

## Quantitative Analysis Sample Based Report

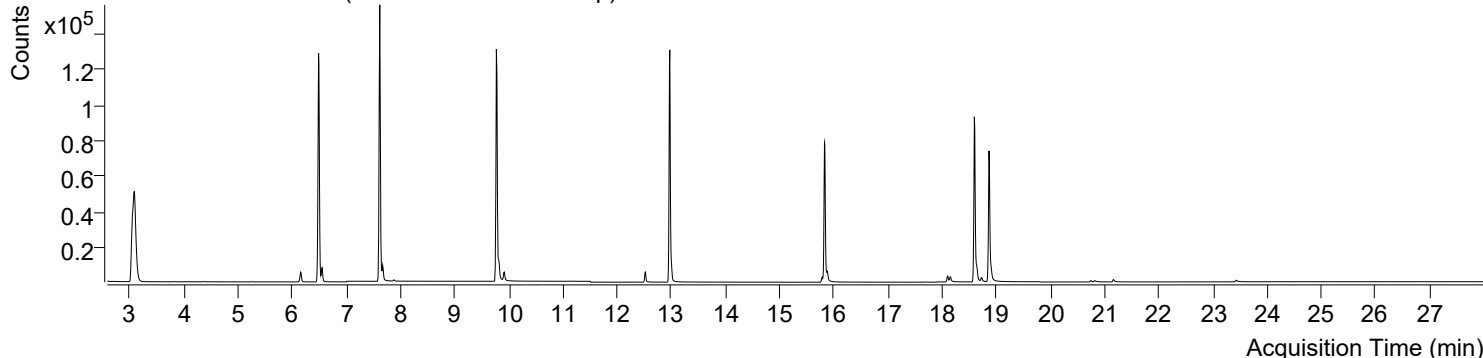


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 1:59:56	Data File	220907-PAHs-004.D
Type	Sample	Name	PAHs-19mix-STD-0.05p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

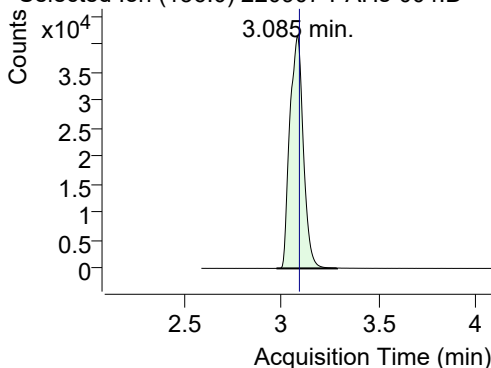
+ TIC SIM 220907-PAHs-004.D (PAHs-19mix-STD-0.05p)



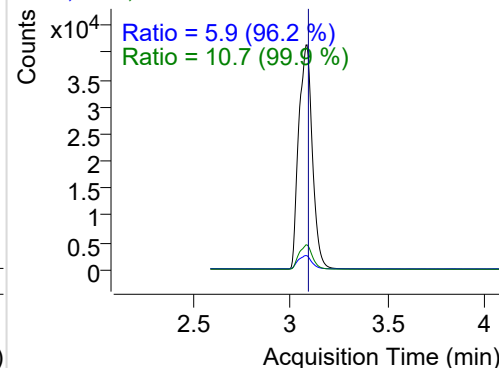
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	200695	41378.78	ND ng/ml	10.7
Naphthalene	3.107	128.0	11744	2486.01	ND ng/ml	12.6
Acenaphthylene	6.155	152.0	8285	4138.55	ND ng/ml	19.6
IS-D10-Acenaphthene	6.487	164.0	111053	61334.96	ND ng/ml	96.3
Acenaphthene	6.552	154.0	4948	2733.89	ND ng/ml	107.1
LSS-D10-Fluorene	7.617	176.0	116248	71188.77	ND ng/ml	92.8
Fluorene	7.669	166.0	6234	3540.11	ND ng/ml	92.2
IS-D10-Phenanthrene	9.769	188.0	185088	102633.4	ND ng/ml	14.9
Phenanthrene	9.822	178.0	9235	4981.83	ND ng/ml	19.1
Anthracene	9.917	178.0	6205	3206.06	ND ng/ml	19.9
Fluoranthene	12.521	202.0	7709	4496.30	ND ng/ml	17.3
LSS-D10-Pyrene	12.971	212.0	152186	98197.60	ND ng/ml	17.2
Pyrene	13.003	202.0	9644	5488.56	ND ng/ml	21.5
Benz(a)anthracene	15.784	228.0	3430	1953.08	ND ng/ml	29.2
IS-D12-Chrysene	15.827	240.0	105576	59065.40	ND ng/ml	18.7
Chrysene	15.882	228.0	5684	2835.98	ND ng/ml	29.6
Benzo(b)fluoranthene	18.103	252.0	3671	2022.97	ND ng/ml	20.7
Benzo(k)fluoranthene	18.153	252.0	3899	1665.34	ND ng/ml	22.3
SS-D12-Benzo(e)pyrene	18.594	264.0	110690	62737.90	ND ng/ml	25.9
Benzo(e)pyrene	18.644	252.0	6740	3067.64	ND ng/ml	21.1
Benzo(a)pyrene	18.730	252.0	2344	1179.12	ND ng/ml	17.0
IS-D12-Perylene	18.865	264.0	92075	50136.00	ND ng/ml	24.5
Perylene	18.900	252.0	4819	2138.61	ND ng/ml	20.7
Indeno(1,2,3-c,d)pyrene	20.744	276.0	1375	616.43	ND ng/ml	18.6
Dibenz(a,h)anthracene	20.820	278.0	1093	391.78	ND ng/ml	23.1
Benzo(g,h,i)perylene	21.164	276.0	2695	1063.14	ND ng/ml	19.3
Coronene	23.431	300.0	1886	586.03	ND ng/ml	22.2

## IS-D8-Naphthalene

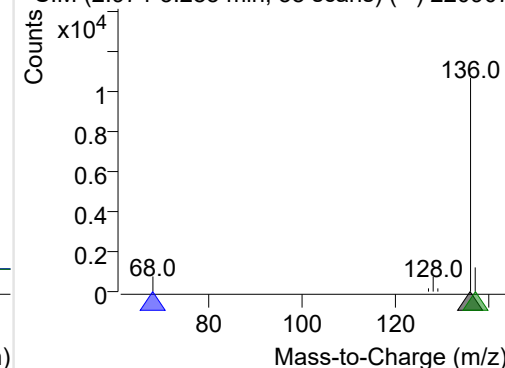
+ Selected Ion (136.0) 220907-PAHs-004.D



136.0, 68.0, 137.0

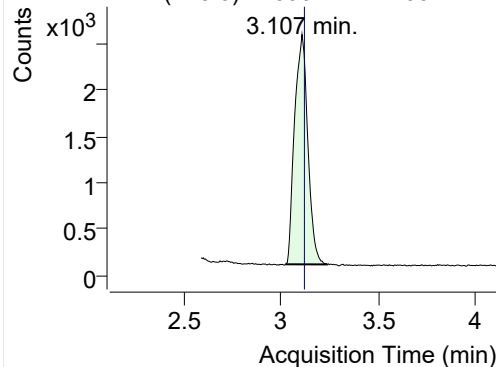


+ SIM (2.974-3.285 min, 58 scans) (\*\*) 220907

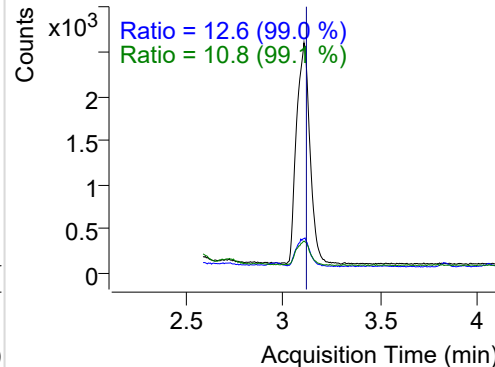


**Naphthalene**

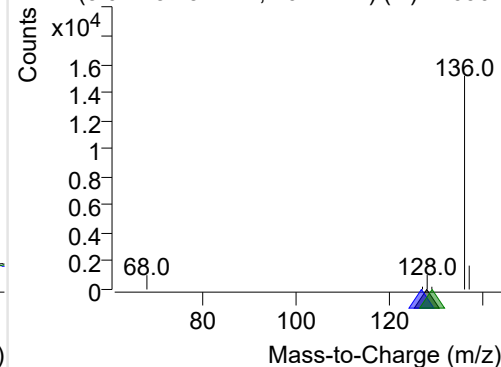
+ Selected Ion (128.0) 220907-PAHs-004.D



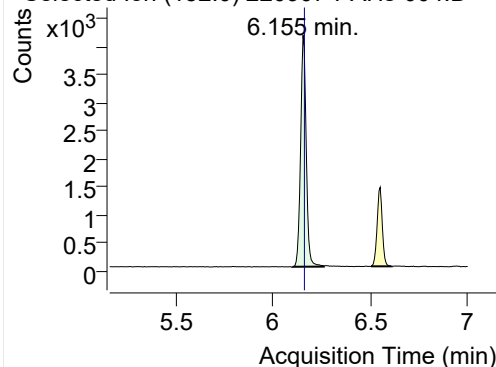
128.0, 127.0, 129.0



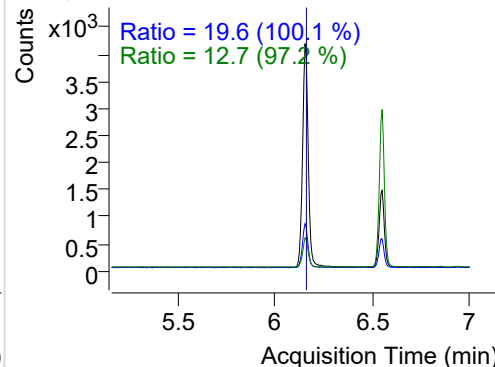
+ SIM (3.022-3.237 min, 40 scans) (\*\*) 220907

**Acenaphthylene**

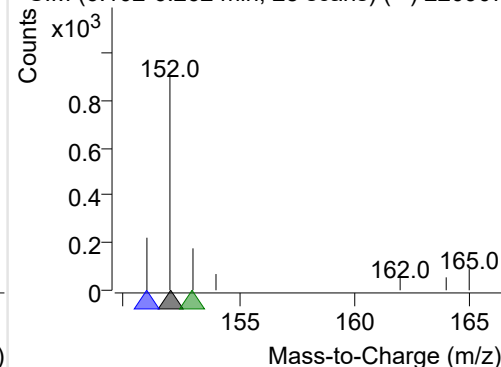
+ Selected Ion (152.0) 220907-PAHs-004.D



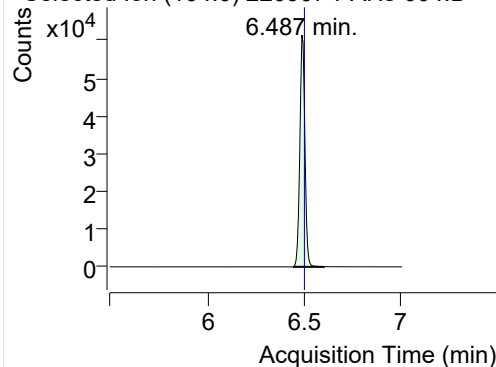
152.0, 151.0, 153.0



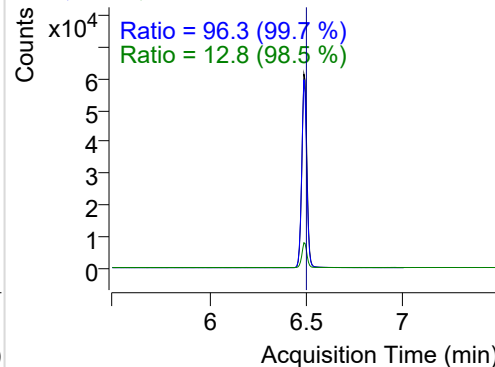
+ SIM (6.102-6.262 min, 28 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

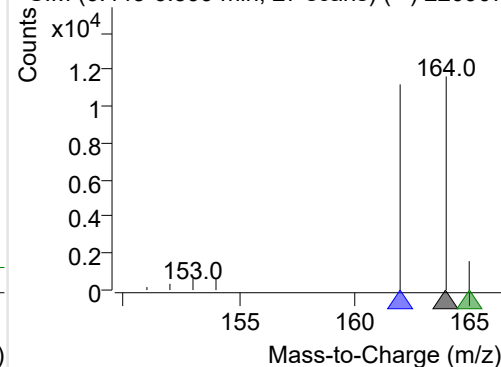
+ Selected Ion (164.0) 220907-PAHs-004.D



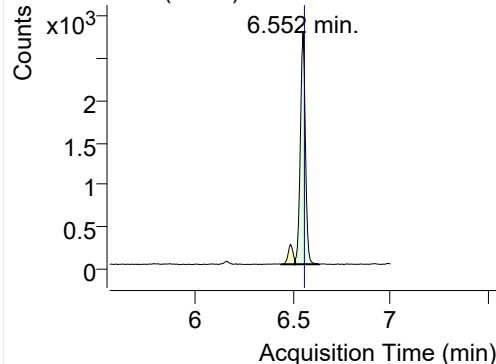
164.0, 162.0, 165.0



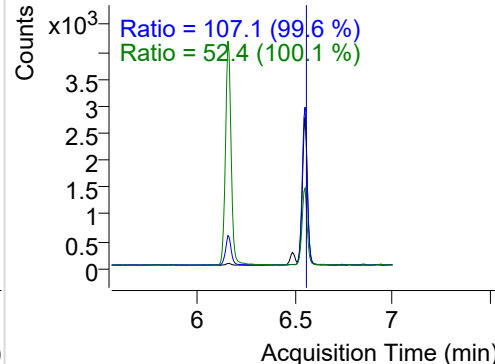
+ SIM (6.445-6.599 min, 27 scans) (\*\*) 220907

**Acenaphthene**

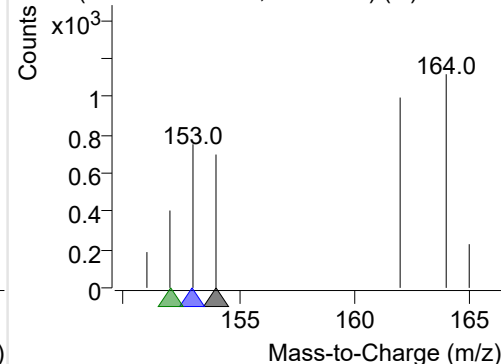
+ Selected Ion (154.0) 220907-PAHs-004.D



154.0, 153.0, 152.0

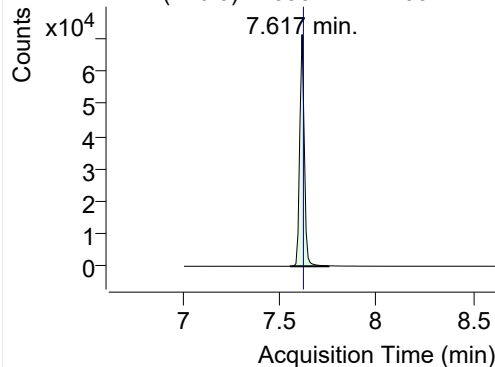


+ SIM (6.510-6.635 min, 22 scans) (\*\*) 220907

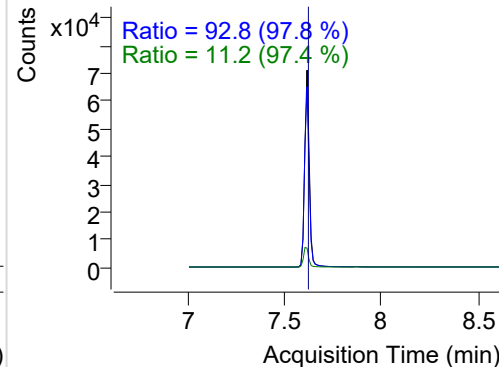


## LSS-D10-Fluorene

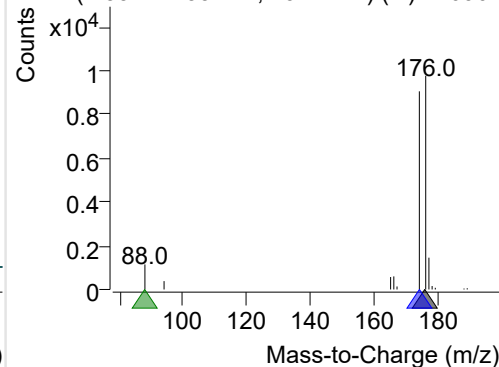
+ Selected Ion (176.0) 220907-PAHs-004.D



176.0, 174.0, 88.0

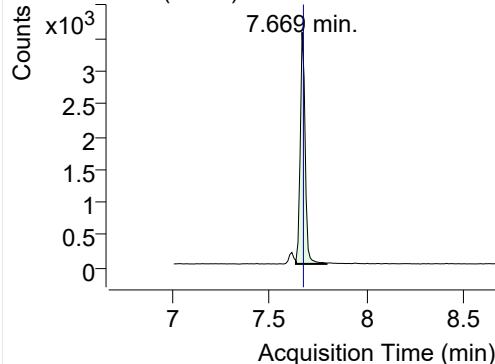


+ SIM (7.554-7.753 min, 19 scans) (\*\*) 220907

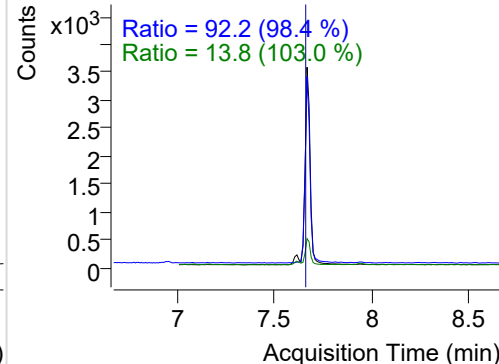


## Fluorene

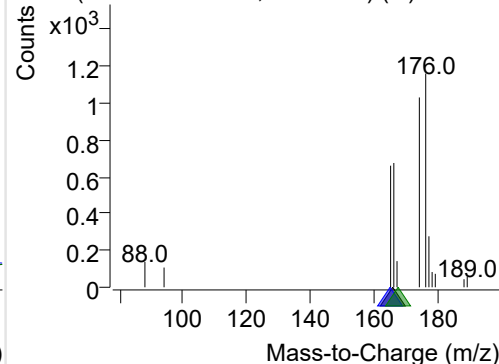
+ Selected Ion (166.0) 220907-PAHs-004.D



166.0, 165.0, 167.0

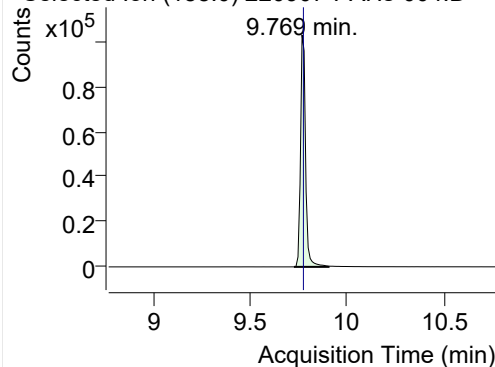


+ SIM (7.638-7.795 min, 16 scans) (\*\*) 220907

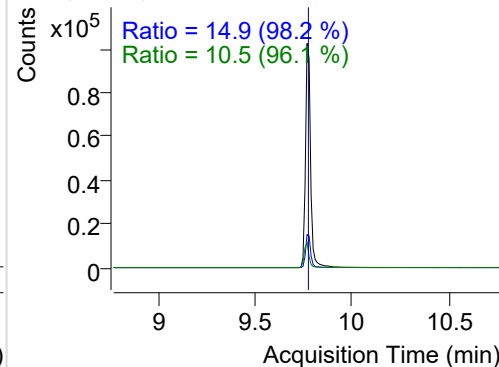


## IS-D10-Phenanthrene

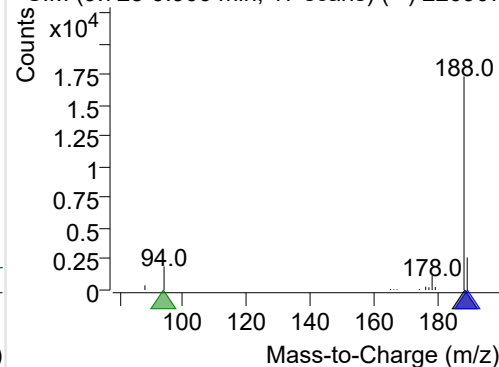
+ Selected Ion (188.0) 220907-PAHs-004.D



188.0, 189.0, 94.0

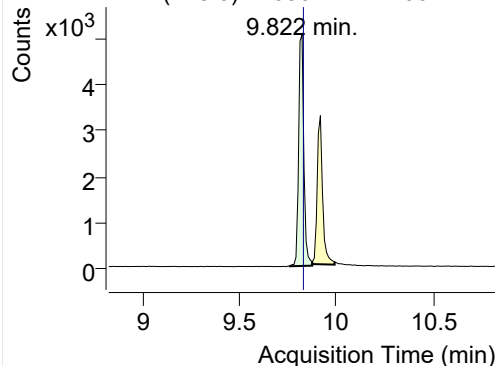


+ SIM (9.728-9.906 min, 17 scans) (\*\*) 220907

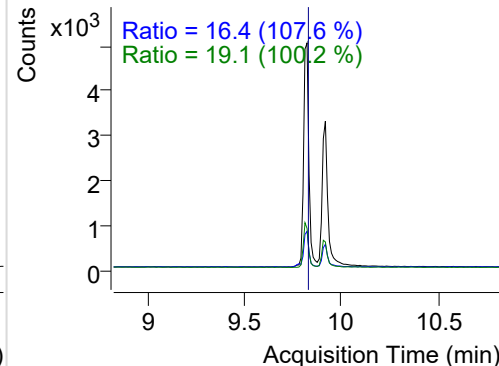


## Phenanthrene

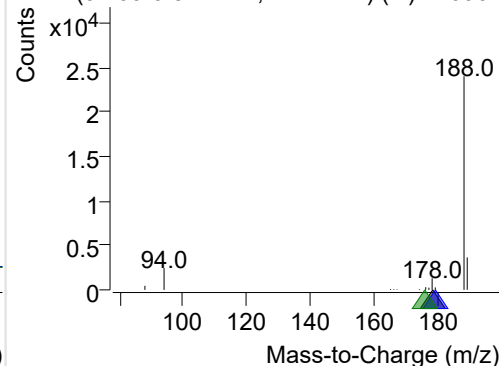
+ Selected Ion (178.0) 220907-PAHs-004.D



178.0, 179.0, 176.0

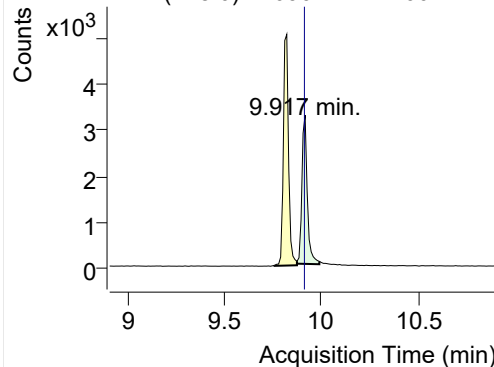


+ SIM (9.759-9.874 min, 12 scans) (\*\*) 220907

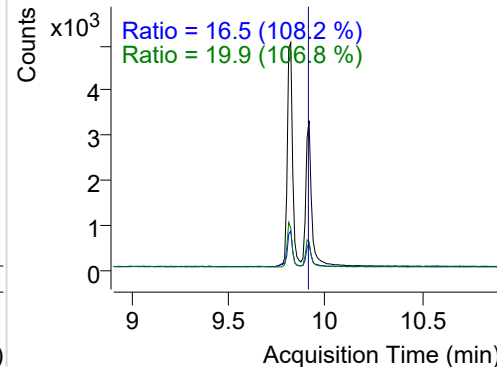


**Anthracene**

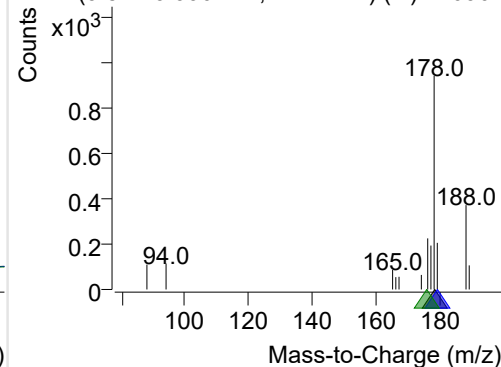
+ Selected Ion (178.0) 220907-PAHs-004.D



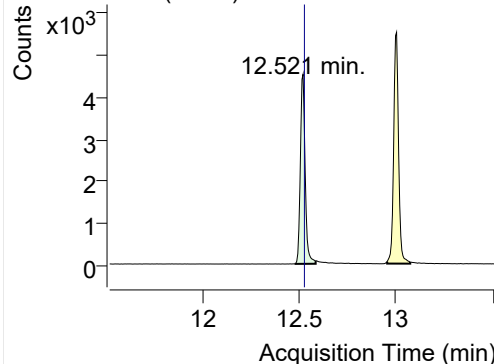
178.0, 179.0, 176.0



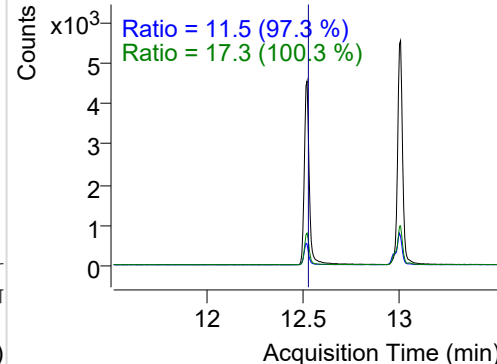
+ SIM (9.874-9.990 min, 12 scans) (\*\*) 220907

**Fluoranthene**

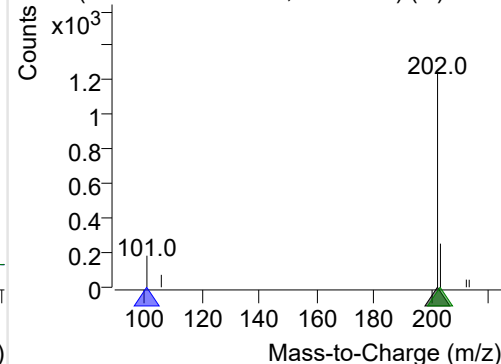
+ Selected Ion (202.0) 220907-PAHs-004.D



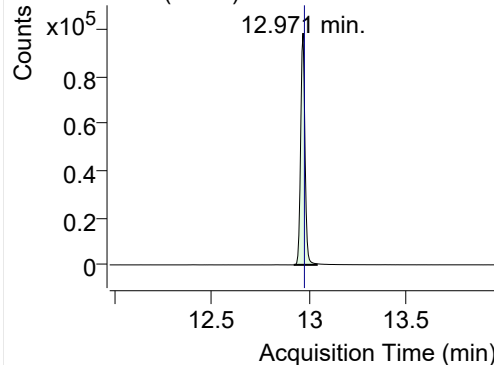
202.0, 101.0, 203.0



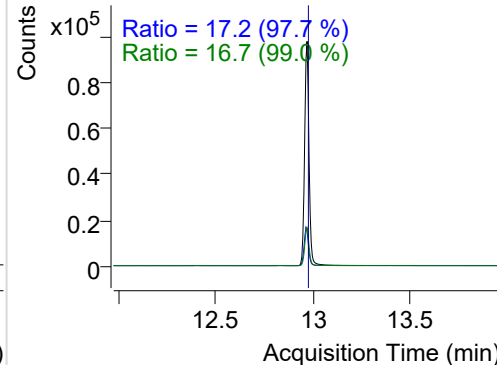
+ SIM (12.478-12.586 min, 20 scans) (\*\*) 2209

**LSS-D10-Pyrene**

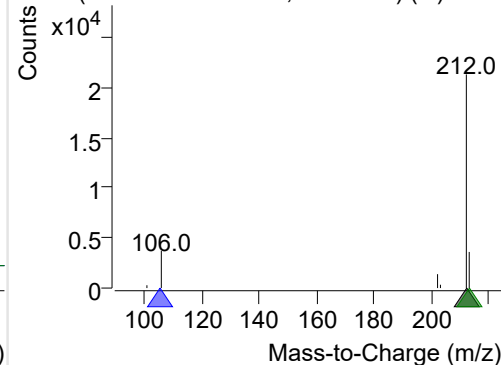
+ Selected Ion (212.0) 220907-PAHs-004.D



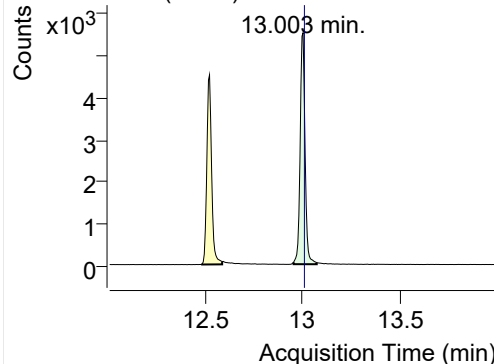
212.0, 106.0, 213.0



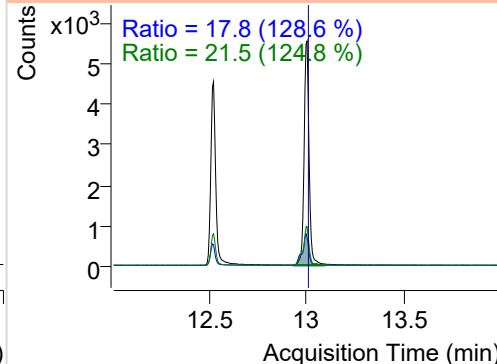
+ SIM (12.923-13.041 min, 22 scans) (\*\*) 2209

**Pyrene**

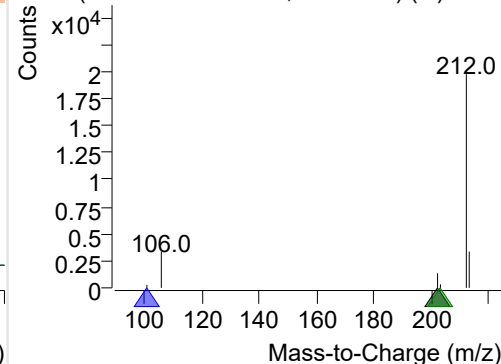
+ Selected Ion (202.0) 220907-PAHs-004.D



202.0, 101.0, 203.0

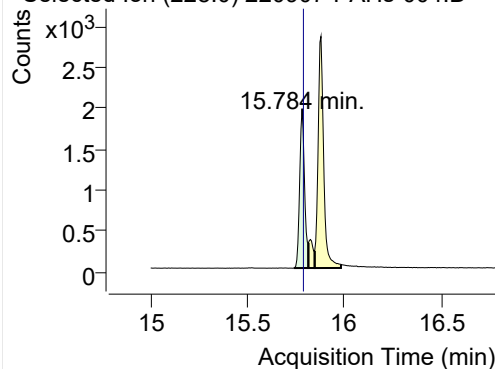


+ SIM (12.954-13.074 min, 23 scans) (\*\*) 2209

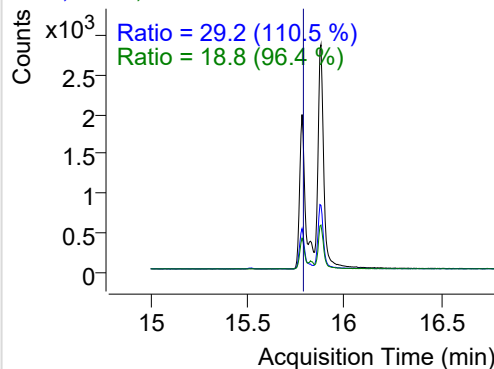


**Benz(a)anthracene**

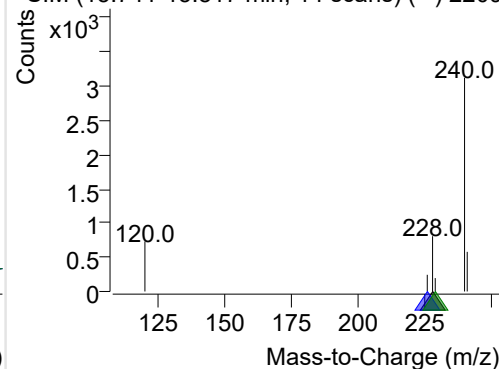
+ Selected Ion (228.0) 220907-PAHs-004.D



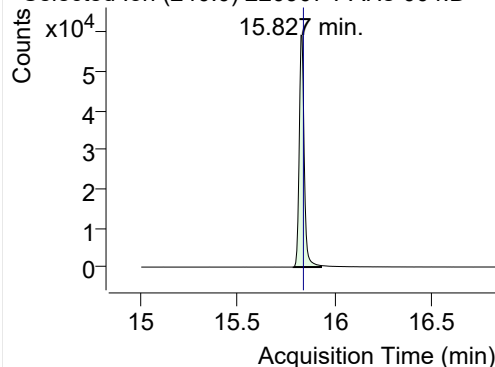
228.0, 226.0, 229.0



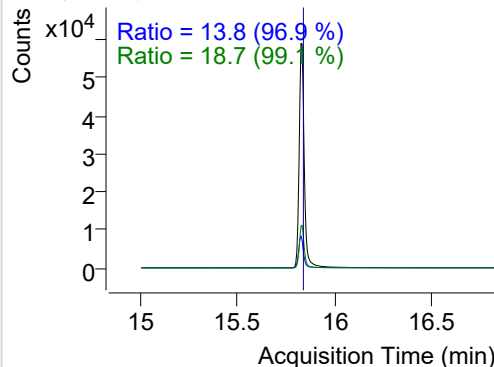
+ SIM (15.741-15.817 min, 14 scans) (\*\*) 2209

**IS-D12-Chrysene**

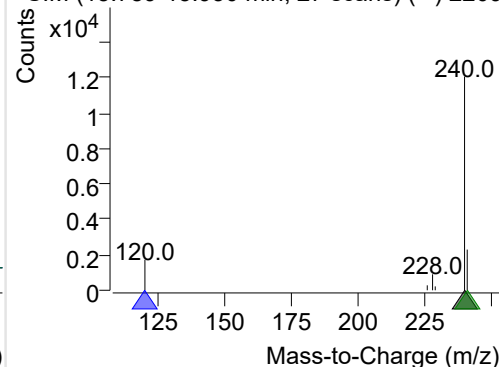
+ Selected Ion (240.0) 220907-PAHs-004.D



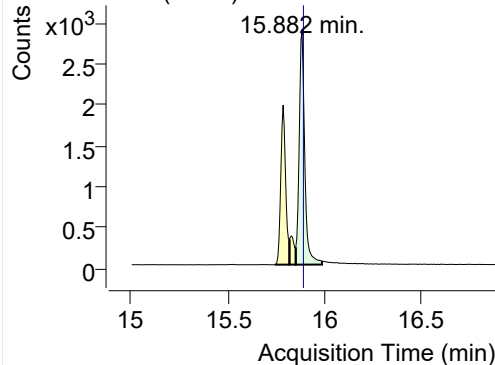
240.0, 120.0, 241.0



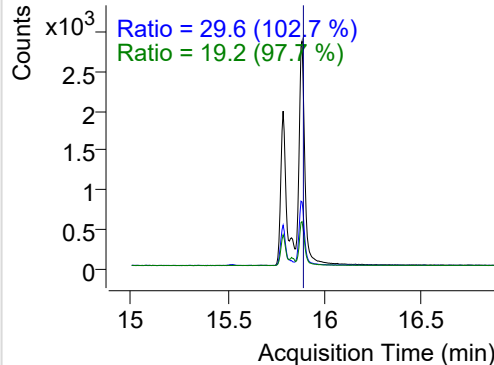
+ SIM (15.789-15.930 min, 27 scans) (\*\*) 2209

**Chrysene**

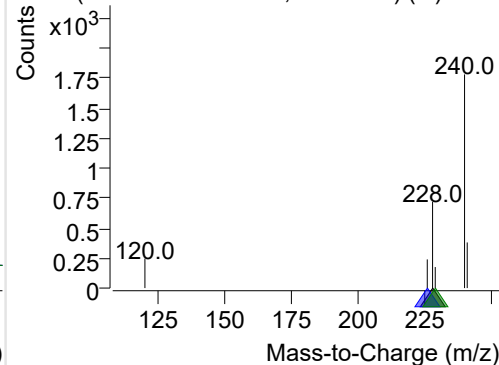
+ Selected Ion (228.0) 220907-PAHs-004.D



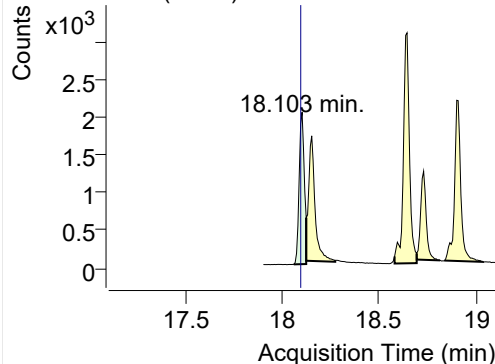
228.0, 226.0, 229.0



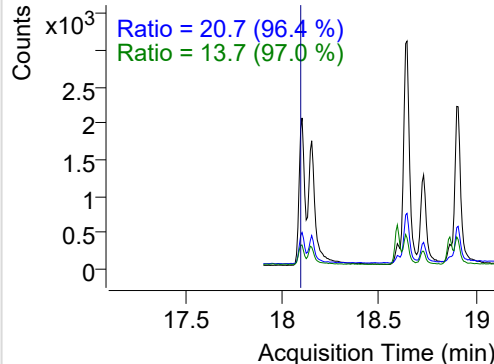
+ SIM (15.849-15.985 min, 26 scans) (\*\*) 2209

**Benzo(b)fluoranthene**

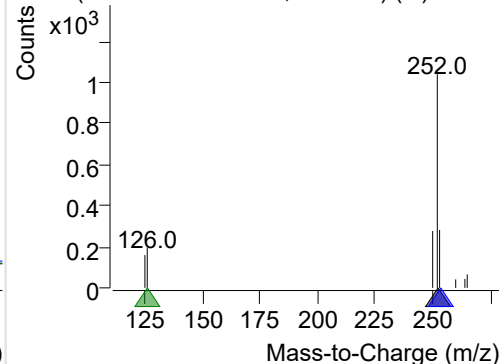
+ Selected Ion (252.0) 220907-PAHs-004.D



252.0, 253.0, 126.0

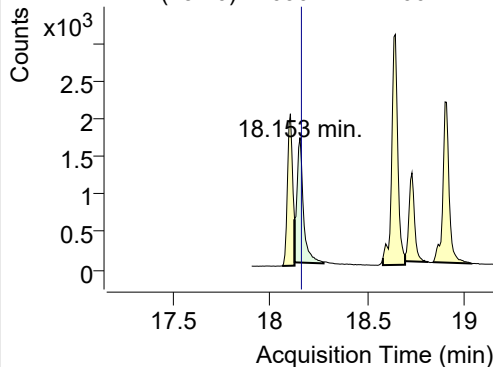


+ SIM (18.060-18.124 min, 9 scans) (\*\*) 22090

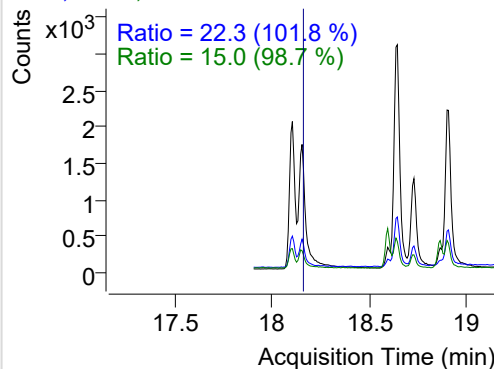


**Benzo(k)fluoranthene**

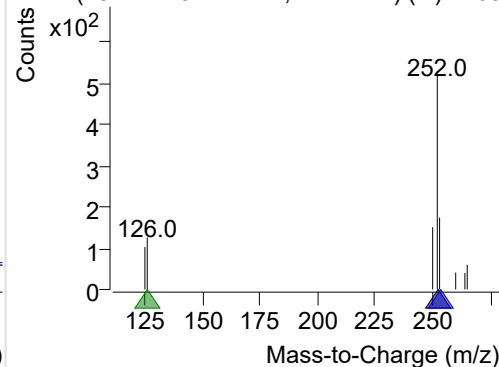
+ Selected Ion (252.0) 220907-PAHs-004.D



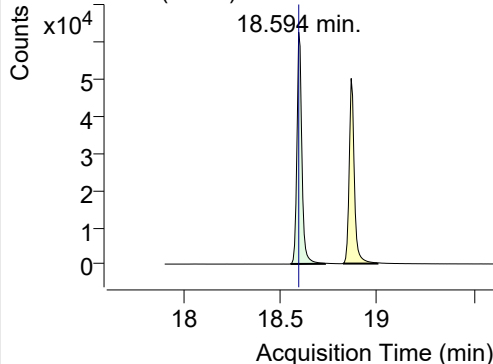
252.0, 253.0, 126.0



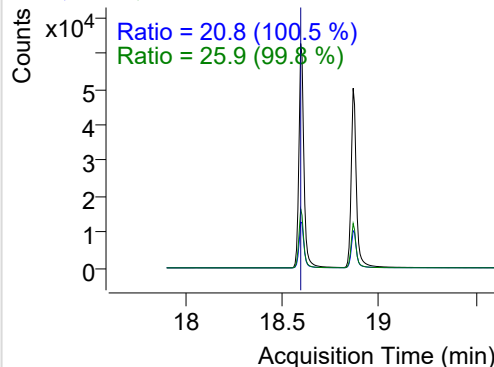
+ SIM (18.124-18.274 min, 22 scans) (\*\*) 2209

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

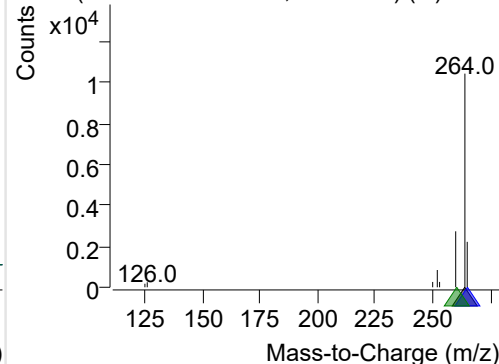
+ Selected Ion (264.0) 220907-PAHs-004.D



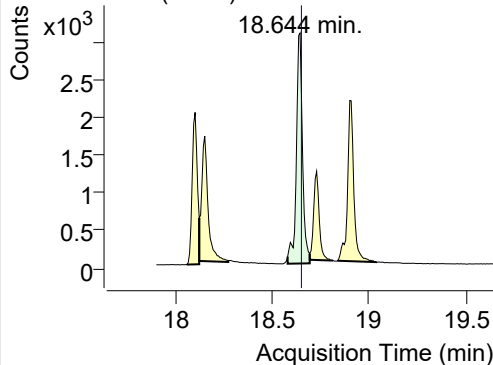
264.0, 265.0, 260.0



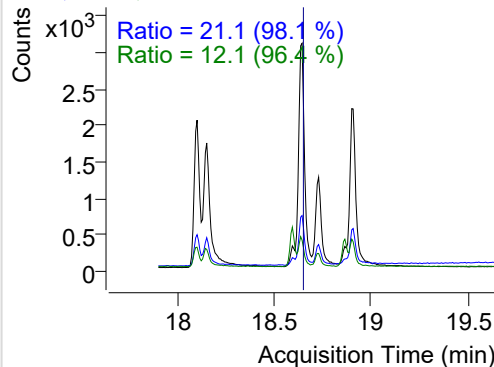
+ SIM (18.552-18.730 min, 25 scans) (\*\*) 2209

**Benzo(e)pyrene**

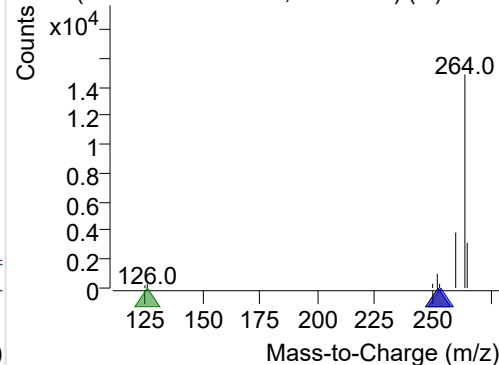
+ Selected Ion (252.0) 220907-PAHs-004.D



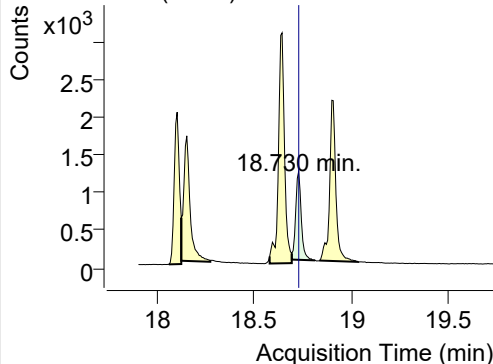
252.0, 253.0, 126.0



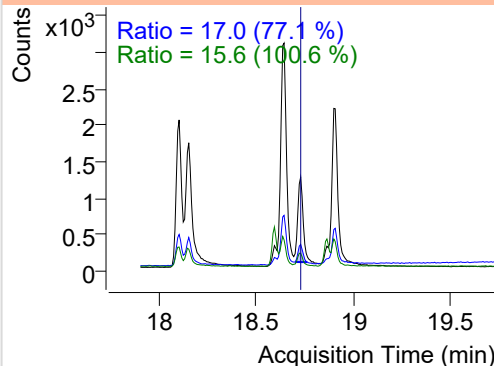
+ SIM (18.580-18.694 min, 17 scans) (\*\*) 2209

**Benzo(a)pyrene**

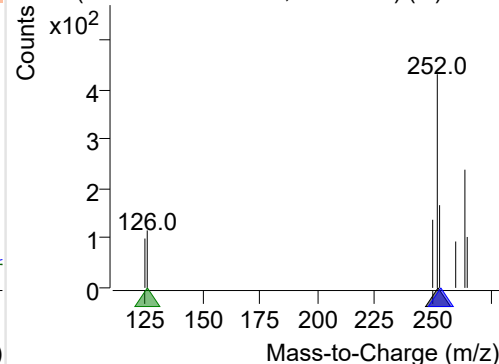
+ Selected Ion (252.0) 220907-PAHs-004.D



252.0, 253.0, 126.0

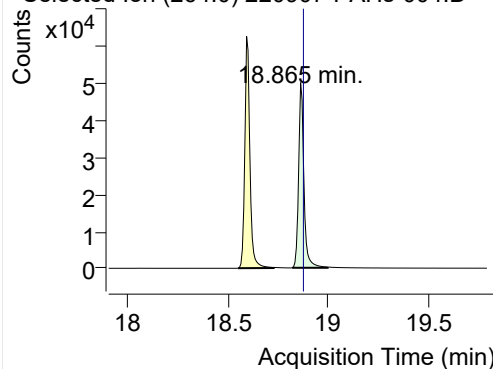


+ SIM (18.694-18.815 min, 17 scans) (\*\*) 2209

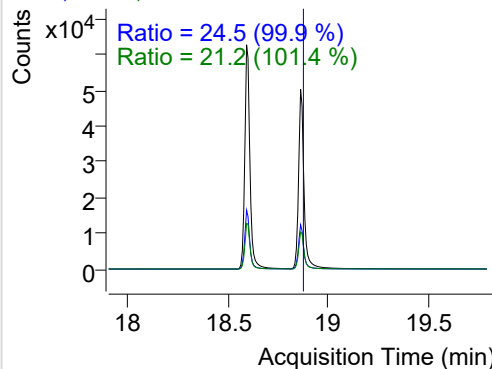


## IS-D12-Perylene

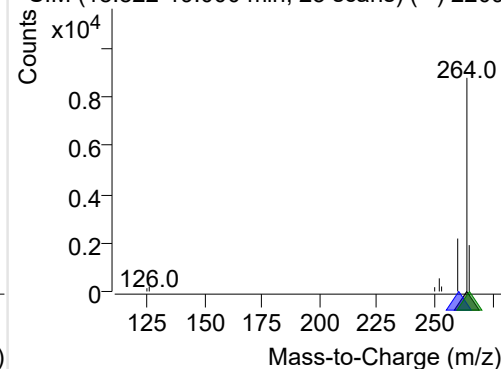
+ Selected Ion (264.0) 220907-PAHs-004.D



264.0, 260.0, 265.0

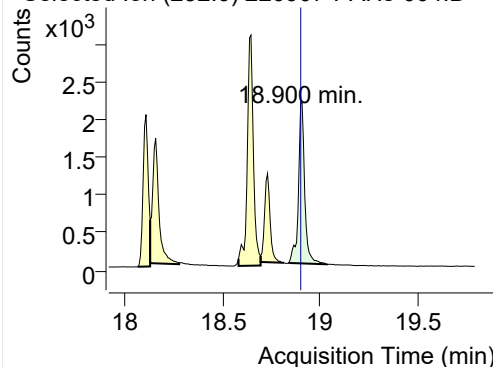


+ SIM (18.822-19.000 min, 25 scans) (\*\*) 2209

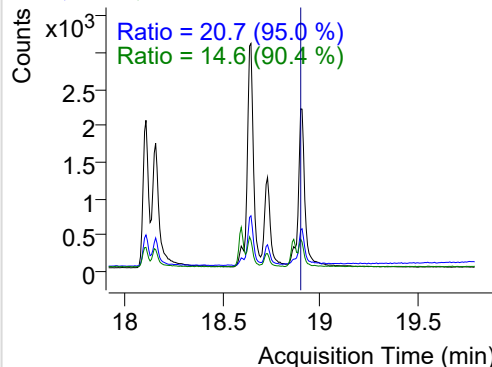


## Perylene

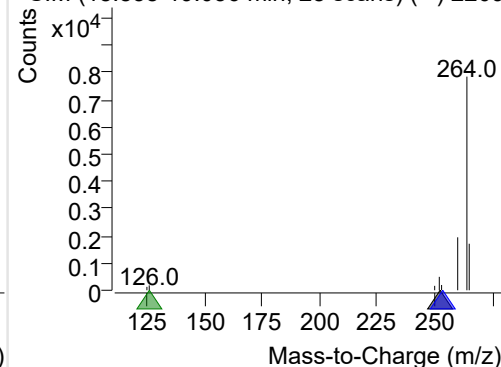
+ Selected Ion (252.0) 220907-PAHs-004.D



252.0, 253.0, 126.0

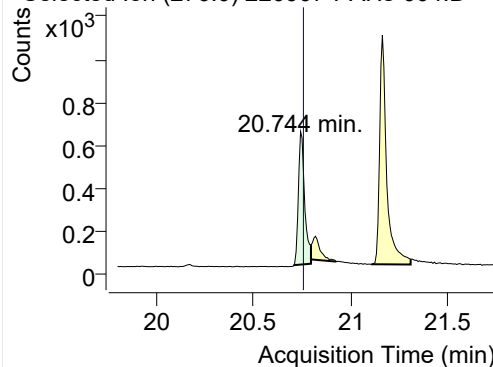


+ SIM (18.838-19.036 min, 28 scans) (\*\*) 2209

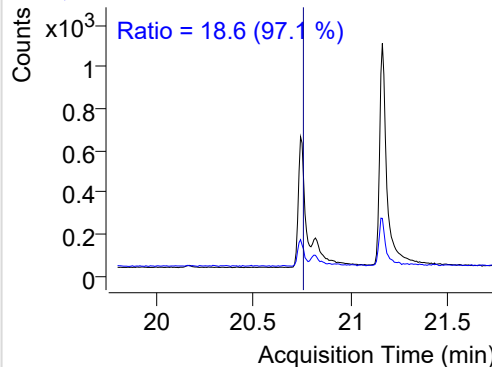


## Indeno(1,2,3-c,d)pyrene

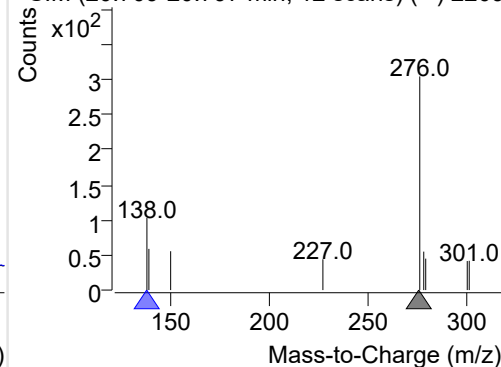
+ Selected Ion (276.0) 220907-PAHs-004.D



276.0, 138.0

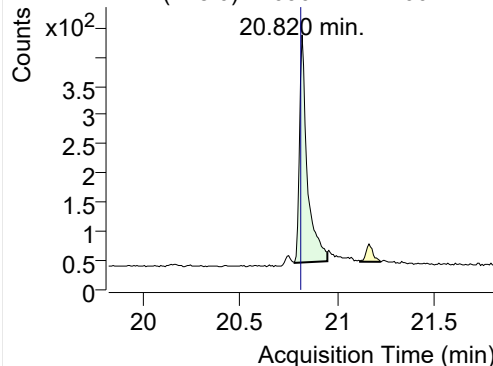


+ SIM (20.709-20.797 min, 12 scans) (\*\*) 2209

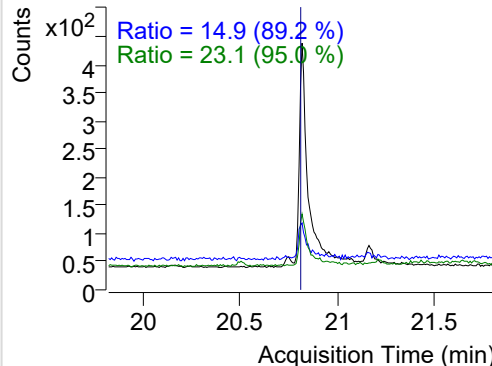


## Dibenz(a,h)anthracene

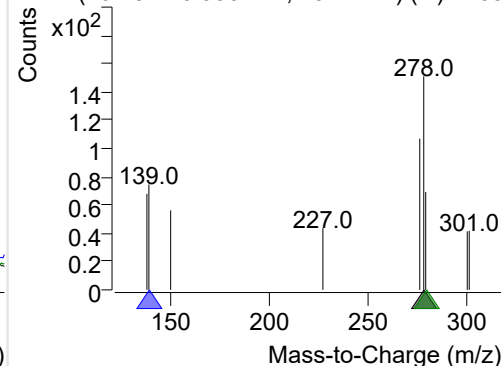
+ Selected Ion (278.0) 220907-PAHs-004.D



278.0, 139.0, 279.0

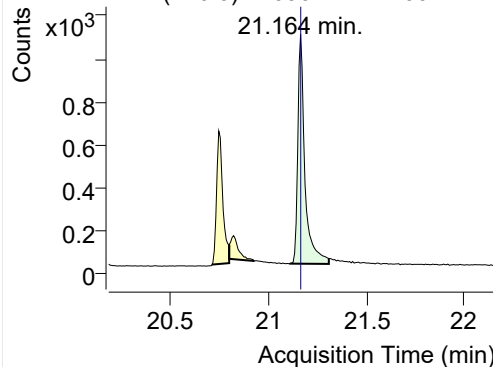


+ SIM (20.782-20.950 min, 23 scans) (\*\*) 2209

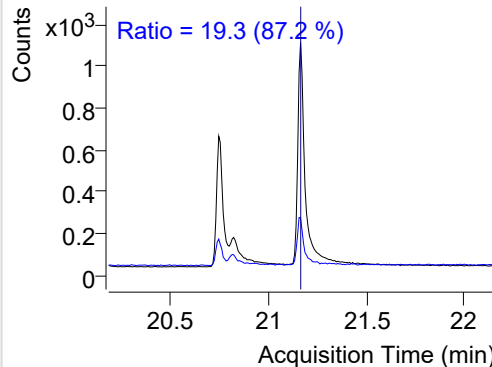


**Benzo(g,h,i)perylene**

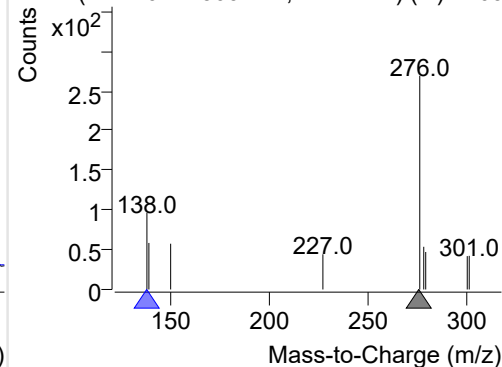
+ Selected Ion (276.0) 220907-PAHs-004.D



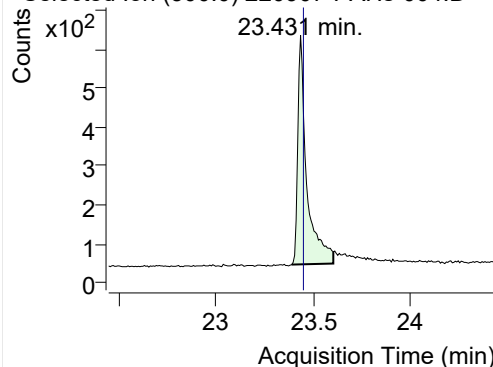
276.0, 138.0



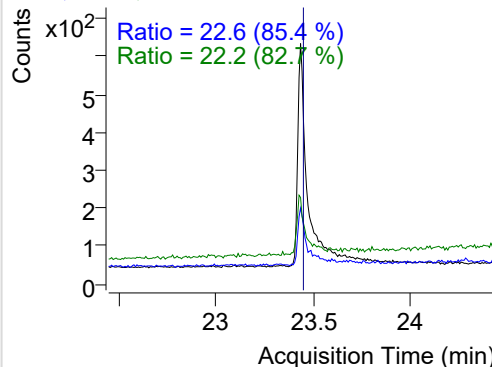
+ SIM (21.110-21.309 min, 27 scans) (\*\*) 2209

**Coronene**

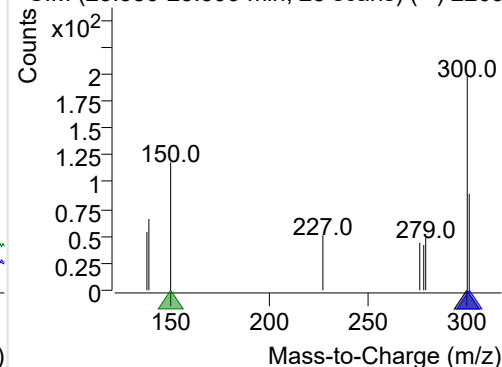
+ Selected Ion (300.0) 220907-PAHs-004.D



300.0, 301.0, 150.0



+ SIM (23.386-23.599 min, 28 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

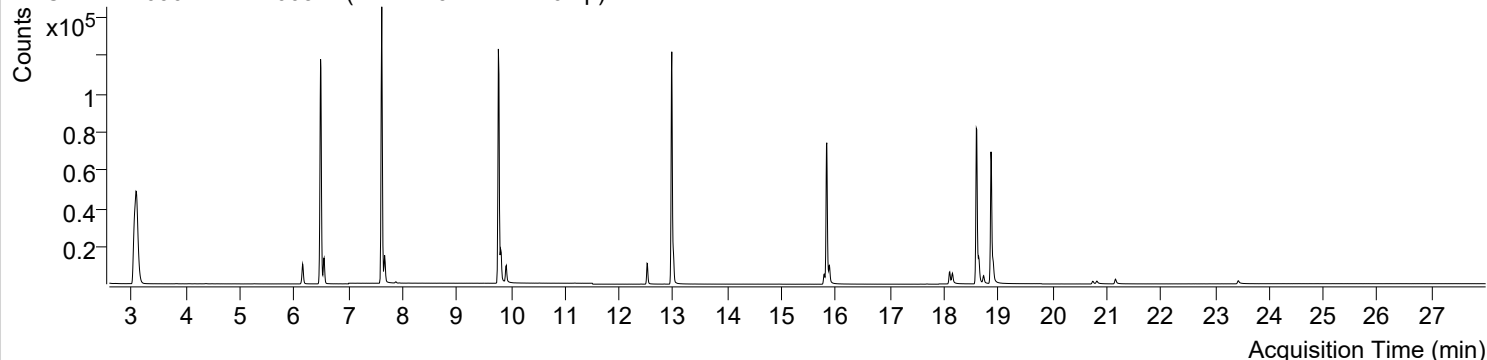


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 2:31:01	Data File	220907-PAHs-005.D
Type	Sample	Name	PAHs-19mix-STD-0.1p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

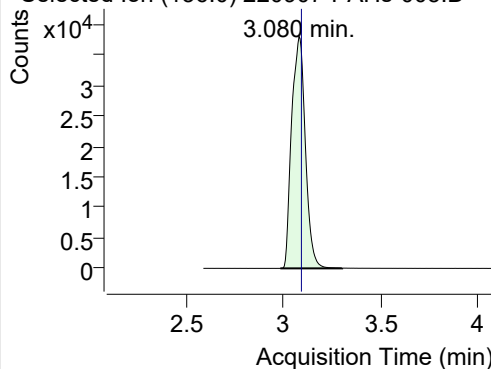
+ TIC SIM 220907-PAHs-005.D (PAHs-19mix-STD-0.1p)



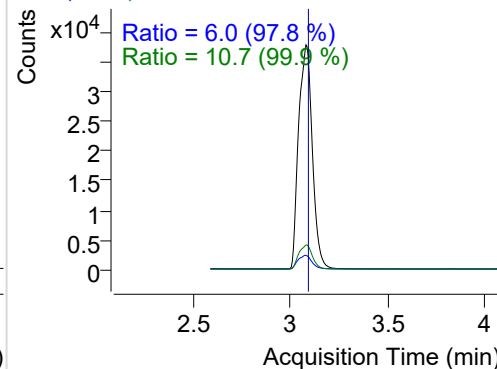
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	185646	37884.05	ND ng/ml	10.7
Naphthalene	3.107	128.0	20471	4177.85	ND ng/ml	12.3
Acenaphthylene	6.155	152.0	15281	7811.38	ND ng/ml	19.6
IS-D10-Acenaphthene	6.487	164.0	103390	55856.51	ND ng/ml	96.5
Acenaphthene	6.552	154.0	8773	4767.53	ND ng/ml	107.7
LSS-D10-Fluorene	7.617	176.0	108293	66187.49	ND ng/ml	93.0
Fluorene	7.669	166.0	10991	6301.27	ND ng/ml	93.9
IS-D10-Phenanthrene	9.770	188.0	173449	96161.82	ND ng/ml	15.0
Phenanthrene	9.822	178.0	16692	8997.39	ND ng/ml	19.2
Anthracene	9.917	178.0	11708	6017.66	ND ng/ml	19.7
Fluoranthene	12.515	202.0	14329	8428.87	ND ng/ml	17.1
LSS-D10-Pyrene	12.971	212.0	141805	90748.01	ND ng/ml	17.3
Pyrene	13.003	202.0	17425	9920.48	ND ng/ml	19.7
Benz(a)anthracene	15.784	228.0	7096	3564.77	ND ng/ml	26.1
IS-D12-Chrysene	15.833	240.0	100516	55915.00	ND ng/ml	18.7
Chrysene	15.882	228.0	10616	5498.35	ND ng/ml	28.7
Benzo(b)fluoranthene	18.103	252.0	6857	3759.70	ND ng/ml	21.3
Benzo(k)fluoranthene	18.153	252.0	7485	3241.67	ND ng/ml	20.9
SS-D12-Benzo(e)pyrene	18.594	264.0	105240	54852.05	ND ng/ml	26.0
Benzo(e)pyrene	18.644	252.0	12093	5717.35	ND ng/ml	20.6
Benzo(a)pyrene	18.730	252.0	4575	2230.96	ND ng/ml	19.9
IS-D12-Perylene	18.865	264.0	88136	46942.00	ND ng/ml	24.2
Perylene	18.908	252.0	8768	4131.34	ND ng/ml	21.7
Indeno(1,2,3-c,d)pyrene	20.744	276.0	2573	1106.06	ND ng/ml	19.4
Dibenz(a,h)anthracene	20.820	278.0	2149	769.36	ND ng/ml	24.3
Benzo(g,h,i)perylene	21.164	276.0	4965	1958.92	ND ng/ml	20.5
Coronene	23.431	300.0	3407	1082.27	ND ng/ml	24.8

## IS-D8-Naphthalene

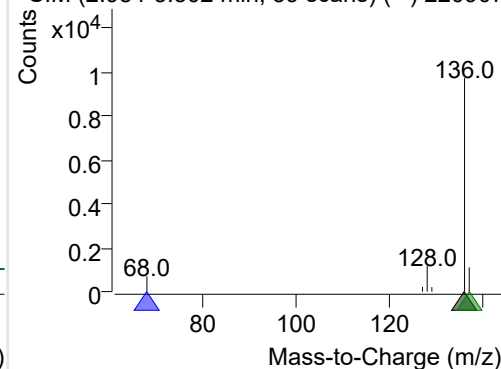
+ Selected Ion (136.0) 220907-PAHs-005.D



136.0, 68.0, 137.0

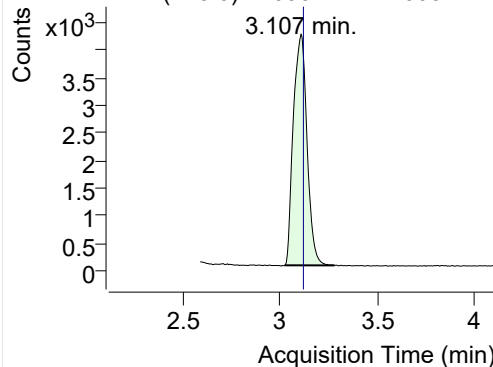


+ SIM (2.984-3.302 min, 59 scans) (\*\*) 220907

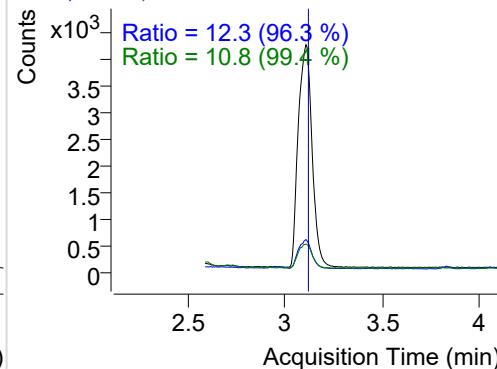


**Naphthalene**

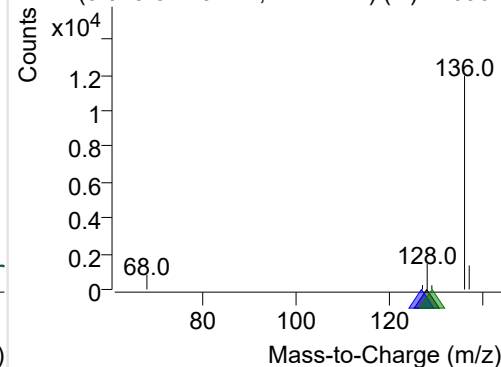
+ Selected Ion (128.0) 220907-PAHs-005.D



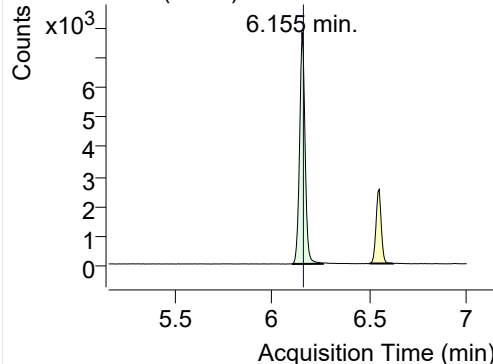
128.0, 127.0, 129.0



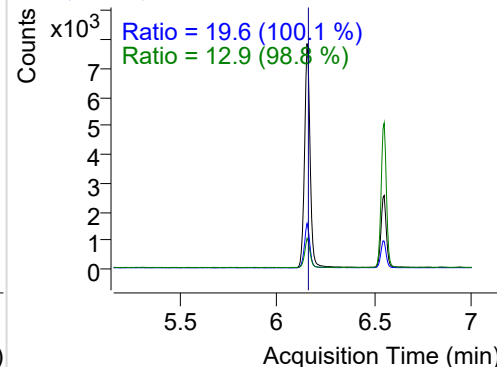
+ SIM (3.023-3.279 min, 47 scans) (\*\*) 220907

**Acenaphthylene**

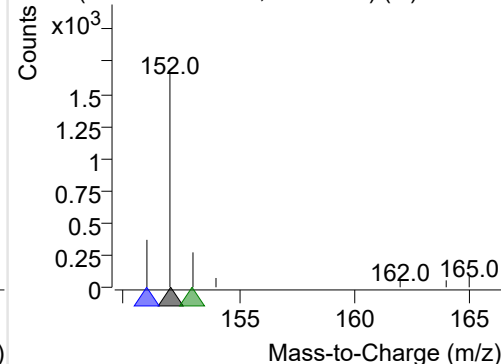
+ Selected Ion (152.0) 220907-PAHs-005.D



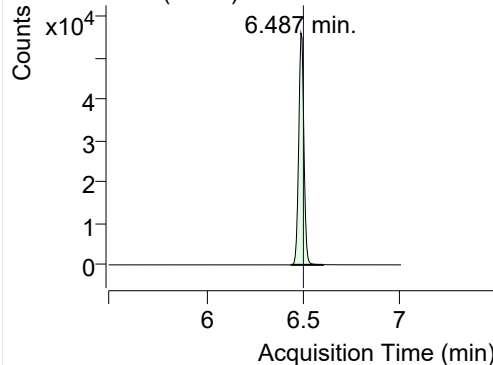
152.0, 151.0, 153.0



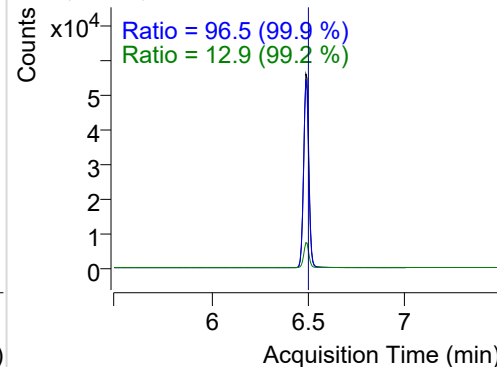
+ SIM (6.103-6.262 min, 27 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

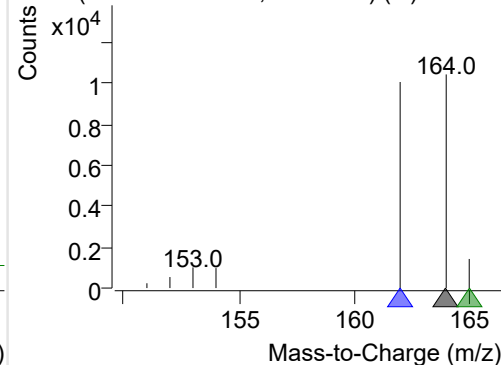
+ Selected Ion (164.0) 220907-PAHs-005.D



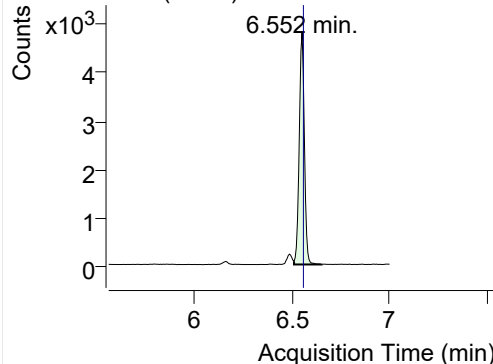
164.0, 162.0, 165.0



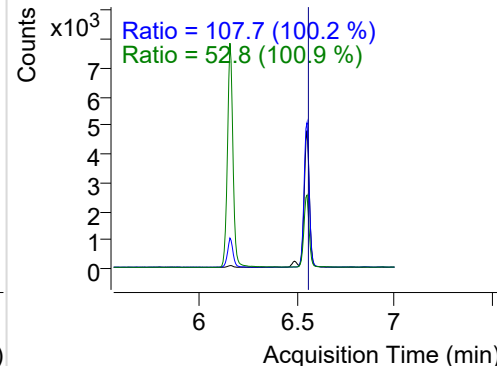
+ SIM (6.434-6.599 min, 28 scans) (\*\*) 220907

**Acenaphthene**

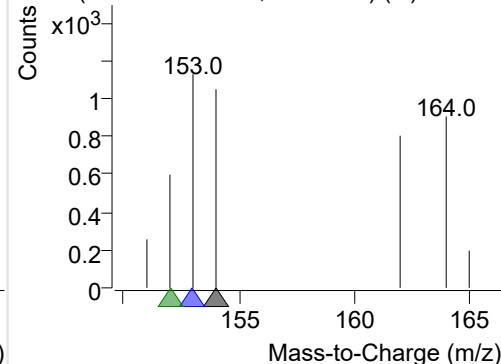
+ Selected Ion (154.0) 220907-PAHs-005.D



154.0, 153.0, 152.0

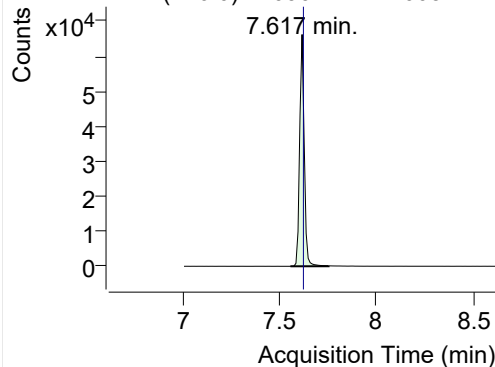


+ SIM (6.510-6.653 min, 25 scans) (\*\*) 220907

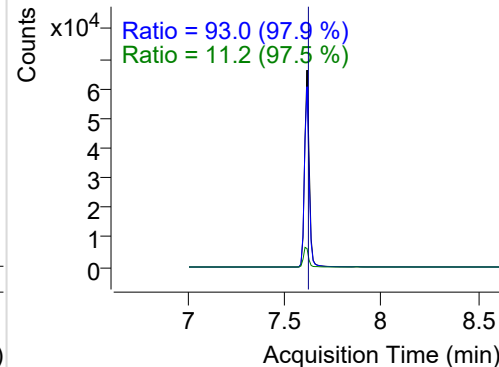


## LSS-D10-Fluorene

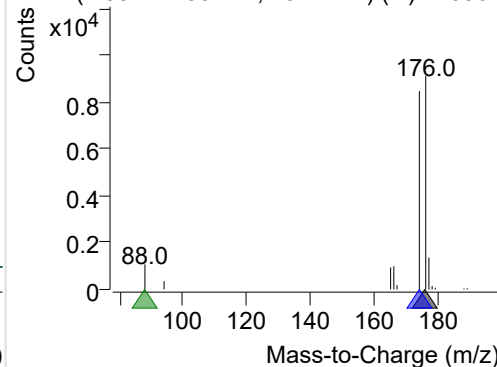
+ Selected Ion (176.0) 220907-PAHs-005.D



176.0, 174.0, 88.0

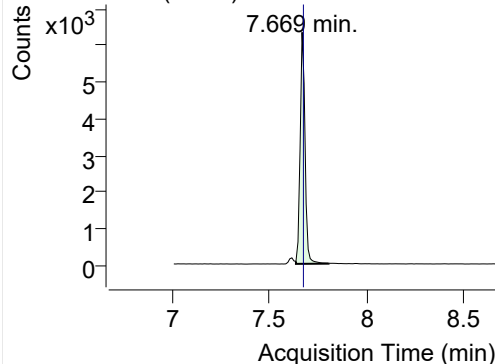


+ SIM (7.557-7.753 min, 19 scans) (\*\*) 220907

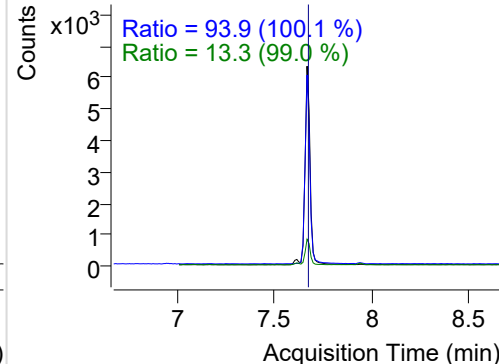


## Fluorene

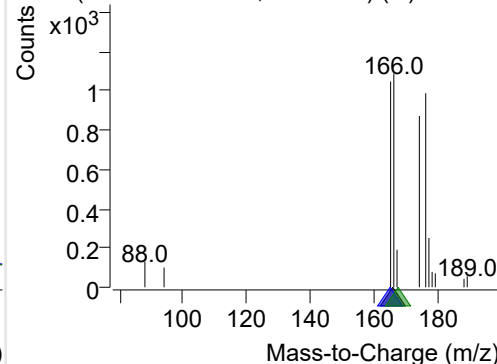
+ Selected Ion (166.0) 220907-PAHs-005.D



166.0, 165.0, 167.0

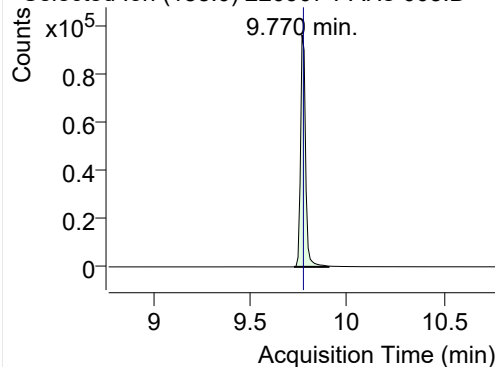


+ SIM (7.638-7.806 min, 17 scans) (\*\*) 220907

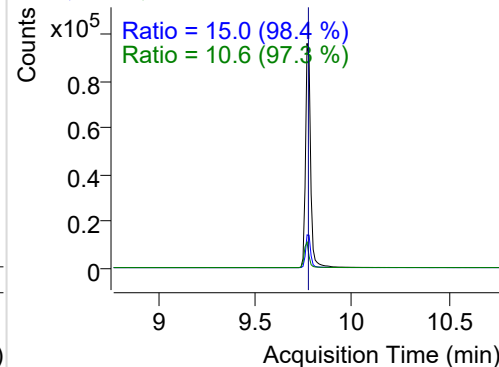


## IS-D10-Phenanthrene

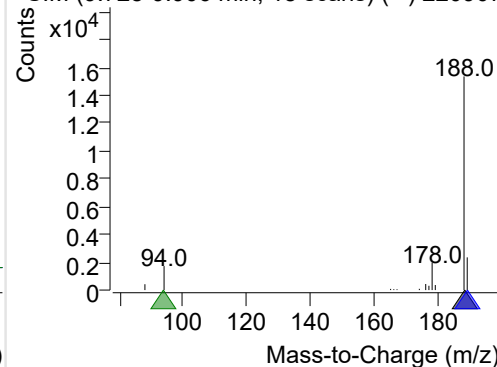
+ Selected Ion (188.0) 220907-PAHs-005.D



188.0, 189.0, 94.0

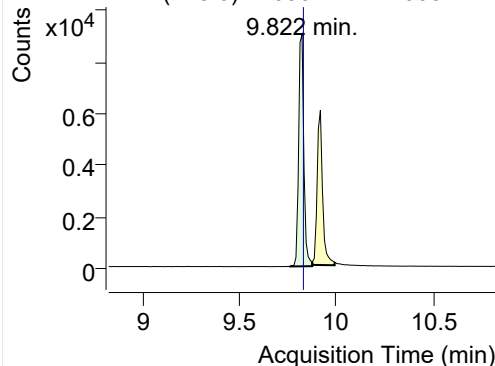


+ SIM (9.728-9.906 min, 18 scans) (\*\*) 220907

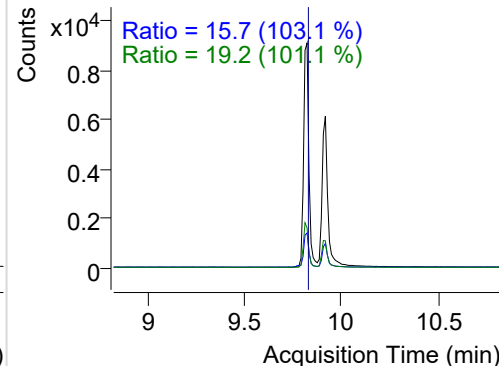


## Phenanthrene

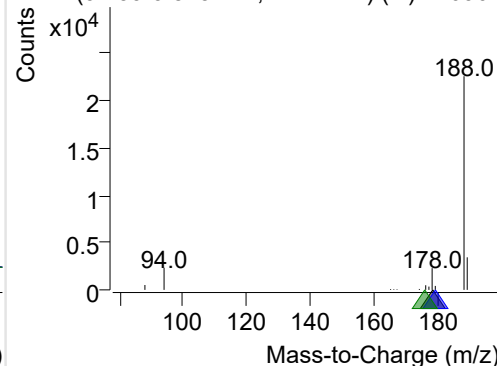
+ Selected Ion (178.0) 220907-PAHs-005.D



178.0, 179.0, 176.0

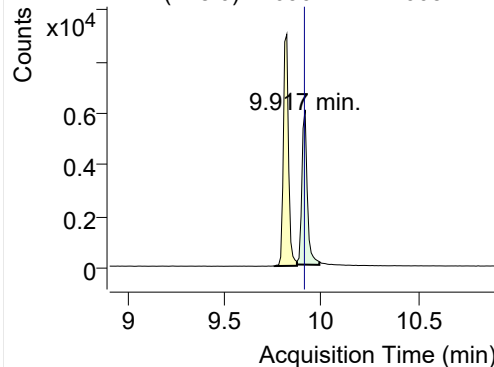


+ SIM (9.759-9.875 min, 12 scans) (\*\*) 220907

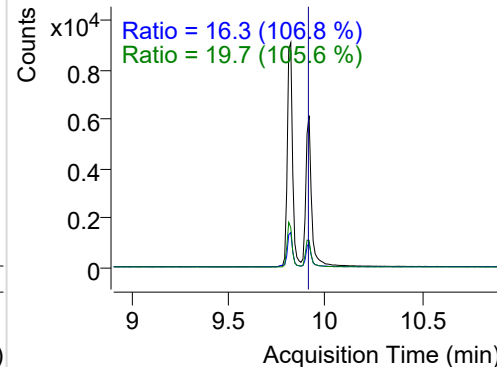


**Anthracene**

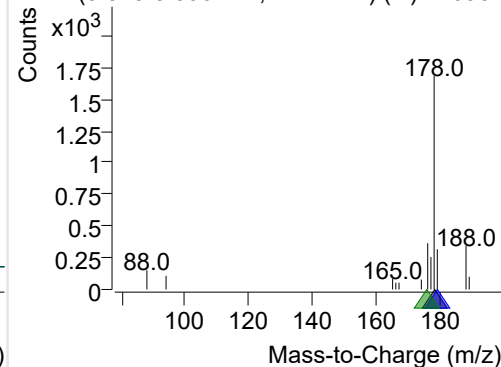
+ Selected Ion (178.0) 220907-PAHs-005.D



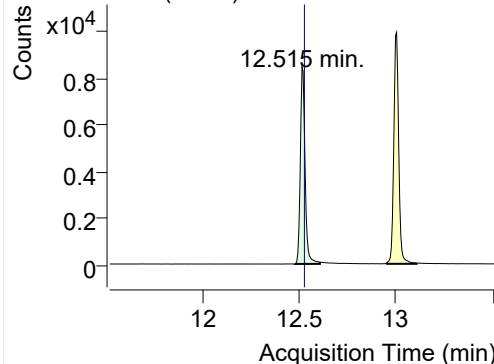
178.0, 179.0, 176.0



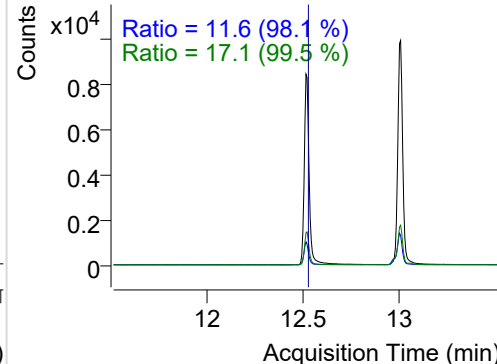
+ SIM (9.875-9.990 min, 12 scans) (\*\*) 220907

**Fluoranthene**

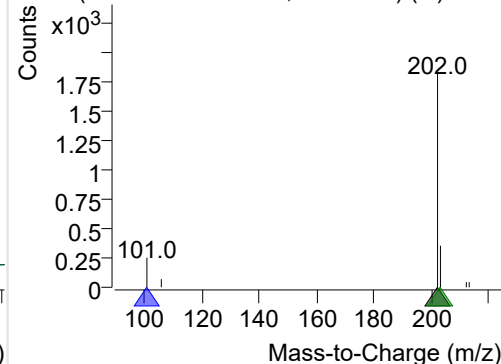
+ Selected Ion (202.0) 220907-PAHs-005.D



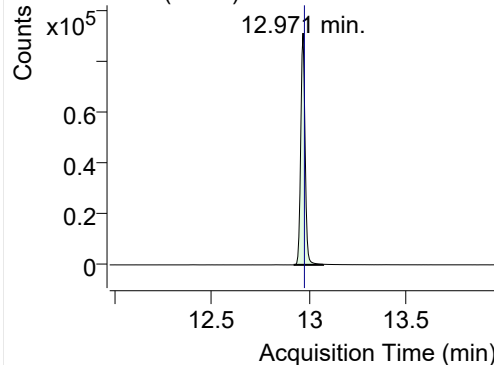
202.0, 101.0, 203.0



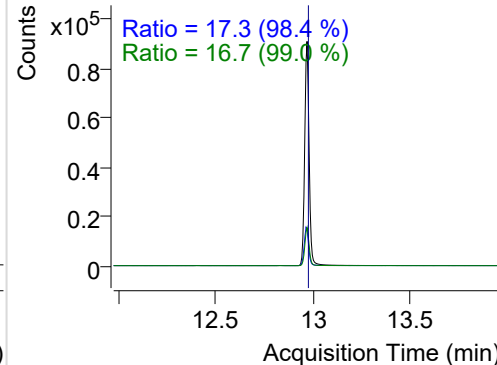
+ SIM (12.478-12.608 min, 25 scans) (\*\*) 2209

**LSS-D10-Pyrene**

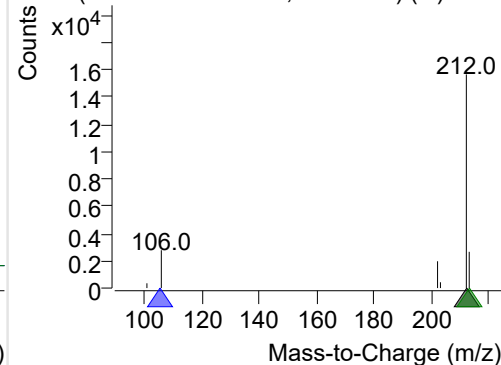
+ Selected Ion (212.0) 220907-PAHs-005.D



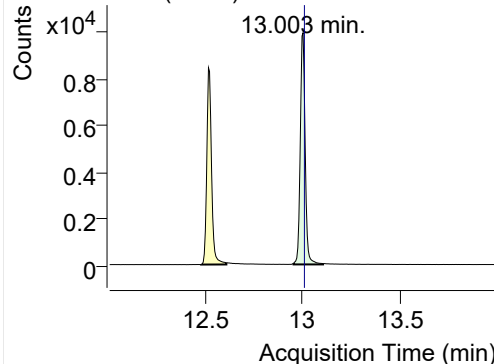
212.0, 106.0, 213.0



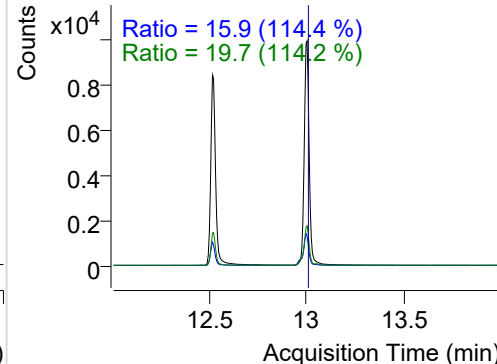
+ SIM (12.922-13.074 min, 28 scans) (\*\*) 2209

**Pyrene**

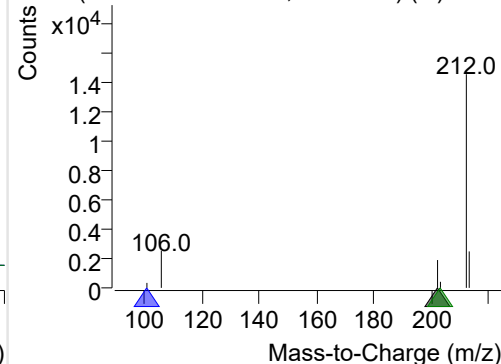
+ Selected Ion (202.0) 220907-PAHs-005.D



202.0, 101.0, 203.0

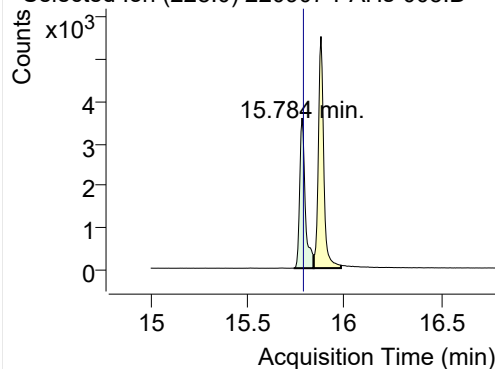


+ SIM (12.955-13.106 min, 29 scans) (\*\*) 2209

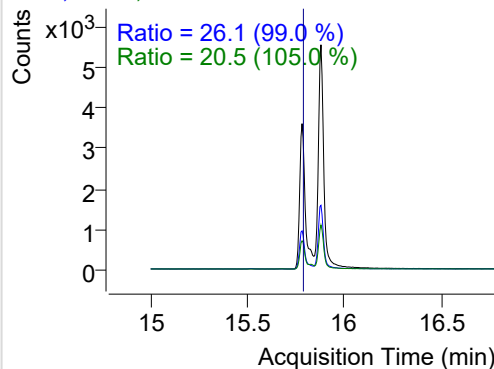


**Benz(a)anthracene**

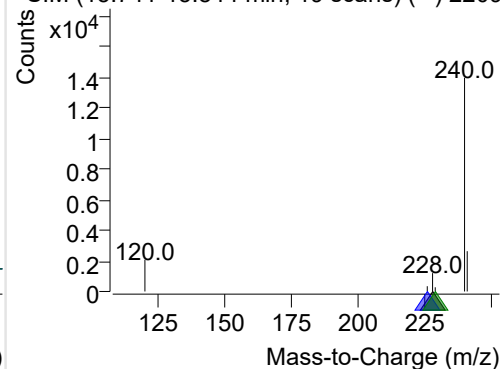
+ Selected Ion (228.0) 220907-PAHs-005.D



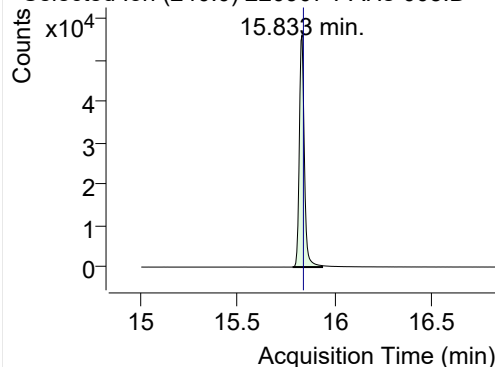
228.0, 226.0, 229.0



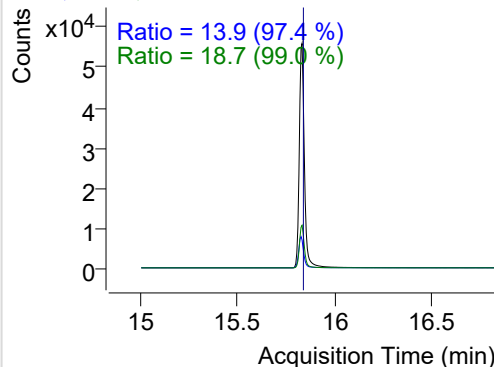
+ SIM (15.741-15.844 min, 19 scans) (\*\*) 2209

**IS-D12-Chrysene**

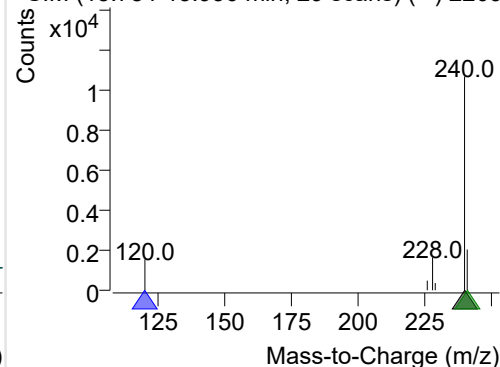
+ Selected Ion (240.0) 220907-PAHs-005.D



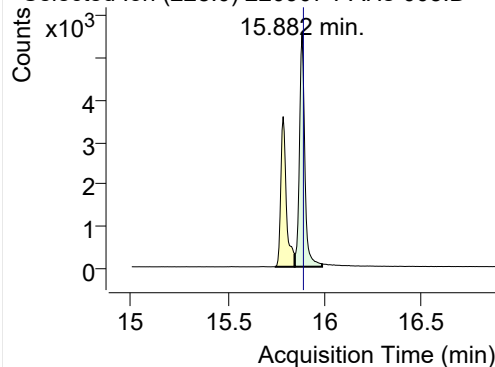
240.0, 120.0, 241.0



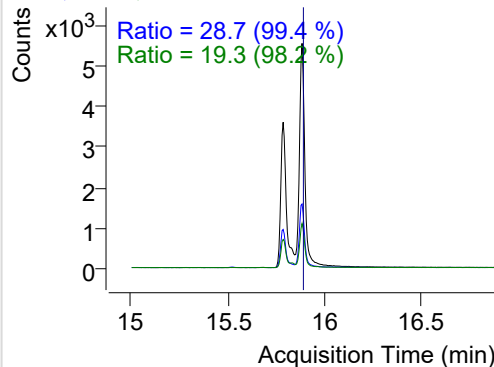
+ SIM (15.784-15.936 min, 29 scans) (\*\*) 2209

**Chrysene**

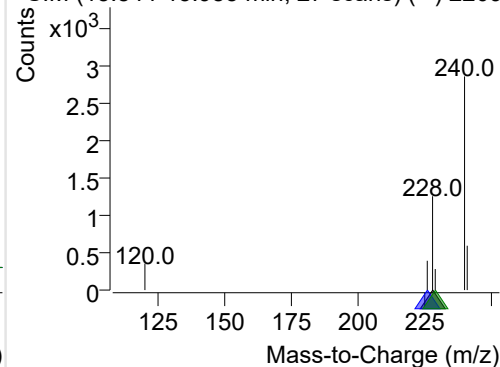
+ Selected Ion (228.0) 220907-PAHs-005.D



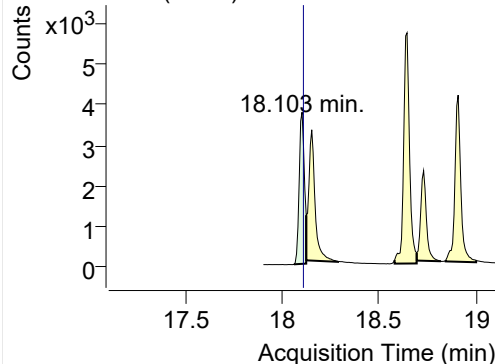
228.0, 226.0, 229.0



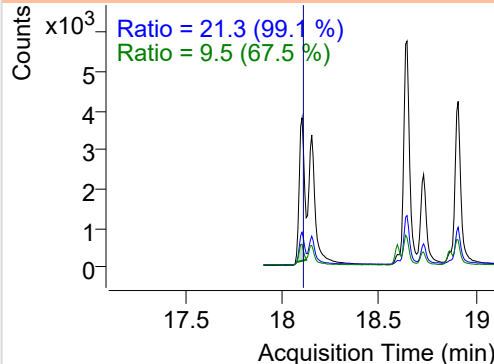
+ SIM (15.844-15.985 min, 27 scans) (\*\*) 2209

**Benzo(b)fluoranthene**

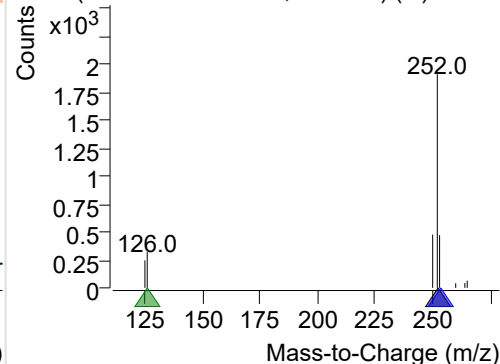
+ Selected Ion (252.0) 220907-PAHs-005.D



252.0, 253.0, 126.0

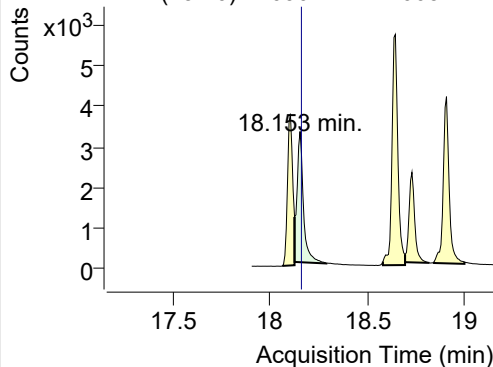


+ SIM (18.061-18.125 min, 9 scans) (\*\*) 22090

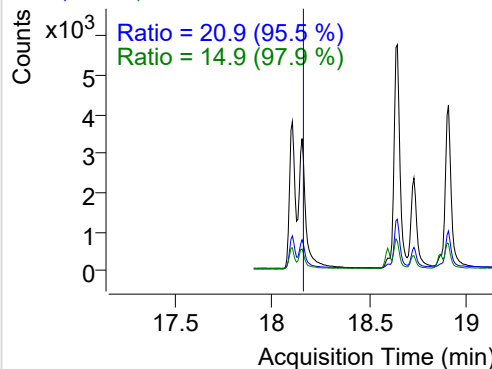


**Benzo(k)fluoranthene**

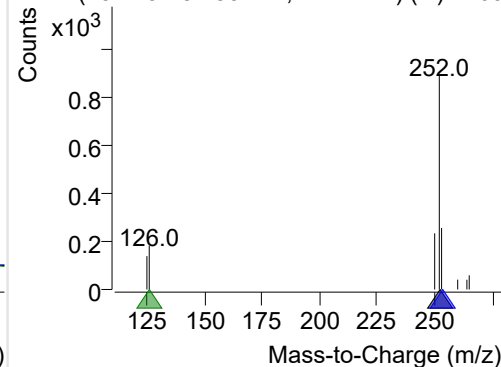
+ Selected Ion (252.0) 220907-PAHs-005.D



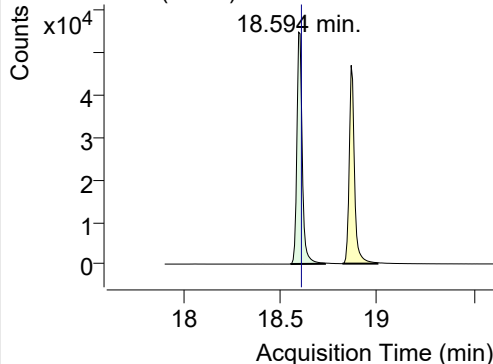
252.0, 253.0, 126.0



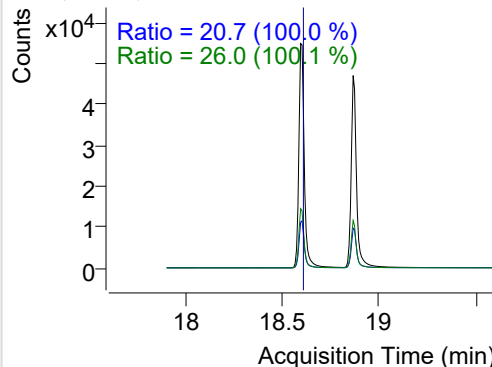
+ SIM (18.125-18.288 min, 24 scans) (\*\*) 2209

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

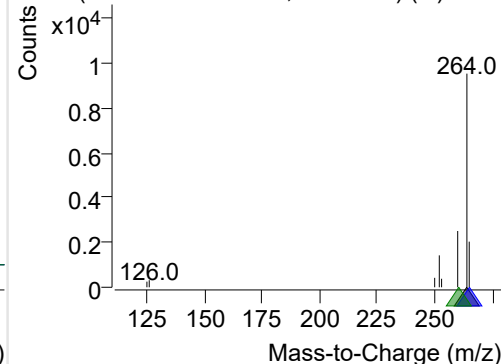
+ Selected Ion (264.0) 220907-PAHs-005.D



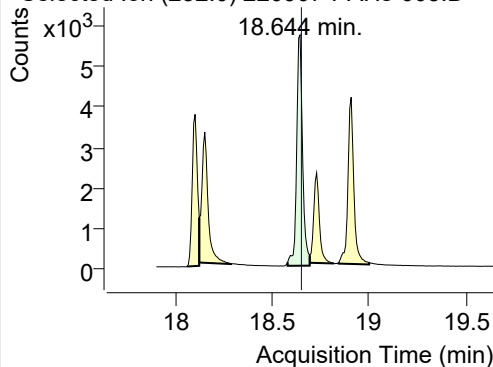
264.0, 265.0, 260.0



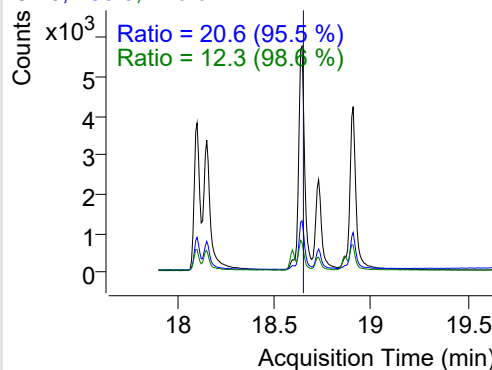
+ SIM (18.552-18.730 min, 26 scans) (\*\*) 2209

**Benzo(e)pyrene**

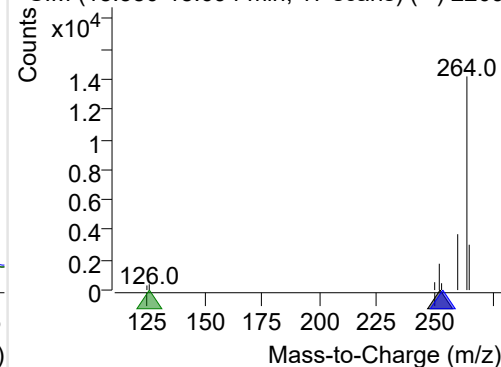
+ Selected Ion (252.0) 220907-PAHs-005.D



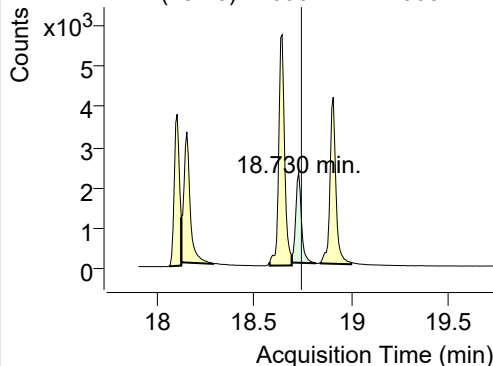
252.0, 253.0, 126.0



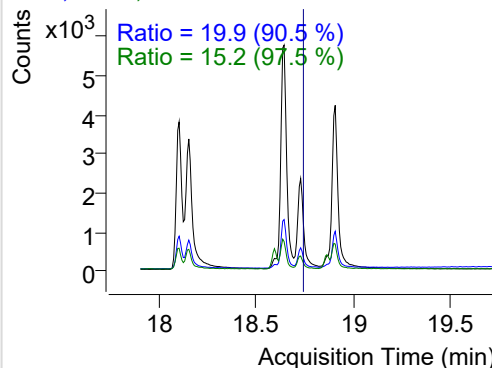
+ SIM (18.580-18.694 min, 17 scans) (\*\*) 2209

**Benzo(a)pyrene**

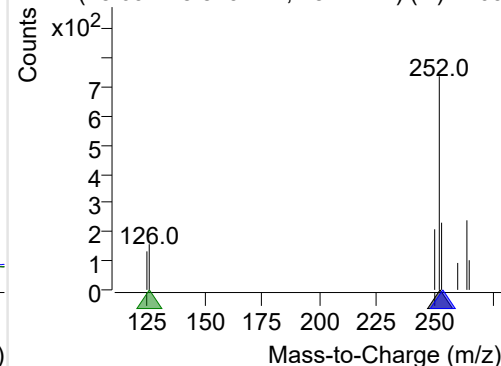
+ Selected Ion (252.0) 220907-PAHs-005.D



252.0, 253.0, 126.0

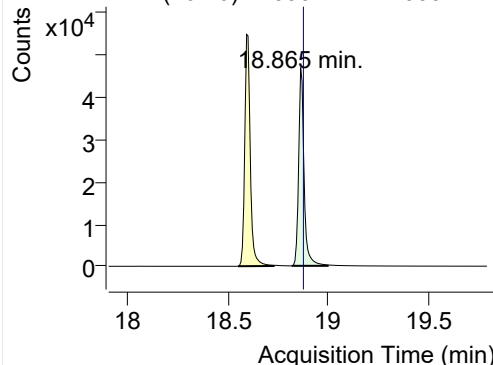


+ SIM (18.694-18.819 min, 18 scans) (\*\*) 2209

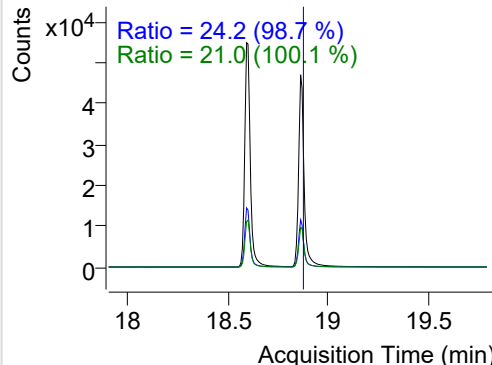


## IS-D12-Perylene

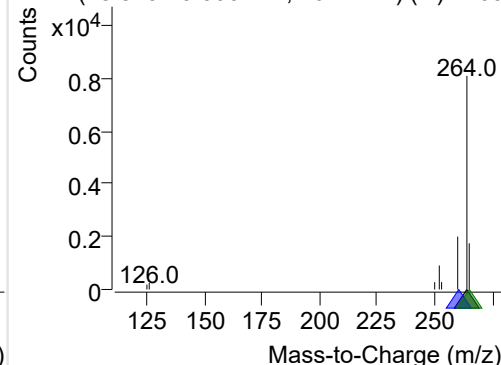
+ Selected Ion (264.0) 220907-PAHs-005.D



264.0, 260.0, 265.0

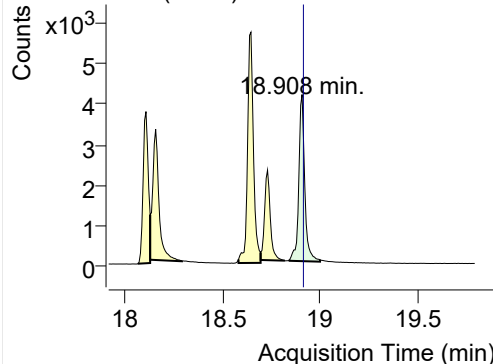


+ SIM (18.820-19.000 min, 26 scans) (\*\*) 2209

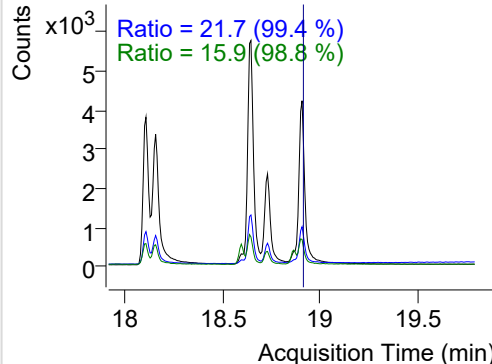


## Perylene

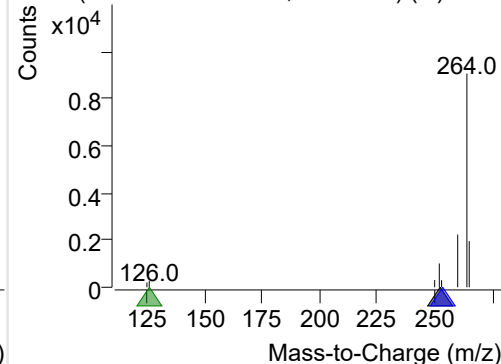
+ Selected Ion (252.0) 220907-PAHs-005.D



252.0, 253.0, 126.0

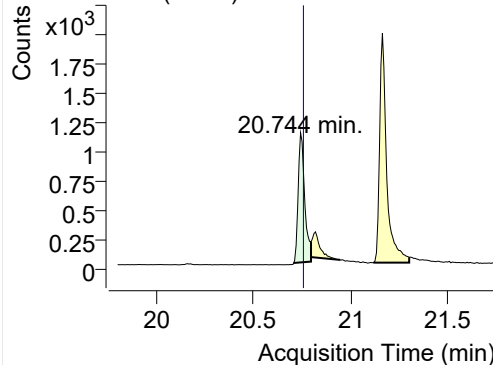


+ SIM (18.844-19.000 min, 23 scans) (\*\*) 2209

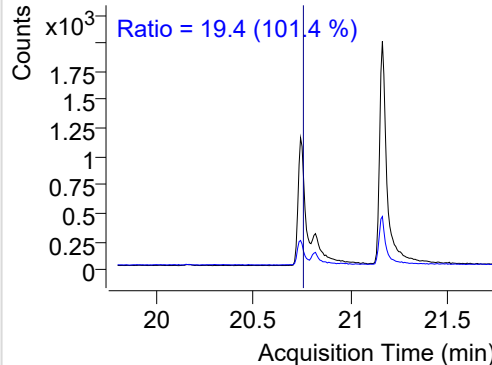


## Indeno(1,2,3-c,d)pyrene

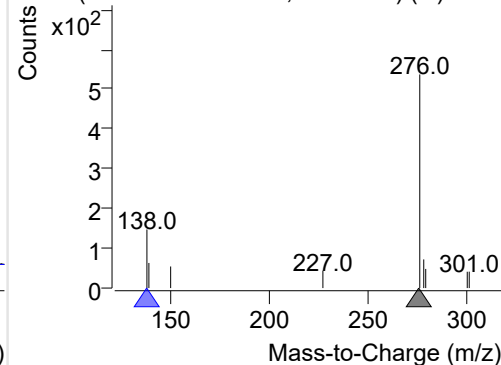
+ Selected Ion (276.0) 220907-PAHs-005.D



276.0, 138.0

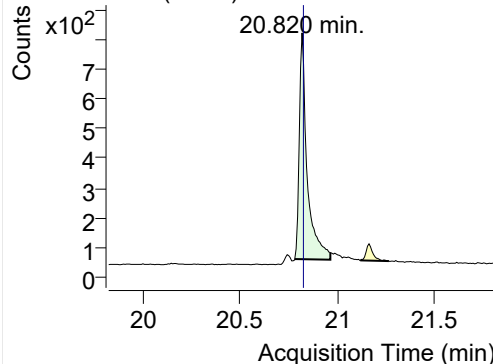


+ SIM (20.708-20.797 min, 12 scans) (\*\*) 2209

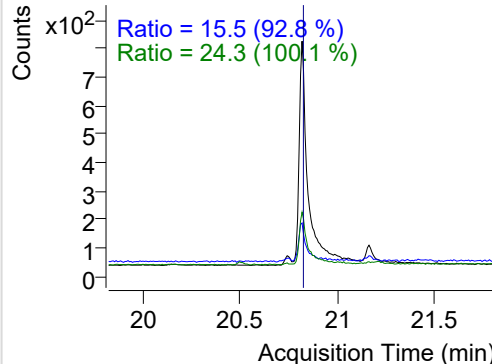


## Dibenz(a,h)anthracene

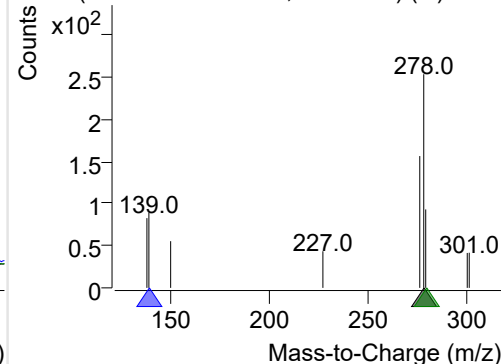
+ Selected Ion (278.0) 220907-PAHs-005.D



278.0, 139.0, 279.0

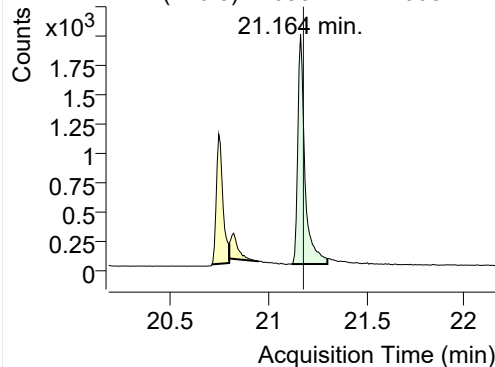


+ SIM (20.783-20.965 min, 24 scans) (\*\*) 2209

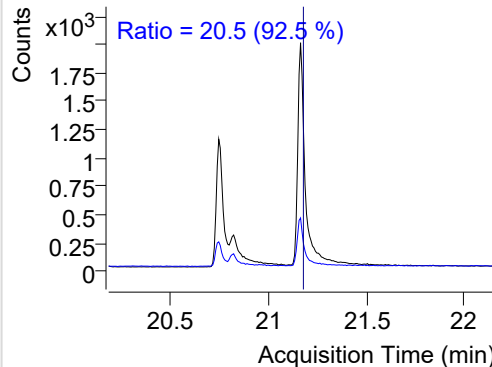


**Benzo(g,h,i)perylene**

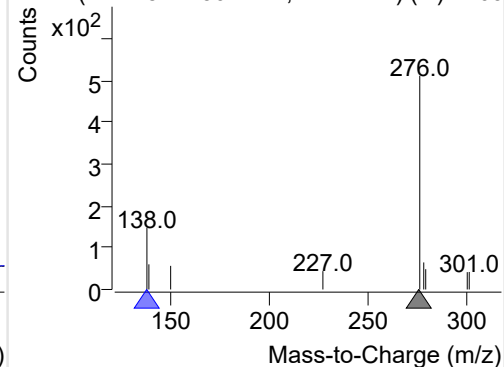
+ Selected Ion (276.0) 220907-PAHs-005.D



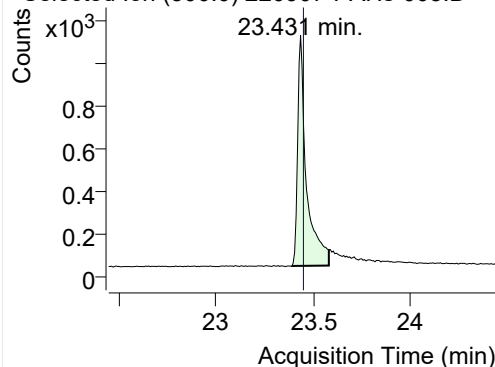
276.0, 138.0



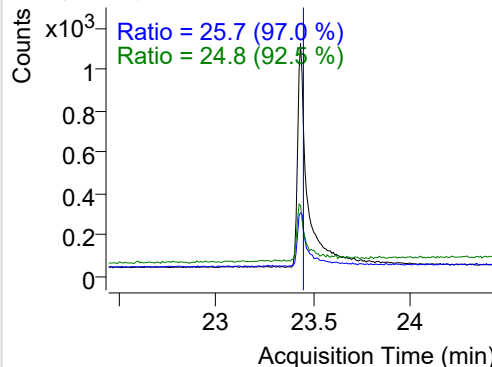
+ SIM (21.118-21.301 min, 24 scans) (\*\*) 2209

**Coronene**

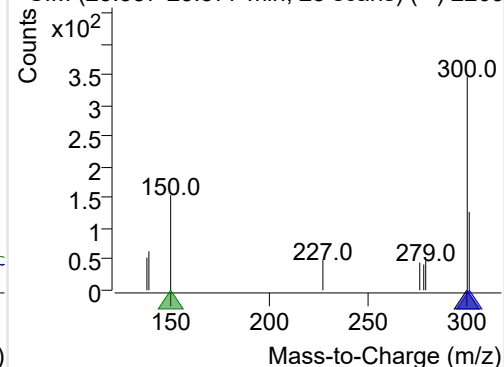
+ Selected Ion (300.0) 220907-PAHs-005.D



300.0, 301.0, 150.0



+ SIM (23.387-23.577 min, 25 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

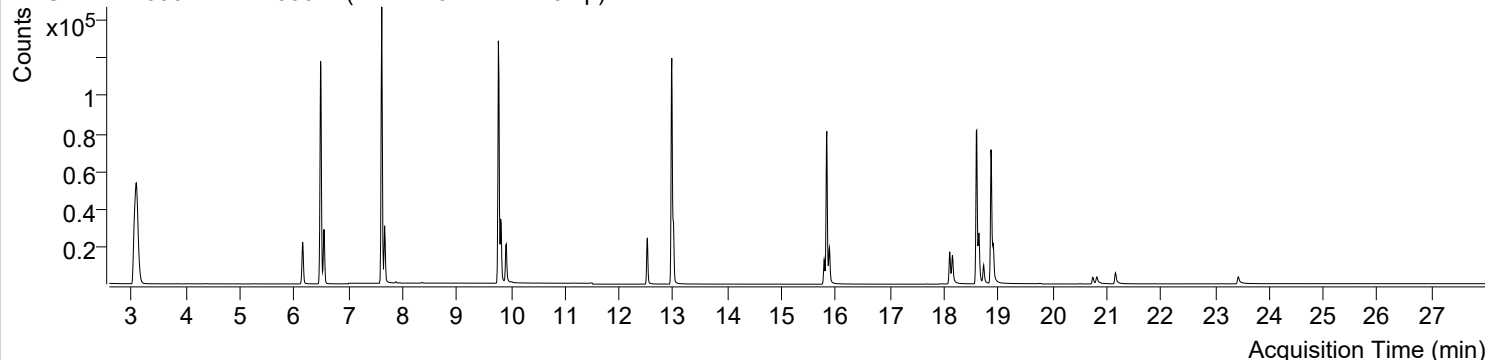


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 3:02:04	Data File	220907-PAHs-006.D
Type	Sample	Name	PAHs-19mix-STD-0.2p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

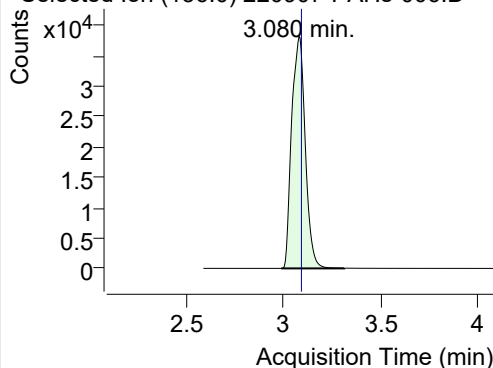
+ TIC SIM 220907-PAHs-006.D (PAHs-19mix-STD-0.2p)



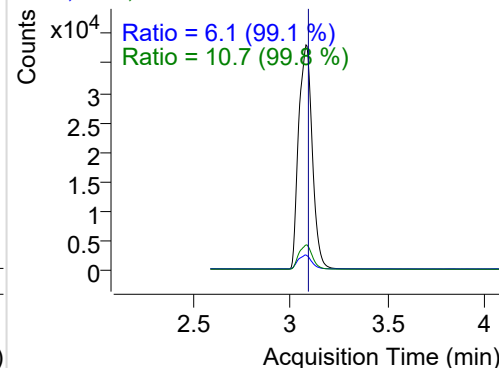
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	185048	38101.69	ND ng/ml	10.7
Naphthalene	3.107	128.0	42181	8864.11	ND ng/ml	12.8
Acenaphthylene	6.155	152.0	32586	16697.00	ND ng/ml	19.4
IS-D10-Acenaphthene	6.487	164.0	102601	56010.10	ND ng/ml	96.8
Acenaphthene	6.552	154.0	18711	10314.72	ND ng/ml	107.1
LSS-D10-Fluorene	7.617	176.0	108644	66709.48	ND ng/ml	93.1
Fluorene	7.669	166.0	23746	13912.50	ND ng/ml	92.6
IS-D10-Phenanthrene	9.770	188.0	176677	100968.1	ND ng/ml	14.9
Phenanthrene	9.822	178.0	35820	19550.33	ND ng/ml	19.3
Anthracene	9.917	178.0	26452	13729.48	ND ng/ml	19.7
Fluoranthene	12.521	202.0	32192	18830.41	ND ng/ml	17.3
LSS-D10-Pyrene	12.971	212.0	145530	88869.19	ND ng/ml	17.4
Pyrene	13.003	202.0	37298	22544.75	ND ng/ml	18.7
Benz(a)anthracene	15.784	228.0	16603	8908.67	ND ng/ml	26.2
IS-D12-Chrysene	15.833	240.0	104616	60706.69	ND ng/ml	18.8
Chrysene	15.882	228.0	23501	11933.29	ND ng/ml	28.7
Benzo(b)fluoranthene	18.103	252.0	18547	10082.94	ND ng/ml	21.4
Benzo(k)fluoranthene	18.153	252.0	19643	8878.82	ND ng/ml	22.6
SS-D12-Benzo(e)pyrene	18.601	264.0	104409	54836.23	ND ng/ml	26.1
Benzo(e)pyrene	18.644	252.0	25956	13277.00	ND ng/ml	20.5
Benzo(a)pyrene	18.730	252.0	11228	5456.45	ND ng/ml	17.7
IS-D12-Perylene	18.865	264.0	91613	47972.00	ND ng/ml	24.3
Perylene	18.908	252.0	19770	9275.14	ND ng/ml	22.3
Indeno(1,2,3-c,d)pyrene	20.744	276.0	6419	2772.54	ND ng/ml	18.4
Dibenz(a,h)anthracene	20.820	278.0	5838	1983.93	ND ng/ml	22.9
Benzo(g,h,i)perylene	21.164	276.0	12240	4687.91	ND ng/ml	20.0
Coronene	23.431	300.0	8084	2472.24	ND ng/ml	25.4

## IS-D8-Naphthalene

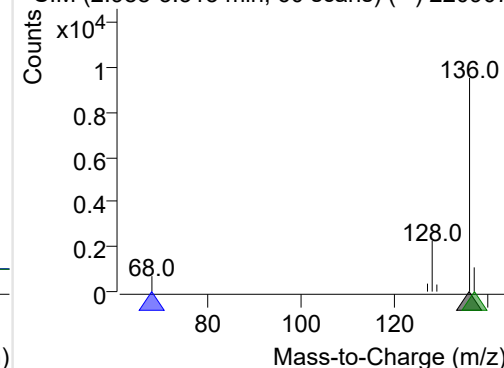
+ Selected Ion (136.0) 220907-PAHs-006.D



136.0, 68.0, 137.0

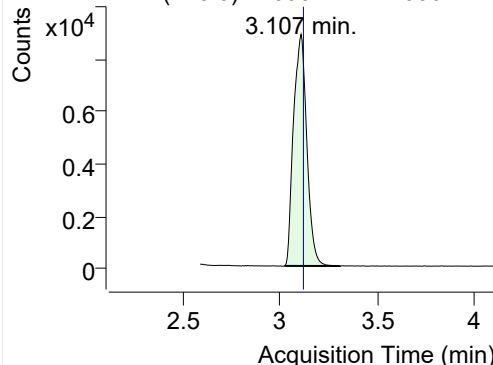


+ SIM (2.988-3.313 min, 60 scans) (\*\*) 220907

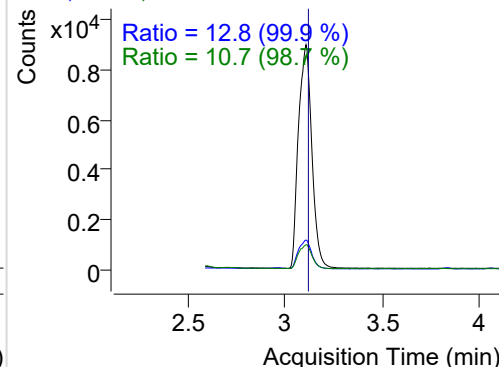


**Naphthalene**

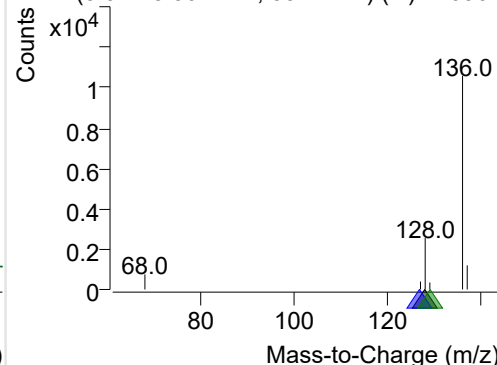
+ Selected Ion (128.0) 220907-PAHs-006.D



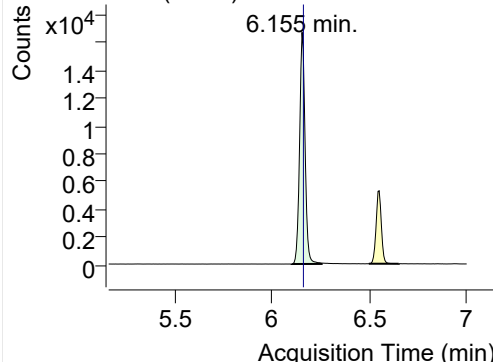
128.0, 127.0, 129.0



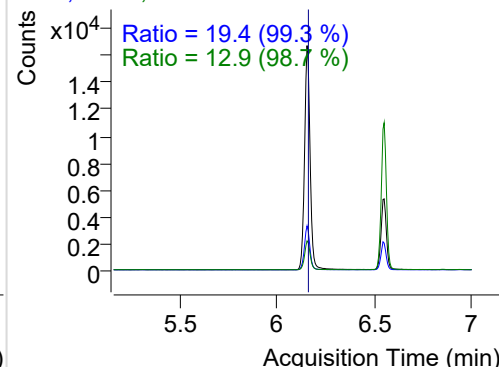
+ SIM (3.021-3.307 min, 53 scans) (\*\*) 220907

**Acenaphthylene**

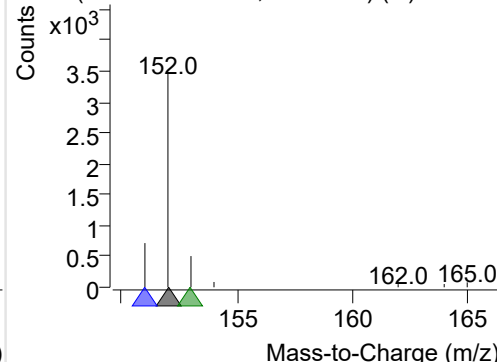
+ Selected Ion (152.0) 220907-PAHs-006.D



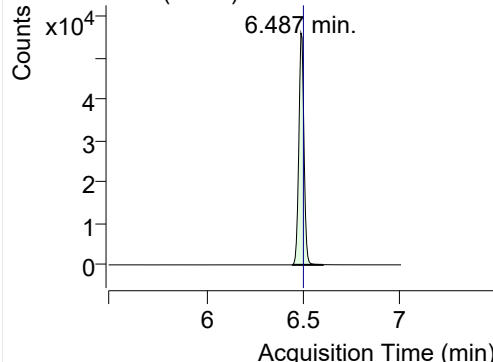
152.0, 151.0, 153.0



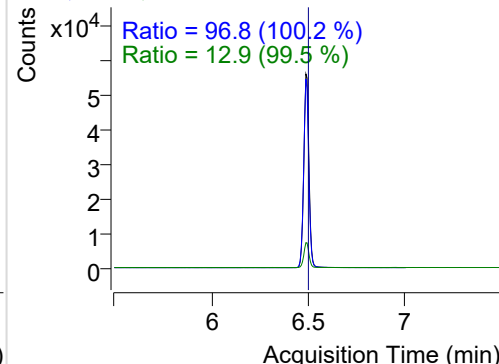
+ SIM (6.102-6.256 min, 27 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

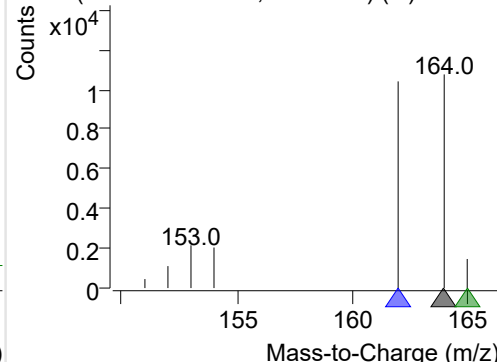
+ Selected Ion (164.0) 220907-PAHs-006.D



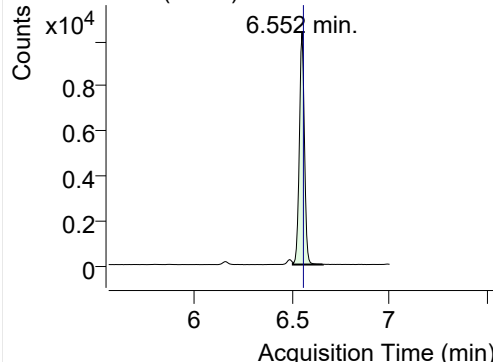
164.0, 162.0, 165.0



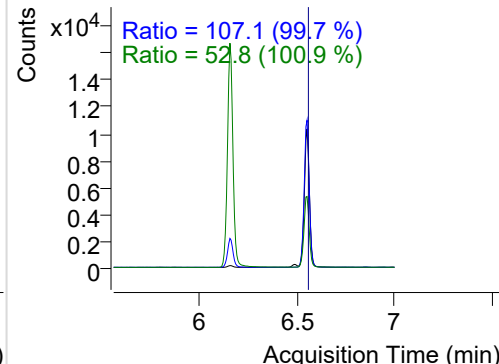
+ SIM (6.445-6.599 min, 27 scans) (\*\*) 220907

**Acenaphthene**

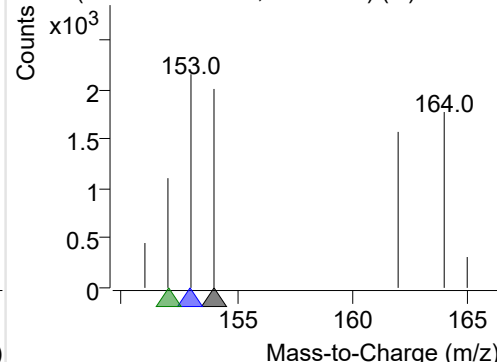
+ Selected Ion (154.0) 220907-PAHs-006.D



154.0, 153.0, 152.0

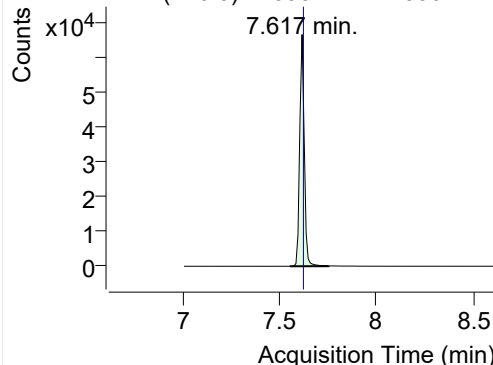


+ SIM (6.505-6.658 min, 27 scans) (\*\*) 220907

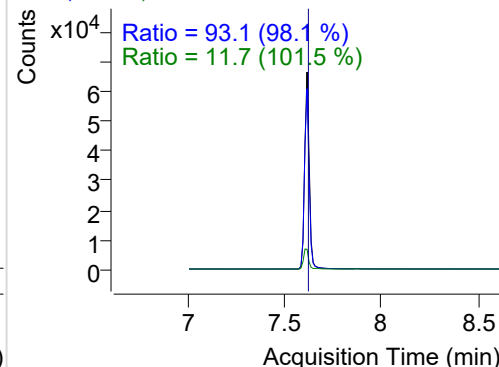


## LSS-D10-Fluorene

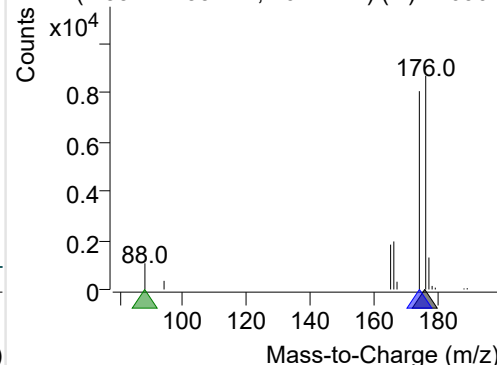
+ Selected Ion (176.0) 220907-PAHs-006.D



176.0, 174.0, 88.0

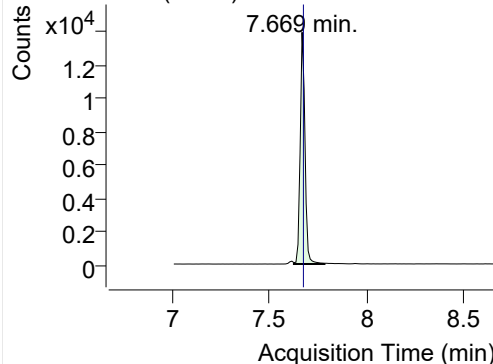


+ SIM (7.554-7.753 min, 20 scans) (\*\*) 220907

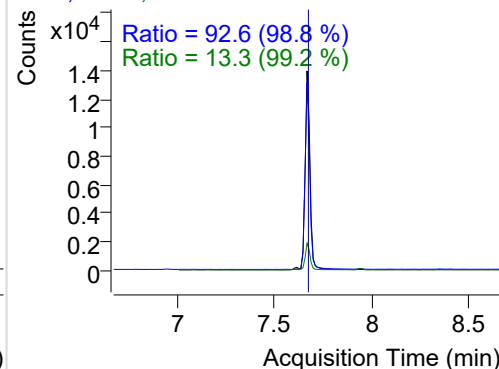


## Fluorene

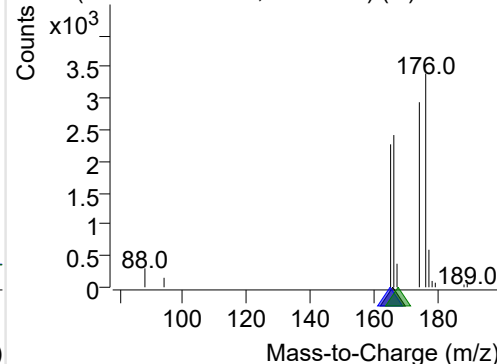
+ Selected Ion (166.0) 220907-PAHs-006.D



166.0, 165.0, 167.0

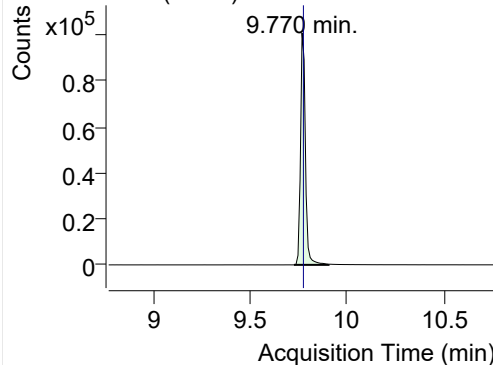


+ SIM (7.627-7.785 min, 16 scans) (\*\*) 220907

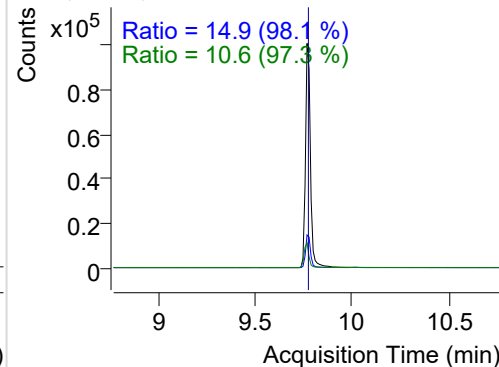


## IS-D10-Phenanthrene

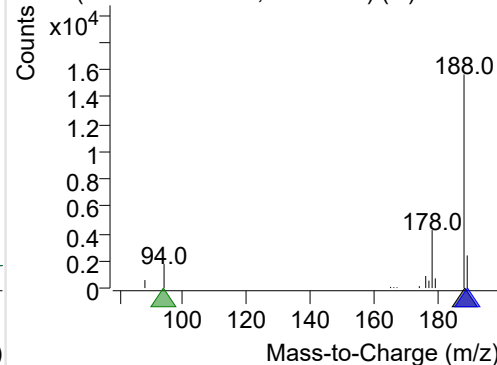
+ Selected Ion (188.0) 220907-PAHs-006.D



188.0, 189.0, 94.0

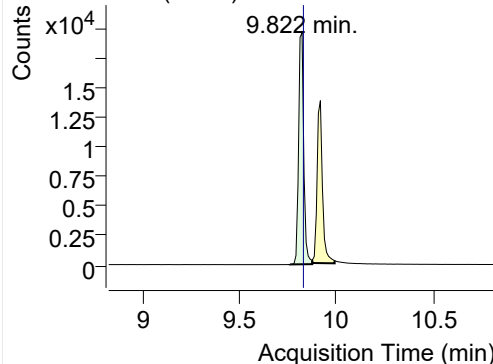


+ SIM (9.728-9.906 min, 18 scans) (\*\*) 220907

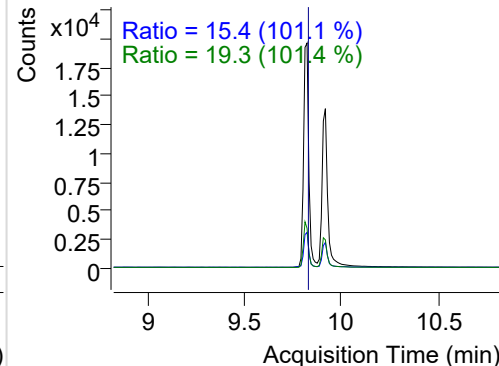


## Phenanthrene

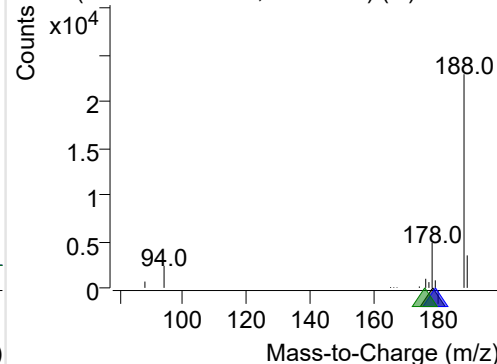
+ Selected Ion (178.0) 220907-PAHs-006.D



178.0, 179.0, 176.0

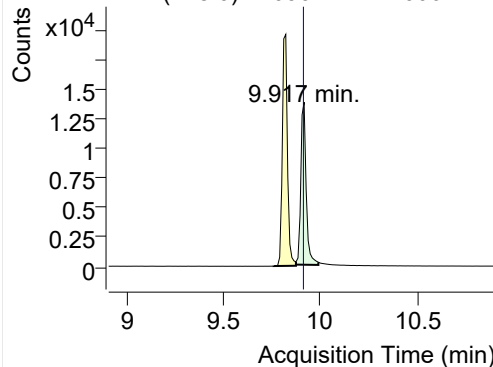


+ SIM (9.759-9.875 min, 12 scans) (\*\*) 220907

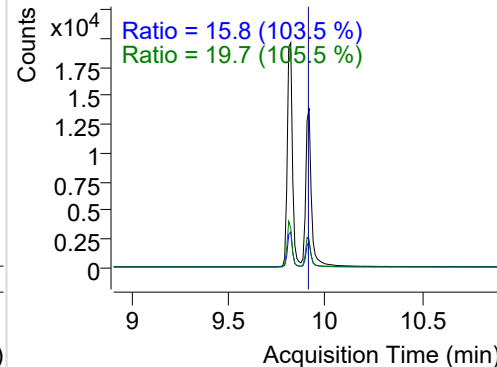


**Anthracene**

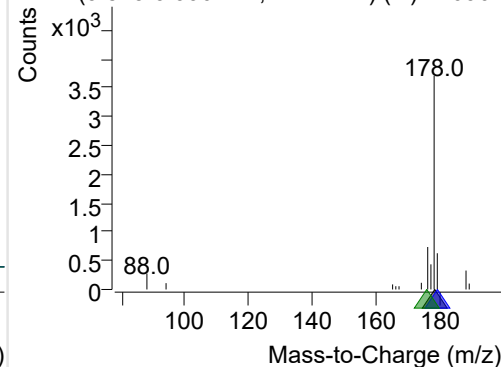
+ Selected Ion (178.0) 220907-PAHs-006.D



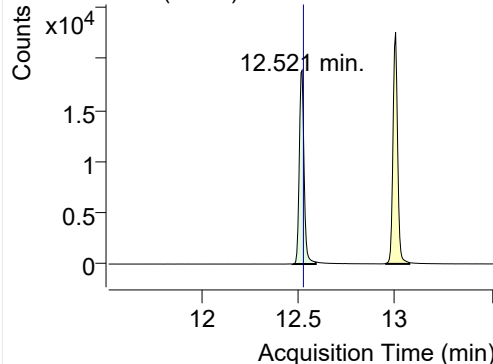
178.0, 179.0, 176.0



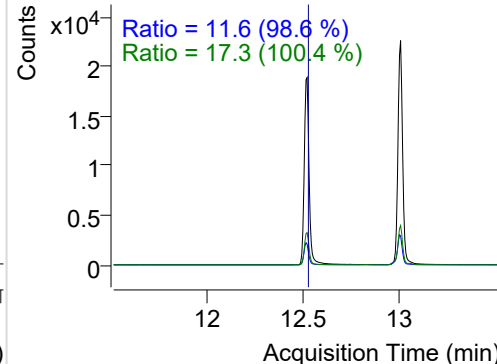
+ SIM (9.875-9.990 min, 12 scans) (\*\*) 220907

**Fluoranthene**

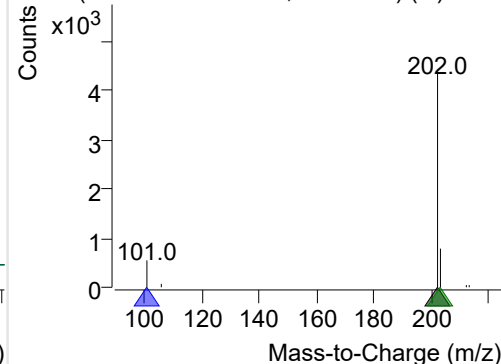
+ Selected Ion (202.0) 220907-PAHs-006.D



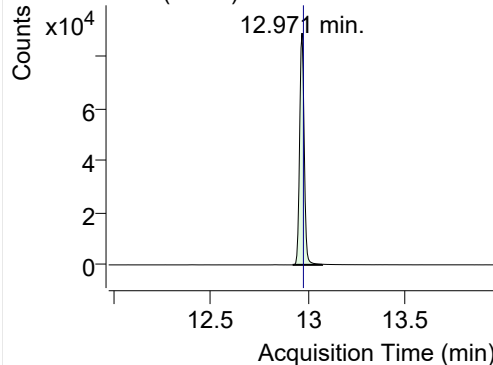
202.0, 101.0, 203.0



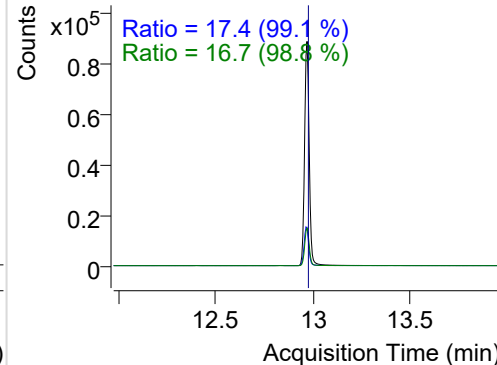
+ SIM (12.472-12.591 min, 23 scans) (\*\*) 2209

**LSS-D10-Pyrene**

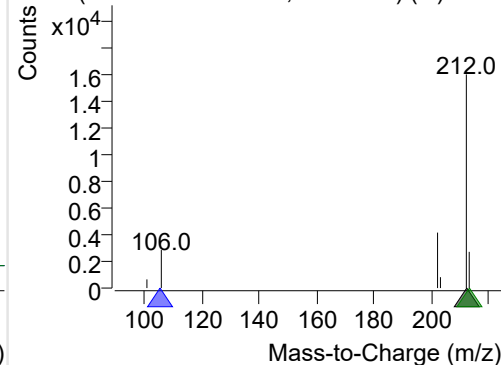
+ Selected Ion (212.0) 220907-PAHs-006.D



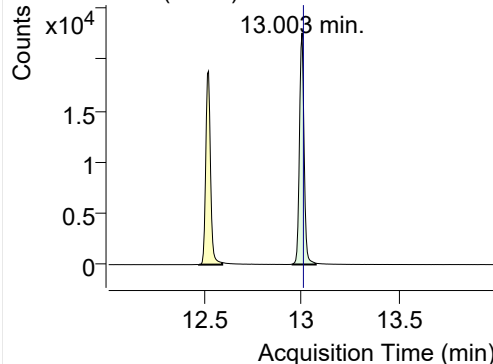
212.0, 106.0, 213.0



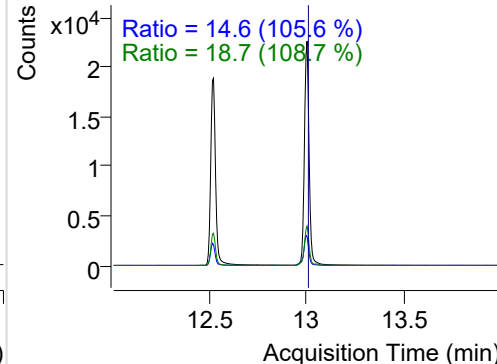
+ SIM (12.922-13.074 min, 28 scans) (\*\*) 2209

**Pyrene**

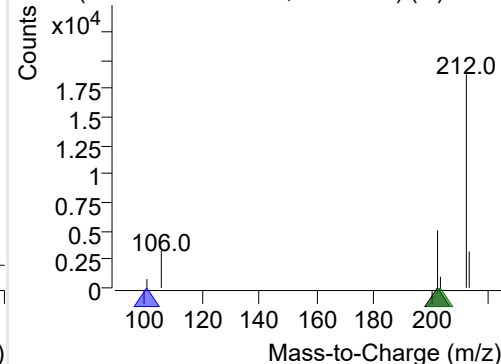
+ Selected Ion (202.0) 220907-PAHs-006.D



202.0, 101.0, 203.0

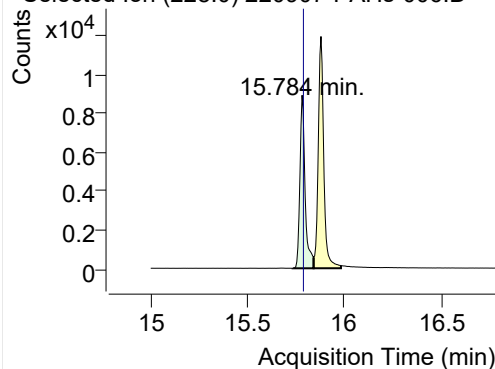


+ SIM (12.955-13.074 min, 23 scans) (\*\*) 2209

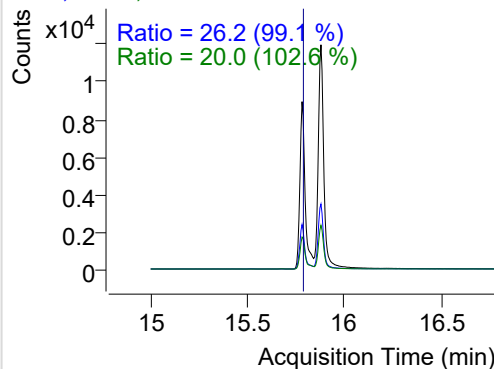


**Benz(a)anthracene**

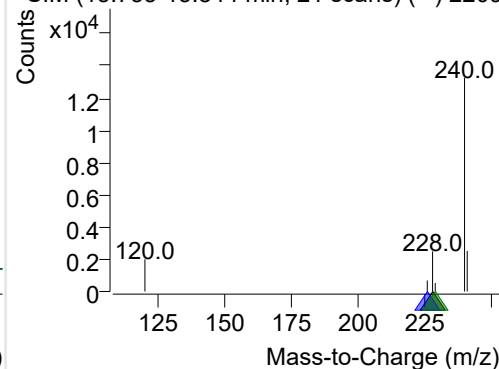
+ Selected Ion (228.0) 220907-PAHs-006.D



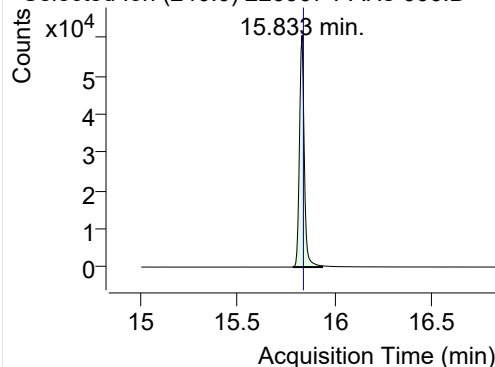
228.0, 226.0, 229.0



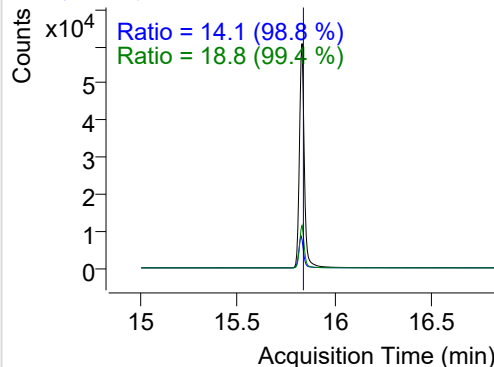
+ SIM (15.735-15.844 min, 21 scans) (\*\*) 2209

**IS-D12-Chrysene**

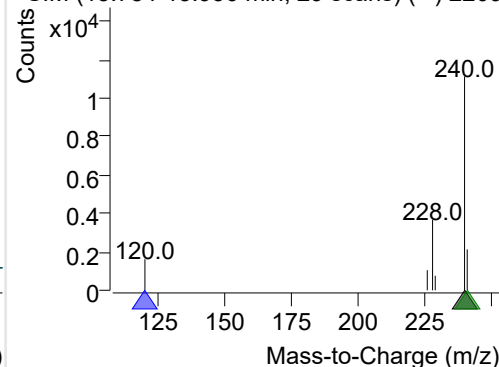
+ Selected Ion (240.0) 220907-PAHs-006.D



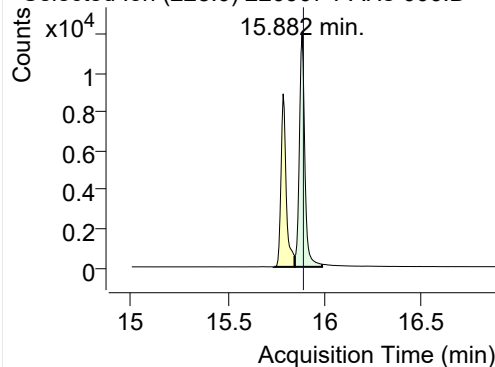
240.0, 120.0, 241.0



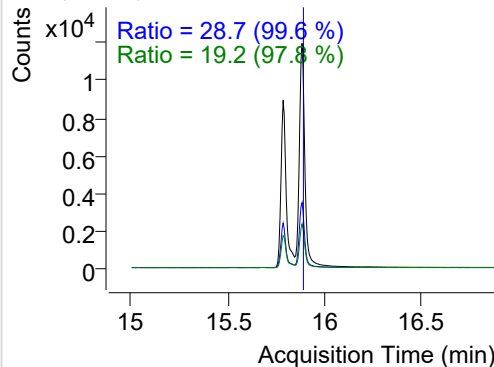
+ SIM (15.784-15.936 min, 29 scans) (\*\*) 2209

**Chrysene**

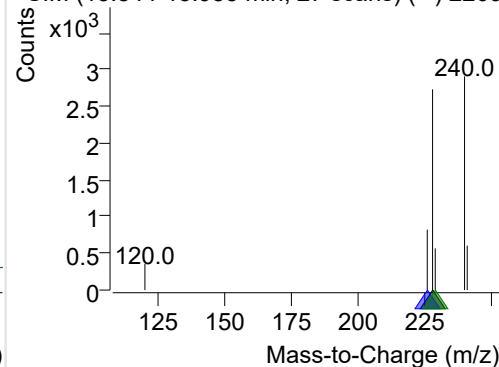
+ Selected Ion (228.0) 220907-PAHs-006.D



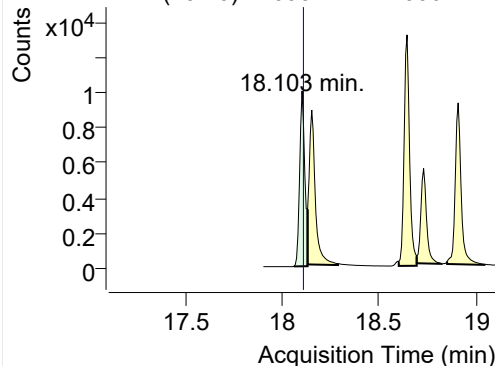
228.0, 226.0, 229.0



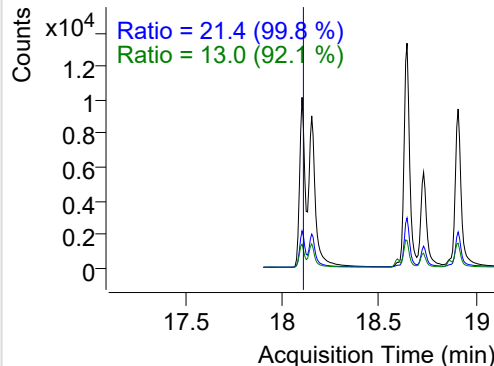
+ SIM (15.844-15.985 min, 27 scans) (\*\*) 2209

**Benzo(b)fluoranthene**

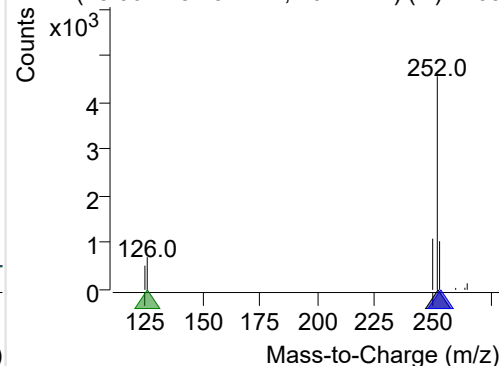
+ Selected Ion (252.0) 220907-PAHs-006.D



252.0, 253.0, 126.0

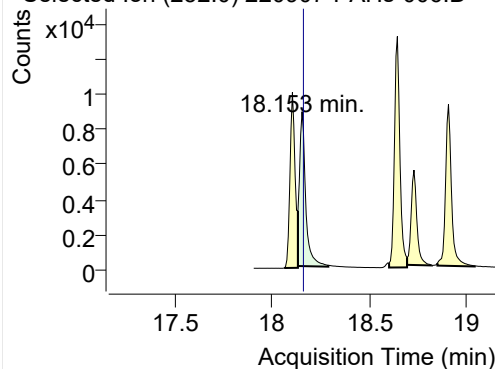


+ SIM (18.061-18.132 min, 10 scans) (\*\*) 2209

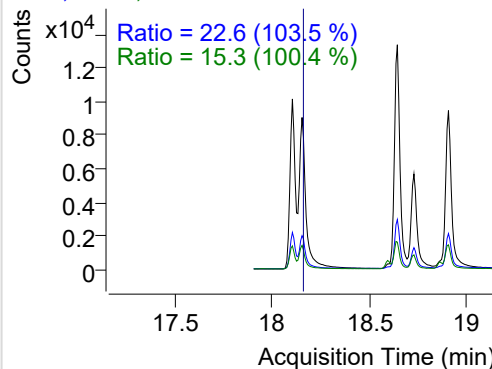


**Benzo(k)fluoranthene**

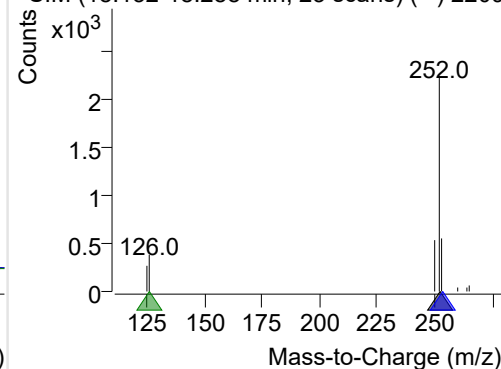
+ Selected Ion (252.0) 220907-PAHs-006.D



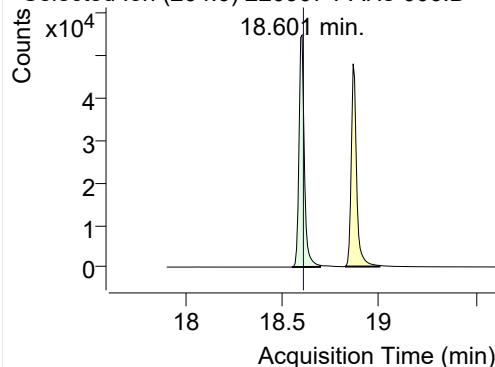
252.0, 253.0, 126.0



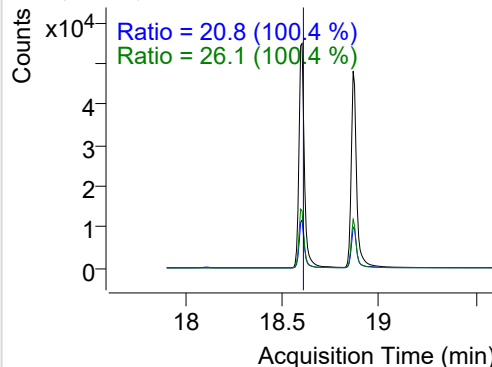
+ SIM (18.132-18.288 min, 23 scans) (\*\*) 2209

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

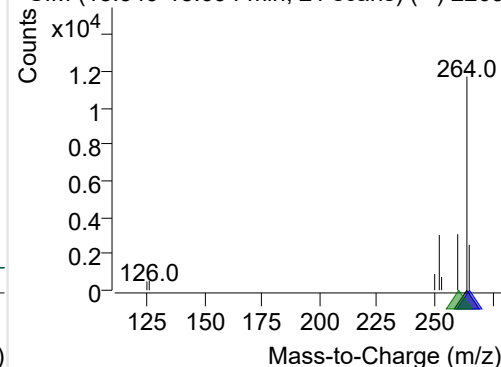
+ Selected Ion (264.0) 220907-PAHs-006.D



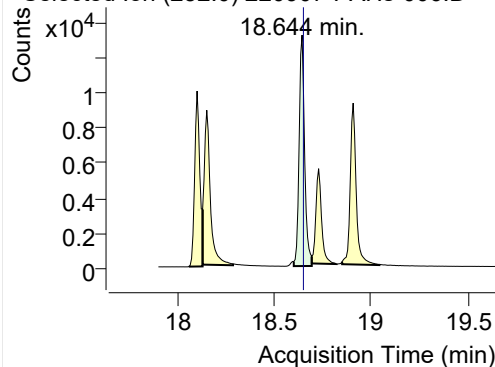
264.0, 265.0, 260.0



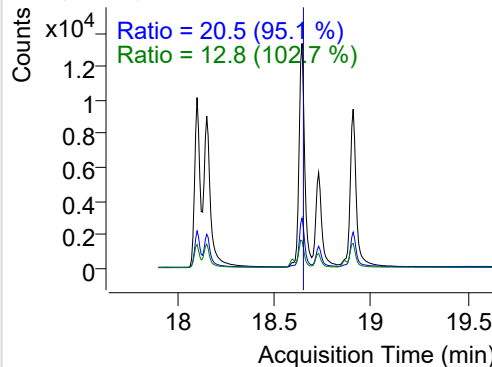
+ SIM (18.549-18.694 min, 21 scans) (\*\*) 2209

**Benzo(e)pyrene**

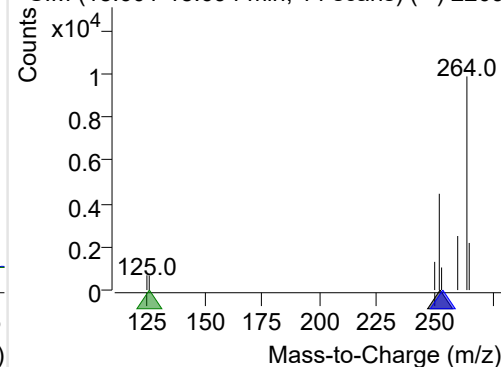
+ Selected Ion (252.0) 220907-PAHs-006.D



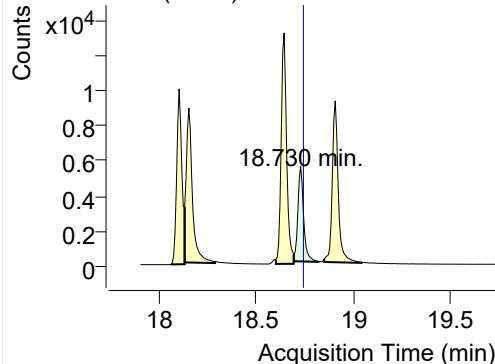
252.0, 253.0, 126.0



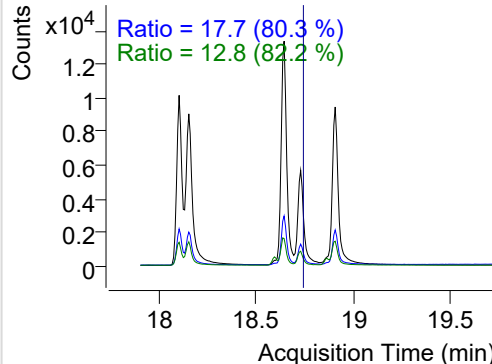
+ SIM (18.601-18.694 min, 14 scans) (\*\*) 2209

**Benzo(a)pyrene**

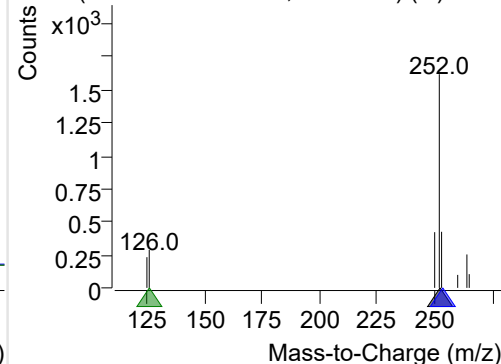
+ Selected Ion (252.0) 220907-PAHs-006.D



252.0, 253.0, 126.0

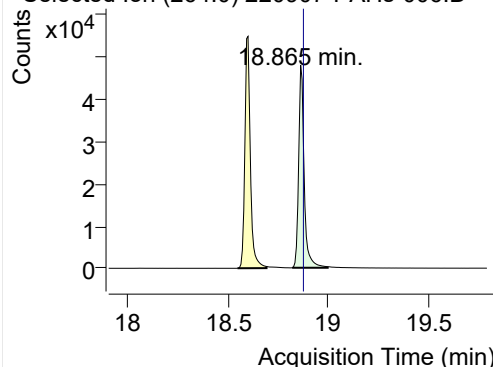


+ SIM (18.694-18.822 min, 19 scans) (\*\*) 2209

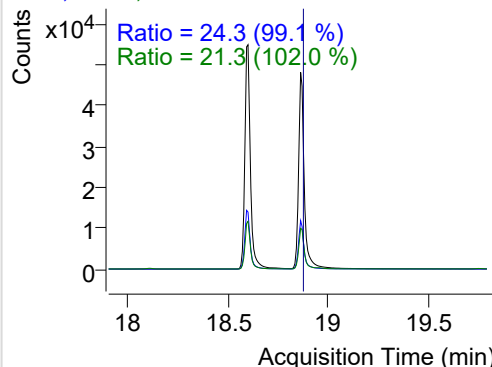


## IS-D12-Perylene

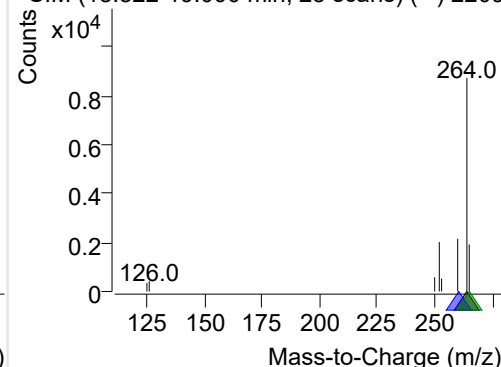
+ Selected Ion (264.0) 220907-PAHs-006.D



264.0, 260.0, 265.0

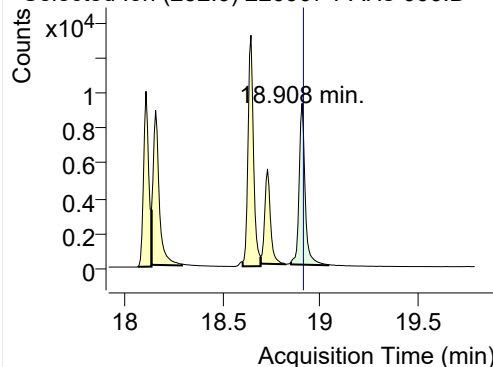


+ SIM (18.822-19.000 min, 25 scans) (\*\*) 2209

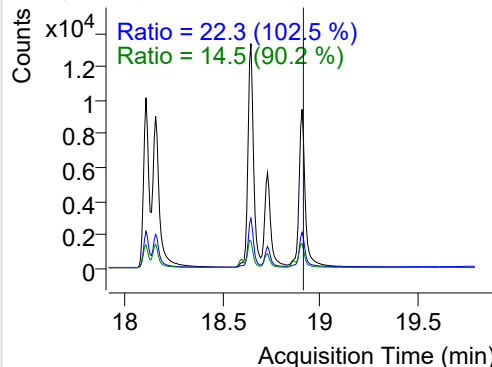


## Perylene

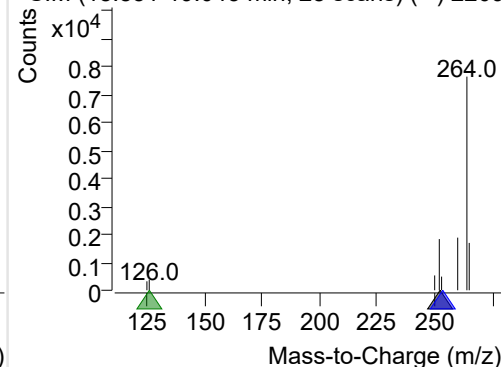
+ Selected Ion (252.0) 220907-PAHs-006.D



252.0, 253.0, 126.0

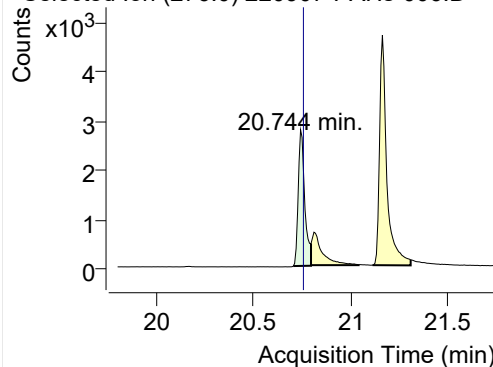


+ SIM (18.851-19.043 min, 28 scans) (\*\*) 2209

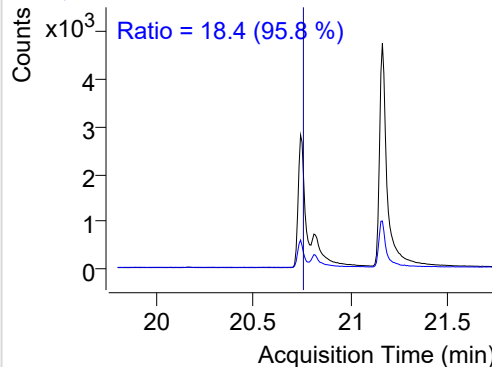


## Indeno(1,2,3-c,d)pyrene

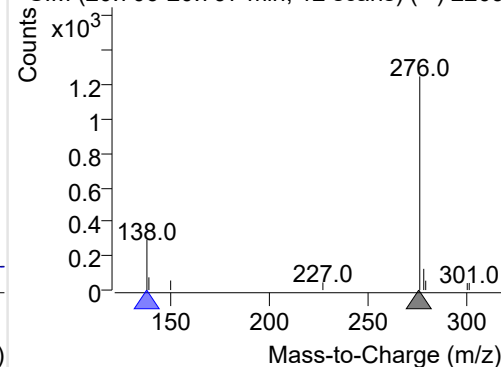
+ Selected Ion (276.0) 220907-PAHs-006.D



276.0, 138.0

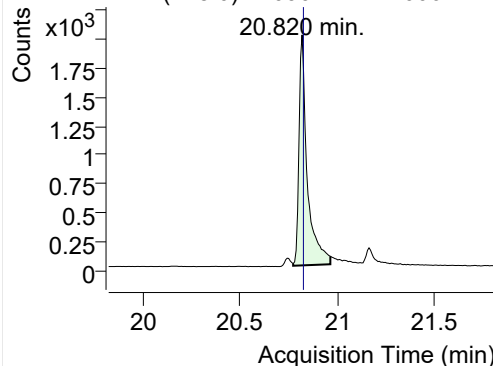


+ SIM (20.706-20.797 min, 12 scans) (\*\*) 2209

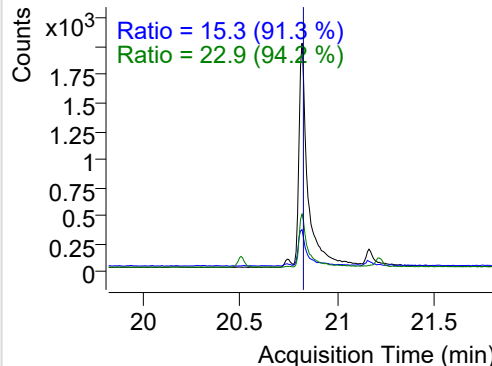


## Dibenz(a,h)anthracene

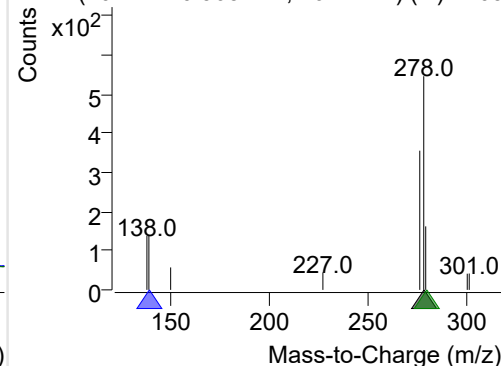
+ Selected Ion (278.0) 220907-PAHs-006.D



278.0, 139.0, 279.0

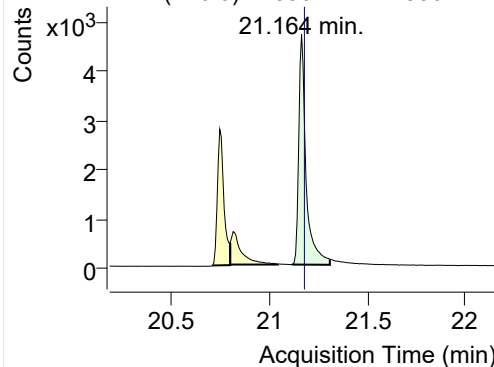


+ SIM (20.774-20.965 min, 26 scans) (\*\*) 2209

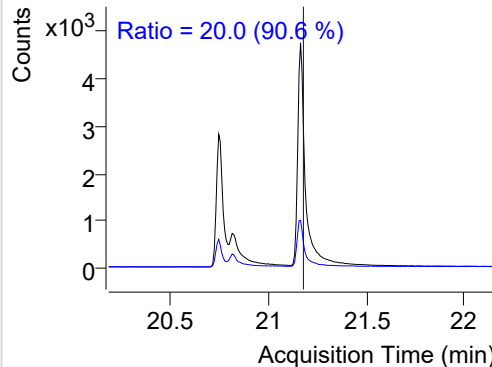


**Benzo(g,h,i)perylene**

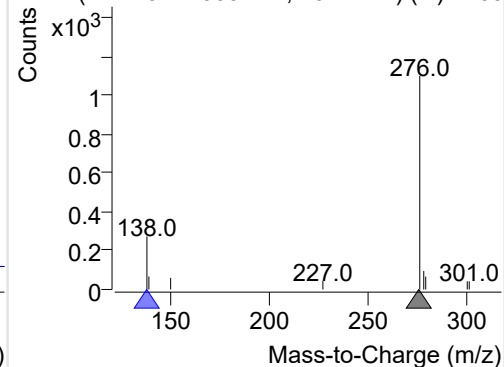
+ Selected Ion (276.0) 220907-PAHs-006.D



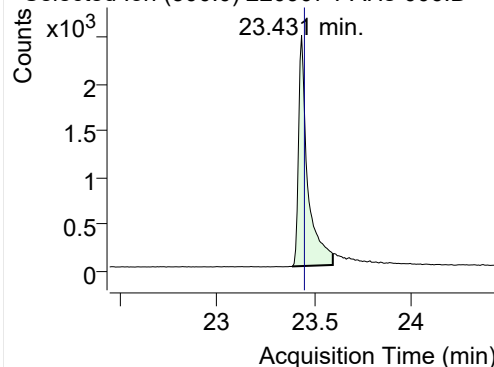
276.0, 138.0



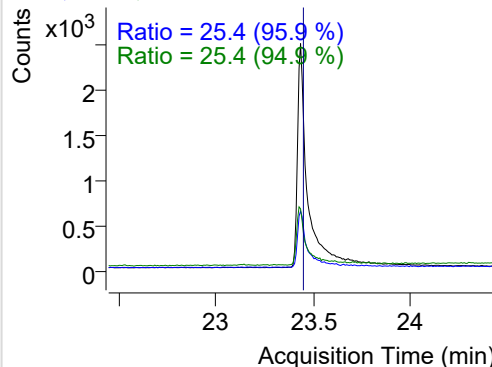
+ SIM (21.113-21.309 min, 26 scans) (\*\*) 2209

**Coronene**

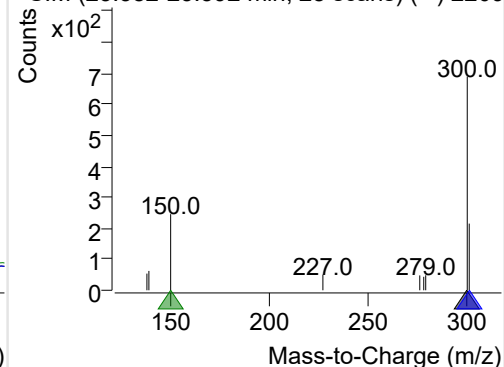
+ Selected Ion (300.0) 220907-PAHs-006.D



300.0, 301.0, 150.0



+ SIM (23.382-23.592 min, 28 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

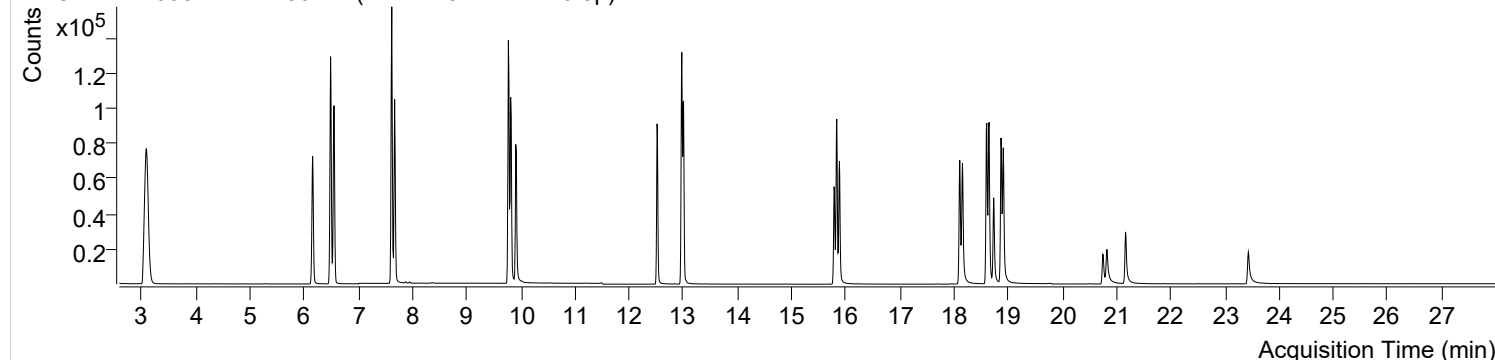


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 3:33:07	Data File	220907-PAHs-007.D
Type	Sample	Name	PAHs-19mix-STD-0.5p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

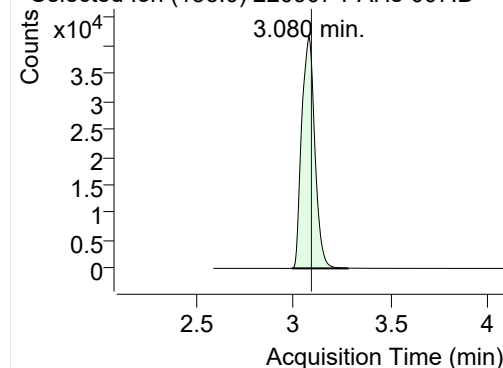
+ TIC SIM 220907-PAHs-007.D (PAHs-19mix-STD-0.5p)



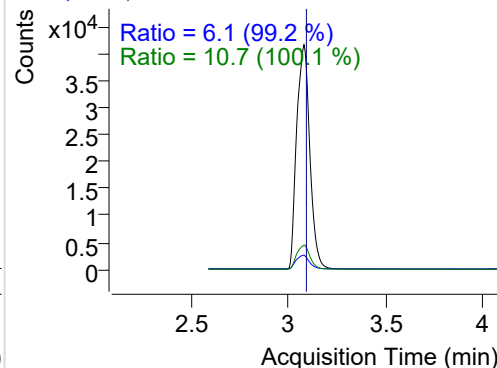
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	195042	41523.71	ND ng/ml	10.7
Naphthalene	3.107	128.0	128829	27463.16	ND ng/ml	12.7
Acenaphthylene	6.155	152.0	105530	54379.89	ND ng/ml	19.4
IS-D10-Acenaphthene	6.487	164.0	108455	61394.08	ND ng/ml	96.6
Acenaphthene	6.552	154.0	67017	36480.60	ND ng/ml	107.1
LSS-D10-Fluorene	7.617	176.0	114759	71644.00	ND ng/ml	92.4
Fluorene	7.669	166.0	81347	49570.69	ND ng/ml	92.8
IS-D10-Phenanthrene	9.769	188.0	188245	108343.7	ND ng/ml	14.9
Phenanthrene	9.812	178.0	115784	65511.61	ND ng/ml	19.3
Anthracene	9.906	178.0	98240	51182.80	ND ng/ml	18.8
Fluoranthene	12.515	202.0	112661	70516.62	ND ng/ml	17.1
LSS-D10-Pyrene	12.971	212.0	155660	97078.65	ND ng/ml	17.4
Pyrene	13.003	202.0	125270	77065.32	ND ng/ml	17.2
Benz(a)anthracene	15.784	228.0	68087	37955.53	ND ng/ml	26.4
IS-D12-Chrysene	15.833	240.0	120429	68889.51	ND ng/ml	18.8
Chrysene	15.882	228.0	82276	45560.22	ND ng/ml	29.0
Benzo(b)fluoranthene	18.103	252.0	76820	41637.77	ND ng/ml	21.4
Benzo(k)fluoranthene	18.153	252.0	84427	40365.83	ND ng/ml	21.7
SS-D12-Benzo(e)pyrene	18.601	264.0	116850	61265.67	ND ng/ml	26.1
Benzo(e)pyrene	18.644	252.0	93448	49866.27	ND ng/ml	21.7
Benzo(a)pyrene	18.730	252.0	53963	27804.99	ND ng/ml	21.1
IS-D12-Perylene	18.865	264.0	108505	55116.50	ND ng/ml	24.3
Perylene	18.908	252.0	76306	38956.45	ND ng/ml	21.7
Indeno(1,2,3-c,d)pyrene	20.751	276.0	31978	13533.86	ND ng/ml	19.1
Dibenz(a,h)anthracene	20.820	278.0	29784	10269.06	ND ng/ml	24.1
Benzo(g,h,i)perylene	21.164	276.0	42637	21524.80	ND ng/ml	28.0
Coronene	23.431	300.0	39304	11872.21	ND ng/ml	25.0

## IS-D8-Naphthalene

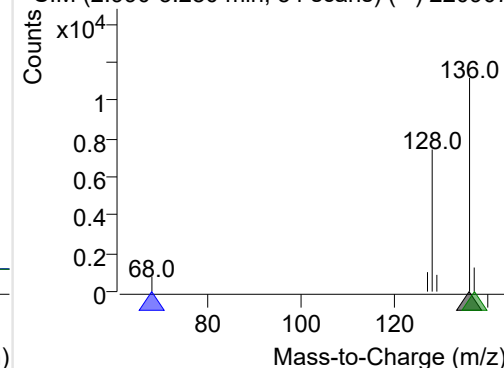
+ Selected Ion (136.0) 220907-PAHs-007.D



