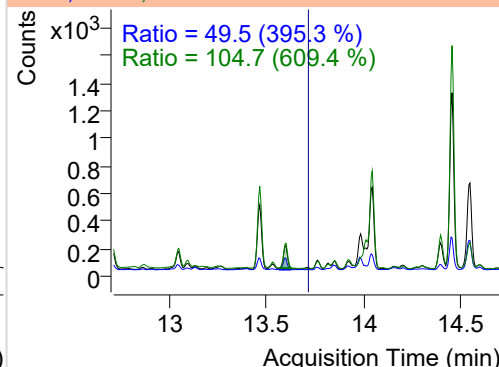
+ SIM (11.047-11.175 min, 13 scans) (\*\*) 2205

**Fluoranthene**

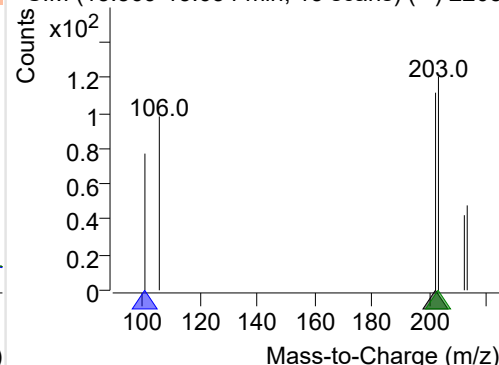
+ Selected Ion (202.0) 220506-PAHs-057.D



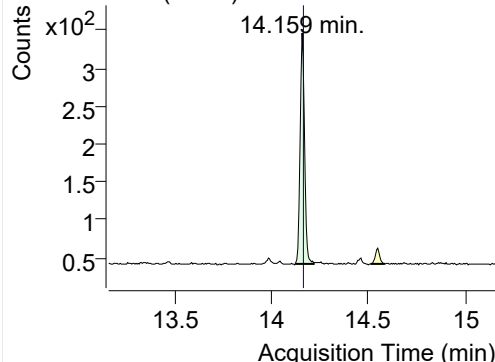
202.0, 101.0, 203.0



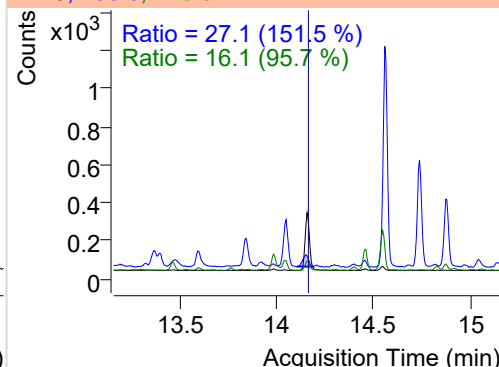
+ SIM (13.569-13.634 min, 13 scans) (\*\*) 2205

**LSS-D10-Pyrene**

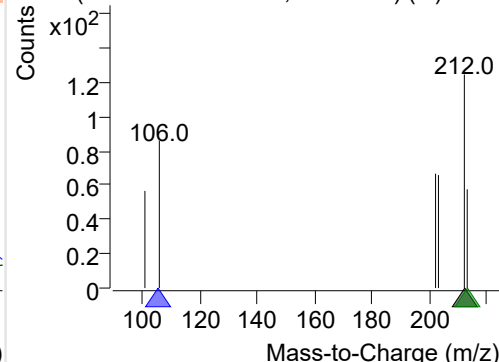
+ Selected Ion (212.0) 220506-PAHs-057.D



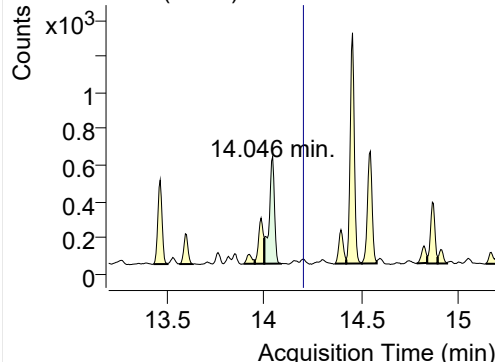
212.0, 106.0, 213.0



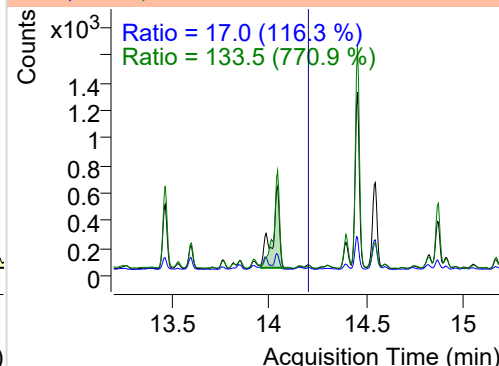
+ SIM (14.124-14.219 min, 18 scans) (\*\*) 2205

**Pyrene**

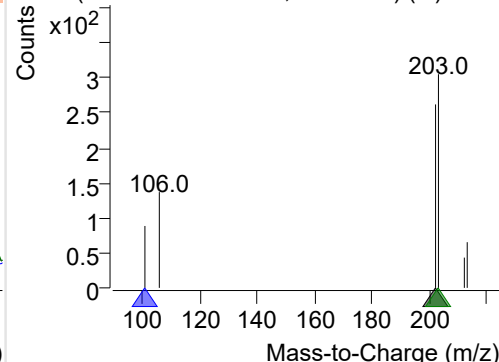
+ Selected Ion (202.0) 220506-PAHs-057.D



202.0, 101.0, 203.0



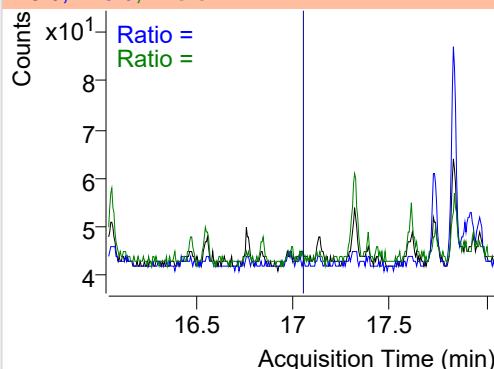
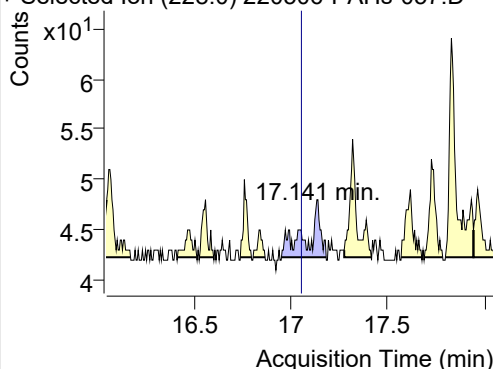
+ SIM (14.002-14.089 min, 17 scans) (\*\*) 2205



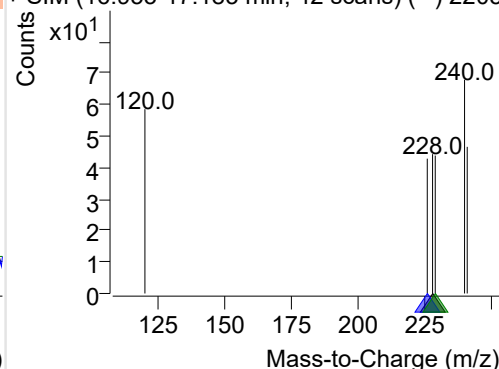
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-057.D

228.0, 226.0, 229.0

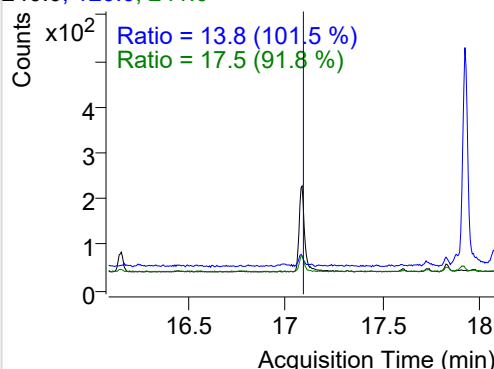
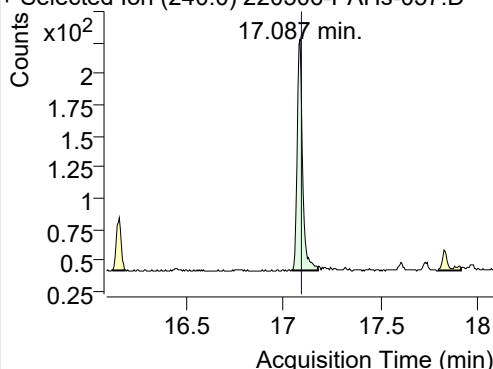


+ SIM (16.953-17.183 min, 42 scans) (\*\*) 2205

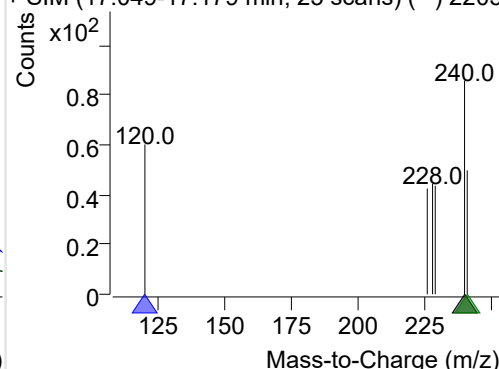
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-057.D

240.0, 120.0, 241.0

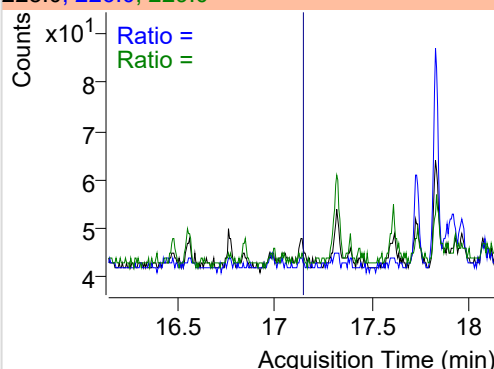
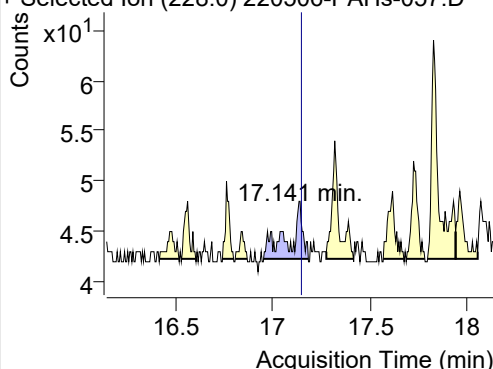


+ SIM (17.049-17.179 min, 25 scans) (\*\*) 2205

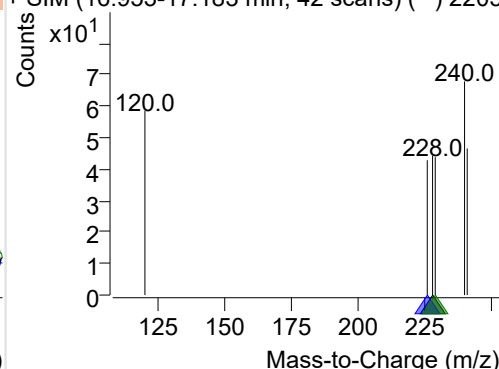
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-057.D