136.0, 68.0, 137.0

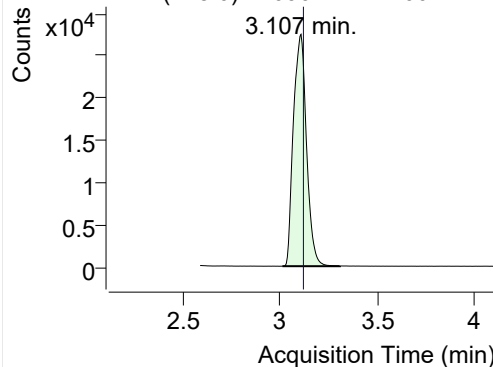


+ SIM (2.990-3.280 min, 54 scans) (\*\*) 220907

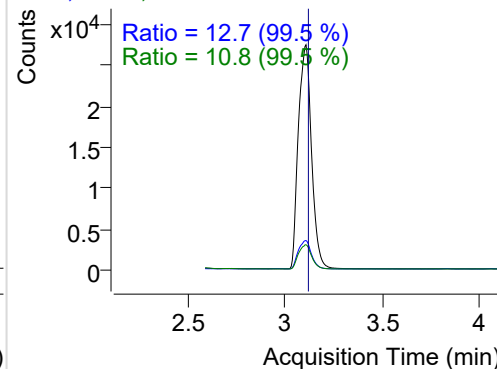


**Naphthalene**

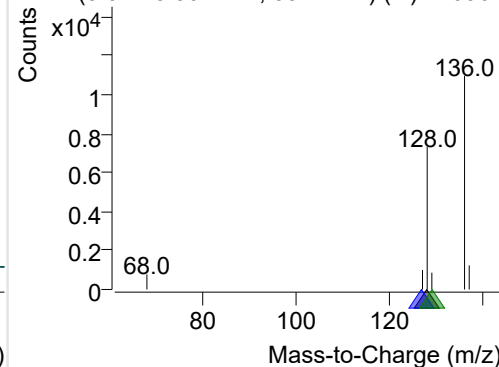
+ Selected Ion (128.0) 220907-PAHs-007.D



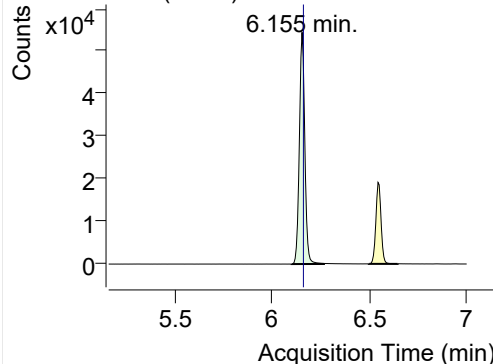
128.0, 127.0, 129.0



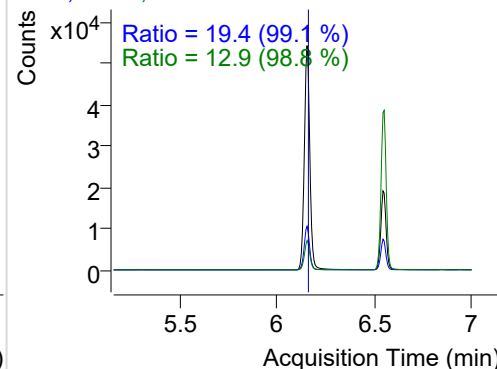
+ SIM (3.011-3.307 min, 55 scans) (\*\*) 220907

**Acenaphthylene**

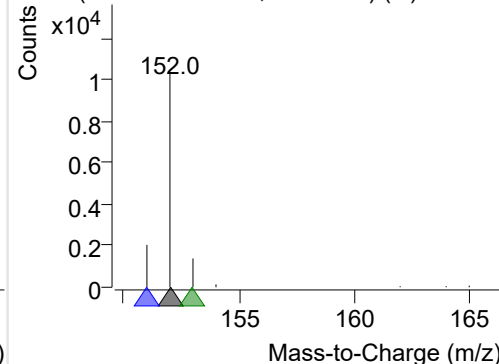
+ Selected Ion (152.0) 220907-PAHs-007.D



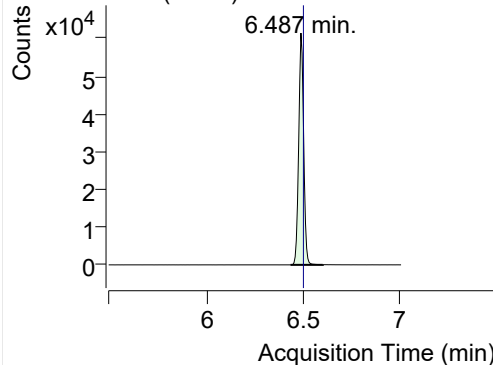
152.0, 151.0, 153.0



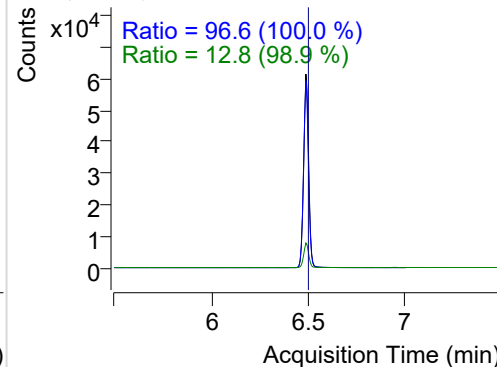
+ SIM (6.102-6.268 min, 29 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

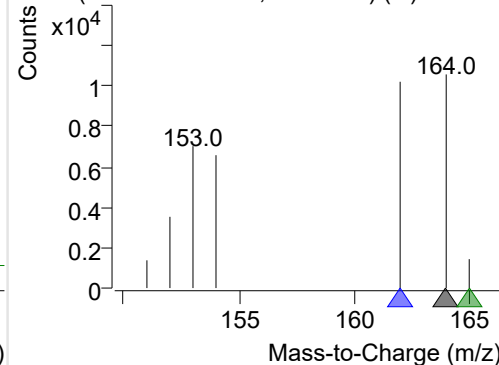
+ Selected Ion (164.0) 220907-PAHs-007.D



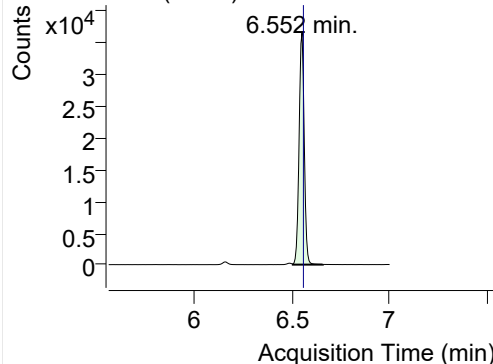
164.0, 162.0, 165.0



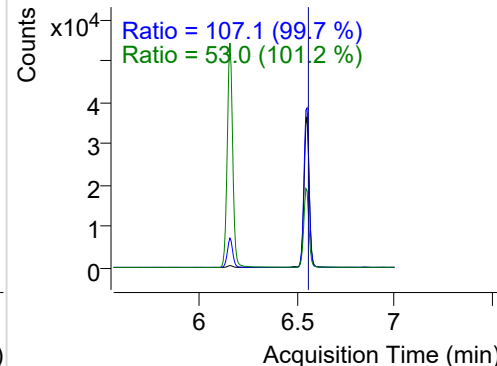
+ SIM (6.434-6.599 min, 29 scans) (\*\*) 220907

**Acenaphthene**

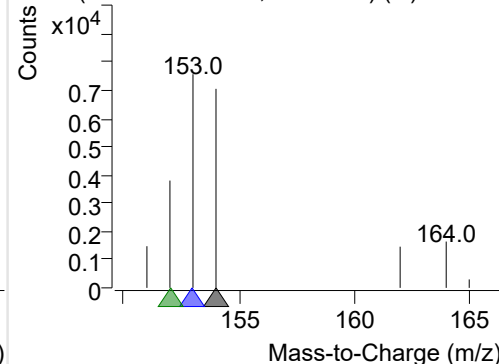
+ Selected Ion (154.0) 220907-PAHs-007.D



154.0, 153.0, 152.0

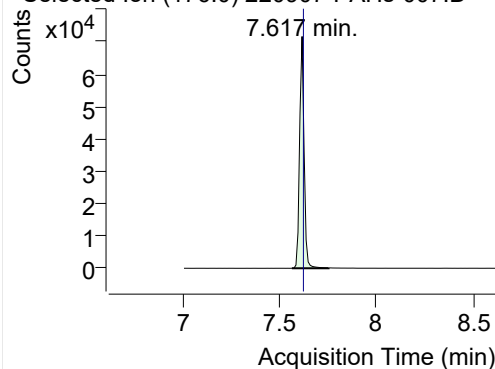


+ SIM (6.505-6.658 min, 27 scans) (\*\*) 220907

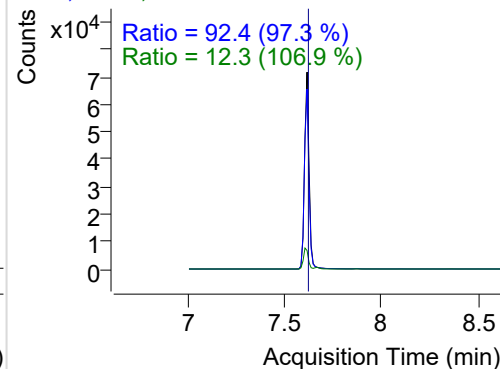


## LSS-D10-Fluorene

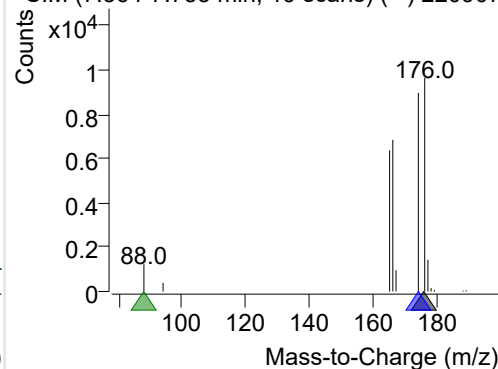
+ Selected Ion (176.0) 220907-PAHs-007.D



176.0, 174.0, 88.0

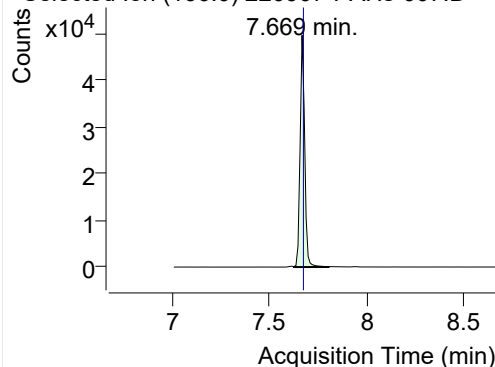


+ SIM (7.564-7.753 min, 19 scans) (\*\*) 220907

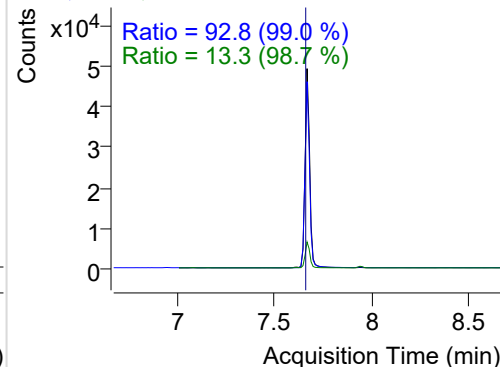


## Fluorene

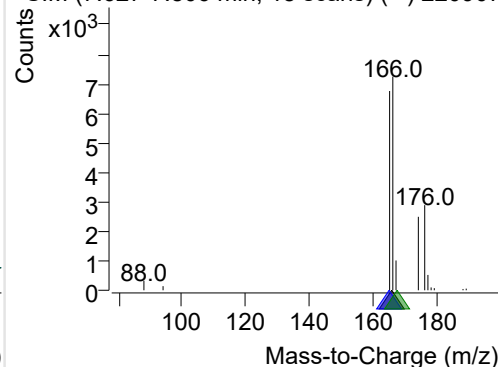
+ Selected Ion (166.0) 220907-PAHs-007.D



166.0, 165.0, 167.0

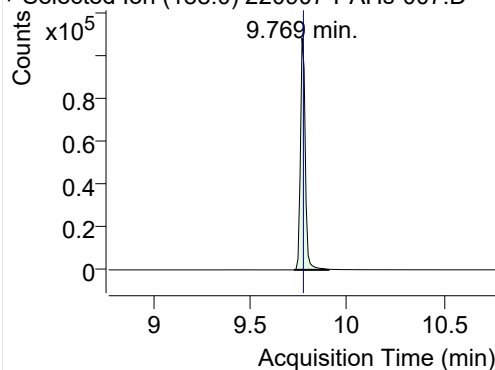


+ SIM (7.627-7.806 min, 18 scans) (\*\*) 220907

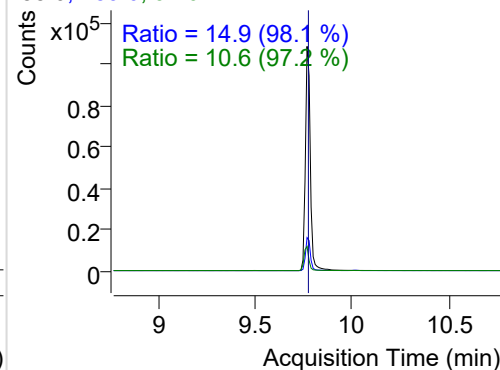


## IS-D10-Phenanthrene

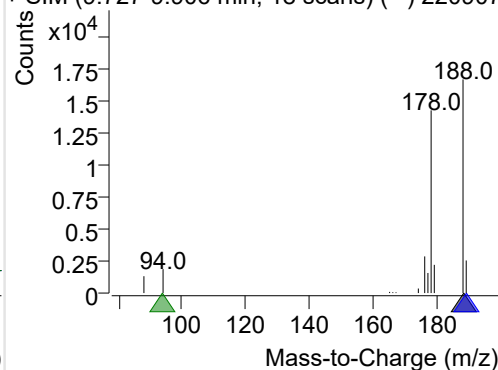
+ Selected Ion (188.0) 220907-PAHs-007.D



188.0, 189.0, 94.0

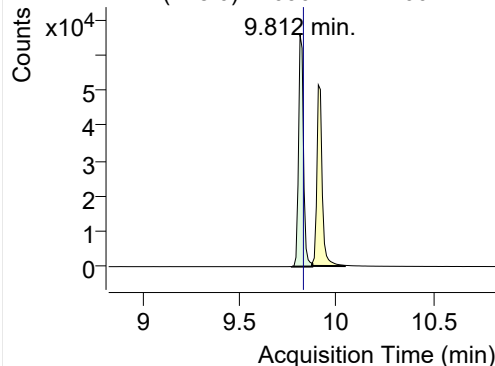


+ SIM (9.727-9.906 min, 18 scans) (\*\*) 220907

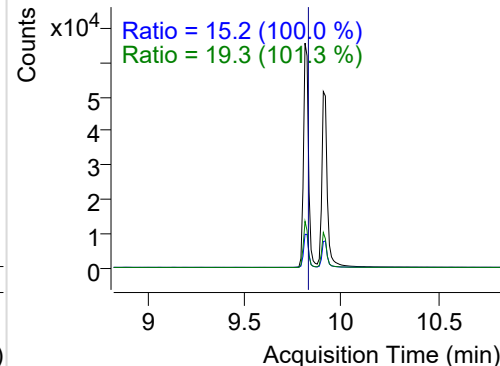


## Phenanthrene

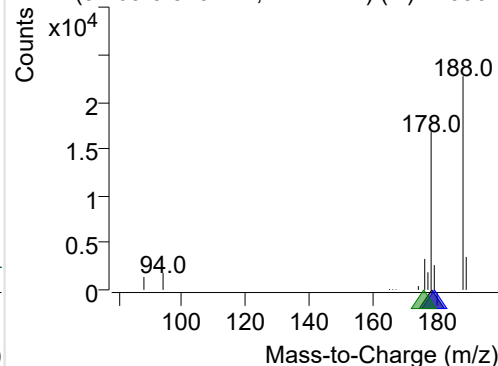
+ Selected Ion (178.0) 220907-PAHs-007.D



178.0, 179.0, 176.0

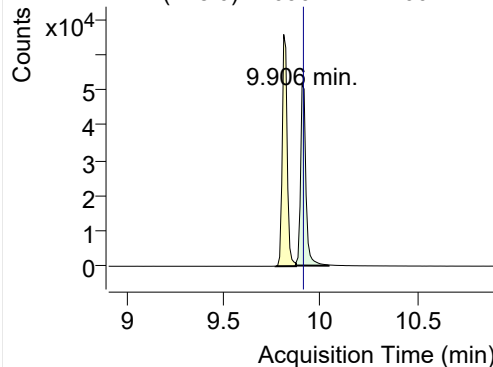


+ SIM (9.769-9.875 min, 11 scans) (\*\*) 220907

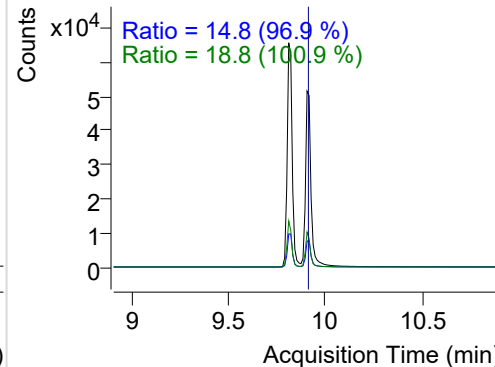


**Anthracene**

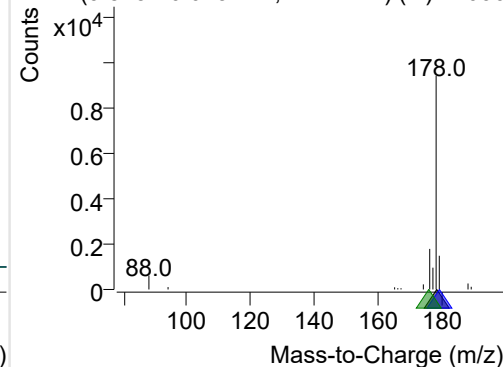
+ Selected Ion (178.0) 220907-PAHs-007.D



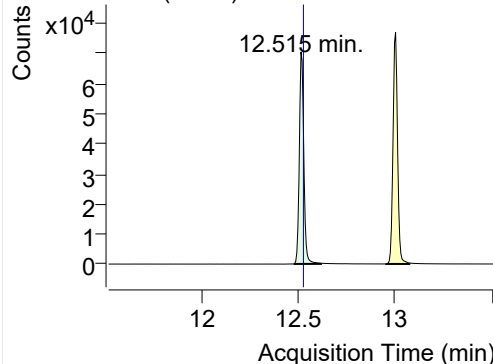
178.0, 179.0, 176.0



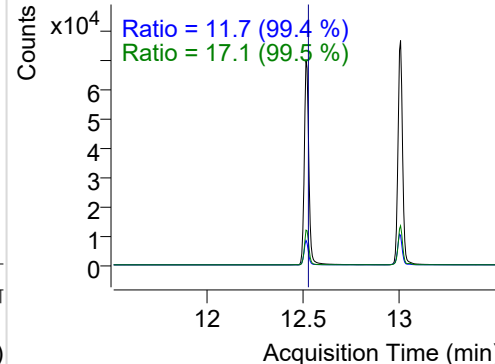
+ SIM (9.875-10.043 min, 17 scans) (\*\*) 22090

**Fluoranthene**

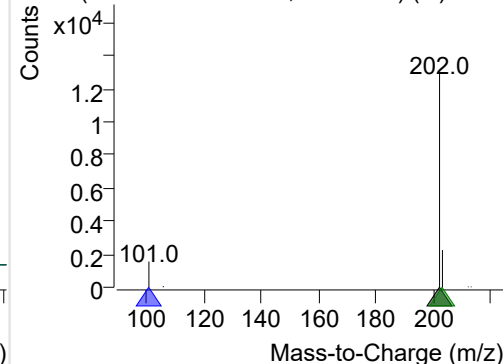
+ Selected Ion (202.0) 220907-PAHs-007.D



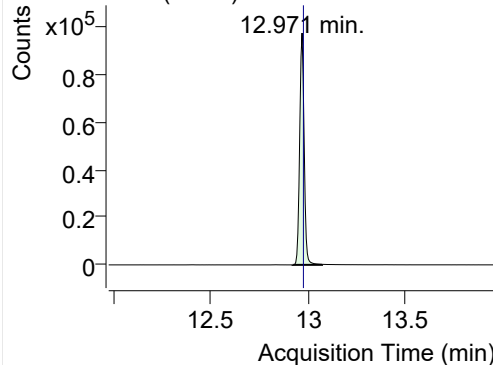
202.0, 101.0, 203.0



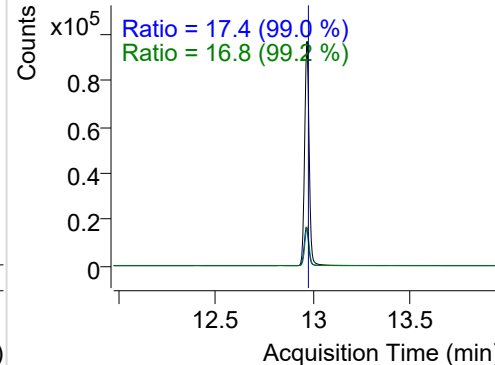
+ SIM (12.478-12.618 min, 27 scans) (\*\*) 2209

**LSS-D10-Pyrene**

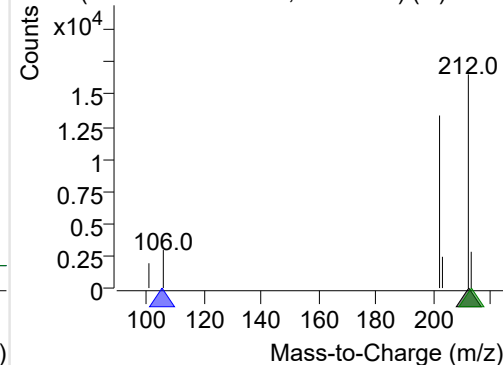
+ Selected Ion (212.0) 220907-PAHs-007.D



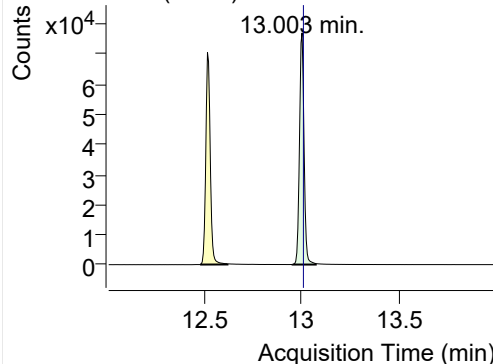
212.0, 106.0, 213.0



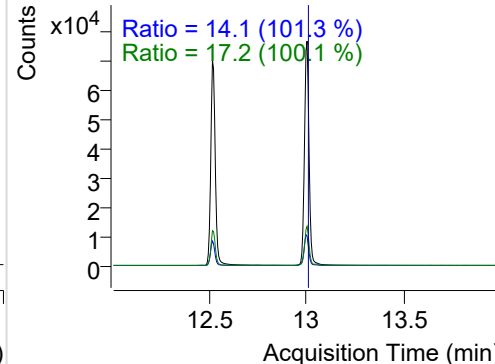
+ SIM (12.922-13.074 min, 29 scans) (\*\*) 2209

**Pyrene**

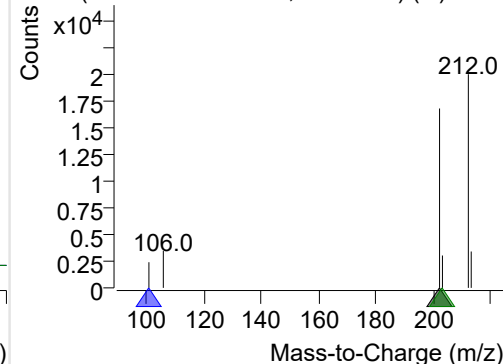
+ Selected Ion (202.0) 220907-PAHs-007.D



202.0, 101.0, 203.0

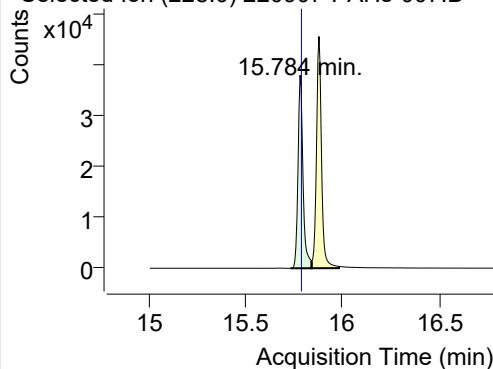


+ SIM (12.954-13.074 min, 23 scans) (\*\*) 2209

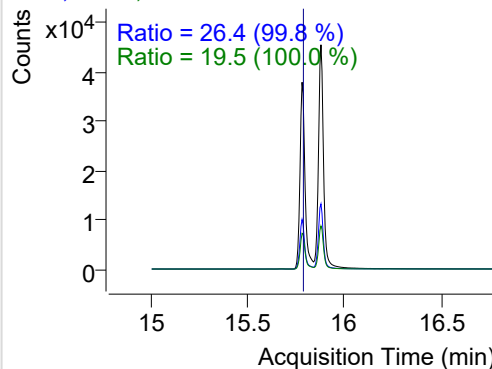


**Benz(a)anthracene**

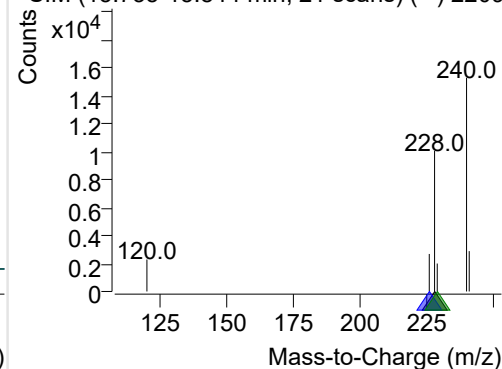
+ Selected Ion (228.0) 220907-PAHs-007.D



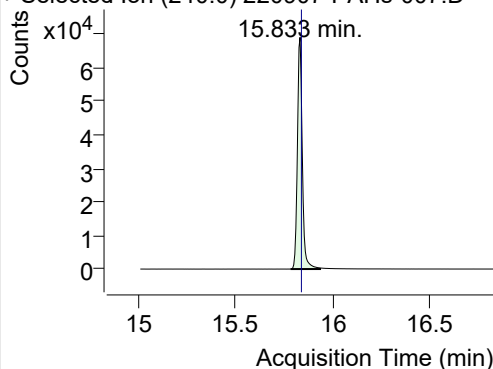
228.0, 226.0, 229.0



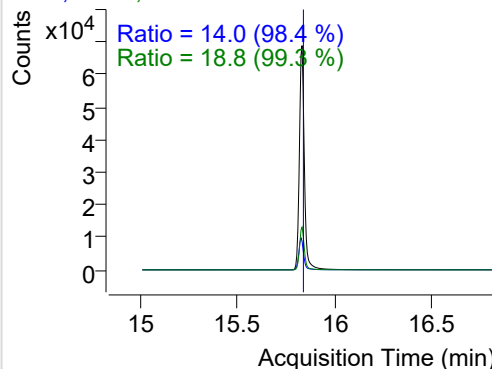
+ SIM (15.735-15.844 min, 21 scans) (\*\*) 2209

**IS-D12-Chrysene**

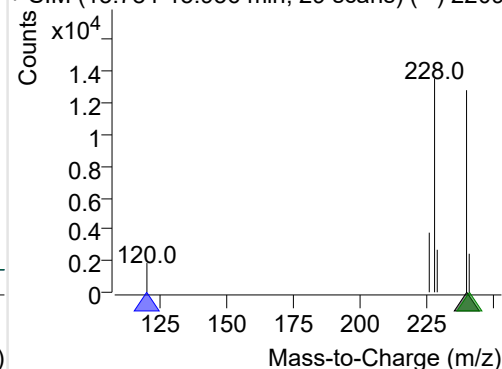
+ Selected Ion (240.0) 220907-PAHs-007.D



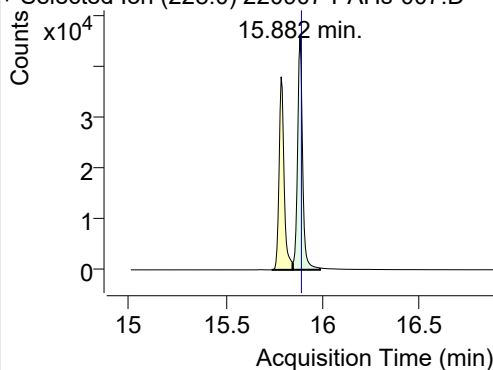
240.0, 120.0, 241.0



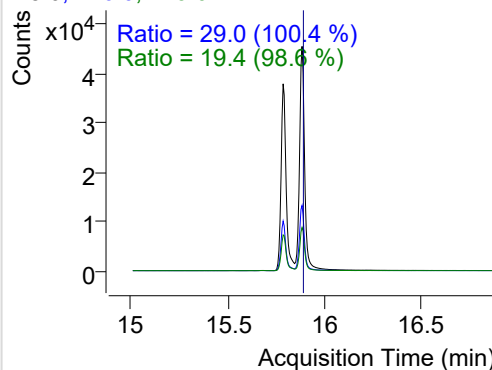
+ SIM (15.784-15.936 min, 29 scans) (\*\*) 2209

**Chrysene**

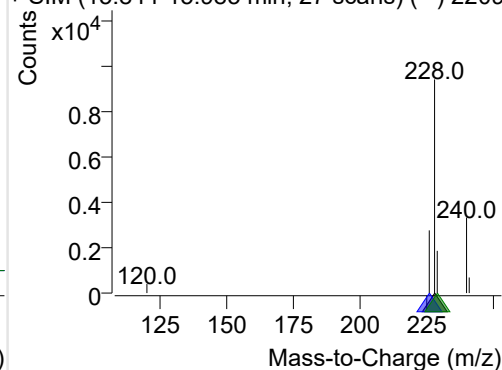
+ Selected Ion (228.0) 220907-PAHs-007.D



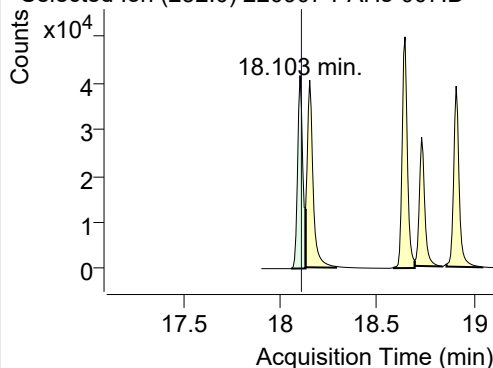
228.0, 226.0, 229.0



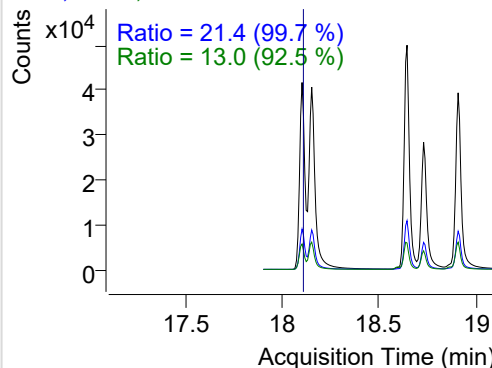
+ SIM (15.844-15.985 min, 27 scans) (\*\*) 2209

**Benzo(b)fluoranthene**

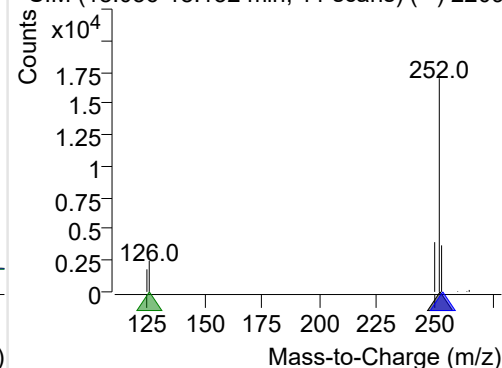
+ Selected Ion (252.0) 220907-PAHs-007.D



252.0, 253.0, 126.0

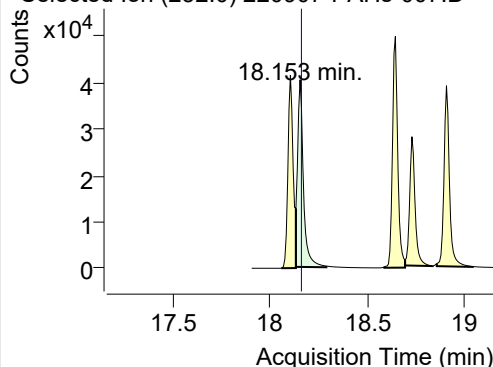


+ SIM (18.056-18.132 min, 11 scans) (\*\*) 2209

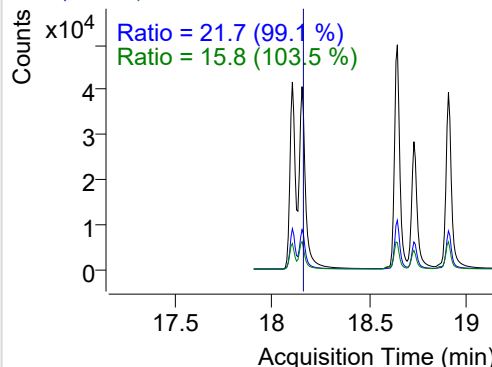


**Benzo(k)fluoranthene**

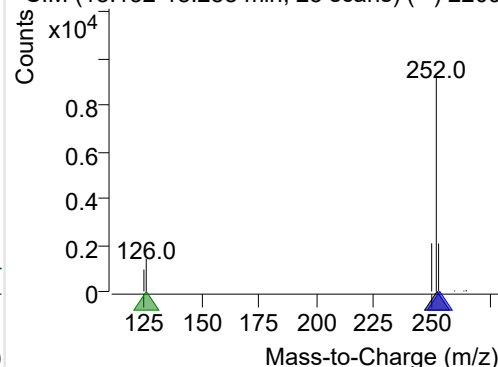
+ Selected Ion (252.0) 220907-PAHs-007.D



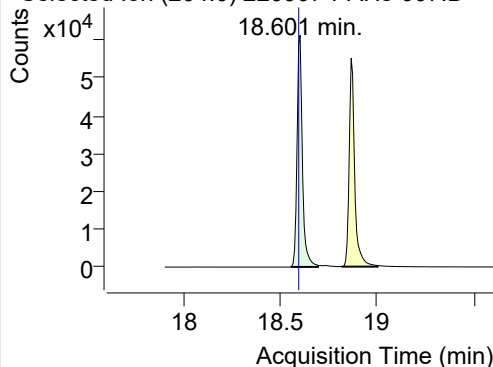
252.0, 253.0, 126.0



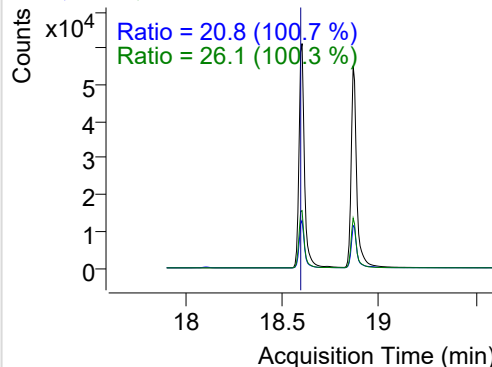
+ SIM (18.132-18.288 min, 23 scans) (\*\*) 2209

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

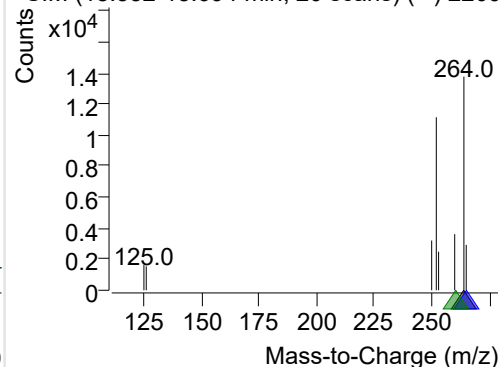
+ Selected Ion (264.0) 220907-PAHs-007.D



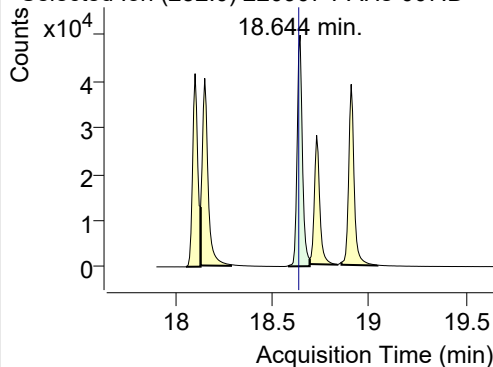
264.0, 265.0, 260.0



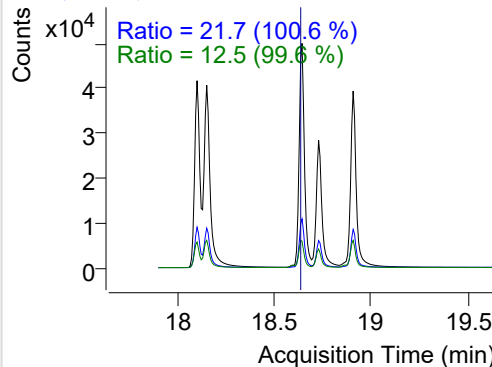
+ SIM (18.552-18.694 min, 20 scans) (\*\*) 2209

**Benzo(e)pyrene**

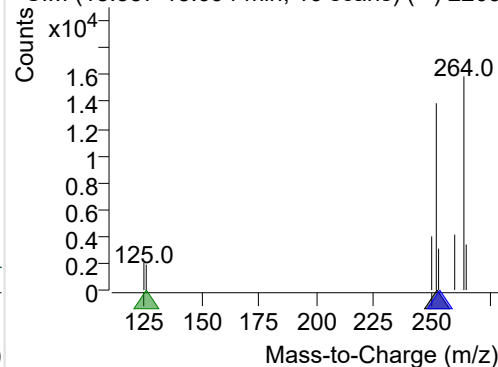
+ Selected Ion (252.0) 220907-PAHs-007.D



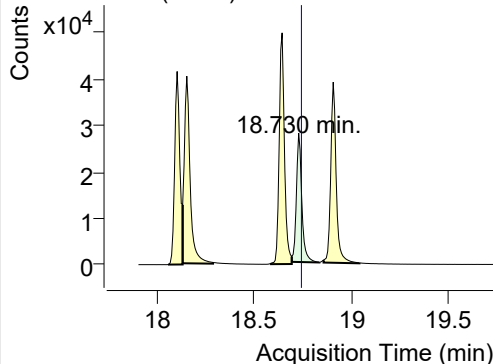
252.0, 253.0, 126.0



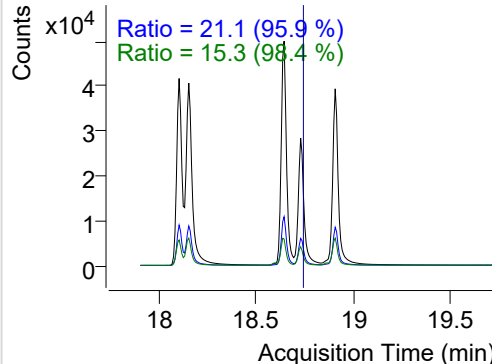
+ SIM (18.587-18.694 min, 16 scans) (\*\*) 2209

**Benzo(a)pyrene**

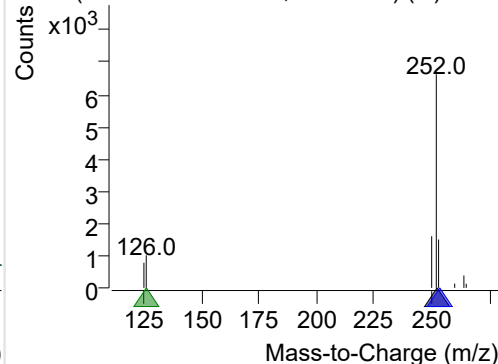
+ Selected Ion (252.0) 220907-PAHs-007.D



252.0, 253.0, 126.0

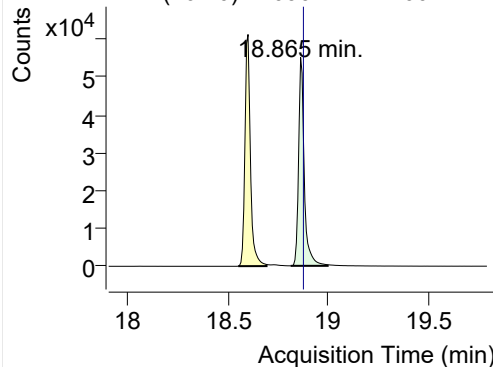


+ SIM (18.694-18.836 min, 21 scans) (\*\*) 2209

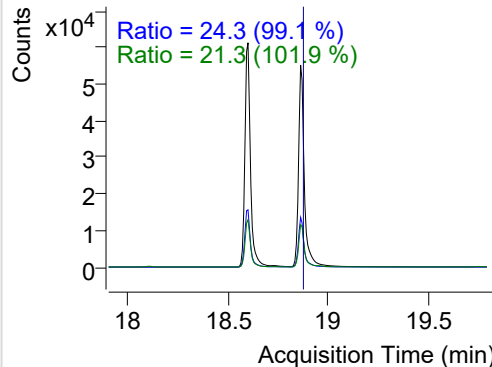


## IS-D12-Perylene

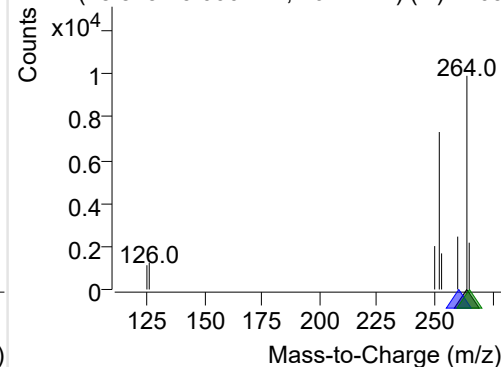
+ Selected Ion (264.0) 220907-PAHs-007.D



264.0, 260.0, 265.0

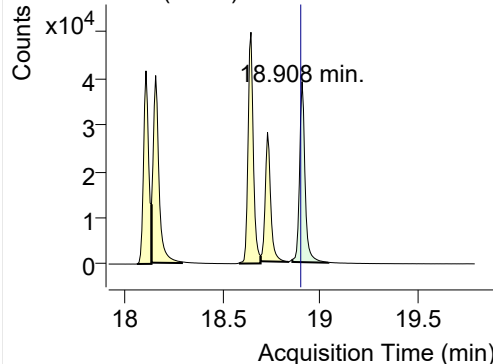


+ SIM (18.815-19.000 min, 26 scans) (\*\*) 2209

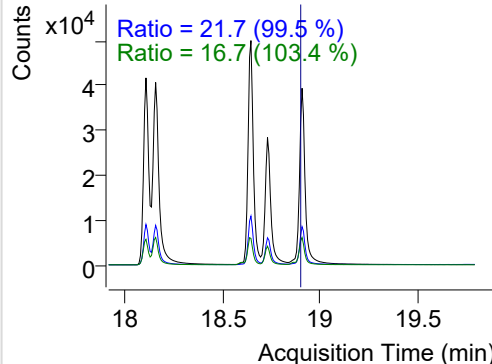


## Perylene

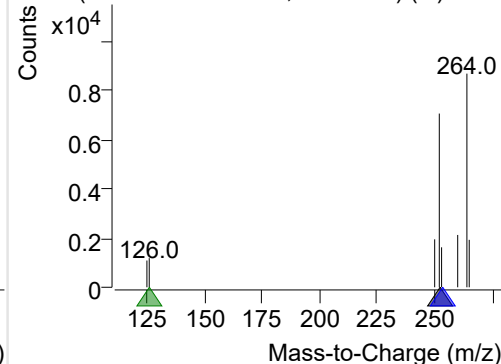
+ Selected Ion (252.0) 220907-PAHs-007.D



252.0, 253.0, 126.0

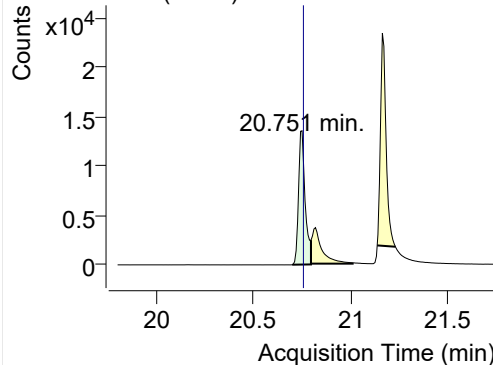


+ SIM (18.858-19.043 min, 27 scans) (\*\*) 2209

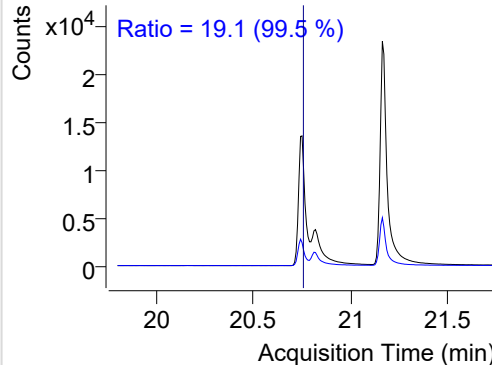


## Indeno(1,2,3-c,d)pyrene

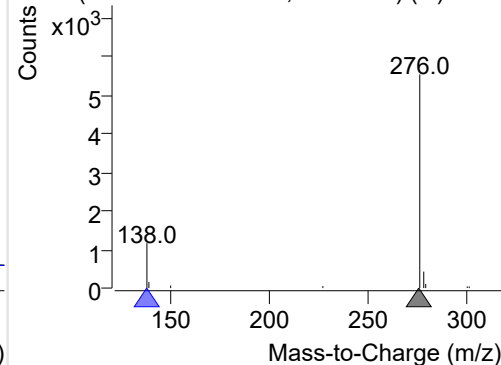
+ Selected Ion (276.0) 220907-PAHs-007.D



276.0, 138.0

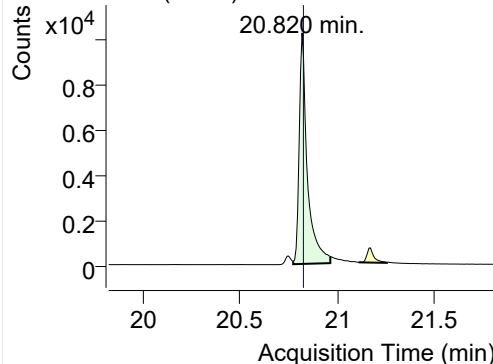


+ SIM (20.701-20.797 min, 13 scans) (\*\*) 2209

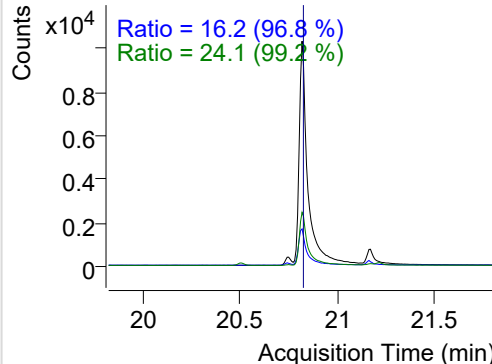


## Dibenz(a,h)anthracene

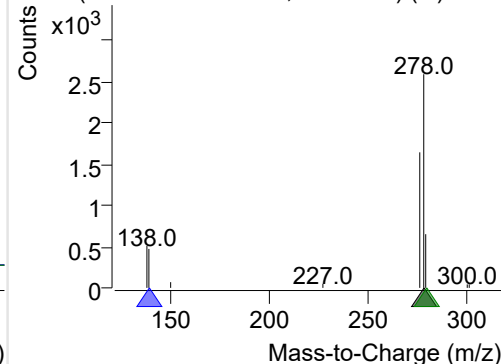
+ Selected Ion (278.0) 220907-PAHs-007.D



278.0, 139.0, 279.0

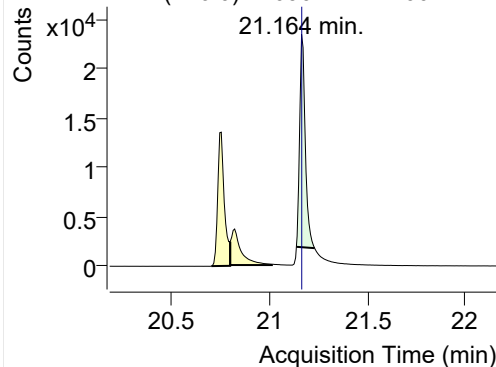


+ SIM (20.774-20.965 min, 26 scans) (\*\*) 2209

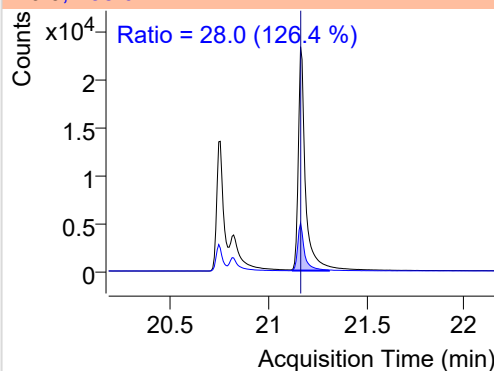


**Benzo(g,h,i)perylene**

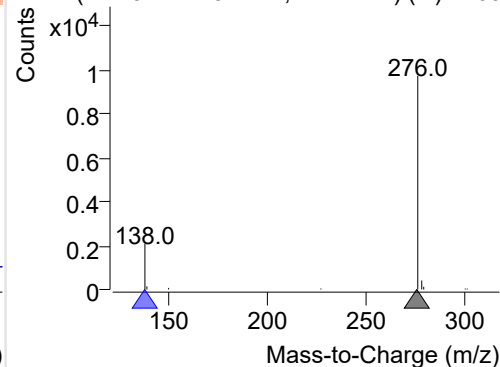
+ Selected Ion (276.0) 220907-PAHs-007.D



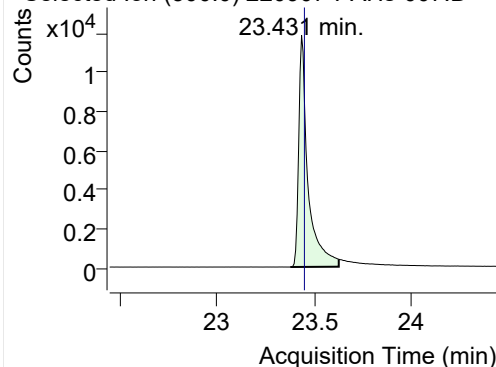
276.0, 138.0



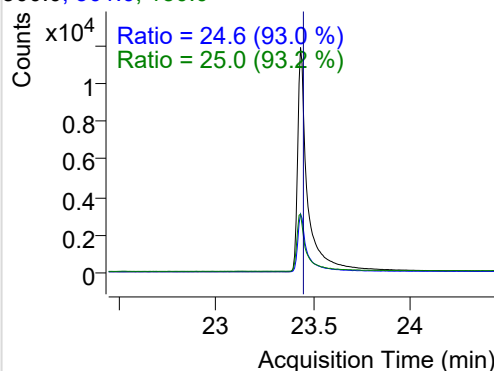
+ SIM (21.137-21.231 min, 12 scans) (\*\*) 2209

**Coronene**

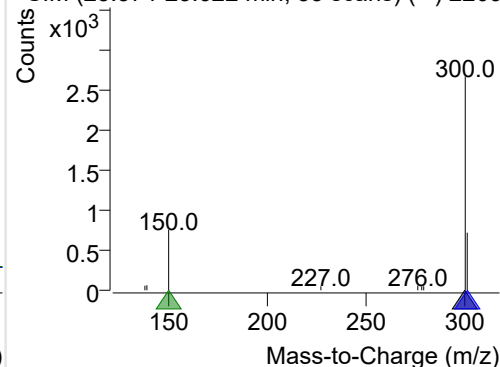
+ Selected Ion (300.0) 220907-PAHs-007.D



300.0, 301.0, 150.0



+ SIM (23.374-23.622 min, 33 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

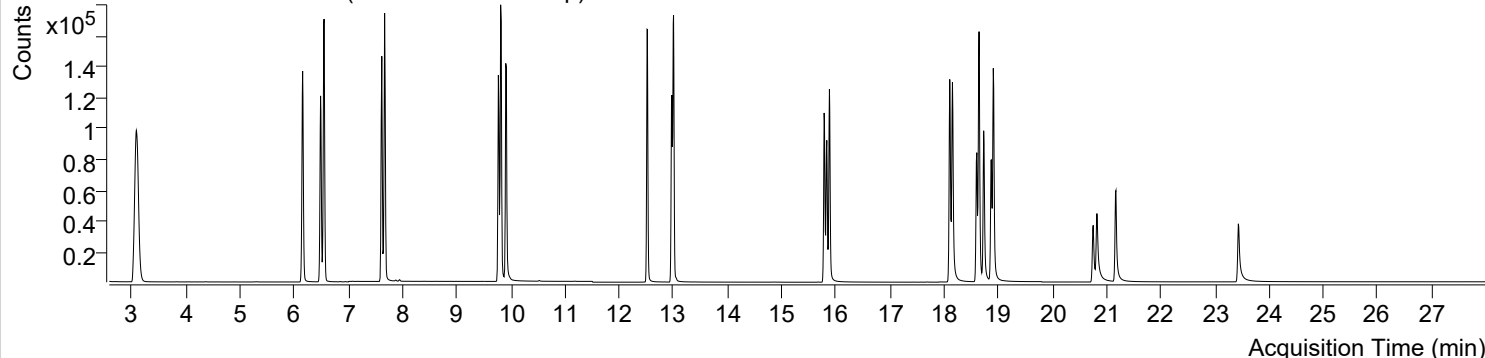


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 4:04:13	Data File	220907-PAHs-008.D
Type	Sample	Name	PAHs-19mix-STD-1p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

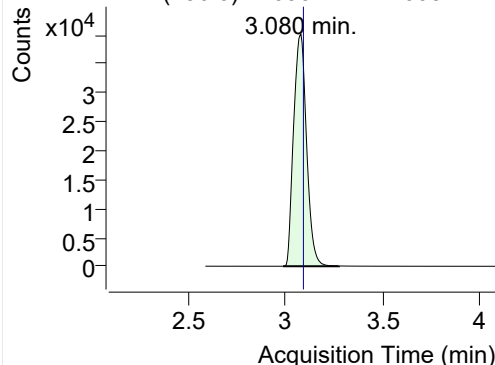
+ TIC SIM 220907-PAHs-008.D (PAHs-19mix-STD-1p)



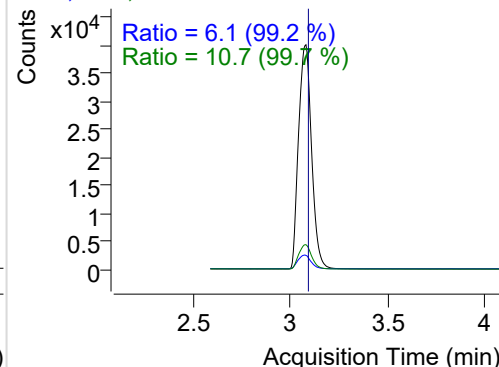
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	185594	40003.49	ND ng/ml	10.7
Naphthalene	3.101	128.0	223422	48137.17	ND ng/ml	12.7
Acenaphthylene	6.155	152.0	191861	103135.44	ND ng/ml	19.4
IS-D10-Acenaphthene	6.487	164.0	102446	57711.08	ND ng/ml	96.4
Acenaphthene	6.552	154.0	110928	62005.95	ND ng/ml	107.0
LSS-D10-Fluorene	7.617	176.0	106836	66881.42	ND ng/ml	92.6
Fluorene	7.669	166.0	137556	82992.32	ND ng/ml	92.9
IS-D10-Phenanthrene	9.769	188.0	177263	105912.81	ND ng/ml	14.9
Phenanthrene	9.811	178.0	201599	112975.36	ND ng/ml	19.2
Anthracene	9.916	178.0	174130	94990.37	ND ng/ml	18.4
Fluoranthene	12.521	202.0	201825	127689.47	ND ng/ml	17.2
LSS-D10-Pyrene	12.971	212.0	142950	88852.63	ND ng/ml	17.4
Pyrene	13.003	202.0	215785	130597.78	ND ng/ml	17.2
Benz(a)anthracene	15.784	228.0	130687	75318.20	ND ng/ml	26.3
IS-D12-Chrysene	15.833	240.0	117617	66551.15	ND ng/ml	18.8
Chrysene	15.881	228.0	147427	82949.19	ND ng/ml	29.0
Benzo(b)fluoranthene	18.103	252.0	141028	78193.47	ND ng/ml	21.4
Benzo(k)fluoranthene	18.153	252.0	156437	76750.88	ND ng/ml	21.3
SS-D12-Benzo(e)pyrene	18.601	264.0	107221	56094.02	ND ng/ml	26.1
Benzo(e)pyrene	18.644	252.0	164928	89438.93	ND ng/ml	21.6
Benzo(a)pyrene	18.729	252.0	113440	56551.64	ND ng/ml	20.9
IS-D12-Perylene	18.865	264.0	105311	52075.00	ND ng/ml	24.4
Perylene	18.907	252.0	143284	72289.06	ND ng/ml	21.4
Indeno(1,2,3-c,d)pyrene	20.751	276.0	67534	30134.33	ND ng/ml	19.1
Dibenz(a,h)anthracene	20.820	278.0	65965	23257.01	ND ng/ml	23.2
Benzo(g,h,i)perylene	21.171	276.0	112175	48159.26	ND ng/ml	21.2
Coronene	23.431	300.0	76907	24759.07	ND ng/ml	25.2

## IS-D8-Naphthalene

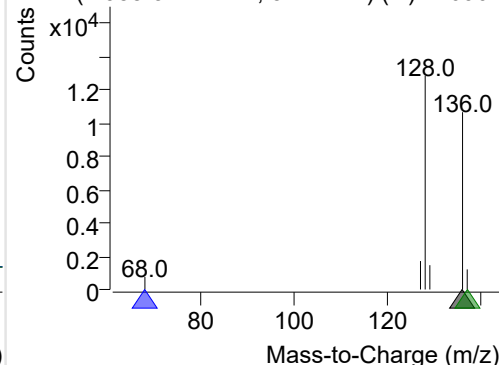
+ Selected Ion (136.0) 220907-PAHs-008.D



136.0, 68.0, 137.0

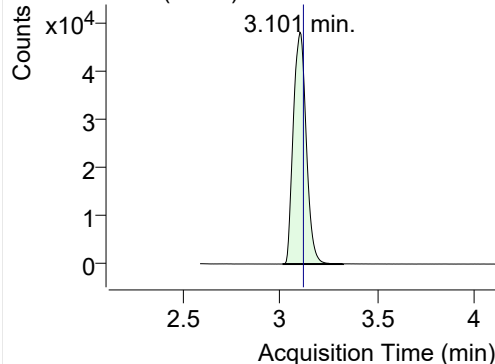


+ SIM (2.988-3.274 min, 54 scans) (\*\*) 220907

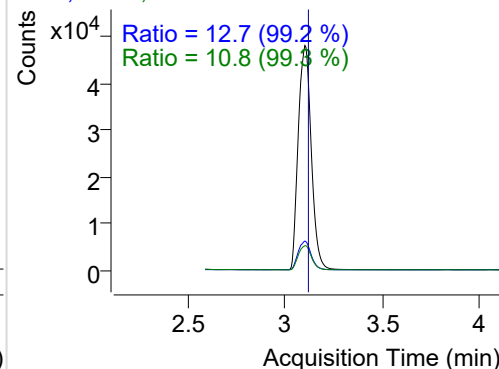


## Naphthalene

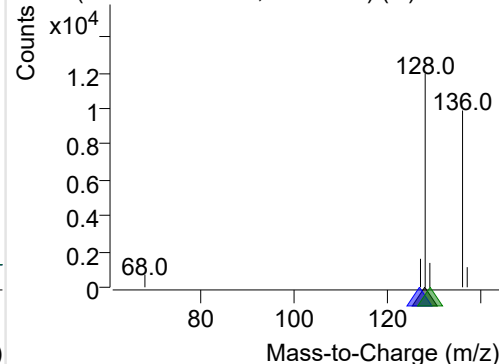
+ Selected Ion (128.0) 220907-PAHs-008.D



128.0, 127.0, 129.0

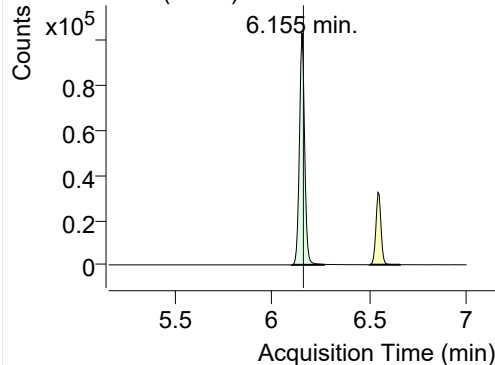


+ SIM (3.012-3.323 min, 58 scans) (\*\*) 220907

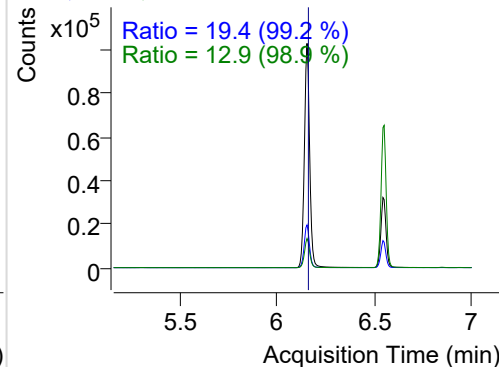


## Acenaphthylene

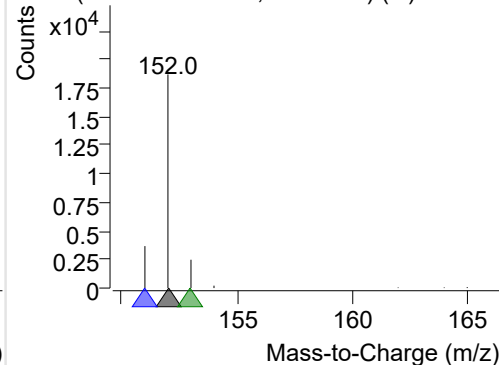
+ Selected Ion (152.0) 220907-PAHs-008.D



152.0, 151.0, 153.0

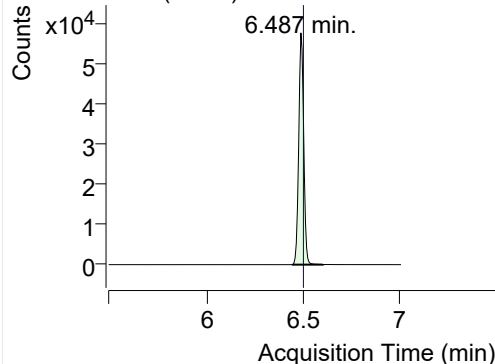


+ SIM (6.102-6.268 min, 29 scans) (\*\*) 220907

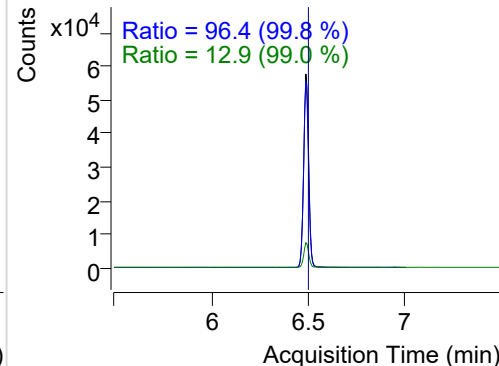


## IS-D10-Acenaphthene

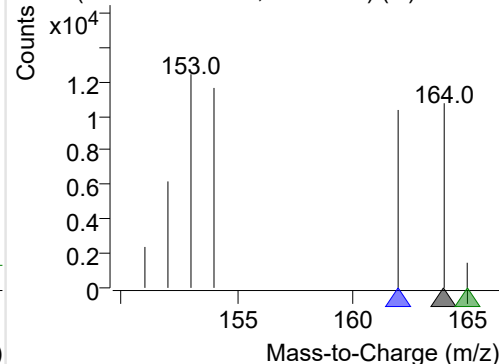
+ Selected Ion (164.0) 220907-PAHs-008.D



164.0, 162.0, 165.0

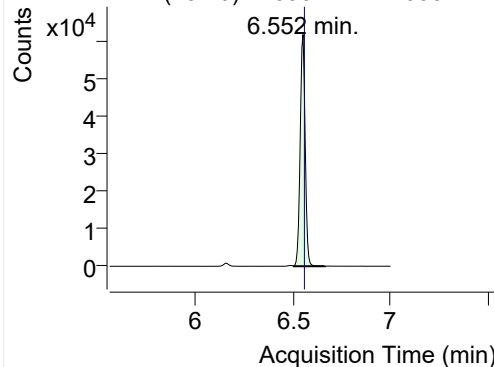


+ SIM (6.445-6.599 min, 27 scans) (\*\*) 220907

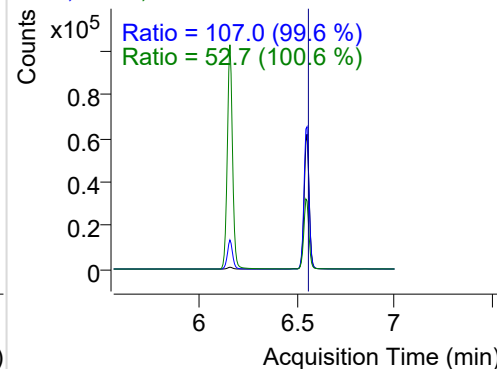


**Acenaphthene**

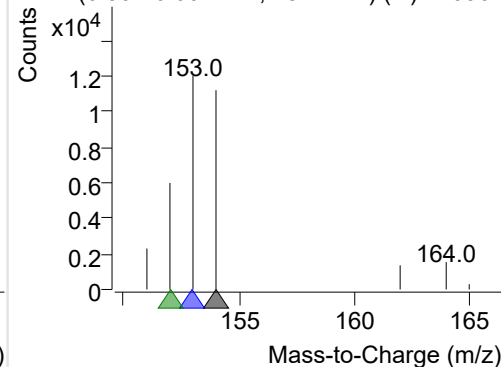
+ Selected Ion (154.0) 220907-PAHs-008.D



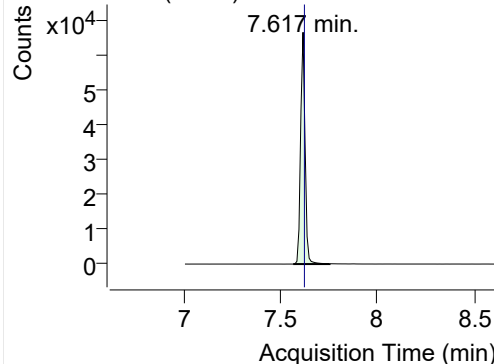
154.0, 153.0, 152.0



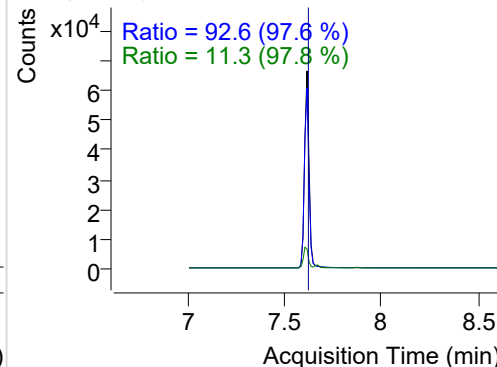
+ SIM (6.504-6.664 min, 28 scans) (\*\*) 220907

**LSS-D10-Fluorene**

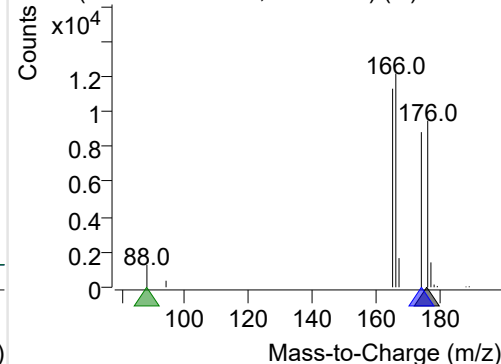
+ Selected Ion (176.0) 220907-PAHs-008.D



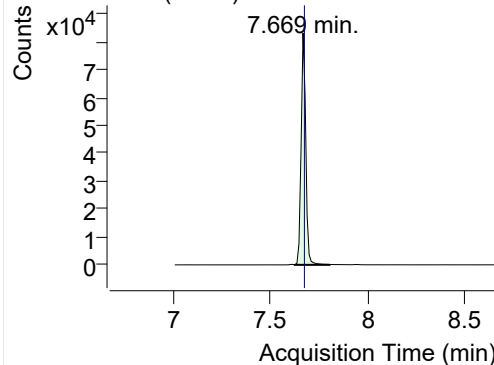
176.0, 174.0, 88.0



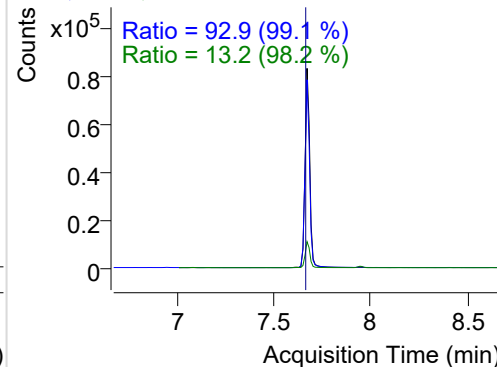
+ SIM (7.566-7.753 min, 18 scans) (\*\*) 220907

**Fluorene**

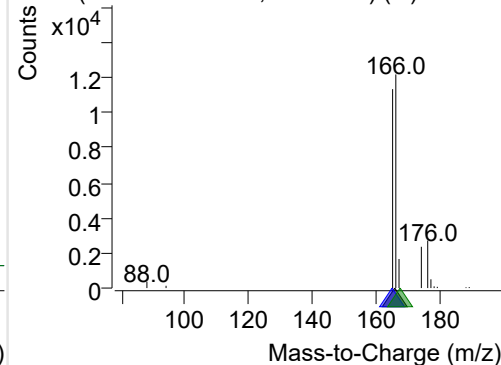
+ Selected Ion (166.0) 220907-PAHs-008.D



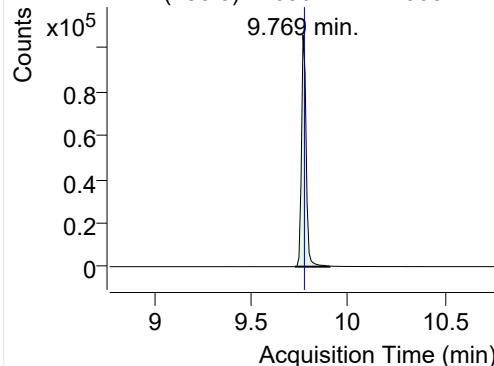
166.0, 165.0, 167.0



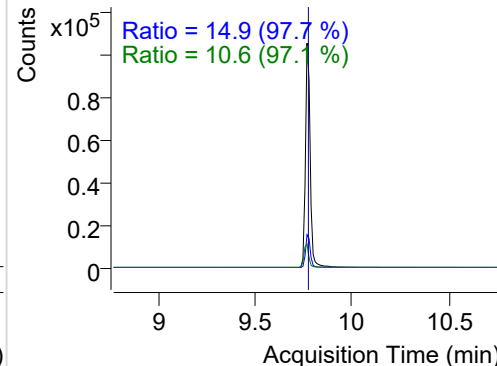
+ SIM (7.627-7.806 min, 18 scans) (\*\*) 220907

**IS-D10-Phenanthrene**

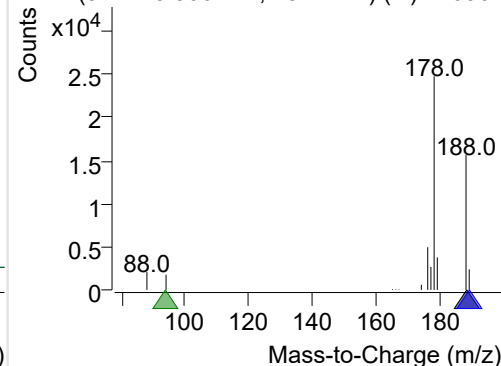
+ Selected Ion (188.0) 220907-PAHs-008.D



188.0, 189.0, 94.0

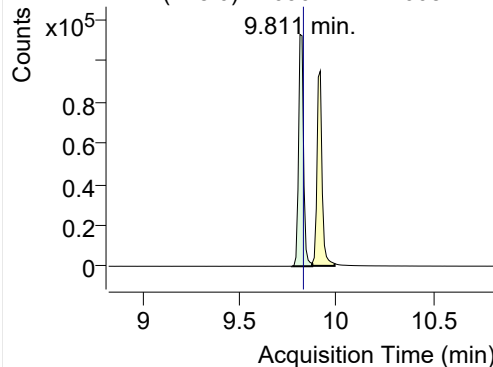


+ SIM (9.727-9.906 min, 18 scans) (\*\*) 220907

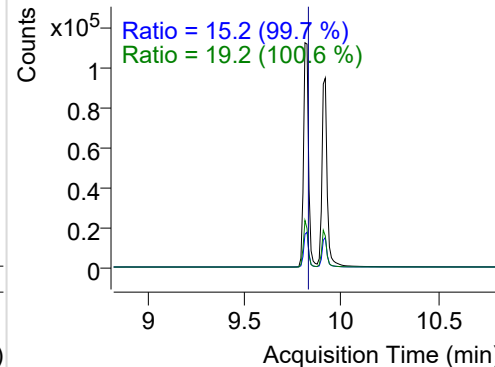


**Phenanthrene**

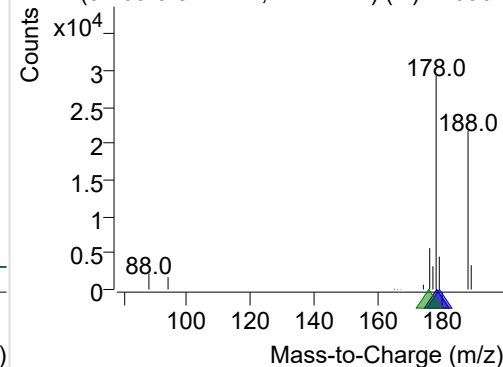
+ Selected Ion (178.0) 220907-PAHs-008.D



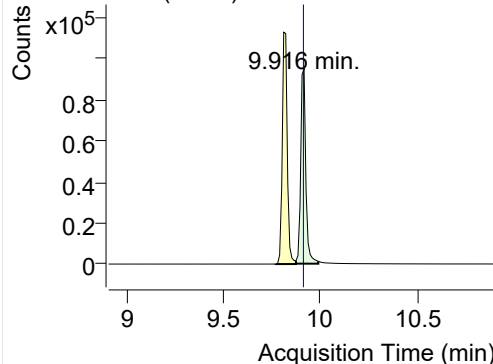
178.0, 179.0, 176.0



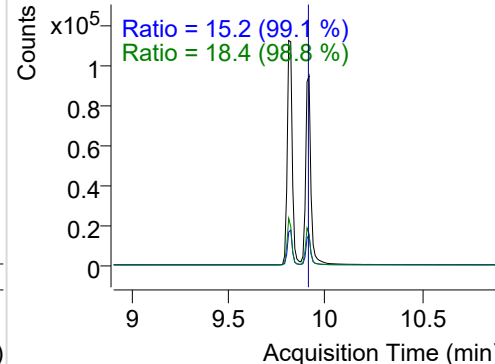
+ SIM (9.769-9.874 min, 11 scans) (\*\*) 220907

**Anthracene**

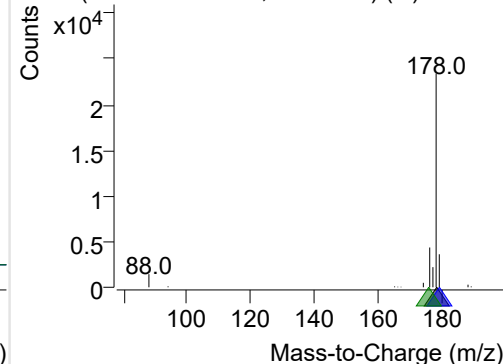
+ Selected Ion (178.0) 220907-PAHs-008.D



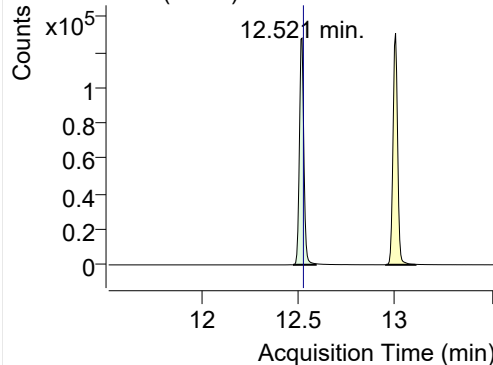
178.0, 179.0, 176.0



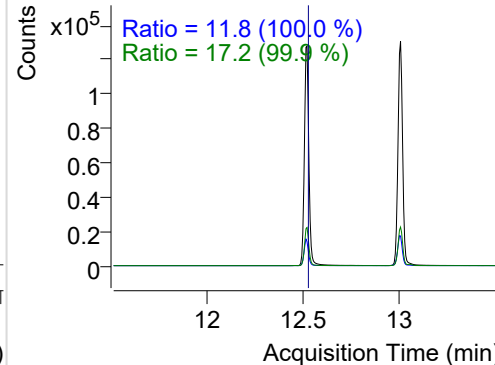
+ SIM (9.874-9.990 min, 12 scans) (\*\*) 220907

**Fluoranthene**

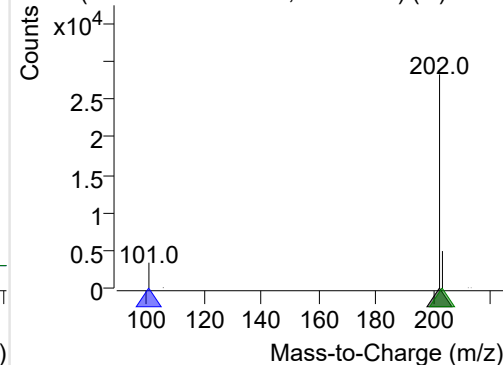
+ Selected Ion (202.0) 220907-PAHs-008.D



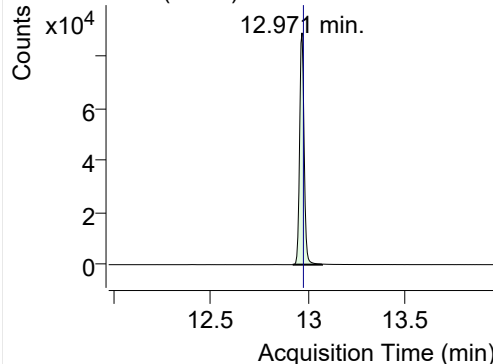
202.0, 101.0, 203.0



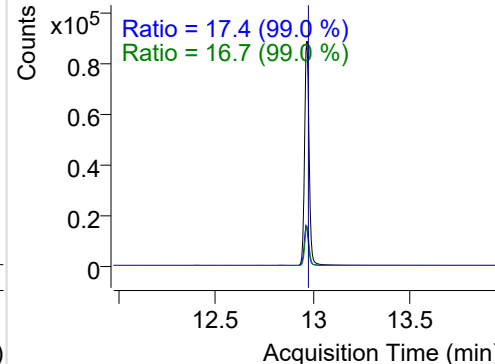
+ SIM (12.474-12.591 min, 22 scans) (\*\*) 2209

**LSS-D10-Pyrene**

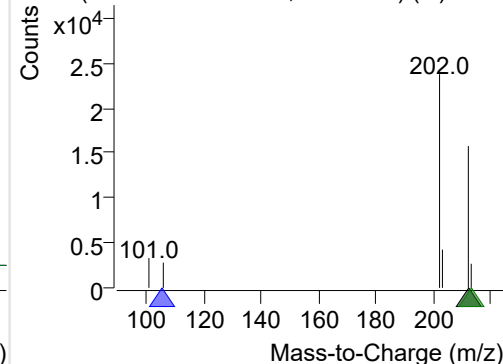
+ Selected Ion (212.0) 220907-PAHs-008.D



212.0, 106.0, 213.0

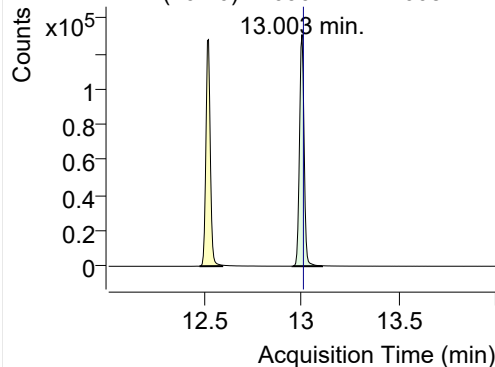


+ SIM (12.923-13.074 min, 28 scans) (\*\*) 2209

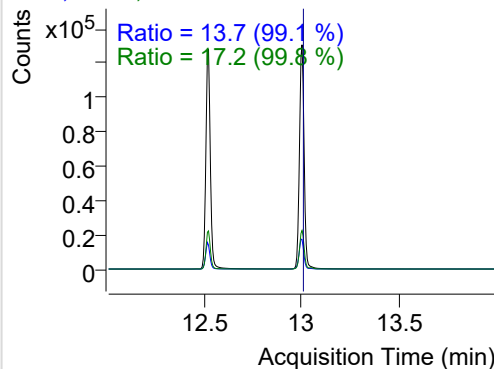


**Pyrene**

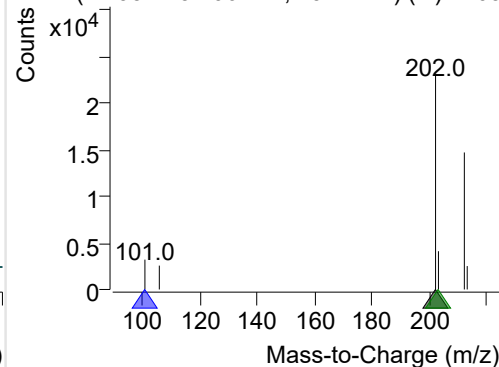
+ Selected Ion (202.0) 220907-PAHs-008.D



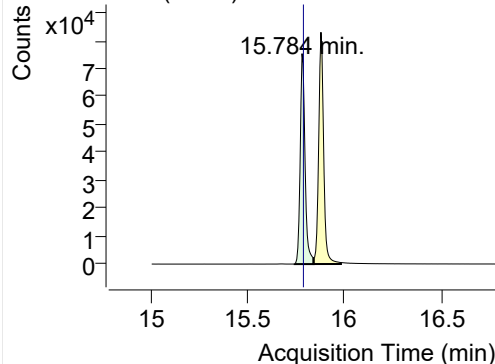
202.0, 101.0, 203.0



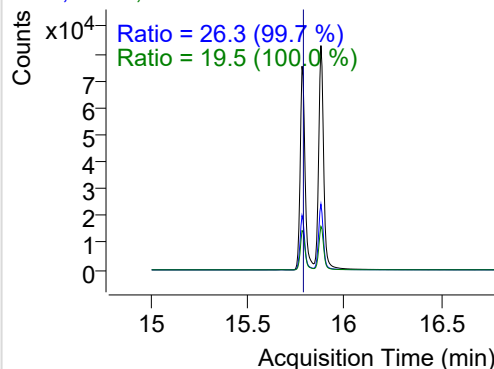
+ SIM (12.954-13.106 min, 29 scans) (\*\*) 2209

**Benz(a)anthracene**

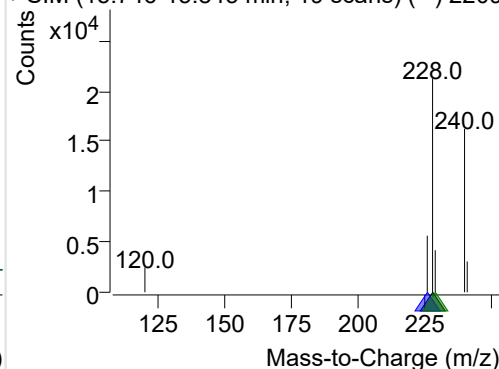
+ Selected Ion (228.0) 220907-PAHs-008.D



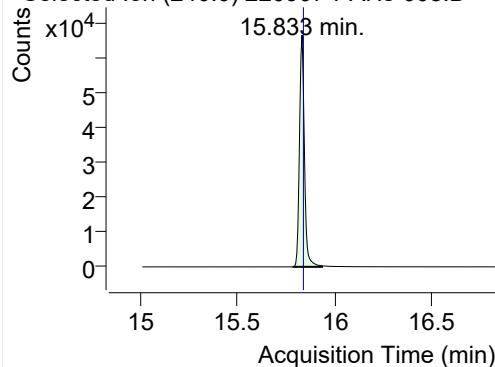
228.0, 226.0, 229.0



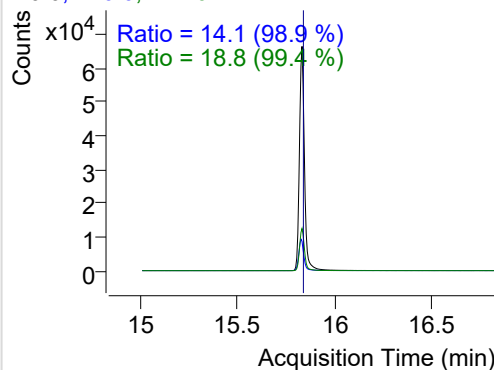
+ SIM (15.746-15.843 min, 19 scans) (\*\*) 2209

**IS-D12-Chrysene**

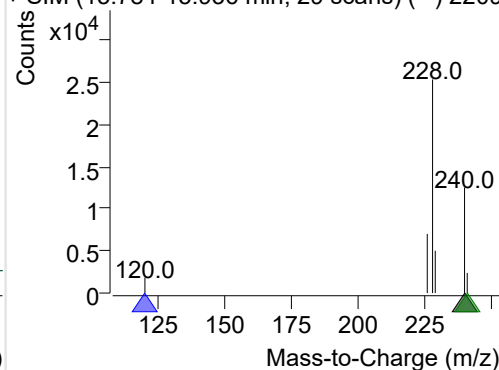
+ Selected Ion (240.0) 220907-PAHs-008.D



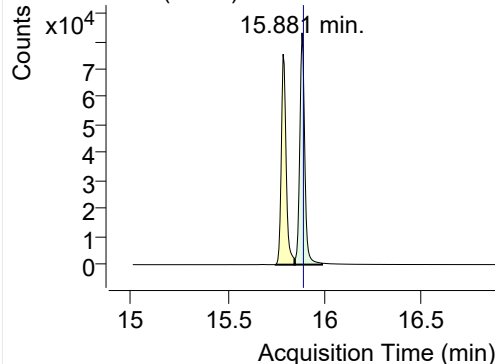
240.0, 120.0, 241.0



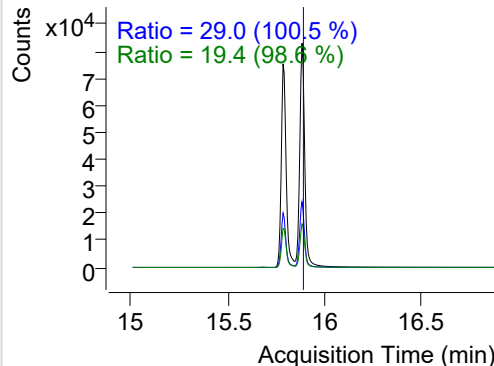
+ SIM (15.784-15.936 min, 29 scans) (\*\*) 2209

**Chrysene**

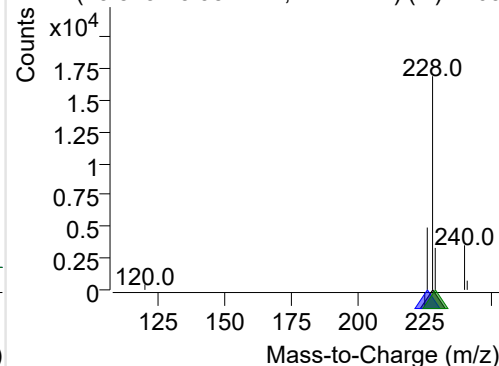
+ Selected Ion (228.0) 220907-PAHs-008.D



228.0, 226.0, 229.0

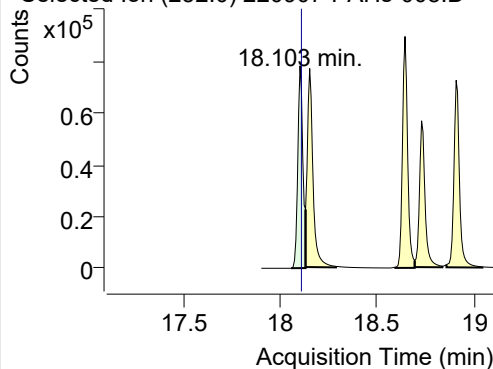


+ SIM (15.843-15.984 min, 27 scans) (\*\*) 2209

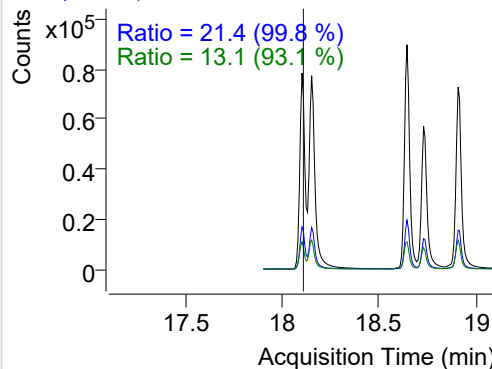


**Benzo(b)fluoranthene**

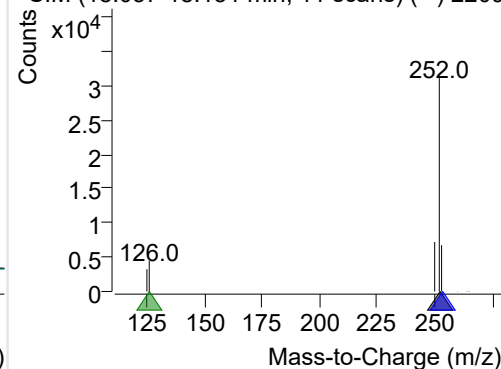
+ Selected Ion (252.0) 220907-PAHs-008.D



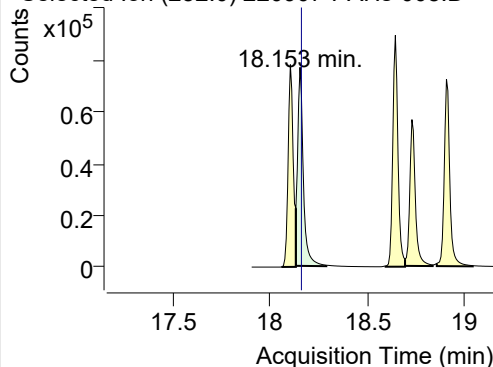
252.0, 253.0, 126.0



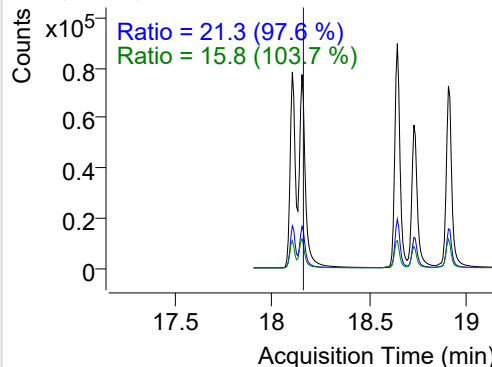
+ SIM (18.057-18.131 min, 11 scans) (\*\*) 2209

**Benzo(k)fluoranthene**

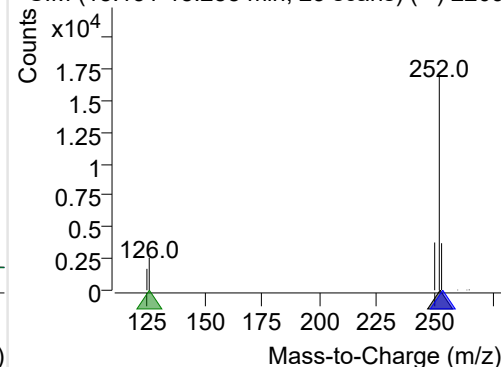
+ Selected Ion (252.0) 220907-PAHs-008.D



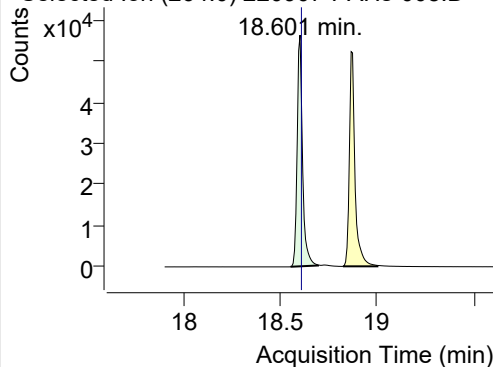
252.0, 253.0, 126.0



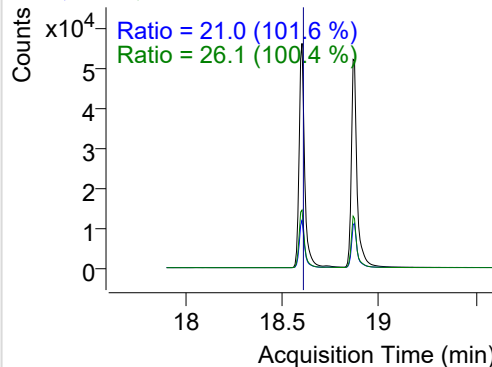
+ SIM (18.131-18.288 min, 23 scans) (\*\*) 2209

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

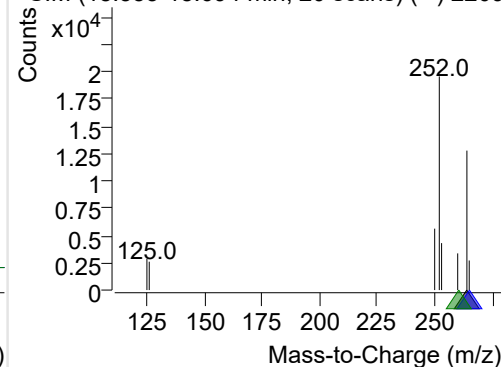
+ Selected Ion (264.0) 220907-PAHs-008.D



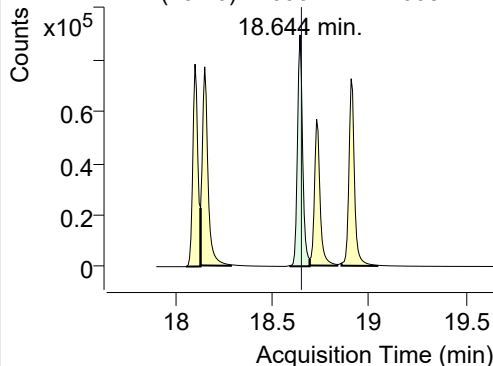
264.0, 265.0, 260.0



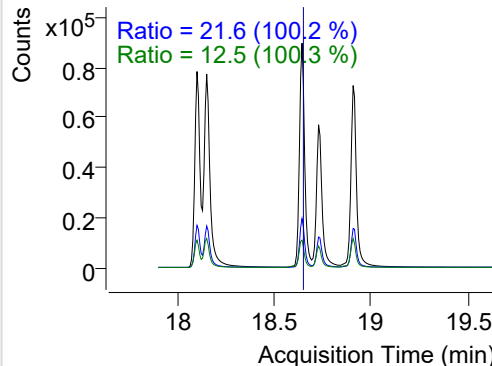
+ SIM (18.553-18.694 min, 20 scans) (\*\*) 2209

**Benzo(e)pyrene**

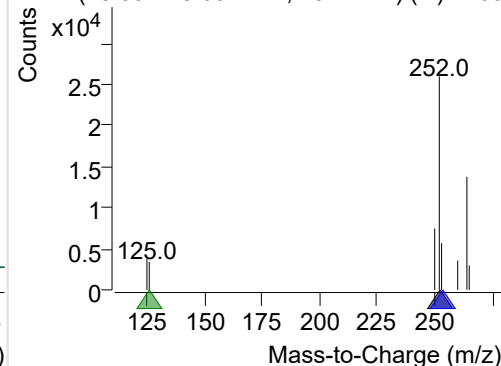
+ Selected Ion (252.0) 220907-PAHs-008.D



252.0, 253.0, 126.0

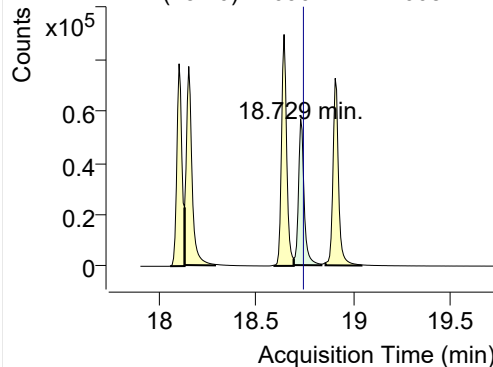


+ SIM (18.594-18.694 min, 15 scans) (\*\*) 2209

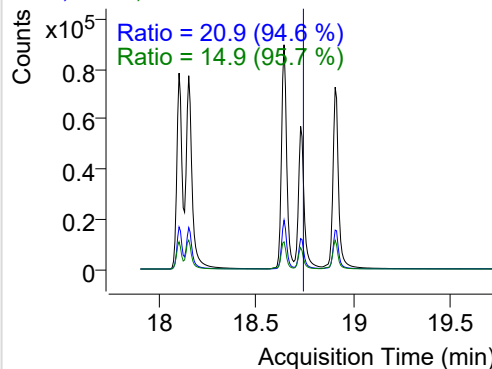


**Benzo(a)pyrene**

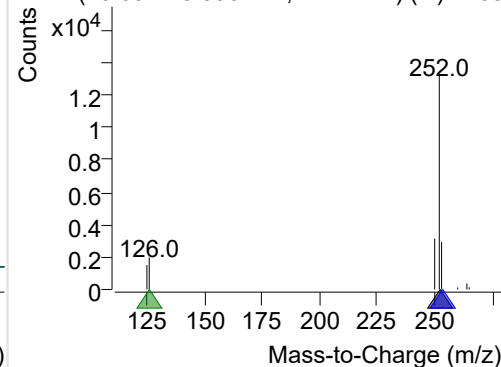
+ Selected Ion (252.0) 220907-PAHs-008.D



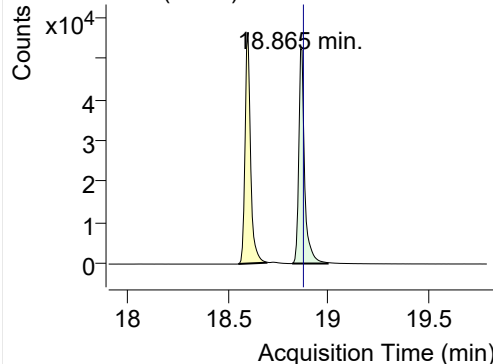
252.0, 253.0, 126.0



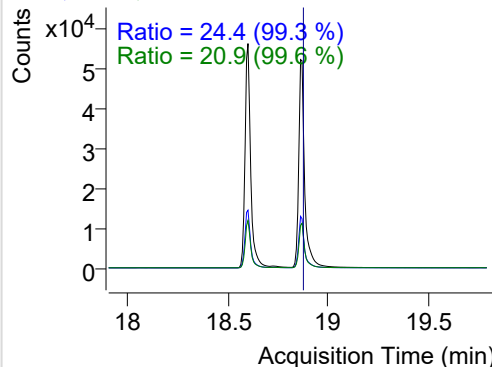
+ SIM (18.694-18.836 min, 21 scans) (\*\*) 2209

**IS-D12-Perylene**

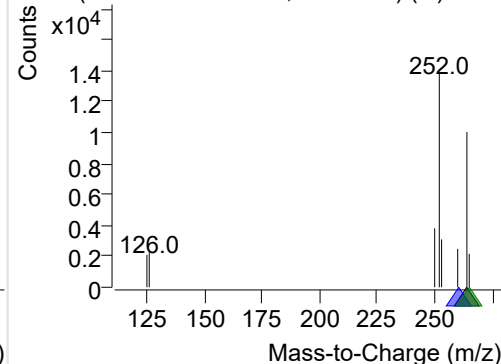
+ Selected Ion (264.0) 220907-PAHs-008.D



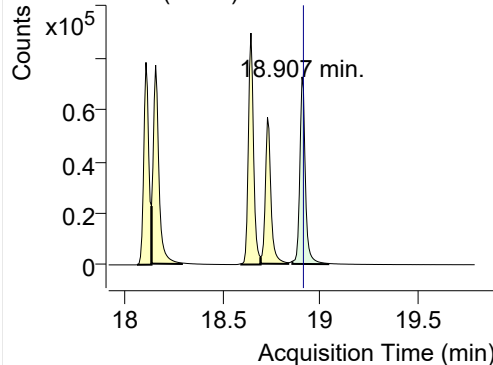
264.0, 260.0, 265.0



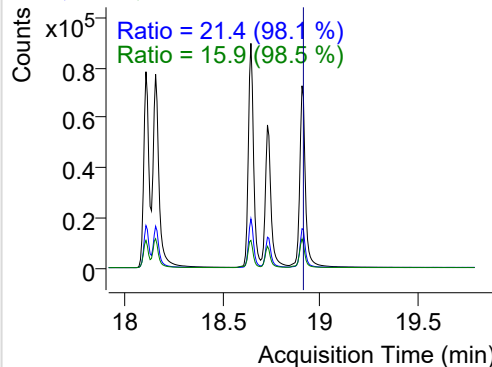
+ SIM (18.822-19.000 min, 25 scans) (\*\*) 2209

**Perylene**

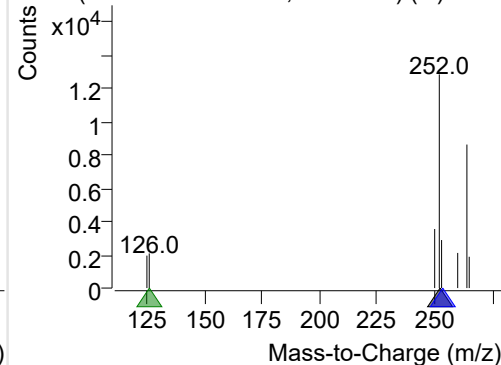
+ Selected Ion (252.0) 220907-PAHs-008.D



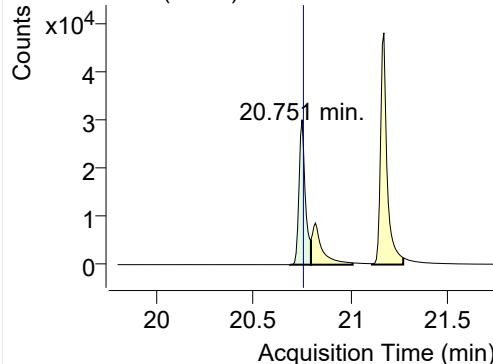
252.0, 253.0, 126.0



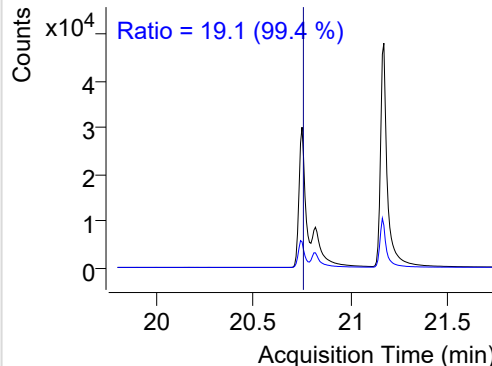
+ SIM (18.858-19.043 min, 27 scans) (\*\*) 2209

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

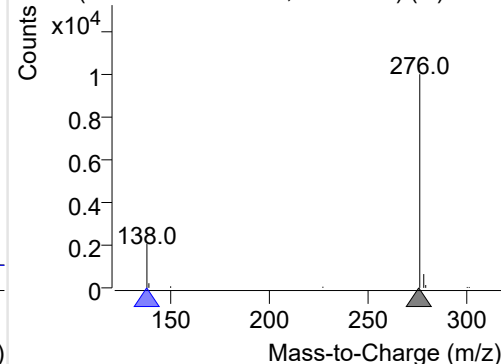
+ Selected Ion (276.0) 220907-PAHs-008.D



276.0, 138.0

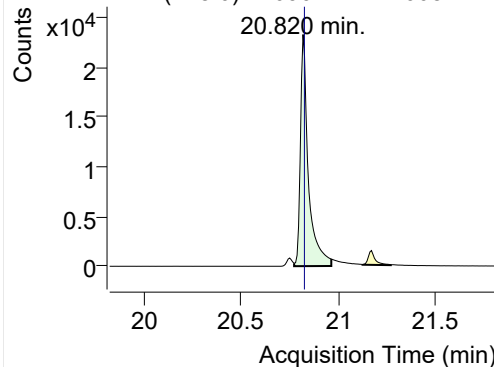


+ SIM (20.690-20.797 min, 15 scans) (\*\*) 2209

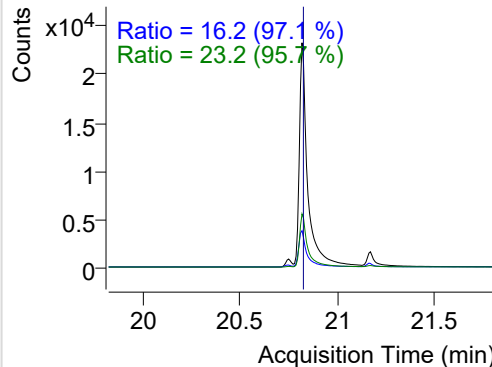


**Dibenz(a,h)anthracene**

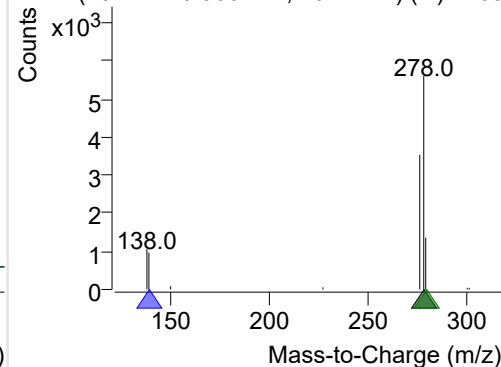
+ Selected Ion (278.0) 220907-PAHs-008.D



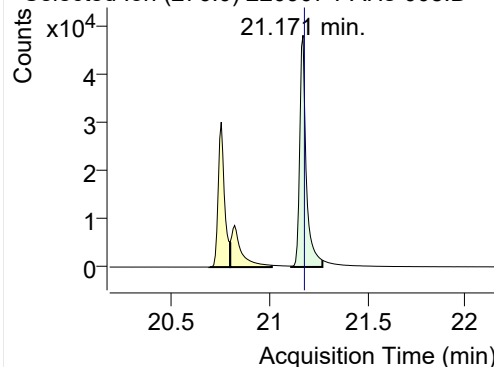
278.0, 139.0, 279.0



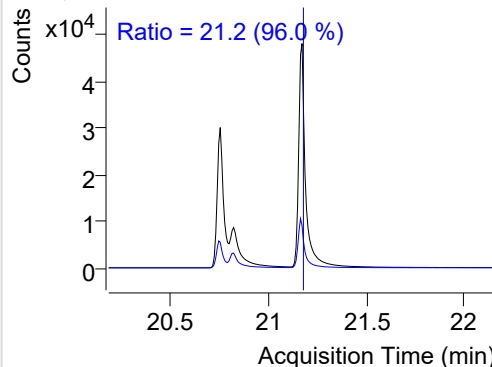
+ SIM (20.774-20.965 min, 26 scans) (\*\*) 2209

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

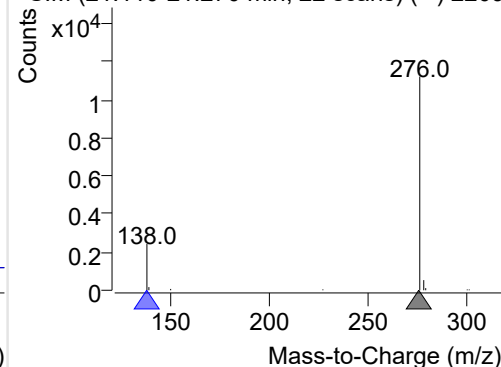
+ Selected Ion (276.0) 220907-PAHs-008.D



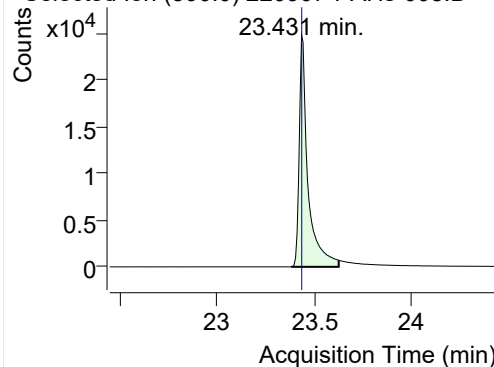
276.0, 138.0



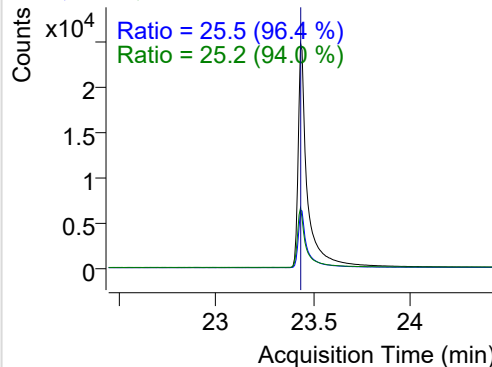
+ SIM (21.110-21.270 min, 22 scans) (\*\*) 2209

**Coronene**

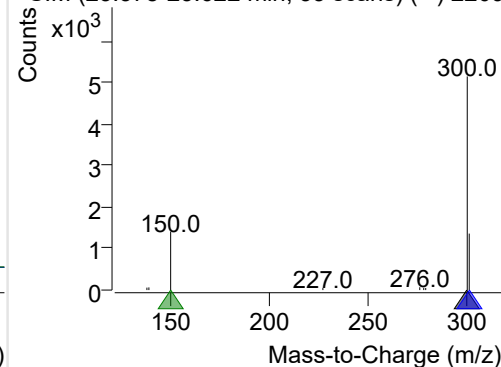
+ Selected Ion (300.0) 220907-PAHs-008.D



300.0, 301.0, 150.0



+ SIM (23.378-23.622 min, 33 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

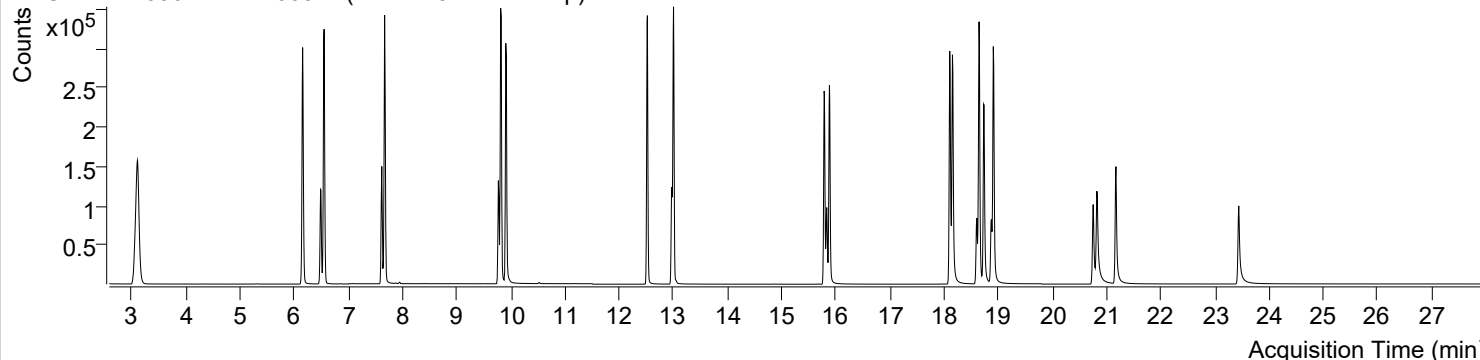


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 4:35:20	Data File	220907-PAHs-009.D
Type	Sample	Name	PAHs-19mix-STD-2p
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

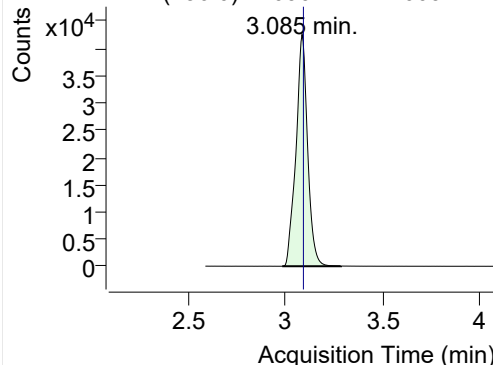
+ TIC SIM 220907-PAHs-009.D (PAHs-19mix-STD-2p)



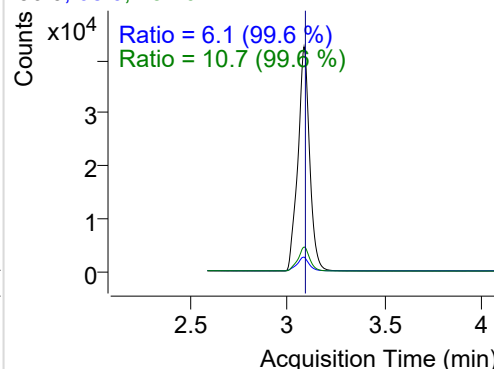
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	177551	42493.35	ND ng/ml	10.7
Naphthalene	3.112	128.0	426948	100748.96	ND ng/ml	12.7
Acenaphthylene	6.155	152.0	399045	225903.40	ND ng/ml	19.4
IS-D10-Acenaphthene	6.493	164.0	100967	57651.67	ND ng/ml	96.4
Acenaphthene	6.552	154.0	202553	117208.58	ND ng/ml	107.1
LSS-D10-Fluorene	7.617	176.0	107905	67990.84	ND ng/ml	92.9
Fluorene	7.669	166.0	264810	163501.26	ND ng/ml	92.8
IS-D10-Phenanthrene	9.770	188.0	173738	103336.93	ND ng/ml	14.9
Phenanthrene	9.822	178.0	401698	228223.05	ND ng/ml	19.0
Anthracene	9.906	178.0	362837	199608.52	ND ng/ml	18.4
Fluoranthene	12.521	202.0	414596	265780.14	ND ng/ml	17.2
LSS-D10-Pyrene	12.971	212.0	143353	89405.12	ND ng/ml	17.4
Pyrene	13.003	202.0	423704	267912.46	ND ng/ml	17.1
Benz(a)anthracene	15.784	228.0	292475	168272.38	ND ng/ml	26.4
IS-D12-Chrysene	15.833	240.0	119698	68514.90	ND ng/ml	18.8
Chrysene	15.882	228.0	300193	168605.42	ND ng/ml	28.5
Benzo(b)fluoranthene	18.103	252.0	306924	175884.13	ND ng/ml	21.5
Benzo(k)fluoranthene	18.153	252.0	343391	170975.91	ND ng/ml	21.7
SS-D12-Benzo(e)pyrene	18.601	264.0	109363	56038.50	ND ng/ml	26.0
Benzo(e)pyrene	18.644	252.0	338554	184516.09	ND ng/ml	21.6
Benzo(a)pyrene	18.737	252.0	264514	133574.55	ND ng/ml	21.0
IS-D12-Perylene	18.872	264.0	110353	52554.95	ND ng/ml	24.4
Perylene	18.908	252.0	310299	161342.51	ND ng/ml	21.3
Indeno(1,2,3-c,d)pyrene	20.751	276.0	173581	82654.50	ND ng/ml	19.2
Dibenz(a,h)anthracene	20.820	278.0	168625	61860.87	ND ng/ml	23.7
Benzo(g,h,i)perylene	21.171	276.0	258234	120646.11	ND ng/ml	21.6
Coronene	23.439	300.0	176389	66305.50	ND ng/ml	25.9

## IS-D8-Naphthalene

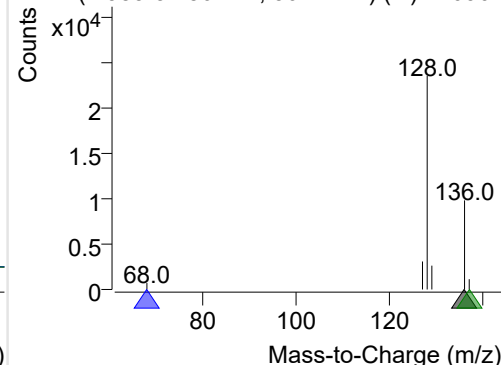
+ Selected Ion (136.0) 220907-PAHs-009.D



136.0, 68.0, 137.0

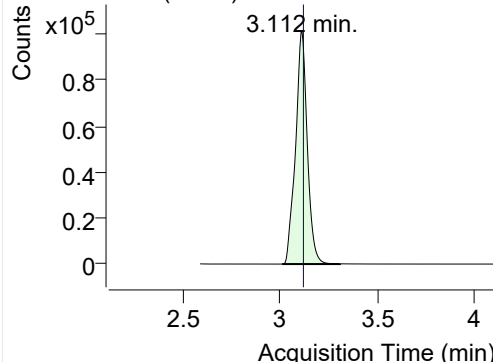


+ SIM (2.983-3.286 min, 56 scans) (\*\*) 220907

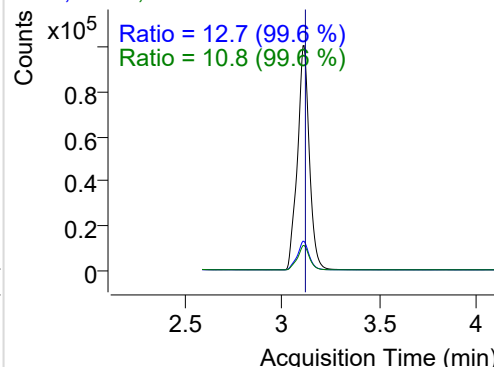


## Naphthalene

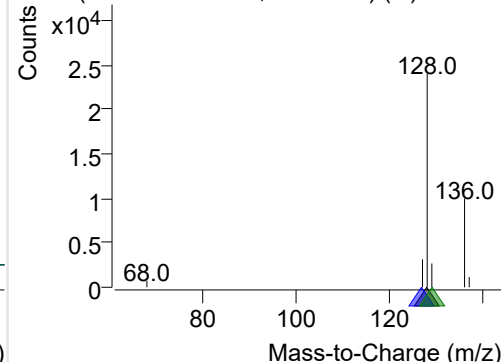
+ Selected Ion (128.0) 220907-PAHs-009.D



128.0, 127.0, 129.0

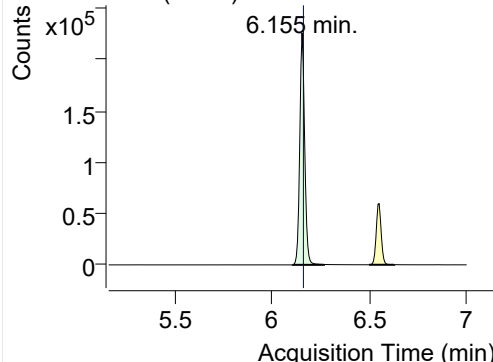


+ SIM (3.009-3.307 min, 55 scans) (\*\*) 220907

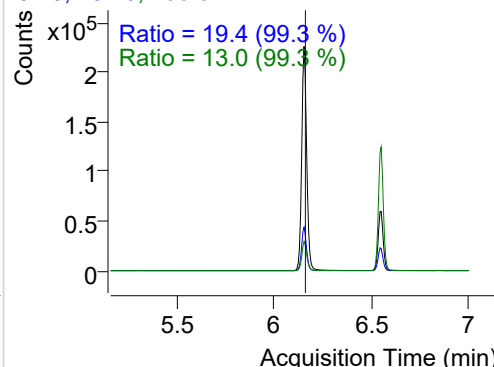


## Acenaphthylene

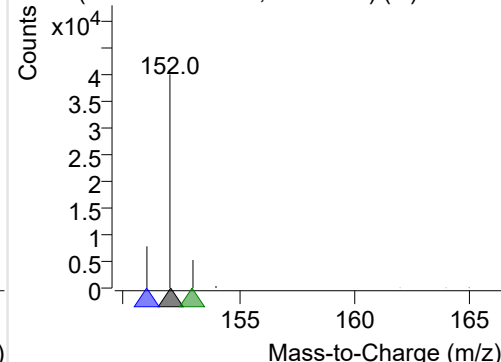
+ Selected Ion (152.0) 220907-PAHs-009.D



152.0, 151.0, 153.0

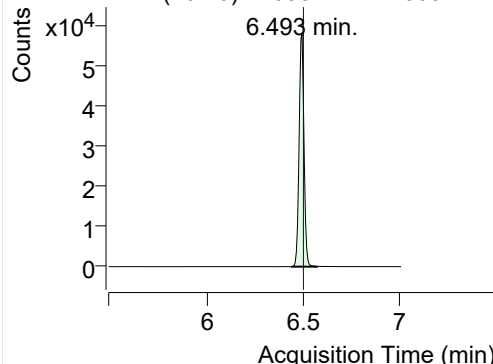


+ SIM (6.108-6.268 min, 28 scans) (\*\*) 220907

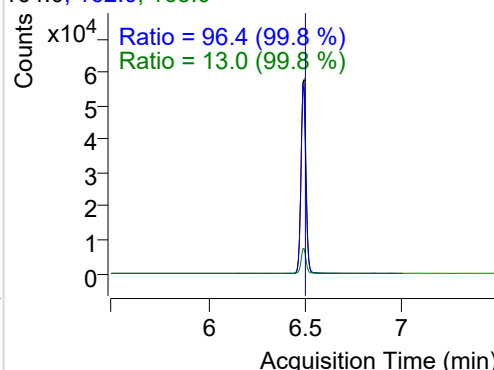


## IS-D10-Acenaphthene

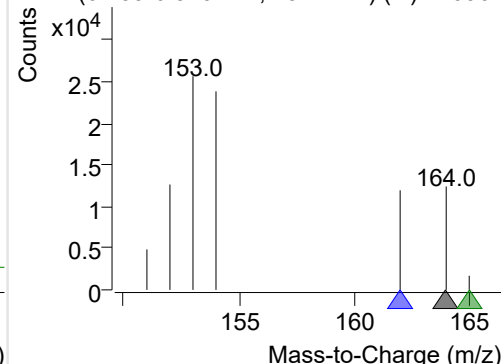
+ Selected Ion (164.0) 220907-PAHs-009.D



164.0, 162.0, 165.0

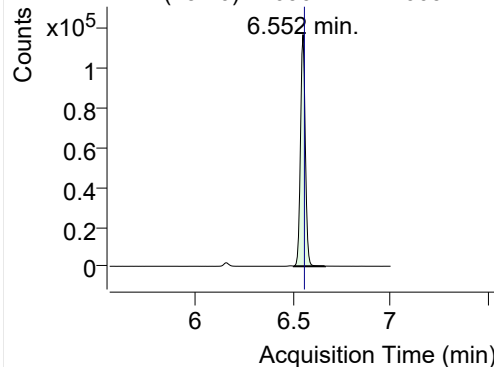


+ SIM (6.439-6.570 min, 23 scans) (\*\*) 220907

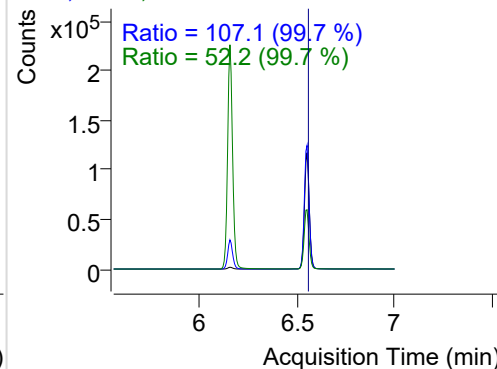


**Acenaphthene**

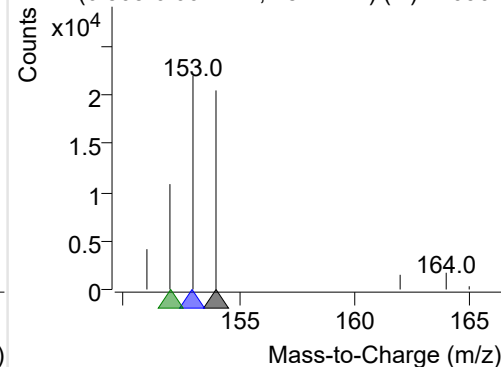
+ Selected Ion (154.0) 220907-PAHs-009.D



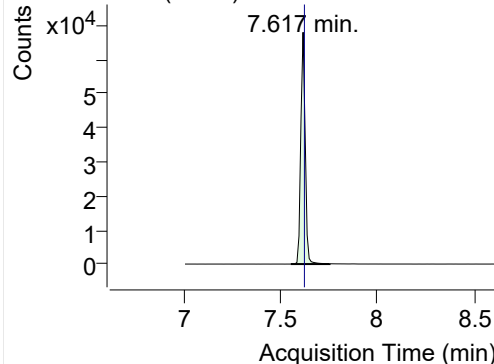
154.0, 153.0, 152.0



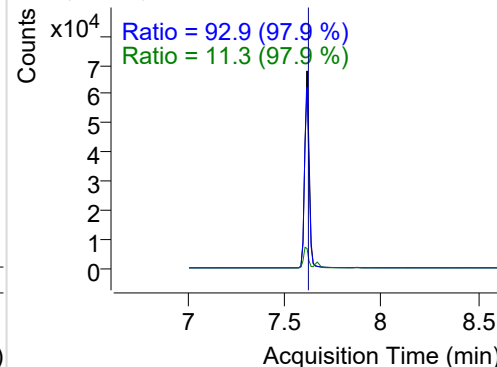
+ SIM (6.505-6.664 min, 28 scans) (\*\*) 220907

**LSS-D10-Fluorene**

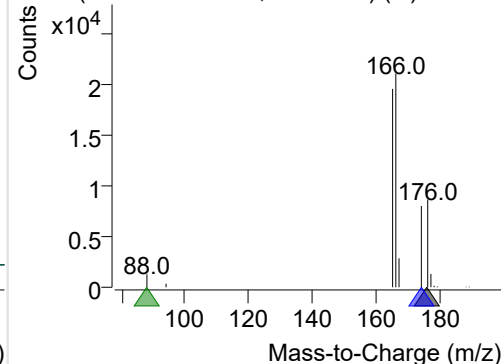
+ Selected Ion (176.0) 220907-PAHs-009.D



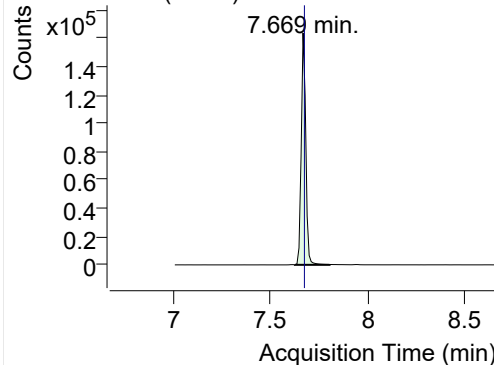
176.0, 174.0, 88.0



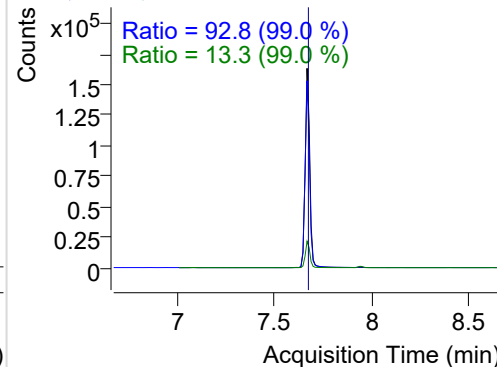
+ SIM (7.554-7.753 min, 20 scans) (\*\*) 220907

**Fluorene**

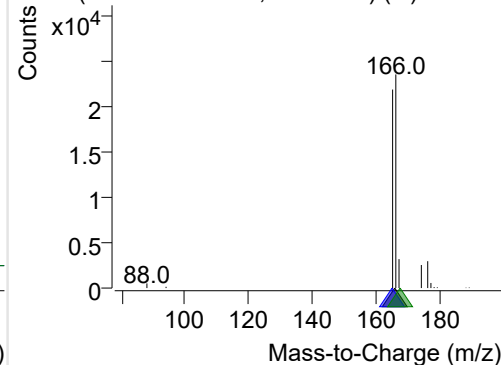
+ Selected Ion (166.0) 220907-PAHs-009.D



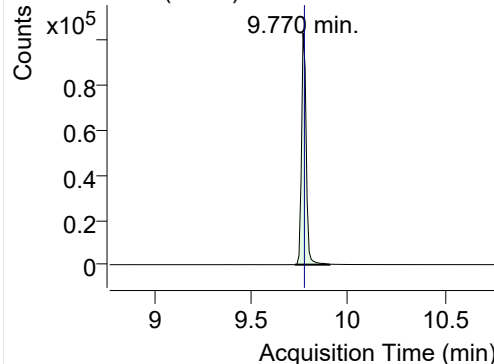
166.0, 165.0, 167.0



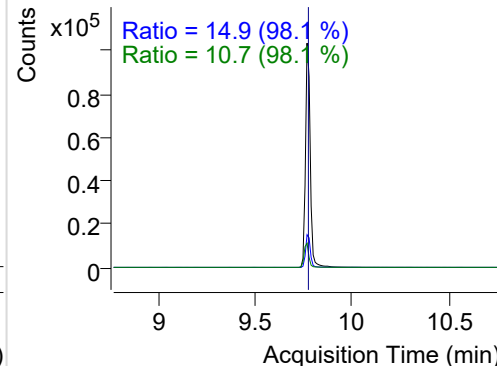
+ SIM (7.627-7.806 min, 18 scans) (\*\*) 220907

**IS-D10-Phenanthrene**

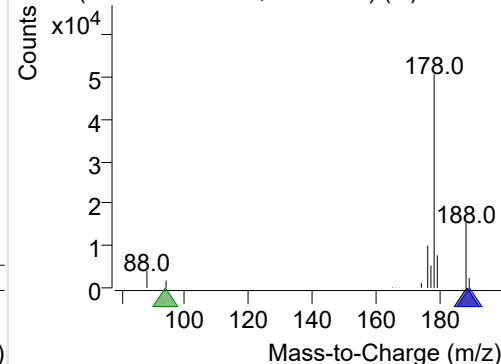
+ Selected Ion (188.0) 220907-PAHs-009.D



188.0, 189.0, 94.0

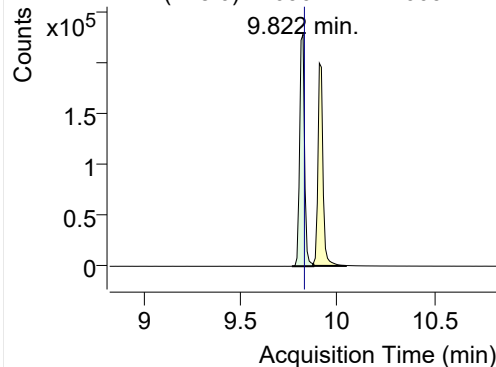


+ SIM (9.728-9.906 min, 18 scans) (\*\*) 220907

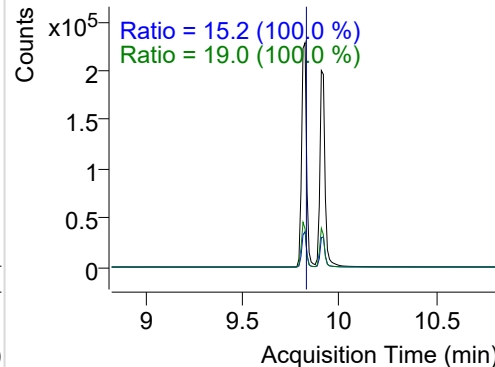


**Phenanthrene**

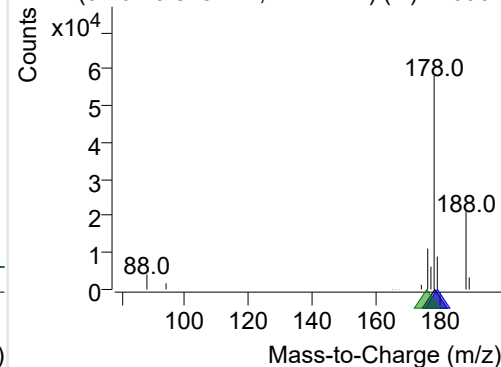
+ Selected Ion (178.0) 220907-PAHs-009.D



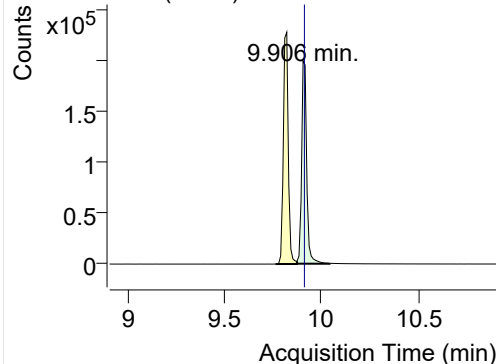
178.0, 179.0, 176.0



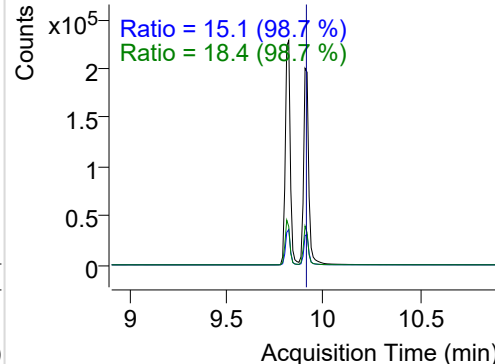
+ SIM (9.764-9.875 min, 11 scans) (\*\*) 220907

**Anthracene**

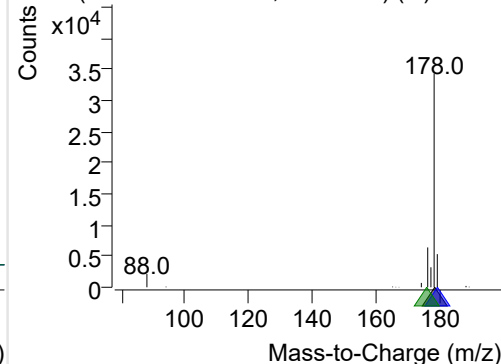
+ Selected Ion (178.0) 220907-PAHs-009.D



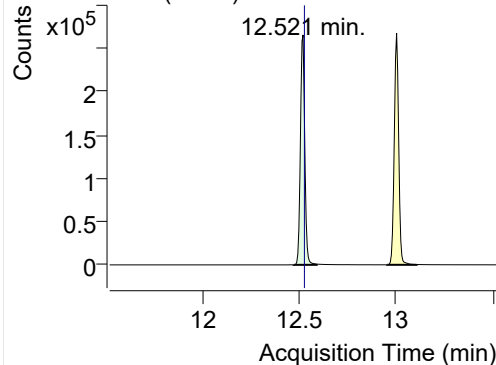
178.0, 179.0, 176.0



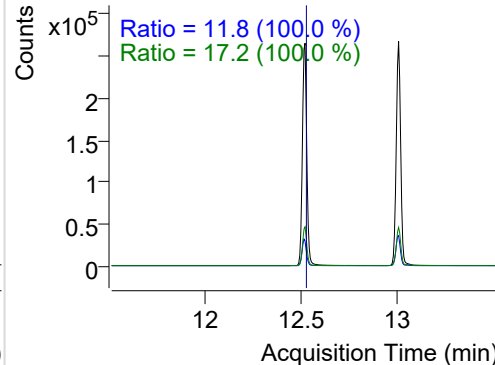
+ SIM (9.875-10.043 min, 17 scans) (\*\*) 22090

**Fluoranthene**

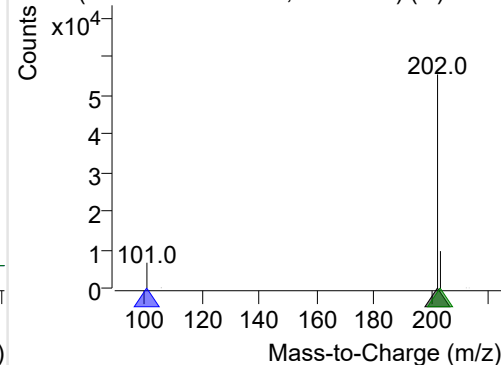
+ Selected Ion (202.0) 220907-PAHs-009.D



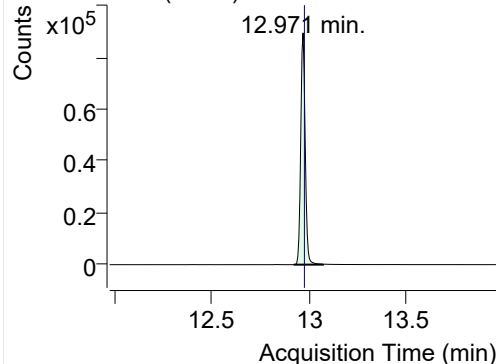
202.0, 101.0, 203.0



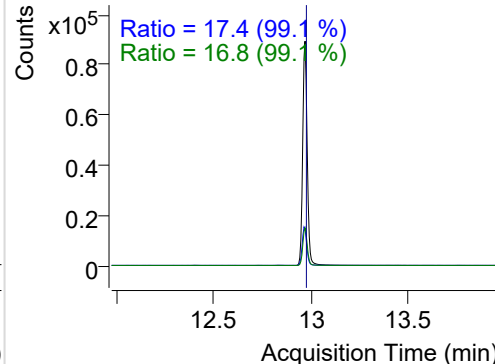
+ SIM (12.472-12.591 min, 23 scans) (\*\*) 2209

**LSS-D10-Pyrene**

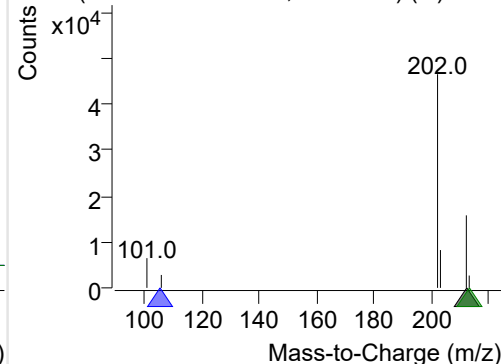
+ Selected Ion (212.0) 220907-PAHs-009.D



212.0, 106.0, 213.0

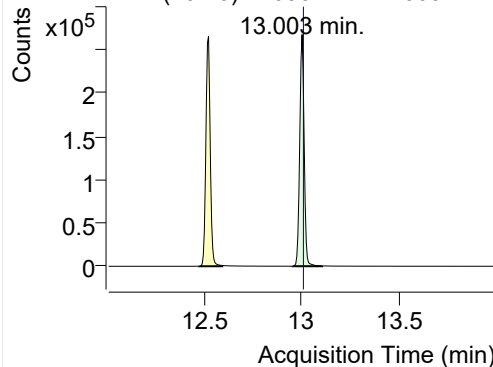


+ SIM (12.922-13.074 min, 28 scans) (\*\*) 2209

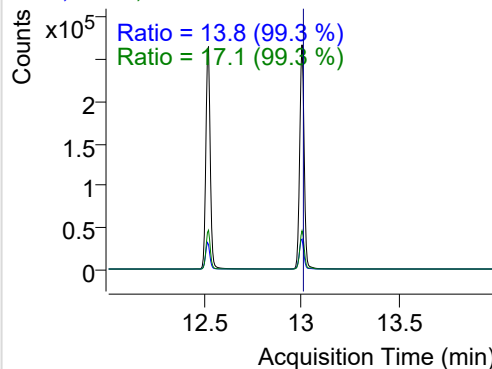


**Pyrene**

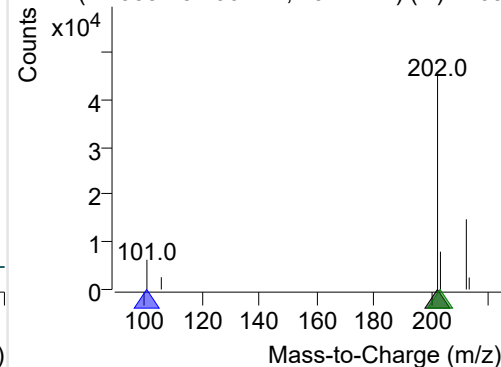
+ Selected Ion (202.0) 220907-PAHs-009.D



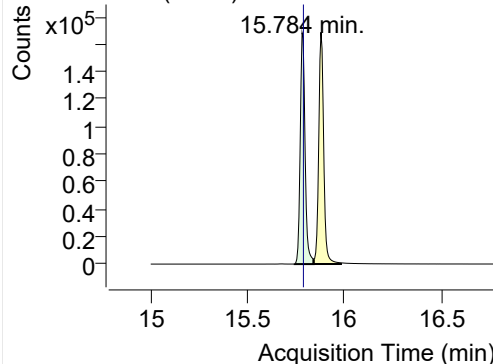
202.0, 101.0, 203.0



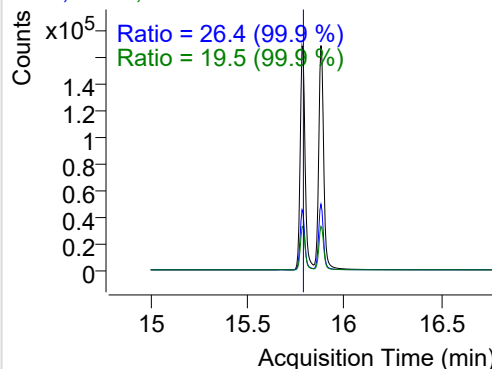
+ SIM (12.955-13.106 min, 29 scans) (\*\*) 2209

**Benz(a)anthracene**

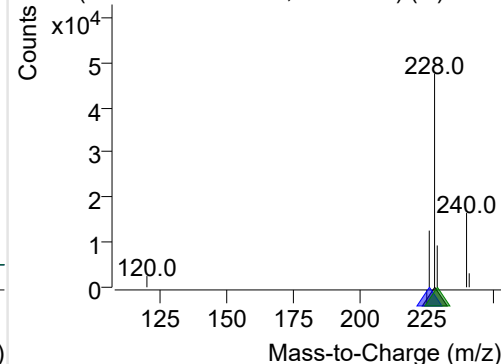
+ Selected Ion (228.0) 220907-PAHs-009.D



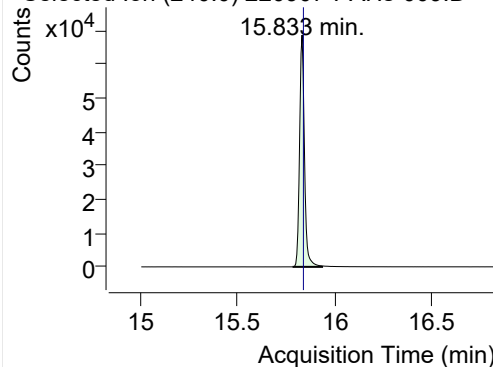
228.0, 226.0, 229.0



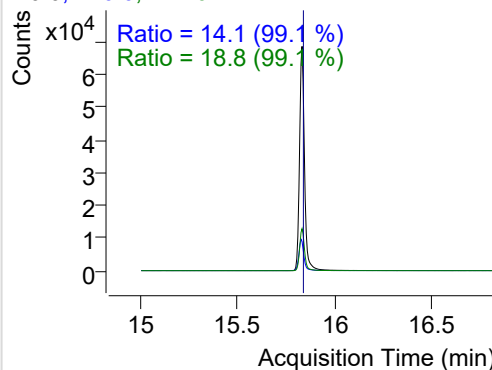
+ SIM (15.746-15.844 min, 19 scans) (\*\*) 2209

**IS-D12-Chrysene**

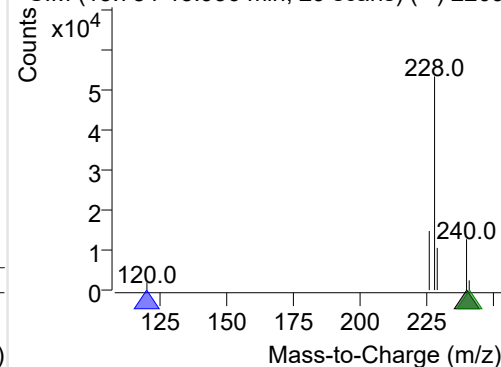
+ Selected Ion (240.0) 220907-PAHs-009.D



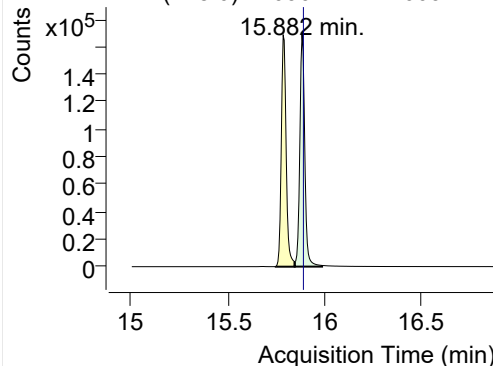
240.0, 120.0, 241.0



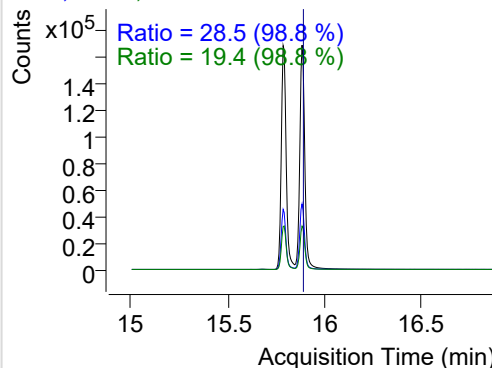
+ SIM (15.784-15.936 min, 29 scans) (\*\*) 2209

**Chrysene**

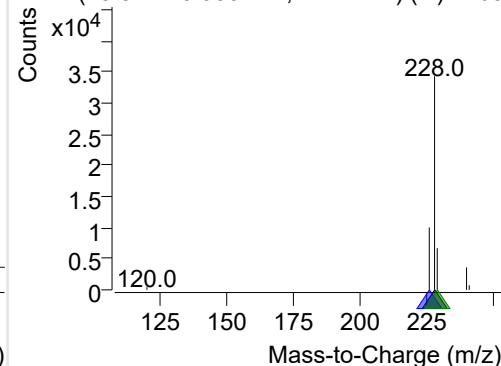
+ Selected Ion (228.0) 220907-PAHs-009.D



228.0, 226.0, 229.0

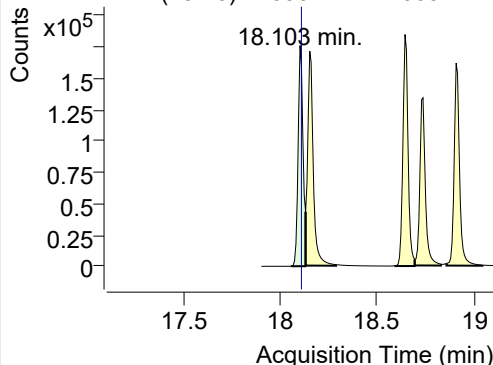


+ SIM (15.844-15.985 min, 27 scans) (\*\*) 2209

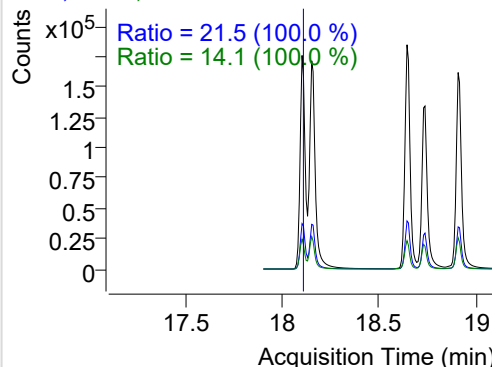


**Benzo(b)fluoranthene**

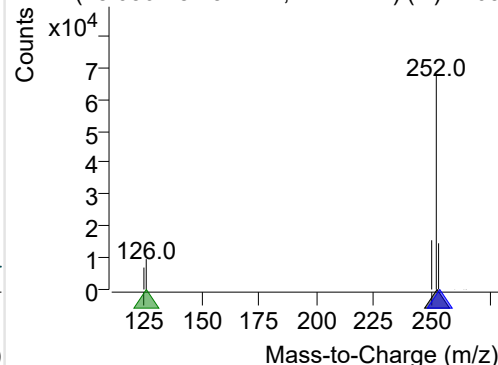
+ Selected Ion (252.0) 220907-PAHs-009.D



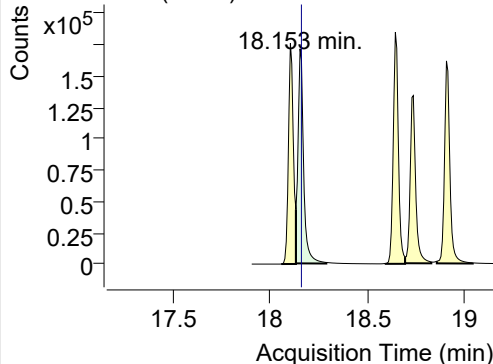
252.0, 253.0, 126.0



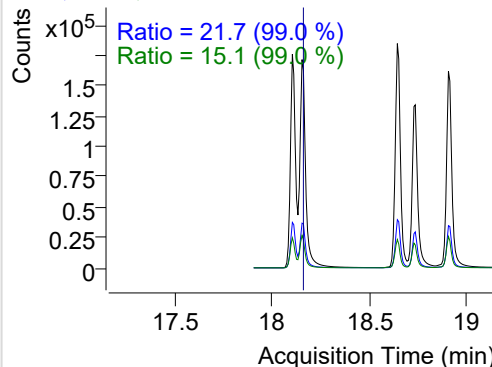
+ SIM (18.056-18.132 min, 11 scans) (\*\*) 2209

**Benzo(k)fluoranthene**

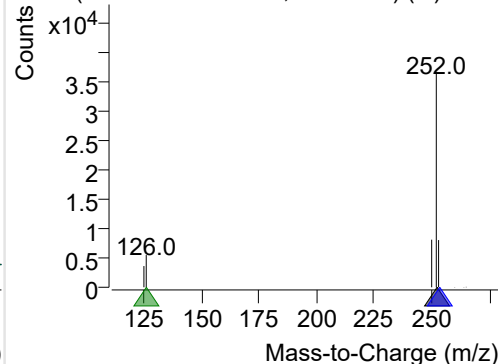
+ Selected Ion (252.0) 220907-PAHs-009.D



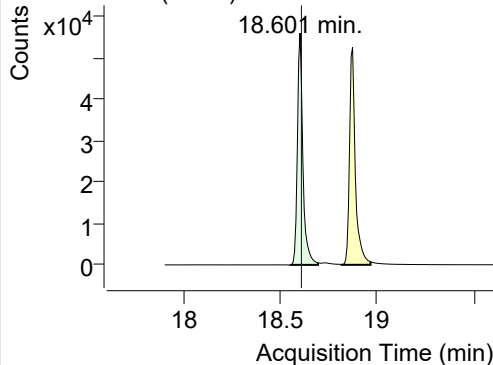
252.0, 253.0, 126.0



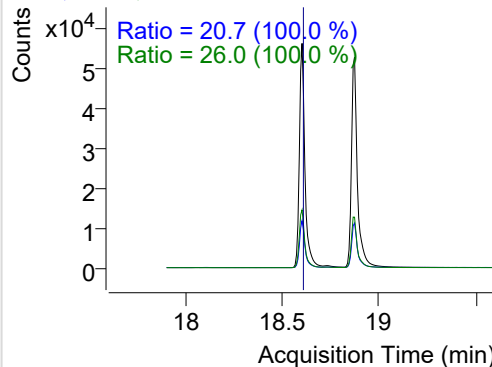
+ SIM (18.132-18.288 min, 23 scans) (\*\*) 2209

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

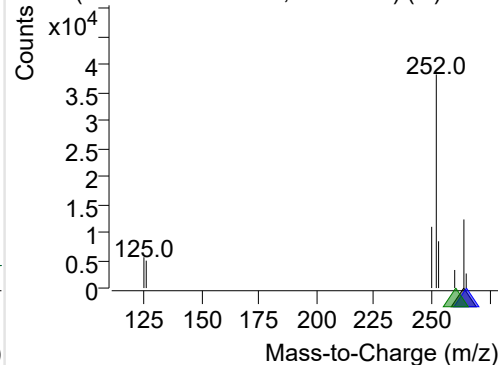
+ Selected Ion (264.0) 220907-PAHs-009.D



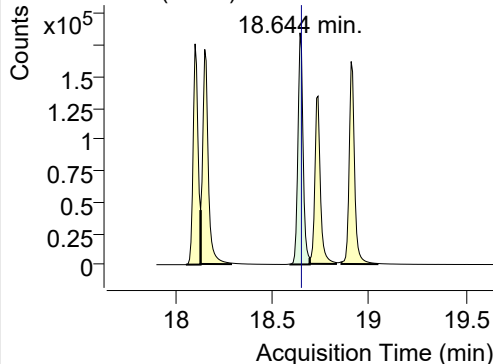
264.0, 265.0, 260.0



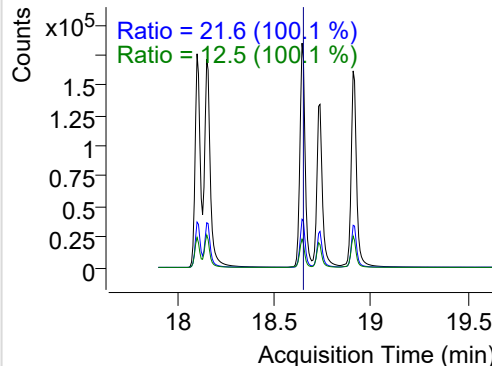
+ SIM (18.552-18.694 min, 21 scans) (\*\*) 2209

**Benzo(e)pyrene**

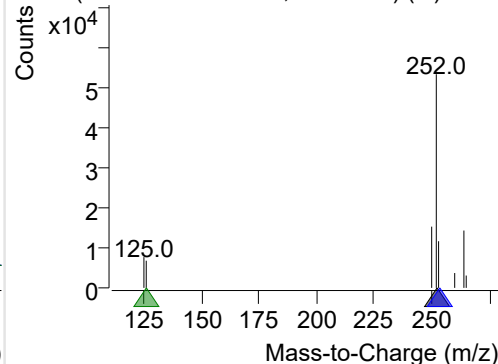
+ Selected Ion (252.0) 220907-PAHs-009.D



252.0, 253.0, 126.0

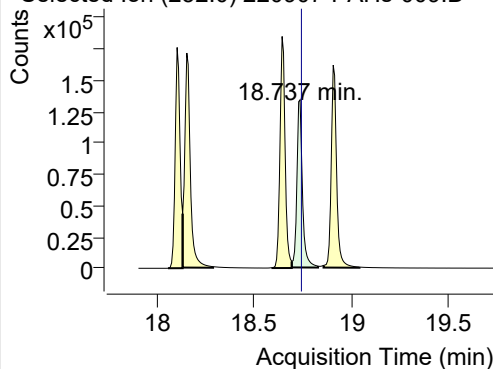


+ SIM (18.594-18.694 min, 15 scans) (\*\*) 2209

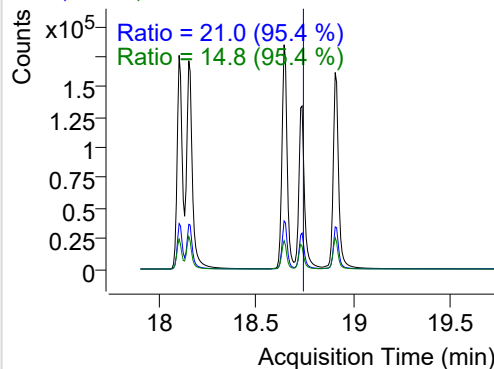


**Benzo(a)pyrene**

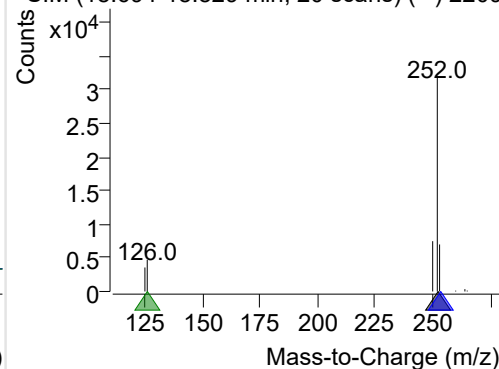
+ Selected Ion (252.0) 220907-PAHs-009.D



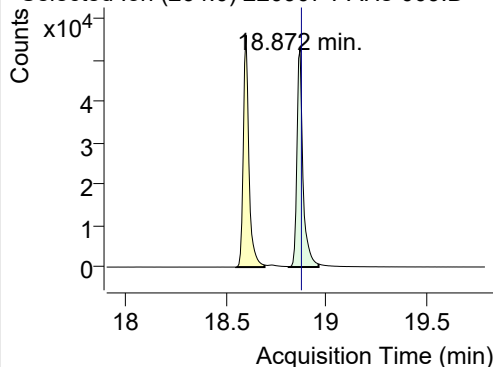
252.0, 253.0, 126.0



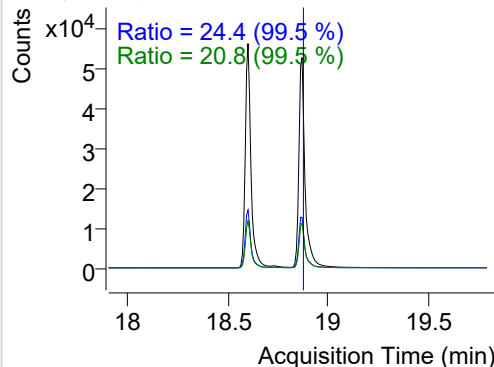
+ SIM (18.694-18.829 min, 20 scans) (\*\*) 2209

**IS-D12-Perylene**

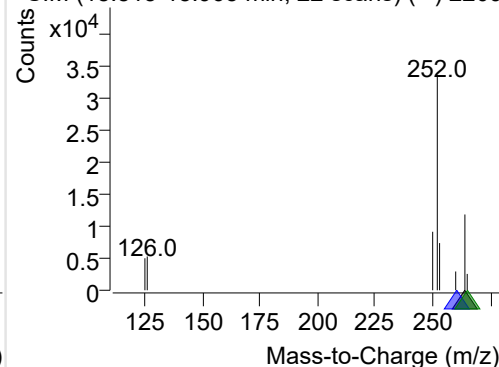
+ Selected Ion (264.0) 220907-PAHs-009.D



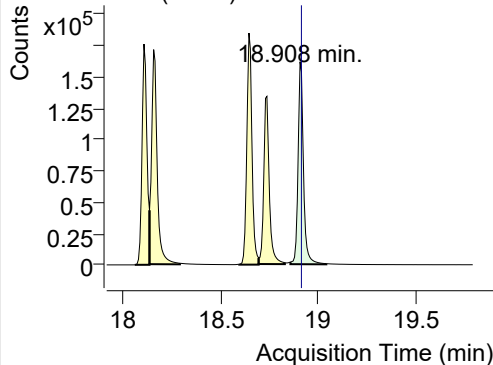
264.0, 260.0, 265.0



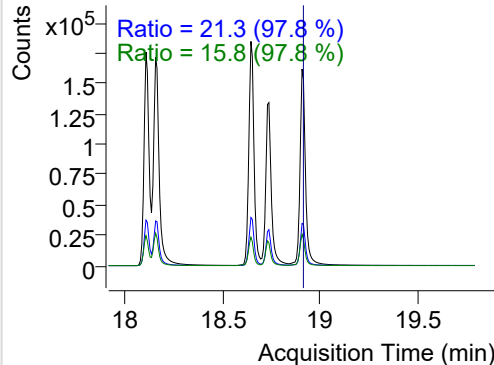
+ SIM (18.815-18.965 min, 22 scans) (\*\*) 2209

**Perylene**

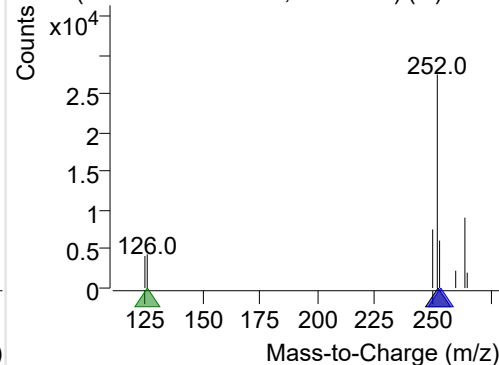
+ Selected Ion (252.0) 220907-PAHs-009.D



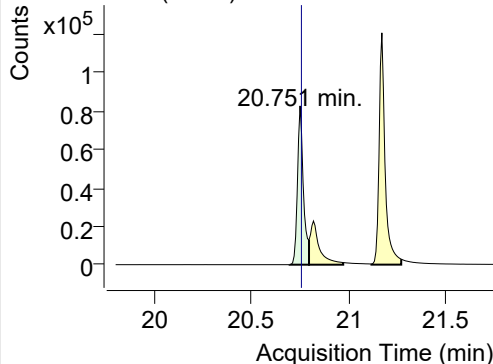
252.0, 253.0, 126.0



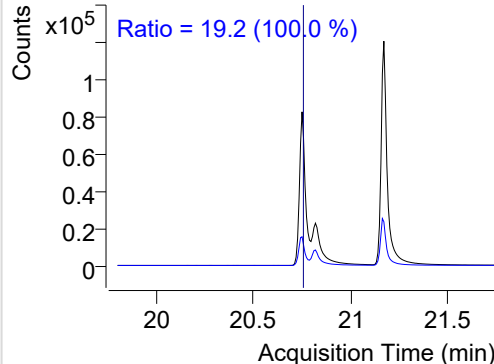
+ SIM (18.858-19.043 min, 27 scans) (\*\*) 2209

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

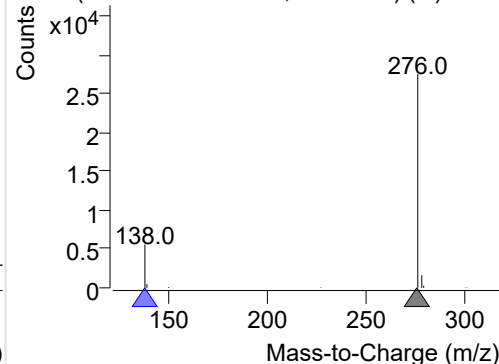
+ Selected Ion (276.0) 220907-PAHs-009.D



276.0, 138.0

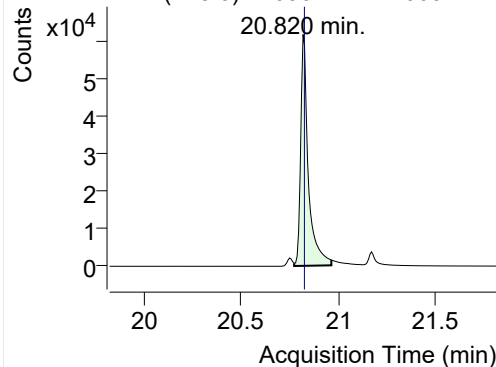


+ SIM (20.698-20.797 min, 14 scans) (\*\*) 2209

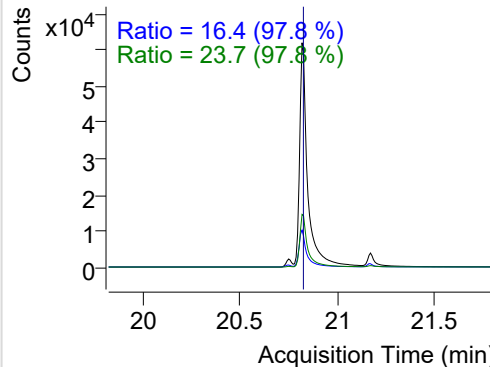


**Dibenz(a,h)anthracene**

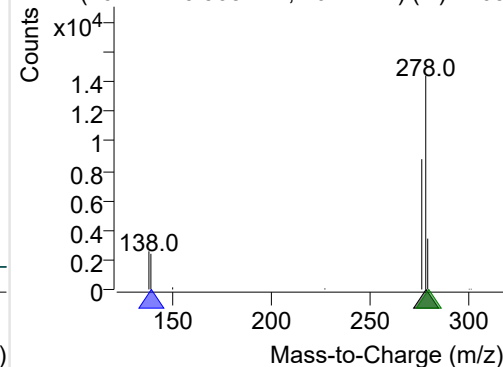
+ Selected Ion (278.0) 220907-PAHs-009.D



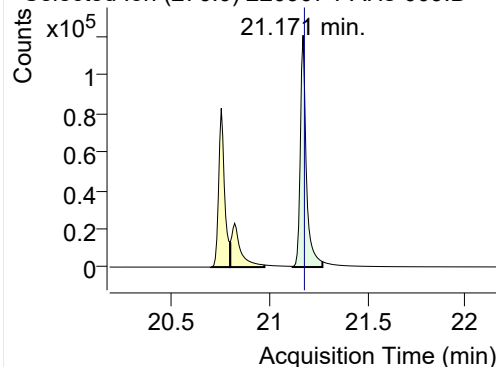
278.0, 139.0, 279.0



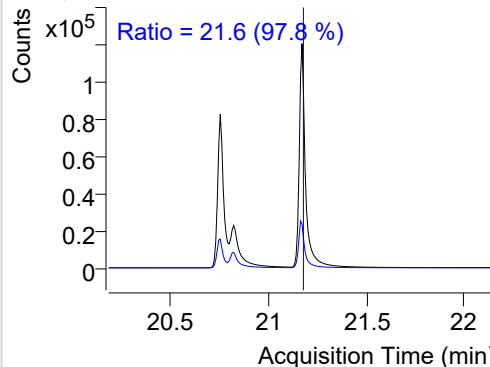
+ SIM (20.774-20.965 min, 26 scans) (\*\*) 2209

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

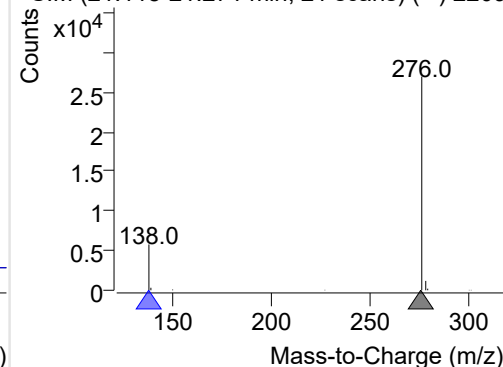
+ Selected Ion (276.0) 220907-PAHs-009.D



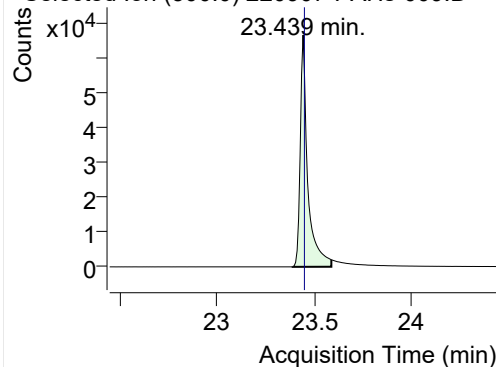
276.0, 138.0



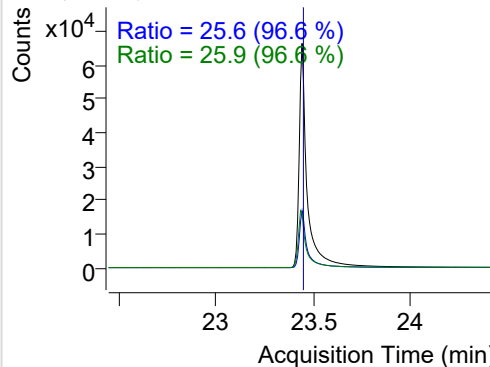
+ SIM (21.118-21.271 min, 21 scans) (\*\*) 2209

**Coronene**

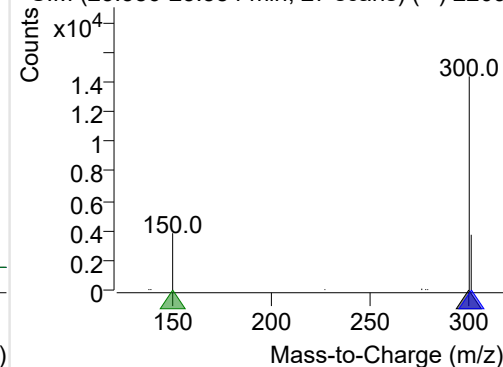
+ Selected Ion (300.0) 220907-PAHs-009.D



300.0, 301.0, 150.0



+ SIM (23.386-23.584 min, 27 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

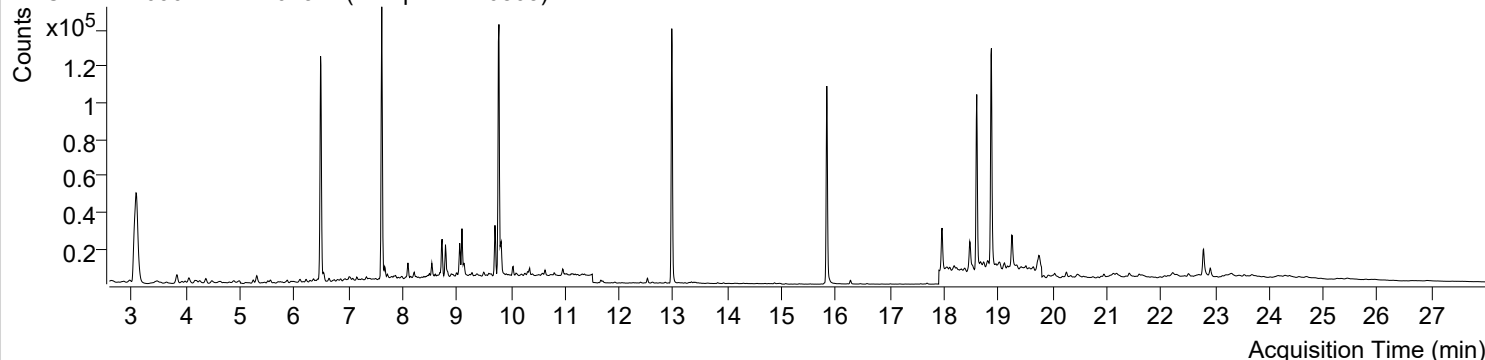


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 6:40:04	Data File	220907-PAHs-013.D
Type	Sample	Name	Sample-PM-0803
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

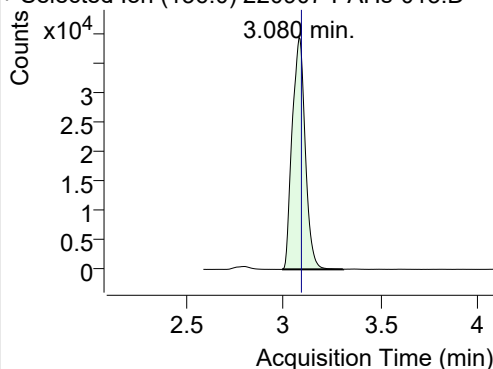
+ TIC SIM 220907-PAHs-013.D (Sample-PM-0803)



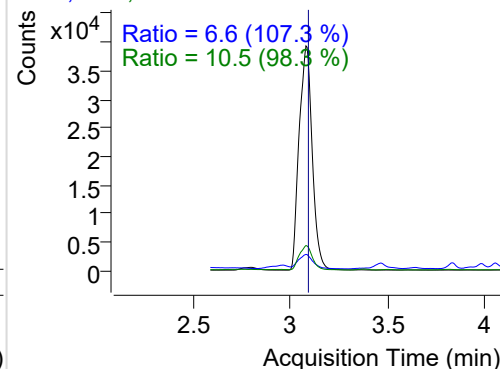
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	183370	39288.68	ND ng/ml	10.5
Naphthalene	3.107	128.0	17217	3852.88	ND ng/ml	12.7
Acenaphthylene	6.155	152.0	451	248.60	ND ng/ml	114.5
IS-D10-Acenaphthene	6.487	164.0	108603	58832.76	ND ng/ml	96.3
Acenaphthene	6.540	154.0	2703	1300.47	ND ng/ml	87.1
LSS-D10-Fluorene	7.617	176.0	110995	67992.34	ND ng/ml	92.3
Fluorene	7.669	166.0	4848	2585.50	ND ng/ml	101.9
IS-D10-Phenanthrene	9.780	188.0	193163	112654.4	ND ng/ml	15.3
Phenanthrene	9.822	178.0	18602	10867.13	ND ng/ml	19.8
Anthracene	9.917	178.0	1220	648.21	ND ng/ml	
Fluoranthene	12.521	202.0	3192	1956.51	ND ng/ml	25.0
LSS-D10-Pyrene	12.971	212.0	168358	103328.9	ND ng/ml	17.0
Pyrene	13.003	202.0	2900	1640.28	ND ng/ml	17.2
Benz(a)anthracene	15.789	228.0	751	429.33	ND ng/ml	28.0
IS-D12-Chrysene	15.833	240.0	140666	81906.35	ND ng/ml	18.9
Chrysene	15.882	228.0	1118	493.65	ND ng/ml	38.4
Benzo(b)fluoranthene	18.103	252.0	1619	799.81	ND ng/ml	23.6
Benzo(k)fluoranthene	18.153	252.0	1640	478.81	ND ng/ml	24.3
SS-D12-Benzo(e)pyrene	18.601	264.0	116248	64470.52	ND ng/ml	25.9
Benzo(e)pyrene	18.644	252.0	1368	583.81	ND ng/ml	34.7
Benzo(a)pyrene	18.737	252.0	1000	409.81	ND ng/ml	31.1
IS-D12-Perylene	18.872	264.0	155567	82688.17	ND ng/ml	24.5
Perylene	18.908	252.0	483	138.81	ND ng/ml	62.3
Indeno(1,2,3-c,d)pyrene	20.759	276.0	649	242.49	ND ng/ml	42.4
Dibenz(a,h)anthracene	20.835	278.0	715	211.92	ND ng/ml	13.7
Benzo(g,h,i)perylene	21.171	276.0	1076	405.52	ND ng/ml	62.5
Coronene	23.447	300.0	545	189.64	ND ng/ml	

## IS-D8-Naphthalene

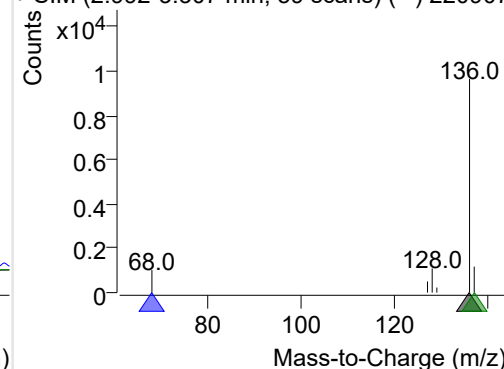
+ Selected Ion (136.0) 220907-PAHs-013.D



136.0, 68.0, 137.0

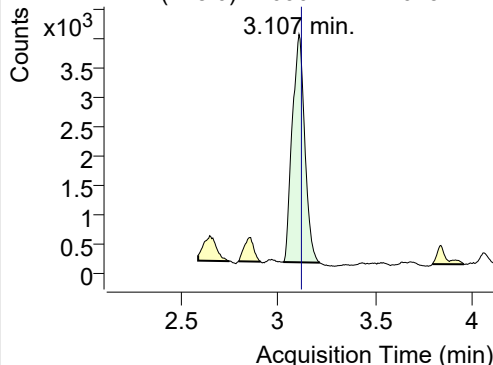


+ SIM (2.992-3.307 min, 59 scans) (\*\*) 220907

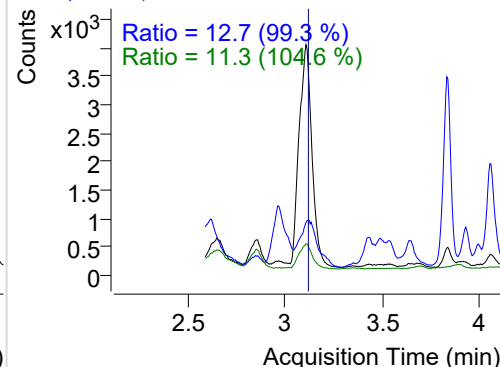


**Naphthalene**

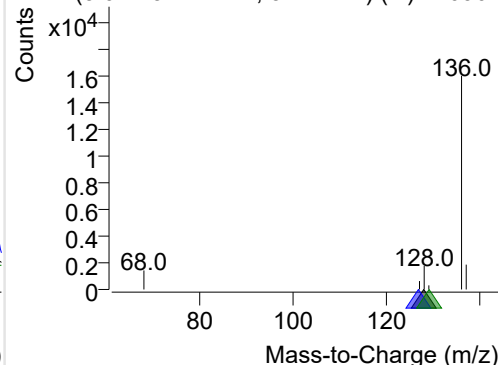
+ Selected Ion (128.0) 220907-PAHs-013.D



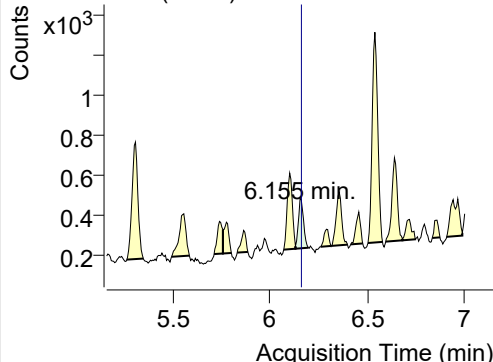
128.0, 127.0, 129.0



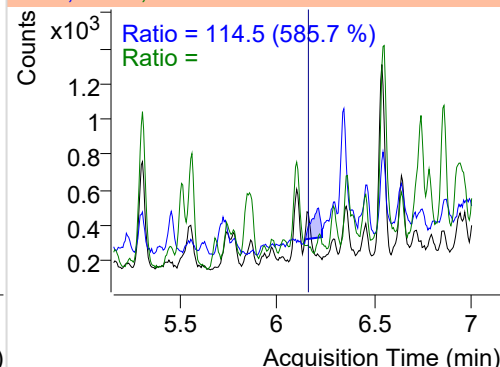
+ SIM (3.027-3.214 min, 34 scans) (\*\*) 220907

**Acenaphthylene**

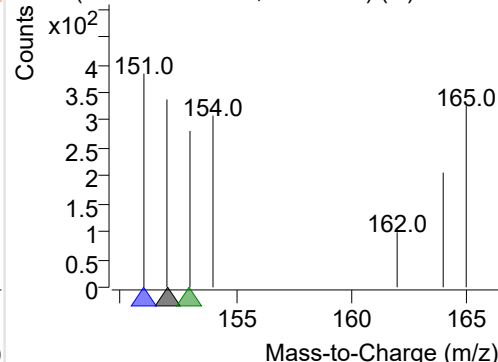
+ Selected Ion (152.0) 220907-PAHs-013.D



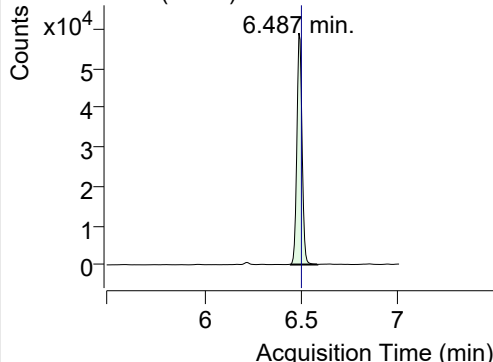
152.0, 151.0, 153.0



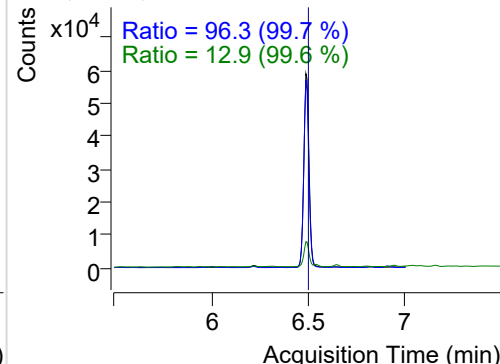
+ SIM (6.132-6.199 min, 12 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

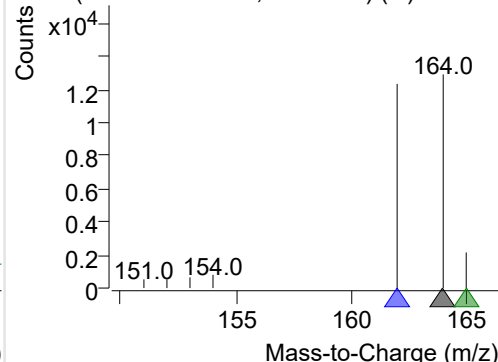
+ Selected Ion (164.0) 220907-PAHs-013.D



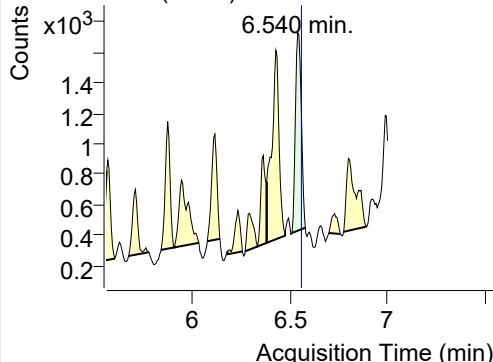
164.0, 162.0, 165.0



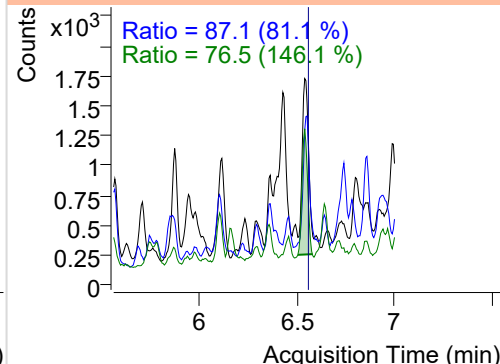
+ SIM (6.445-6.581 min, 24 scans) (\*\*) 220907