228.0, 226.0, 229.0

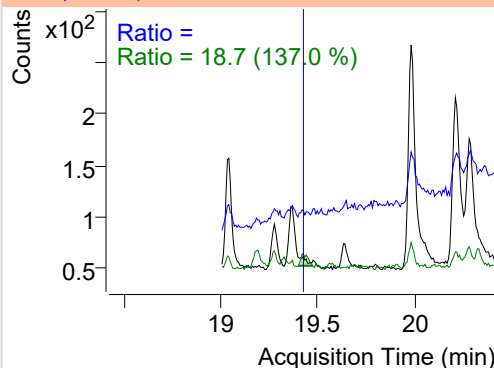
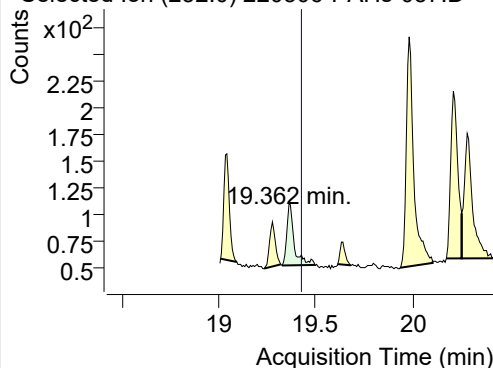


+ SIM (16.953-17.183 min, 42 scans) (\*\*) 2205

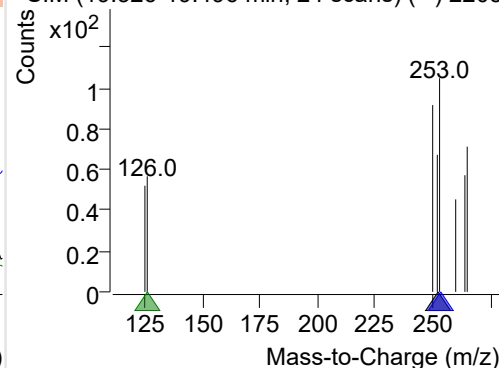
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-057.D

252.0, 253.0, 126.0



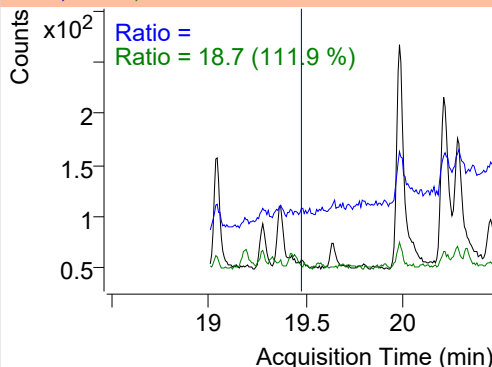
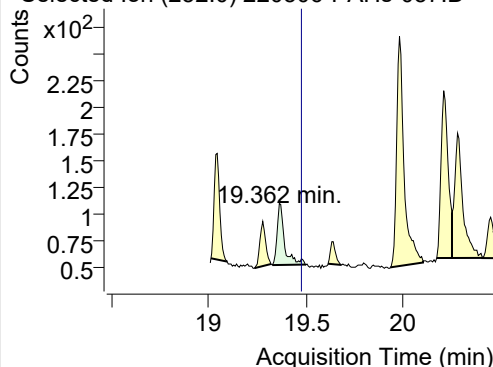
+ SIM (19.326-19.496 min, 24 scans) (\*\*) 2205



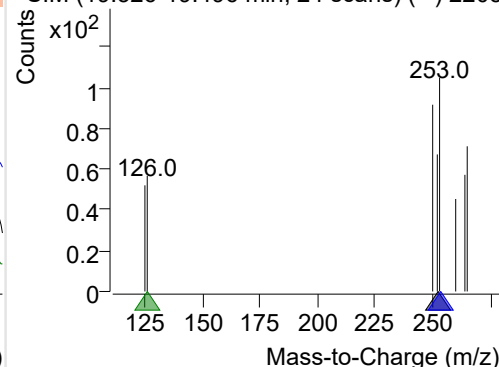
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-057.D

252.0, 253.0, 126.0

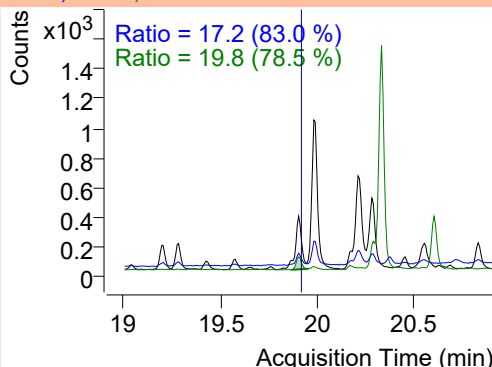
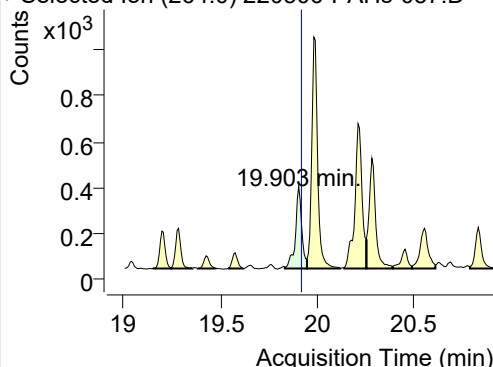


+ SIM (19.326-19.496 min, 24 scans) (\*\*) 2205

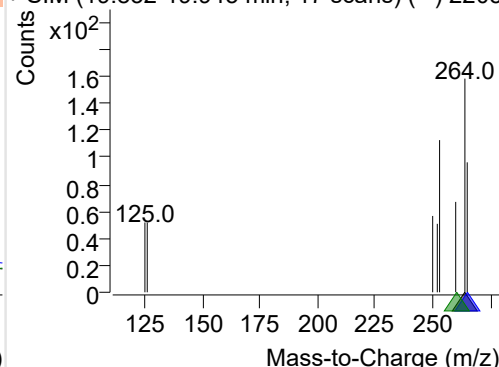
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-057.D

264.0, 265.0, 260.0

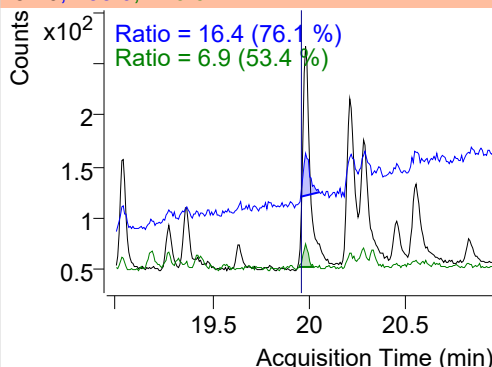
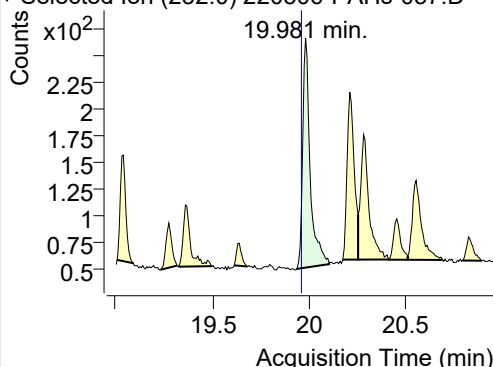


+ SIM (19.832-19.945 min, 17 scans) (\*\*) 2205

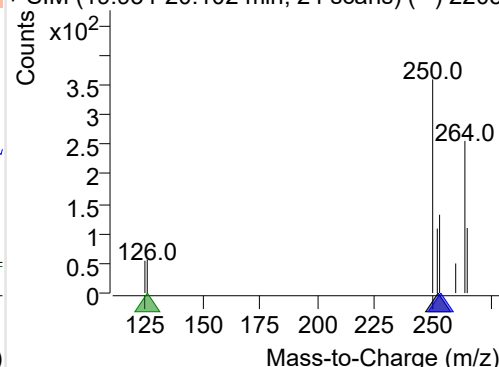
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-057.D

252.0, 253.0, 126.0

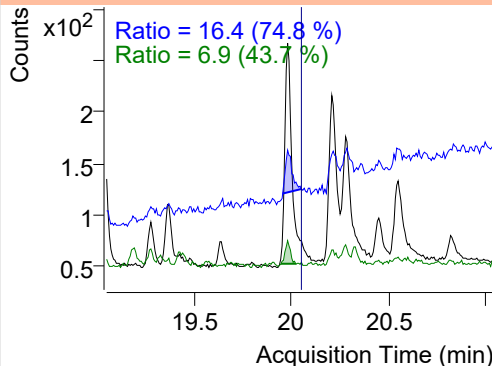
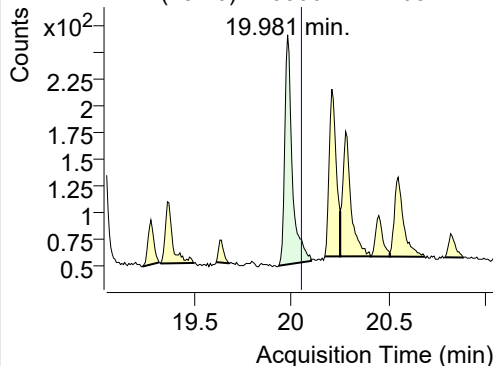


+ SIM (19.934-20.102 min, 24 scans) (\*\*) 2205

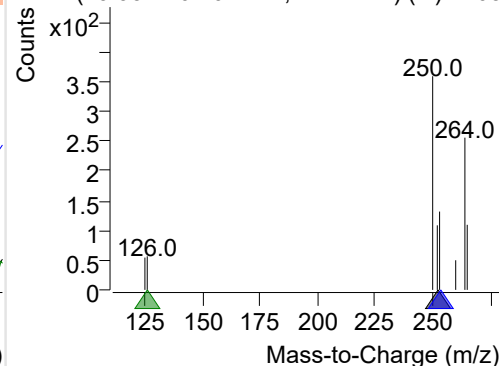
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-057.D

252.0, 253.0, 126.0



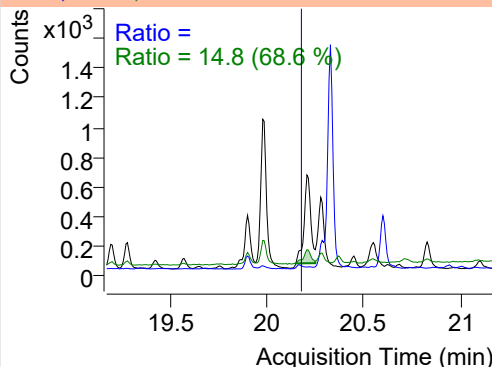
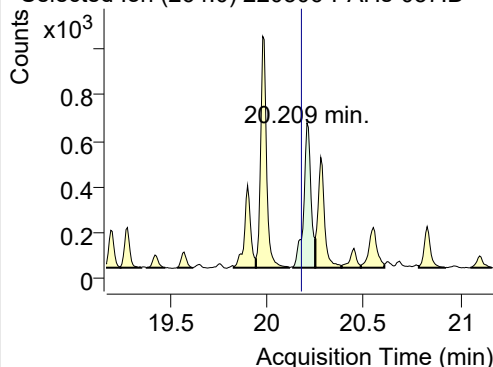
+ SIM (19.934-20.102 min, 24 scans) (\*\*) 2205



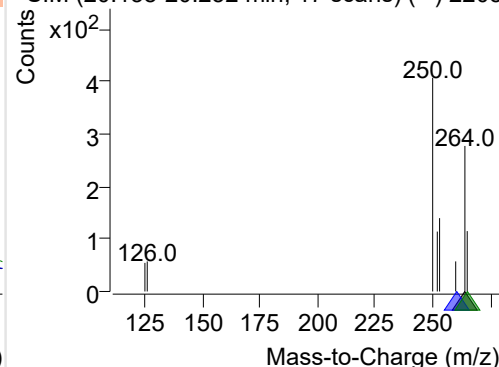
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-057.D

264.0, 260.0, 265.0



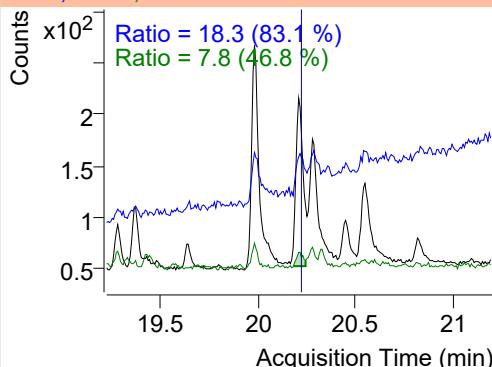
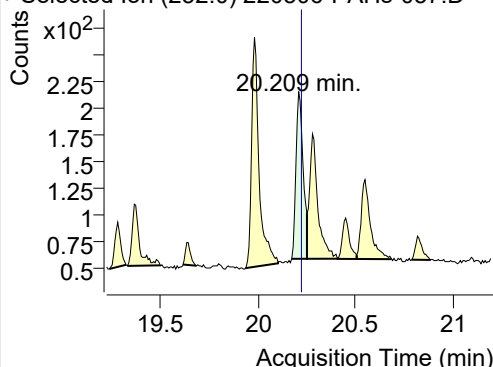
+ SIM (20.138-20.252 min, 17 scans) (\*\*) 2205



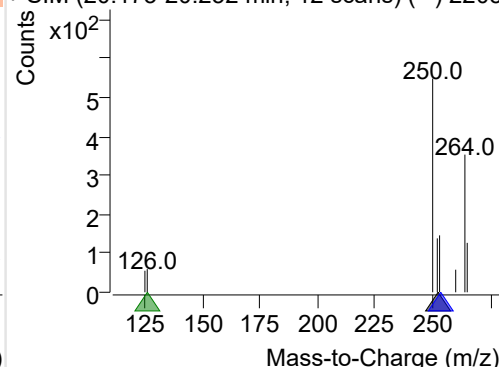
## Perylene

+ Selected Ion (252.0) 220506-PAHs-057.D

252.0, 253.0, 126.0



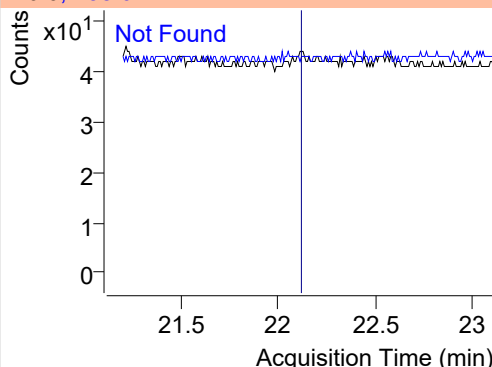
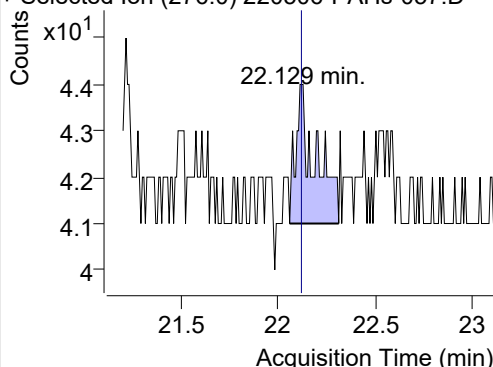
+ SIM (20.173-20.252 min, 12 scans) (\*\*) 2205



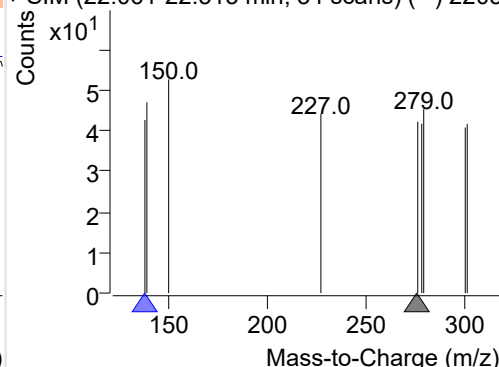
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-057.D

276.0, 138.0



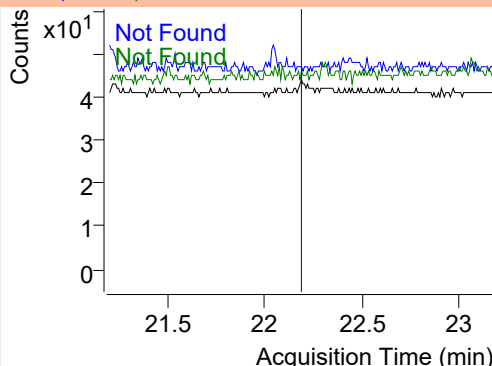
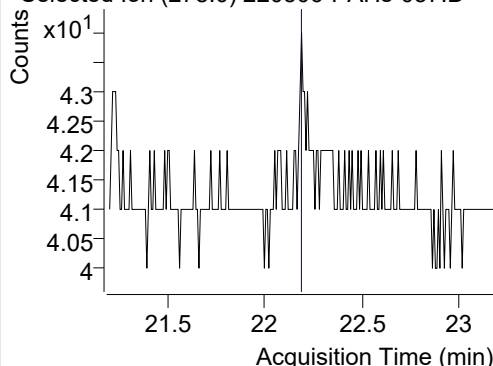
+ SIM (22.061-22.313 min, 34 scans) (\*\*) 2205



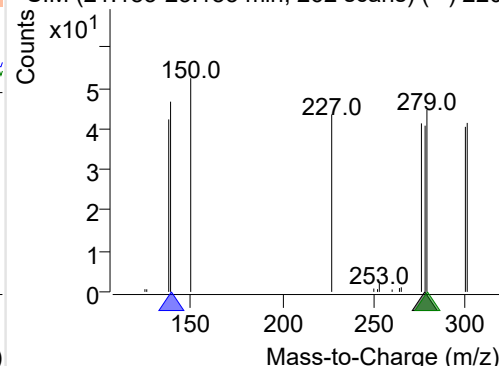
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-057.D

278.0, 139.0, 279.0



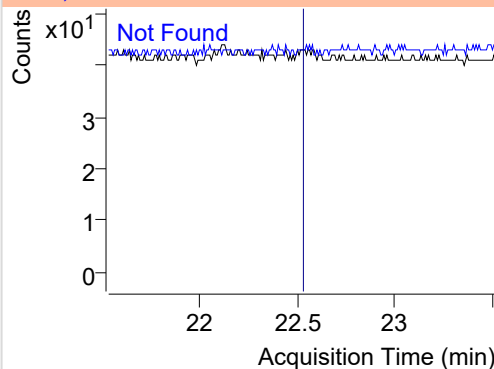
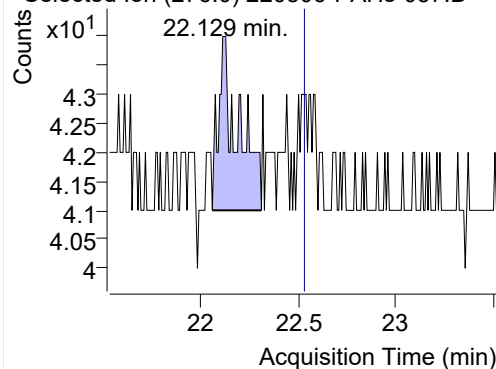
+ SIM (21.183-23.183 min, 262 scans) (\*\*) 220



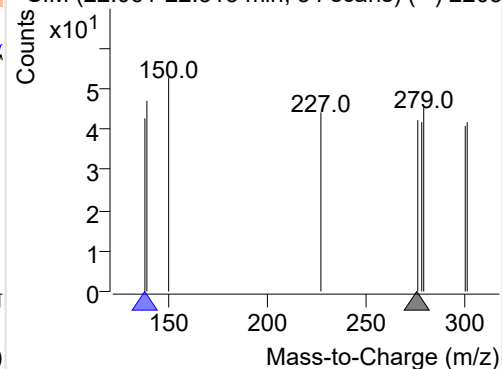
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-057.D

276.0, 138.0

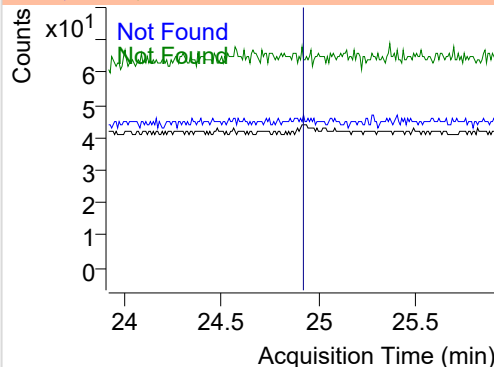
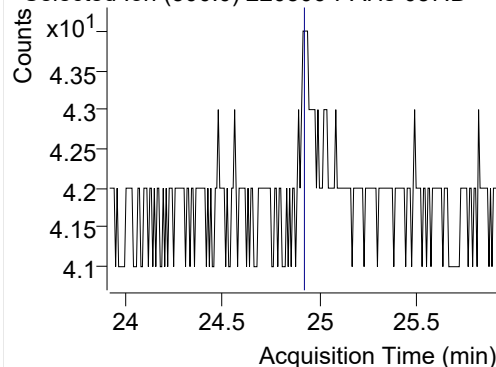


+ SIM (22.061-22.313 min, 34 scans) (\*\*) 2205

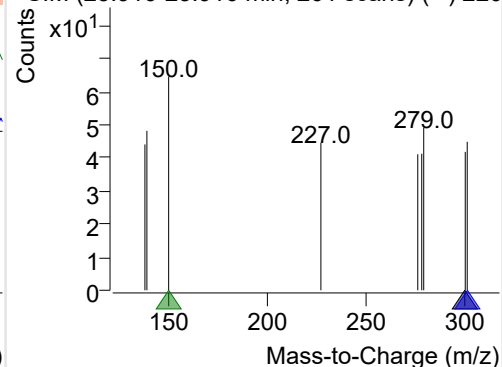
**Coronene**

+ Selected Ion (300.0) 220506-PAHs-057.D

300.0, 301.0, 150.0



+ SIM (23.916-25.916 min, 261 scans) (\*\*) 220





## Quantitative Analysis Sample Based Report

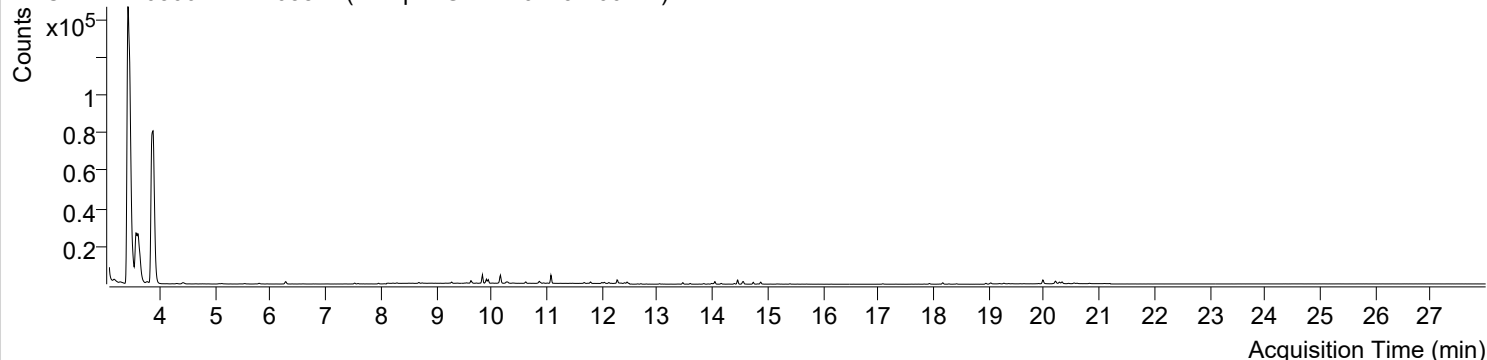


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220506-PAHs-Sample\QuantResults\220506-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-08-05 오후 2:59:27	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-08-05 오후 2:59:42	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-08-05 오후 2:57:49	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-05-07 오후 4:17:57	Data File	220506-PAHs-058.D
Type	Sample	Name	Sample-Gas-220429-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