**Acenaphthene**

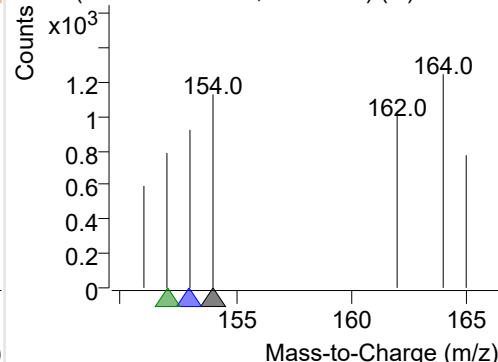
+ Selected Ion (154.0) 220907-PAHs-013.D



154.0, 153.0, 152.0

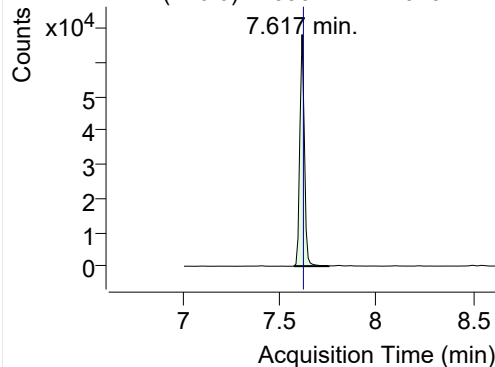


+ SIM (6.511-6.579 min, 11 scans) (\*\*) 220907

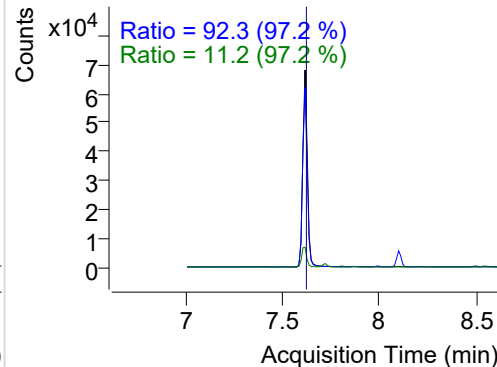


## LSS-D10-Fluorene

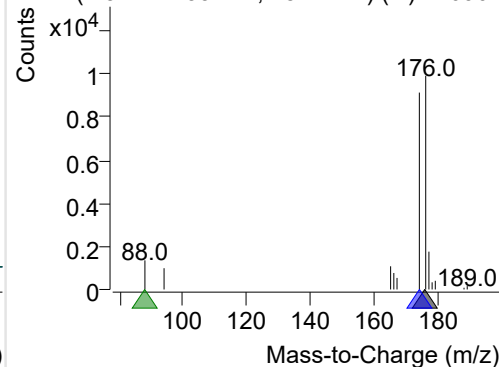
+ Selected Ion (176.0) 220907-PAHs-013.D



176.0, 174.0, 88.0

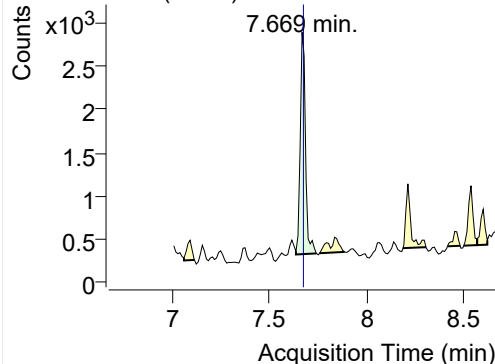


+ SIM (7.574-7.753 min, 18 scans) (\*\*) 220907

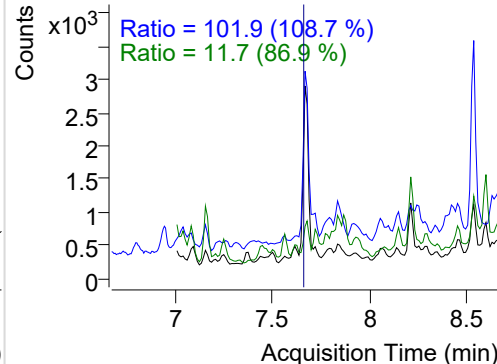


## Fluorene

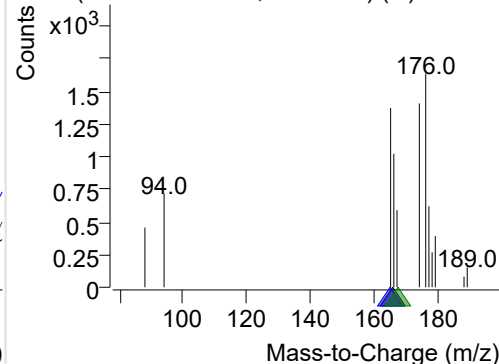
+ Selected Ion (166.0) 220907-PAHs-013.D



166.0, 165.0, 167.0

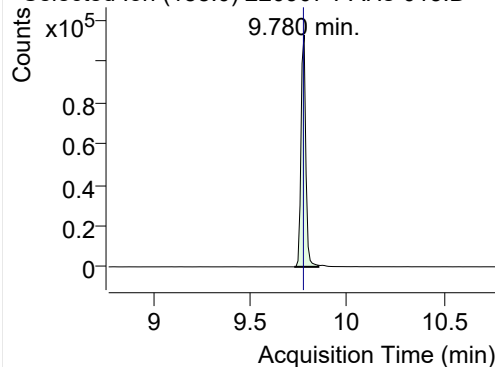


+ SIM (7.638-7.743 min, 11 scans) (\*\*) 220907

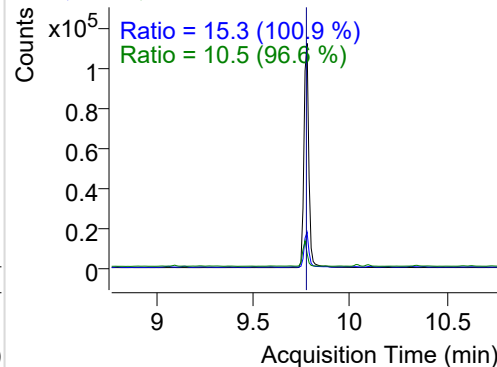


## IS-D10-Phenanthrene

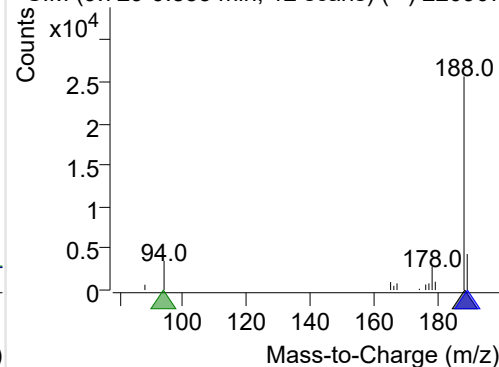
+ Selected Ion (188.0) 220907-PAHs-013.D



188.0, 189.0, 94.0

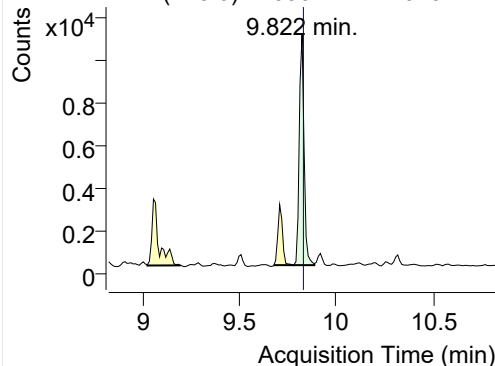


+ SIM (9.729-9.853 min, 12 scans) (\*\*) 220907

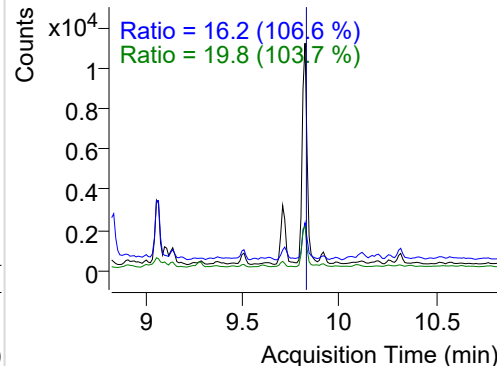


## Phenanthrene

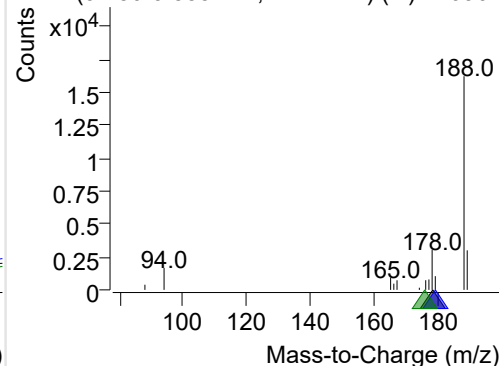
+ Selected Ion (178.0) 220907-PAHs-013.D



178.0, 179.0, 176.0

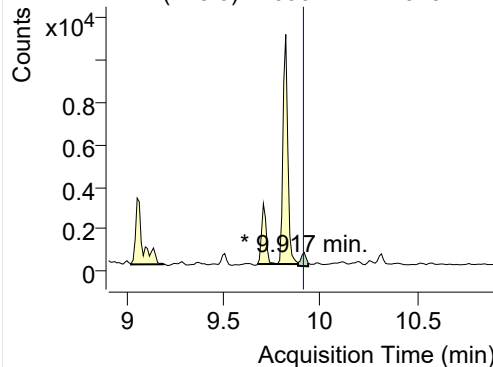


+ SIM (9.780-9.885 min, 11 scans) (\*\*) 220907

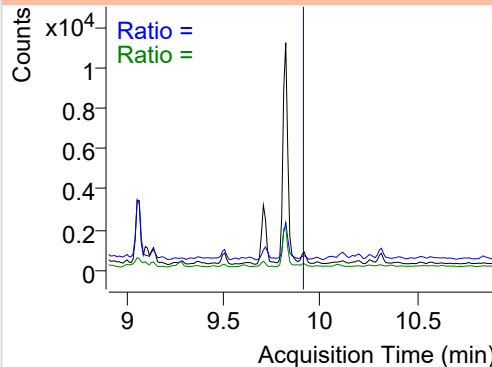


**Anthracene**

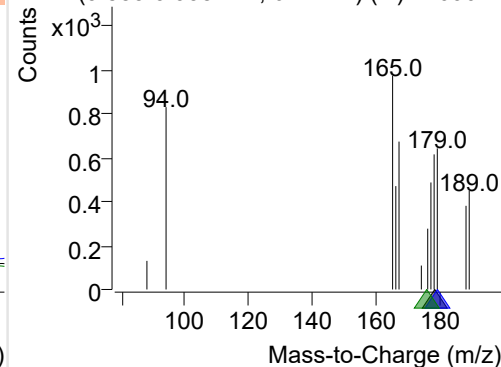
+ Selected Ion (178.0) 220907-PAHs-013.D



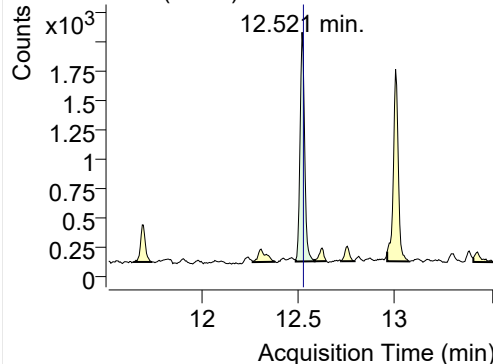
178.0, 179.0, 176.0



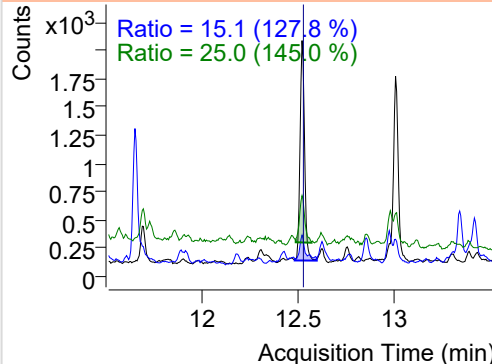
+ SIM (9.885-9.938 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

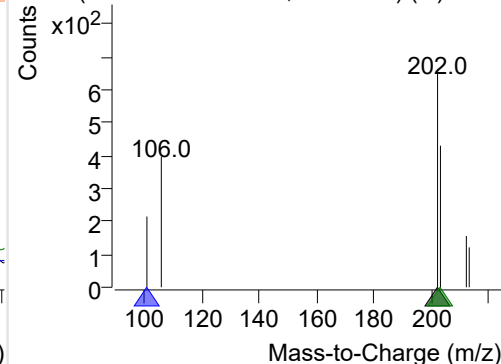
+ Selected Ion (202.0) 220907-PAHs-013.D



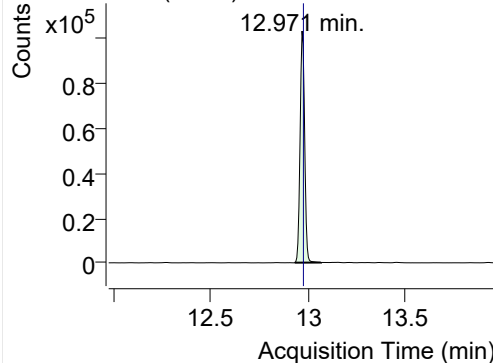
202.0, 101.0, 203.0



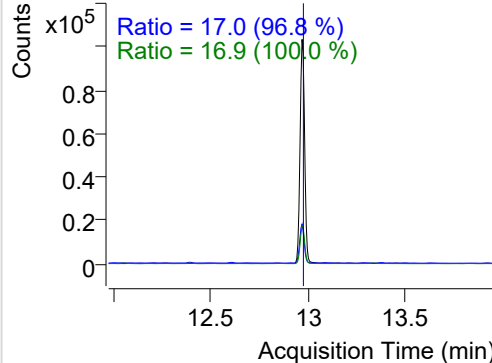
+ SIM (12.488-12.586 min, 19 scans) (\*\*) 2209

**LSS-D10-Pyrene**

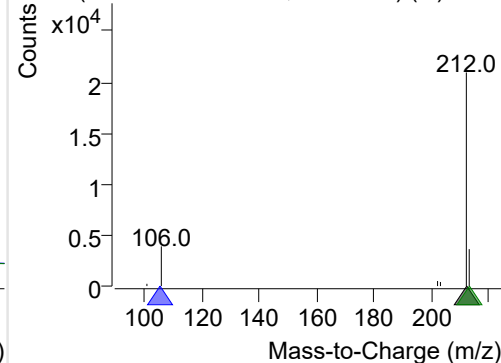
+ Selected Ion (212.0) 220907-PAHs-013.D



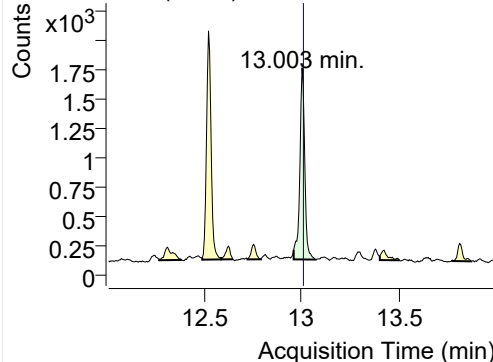
212.0, 106.0, 213.0



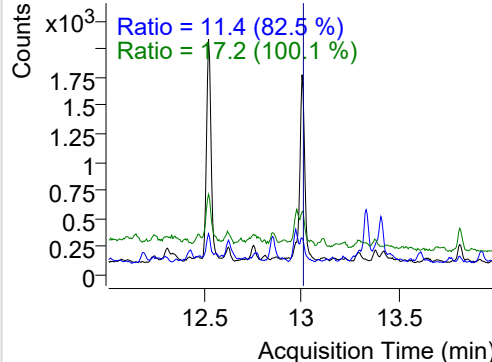
+ SIM (12.933-13.068 min, 25 scans) (\*\*) 2209

**Pyrene**

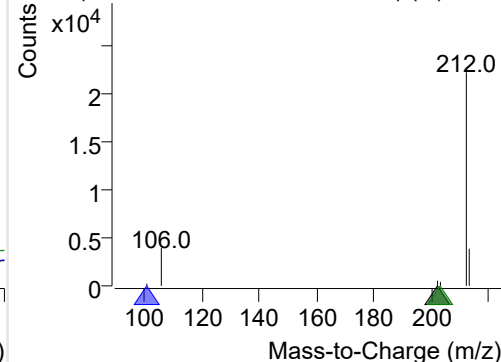
+ Selected Ion (202.0) 220907-PAHs-013.D



202.0, 101.0, 203.0

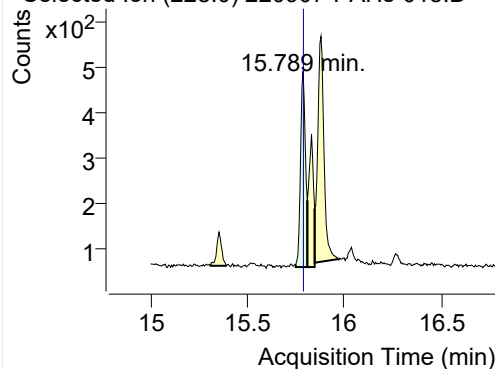


+ SIM (12.960-13.074 min, 22 scans) (\*\*) 2209

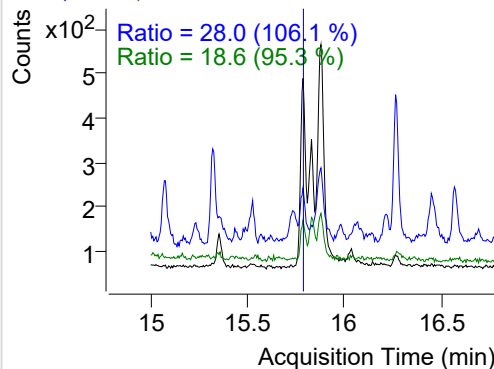


**Benz(a)anthracene**

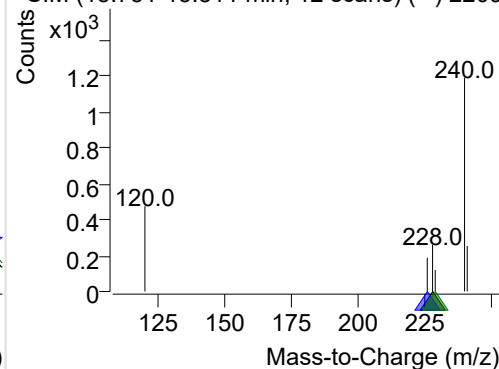
+ Selected Ion (228.0) 220907-PAHs-013.D



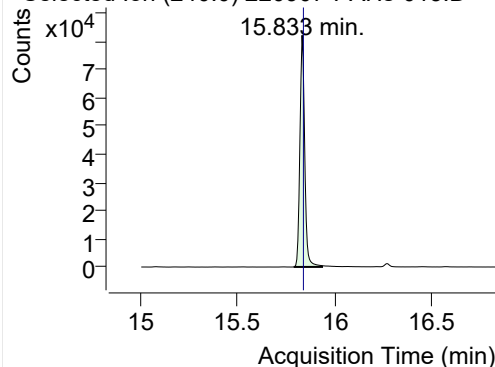
228.0, 226.0, 229.0



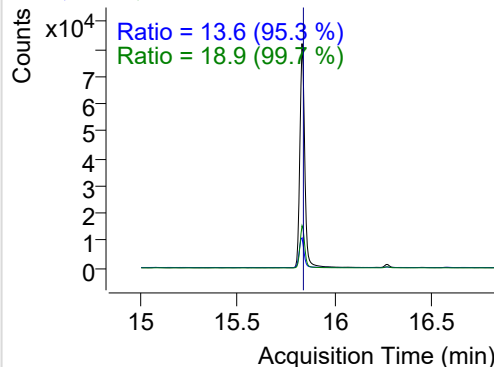
+ SIM (15.751-15.811 min, 12 scans) (\*\*) 2209

**IS-D12-Chrysene**

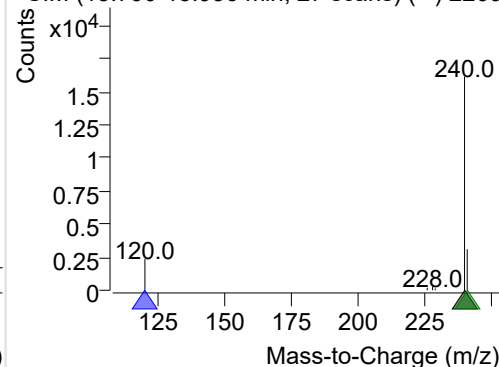
+ Selected Ion (240.0) 220907-PAHs-013.D



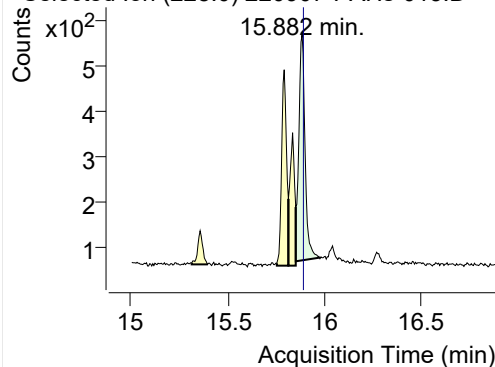
240.0, 120.0, 241.0



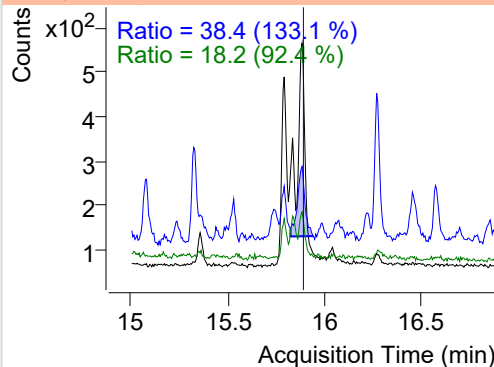
+ SIM (15.790-15.936 min, 27 scans) (\*\*) 2209

**Chrysene**

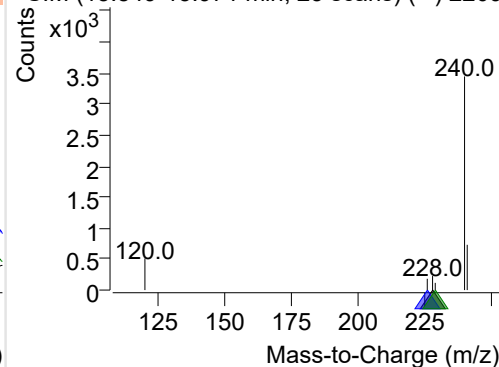
+ Selected Ion (228.0) 220907-PAHs-013.D



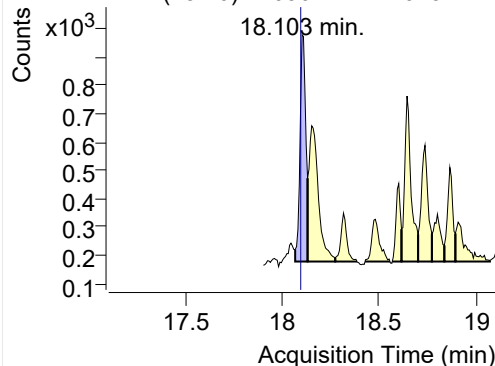
228.0, 226.0, 229.0



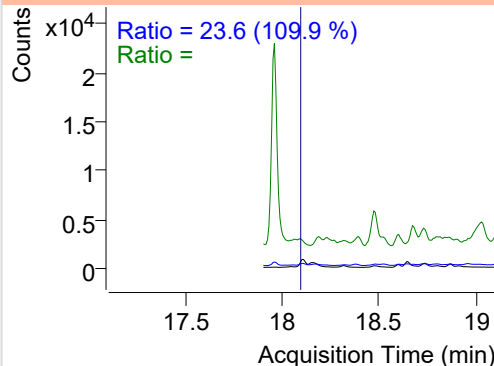
+ SIM (15.849-15.971 min, 23 scans) (\*\*) 2209

**Benzo(b)fluoranthene**

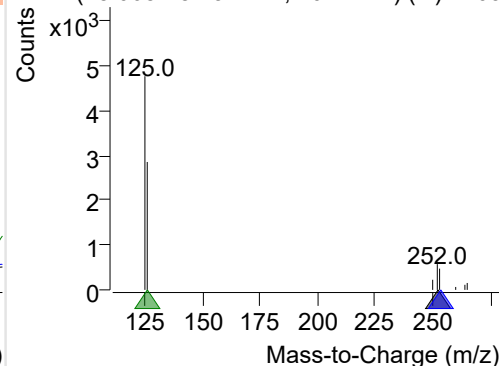
+ Selected Ion (252.0) 220907-PAHs-013.D



252.0, 253.0, 126.0



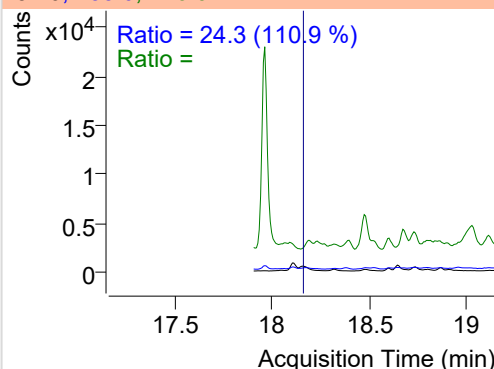
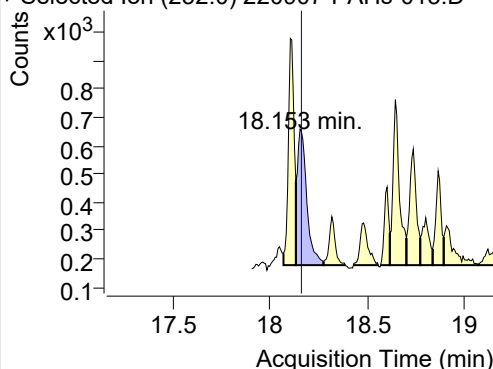
+ SIM (18.068-18.132 min, 10 scans) (\*\*) 2209



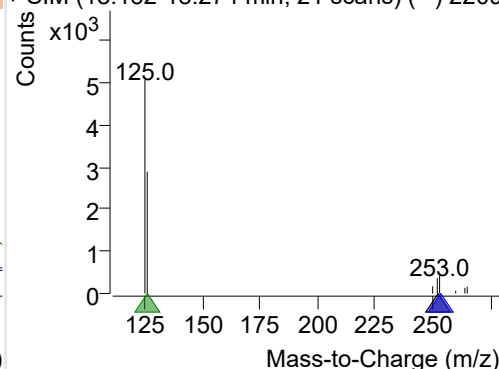
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-013.D

252.0, 253.0, 126.0

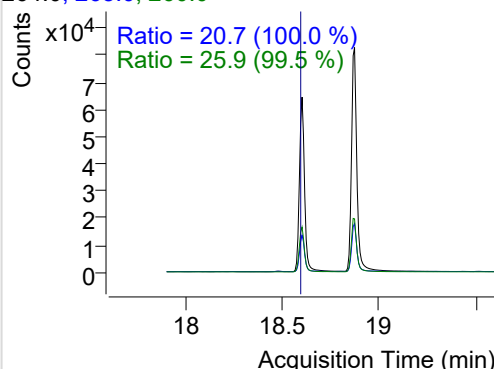
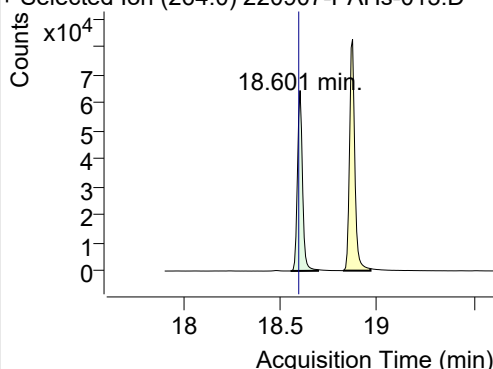


+ SIM (18.132-18.274 min, 21 scans) (\*\*) 2209

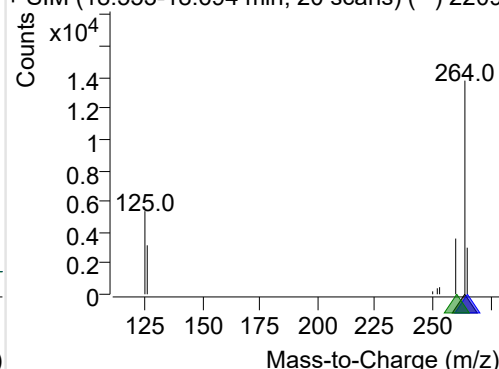
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-013.D

264.0, 265.0, 260.0

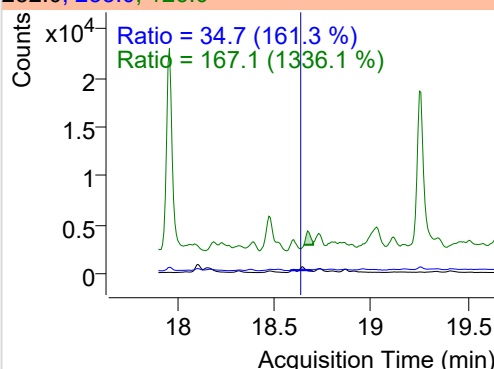
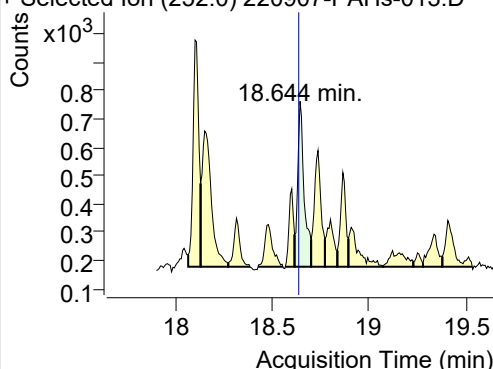


+ SIM (18.553-18.694 min, 20 scans) (\*\*) 2209

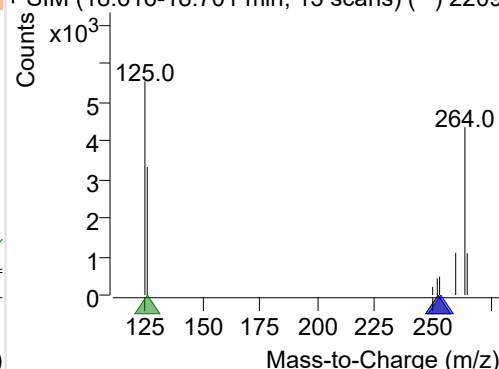
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-013.D

252.0, 253.0, 126.0

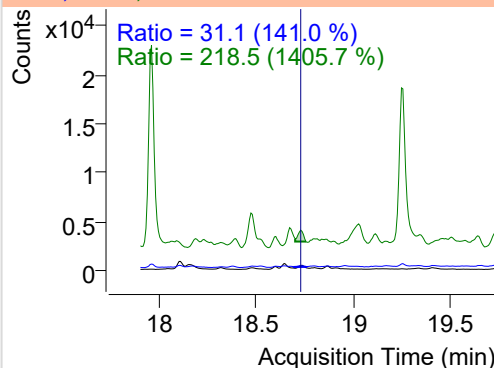
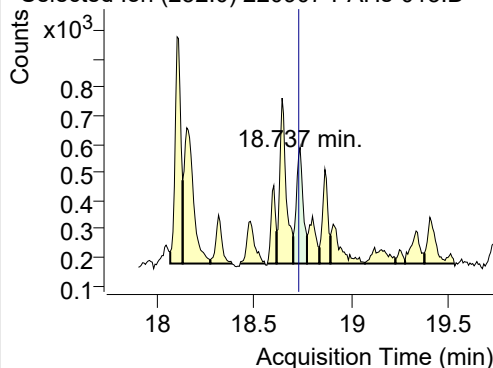


+ SIM (18.616-18.701 min, 13 scans) (\*\*) 2209

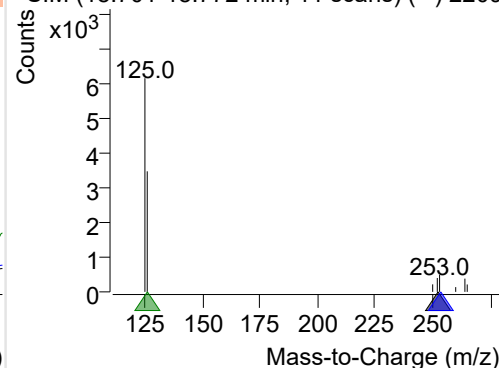
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-013.D

252.0, 253.0, 126.0

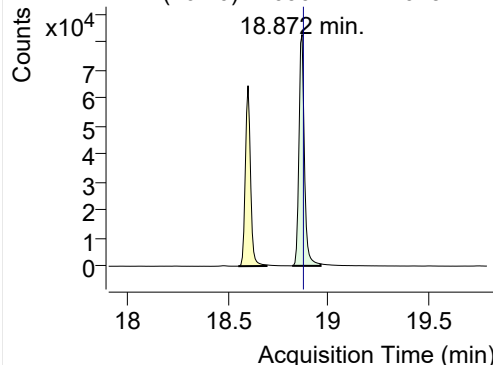


+ SIM (18.701-18.772 min, 11 scans) (\*\*) 2209

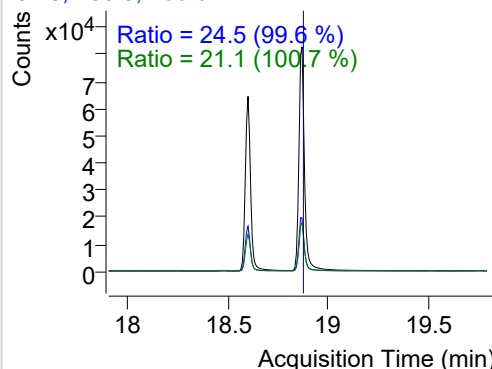


## IS-D12-Perylene

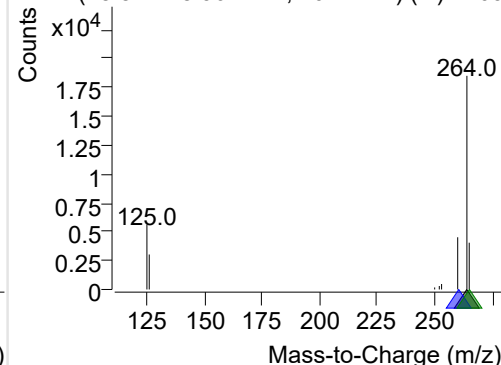
+ Selected Ion (264.0) 220907-PAHs-013.D



264.0, 260.0, 265.0

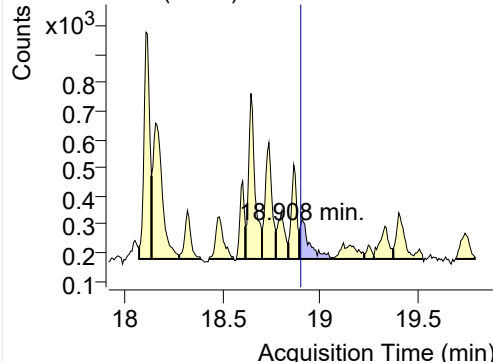


+ SIM (18.822-18.964 min, 20 scans) (\*\*) 2209

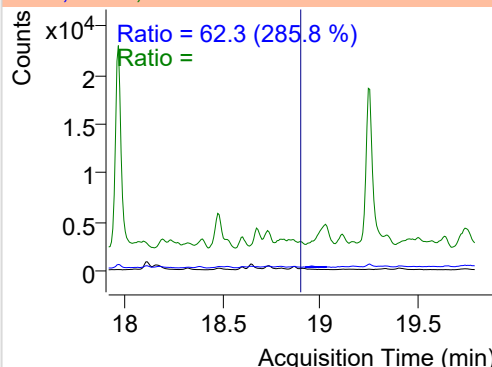


## Perylene

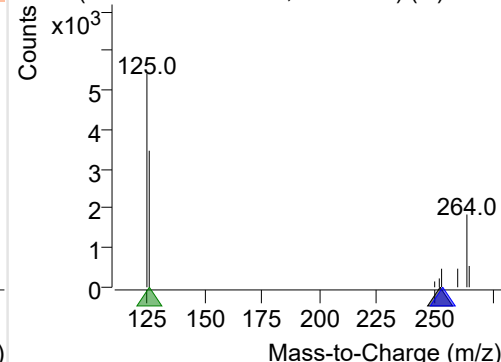
+ Selected Ion (252.0) 220907-PAHs-013.D



252.0, 253.0, 126.0

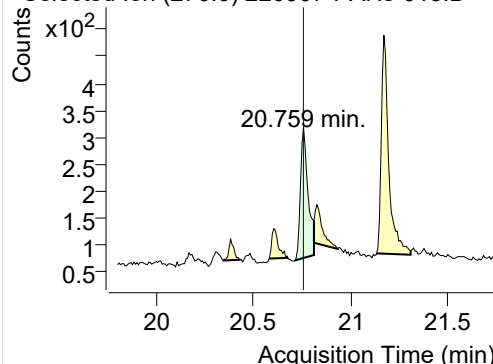


+ SIM (18.893-19.071 min, 26 scans) (\*\*) 2209

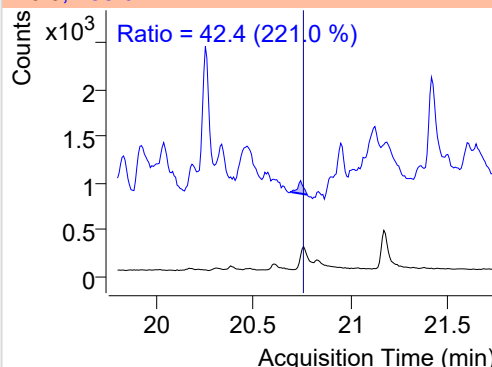


## Indeno(1,2,3-c,d)pyrene

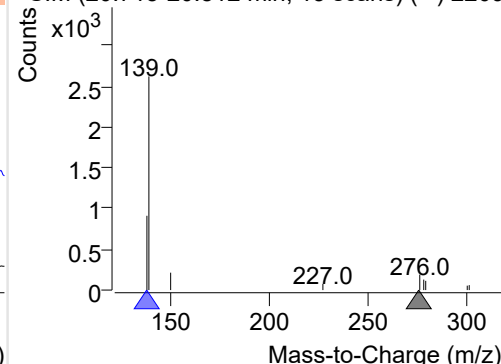
+ Selected Ion (276.0) 220907-PAHs-013.D



276.0, 138.0

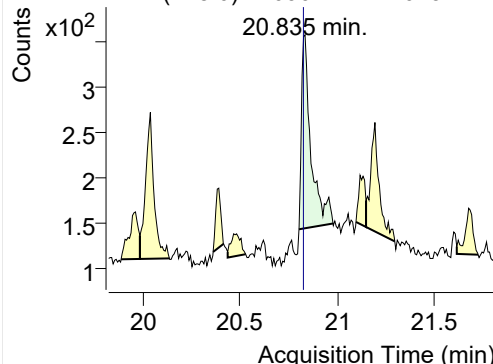


+ SIM (20.715-20.812 min, 13 scans) (\*\*) 2209

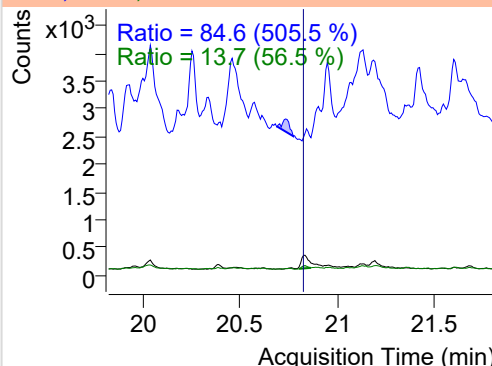


## Dibenz(a,h)anthracene

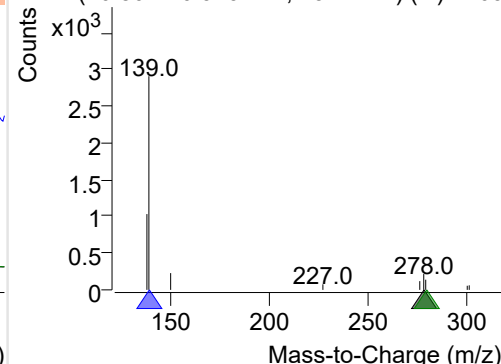
+ Selected Ion (278.0) 220907-PAHs-013.D



278.0, 139.0, 279.0



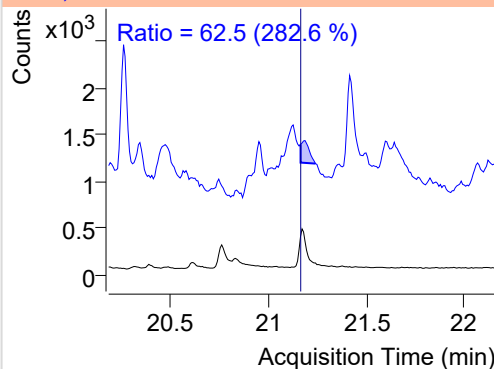
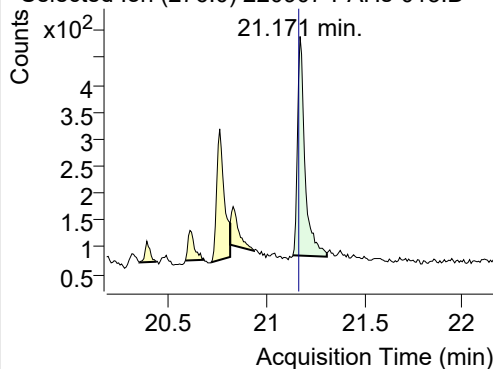
+ SIM (20.804-20.979 min, 23 scans) (\*\*) 2209



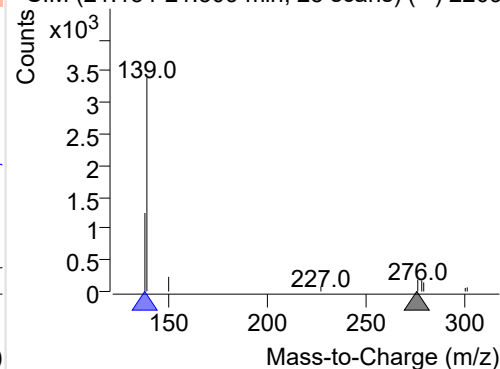
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-013.D

276.0, 138.0

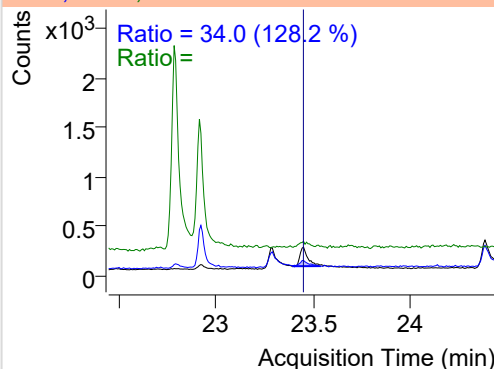
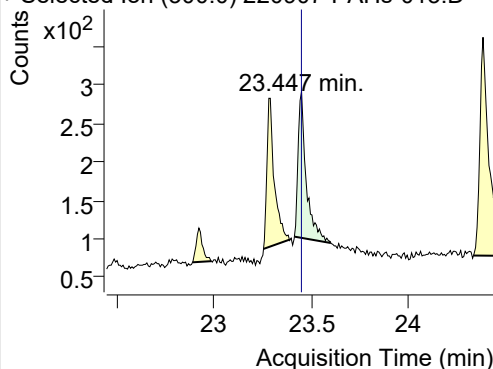


+ SIM (21.134-21.309 min, 23 scans) (\*\*) 2209

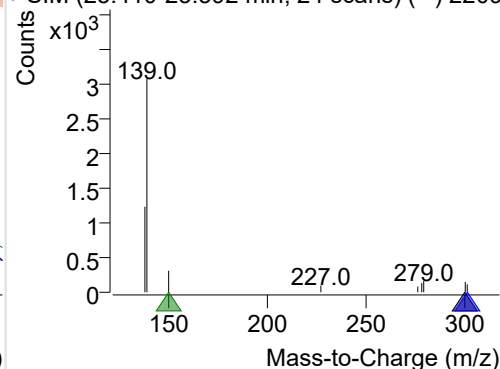
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-013.D

300.0, 301.0, 150.0



+ SIM (23.410-23.592 min, 24 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

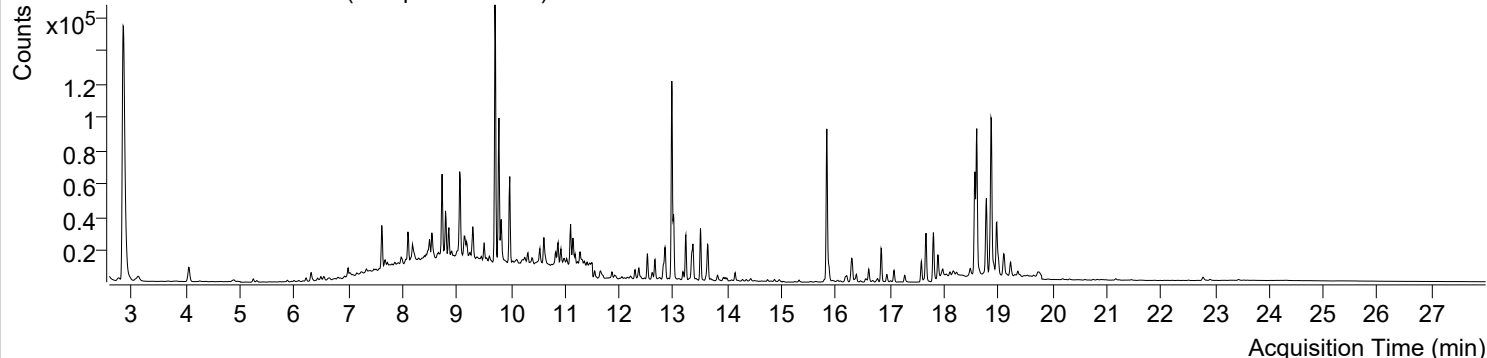


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 7:11:11	Data File	220907-PAHs-014.D
Type	Sample	Name	Sample-PM-0809
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

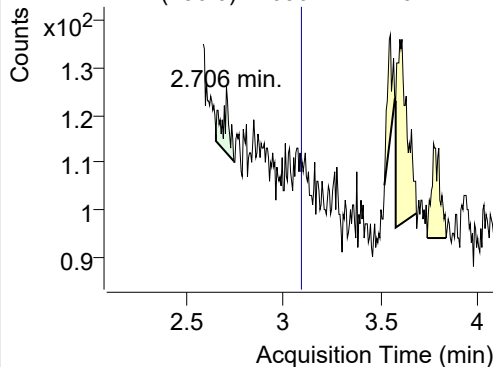
+ TIC SIM 220907-PAHs-014.D (Sample-PM-0809)



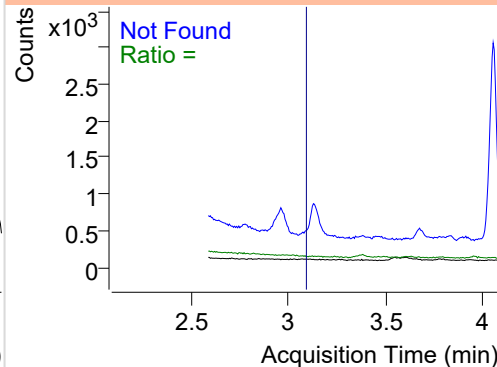
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	2.706	136.0	31	14.00	ND ng/ml	
Naphthalene	3.117	128.0	6111	1687.50	ND ng/ml	
Acenaphthylene	6.161	152.0	385	221.82	ND ng/ml	
IS-D10-Acenaphthene	6.493	164.0	2595	1141.76	ND ng/ml	77.6
Acenaphthene	6.546	154.0	2956	1200.44	ND ng/ml	20.1
LSS-D10-Fluorene	7.617	176.0	18873	10969.37	ND ng/ml	94.8
Fluorene	7.680	166.0	3393	1730.71	ND ng/ml	182.2
IS-D10-Phenanthrene	9.780	188.0	110775	69950.66	ND ng/ml	17.3
Phenanthrene	9.822	178.0	25390	15251.88	ND ng/ml	19.2
Anthracene	9.916	178.0	996	469.46	ND ng/ml	587.8
Fluoranthene	12.521	202.0	18101	11565.83	ND ng/ml	18.8
LSS-D10-Pyrene	12.971	212.0	140179	88209.18	ND ng/ml	18.3
Pyrene	13.003	202.0	45810	28481.71	ND ng/ml	18.7
Benz(a)anthracene	15.784	228.0	649	373.79	ND ng/ml	33.2
IS-D12-Chrysene	15.833	240.0	122122	69821.81	ND ng/ml	18.5
Chrysene	15.876	228.0	2834	1301.84	ND ng/ml	31.7
Benzo(b)fluoranthene	18.110	252.0	2178	1197.07	ND ng/ml	21.8
Benzo(k)fluoranthene	18.153	252.0	1822	767.11	ND ng/ml	26.3
SS-D12-Benzo(e)pyrene	18.601	264.0	143853	59111.32	ND ng/ml	18.9
Benzo(e)pyrene	18.644	252.0	1808	955.30	ND ng/ml	24.5
Benzo(a)pyrene	18.737	252.0	339	266.21	ND ng/ml	145.6
IS-D12-Perylene	18.872	264.0	132074	63393.64	ND ng/ml	21.1
Perylene	18.915	252.0	328	178.96	ND ng/ml	59.5
Indeno(1,2,3-c,d)pyrene	20.751	276.0	986	418.26	ND ng/ml	4.7
Dibenz(a,h)anthracene	20.828	278.0	822	258.76	ND ng/ml	18.0
Benzo(g,h,i)perylene	21.171	276.0	1910	694.17	ND ng/ml	16.0
Coronene	23.439	300.0	1078	329.60	ND ng/ml	18.5

## IS-D8-Naphthalene

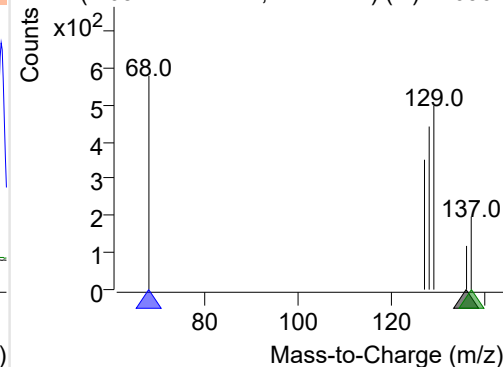
+ Selected Ion (136.0) 220907-PAHs-014.D



136.0, 68.0, 137.0

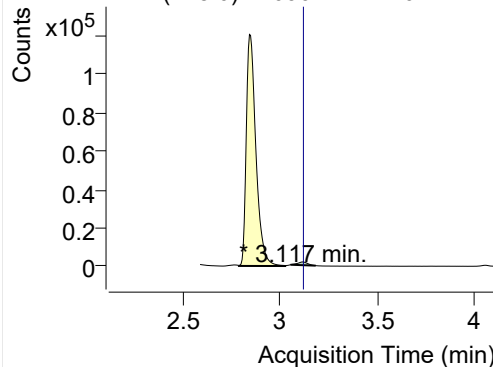


+ SIM (2.652-2.744 min, 17 scans) (\*\*) 220907

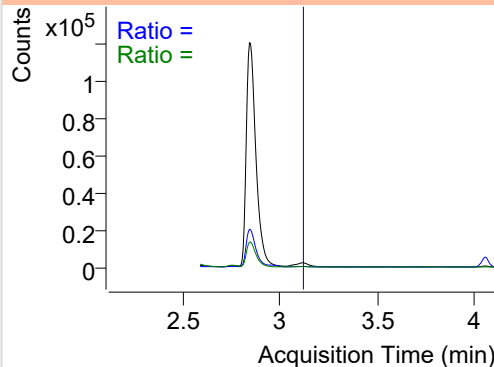


**Naphthalene**

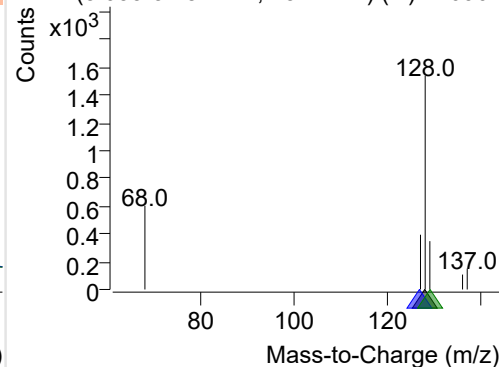
+ Selected Ion (128.0) 220907-PAHs-014.D



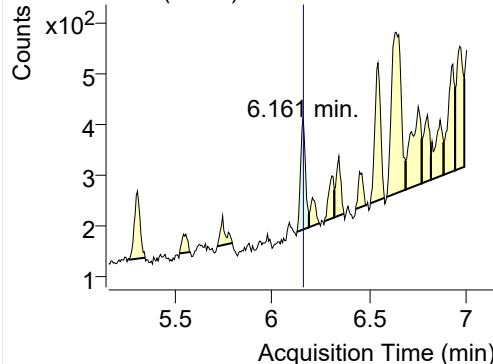
128.0, 127.0, 129.0



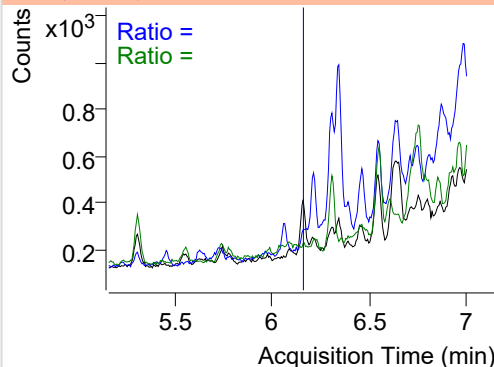
+ SIM (3.053-3.182 min, 25 scans) (\*\*) 220907

**Acenaphthylene**

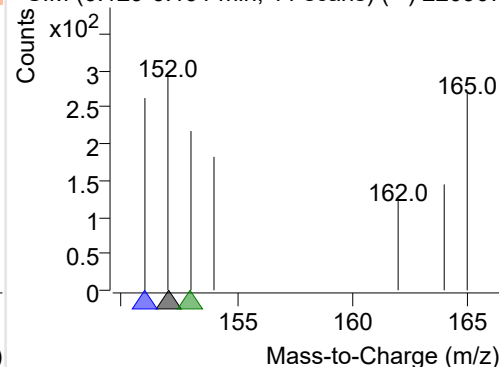
+ Selected Ion (152.0) 220907-PAHs-014.D



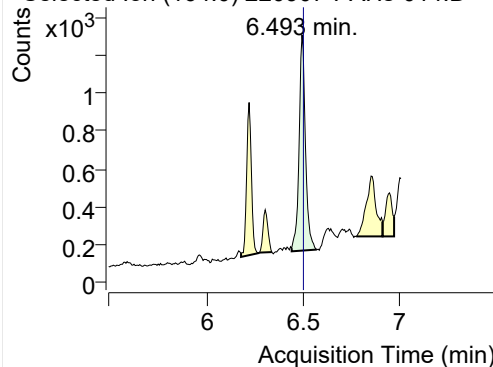
152.0, 151.0, 153.0



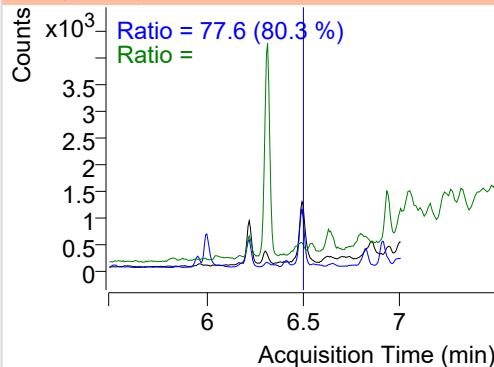
+ SIM (6.129-6.191 min, 11 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

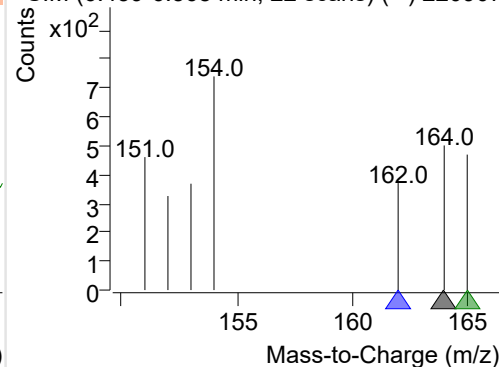
+ Selected Ion (164.0) 220907-PAHs-014.D



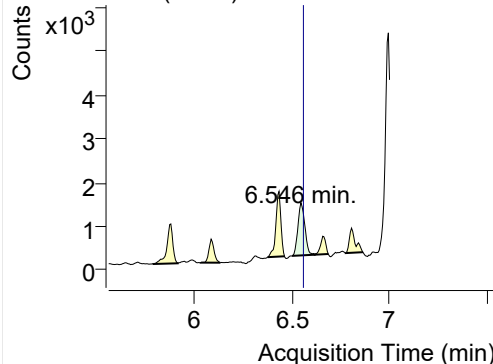
164.0, 162.0, 165.0



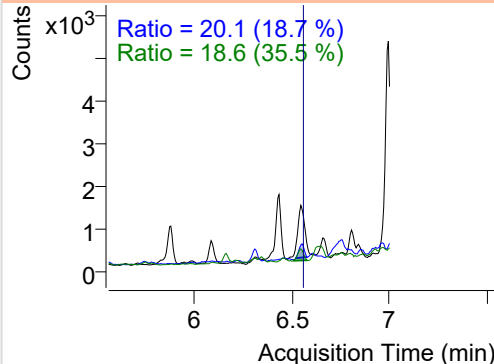
+ SIM (6.439-6.568 min, 22 scans) (\*\*) 220907

**Acenaphthene**

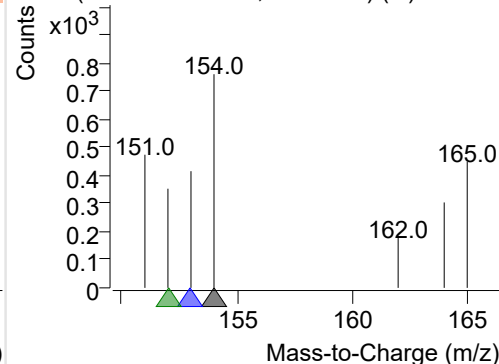
+ Selected Ion (154.0) 220907-PAHs-014.D



154.0, 153.0, 152.0

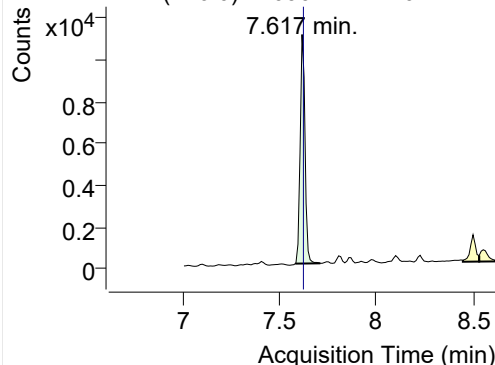


+ SIM (6.500-6.617 min, 20 scans) (\*\*) 220907

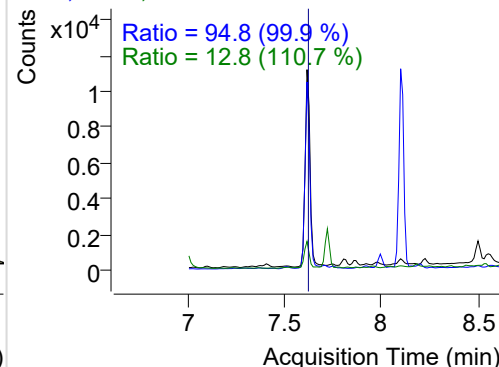


## LSS-D10-Fluorene

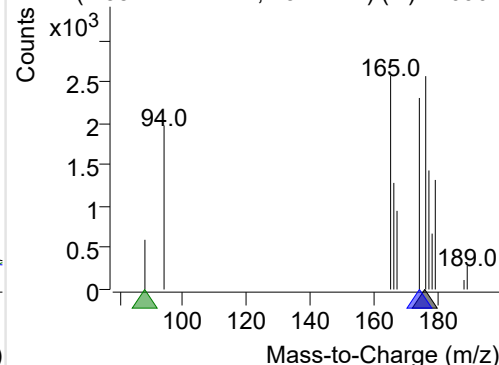
+ Selected Ion (176.0) 220907-PAHs-014.D



176.0, 174.0, 88.0

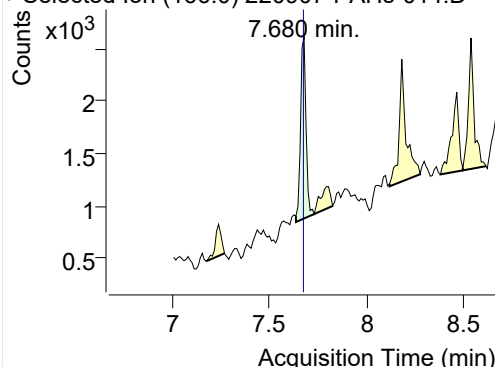


+ SIM (7.582-7.711 min, 13 scans) (\*\*) 220907

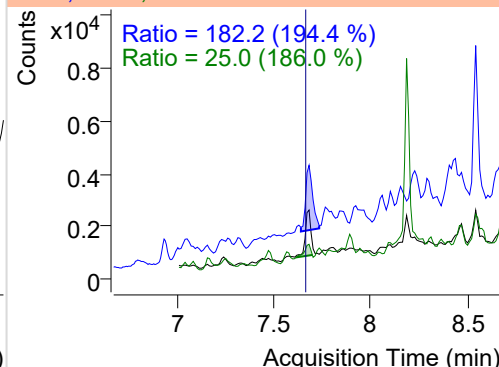


## Fluorene

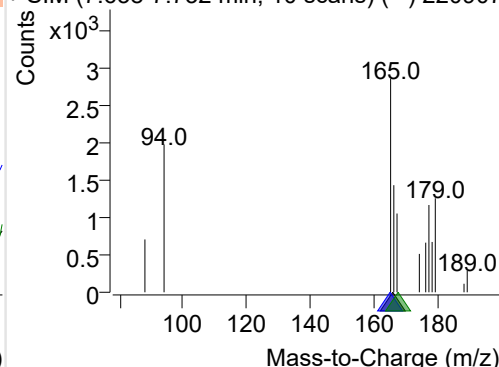
+ Selected Ion (166.0) 220907-PAHs-014.D



166.0, 165.0, 167.0

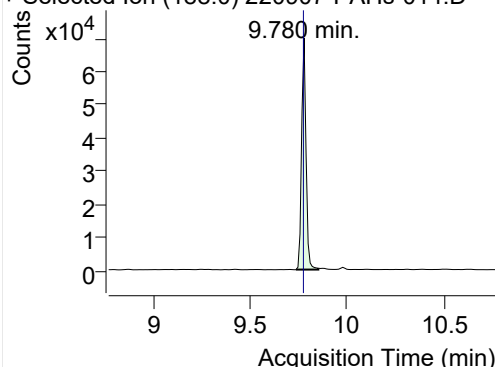


+ SIM (7.638-7.732 min, 10 scans) (\*\*) 220907

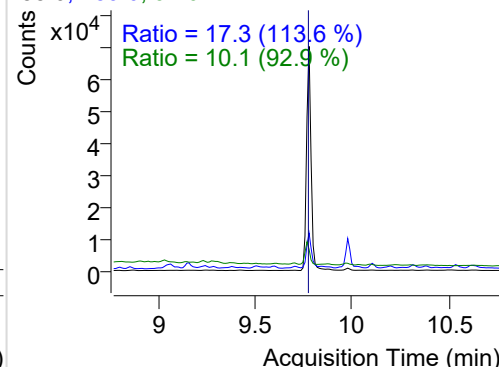


## IS-D10-Phenanthrene

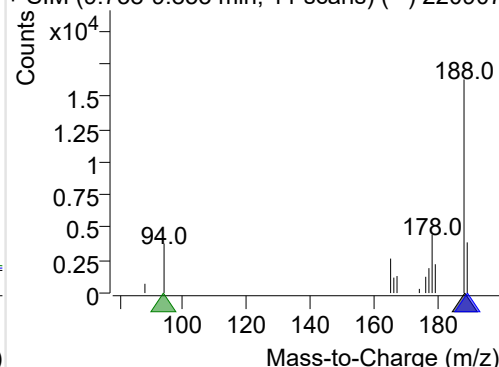
+ Selected Ion (188.0) 220907-PAHs-014.D



188.0, 189.0, 94.0

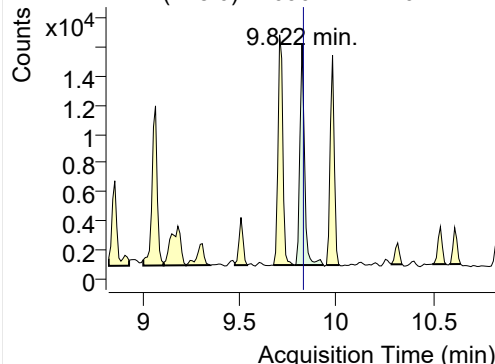


+ SIM (9.738-9.853 min, 11 scans) (\*\*) 220907

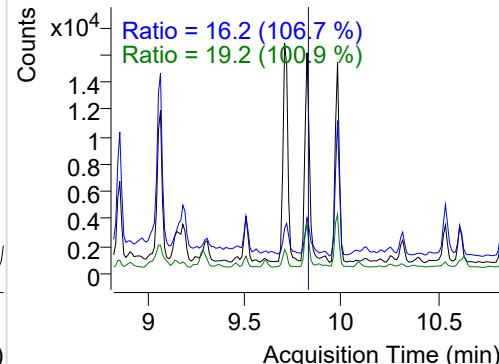


## Phenanthrene

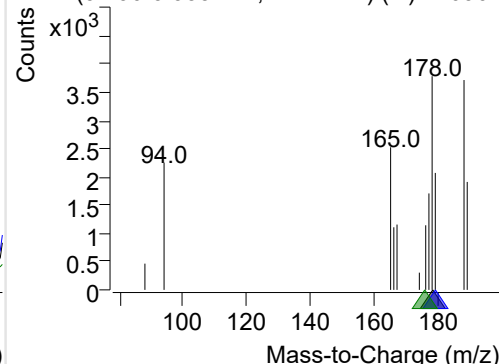
+ Selected Ion (178.0) 220907-PAHs-014.D



178.0, 179.0, 176.0

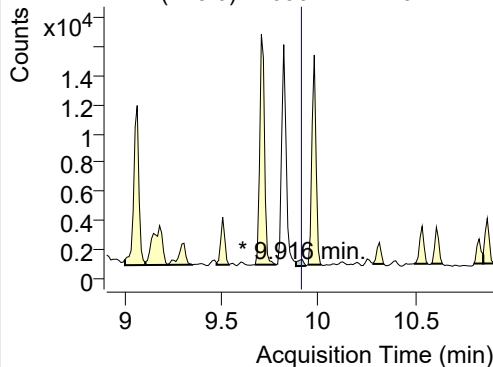


+ SIM (9.790-9.933 min, 14 scans) (\*\*) 220907

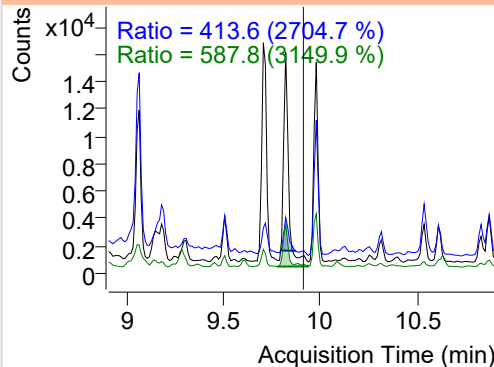


**Anthracene**

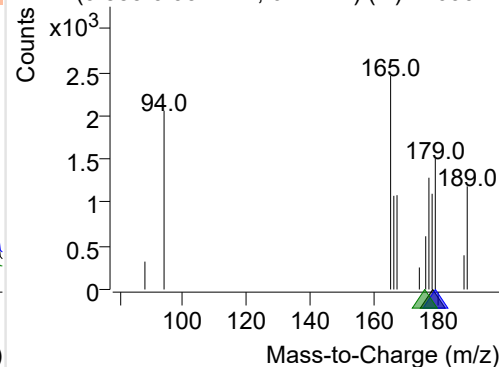
+ Selected Ion (178.0) 220907-PAHs-014.D



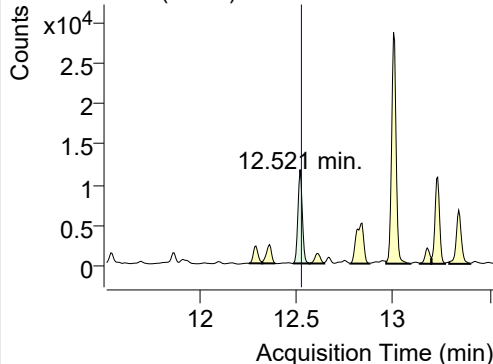
178.0, 179.0, 176.0



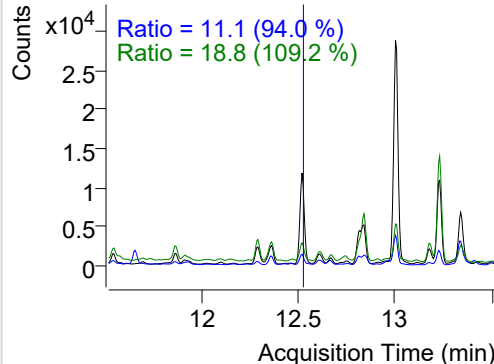
+ SIM (9.885-9.937 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

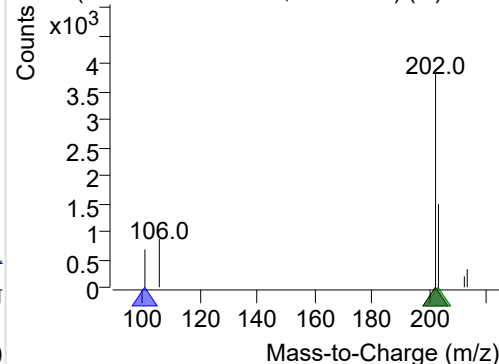
+ Selected Ion (202.0) 220907-PAHs-014.D



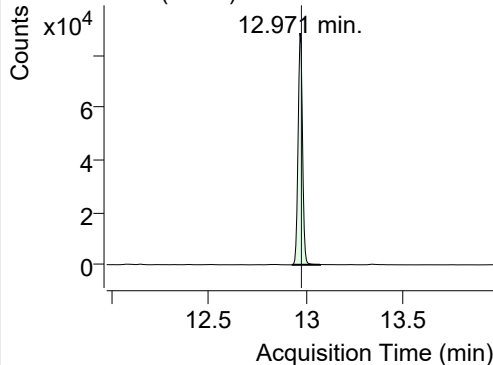
202.0, 101.0, 203.0



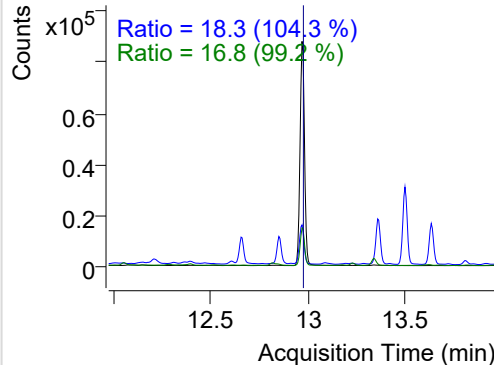
+ SIM (12.484-12.569 min, 16 scans) (\*\*) 2209

**LSS-D10-Pyrene**

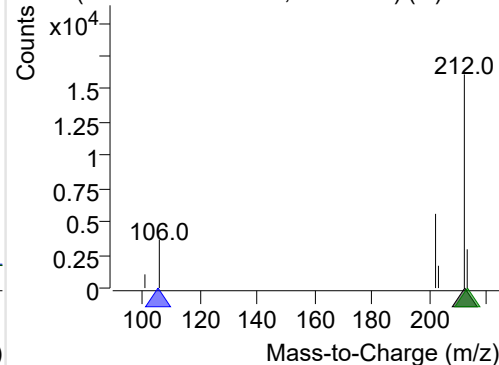
+ Selected Ion (212.0) 220907-PAHs-014.D



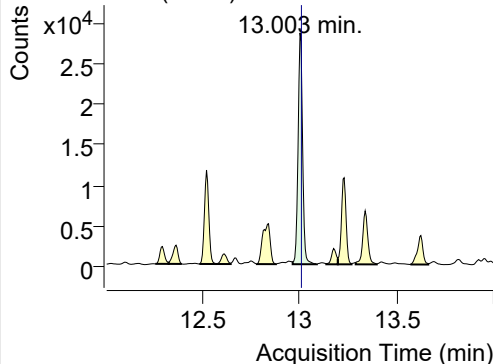
212.0, 106.0, 213.0



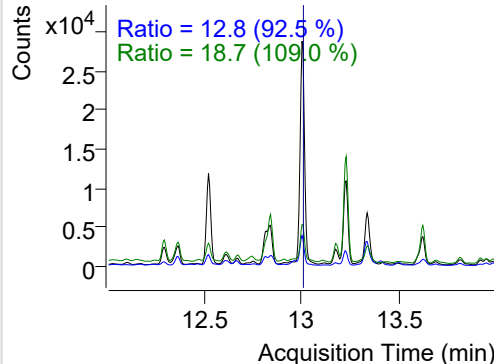
+ SIM (12.928-13.074 min, 27 scans) (\*\*) 2209

**Pyrene**

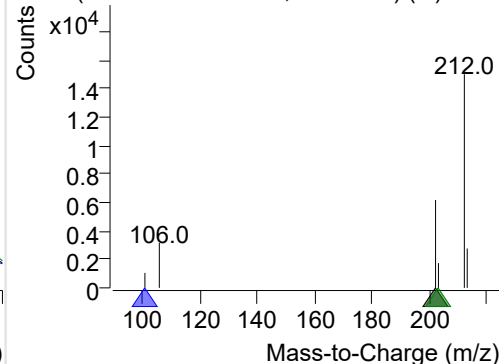
+ Selected Ion (202.0) 220907-PAHs-014.D



202.0, 101.0, 203.0



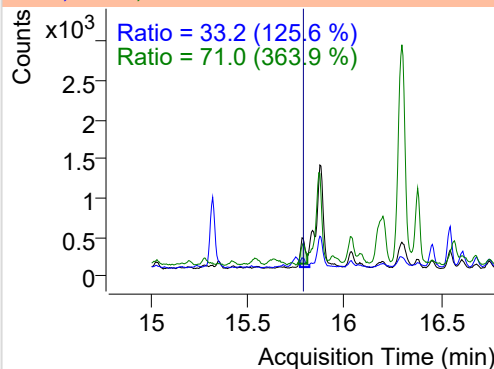
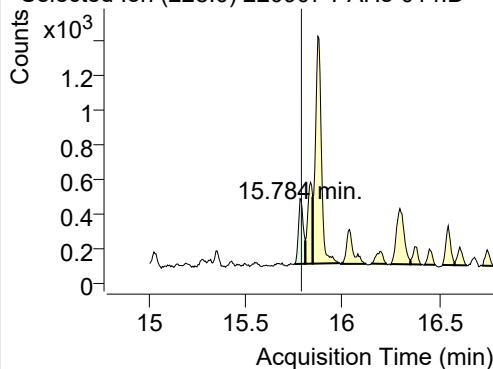
+ SIM (12.965-13.090 min, 24 scans) (\*\*) 2209



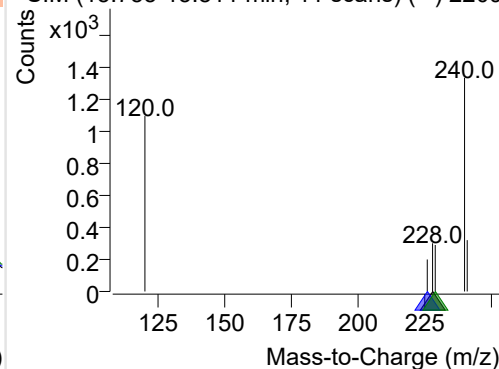
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-014.D

228.0, 226.0, 229.0

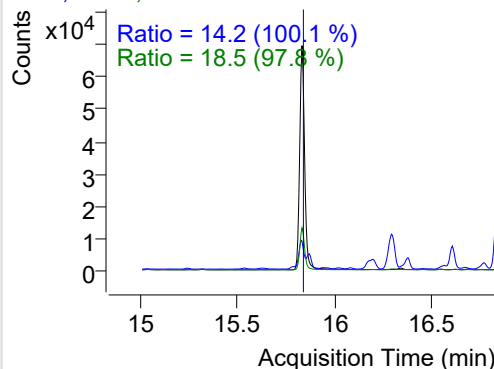
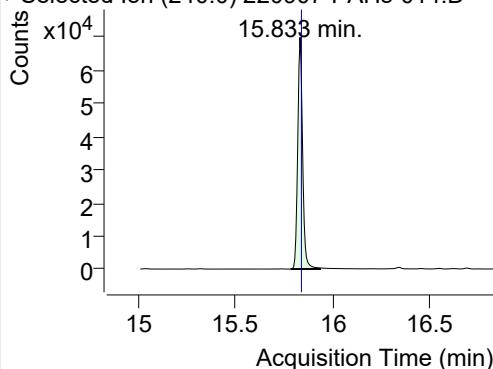


+ SIM (15.755-15.811 min, 11 scans) (\*\*) 2209

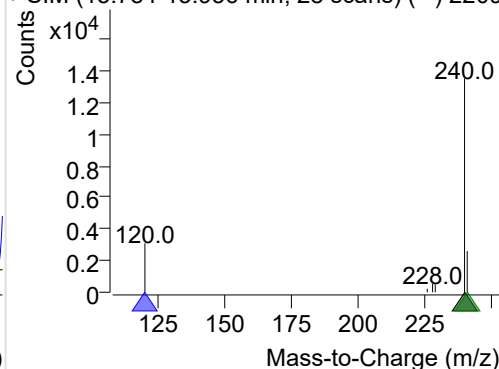
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-014.D

240.0, 120.0, 241.0

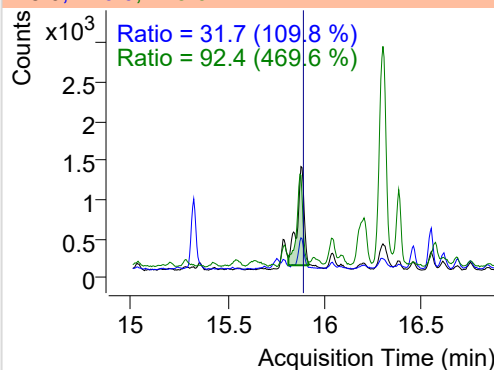
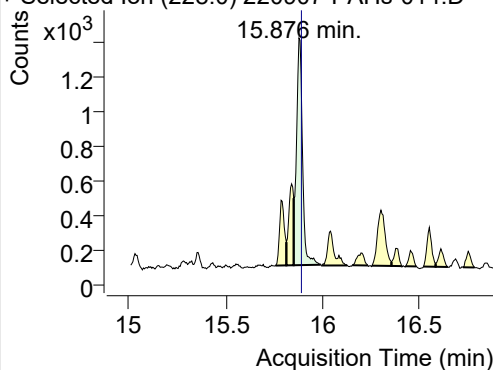


+ SIM (15.784-15.936 min, 28 scans) (\*\*) 2209

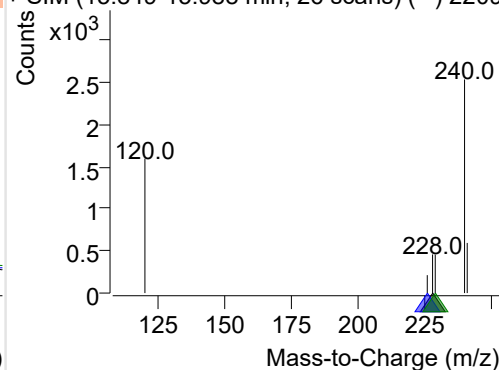
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-014.D

228.0, 226.0, 229.0

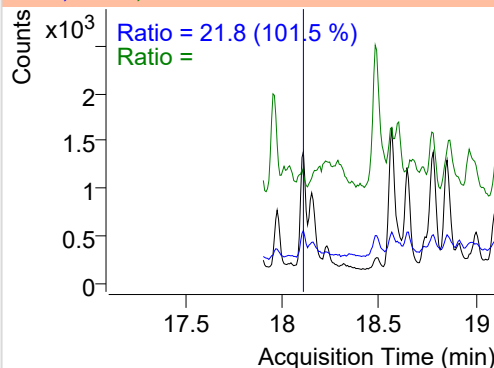
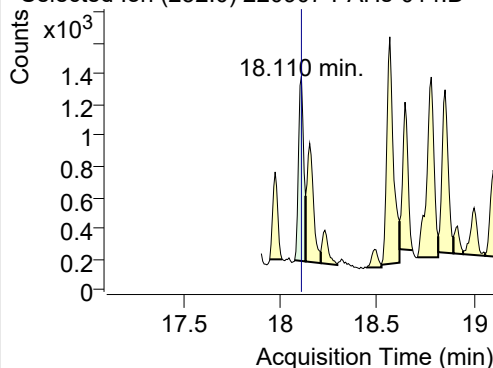


+ SIM (15.849-15.988 min, 26 scans) (\*\*) 2209

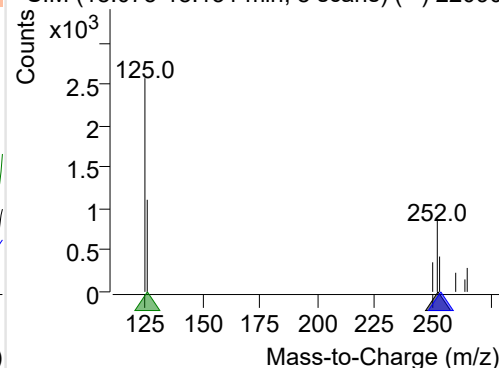
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-014.D

252.0, 253.0, 126.0



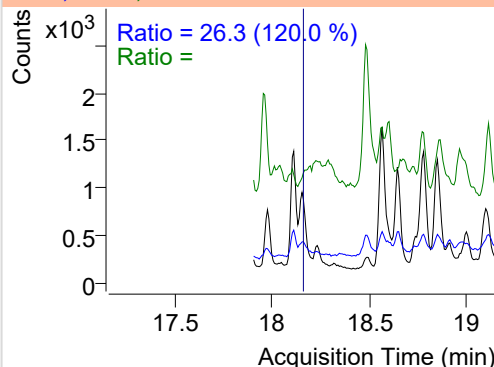
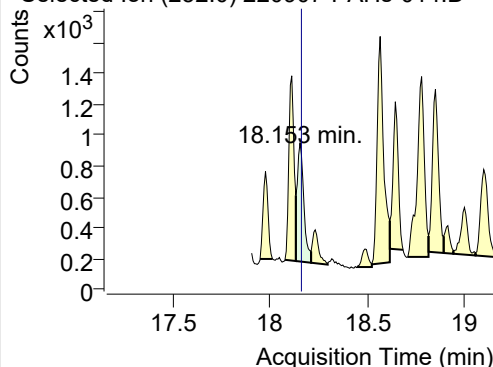
+ SIM (18.075-18.131 min, 8 scans) (\*\*) 22090



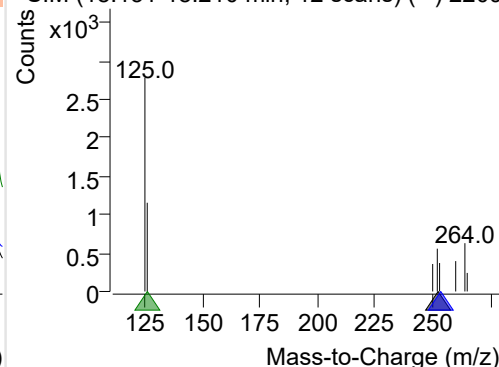
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-014.D

252.0, 253.0, 126.0

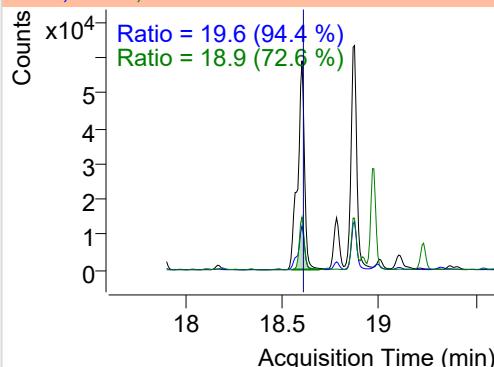
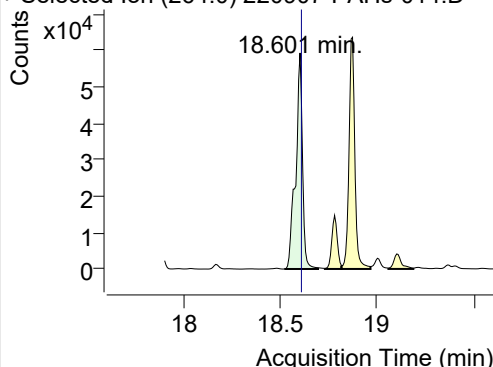


+ SIM (18.131-18.210 min, 12 scans) (\*\*) 2209

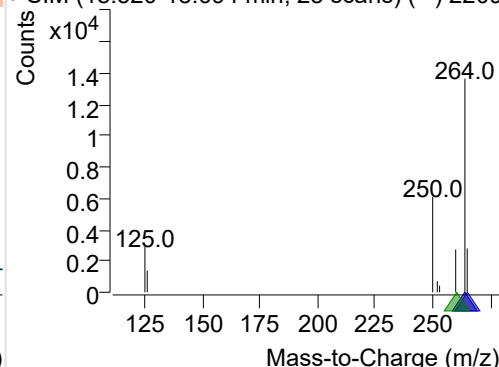
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-014.D

264.0, 265.0, 260.0

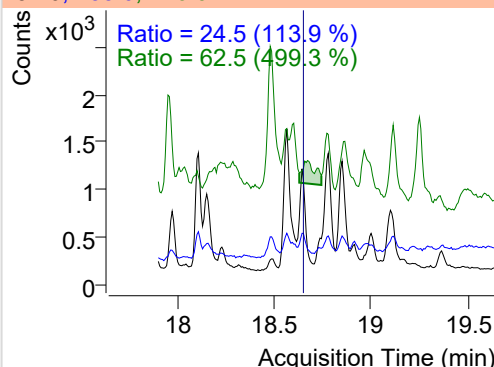
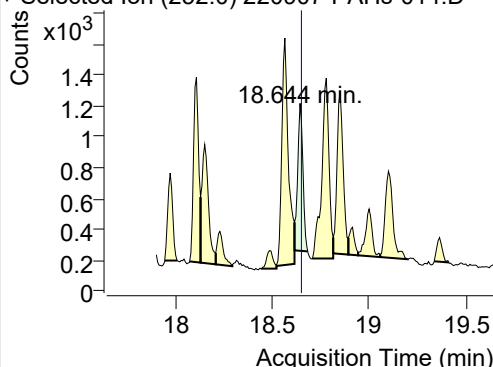


+ SIM (18.520-18.694 min, 25 scans) (\*\*) 2209

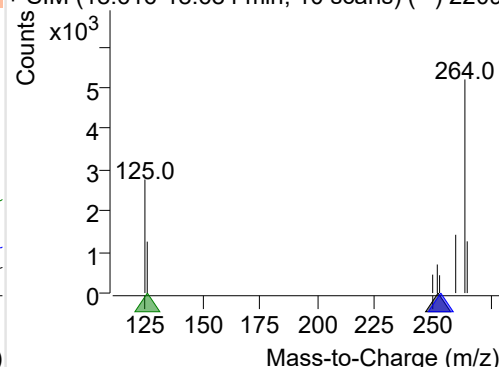
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-014.D

252.0, 253.0, 126.0

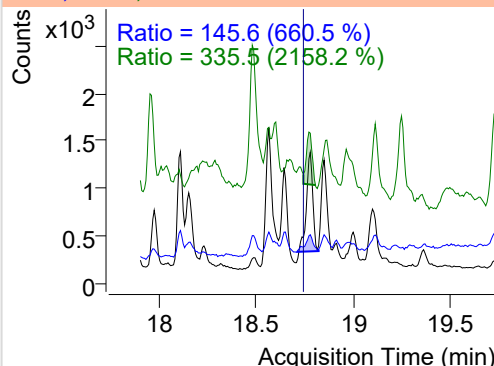
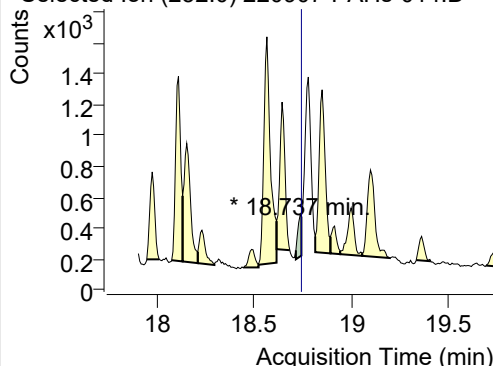


+ SIM (18.616-18.684 min, 10 scans) (\*\*) 2209

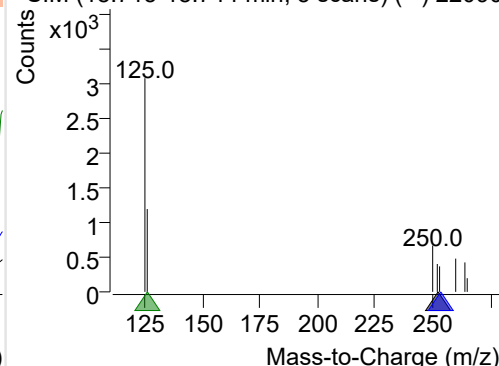
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-014.D

252.0, 253.0, 126.0

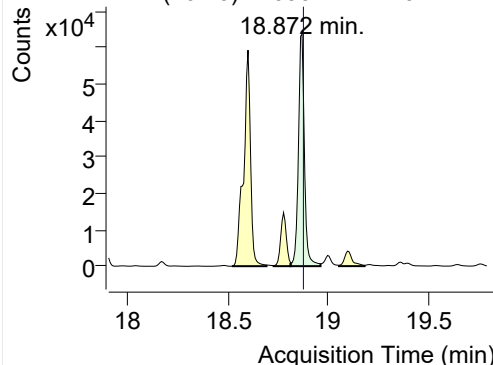


+ SIM (18.715-18.744 min, 5 scans) (\*\*) 22090

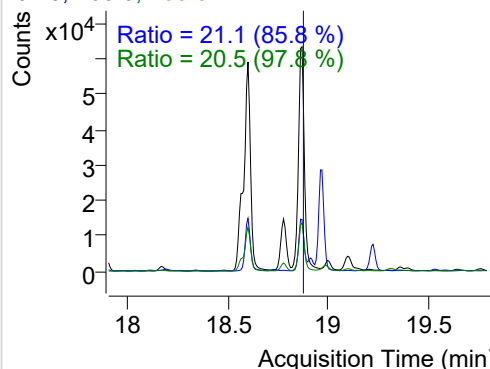


## IS-D12-Perylene

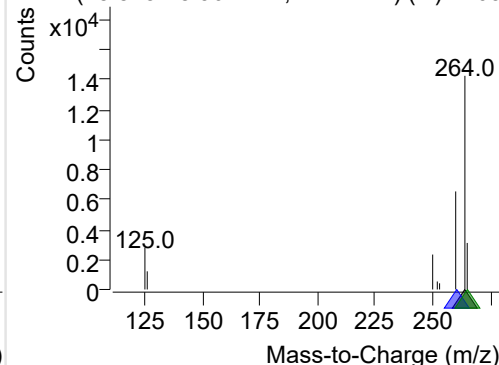
+ Selected Ion (264.0) 220907-PAHs-014.D



264.0, 260.0, 265.0

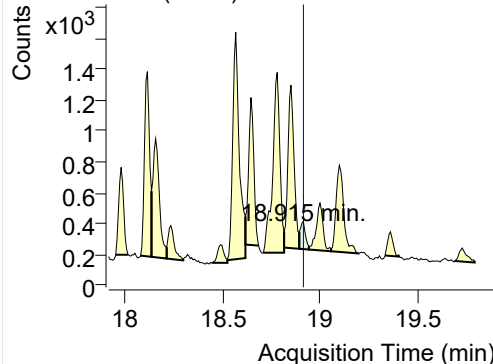


+ SIM (18.815-18.964 min, 22 scans) (\*\*) 2209

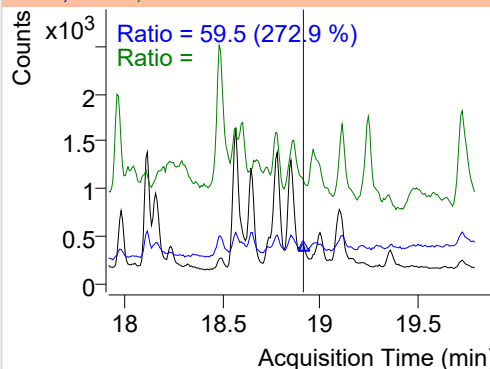


## Perylene

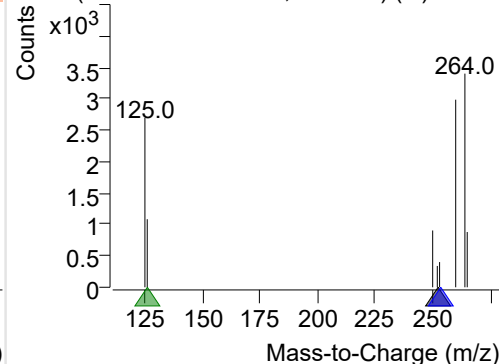
+ Selected Ion (252.0) 220907-PAHs-014.D



252.0, 253.0, 126.0

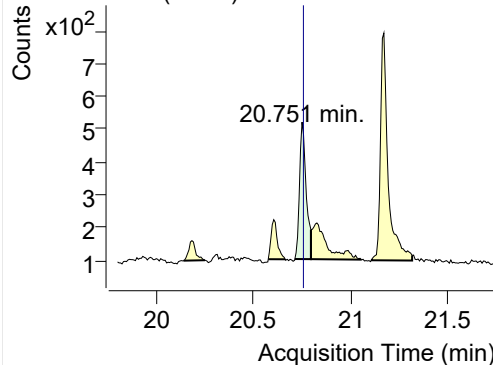


+ SIM (18.893-18.943 min, 8 scans) (\*\*) 22090

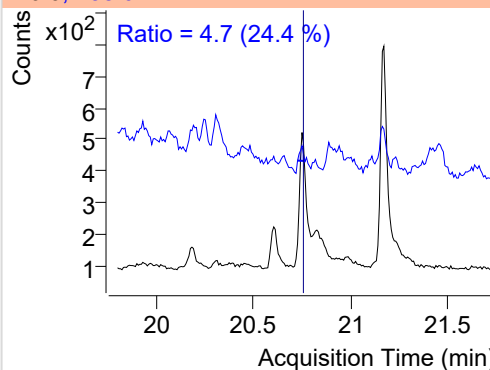


## Indeno(1,2,3-c,d)pyrene

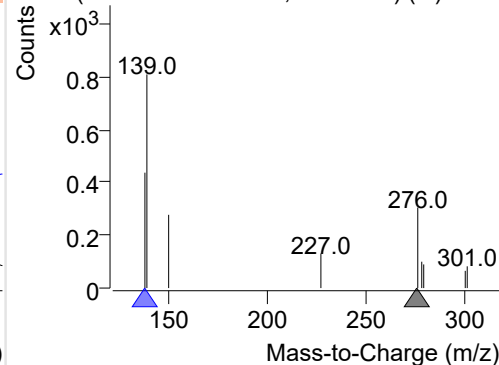
+ Selected Ion (276.0) 220907-PAHs-014.D



276.0, 138.0

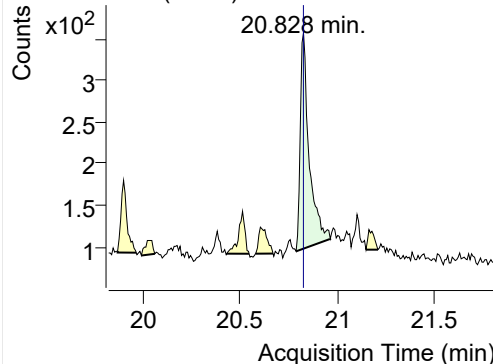


+ SIM (20.714-20.797 min, 11 scans) (\*\*) 2209

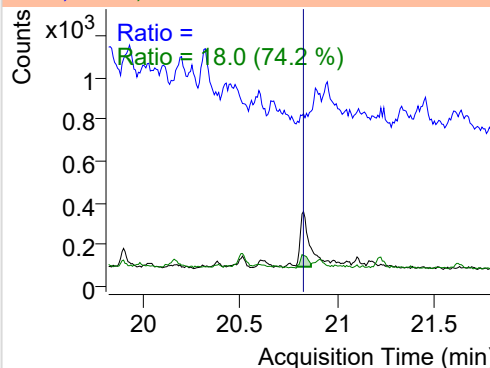


## Dibenz(a,h)anthracene

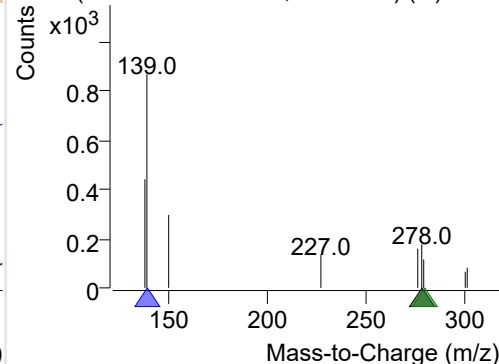
+ Selected Ion (278.0) 220907-PAHs-014.D



278.0, 139.0, 279.0



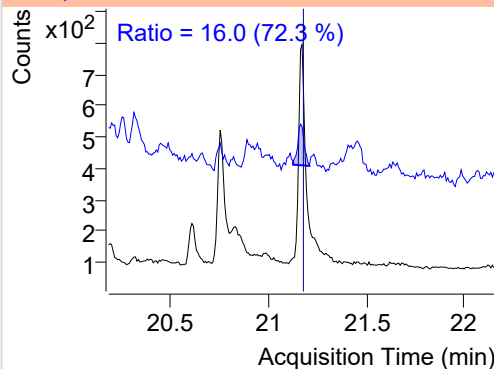
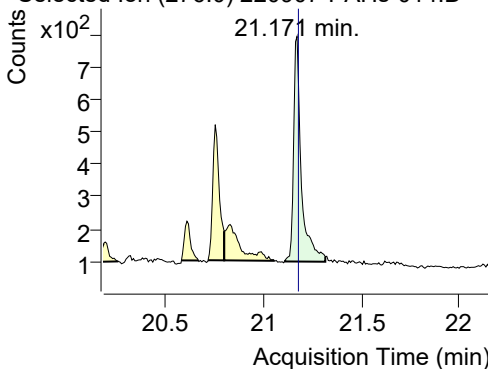
+ SIM (20.789-20.965 min, 24 scans) (\*\*) 2209



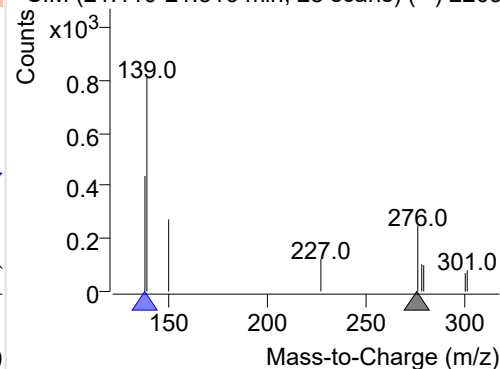
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-014.D

276.0, 138.0

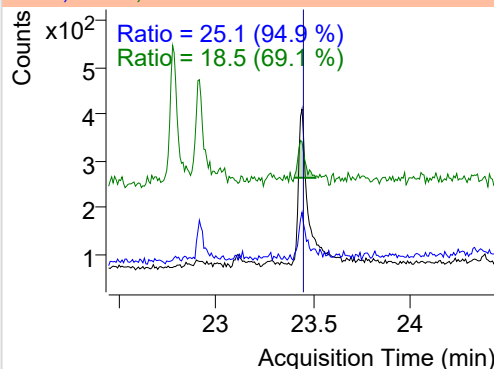
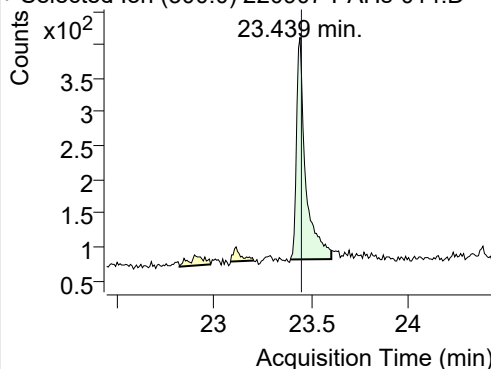


+ SIM (21.110-21.316 min, 28 scans) (\*\*) 2209

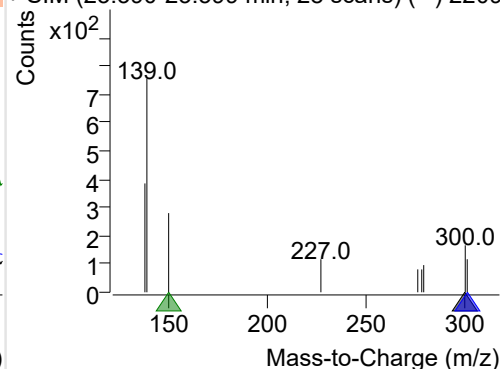
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-014.D

300.0, 301.0, 150.0



+ SIM (23.390-23.599 min, 28 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

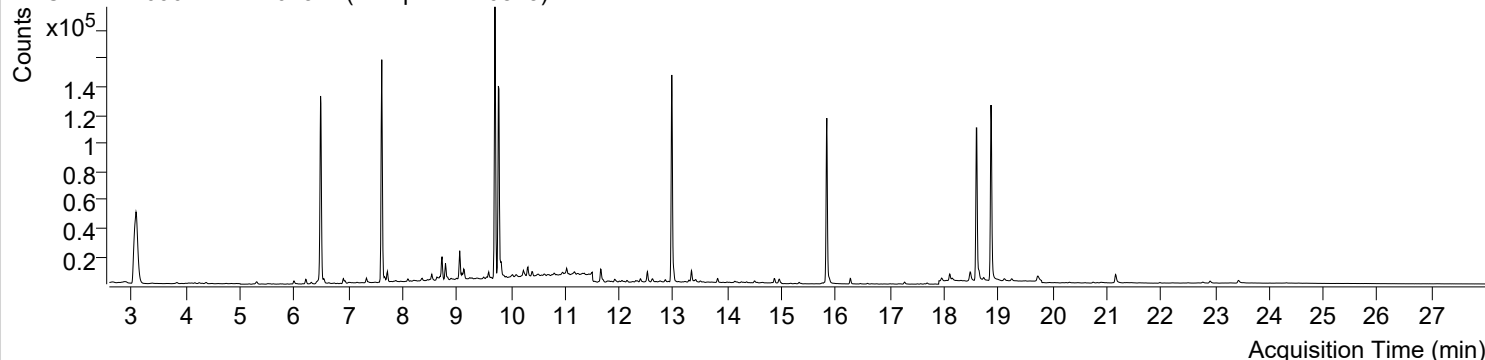


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 7:42:19	Data File	220907-PAHs-015.D
Type	Sample	Name	Sample-PM-0815
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

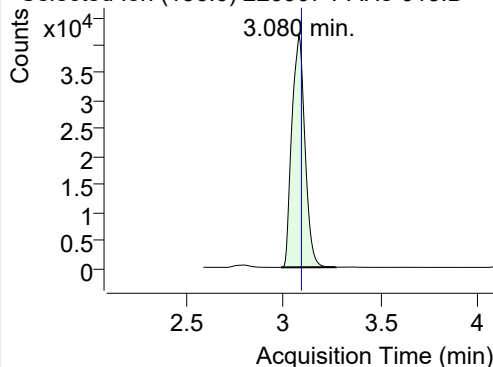
+ TIC SIM 220907-PAHs-015.D (Sample-PM-0815)



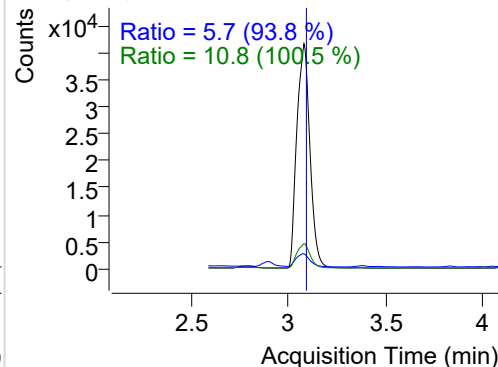
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	194589	41605.00	ND ng/ml	10.8
Naphthalene	3.107	128.0	9226	1980.54	ND ng/ml	10.9
Acenaphthylene	6.161	152.0	294	159.03	ND ng/ml	14.2
IS-D10-Acenaphthene	6.487	164.0	115901	62553.32	ND ng/ml	100.3
Acenaphthene	6.552	154.0	1101	555.21	ND ng/ml	120.4
LSS-D10-Fluorene	7.617	176.0	118609	71889.96	ND ng/ml	92.3
Fluorene	7.669	166.0	2028	1128.51	ND ng/ml	105.0
IS-D10-Phenanthrene	9.780	188.0	196691	108895.5	ND ng/ml	15.3
Phenanthrene	9.822	178.0	10196	6008.28	ND ng/ml	18.1
Anthracene	9.917	178.0	567	353.39	ND ng/ml	27.0
Fluoranthene	12.521	202.0	8449	5267.20	ND ng/ml	18.4
LSS-D10-Pyrene	12.971	212.0	176744	109242.9	ND ng/ml	16.5
Pyrene	13.003	202.0	9808	5607.11	ND ng/ml	18.5
Benz(a)anthracene	15.784	228.0	1253	703.94	ND ng/ml	134.0
IS-D12-Chrysene	15.833	240.0	148885	88876.24	ND ng/ml	18.7
Chrysene	15.876	228.0	3245	1612.80	ND ng/ml	31.5
Benzo(b)fluoranthene	18.103	252.0	5453	2857.73	ND ng/ml	21.2
Benzo(k)fluoranthene	18.153	252.0	2900	1122.35	ND ng/ml	19.1
SS-D12-Benzo(e)pyrene	18.601	264.0	136089	72782.06	ND ng/ml	25.9
Benzo(e)pyrene	18.644	252.0	5611	2929.90	ND ng/ml	24.4
Benzo(a)pyrene	18.730	252.0	1712	828.88	ND ng/ml	23.3
IS-D12-Perylene	18.865	264.0	156422	84411.28	ND ng/ml	24.2
Perylene	18.908	252.0	537	263.21	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	20.751	276.0	1167	468.22	ND ng/ml	15.6
Dibenz(a,h)anthracene	20.828	278.0	531	160.98	ND ng/ml	15.2
Benzo(g,h,i)perylene	21.164	276.0	11650	4731.09	ND ng/ml	22.5
Coronene	23.431	300.0	4133	1214.04	ND ng/ml	21.7

## IS-D8-Naphthalene

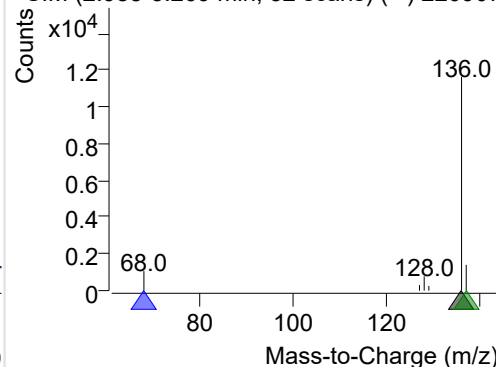
+ Selected Ion (136.0) 220907-PAHs-015.D



136.0, 68.0, 137.0

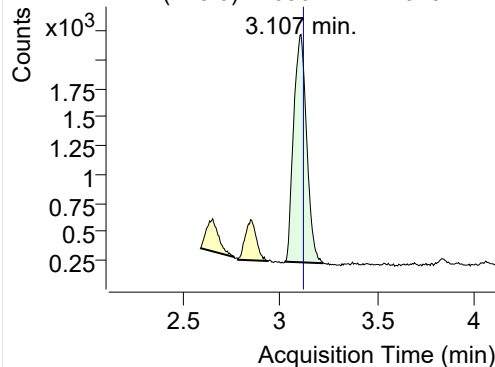


+ SIM (2.988-3.269 min, 52 scans) (\*\*) 220907

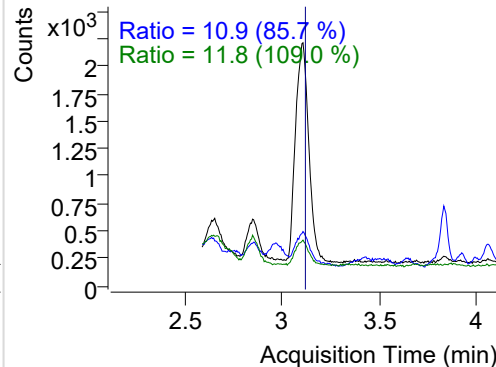


**Naphthalene**

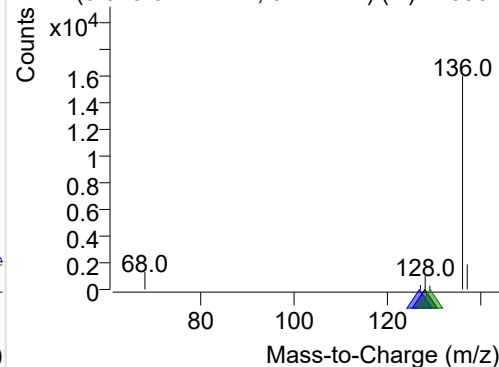
+ Selected Ion (128.0) 220907-PAHs-015.D



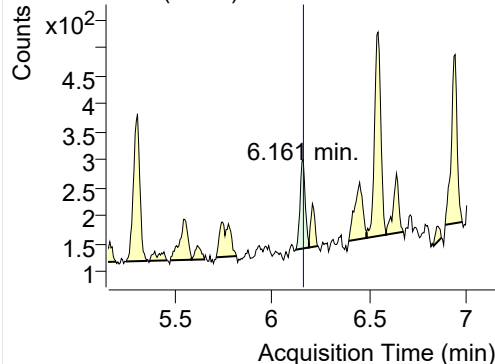
128.0, 127.0, 129.0



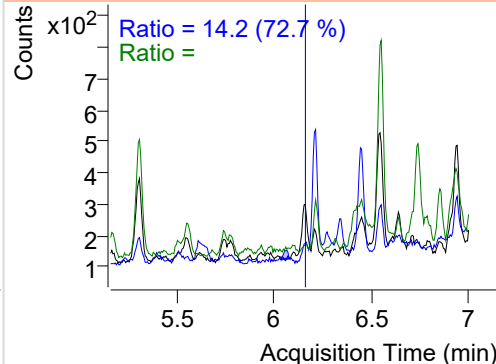
+ SIM (3.023-3.222 min, 37 scans) (\*\*) 220907

**Acenaphthylene**

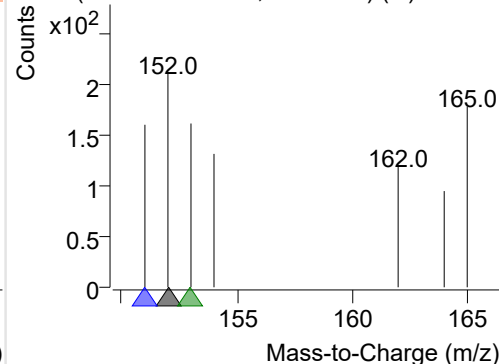
+ Selected Ion (152.0) 220907-PAHs-015.D



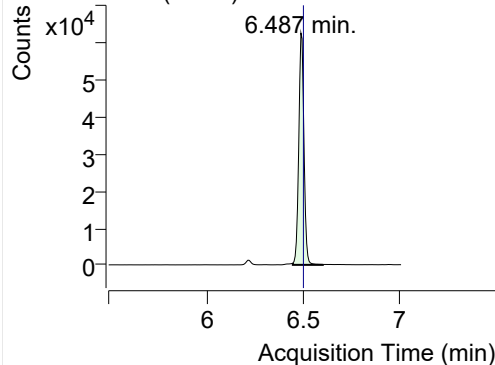
152.0, 151.0, 153.0



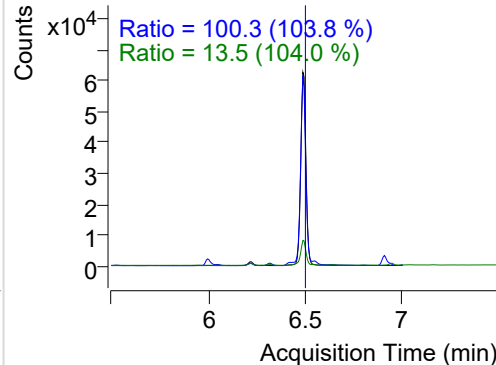
+ SIM (6.122-6.191 min, 12 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

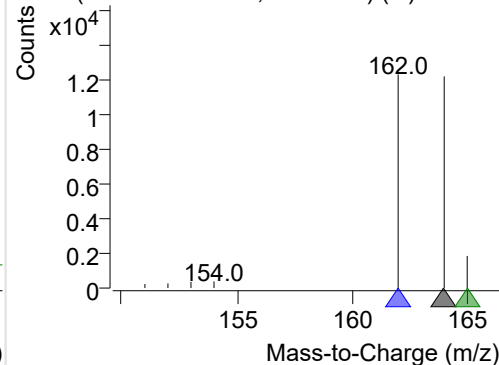
+ Selected Ion (164.0) 220907-PAHs-015.D



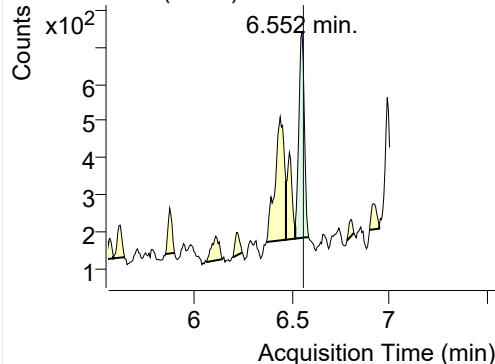
164.0, 162.0, 165.0



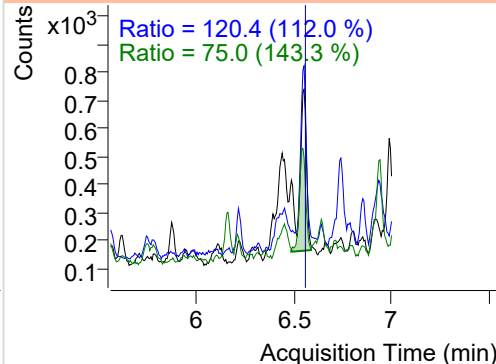
+ SIM (6.445-6.599 min, 27 scans) (\*\*) 220907

**Acenaphthene**

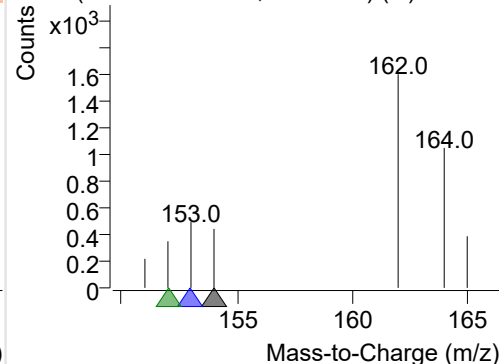
+ Selected Ion (154.0) 220907-PAHs-015.D



154.0, 153.0, 152.0

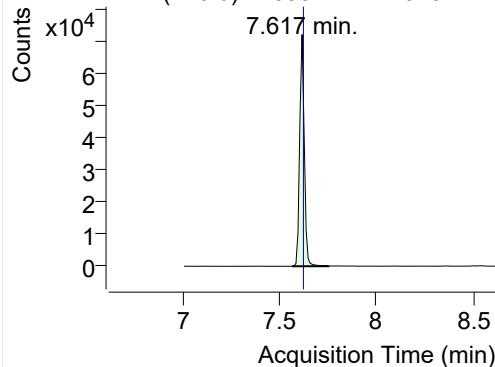


+ SIM (6.516-6.586 min, 12 scans) (\*\*) 220907

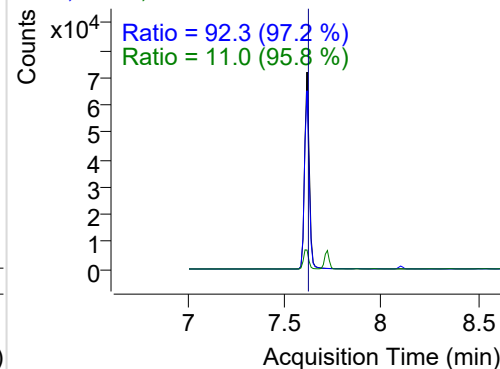


## LSS-D10-Fluorene

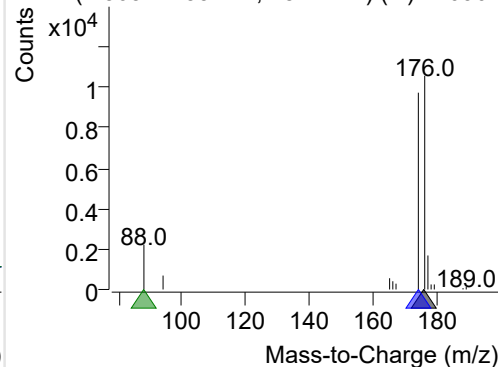
+ Selected Ion (176.0) 220907-PAHs-015.D



176.0, 174.0, 88.0

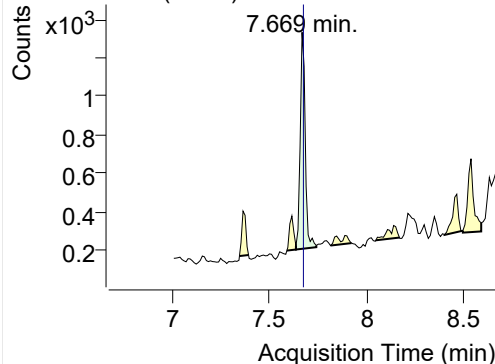


+ SIM (7.565-7.753 min, 18 scans) (\*\*) 220907

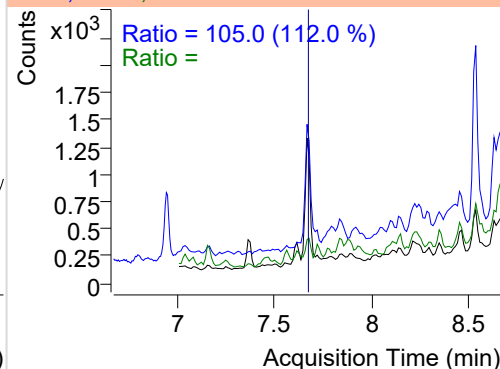


## Fluorene

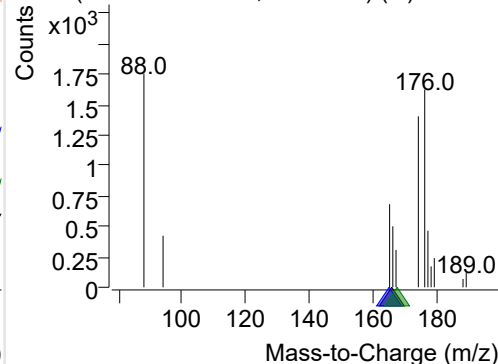
+ Selected Ion (166.0) 220907-PAHs-015.D



166.0, 165.0, 167.0

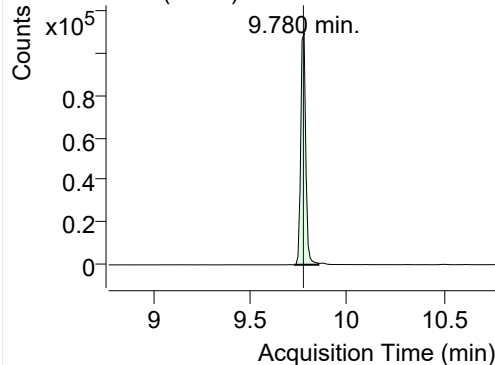


+ SIM (7.638-7.743 min, 11 scans) (\*\*) 220907

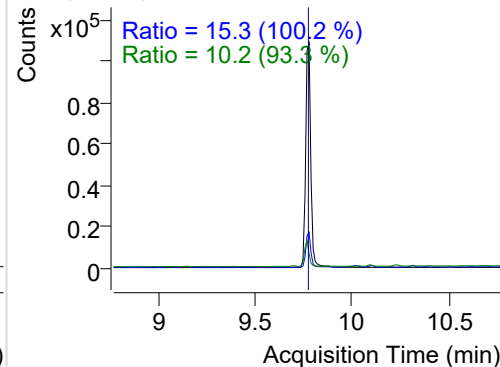


## IS-D10-Phenanthrene

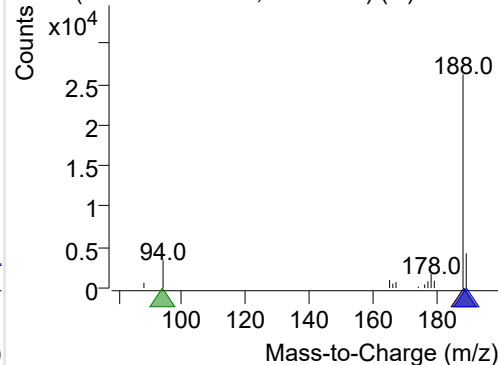
+ Selected Ion (188.0) 220907-PAHs-015.D



188.0, 189.0, 94.0

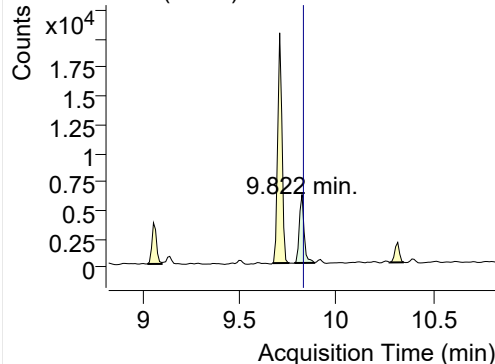


+ SIM (9.729-9.854 min, 12 scans) (\*\*) 220907

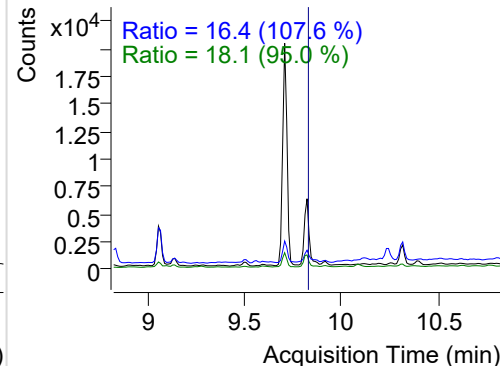


## Phenanthrene

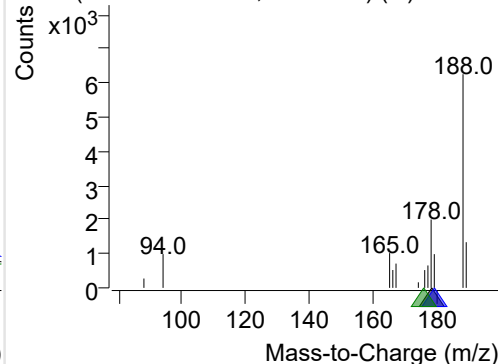
+ Selected Ion (178.0) 220907-PAHs-015.D



178.0, 179.0, 176.0

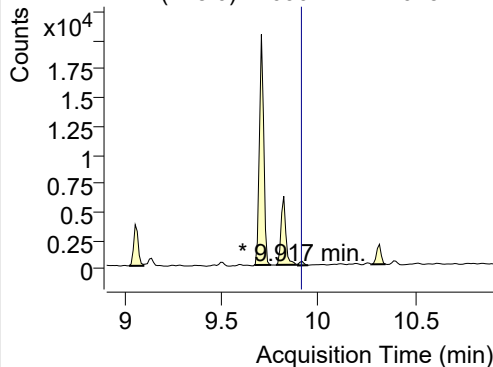


+ SIM (9.782-9.885 min, 10 scans) (\*\*) 220907

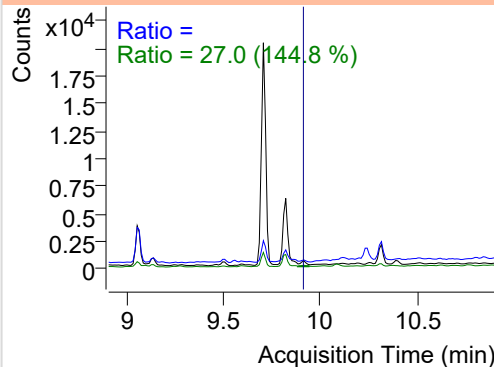


**Anthracene**

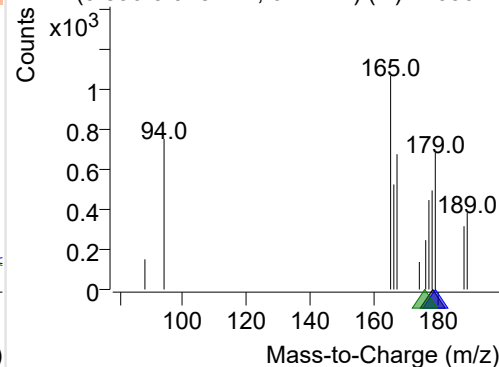
+ Selected Ion (178.0) 220907-PAHs-015.D



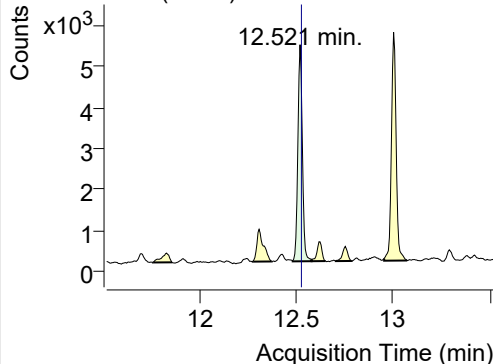
178.0, 179.0, 176.0



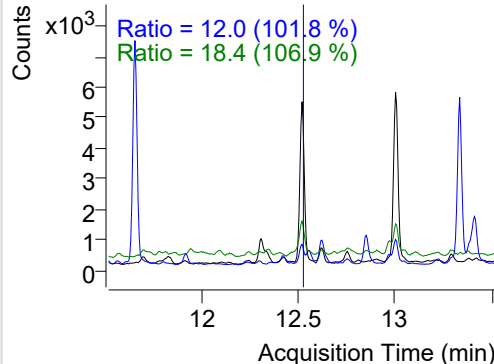
+ SIM (9.896-9.948 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

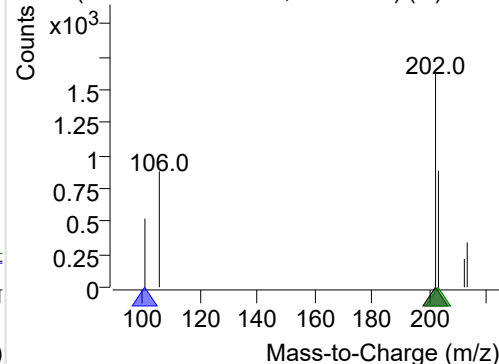
+ Selected Ion (202.0) 220907-PAHs-015.D



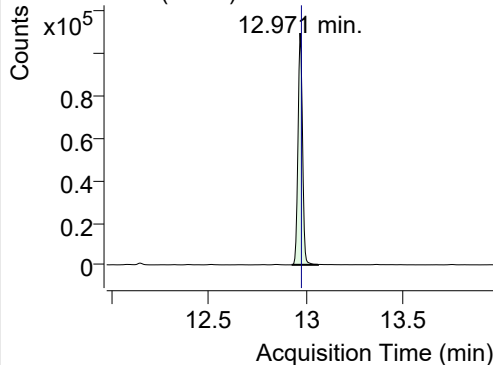
202.0, 101.0, 203.0



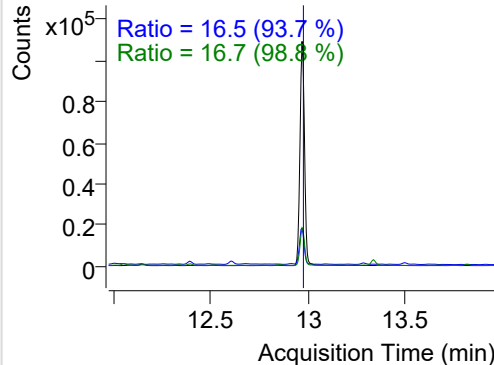
+ SIM (12.483-12.581 min, 19 scans) (\*\*) 2209

**LSS-D10-Pyrene**

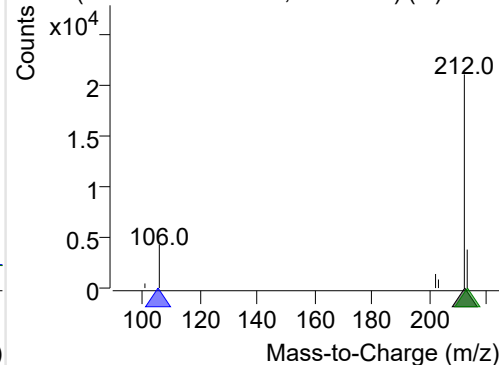
+ Selected Ion (212.0) 220907-PAHs-015.D



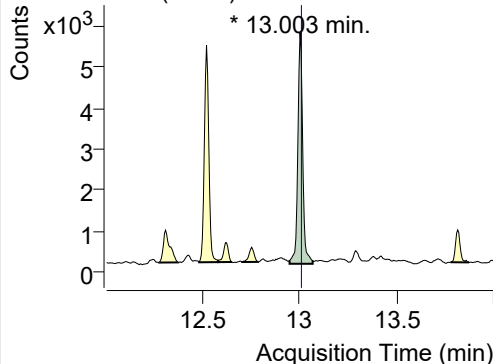
212.0, 106.0, 213.0



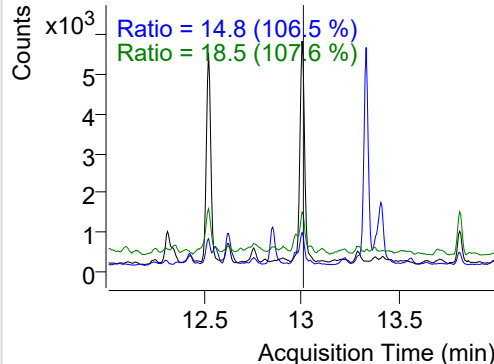
+ SIM (12.927-13.063 min, 26 scans) (\*\*) 2209

**Pyrene**

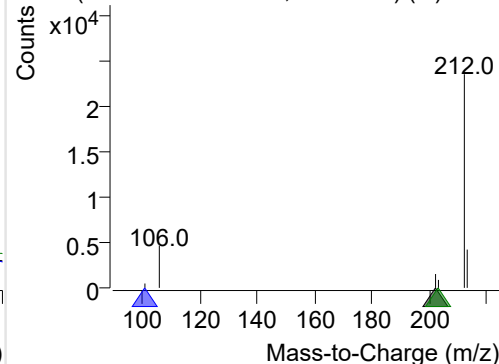
+ Selected Ion (202.0) 220907-PAHs-015.D



202.0, 101.0, 203.0



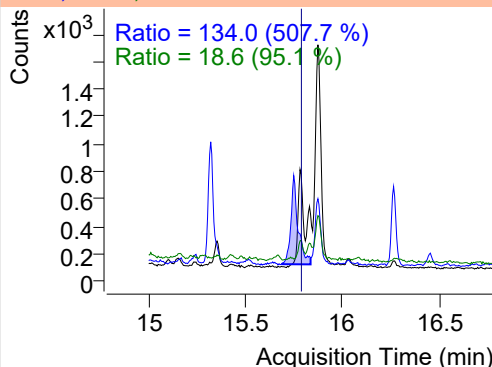
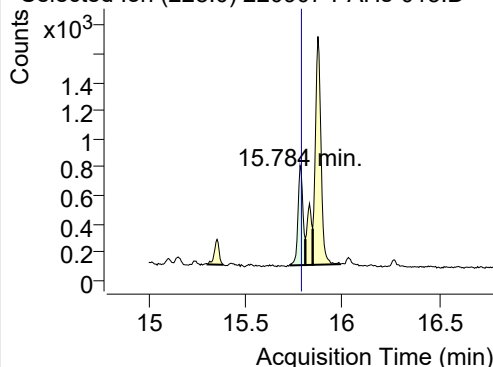
+ SIM (12.949-13.068 min, 23 scans) (\*\*) 2209



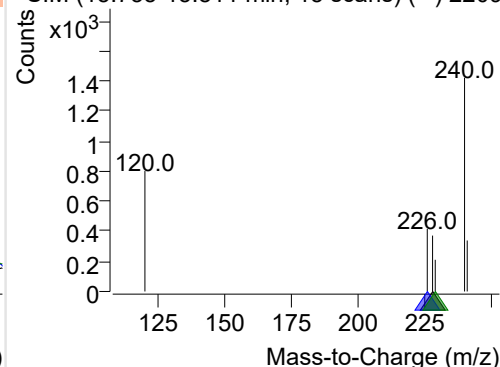
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-015.D

228.0, 226.0, 229.0

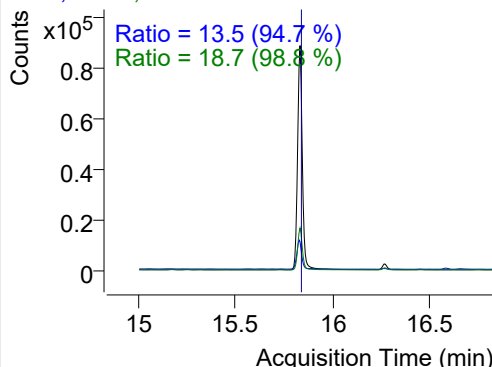
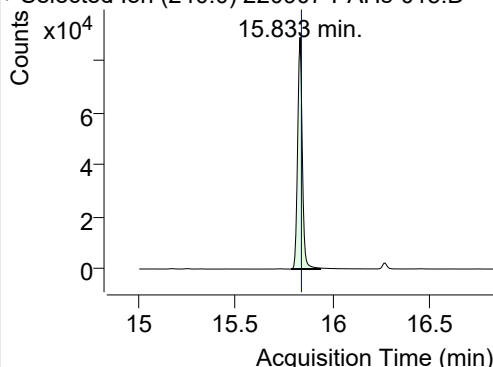


+ SIM (15.735-15.811 min, 15 scans) (\*\*) 2209

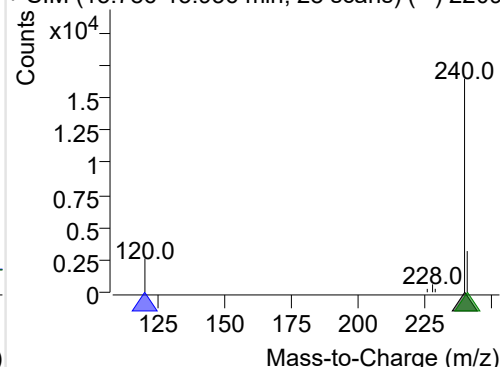
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-015.D

240.0, 120.0, 241.0

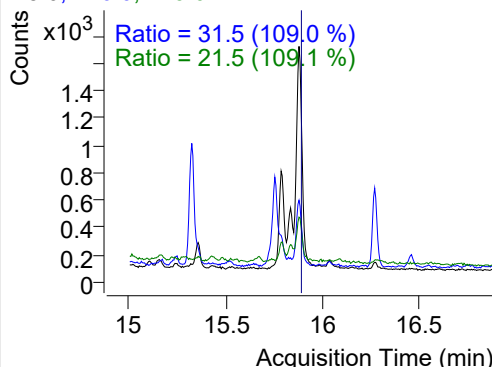
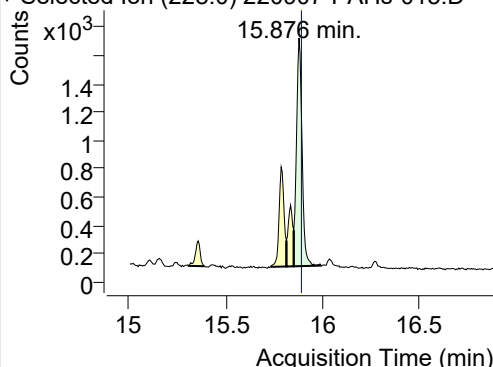


+ SIM (15.786-15.936 min, 28 scans) (\*\*) 2209

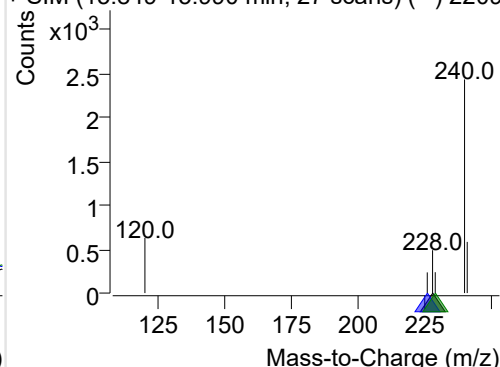
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-015.D

228.0, 226.0, 229.0

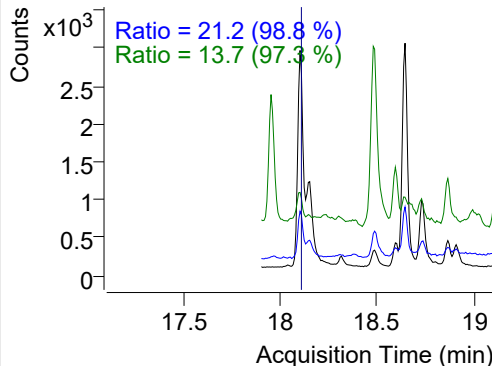
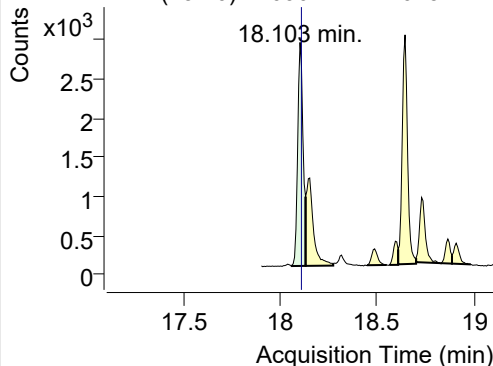


+ SIM (15.849-15.990 min, 27 scans) (\*\*) 2209

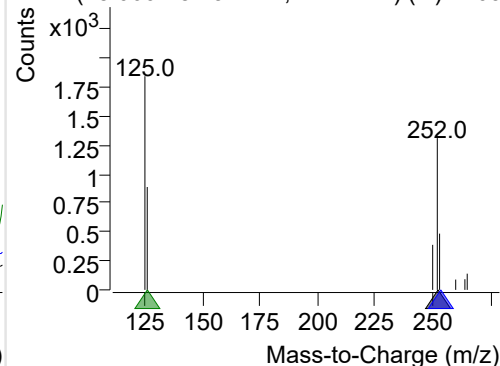
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-015.D

252.0, 253.0, 126.0



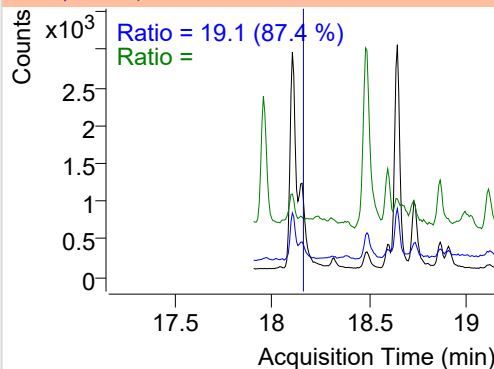
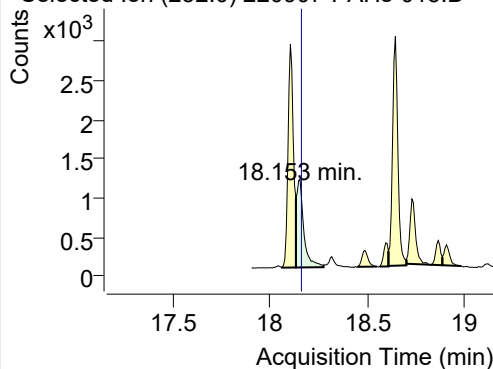
+ SIM (18.060-18.132 min, 11 scans) (\*\*) 2209



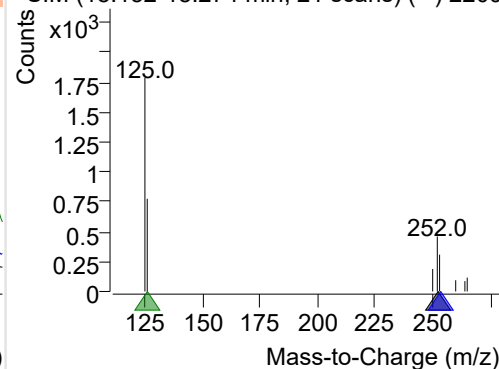
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-015.D

252.0, 253.0, 126.0

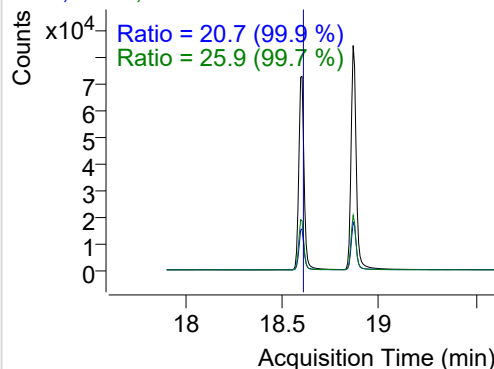
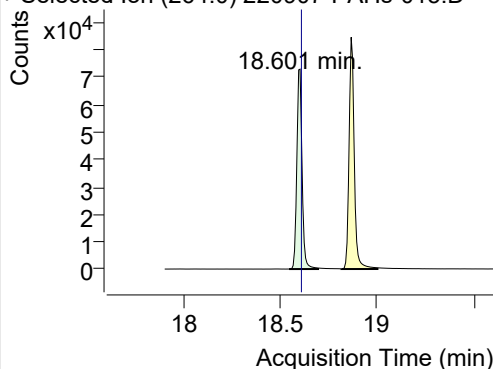


+ SIM (18.132-18.274 min, 21 scans) (\*\*) 2209

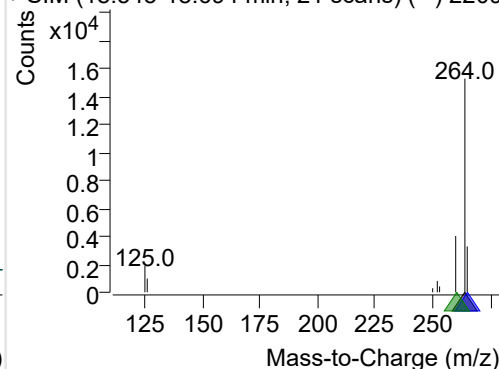
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-015.D

264.0, 265.0, 260.0

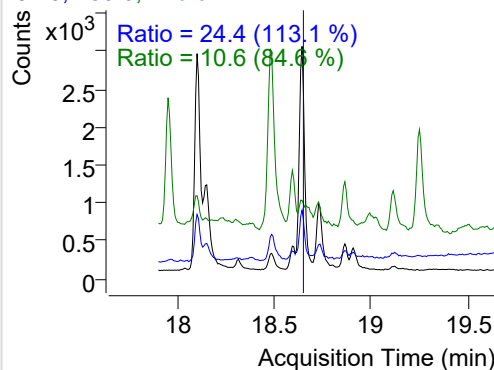
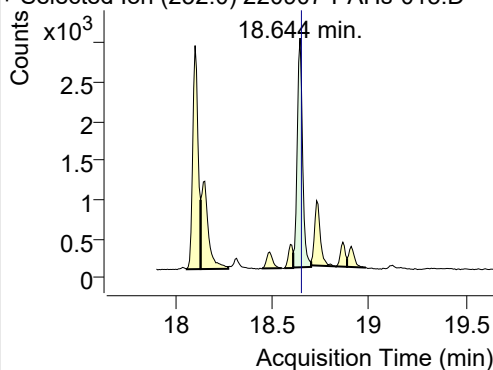


+ SIM (18.545-18.694 min, 21 scans) (\*\*) 2209

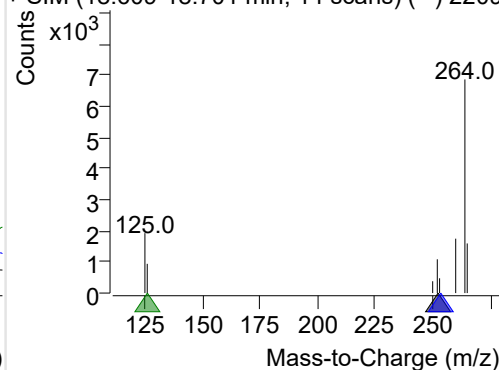
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-015.D

252.0, 253.0, 126.0

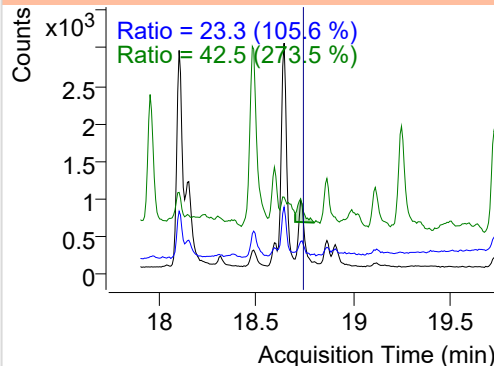
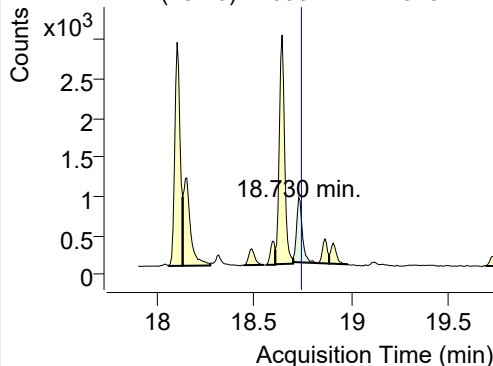


+ SIM (18.609-18.701 min, 14 scans) (\*\*) 2209

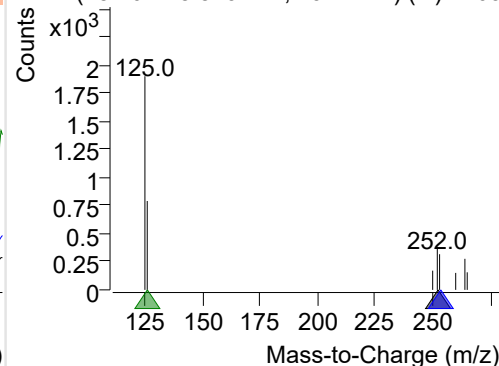
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-015.D

252.0, 253.0, 126.0

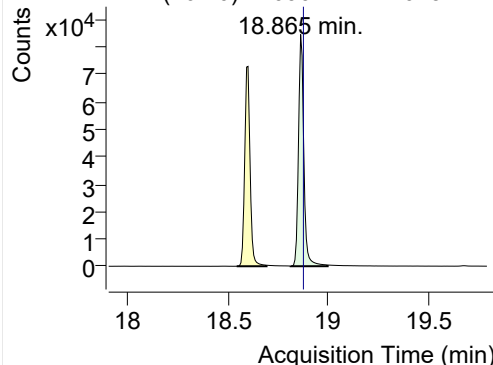


+ SIM (18.701-18.829 min, 19 scans) (\*\*) 2209

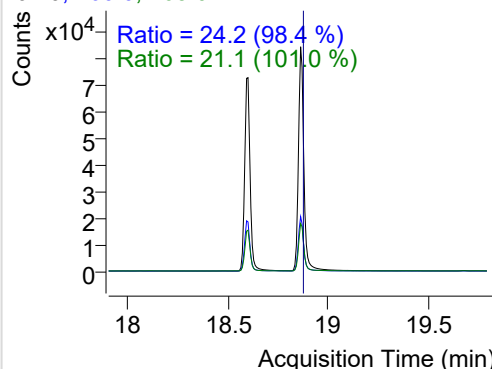


## IS-D12-Perylene

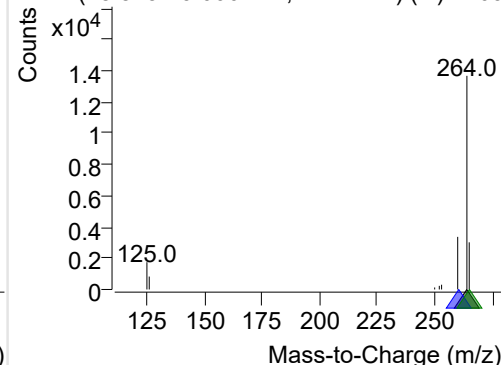
+ Selected Ion (264.0) 220907-PAHs-015.D



264.0, 260.0, 265.0

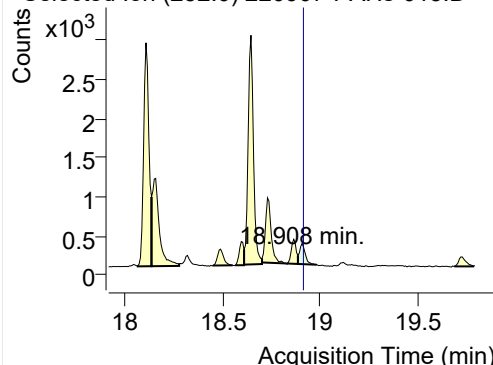


+ SIM (18.815-19.000 min, 27 scans) (\*\*) 2209

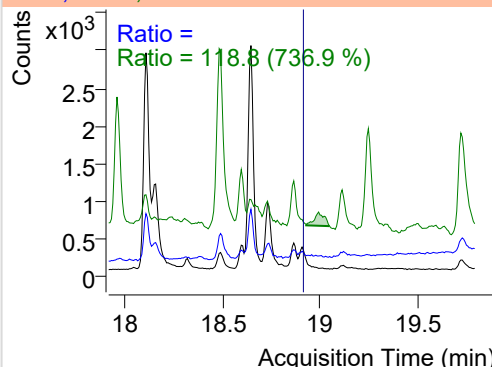


## Perylene

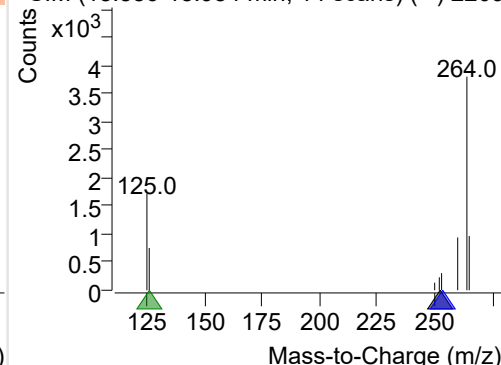
+ Selected Ion (252.0) 220907-PAHs-015.D



252.0, 253.0, 126.0

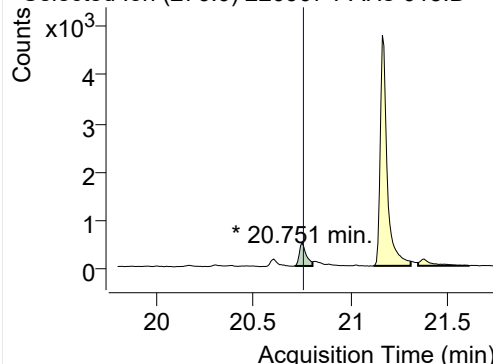


+ SIM (18.886-18.984 min, 14 scans) (\*\*) 2209

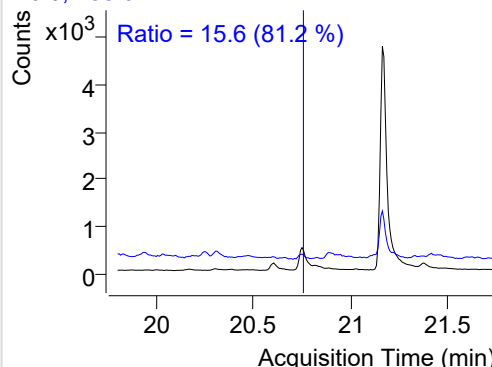


## Indeno(1,2,3-c,d)pyrene

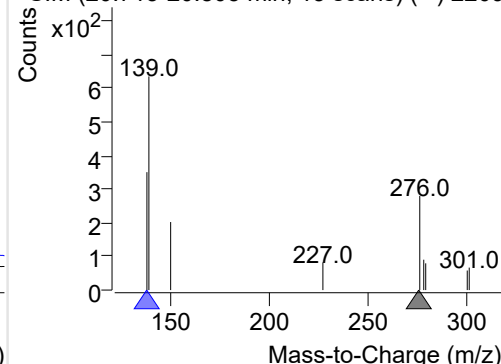
+ Selected Ion (276.0) 220907-PAHs-015.D



276.0, 138.0

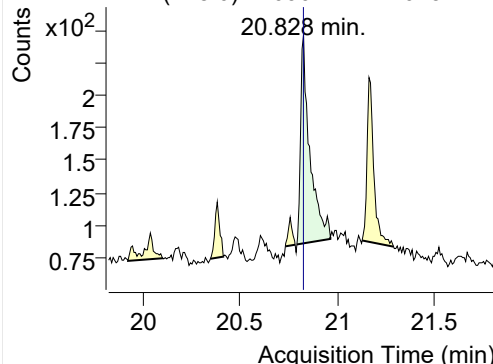


+ SIM (20.713-20.805 min, 13 scans) (\*\*) 2209

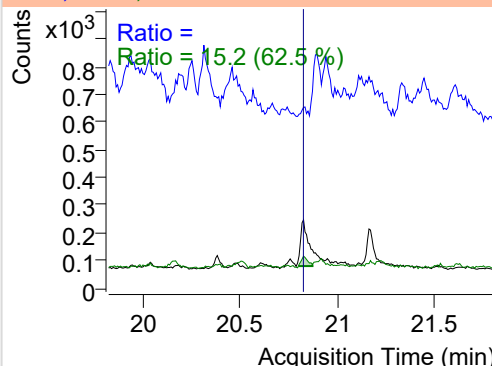


## Dibenz(a,h)anthracene

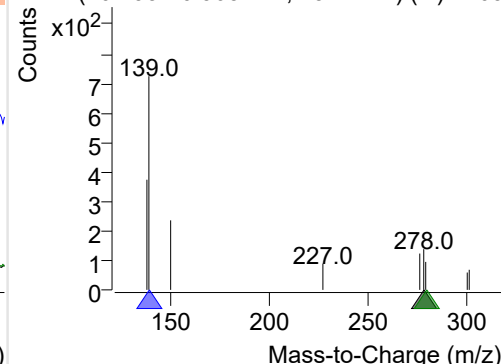
+ Selected Ion (278.0) 220907-PAHs-015.D



278.0, 139.0, 279.0

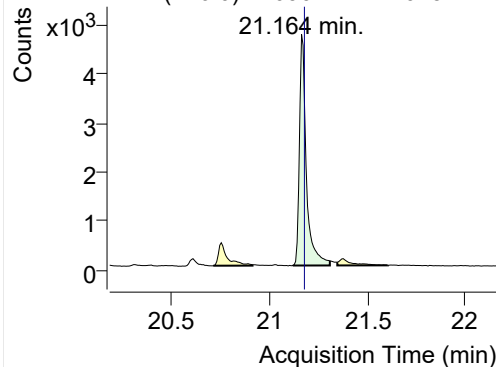


+ SIM (20.793-20.965 min, 23 scans) (\*\*) 2209

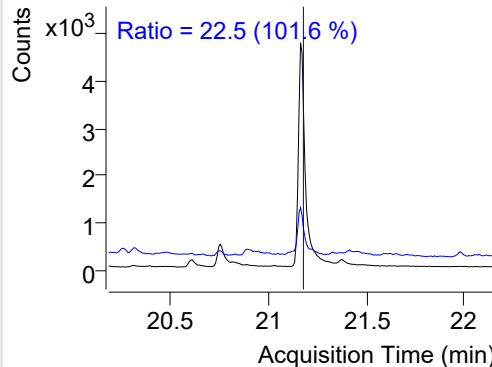


**Benzo(g,h,i)perylene**

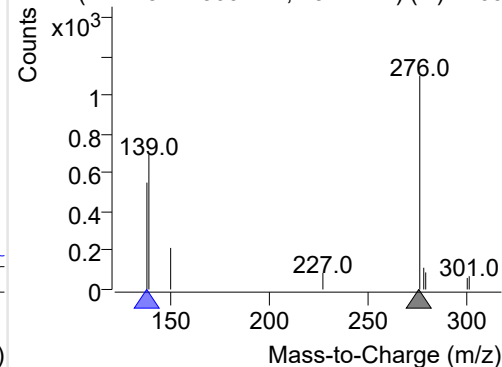
+ Selected Ion (276.0) 220907-PAHs-015.D



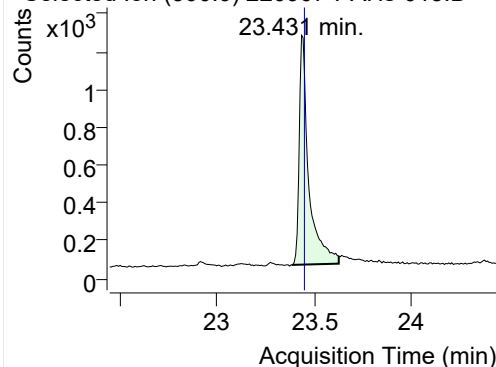
276.0, 138.0



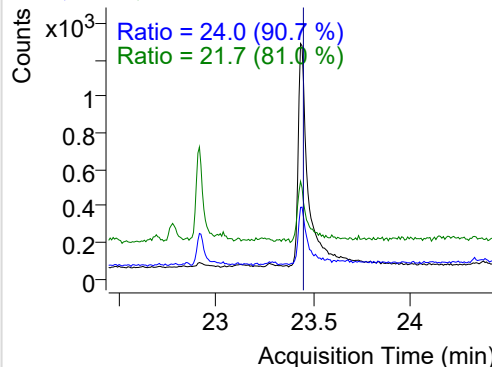
+ SIM (21.118-21.309 min, 25 scans) (\*\*) 2209

**Coronene**

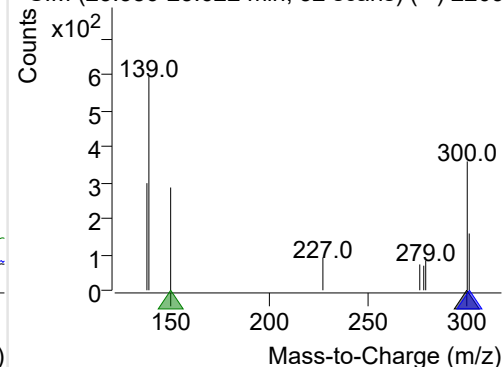
+ Selected Ion (300.0) 220907-PAHs-015.D



300.0, 301.0, 150.0



+ SIM (23.386-23.622 min, 32 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

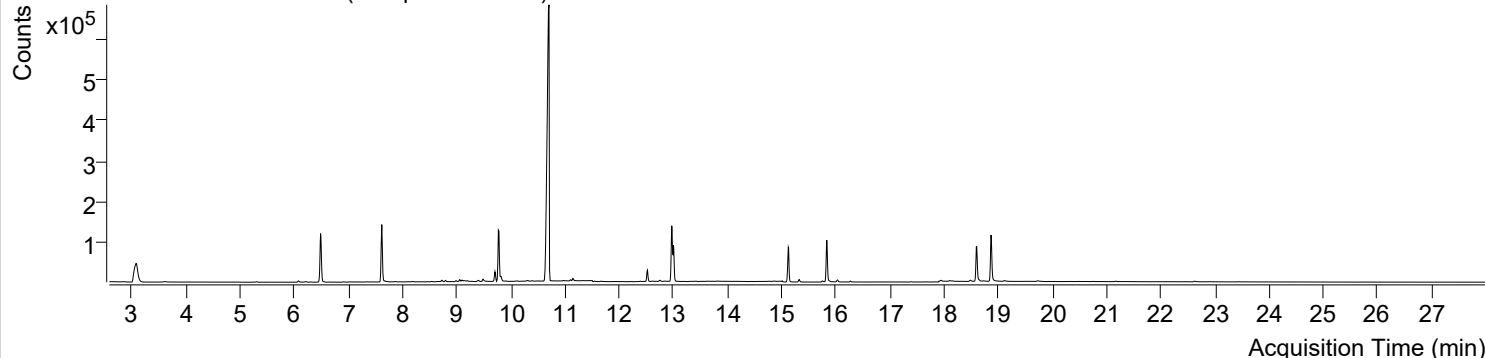


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 8:13:25	Data File	220907-PAHs-016.D
Type	Sample	Name	Sample-PM-0821
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

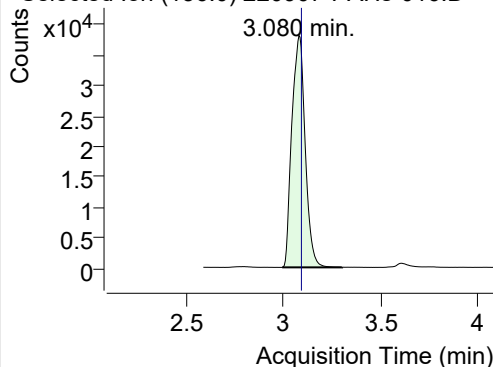
+ TIC SIM 220907-PAHs-016.D (Sample-PM-0821)



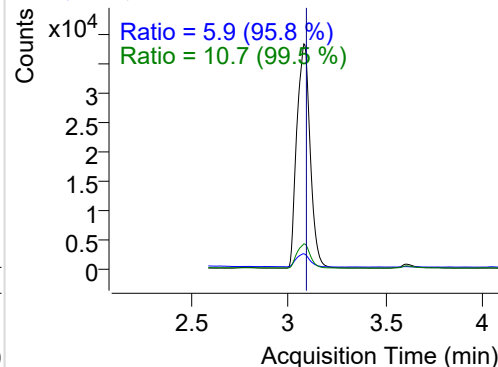
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	181408	38137.62	ND ng/ml	10.7
Naphthalene	3.107	128.0	7560	1670.71	ND ng/ml	12.5
Acenaphthylene	6.155	152.0	313	153.98	ND ng/ml	21.5
IS-D10-Acenaphthene	6.487	164.0	105366	57276.63	ND ng/ml	96.5
Acenaphthene	6.552	154.0	503	265.69	ND ng/ml	121.7
LSS-D10-Fluorene	7.617	176.0	106089	64281.69	ND ng/ml	93.4
Fluorene	7.669	166.0	1385	754.00	ND ng/ml	88.6
IS-D10-Phenanthrene	9.780	188.0	183162	101511.3	ND ng/ml	15.2
Phenanthrene	9.822	178.0	10551	6051.54	ND ng/ml	22.7
Anthracene	9.916	178.0	523	325.27	ND ng/ml	
Fluoranthene	12.521	202.0	33924	21668.93	ND ng/ml	18.5
LSS-D10-Pyrene	12.971	212.0	162594	101960.1	ND ng/ml	17.1
Pyrene	13.003	202.0	103870	66249.33	ND ng/ml	17.7
Benz(a)anthracene	15.789	228.0	1040	434.65	ND ng/ml	449.7
IS-D12-Chrysene	15.833	240.0	132062	78029.96	ND ng/ml	18.7
Chrysene	15.881	228.0	1770	902.44	ND ng/ml	31.6
Benzo(b)fluoranthene	18.103	252.0	2013	1044.16	ND ng/ml	19.4
Benzo(k)fluoranthene	18.153	252.0	1640	631.33	ND ng/ml	16.0
SS-D12-Benzo(e)pyrene	18.594	264.0	109334	57741.96	ND ng/ml	25.8
Benzo(e)pyrene	18.644	252.0	2421	1267.26	ND ng/ml	21.4
Benzo(a)pyrene	18.737	252.0	1071	455.02	ND ng/ml	20.8
IS-D12-Perylene	18.865	264.0	144570	77685.86	ND ng/ml	24.1
Perylene	18.915	252.0	319	158.32	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	20.751	276.0	1179	451.21	ND ng/ml	7.6
Dibenz(a,h)anthracene	20.828	278.0	632	174.79	ND ng/ml	19.3
Benzo(g,h,i)perylene	21.171	276.0	2673	932.56	ND ng/ml	19.8
Coronene	23.431	300.0	830	223.99	ND ng/ml	18.5

## IS-D8-Naphthalene

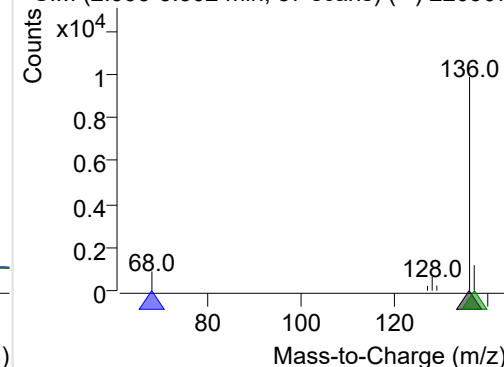
+ Selected Ion (136.0) 220907-PAHs-016.D



136.0, 68.0, 137.0

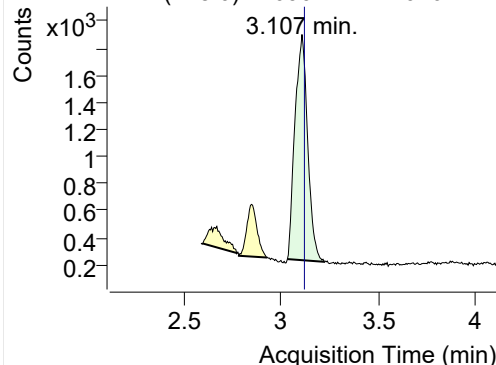


+ SIM (2.993-3.302 min, 57 scans) (\*\*) 220907

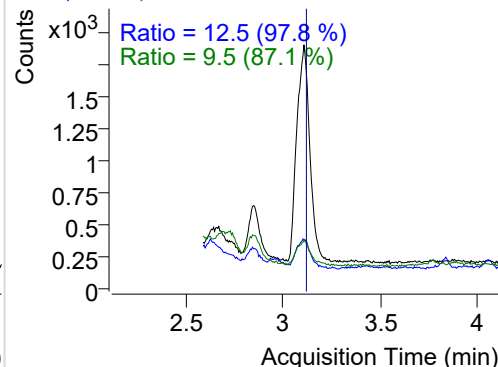


**Naphthalene**

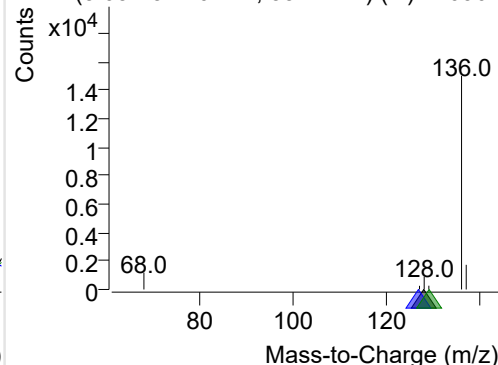
+ Selected Ion (128.0) 220907-PAHs-016.D



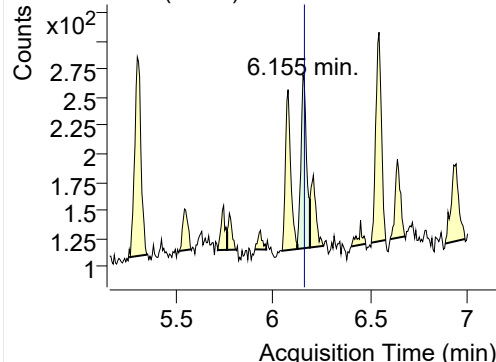
128.0, 127.0, 129.0



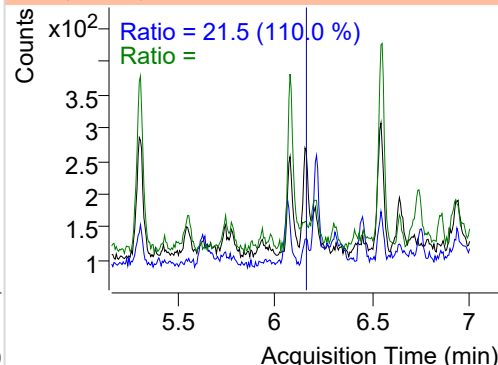
+ SIM (3.031-3.220 min, 35 scans) (\*\*) 220907

**Acenaphthylene**

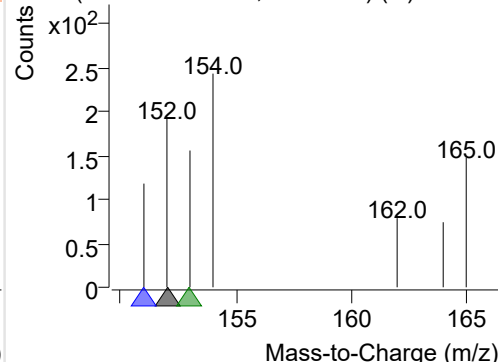
+ Selected Ion (152.0) 220907-PAHs-016.D



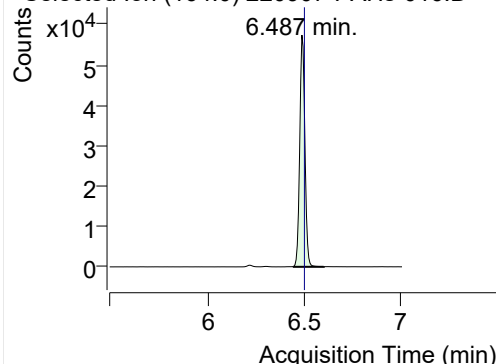
152.0, 151.0, 153.0



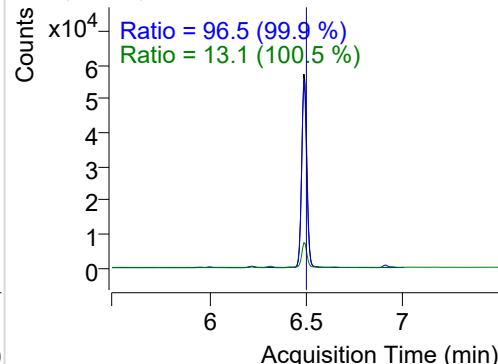
+ SIM (6.126-6.191 min, 12 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

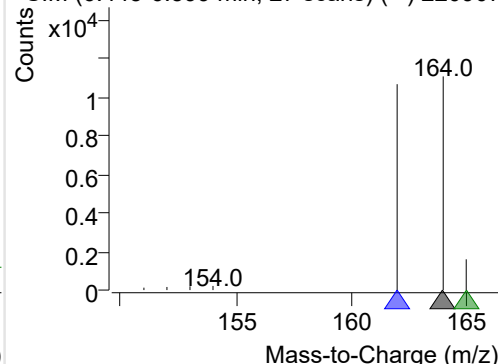
+ Selected Ion (164.0) 220907-PAHs-016.D



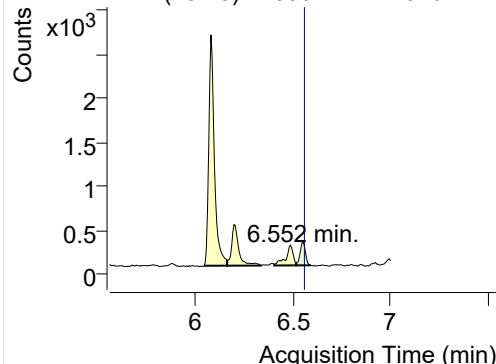
164.0, 162.0, 165.0



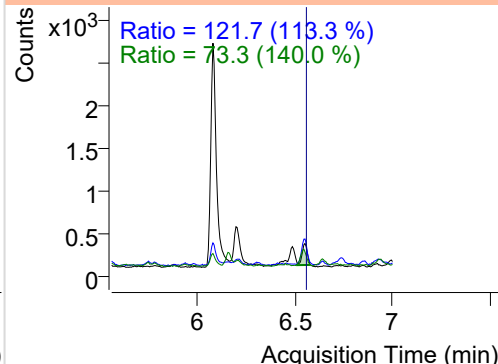
+ SIM (6.445-6.599 min, 27 scans) (\*\*) 220907

**Acenaphthene**

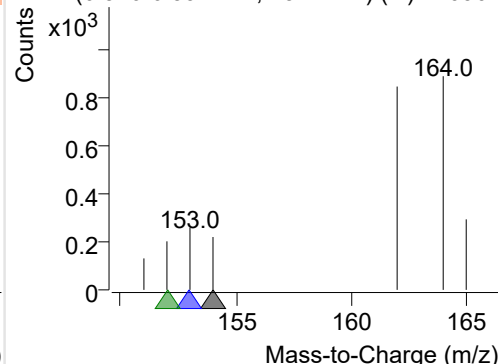
+ Selected Ion (154.0) 220907-PAHs-016.D



154.0, 153.0, 152.0

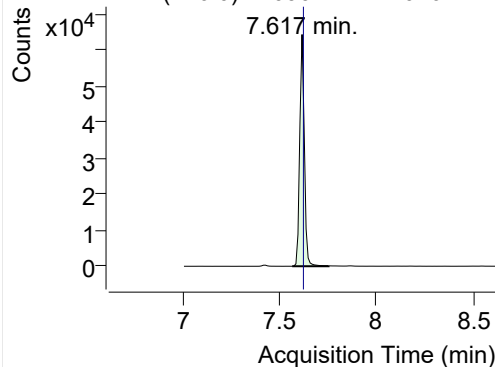


+ SIM (6.516-6.591 min, 13 scans) (\*\*) 220907

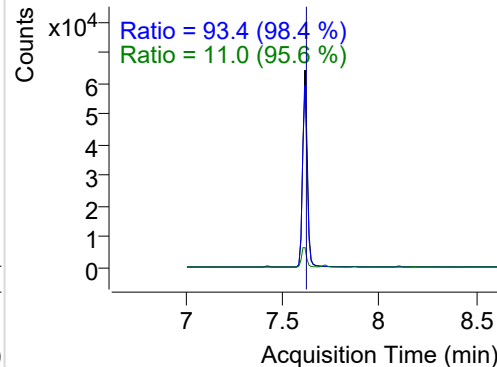


## LSS-D10-Fluorene

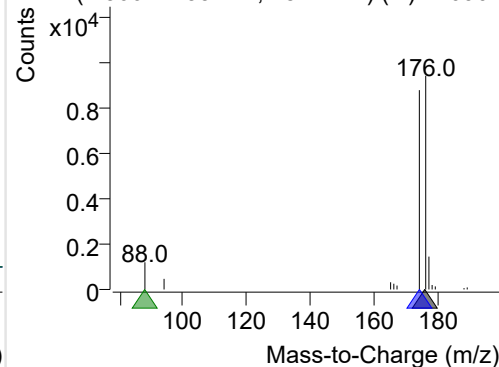
+ Selected Ion (176.0) 220907-PAHs-016.D



176.0, 174.0, 88.0

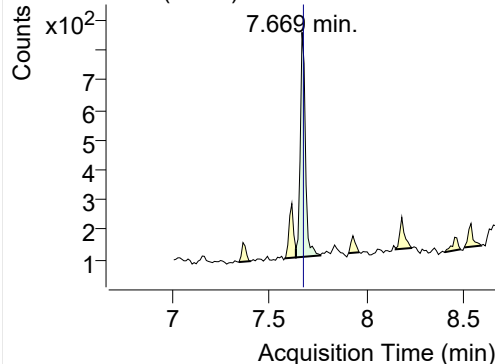


+ SIM (7.566-7.753 min, 18 scans) (\*\*) 220907

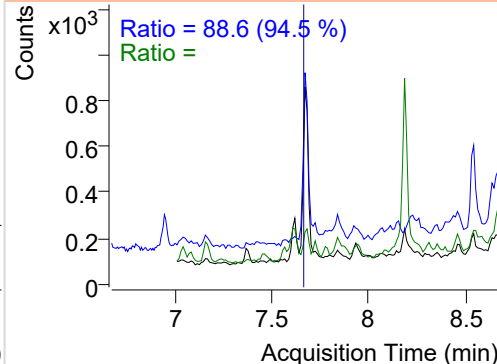


## Fluorene

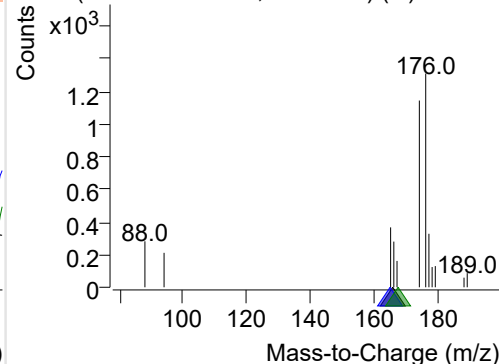
+ Selected Ion (166.0) 220907-PAHs-016.D



166.0, 165.0, 167.0

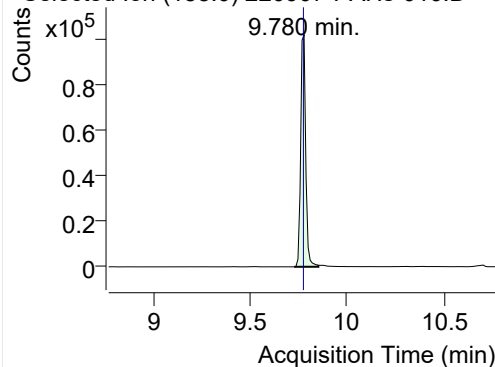


+ SIM (7.638-7.764 min, 13 scans) (\*\*) 220907

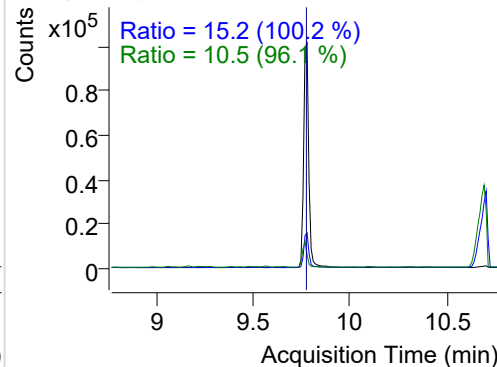


## IS-D10-Phenanthrene

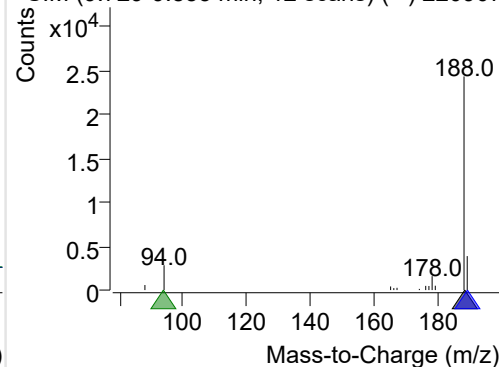
+ Selected Ion (188.0) 220907-PAHs-016.D



188.0, 189.0, 94.0

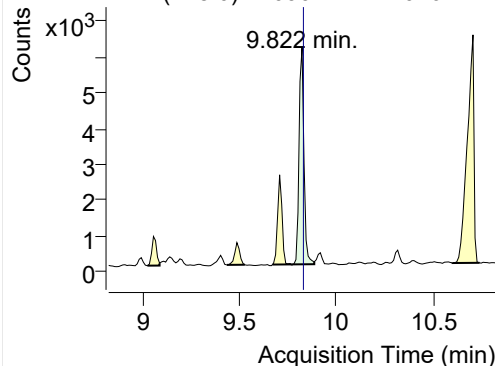


+ SIM (9.729-9.853 min, 12 scans) (\*\*) 220907

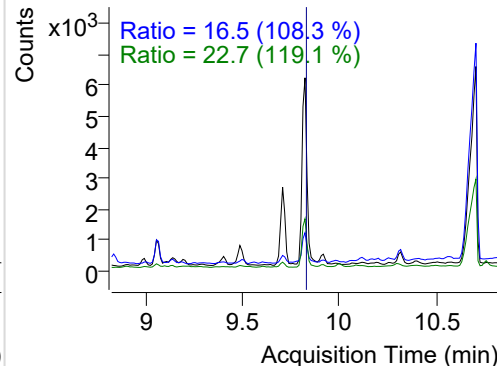


## Phenanthrene

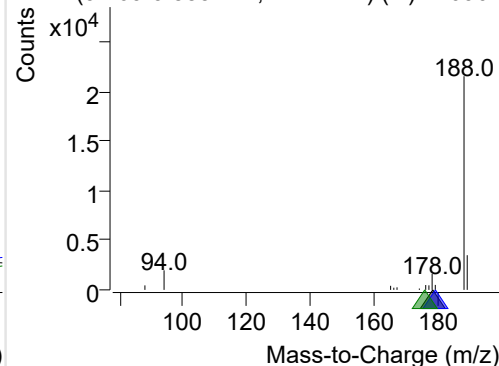
+ Selected Ion (178.0) 220907-PAHs-016.D