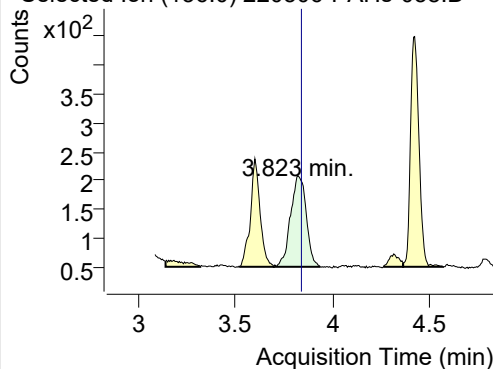
+ TIC SIM 220506-PAHs-058.D (Sample-Gas-220429-100DIL)



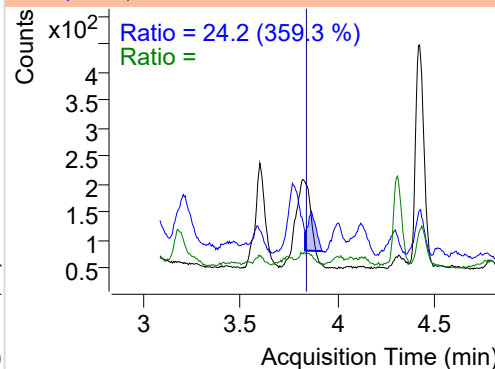
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.823	136.0	880	157.20	ND ng/ml	
Naphthalene	3.877	128.0	274878	64794.80	ND ng/ml	12.8
Acenaphthylene	6.774	152.0	26	14.73	ND ng/ml	97.4
IS-D10-Acenaphthene	7.526	164.0	335	203.45	ND ng/ml	102.0
Acenaphthene	7.591	154.0	116	72.64	ND ng/ml	116.0
LSS-D10-Fluorene	8.684	176.0	304	178.61	ND ng/ml	94.4
Fluorene	8.747	166.0	173	103.22	ND ng/ml	108.5
IS-D10-Phenanthrene	10.889	188.0	587	382.10	ND ng/ml	13.5
Phenanthrene	10.942	178.0	125	61.66	ND ng/ml	
Anthracene	11.078	178.0	1733	1147.66	ND ng/ml	27.1
Fluoranthene	13.596	202.0	162	110.43	ND ng/ml	103.1
LSS-D10-Pyrene	14.159	212.0	430	258.55	ND ng/ml	20.5
Pyrene	14.046	202.0	827	432.83	ND ng/ml	129.5
Benz(a)anthracene	17.135	228.0	11	5.94	ND ng/ml	
IS-D12-Chrysene	17.087	240.0	324	159.71	ND ng/ml	17.7
Chrysene	17.135	228.0	11	5.94	ND ng/ml	
Benzo(b)fluoranthene	19.362	252.0	117	45.08	ND ng/ml	
Benzo(k)fluoranthene	19.362	252.0	117	45.08	ND ng/ml	
SS-D12-Benzo(e)pyrene	19.903	264.0	201	100.76	ND ng/ml	
Benzo(e)pyrene	19.981	252.0	433	173.17	ND ng/ml	17.0
Benzo(a)pyrene	19.981	252.0	433	173.17	ND ng/ml	17.0
IS-D12-Perylene	20.209	264.0	1103	407.76	ND ng/ml	
Perylene	20.209	252.0	288	119.01	ND ng/ml	34.8
Indeno(1,2,3-c,d)pyrene		276.0			ND ng/ml	
Dibenz(a,h)anthracene		278.0			ND ng/ml	
Benzo(g,h,i)perylene		276.0			ND ng/ml	
Coronene		300.0			ND ng/ml	

## IS-D8-Naphthalene

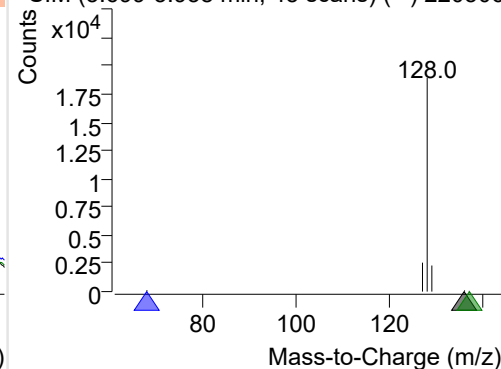
+ Selected Ion (136.0) 220506-PAHs-058.D



136.0, 68.0, 137.0

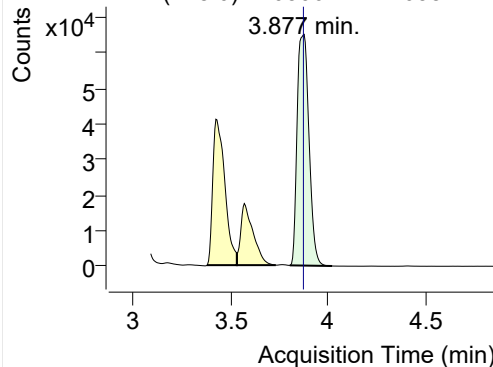


+ SIM (3.699-3.938 min, 45 scans) (\*\*) 220506

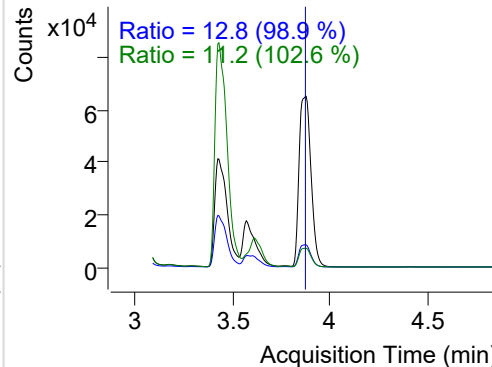


**Naphthalene**

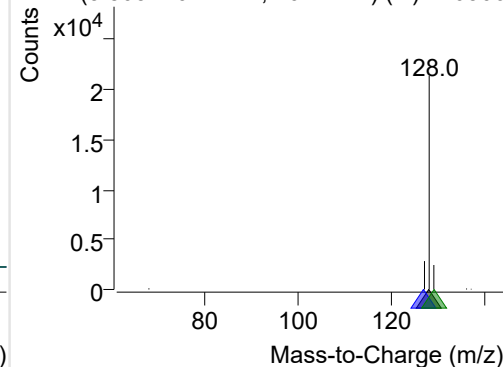
+ Selected Ion (128.0) 220506-PAHs-058.D



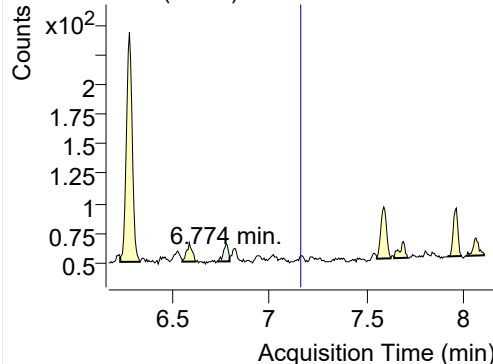
128.0, 127.0, 129.0



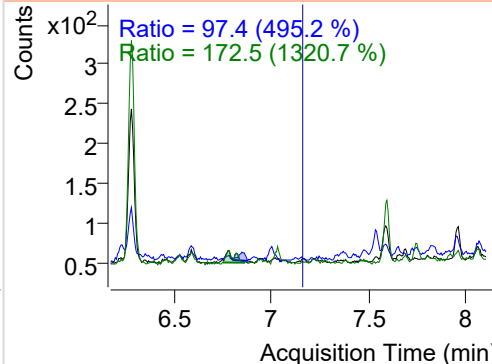
+ SIM (3.803-4.021 min, 40 scans) (\*\*) 220506

**Acenaphthylene**

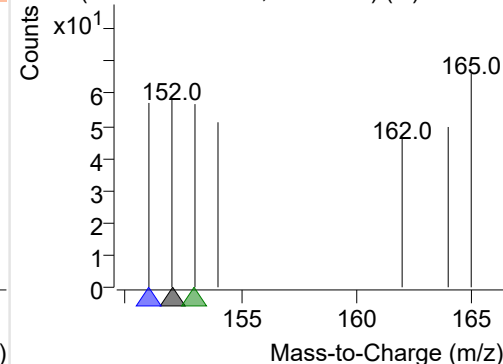
+ Selected Ion (152.0) 220506-PAHs-058.D



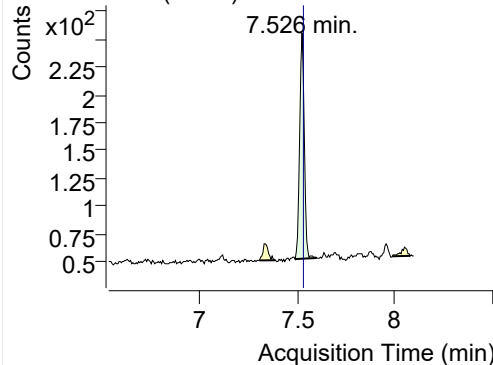
152.0, 151.0, 153.0



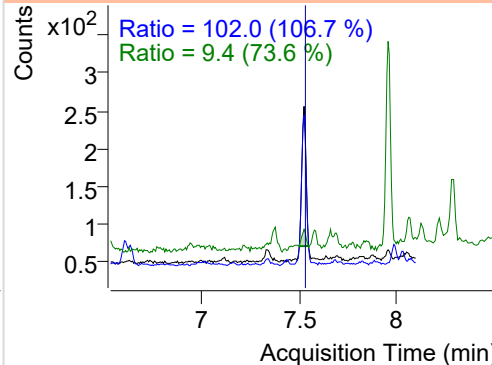
+ SIM (6.728-6.792 min, 11 scans) (\*\*) 220506

**IS-D10-Acenaphthene**

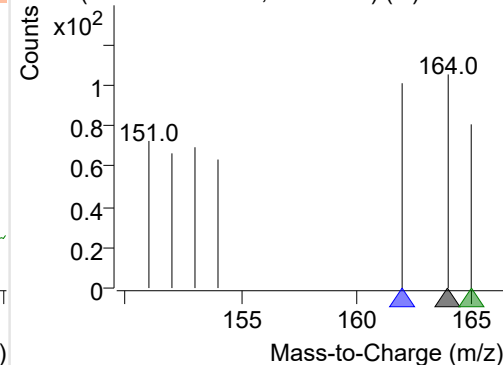
+ Selected Ion (164.0) 220506-PAHs-058.D



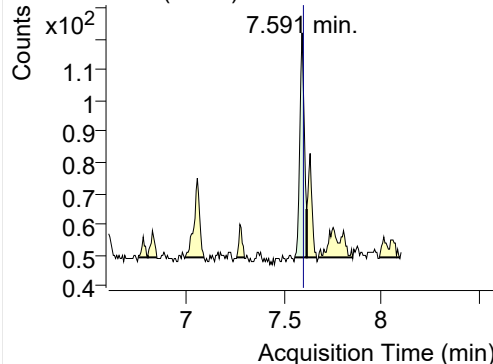
164.0, 162.0, 165.0



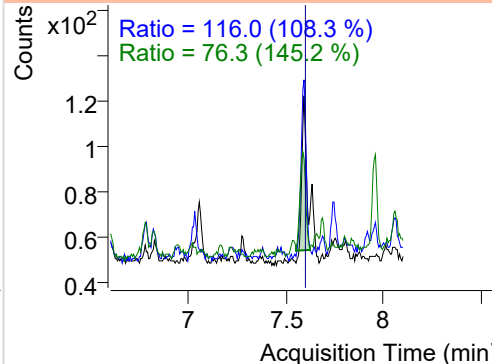
+ SIM (7.491-7.602 min, 18 scans) (\*\*) 220506

**Acenaphthene**

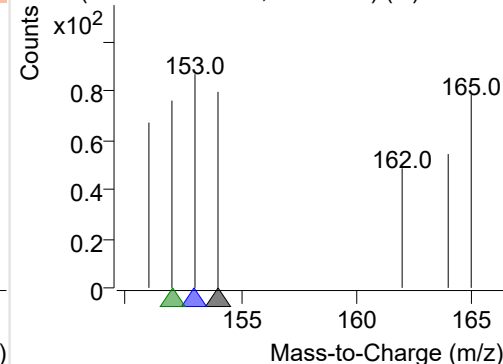
+ Selected Ion (154.0) 220506-PAHs-058.D



154.0, 153.0, 152.0

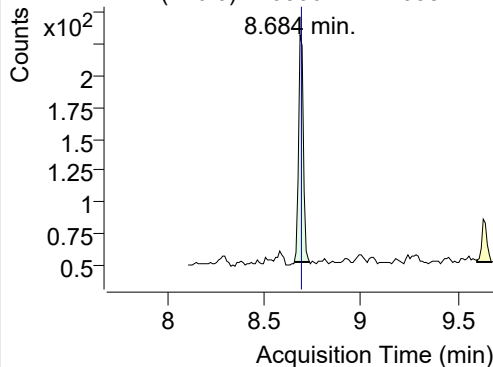


+ SIM (7.554-7.615 min, 11 scans) (\*\*) 220506

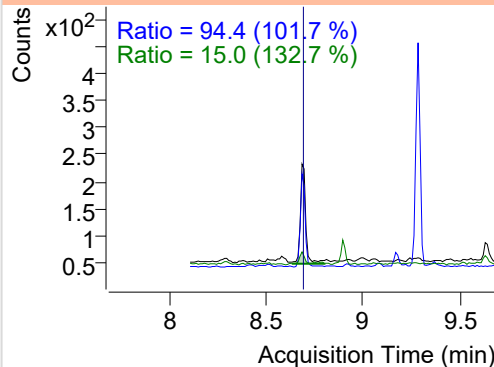


## LSS-D10-Fluorene

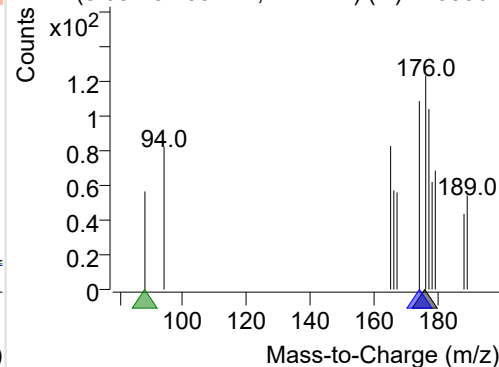
+ Selected Ion (176.0) 220506-PAHs-058.D



176.0, 174.0, 88.0

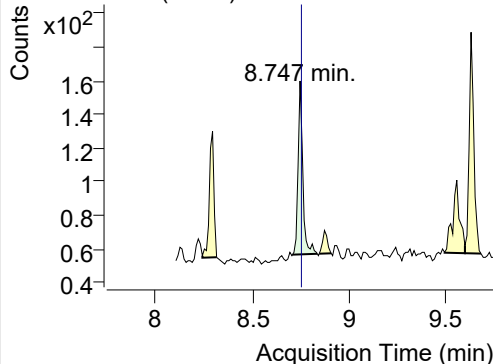


+ SIM (8.654-8.733 min, 7 scans) (\*\*) 220506-I

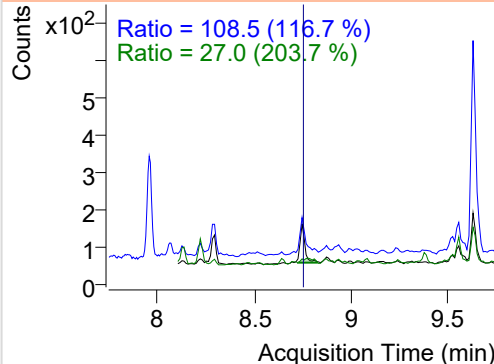


## Fluorene

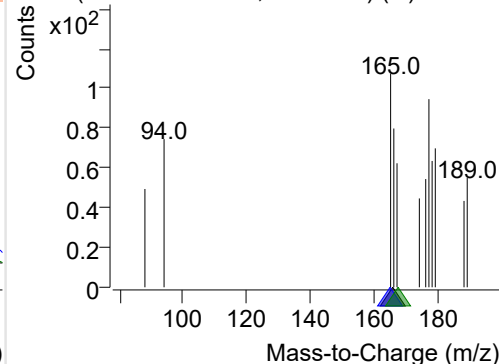
+ Selected Ion (166.0) 220506-PAHs-058.D



166.0, 165.0, 167.0

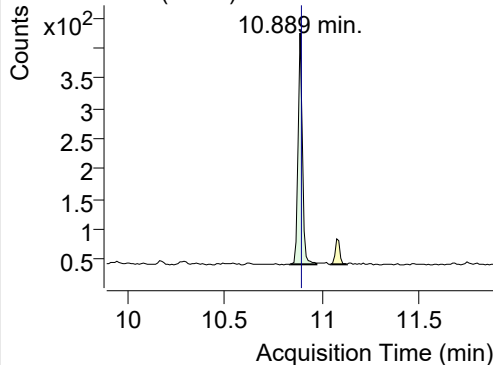


+ SIM (8.708-8.835 min, 12 scans) (\*\*) 220506

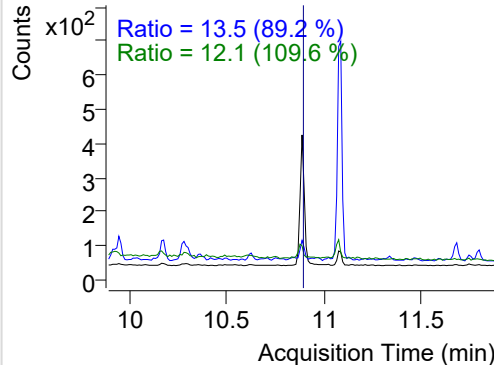


## IS-D10-Phenanthrene

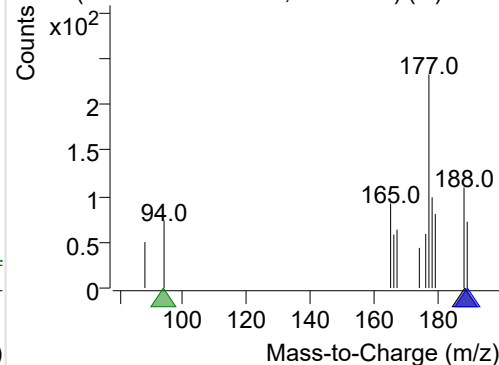
+ Selected Ion (188.0) 220506-PAHs-058.D



188.0, 189.0, 94.0

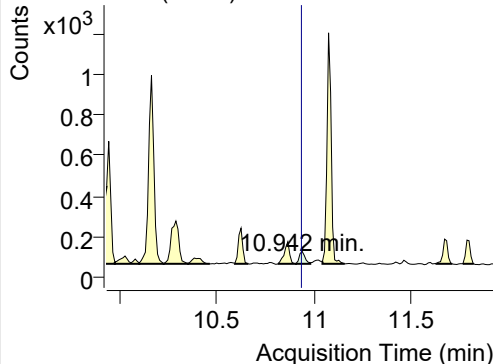


+ SIM (10.837-10.973 min, 14 scans) (\*\*) 2205

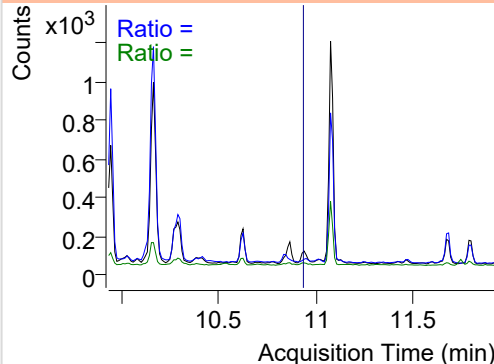


## Phenanthrene

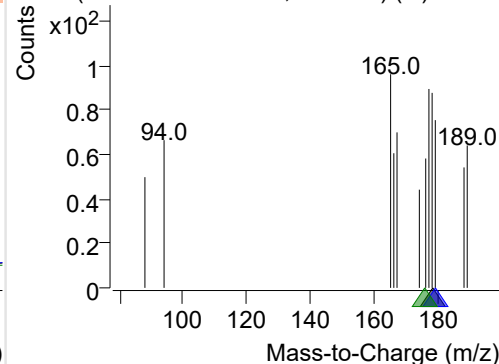
+ Selected Ion (178.0) 220506-PAHs-058.D



178.0, 179.0, 176.0

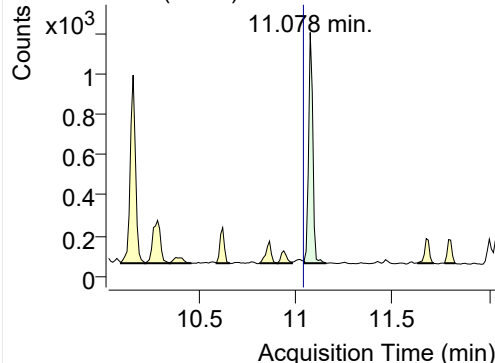


+ SIM (10.910-10.984 min, 8 scans) (\*\*) 22050

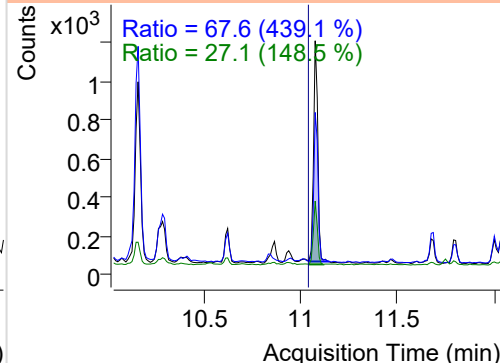


**Anthracene**

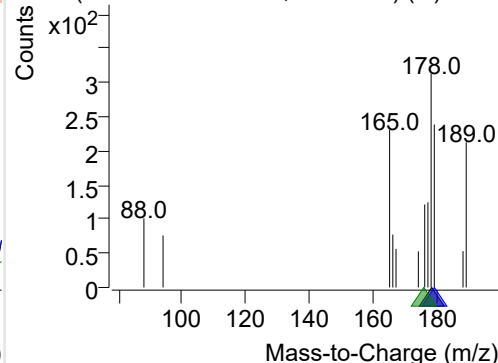
+ Selected Ion (178.0) 220506-PAHs-058.D