178.0, 179.0, 176.0

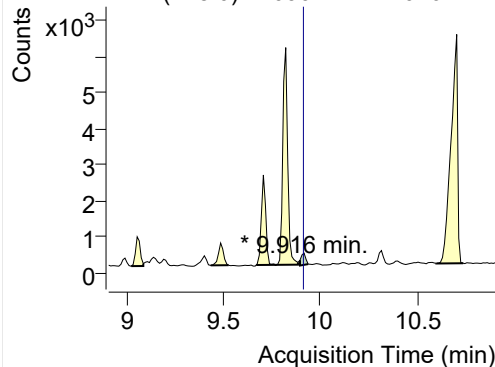


+ SIM (9.769-9.885 min, 12 scans) (\*\*) 220907

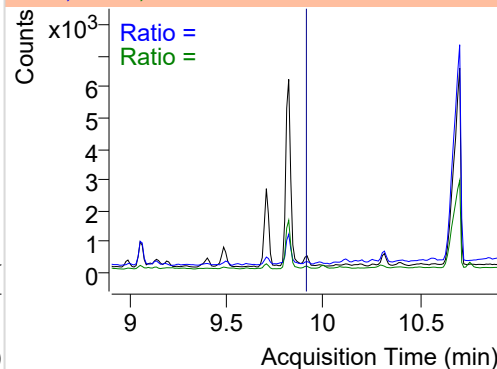


**Anthracene**

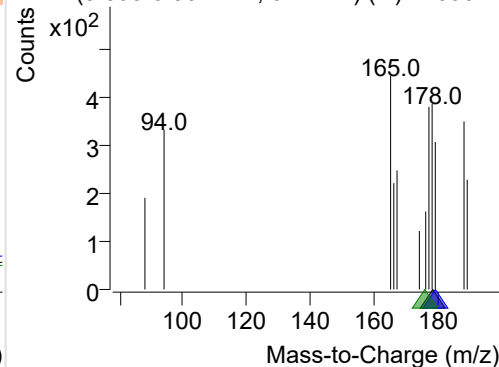
+ Selected Ion (178.0) 220907-PAHs-016.D



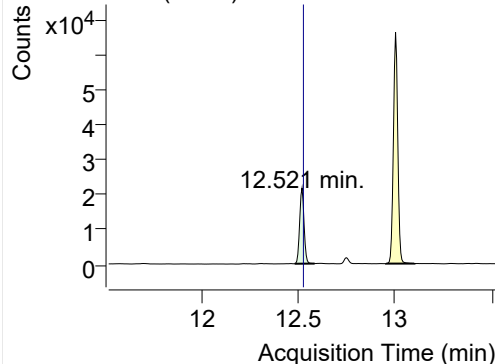
178.0, 179.0, 176.0



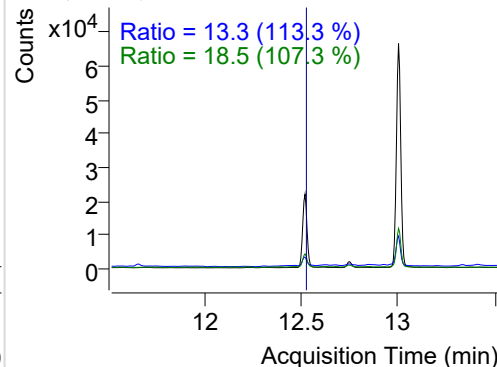
+ SIM (9.895-9.937 min, 5 scans) (\*\*) 220907-I

**Fluoranthene**

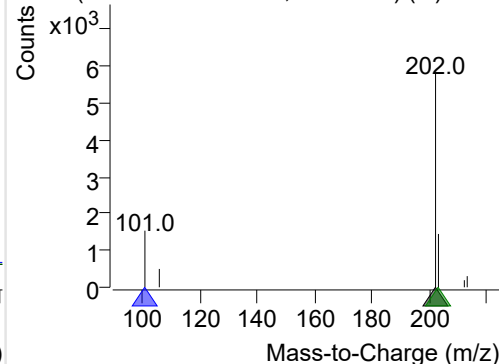
+ Selected Ion (202.0) 220907-PAHs-016.D



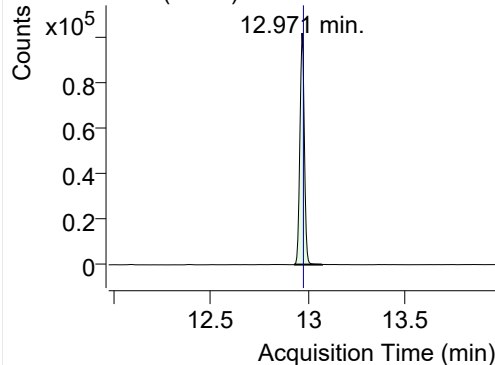
202.0, 101.0, 203.0



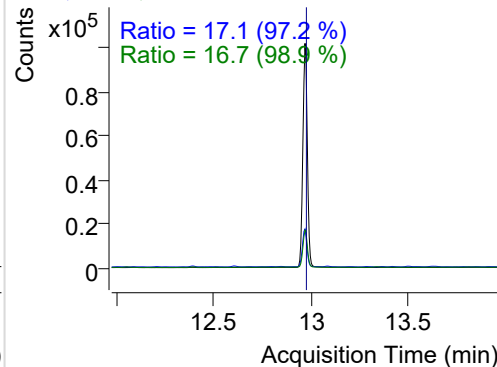
+ SIM (12.483-12.586 min, 19 scans) (\*\*) 2209

**LSS-D10-Pyrene**

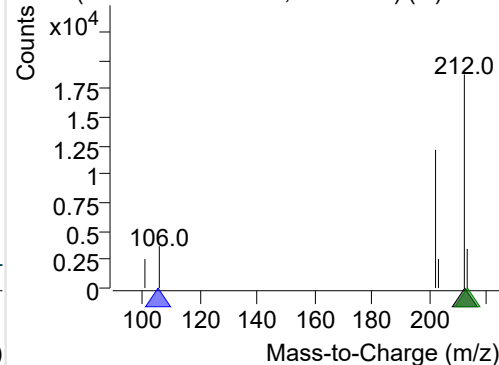
+ Selected Ion (212.0) 220907-PAHs-016.D



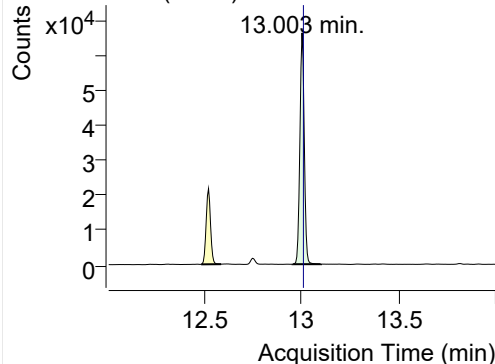
212.0, 106.0, 213.0



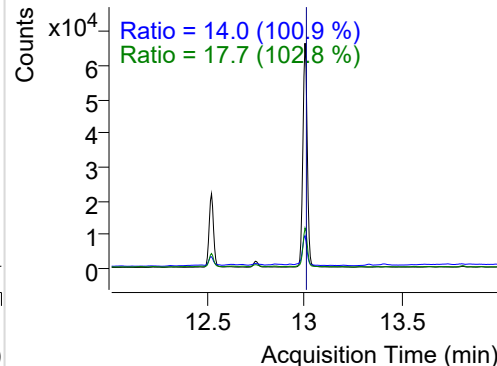
+ SIM (12.929-13.074 min, 27 scans) (\*\*) 2209

**Pyrene**

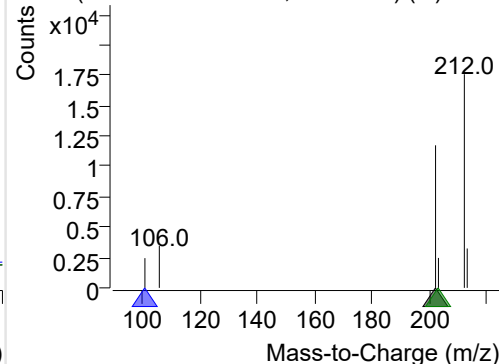
+ Selected Ion (202.0) 220907-PAHs-016.D



202.0, 101.0, 203.0



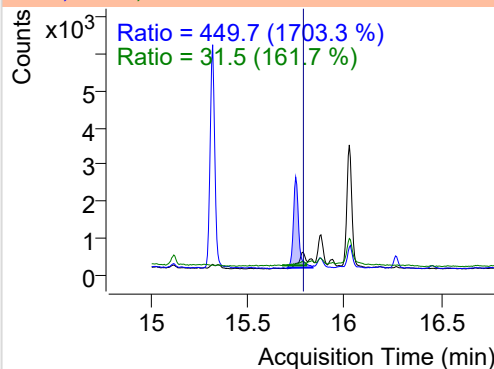
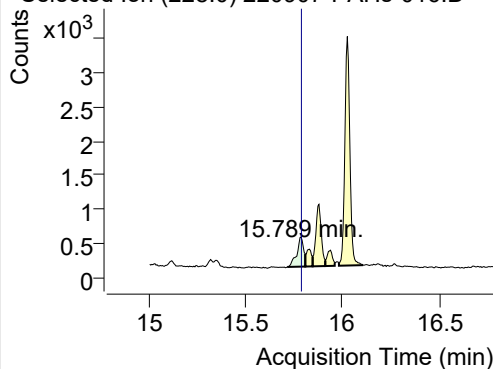
+ SIM (12.954-13.101 min, 28 scans) (\*\*) 2209



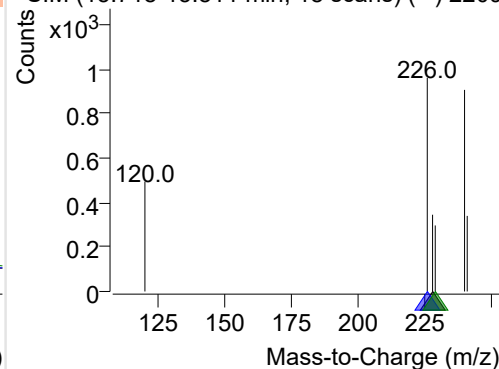
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-016.D

228.0, 226.0, 229.0

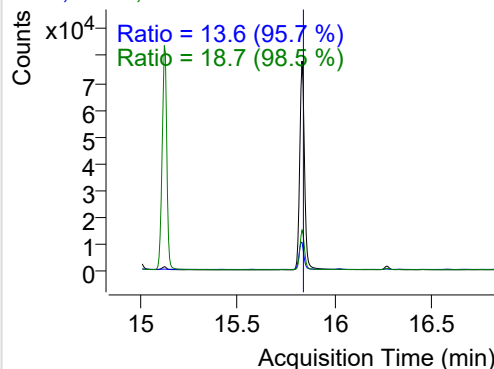
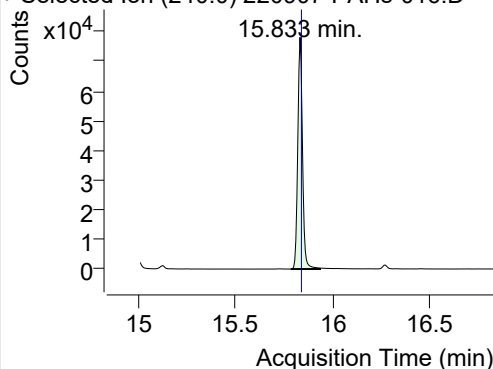


+ SIM (15.718-15.811 min, 18 scans) (\*\*) 2209

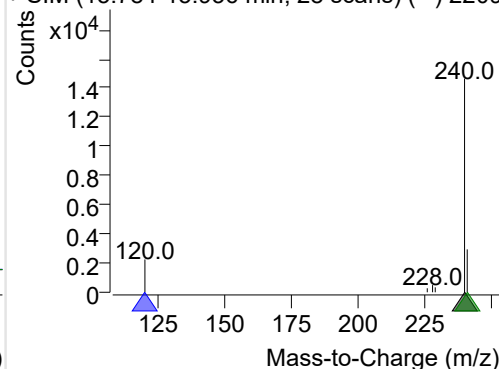
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-016.D

240.0, 120.0, 241.0

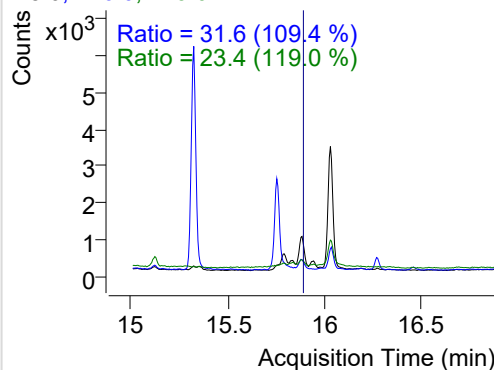
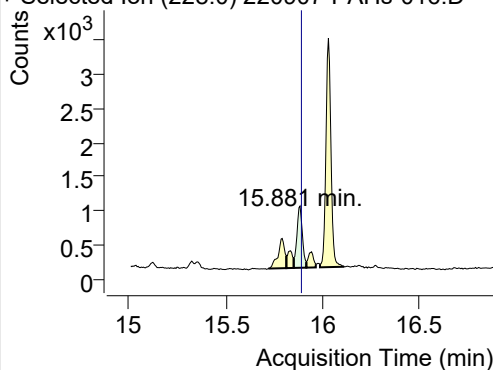


+ SIM (15.784-15.936 min, 28 scans) (\*\*) 2209

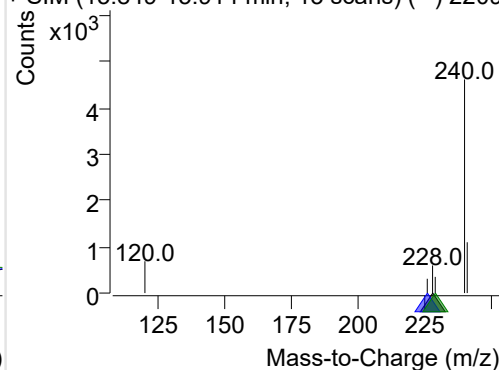
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-016.D

228.0, 226.0, 229.0

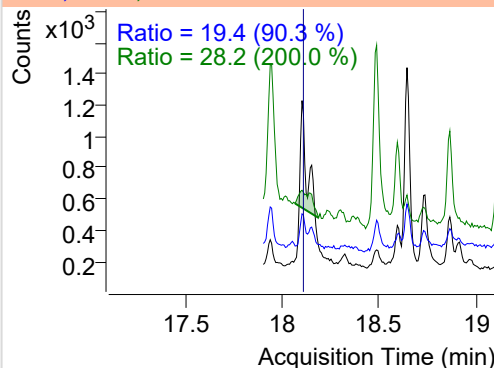
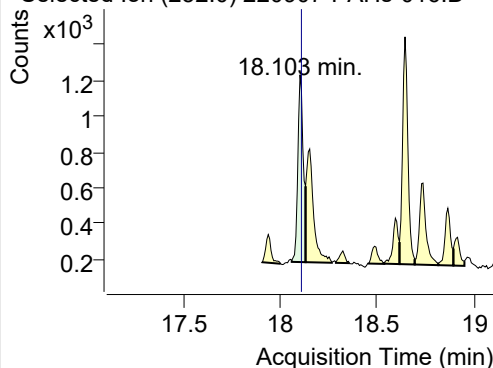


+ SIM (15.849-15.914 min, 13 scans) (\*\*) 2209

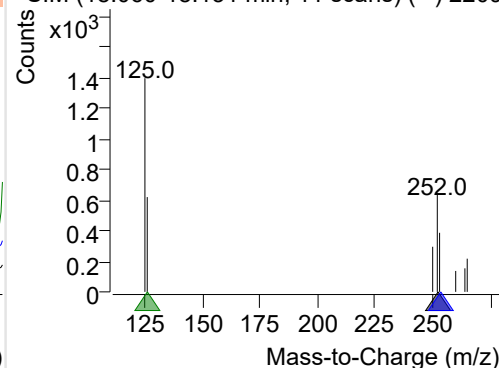
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-016.D

252.0, 253.0, 126.0



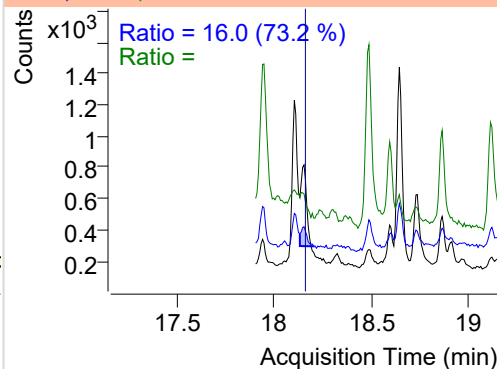
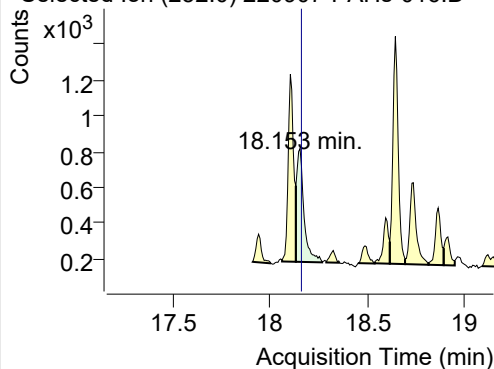
+ SIM (18.060-18.131 min, 11 scans) (\*\*) 2209



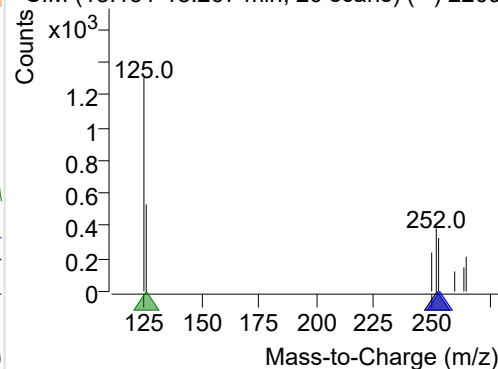
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-016.D

252.0, 253.0, 126.0

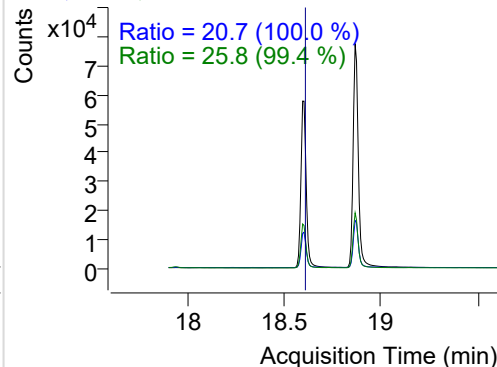
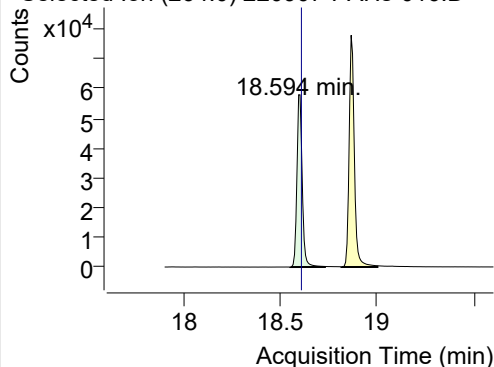


+ SIM (18.131-18.267 min, 20 scans) (\*\*) 2209

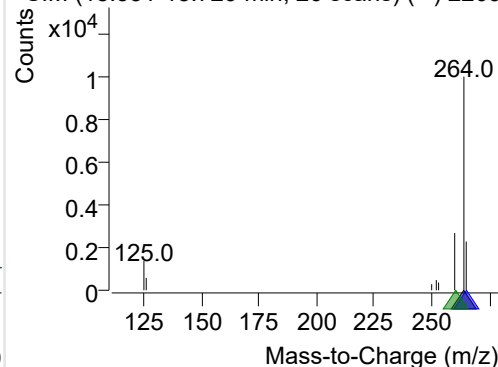
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-016.D

264.0, 265.0, 260.0

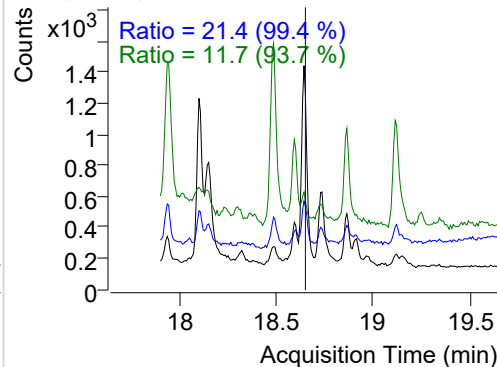
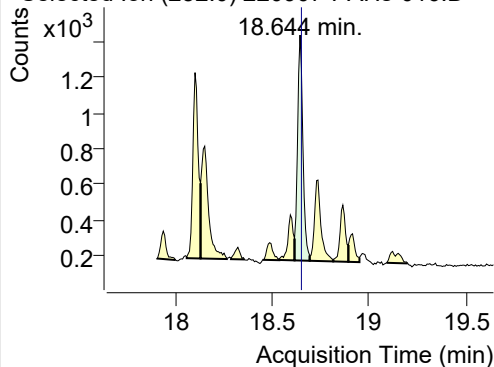


+ SIM (18.551-18.729 min, 26 scans) (\*\*) 2209

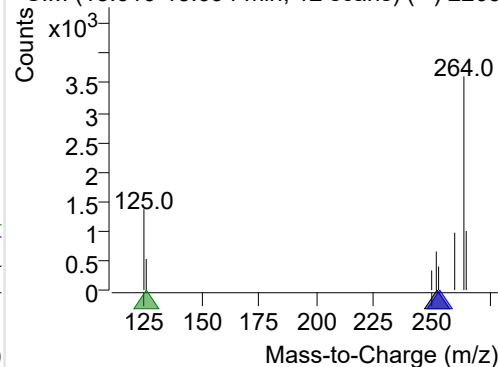
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-016.D

252.0, 253.0, 126.0

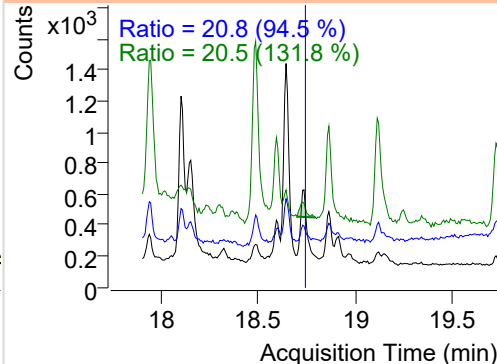
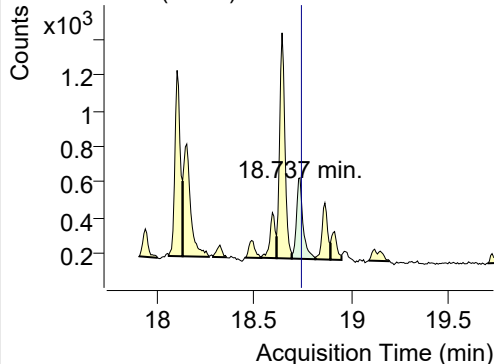


+ SIM (18.616-18.694 min, 12 scans) (\*\*) 2209

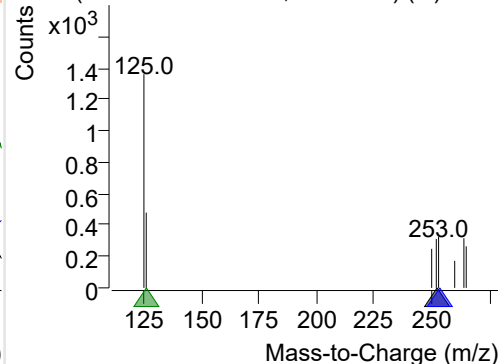
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-016.D

252.0, 253.0, 126.0

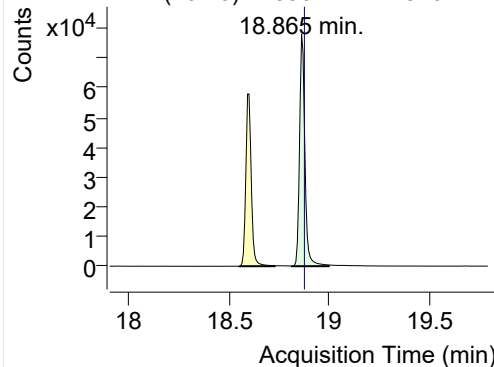


+ SIM (18.694-18.815 min, 18 scans) (\*\*) 2209

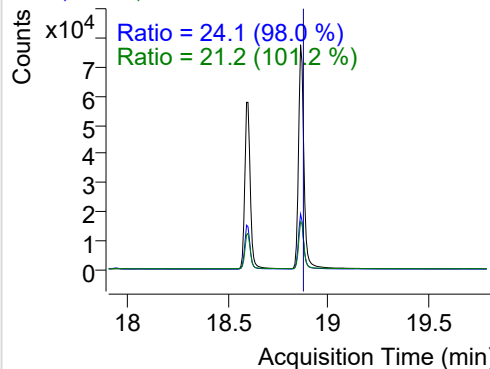


## IS-D12-Perylene

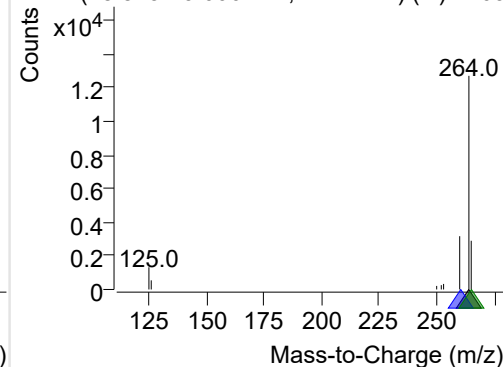
+ Selected Ion (264.0) 220907-PAHs-016.D



264.0, 260.0, 265.0

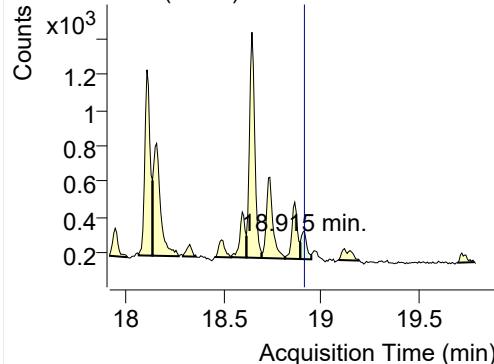


+ SIM (18.815-19.000 min, 27 scans) (\*\*) 2209

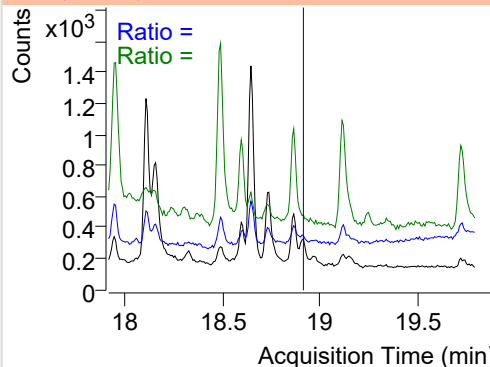


## Perylene

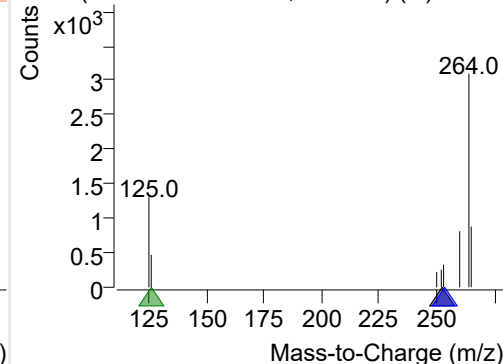
+ Selected Ion (252.0) 220907-PAHs-016.D



252.0, 253.0, 126.0

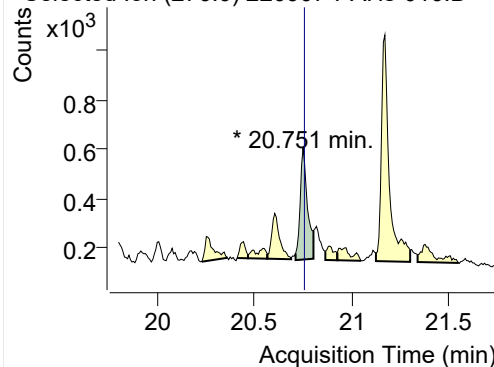


+ SIM (18.893-18.950 min, 9 scans) (\*\*) 22090

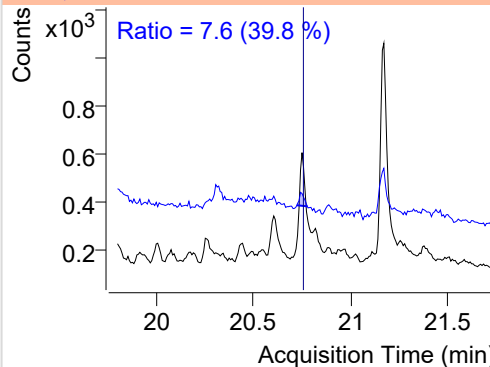


## Indeno(1,2,3-c,d)pyrene

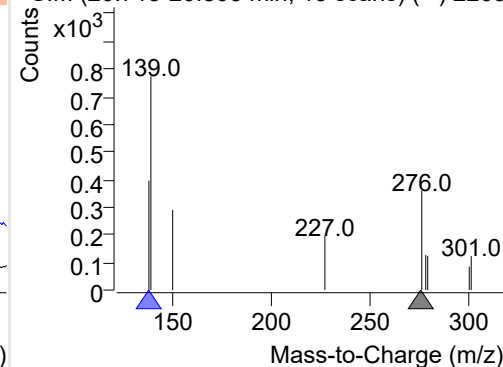
+ Selected Ion (276.0) 220907-PAHs-016.D



276.0, 138.0

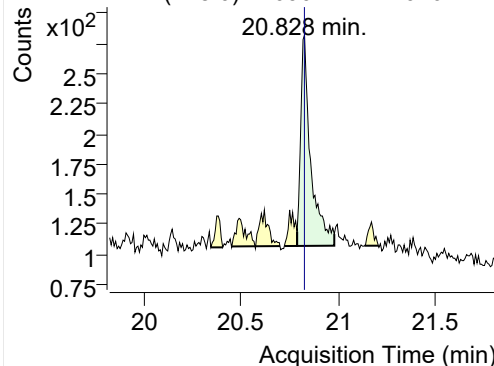


+ SIM (20.713-20.805 min, 13 scans) (\*\*) 2209

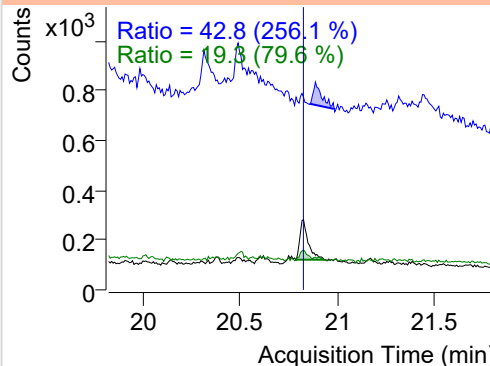


## Dibenz(a,h)anthracene

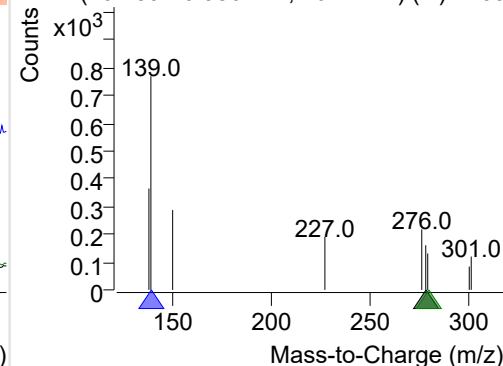
+ Selected Ion (278.0) 220907-PAHs-016.D



278.0, 139.0, 279.0

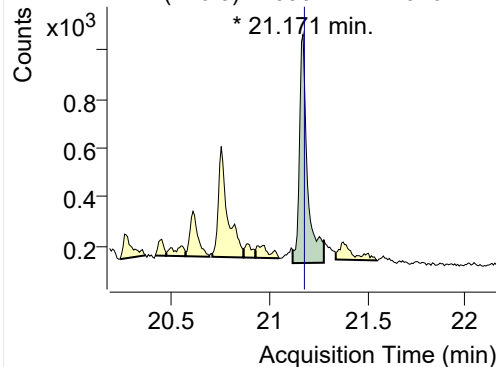


+ SIM (20.789-20.980 min, 26 scans) (\*\*) 2209

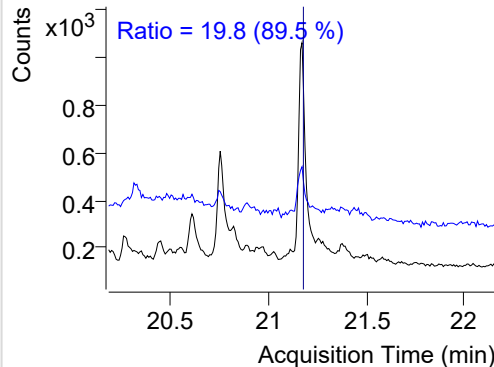


**Benzo(g,h,i)perylene**

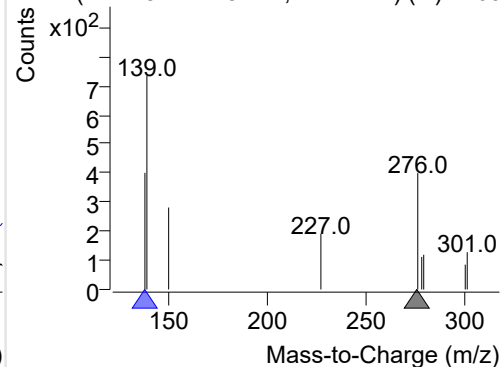
+ Selected Ion (276.0) 220907-PAHs-016.D



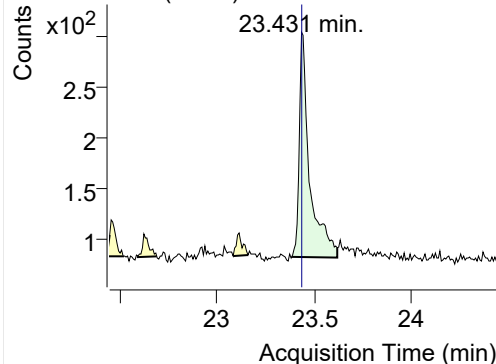
276.0, 138.0



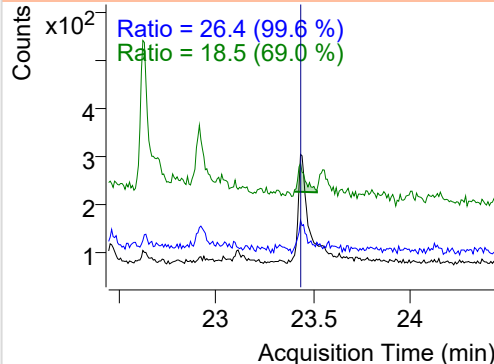
+ SIM (21.118-21.278 min, 22 scans) (\*\*) 2209

**Coronene**

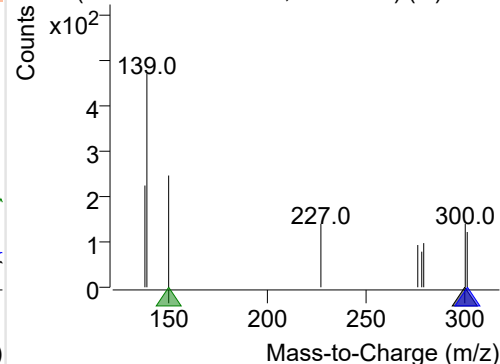
+ Selected Ion (300.0) 220907-PAHs-016.D



300.0, 301.0, 150.0



+ SIM (23.381-23.615 min, 31 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

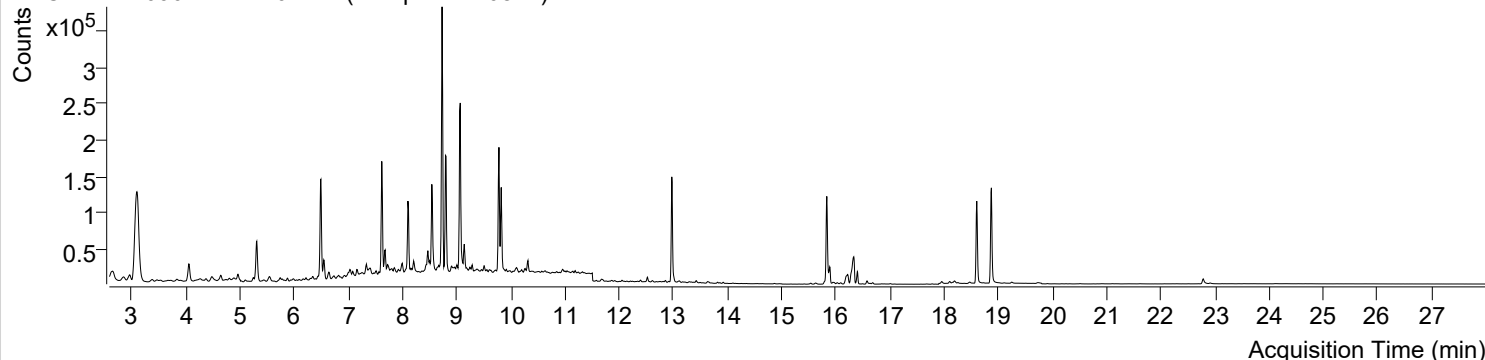


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 8:44:32	Data File	220907-PAHs-017.D
Type	Sample	Name	Sample-PM-0827
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

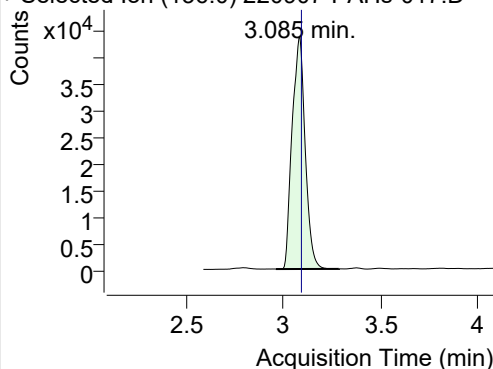
+ TIC SIM 220907-PAHs-017.D (Sample-PM-0827)



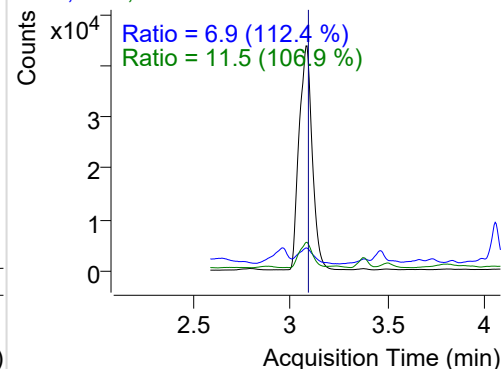
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	204882	43708.77	ND ng/ml	11.5
Naphthalene	3.107	128.0	327203	69710.75	ND ng/ml	13.7
Acenaphthylene	6.161	152.0	2125	1203.54	ND ng/ml	31.7
IS-D10-Acenaphthene	6.493	164.0	128548	66459.30	ND ng/ml	93.6
Acenaphthene	6.552	154.0	13985	7316.84	ND ng/ml	126.9
LSS-D10-Fluorene	7.617	176.0	112362	67565.30	ND ng/ml	95.0
Fluorene	7.680	166.0	28924	14264.30	ND ng/ml	111.2
IS-D10-Phenanthrene	9.780	188.0	223902	139682.0	ND ng/ml	15.0
Phenanthrene	9.822	178.0	122502	75200.88	ND ng/ml	18.5
Anthracene	9.917	178.0	2774	1657.70	ND ng/ml	816.9
Fluoranthene	12.521	202.0	6183	3894.87	ND ng/ml	19.4
LSS-D10-Pyrene	12.971	212.0	171786	108271.7	ND ng/ml	16.7
Pyrene	13.009	202.0	8497	4770.88	ND ng/ml	16.5
Benz(a)anthracene	15.795	228.0	277	167.00	ND ng/ml	63.3
IS-D12-Chrysene	15.833	240.0	165932	90995.03	ND ng/ml	19.3
Chrysene	15.887	228.0	1177	589.96	ND ng/ml	37.8
Benzo(b)fluoranthene	18.110	252.0	181	88.95	ND ng/ml	104.3
Benzo(k)fluoranthene	18.160	252.0	254	93.25	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.601	264.0	139516	76929.13	ND ng/ml	25.8
Benzo(e)pyrene	18.601	252.0	656	301.53	ND ng/ml	31.9
Benzo(a)pyrene	18.737	252.0	90	52.06	ND ng/ml	46.3
IS-D12-Perylene	18.872	264.0	167819	90301.67	ND ng/ml	24.2
Perylene	18.865	252.0	651	334.07	ND ng/ml	26.2
Indeno(1,2,3-c,d)pyrene	20.759	276.0	159	66.09	ND ng/ml	
Dibenz(a,h)anthracene	20.828	278.0	301	82.19	ND ng/ml	13.0
Benzo(g,h,i)perylene	21.171	276.0	184	64.61	ND ng/ml	165.6
Coronene	23.439	300.0	155	47.88	ND ng/ml	

## IS-D8-Naphthalene

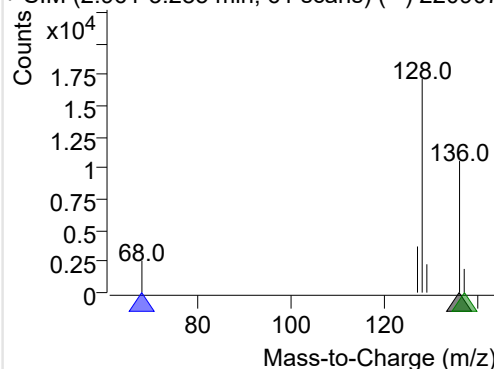
+ Selected Ion (136.0) 220907-PAHs-017.D



136.0, 68.0, 137.0

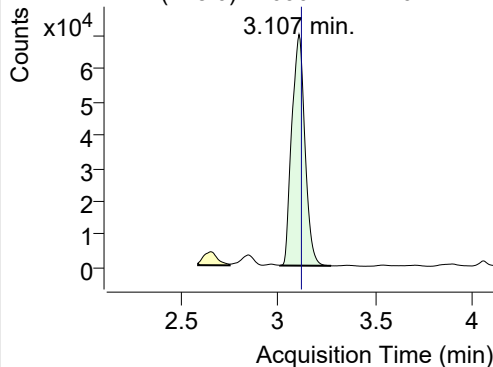


+ SIM (2.961-3.285 min, 61 scans) (\*\*) 220907

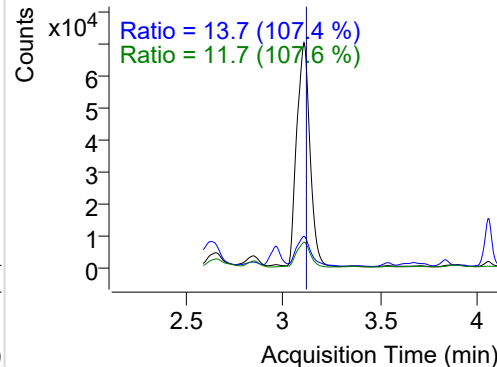


**Naphthalene**

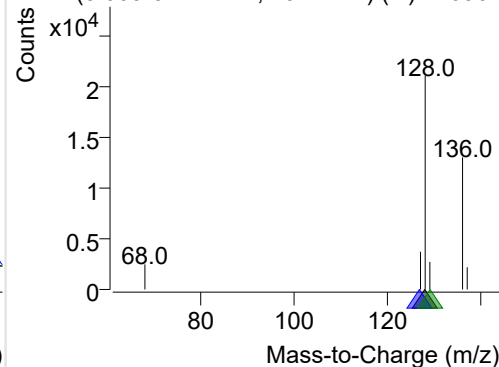
+ Selected Ion (128.0) 220907-PAHs-017.D



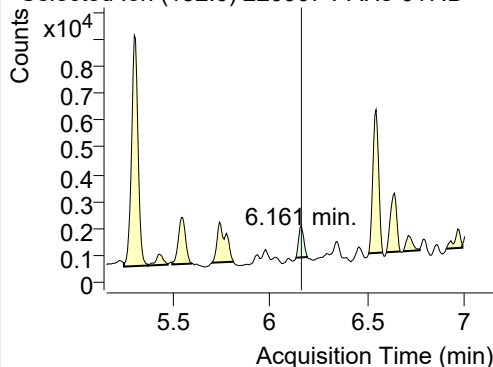
128.0, 127.0, 129.0



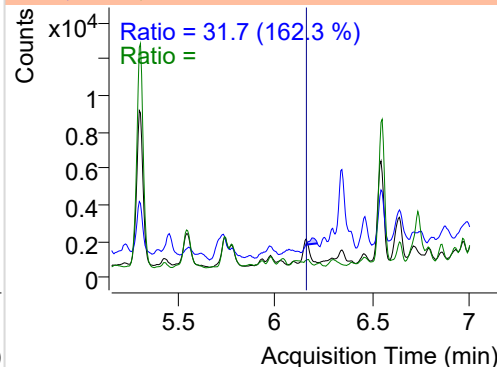
+ SIM (3.009-3.272 min, 49 scans) (\*\*) 220907

**Acenaphthylene**

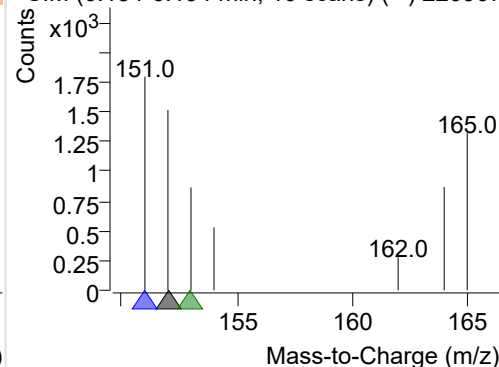
+ Selected Ion (152.0) 220907-PAHs-017.D



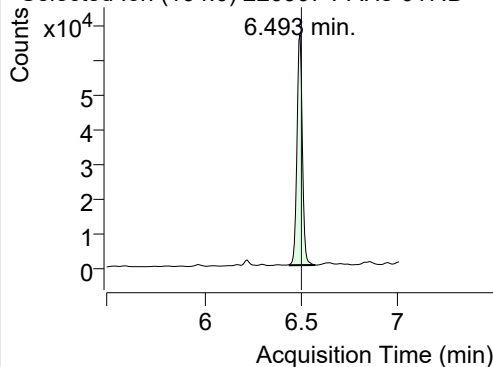
152.0, 151.0, 153.0



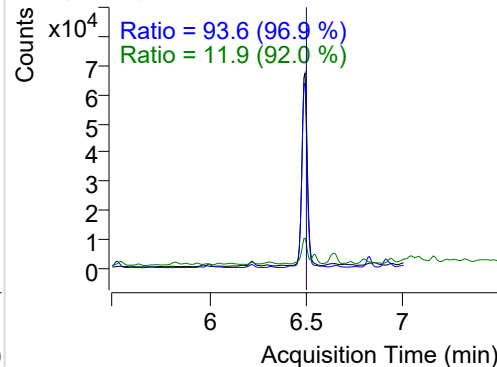
+ SIM (6.134-6.194 min, 10 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

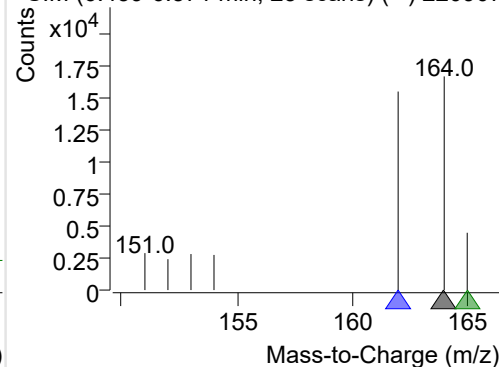
+ Selected Ion (164.0) 220907-PAHs-017.D



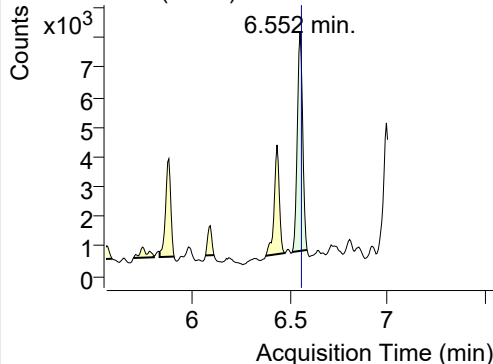
164.0, 162.0, 165.0



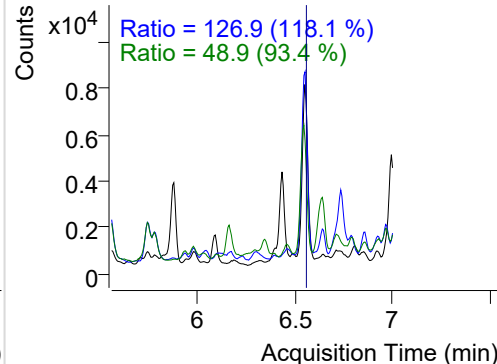
+ SIM (6.439-6.571 min, 23 scans) (\*\*) 220907

**Acenaphthene**

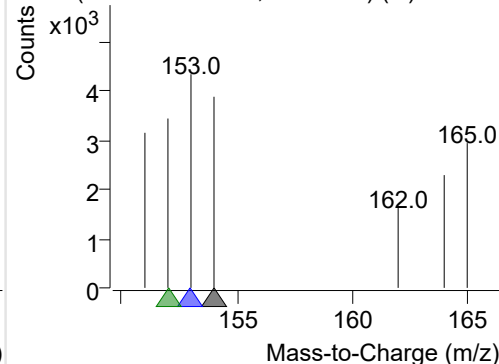
+ Selected Ion (154.0) 220907-PAHs-017.D



154.0, 153.0, 152.0

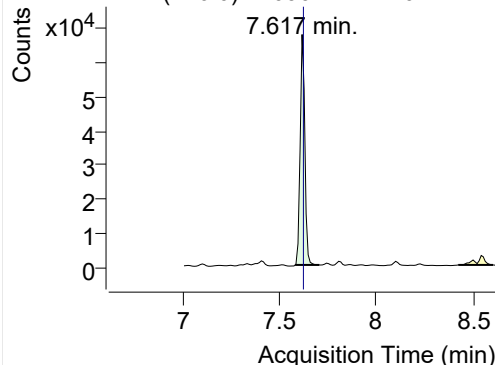


+ SIM (6.511-6.588 min, 13 scans) (\*\*) 220907

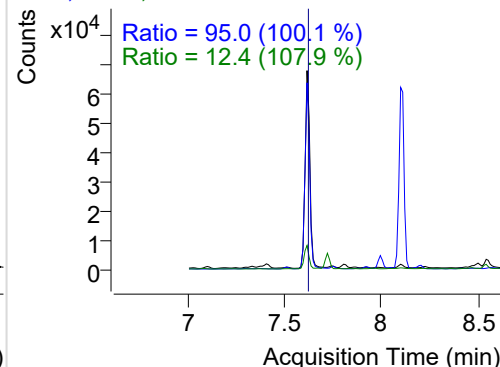


## LSS-D10-Fluorene

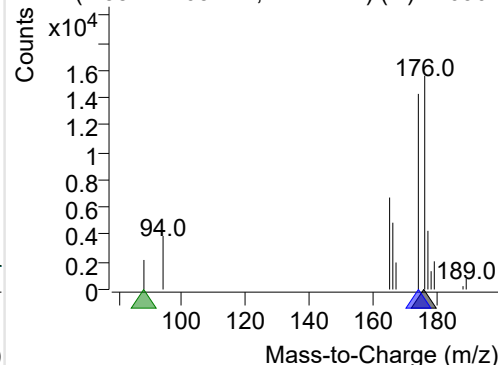
+ Selected Ion (176.0) 220907-PAHs-017.D



176.0, 174.0, 88.0

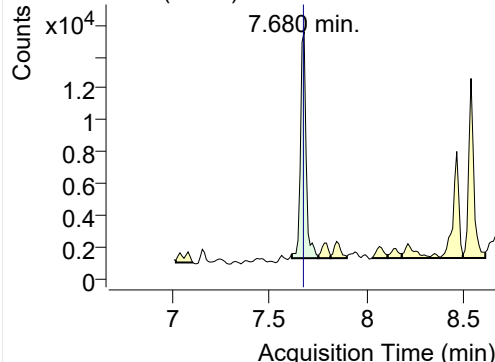


+ SIM (7.581-7.705 min, 12 scans) (\*\*) 220907

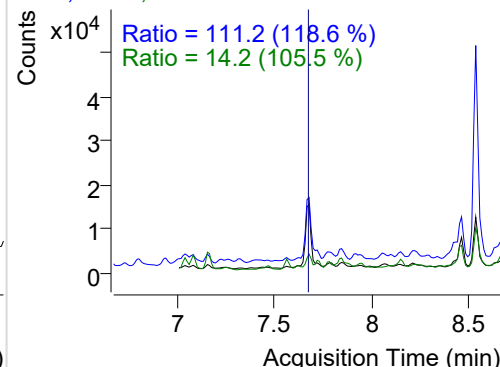


## Fluorene

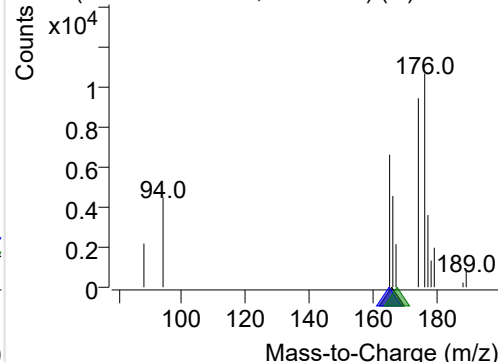
+ Selected Ion (166.0) 220907-PAHs-017.D



166.0, 165.0, 167.0

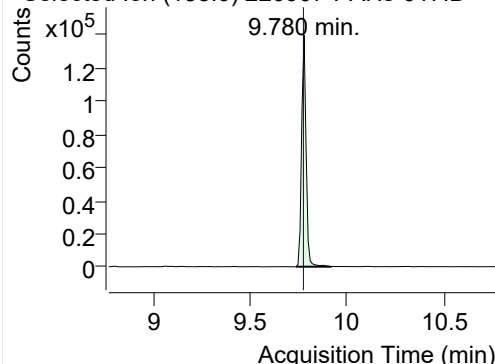


+ SIM (7.617-7.753 min, 14 scans) (\*\*) 220907

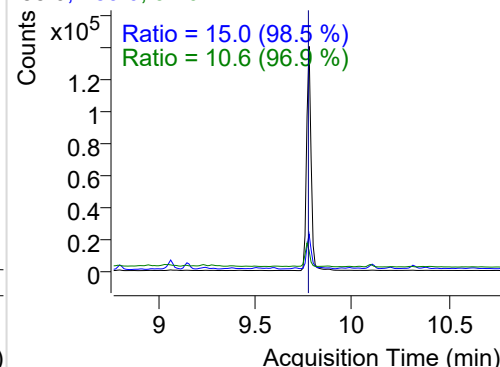


## IS-D10-Phenanthrene

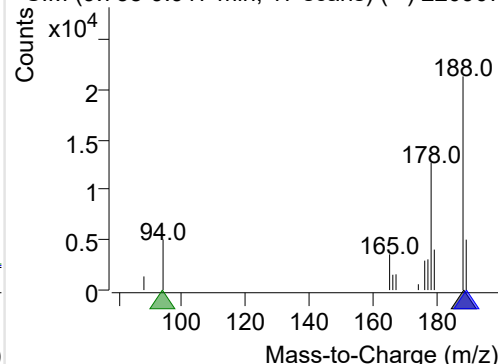
+ Selected Ion (188.0) 220907-PAHs-017.D



188.0, 189.0, 94.0

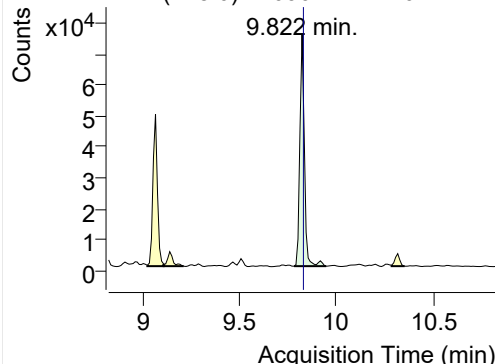


+ SIM (9.738-9.917 min, 17 scans) (\*\*) 220907

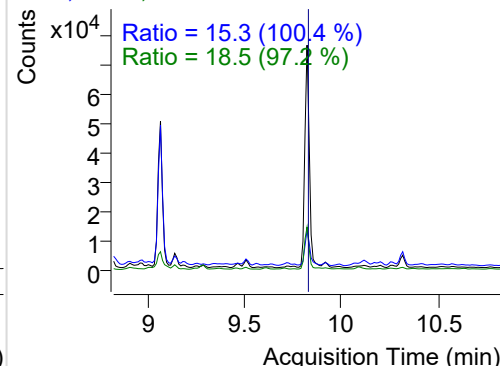


## Phenanthrene

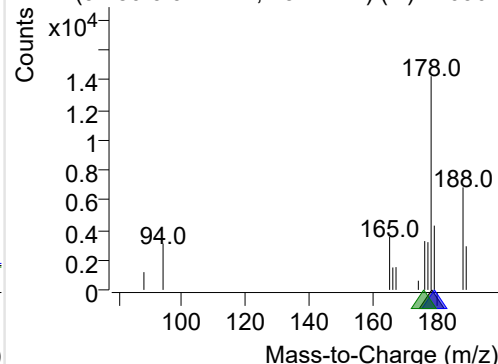
+ Selected Ion (178.0) 220907-PAHs-017.D



178.0, 179.0, 176.0

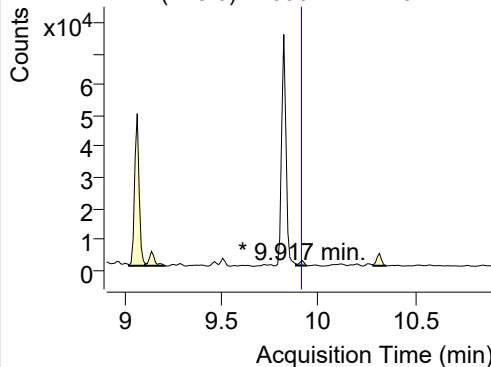


+ SIM (9.780-9.947 min, 15 scans) (\*\*) 220907

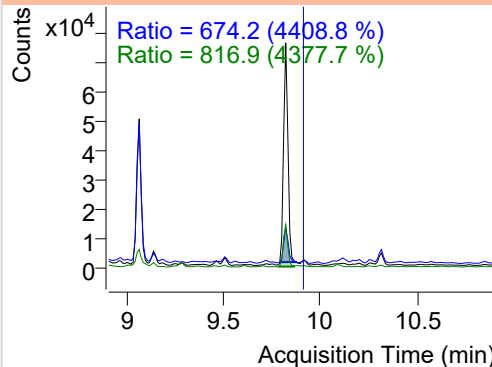


**Anthracene**

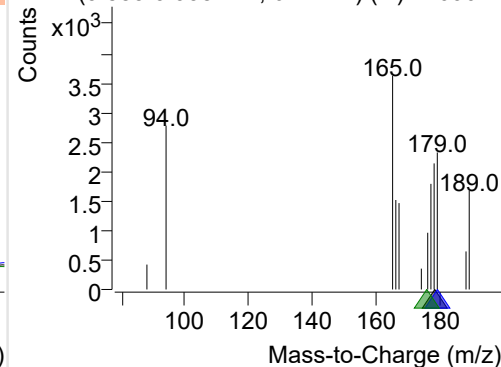
+ Selected Ion (178.0) 220907-PAHs-017.D



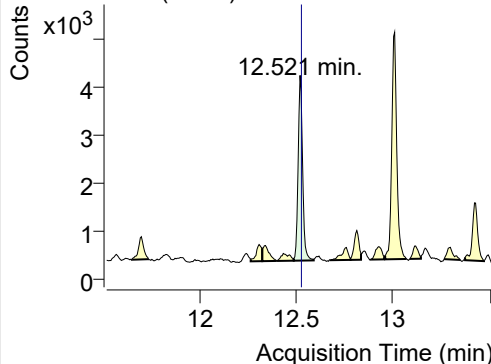
178.0, 179.0, 176.0



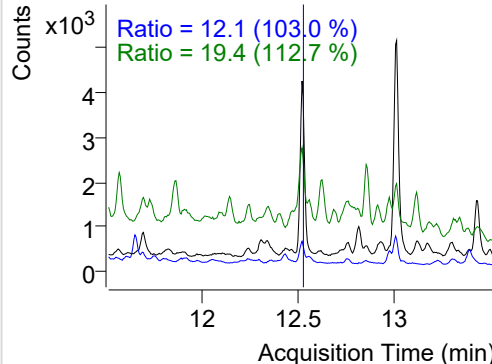
+ SIM (9.885-9.938 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

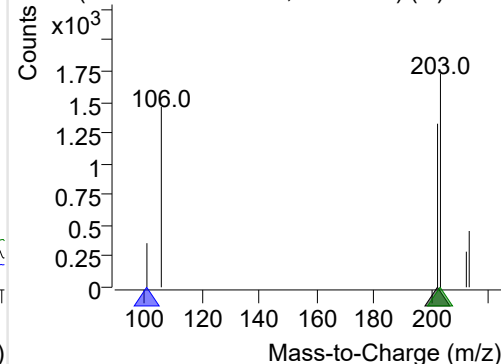
+ Selected Ion (202.0) 220907-PAHs-017.D



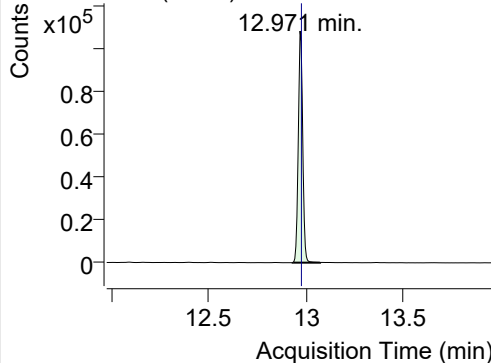
202.0, 101.0, 203.0



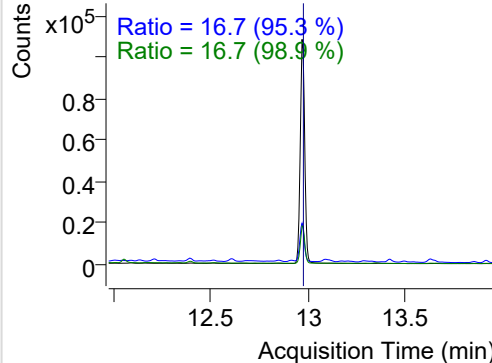
+ SIM (12.488-12.591 min, 20 scans) (\*\*) 2209

**LSS-D10-Pyrene**

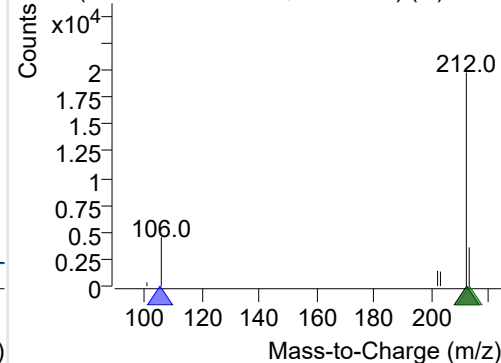
+ Selected Ion (212.0) 220907-PAHs-017.D



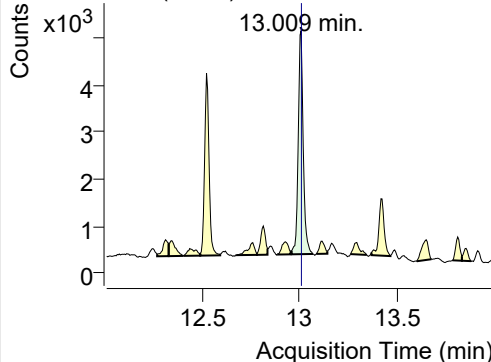
212.0, 106.0, 213.0



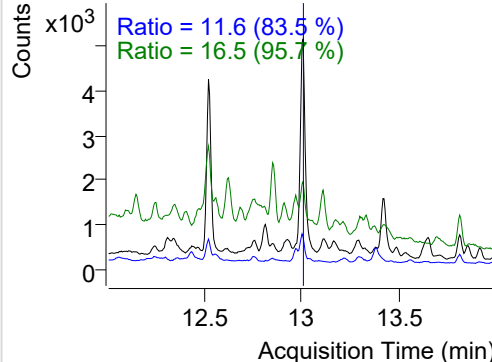
+ SIM (12.933-13.074 min, 27 scans) (\*\*) 2209

**Pyrene**

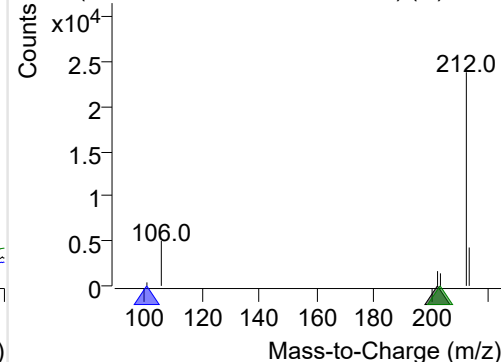
+ Selected Ion (202.0) 220907-PAHs-017.D



202.0, 101.0, 203.0



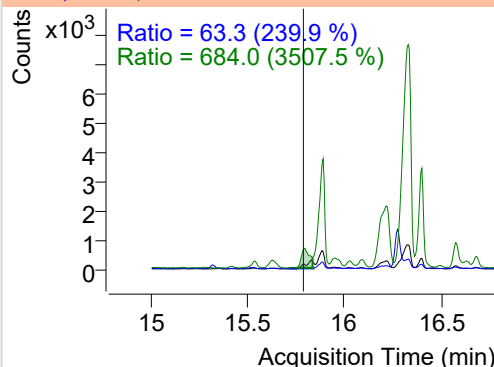
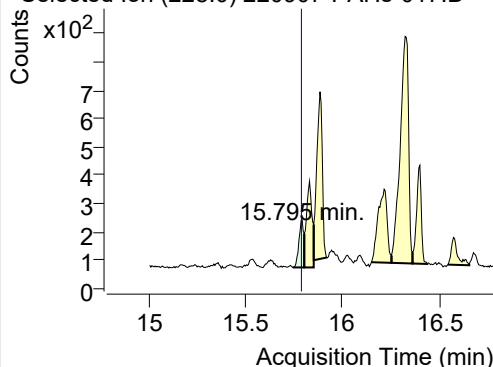
+ SIM (12.960-13.070 min, 21 scans) (\*\*) 2209



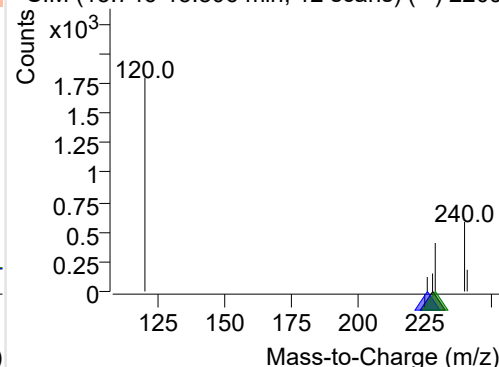
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-017.D

228.0, 226.0, 229.0

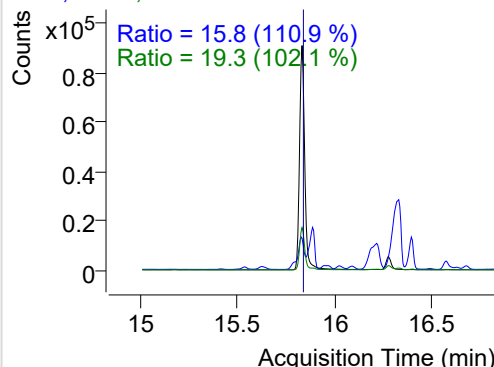
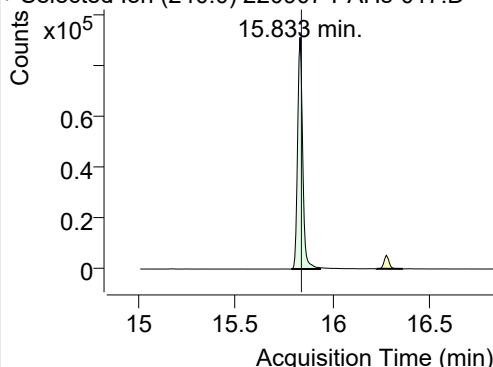


+ SIM (15.746-15.806 min, 12 scans) (\*\*) 2209

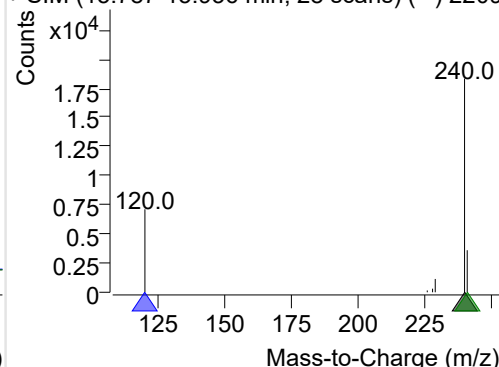
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-017.D

240.0, 120.0, 241.0

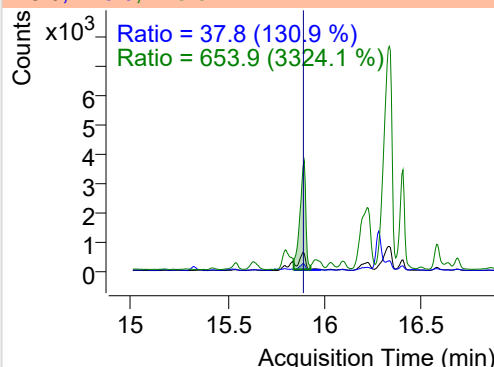
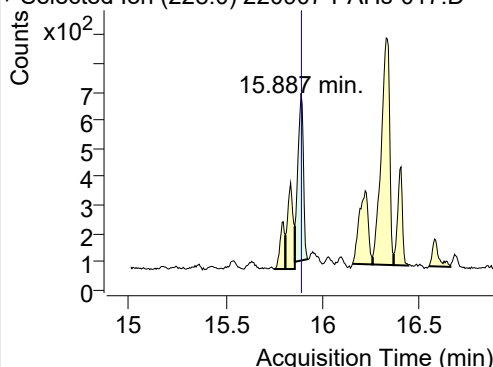


+ SIM (15.787-15.936 min, 28 scans) (\*\*) 2209

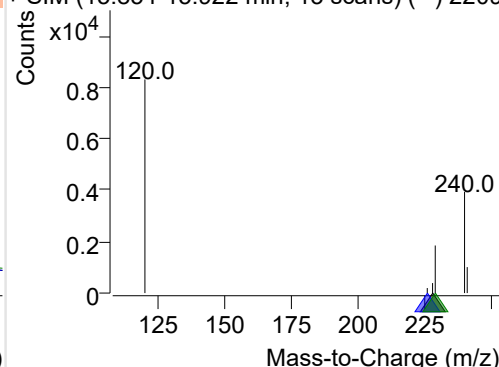
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-017.D

228.0, 226.0, 229.0

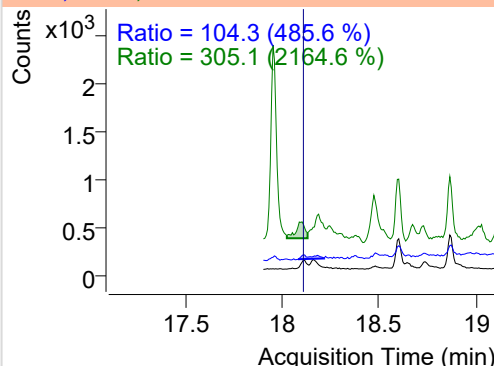
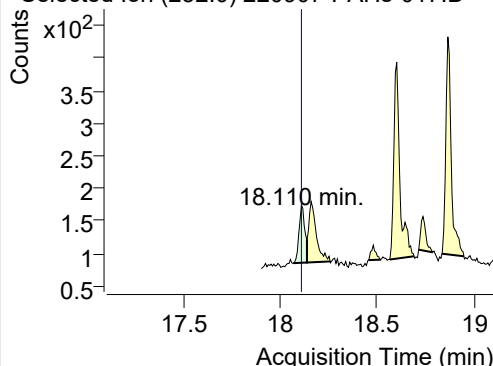


+ SIM (15.854-15.922 min, 13 scans) (\*\*) 2209

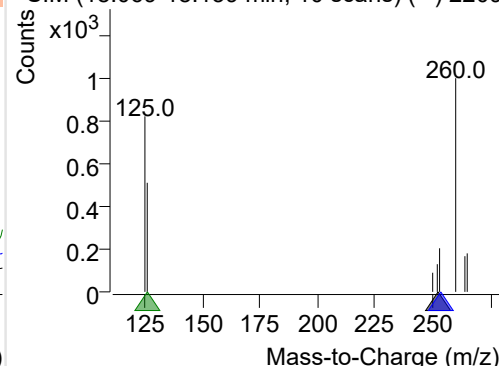
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-017.D

252.0, 253.0, 126.0



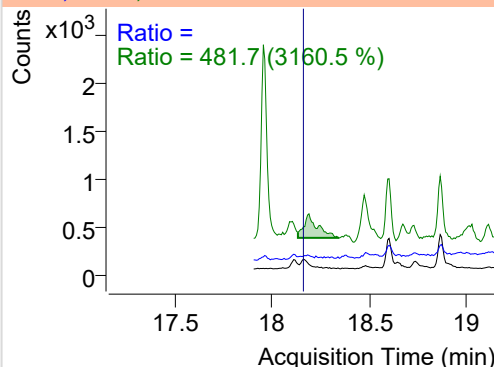
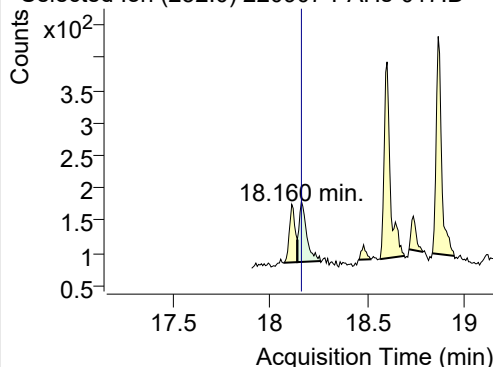
+ SIM (18.069-18.139 min, 10 scans) (\*\*) 2209



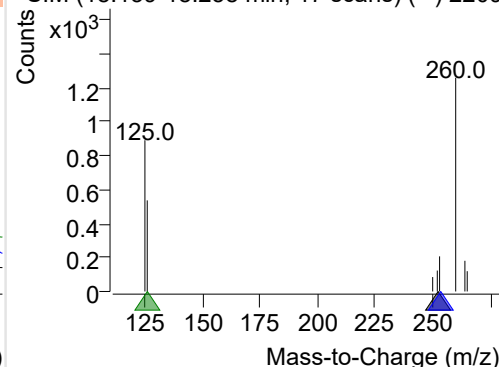
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-017.D

252.0, 253.0, 126.0

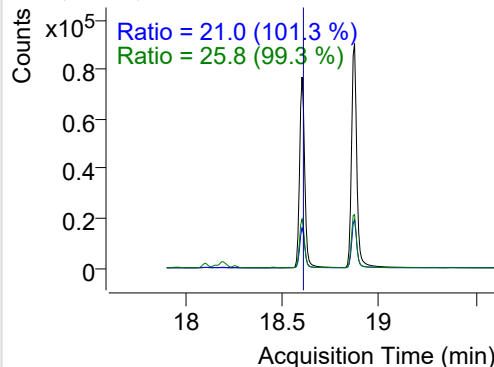
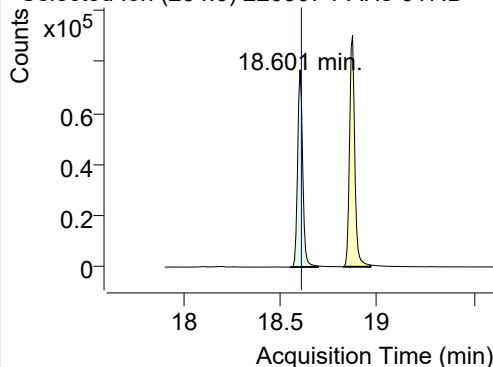


+ SIM (18.139-18.258 min, 17 scans) (\*\*) 2209

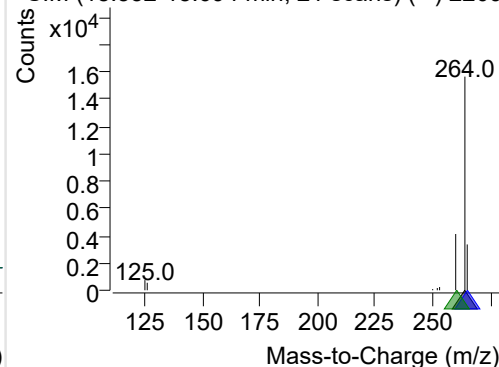
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-017.D

264.0, 265.0, 260.0

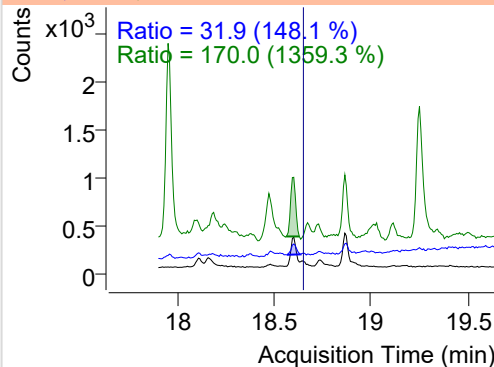
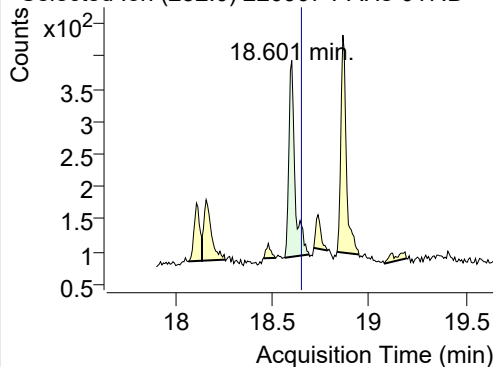


+ SIM (18.552-18.694 min, 21 scans) (\*\*) 2209

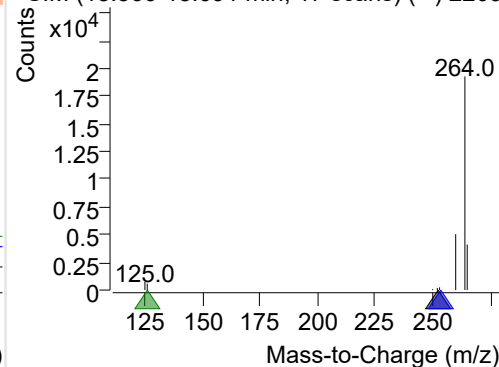
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-017.D

252.0, 253.0, 126.0

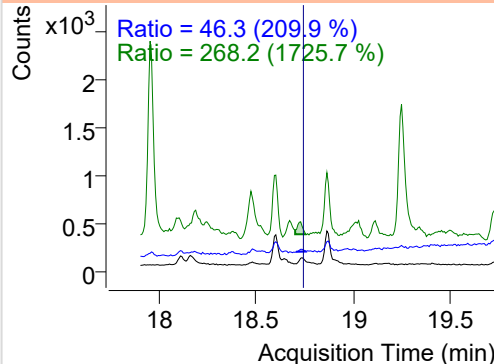
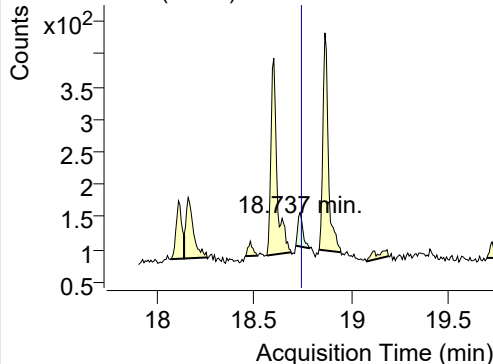


+ SIM (18.566-18.691 min, 17 scans) (\*\*) 2209

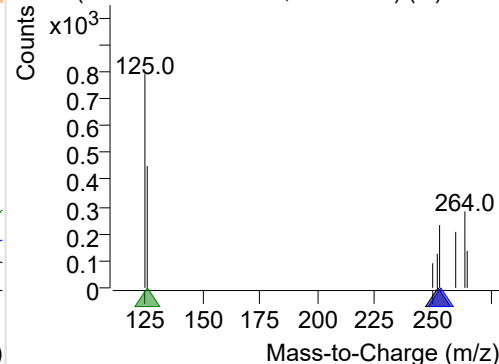
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-017.D

252.0, 253.0, 126.0

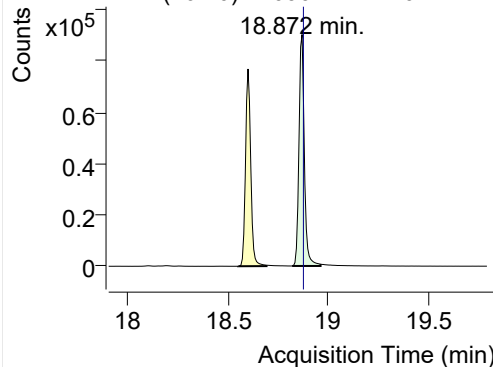


+ SIM (18.714-18.786 min, 10 scans) (\*\*) 2209

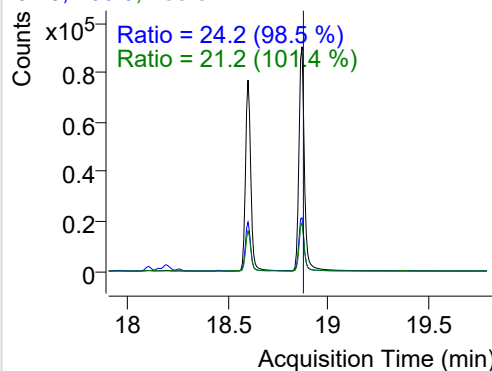


## IS-D12-Perylene

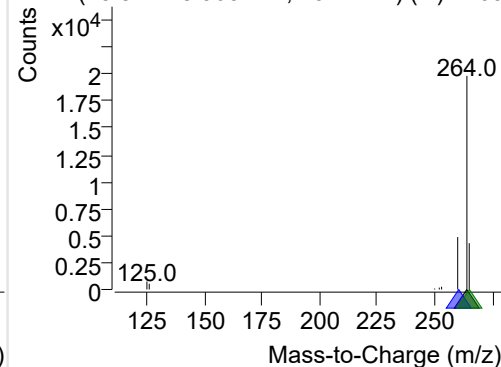
+ Selected Ion (264.0) 220907-PAHs-017.D



264.0, 260.0, 265.0

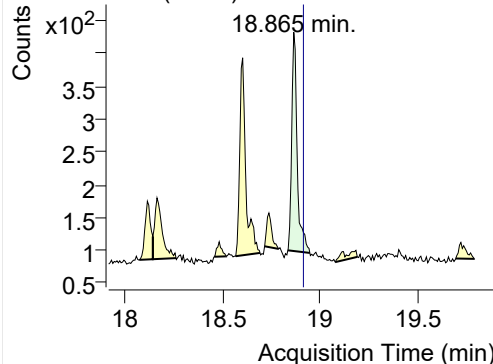


+ SIM (18.822-18.965 min, 20 scans) (\*\*) 2209

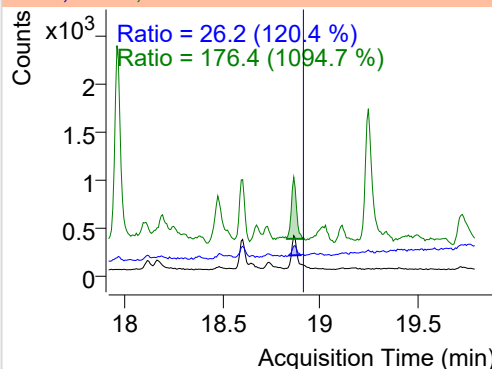


## Perylene

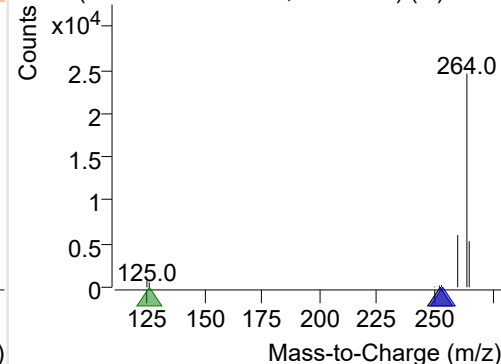
+ Selected Ion (252.0) 220907-PAHs-017.D



252.0, 253.0, 126.0

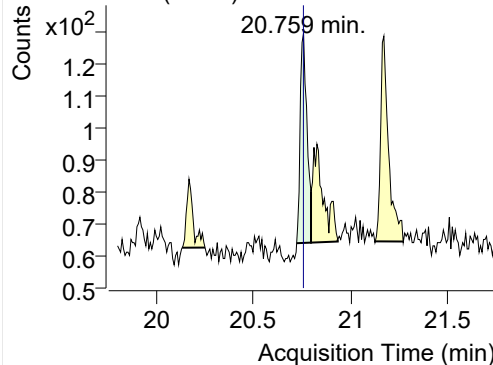


+ SIM (18.834-18.948 min, 16 scans) (\*\*) 2209

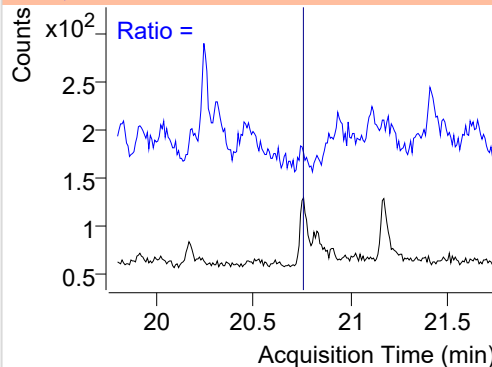


## Indeno(1,2,3-c,d)pyrene

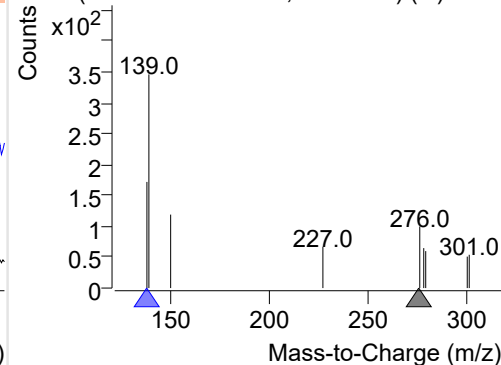
+ Selected Ion (276.0) 220907-PAHs-017.D



276.0, 138.0

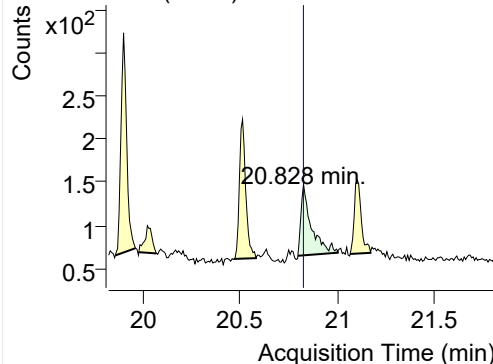


+ SIM (20.723-20.797 min, 10 scans) (\*\*) 2209

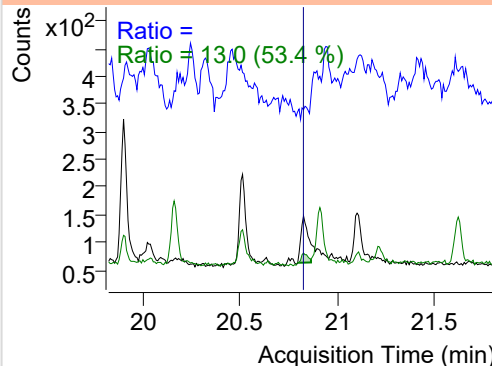


## Dibenz(a,h)anthracene

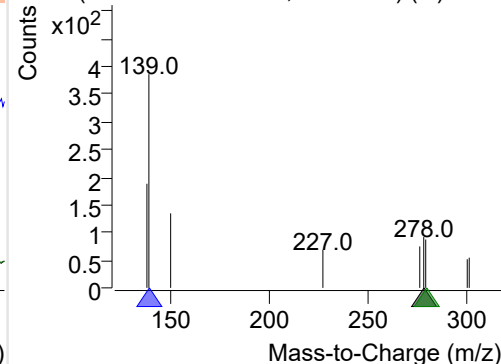
+ Selected Ion (278.0) 220907-PAHs-017.D



278.0, 139.0, 279.0



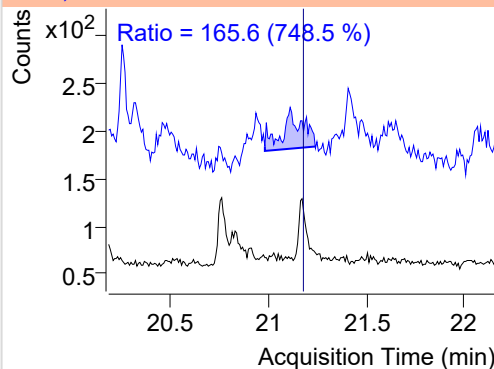
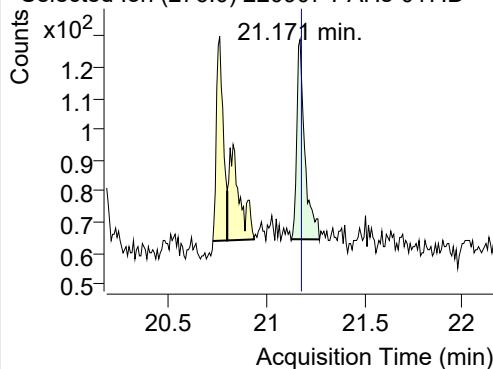
+ SIM (20.798-21.003 min, 27 scans) (\*\*) 2209



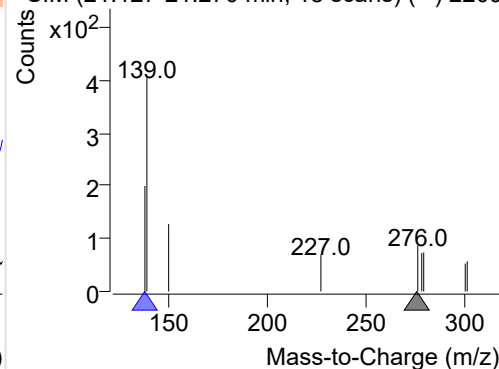
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-017.D

276.0, 138.0

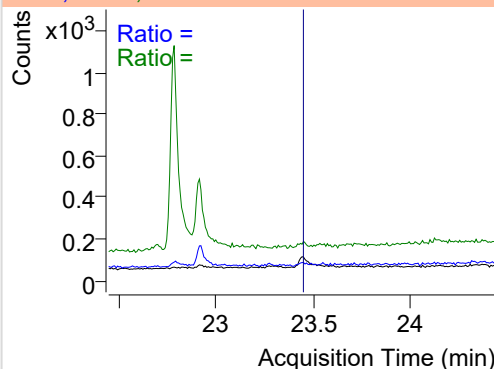
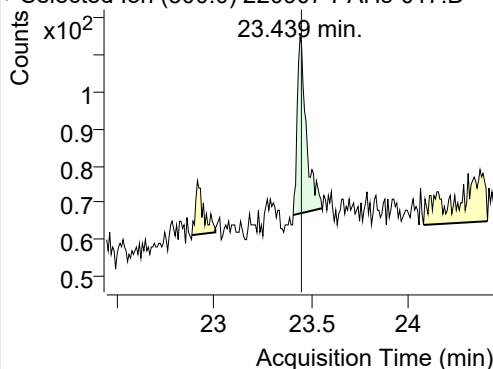


+ SIM (21.127-21.270 min, 18 scans) (\*\*) 2209

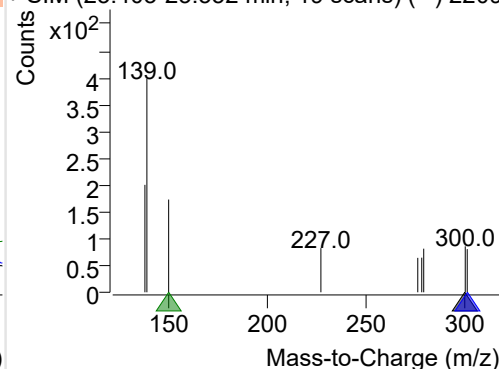
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-017.D

300.0, 301.0, 150.0



+ SIM (23.403-23.552 min, 19 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

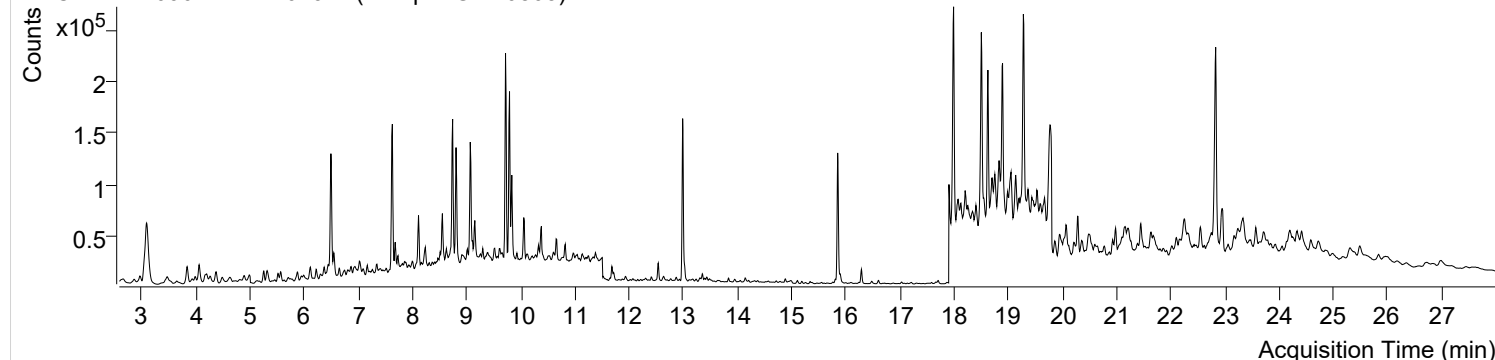


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 9:46:39	Data File	220907-PAHs-019.D
Type	Sample	Name	Sample-Gas-0803
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

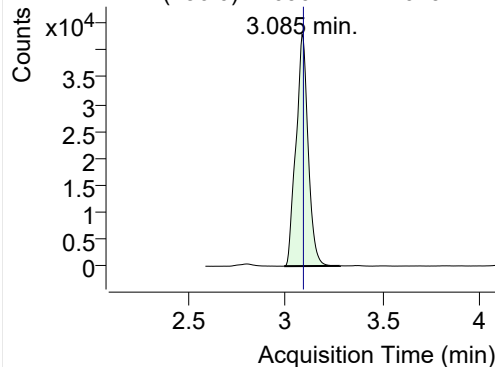
+ TIC SIM 220907-PAHs-019.D (Sample-Gas-0803)



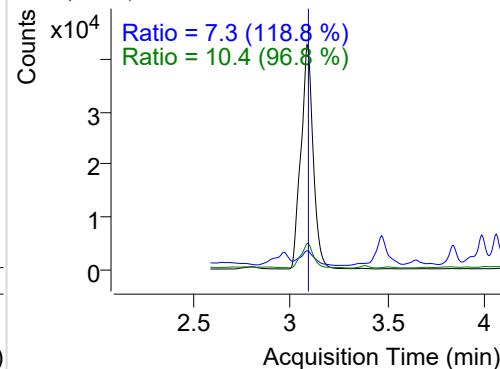
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	185932	42734.23	ND ng/ml	10.4
Naphthalene	3.112	128.0	52274	11994.69	ND ng/ml	12.9
Acenaphthylene	6.161	152.0	2591	1218.43	ND ng/ml	74.9
IS-D10-Acenaphthene	6.493	164.0	116795	57595.43	ND ng/ml	99.4
Acenaphthene	6.546	154.0	17095	8417.89	ND ng/ml	89.8
LSS-D10-Fluorene	7.627	176.0	117826	64848.16	ND ng/ml	95.0
Fluorene	7.680	166.0	21473	12201.26	ND ng/ml	85.0
IS-D10-Phenanthrene	9.791	188.0	216780	131678.3	ND ng/ml	17.3
Phenanthrene	9.833	178.0	87473	53536.19	ND ng/ml	19.0
Anthracene	9.927	178.0	7154	4316.12	ND ng/ml	17.7
Fluoranthene	12.537	202.0	19934	12336.75	ND ng/ml	19.0
LSS-D10-Pyrene	12.987	212.0	190153	118781.0	ND ng/ml	16.8
Pyrene	13.020	202.0	16843	10340.73	ND ng/ml	17.2
Benz(a)anthracene	15.806	228.0	4715	2782.63	ND ng/ml	28.9
IS-D12-Chrysene	15.849	240.0	168978	96888.21	ND ng/ml	18.8
Chrysene	15.898	228.0	9287	4865.20	ND ng/ml	33.8
Benzo(b)fluoranthene	18.125	252.0	15335	7836.88	ND ng/ml	23.3
Benzo(k)fluoranthene	18.125	252.0	15123	7787.91	ND ng/ml	17.1
SS-D12-Benzo(e)pyrene	18.623	264.0	158023	90934.78	ND ng/ml	26.0
Benzo(e)pyrene	18.666	252.0	11187	4752.91	ND ng/ml	9.1
Benzo(a)pyrene	18.751	252.0	8662	3819.91	ND ng/ml	29.3
IS-D12-Perylene	18.893	264.0	195838	101628.2	ND ng/ml	23.8
Perylene	18.929	252.0	1674	537.91	ND ng/ml	136.2
Indeno(1,2,3-c,d)pyrene	20.774	276.0	6755	2981.68	ND ng/ml	21.3
Dibenz(a,h)anthracene	20.843	278.0	1852	835.98	ND ng/ml	18.7
Benzo(g,h,i)perylene	21.194	276.0	10087	4592.61	ND ng/ml	162.7
Coronene	23.470	300.0	3669	1271.73	ND ng/ml	

## IS-D8-Naphthalene

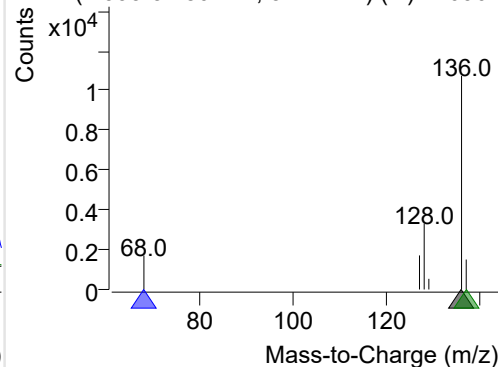
+ Selected Ion (136.0) 220907-PAHs-019.D



136.0, 68.0, 137.0

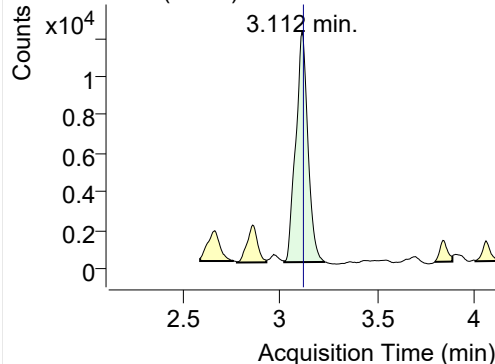


+ SIM (2.993-3.280 min, 54 scans) (\*\*) 220907

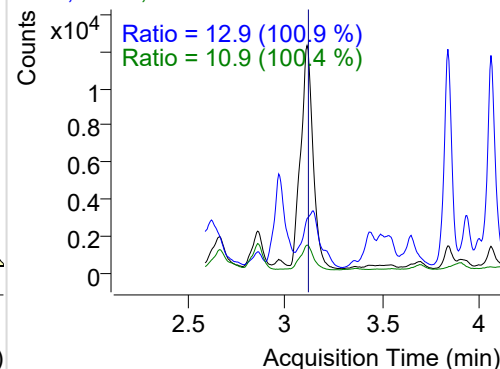


## Naphthalene

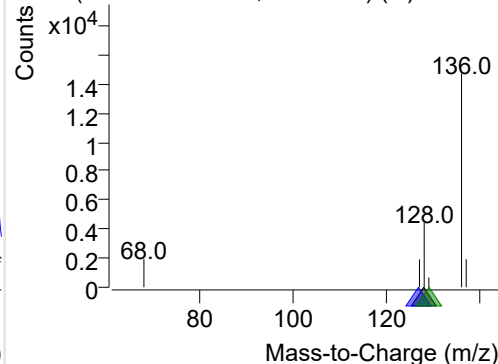
+ Selected Ion (128.0) 220907-PAHs-019.D



128.0, 127.0, 129.0

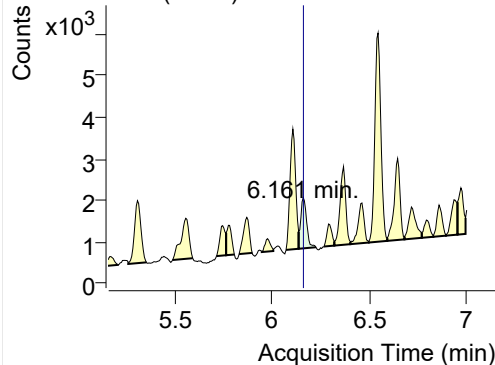


+ SIM (3.020-3.230 min, 39 scans) (\*\*) 220907

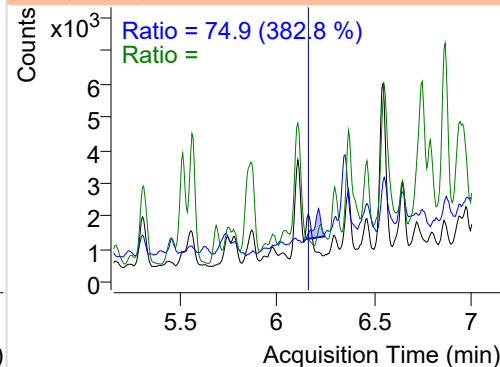


## Acenaphthylene

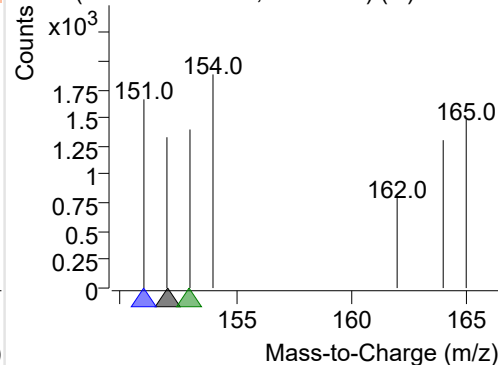
+ Selected Ion (152.0) 220907-PAHs-019.D



152.0, 151.0, 153.0

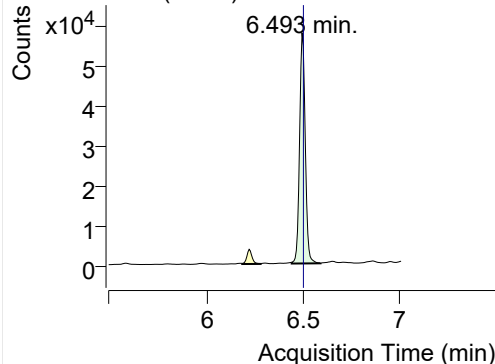


+ SIM (6.138-6.227 min, 16 scans) (\*\*) 220907

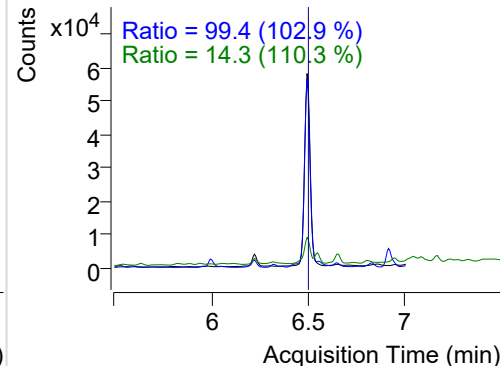


## IS-D10-Acenaphthene

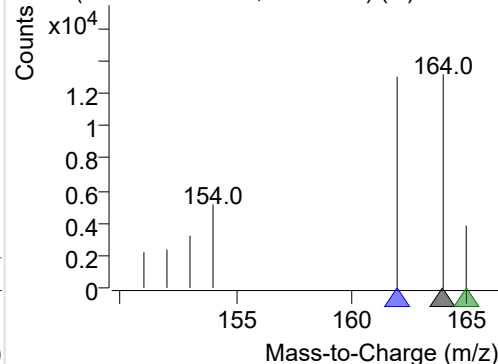
+ Selected Ion (164.0) 220907-PAHs-019.D



164.0, 162.0, 165.0

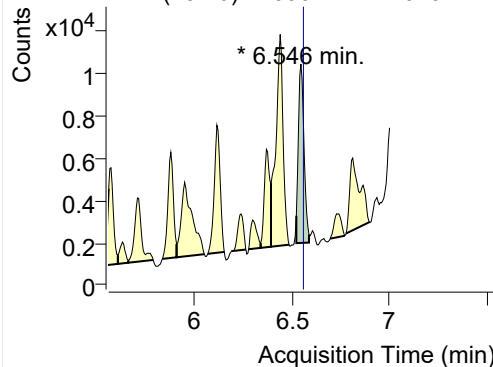


+ SIM (6.440-6.587 min, 26 scans) (\*\*) 220907

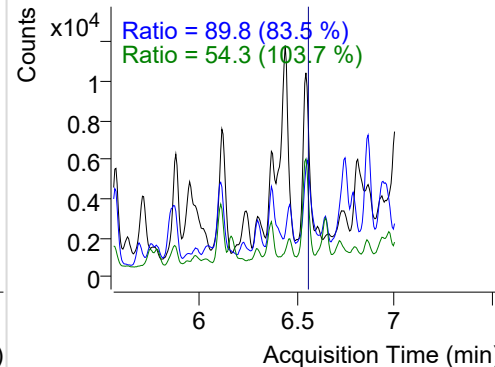


**Acenaphthene**

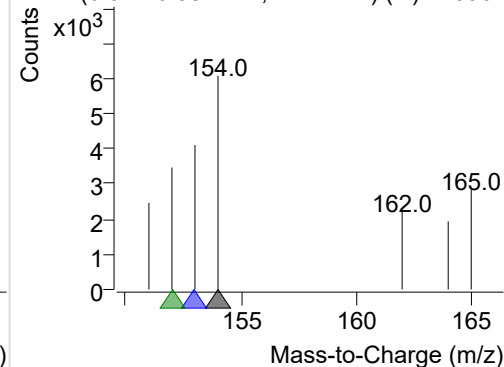
+ Selected Ion (154.0) 220907-PAHs-019.D



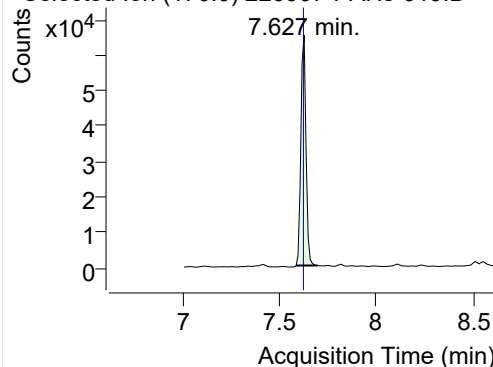
154.0, 153.0, 152.0



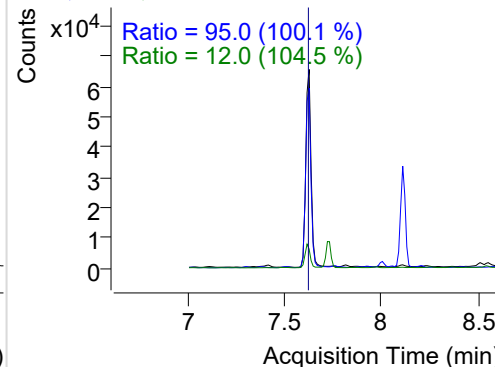
+ SIM (6.522-6.587 min, 12 scans) (\*\*) 220907

**LSS-D10-Fluorene**

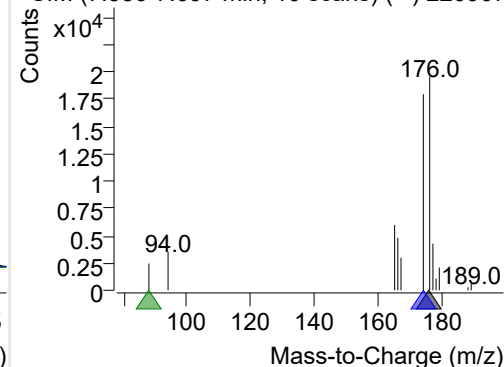
+ Selected Ion (176.0) 220907-PAHs-019.D



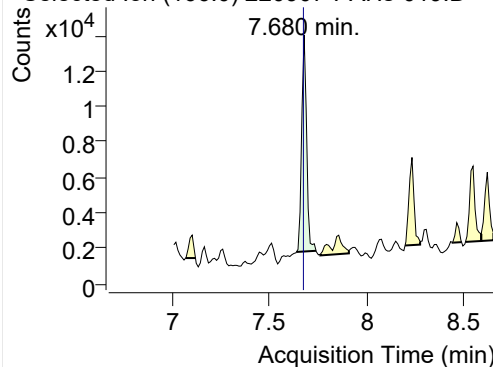
176.0, 174.0, 88.0



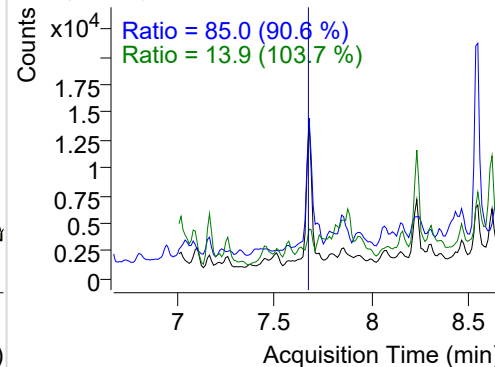
+ SIM (7.586-7.697 min, 10 scans) (\*\*) 220907

**Fluorene**

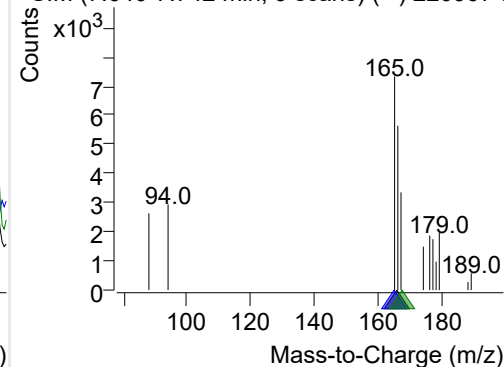
+ Selected Ion (166.0) 220907-PAHs-019.D



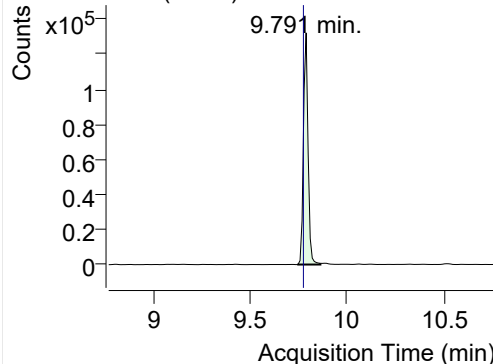
166.0, 165.0, 167.0



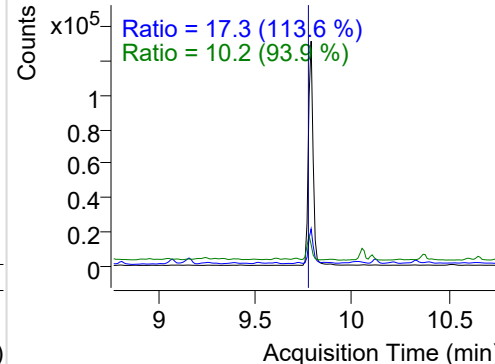
+ SIM (7.640-7.742 min, 9 scans) (\*\*) 220907

**IS-D10-Phenanthrene**

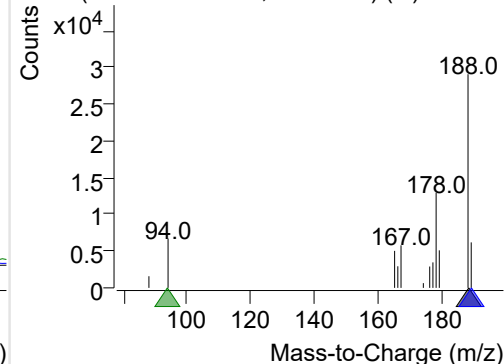
+ Selected Ion (188.0) 220907-PAHs-019.D



188.0, 189.0, 94.0

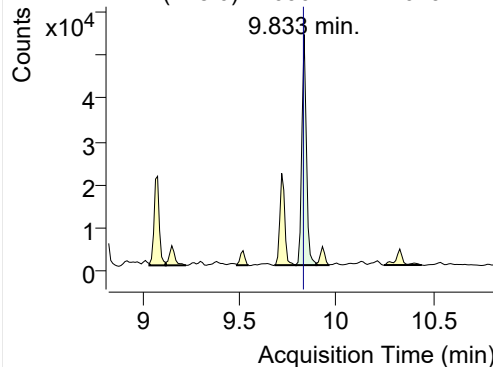


+ SIM (9.745-9.864 min, 12 scans) (\*\*) 220907

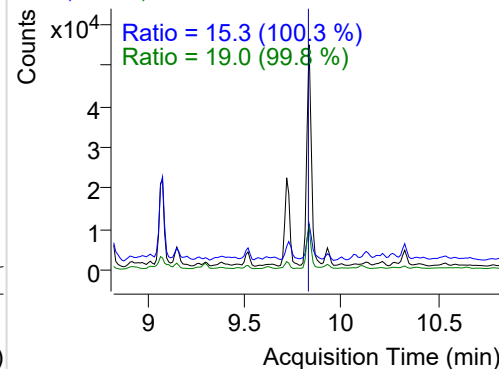


**Phenanthrene**

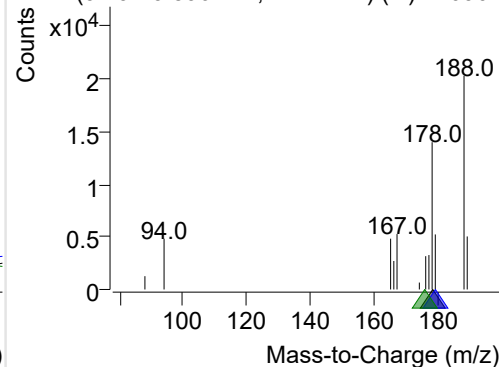
+ Selected Ion (178.0) 220907-PAHs-019.D



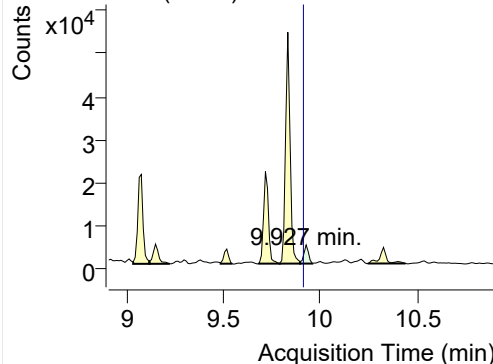
178.0, 179.0, 176.0



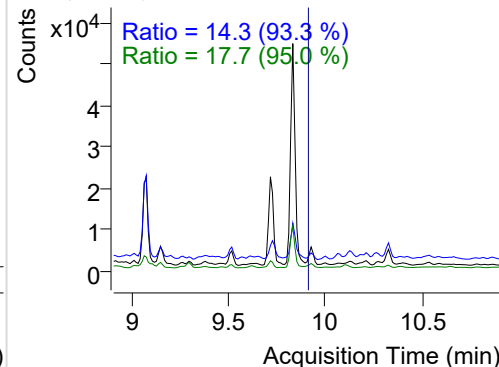
+ SIM (9.791-9.896 min, 11 scans) (\*\*) 220907

**Anthracene**

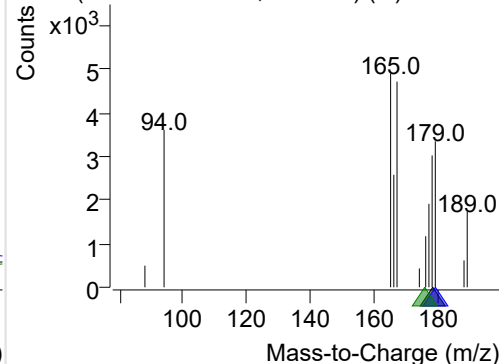
+ Selected Ion (178.0) 220907-PAHs-019.D



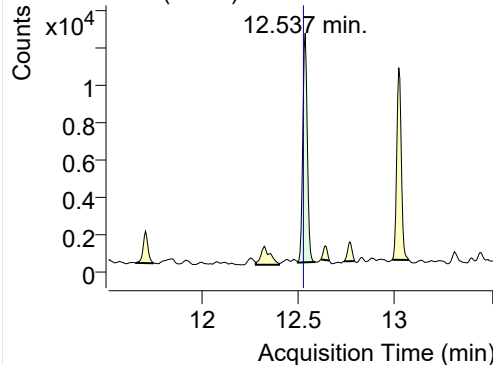
178.0, 179.0, 176.0



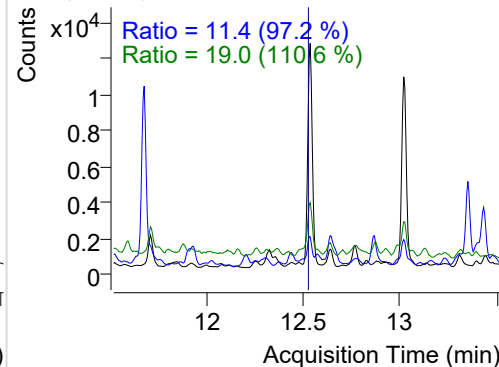
+ SIM (9.896-9.959 min, 7 scans) (\*\*) 220907-I

**Fluoranthene**

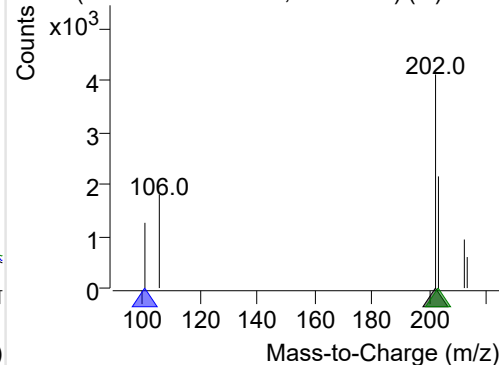
+ Selected Ion (202.0) 220907-PAHs-019.D



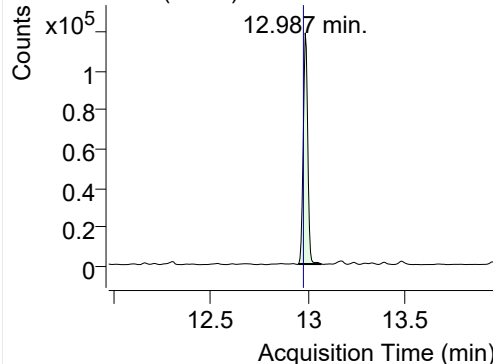
202.0, 101.0, 203.0



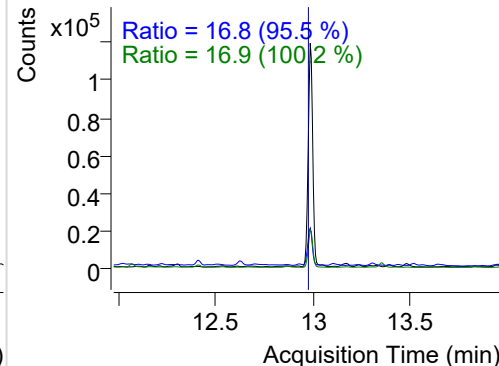
+ SIM (12.499-12.589 min, 17 scans) (\*\*) 2209

**LSS-D10-Pyrene**

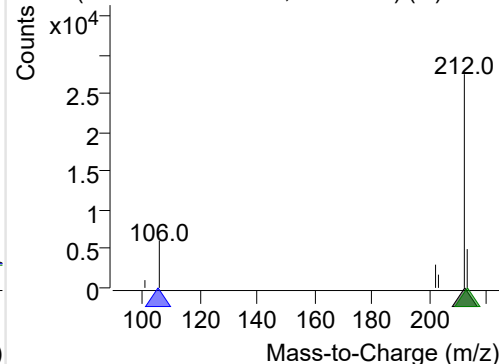
+ Selected Ion (212.0) 220907-PAHs-019.D



212.0, 106.0, 213.0

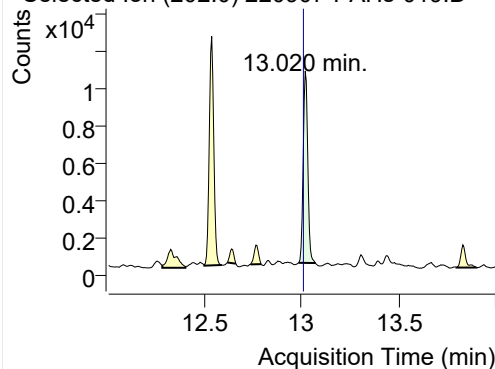


+ SIM (12.951-13.071 min, 22 scans) (\*\*) 2209

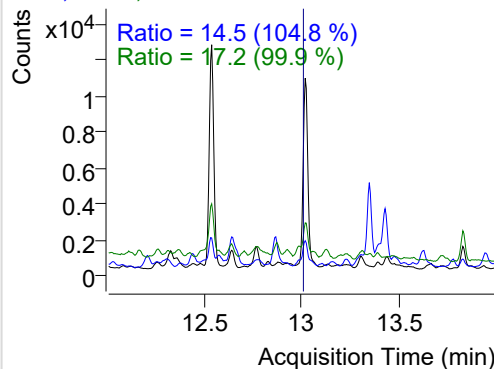


**Pyrene**

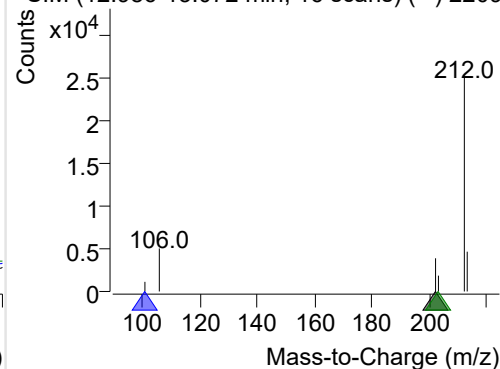
+ Selected Ion (202.0) 220907-PAHs-019.D



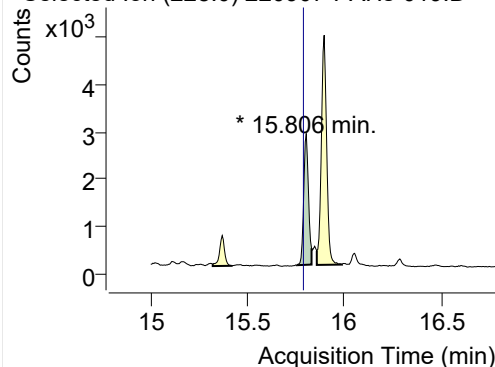
202.0, 101.0, 203.0



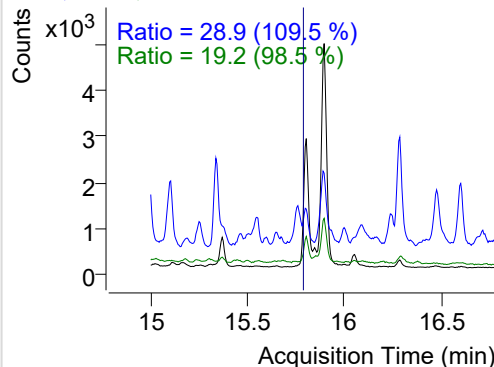
+ SIM (12.986-13.072 min, 16 scans) (\*\*) 2209

**Benz(a)anthracene**

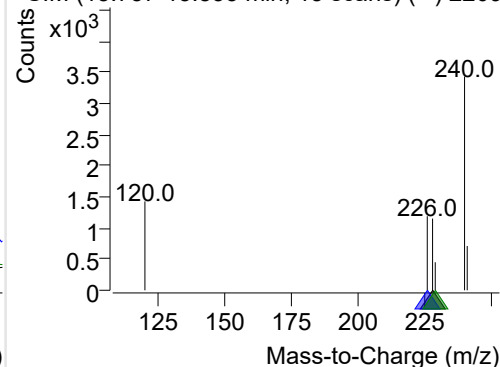
+ Selected Ion (228.0) 220907-PAHs-019.D



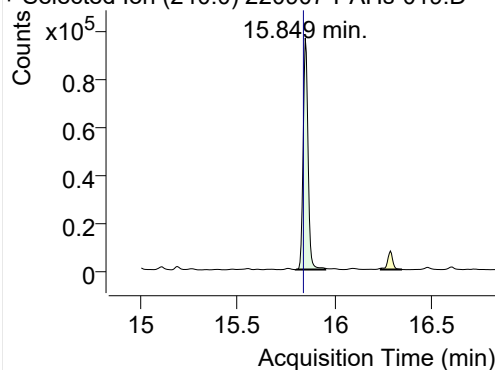
228.0, 226.0, 229.0



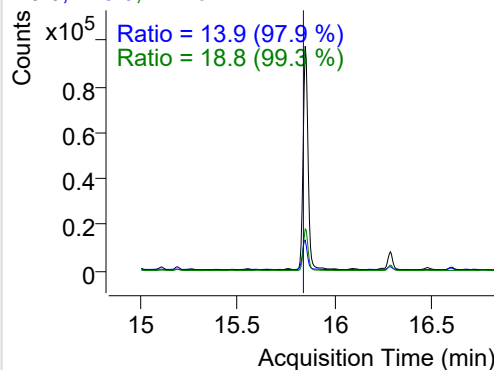
+ SIM (15.757-15.833 min, 15 scans) (\*\*) 2209

**IS-D12-Chrysene**

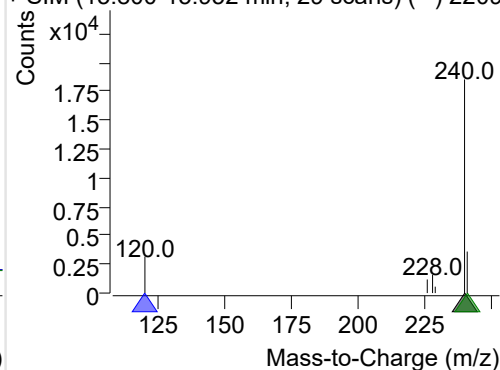
+ Selected Ion (240.0) 220907-PAHs-019.D



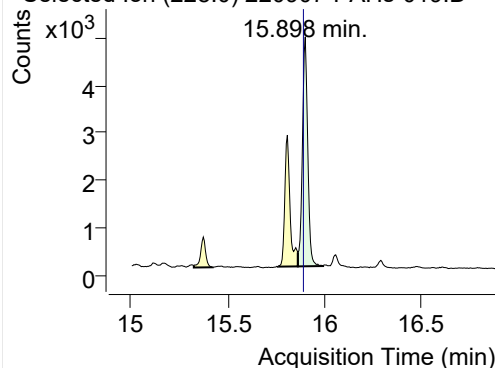
240.0, 120.0, 241.0



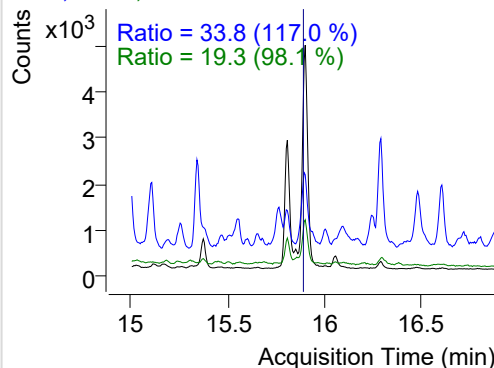
+ SIM (15.800-15.952 min, 29 scans) (\*\*) 2209

**Chrysene**

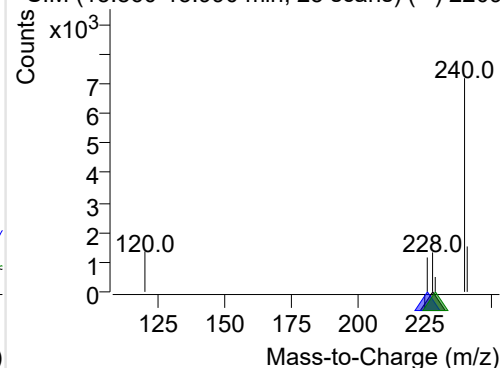
+ Selected Ion (228.0) 220907-PAHs-019.D



228.0, 226.0, 229.0

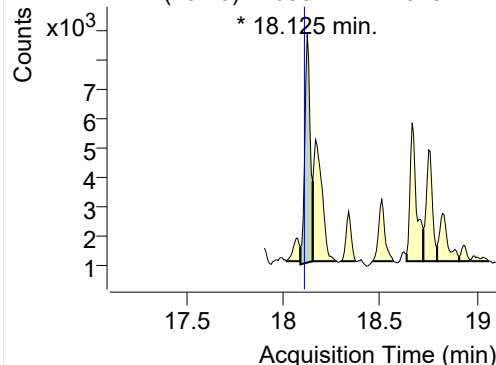


+ SIM (15.860-15.990 min, 25 scans) (\*\*) 2209

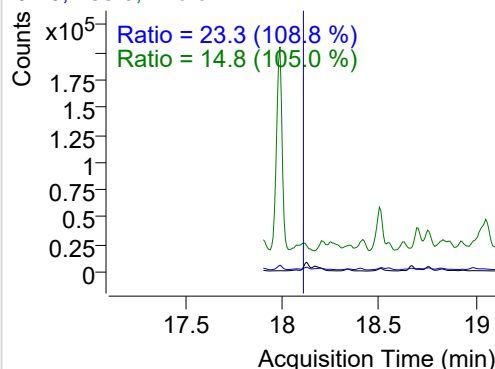


**Benzo(b)fluoranthene**

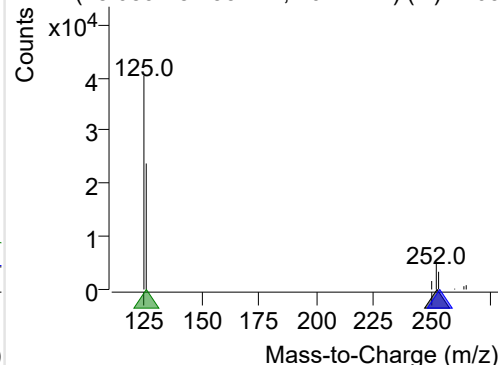
+ Selected Ion (252.0) 220907-PAHs-019.D



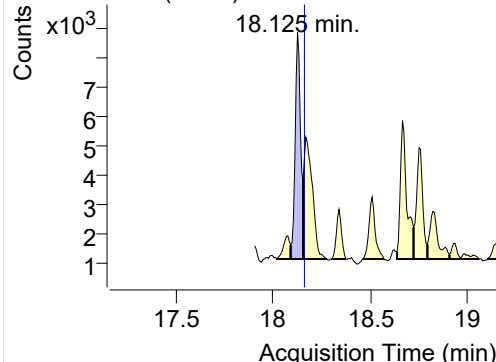
252.0, 253.0, 126.0



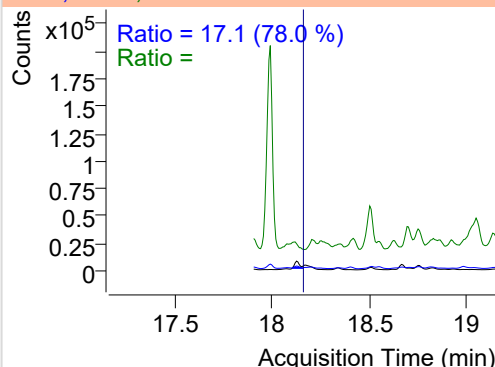
+ SIM (18.089-18.153 min, 10 scans) (\*\*) 2209

**Benzo(k)fluoranthene**

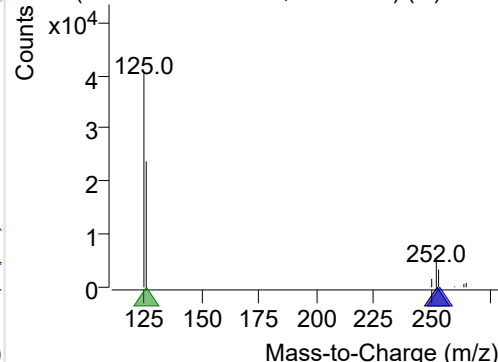
+ Selected Ion (252.0) 220907-PAHs-019.D



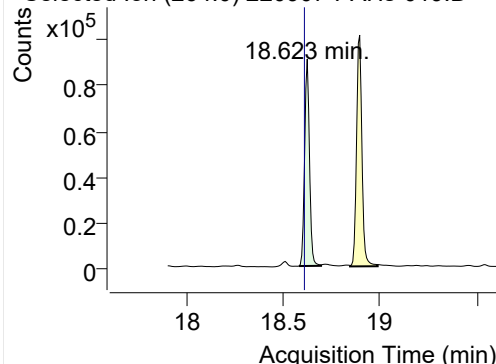
252.0, 253.0, 126.0



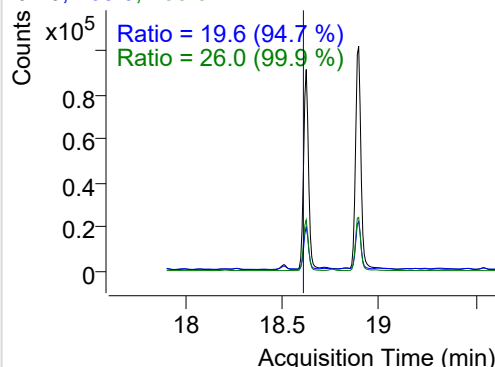
+ SIM (18.089-18.153 min, 10 scans) (\*\*) 2209

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

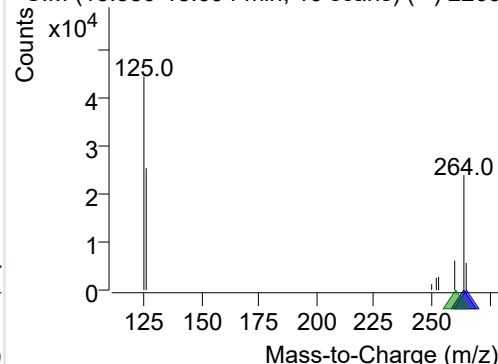
+ Selected Ion (264.0) 220907-PAHs-019.D



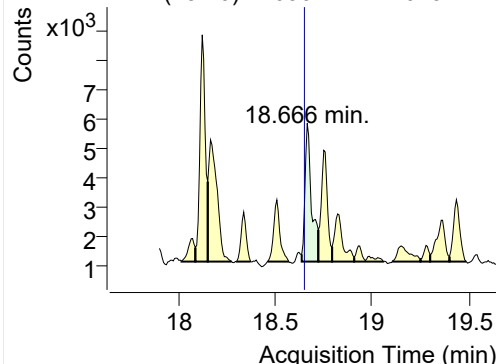
264.0, 265.0, 260.0



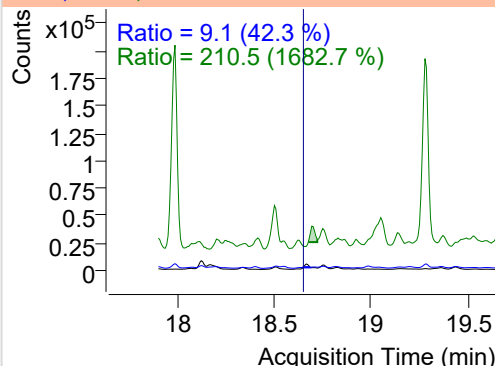
+ SIM (18.580-18.694 min, 16 scans) (\*\*) 2209

**Benzo(e)pyrene**

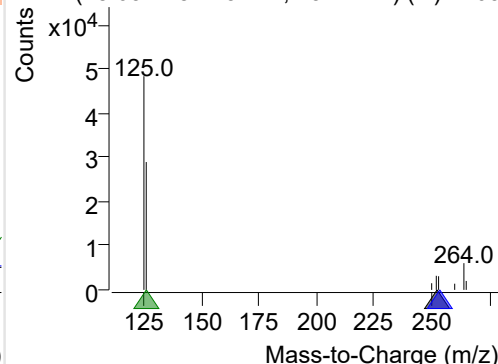
+ Selected Ion (252.0) 220907-PAHs-019.D



252.0, 253.0, 126.0



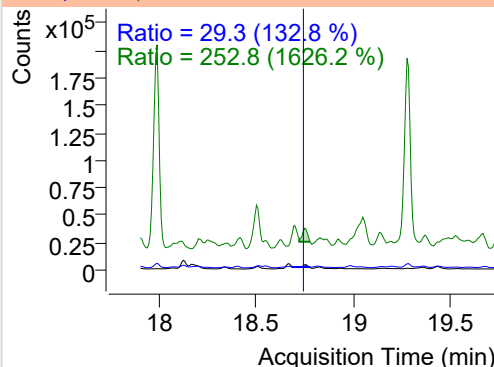
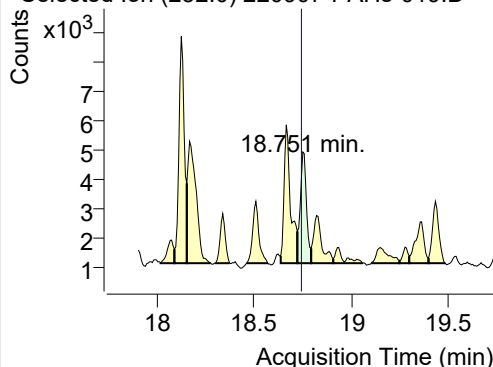
+ SIM (18.637-18.723 min, 13 scans) (\*\*) 2209



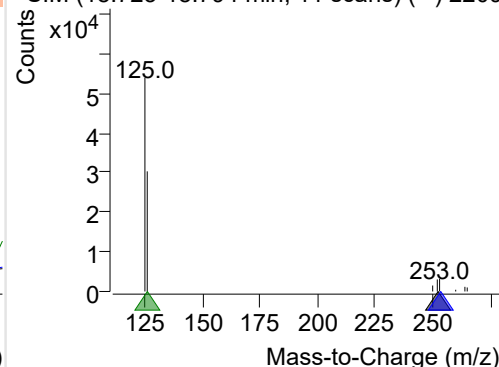
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-019.D

252.0, 253.0, 126.0

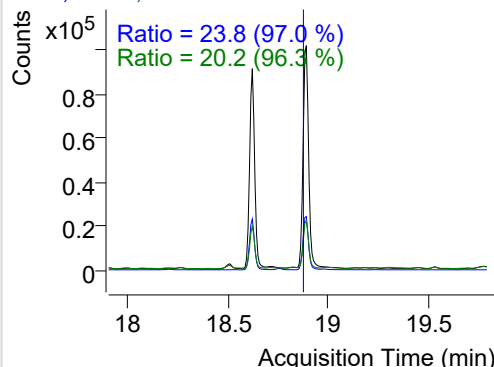
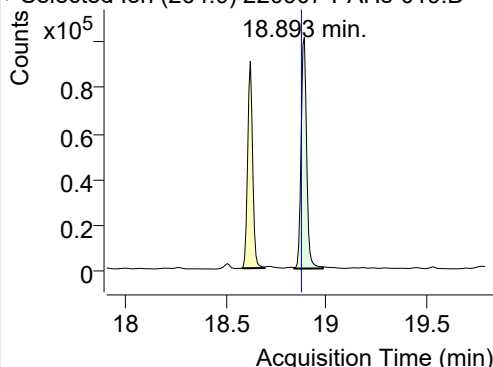


+ SIM (18.723-18.794 min, 11 scans) (\*\*) 2209

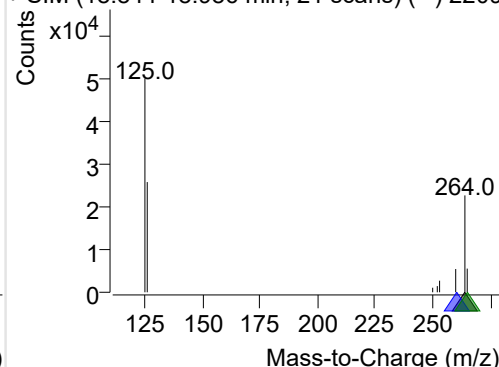
**IS-D12-Perylene**

+ Selected Ion (264.0) 220907-PAHs-019.D

264.0, 260.0, 265.0

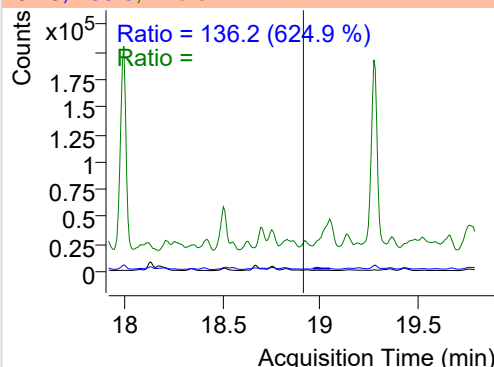
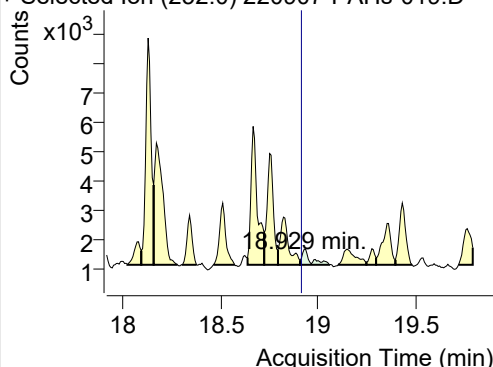


+ SIM (18.844-18.986 min, 21 scans) (\*\*) 2209

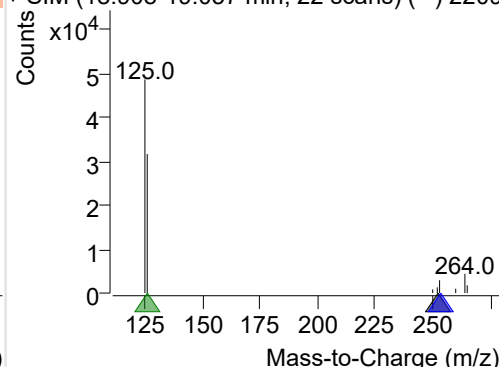
**Perylene**

+ Selected Ion (252.0) 220907-PAHs-019.D

252.0, 253.0, 126.0

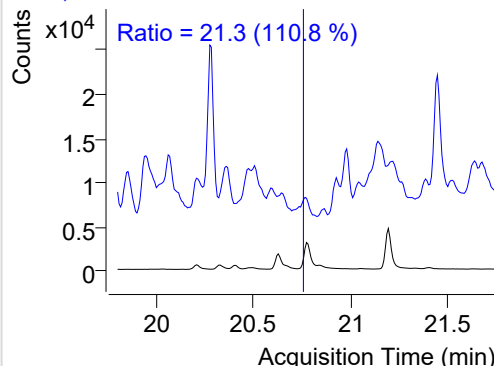
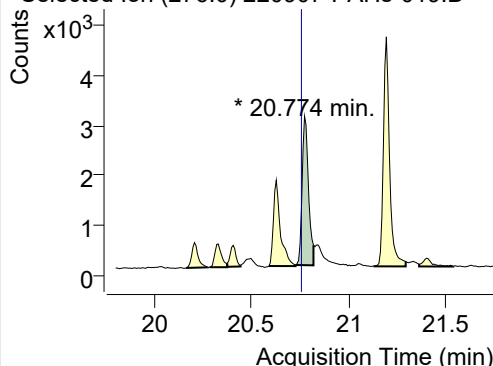


+ SIM (18.908-19.057 min, 22 scans) (\*\*) 2209

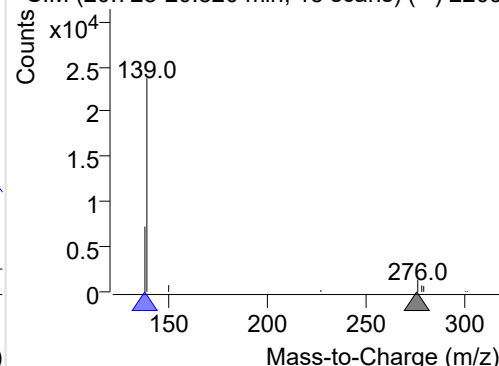
**Indeno(1,2,3-c,d)pyrene**

+ Selected Ion (276.0) 220907-PAHs-019.D

276.0, 138.0



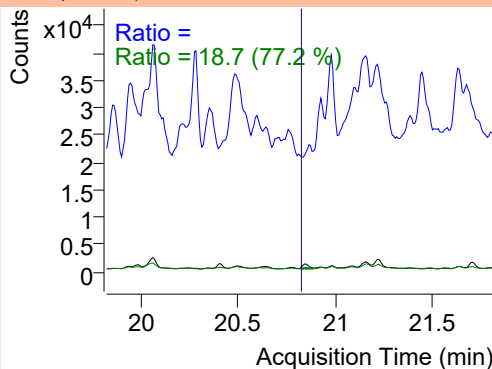
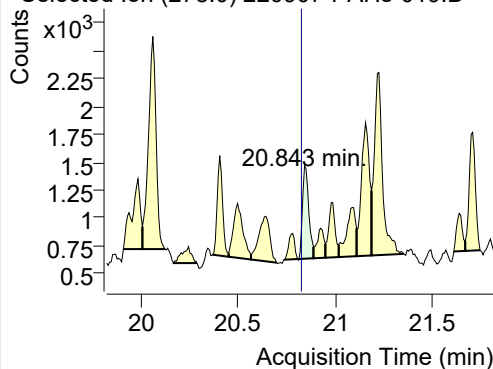
+ SIM (20.728-20.820 min, 13 scans) (\*\*) 2209



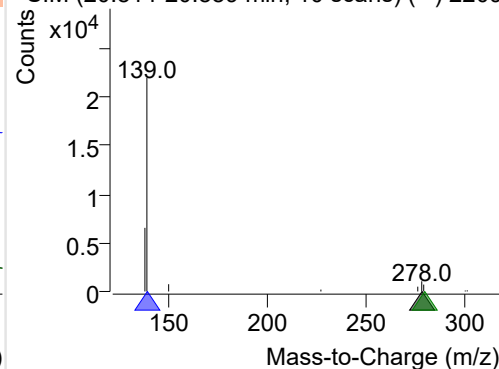
**Dibenz(a,h)anthracene**

+ Selected Ion (278.0) 220907-PAHs-019.D

278.0, 139.0, 279.0

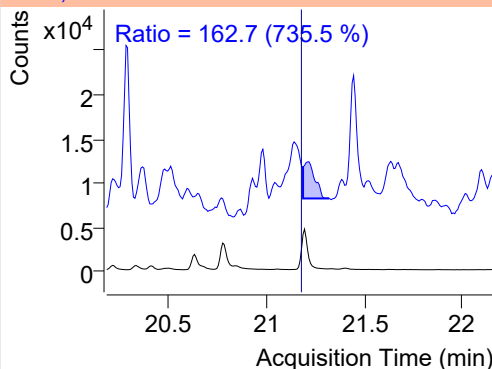
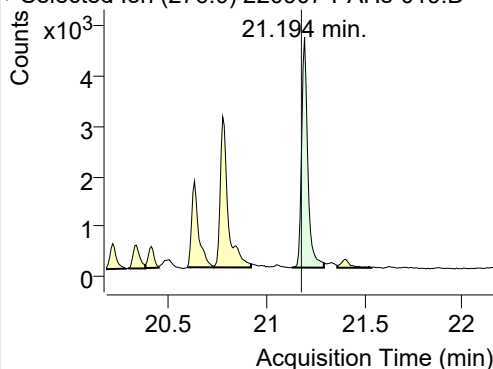


+ SIM (20.814-20.889 min, 10 scans) (\*\*) 2209

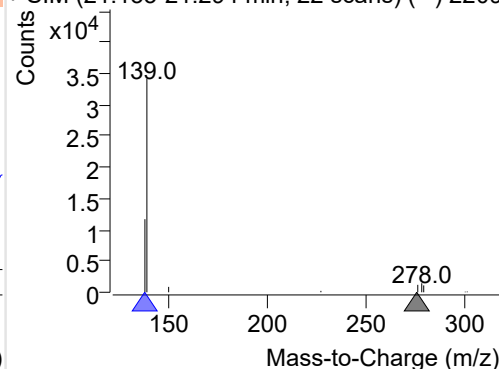
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-019.D

276.0, 138.0

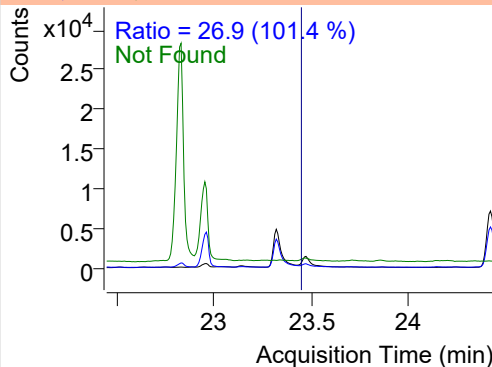
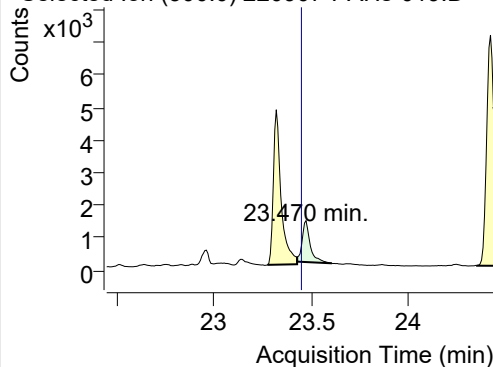


+ SIM (21.133-21.294 min, 22 scans) (\*\*) 2209

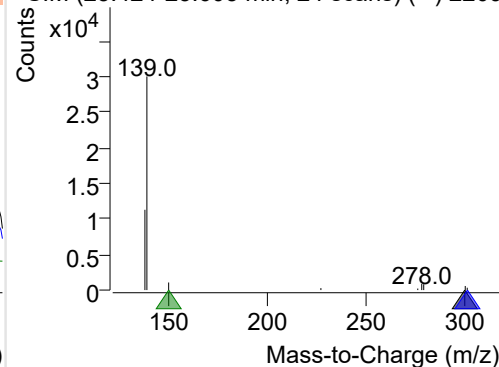
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-019.D

300.0, 301.0, 150.0



+ SIM (23.424-23.603 min, 24 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

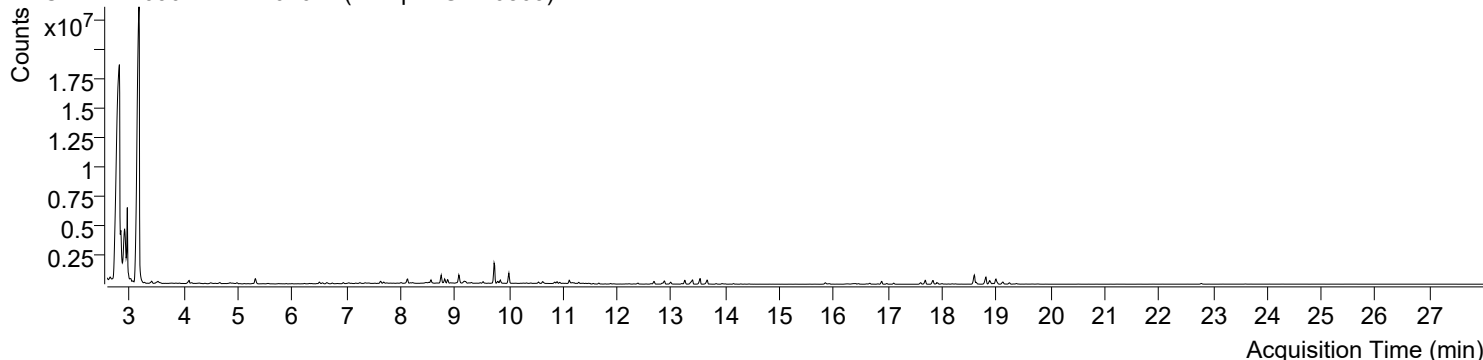


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 10:17:44	Data File	220907-PAHs-020.D
Type	Sample	Name	Sample-Gas-0809
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

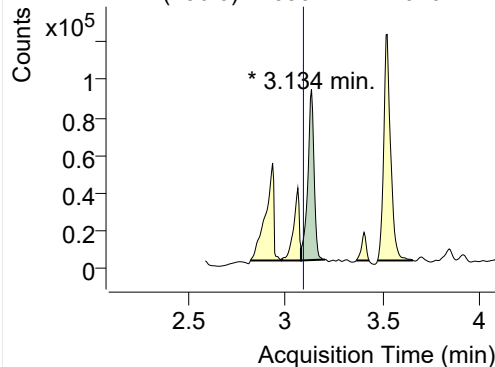
+ TIC SIM 220907-PAHs-020.D (Sample-Gas-0809)



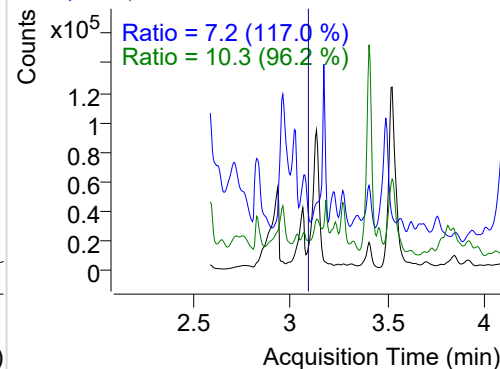
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.134	136.0	202750	90315.57	ND ng/ml	10.3
Naphthalene	3.151	128.0	36524052	8381303.58	ND ng/ml	28.1
Acenaphthylene	5.788	152.0	6841	4492.84	ND ng/ml	
IS-D10-Acenaphthene	6.504	164.0	129857	67211.36	ND ng/ml	93.2
Acenaphthene	6.564	154.0	39194	20595.04	ND ng/ml	113.9
LSS-D10-Fluorene	7.638	176.0	127575	70860.40	ND ng/ml	98.4
Fluorene	7.690	166.0	88494	50294.51	ND ng/ml	109.8
IS-D10-Phenanthrene	9.801	188.0	207073	125779.31	ND ng/ml	16.9
Phenanthrene	9.843	178.0	279430	175304.43	ND ng/ml	19.1
Anthracene	9.916	178.0	5182	2740.56	ND ng/ml	
Fluoranthene	12.537	202.0	10780	6536.01	ND ng/ml	17.7
LSS-D10-Pyrene	12.987	212.0	185781	113763.52	ND ng/ml	16.0
Pyrene	13.019	202.0	8253	5713.19	ND ng/ml	
Benz(a)anthracene	15.816	228.0	1950	546.53	ND ng/ml	40.5
IS-D12-Chrysene	15.843	240.0	166157	87081.47	ND ng/ml	19.6
Chrysene	15.898	228.0	4132	1102.07	ND ng/ml	39.9
Benzo(b)fluoranthene	18.117	252.0	1438	530.67	ND ng/ml	112.8
Benzo(k)fluoranthene	18.117	252.0	1438	530.67	ND ng/ml	112.8
SS-D12-Benzo(e)pyrene	18.630	264.0	146911	97466.81	ND ng/ml	28.5
Benzo(e)pyrene	18.637	252.0	2938	1979.42	ND ng/ml	27.5
Benzo(a)pyrene	18.672	252.0	4413	2261.34	ND ng/ml	35.4
IS-D12-Perylene	18.879	264.0	176872	135440.10	ND ng/ml	23.9
Perylene	18.872	252.0	21265	11907.13	ND ng/ml	13.0
Indeno(1,2,3-c,d)pyrene	20.759	276.0	706	259.54	ND ng/ml	
Dibenz(a,h)anthracene	20.835	278.0	819	318.68	ND ng/ml	
Benzo(g,h,i)perylene	21.171	276.0	1432	437.45	ND ng/ml	
Coronene	23.439	300.0	393	168.55	ND ng/ml	

## IS-D8-Naphthalene

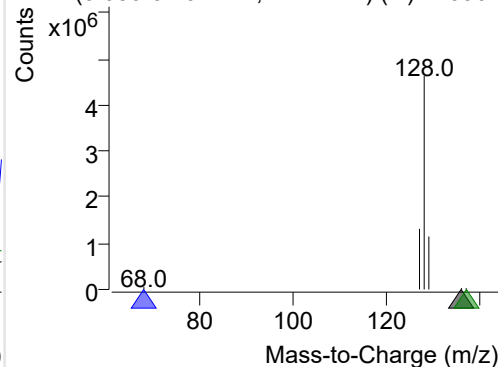
+ Selected Ion (136.0) 220907-PAHs-020.D



136.0, 68.0, 137.0

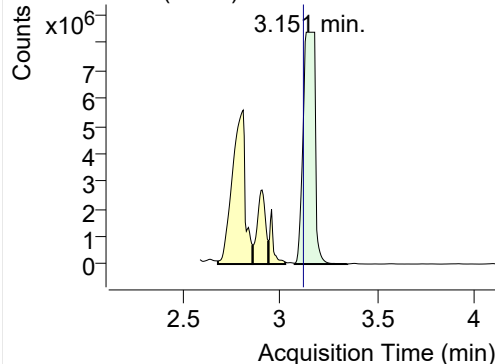


+ SIM (3.080-3.204 min, 24 scans) (\*\*) 220907

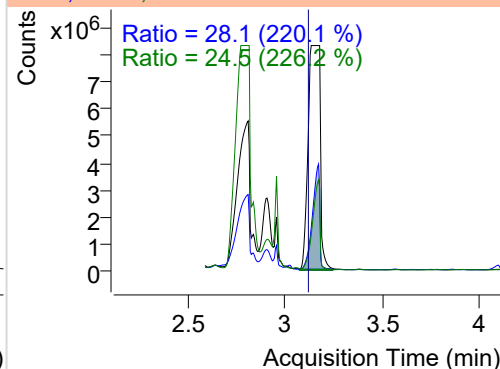


## Naphthalene

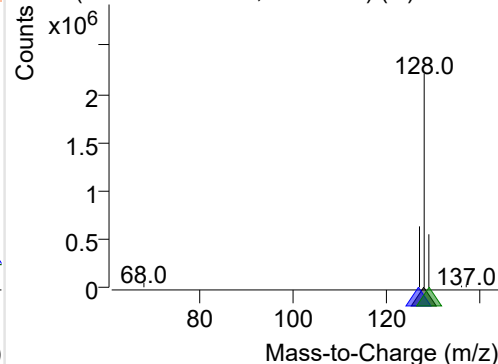
+ Selected Ion (128.0) 220907-PAHs-020.D



128.0, 127.0, 129.0

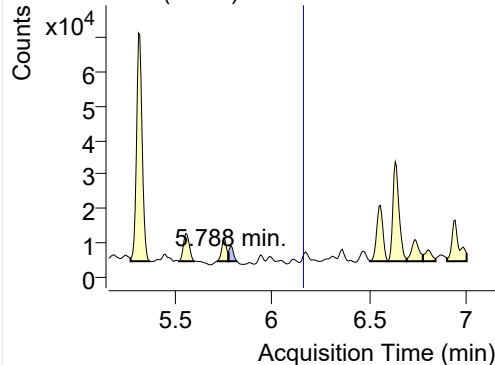


+ SIM (3.074-3.345 min, 51 scans) (\*\*) 220907

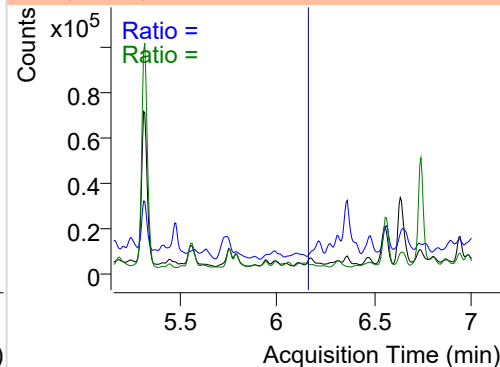


## Acenaphthylene

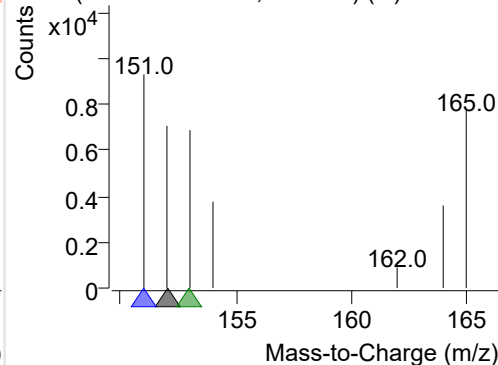
+ Selected Ion (152.0) 220907-PAHs-020.D



152.0, 151.0, 153.0

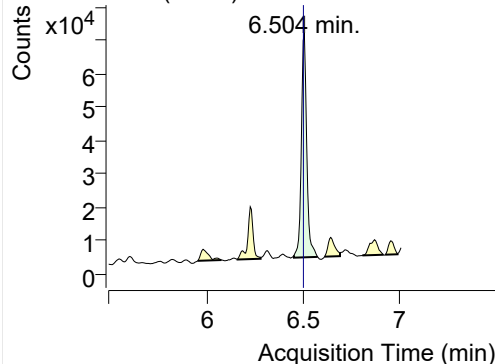


+ SIM (5.776-5.821 min, 8 scans) (\*\*) 220907-I

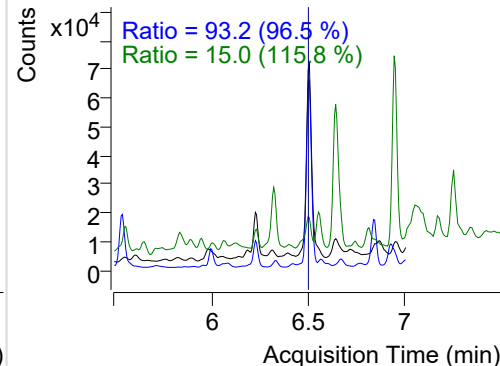


## IS-D10-Acenaphthene

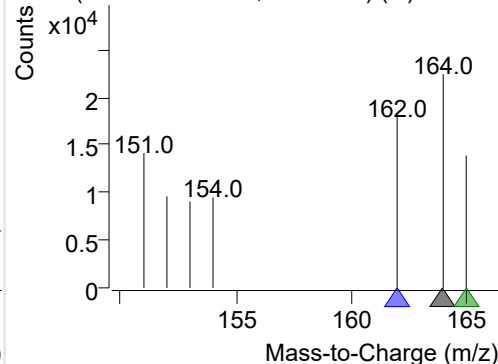
+ Selected Ion (164.0) 220907-PAHs-020.D



164.0, 162.0, 165.0

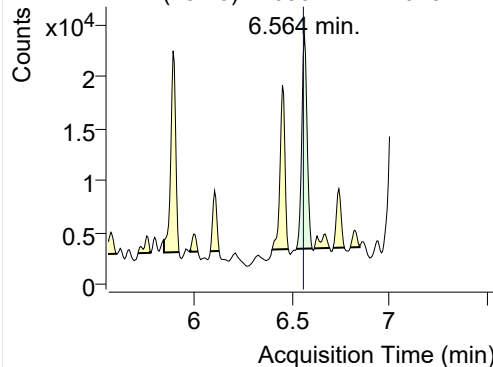


+ SIM (6.451-6.573 min, 21 scans) (\*\*) 220907

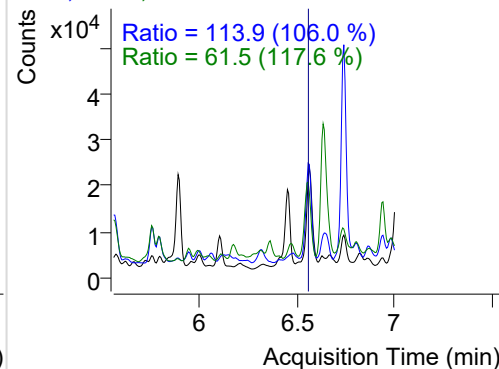


**Acenaphthene**

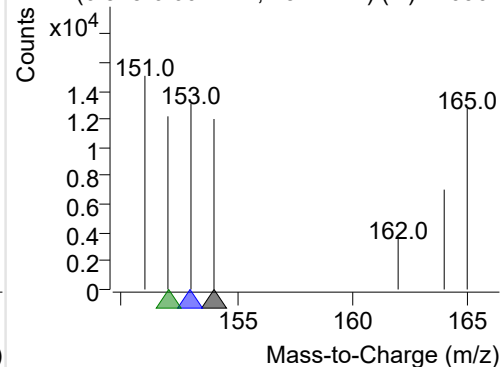
+ Selected Ion (154.0) 220907-PAHs-020.D



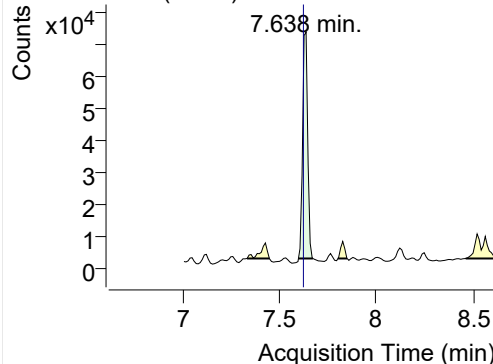
154.0, 153.0, 152.0



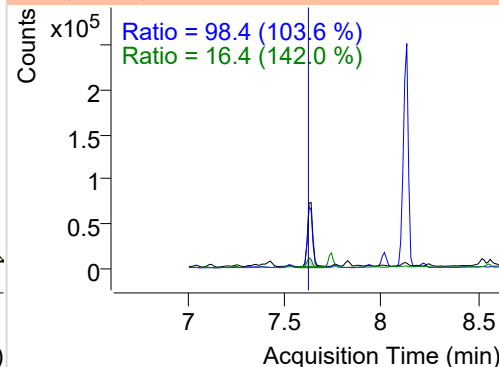
+ SIM (6.523-6.604 min, 13 scans) (\*\*) 220907

**LSS-D10-Fluorene**

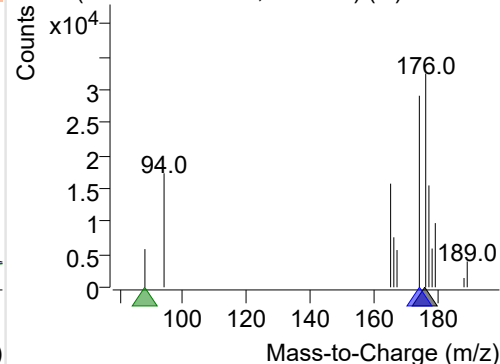
+ Selected Ion (176.0) 220907-PAHs-020.D



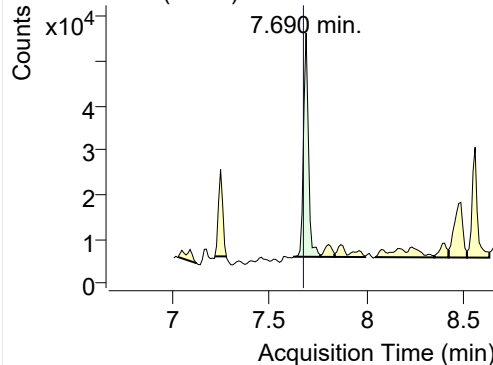
176.0, 174.0, 88.0



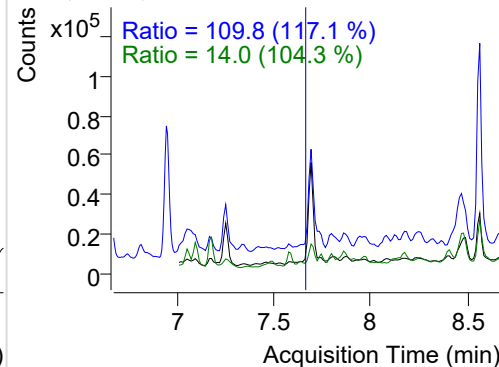
+ SIM (7.598-7.673 min, 7 scans) (\*\*) 220907-I

**Fluorene**

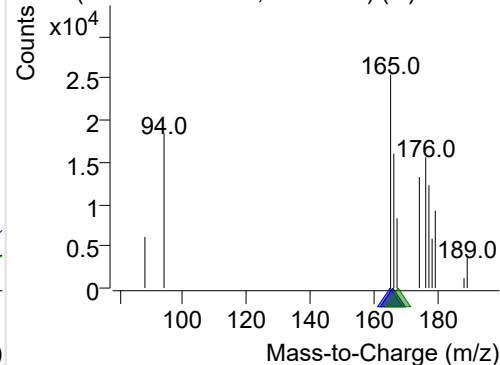
+ Selected Ion (166.0) 220907-PAHs-020.D



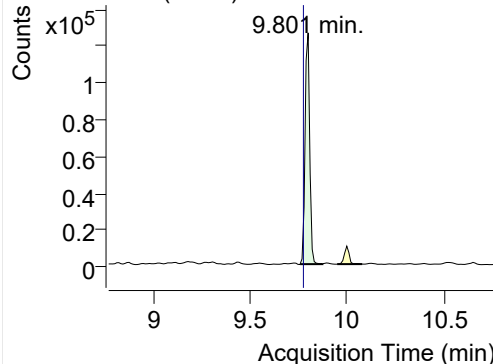
166.0, 165.0, 167.0



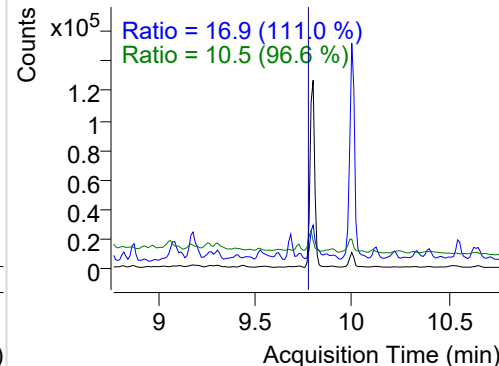
+ SIM (7.627-7.764 min, 14 scans) (\*\*) 220907

**IS-D10-Phenanthrene**

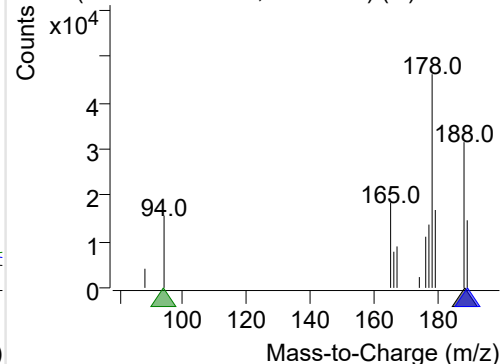
+ Selected Ion (188.0) 220907-PAHs-020.D



188.0, 189.0, 94.0

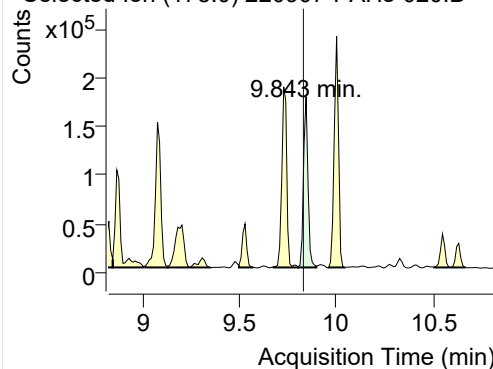


+ SIM (9.759-9.874 min, 11 scans) (\*\*) 220907

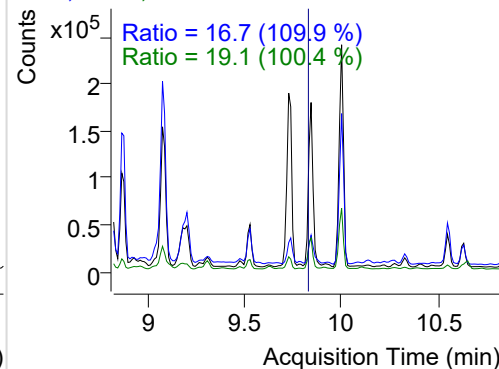


**Phenanthrene**

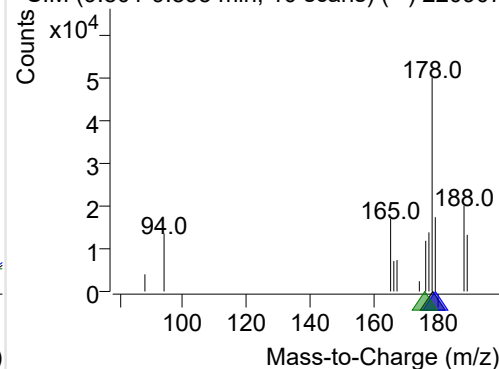
+ Selected Ion (178.0) 220907-PAHs-020.D



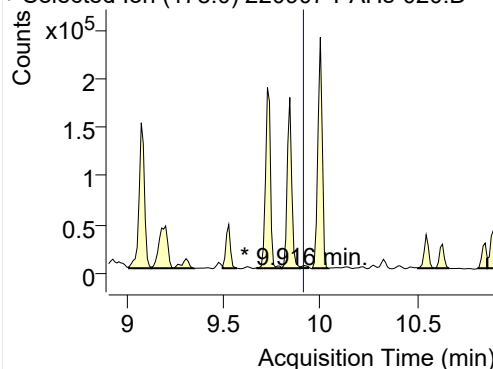
178.0, 179.0, 176.0



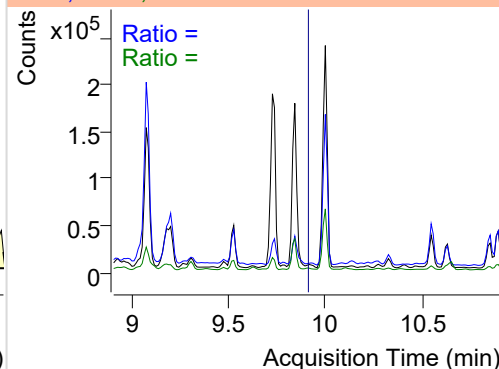
+ SIM (9.801-9.895 min, 10 scans) (\*\*) 220907

**Anthracene**

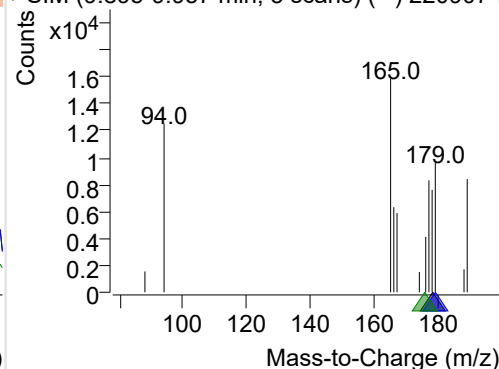
+ Selected Ion (178.0) 220907-PAHs-020.D



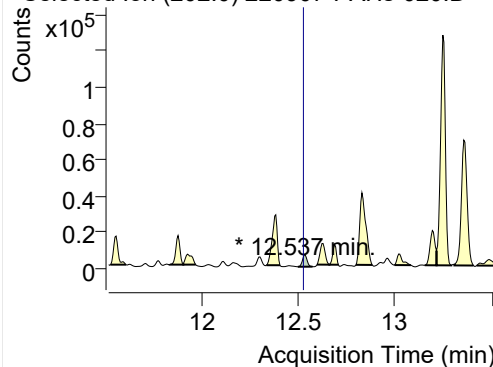
178.0, 179.0, 176.0



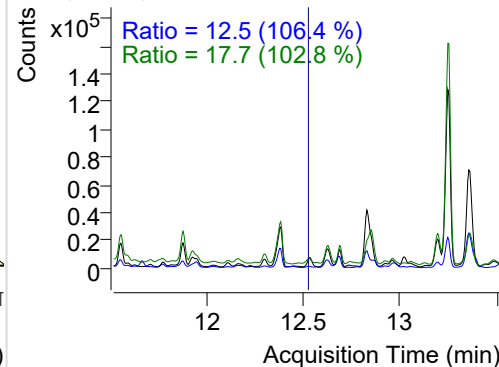
+ SIM (9.895-9.937 min, 5 scans) (\*\*) 220907-I

**Fluoranthene**

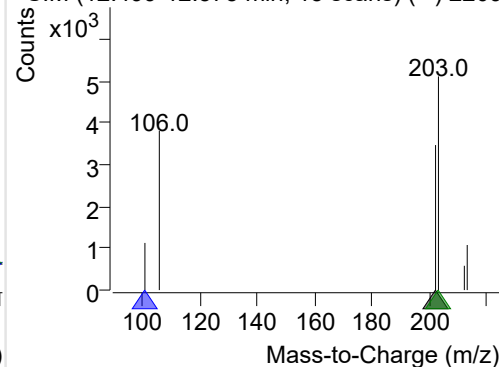
+ Selected Ion (202.0) 220907-PAHs-020.D



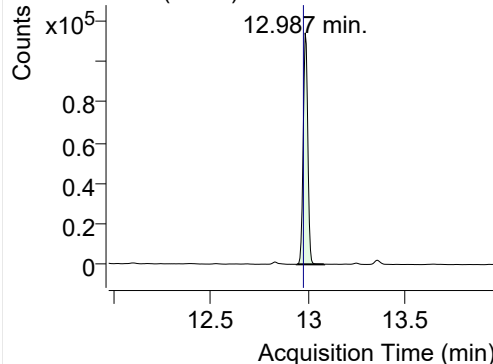
202.0, 101.0, 203.0



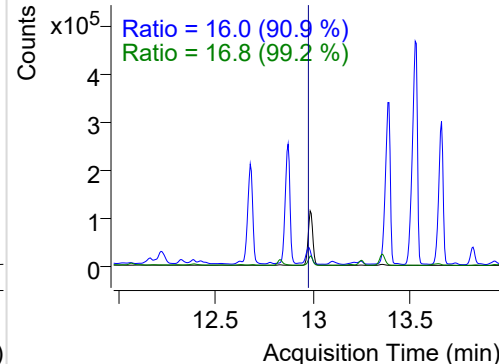
+ SIM (12.499-12.575 min, 15 scans) (\*\*) 2209

**LSS-D10-Pyrene**

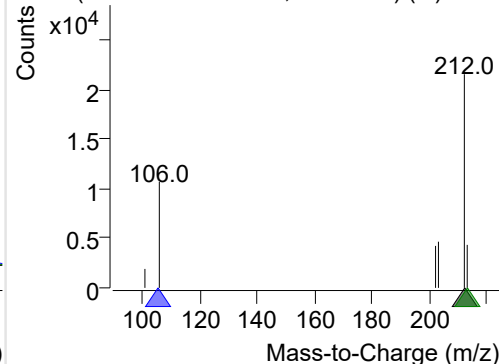
+ Selected Ion (212.0) 220907-PAHs-020.D



212.0, 106.0, 213.0



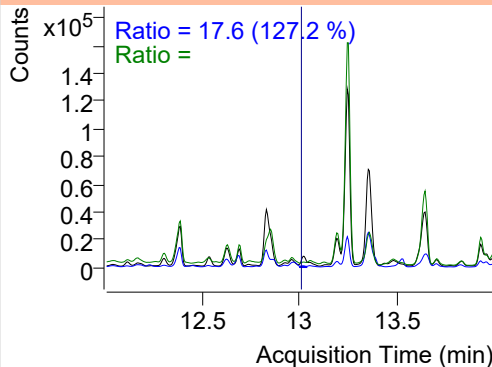
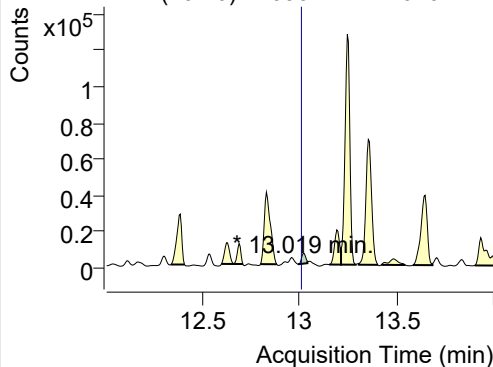
+ SIM (12.943-13.084 min, 27 scans) (\*\*) 2209