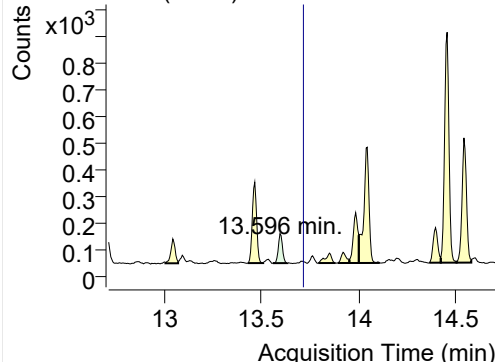
178.0, 179.0, 176.0



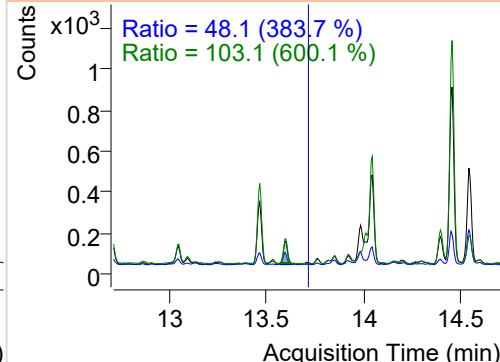
+ SIM (11.047-11.161 min, 11 scans) (\*\*) 2205

**Fluoranthene**

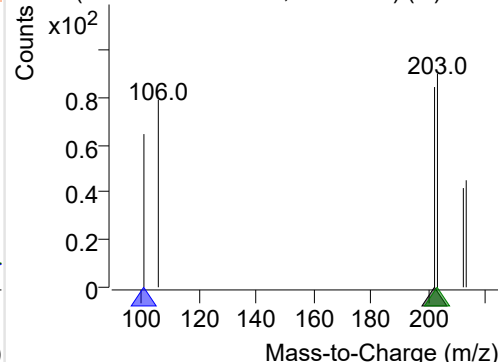
+ Selected Ion (202.0) 220506-PAHs-058.D



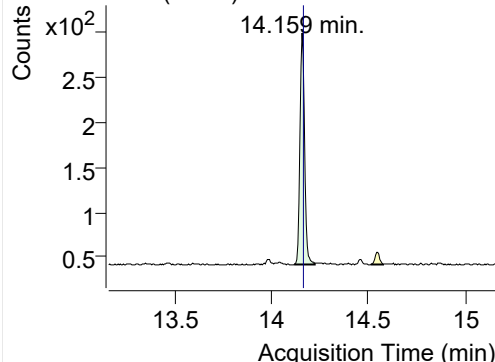
202.0, 101.0, 203.0



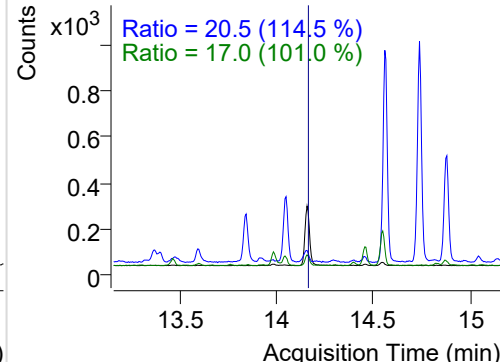
+ SIM (13.559-13.634 min, 14 scans) (\*\*) 2205

**LSS-D10-Pyrene**

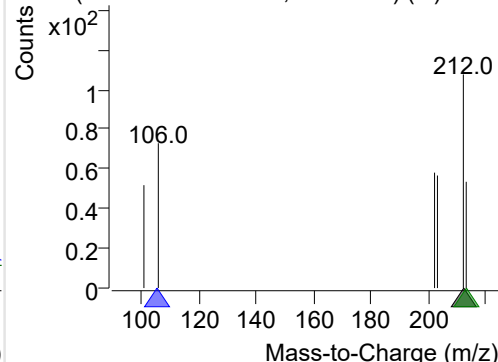
+ Selected Ion (212.0) 220506-PAHs-058.D



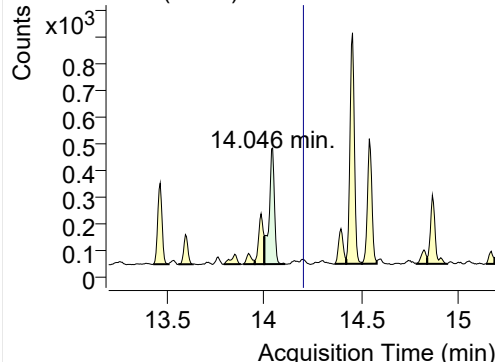
212.0, 106.0, 213.0



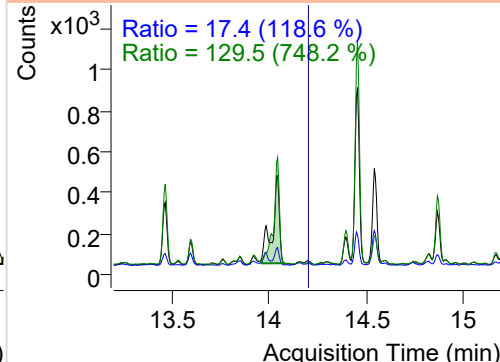
+ SIM (14.118-14.224 min, 20 scans) (\*\*) 2205

**Pyrene**

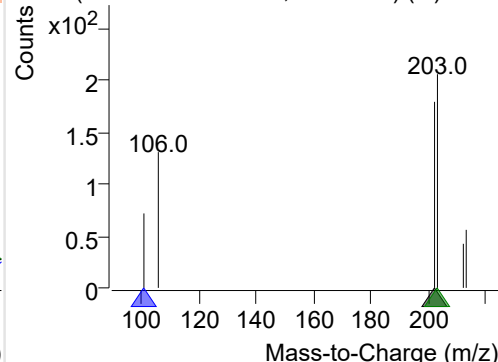
+ Selected Ion (202.0) 220506-PAHs-058.D



202.0, 101.0, 203.0



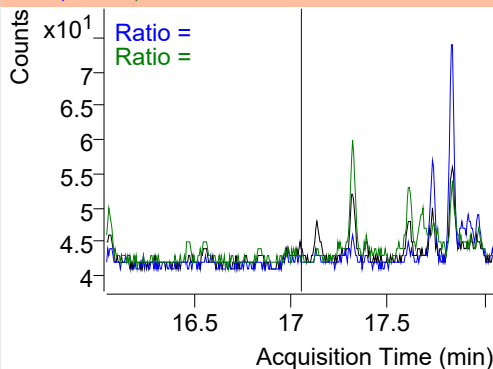
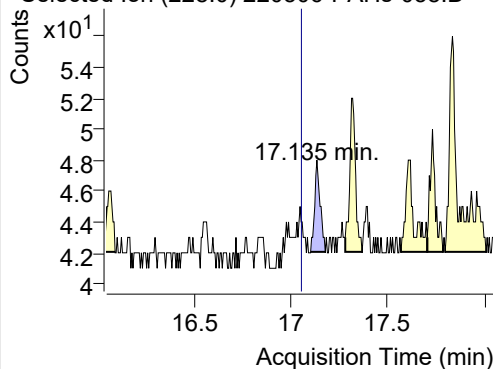
+ SIM (14.002-14.110 min, 20 scans) (\*\*) 2205



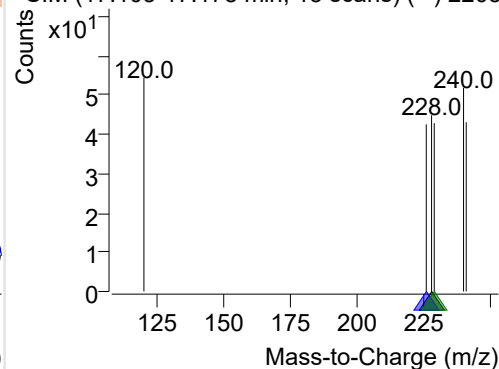
**Benz(a)anthracene**

+ Selected Ion (228.0) 220506-PAHs-058.D

228.0, 226.0, 229.0

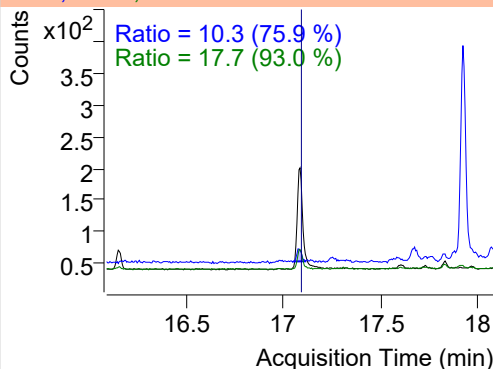
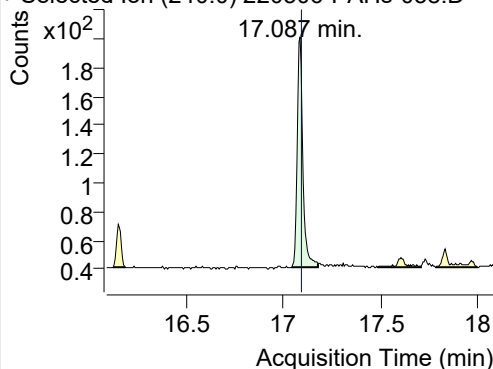


+ SIM (17.103-17.178 min, 13 scans) (\*\*) 2205

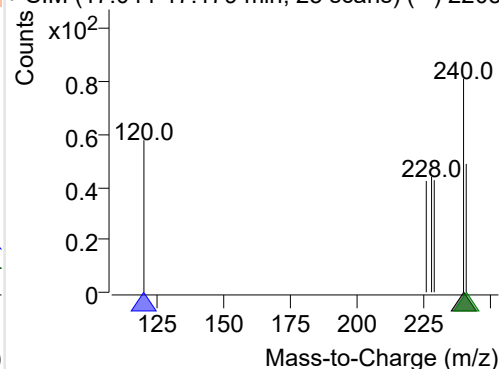
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220506-PAHs-058.D

240.0, 120.0, 241.0

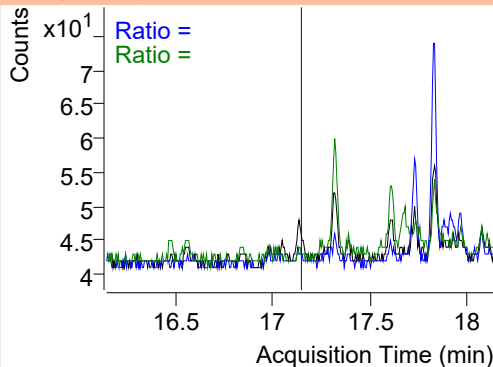
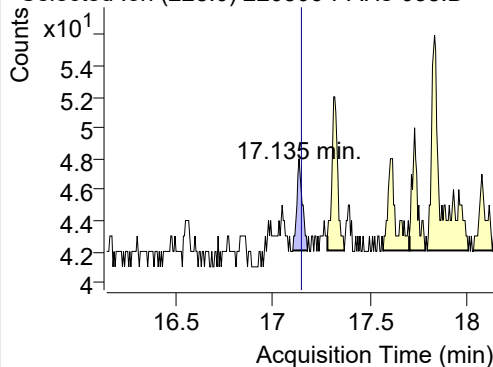


+ SIM (17.044-17.179 min, 25 scans) (\*\*) 2205

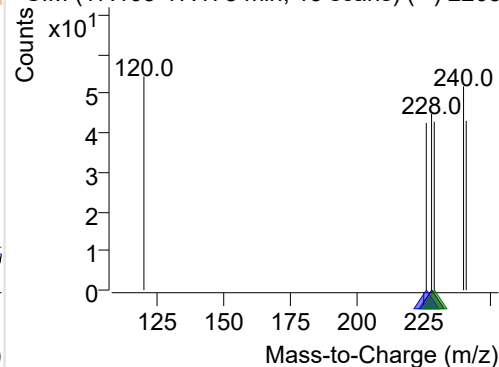
**Chrysene**

+ Selected Ion (228.0) 220506-PAHs-058.D

228.0, 226.0, 229.0

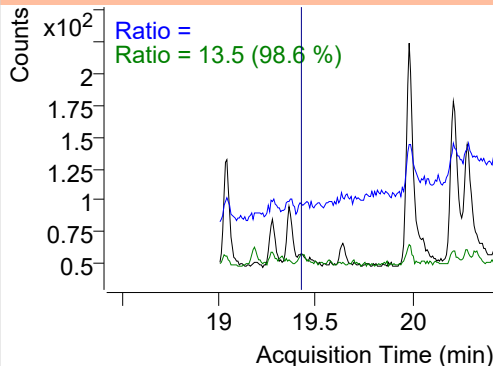
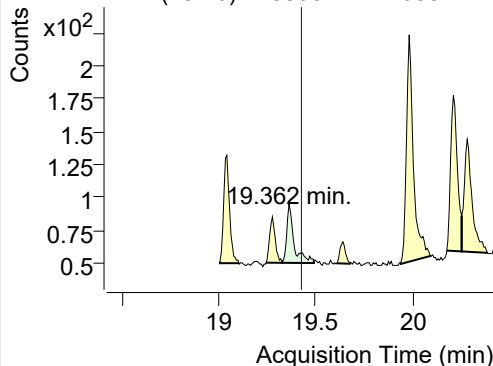


+ SIM (17.103-17.178 min, 13 scans) (\*\*) 2205

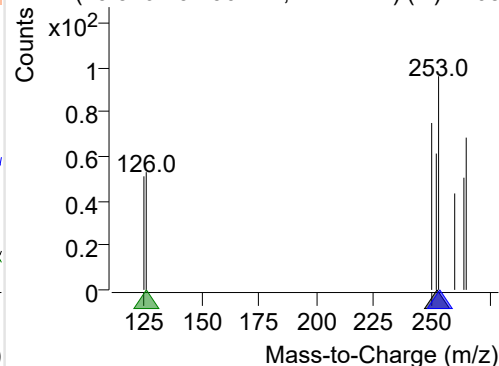
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-058.D

252.0, 253.0, 126.0



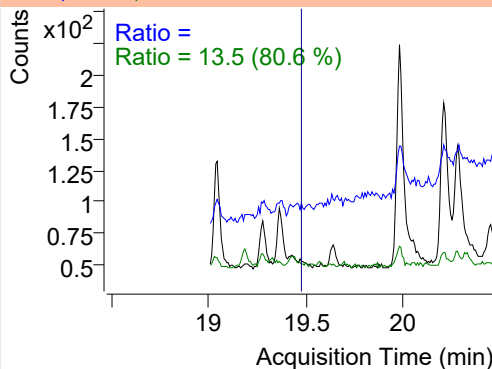
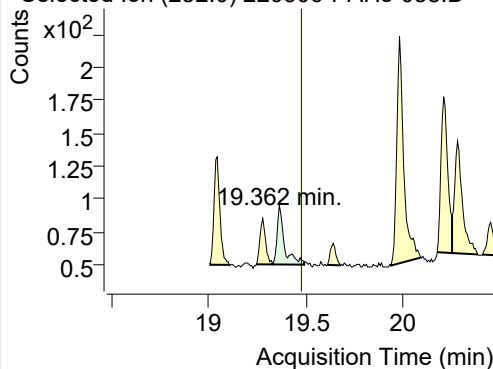
+ SIM (19.326-19.490 min, 24 scans) (\*\*) 2205



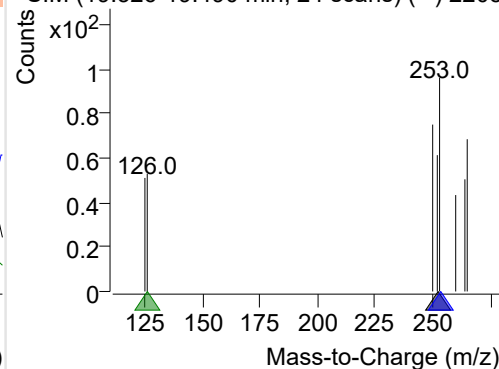
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220506-PAHs-058.D

252.0, 253.0, 126.0

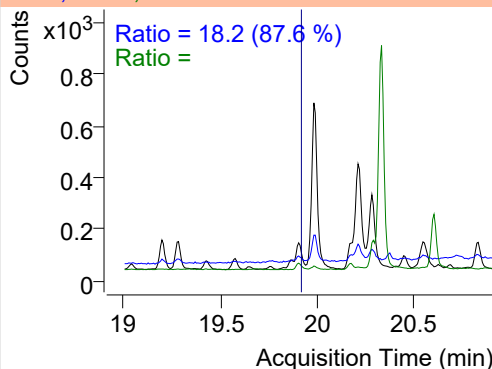
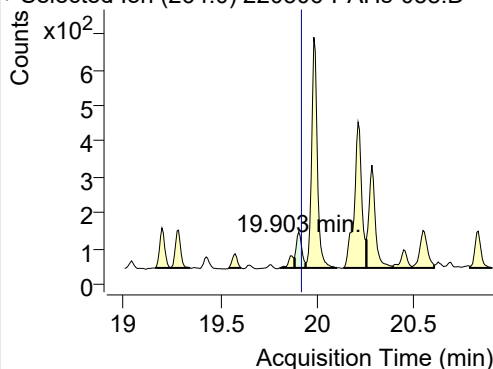


+ SIM (19.326-19.490 min, 24 scans) (\*\*) 2205

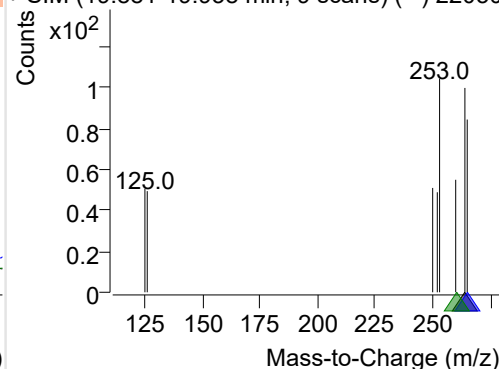
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220506-PAHs-058.D

264.0, 265.0, 260.0

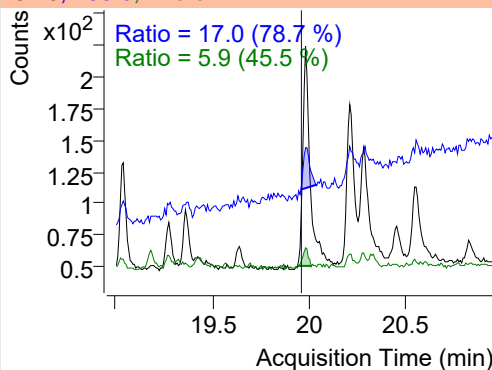
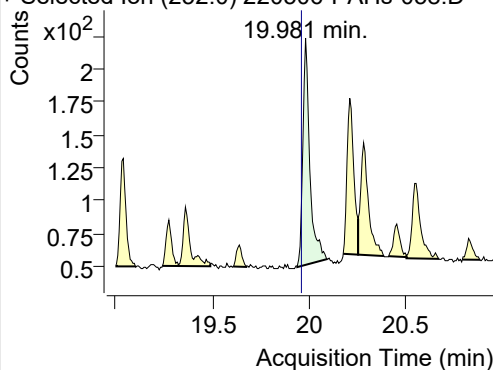


+ SIM (19.881-19.938 min, 9 scans) (\*\*) 22050

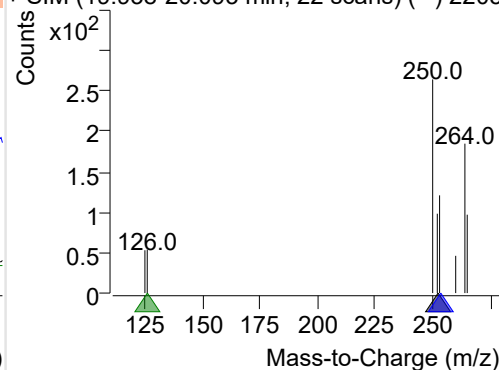
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220506-PAHs-058.D

252.0, 253.0, 126.0

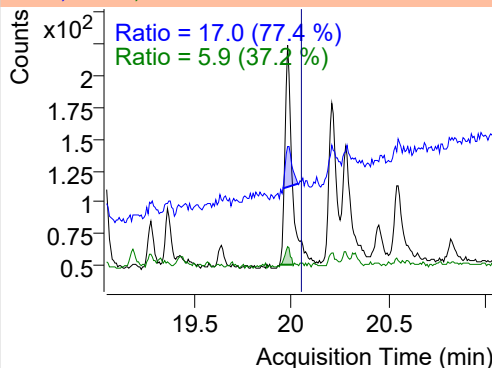
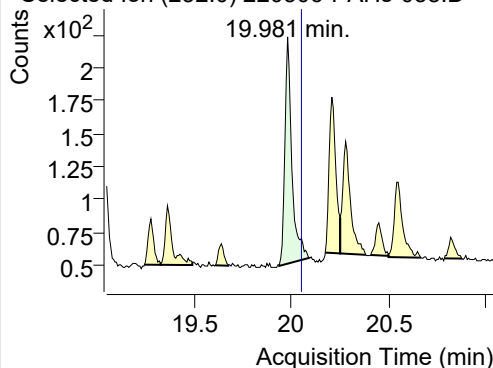


+ SIM (19.938-20.093 min, 22 scans) (\*\*) 2205

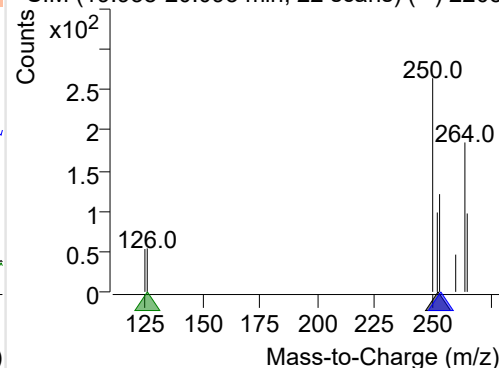
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220506-PAHs-058.D