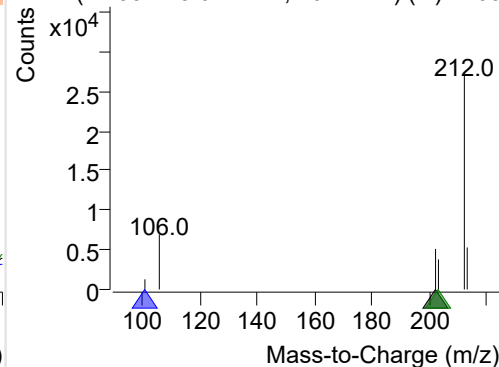
**Pyrene**

+ Selected Ion (202.0) 220907-PAHs-020.D

202.0, 101.0, 203.0

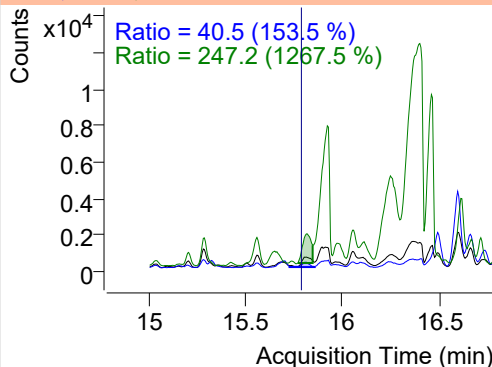
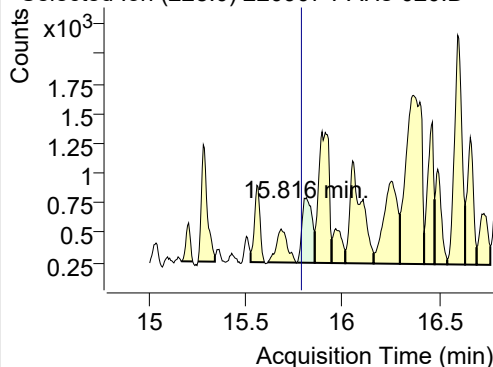


+ SIM (12.992-13.041 min, 10 scans) (\*\*) 2209

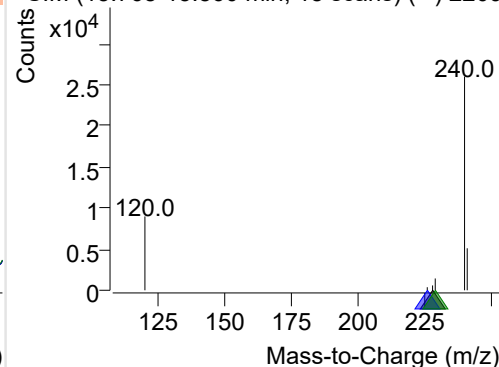
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-020.D

228.0, 226.0, 229.0

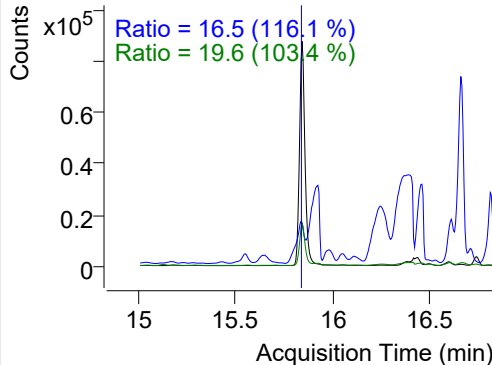
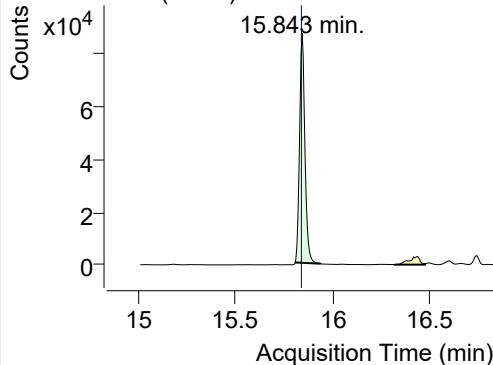


+ SIM (15.768-15.860 min, 18 scans) (\*\*) 2209

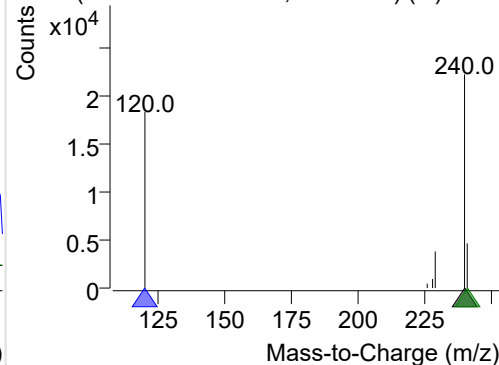
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-020.D

240.0, 120.0, 241.0

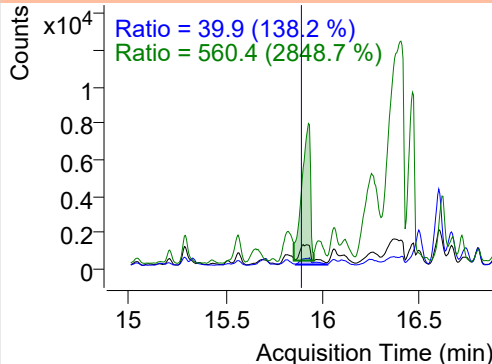
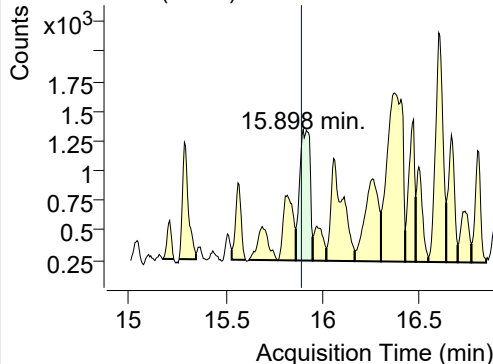


+ SIM (15.807-15.940 min, 24 scans) (\*\*) 2209

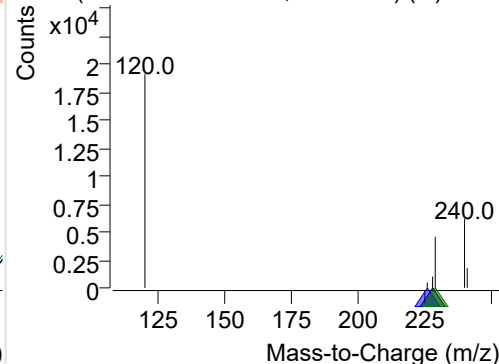
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-020.D

228.0, 226.0, 229.0



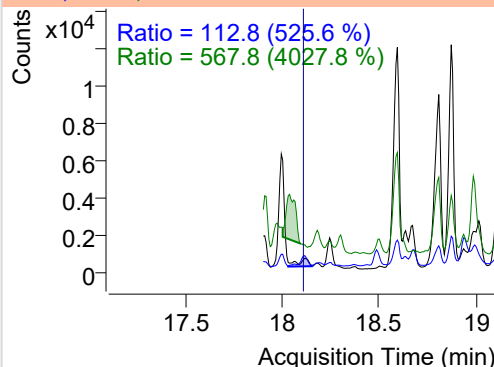
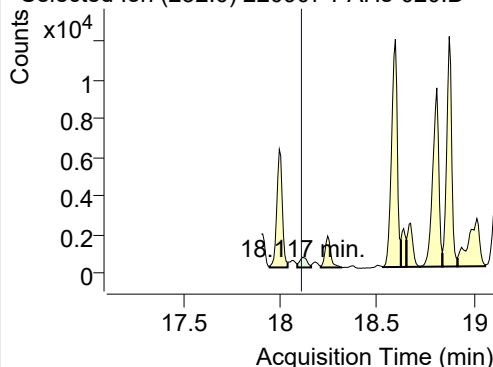
+ SIM (15.860-15.946 min, 17 scans) (\*\*) 2209



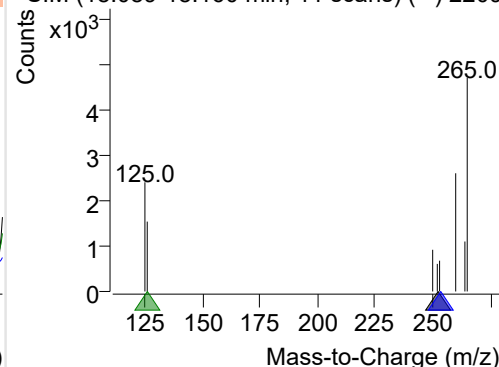
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-020.D

252.0, 253.0, 126.0

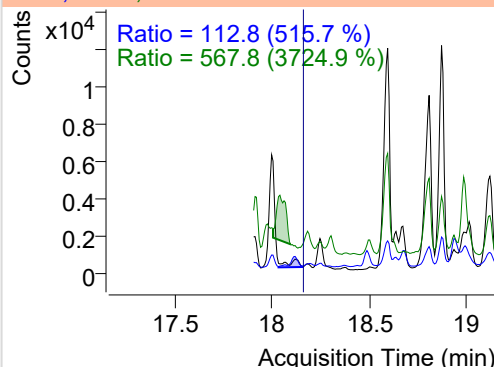
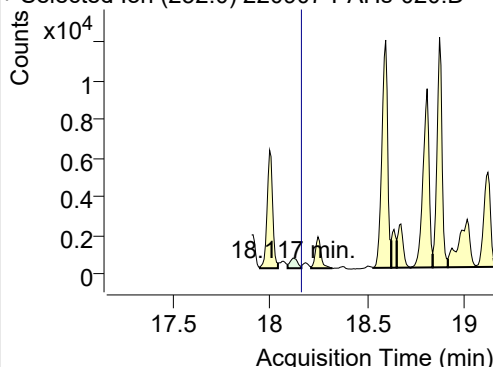


+ SIM (18.089-18.160 min, 11 scans) (\*\*) 2209

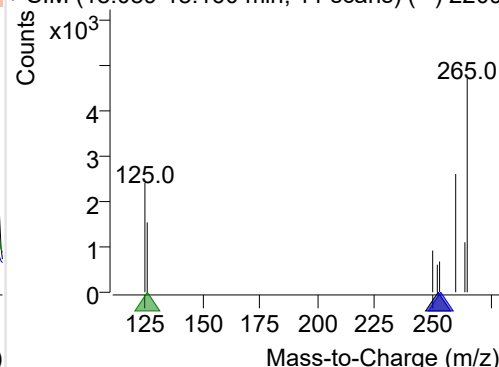
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-020.D

252.0, 253.0, 126.0

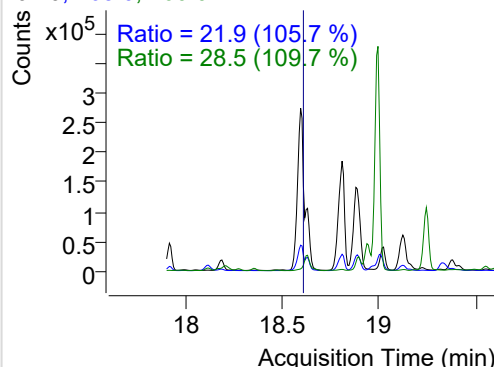
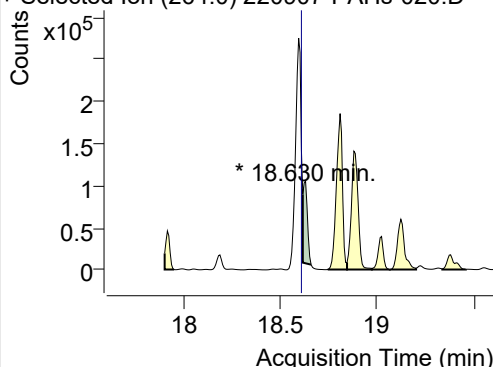


+ SIM (18.089-18.160 min, 11 scans) (\*\*) 2209

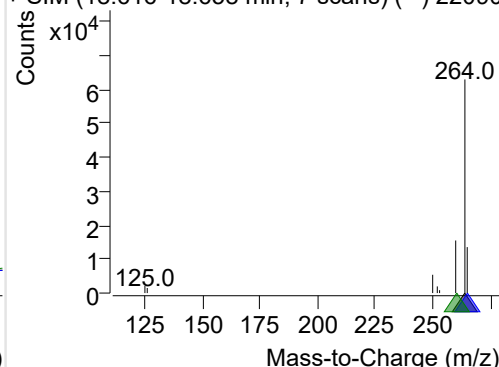
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-020.D

264.0, 265.0, 260.0

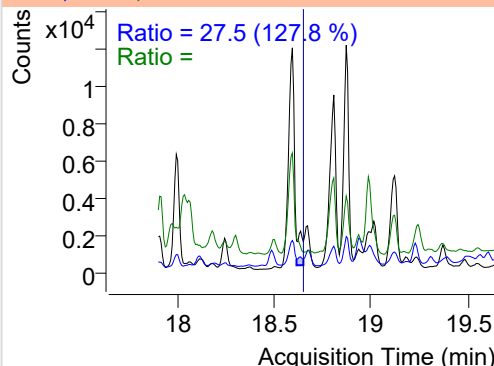
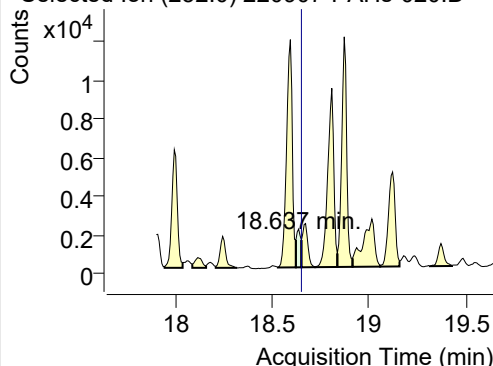


+ SIM (18.616-18.658 min, 7 scans) (\*\*) 22090

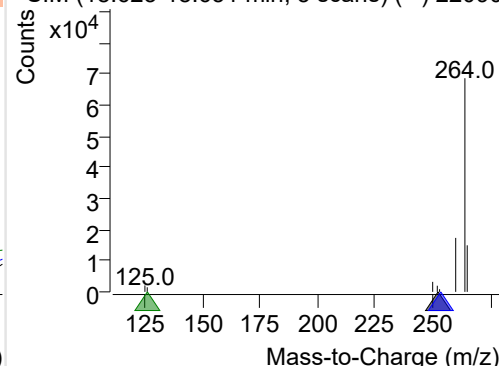
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-020.D

252.0, 253.0, 126.0



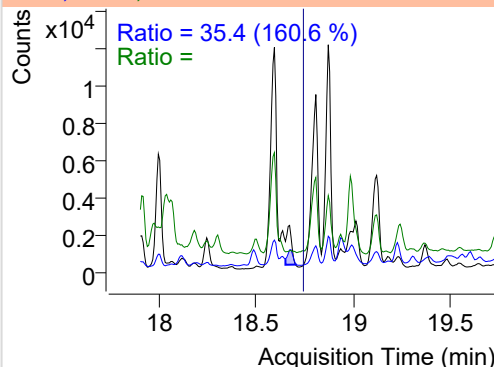
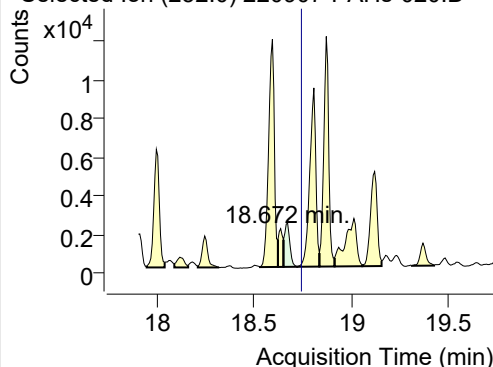
+ SIM (18.623-18.651 min, 5 scans) (\*\*) 22090



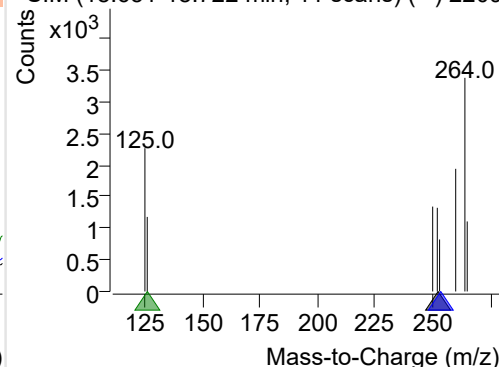
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-020.D

252.0, 253.0, 126.0

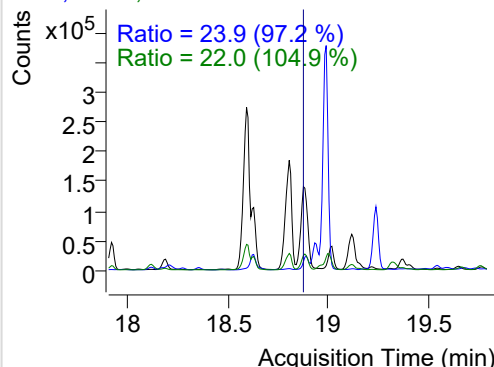
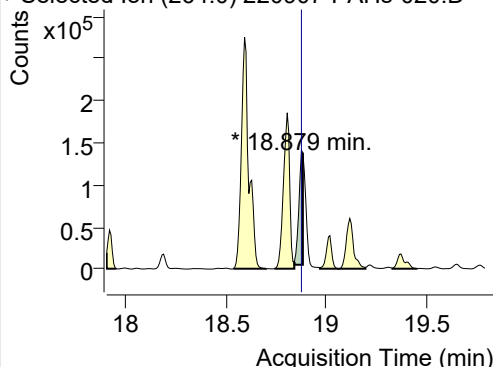


+ SIM (18.651-18.722 min, 11 scans) (\*\*) 2209

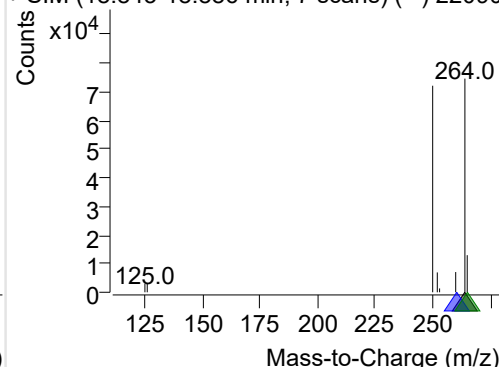
**IS-D12-Perylene**

+ Selected Ion (264.0) 220907-PAHs-020.D

264.0, 260.0, 265.0

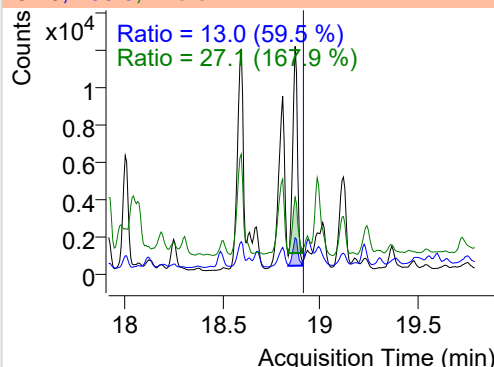
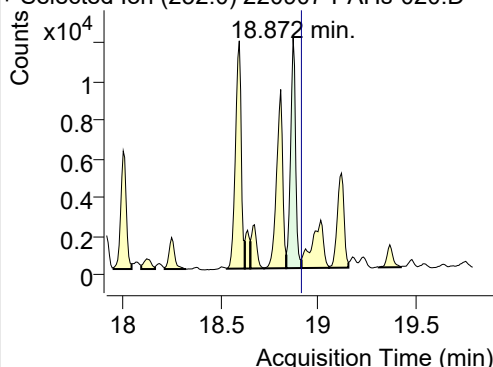


+ SIM (18.843-18.886 min, 7 scans) (\*\*) 22090

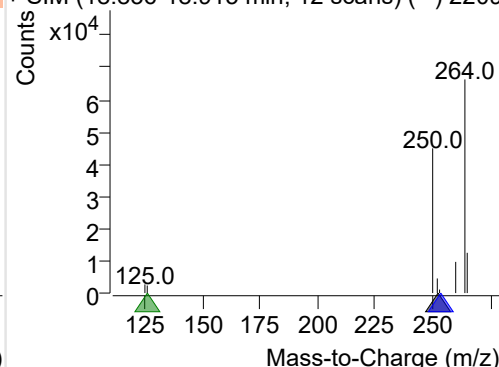
**Perylene**

+ Selected Ion (252.0) 220907-PAHs-020.D

252.0, 253.0, 126.0

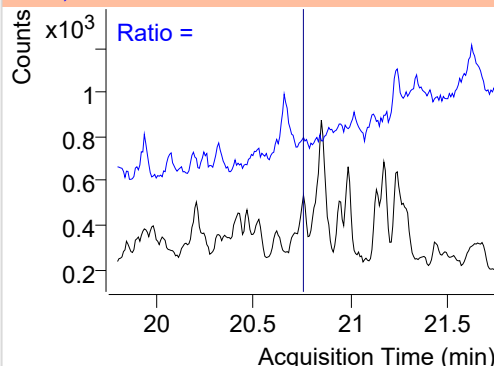
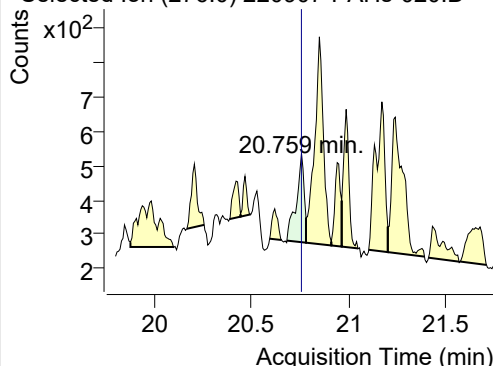


+ SIM (18.836-18.915 min, 12 scans) (\*\*) 2209

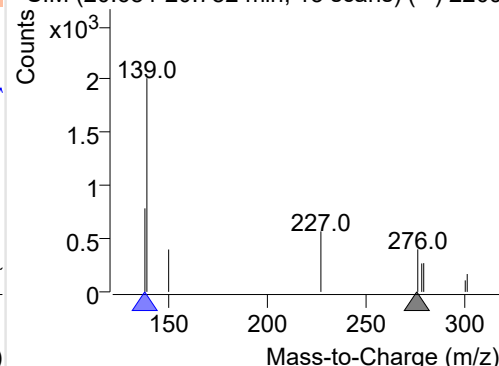
**Indeno(1,2,3-c,d)pyrene**

+ Selected Ion (276.0) 220907-PAHs-020.D

276.0, 138.0



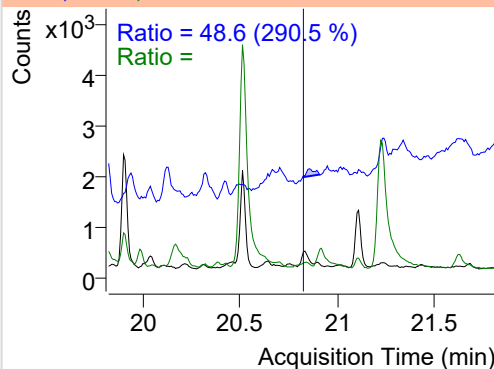
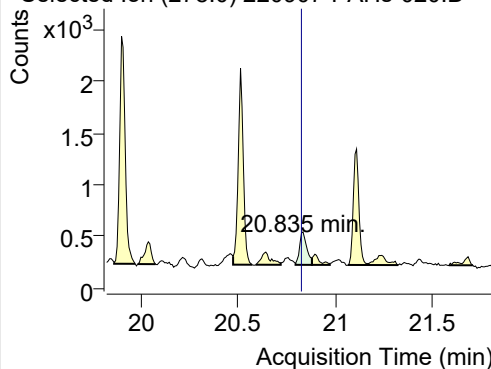
+ SIM (20.684-20.782 min, 13 scans) (\*\*) 2209



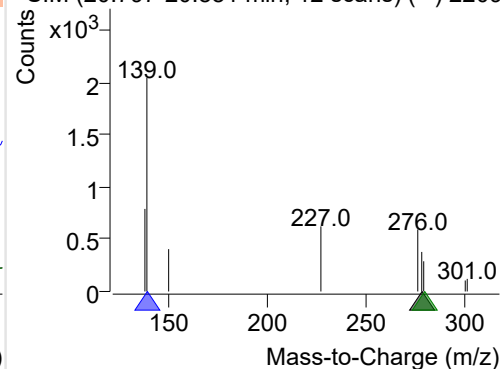
**Dibenz(a,h)anthracene**

+ Selected Ion (278.0) 220907-PAHs-020.D

278.0, 139.0, 279.0

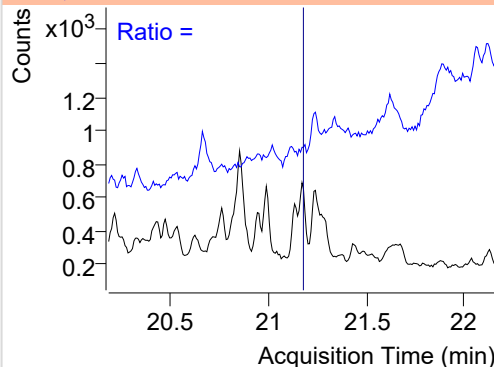
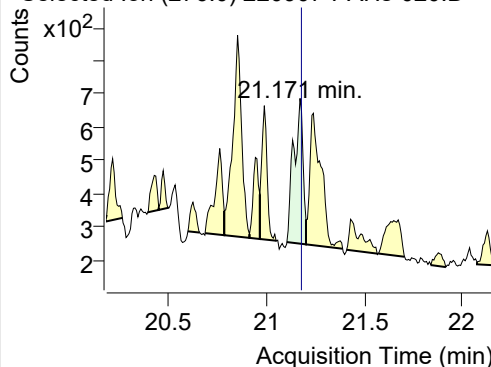


+ SIM (20.797-20.881 min, 12 scans) (\*\*) 2209

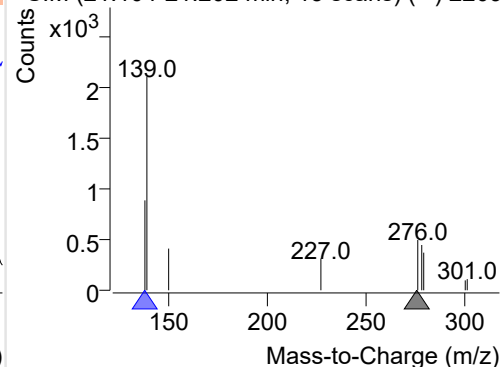
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-020.D

276.0, 138.0

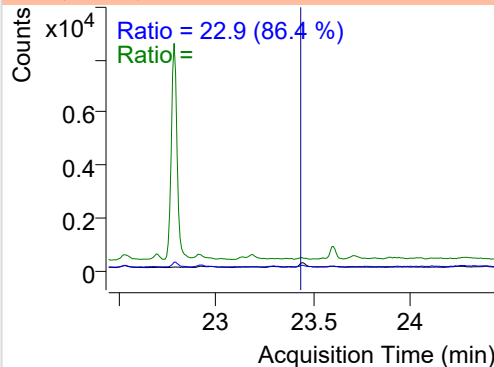
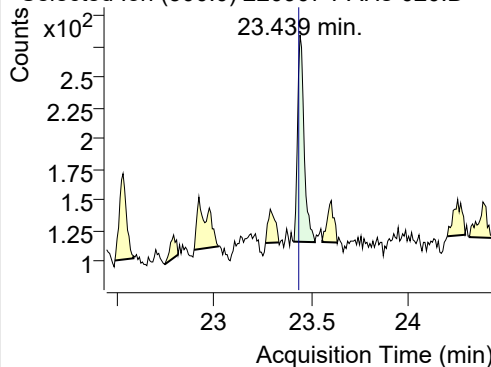


+ SIM (21.104-21.202 min, 13 scans) (\*\*) 2209

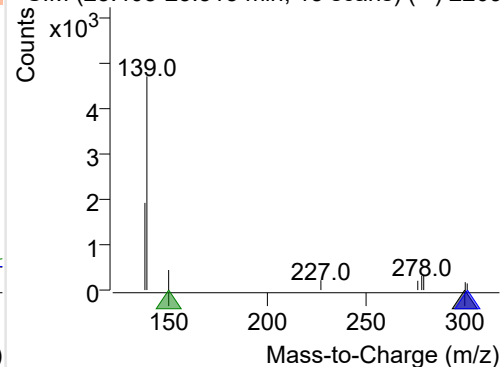
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-020.D

300.0, 301.0, 150.0



+ SIM (23.408-23.515 min, 15 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

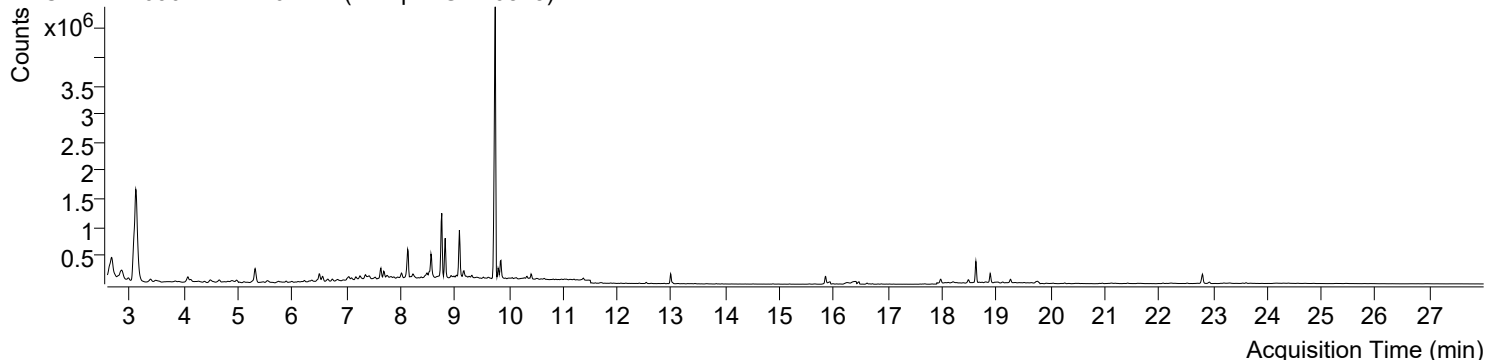


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 10:48:49	Data File	220907-PAHs-021.D
Type	Sample	Name	Sample-Gas-0815
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

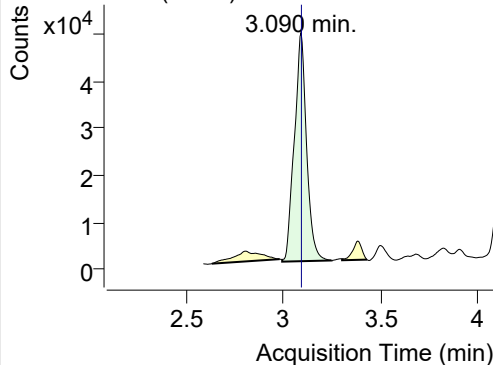
+ TIC SIM 220907-PAHs-021.D (Sample-Gas-0815)



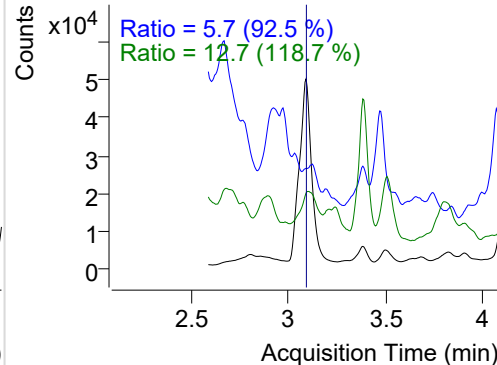
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.090	136.0	211726	48465.84	ND ng/ml	12.7
Naphthalene	3.112	128.0	5475117	1273683.67	ND ng/ml	13.8
Acenaphthylene	6.173	152.0	12901	5676.54	ND ng/ml	84.0
IS-D10-Acenaphthene	6.499	164.0	137512	59938.00	ND ng/ml	113.9
Acenaphthene	6.564	154.0	58771	25138.73	ND ng/ml	87.4
LSS-D10-Fluorene	7.638	176.0	138073	73895.57	ND ng/ml	98.2
Fluorene	7.690	166.0	120135	58931.97	ND ng/ml	89.2
IS-D10-Phenanthrene	9.801	188.0	239401	143252.67	ND ng/ml	17.2
Phenanthrene	9.853	178.0	365120	200535.33	ND ng/ml	19.5
Anthracene	9.948	178.0	5517	3791.46	ND ng/ml	135.3
Fluoranthene	12.537	202.0	20593	12902.76	ND ng/ml	19.6
LSS-D10-Pyrene	12.987	212.0	203795	130744.66	ND ng/ml	16.7
Pyrene	13.019	202.0	27267	16231.66	ND ng/ml	16.9
Benz(a)anthracene	15.844	228.0	1308	413.63	ND ng/ml	41.2
IS-D12-Chrysene	15.849	240.0	192847	99199.45	ND ng/ml	18.9
Chrysene	15.903	228.0	2221	963.71	ND ng/ml	
Benzo(b)fluoranthene	18.110	252.0	1122	516.95	ND ng/ml	64.0
Benzo(k)fluoranthene	18.188	252.0	2008	831.96	ND ng/ml	48.4
SS-D12-Benzo(e)pyrene	18.623	264.0	307282	253518.78	ND ng/ml	36.1
Benzo(e)pyrene	18.623	252.0	1976	1085.56	ND ng/ml	30.3
Benzo(a)pyrene	18.737	252.0	1010	434.02	ND ng/ml	60.2
IS-D12-Perylene	18.886	264.0	202370	113137.96	ND ng/ml	23.9
Perylene	18.886	252.0	1600	423.95	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	20.767	276.0	297	110.12	ND ng/ml	
Dibenz(a,h)anthracene	20.644	278.0	267	122.41	ND ng/ml	
Benzo(g,h,i)perylene	21.179	276.0	476	127.79	ND ng/ml	602.2
Coronene	23.447	300.0	212	82.82	ND ng/ml	

## IS-D8-Naphthalene

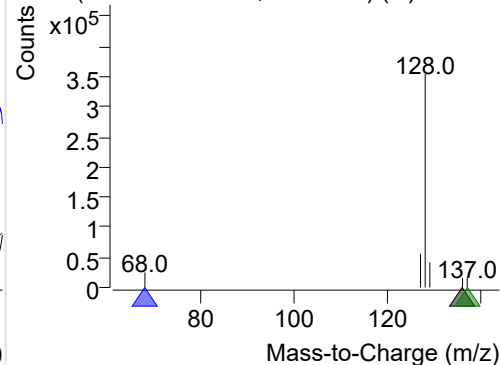
+ Selected Ion (136.0) 220907-PAHs-021.D



136.0, 68.0, 137.0

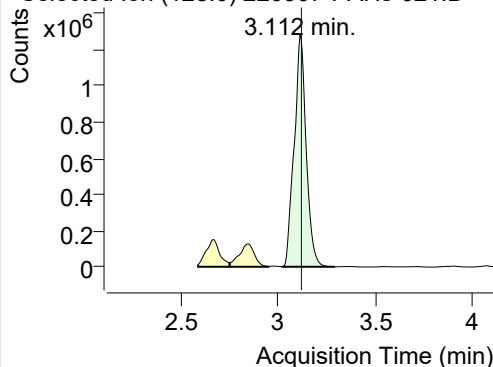


+ SIM (2.993-3.247 min, 48 scans) (\*\*) 220907

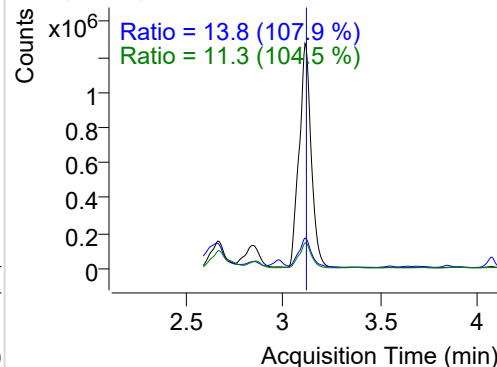


## Naphthalene

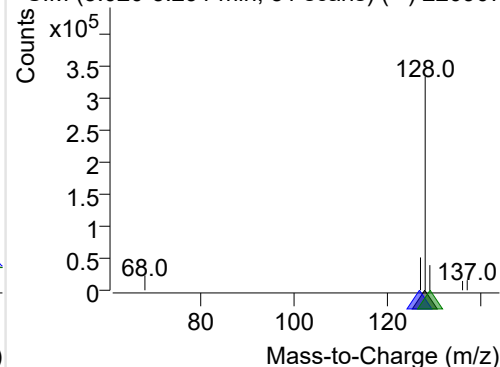
+ Selected Ion (128.0) 220907-PAHs-021.D



128.0, 127.0, 129.0

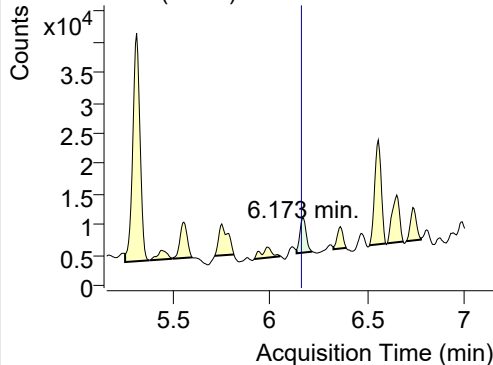


+ SIM (3.020-3.291 min, 51 scans) (\*\*) 220907

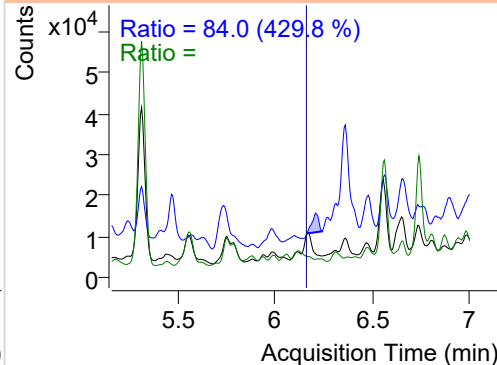


## Acenaphthylene

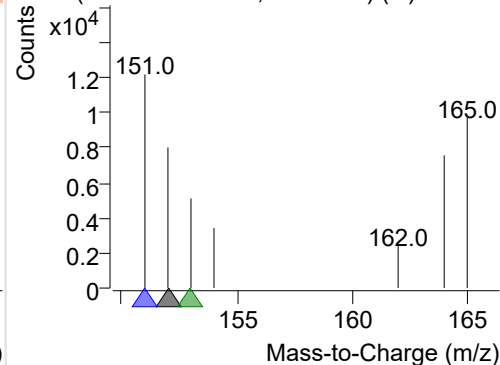
+ Selected Ion (152.0) 220907-PAHs-021.D



152.0, 151.0, 153.0

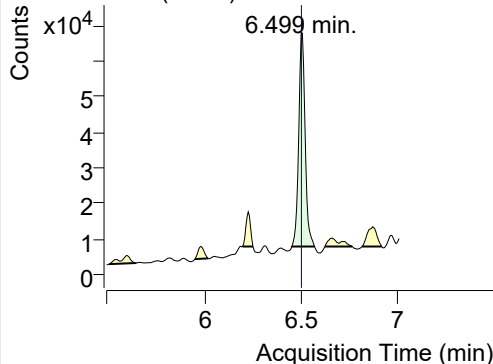


+ SIM (6.137-6.218 min, 14 scans) (\*\*) 220907

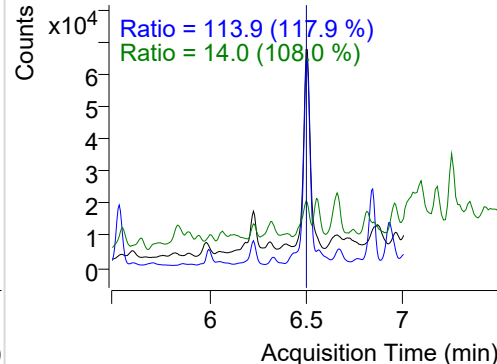


## IS-D10-Acenaphthene

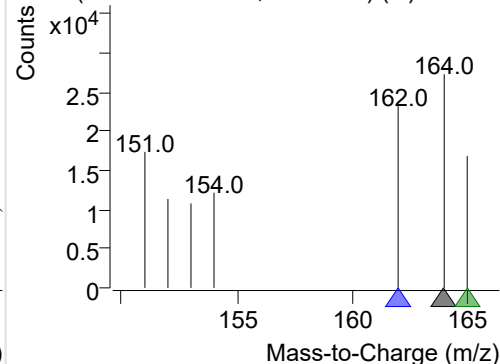
+ Selected Ion (164.0) 220907-PAHs-021.D



164.0, 162.0, 165.0

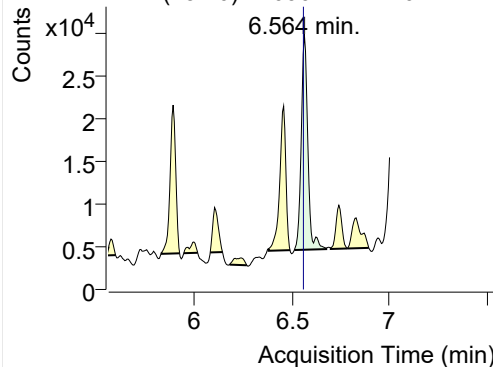


+ SIM (6.451-6.567 min, 20 scans) (\*\*) 220907

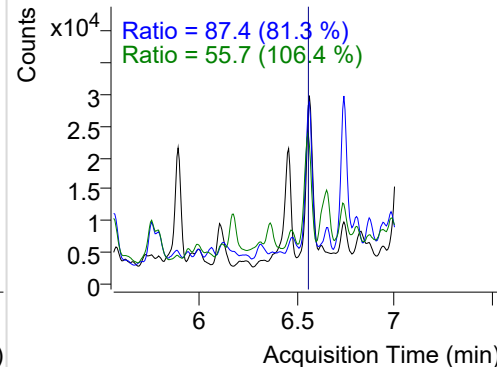


**Acenaphthene**

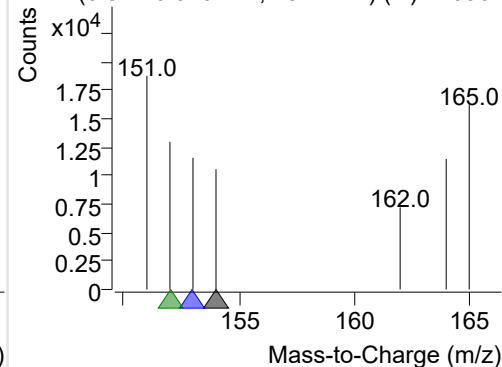
+ Selected Ion (154.0) 220907-PAHs-021.D



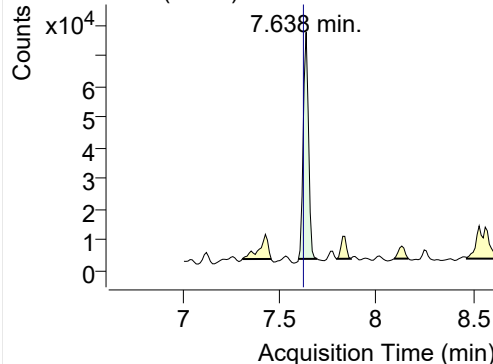
154.0, 153.0, 152.0



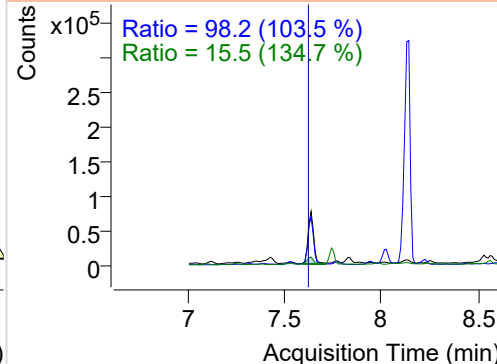
+ SIM (6.512-6.676 min, 28 scans) (\*\*) 220907

**LSS-D10-Fluorene**

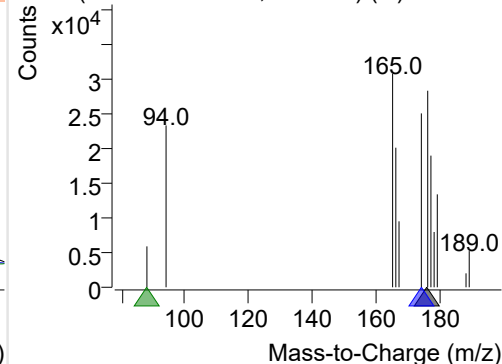
+ Selected Ion (176.0) 220907-PAHs-021.D



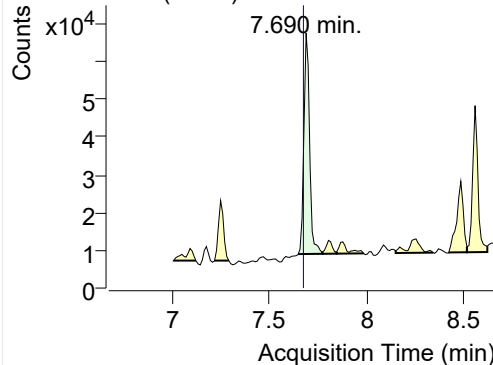
176.0, 174.0, 88.0



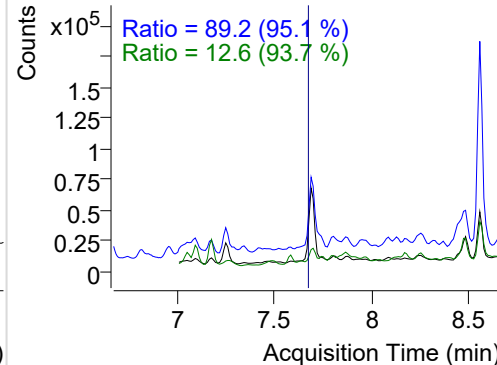
+ SIM (7.598-7.694 min, 9 scans) (\*\*) 220907-I

**Fluorene**

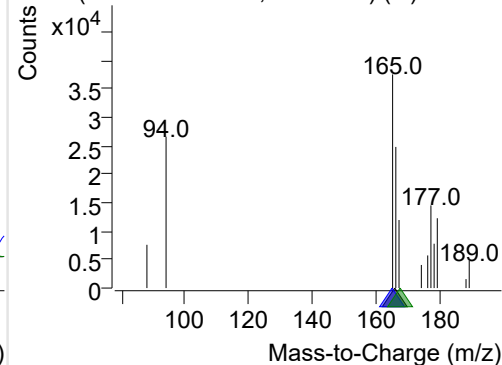
+ Selected Ion (166.0) 220907-PAHs-021.D



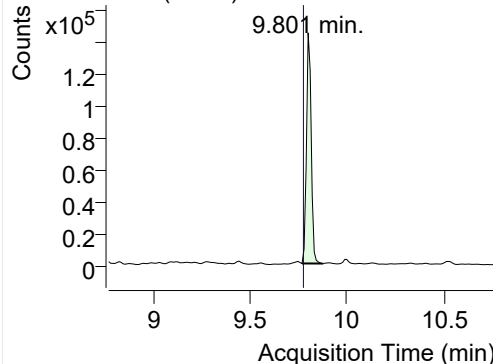
166.0, 165.0, 167.0



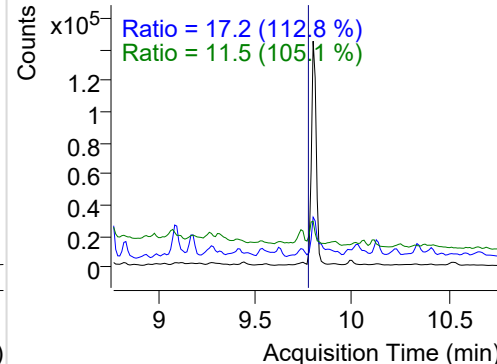
+ SIM (7.649-7.774 min, 12 scans) (\*\*) 220907

**IS-D10-Phenanthrene**

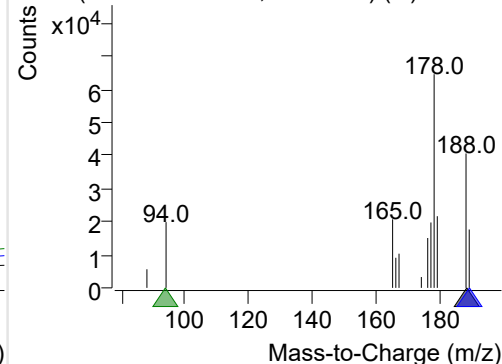
+ Selected Ion (188.0) 220907-PAHs-021.D



188.0, 189.0, 94.0

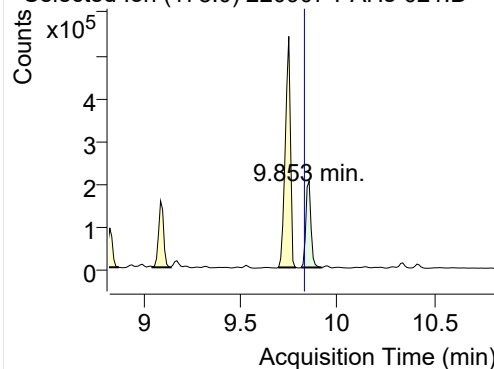


+ SIM (9.769-9.874 min, 10 scans) (\*\*) 220907

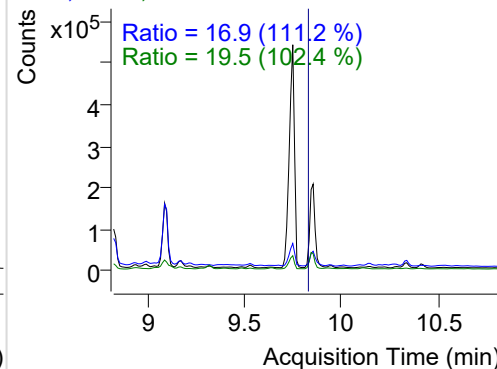


**Phenanthrene**

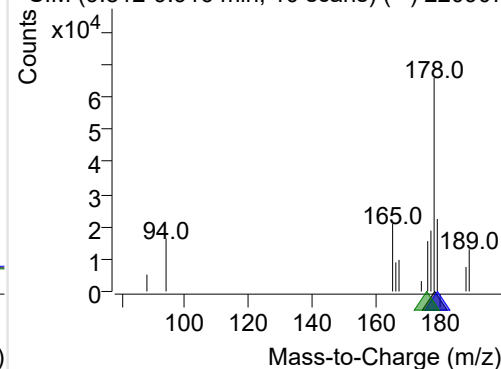
+ Selected Ion (178.0) 220907-PAHs-021.D



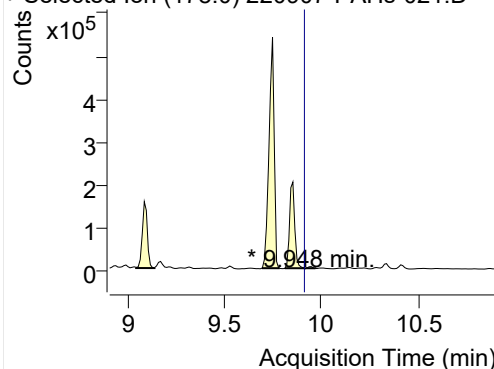
178.0, 179.0, 176.0



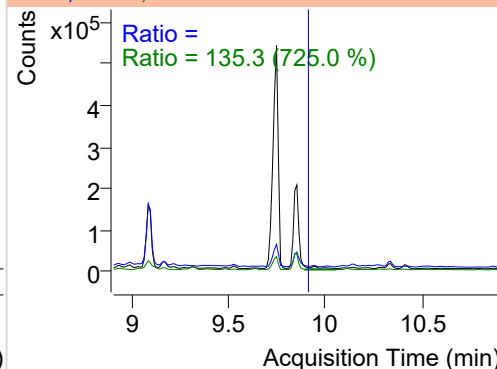
+ SIM (9.812-9.916 min, 10 scans) (\*\*) 220907

**Anthracene**

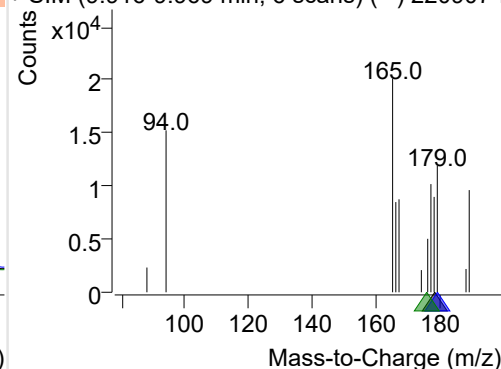
+ Selected Ion (178.0) 220907-PAHs-021.D



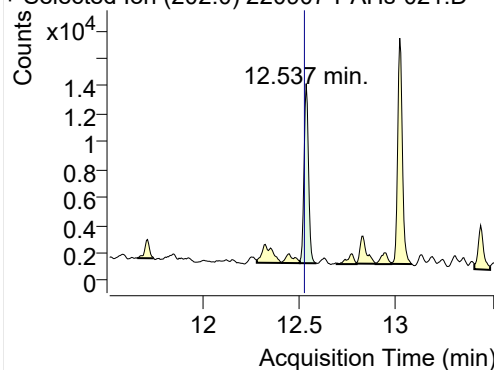
178.0, 179.0, 176.0



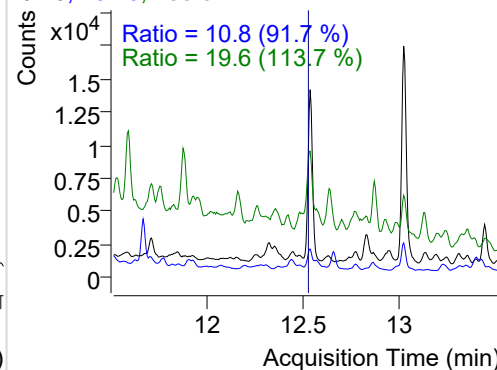
+ SIM (9.916-9.969 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

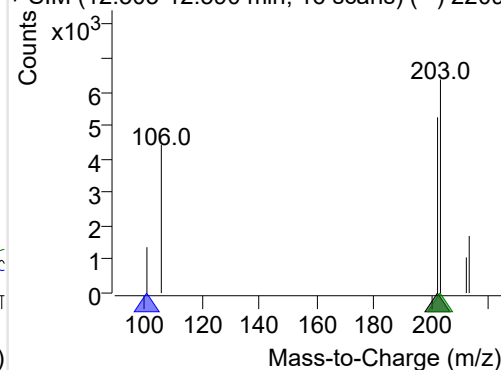
+ Selected Ion (202.0) 220907-PAHs-021.D



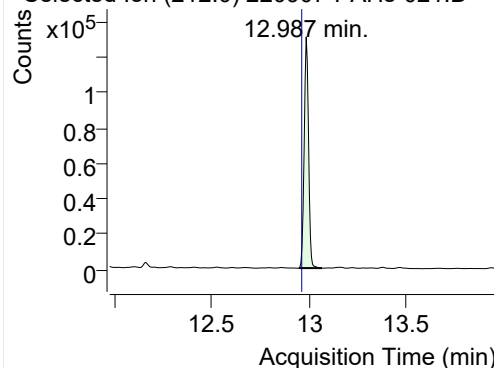
202.0, 101.0, 203.0



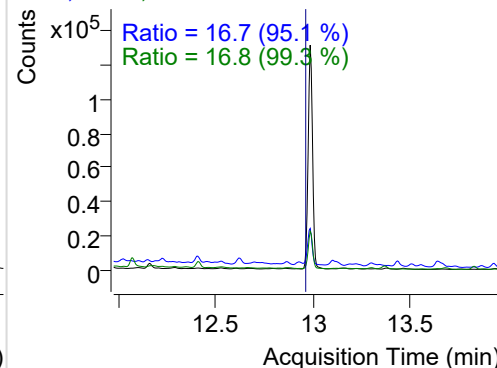
+ SIM (12.505-12.590 min, 16 scans) (\*\*) 2209

**LSS-D10-Pyrene**

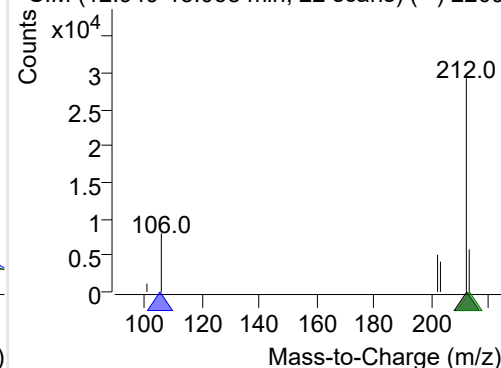
+ Selected Ion (212.0) 220907-PAHs-021.D



212.0, 106.0, 213.0

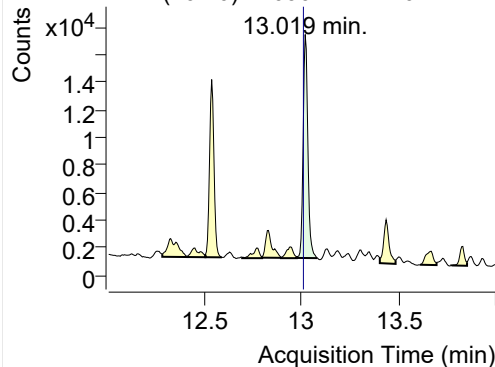


+ SIM (12.949-13.068 min, 22 scans) (\*\*) 2209

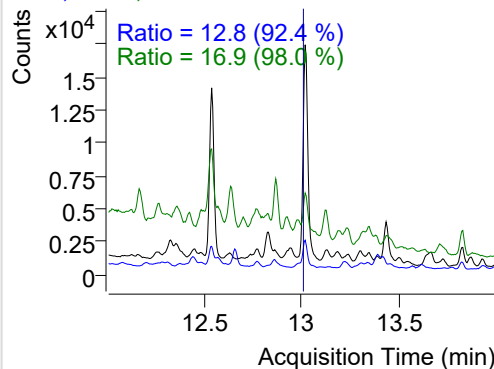


**Pyrene**

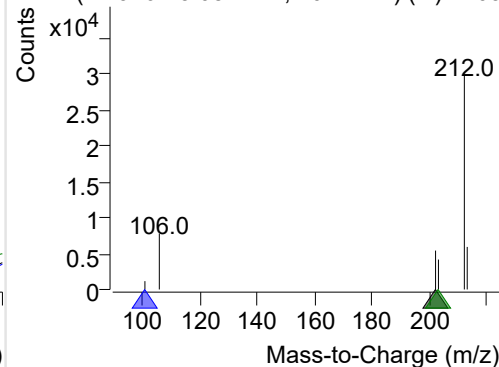
+ Selected Ion (202.0) 220907-PAHs-021.D



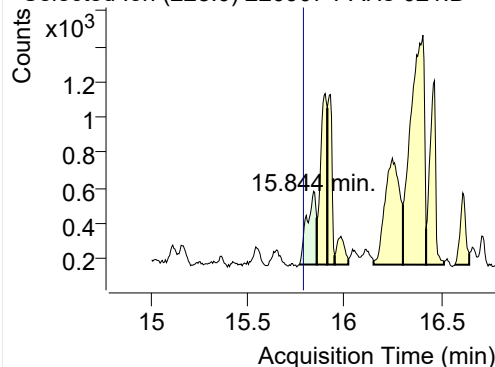
202.0, 101.0, 203.0



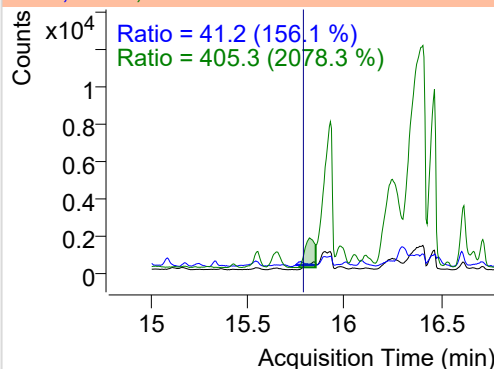
+ SIM (12.976-13.082 min, 20 scans) (\*\*) 2209

**Benz(a)anthracene**

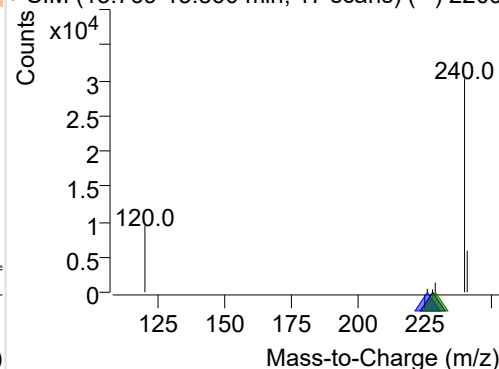
+ Selected Ion (228.0) 220907-PAHs-021.D



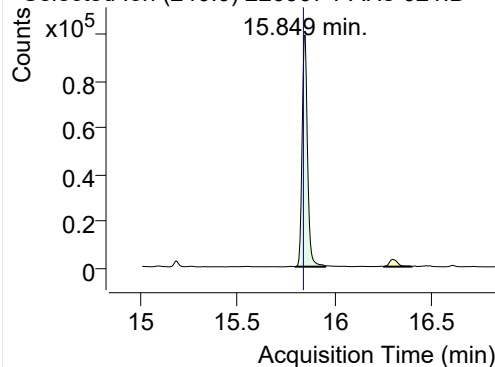
228.0, 226.0, 229.0



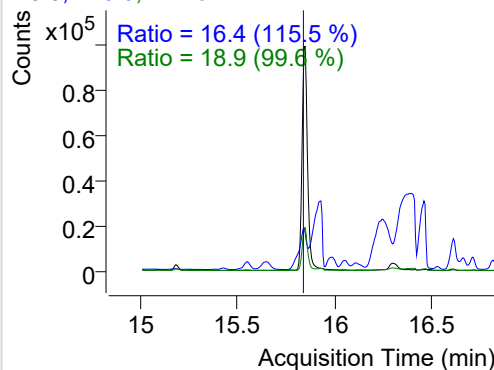
+ SIM (15.769-15.860 min, 17 scans) (\*\*) 2209

**IS-D12-Chrysene**

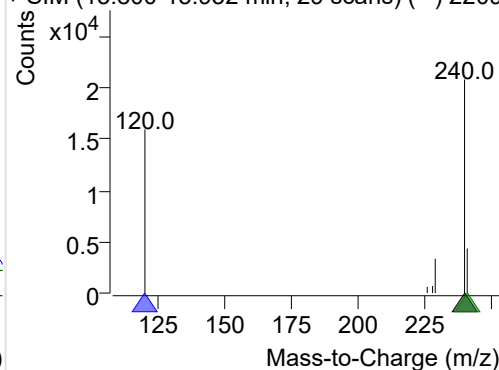
+ Selected Ion (240.0) 220907-PAHs-021.D



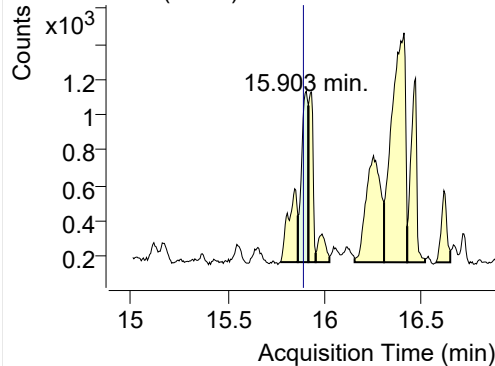
240.0, 120.0, 241.0



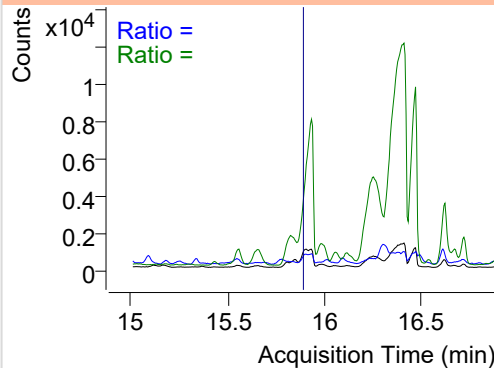
+ SIM (15.800-15.952 min, 29 scans) (\*\*) 2209

**Chrysene**

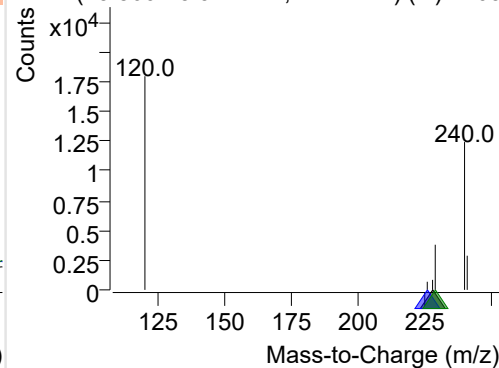
+ Selected Ion (228.0) 220907-PAHs-021.D



228.0, 226.0, 229.0



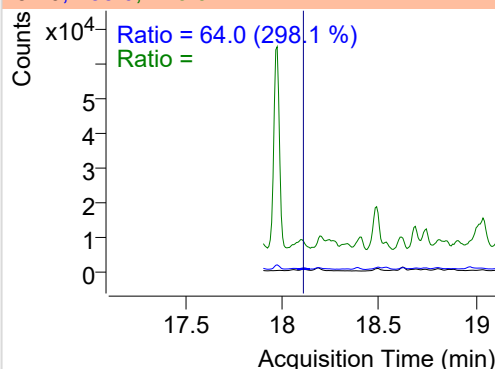
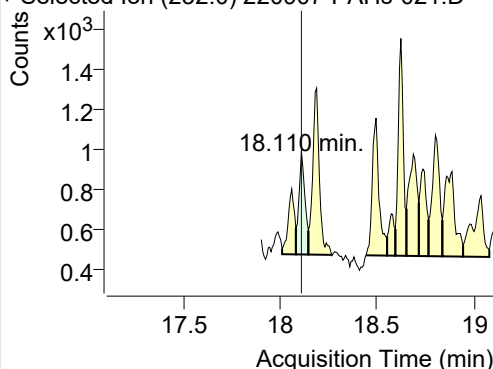
+ SIM (15.860-15.914 min, 11 scans) (\*\*) 2209



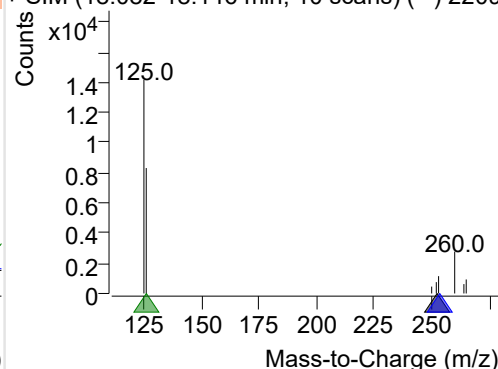
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-021.D

252.0, 253.0, 126.0

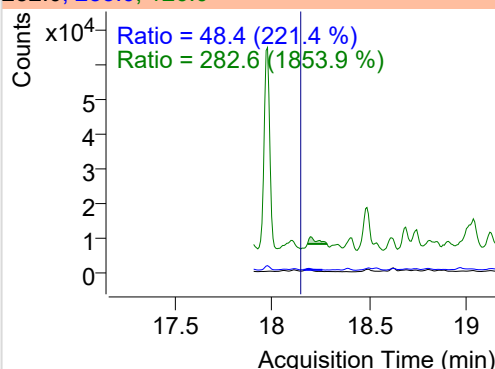
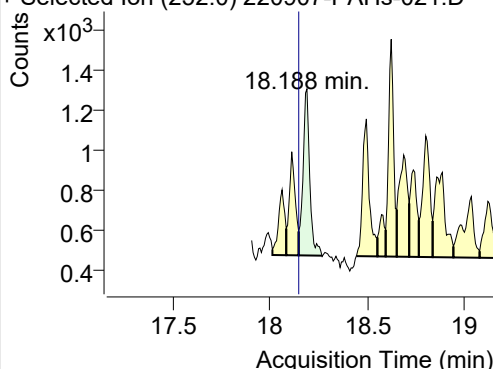


+ SIM (18.082-18.146 min, 10 scans) (\*\*) 2209

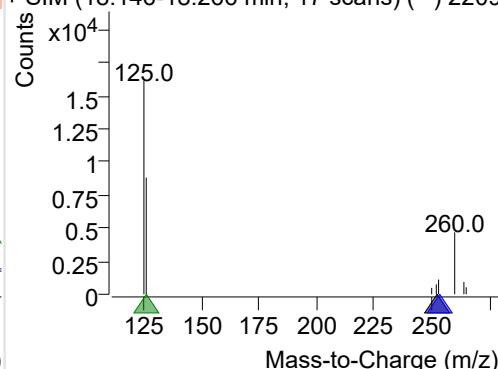
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-021.D

252.0, 253.0, 126.0

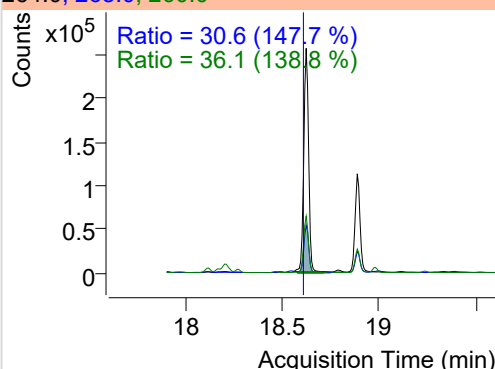
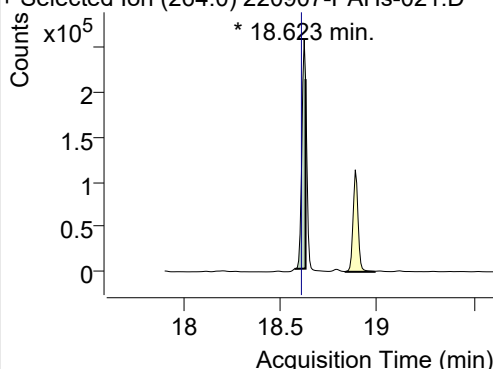


+ SIM (18.146-18.266 min, 17 scans) (\*\*) 2209

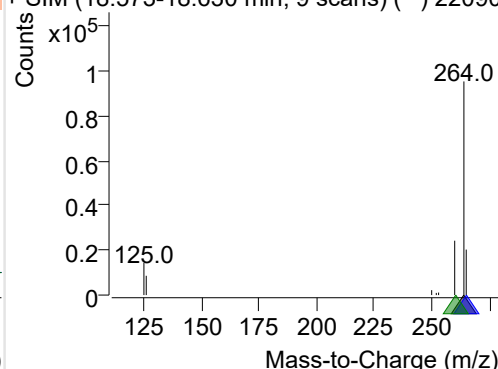
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-021.D

264.0, 265.0, 260.0

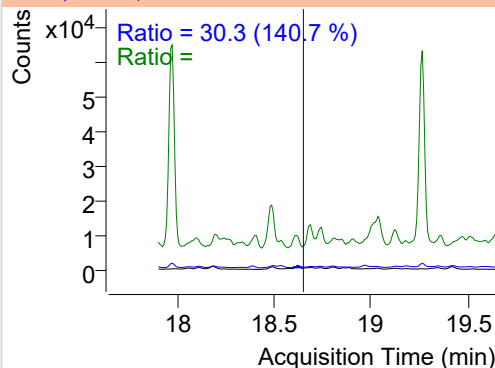
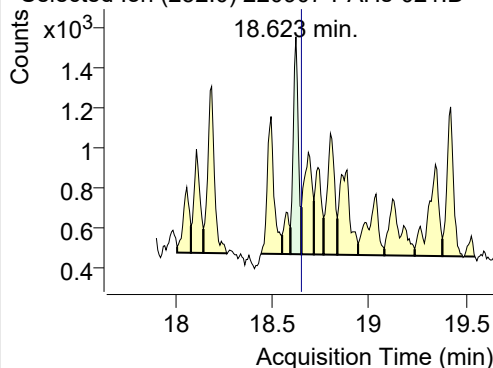


+ SIM (18.573-18.630 min, 9 scans) (\*\*) 22090

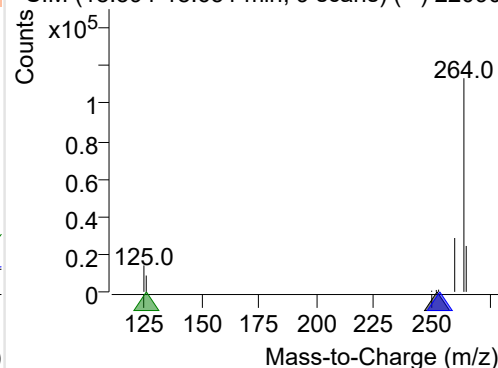
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-021.D

252.0, 253.0, 126.0



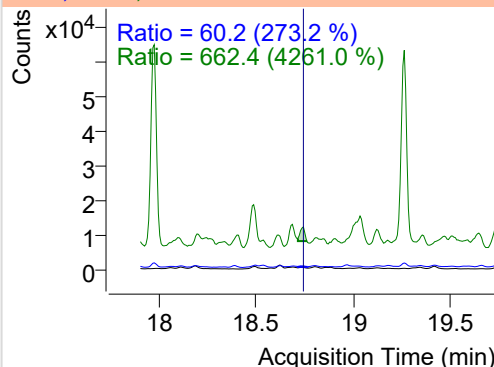
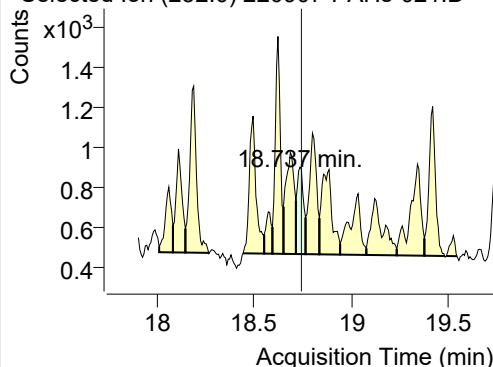
+ SIM (18.594-18.651 min, 9 scans) (\*\*) 22090



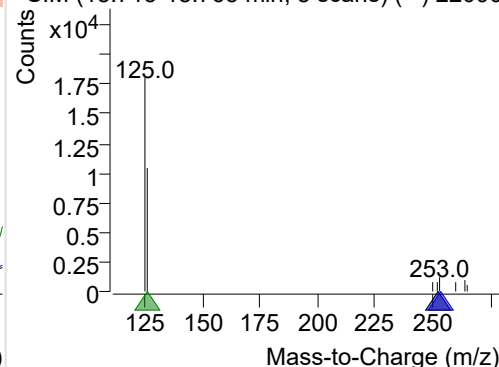
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-021.D

252.0, 253.0, 126.0

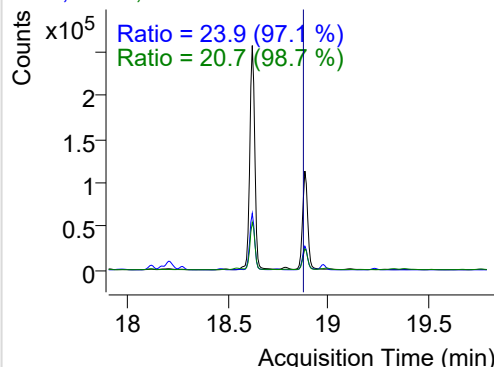
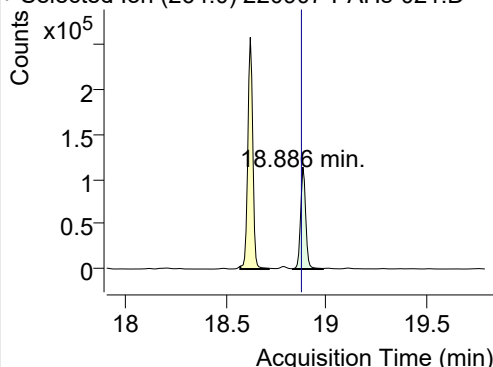


+ SIM (18.715-18.765 min, 8 scans) (\*\*) 22090

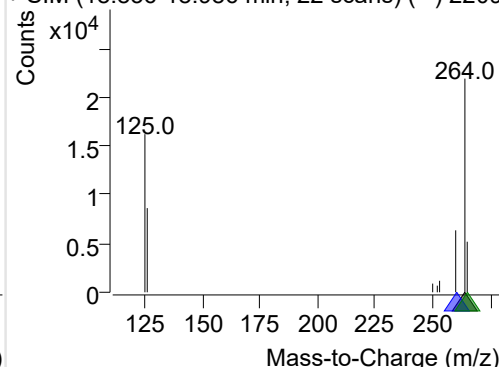
**IS-D12-Perylene**

+ Selected Ion (264.0) 220907-PAHs-021.D

264.0, 260.0, 265.0

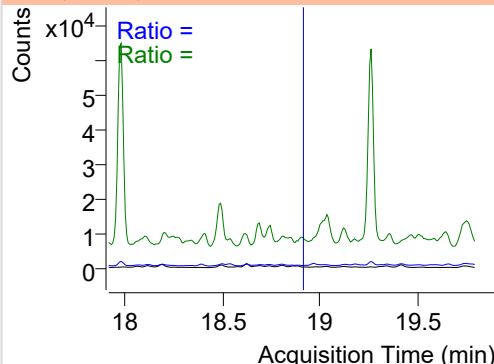
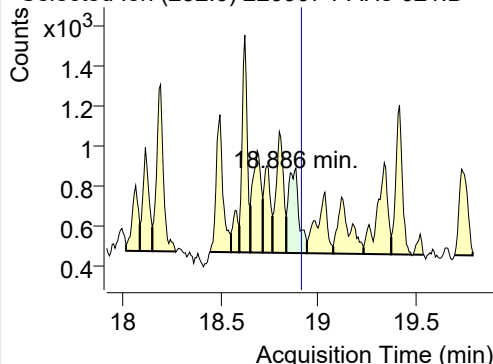


+ SIM (18.836-18.986 min, 22 scans) (\*\*) 2209

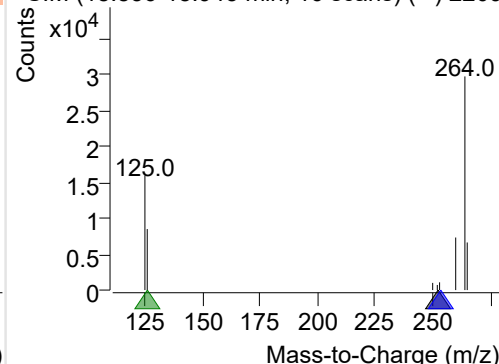
**Perylene**

+ Selected Ion (252.0) 220907-PAHs-021.D

252.0, 253.0, 126.0

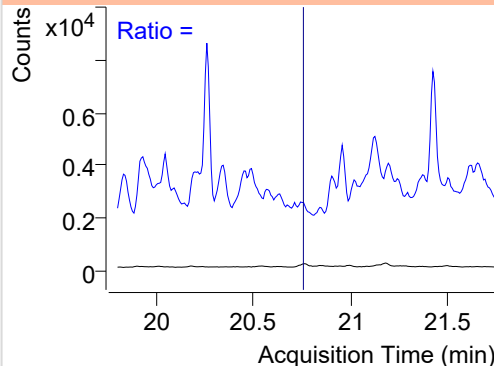
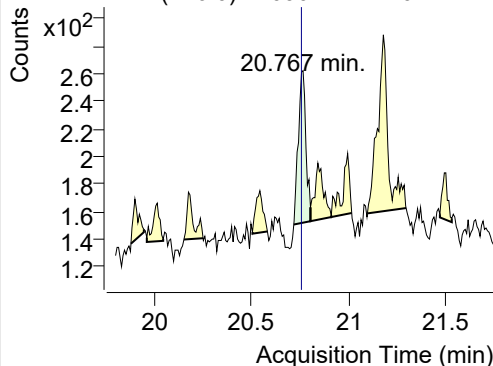


+ SIM (18.836-18.943 min, 16 scans) (\*\*) 2209

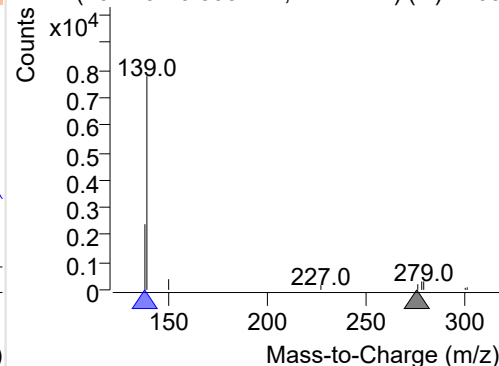
**Indeno(1,2,3-c,d)pyrene**

+ Selected Ion (276.0) 220907-PAHs-021.D

276.0, 138.0



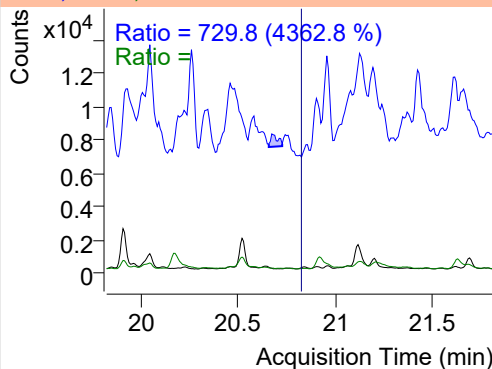
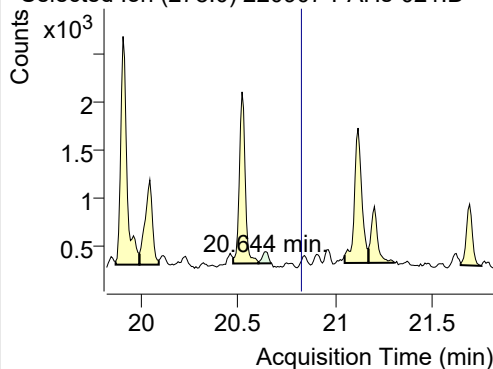
+ SIM (20.719-20.805 min, 12 scans) (\*\*) 2209



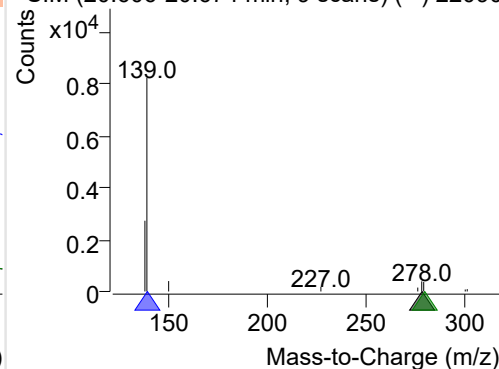
**Dibenz(a,h)anthracene**

+ Selected Ion (278.0) 220907-PAHs-021.D

278.0, 139.0, 279.0

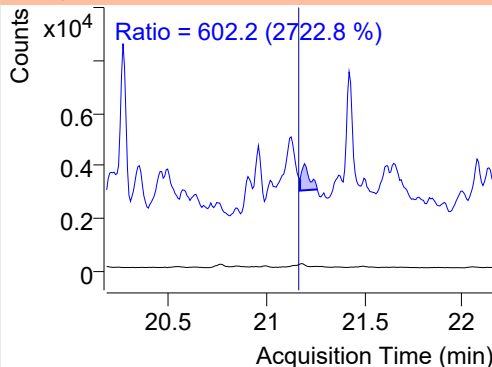
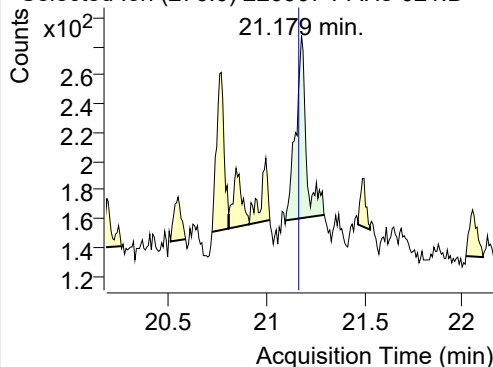


+ SIM (20.606-20.674 min, 9 scans) (\*\*) 22090

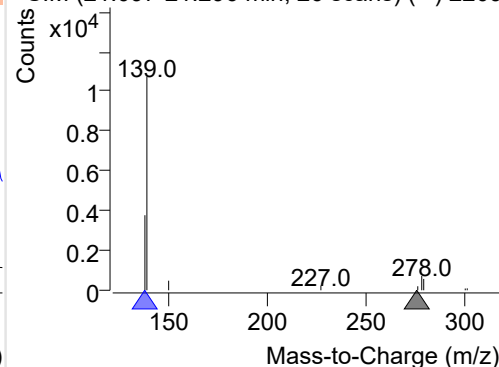
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-021.D

276.0, 138.0

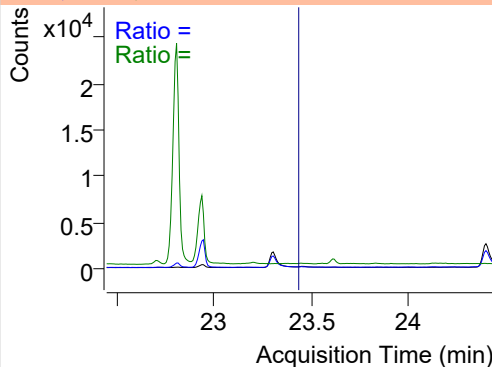
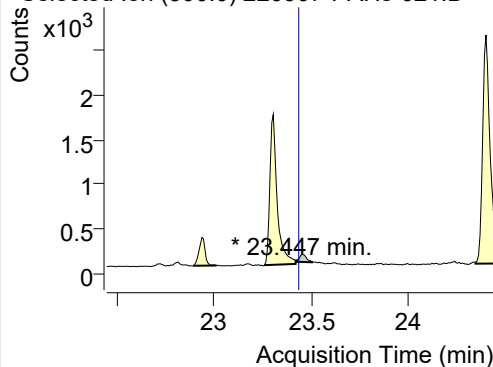


+ SIM (21.097-21.296 min, 26 scans) (\*\*) 2209

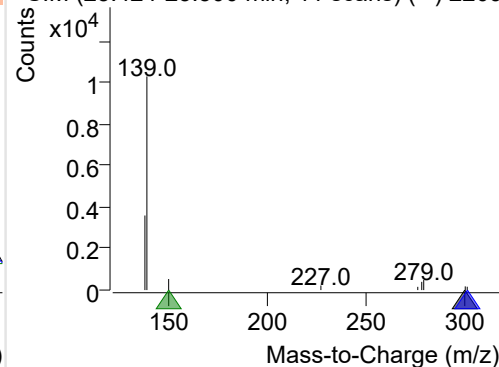
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-021.D

300.0, 301.0, 150.0



+ SIM (23.424-23.500 min, 11 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

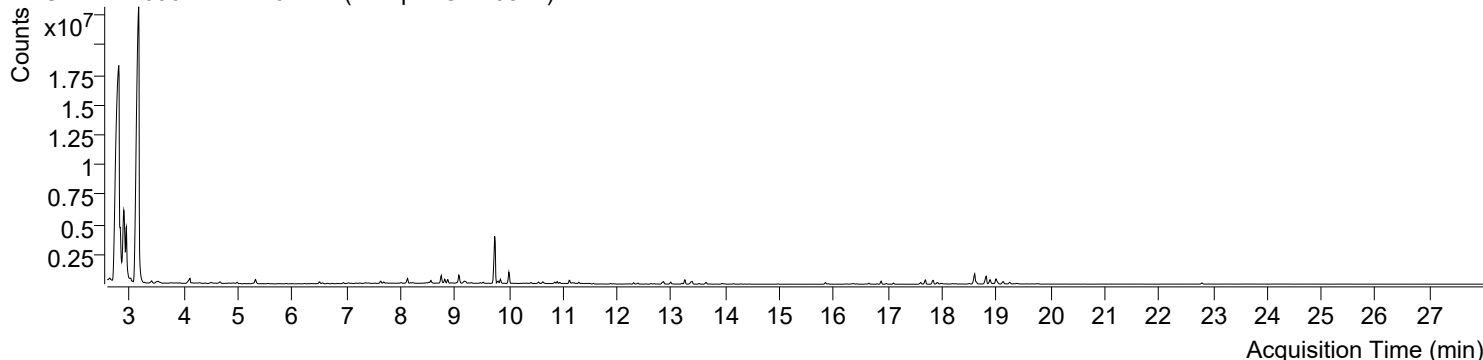


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 11:19:49	Data File	220907-PAHs-022.D
Type	Sample	Name	Sample-Gas-0821
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

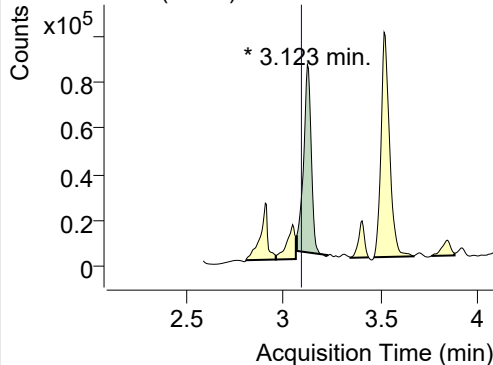
+ TIC SIM 220907-PAHs-022.D (Sample-Gas-0821)



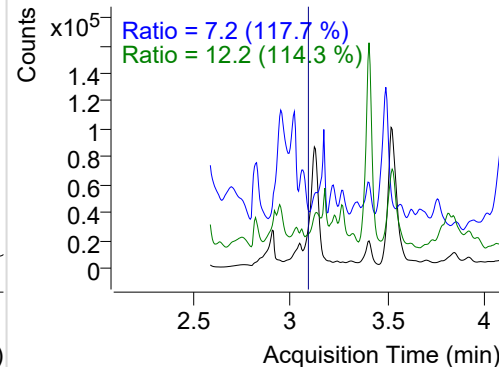
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.123	136.0	222139	80995.95	ND ng/ml	12.2
Naphthalene	3.139	128.0	42074004	8380776.80	ND ng/ml	26.2
Acenaphthylene	5.753	152.0	7891	5150.43	ND ng/ml	290.6
IS-D10-Acenaphthene	6.504	164.0	145295	75300.11	ND ng/ml	95.7
Acenaphthene	6.564	154.0	40595	19338.55	ND ng/ml	99.7
LSS-D10-Fluorene	7.638	176.0	136193	78045.14	ND ng/ml	96.9
Fluorene	7.690	166.0	93544	54092.62	ND ng/ml	82.5
IS-D10-Phenanthrene	9.801	188.0	241180	145826.19	ND ng/ml	14.9
Phenanthrene	9.843	178.0	362506	222547.97	ND ng/ml	19.7
Anthracene	9.916	178.0	4522	2556.52	ND ng/ml	1580.5
Fluoranthene	12.537	202.0	16148	10316.13	ND ng/ml	17.6
LSS-D10-Pyrene	12.987	212.0	197296	121072.48	ND ng/ml	19.4
Pyrene	13.025	202.0	25800	11106.13	ND ng/ml	
Benz(a)anthracene	15.816	228.0	2019	623.67	ND ng/ml	24.0
IS-D12-Chrysene	15.843	240.0	187110	102936.35	ND ng/ml	19.5
Chrysene	15.903	228.0	2321	919.67	ND ng/ml	27.8
Benzo(b)fluoranthene	18.003	252.0	12012	6390.75	ND ng/ml	17.6
Benzo(k)fluoranthene	18.245	252.0	1832	1287.60	ND ng/ml	24.4
SS-D12-Benzo(e)pyrene	18.601	264.0	815309	306514.86	ND ng/ml	8.7
Benzo(e)pyrene	18.601	252.0	29956	12314.85	ND ng/ml	8.9
Benzo(a)pyrene	18.815	252.0	21895	9940.40	ND ng/ml	13.6
IS-D12-Perylene	18.886	264.0	395435	182418.86	ND ng/ml	21.3
Perylene	18.879	252.0	21441	12612.96	ND ng/ml	12.9
Indeno(1,2,3-c,d)pyrene	20.766	276.0	833	187.75	ND ng/ml	
Dibenz(a,h)anthracene	20.835	278.0	432	204.60	ND ng/ml	33.0
Benzo(g,h,i)perylene	21.179	276.0	722	387.66	ND ng/ml	378.9
Coronene	23.454	300.0	397	146.16	ND ng/ml	

## IS-D8-Naphthalene

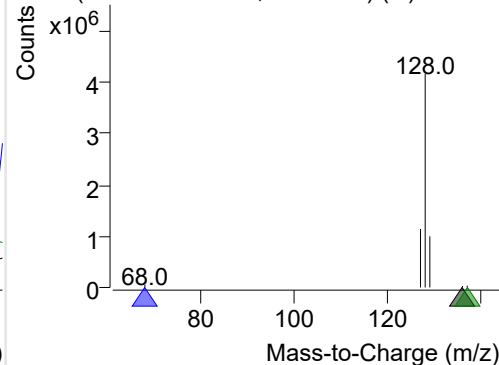
+ Selected Ion (136.0) 220907-PAHs-022.D



136.0, 68.0, 137.0

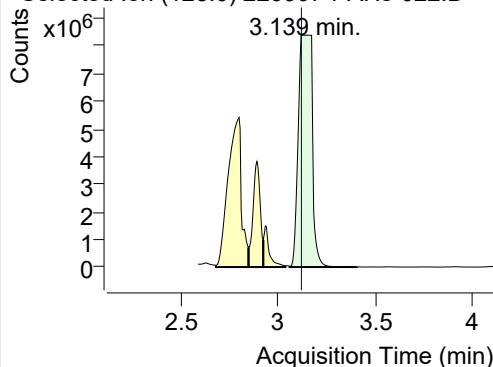


+ SIM (3.069-3.231 min, 31 scans) (\*\*) 220907

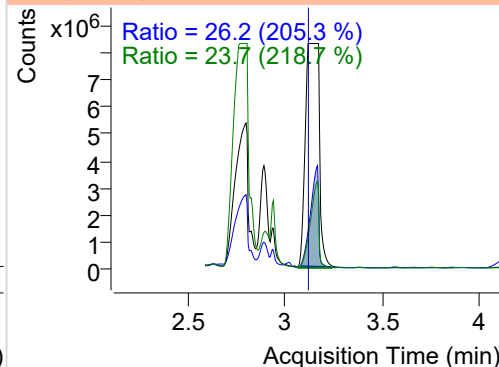


## Naphthalene

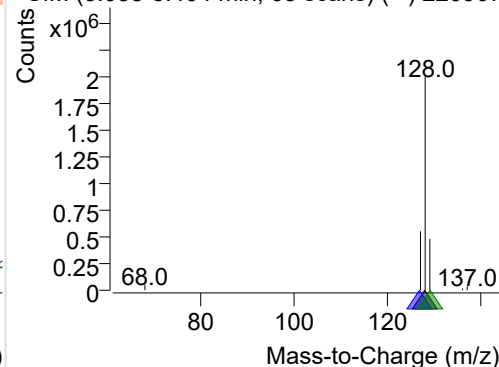
+ Selected Ion (128.0) 220907-PAHs-022.D



128.0, 127.0, 129.0

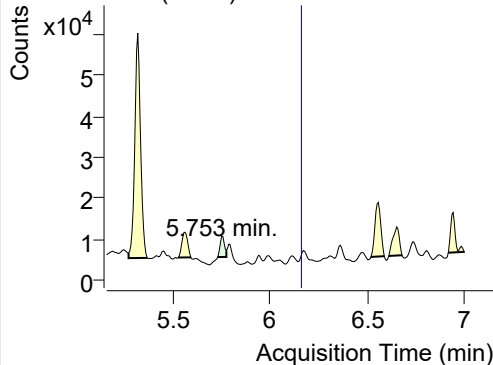


+ SIM (3.058-3.404 min, 65 scans) (\*\*) 220907

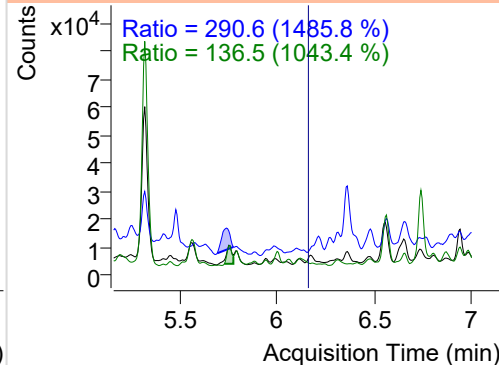


## Acenaphthylene

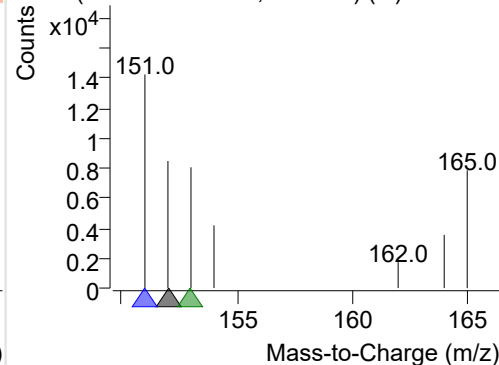
+ Selected Ion (152.0) 220907-PAHs-022.D



152.0, 151.0, 153.0

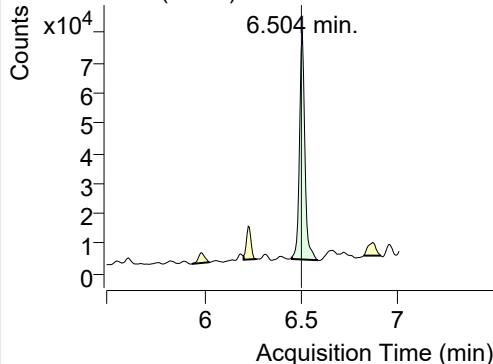


+ SIM (5.731-5.776 min, 8 scans) (\*\*) 220907-I

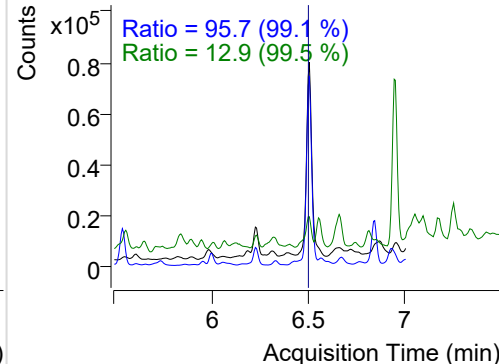


## IS-D10-Acenaphthene

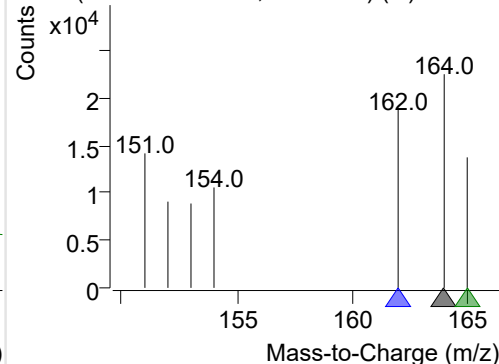
+ Selected Ion (164.0) 220907-PAHs-022.D



164.0, 162.0, 165.0

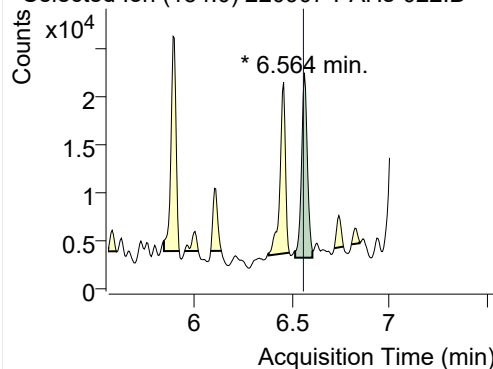


+ SIM (6.451-6.585 min, 23 scans) (\*\*) 220907

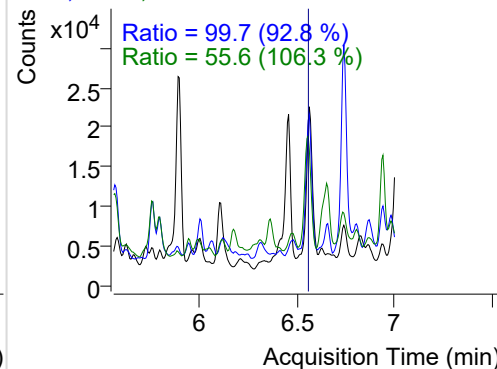


**Acenaphthene**

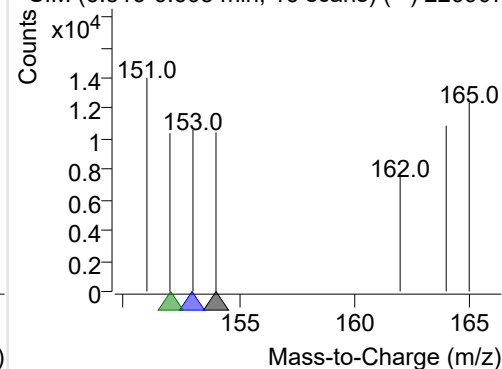
+ Selected Ion (154.0) 220907-PAHs-022.D



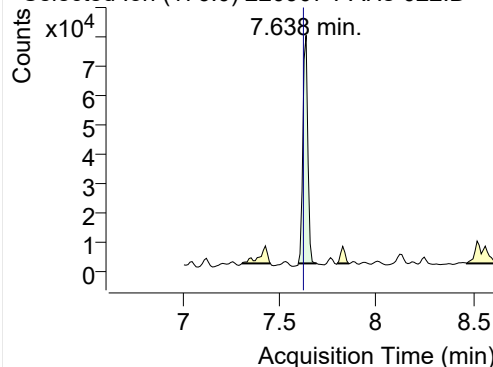
154.0, 153.0, 152.0



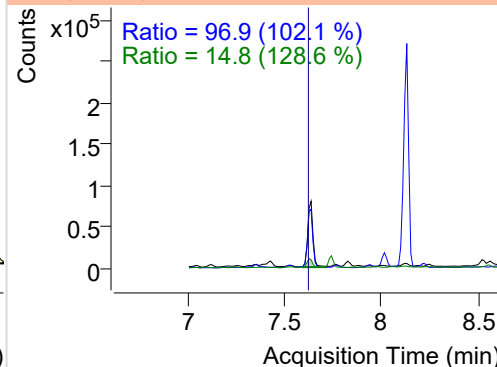
+ SIM (6.516-6.605 min, 16 scans) (\*\*) 220907

**LSS-D10-Fluorene**

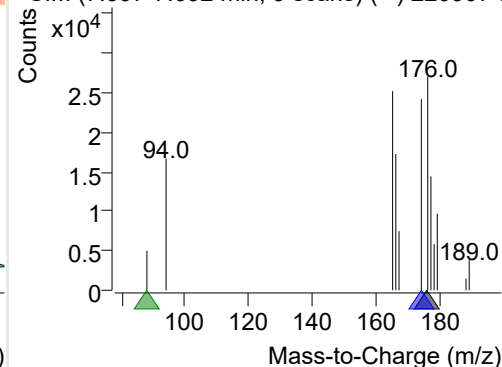
+ Selected Ion (176.0) 220907-PAHs-022.D



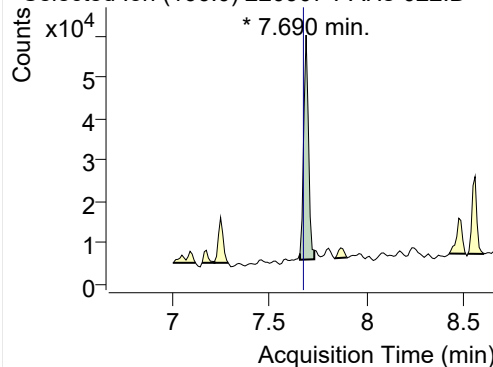
176.0, 174.0, 88.0



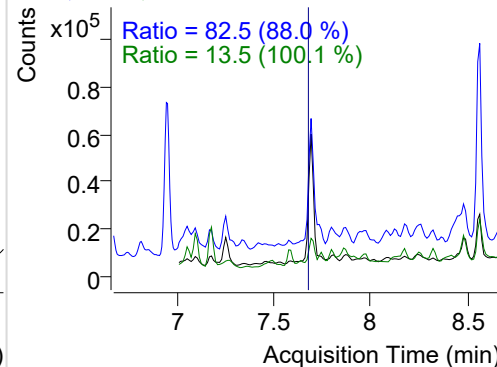
+ SIM (7.597-7.692 min, 9 scans) (\*\*) 220907-I

**Fluorene**

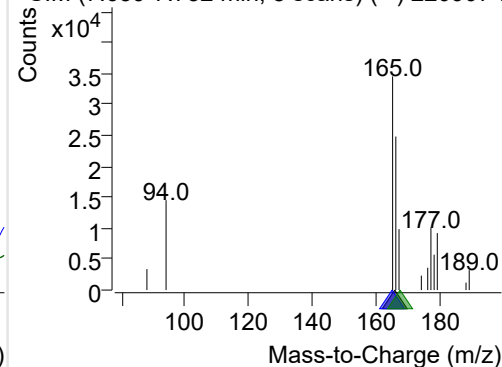
+ Selected Ion (166.0) 220907-PAHs-022.D



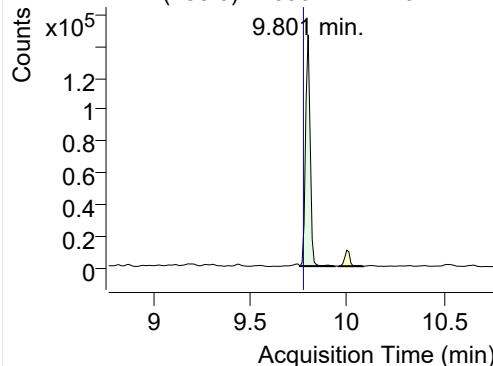
166.0, 165.0, 167.0



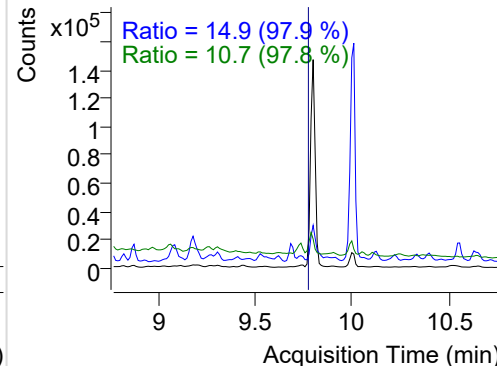
+ SIM (7.659-7.732 min, 8 scans) (\*\*) 220907-I

**IS-D10-Phenanthrene**

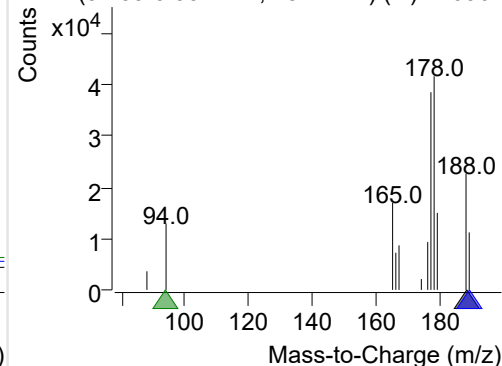
+ Selected Ion (188.0) 220907-PAHs-022.D



188.0, 189.0, 94.0

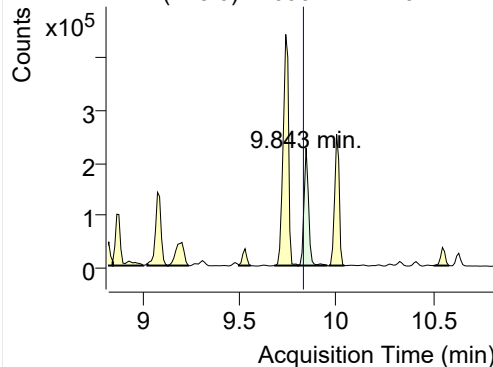


+ SIM (9.759-9.937 min, 18 scans) (\*\*) 220907

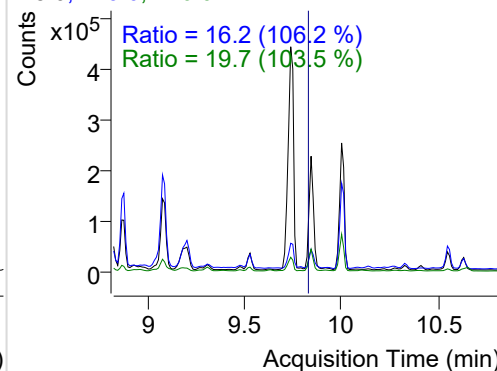


**Phenanthrene**

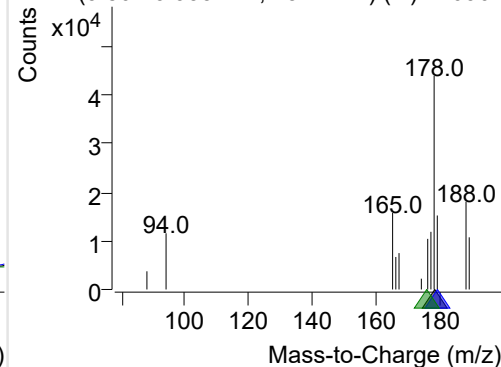
+ Selected Ion (178.0) 220907-PAHs-022.D



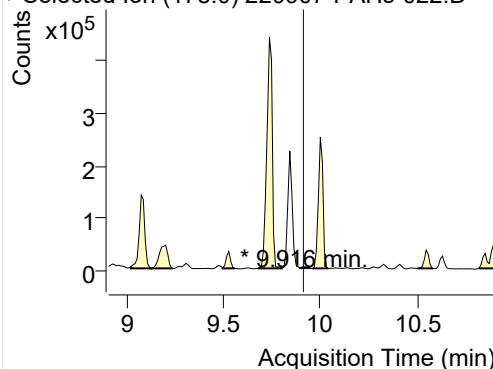
178.0, 179.0, 176.0



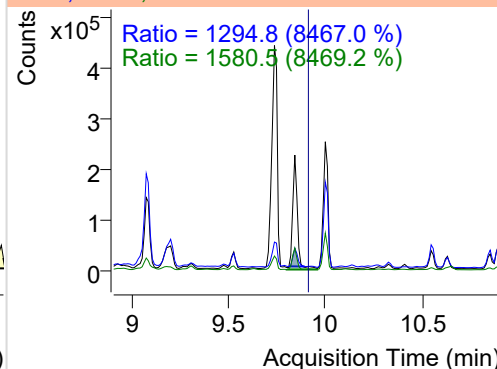
+ SIM (9.801-9.953 min, 15 scans) (\*\*) 220907

**Anthracene**

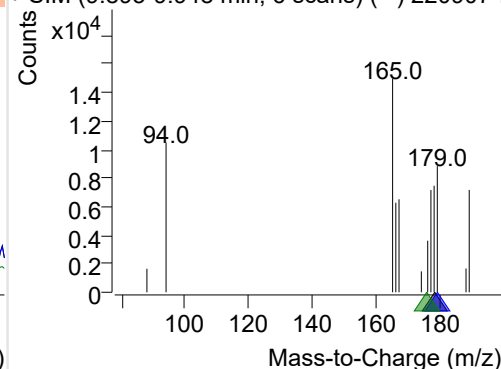
+ Selected Ion (178.0) 220907-PAHs-022.D



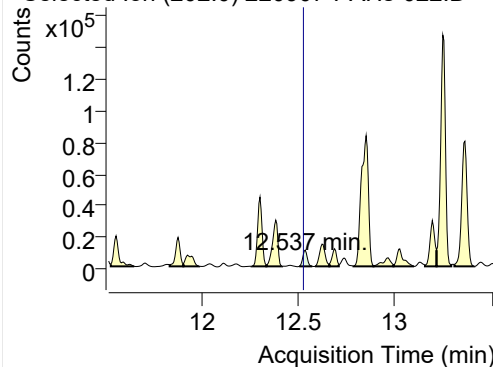
178.0, 179.0, 176.0



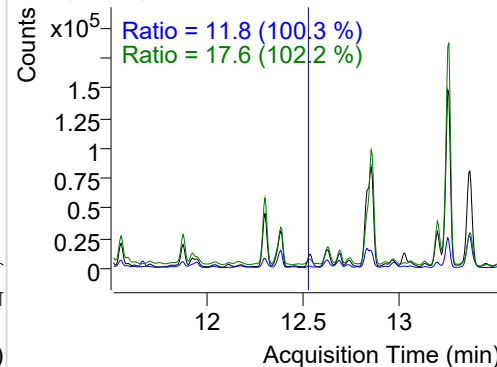
+ SIM (9.895-9.948 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

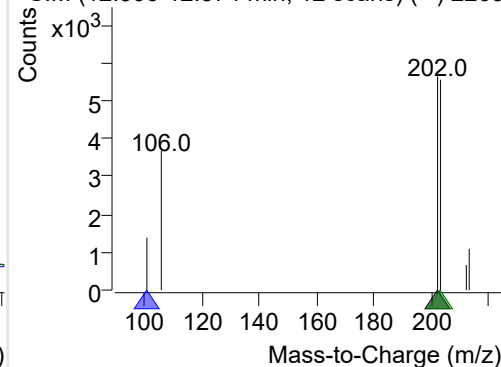
+ Selected Ion (202.0) 220907-PAHs-022.D



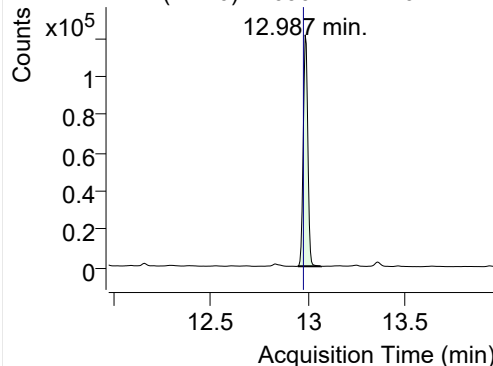
202.0, 101.0, 203.0



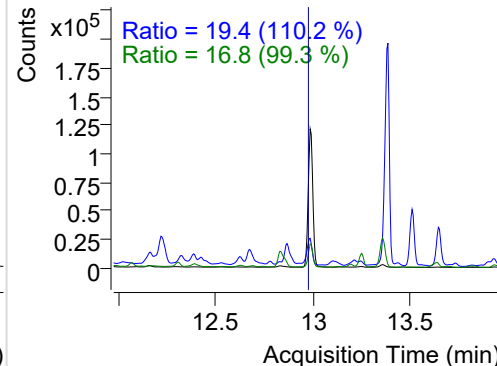
+ SIM (12.506-12.574 min, 12 scans) (\*\*) 2209

**LSS-D10-Pyrene**

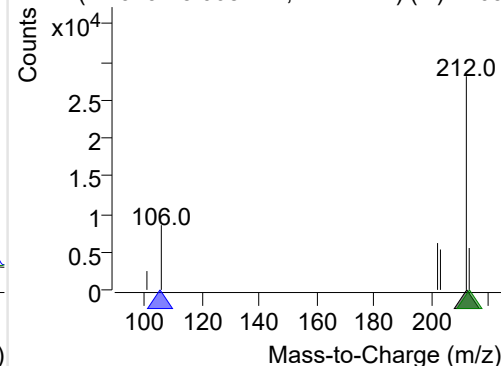
+ Selected Ion (212.0) 220907-PAHs-022.D



212.0, 106.0, 213.0



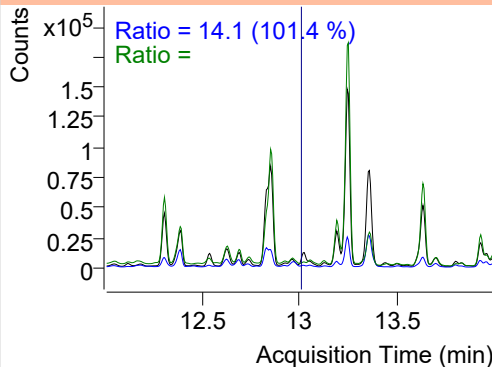
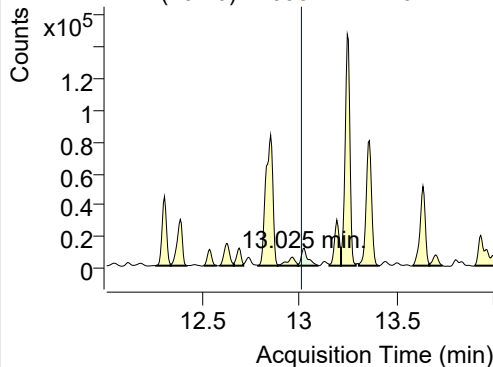
+ SIM (12.949-13.068 min, 22 scans) (\*\*) 2209



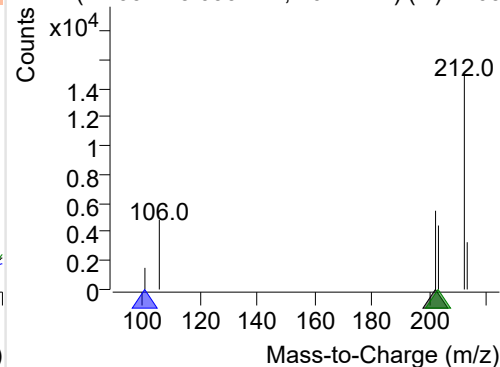
**Pyrene**

+ Selected Ion (202.0) 220907-PAHs-022.D

202.0, 101.0, 203.0

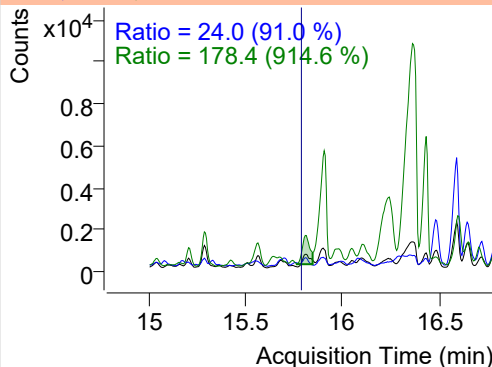
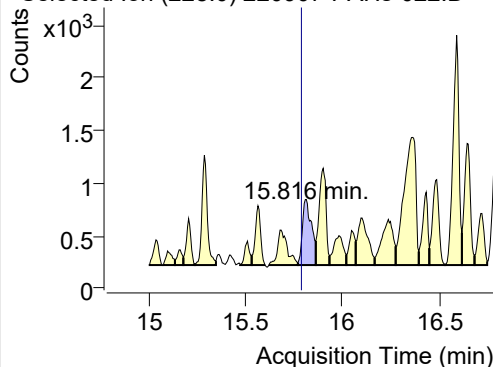


+ SIM (12.992-13.099 min, 20 scans) (\*\*) 2209

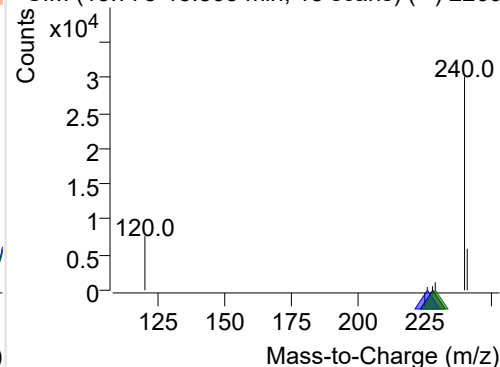
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-022.D

228.0, 226.0, 229.0

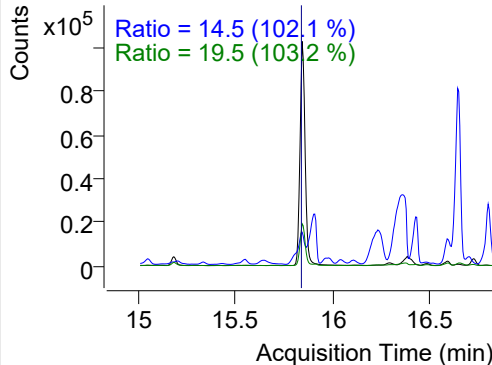
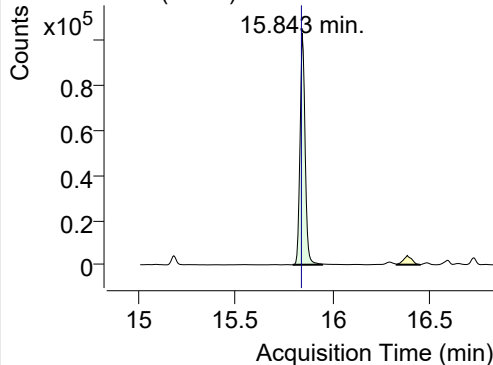


+ SIM (15.773-15.865 min, 18 scans) (\*\*) 2209

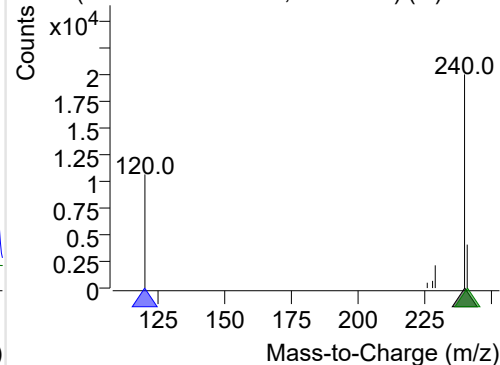
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-022.D

240.0, 120.0, 241.0

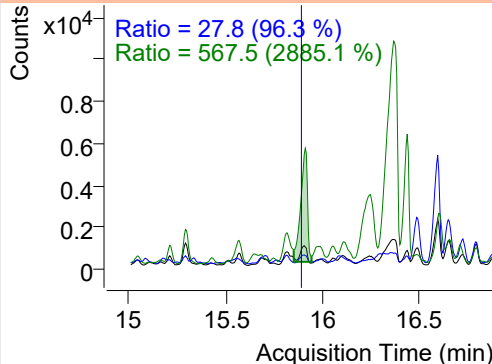
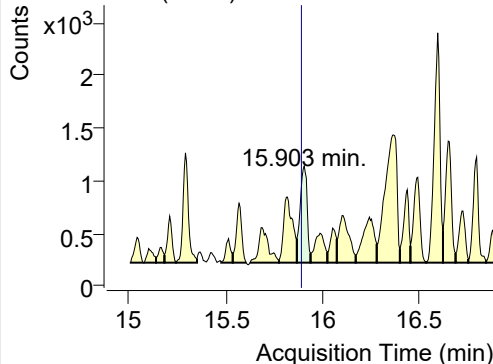


+ SIM (15.795-15.946 min, 29 scans) (\*\*) 2209

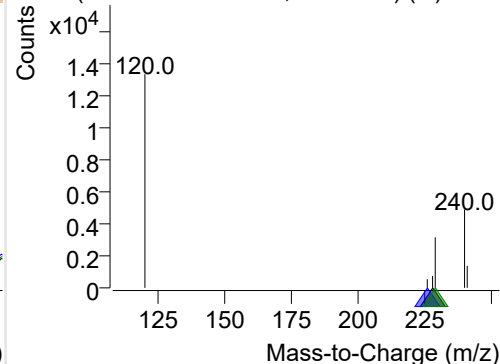
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-022.D

228.0, 226.0, 229.0



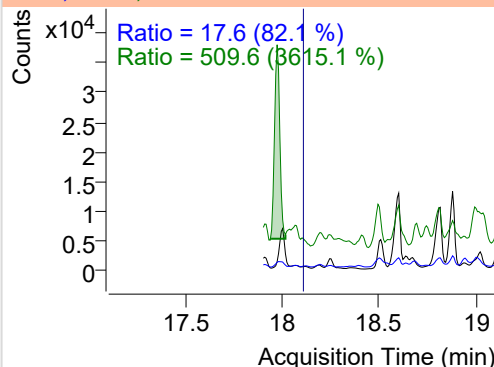
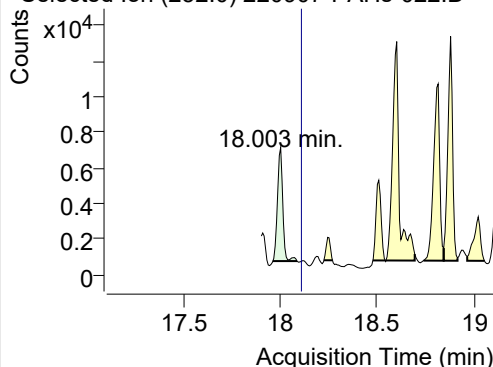
+ SIM (15.865-15.936 min, 14 scans) (\*\*) 2209



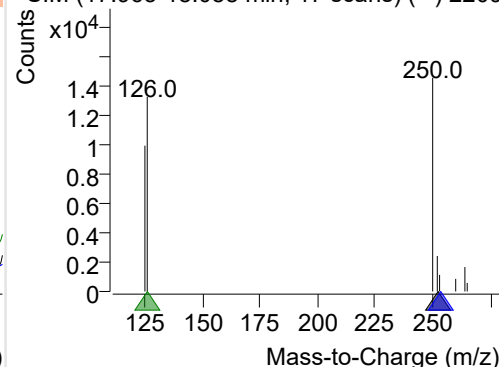
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-022.D

252.0, 253.0, 126.0

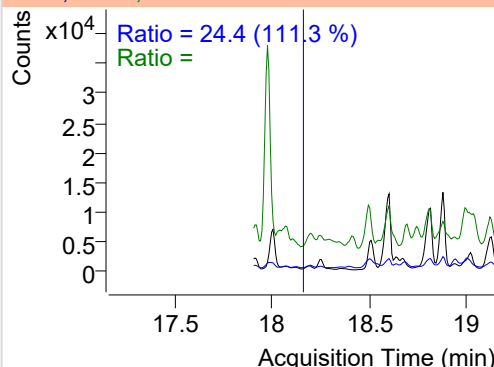
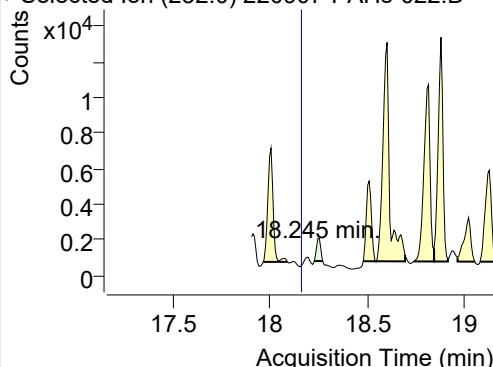


+ SIM (17.963-18.088 min, 17 scans) (\*\*) 2209

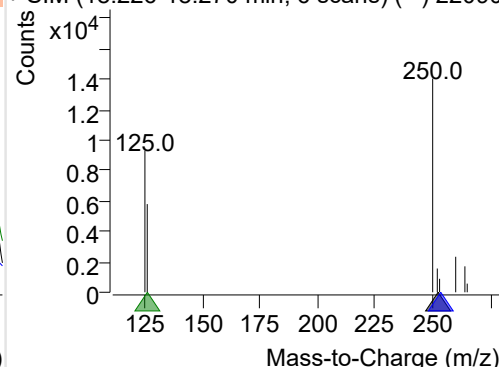
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-022.D

252.0, 253.0, 126.0

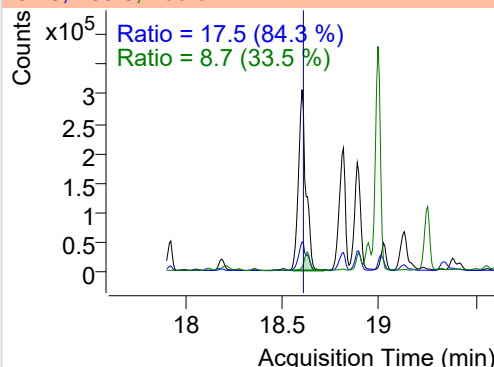
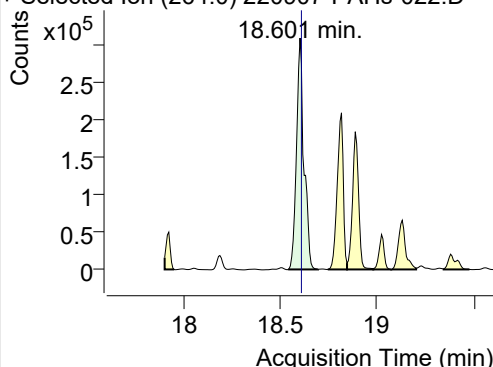


+ SIM (18.226-18.270 min, 6 scans) (\*\*) 22090

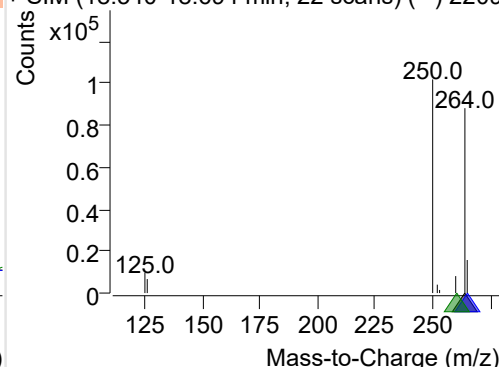
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-022.D

264.0, 265.0, 260.0

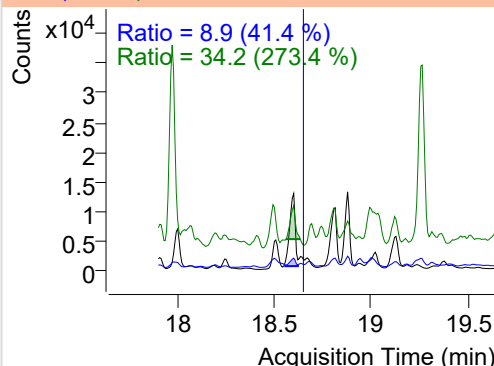
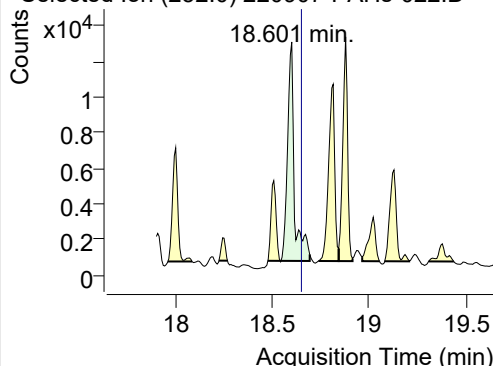


+ SIM (18.540-18.694 min, 22 scans) (\*\*) 2209

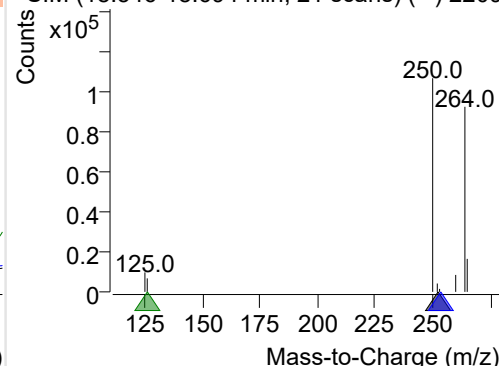
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-022.D

252.0, 253.0, 126.0



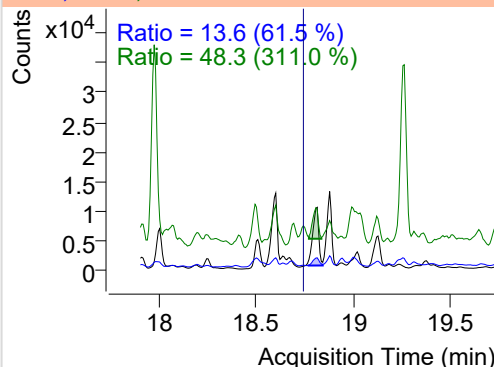
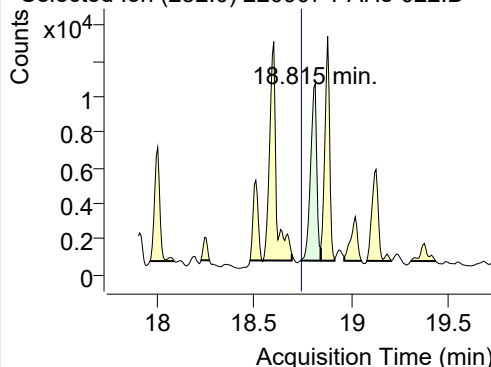
+ SIM (18.546-18.694 min, 21 scans) (\*\*) 2209



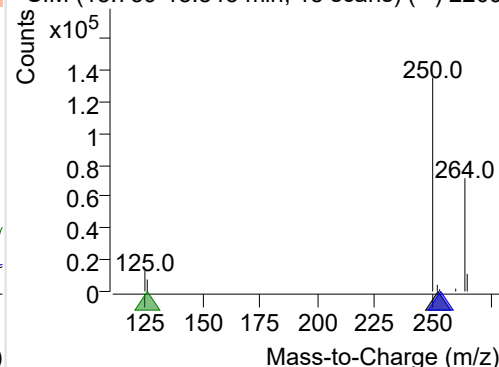
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-022.D

252.0, 253.0, 126.0

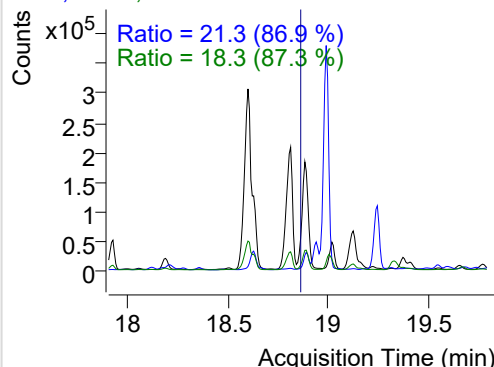
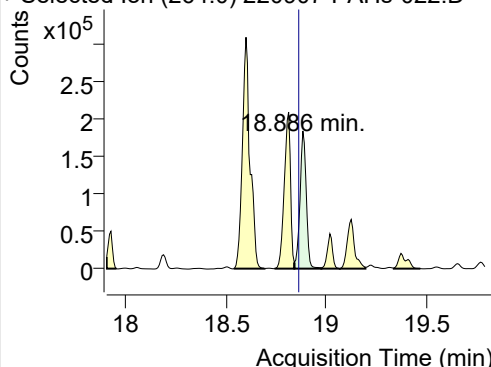


+ SIM (18.739-18.843 min, 15 scans) (\*\*) 2209

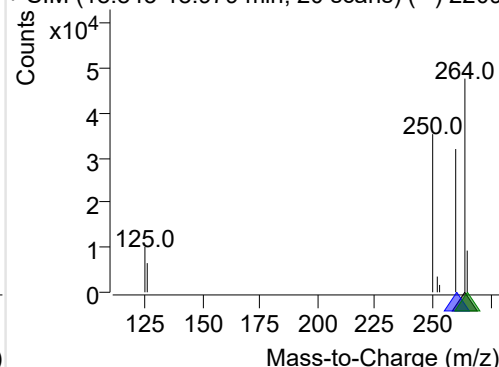
**IS-D12-Perylene**

+ Selected Ion (264.0) 220907-PAHs-022.D

264.0, 260.0, 265.0

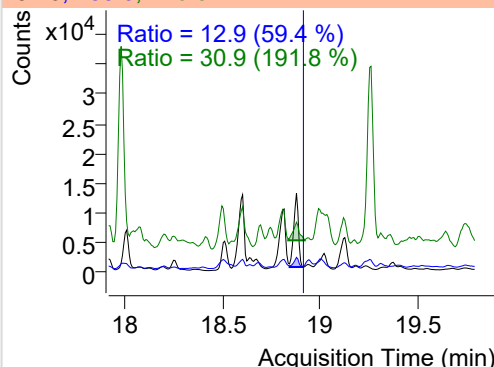
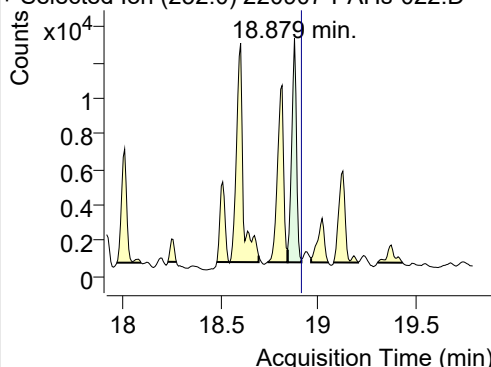


+ SIM (18.843-18.979 min, 20 scans) (\*\*) 2209

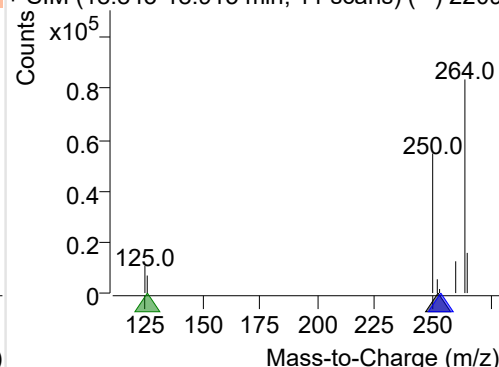
**Perylene**

+ Selected Ion (252.0) 220907-PAHs-022.D

252.0, 253.0, 126.0

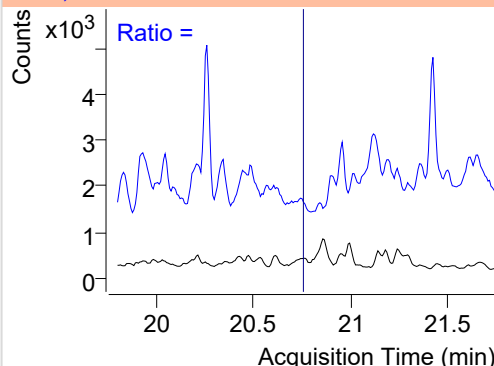
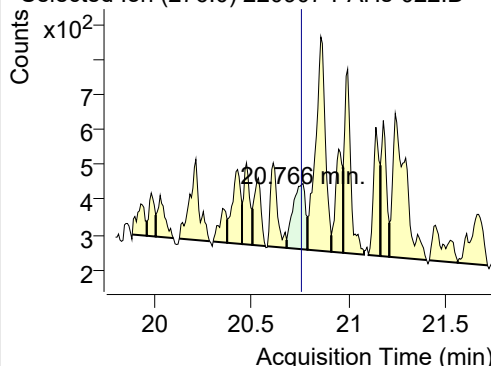


+ SIM (18.843-18.915 min, 11 scans) (\*\*) 2209

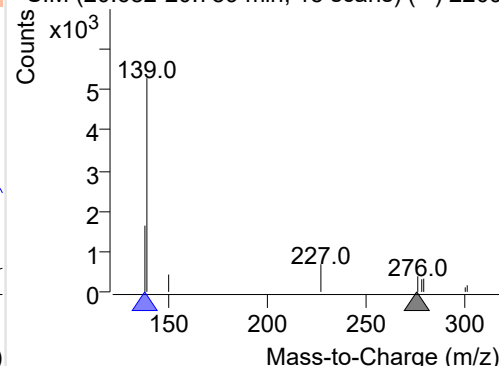
**Indeno(1,2,3-c,d)pyrene**

+ Selected Ion (276.0) 220907-PAHs-022.D

276.0, 138.0



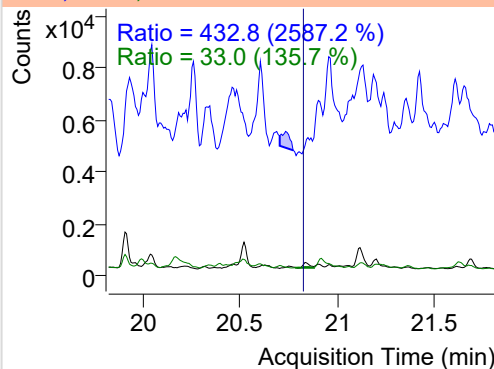
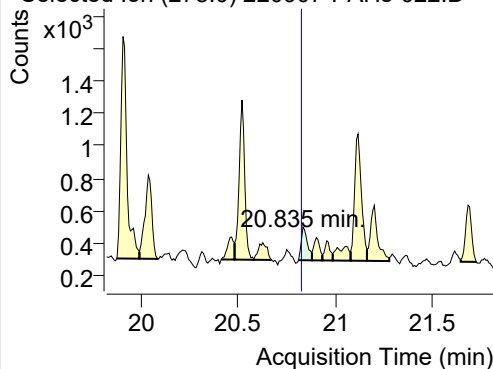
+ SIM (20.682-20.789 min, 15 scans) (\*\*) 2209



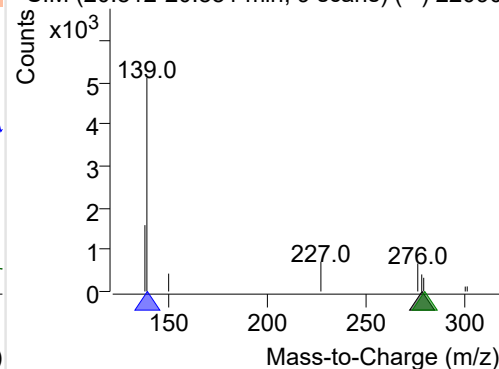
**Dibenz(a,h)anthracene**

+ Selected Ion (278.0) 220907-PAHs-022.D

278.0, 139.0, 279.0

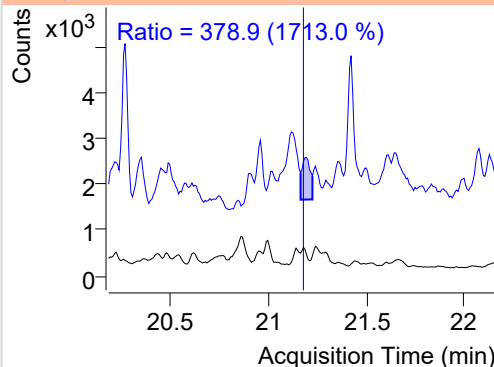
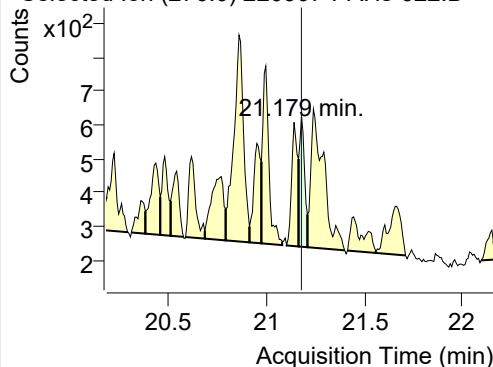


+ SIM (20.812-20.881 min, 9 scans) (\*\*) 22090

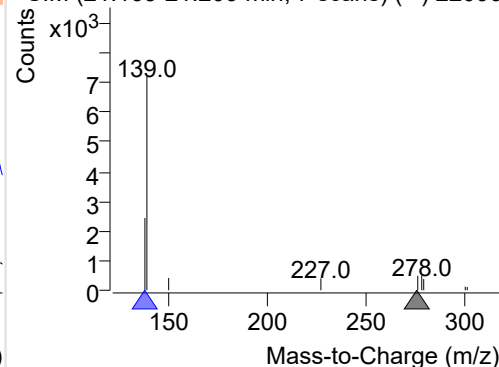
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-022.D

276.0, 138.0

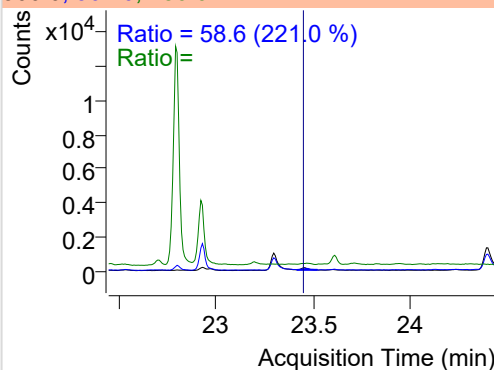
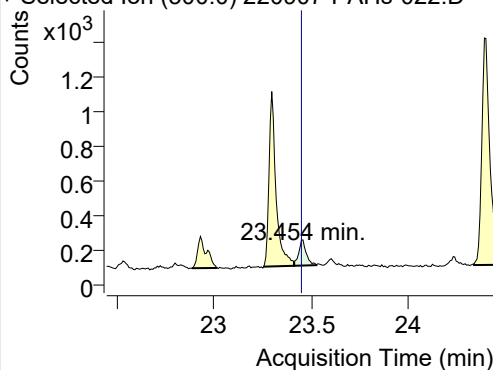


+ SIM (21.163-21.209 min, 7 scans) (\*\*) 22090

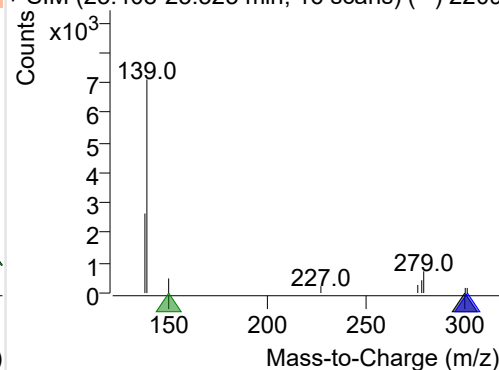
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-022.D

300.0, 301.0, 150.0



+ SIM (23.408-23.523 min, 16 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

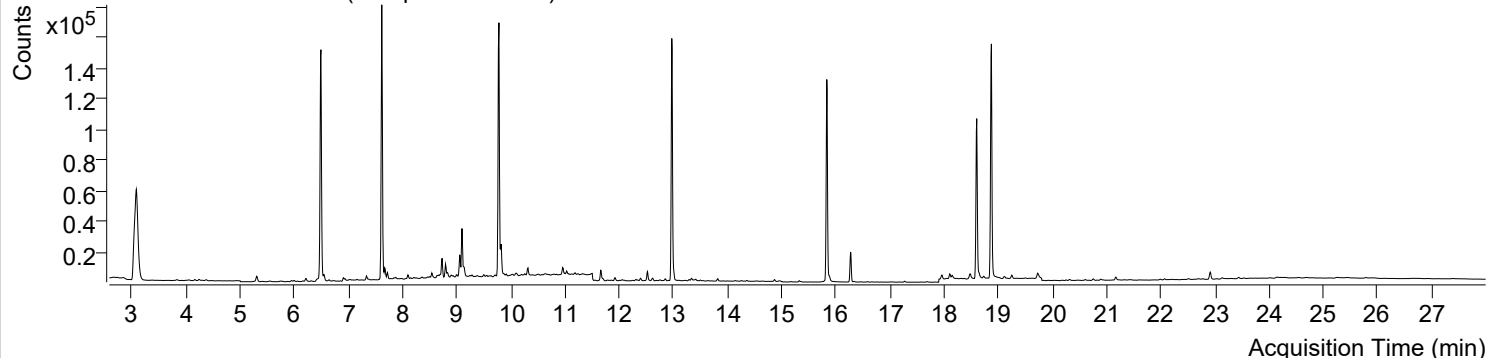


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-07 오후 11:50:52	Data File	220907-PAHs-023.D
Type	Sample	Name	Sample-Gas-0827
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

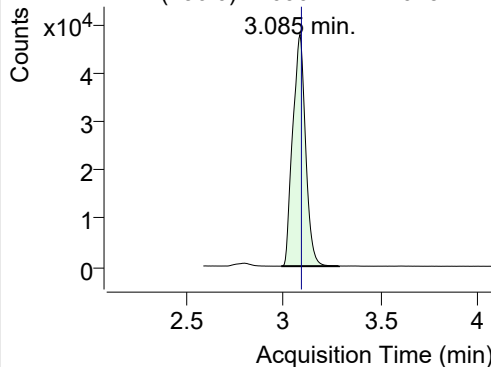
+ TIC SIM 220907-PAHs-023.D (Sample-Gas-0827)



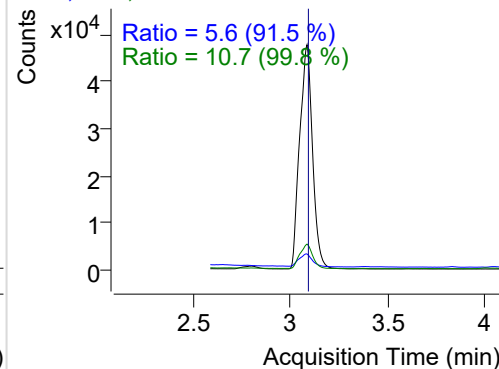
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	219016	47760.58	ND ng/ml	10.7
Naphthalene	3.112	128.0	16245	3602.94	ND ng/ml	11.9
Acenaphthylene	6.161	152.0	628	346.94	ND ng/ml	29.5
IS-D10-Acenaphthene	6.493	164.0	130296	72528.45	ND ng/ml	99.3
Acenaphthene	6.552	154.0	2094	1058.91	ND ng/ml	110.7
LSS-D10-Fluorene	7.617	176.0	129160	81602.49	ND ng/ml	92.4
Fluorene	7.669	166.0	5606	2964.34	ND ng/ml	95.7
IS-D10-Phenanthrene	9.780	188.0	227116	134861.8	ND ng/ml	15.0
Phenanthrene	9.822	178.0	19714	12293.40	ND ng/ml	19.6
Anthracene	9.916	178.0	750	549.61	ND ng/ml	31.3
Fluoranthene	12.521	202.0	7121	4372.35	ND ng/ml	18.2
LSS-D10-Pyrene	12.971	212.0	191813	118349.6	ND ng/ml	15.7
Pyrene	13.003	202.0	6716	3872.36	ND ng/ml	20.0
Benz(a)anthracene	15.789	228.0	891	516.58	ND ng/ml	88.7
IS-D12-Chrysene	15.833	240.0	169380	100105.0	ND ng/ml	18.8
Chrysene	15.881	228.0	3100	1698.46	ND ng/ml	28.9
Benzo(b)fluoranthene	18.103	252.0	3632	1907.49	ND ng/ml	20.3
Benzo(k)fluoranthene	18.146	252.0	2866	1372.44	ND ng/ml	21.1
SS-D12-Benzo(e)pyrene	18.601	264.0	124172	70423.88	ND ng/ml	25.7
Benzo(e)pyrene	18.644	252.0	2852	1557.44	ND ng/ml	23.7
Benzo(a)pyrene	18.729	252.0	1104	541.44	ND ng/ml	14.3
IS-D12-Perylene	18.872	264.0	185784	104532.3	ND ng/ml	24.2
Perylene	18.865	252.0	874	393.44	ND ng/ml	26.3
Indeno(1,2,3-c,d)pyrene	20.751	276.0	2023	824.97	ND ng/ml	9.5
Dibenz(a,h)anthracene	20.828	278.0	397	149.24	ND ng/ml	
Benzo(g,h,i)perylene	21.171	276.0	3315	1550.16	ND ng/ml	20.3
Coronene	23.439	300.0	1367	520.63	ND ng/ml	20.4

## IS-D8-Naphthalene

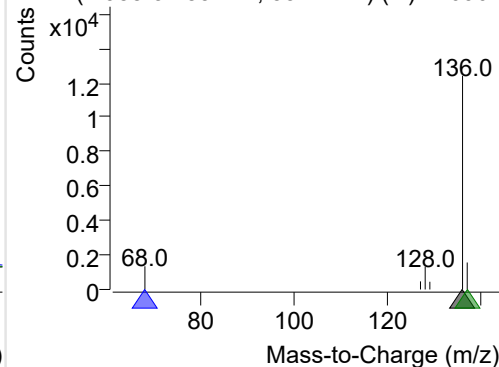
+ Selected Ion (136.0) 220907-PAHs-023.D



136.0, 68.0, 137.0

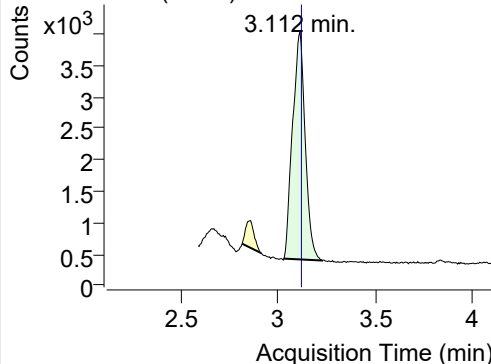


+ SIM (2.988-3.285 min, 55 scans) (\*\*) 220907

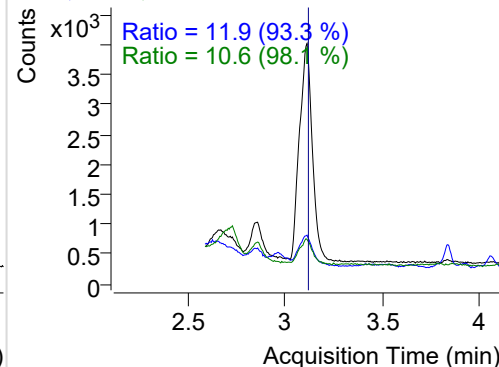


## Naphthalene

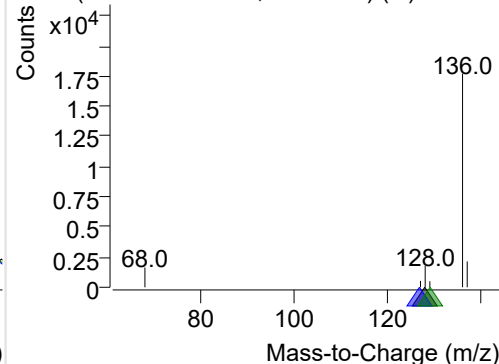
+ Selected Ion (128.0) 220907-PAHs-023.D



128.0, 127.0, 129.0

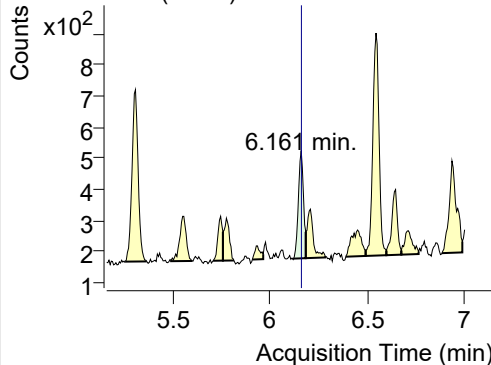


+ SIM (3.028-3.226 min, 37 scans) (\*\*) 220907

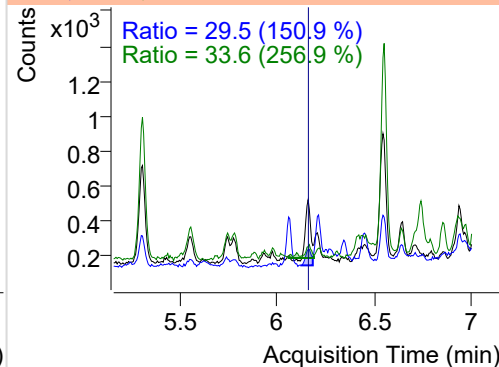


## Acenaphthylene

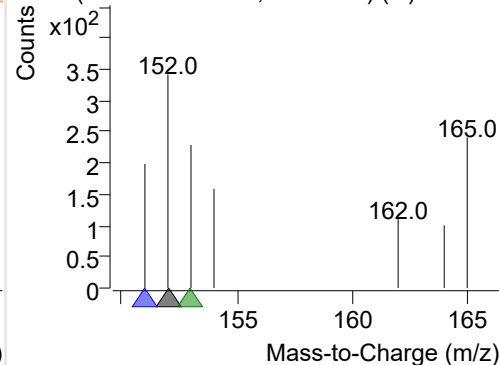
+ Selected Ion (152.0) 220907-PAHs-023.D



152.0, 151.0, 153.0

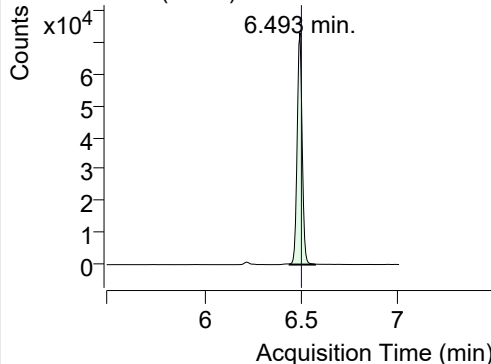


+ SIM (6.122-6.185 min, 11 scans) (\*\*) 220907

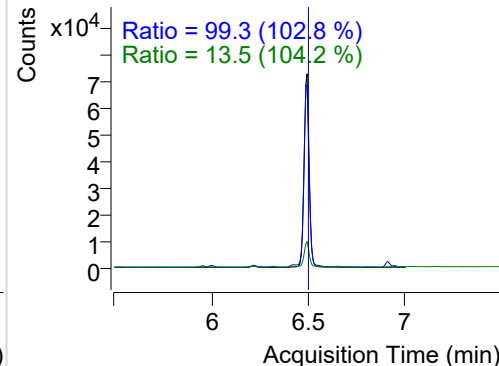


## IS-D10-Acenaphthene

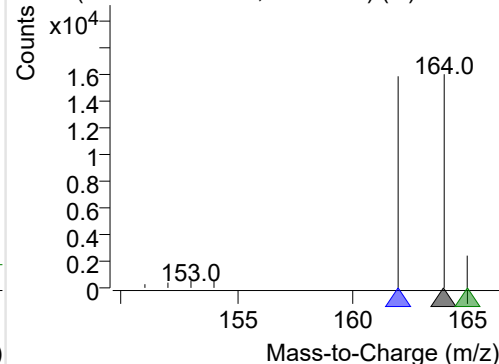
+ Selected Ion (164.0) 220907-PAHs-023.D



164.0, 162.0, 165.0

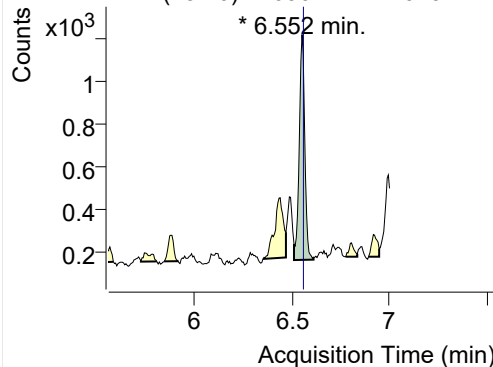


+ SIM (6.439-6.570 min, 23 scans) (\*\*) 220907

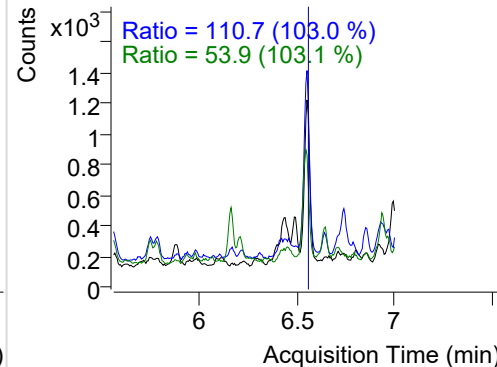


**Acenaphthene**

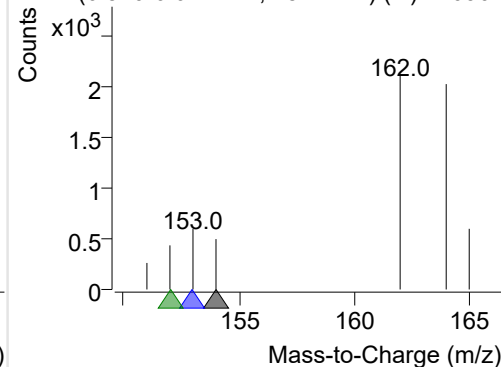
+ Selected Ion (154.0) 220907-PAHs-023.D



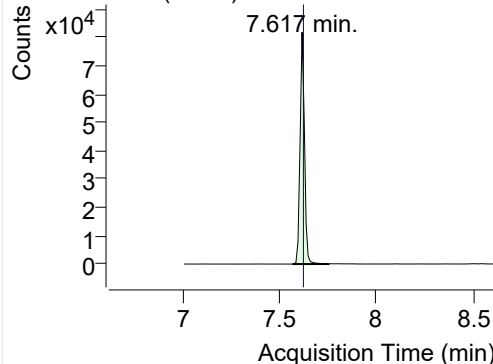
154.0, 153.0, 152.0



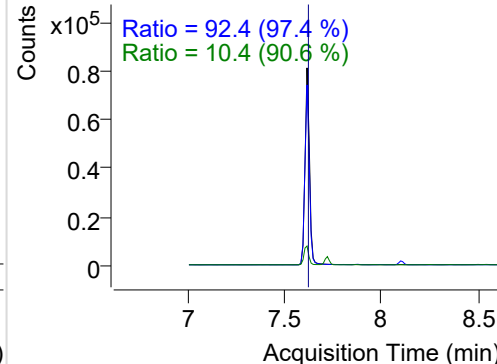
+ SIM (6.510-6.611 min, 18 scans) (\*\*) 220907

**LSS-D10-Fluorene**

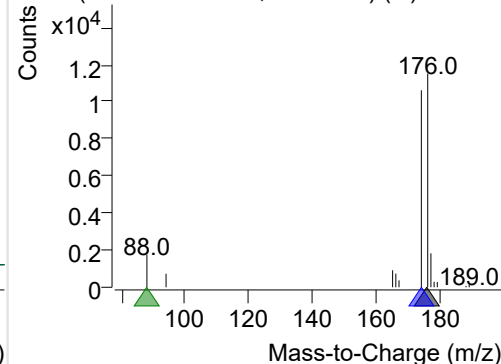
+ Selected Ion (176.0) 220907-PAHs-023.D



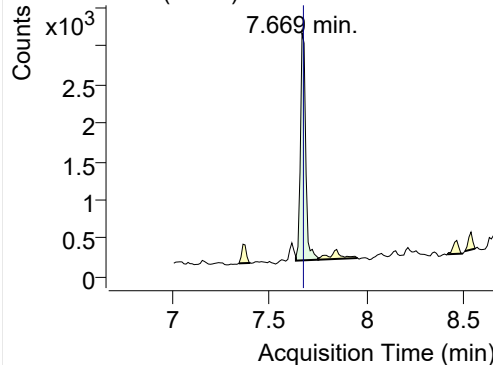
176.0, 174.0, 88.0



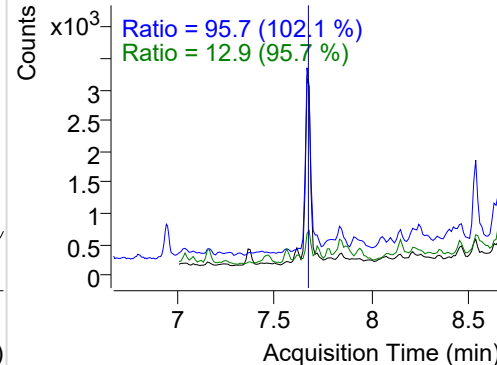
+ SIM (7.567-7.753 min, 18 scans) (\*\*) 220907

**Fluorene**

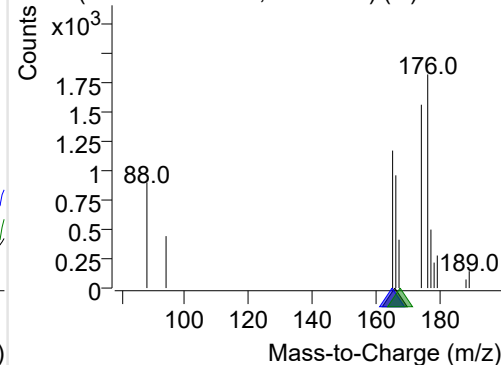
+ Selected Ion (166.0) 220907-PAHs-023.D



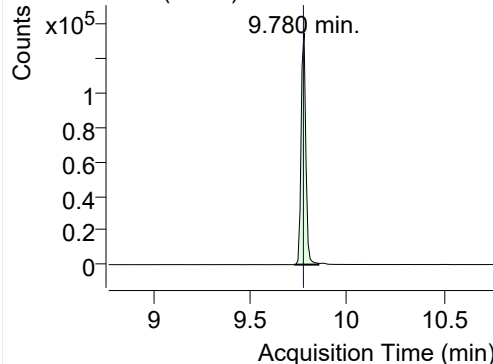
166.0, 165.0, 167.0



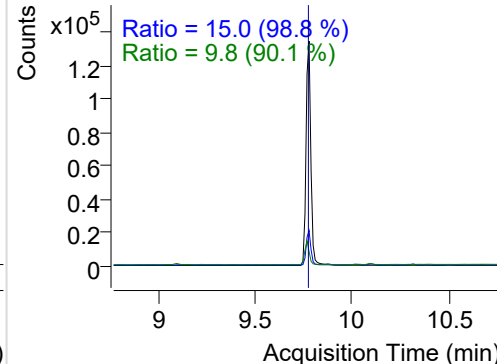
+ SIM (7.638-7.753 min, 12 scans) (\*\*) 220907

**IS-D10-Phenanthrene**

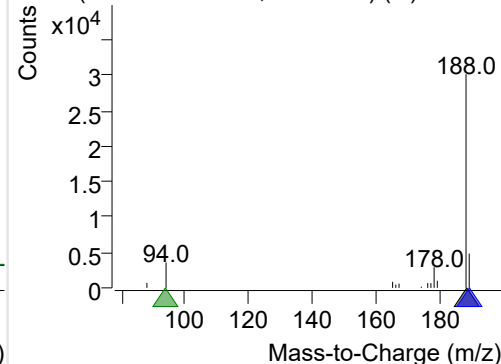
+ Selected Ion (188.0) 220907-PAHs-023.D



188.0, 189.0, 94.0

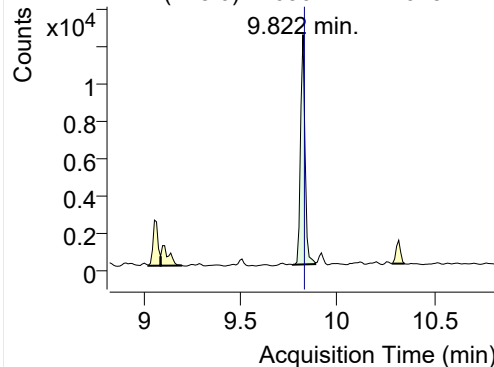


+ SIM (9.729-9.853 min, 12 scans) (\*\*) 220907

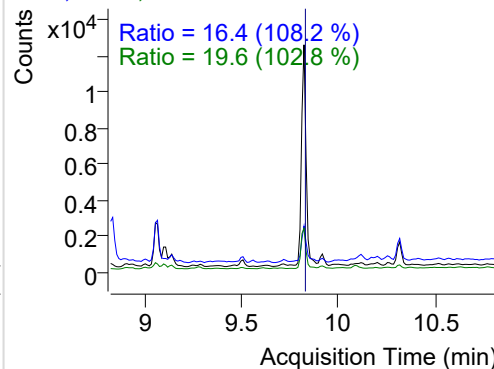


**Phenanthrene**

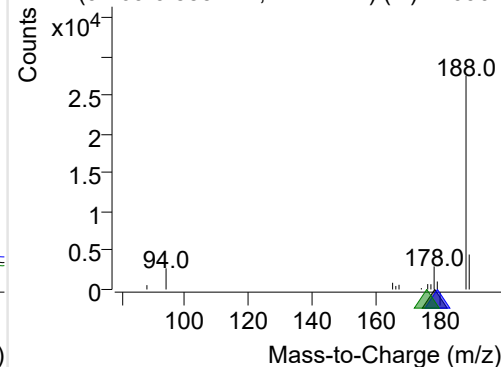
+ Selected Ion (178.0) 220907-PAHs-023.D



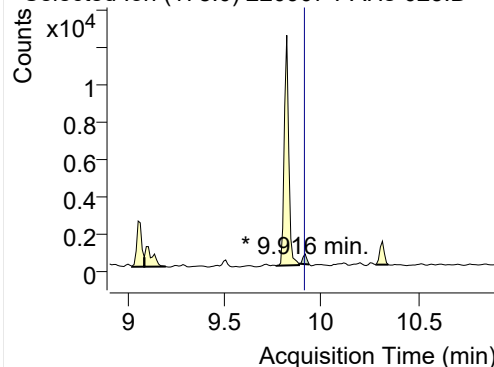
178.0, 179.0, 176.0



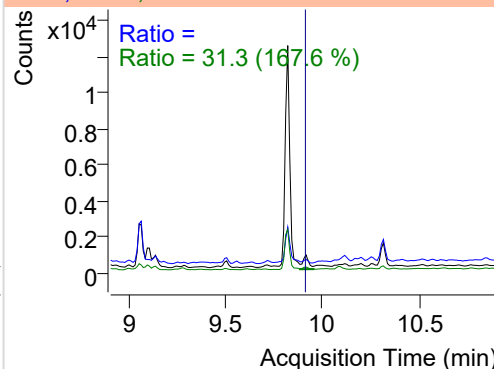
+ SIM (9.769-9.885 min, 12 scans) (\*\*) 220907

**Anthracene**

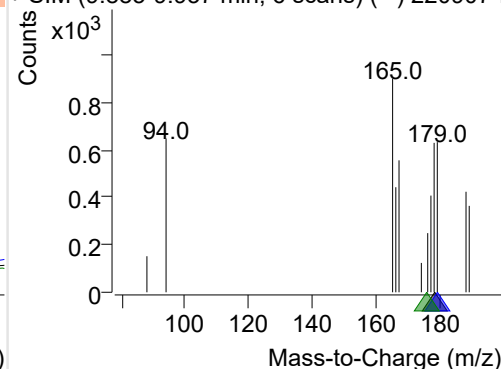
+ Selected Ion (178.0) 220907-PAHs-023.D



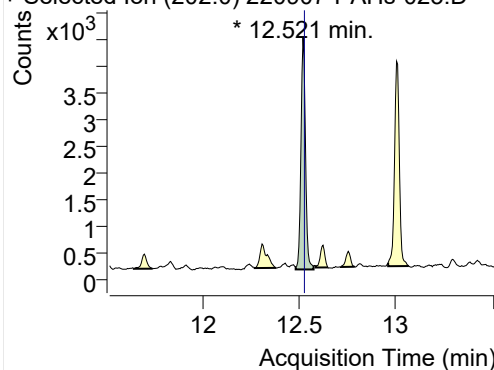
178.0, 179.0, 176.0



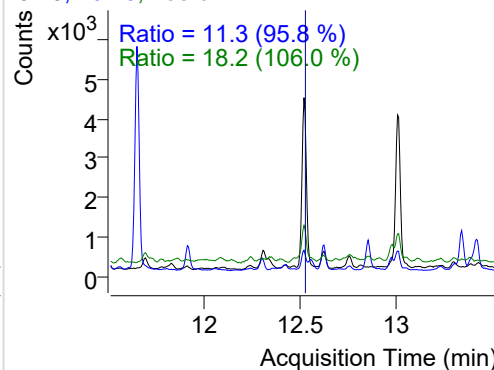
+ SIM (9.885-9.937 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

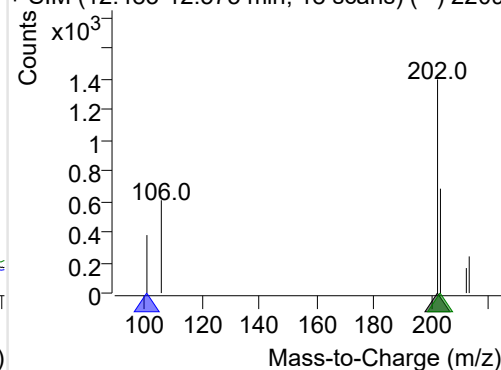
+ Selected Ion (202.0) 220907-PAHs-023.D



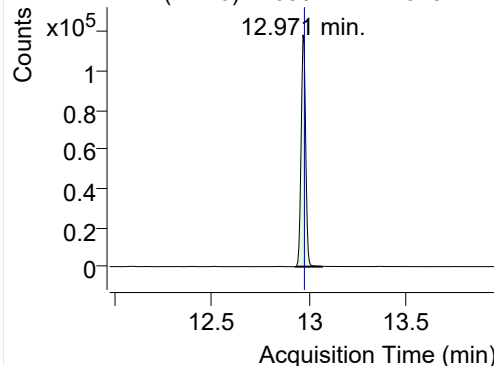
202.0, 101.0, 203.0



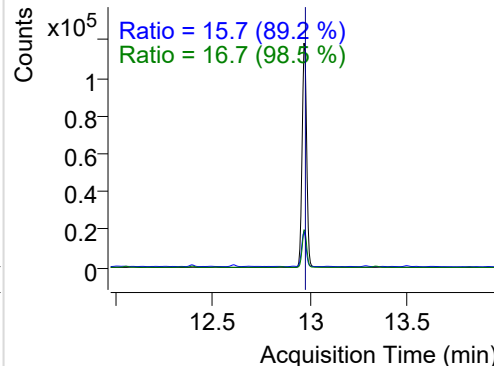
+ SIM (12.483-12.575 min, 18 scans) (\*\*) 2209

**LSS-D10-Pyrene**

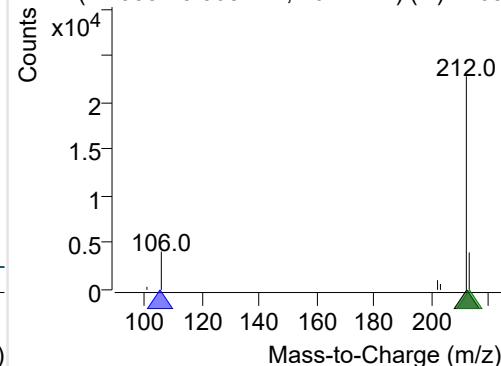
+ Selected Ion (212.0) 220907-PAHs-023.D



212.0, 106.0, 213.0

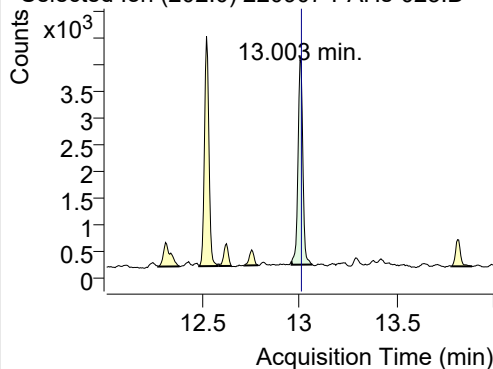


+ SIM (12.933-13.068 min, 26 scans) (\*\*) 2209

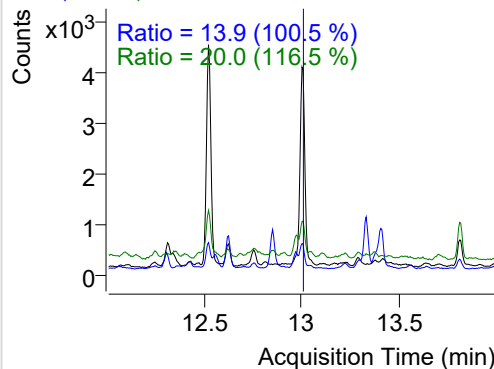


**Pyrene**

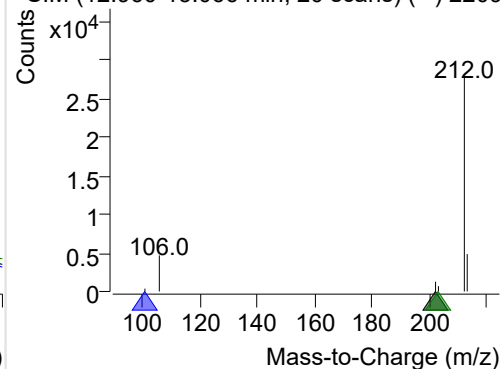
+ Selected Ion (202.0) 220907-PAHs-023.D



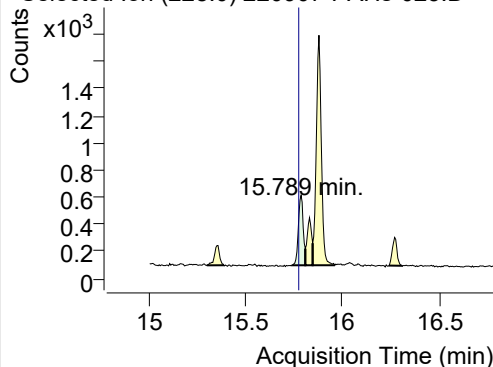
202.0, 101.0, 203.0



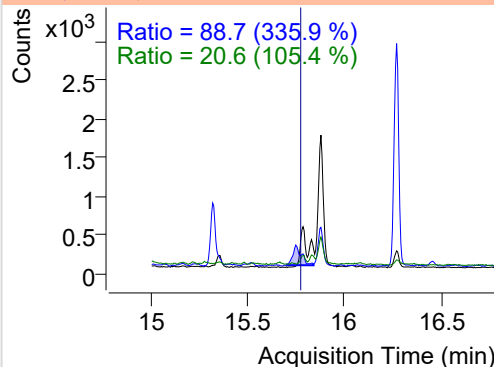
+ SIM (12.960-13.066 min, 20 scans) (\*\*) 2209

**Benz(a)anthracene**

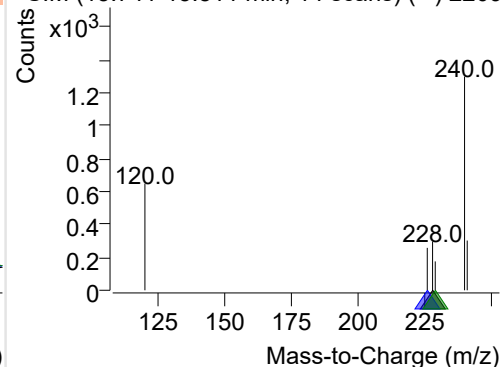
+ Selected Ion (228.0) 220907-PAHs-023.D



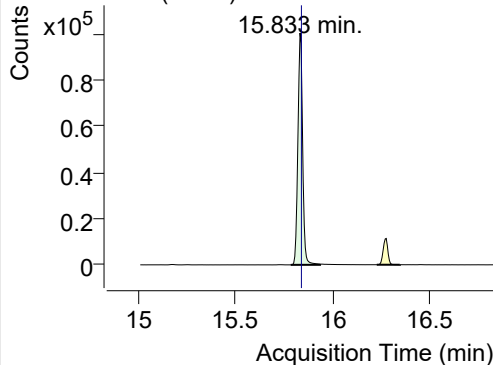
228.0, 226.0, 229.0



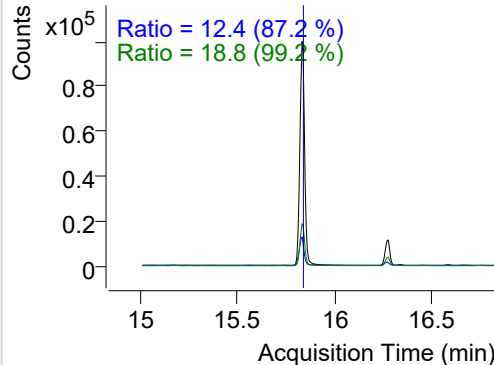
+ SIM (15.741-15.811 min, 14 scans) (\*\*) 2209

**IS-D12-Chrysene**

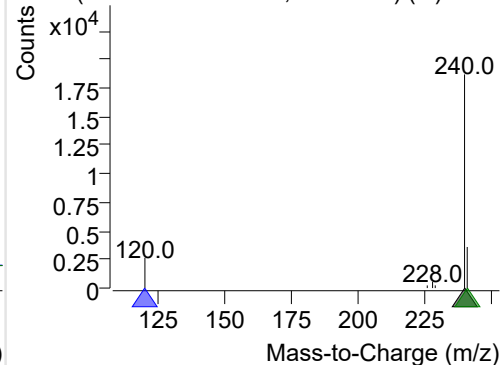
+ Selected Ion (240.0) 220907-PAHs-023.D



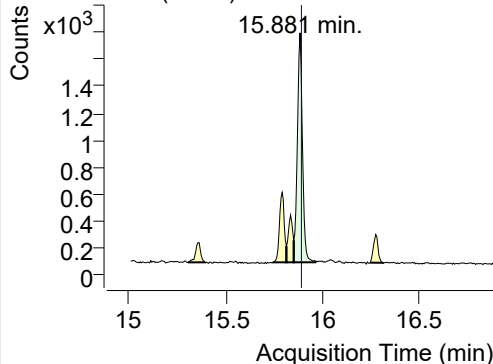
240.0, 120.0, 241.0



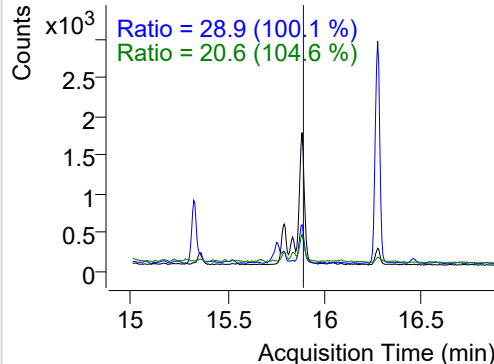
+ SIM (15.785-15.936 min, 28 scans) (\*\*) 2209

**Chrysene**

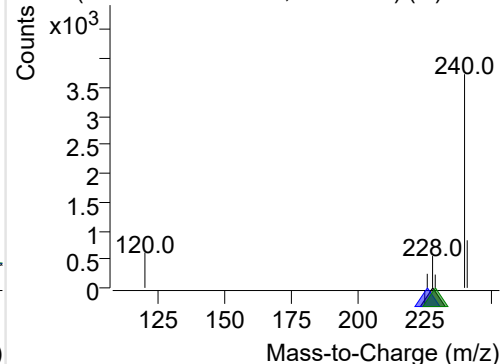
+ Selected Ion (228.0) 220907-PAHs-023.D



228.0, 226.0, 229.0

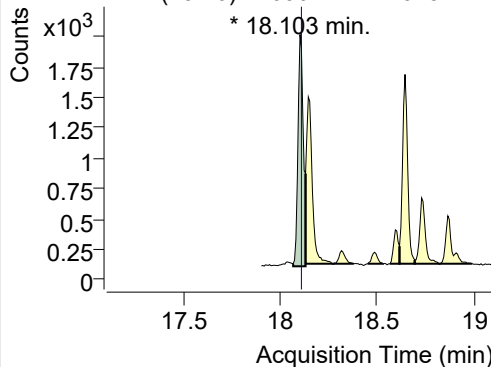


+ SIM (15.849-15.962 min, 21 scans) (\*\*) 2209

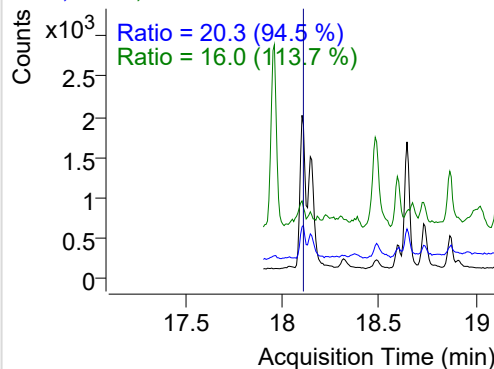


**Benzo(b)fluoranthene**

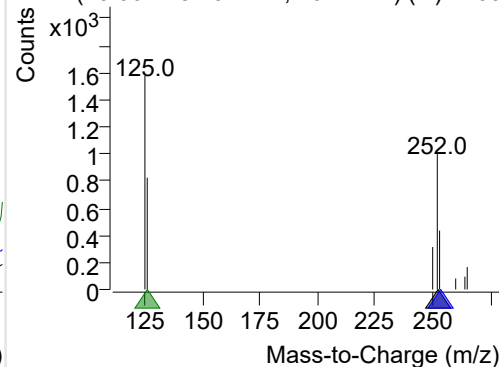
+ Selected Ion (252.0) 220907-PAHs-023.D



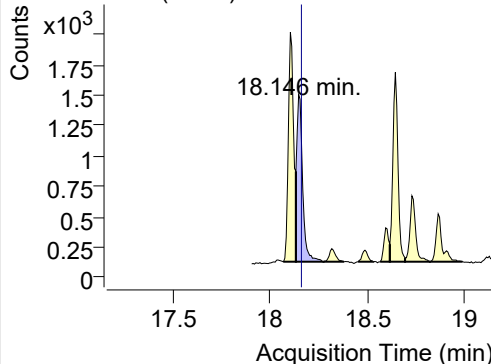
252.0, 253.0, 126.0



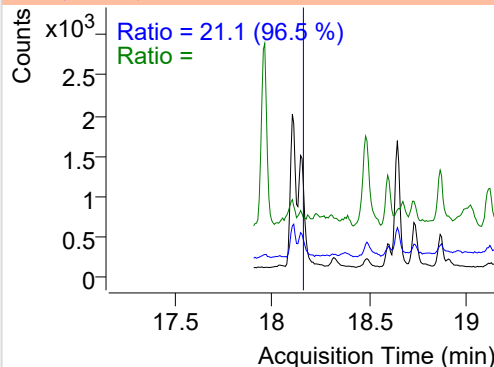
+ SIM (18.067-18.132 min, 10 scans) (\*\*) 2209

**Benzo(k)fluoranthene**

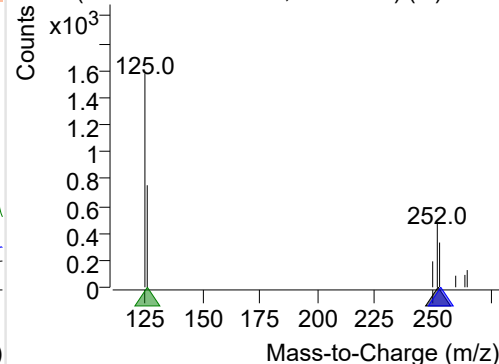
+ Selected Ion (252.0) 220907-PAHs-023.D



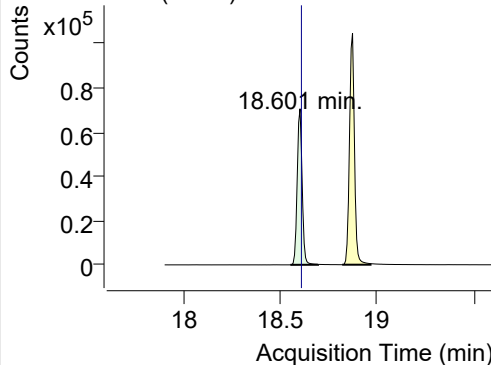
252.0, 253.0, 126.0



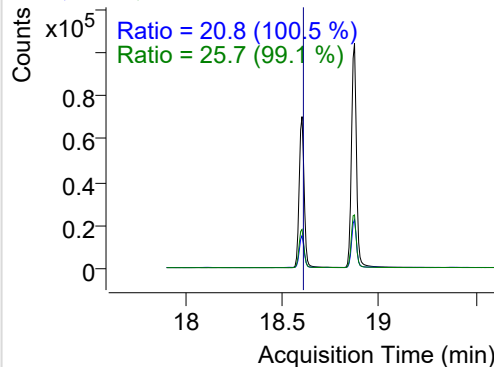
+ SIM (18.132-18.274 min, 21 scans) (\*\*) 2209

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

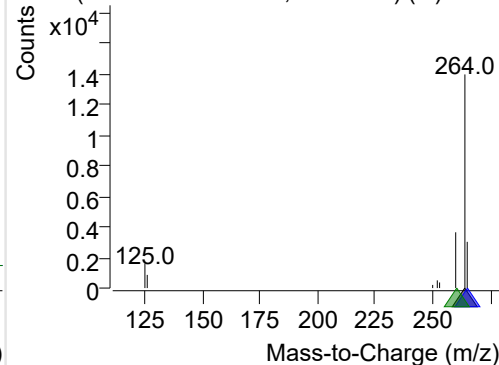
+ Selected Ion (264.0) 220907-PAHs-023.D



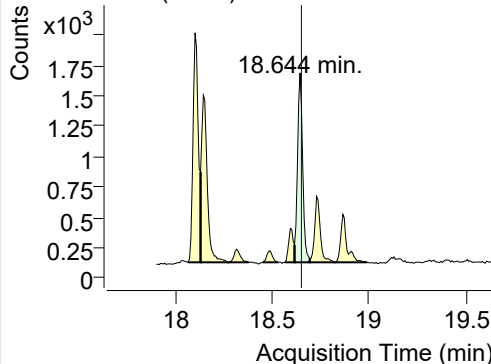
264.0, 265.0, 260.0



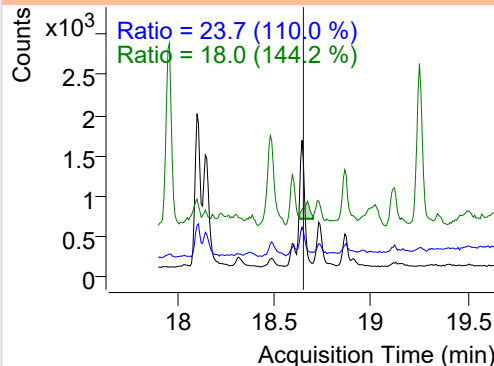
+ SIM (18.552-18.694 min, 21 scans) (\*\*) 2209

**Benzo(e)pyrene**

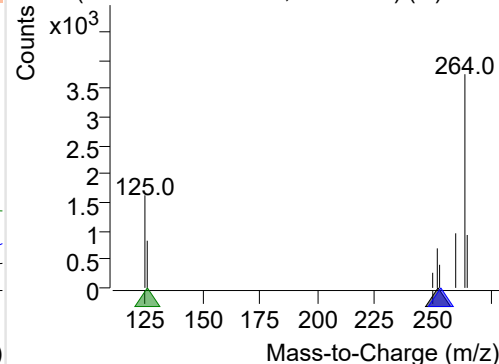
+ Selected Ion (252.0) 220907-PAHs-023.D



252.0, 253.0, 126.0



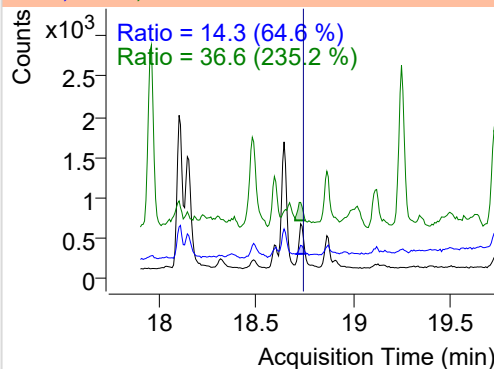
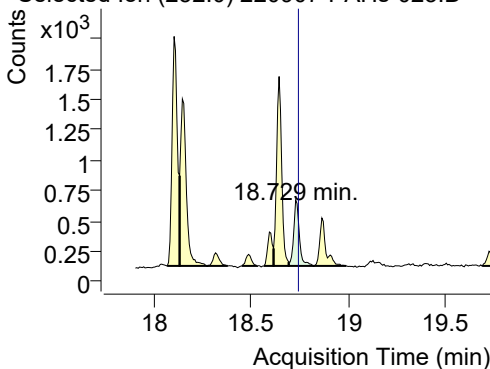
+ SIM (18.616-18.694 min, 12 scans) (\*\*) 2209



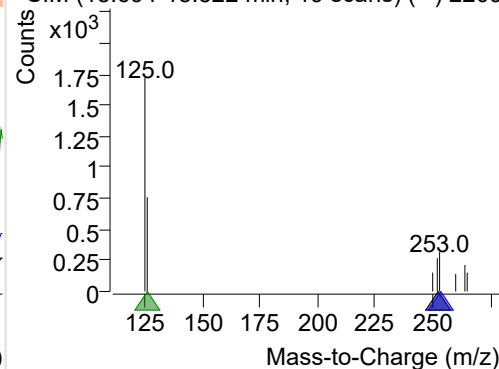
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-023.D

252.0, 253.0, 126.0

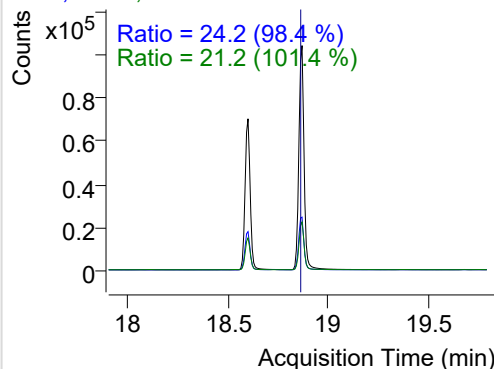
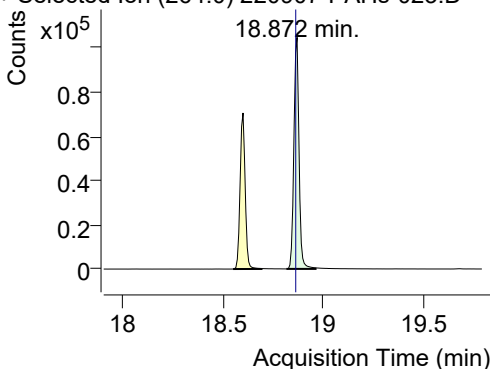


+ SIM (18.694-18.822 min, 19 scans) (\*\*) 2209

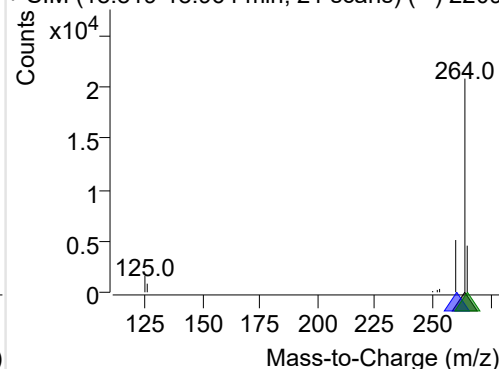
**IS-D12-Perylene**

+ Selected Ion (264.0) 220907-PAHs-023.D

264.0, 260.0, 265.0

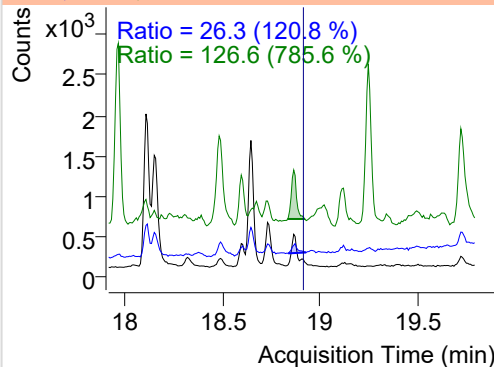
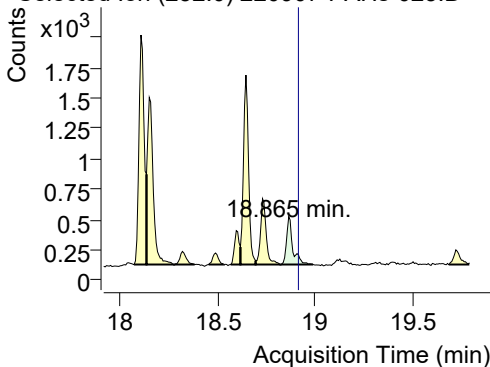


+ SIM (18.819-18.964 min, 21 scans) (\*\*) 2209

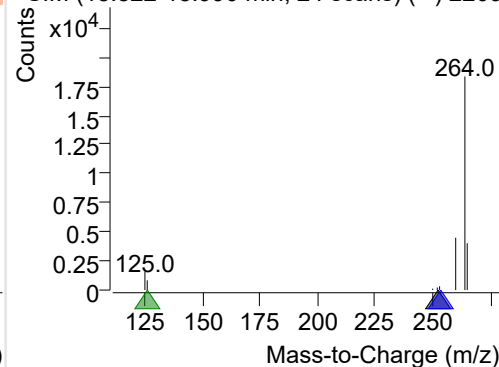
**Perylene**

+ Selected Ion (252.0) 220907-PAHs-023.D

252.0, 253.0, 126.0

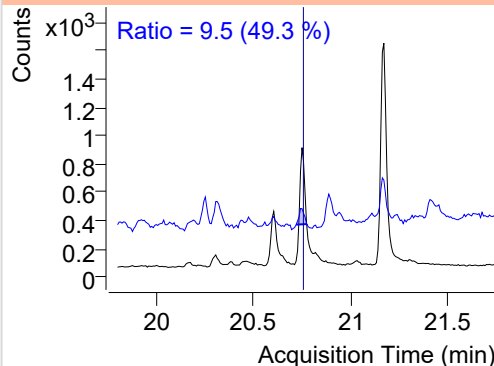
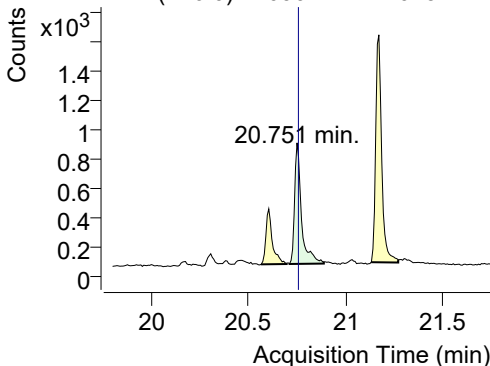


+ SIM (18.822-18.990 min, 24 scans) (\*\*) 2209

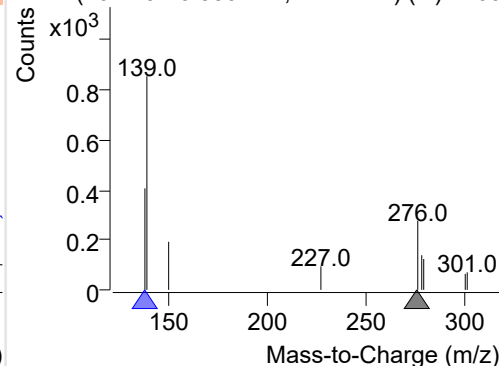
**Indeno(1,2,3-c,d)pyrene**

+ Selected Ion (276.0) 220907-PAHs-023.D

276.0, 138.0



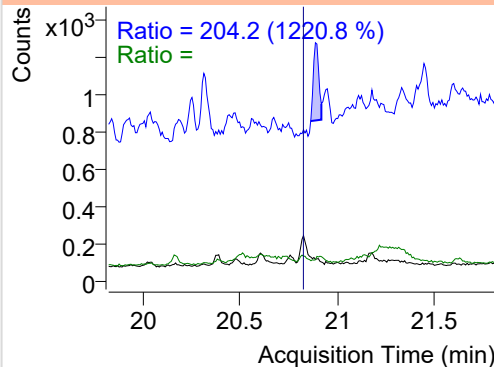
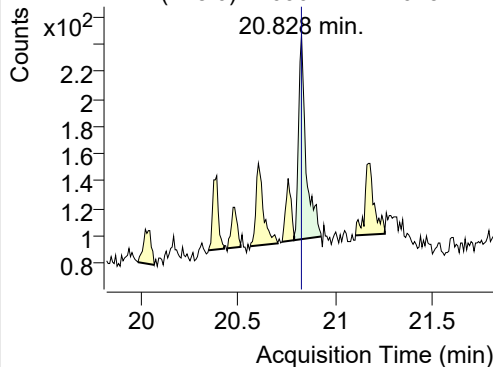
+ SIM (20.713-20.889 min, 24 scans) (\*\*) 2209



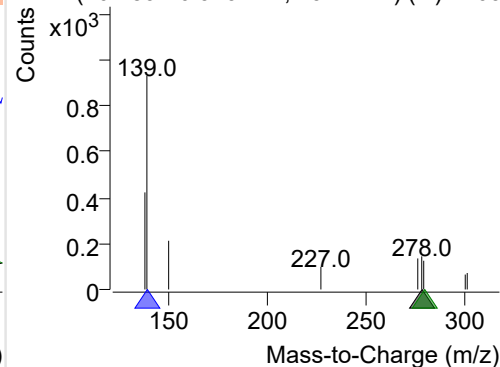
**Dibenz(a,h)anthracene**

+ Selected Ion (278.0) 220907-PAHs-023.D

278.0, 139.0, 279.0

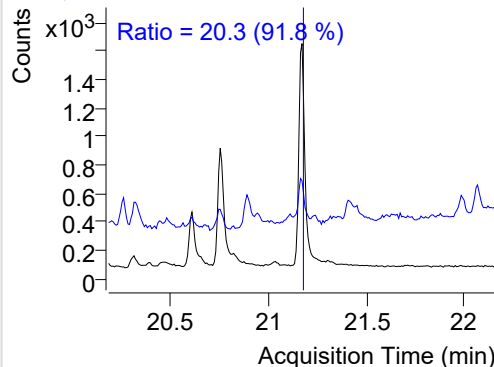
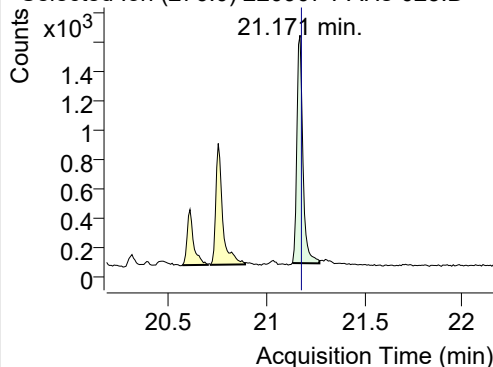


+ SIM (20.789-20.929 min, 19 scans) (\*\*) 2209

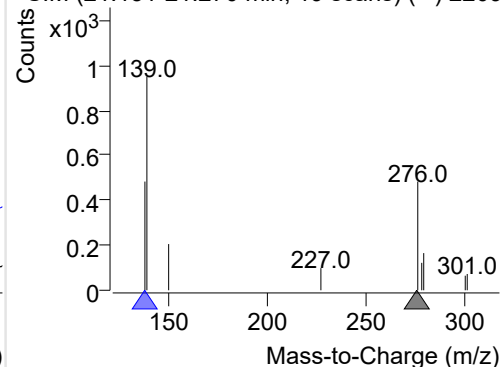
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-023.D

276.0, 138.0

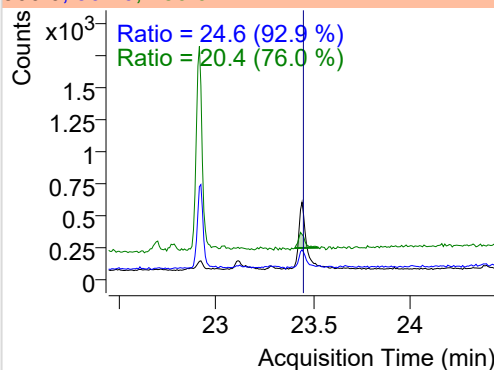
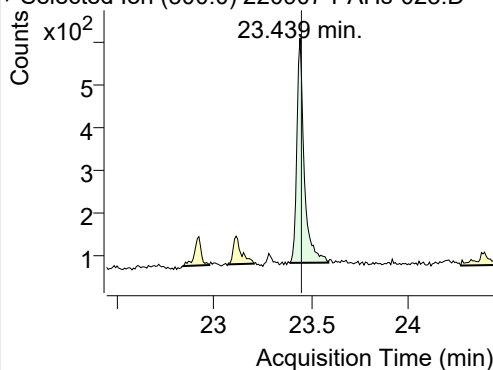


+ SIM (21.131-21.270 min, 19 scans) (\*\*) 2209

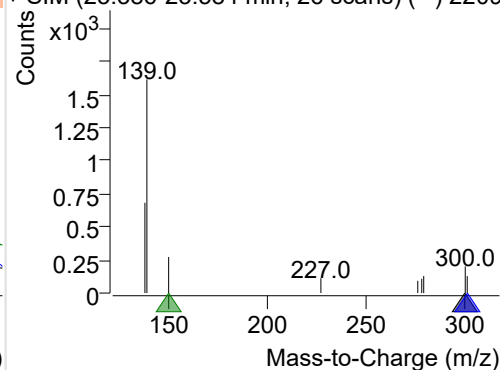
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-023.D

300.0, 301.0, 150.0



+ SIM (23.386-23.584 min, 26 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

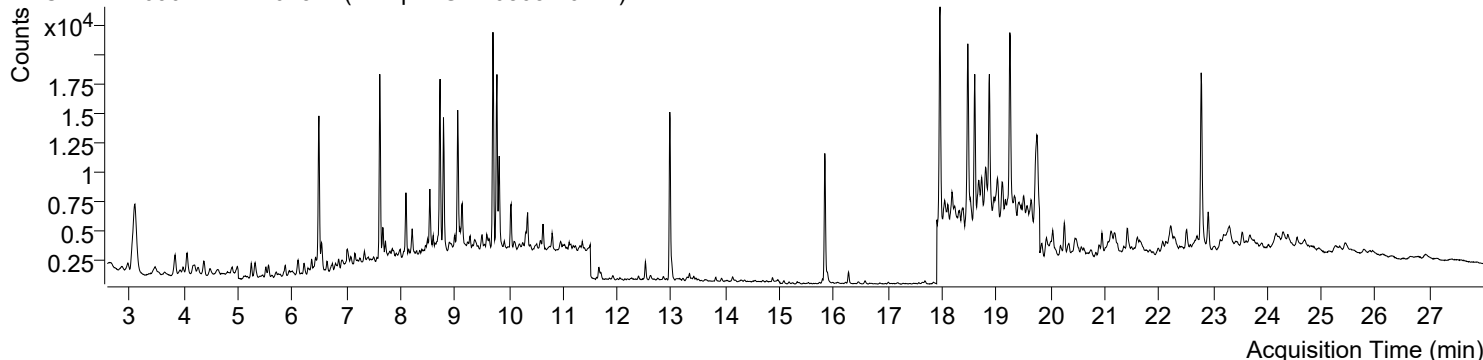


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 12:52:56	Data File	220907-PAHs-025.D
Type	Sample	Name	Sample-Gas-0803-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

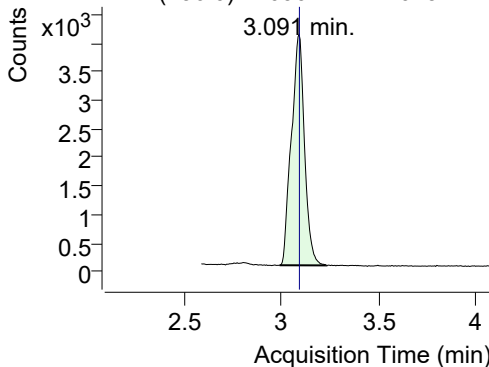
+ TIC SIM 220907-PAHs-025.D (Sample-Gas-0803-10DIL)



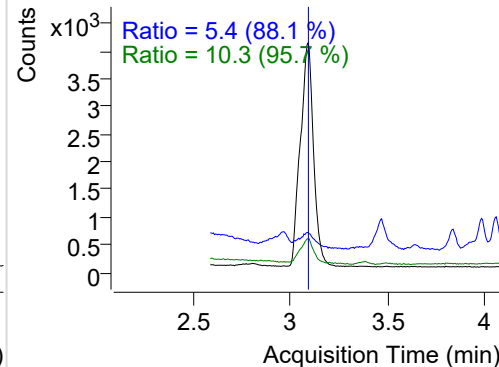
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.091	136.0	18967	4038.82	ND ng/ml	10.3
Naphthalene	3.118	128.0	5961	1292.98	ND ng/ml	18.2
Acenaphthylene	6.161	152.0	222	132.46	ND ng/ml	76.6
IS-D10-Acenaphthene	6.493	164.0	11627	6349.11	ND ng/ml	103.5
Acenaphthene	6.540	154.0	1817	863.01	ND ng/ml	48.0
LSS-D10-Fluorene	7.617	176.0	11647	6965.85	ND ng/ml	92.5
Fluorene	7.669	166.0	2213	1145.36	ND ng/ml	104.7
IS-D10-Phenanthrene	9.780	188.0	20027	11952.20	ND ng/ml	16.1
Phenanthrene	9.822	178.0	8132	4939.50	ND ng/ml	20.2
Anthracene	9.916	178.0	669	392.52	ND ng/ml	19.6
Fluoranthene	12.521	202.0	1813	1121.74	ND ng/ml	26.5
LSS-D10-Pyrene	12.971	212.0	17807	10712.16	ND ng/ml	15.7
Pyrene	13.003	202.0	1649	963.58	ND ng/ml	24.6
Benz(a)anthracene	15.789	228.0	501	260.77	ND ng/ml	25.4
IS-D12-Chrysene	15.833	240.0	14782	8377.37	ND ng/ml	19.0
Chrysene	15.882	228.0	905	439.77	ND ng/ml	38.6
Benzo(b)fluoranthene	18.110	252.0	1237	641.38	ND ng/ml	46.4
Benzo(k)fluoranthene	18.160	252.0	1168	365.76	ND ng/ml	35.5
SS-D12-Benzo(e)pyrene	18.601	264.0	13962	7890.49	ND ng/ml	25.7
Benzo(e)pyrene	18.644	252.0	966	424.86	ND ng/ml	27.2
Benzo(a)pyrene	18.737	252.0	671	304.37	ND ng/ml	34.8
IS-D12-Perylene	18.872	264.0	15939	8174.23	ND ng/ml	23.7
Perylene	18.915	252.0	68	40.49	ND ng/ml	292.0
Indeno(1,2,3-c,d)pyrene	20.759	276.0	636	215.39	ND ng/ml	39.8
Dibenz(a,h)anthracene	20.828	278.0	239	79.43	ND ng/ml	
Benzo(g,h,i)perylene	21.171	276.0	734	330.83	ND ng/ml	151.3
Coronene	23.447	300.0	358	107.19	ND ng/ml	

## IS-D8-Naphthalene

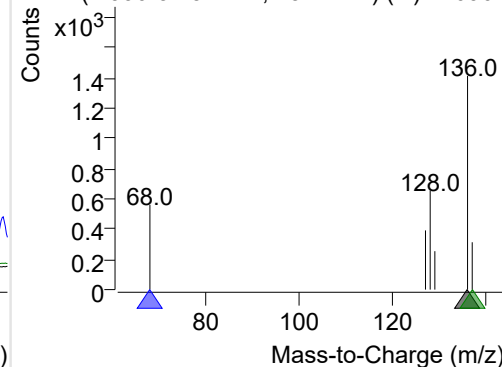
+ Selected Ion (136.0) 220907-PAHs-025.D



136.0, 68.0, 137.0

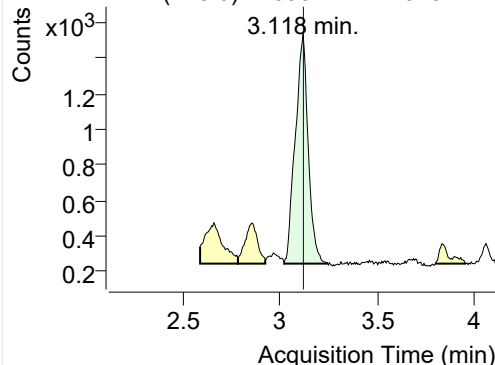


+ SIM (2.990-3.231 min, 45 scans) (\*\*) 220907

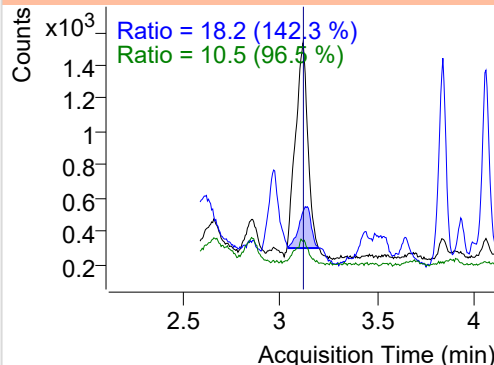


**Naphthalene**

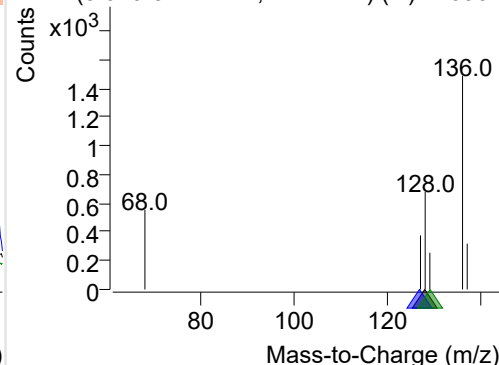
+ Selected Ion (128.0) 220907-PAHs-025.D



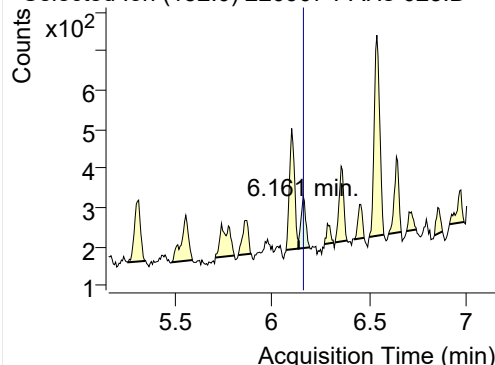
128.0, 127.0, 129.0



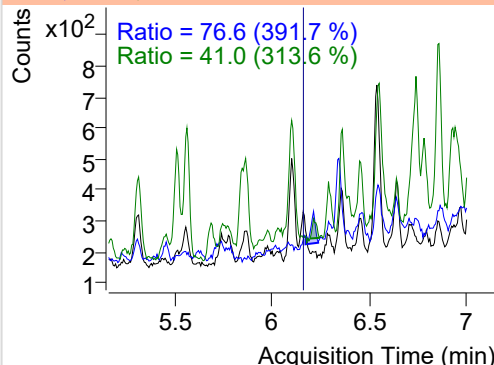
+ SIM (3.020-3.244 min, 42 scans) (\*\*) 220907

**Acenaphthylene**

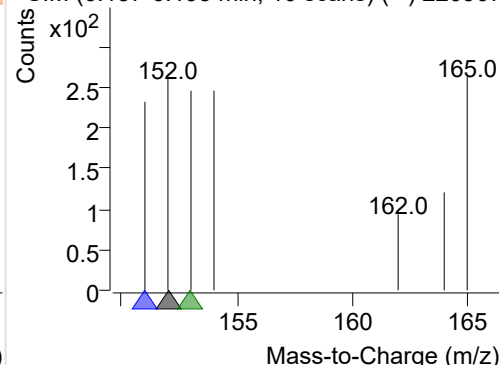
+ Selected Ion (152.0) 220907-PAHs-025.D



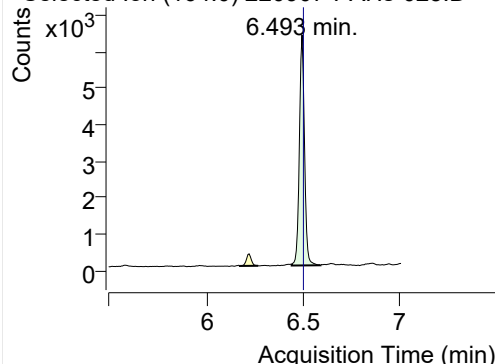
152.0, 151.0, 153.0



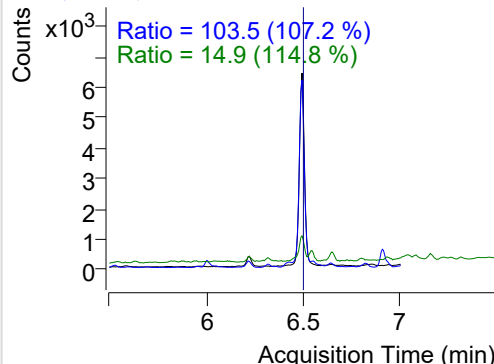
+ SIM (6.137-6.195 min, 10 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

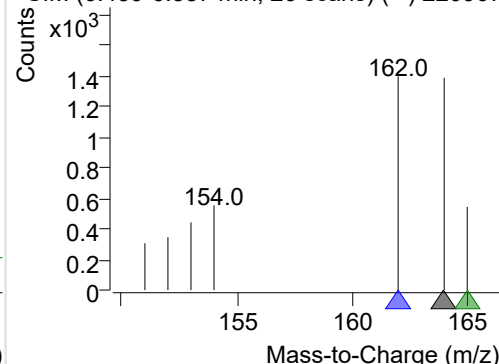
+ Selected Ion (164.0) 220907-PAHs-025.D



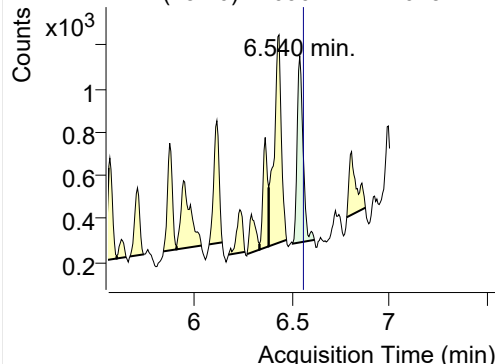
164.0, 162.0, 165.0



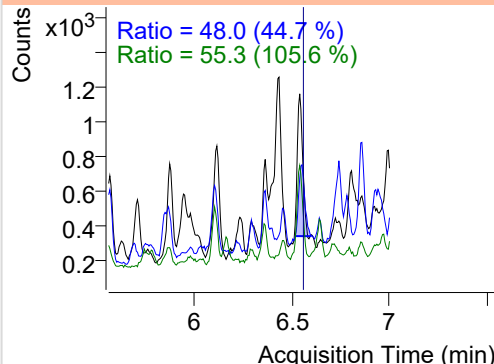
+ SIM (6.439-6.587 min, 26 scans) (\*\*) 220907

**Acenaphthene**

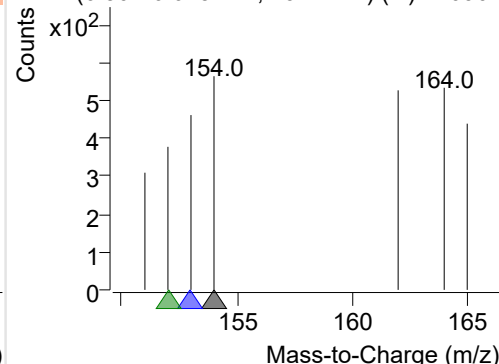
+ Selected Ion (154.0) 220907-PAHs-025.D



154.0, 153.0, 152.0

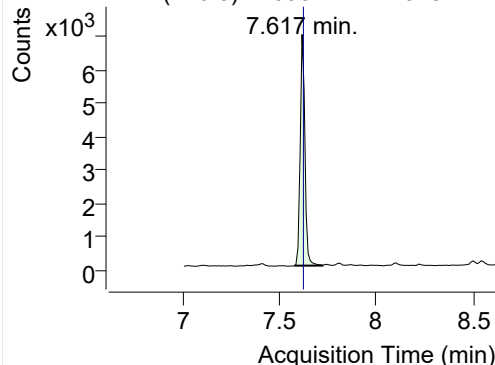


+ SIM (6.504-6.615 min, 19 scans) (\*\*) 220907

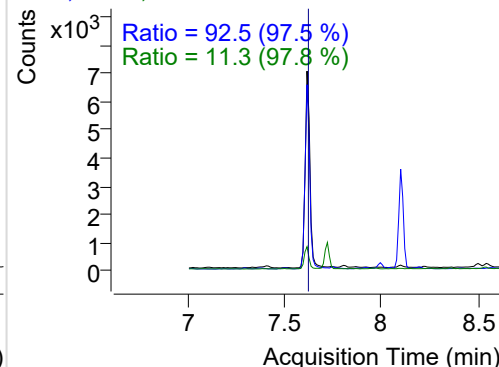


## LSS-D10-Fluorene

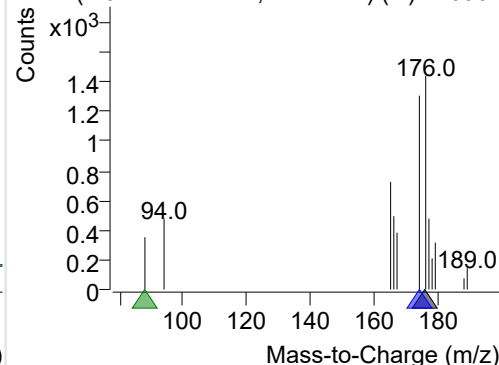
+ Selected Ion (176.0) 220907-PAHs-025.D



176.0, 174.0, 88.0

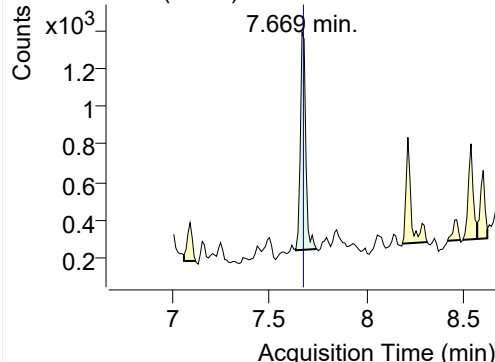


+ SIM (7.577-7.722 min, 14 scans) (\*\*) 220907

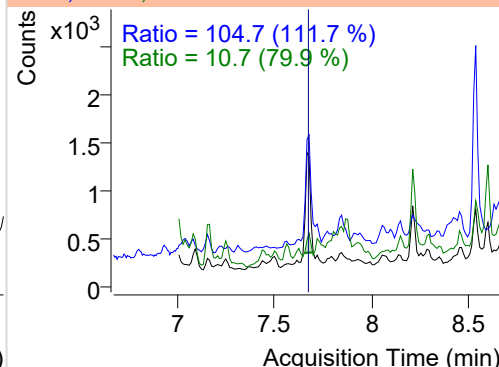


## Fluorene

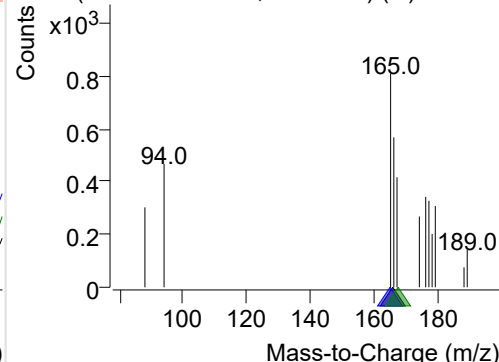
+ Selected Ion (166.0) 220907-PAHs-025.D



166.0, 165.0, 167.0

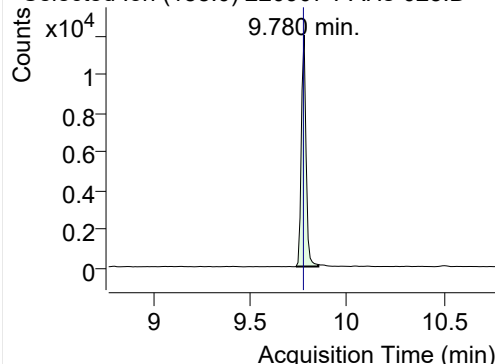


+ SIM (7.638-7.745 min, 11 scans) (\*\*) 220907

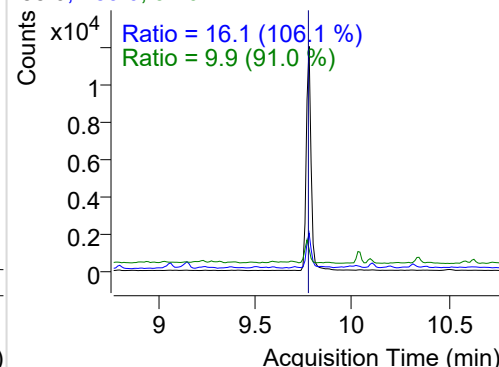


## IS-D10-Phenanthrene

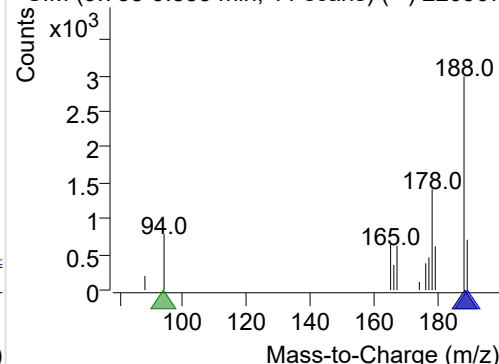
+ Selected Ion (188.0) 220907-PAHs-025.D



188.0, 189.0, 94.0

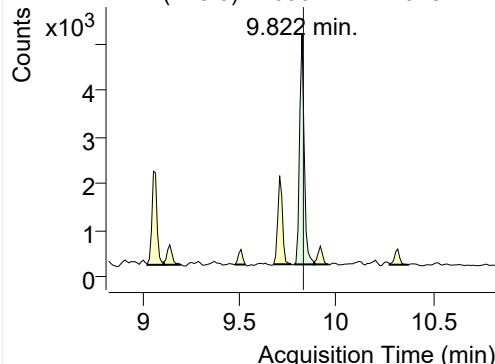


+ SIM (9.738-9.853 min, 11 scans) (\*\*) 220907

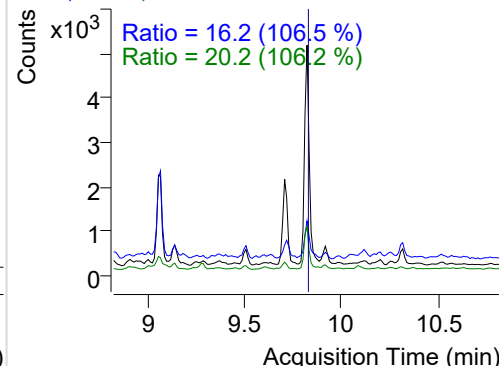


## Phenanthrene

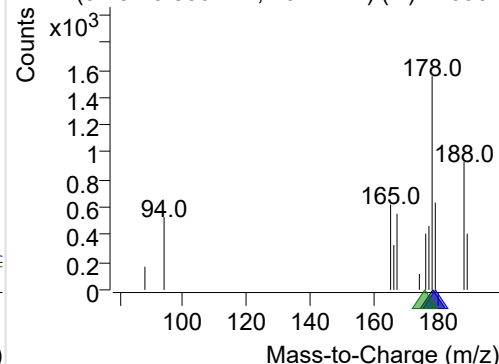
+ Selected Ion (178.0) 220907-PAHs-025.D



178.0, 179.0, 176.0

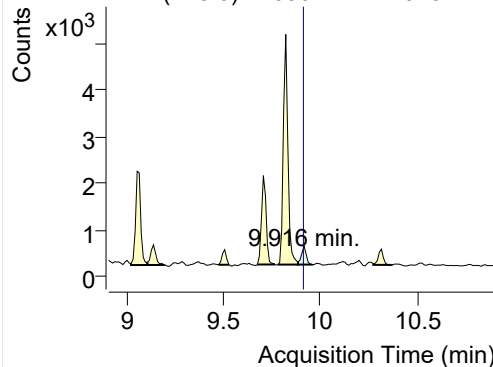


+ SIM (9.781-9.885 min, 10 scans) (\*\*) 220907

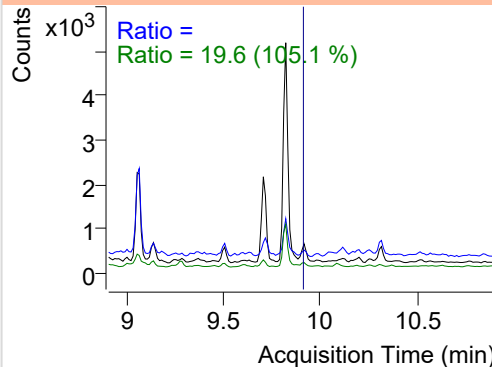


**Anthracene**

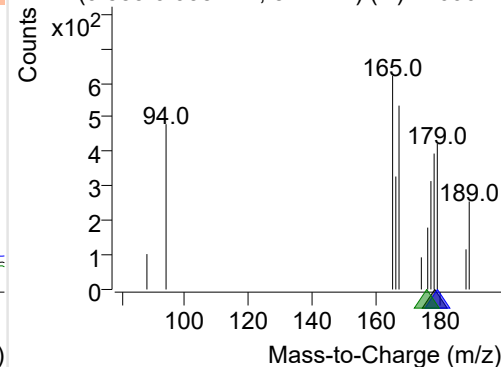
+ Selected Ion (178.0) 220907-PAHs-025.D



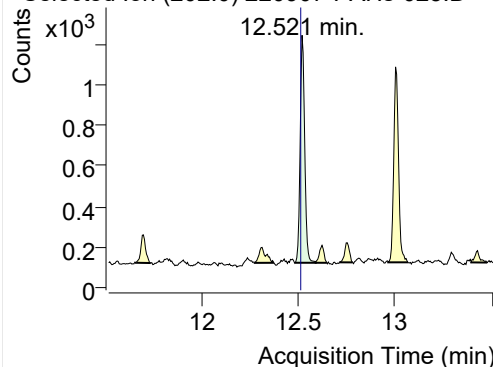
178.0, 179.0, 176.0



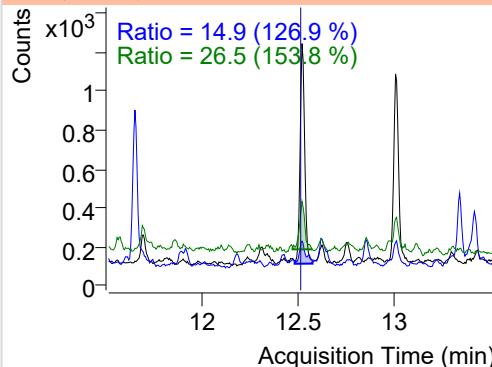
+ SIM (9.885-9.958 min, 8 scans) (\*\*) 220907-I

**Fluoranthene**

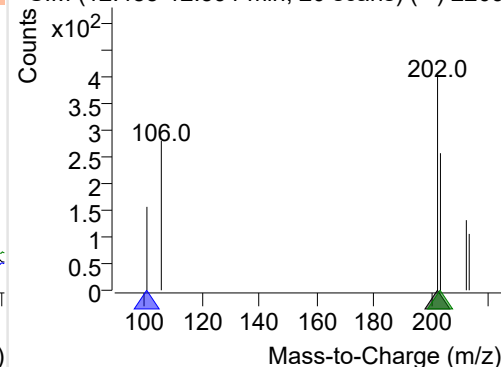
+ Selected Ion (202.0) 220907-PAHs-025.D



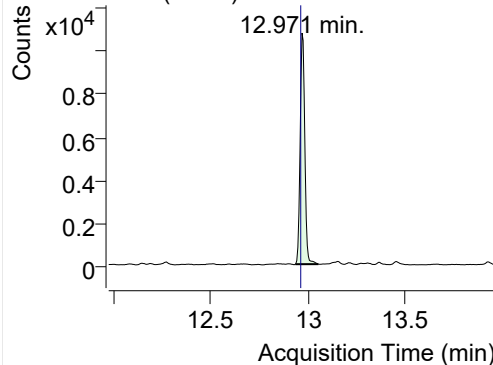
202.0, 101.0, 203.0



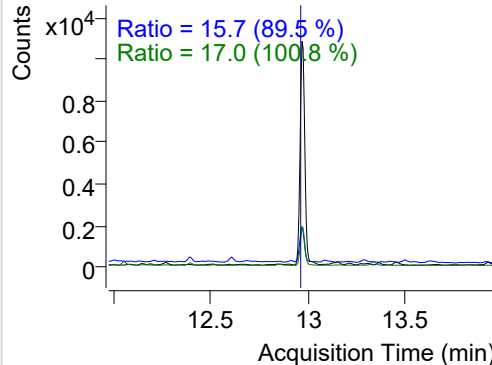
+ SIM (12.485-12.591 min, 20 scans) (\*\*) 2209

**LSS-D10-Pyrene**

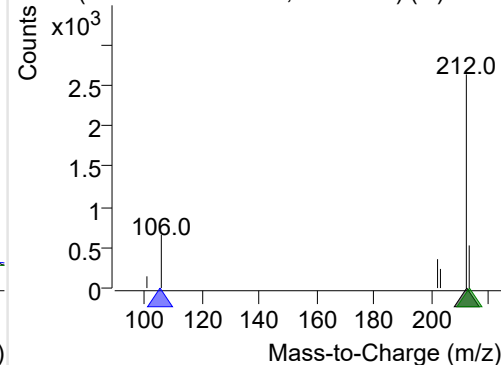
+ Selected Ion (212.0) 220907-PAHs-025.D



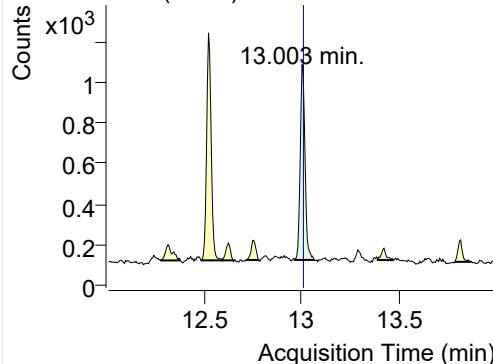
212.0, 106.0, 213.0



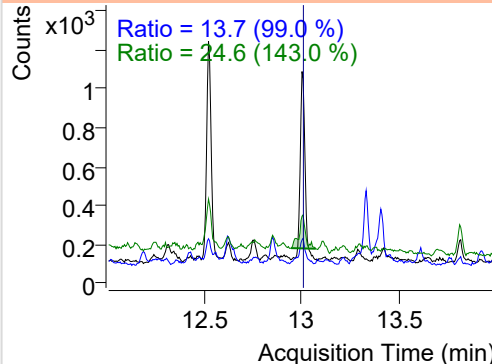
+ SIM (12.936-13.055 min, 22 scans) (\*\*) 2209

**Pyrene**

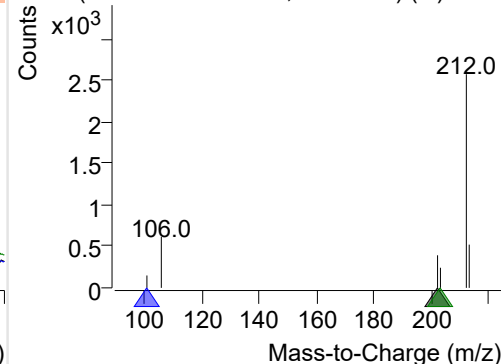
+ Selected Ion (202.0) 220907-PAHs-025.D



202.0, 101.0, 203.0

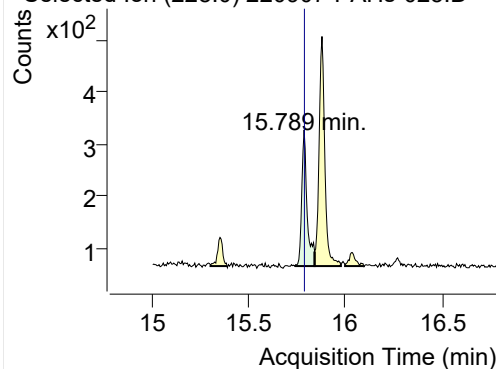


+ SIM (12.965-13.067 min, 19 scans) (\*\*) 2209

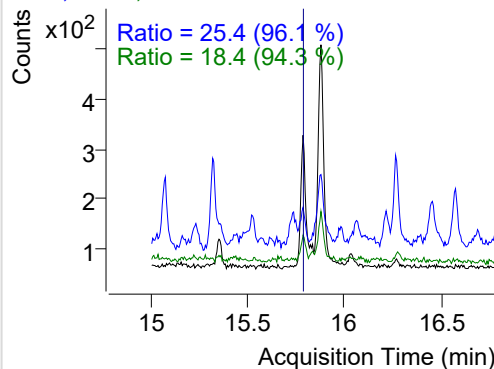


**Benz(a)anthracene**

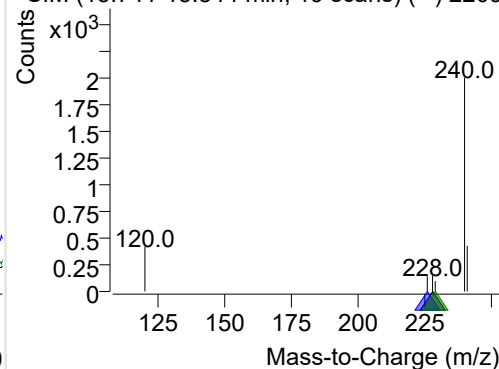
+ Selected Ion (228.0) 220907-PAHs-025.D



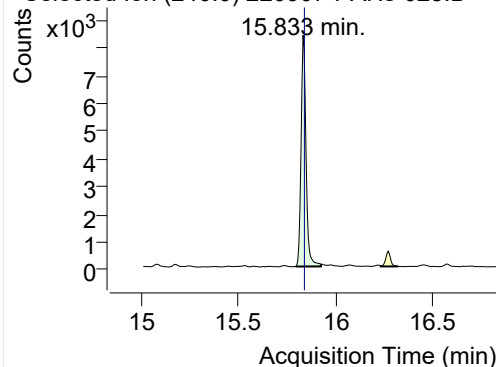
228.0, 226.0, 229.0



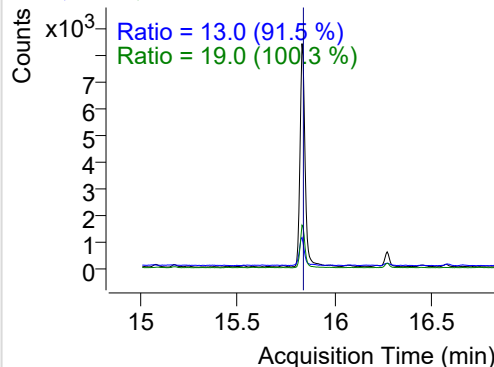
+ SIM (15.741-15.844 min, 19 scans) (\*\*) 2209

**IS-D12-Chrysene**

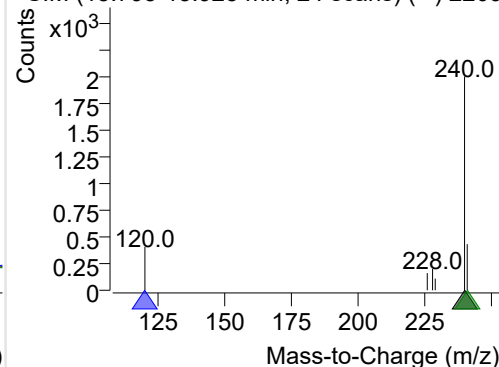
+ Selected Ion (240.0) 220907-PAHs-025.D



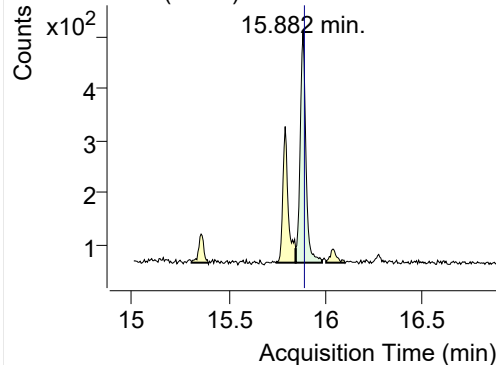
240.0, 120.0, 241.0



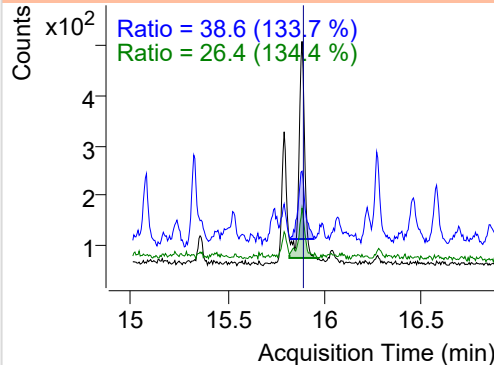
+ SIM (15.795-15.925 min, 24 scans) (\*\*) 2209

**Chrysene**

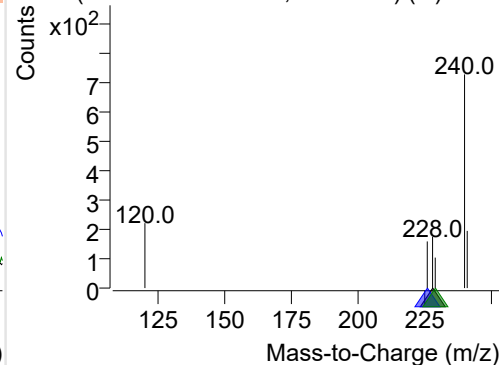
+ Selected Ion (228.0) 220907-PAHs-025.D



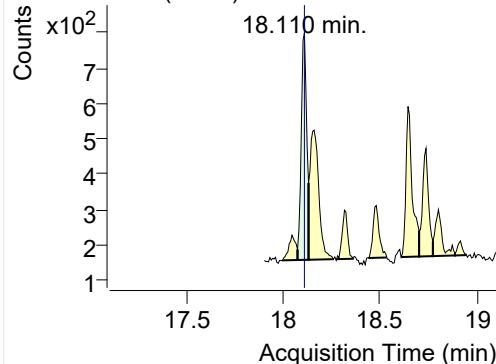
228.0, 226.0, 229.0



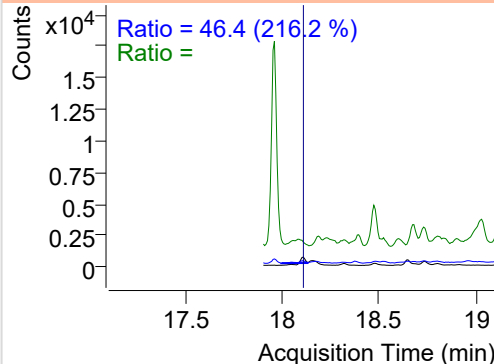
+ SIM (15.844-15.979 min, 26 scans) (\*\*) 2209

**Benzo(b)fluoranthene**

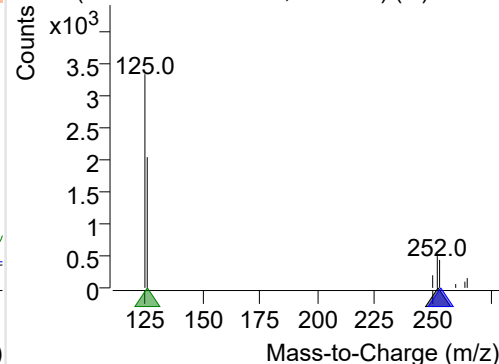
+ Selected Ion (252.0) 220907-PAHs-025.D



252.0, 253.0, 126.0



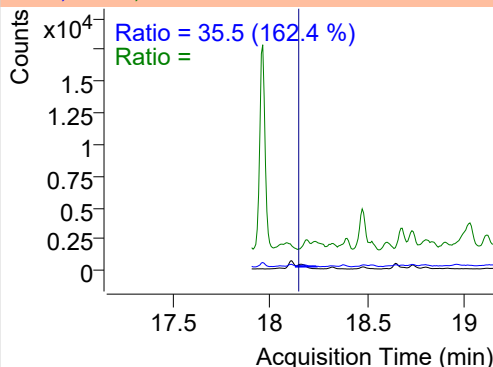
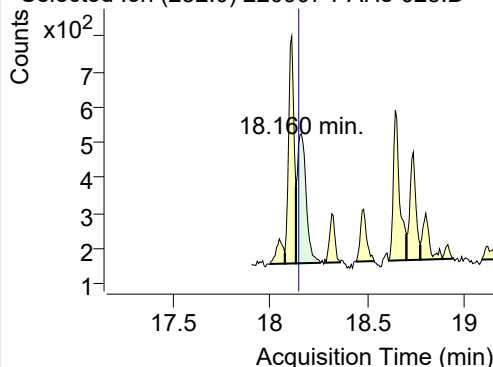
+ SIM (18.075-18.132 min, 9 scans) (\*\*) 22090



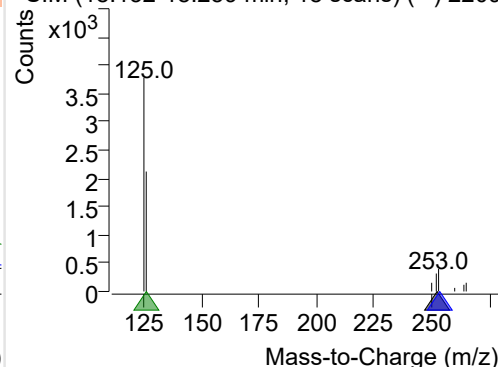
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-025.D

252.0, 253.0, 126.0

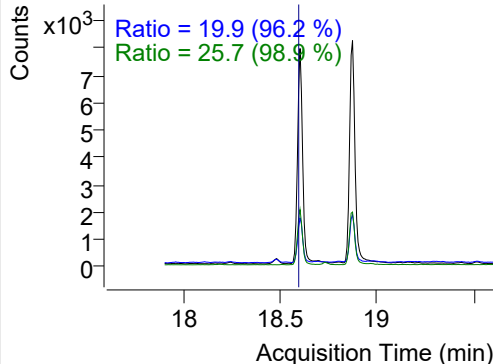
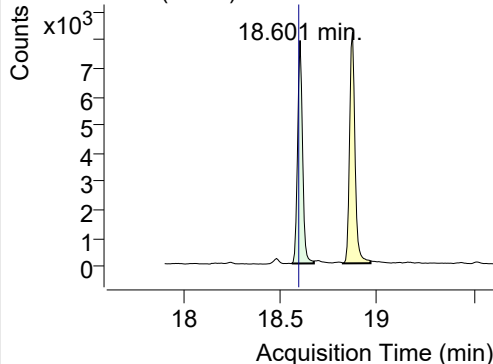


+ SIM (18.132-18.259 min, 18 scans) (\*\*) 2209

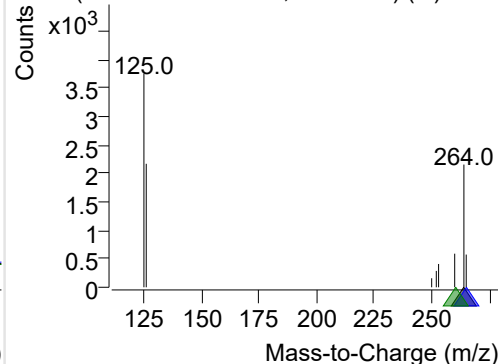
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-025.D

264.0, 265.0, 260.0

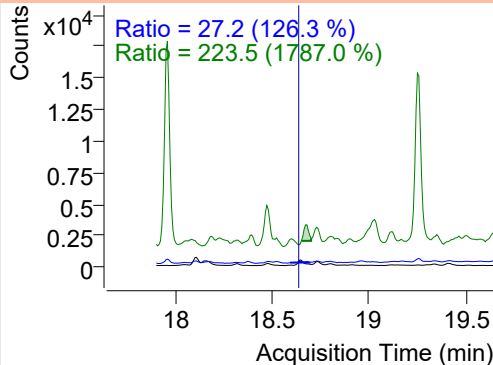
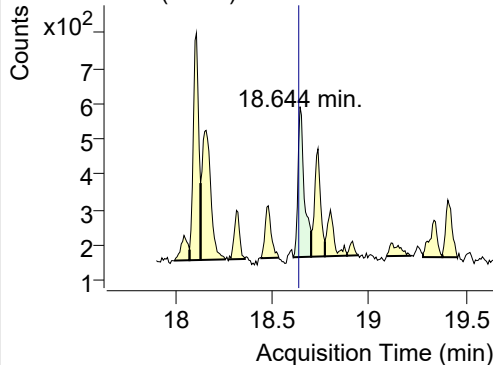


+ SIM (18.559-18.673 min, 16 scans) (\*\*) 2209

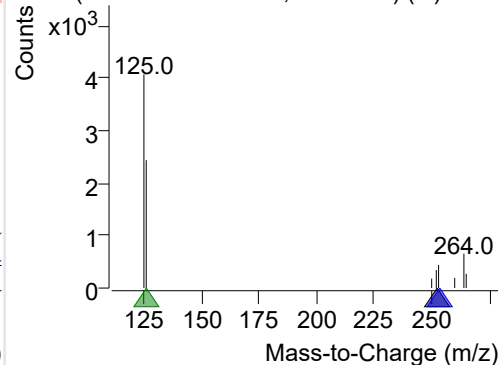
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-025.D

252.0, 253.0, 126.0

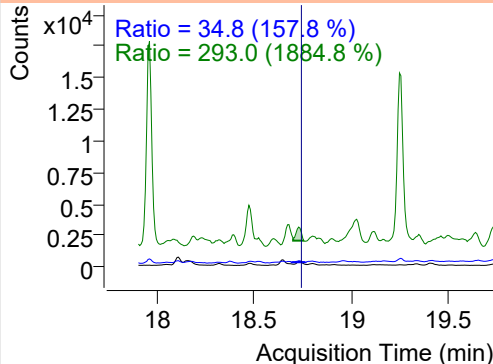
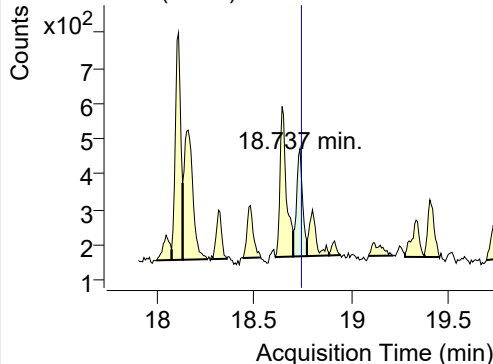


+ SIM (18.609-18.701 min, 13 scans) (\*\*) 2209

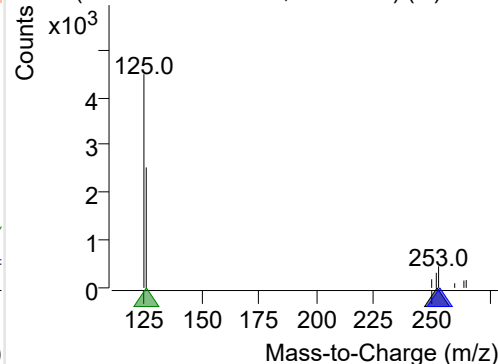
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-025.D

252.0, 253.0, 126.0

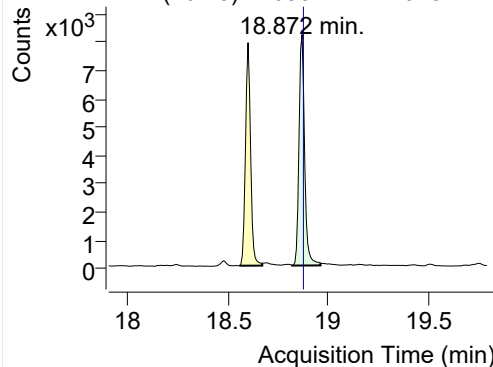


+ SIM (18.701-18.772 min, 11 scans) (\*\*) 2209

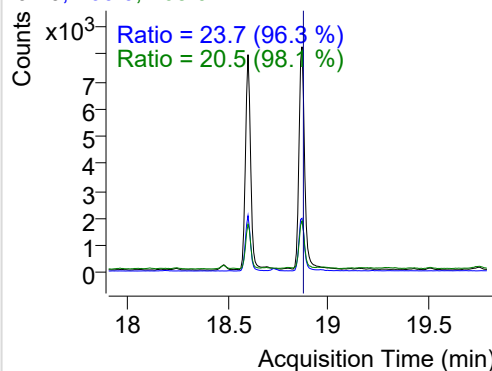


## IS-D12-Perylene

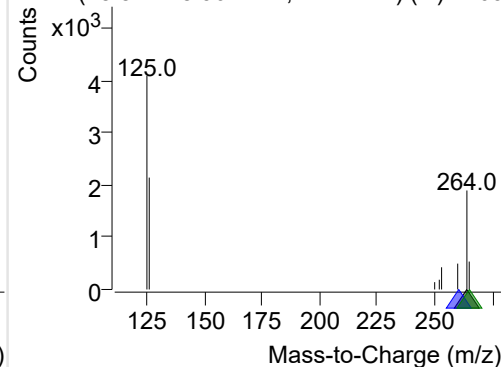
+ Selected Ion (264.0) 220907-PAHs-025.D



264.0, 260.0, 265.0

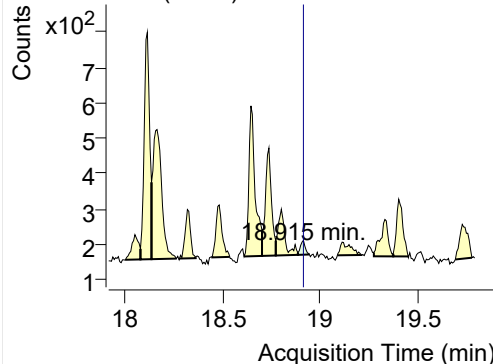


+ SIM (18.822-18.964 min, 21 scans) (\*\*) 2209

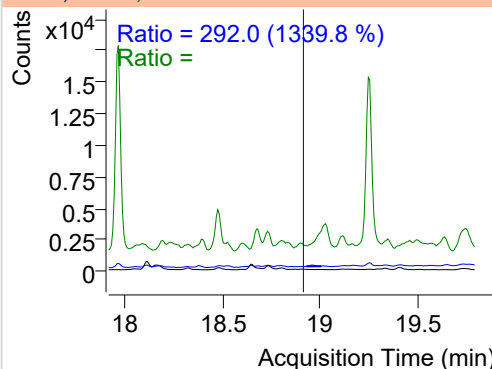


## Perylene

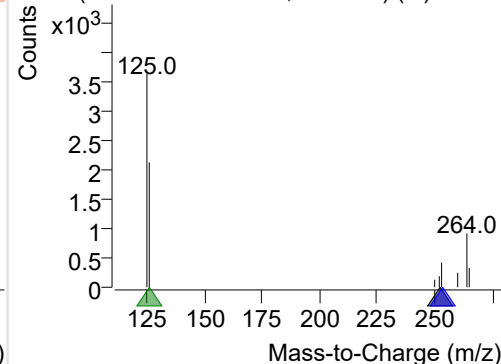
+ Selected Ion (252.0) 220907-PAHs-025.D



252.0, 253.0, 126.0

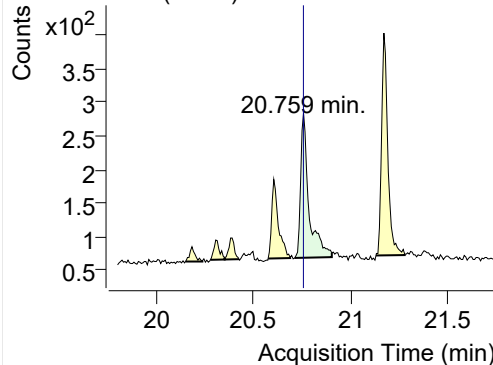


+ SIM (18.886-18.945 min, 9 scans) (\*\*) 22090

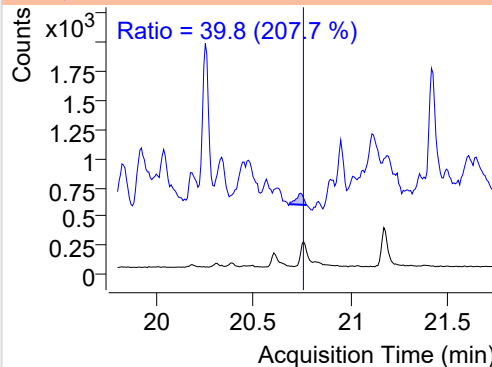


## Indeno(1,2,3-c,d)pyrene

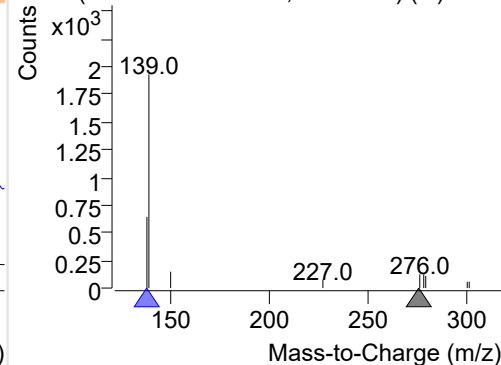
+ Selected Ion (276.0) 220907-PAHs-025.D



276.0, 138.0

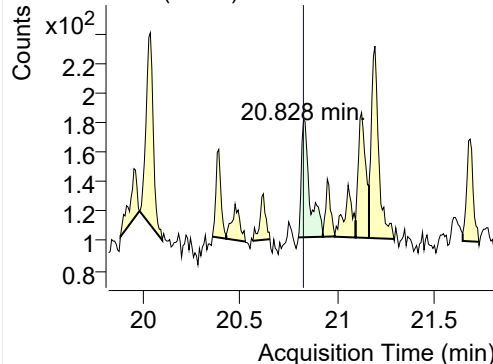


+ SIM (20.714-20.904 min, 25 scans) (\*\*) 2209

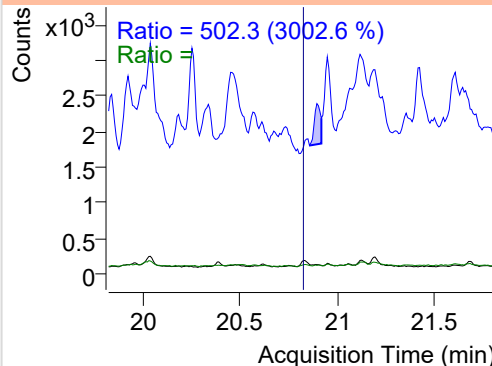


## Dibenz(a,h)anthracene

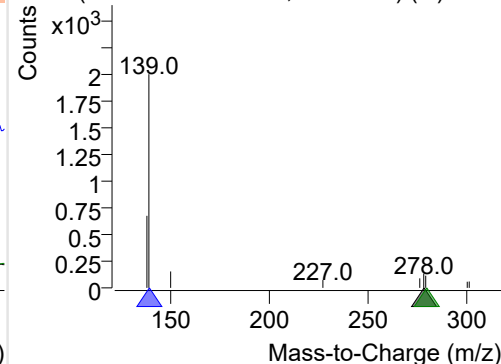
+ Selected Ion (278.0) 220907-PAHs-025.D



278.0, 139.0, 279.0



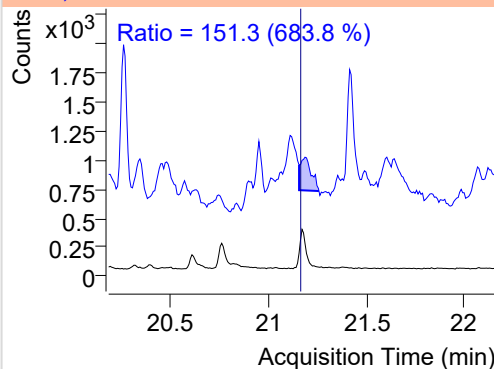
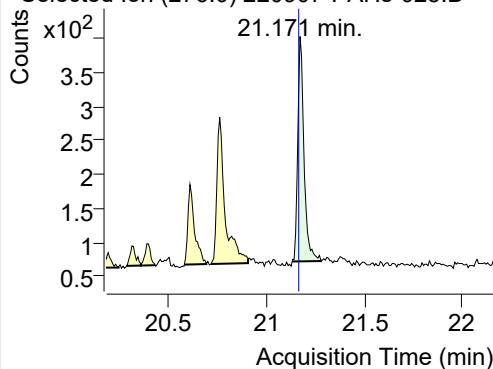
+ SIM (20.801-20.927 min, 17 scans) (\*\*) 2209



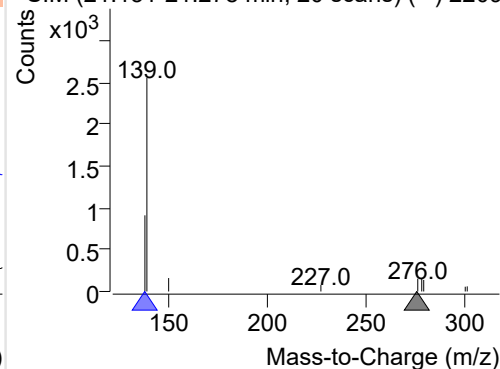
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-025.D

276.0, 138.0

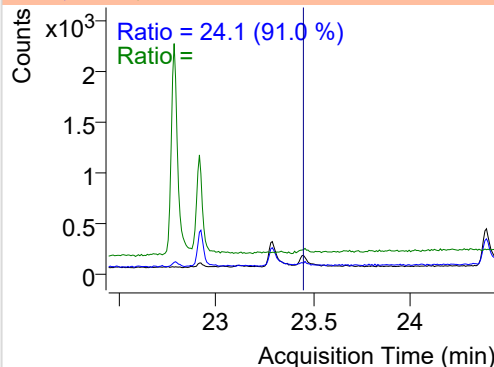
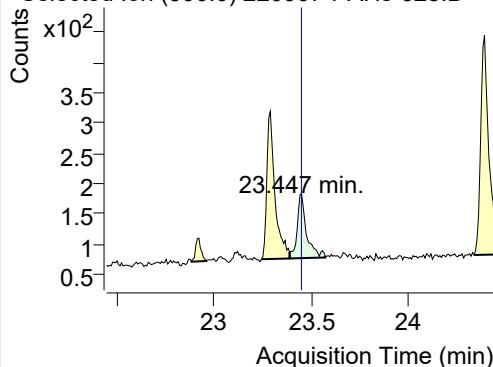


+ SIM (21.131-21.278 min, 20 scans) (\*\*) 2209

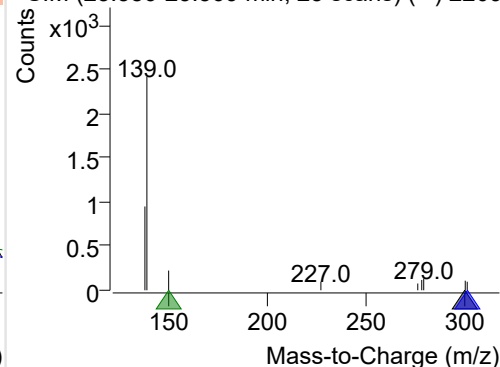
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-025.D

300.0, 301.0, 150.0



+ SIM (23.386-23.569 min, 25 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

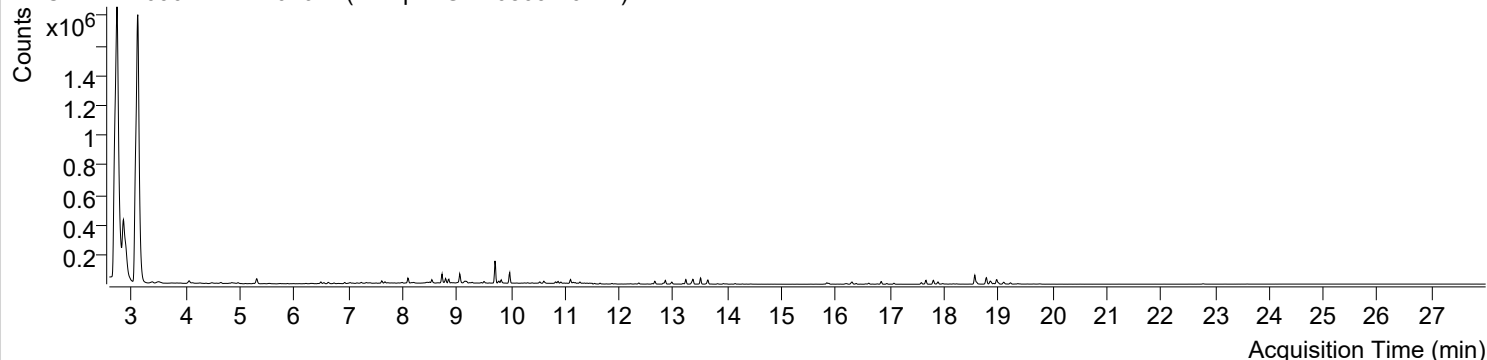


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 1:23:55	Data File	220907-PAHs-026.D
Type	Sample	Name	Sample-Gas-0809-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

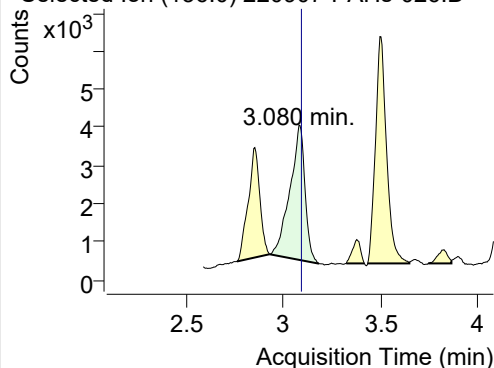
+ TIC SIM 220907-PAHs-026.D (Sample-Gas-0809-10DIL)



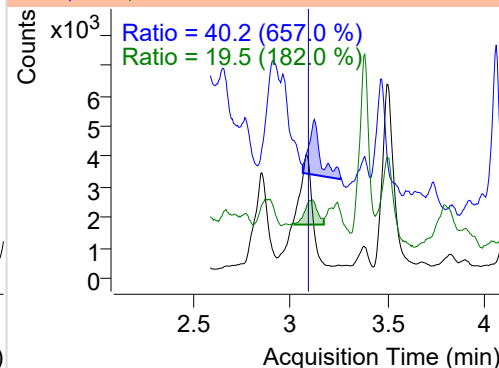
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.080	136.0	18966	3522.67	ND ng/ml	19.5
Naphthalene	3.112	128.0	6161066	1444149.92	ND ng/ml	13.0
Acenaphthylene	6.350	152.0	1137	308.76	ND ng/ml	411.5
IS-D10-Acenaphthene	6.493	164.0	10701	5663.37	ND ng/ml	92.7
Acenaphthene	6.552	154.0	3610	1742.02	ND ng/ml	92.1
LSS-D10-Fluorene	7.617	176.0	10300	6405.91	ND ng/ml	99.5
Fluorene	7.680	166.0	7116	3761.60	ND ng/ml	131.1
IS-D10-Phenanthrene	9.780	188.0	16840	10321.20	ND ng/ml	31.8
Phenanthrene	9.822	178.0	23209	13927.16	ND ng/ml	18.6
Anthracene	9.979	178.0	30746	20298.16	ND ng/ml	28.1
Fluoranthene	12.613	202.0	2021	1097.13	ND ng/ml	99.9
LSS-D10-Pyrene	12.971	212.0	15481	9428.04	ND ng/ml	29.3
Pyrene	13.003	202.0	1271	574.13	ND ng/ml	
Benz(a)anthracene	15.795	228.0	161	75.38	ND ng/ml	35.5
IS-D12-Chrysene	15.833	240.0	12513	6733.81	ND ng/ml	20.2
Chrysene	15.876	228.0	319	155.53	ND ng/ml	33.6
Benzo(b)fluoranthene	17.975	252.0	1062	589.39	ND ng/ml	17.3
Benzo(k)fluoranthene	18.231	252.0	360	183.05	ND ng/ml	39.6
SS-D12-Benzo(e)pyrene	18.587	264.0	13099	8526.10	ND ng/ml	27.1
Benzo(e)pyrene	18.623	252.0	386	118.37	ND ng/ml	34.4
Benzo(a)pyrene	18.779	252.0	2377	1053.67	ND ng/ml	15.8
IS-D12-Perylene	18.858	264.0	24800	9676.98	ND ng/ml	11.2
Perylene	18.914	252.0	192	83.03	ND ng/ml	62.1
Indeno(1,2,3-c,d)pyrene	20.759	276.0	69	25.41	ND ng/ml	
Dibenz(a,h)anthracene	20.827	278.0	136	45.51	ND ng/ml	29.0
Benzo(g,h,i)perylene	21.171	276.0	94	35.80	ND ng/ml	
Coronene	23.439	300.0	53	22.73	ND ng/ml	

## IS-D8-Naphthalene

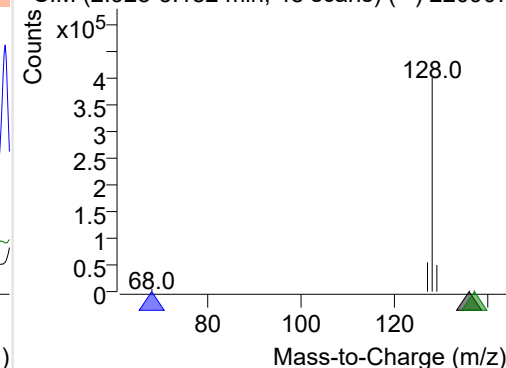
+ Selected Ion (136.0) 220907-PAHs-026.D



136.0, 68.0, 137.0

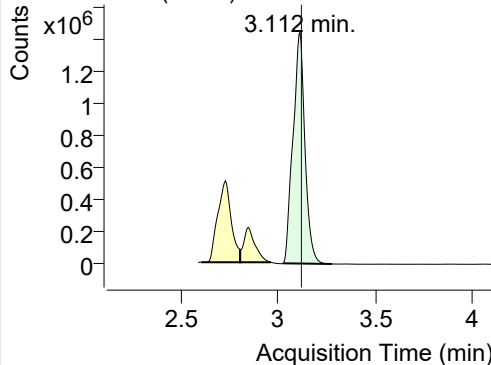


+ SIM (2.928-3.182 min, 48 scans) (\*\*) 220907

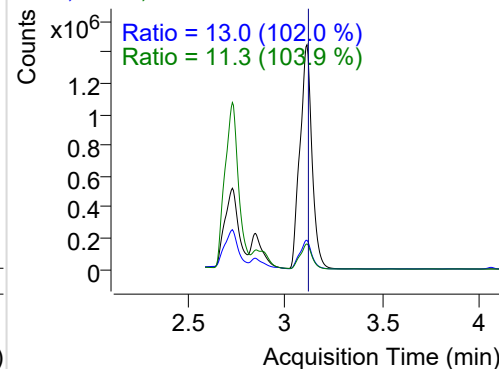


**Naphthalene**

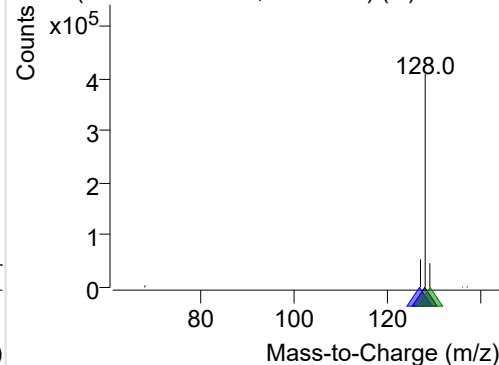
+ Selected Ion (128.0) 220907-PAHs-026.D



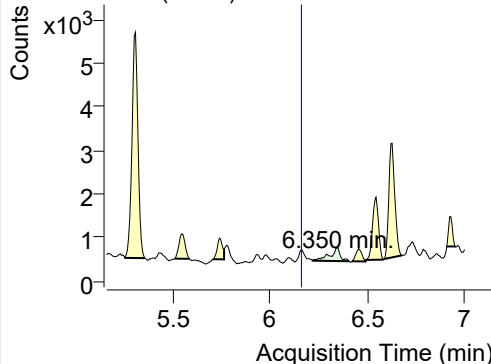
128.0, 127.0, 129.0



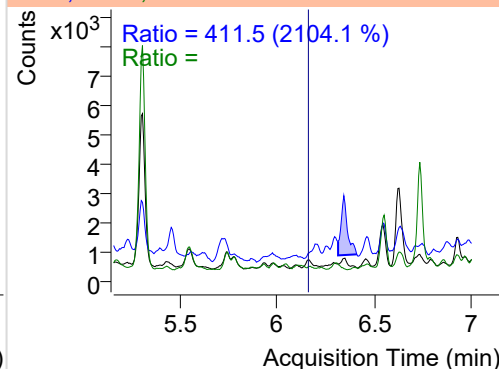
+ SIM (3.025-3.276 min, 47 scans) (\*\*) 220907

**Acenaphthylene**

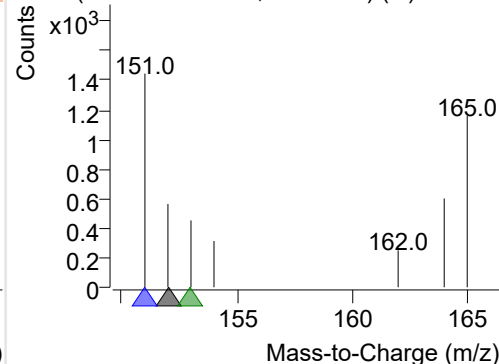
+ Selected Ion (152.0) 220907-PAHs-026.D



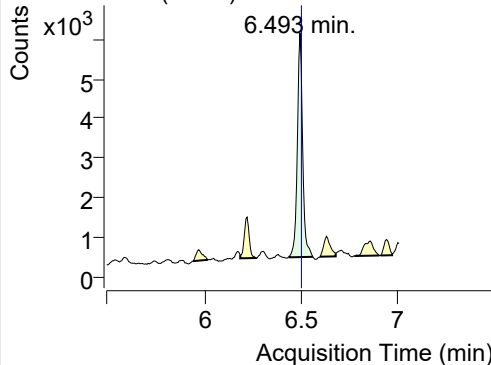
152.0, 151.0, 153.0



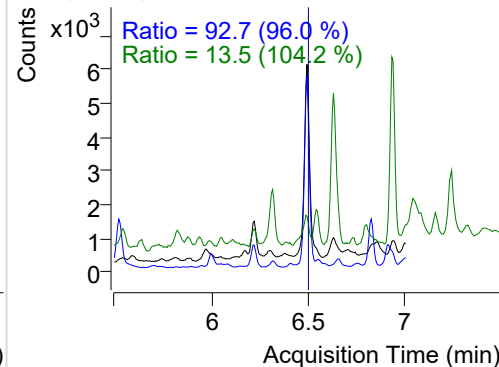
+ SIM (6.220-6.408 min, 32 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

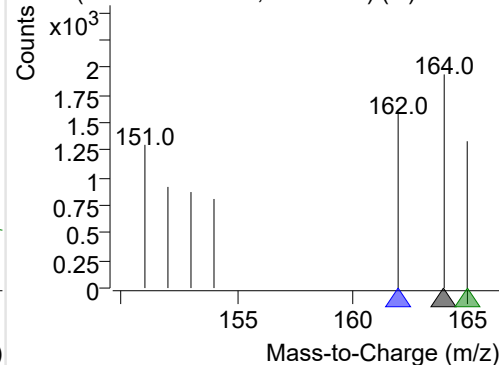
+ Selected Ion (164.0) 220907-PAHs-026.D



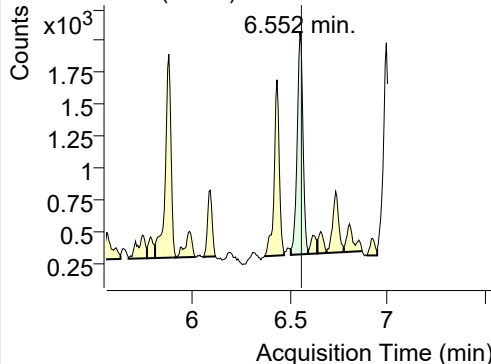
164.0, 162.0, 165.0



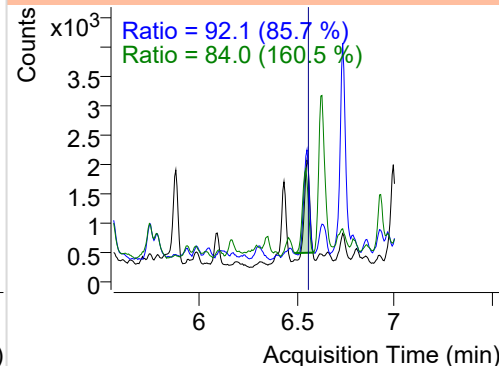
+ SIM (6.439-6.559 min, 21 scans) (\*\*) 220907

**Acenaphthene**

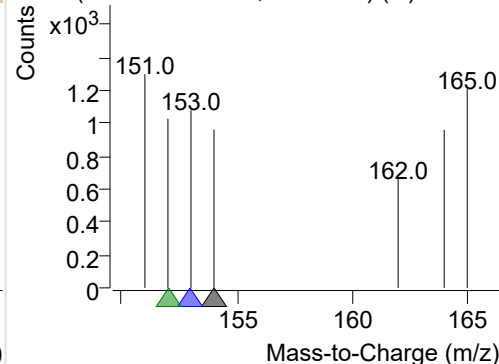
+ Selected Ion (154.0) 220907-PAHs-026.D



154.0, 153.0, 152.0

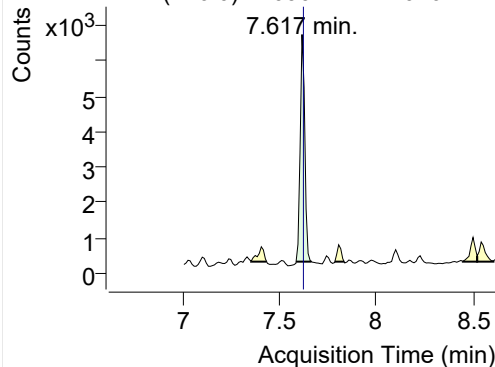


+ SIM (6.504-6.593 min, 16 scans) (\*\*) 220907

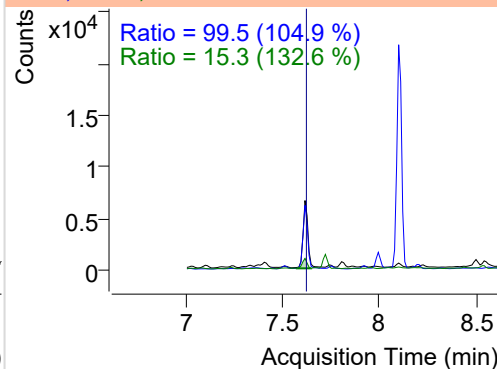


## LSS-D10-Fluorene

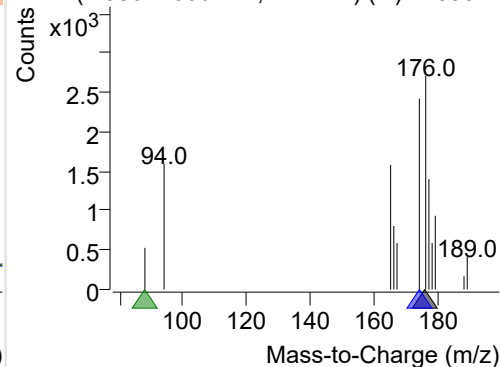
+ Selected Ion (176.0) 220907-PAHs-026.D



176.0, 174.0, 88.0

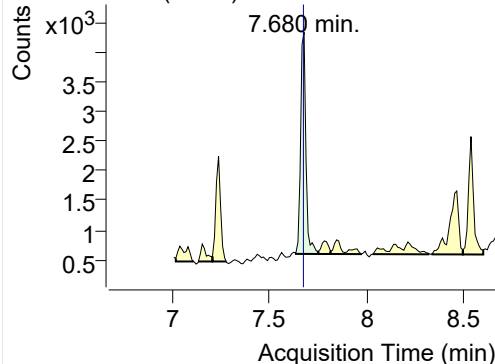


+ SIM (7.586-7.666 min, 7 scans) (\*\*) 220907-I

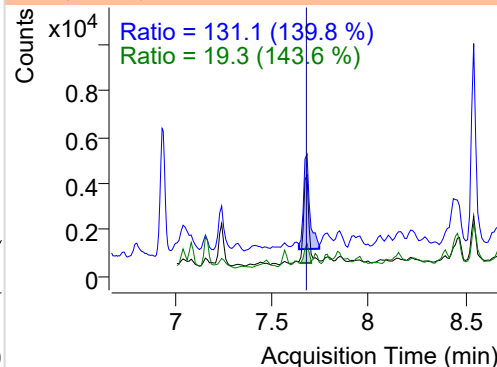


## Fluorene

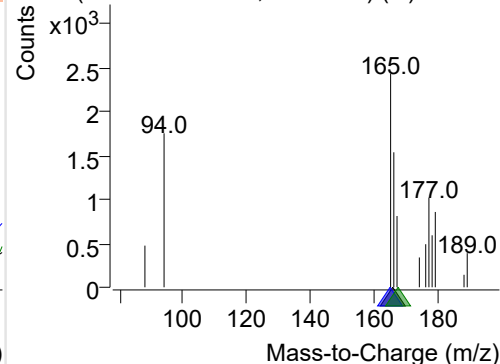
+ Selected Ion (166.0) 220907-PAHs-026.D



166.0, 165.0, 167.0

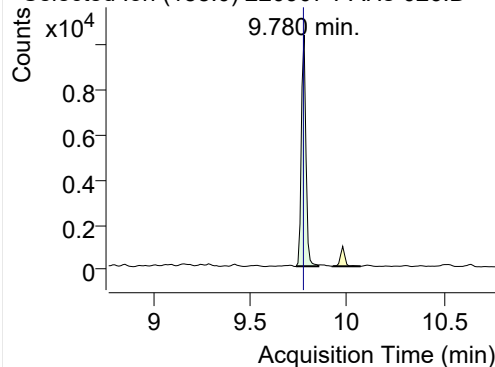


+ SIM (7.638-7.753 min, 12 scans) (\*\*) 220907

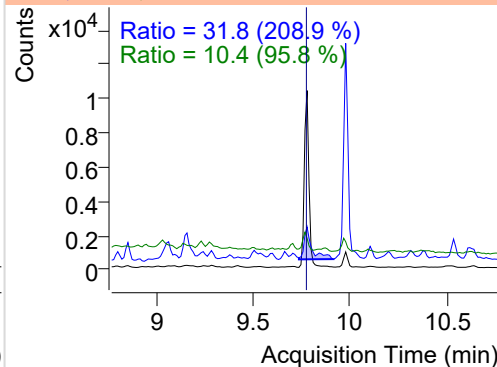


## IS-D10-Phenanthrene

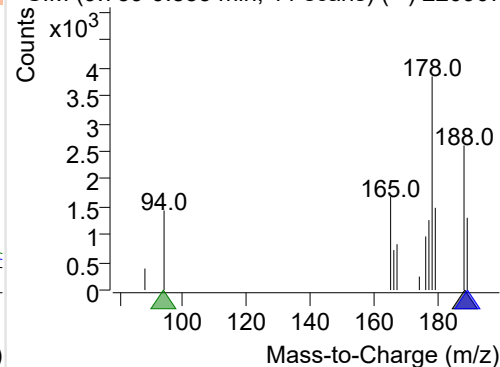
+ Selected Ion (188.0) 220907-PAHs-026.D



188.0, 189.0, 94.0

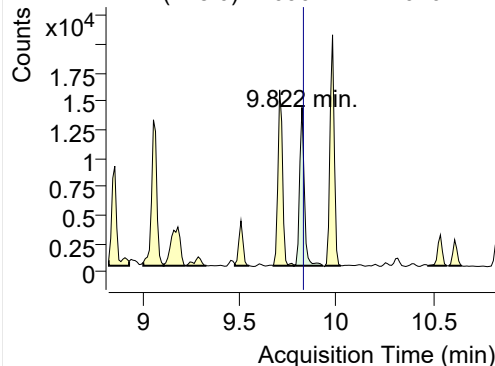


+ SIM (9.739-9.853 min, 11 scans) (\*\*) 220907

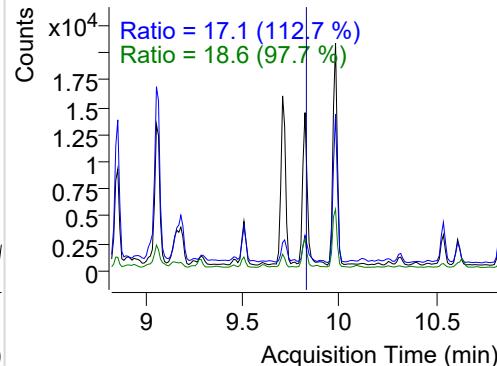


## Phenanthrene

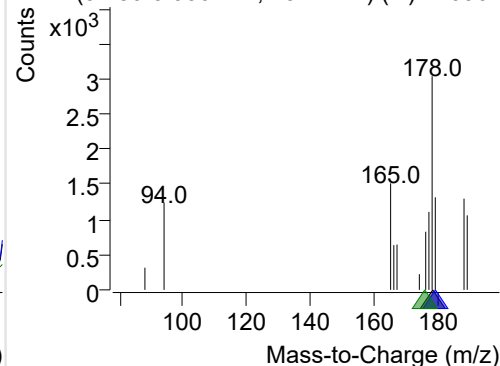
+ Selected Ion (178.0) 220907-PAHs-026.D



178.0, 179.0, 176.0

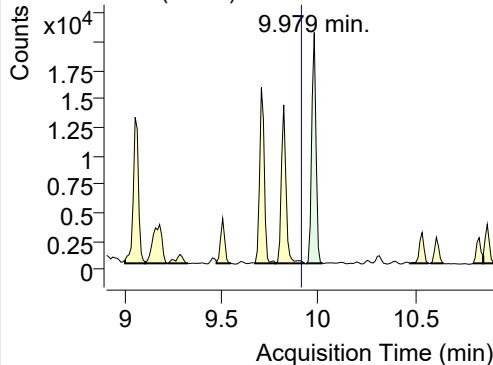


+ SIM (9.780-9.930 min, 15 scans) (\*\*) 220907

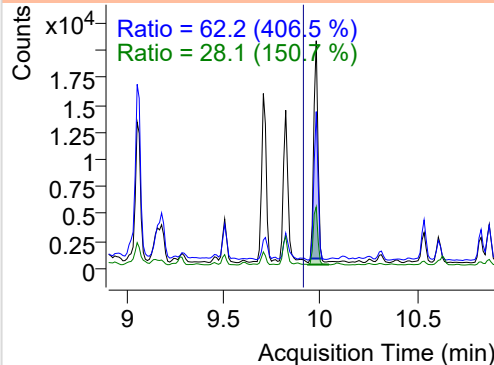


**Anthracene**

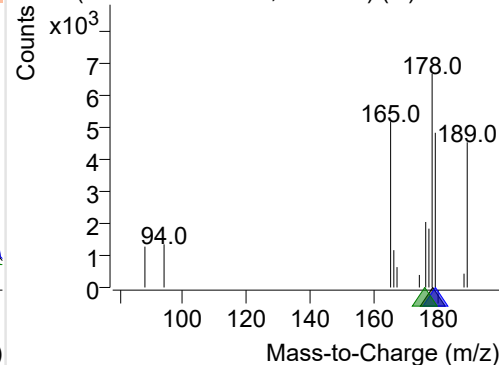
+ Selected Ion (178.0) 220907-PAHs-026.D



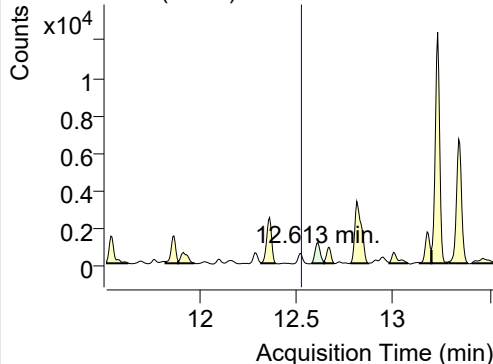
178.0, 179.0, 176.0



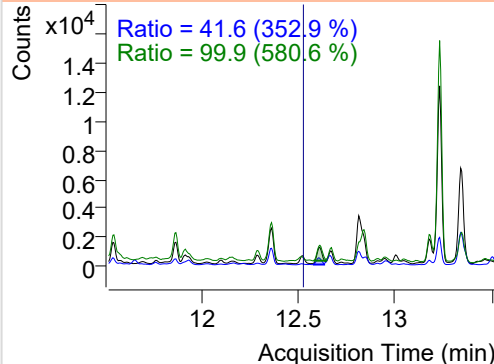
+ SIM (9.940-10.022 min, 8 scans) (\*\*) 220907

**Fluoranthene**

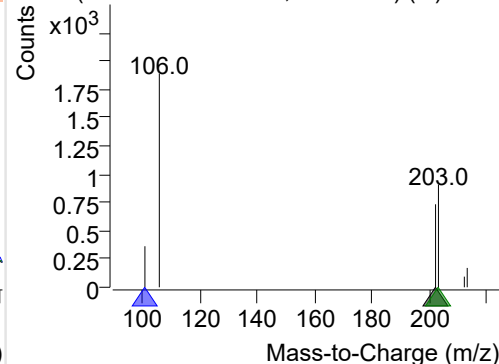
+ Selected Ion (202.0) 220907-PAHs-026.D



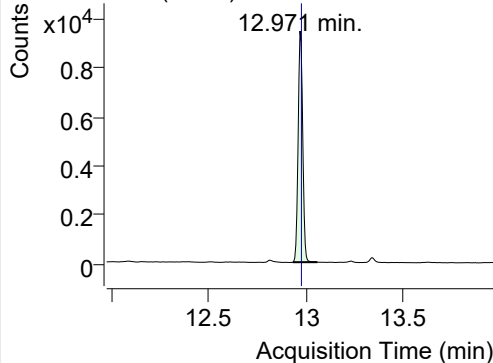
202.0, 101.0, 203.0



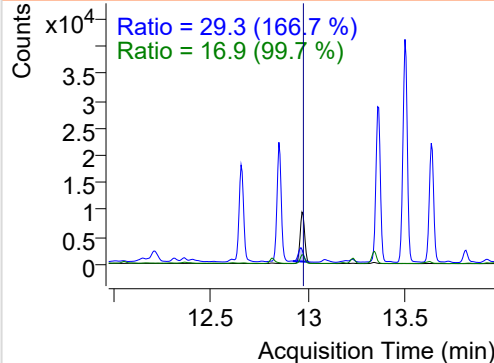
+ SIM (12.580-12.645 min, 12 scans) (\*\*) 2209

**LSS-D10-Pyrene**

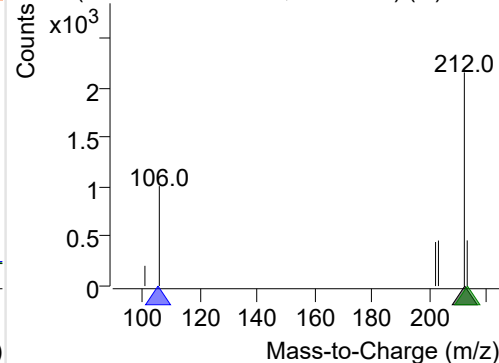
+ Selected Ion (212.0) 220907-PAHs-026.D



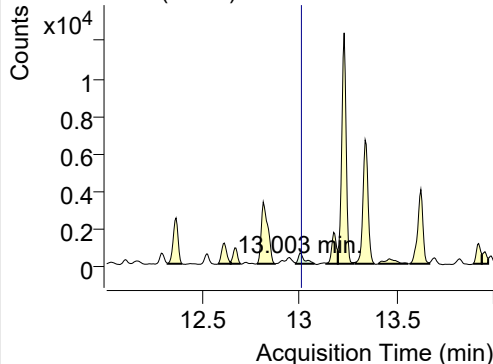
212.0, 106.0, 213.0



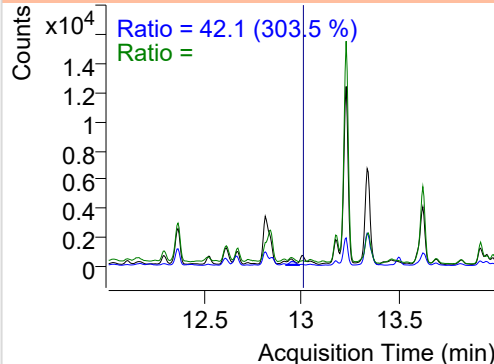
+ SIM (12.933-13.060 min, 23 scans) (\*\*) 2209

**Pyrene**

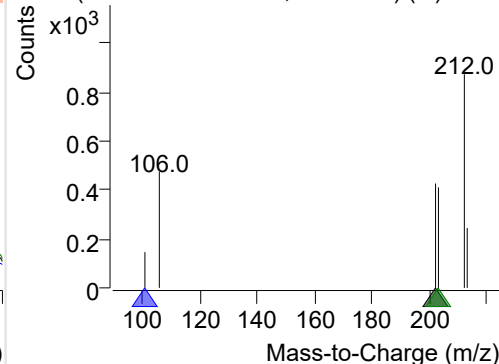
+ Selected Ion (202.0) 220907-PAHs-026.D



202.0, 101.0, 203.0



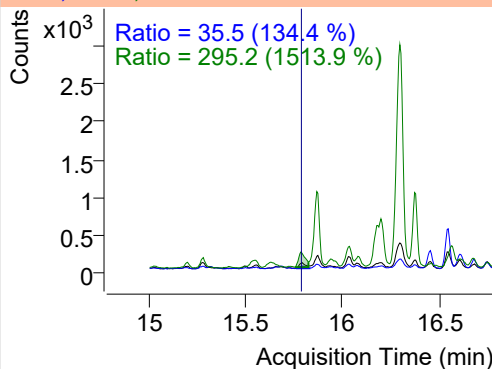
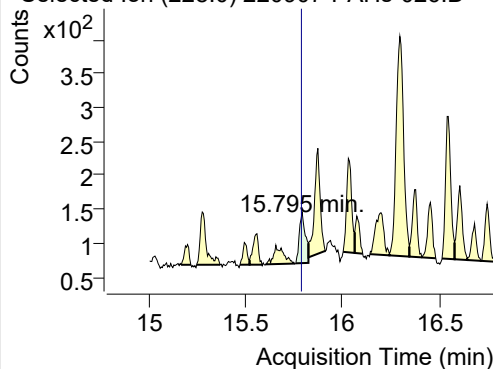
+ SIM (12.981-13.078 min, 18 scans) (\*\*) 2209



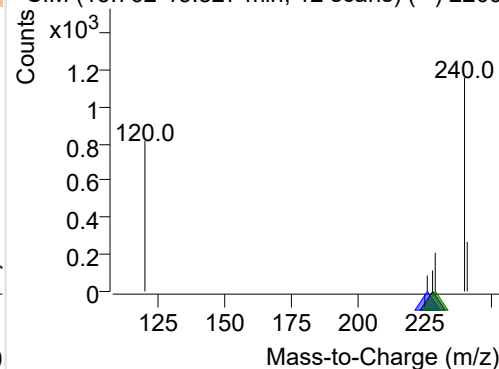
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-026.D

228.0, 226.0, 229.0

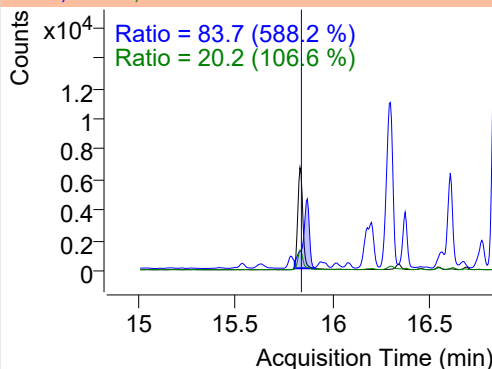
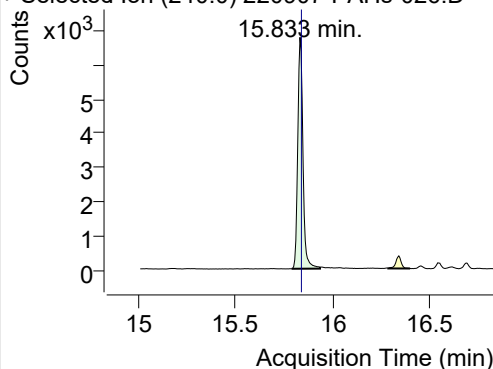


+ SIM (15.762-15.827 min, 12 scans) (\*\*) 2209

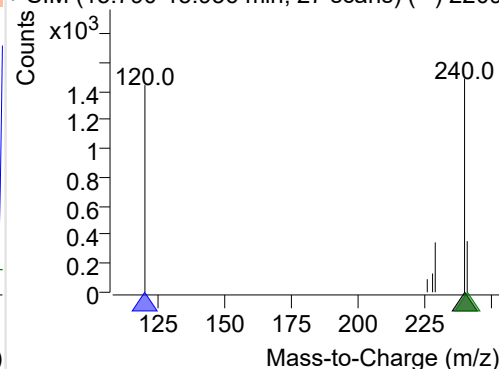
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-026.D

240.0, 120.0, 241.0

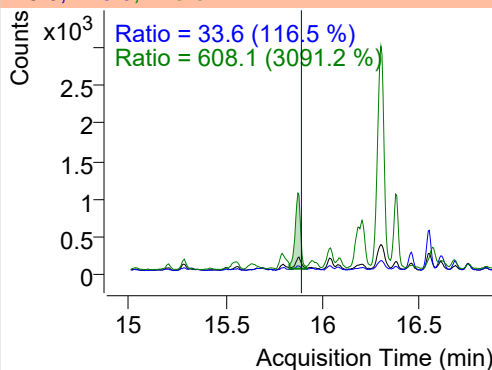
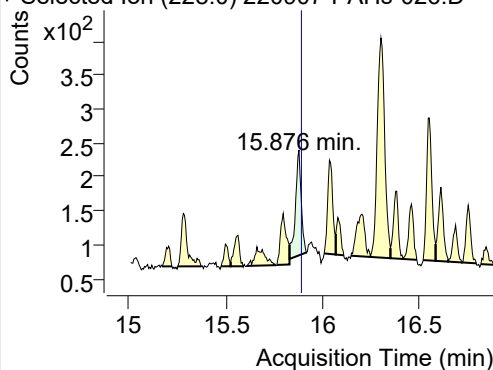


+ SIM (15.790-15.936 min, 27 scans) (\*\*) 2209

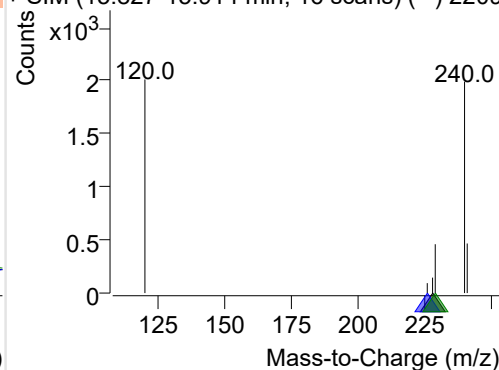
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-026.D

228.0, 226.0, 229.0

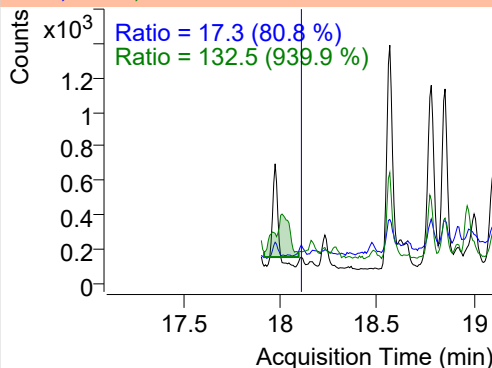
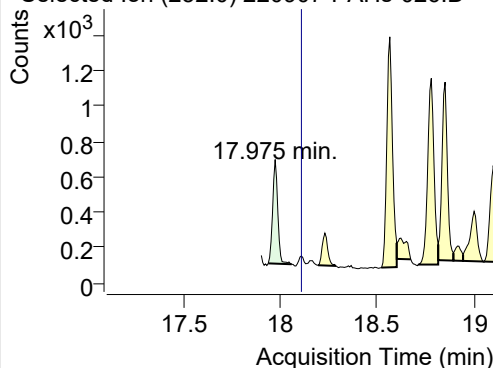


+ SIM (15.827-15.914 min, 16 scans) (\*\*) 2209

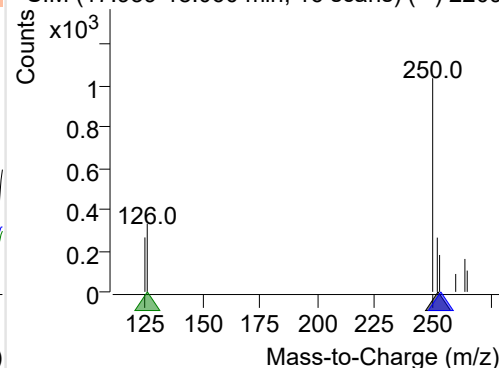
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-026.D

252.0, 253.0, 126.0



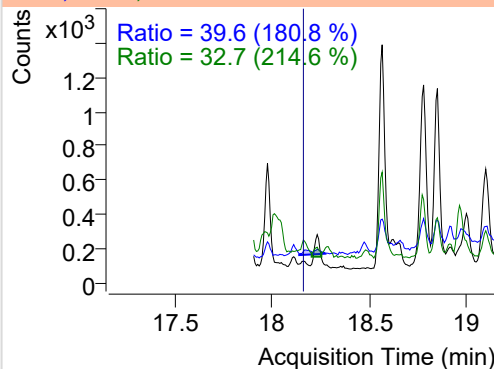
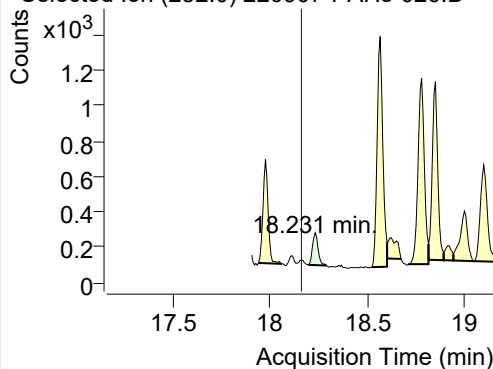
+ SIM (17.939-18.060 min, 16 scans) (\*\*) 2209



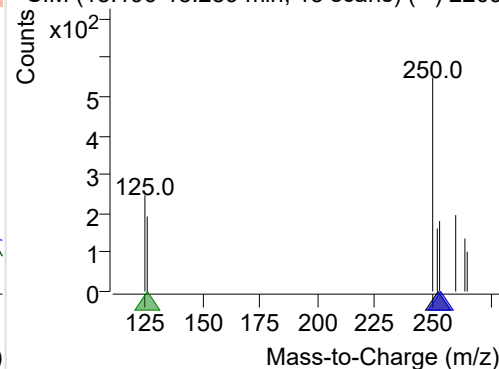
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-026.D

252.0, 253.0, 126.0

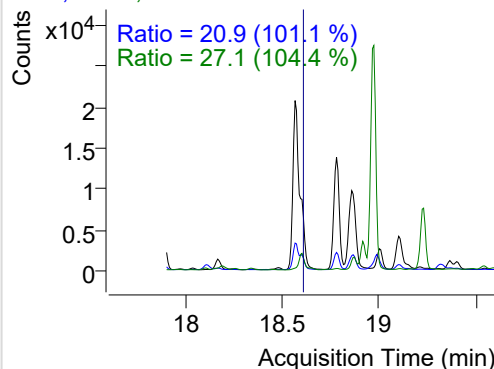
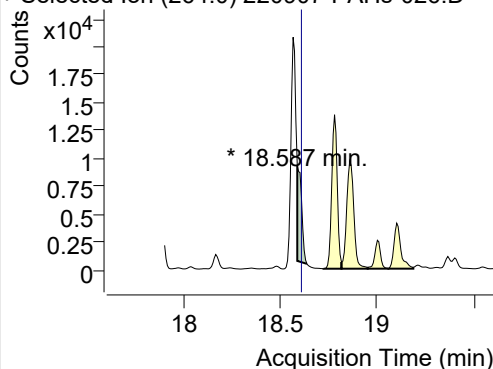


+ SIM (18.196-18.289 min, 13 scans) (\*\*) 2209

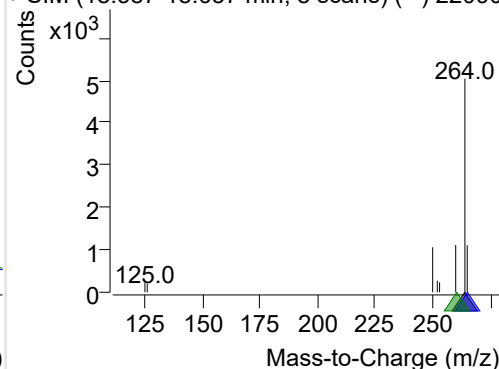
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-026.D

264.0, 265.0, 260.0

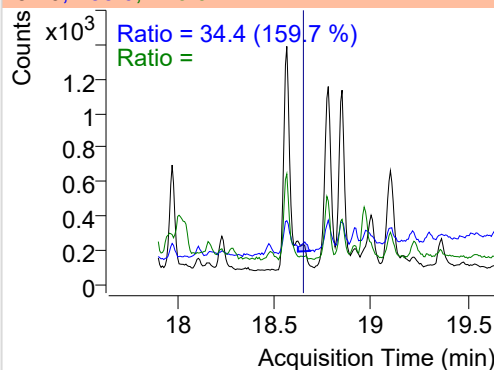
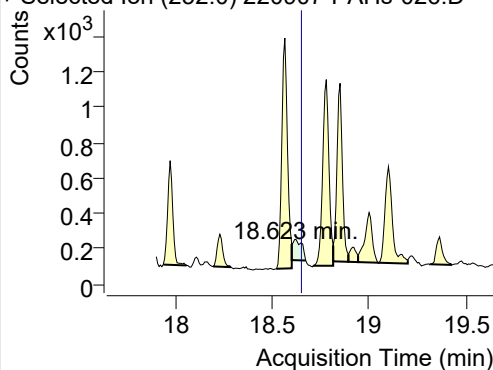


+ SIM (18.587-18.637 min, 8 scans) (\*\*) 22090

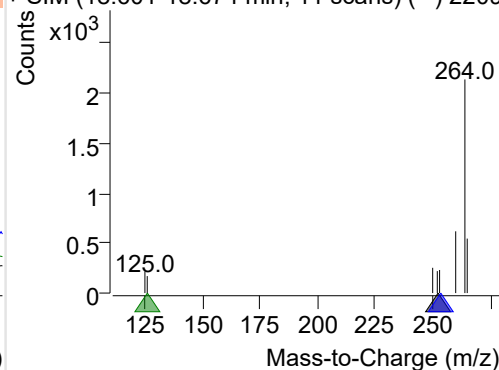
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-026.D

252.0, 253.0, 126.0

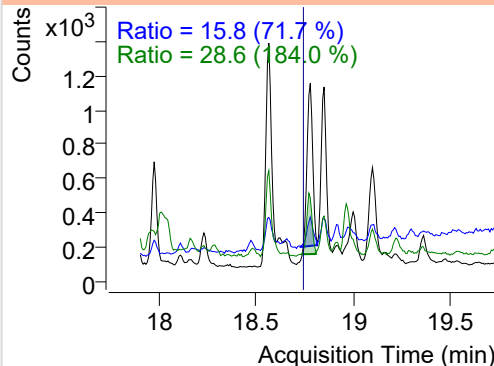
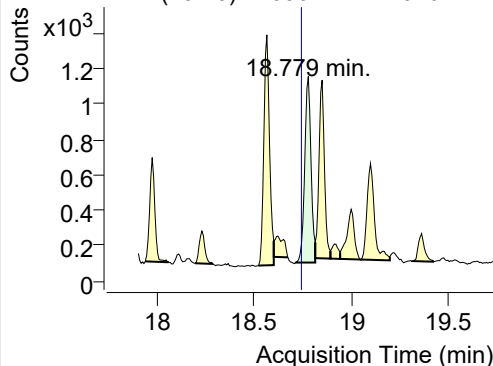


+ SIM (18.601-18.674 min, 11 scans) (\*\*) 2209

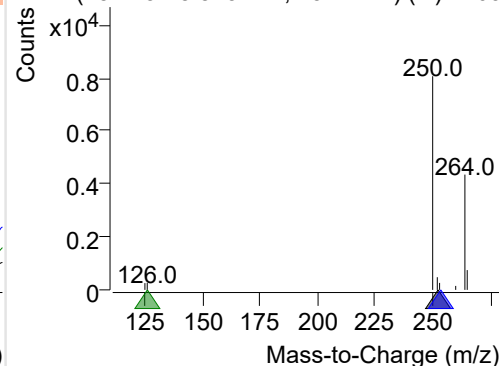
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-026.D

252.0, 253.0, 126.0



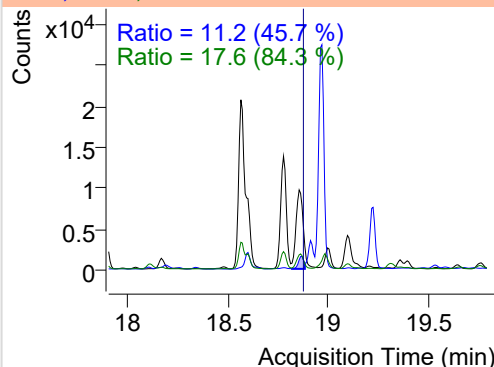
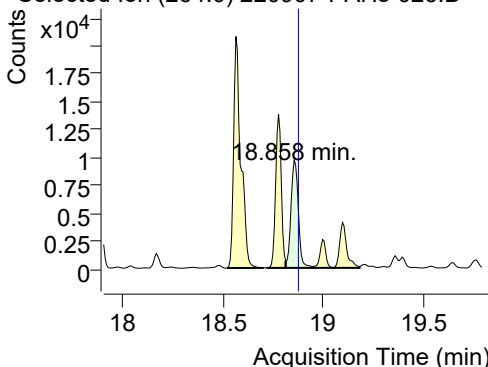
+ SIM (18.715-18.815 min, 15 scans) (\*\*) 2209



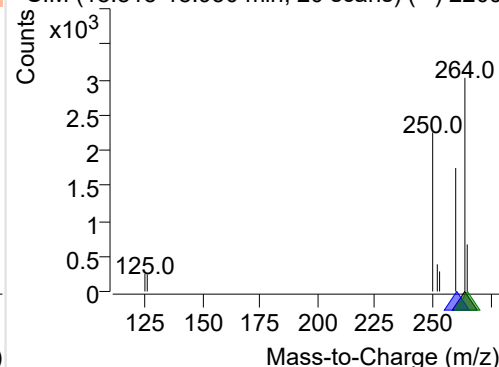
## IS-D12-Perylene

+ Selected Ion (264.0) 220907-PAHs-026.D

264.0, 260.0, 265.0



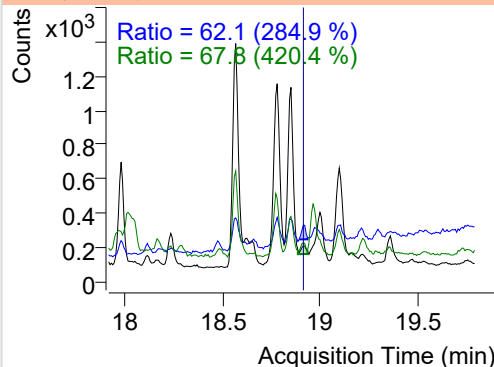
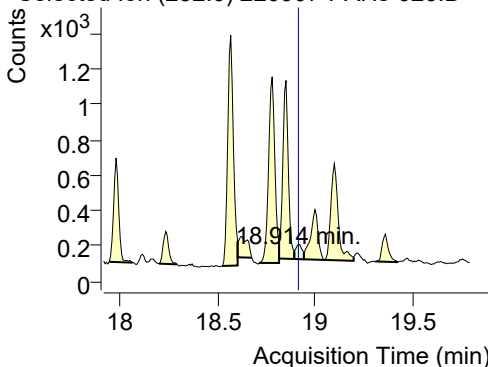
+ SIM (18.815-18.950 min, 20 scans) (\*\*) 2209



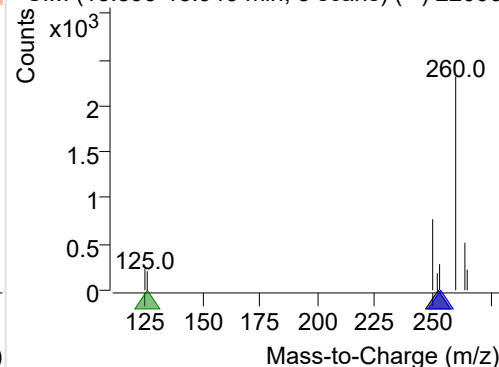
## Perylene

+ Selected Ion (252.0) 220907-PAHs-026.D

252.0, 253.0, 126.0



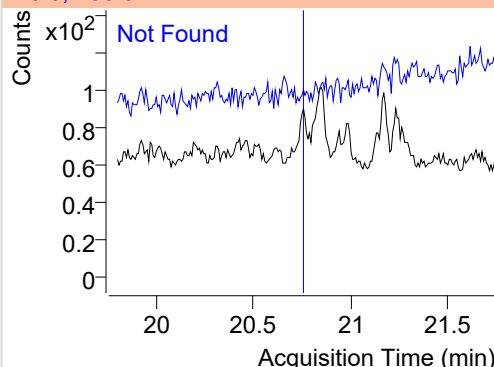
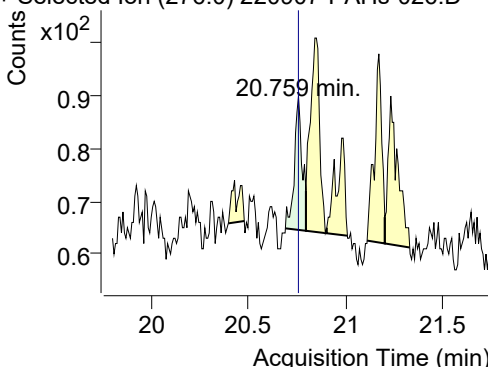
+ SIM (18.893-18.943 min, 8 scans) (\*\*) 22090



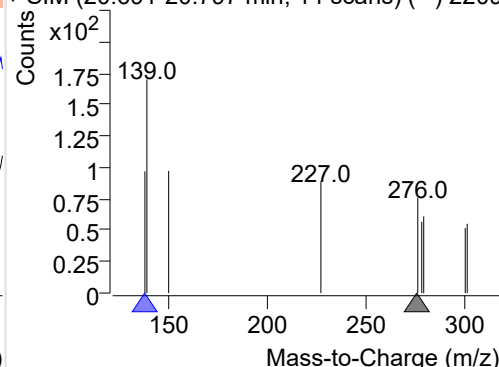
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220907-PAHs-026.D

276.0, 138.0



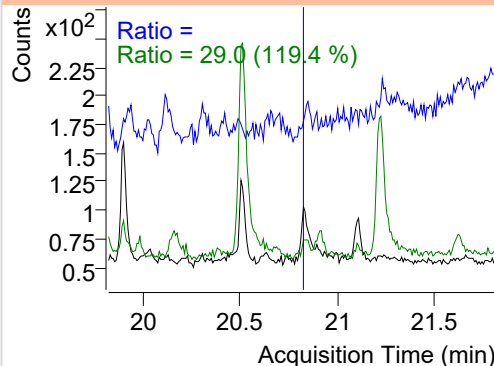
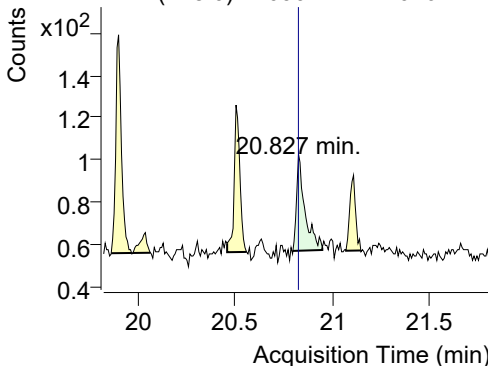
+ SIM (20.691-20.797 min, 14 scans) (\*\*) 2209



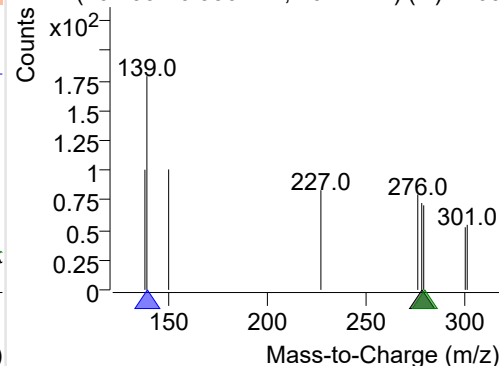
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220907-PAHs-026.D

278.0, 139.0, 279.0



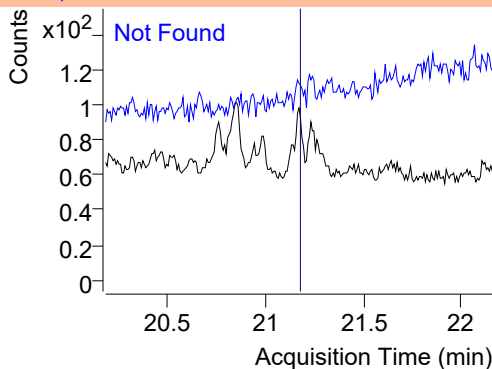
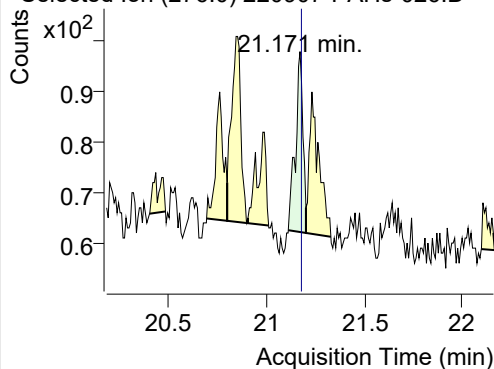
+ SIM (20.799-20.950 min, 20 scans) (\*\*) 2209



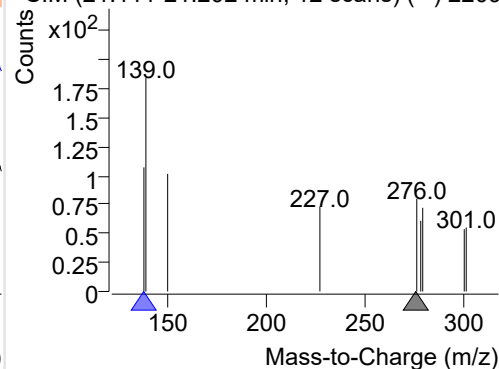
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-026.D

276.0, 138.0

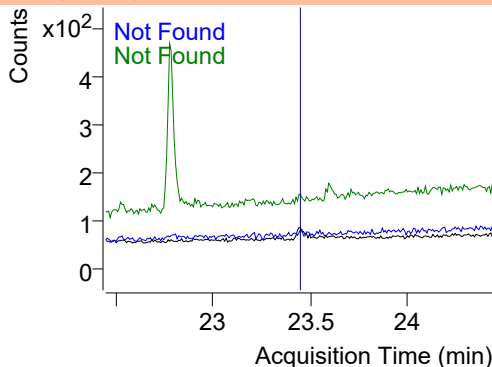
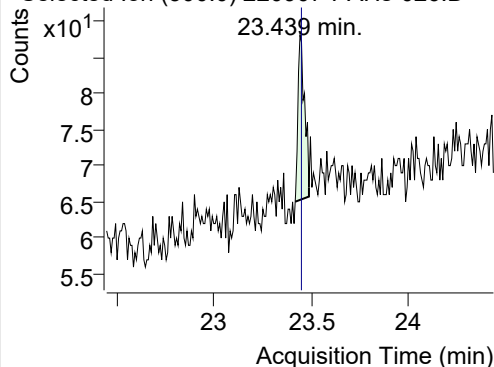


+ SIM (21.111-21.202 min, 12 scans) (\*\*) 2209

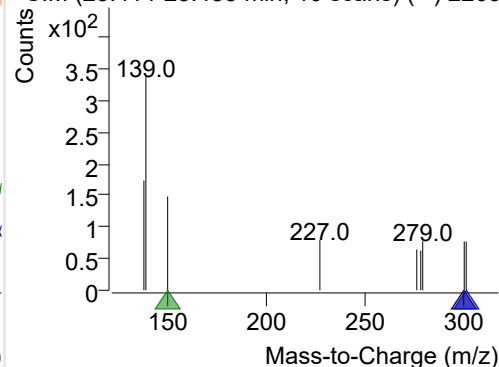
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-026.D

300.0, 301.0, 150.0



+ SIM (23.414-23.485 min, 10 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

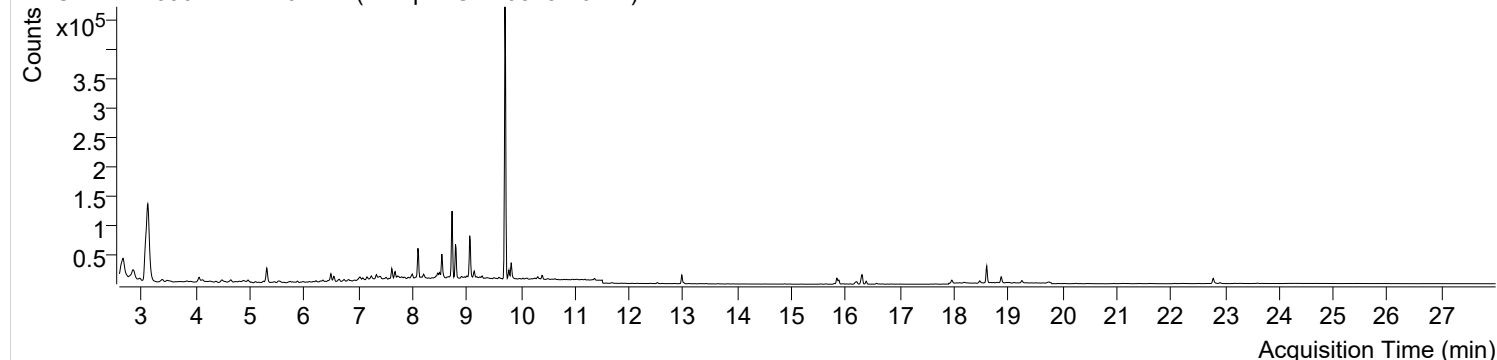


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 1:54:55	Data File	220907-PAHs-027.D
Type	Sample	Name	Sample-Gas-0815-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

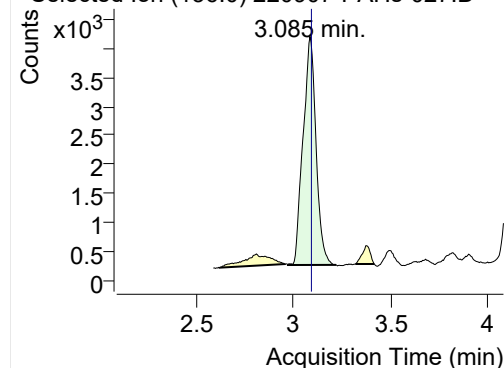
+ TIC SIM 220907-PAHs-027.D (Sample-Gas-0815-10DIL)



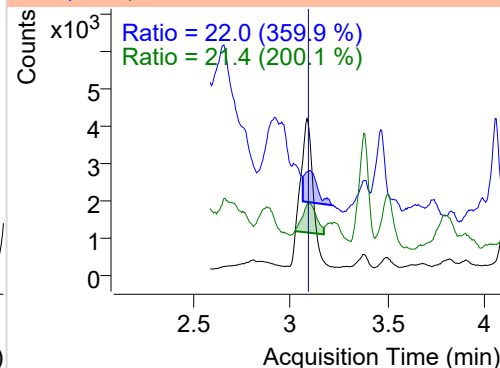
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	18258	3942.90	ND ng/ml	21.4
Naphthalene	3.112	128.0	478268	103619.10	ND ng/ml	12.1
Acenaphthylene	6.161	152.0	1165	621.71	ND ng/ml	99.5
IS-D10-Acenaphthene	6.493	164.0	12657	6293.09	ND ng/ml	94.9
Acenaphthene	6.552	154.0	4767	2319.19	ND ng/ml	92.5
LSS-D10-Fluorene	7.617	176.0	10892	6578.73	ND ng/ml	101.7
Fluorene	7.680	166.0	10105	5370.72	ND ng/ml	110.6
IS-D10-Phenanthrene	9.780	188.0	19451	12142.51	ND ng/ml	23.2
Phenanthrene	9.822	178.0	29697	17889.03	ND ng/ml	18.4
Anthracene	9.822	178.0	29697	17889.03	ND ng/ml	18.4
Fluoranthene	12.521	202.0	1680	1043.82	ND ng/ml	83.2
LSS-D10-Pyrene	12.971	212.0	17597	11007.82	ND ng/ml	16.1
Pyrene	13.003	202.0	2354	1315.93	ND ng/ml	19.2
Benz(a)anthracene	15.789	228.0	78	46.04	ND ng/ml	80.7
IS-D12-Chrysene	15.833	240.0	14271	7542.56	ND ng/ml	20.9
Chrysene	15.876	228.0	403	178.64	ND ng/ml	43.7
Benzo(b)fluoranthene	18.103	252.0	150	45.13	ND ng/ml	
Benzo(k)fluoranthene	18.167	252.0	188	67.64	ND ng/ml	30.2
SS-D12-Benzo(e)pyrene	18.601	264.0	31219	18856.06	ND ng/ml	29.3
Benzo(e)pyrene	18.594	252.0	177	71.70	ND ng/ml	
Benzo(a)pyrene	18.737	252.0	143	32.17	ND ng/ml	
IS-D12-Perylene	18.872	264.0	14940	7362.55	ND ng/ml	24.0
Perylene	18.850	252.0	85	34.92	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	20.766	276.0	58	22.11	ND ng/ml	
Dibenz(a,h)anthracene	20.835	278.0	72	33.67	ND ng/ml	
Benzo(g,h,i)perylene	21.179	276.0	107	22.68	ND ng/ml	891.5
Coronene	23.439	300.0	92	24.07	ND ng/ml	

## IS-D8-Naphthalene

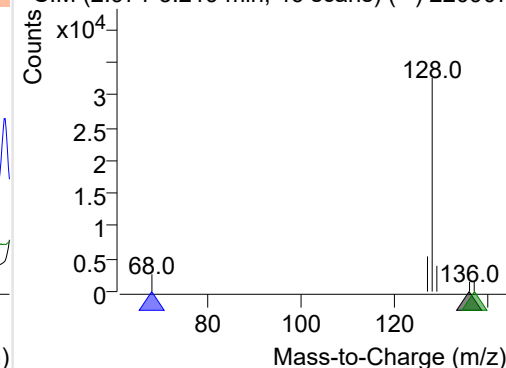
+ Selected Ion (136.0) 220907-PAHs-027.D



136.0, 68.0, 137.0

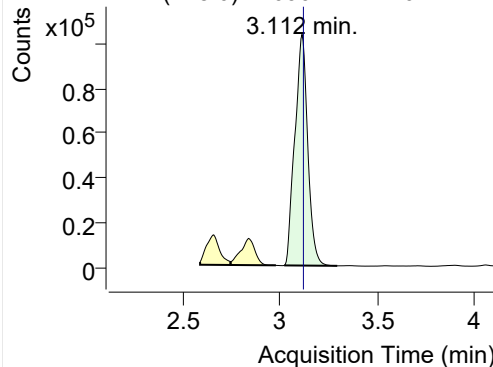


+ SIM (2.971-3.219 min, 46 scans) (\*\*) 220907

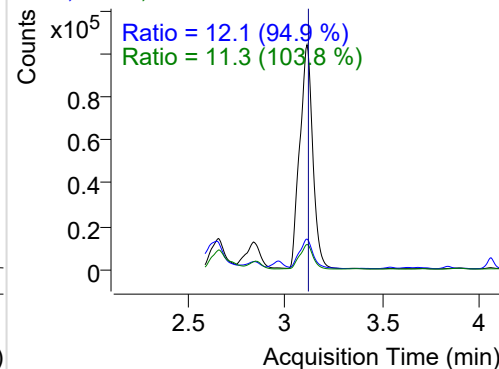


**Naphthalene**

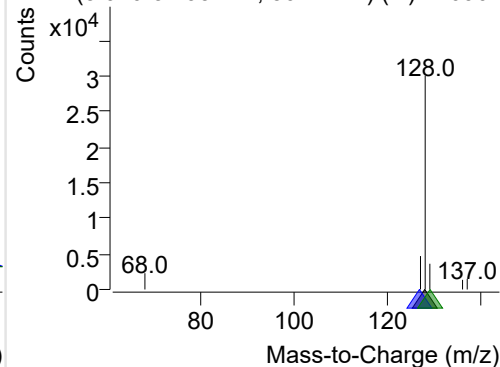
+ Selected Ion (128.0) 220907-PAHs-027.D



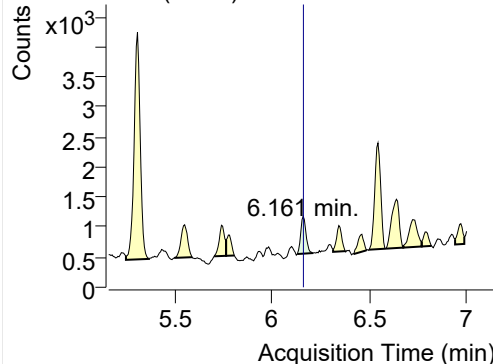
128.0, 127.0, 129.0



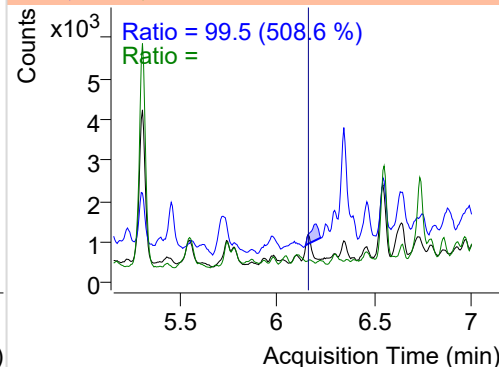
+ SIM (3.020-3.293 min, 50 scans) (\*\*) 220907

**Acenaphthylene**

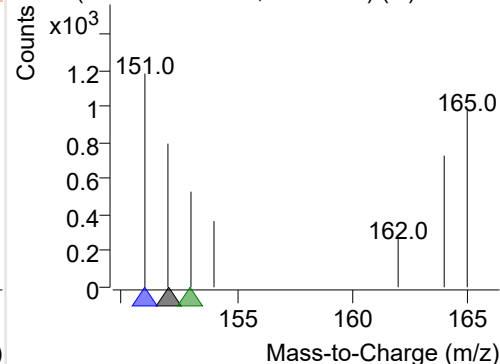
+ Selected Ion (152.0) 220907-PAHs-027.D



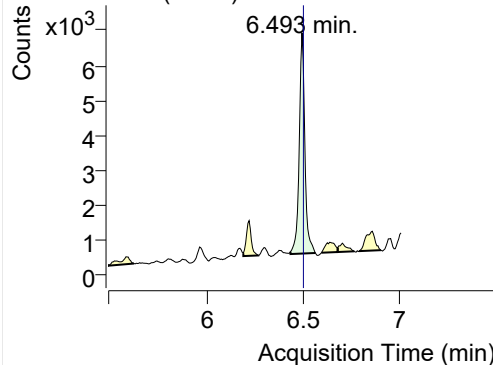
152.0, 151.0, 153.0



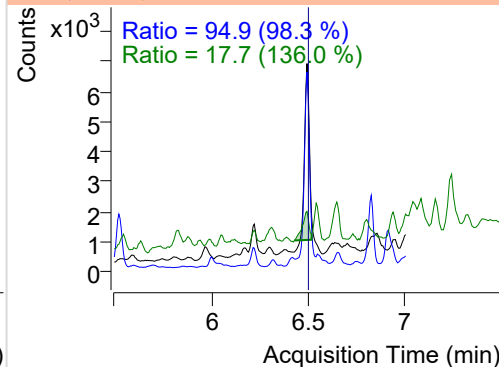
+ SIM (6.130-6.208 min, 14 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

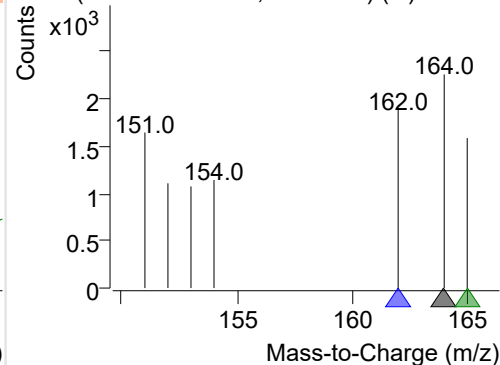
+ Selected Ion (164.0) 220907-PAHs-027.D



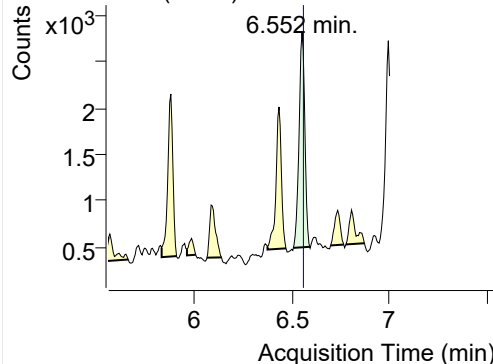
164.0, 162.0, 165.0



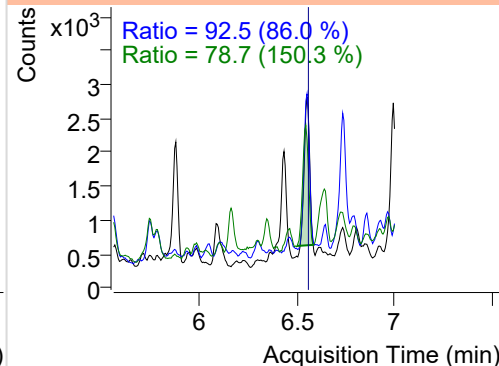
+ SIM (6.433-6.561 min, 22 scans) (\*\*) 220907

**Acenaphthene**

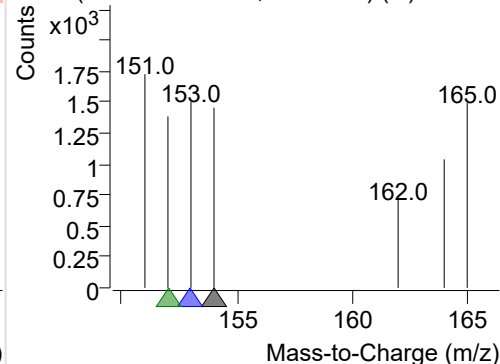
+ Selected Ion (154.0) 220907-PAHs-027.D



154.0, 153.0, 152.0

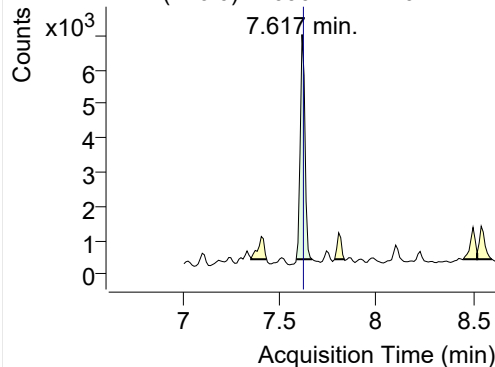


+ SIM (6.507-6.591 min, 14 scans) (\*\*) 220907

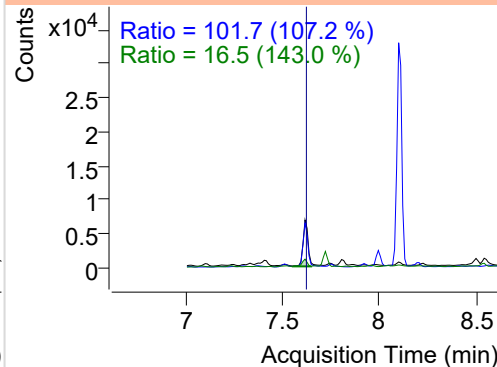


## LSS-D10-Fluorene

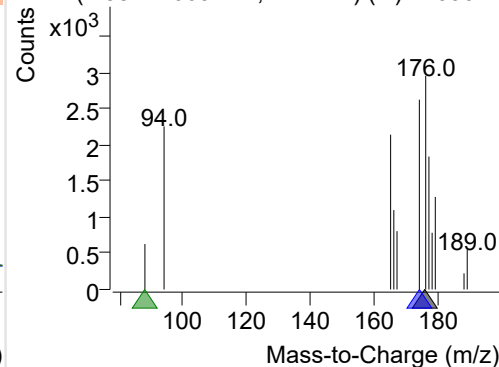
+ Selected Ion (176.0) 220907-PAHs-027.D



176.0, 174.0, 88.0

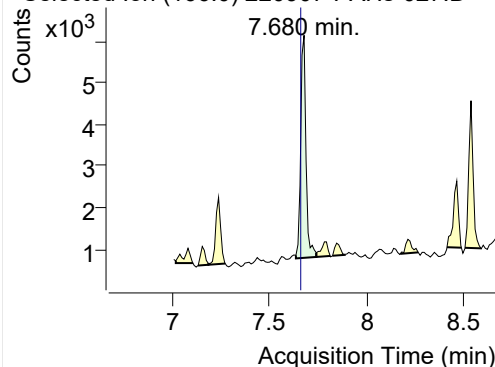


+ SIM (7.587-7.669 min, 7 scans) (\*\*) 220907-I

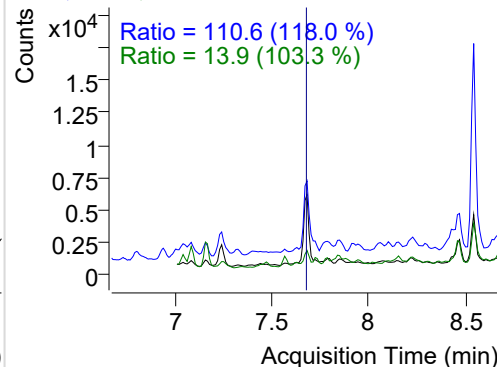


## Fluorene

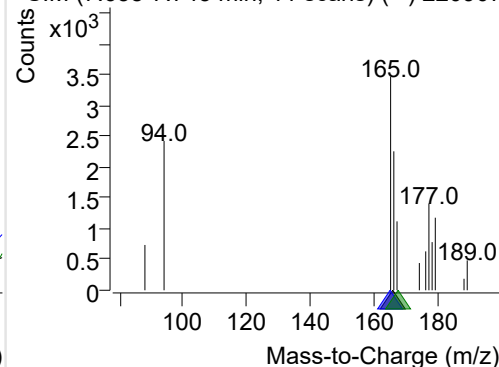
+ Selected Ion (166.0) 220907-PAHs-027.D



166.0, 165.0, 167.0

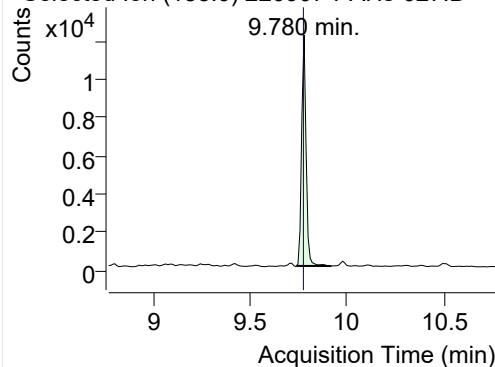


+ SIM (7.638-7.743 min, 11 scans) (\*\*) 220907

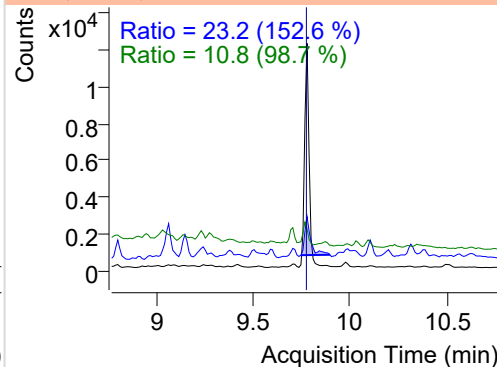


## IS-D10-Phenanthrene

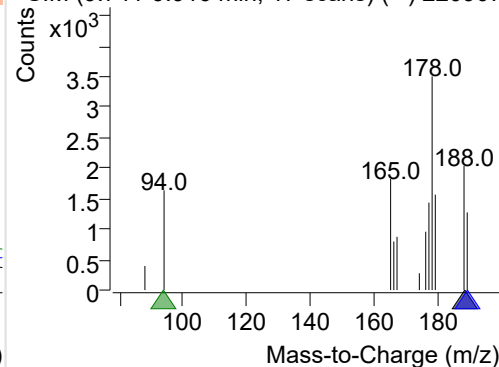
+ Selected Ion (188.0) 220907-PAHs-027.D



188.0, 189.0, 94.0

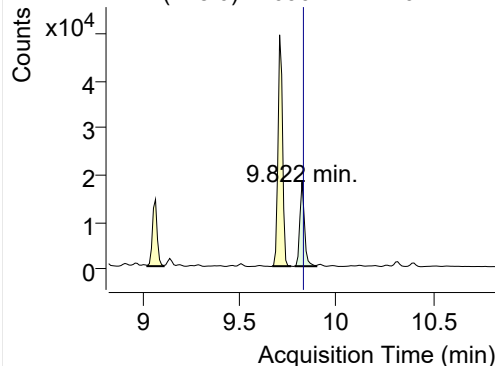


+ SIM (9.741-9.916 min, 17 scans) (\*\*) 220907

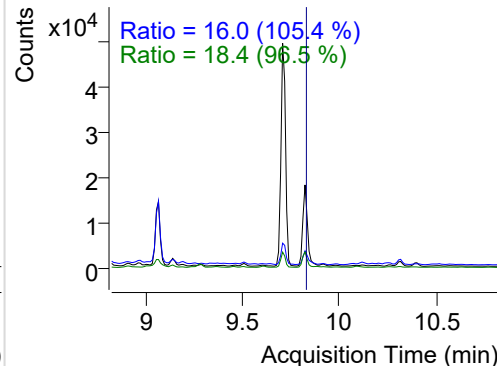


## Phenanthrene

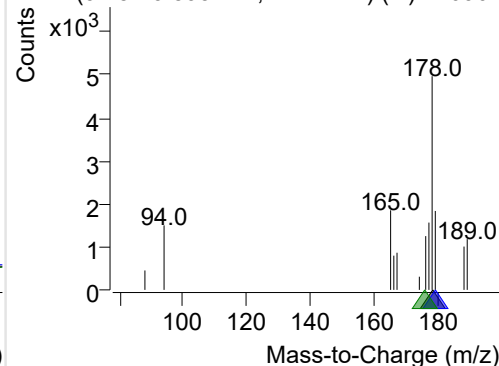
+ Selected Ion (178.0) 220907-PAHs-027.D



178.0, 179.0, 176.0

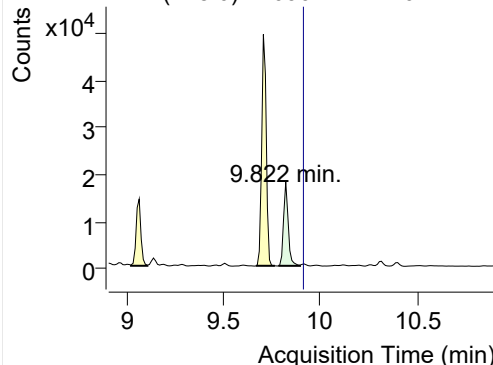


+ SIM (9.784-9.895 min, 11 scans) (\*\*) 220907

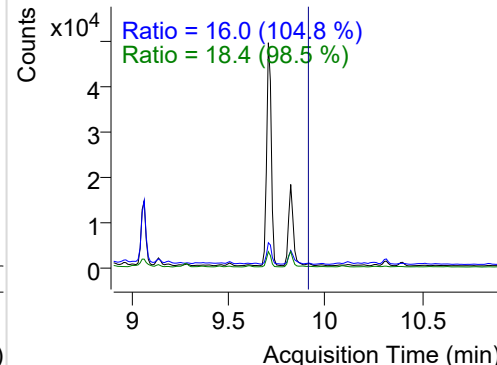


**Anthracene**

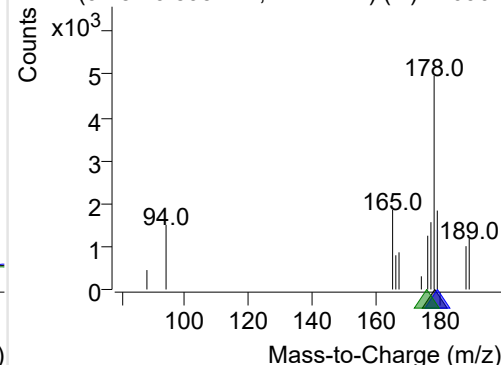
+ Selected Ion (178.0) 220907-PAHs-027.D



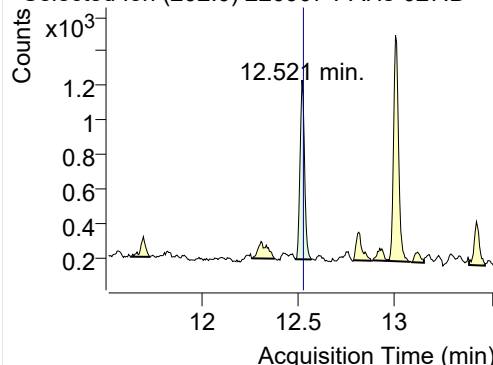
178.0, 179.0, 176.0



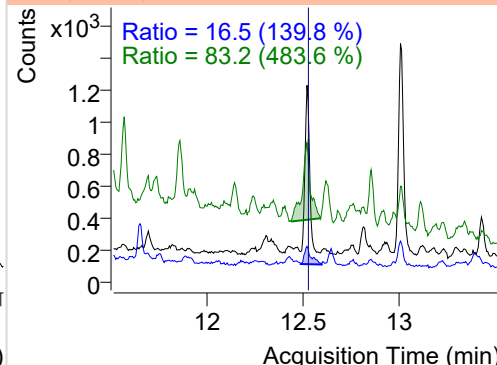
+ SIM (9.784-9.895 min, 11 scans) (\*\*) 220907

**Fluoranthene**

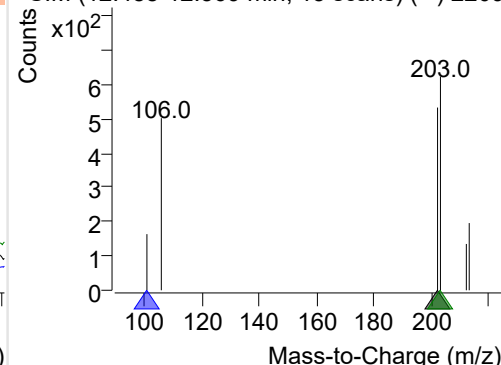
+ Selected Ion (202.0) 220907-PAHs-027.D



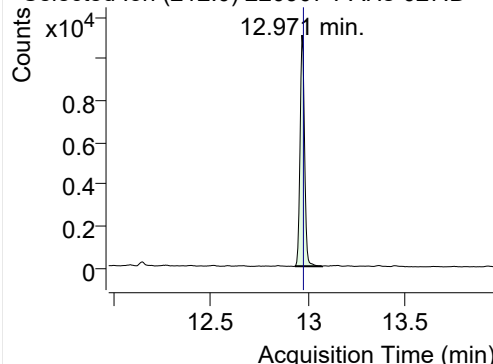
202.0, 101.0, 203.0



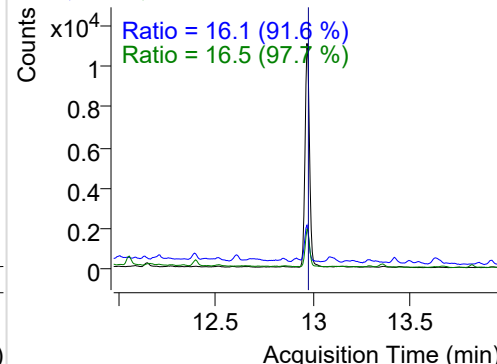
+ SIM (12.488-12.569 min, 15 scans) (\*\*) 2209

**LSS-D10-Pyrene**

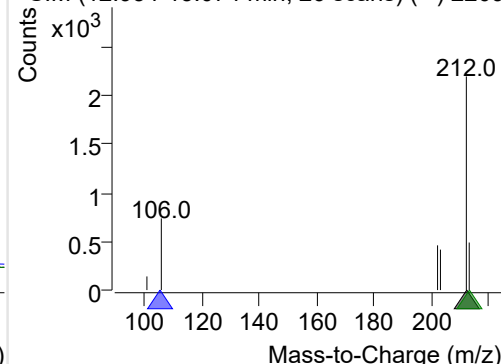
+ Selected Ion (212.0) 220907-PAHs-027.D



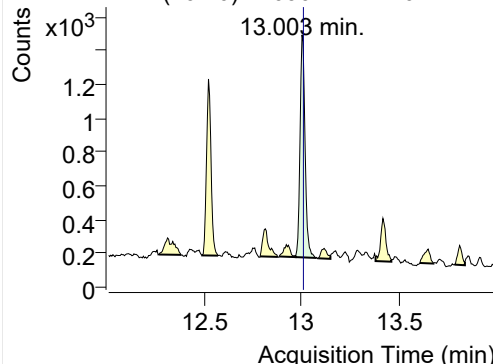
212.0, 106.0, 213.0



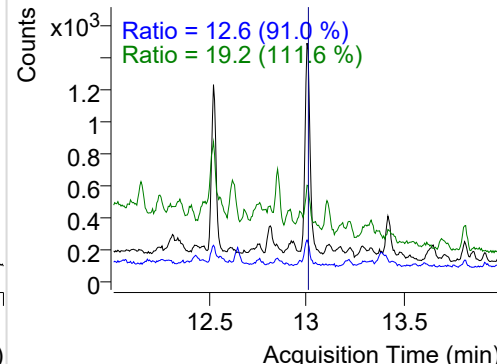
+ SIM (12.934-13.074 min, 26 scans) (\*\*) 2209

**Pyrene**

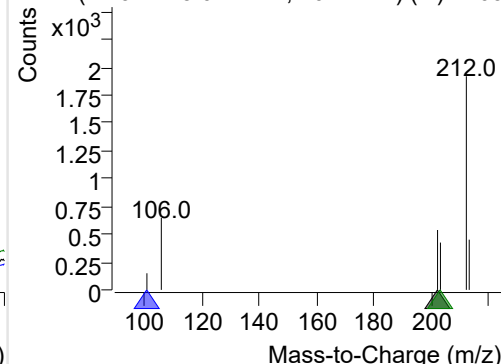
+ Selected Ion (202.0) 220907-PAHs-027.D



202.0, 101.0, 203.0



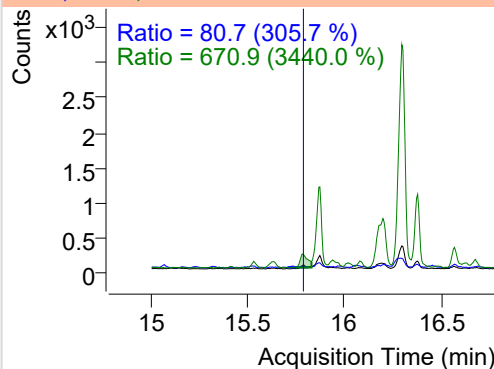
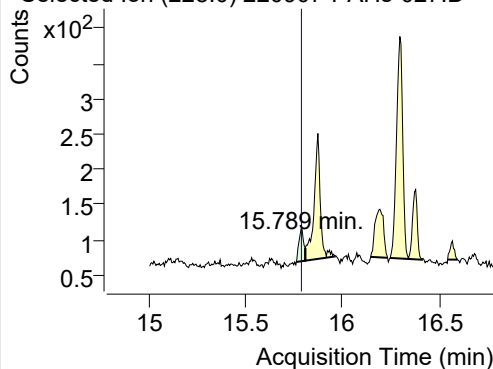
+ SIM (12.971-13.074 min, 20 scans) (\*\*) 2209



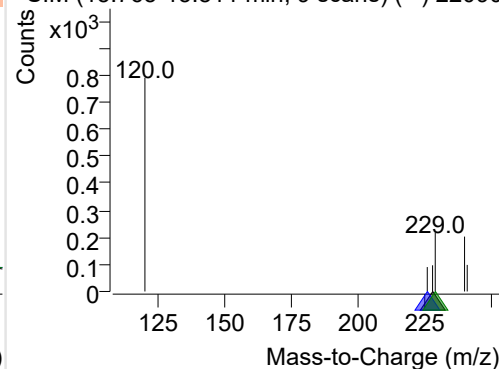
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-027.D

228.0, 226.0, 229.0

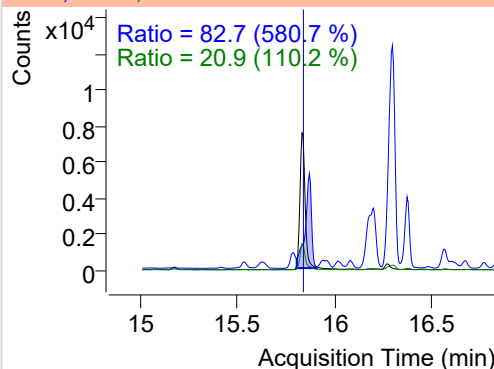
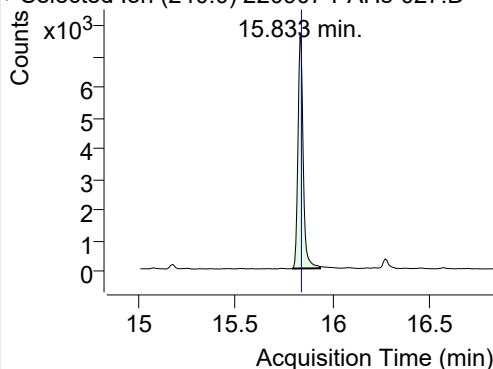


+ SIM (15.765-15.811 min, 9 scans) (\*\*) 22090

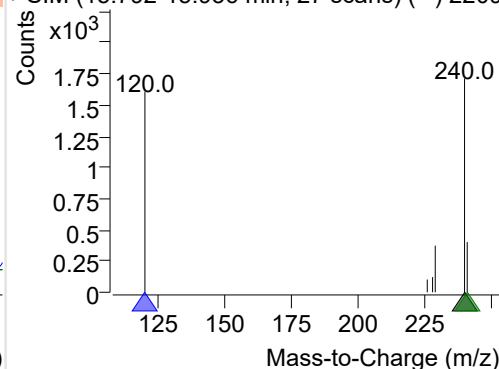
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-027.D

240.0, 120.0, 241.0

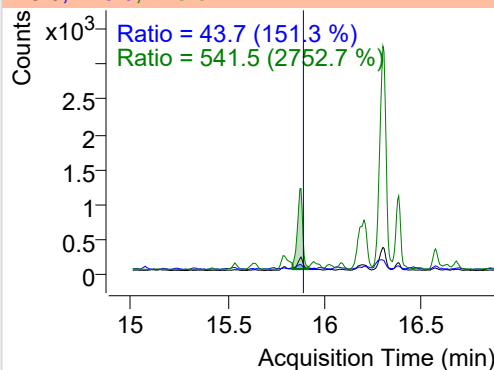
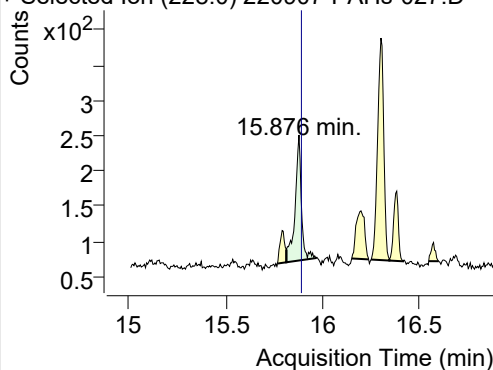


+ SIM (15.792-15.936 min, 27 scans) (\*\*) 2209

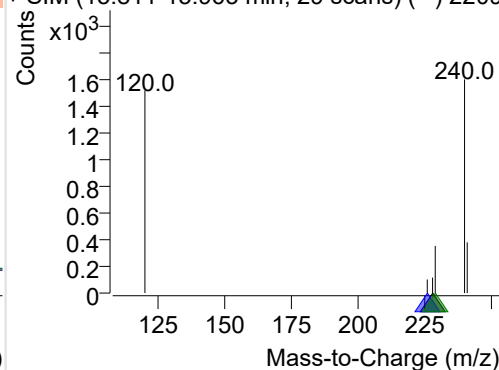
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-027.D

228.0, 226.0, 229.0

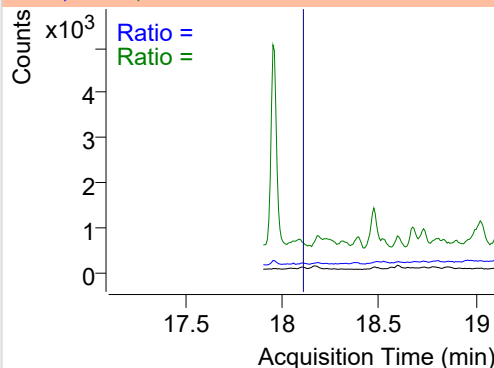
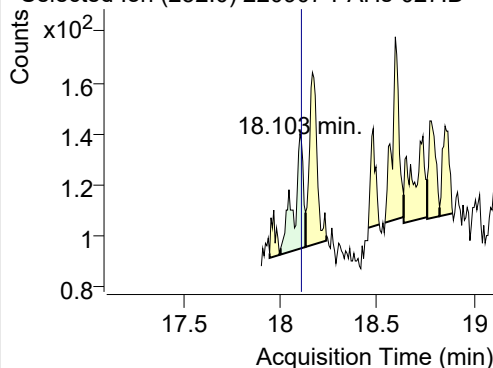


+ SIM (15.811-15.963 min, 29 scans) (\*\*) 2209

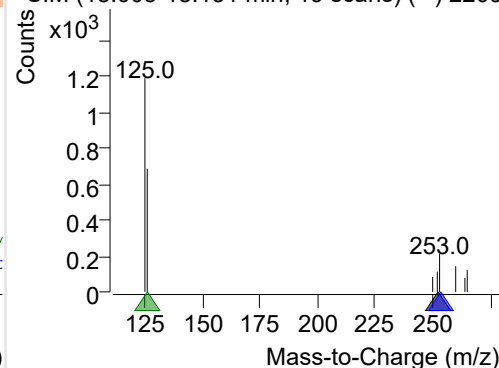
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-027.D

252.0, 253.0, 126.0



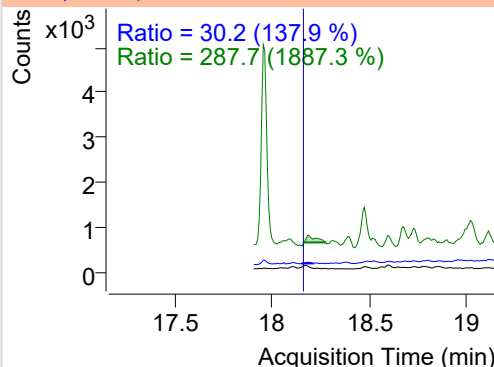
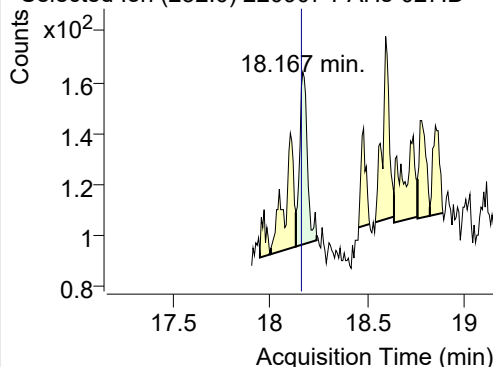
+ SIM (18.003-18.131 min, 19 scans) (\*\*) 2209



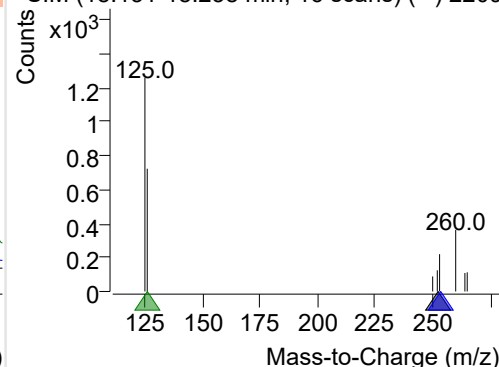
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-027.D

252.0, 253.0, 126.0

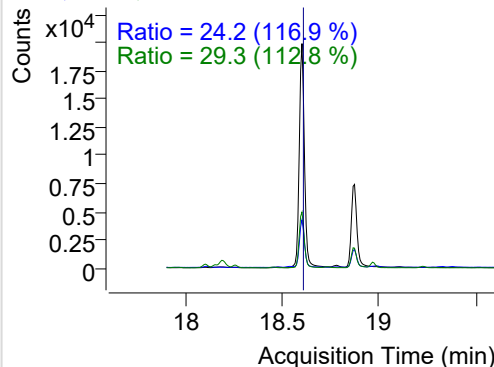
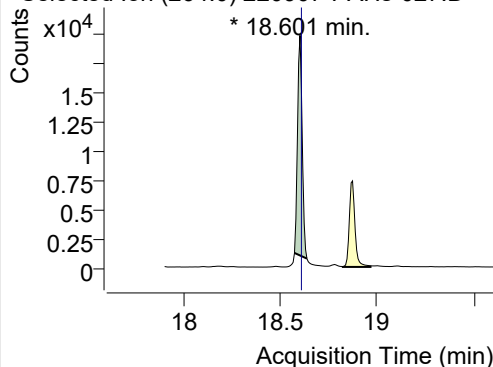


+ SIM (18.131-18.238 min, 16 scans) (\*\*) 2209

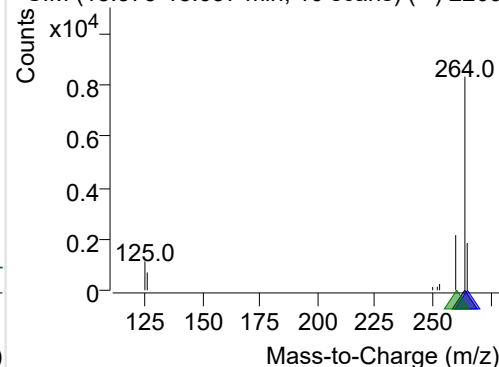
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-027.D

264.0, 265.0, 260.0

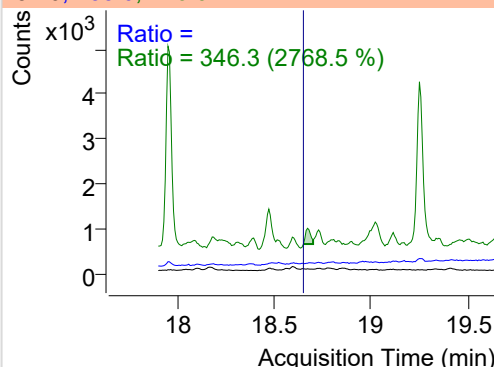
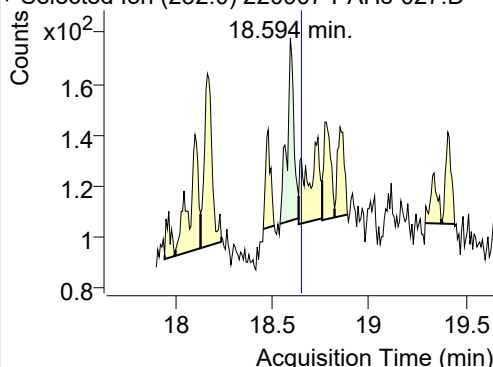


+ SIM (18.573-18.637 min, 10 scans) (\*\*) 2209

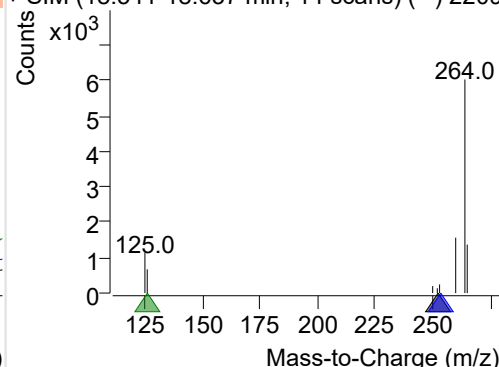
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-027.D

252.0, 253.0, 126.0

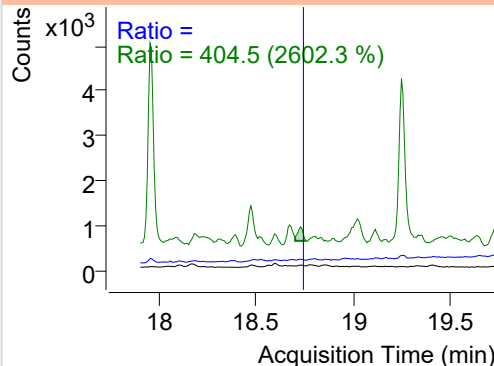
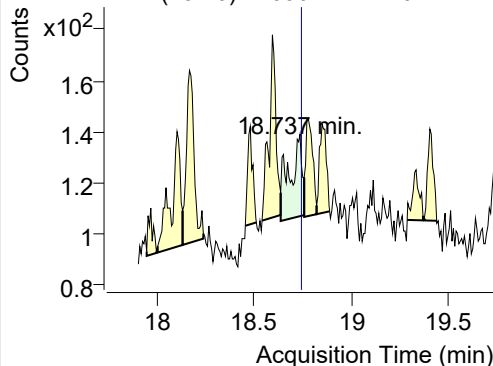


+ SIM (18.541-18.637 min, 14 scans) (\*\*) 2209

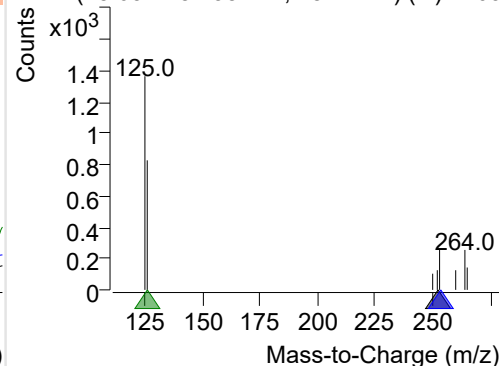
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-027.D