252.0, 253.0, 126.0



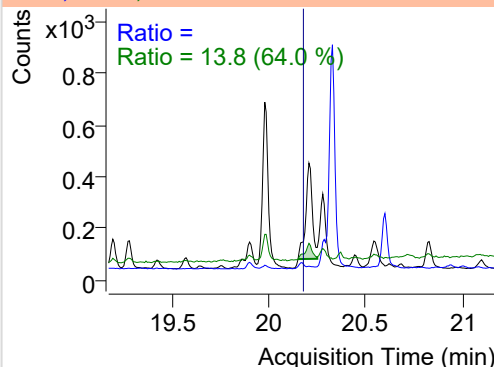
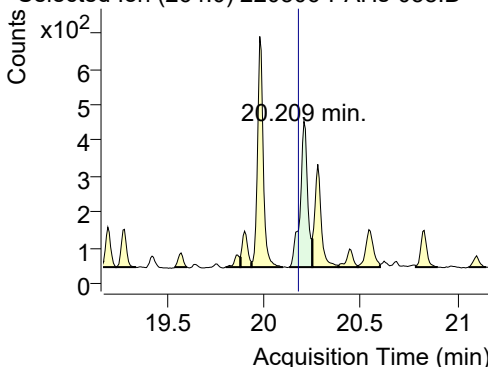
+ SIM (19.938-20.093 min, 22 scans) (\*\*) 2205



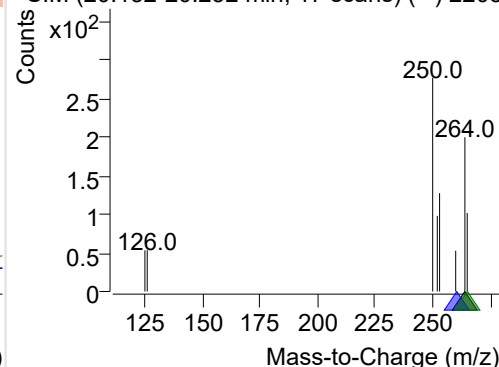
## IS-D12-Perylene

+ Selected Ion (264.0) 220506-PAHs-058.D

264.0, 260.0, 265.0



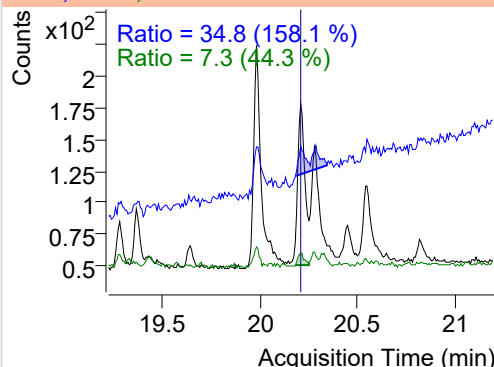
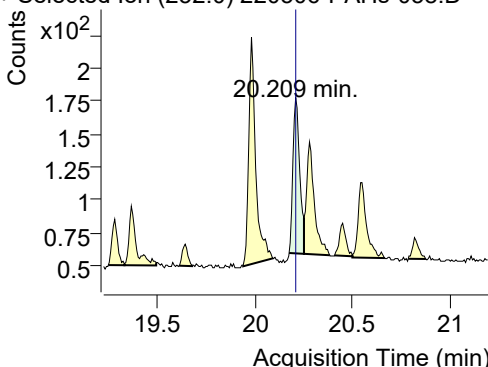
+ SIM (20.132-20.252 min, 17 scans) (\*\*) 2205



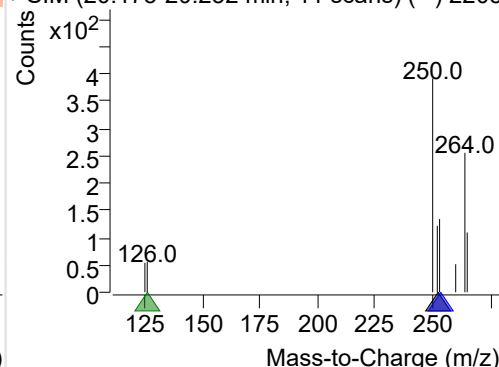
## Perylene

+ Selected Ion (252.0) 220506-PAHs-058.D

252.0, 253.0, 126.0



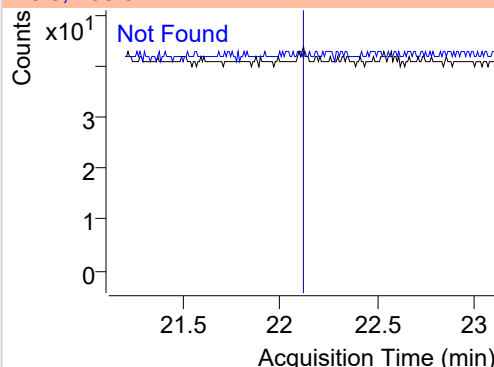
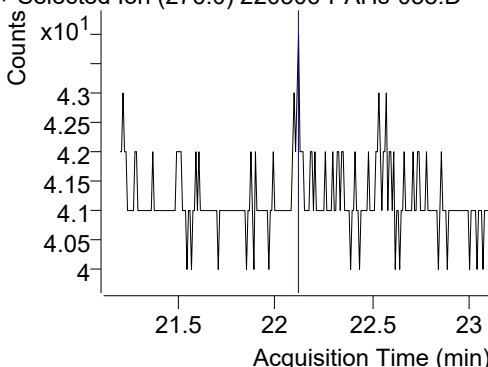
+ SIM (20.175-20.252 min, 11 scans) (\*\*) 2205



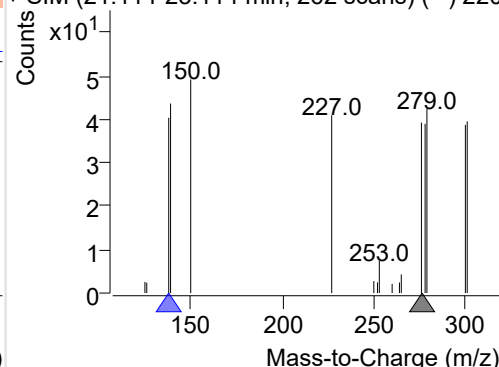
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220506-PAHs-058.D

276.0, 138.0



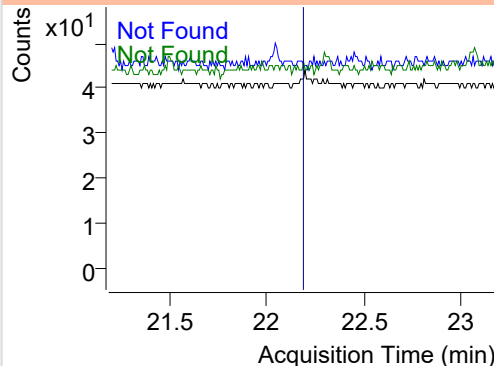
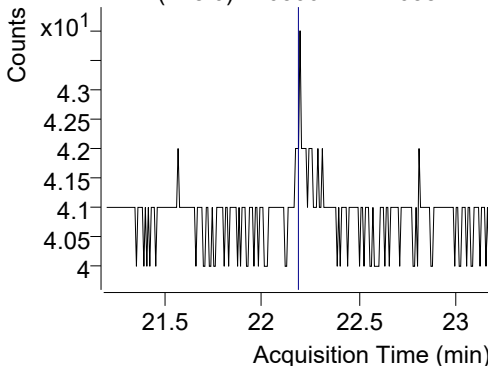
+ SIM (21.114-23.114 min, 262 scans) (\*\*) 220



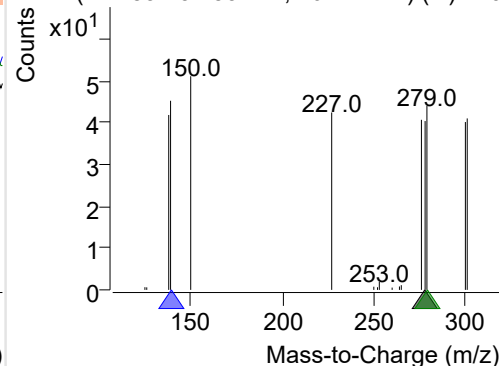
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220506-PAHs-058.D

278.0, 139.0, 279.0



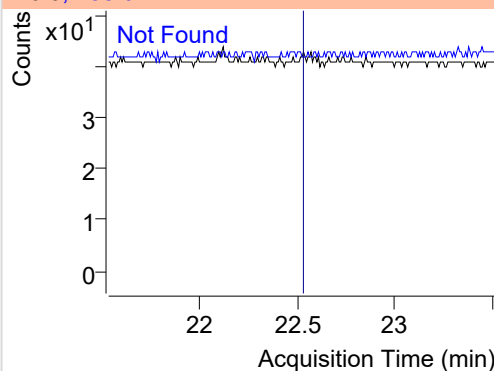
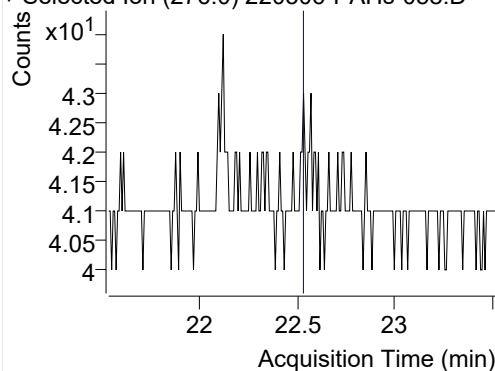
+ SIM (21.183-23.183 min, 262 scans) (\*\*) 220



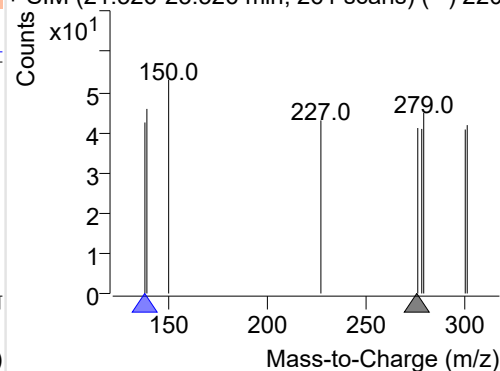
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220506-PAHs-058.D

276.0, 138.0

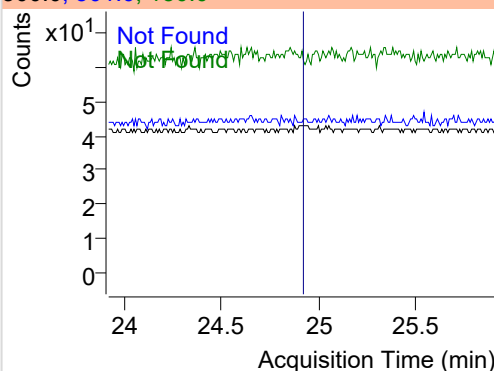
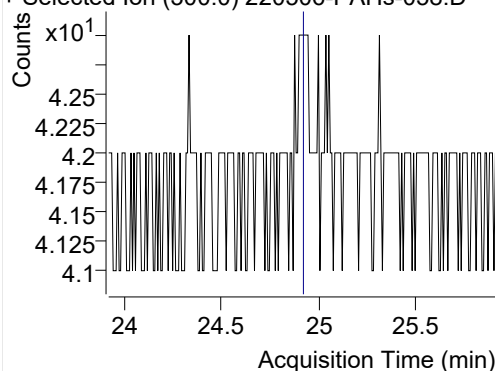


+ SIM (21.526-23.526 min, 261 scans) (\*\*) 220

**Coronene**

+ Selected Ion (300.0) 220506-PAHs-058.D

300.0, 301.0, 150.0



+ SIM (23.916-25.916 min, 261 scans) (\*\*) 220