252.0, 253.0, 126.0

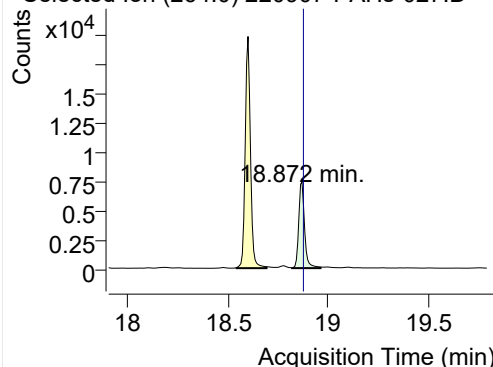


+ SIM (18.637-18.758 min, 18 scans) (\*\*) 2209

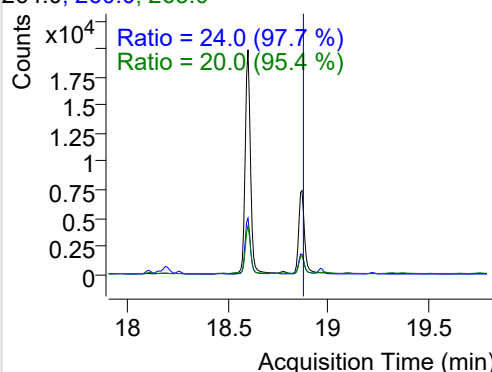


## IS-D12-Perylene

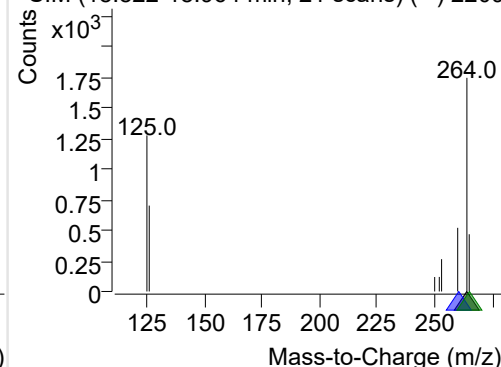
+ Selected Ion (264.0) 220907-PAHs-027.D



264.0, 260.0, 265.0

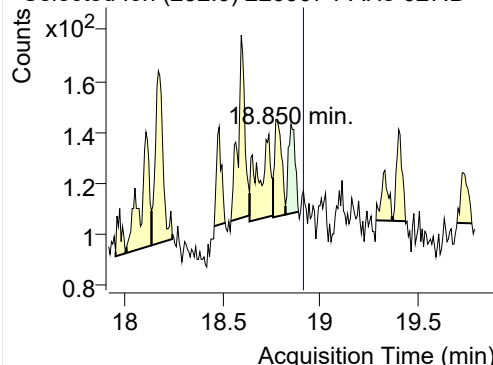


+ SIM (18.822-18.964 min, 21 scans) (\*\*) 2209

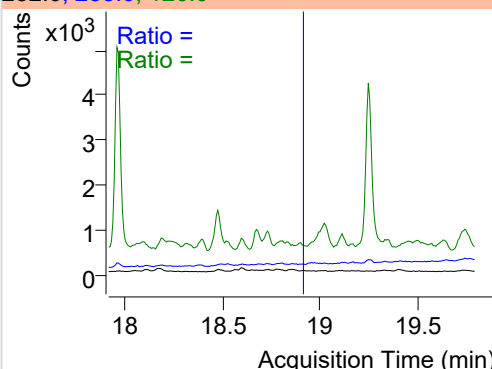


## Perylene

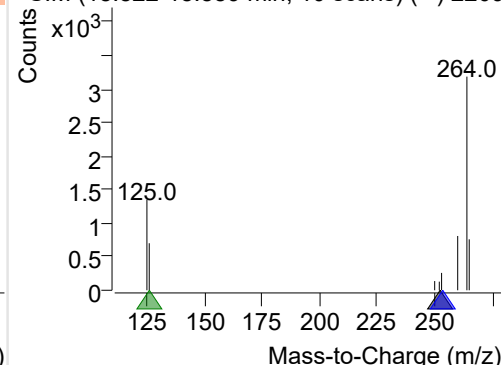
+ Selected Ion (252.0) 220907-PAHs-027.D



252.0, 253.0, 126.0

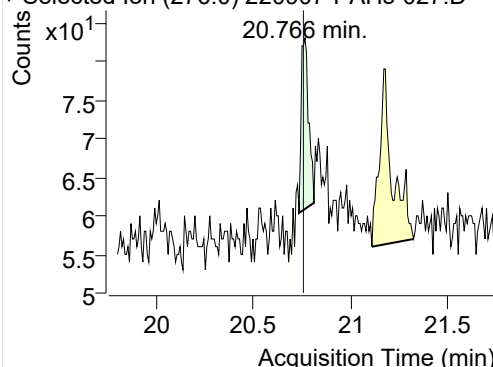


+ SIM (18.822-18.889 min, 10 scans) (\*\*) 2209

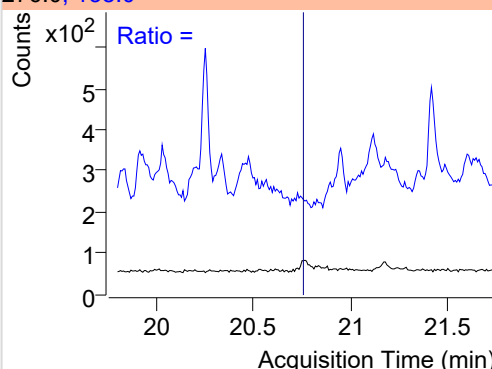


## Indeno(1,2,3-c,d)pyrene

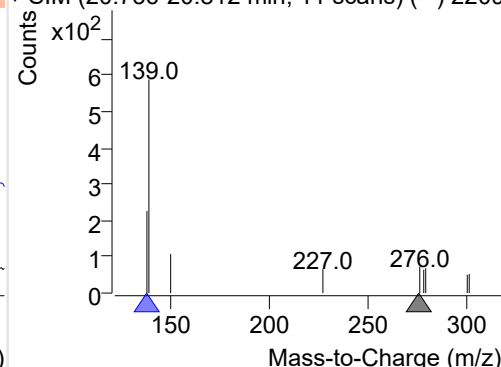
+ Selected Ion (276.0) 220907-PAHs-027.D



276.0, 138.0

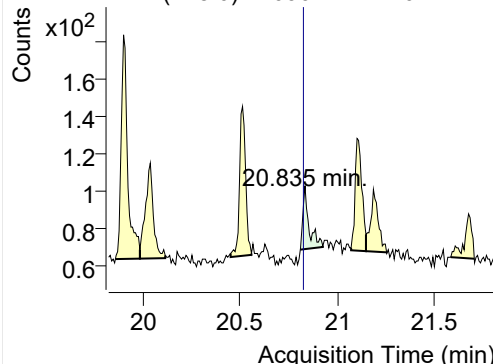


+ SIM (20.736-20.812 min, 11 scans) (\*\*) 2209

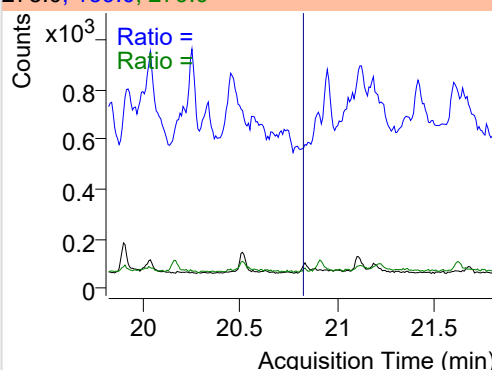


## Dibenz(a,h)anthracene

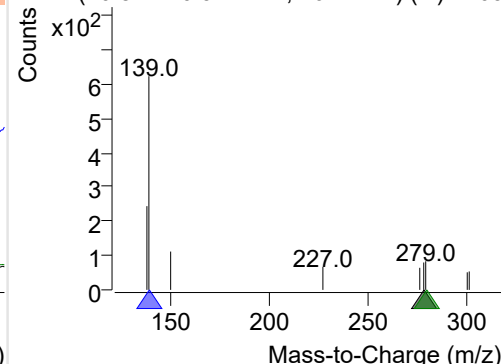
+ Selected Ion (278.0) 220907-PAHs-027.D



278.0, 139.0, 279.0



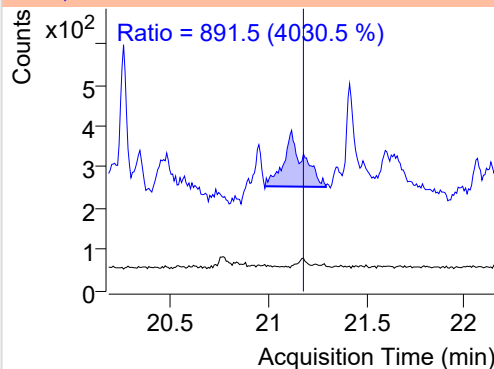
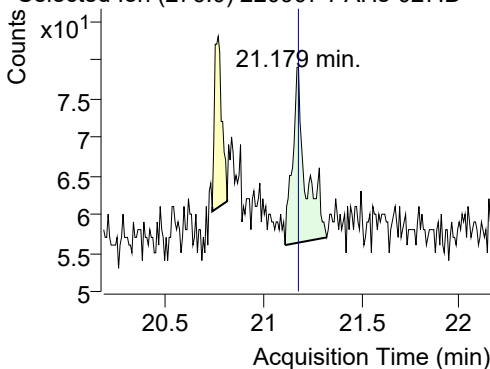
+ SIM (20.811-20.927 min, 16 scans) (\*\*) 2209



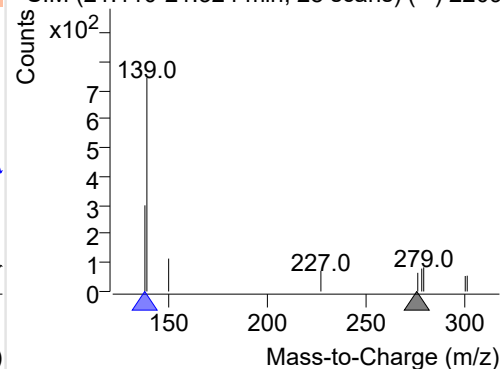
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-027.D

276.0, 138.0

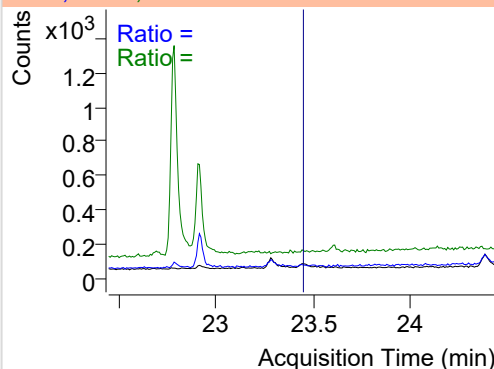
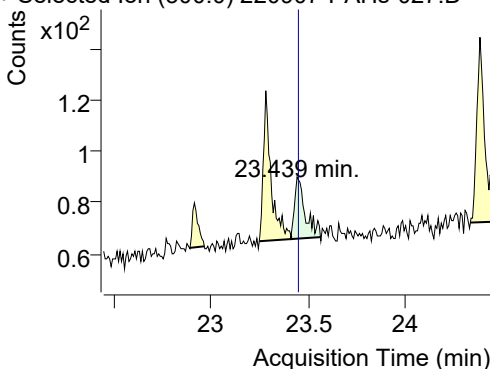


+ SIM (21.110-21.324 min, 28 scans) (\*\*) 2209

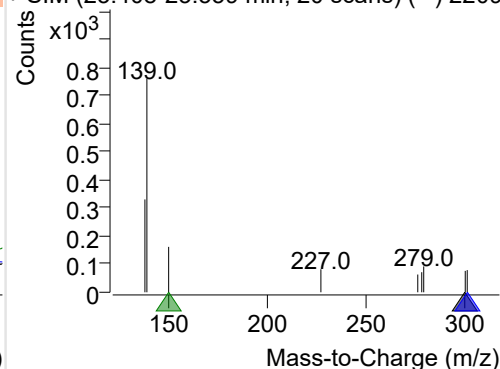
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-027.D

300.0, 301.0, 150.0



+ SIM (23.408-23.559 min, 20 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

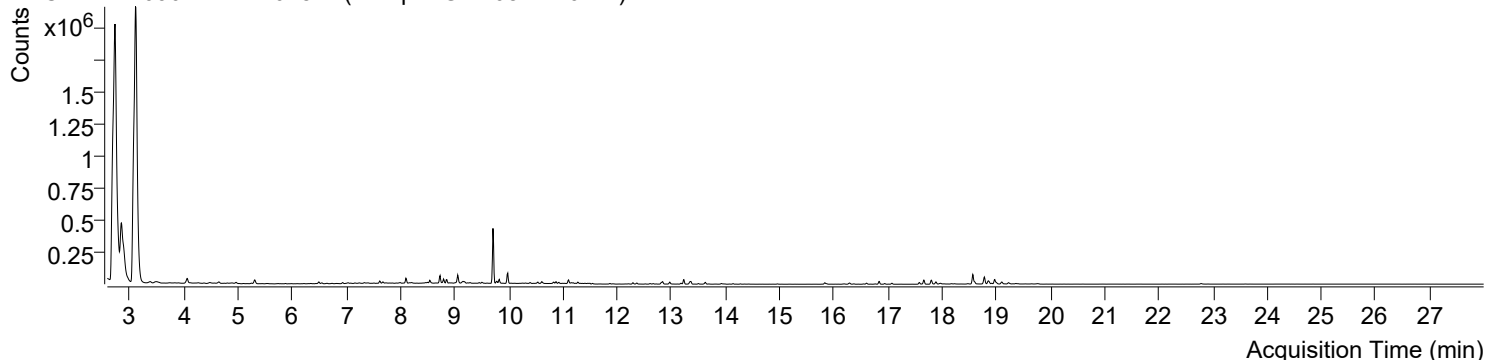


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 2:25:52	Data File	220907-PAHs-028.D
Type	Sample	Name	Sample-Gas-0821-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

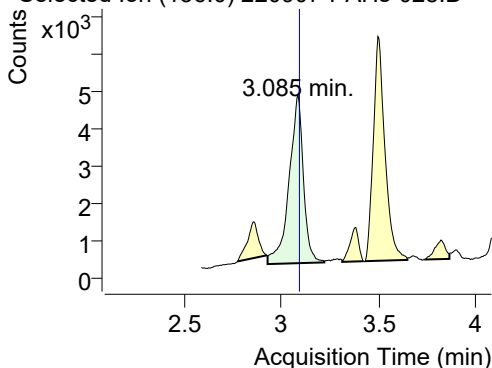
+ TIC SIM 220907-PAHs-028.D (Sample-Gas-0821-10DIL)



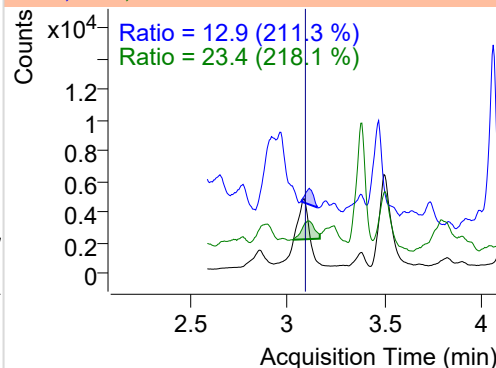
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	22906	4473.83	ND ng/ml	23.4
Naphthalene	3.107	128.0	7537076	1738362.10	ND ng/ml	13.0
Acenaphthylene	6.540	152.0	2375	1220.31	ND ng/ml	80.7
IS-D10-Acenaphthene	6.493	164.0	12731	6680.00	ND ng/ml	97.0
Acenaphthene	6.552	154.0	3334	1615.50	ND ng/ml	92.5
LSS-D10-Fluorene	7.617	176.0	12011	7419.47	ND ng/ml	96.9
Fluorene	7.669	166.0	8283	4341.35	ND ng/ml	137.7
IS-D10-Phenanthrene	9.780	188.0	20528	12385.13	ND ng/ml	24.2
Phenanthrene	9.822	178.0	30905	18897.38	ND ng/ml	18.8
Anthracene	9.979	178.0	36390	23009.38	ND ng/ml	27.6
Fluoranthene	12.521	202.0	1405	881.26	ND ng/ml	
LSS-D10-Pyrene	12.971	212.0	17877	11292.79	ND ng/ml	17.6
Pyrene	13.003	202.0	2302	983.28	ND ng/ml	
Benz(a)anthracene	15.795	228.0	104	60.86	ND ng/ml	57.3
IS-D12-Chrysene	15.833	240.0	15084	8227.65	ND ng/ml	19.3
Chrysene	15.871	228.0	222	88.94	ND ng/ml	33.4
Benzo(b)fluoranthene	18.231	252.0	388	204.13	ND ng/ml	8.5
Benzo(k)fluoranthene	18.231	252.0	388	204.13	ND ng/ml	8.5
SS-D12-Benzo(e)pyrene	18.587	264.0	18601	12000.04	ND ng/ml	26.8
Benzo(e)pyrene	18.566	252.0	3826	1562.13	ND ng/ml	12.9
Benzo(a)pyrene	18.779	252.0	2754	1232.00	ND ng/ml	14.9
IS-D12-Perylene	18.865	264.0	24292	11459.68	ND ng/ml	24.6
Perylene	18.851	252.0	2111	1095.64	ND ng/ml	15.1
Indeno(1,2,3-c,d)pyrene	20.759	276.0	73	21.64	ND ng/ml	
Dibenz(a,h)anthracene	20.828	278.0	98	28.98	ND ng/ml	
Benzo(g,h,i)perylene	21.171	276.0	107	40.15	ND ng/ml	330.0
Coronene	23.447	300.0	60	20.23	ND ng/ml	

## IS-D8-Naphthalene

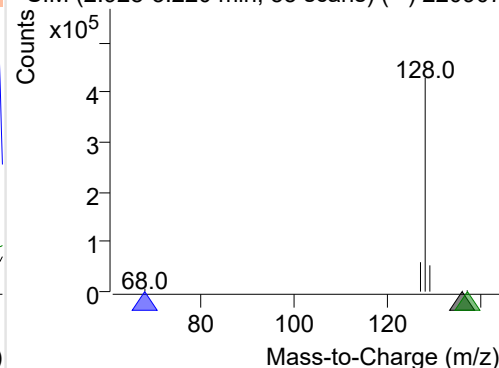
+ Selected Ion (136.0) 220907-PAHs-028.D



136.0, 68.0, 137.0

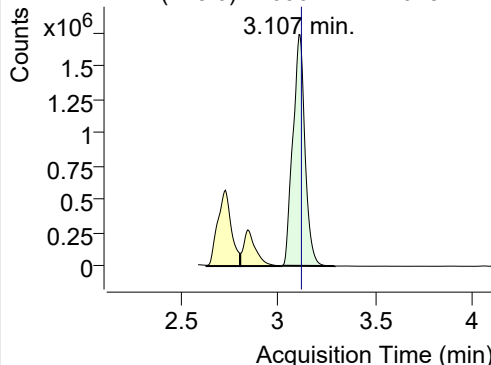


+ SIM (2.928-3.220 min, 55 scans) (\*\*) 220907

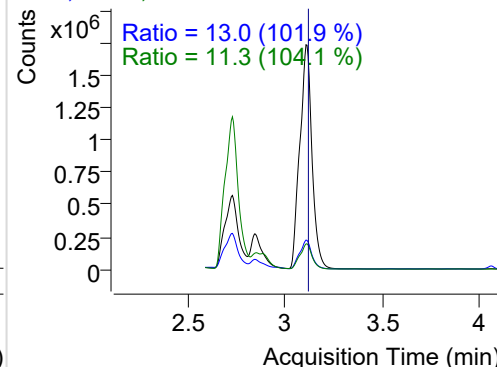


**Naphthalene**

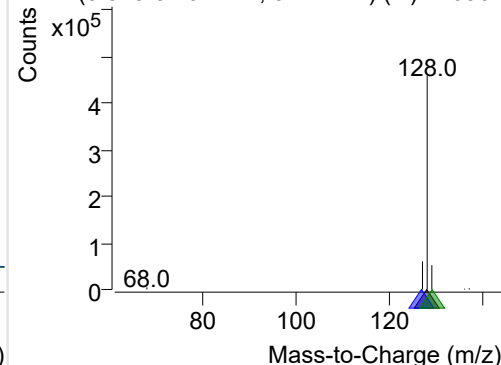
+ Selected Ion (128.0) 220907-PAHs-028.D



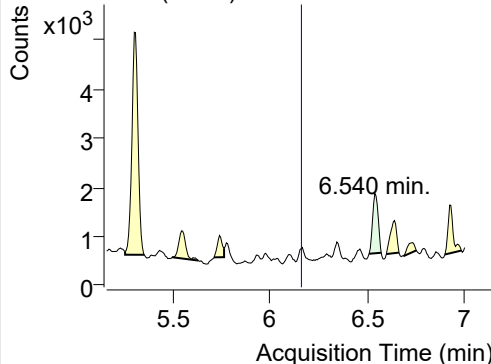
128.0, 127.0, 129.0



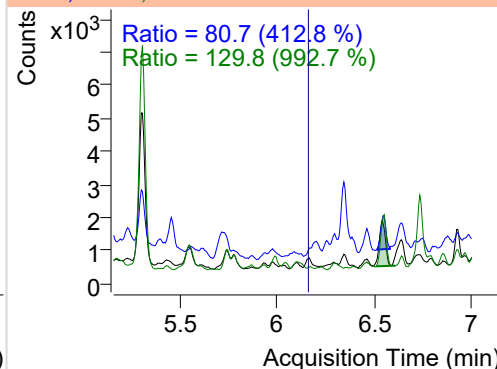
+ SIM (3.018-3.291 min, 51 scans) (\*\*) 220907

**Acenaphthylene**

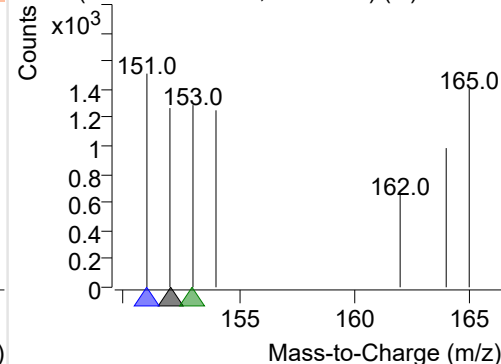
+ Selected Ion (152.0) 220907-PAHs-028.D



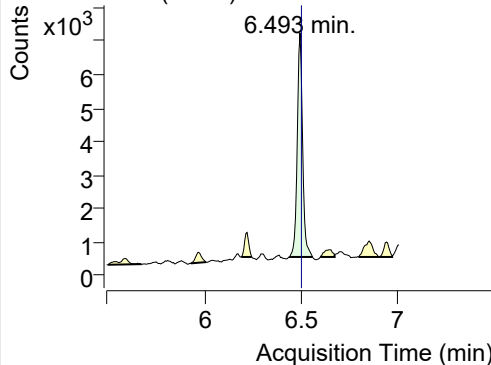
152.0, 151.0, 153.0



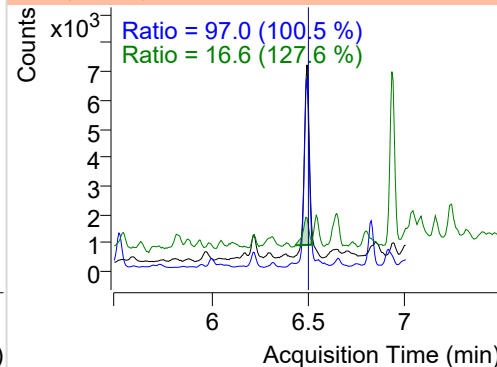
+ SIM (6.510-6.573 min, 11 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

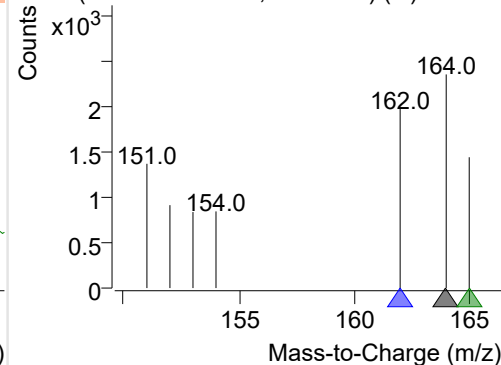
+ Selected Ion (164.0) 220907-PAHs-028.D



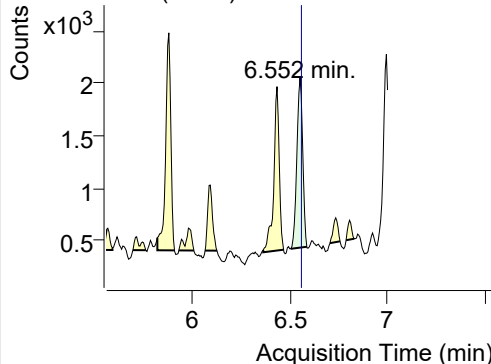
164.0, 162.0, 165.0



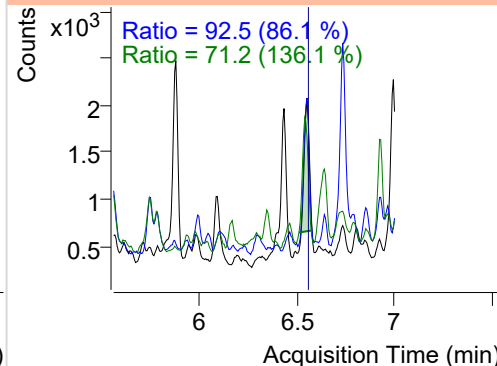
+ SIM (6.439-6.557 min, 20 scans) (\*\*) 220907

**Acenaphthene**

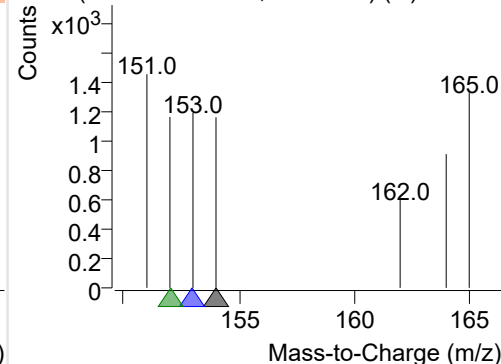
+ Selected Ion (154.0) 220907-PAHs-028.D



154.0, 153.0, 152.0

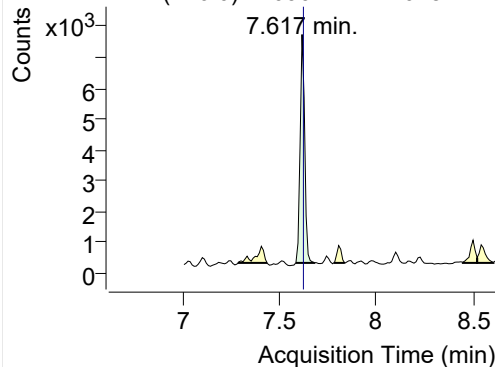


+ SIM (6.505-6.587 min, 13 scans) (\*\*) 220907

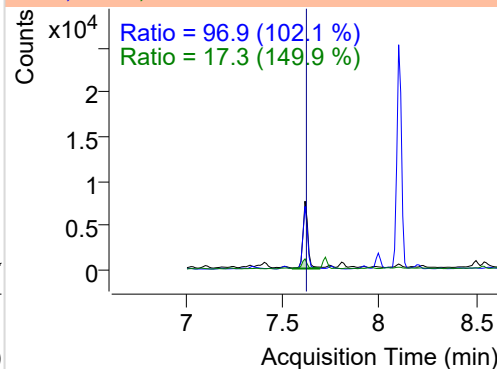


## LSS-D10-Fluorene

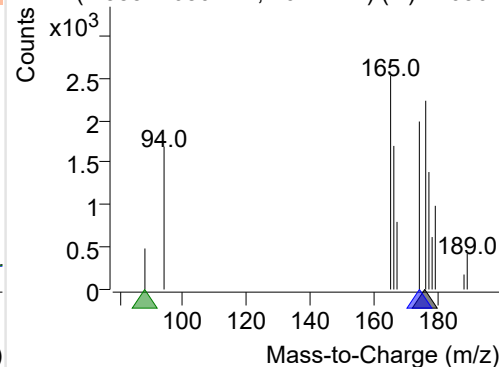
+ Selected Ion (176.0) 220907-PAHs-028.D



176.0, 174.0, 88.0

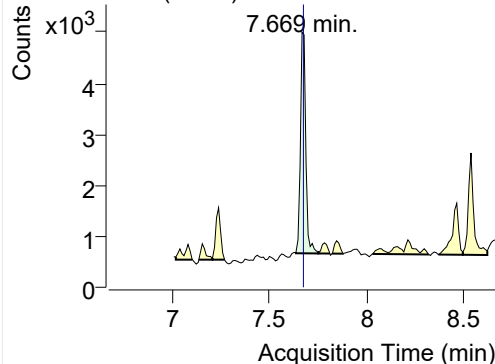


+ SIM (7.585-7.680 min, 10 scans) (\*\*) 220907

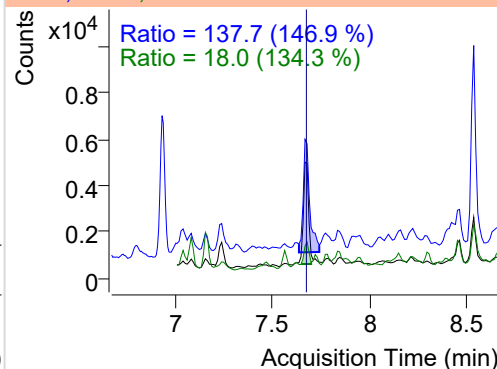


## Fluorene

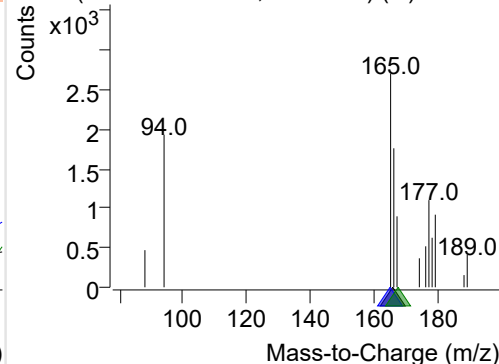
+ Selected Ion (166.0) 220907-PAHs-028.D



166.0, 165.0, 167.0

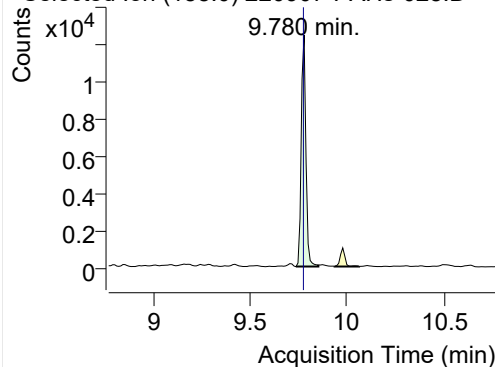


+ SIM (7.638-7.753 min, 12 scans) (\*\*) 220907

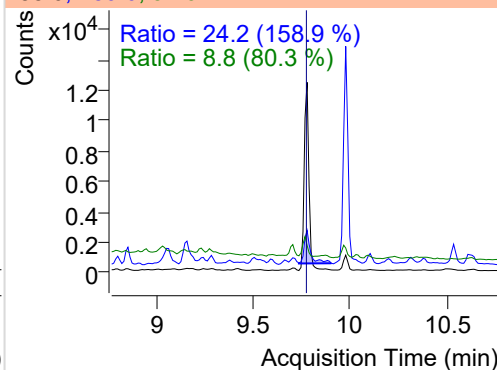


## IS-D10-Phenanthrene

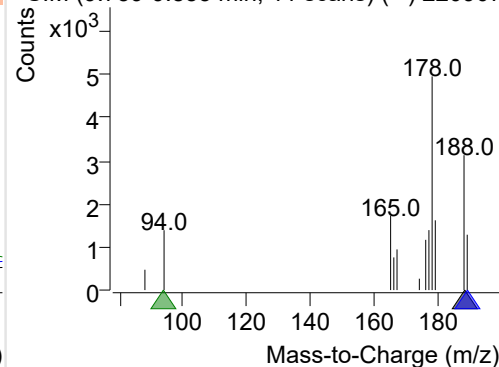
+ Selected Ion (188.0) 220907-PAHs-028.D



188.0, 189.0, 94.0

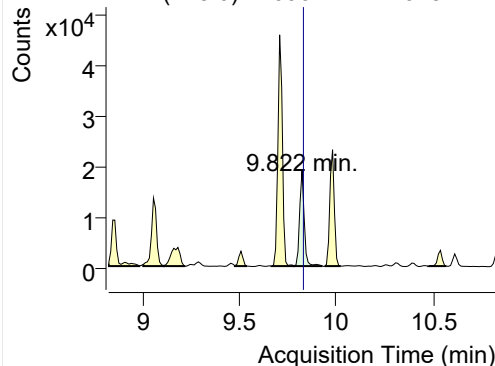


+ SIM (9.739-9.853 min, 11 scans) (\*\*) 220907

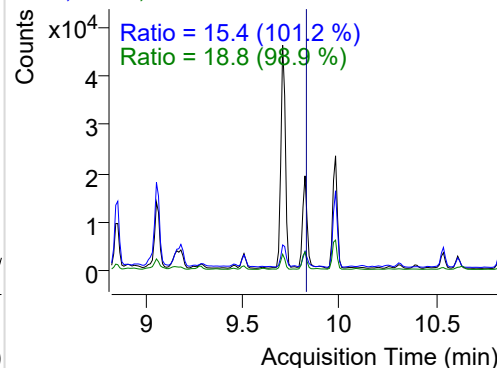


## Phenanthrene

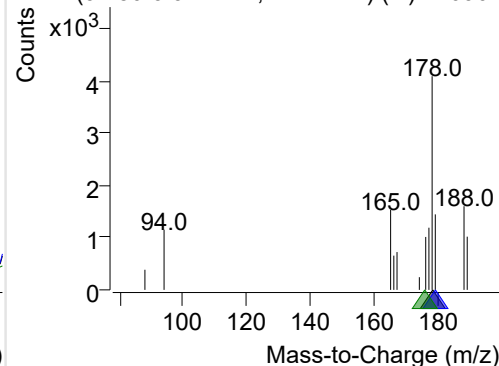
+ Selected Ion (178.0) 220907-PAHs-028.D



178.0, 179.0, 176.0

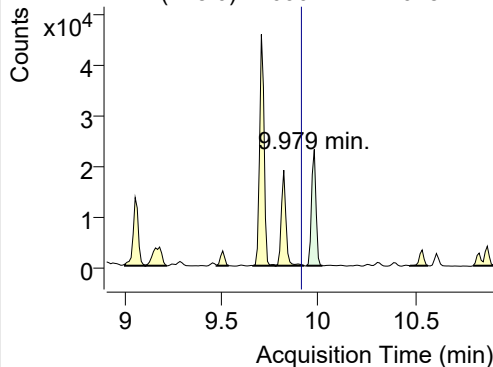


+ SIM (9.780-9.927 min, 14 scans) (\*\*) 220907

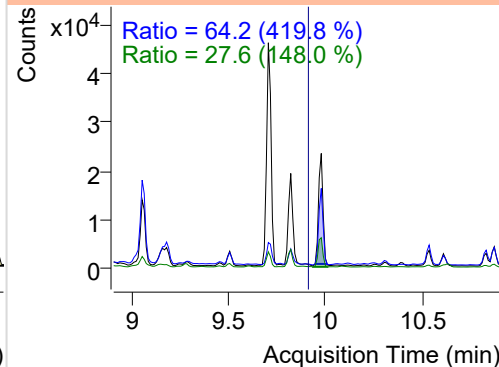


**Anthracene**

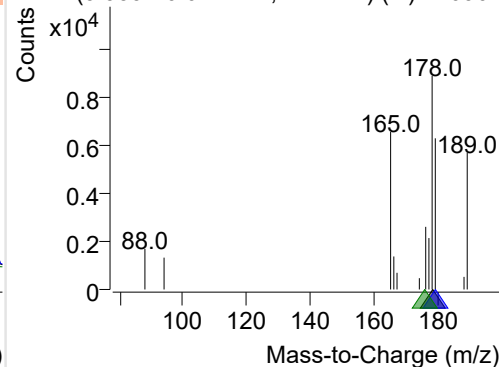
+ Selected Ion (178.0) 220907-PAHs-028.D



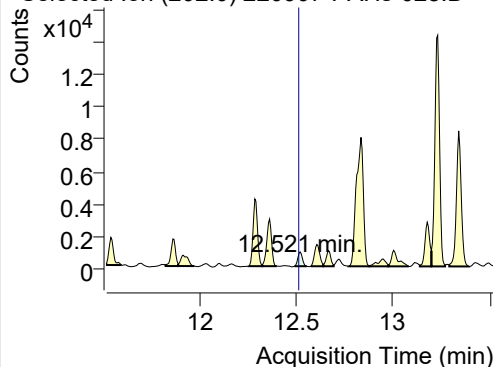
178.0, 179.0, 176.0



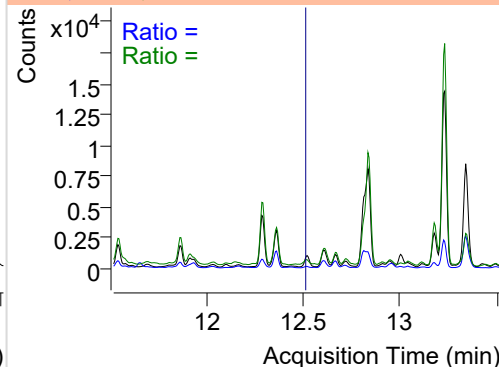
+ SIM (9.939-10.021 min, 7 scans) (\*\*) 220907

**Fluoranthene**

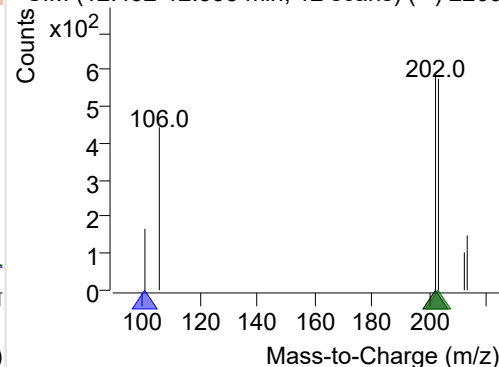
+ Selected Ion (202.0) 220907-PAHs-028.D



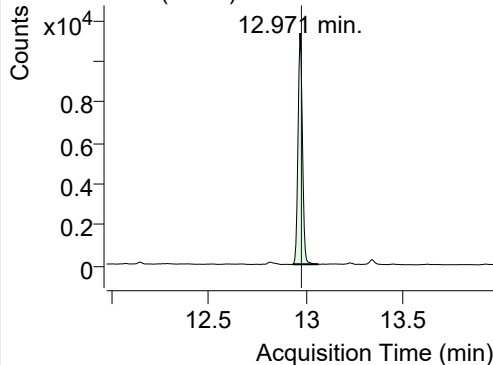
202.0, 101.0, 203.0



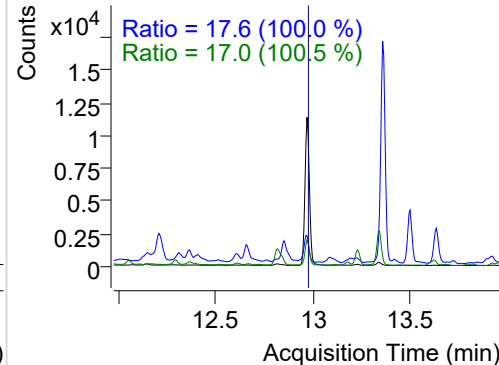
+ SIM (12.492-12.555 min, 12 scans) (\*\*) 2209

**LSS-D10-Pyrene**

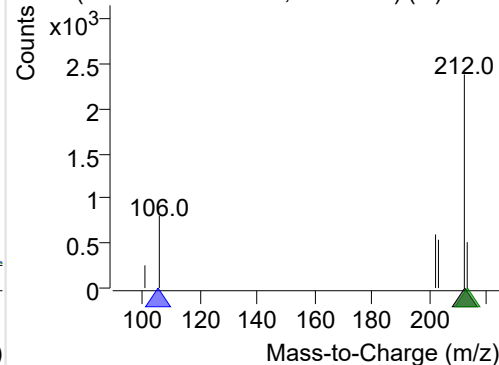
+ Selected Ion (212.0) 220907-PAHs-028.D



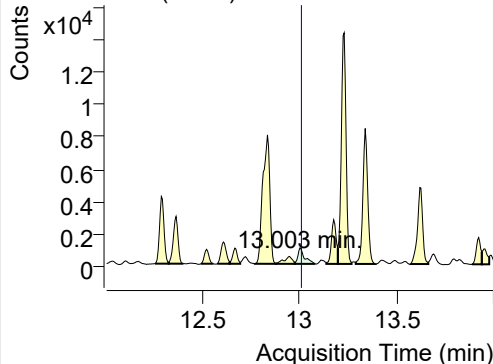
212.0, 106.0, 213.0



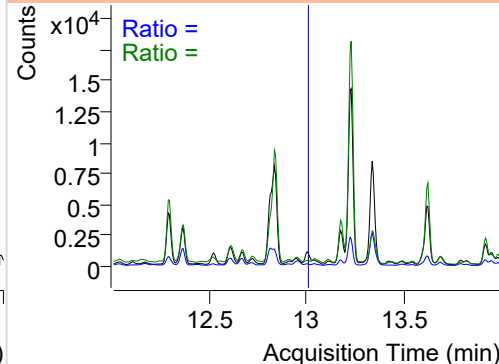
+ SIM (12.933-13.065 min, 24 scans) (\*\*) 2209

**Pyrene**

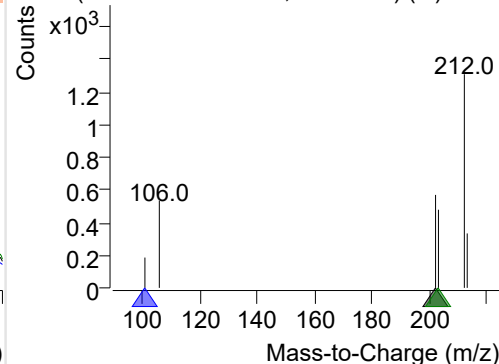
+ Selected Ion (202.0) 220907-PAHs-028.D



202.0, 101.0, 203.0



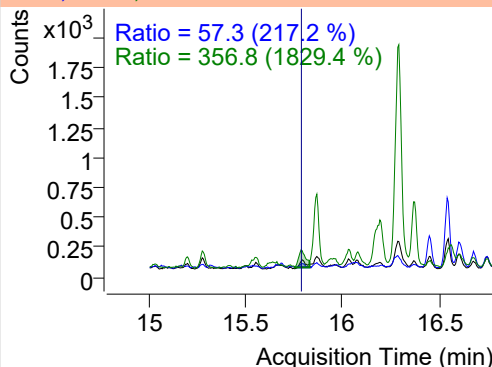
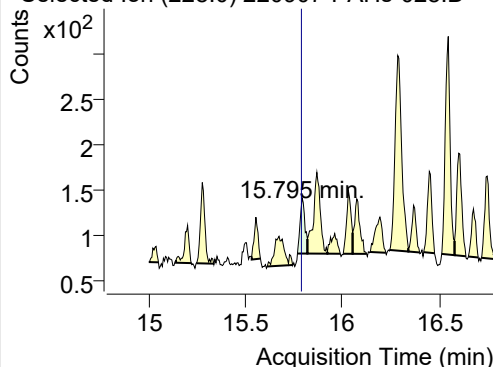
+ SIM (12.976-13.082 min, 20 scans) (\*\*) 2209



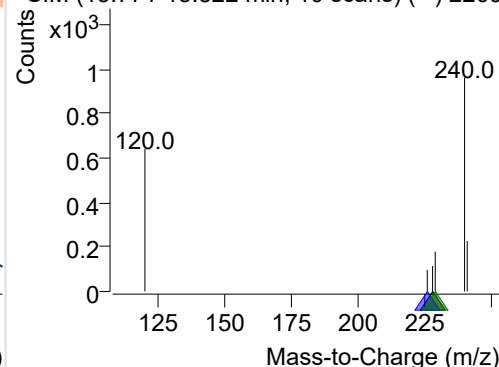
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-028.D

228.0, 226.0, 229.0

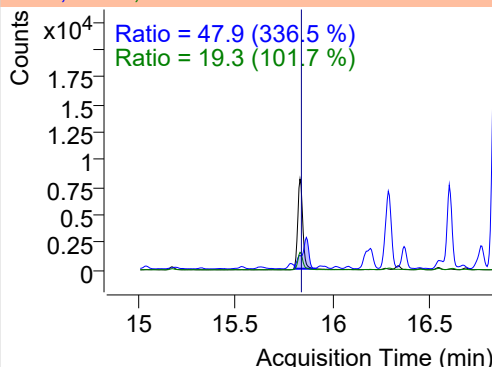
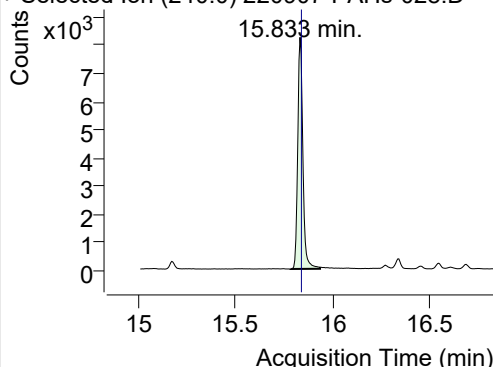


+ SIM (15.771-15.822 min, 10 scans) (\*\*) 2209

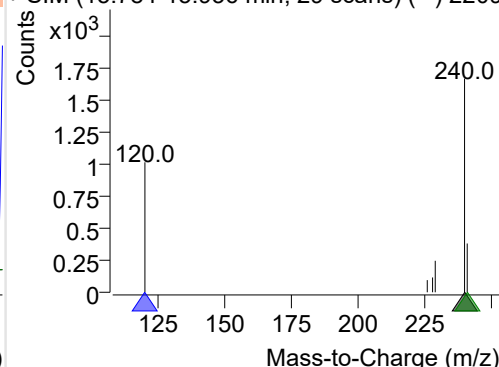
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-028.D

240.0, 120.0, 241.0

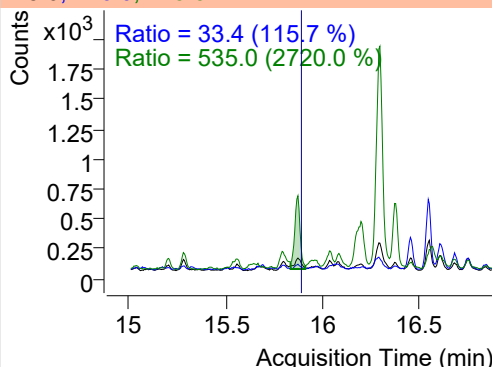
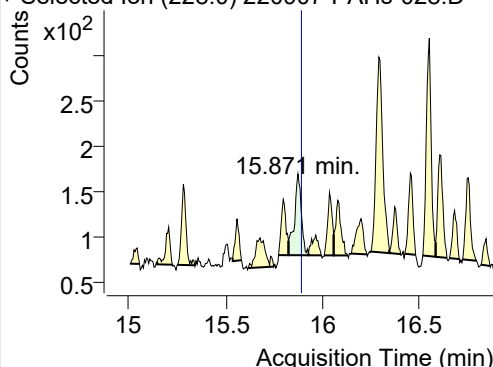


+ SIM (15.784-15.936 min, 29 scans) (\*\*) 2209

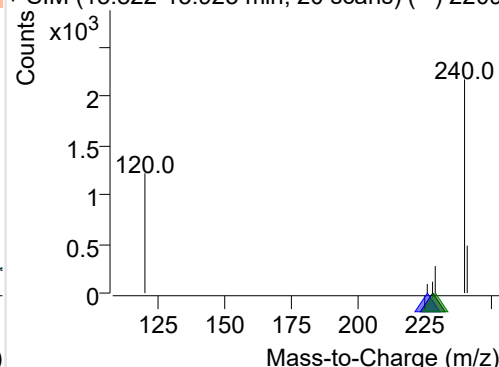
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-028.D

228.0, 226.0, 229.0

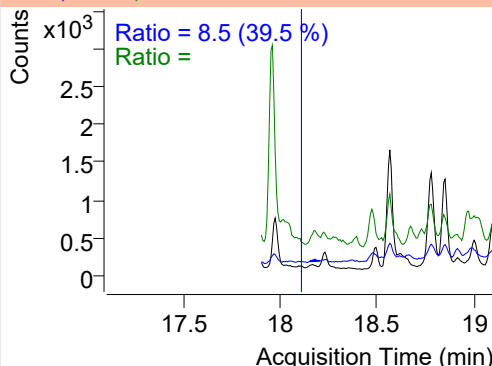
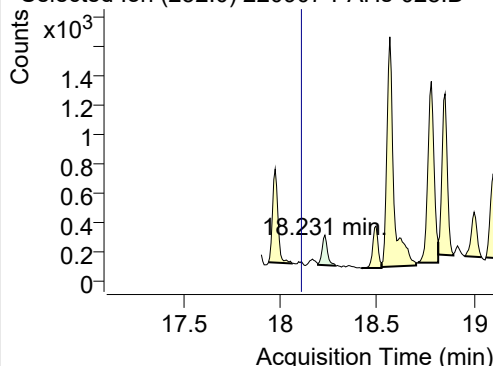


+ SIM (15.822-15.925 min, 20 scans) (\*\*) 2209

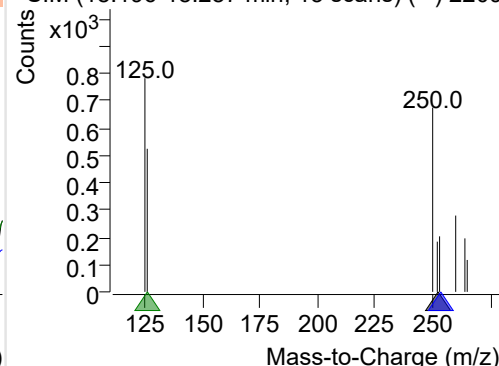
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-028.D

252.0, 253.0, 126.0



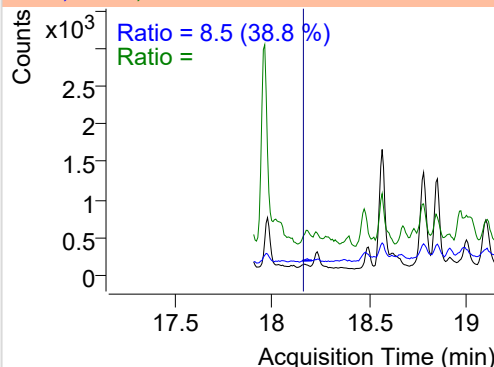
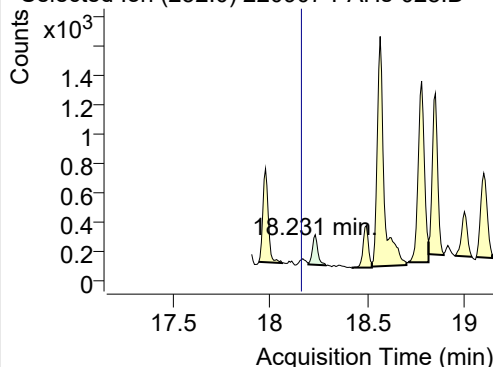
+ SIM (18.196-18.287 min, 13 scans) (\*\*) 2209



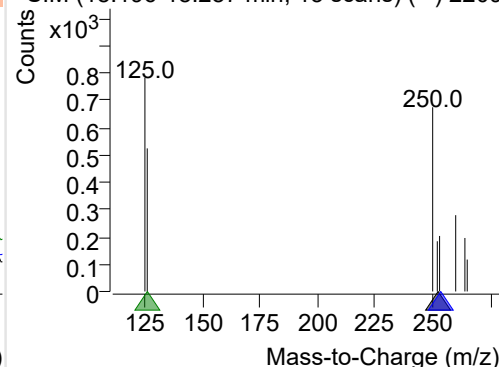
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-028.D

252.0, 253.0, 126.0

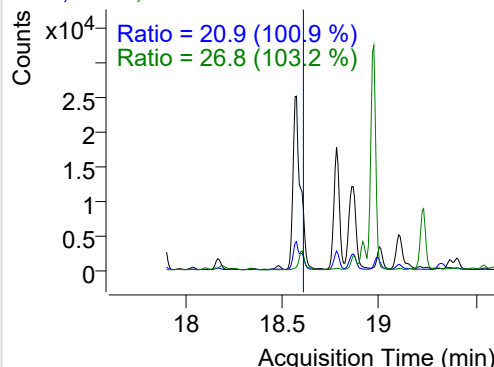
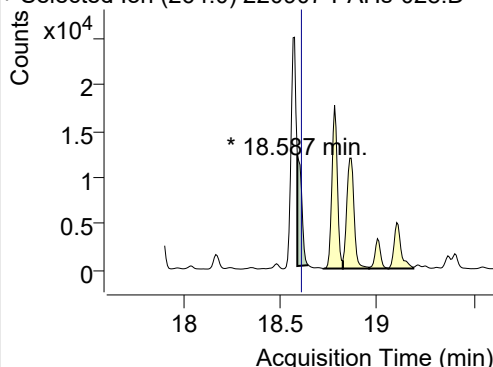


+ SIM (18.196-18.287 min, 13 scans) (\*\*) 2209

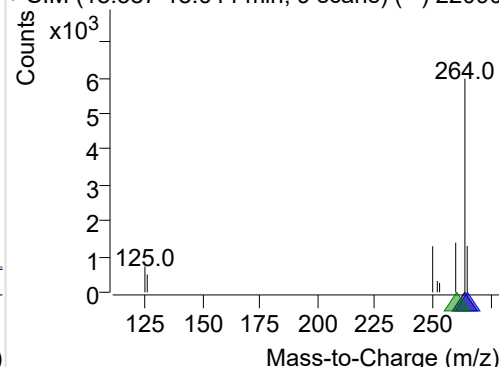
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-028.D

264.0, 265.0, 260.0

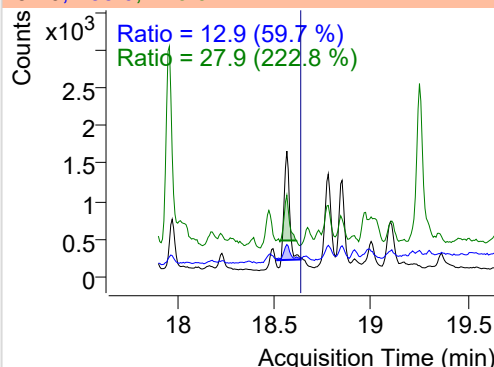
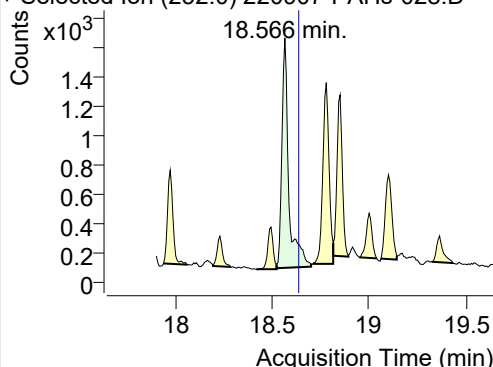


+ SIM (18.587-18.644 min, 9 scans) (\*\*) 22090

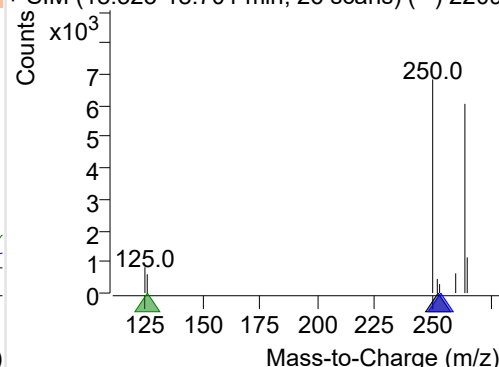
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-028.D

252.0, 253.0, 126.0

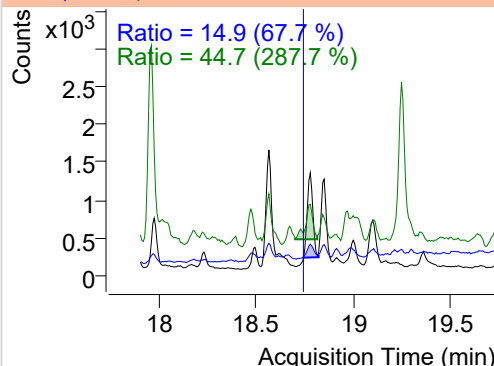
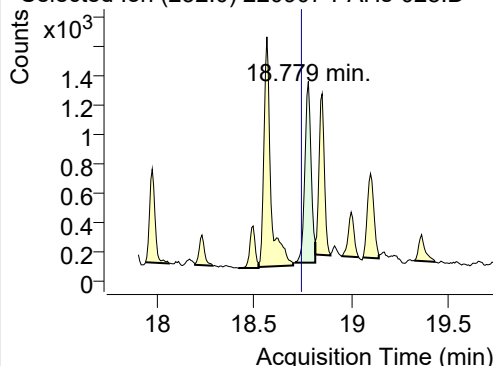


+ SIM (18.523-18.701 min, 26 scans) (\*\*) 2209

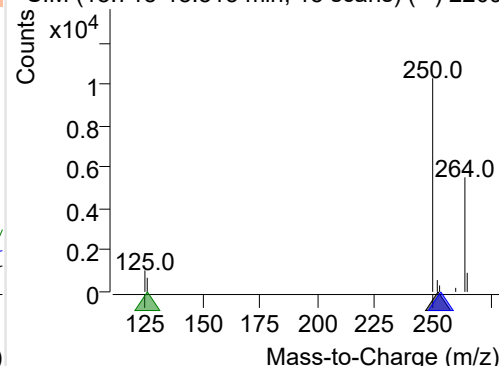
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-028.D

252.0, 253.0, 126.0

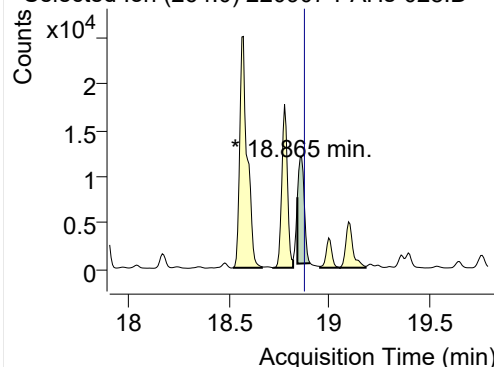


+ SIM (18.715-18.815 min, 15 scans) (\*\*) 2209

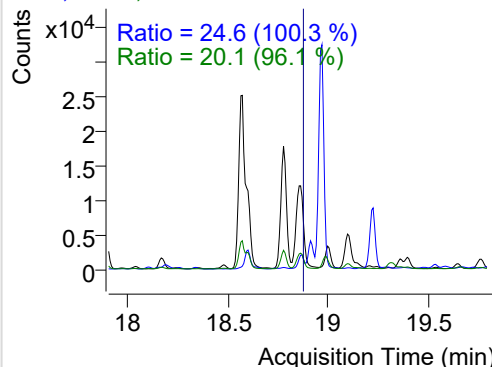


## IS-D12-Perylene

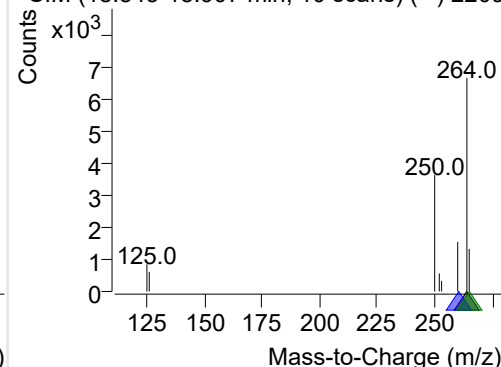
+ Selected Ion (264.0) 220907-PAHs-028.D



264.0, 260.0, 265.0

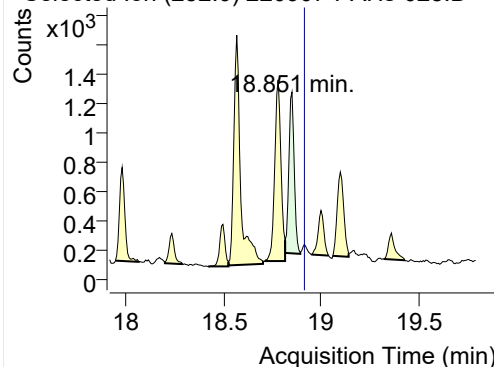


+ SIM (18.843-18.907 min, 10 scans) (\*\*) 2209

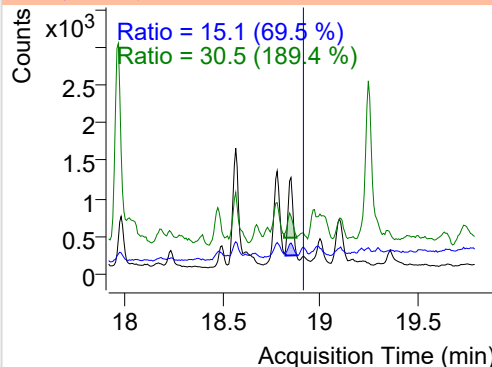


## Perylene

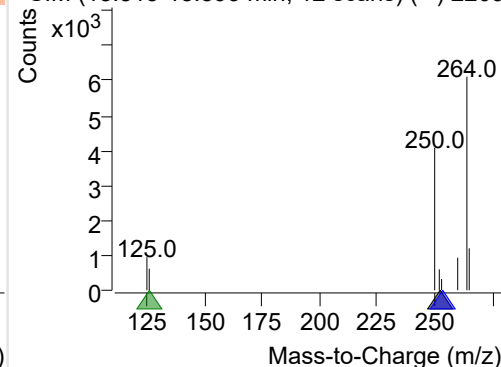
+ Selected Ion (252.0) 220907-PAHs-028.D



252.0, 253.0, 126.0

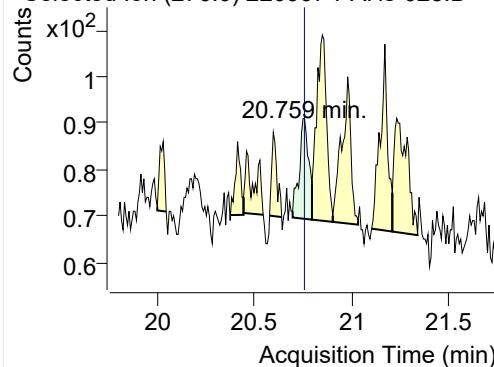


+ SIM (18.815-18.893 min, 12 scans) (\*\*) 2209

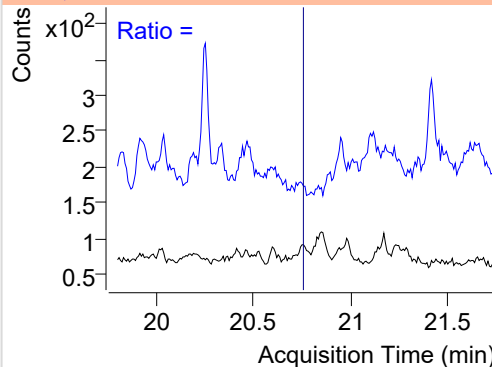


## Indeno(1,2,3-c,d)pyrene

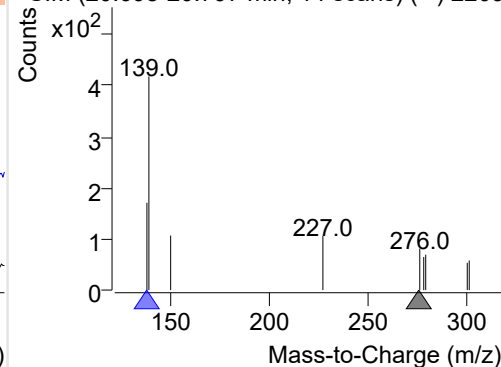
+ Selected Ion (276.0) 220907-PAHs-028.D



276.0, 138.0

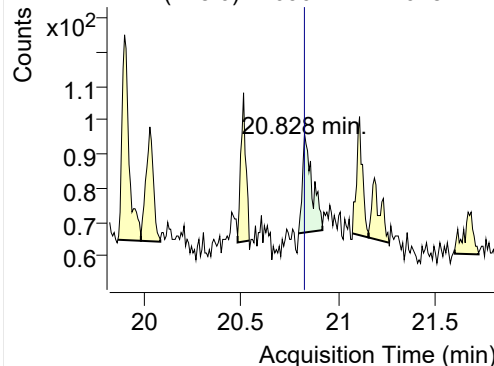


+ SIM (20.698-20.797 min, 14 scans) (\*\*) 2209

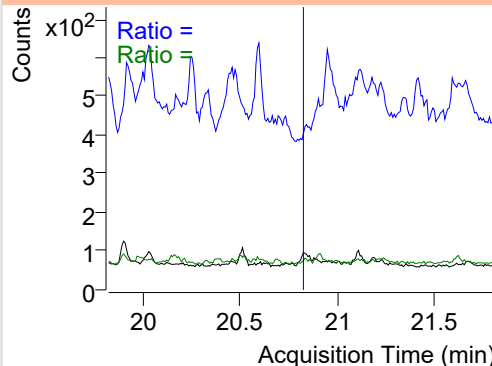


## Dibenz(a,h)anthracene

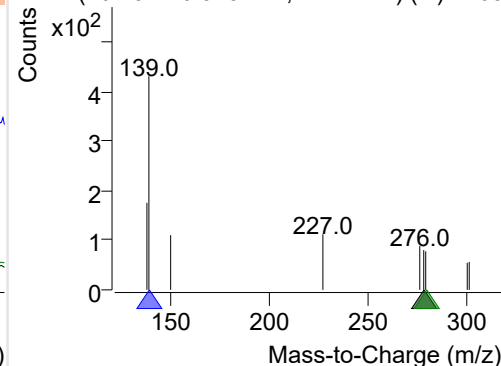
+ Selected Ion (278.0) 220907-PAHs-028.D



278.0, 139.0, 279.0



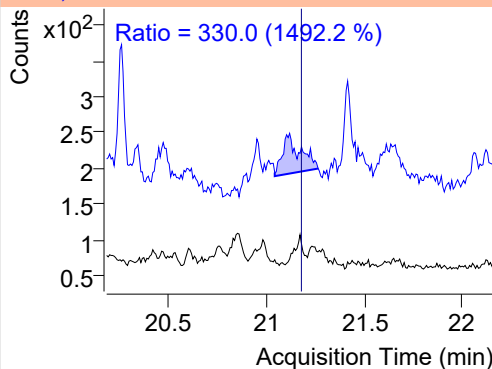
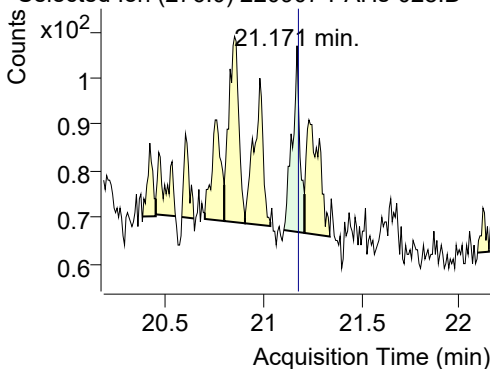
+ SIM (20.797-20.919 min, 17 scans) (\*\*) 2209



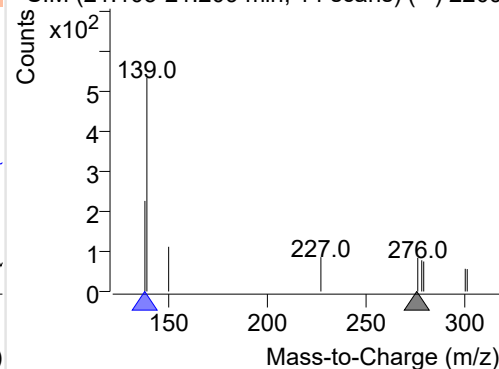
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-028.D

276.0, 138.0

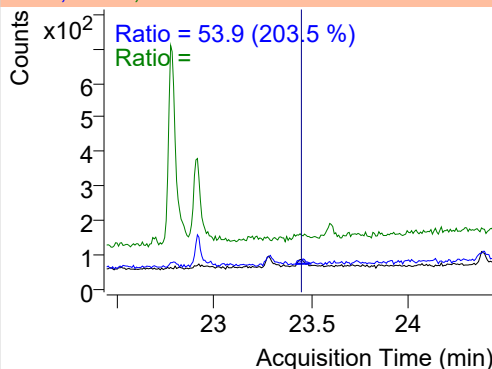
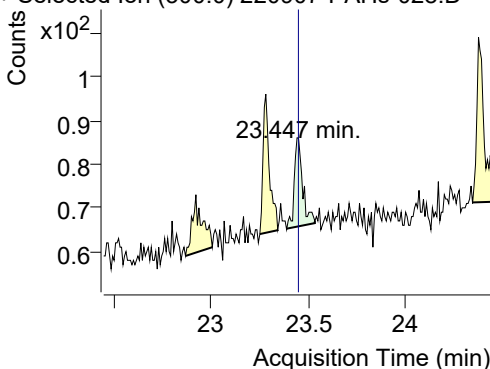


+ SIM (21.103-21.209 min, 14 scans) (\*\*) 2209

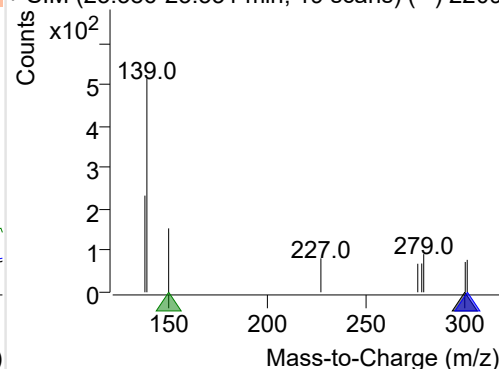
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-028.D

300.0, 301.0, 150.0



+ SIM (23.386-23.531 min, 19 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

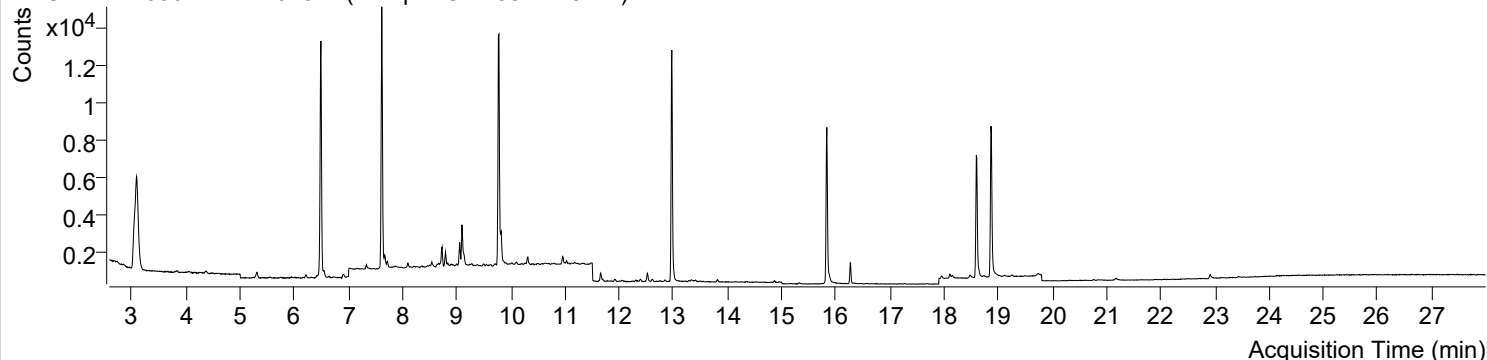


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 2:56:58	Data File	220907-PAHs-029.D
Type	Sample	Name	Sample-Gas-0827-10DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

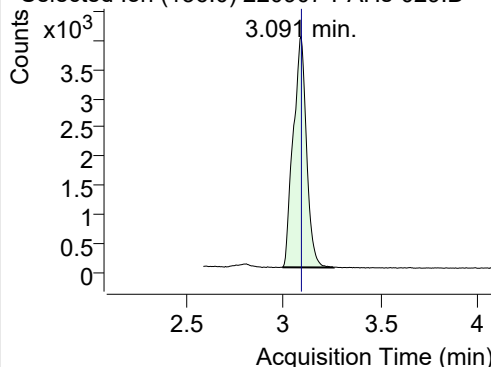
+ TIC SIM 220907-PAHs-029.D (Sample-Gas-0827-10DIL)



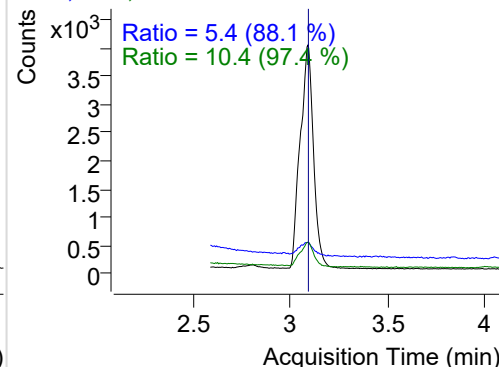
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.091	136.0	18817	3965.12	ND ng/ml	10.4
Naphthalene	3.118	128.0	1815	390.56	ND ng/ml	4.0
Acenaphthylene	6.155	152.0	45	28.85	ND ng/ml	82.0
IS-D10-Acenaphthene	6.493	164.0	11030	6042.46	ND ng/ml	99.5
Acenaphthene	6.558	154.0	179	85.38	ND ng/ml	111.3
LSS-D10-Fluorene	7.617	176.0	10633	6342.88	ND ng/ml	93.7
Fluorene	7.669	166.0	461	237.16	ND ng/ml	97.9
IS-D10-Phenanthrene	9.780	188.0	18749	10113.76	ND ng/ml	15.2
Phenanthrene	9.822	178.0	1657	957.13	ND ng/ml	19.4
Anthracene	9.822	178.0	1657	957.13	ND ng/ml	19.4
Fluoranthene	12.521	202.0	561	325.17	ND ng/ml	24.2
LSS-D10-Pyrene	12.971	212.0	15658	9313.53	ND ng/ml	15.4
Pyrene	13.003	202.0	551	317.61	ND ng/ml	27.9
Benz(a)anthracene	15.789	228.0	73	42.22	ND ng/ml	85.1
IS-D12-Chrysene	15.833	240.0	11919	6389.39	ND ng/ml	18.6
Chrysene	15.876	228.0	270	129.66	ND ng/ml	29.0
Benzo(b)fluoranthene	18.103	252.0	211	114.93	ND ng/ml	36.2
Benzo(k)fluoranthene	18.146	252.0	203	80.93	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.594	264.0	8728	4395.44	ND ng/ml	25.7
Benzo(e)pyrene	18.637	252.0	218	113.93	ND ng/ml	13.1
Benzo(a)pyrene	18.737	252.0	67	34.93	ND ng/ml	
IS-D12-Perylene	18.865	264.0	11380	5520.60	ND ng/ml	23.8
Perylene	18.865	252.0	51	19.93	ND ng/ml	
Indeno(1,2,3-c,d)pytene	20.767	276.0	141	38.74	ND ng/ml	
Dibenz(a,h)anthracene	20.828	278.0	96	19.82	ND ng/ml	
Benzo(g,h,i)perylene	21.171	276.0	221	80.66	ND ng/ml	32.6
Coronene	23.447	300.0	107	30.33	ND ng/ml	12.0

## IS-D8-Naphthalene

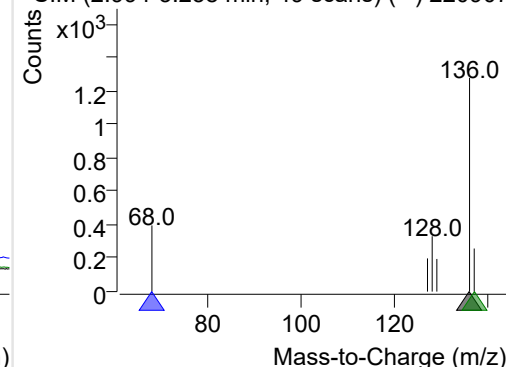
+ Selected Ion (136.0) 220907-PAHs-029.D



136.0, 68.0, 137.0

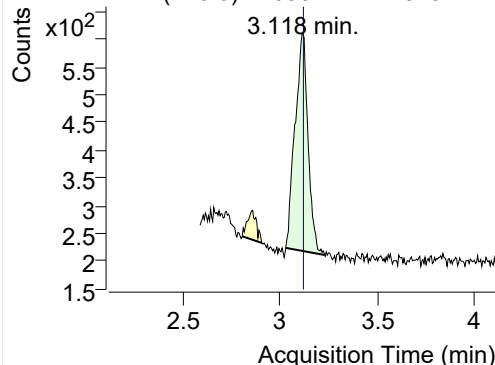


+ SIM (2.994-3.258 min, 49 scans) (\*\*) 220907

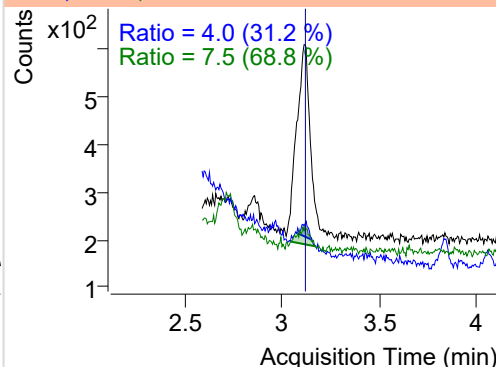


**Naphthalene**

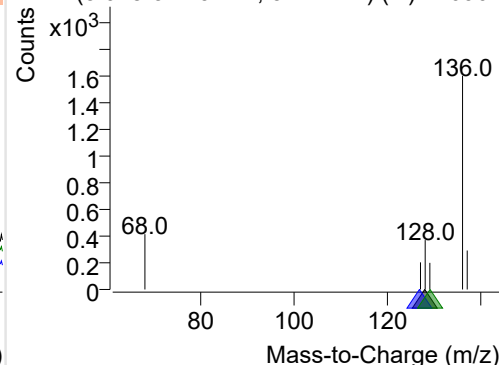
+ Selected Ion (128.0) 220907-PAHs-029.D



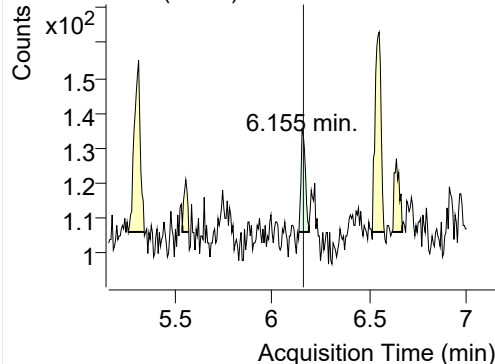
128.0, 127.0, 129.0



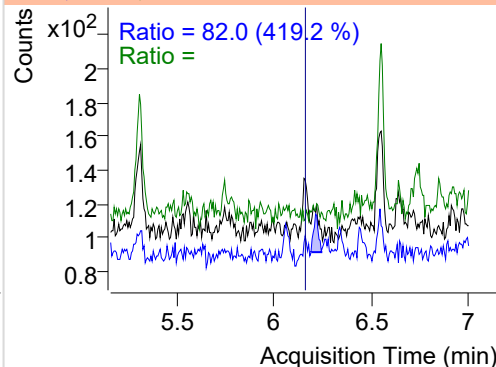
+ SIM (3.028-3.229 min, 37 scans) (\*\*) 220907

**Acenaphthylene**

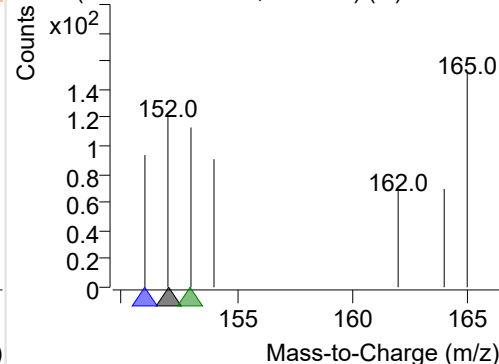
+ Selected Ion (152.0) 220907-PAHs-029.D



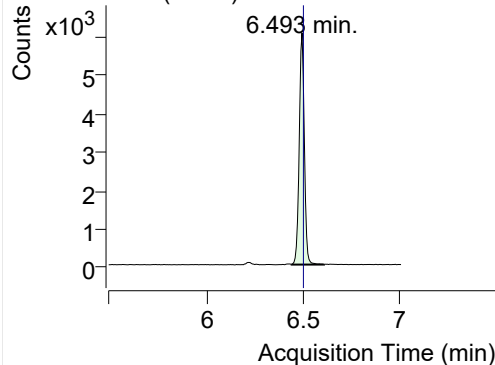
152.0, 151.0, 153.0



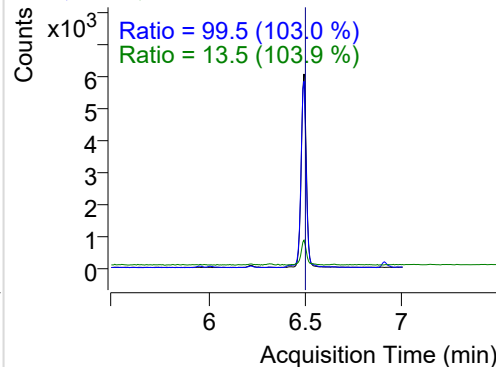
+ SIM (6.139-6.191 min, 9 scans) (\*\*) 220907-I

**IS-D10-Acenaphthene**

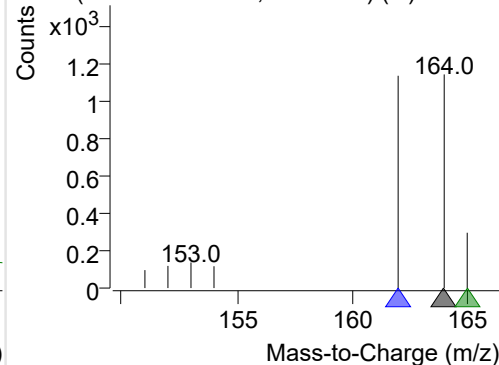
+ Selected Ion (164.0) 220907-PAHs-029.D



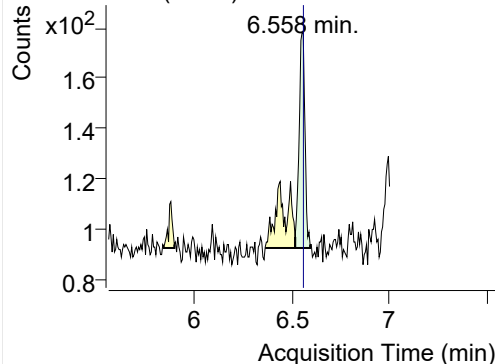
164.0, 162.0, 165.0



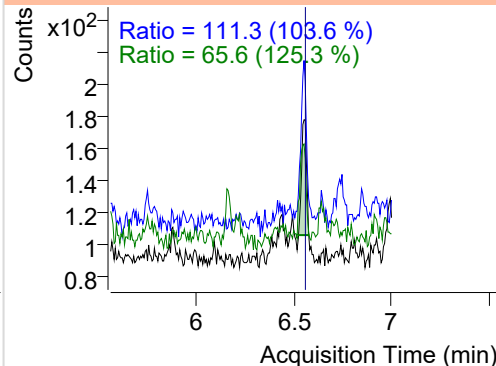
+ SIM (6.439-6.605 min, 29 scans) (\*\*) 220907

**Acenaphthene**

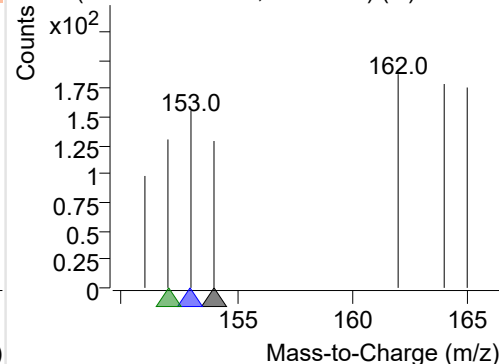
+ Selected Ion (154.0) 220907-PAHs-029.D



154.0, 153.0, 152.0

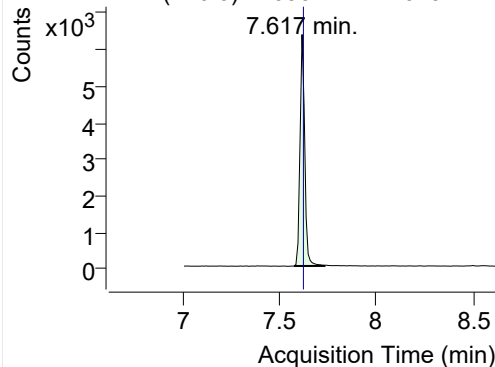


+ SIM (6.516-6.593 min, 14 scans) (\*\*) 220907

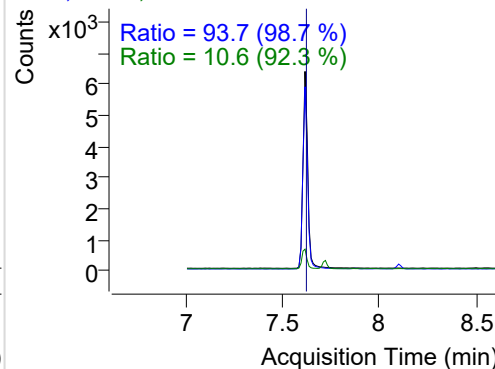


## LSS-D10-Fluorene

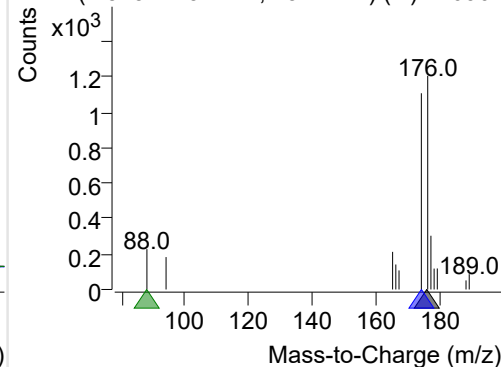
+ Selected Ion (176.0) 220907-PAHs-029.D



176.0, 174.0, 88.0

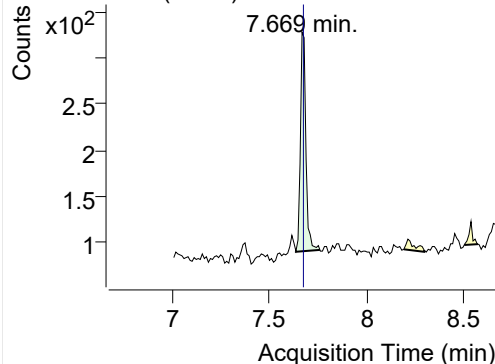


+ SIM (7.575-7.732 min, 15 scans) (\*\*) 220907

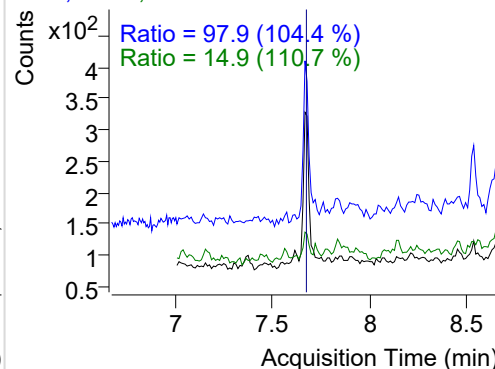


## Fluorene

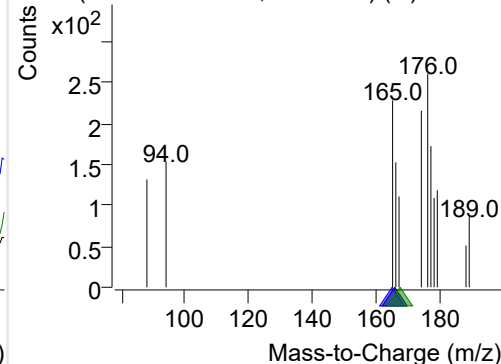
+ Selected Ion (166.0) 220907-PAHs-029.D



166.0, 165.0, 167.0

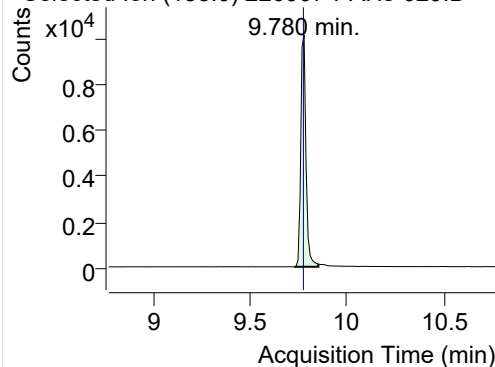


+ SIM (7.638-7.761 min, 12 scans) (\*\*) 220907

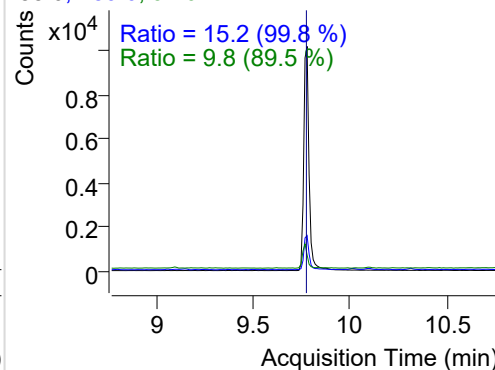


## IS-D10-Phenanthrene

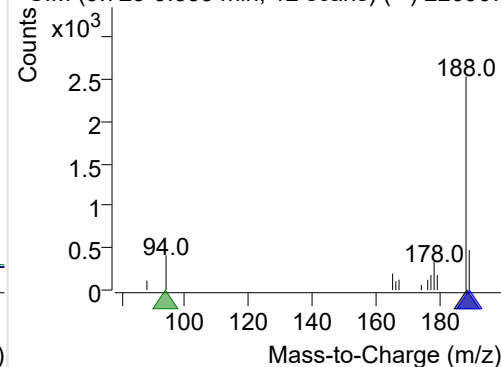
+ Selected Ion (188.0) 220907-PAHs-029.D



188.0, 189.0, 94.0

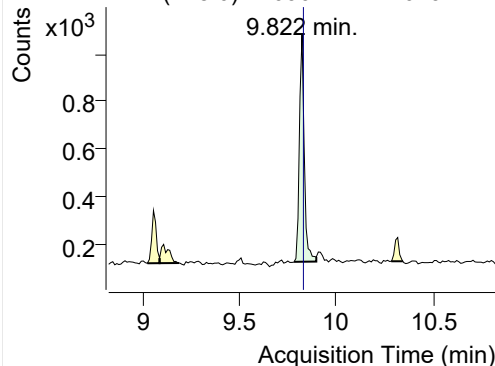


+ SIM (9.729-9.853 min, 12 scans) (\*\*) 220907

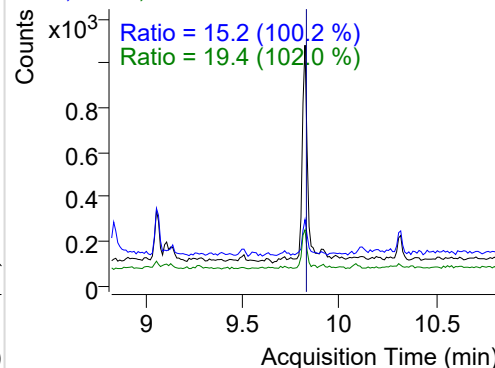


## Phenanthrene

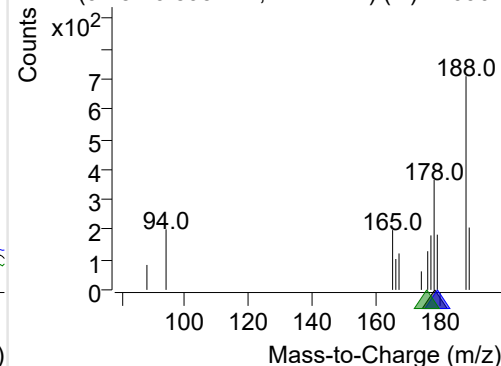
+ Selected Ion (178.0) 220907-PAHs-029.D



178.0, 179.0, 176.0

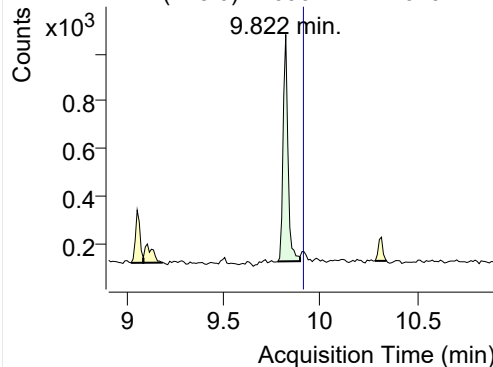


+ SIM (9.781-9.895 min, 11 scans) (\*\*) 220907

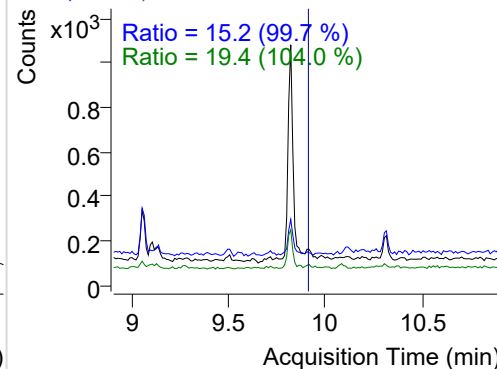


**Anthracene**

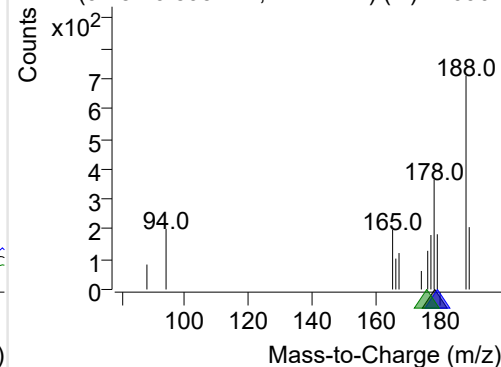
+ Selected Ion (178.0) 220907-PAHs-029.D



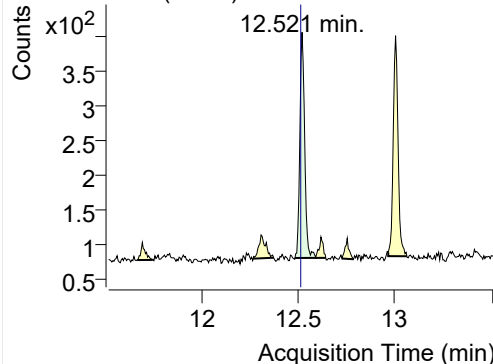
178.0, 179.0, 176.0



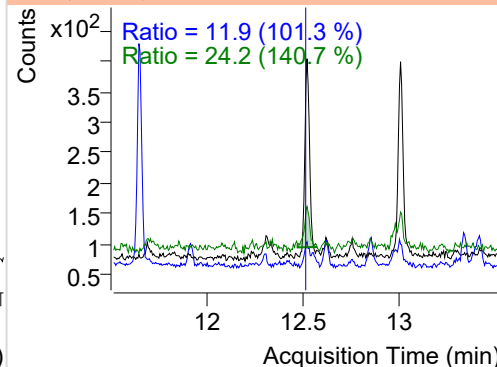
+ SIM (9.781-9.895 min, 11 scans) (\*\*) 220907

**Fluoranthene**

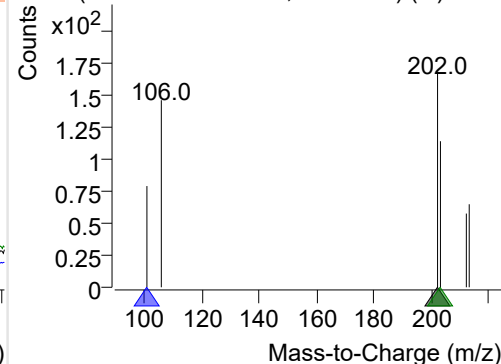
+ Selected Ion (202.0) 220907-PAHs-029.D



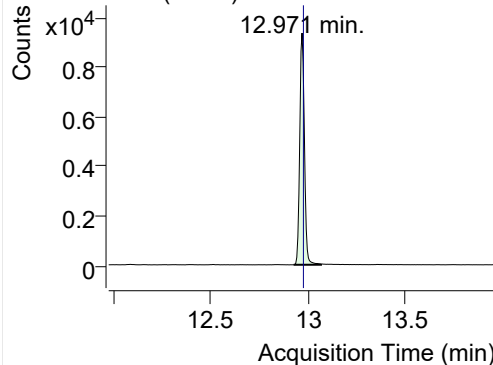
202.0, 101.0, 203.0



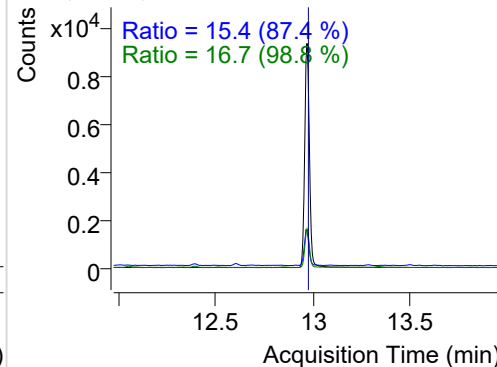
+ SIM (12.484-12.591 min, 20 scans) (\*\*) 2209

**LSS-D10-Pyrene**

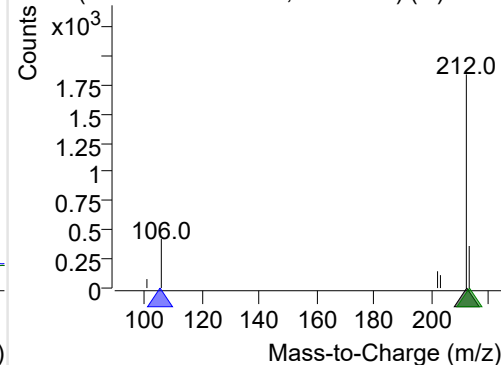
+ Selected Ion (212.0) 220907-PAHs-029.D



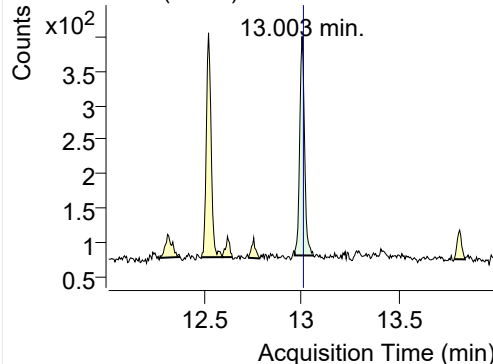
212.0, 106.0, 213.0



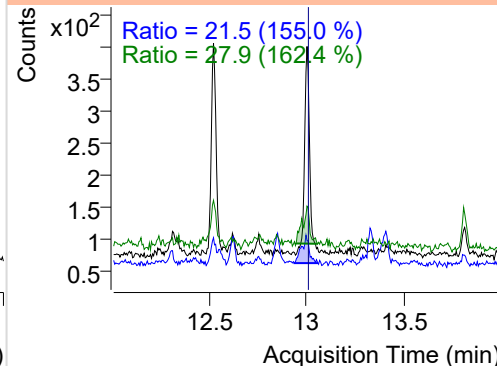
+ SIM (12.927-13.068 min, 27 scans) (\*\*) 2209

**Pyrene**

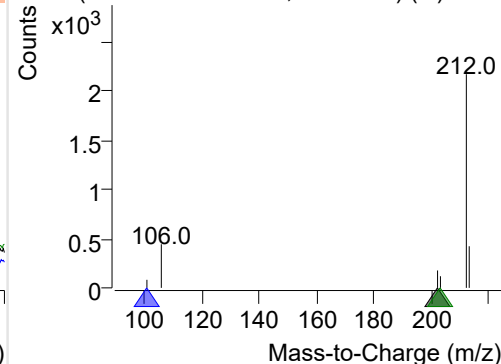
+ Selected Ion (202.0) 220907-PAHs-029.D



202.0, 101.0, 203.0



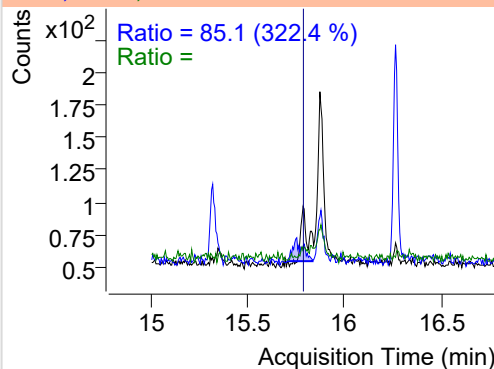
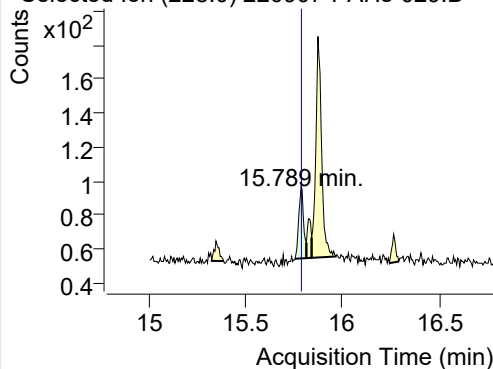
+ SIM (12.965-13.062 min, 18 scans) (\*\*) 2209



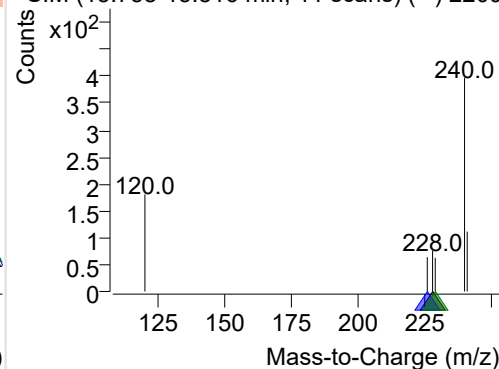
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-029.D

228.0, 226.0, 229.0

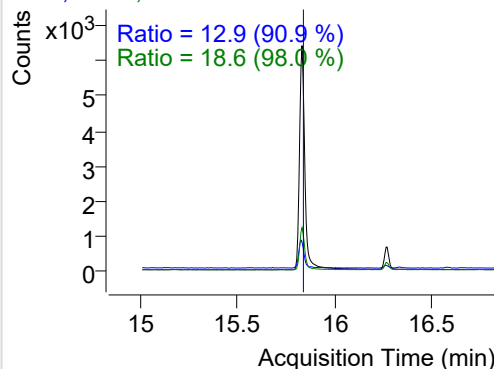
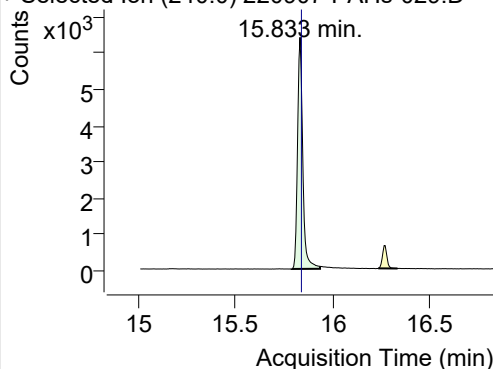


+ SIM (15.758-15.816 min, 11 scans) (\*\*) 2209

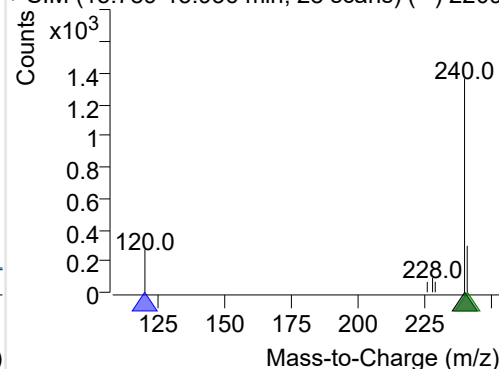
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-029.D

240.0, 120.0, 241.0

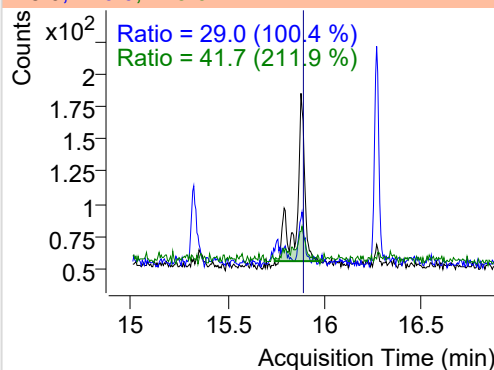
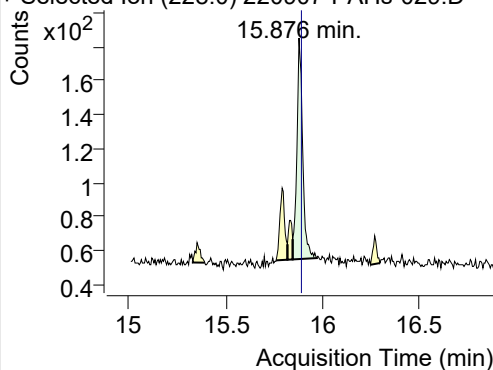


+ SIM (15.789-15.936 min, 28 scans) (\*\*) 2209

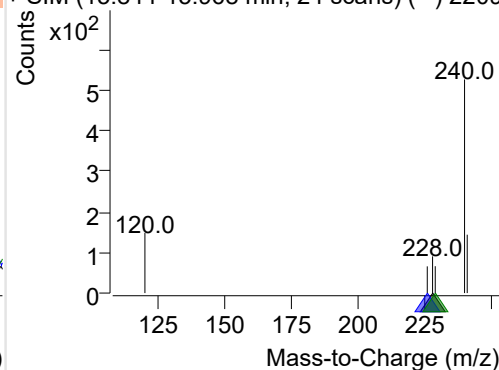
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-029.D

228.0, 226.0, 229.0

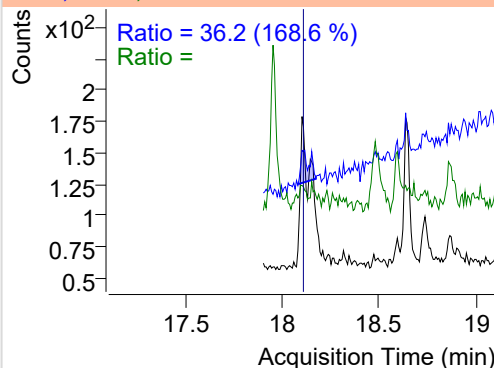
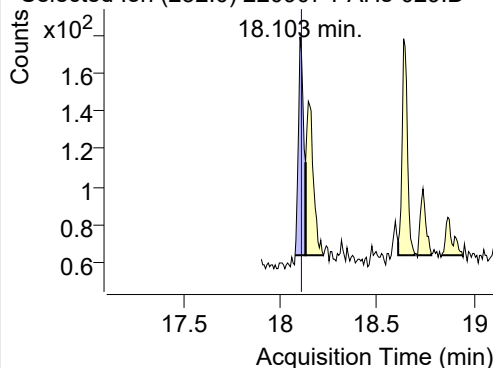


+ SIM (15.844-15.968 min, 24 scans) (\*\*) 2209

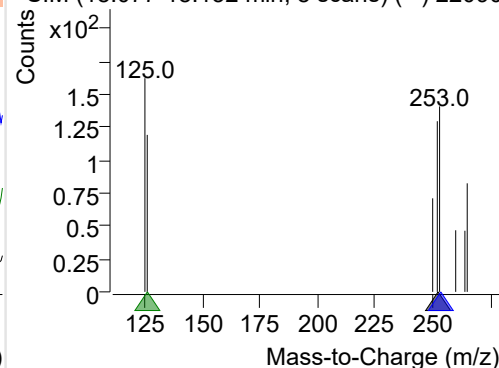
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-029.D

252.0, 253.0, 126.0



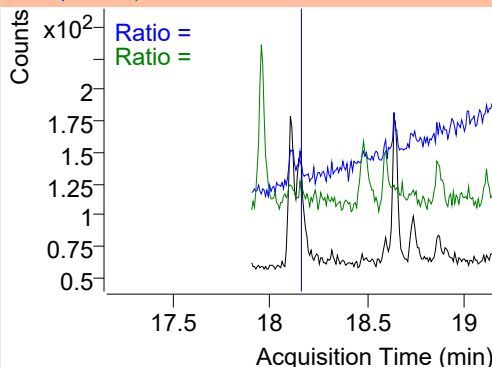
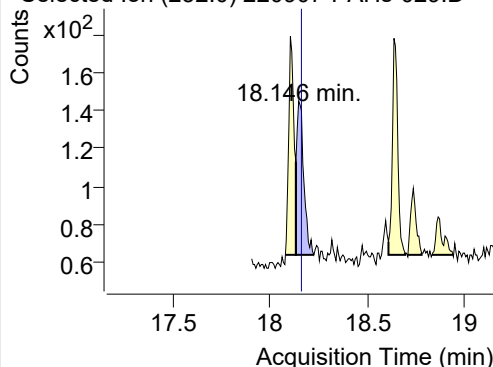
+ SIM (18.077-18.132 min, 8 scans) (\*\*) 22090



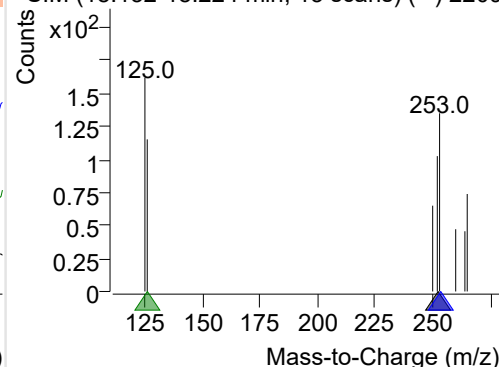
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-029.D

252.0, 253.0, 126.0

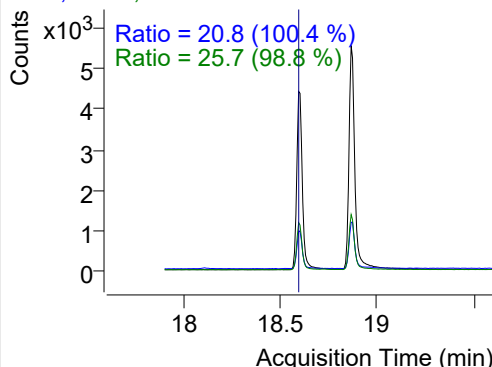
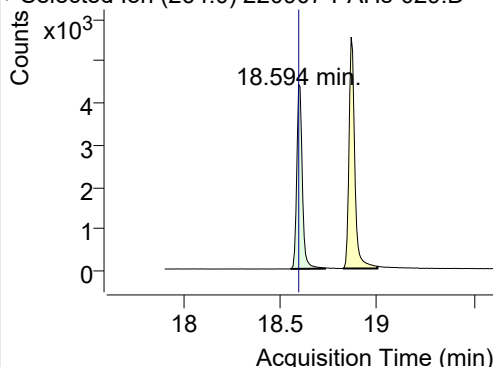


+ SIM (18.132-18.224 min, 13 scans) (\*\*) 2209

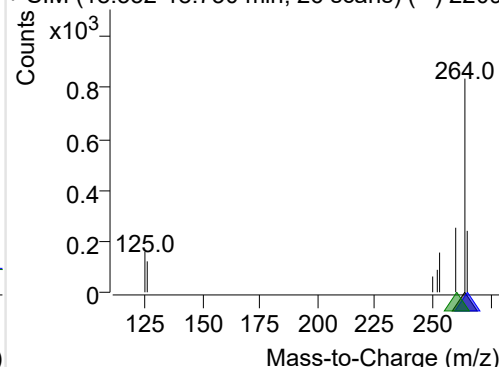
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-029.D

264.0, 265.0, 260.0

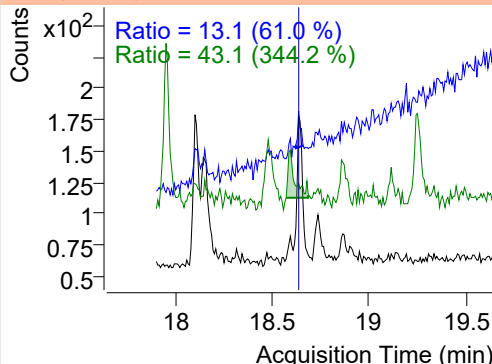
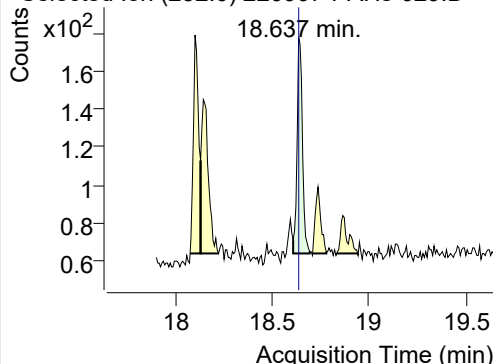


+ SIM (18.552-18.730 min, 26 scans) (\*\*) 2209

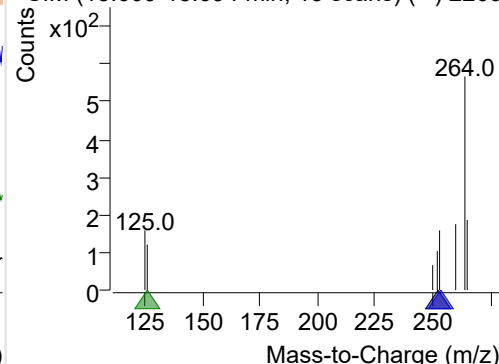
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-029.D

252.0, 253.0, 126.0

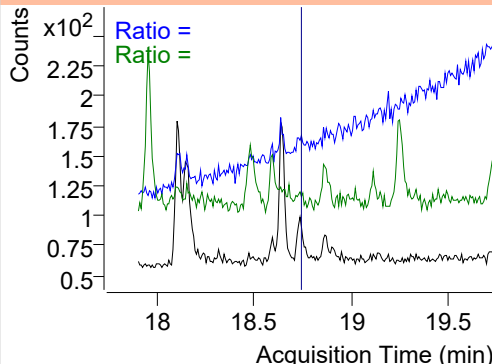
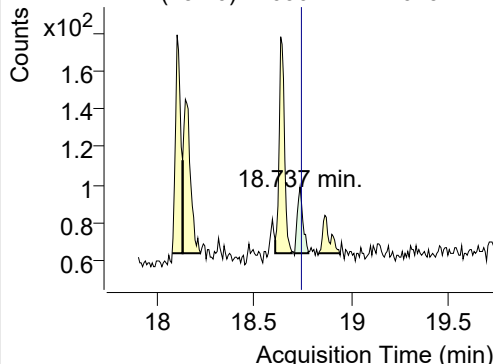


+ SIM (18.609-18.694 min, 13 scans) (\*\*) 2209

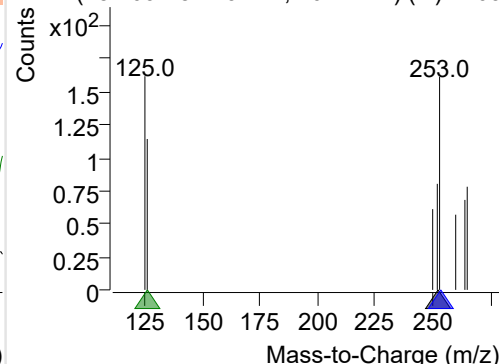
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-029.D

252.0, 253.0, 126.0

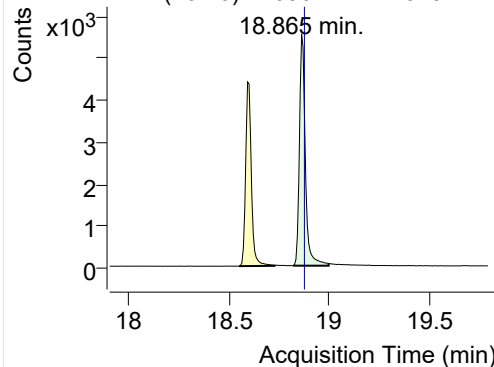


+ SIM (18.709-18.779 min, 10 scans) (\*\*) 2209

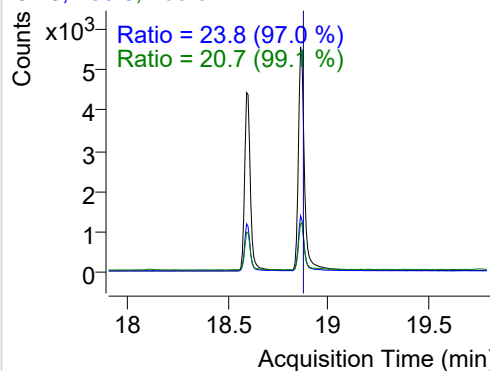


## IS-D12-Perylene

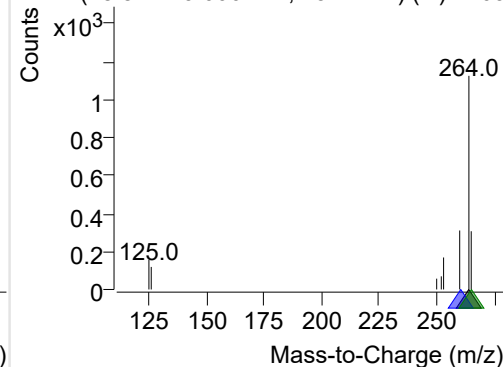
+ Selected Ion (264.0) 220907-PAHs-029.D



264.0, 260.0, 265.0

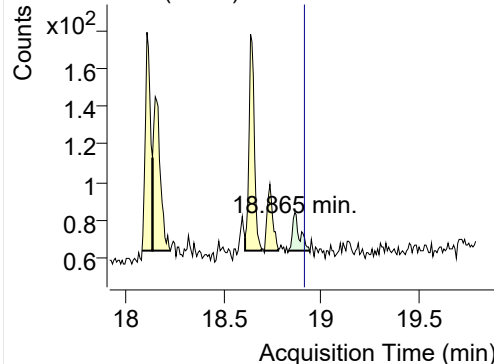


+ SIM (18.822-19.000 min, 25 scans) (\*\*) 2209

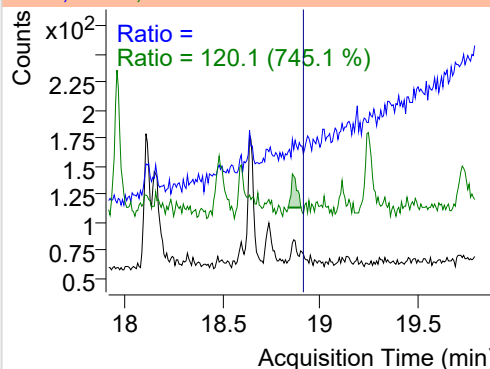


## Perylene

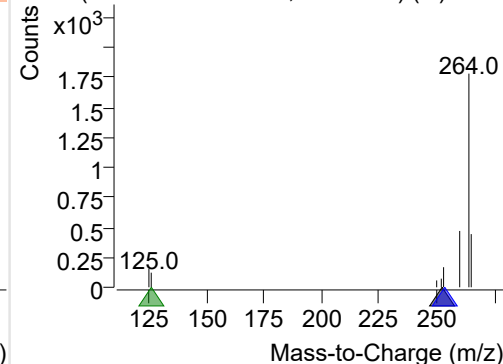
+ Selected Ion (252.0) 220907-PAHs-029.D



252.0, 253.0, 126.0

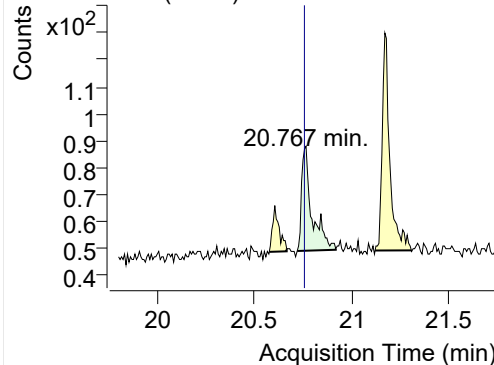


+ SIM (18.833-18.941 min, 15 scans) (\*\*) 2209

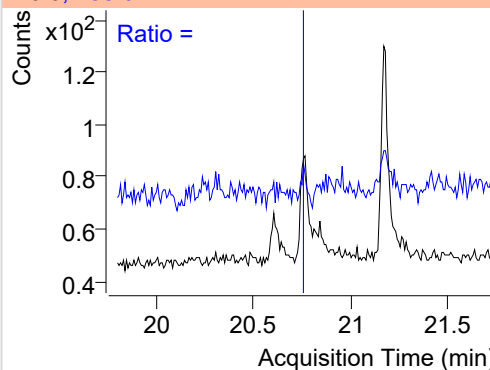


## Indeno(1,2,3-c,d)pyrene

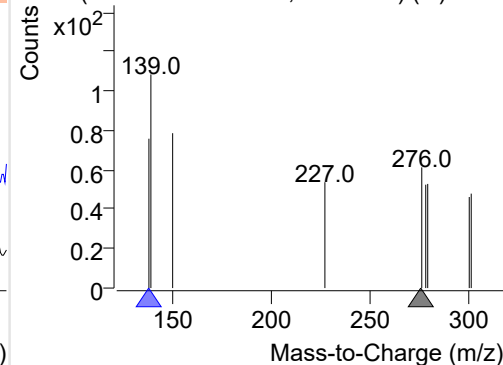
+ Selected Ion (276.0) 220907-PAHs-029.D



276.0, 138.0

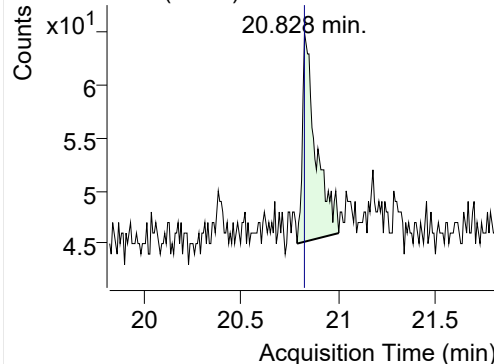


+ SIM (20.721-20.919 min, 26 scans) (\*\*) 2209

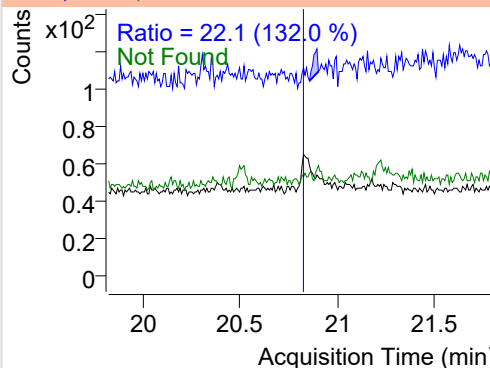


## Dibenz(a,h)anthracene

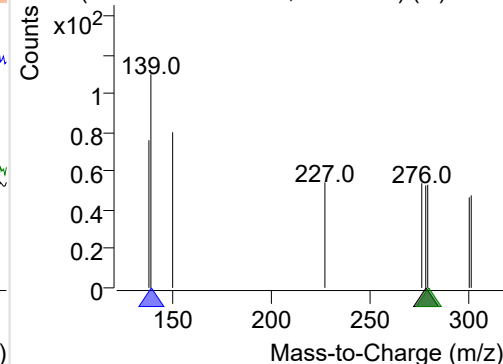
+ Selected Ion (278.0) 220907-PAHs-029.D



278.0, 139.0, 279.0

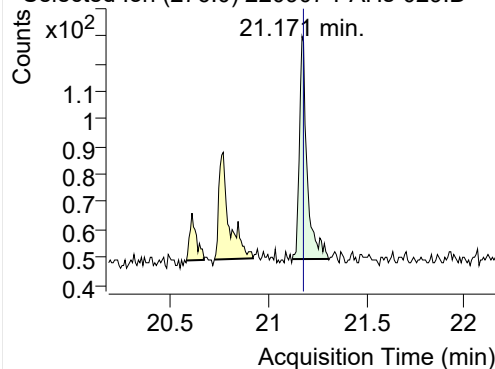


+ SIM (20.789-21.003 min, 29 scans) (\*\*) 2209

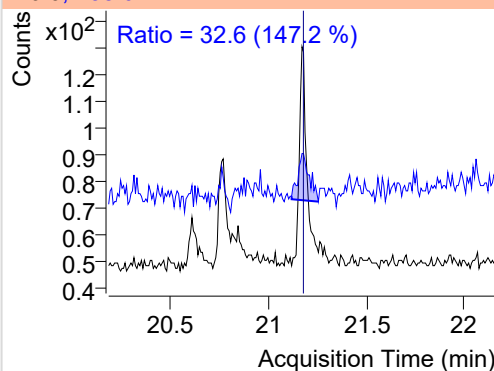


**Benzo(g,h,i)perylene**

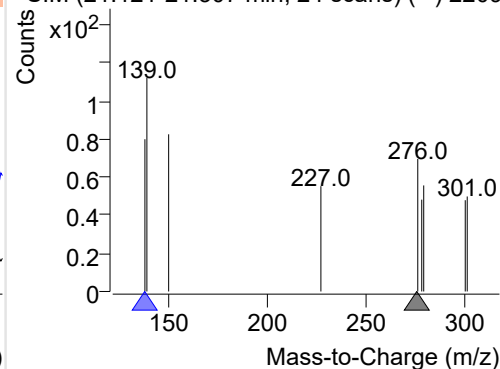
+ Selected Ion (276.0) 220907-PAHs-029.D



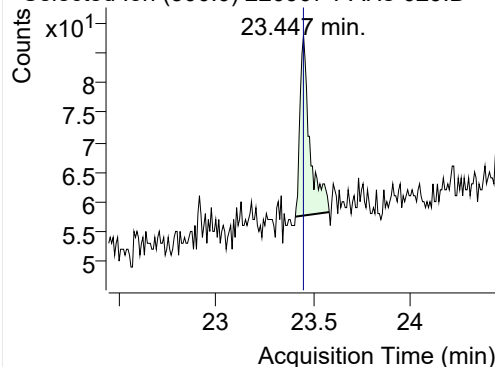
276.0, 138.0



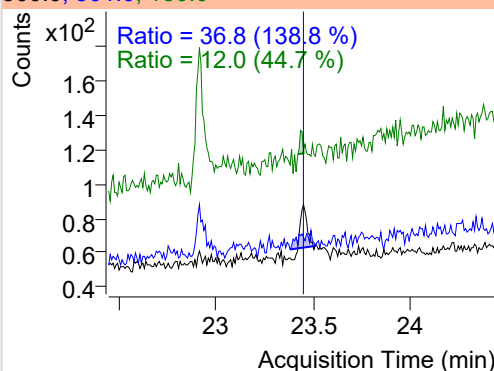
+ SIM (21.121-21.307 min, 24 scans) (\*\*) 2209

**Coronene**

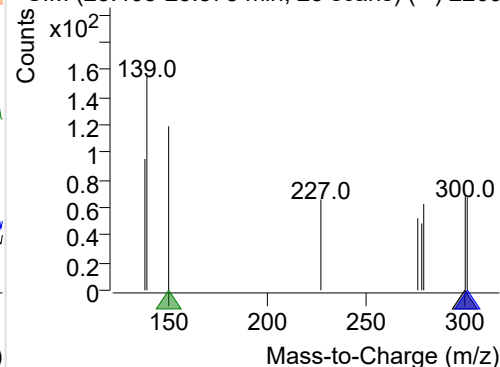
+ Selected Ion (300.0) 220907-PAHs-029.D



300.0, 301.0, 150.0



+ SIM (23.405-23.578 min, 23 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

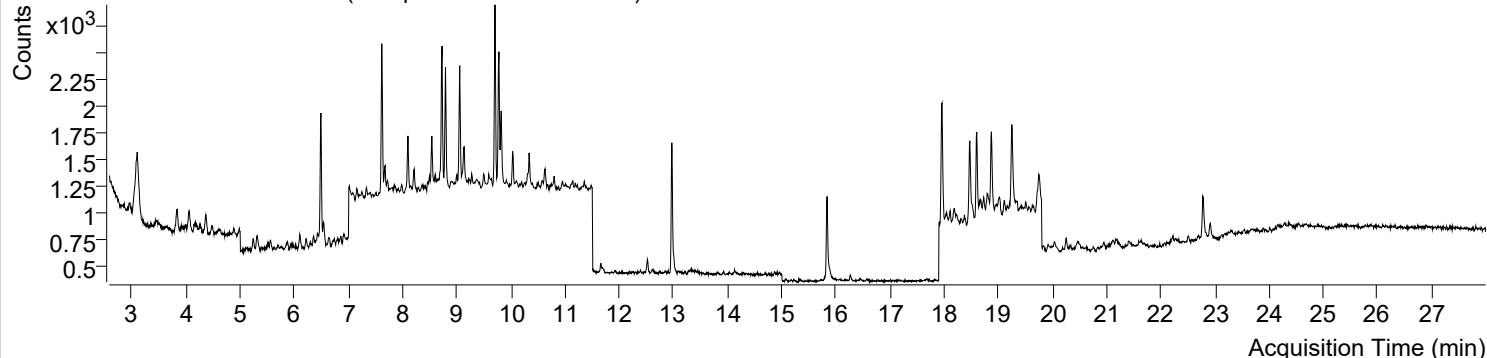


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 3:27:58	Data File	220907-PAHs-030.D
Type	Sample	Name	Sample-Gas-0803-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

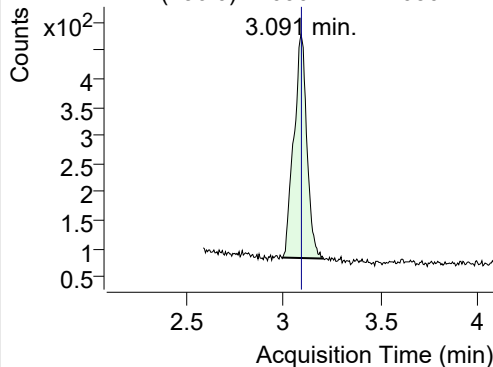
+ TIC SIM 220907-PAHs-030.D (Sample-Gas-0803-100DIL)



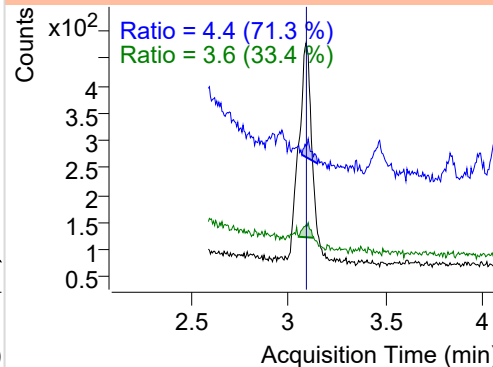
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.091	136.0	1833	394.20	ND ng/ml	3.6
Naphthalene	3.118	128.0	753	173.04	ND ng/ml	15.4
Acenaphthylene	6.155	152.0	12	9.30	ND ng/ml	
IS-D10-Acenaphthene	6.493	164.0	1090	602.51	ND ng/ml	103.2
Acenaphthene	6.534	154.0	142	71.51	ND ng/ml	68.0
LSS-D10-Fluorene	7.617	176.0	1061	617.50	ND ng/ml	94.9
Fluorene	7.680	166.0	182	102.17	ND ng/ml	138.9
IS-D10-Phenanthrene	9.780	188.0	1852	995.47	ND ng/ml	17.4
Phenanthrene	9.822	178.0	775	420.59	ND ng/ml	18.9
Anthracene	9.916	178.0	60	32.51	ND ng/ml	
Fluoranthene	12.521	202.0	158	98.24	ND ng/ml	39.9
LSS-D10-Pyrene	12.971	212.0	1621	925.43	ND ng/ml	14.8
Pyrene	13.003	202.0	151	90.03	ND ng/ml	24.5
Benz(a)anthracene	15.789	228.0	50	24.69	ND ng/ml	16.6
IS-D12-Chrysene	15.838	240.0	1248	604.18	ND ng/ml	18.6
Chrysene	15.882	228.0	124	42.69	ND ng/ml	27.0
Benzo(b)fluoranthene	18.110	252.0	90	45.83	ND ng/ml	
Benzo(k)fluoranthene	18.153	252.0	81	31.83	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.601	264.0	1169	553.37	ND ng/ml	25.6
Benzo(e)pyrene	18.651	252.0	78	42.83	ND ng/ml	
Benzo(a)pyrene	18.737	252.0	67	21.83	ND ng/ml	
IS-D12-Perylene	18.872	264.0	1213	550.92	ND ng/ml	26.8
Perylene	18.737	252.0	67	21.83	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	20.759	276.0	57	17.01	ND ng/ml	
Dibenz(a,h)anthracene	20.835	278.0	66	18.77	ND ng/ml	
Benzo(g,h,i)perylene	21.179	276.0	65	23.44	ND ng/ml	283.7
Coronene	23.447	300.0	36	13.16	ND ng/ml	

## IS-D8-Naphthalene

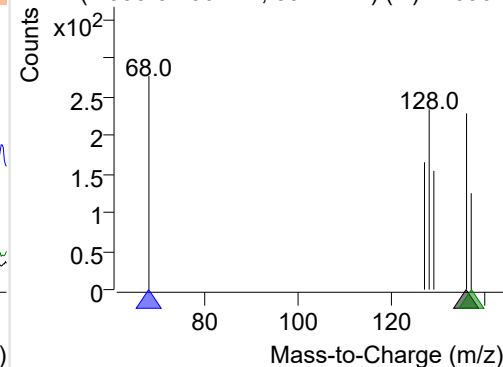
+ Selected Ion (136.0) 220907-PAHs-030.D



136.0, 68.0, 137.0

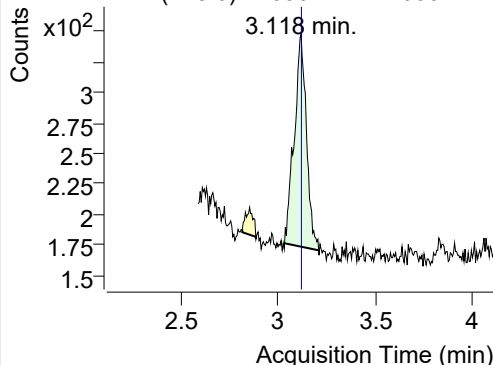


+ SIM (2.995-3.206 min, 39 scans) (\*\*) 220907

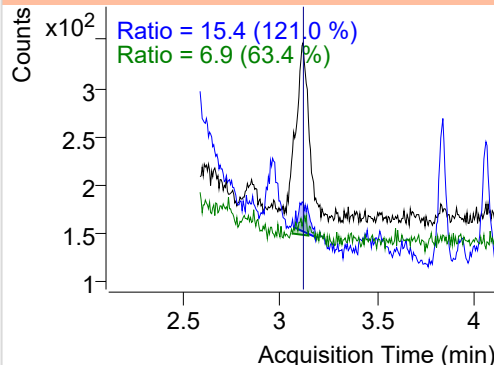


**Naphthalene**

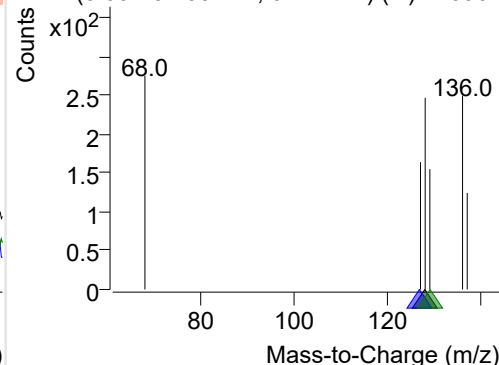
+ Selected Ion (128.0) 220907-PAHs-030.D



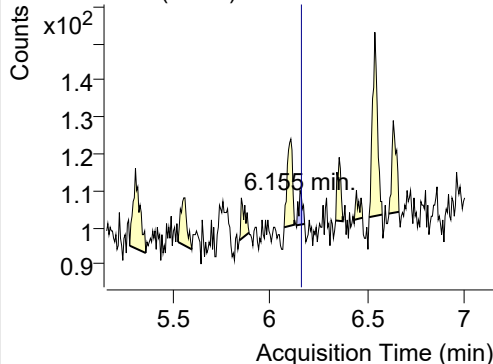
128.0, 127.0, 129.0



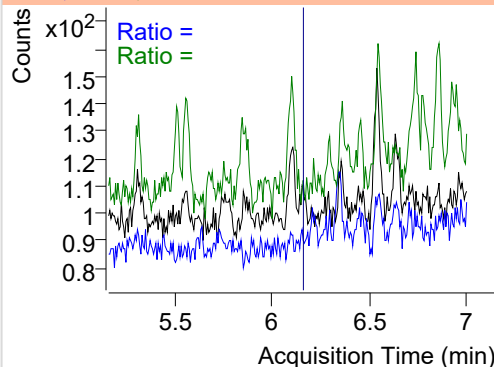
+ SIM (3.032-3.208 min, 32 scans) (\*\*) 220907

**Acenaphthylene**

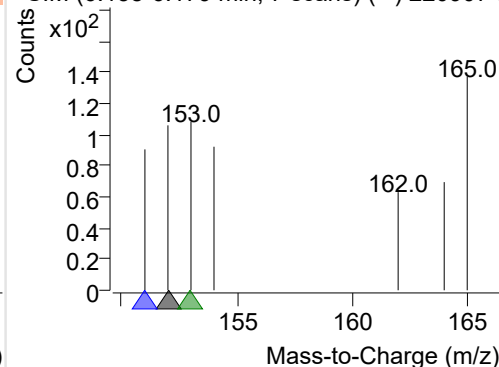
+ Selected Ion (152.0) 220907-PAHs-030.D



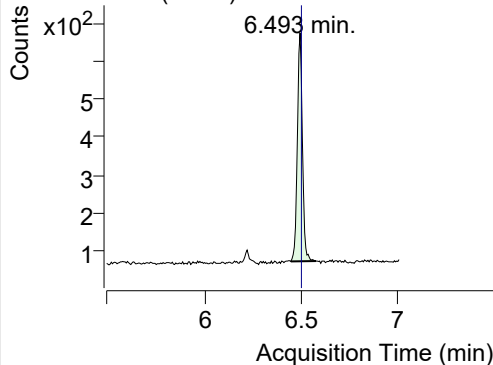
152.0, 151.0, 153.0



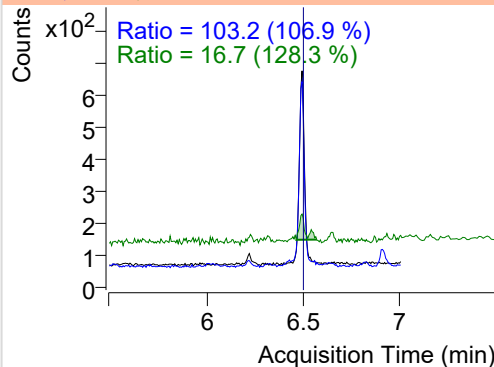
+ SIM (6.138-6.179 min, 7 scans) (\*\*) 220907-I

**IS-D10-Acenaphthene**

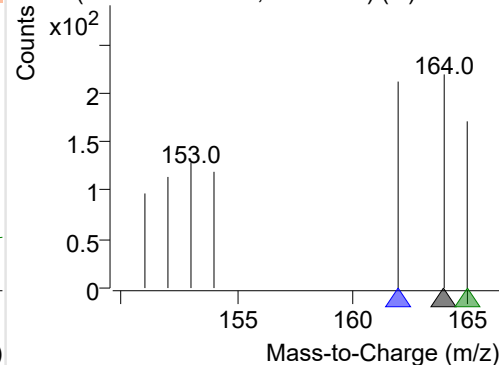
+ Selected Ion (164.0) 220907-PAHs-030.D



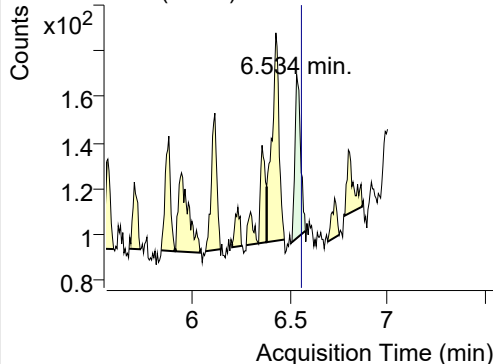
164.0, 162.0, 165.0



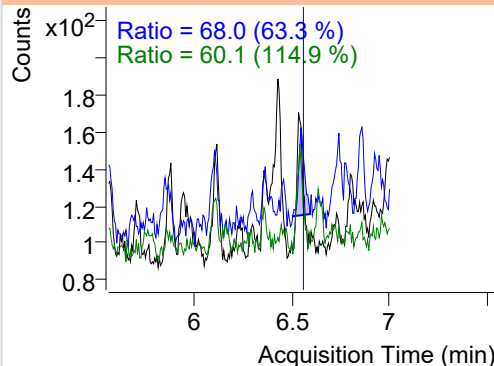
+ SIM (6.445-6.575 min, 21 scans) (\*\*) 220907

**Acenaphthene**

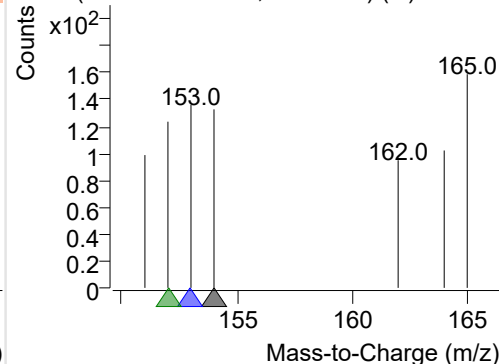
+ Selected Ion (154.0) 220907-PAHs-030.D



154.0, 153.0, 152.0

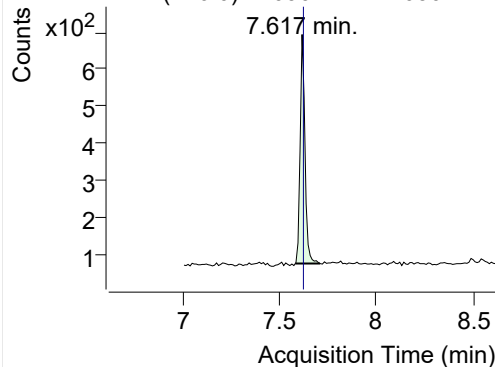


+ SIM (6.508-6.579 min, 12 scans) (\*\*) 220907

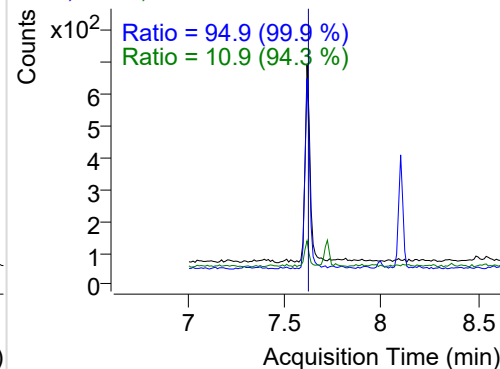


## LSS-D10-Fluorene

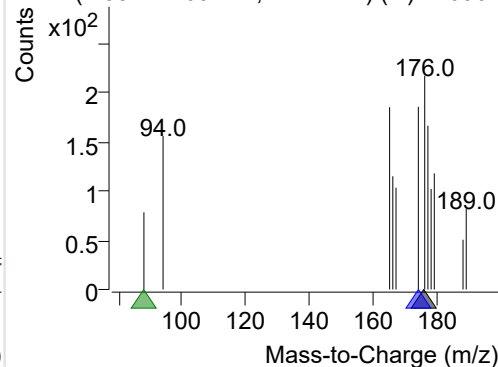
+ Selected Ion (176.0) 220907-PAHs-030.D



176.0, 174.0, 88.0

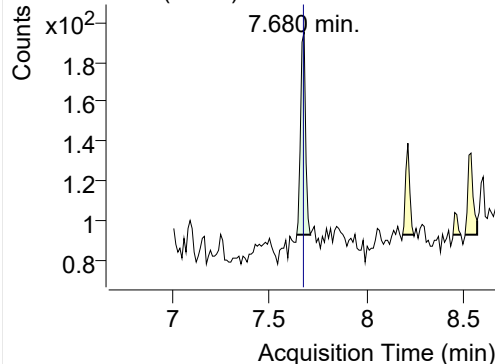


+ SIM (7.582-7.709 min, 12 scans) (\*\*) 220907

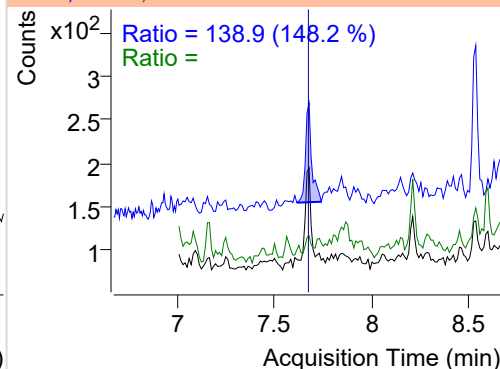


## Fluorene

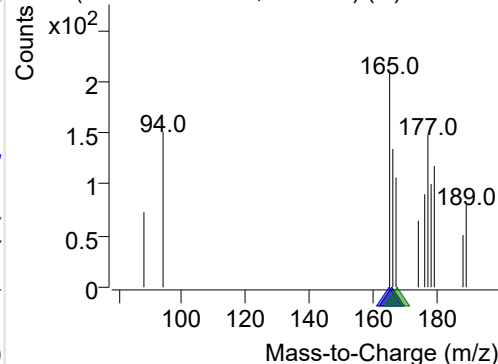
+ Selected Ion (166.0) 220907-PAHs-030.D



166.0, 165.0, 167.0

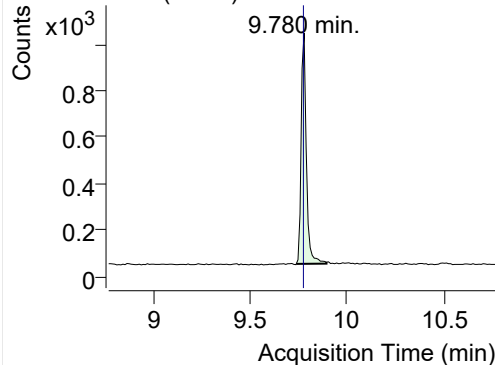


+ SIM (7.642-7.711 min, 7 scans) (\*\*) 220907-I

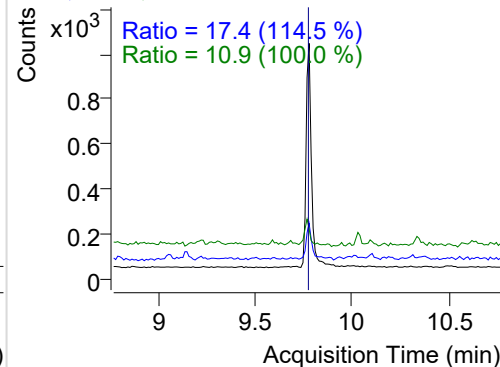


## IS-D10-Phenanthrene

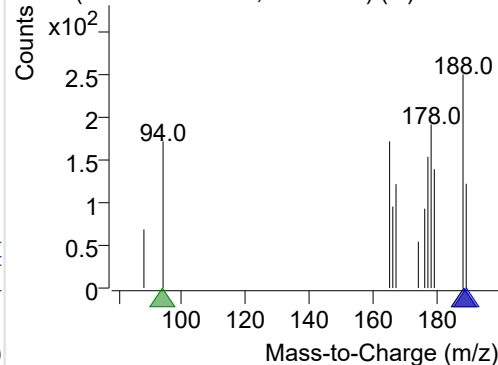
+ Selected Ion (188.0) 220907-PAHs-030.D



188.0, 189.0, 94.0

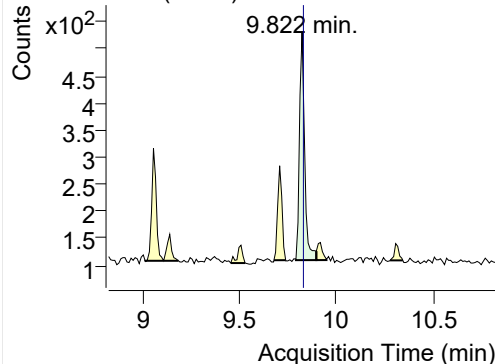


+ SIM (9.740-9.895 min, 15 scans) (\*\*) 220907

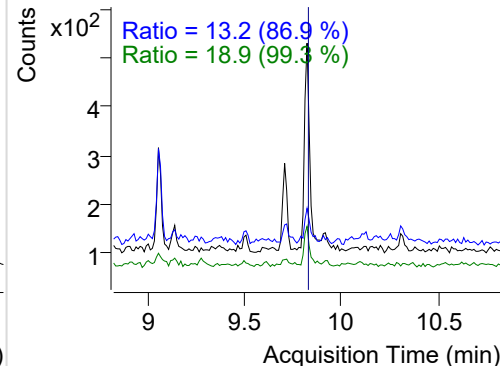


## Phenanthrene

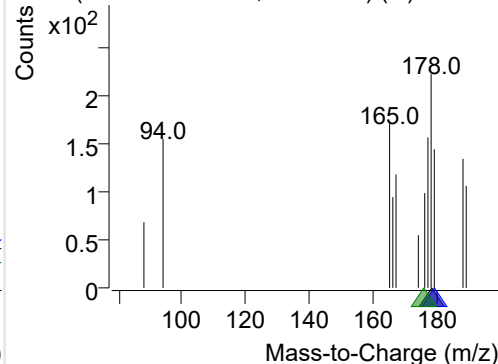
+ Selected Ion (178.0) 220907-PAHs-030.D



178.0, 179.0, 176.0

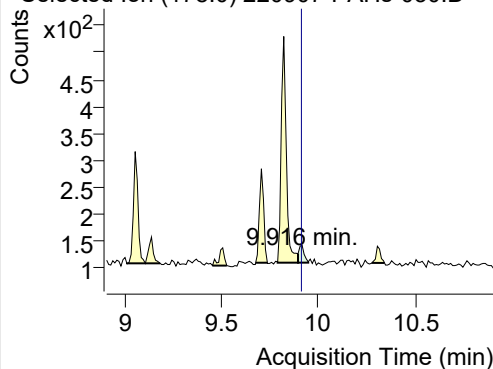


+ SIM (9.790-9.895 min, 11 scans) (\*\*) 220907

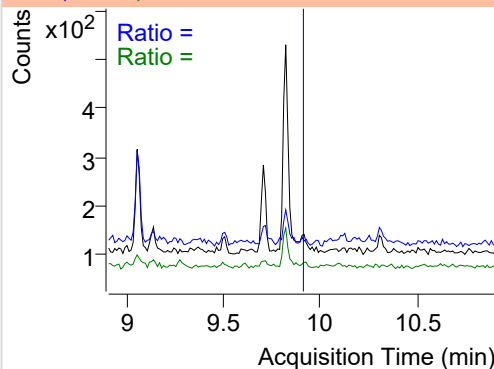


**Anthracene**

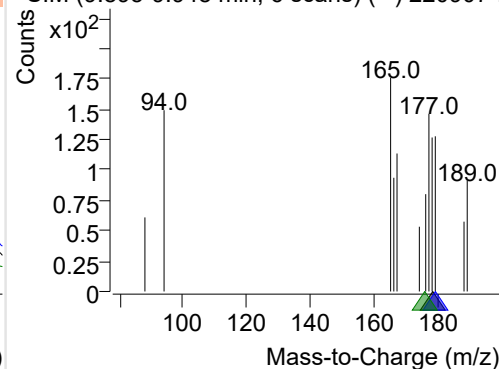
+ Selected Ion (178.0) 220907-PAHs-030.D



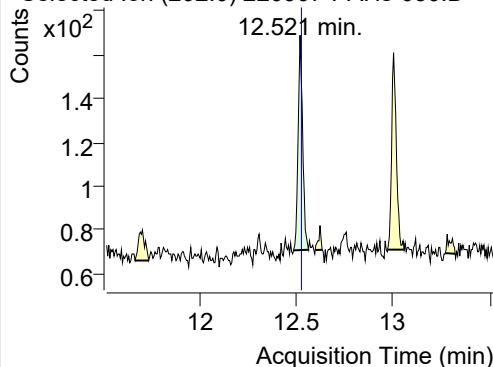
178.0, 179.0, 176.0



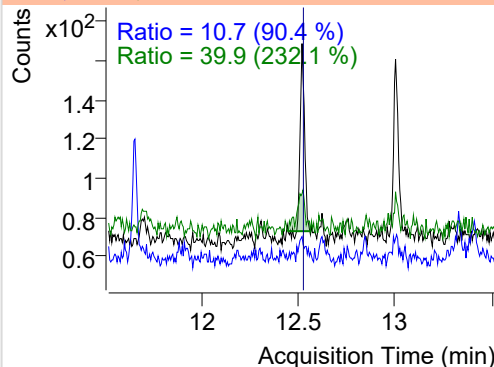
+ SIM (9.895-9.948 min, 6 scans) (\*\*) 220907-I

**Fluoranthene**

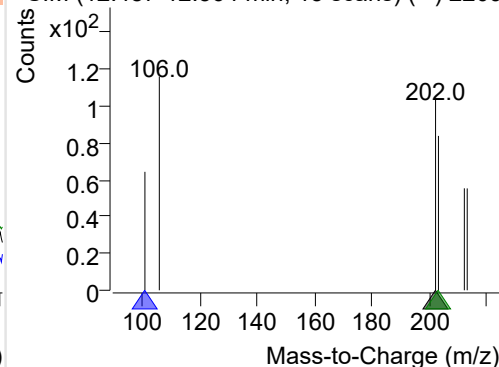
+ Selected Ion (202.0) 220907-PAHs-030.D



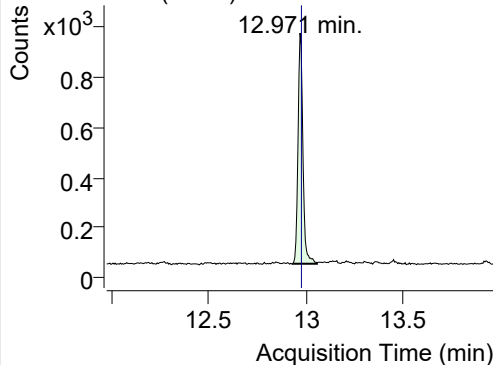
202.0, 101.0, 203.0



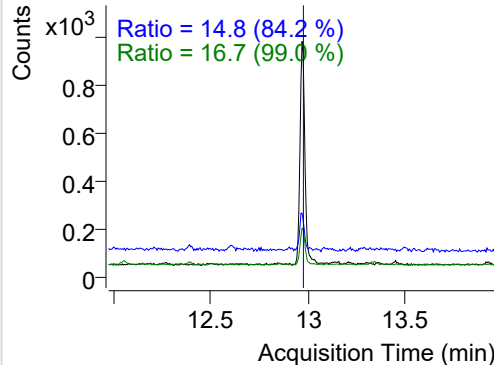
+ SIM (12.487-12.564 min, 15 scans) (\*\*) 2209

**LSS-D10-Pyrene**

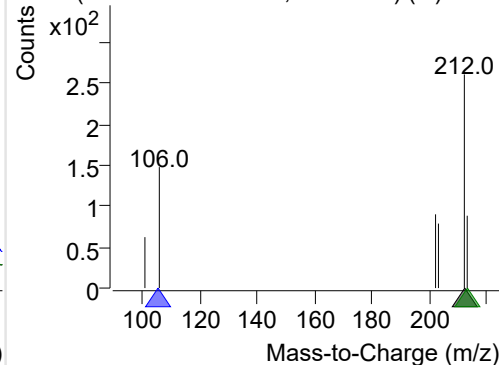
+ Selected Ion (212.0) 220907-PAHs-030.D



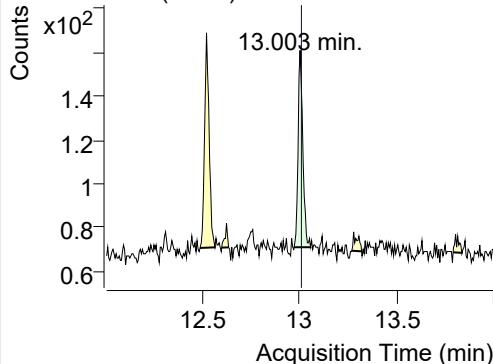
212.0, 106.0, 213.0



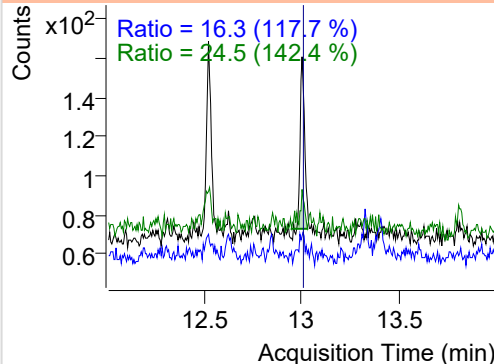
+ SIM (12.933-13.057 min, 24 scans) (\*\*) 2209

**Pyrene**

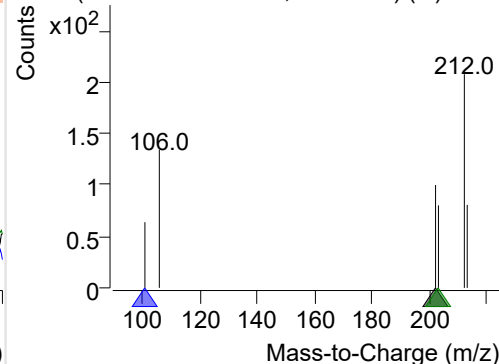
+ Selected Ion (202.0) 220907-PAHs-030.D



202.0, 101.0, 203.0



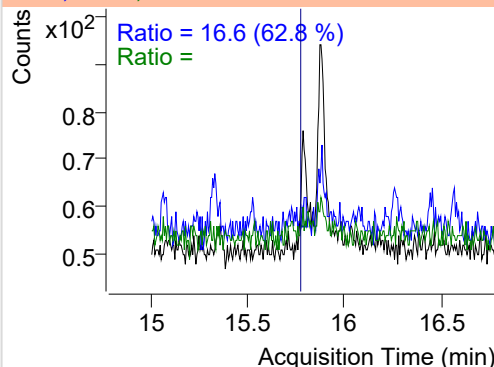
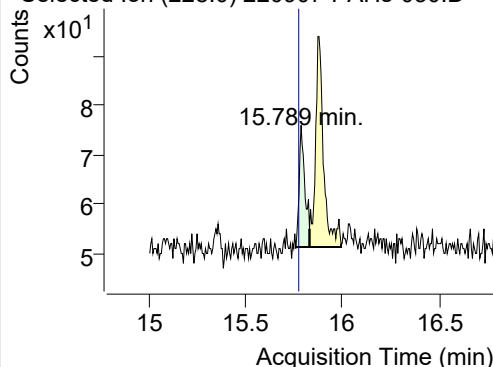
+ SIM (12.972-13.057 min, 16 scans) (\*\*) 2209



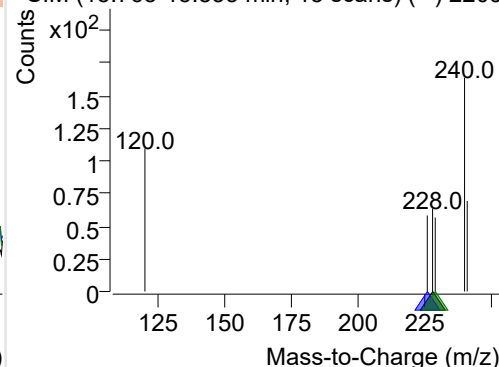
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-030.D

228.0, 226.0, 229.0

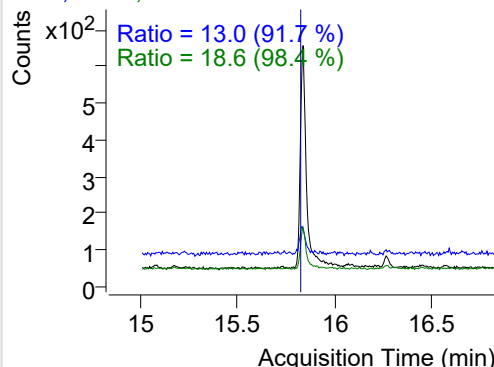
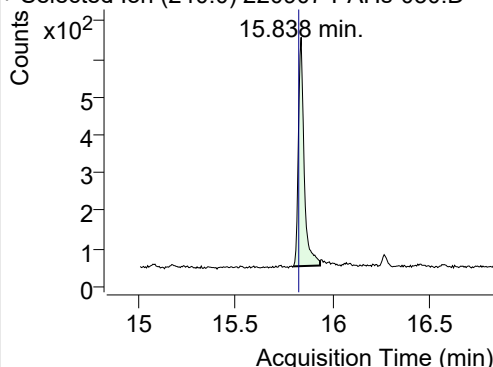


+ SIM (15.763-15.833 min, 13 scans) (\*\*) 2209

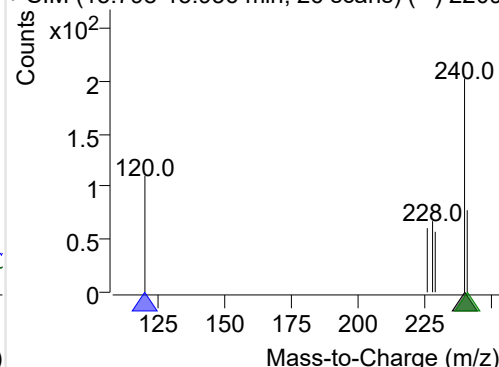
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-030.D

240.0, 120.0, 241.0

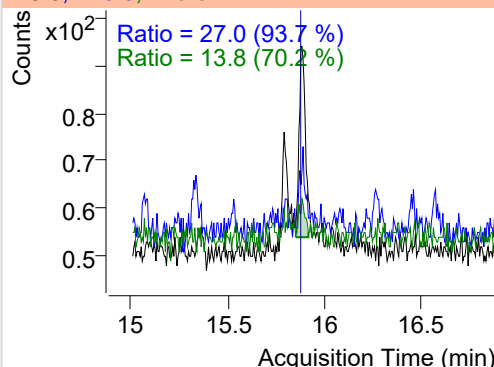
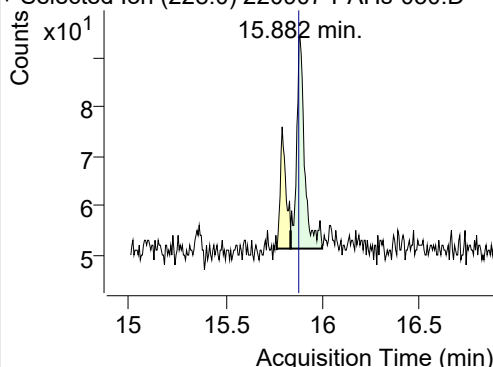


+ SIM (15.798-15.936 min, 26 scans) (\*\*) 2209

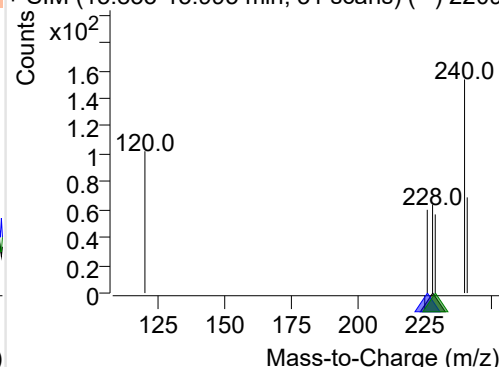
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-030.D

228.0, 226.0, 229.0

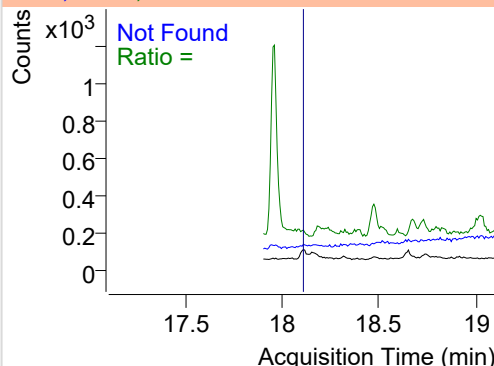
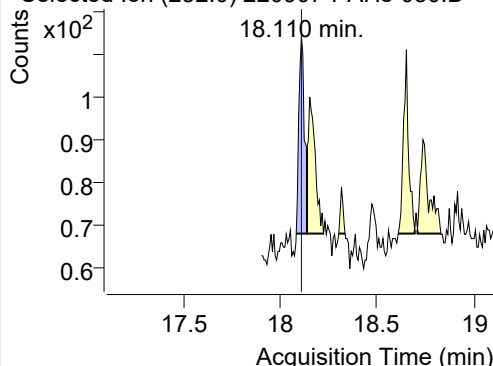


+ SIM (15.833-15.995 min, 31 scans) (\*\*) 2209

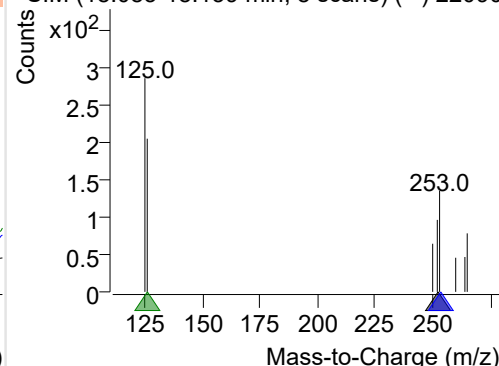
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-030.D

252.0, 253.0, 126.0



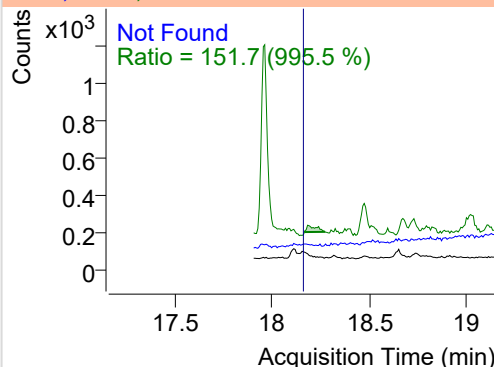
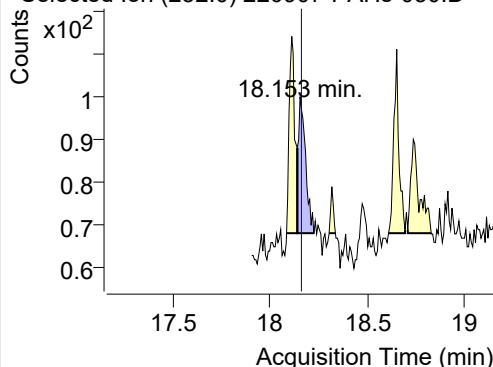
+ SIM (18.083-18.139 min, 8 scans) (\*\*) 22090



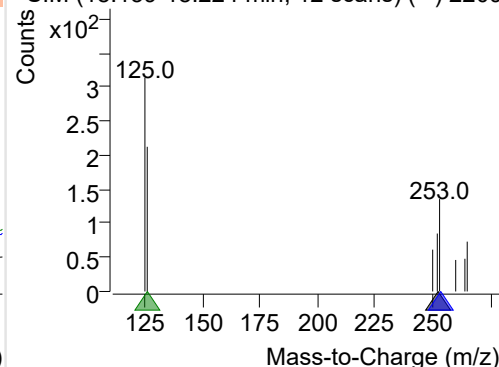
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-030.D

252.0, 253.0, 126.0

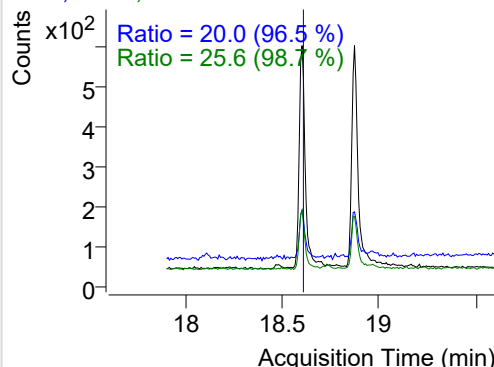
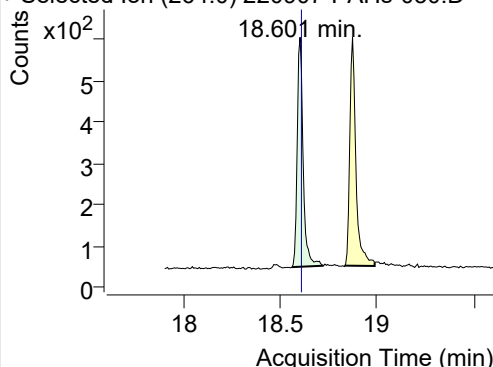


+ SIM (18.139-18.224 min, 12 scans) (\*\*) 2209

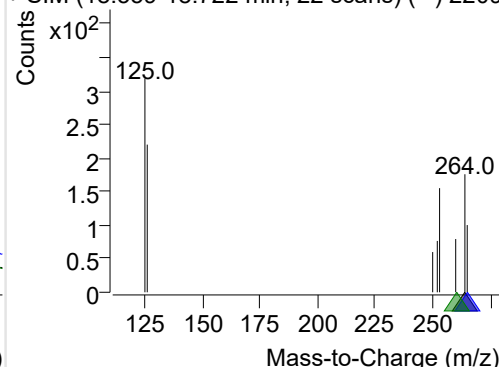
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-030.D

264.0, 265.0, 260.0

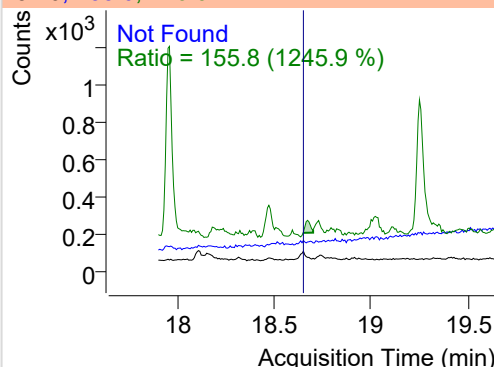
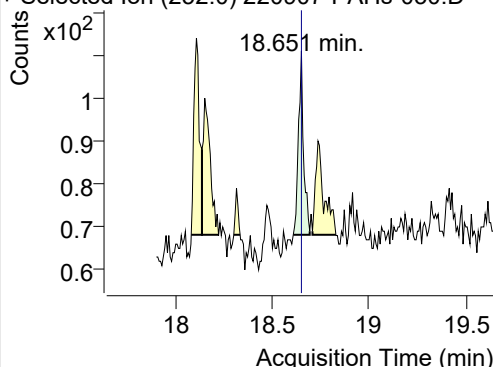


+ SIM (18.559-18.722 min, 22 scans) (\*\*) 2209

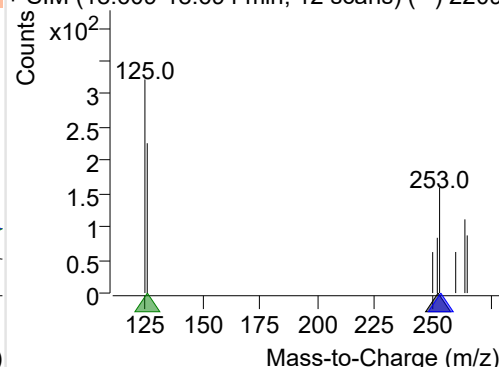
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-030.D

252.0, 253.0, 126.0

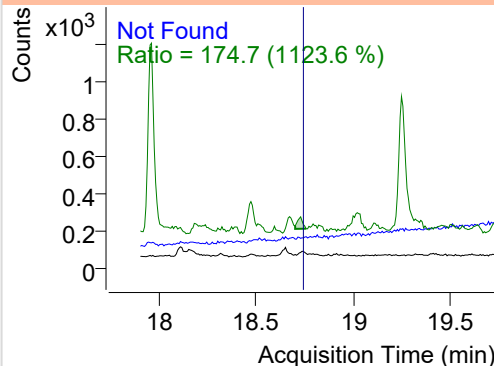
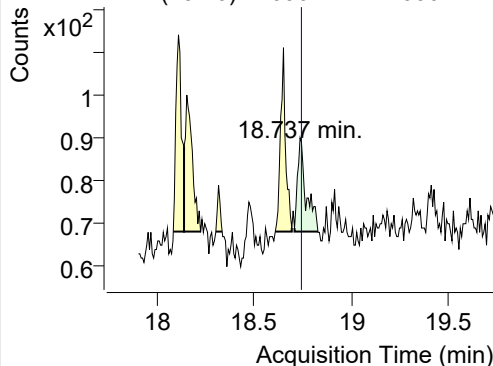


+ SIM (18.609-18.694 min, 12 scans) (\*\*) 2209

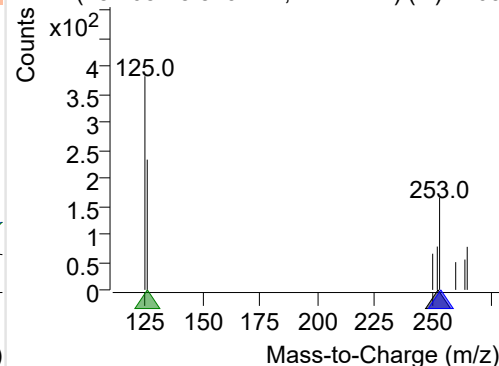
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-030.D

252.0, 253.0, 126.0

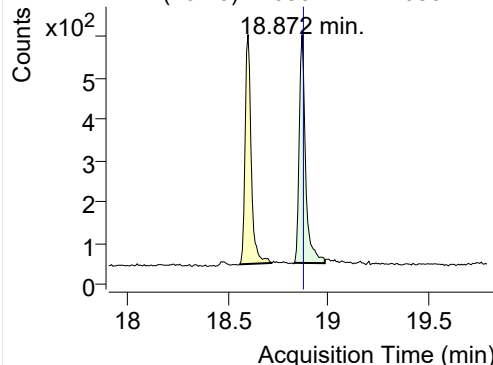


+ SIM (18.708-18.829 min, 17 scans) (\*\*) 2209

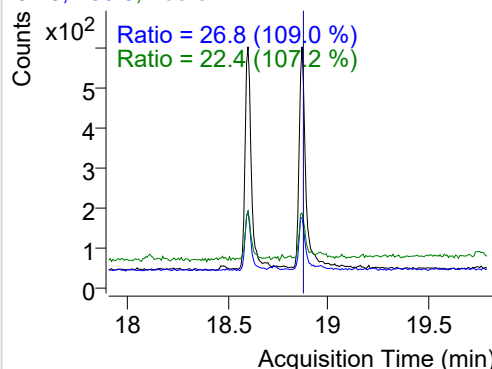


## IS-D12-Perylene

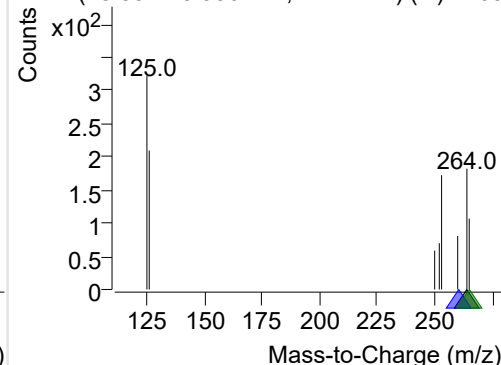
+ Selected Ion (264.0) 220907-PAHs-030.D



264.0, 260.0, 265.0

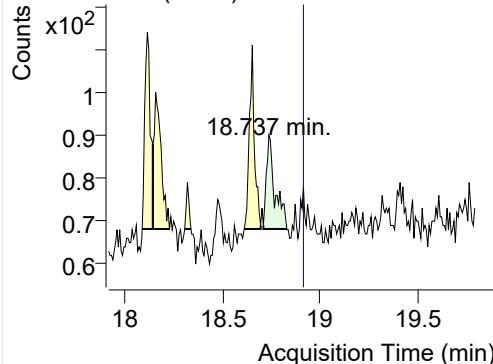


+ SIM (18.832-18.986 min, 22 scans) (\*\*) 2209

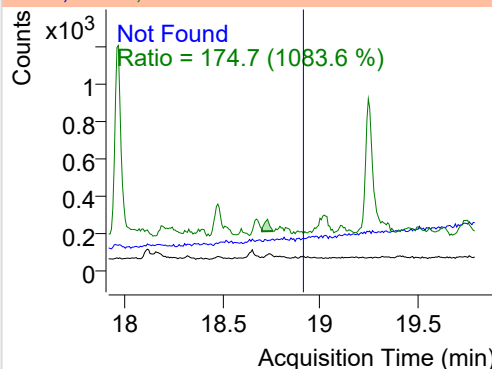


## Perylene

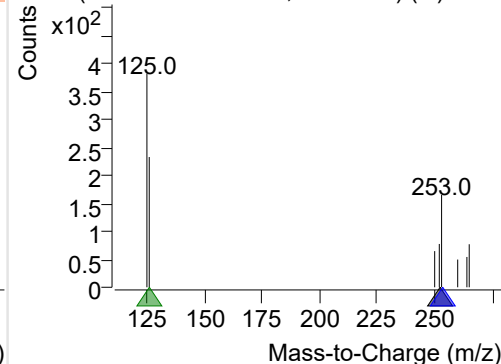
+ Selected Ion (252.0) 220907-PAHs-030.D



252.0, 253.0, 126.0

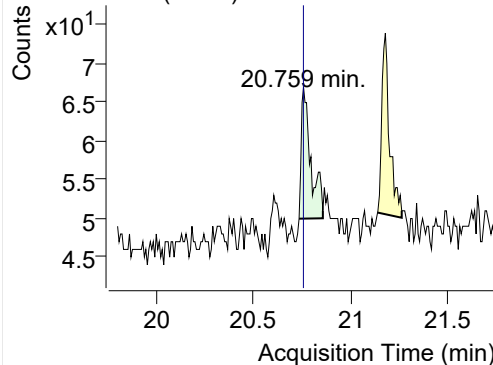


+ SIM (18.708-18.829 min, 17 scans) (\*\*) 2209

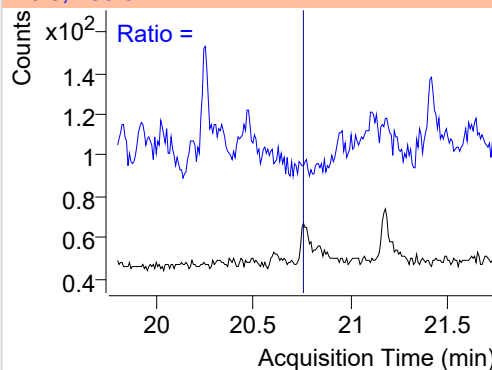


## Indeno(1,2,3-c,d)pyrene

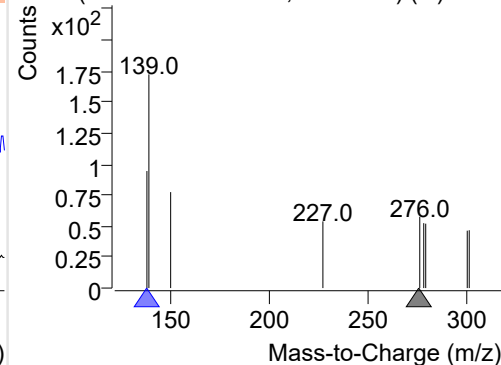
+ Selected Ion (276.0) 220907-PAHs-030.D



276.0, 138.0

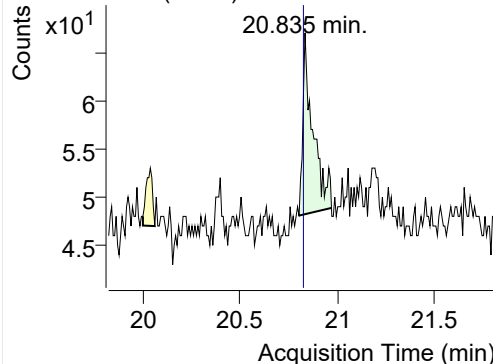


+ SIM (20.736-20.858 min, 17 scans) (\*\*) 2209

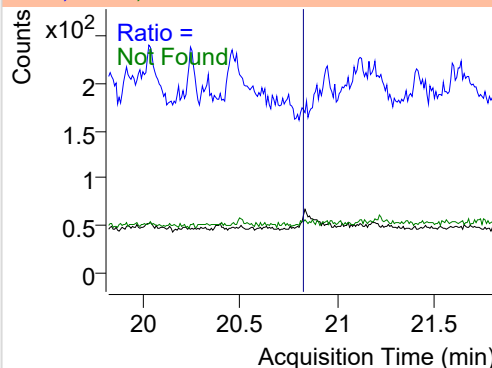


## Dibenz(a,h)anthracene

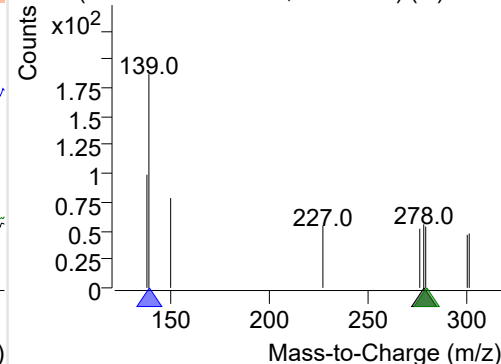
+ Selected Ion (278.0) 220907-PAHs-030.D



278.0, 139.0, 279.0



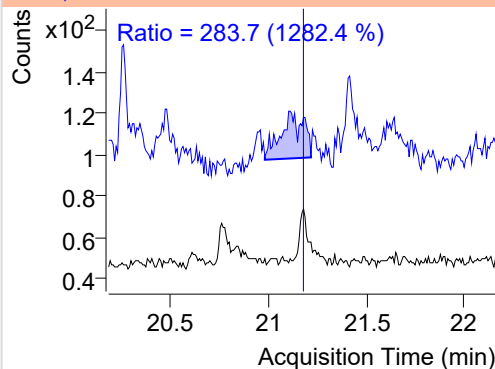
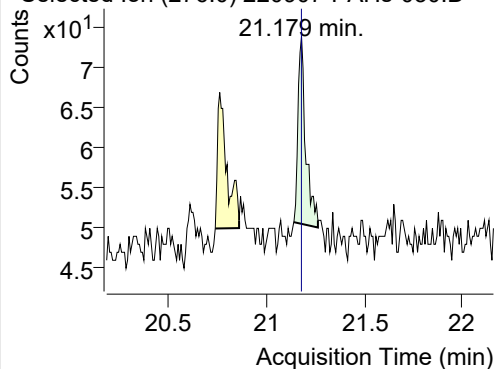
+ SIM (20.805-20.971 min, 21 scans) (\*\*) 2209



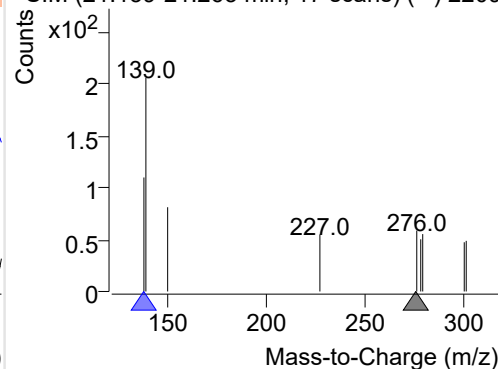
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-030.D

276.0, 138.0

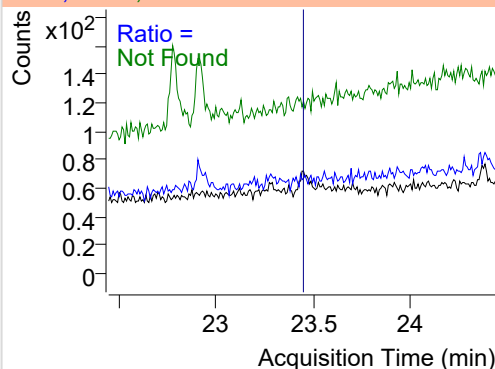
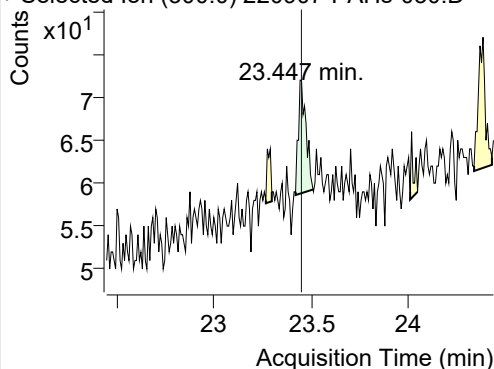


+ SIM (21.139-21.263 min, 17 scans) (\*\*) 2209

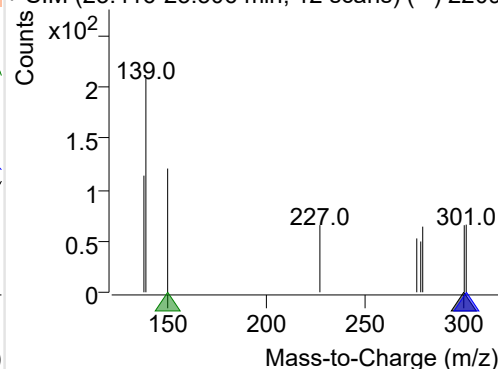
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-030.D

300.0, 301.0, 150.0



+ SIM (23.416-23.506 min, 12 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

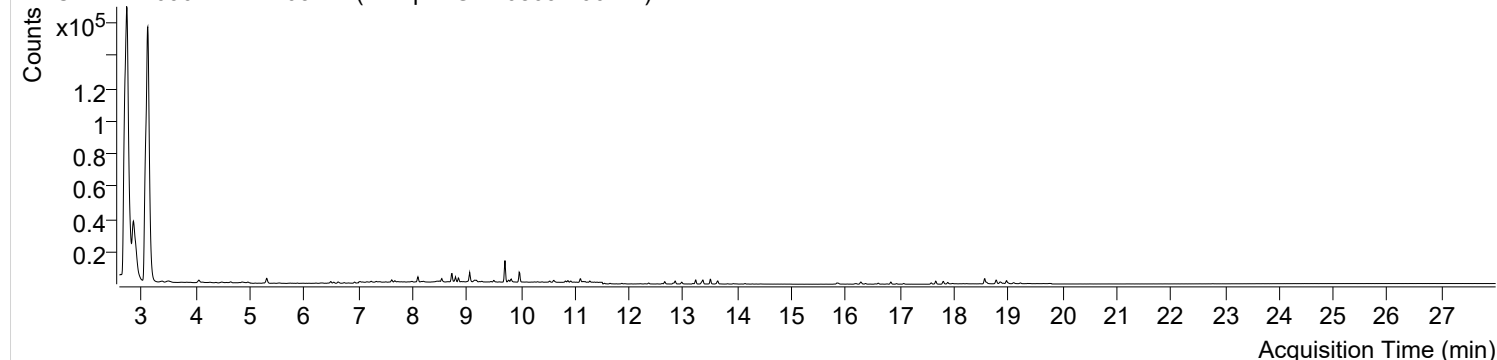


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 3:59:02	Data File	220907-PAHs-031.D
Type	Sample	Name	Sample-Gas-0809-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

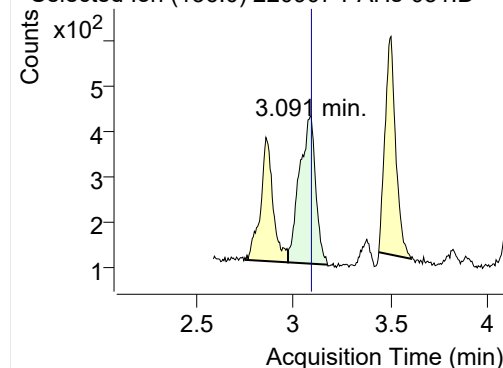
+ TIC SIM 220907-PAHs-031.D (Sample-Gas-0809-100DIL)



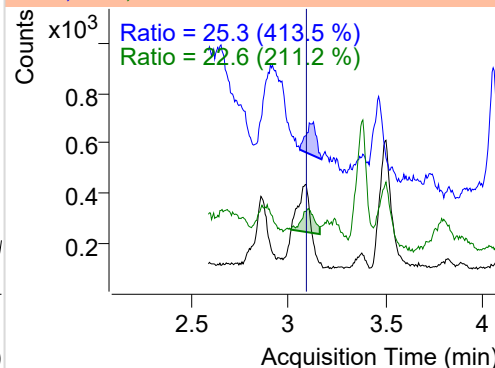
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.091	136.0	1886	326.58	ND ng/ml	22.6
Naphthalene	3.112	128.0	586636	125463.57	ND ng/ml	13.0
Acenaphthylene	6.339	152.0	55	28.90	ND ng/ml	910.4
IS-D10-Acenaphthene	6.493	164.0	983	501.09	ND ng/ml	101.5
Acenaphthene	6.552	154.0	381	158.17	ND ng/ml	88.6
LSS-D10-Fluorene	7.617	176.0	969	577.22	ND ng/ml	91.2
Fluorene	7.669	166.0	685	341.41	ND ng/ml	105.1
IS-D10-Phenanthrene	9.780	188.0	1565	852.46	ND ng/ml	28.1
Phenanthrene	9.822	178.0	2157	1134.80	ND ng/ml	19.0
Anthracene	9.969	178.0	2814	1625.80	ND ng/ml	29.0
Fluoranthene	12.521	202.0	89	56.00	ND ng/ml	
LSS-D10-Pyrene	12.971	212.0	1347	797.83	ND ng/ml	26.5
Pyrene	13.003	202.0	82	51.13	ND ng/ml	
Benz(a)anthracene	15.790	228.0	23	16.63	ND ng/ml	60.9
IS-D12-Chrysene	15.833	240.0	1057	485.74	ND ng/ml	21.8
Chrysene	15.882	228.0	69	21.74	ND ng/ml	52.1
Benzo(b)fluoranthene	17.975	252.0	114	62.22	ND ng/ml	
Benzo(k)fluoranthene	18.231	252.0	49	27.78	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.566	264.0	3087	1057.74	ND ng/ml	
Benzo(e)pyrene	18.559	252.0	537	205.64	ND ng/ml	22.4
Benzo(a)pyrene	18.772	252.0	380	166.90	ND ng/ml	21.4
IS-D12-Perylene	18.865	264.0	1547	502.61	ND ng/ml	10.3
Perylene	18.844	252.0	239	120.81	ND ng/ml	19.4
Indeno(1,2,3-c,d)pyrene	20.767	276.0	18	8.84	ND ng/ml	
Dibenz(a,h)anthracene	20.843	278.0	37	8.92	ND ng/ml	
Benzo(g,h,i)perylene	21.179	276.0	23	7.30	ND ng/ml	
Coronene	23.462	300.0	22	7.09	ND ng/ml	

## IS-D8-Naphthalene

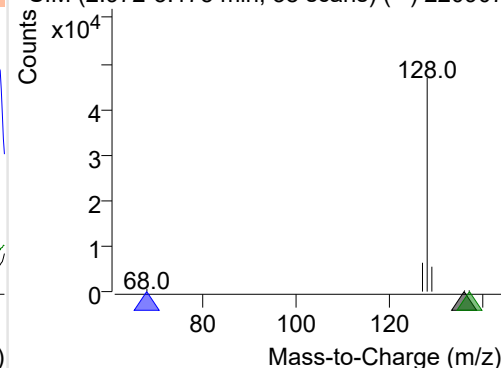
+ Selected Ion (136.0) 220907-PAHs-031.D



136.0, 68.0, 137.0

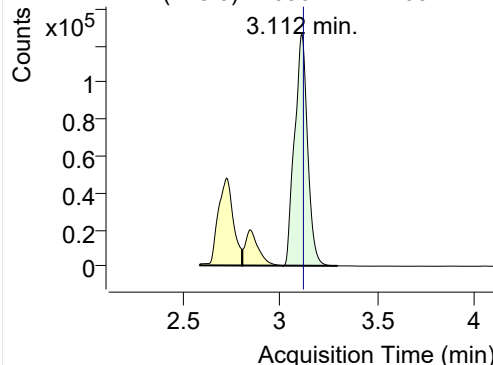


+ SIM (2.972-3.175 min, 38 scans) (\*\*) 220907

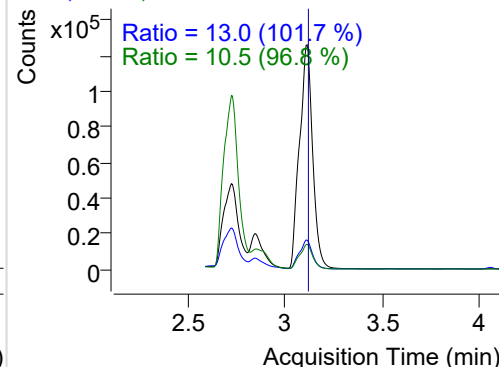


**Naphthalene**

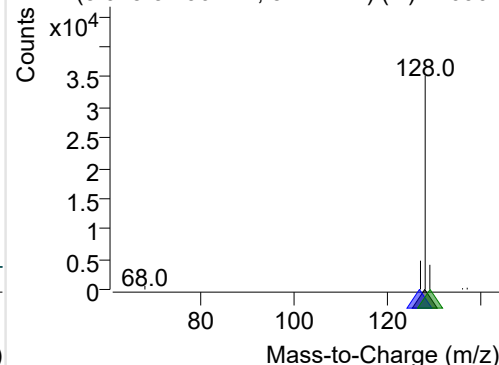
+ Selected Ion (128.0) 220907-PAHs-031.D



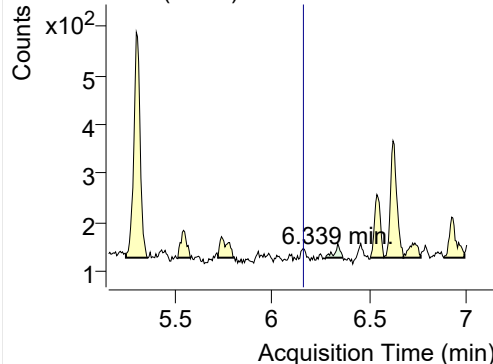
128.0, 127.0, 129.0



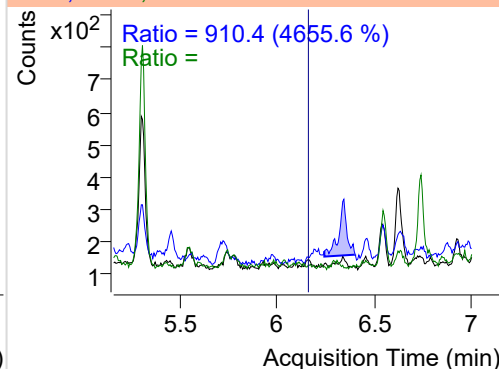
+ SIM (3.015-3.296 min, 52 scans) (\*\*) 220907

**Acenaphthylene**

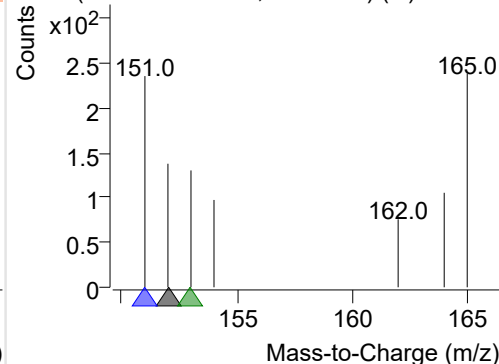
+ Selected Ion (152.0) 220907-PAHs-031.D



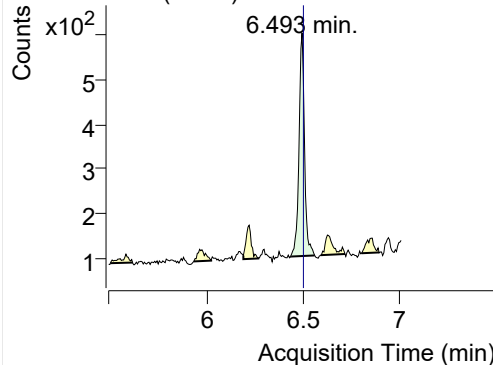
152.0, 151.0, 153.0



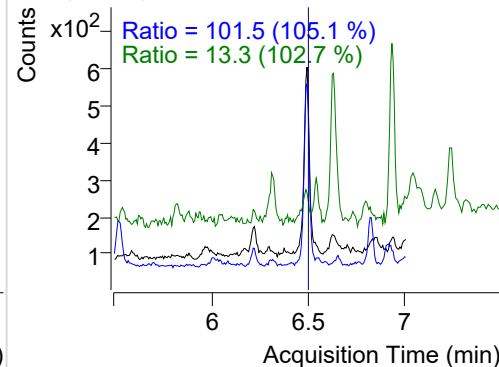
+ SIM (6.276-6.365 min, 15 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

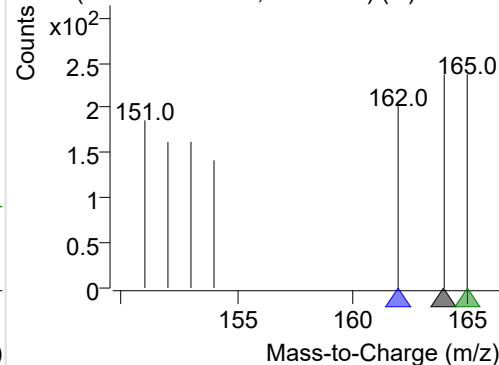
+ Selected Ion (164.0) 220907-PAHs-031.D



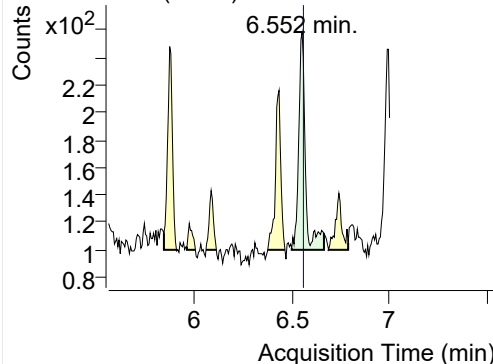
164.0, 162.0, 165.0



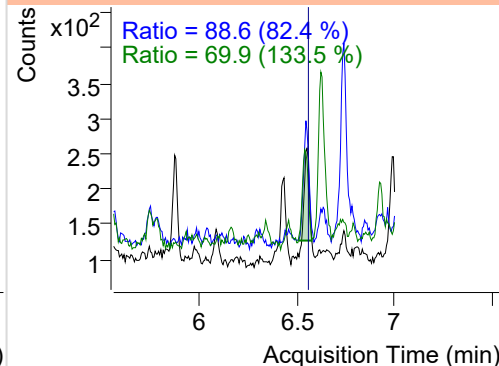
+ SIM (6.434-6.558 min, 21 scans) (\*\*) 220907

**Acenaphthene**

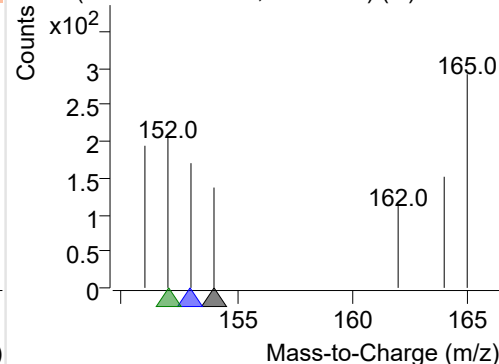
+ Selected Ion (154.0) 220907-PAHs-031.D



154.0, 153.0, 152.0

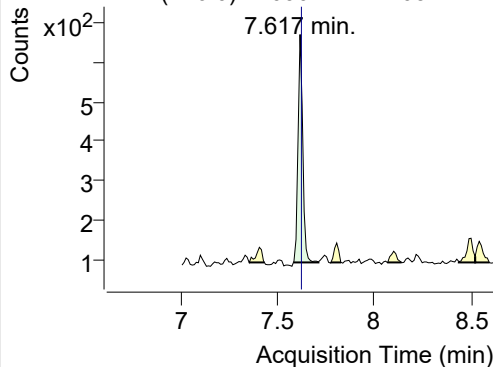


+ SIM (6.499-6.664 min, 29 scans) (\*\*) 220907

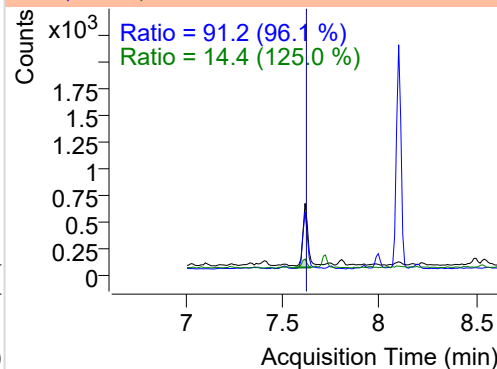


## LSS-D10-Fluorene

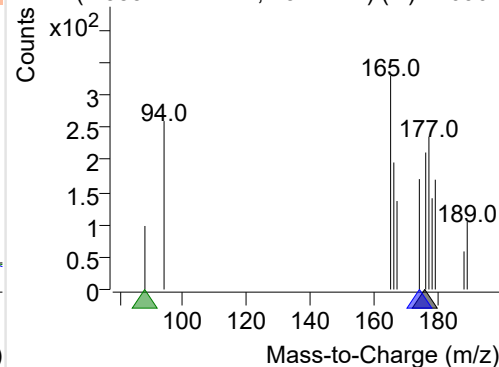
+ Selected Ion (176.0) 220907-PAHs-031.D



176.0, 174.0, 88.0

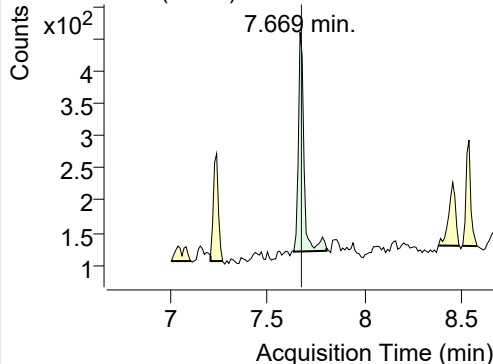


+ SIM (7.583-7.711 min, 13 scans) (\*\*) 220907

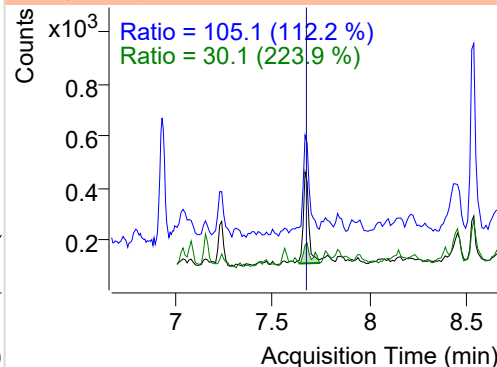


## Fluorene

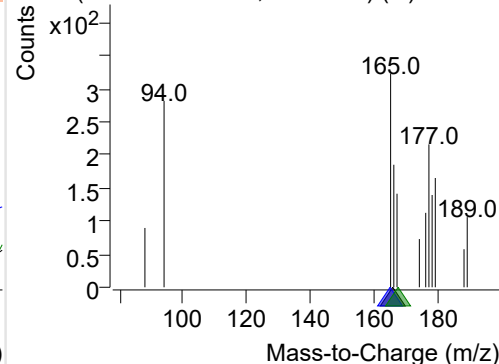
+ Selected Ion (166.0) 220907-PAHs-031.D



166.0, 165.0, 167.0

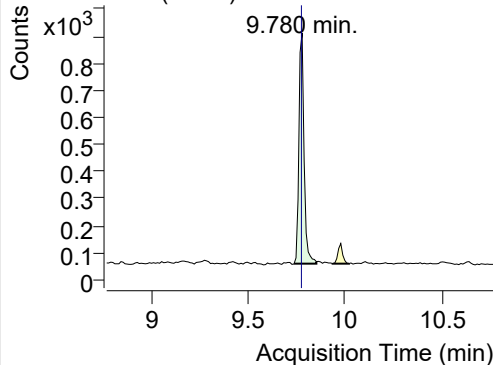


+ SIM (7.638-7.806 min, 17 scans) (\*\*) 220907

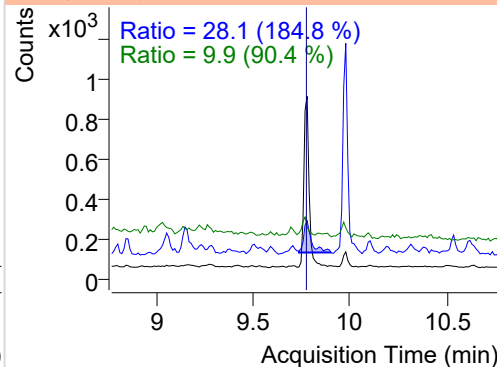


## IS-D10-Phenanthrene

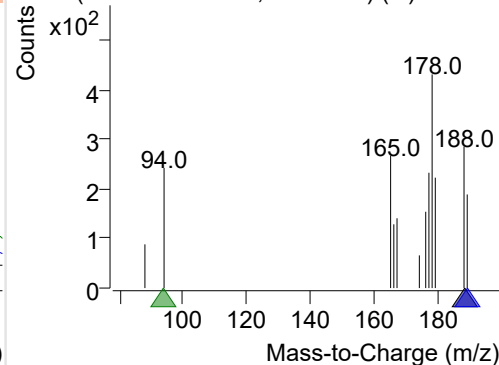
+ Selected Ion (188.0) 220907-PAHs-031.D



188.0, 189.0, 94.0

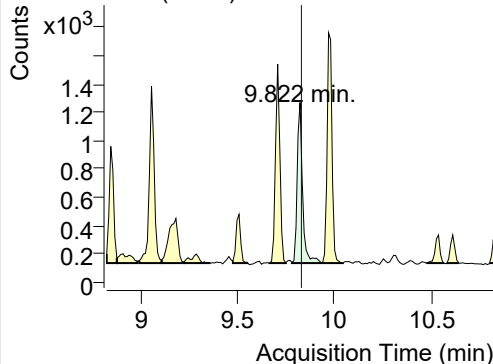


+ SIM (9.739-9.854 min, 11 scans) (\*\*) 220907

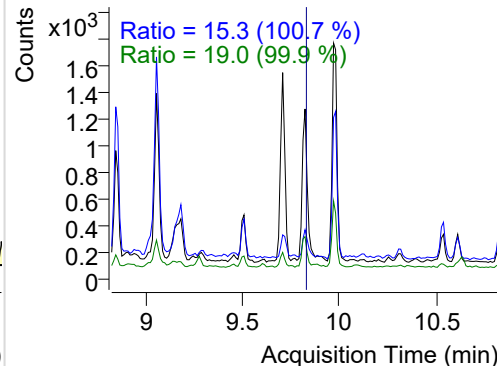


## Phenanthrene

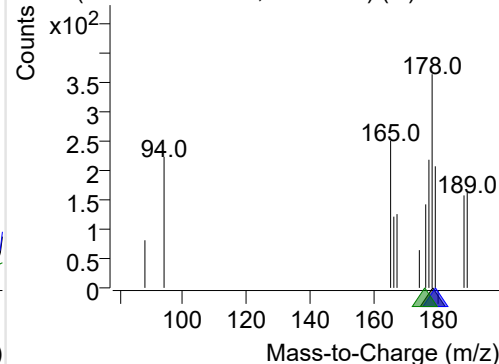
+ Selected Ion (178.0) 220907-PAHs-031.D



178.0, 179.0, 176.0

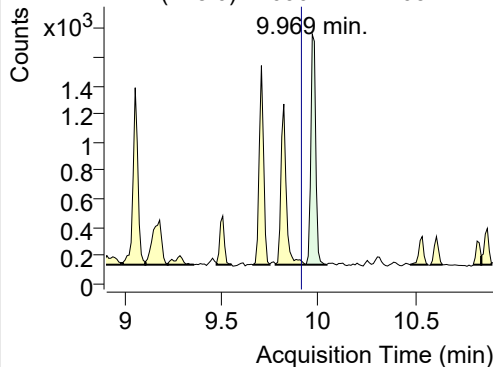


+ SIM (9.780-9.937 min, 15 scans) (\*\*) 220907

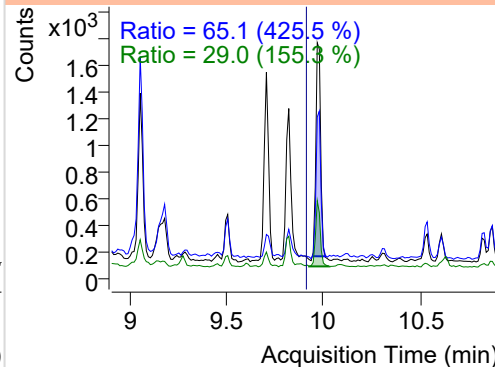


**Anthracene**

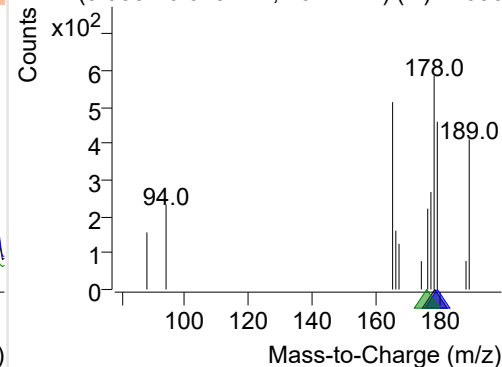
+ Selected Ion (178.0) 220907-PAHs-031.D



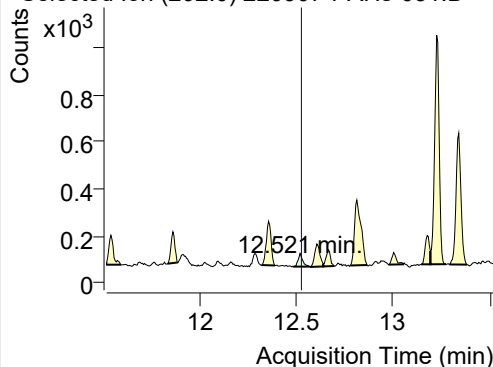
178.0, 179.0, 176.0



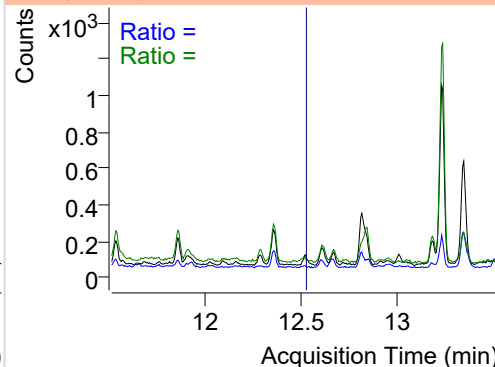
+ SIM (9.938-10.043 min, 10 scans) (\*\*) 22090

**Fluoranthene**

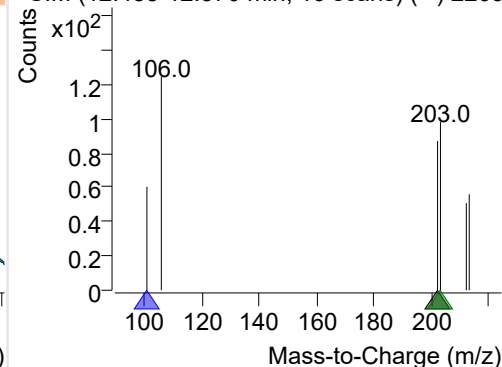
+ Selected Ion (202.0) 220907-PAHs-031.D



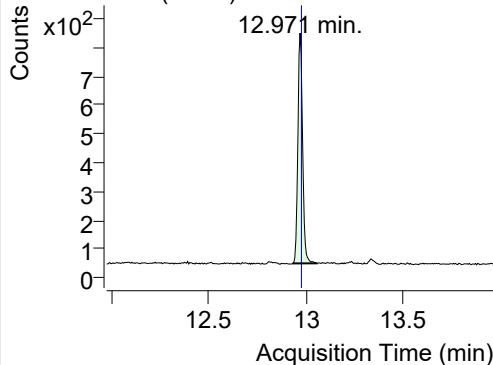
202.0, 101.0, 203.0



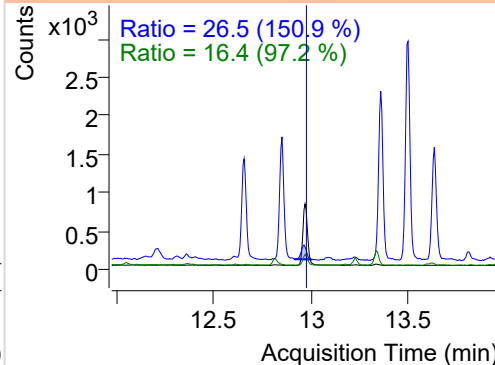
+ SIM (12.488-12.570 min, 16 scans) (\*\*) 2209

**LSS-D10-Pyrene**

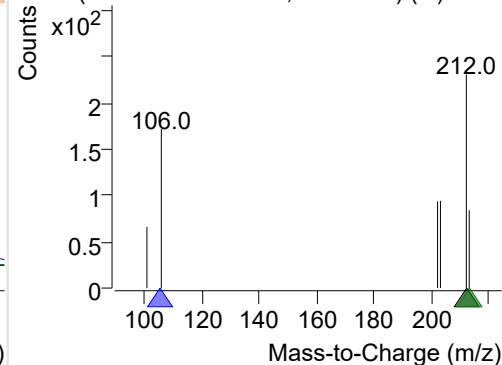
+ Selected Ion (212.0) 220907-PAHs-031.D



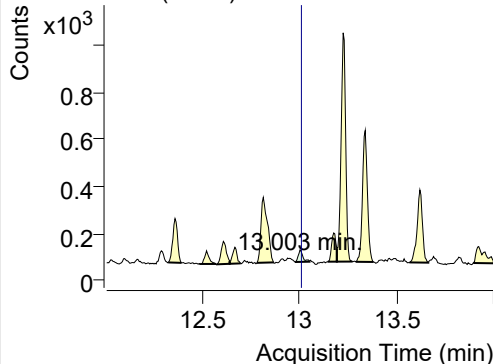
212.0, 106.0, 213.0



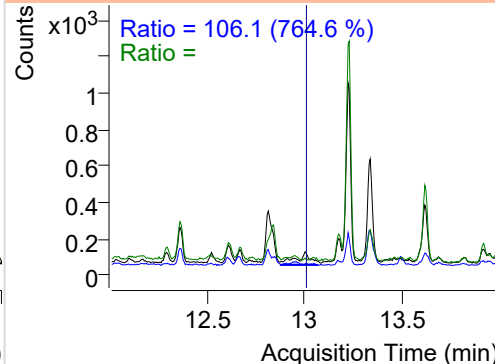
+ SIM (12.933-13.058 min, 23 scans) (\*\*) 2209

**Pyrene**

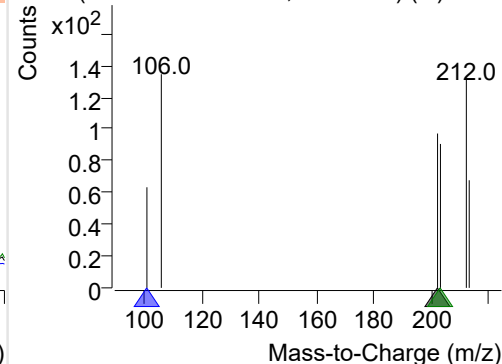
+ Selected Ion (202.0) 220907-PAHs-031.D



202.0, 101.0, 203.0



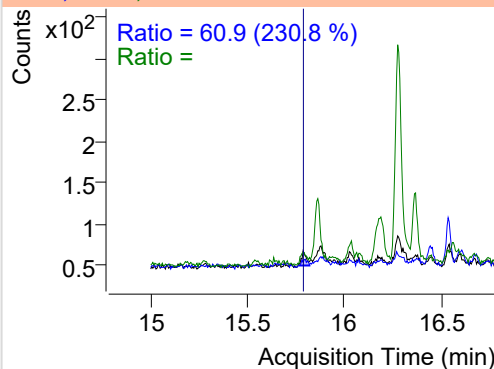
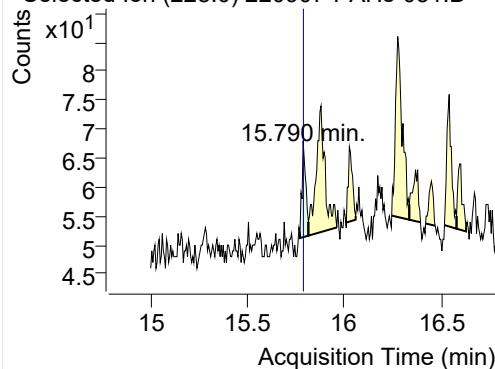
+ SIM (12.982-13.052 min, 14 scans) (\*\*) 2209



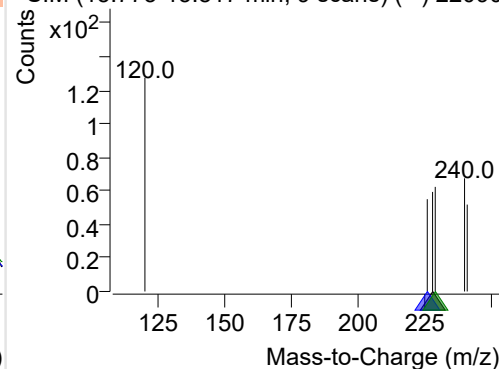
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-031.D

228.0, 226.0, 229.0

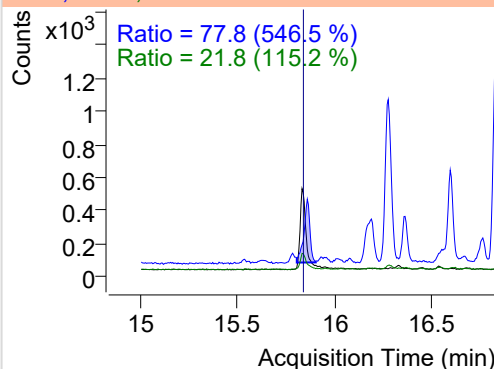
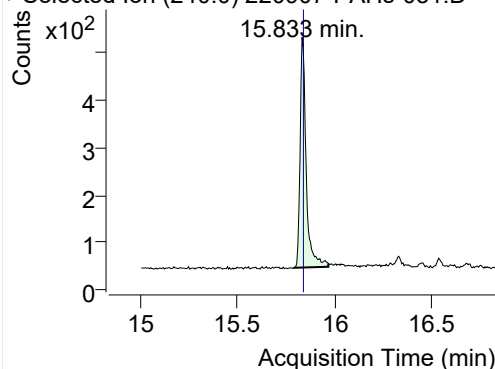


+ SIM (15.773-15.817 min, 9 scans) (\*\*) 22090

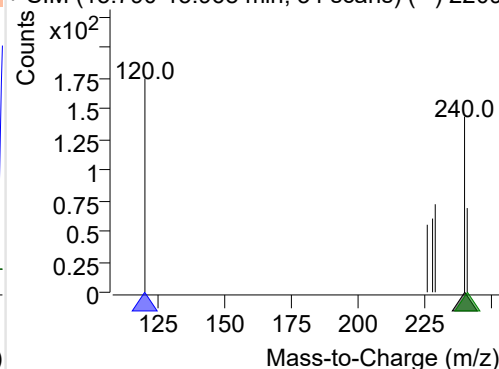
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-031.D

240.0, 120.0, 241.0

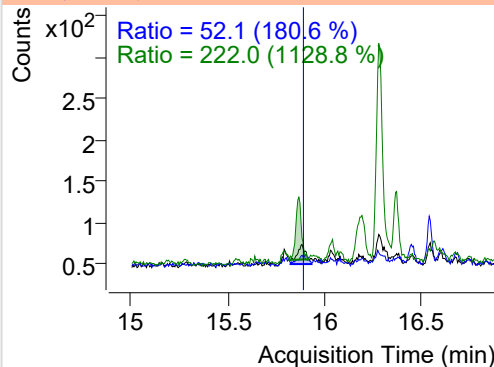
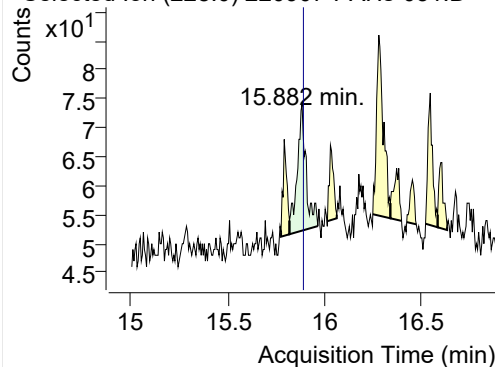


+ SIM (15.790-15.968 min, 34 scans) (\*\*) 2209

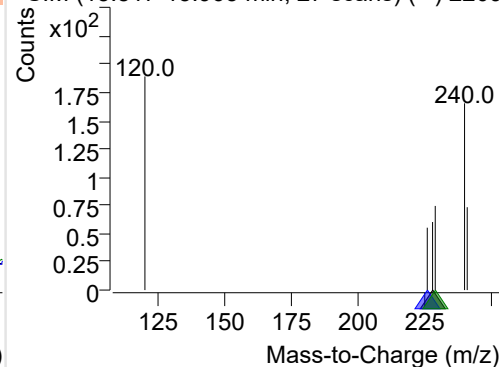
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-031.D

228.0, 226.0, 229.0

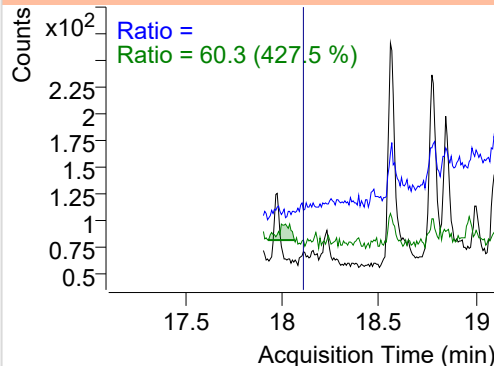
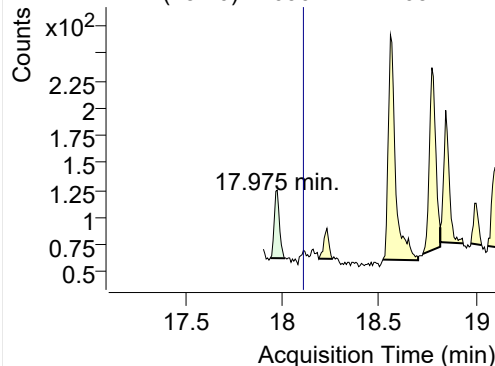


+ SIM (15.817-15.963 min, 27 scans) (\*\*) 2209

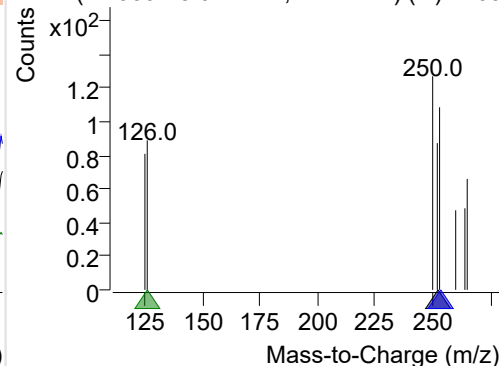
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-031.D

252.0, 253.0, 126.0



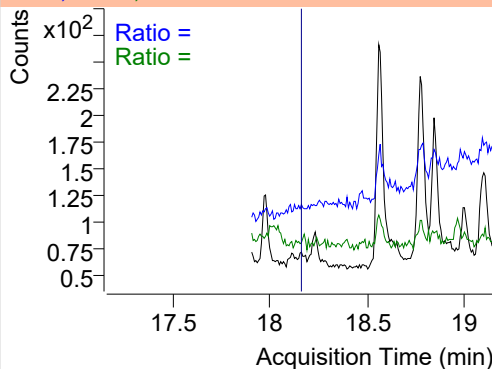
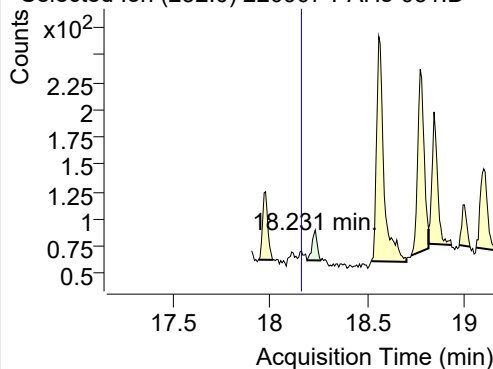
+ SIM (17.939-18.011 min, 11 scans) (\*\*) 2209



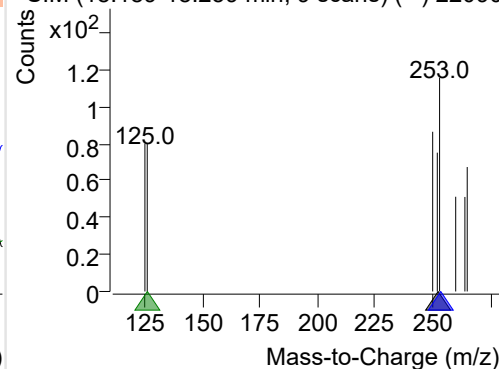
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-031.D

252.0, 253.0, 126.0

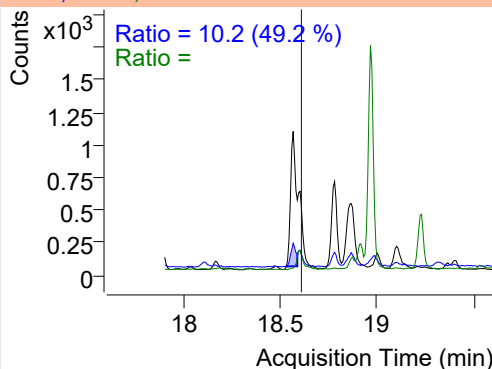
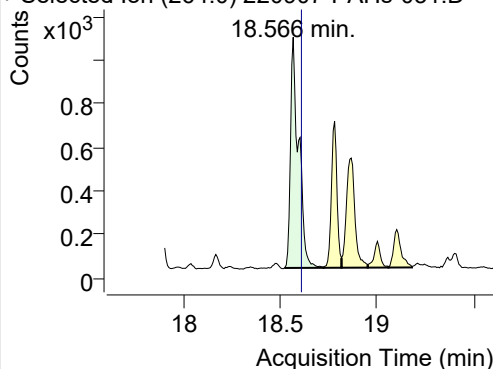


+ SIM (18.189-18.259 min, 9 scans) (\*\*) 22090

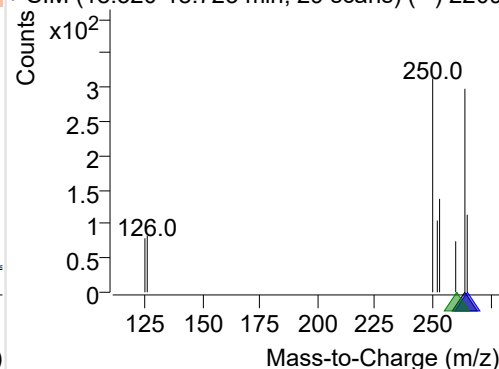
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-031.D

264.0, 265.0, 260.0

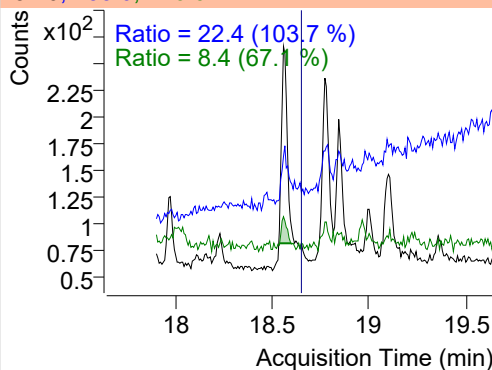
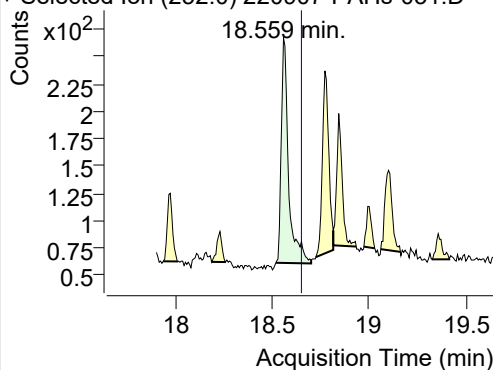


+ SIM (18.520-18.723 min, 29 scans) (\*\*) 2209

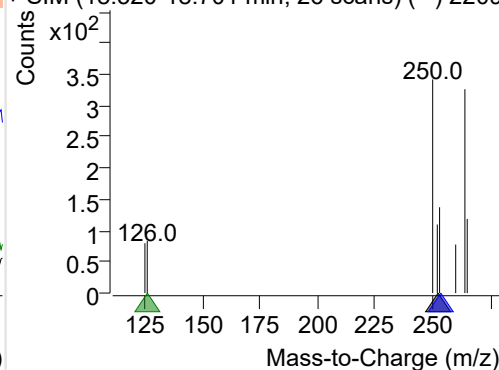
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-031.D

252.0, 253.0, 126.0

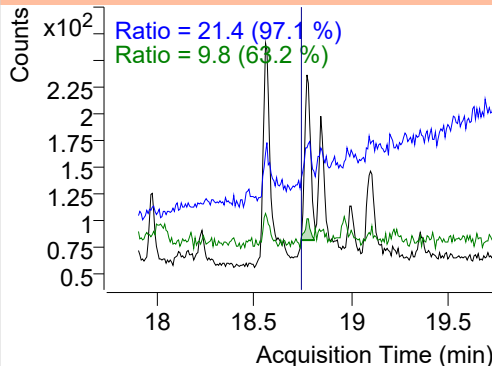
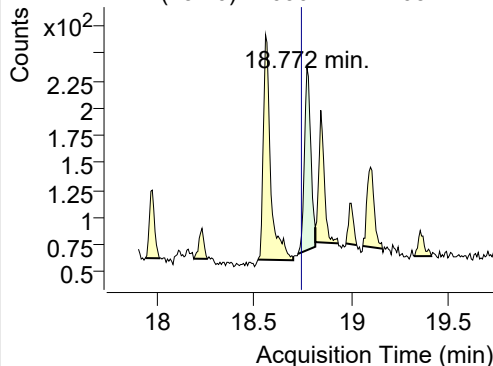


+ SIM (18.520-18.701 min, 26 scans) (\*\*) 2209

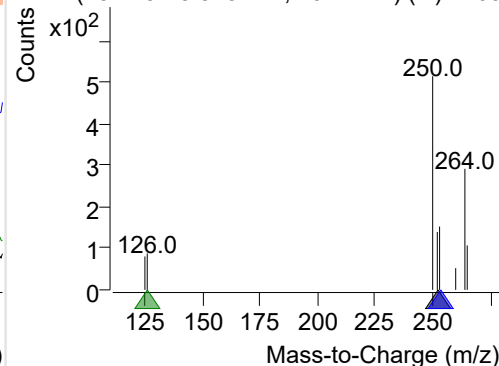
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-031.D

252.0, 253.0, 126.0



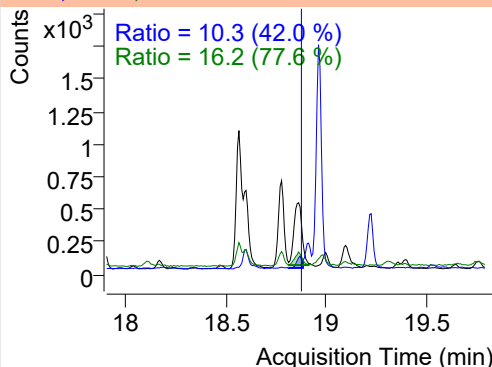
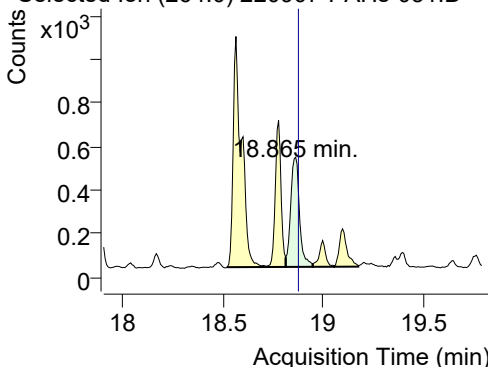
+ SIM (18.725-18.815 min, 13 scans) (\*\*) 2209



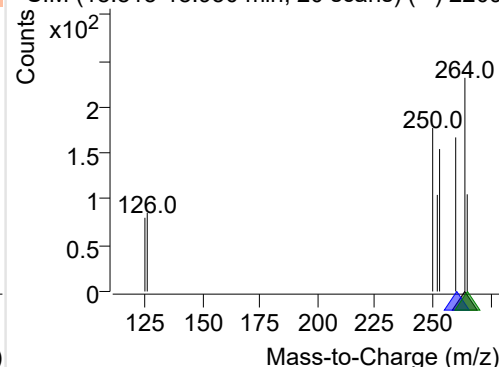
## IS-D12-Perylene

+ Selected Ion (264.0) 220907-PAHs-031.D

264.0, 260.0, 265.0



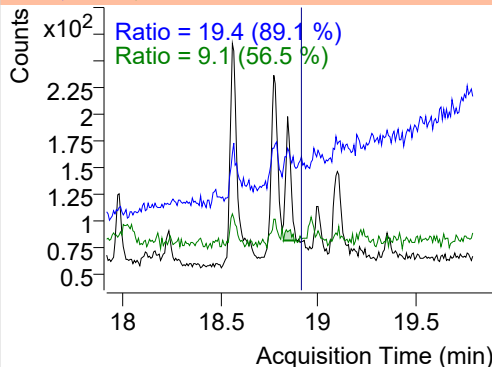
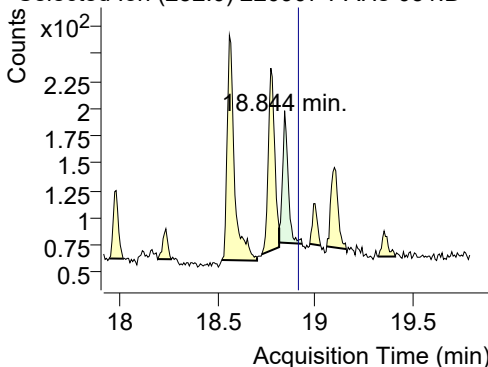
+ SIM (18.815-18.950 min, 20 scans) (\*\*) 2209



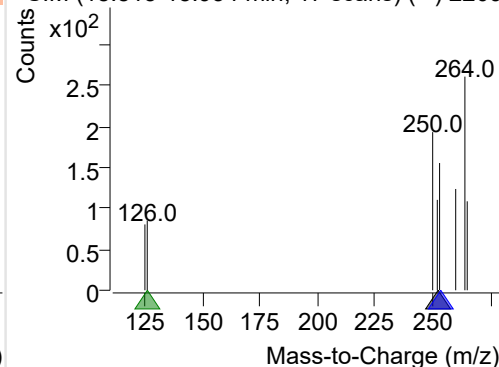
## Perylene

+ Selected Ion (252.0) 220907-PAHs-031.D

252.0, 253.0, 126.0



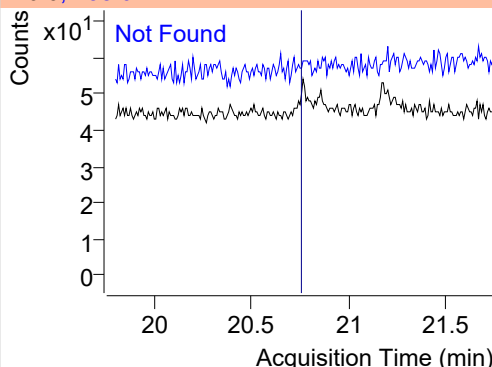
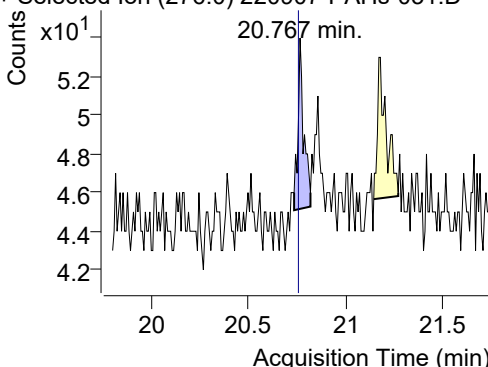
+ SIM (18.815-18.934 min, 17 scans) (\*\*) 2209



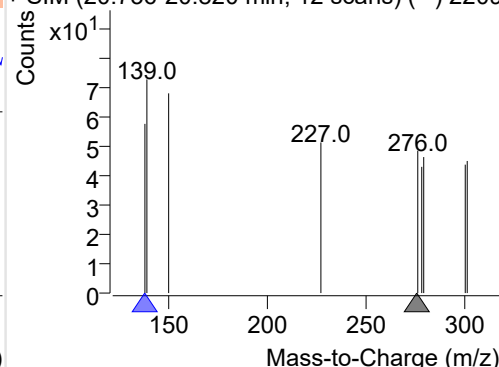
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220907-PAHs-031.D

276.0, 138.0



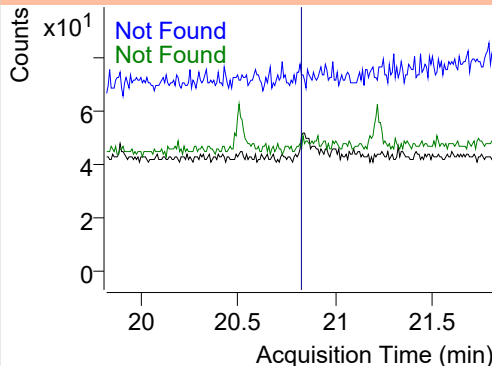
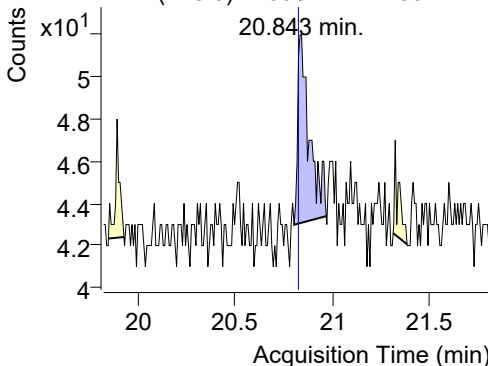
+ SIM (20.736-20.820 min, 12 scans) (\*\*) 2209



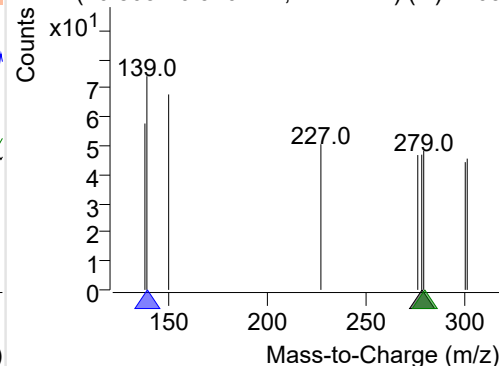
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220907-PAHs-031.D

278.0, 139.0, 279.0



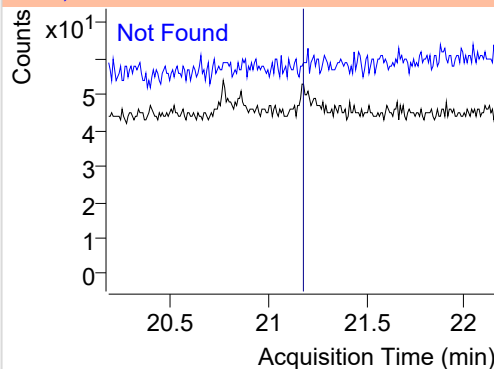
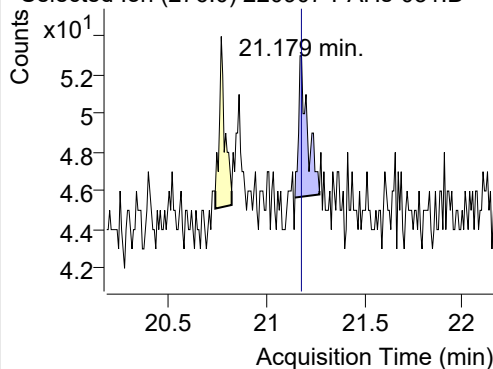
+ SIM (20.805-20.970 min, 22 scans) (\*\*) 2209



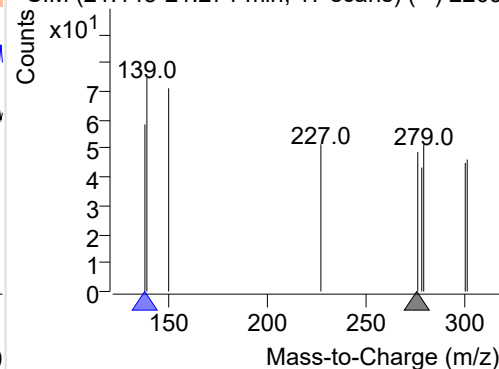
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-031.D

276.0, 138.0

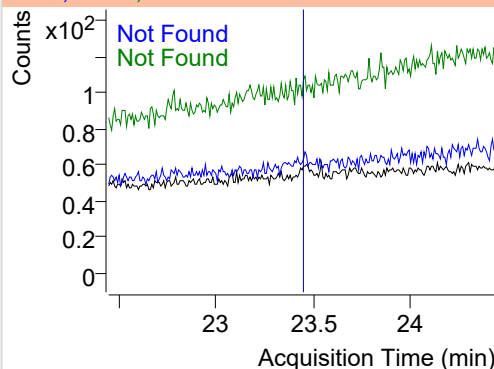
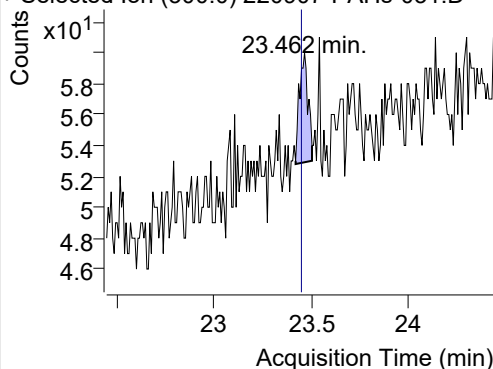


+ SIM (21.145-21.271 min, 17 scans) (\*\*) 2209

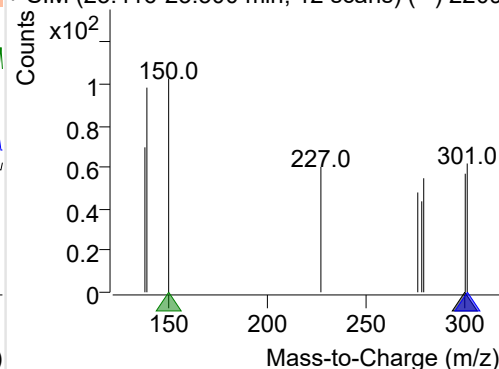
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-031.D

300.0, 301.0, 150.0



+ SIM (23.416-23.500 min, 12 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

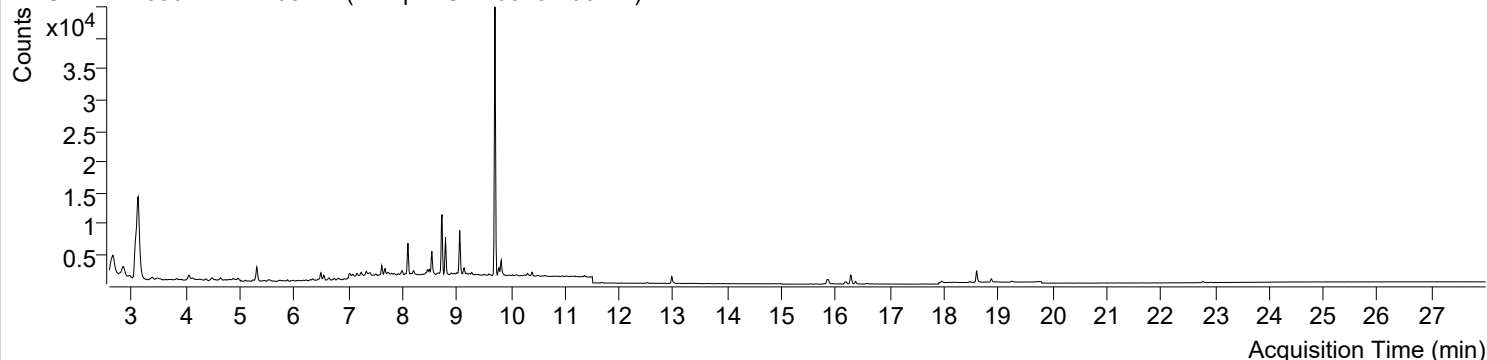


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 4:30:05	Data File	220907-PAHs-032.D
Type	Sample	Name	Sample-Gas-0815-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

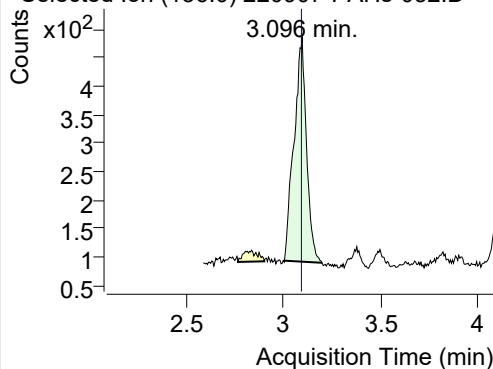
+ TIC SIM 220907-PAHs-032.D (Sample-Gas-0815-100DIL)



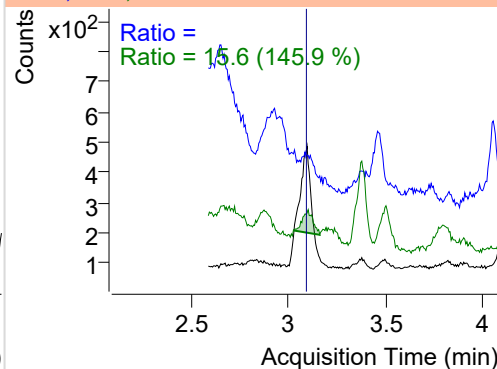
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.096	136.0	1758	395.16	ND ng/ml	15.6
Naphthalene	3.117	128.0	47520	10418.14	ND ng/ml	12.3
Acenaphthylene	6.161	152.0	87	52.85	ND ng/ml	60.2
IS-D10-Acenaphthene	6.493	164.0	1133	594.12	ND ng/ml	106.0
Acenaphthene	6.552	154.0	440	204.81	ND ng/ml	90.2
LSS-D10-Fluorene	7.617	176.0	1028	609.15	ND ng/ml	96.1
Fluorene	7.669	166.0	937	447.00	ND ng/ml	106.0
IS-D10-Phenanthrene	9.780	188.0	1792	1003.82	ND ng/ml	23.4
Phenanthrene	9.822	178.0	2769	1493.07	ND ng/ml	21.0
Anthracene	9.822	178.0	2769	1493.07	ND ng/ml	21.0
Fluoranthene	12.521	202.0	141	78.98	ND ng/ml	63.0
LSS-D10-Pyrene	12.971	212.0	1437	821.35	ND ng/ml	15.3
Pyrene	13.003	202.0	192	108.02	ND ng/ml	13.3
Benz(a)anthracene	15.800	228.0	13	6.96	ND ng/ml	
IS-D12-Chrysene	15.838	240.0	1079	479.87	ND ng/ml	18.1
Chrysene	15.876	228.0	51	18.71	ND ng/ml	
Benzo(b)fluoranthene	18.103	252.0	55	11.38	ND ng/ml	
Benzo(k)fluoranthene	18.103	252.0	55	11.38	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.601	264.0	2478	1207.37	ND ng/ml	25.6
Benzo(e)pyrene	18.630	252.0	9	5.40	ND ng/ml	
Benzo(a)pyrene	18.630	252.0	9	5.40	ND ng/ml	
IS-D12-Perylene	18.872	264.0	781	359.75	ND ng/ml	26.2
Perylene	18.630	252.0	9	5.40	ND ng/ml	
Indeno(1,2,3-c,d)pyrene	20.774	276.0	20	7.00	ND ng/ml	
Dibenz(a,h)anthracene	20.835	278.0	43	10.74	ND ng/ml	
Benzo(g,h,i)perylene	21.179	276.0	25	7.67	ND ng/ml	
Coronene	23.454	300.0	16	8.21	ND ng/ml	

## IS-D8-Naphthalene

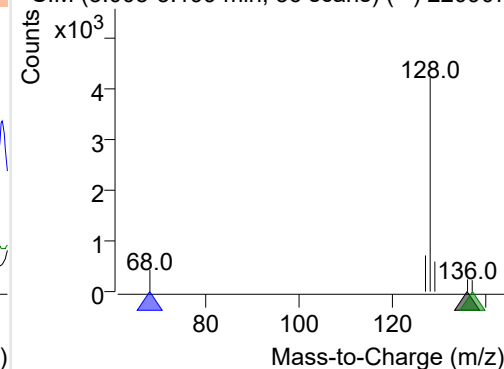
+ Selected Ion (136.0) 220907-PAHs-032.D



136.0, 68.0, 137.0

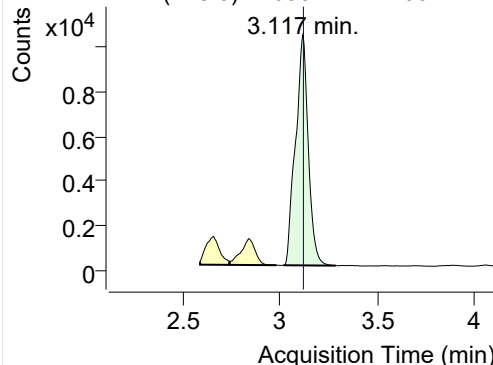


+ SIM (3.005-3.199 min, 36 scans) (\*\*) 220907

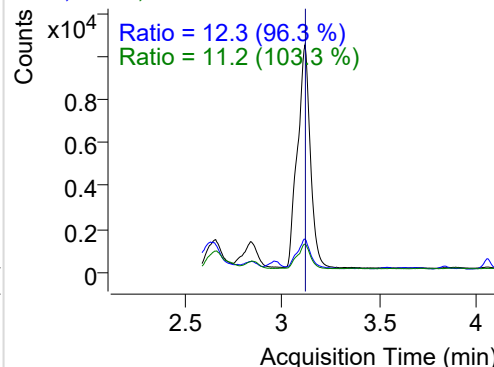


**Naphthalene**

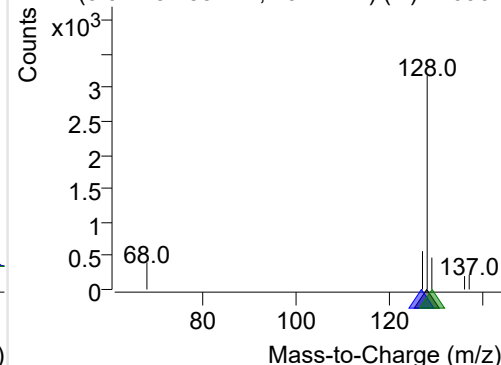
+ Selected Ion (128.0) 220907-PAHs-032.D



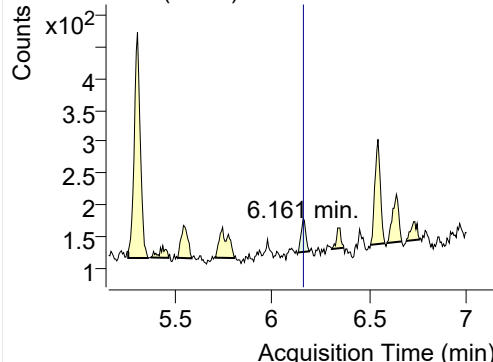
128.0, 127.0, 129.0



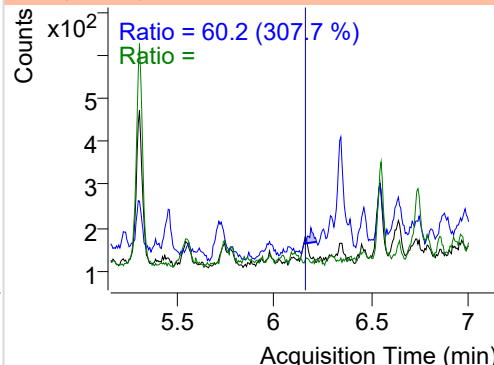
+ SIM (3.017-3.285 min, 49 scans) (\*\*) 220907

**Acenaphthylene**

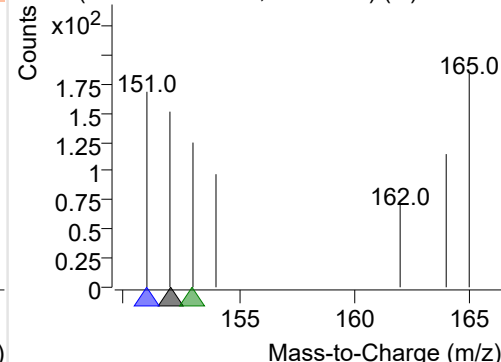
+ Selected Ion (152.0) 220907-PAHs-032.D



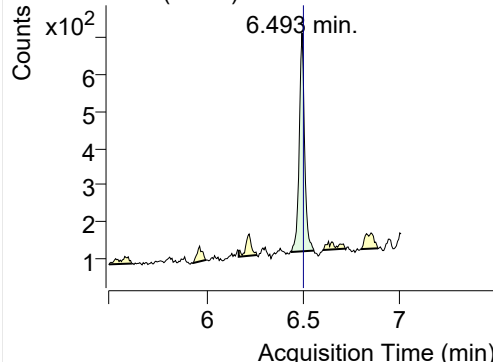
152.0, 151.0, 153.0



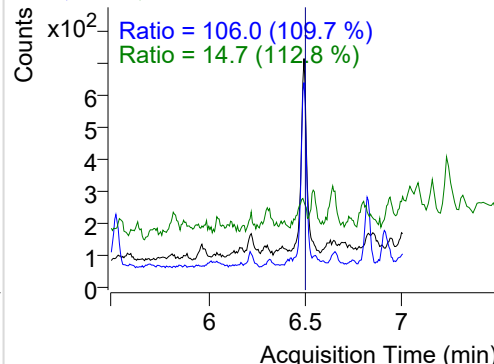
+ SIM (6.135-6.191 min, 10 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

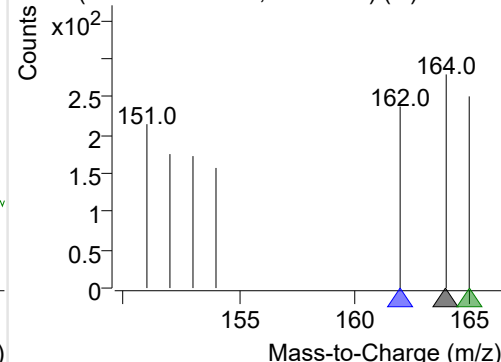
+ Selected Ion (164.0) 220907-PAHs-032.D



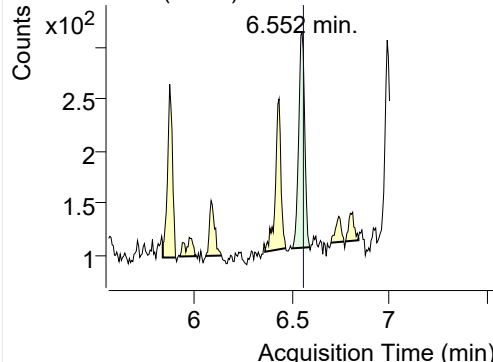
164.0, 162.0, 165.0



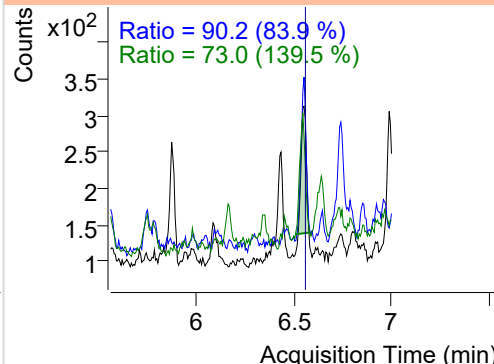
+ SIM (6.439-6.554 min, 20 scans) (\*\*) 220907

**Acenaphthene**

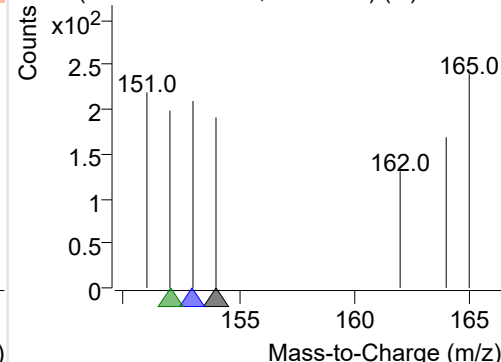
+ Selected Ion (154.0) 220907-PAHs-032.D



154.0, 153.0, 152.0

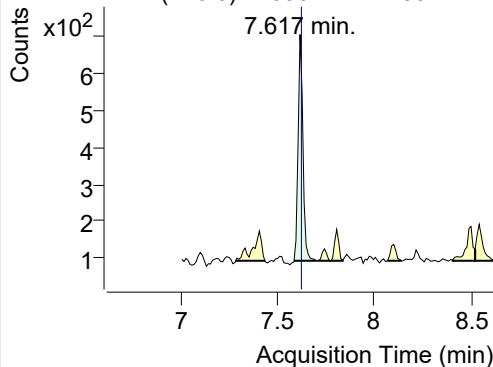


+ SIM (6.502-6.591 min, 15 scans) (\*\*) 220907

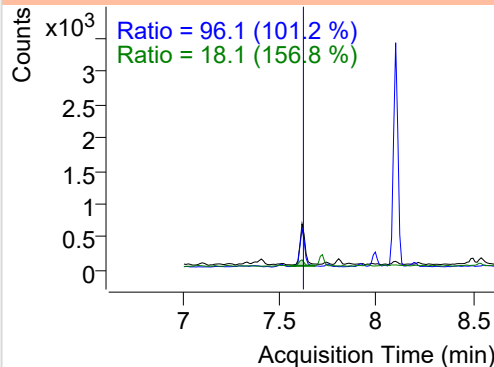


## LSS-D10-Fluorene

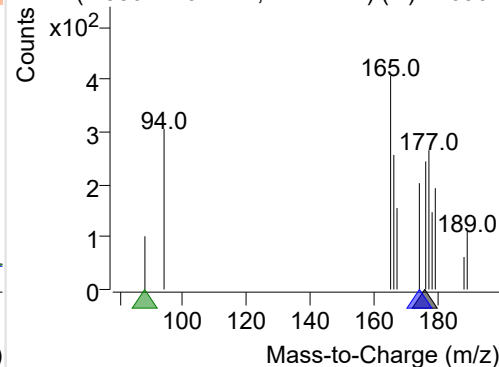
+ Selected Ion (176.0) 220907-PAHs-032.D



176.0, 174.0, 88.0

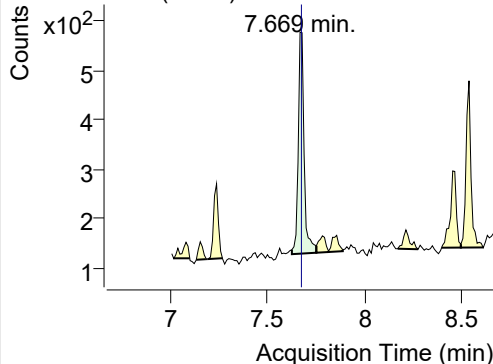


+ SIM (7.586-7.701 min, 11 scans) (\*\*) 220907

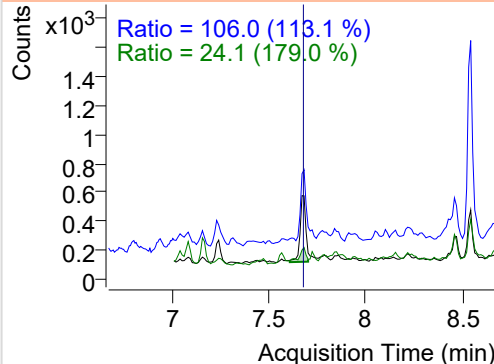


## Fluorene

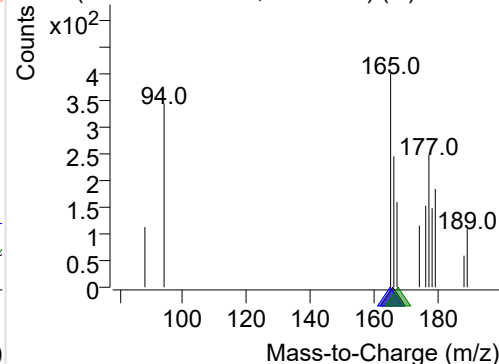
+ Selected Ion (166.0) 220907-PAHs-032.D



166.0, 165.0, 167.0

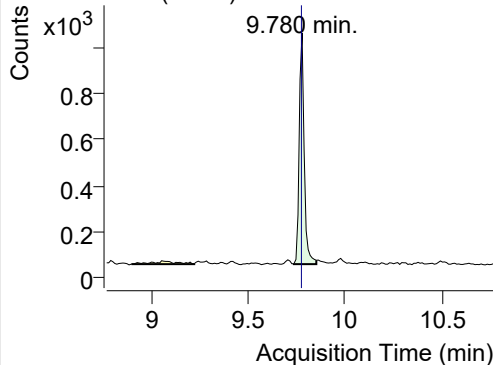


+ SIM (7.627-7.753 min, 13 scans) (\*\*) 220907

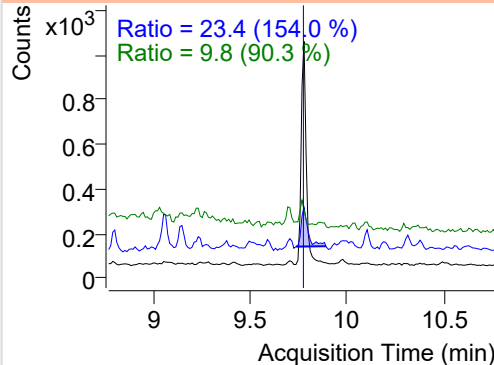


## IS-D10-Phenanthrene

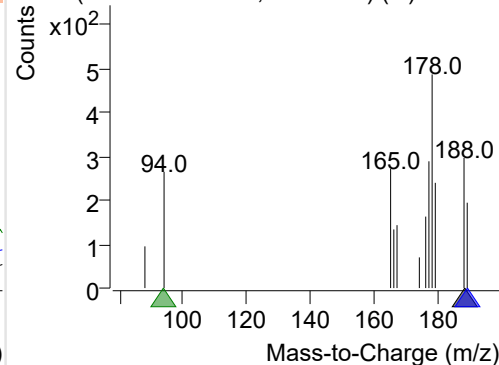
+ Selected Ion (188.0) 220907-PAHs-032.D



188.0, 189.0, 94.0

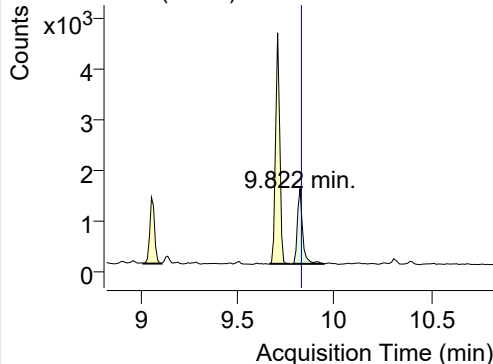


+ SIM (9.738-9.853 min, 12 scans) (\*\*) 220907

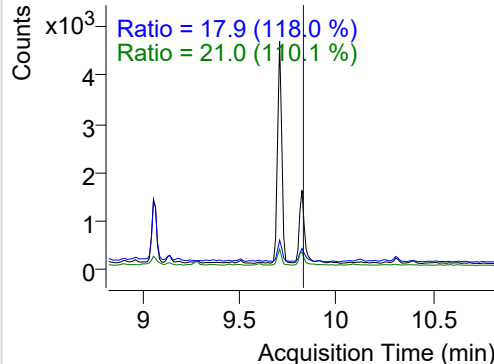


## Phenanthrene

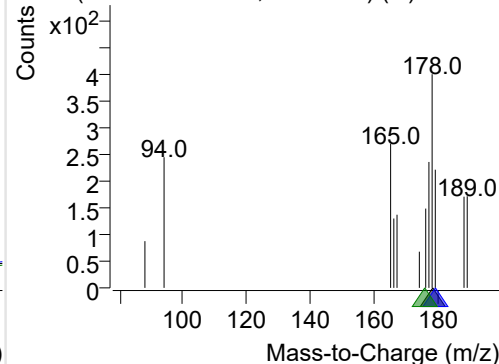
+ Selected Ion (178.0) 220907-PAHs-032.D



178.0, 179.0, 176.0

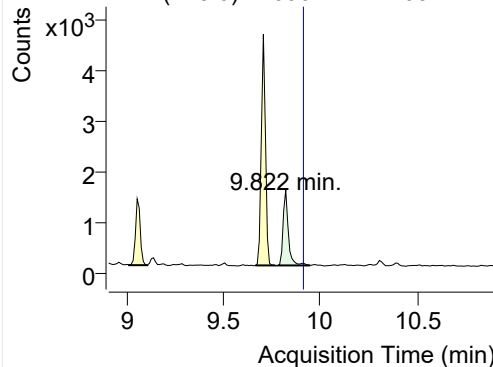


+ SIM (9.780-9.948 min, 17 scans) (\*\*) 220907

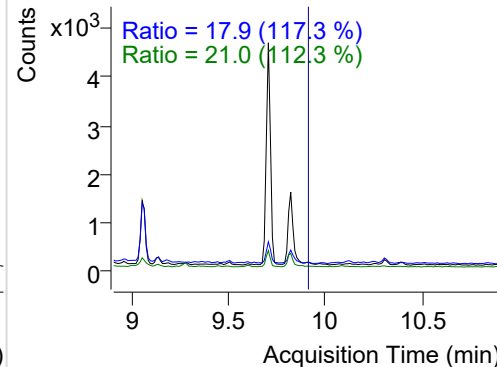


**Anthracene**

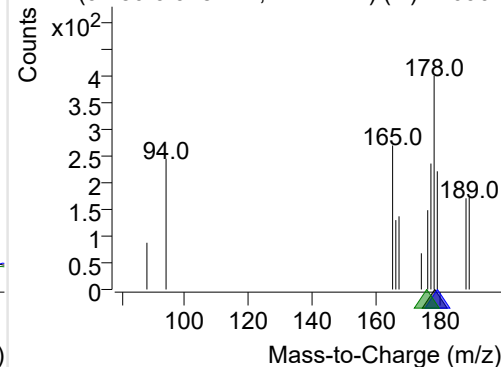
+ Selected Ion (178.0) 220907-PAHs-032.D



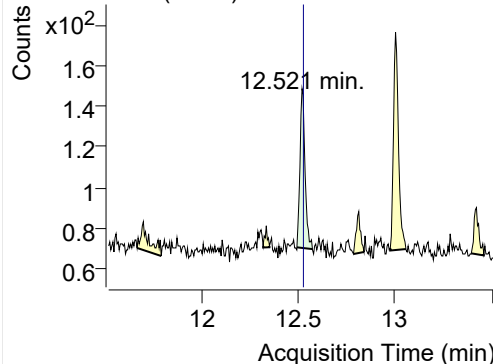
178.0, 179.0, 176.0



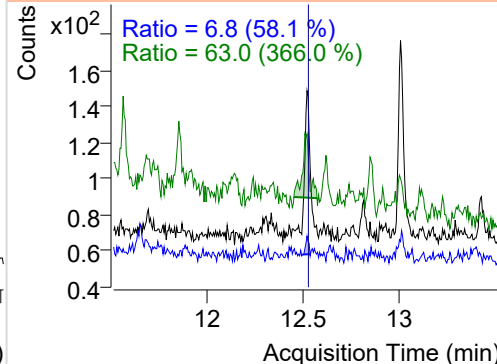
+ SIM (9.780-9.948 min, 17 scans) (\*\*) 220907

**Fluoranthene**

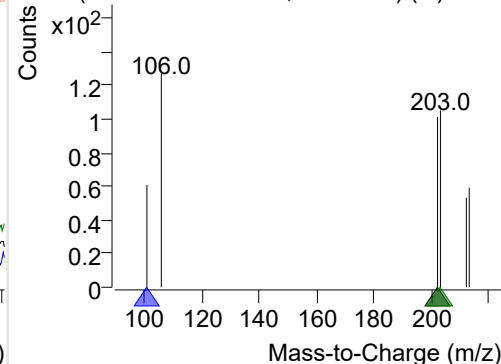
+ Selected Ion (202.0) 220907-PAHs-032.D



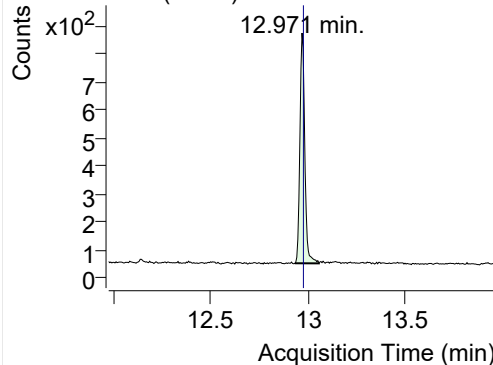
202.0, 101.0, 203.0



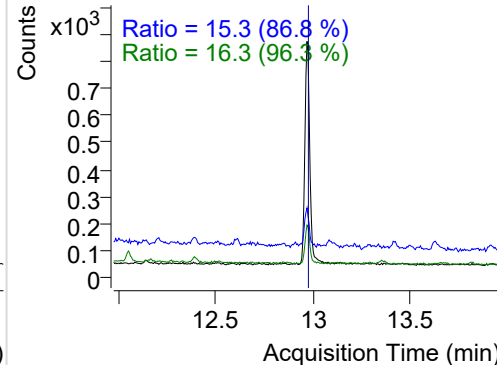
+ SIM (12.494-12.574 min, 14 scans) (\*\*) 2209

**LSS-D10-Pyrene**

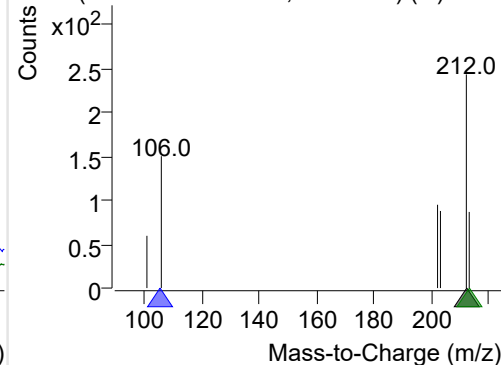
+ Selected Ion (212.0) 220907-PAHs-032.D



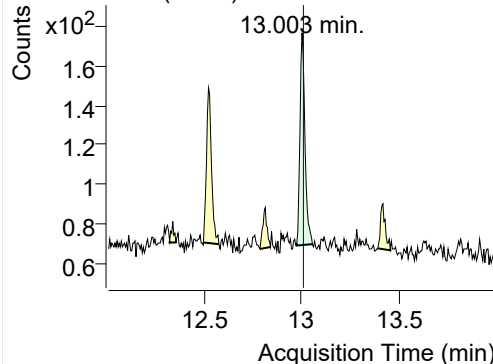
212.0, 106.0, 213.0



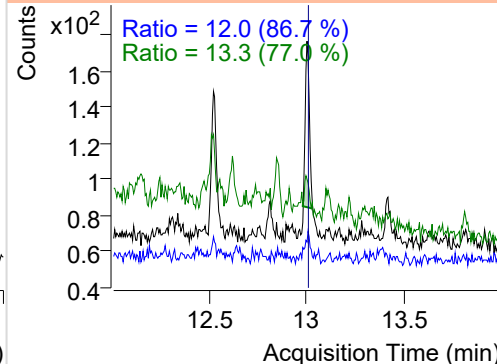
+ SIM (12.934-13.057 min, 23 scans) (\*\*) 2209

**Pyrene**

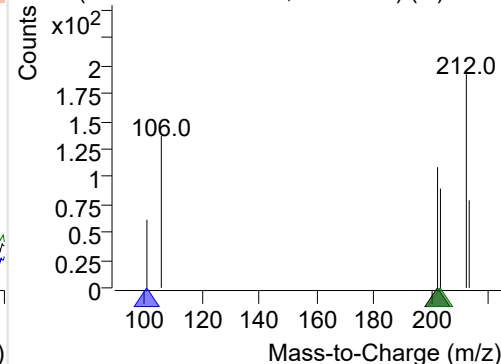
+ Selected Ion (202.0) 220907-PAHs-032.D



202.0, 101.0, 203.0



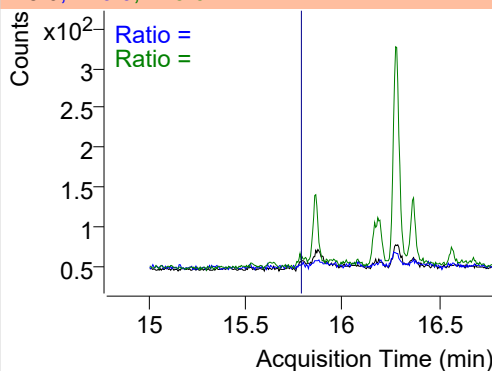
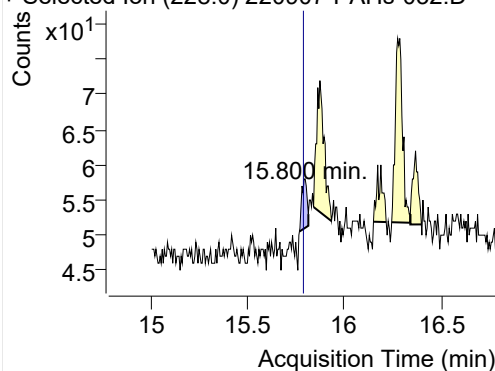
+ SIM (12.976-13.057 min, 15 scans) (\*\*) 2209



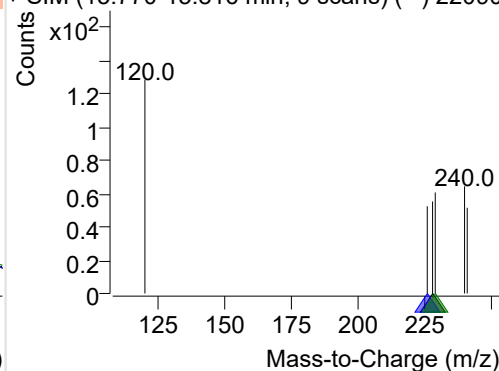
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-032.D

228.0, 226.0, 229.0

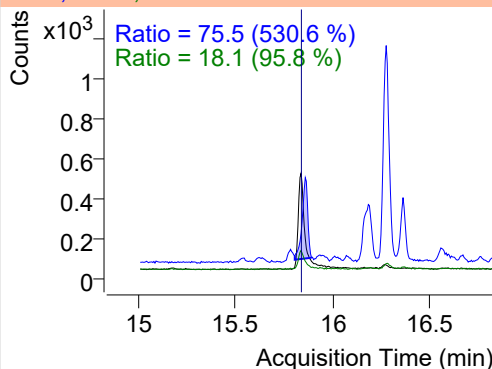
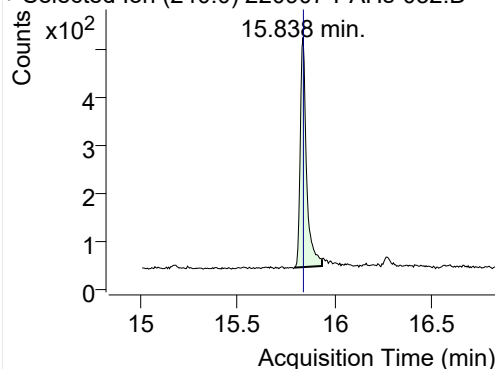


+ SIM (15.770-15.816 min, 9 scans) (\*\*) 22090

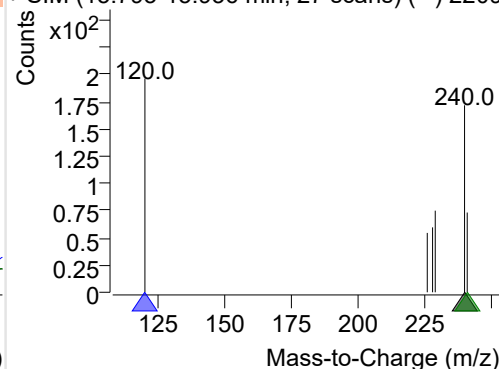
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-032.D

240.0, 120.0, 241.0

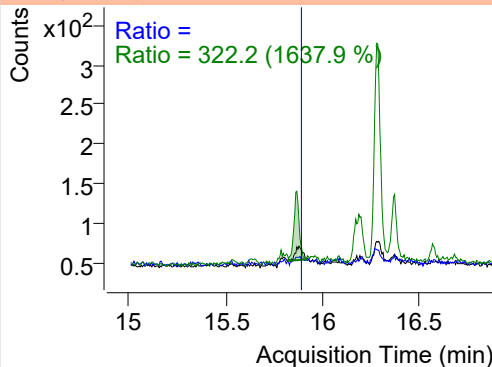
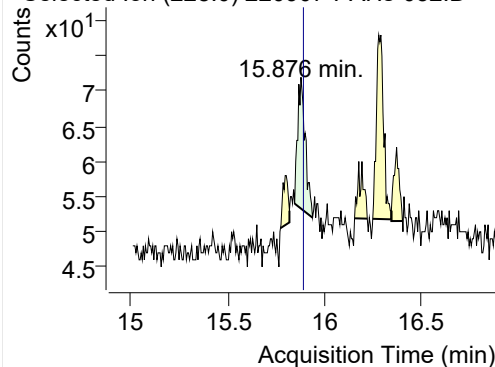


+ SIM (15.793-15.936 min, 27 scans) (\*\*) 2209

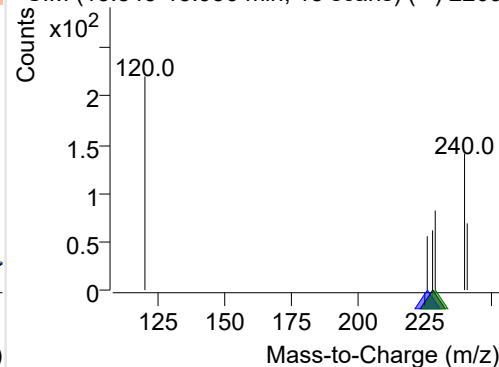
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-032.D

228.0, 226.0, 229.0

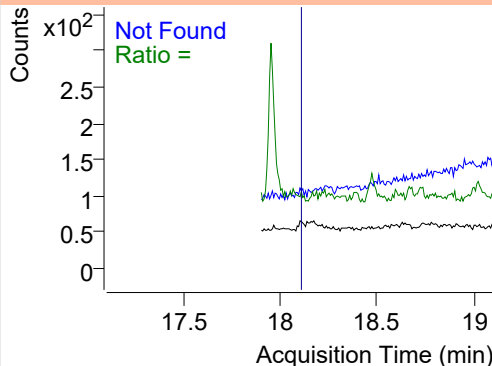
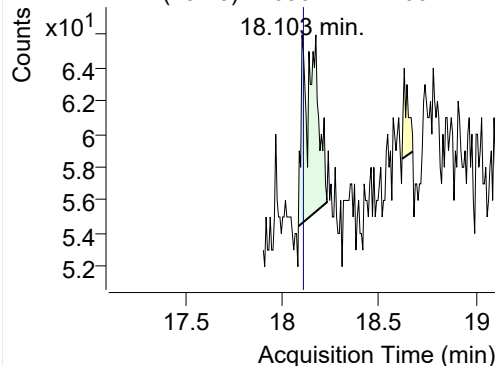


+ SIM (15.843-15.936 min, 18 scans) (\*\*) 2209

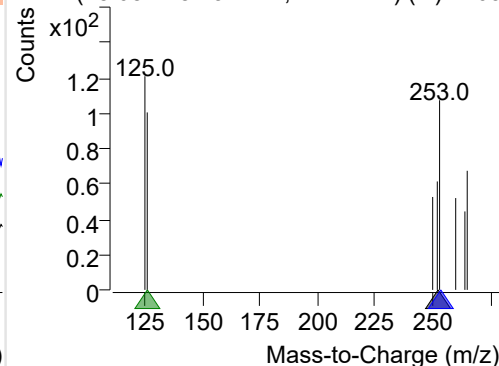
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-032.D

252.0, 253.0, 126.0



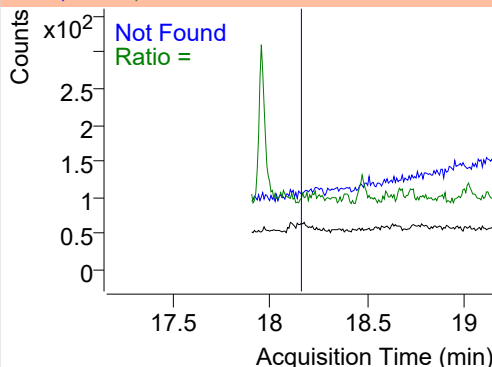
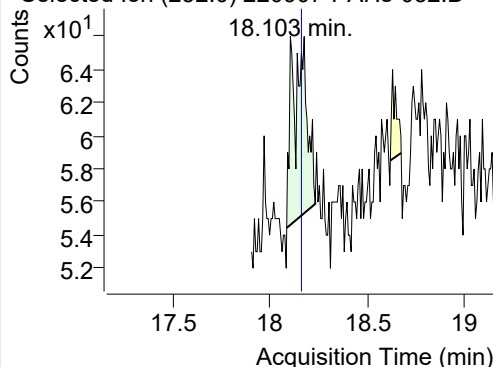
+ SIM (18.084-18.231 min, 21 scans) (\*\*) 2209



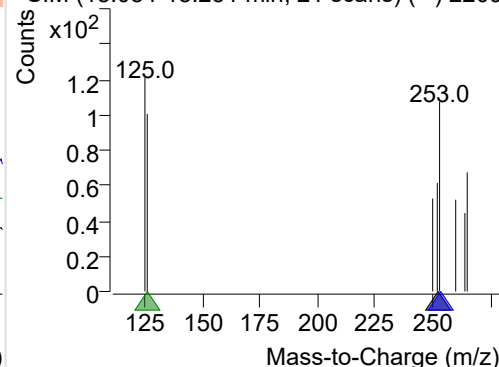
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-032.D

252.0, 253.0, 126.0

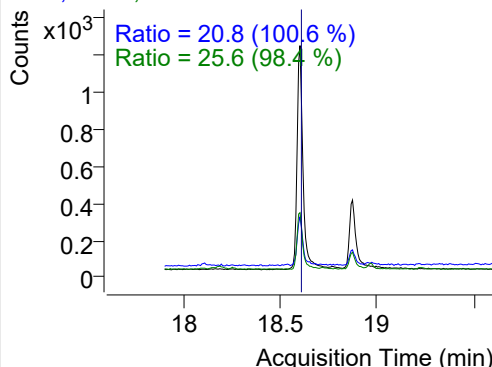
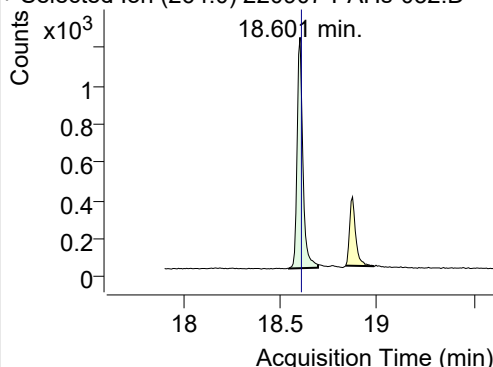


+ SIM (18.084-18.231 min, 21 scans) (\*\*) 2209

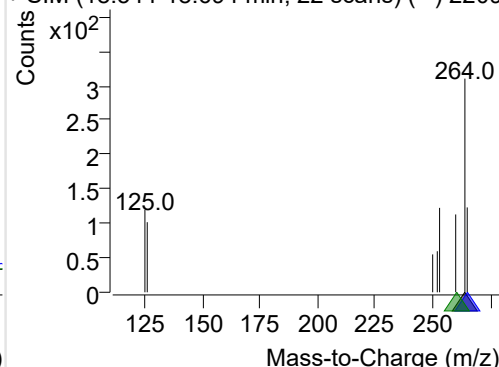
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-032.D

264.0, 265.0, 260.0

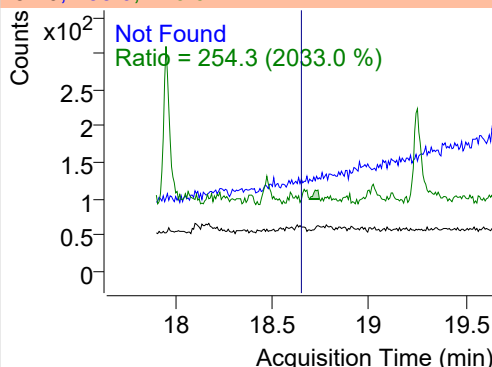
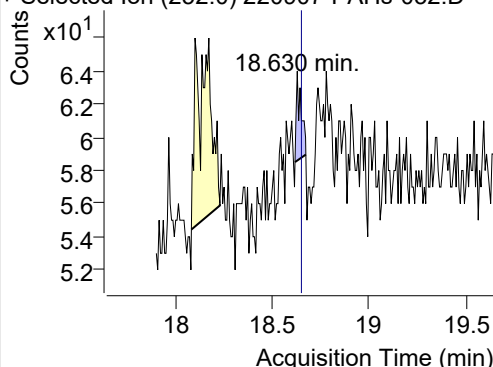


+ SIM (18.544-18.694 min, 22 scans) (\*\*) 2209

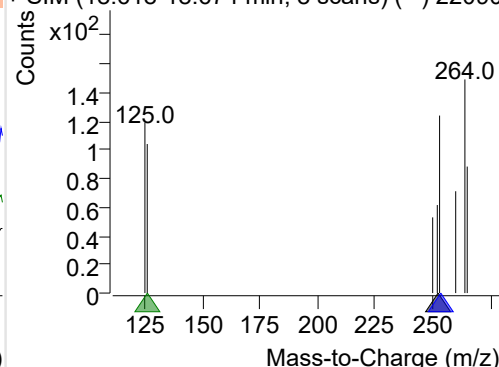
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-032.D

252.0, 253.0, 126.0

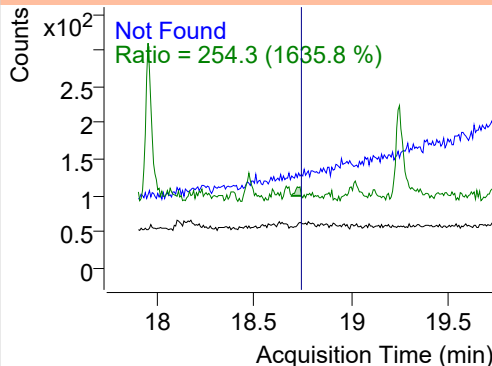
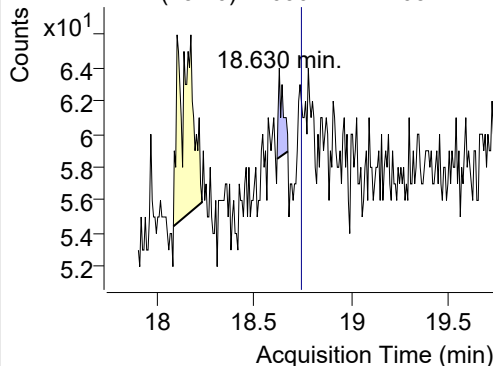


+ SIM (18.618-18.674 min, 8 scans) (\*\*) 22090

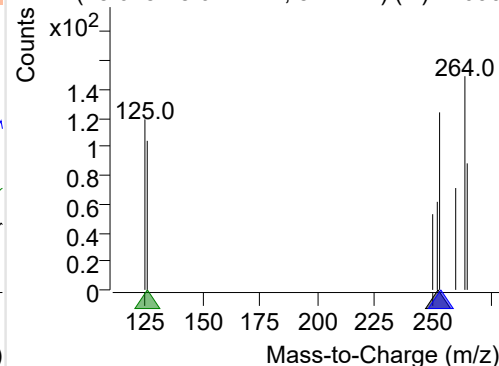
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-032.D

252.0, 253.0, 126.0

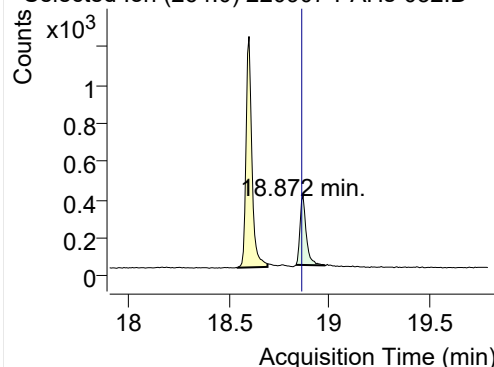


+ SIM (18.618-18.674 min, 8 scans) (\*\*) 22090

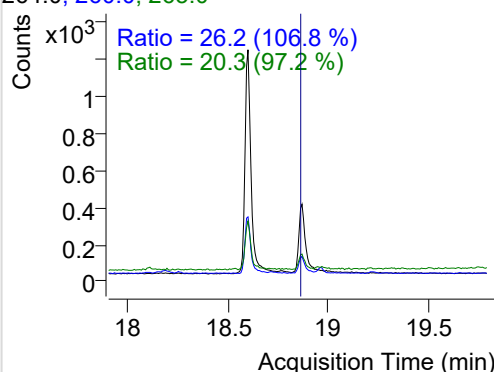


## IS-D12-Perylene

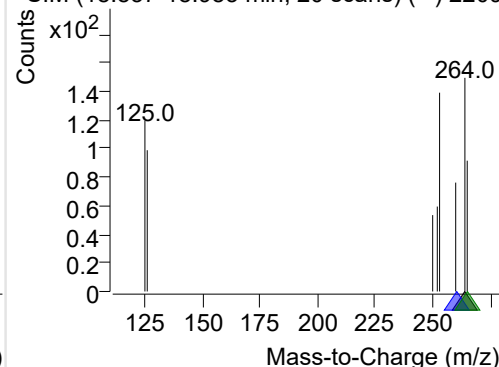
+ Selected Ion (264.0) 220907-PAHs-032.D



264.0, 260.0, 265.0

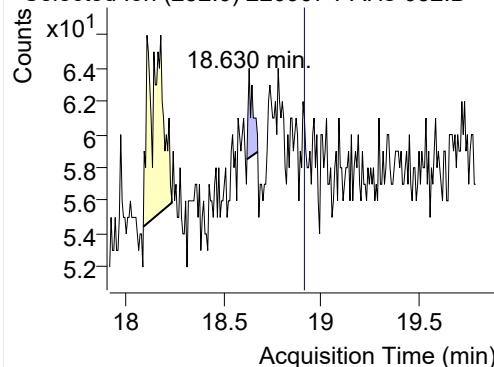


+ SIM (18.837-18.983 min, 20 scans) (\*\*) 2209

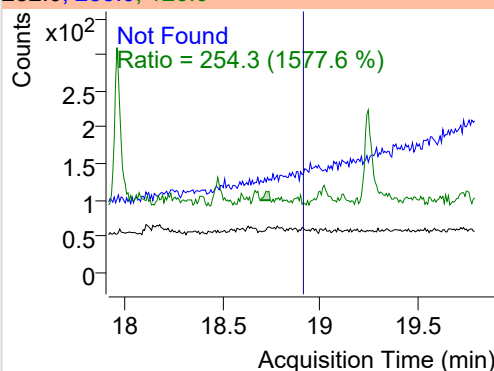


## Perylene

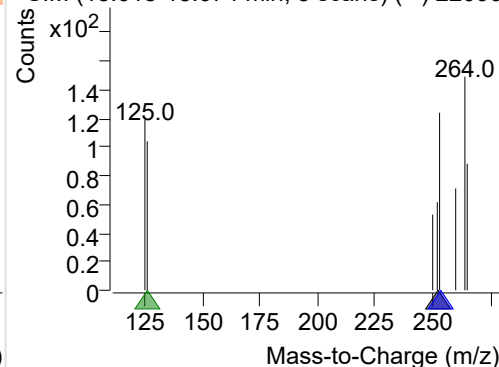
+ Selected Ion (252.0) 220907-PAHs-032.D



252.0, 253.0, 126.0

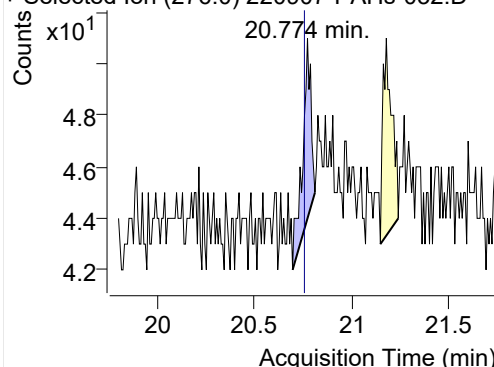


+ SIM (18.618-18.674 min, 8 scans) (\*\*) 22090

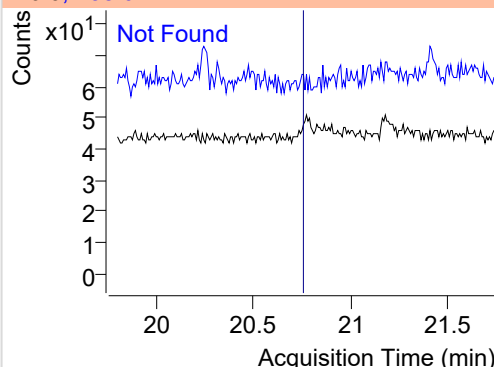


## Indeno(1,2,3-c,d)pyrene

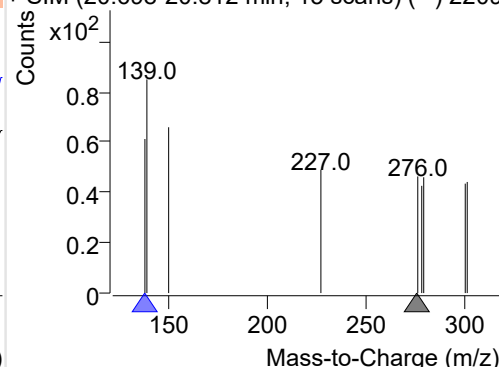
+ Selected Ion (276.0) 220907-PAHs-032.D



276.0, 138.0

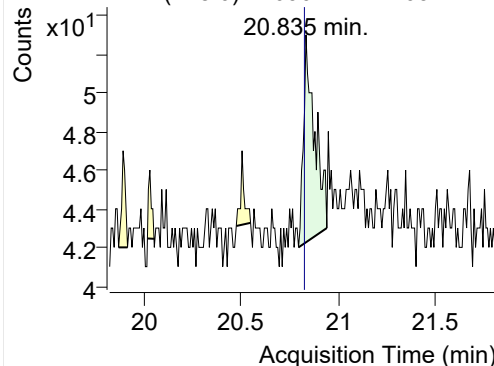


+ SIM (20.698-20.812 min, 15 scans) (\*\*) 2209

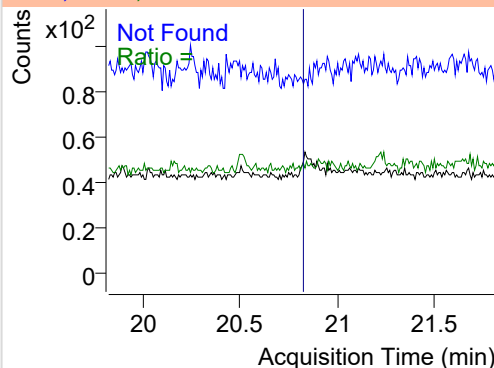


## Dibenz(a,h)anthracene

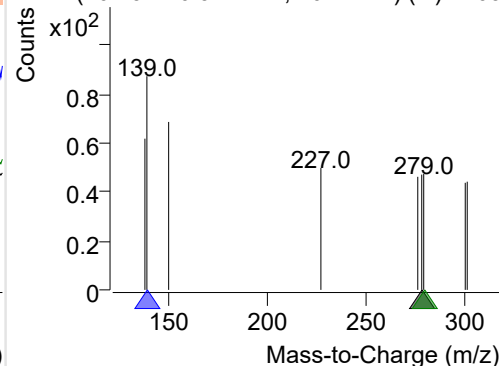
+ Selected Ion (278.0) 220907-PAHs-032.D



278.0, 139.0, 279.0

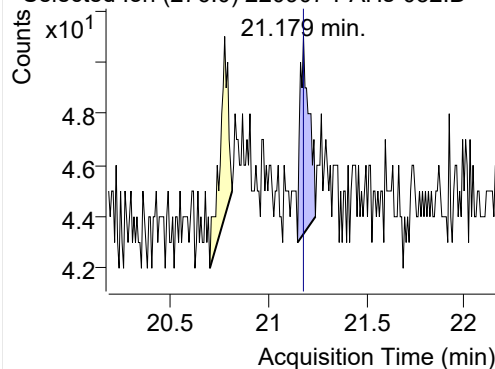


+ SIM (20.797-20.942 min, 20 scans) (\*\*) 2209

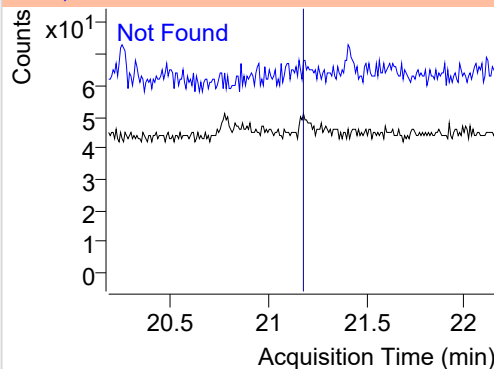


**Benzo(g,h,i)perylene**

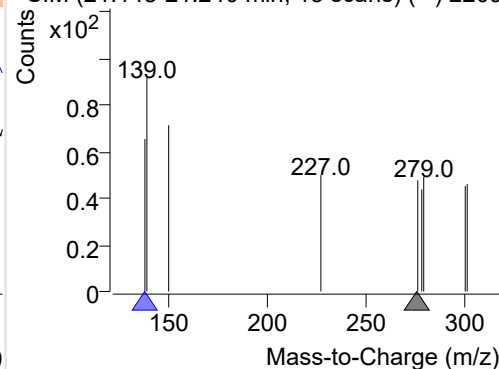
+ Selected Ion (276.0) 220907-PAHs-032.D



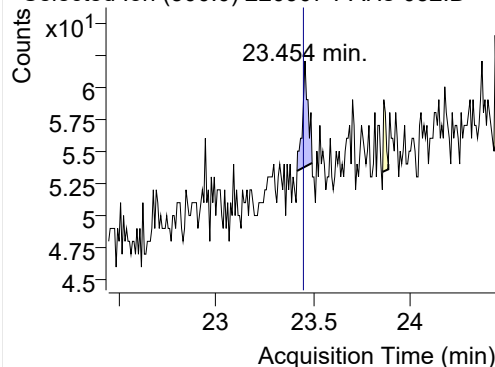
276.0, 138.0



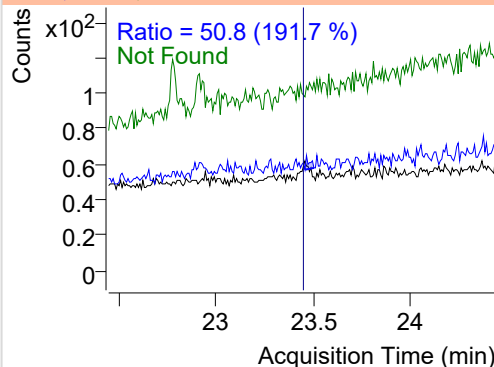
+ SIM (21.148-21.240 min, 13 scans) (\*\*) 2209

**Coronene**

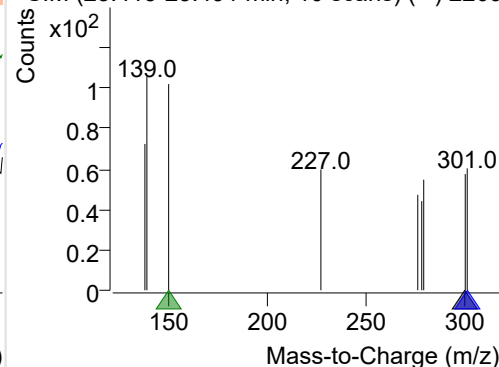
+ Selected Ion (300.0) 220907-PAHs-032.D



300.0, 301.0, 150.0



+ SIM (23.413-23.491 min, 10 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

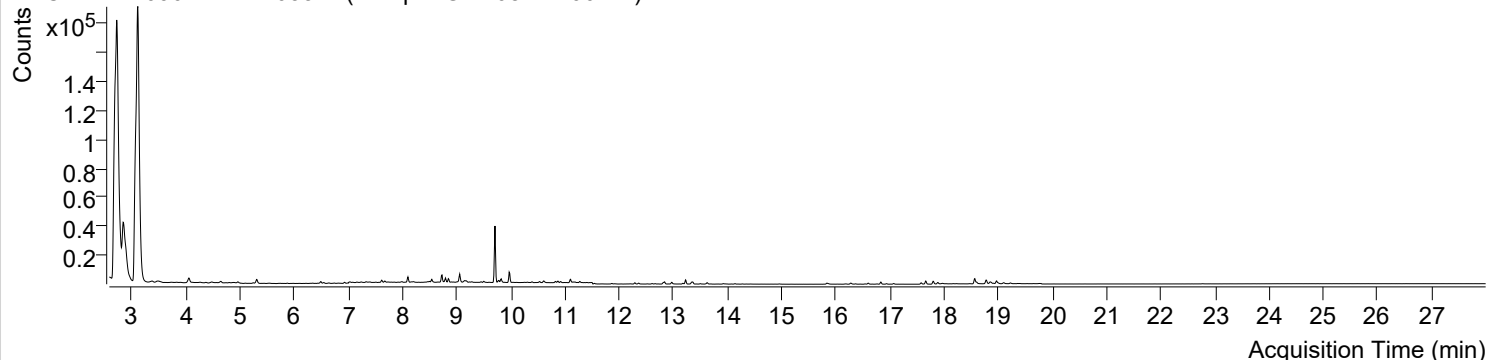


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 5:01:08	Data File	220907-PAHs-033.D
Type	Sample	Name	Sample-Gas-0821-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

+ TIC SIM 220907-PAHs-033.D (Sample-Gas-0821-100DIL)

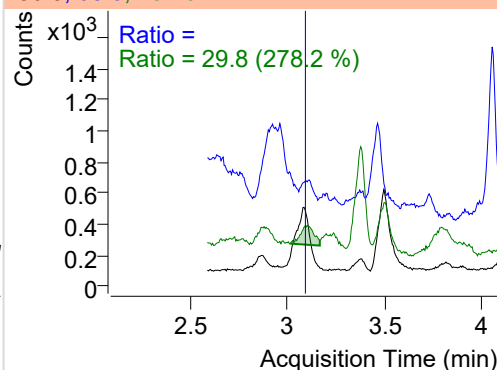
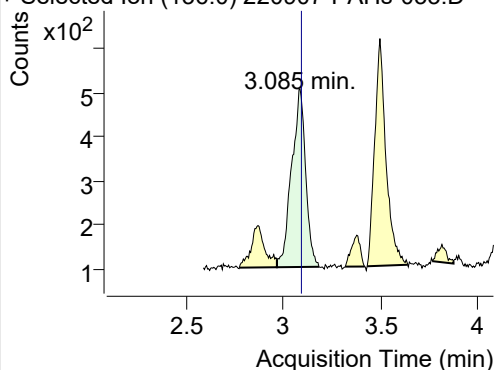


Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.085	136.0	2030	404.16	ND ng/ml	29.8
Naphthalene	3.112	128.0	704296	152569.16	ND ng/ml	12.8
Acenaphthylene	6.540	152.0	230	118.09	ND ng/ml	70.1
IS-D10-Acenaphthene	6.493	164.0	1140	593.82	ND ng/ml	104.9
Acenaphthene	6.552	154.0	315	152.31	ND ng/ml	88.3
LSS-D10-Fluorene	7.617	176.0	1060	622.54	ND ng/ml	97.6
Fluorene	7.669	166.0	775	388.35	ND ng/ml	122.8
IS-D10-Phenanthrene	9.780	188.0	1824	1022.38	ND ng/ml	26.5
Phenanthrene	9.822	178.0	2810	1529.90	ND ng/ml	19.6
Anthracene	9.969	178.0	3194	1879.90	ND ng/ml	28.6
Fluoranthene	12.521	202.0	118	64.62	ND ng/ml	
LSS-D10-Pyrene	12.971	212.0	1484	864.52	ND ng/ml	19.6
Pyrene	13.003	202.0	184	86.43	ND ng/ml	
Benz(a)anthracene	15.800	228.0	18	9.22	ND ng/ml	
IS-D12-Chrysene	15.833	240.0	1100	512.99	ND ng/ml	20.8
Chrysene	15.876	228.0	46	16.83	ND ng/ml	34.5
Benzo(b)fluoranthene	18.231	252.0	63	32.18	ND ng/ml	
Benzo(k)fluoranthene	18.231	252.0	63	32.18	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.566	264.0	3701	1227.59	ND ng/ml	
Benzo(e)pyrene	18.566	252.0	588	235.06	ND ng/ml	16.5
Benzo(a)pyrene	18.772	252.0	427	181.24	ND ng/ml	18.4
IS-D12-Perylene	18.865	264.0	1854	607.59	ND ng/ml	10.3
Perylene	18.843	252.0	314	133.25	ND ng/ml	14.5
Indeno(1,2,3-c,d)pyrene	20.835	276.0	32	6.26	ND ng/ml	
Dibenz(a,h)anthracene	20.843	278.0	30	12.00	ND ng/ml	
Benzo(g,h,i)perylene	21.171	276.0	11	5.36	ND ng/ml	
Coronene	23.447	300.0	18	7.09	ND ng/ml	

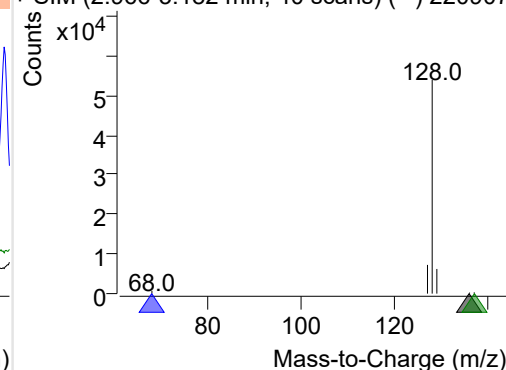
## IS-D8-Naphthalene

+ Selected Ion (136.0) 220907-PAHs-033.D

136.0, 68.0, 137.0

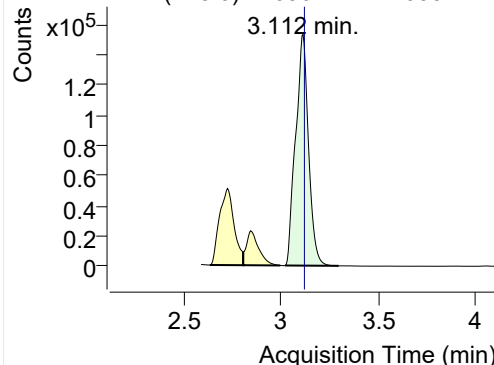


+ SIM (2.966-3.182 min, 40 scans) (\*\*) 220907

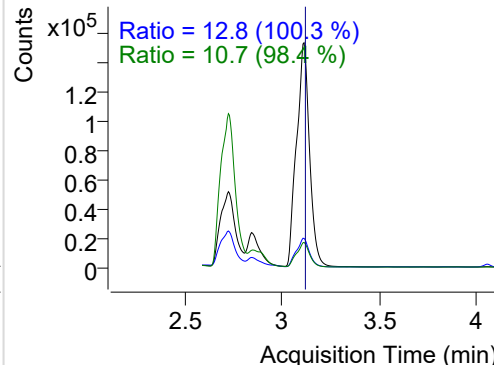


**Naphthalene**

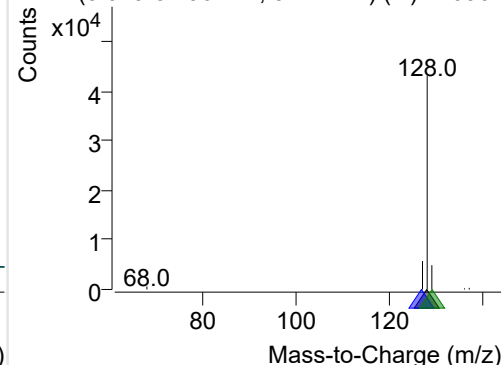
+ Selected Ion (128.0) 220907-PAHs-033.D



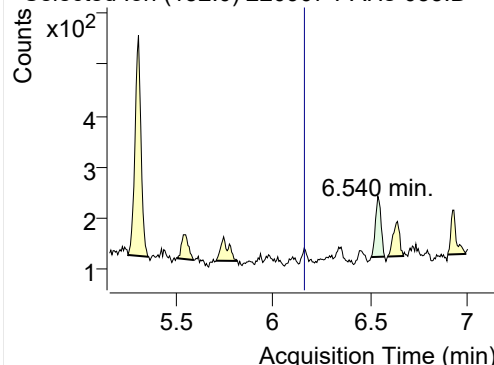
128.0, 127.0, 129.0



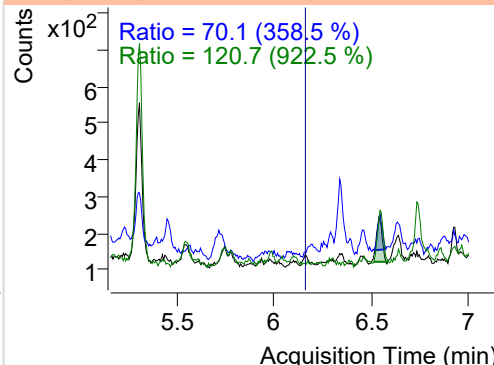
+ SIM (3.019-3.296 min, 51 scans) (\*\*) 220907

**Acenaphthylene**

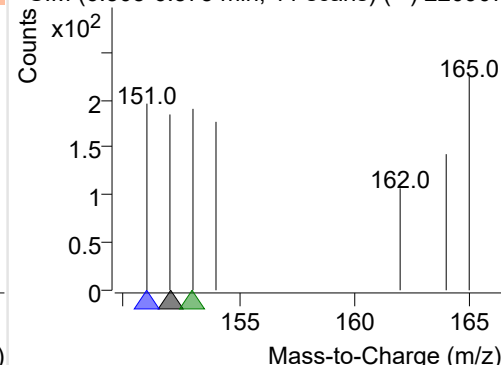
+ Selected Ion (152.0) 220907-PAHs-033.D



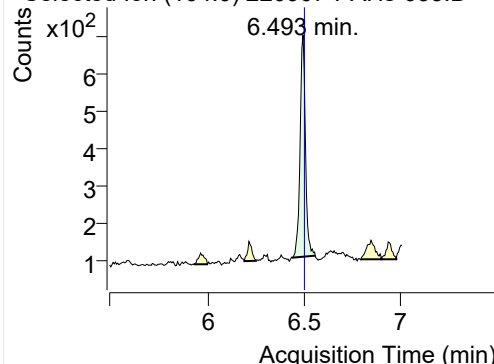
152.0, 151.0, 153.0



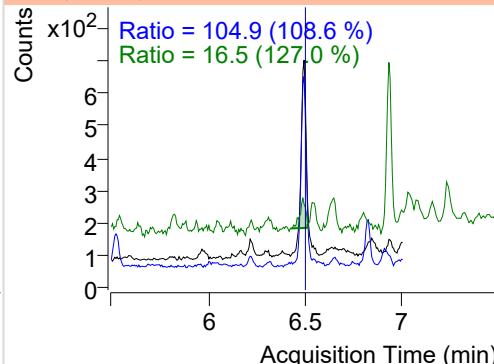
+ SIM (6.505-6.575 min, 11 scans) (\*\*) 220907

**IS-D10-Acenaphthene**

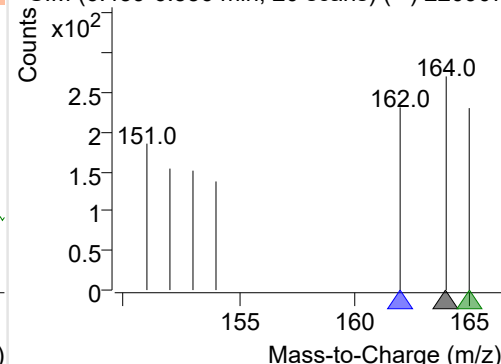
+ Selected Ion (164.0) 220907-PAHs-033.D



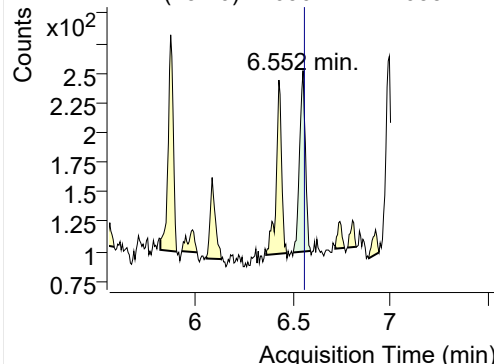
164.0, 162.0, 165.0



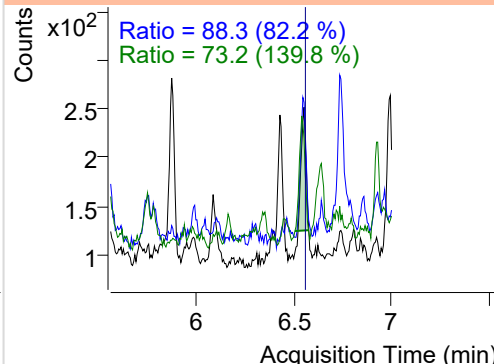
+ SIM (6.439-6.556 min, 20 scans) (\*\*) 220907

**Acenaphthene**

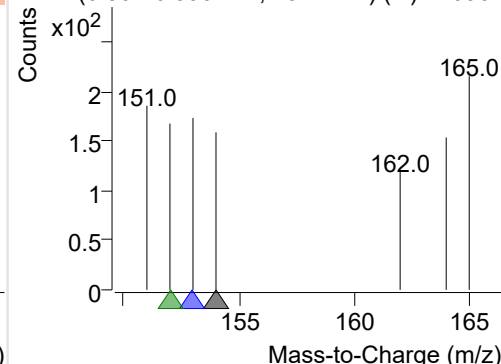
+ Selected Ion (154.0) 220907-PAHs-033.D



154.0, 153.0, 152.0

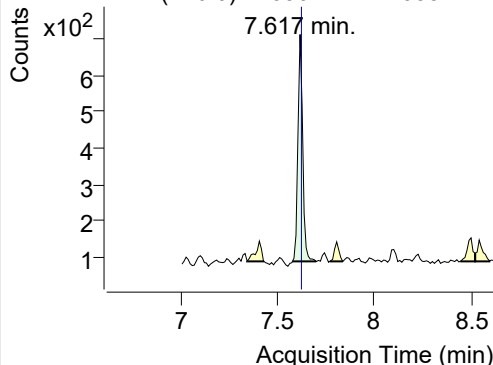


+ SIM (6.501-6.590 min, 15 scans) (\*\*) 220907

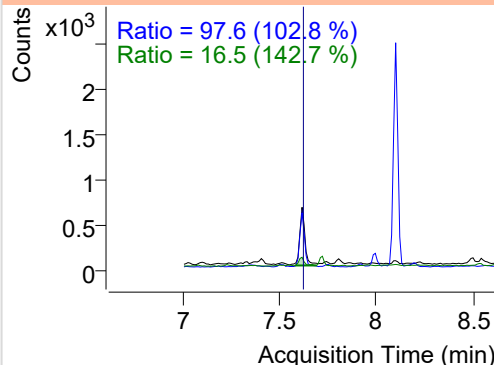


## LSS-D10-Fluorene

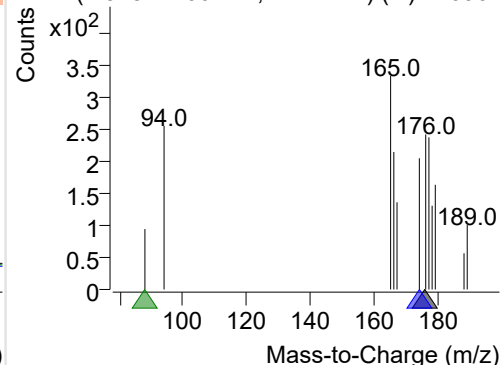
+ Selected Ion (176.0) 220907-PAHs-033.D



176.0, 174.0, 88.0

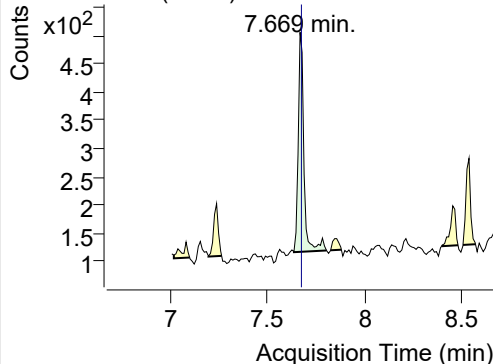


+ SIM (7.578-7.700 min, 11 scans) (\*\*) 220907

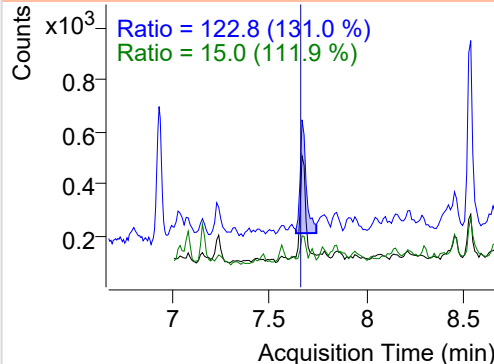


## Fluorene

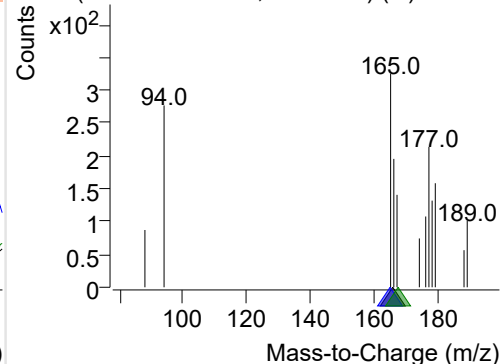
+ Selected Ion (166.0) 220907-PAHs-033.D



166.0, 165.0, 167.0

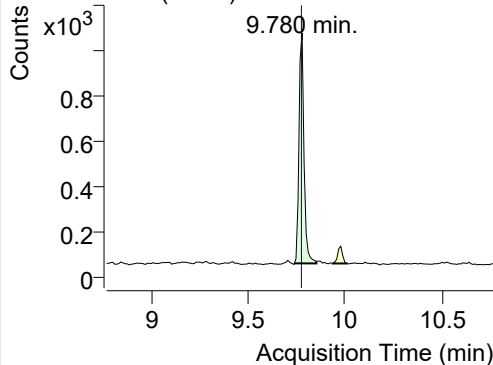


+ SIM (7.638-7.806 min, 16 scans) (\*\*) 220907

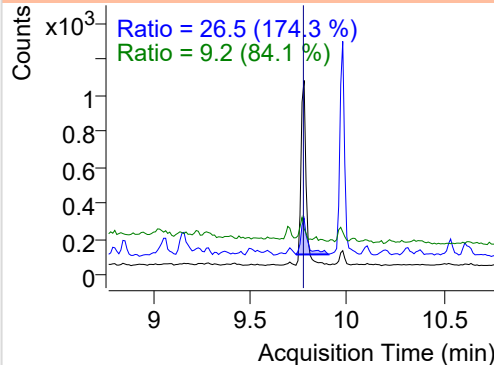


## IS-D10-Phenanthrene

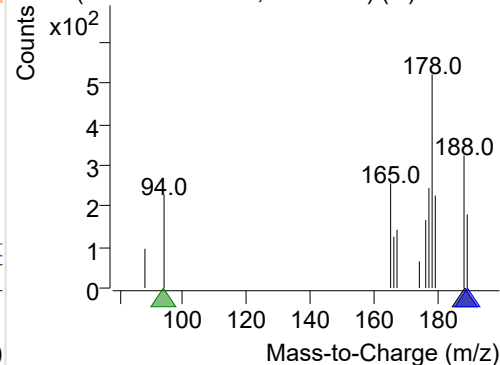
+ Selected Ion (188.0) 220907-PAHs-033.D



188.0, 189.0, 94.0

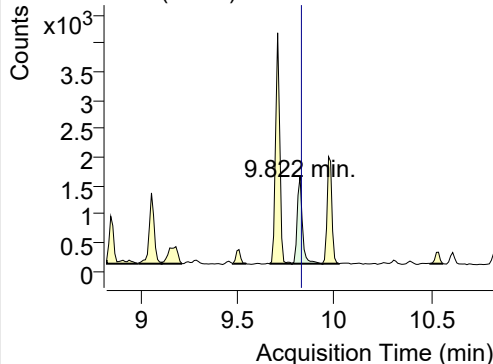


+ SIM (9.740-9.853 min, 11 scans) (\*\*) 220907

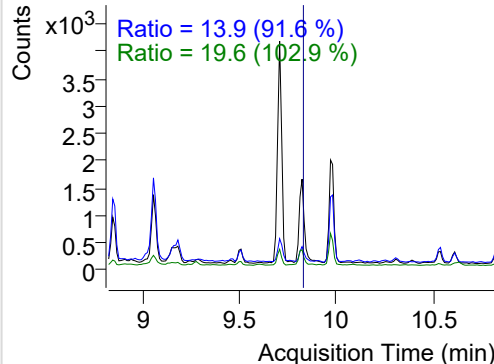


## Phenanthrene

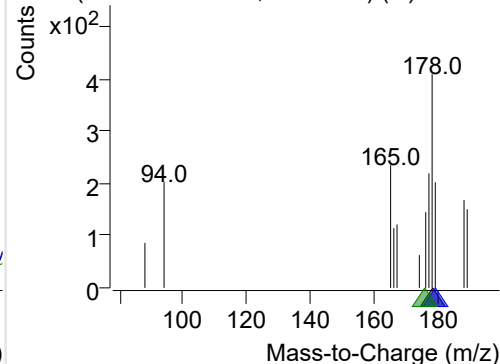
+ Selected Ion (178.0) 220907-PAHs-033.D



178.0, 179.0, 176.0

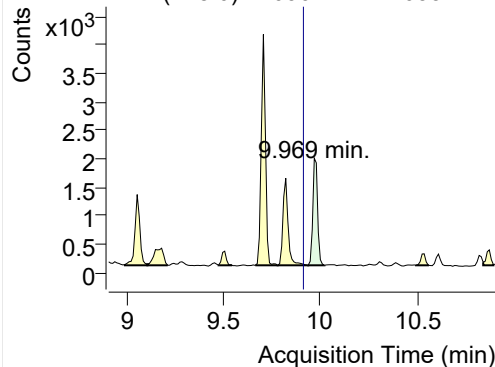


+ SIM (9.780-9.937 min, 16 scans) (\*\*) 220907

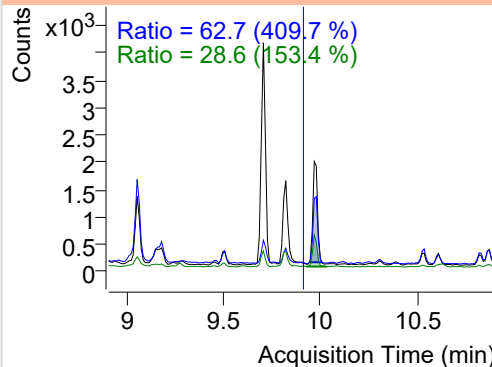


**Anthracene**

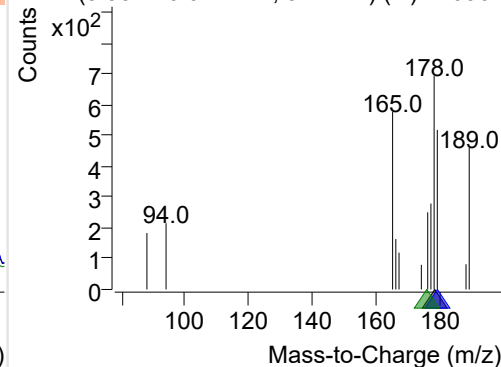
+ Selected Ion (178.0) 220907-PAHs-033.D



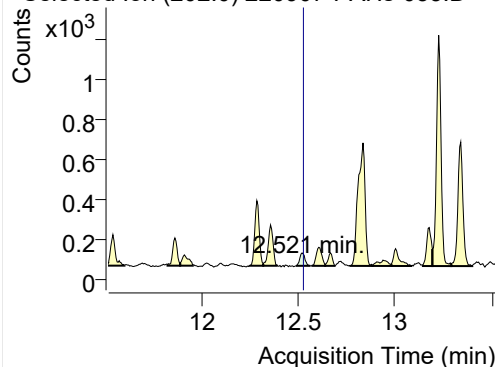
178.0, 179.0, 176.0



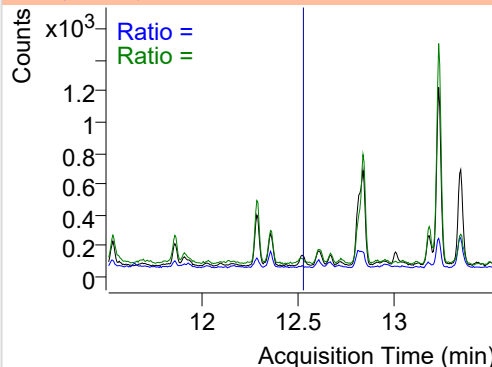
+ SIM (9.937-10.022 min, 9 scans) (\*\*) 220907

**Fluoranthene**

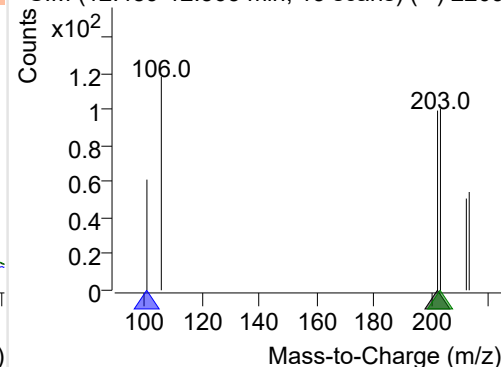
+ Selected Ion (202.0) 220907-PAHs-033.D



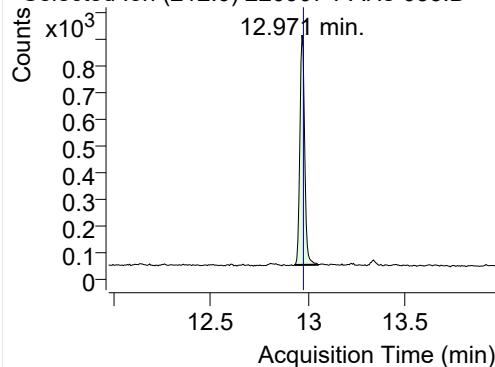
202.0, 101.0, 203.0



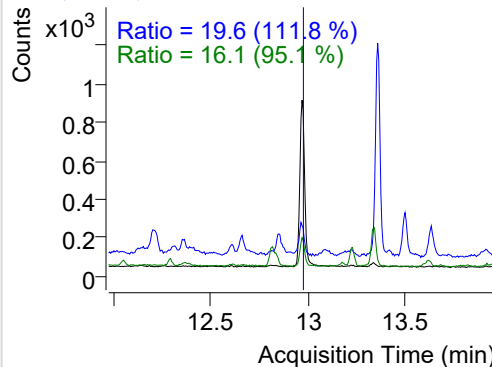
+ SIM (12.489-12.563 min, 13 scans) (\*\*) 2209

**LSS-D10-Pyrene**

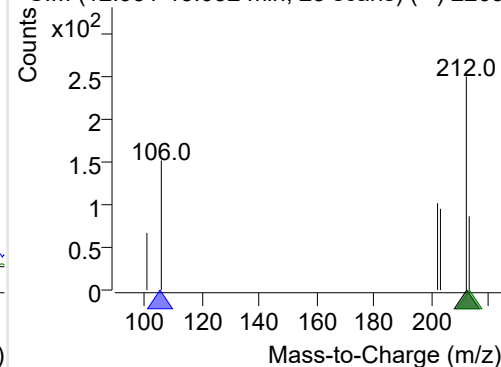
+ Selected Ion (212.0) 220907-PAHs-033.D



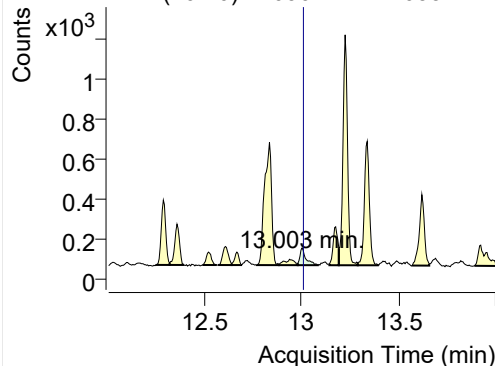
212.0, 106.0, 213.0



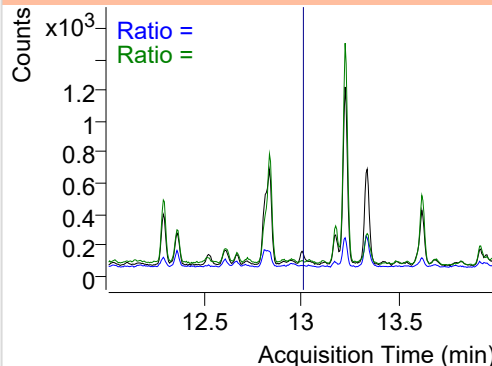
+ SIM (12.931-13.052 min, 23 scans) (\*\*) 2209

**Pyrene**

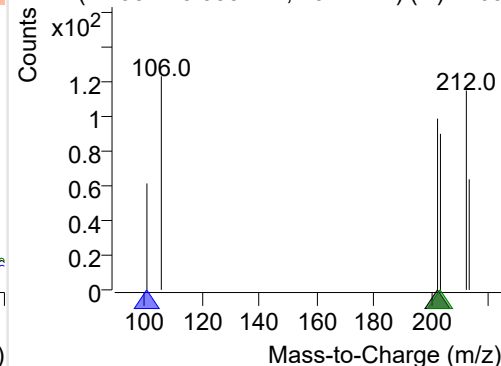
+ Selected Ion (202.0) 220907-PAHs-033.D



202.0, 101.0, 203.0



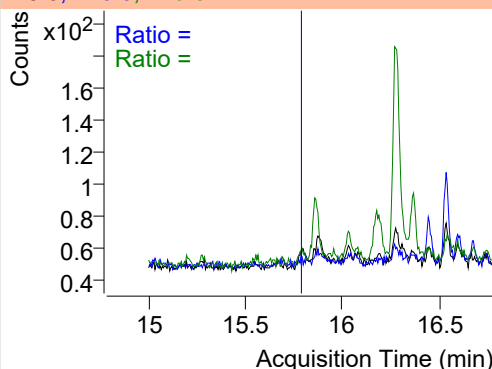
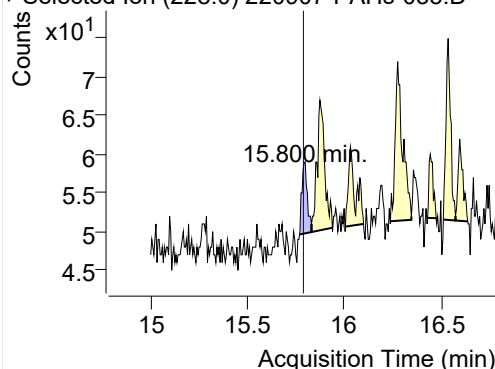
+ SIM (12.982-13.085 min, 20 scans) (\*\*) 2209



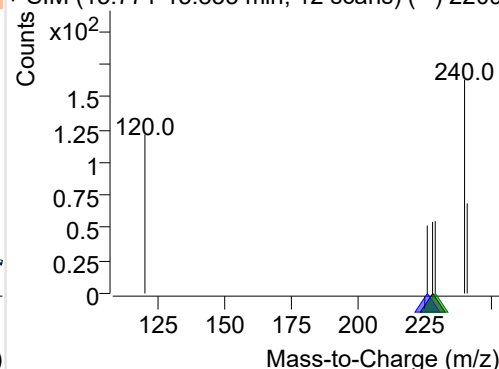
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-033.D

228.0, 226.0, 229.0

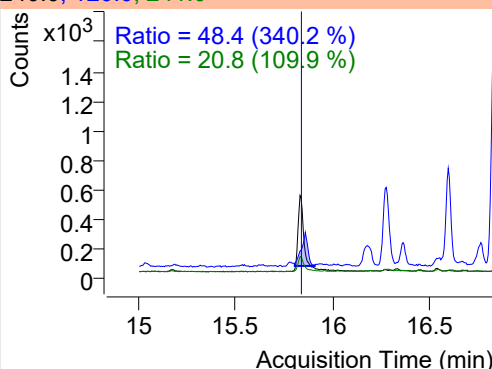
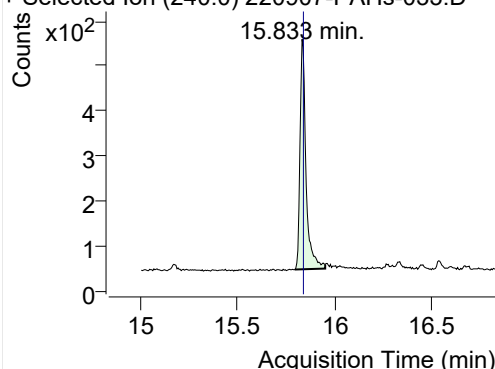


+ SIM (15.771-15.833 min, 12 scans) (\*\*) 2209

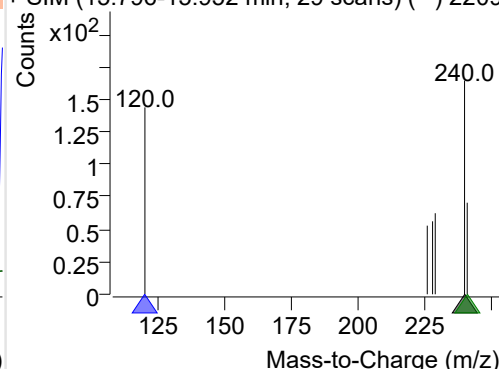
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-033.D

240.0, 120.0, 241.0

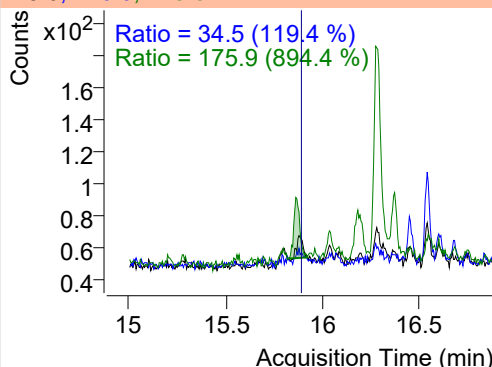
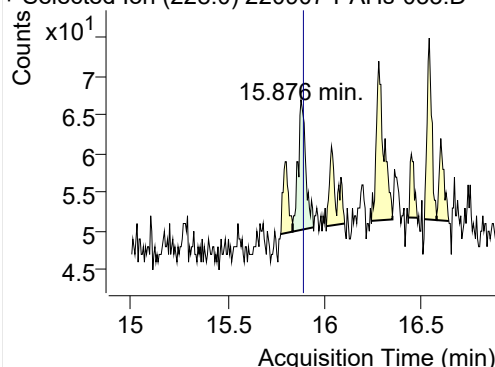


+ SIM (15.796-15.952 min, 29 scans) (\*\*) 2209

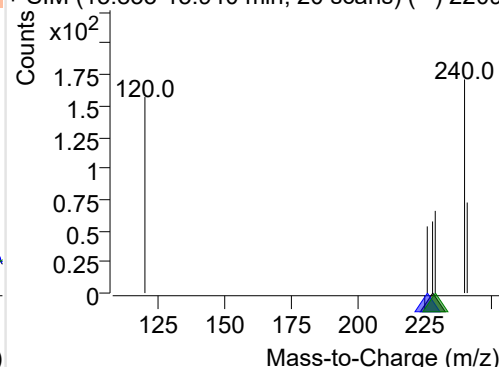
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-033.D

228.0, 226.0, 229.0

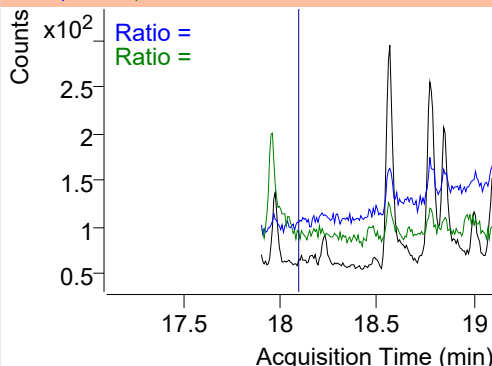
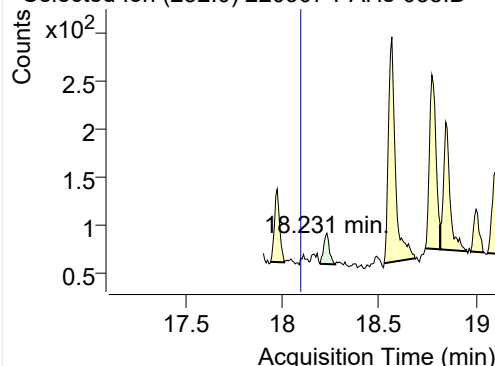


+ SIM (15.833-15.940 min, 20 scans) (\*\*) 2209

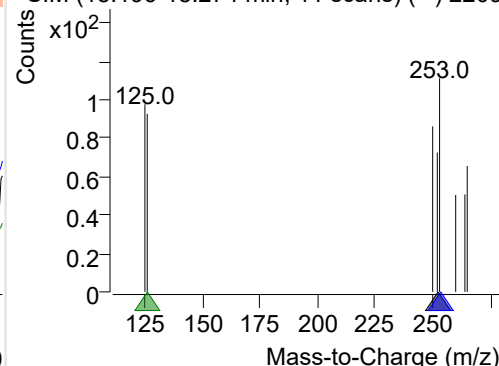
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-033.D

252.0, 253.0, 126.0



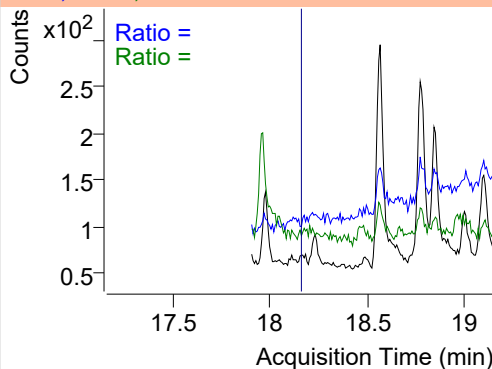
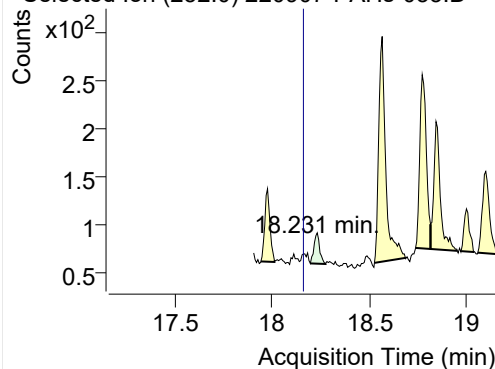
+ SIM (18.196-18.274 min, 11 scans) (\*\*) 2209



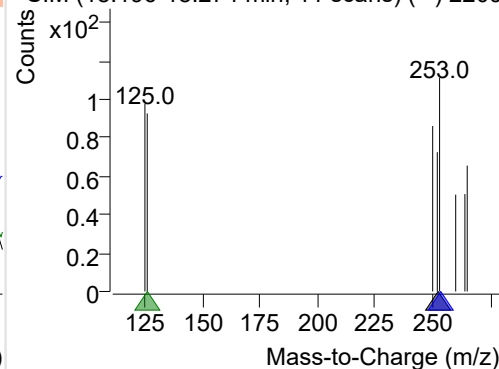
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-033.D

252.0, 253.0, 126.0

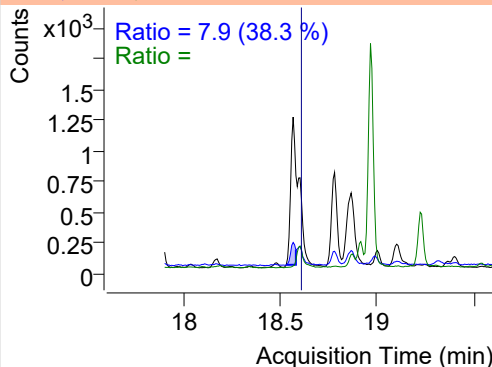
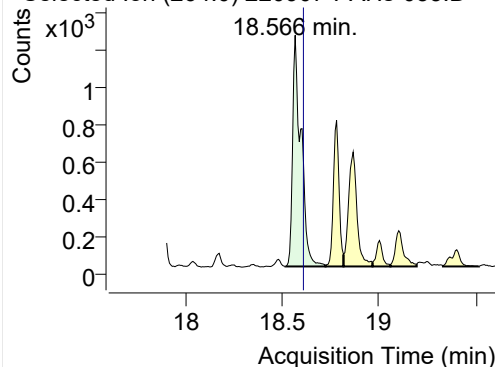


+ SIM (18.196-18.274 min, 11 scans) (\*\*) 2209

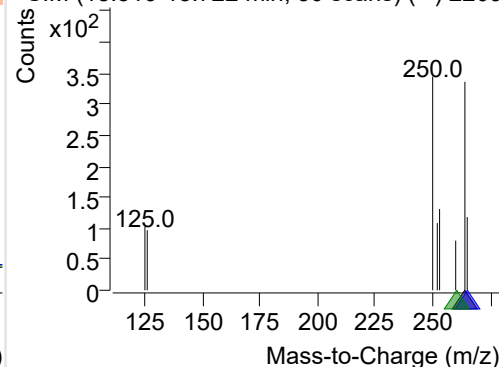
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-033.D

264.0, 265.0, 260.0

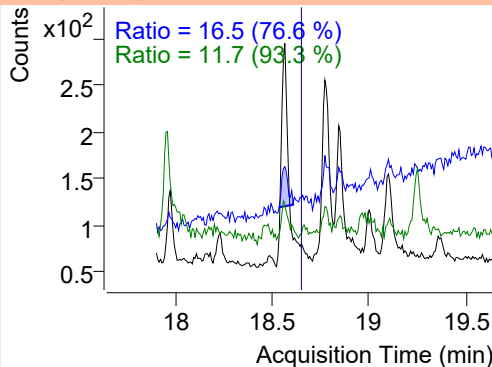
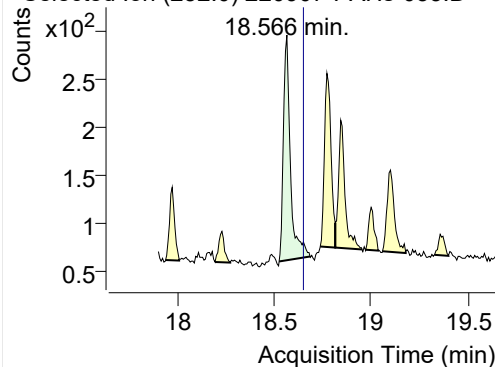


+ SIM (18.516-18.722 min, 30 scans) (\*\*) 2209

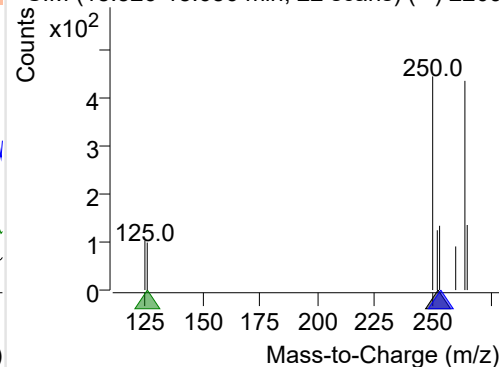
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-033.D

252.0, 253.0, 126.0

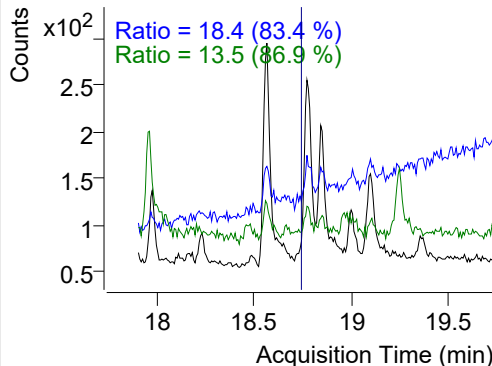
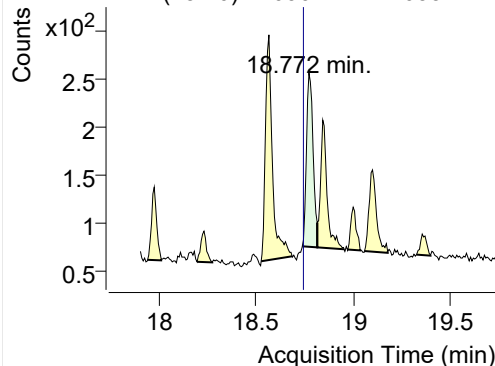


+ SIM (18.526-18.686 min, 22 scans) (\*\*) 2209

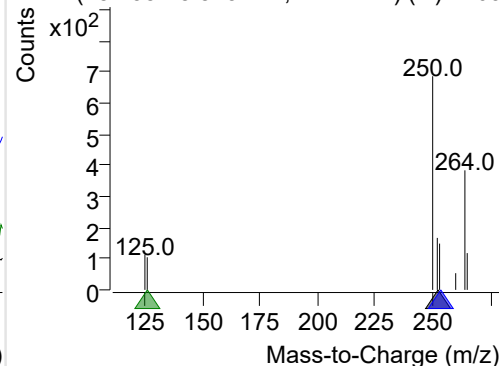
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-033.D

252.0, 253.0, 126.0



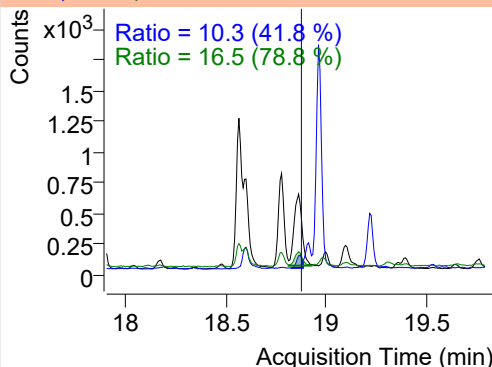
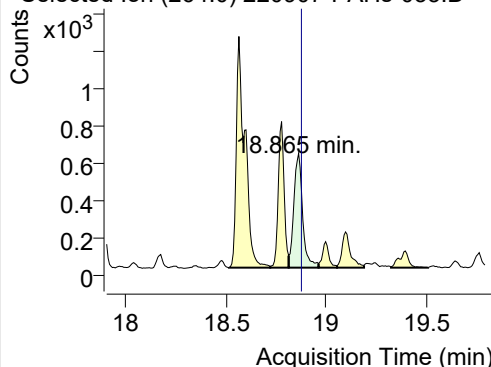
+ SIM (18.738-18.815 min, 11 scans) (\*\*) 2209



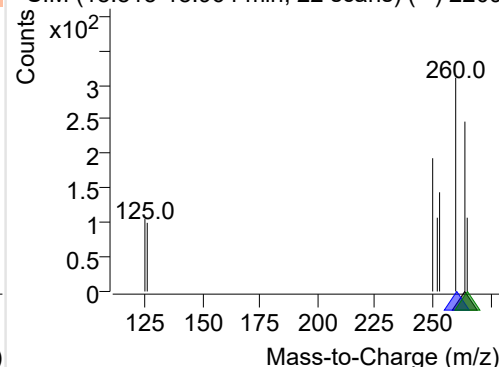
## IS-D12-Perylene

+ Selected Ion (264.0) 220907-PAHs-033.D

264.0, 260.0, 265.0



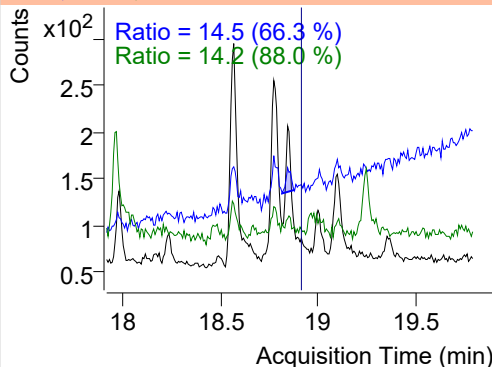
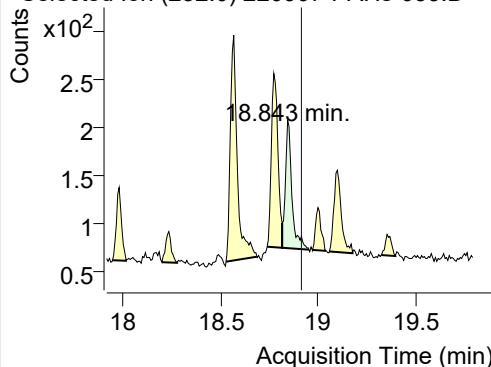
+ SIM (18.815-18.964 min, 22 scans) (\*\*) 2209



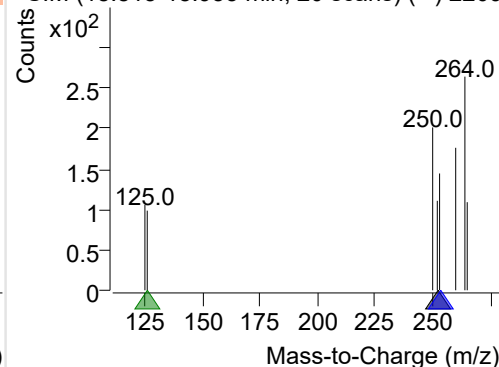
## Perylene

+ Selected Ion (252.0) 220907-PAHs-033.D

252.0, 253.0, 126.0



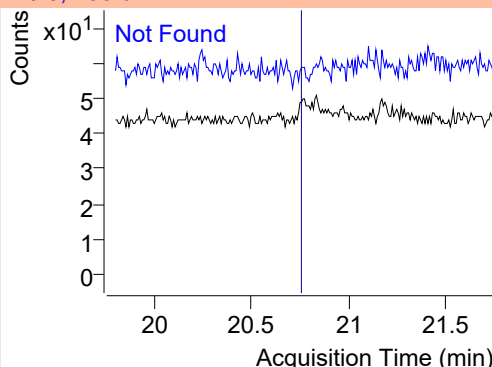
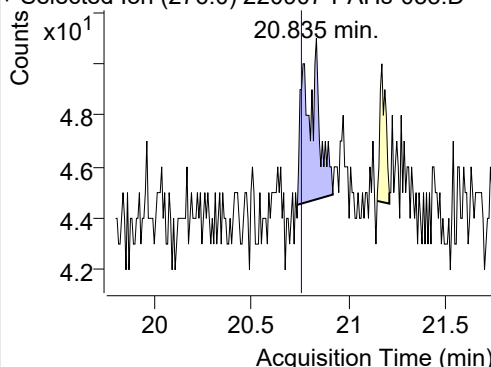
+ SIM (18.815-18.953 min, 20 scans) (\*\*) 2209



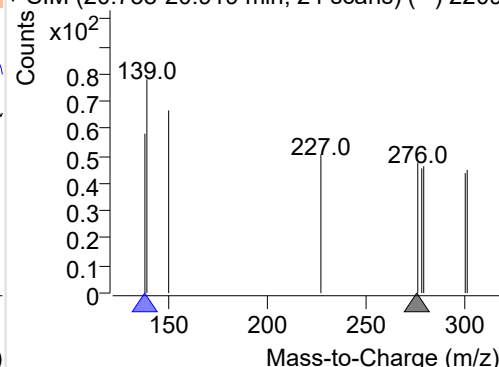
## Indeno(1,2,3-c,d)pyrene

+ Selected Ion (276.0) 220907-PAHs-033.D

276.0, 138.0



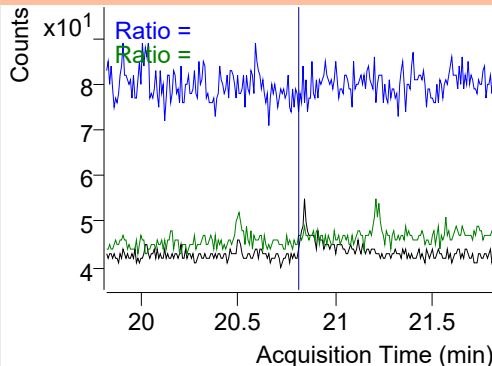
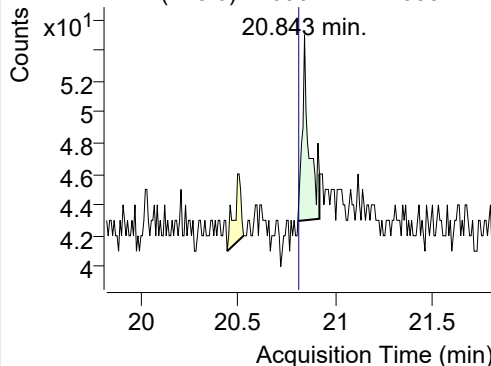
+ SIM (20.738-20.919 min, 24 scans) (\*\*) 2209



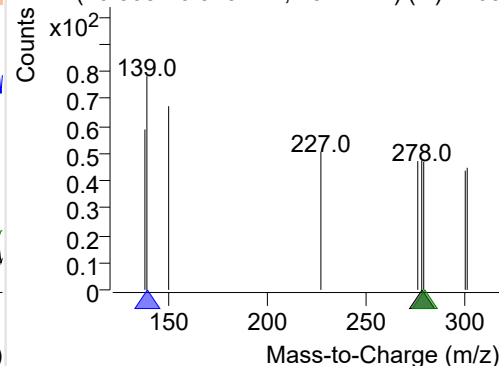
## Dibenz(a,h)anthracene

+ Selected Ion (278.0) 220907-PAHs-033.D

278.0, 139.0, 279.0



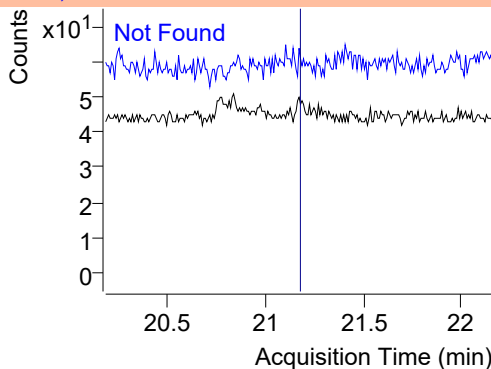
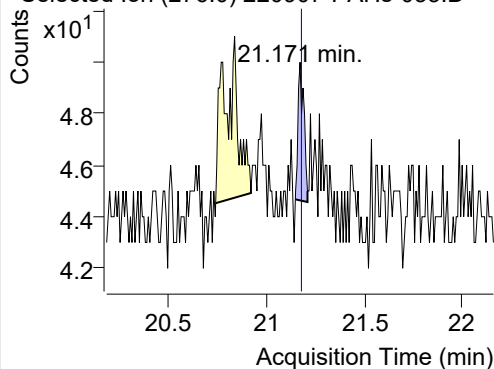
+ SIM (20.808-20.919 min, 15 scans) (\*\*) 2209



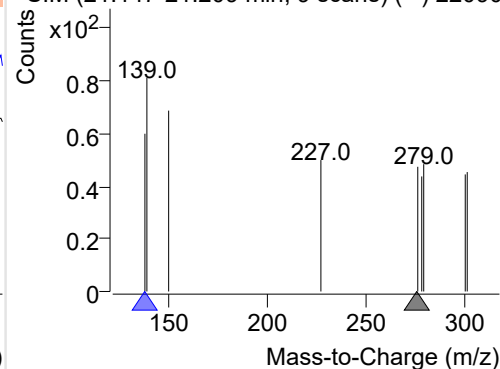
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-033.D

276.0, 138.0

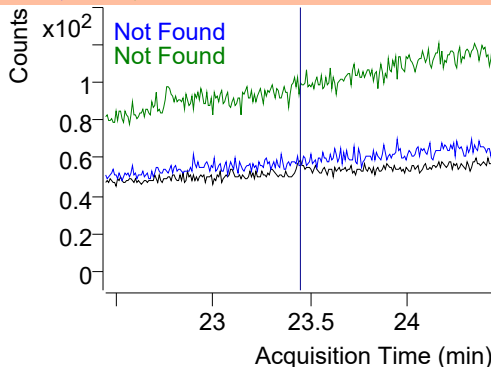
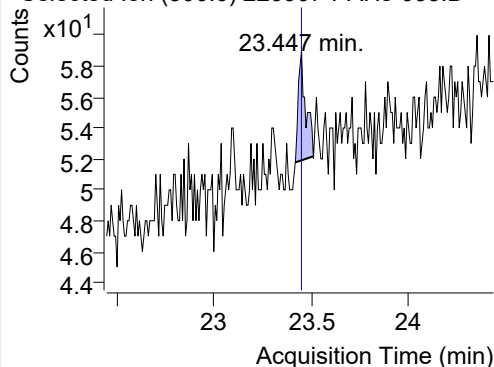


+ SIM (21.147-21.209 min, 9 scans) (\*\*) 22090

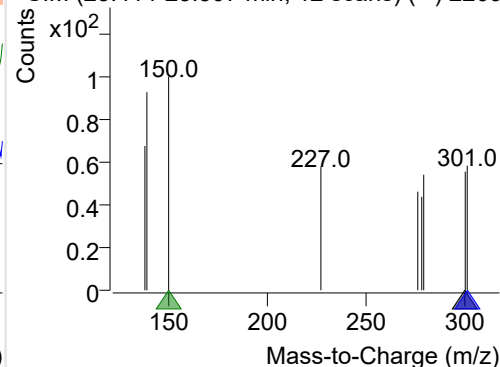
**Coronene**

+ Selected Ion (300.0) 220907-PAHs-033.D

300.0, 301.0, 150.0



+ SIM (23.414-23.507 min, 12 scans) (\*\*) 2209





## Quantitative Analysis Sample Based Report

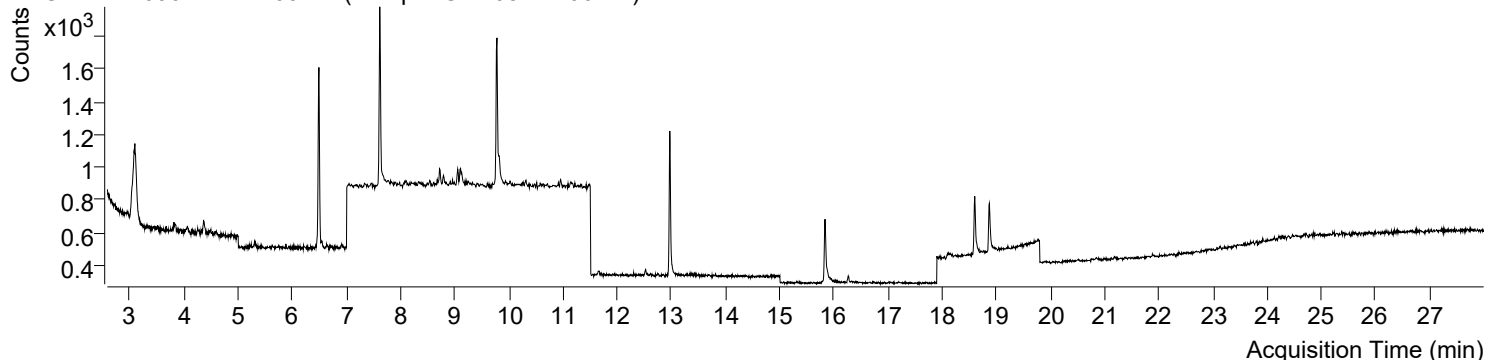


Trusted Answers

Batch Data Path File Name	D:\MassHunter\GCMS\1\data\PAHs\220907-PAHs-Sample\QuantResults\220907-PAHs-Quant.batch.bin		
Analysis Time Stamp	2022-10-08 오후 3:18:42	Analyst Name	DESKTOP-86B7UPG\5975MS
Report Generation Time	2022-10-08 오후 3:18:49	Report Generator Name	DESKTOP-86B7UPG\5975MS
Calibration Last Update	2022-10-08 오후 3:16:43	Batch State	Processed
Analyze Quant Version	10.2	Report Quant Version	10.2
Acq. Date-Time	2022-09-08 오전 5:32:11	Data File	220907-PAHs-034.D
Type	Sample	Name	Sample-Gas-0827-100DIL
Dil.	1	Acq. Method File	PAHs 19mix-Method

## Sample Chromatogram

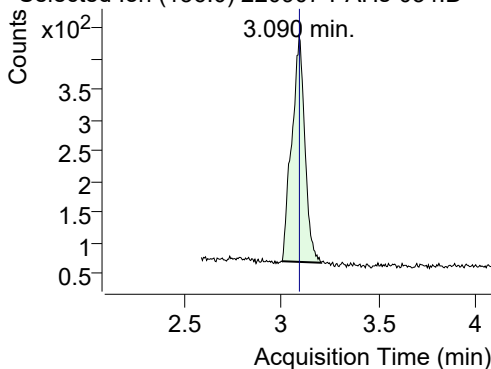
+ TIC SIM 220907-PAHs-034.D (Sample-Gas-0827-100DIL)



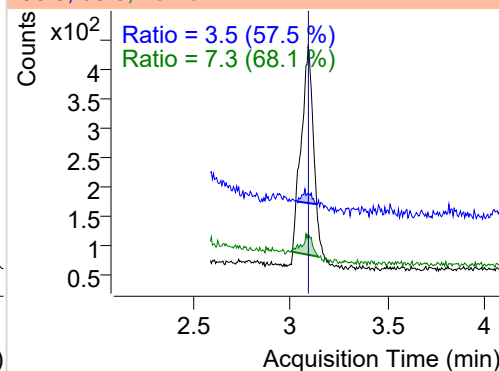
Name	RT	Transition	Resp.	Height	Final Conc. Units	Ratio
IS-D8-Naphthalene	3.090	136.0	1726	368.32	ND ng/ml	7.3
Naphthalene	3.123	128.0	259	61.89	ND ng/ml	
Acenaphthylene	6.001	152.0	2	5.50	ND ng/ml	
IS-D10-Acenaphthene	6.493	164.0	974	537.06	ND ng/ml	95.4
Acenaphthene	6.552	154.0	11	9.90	ND ng/ml	118.7
LSS-D10-Fluorene	7.617	176.0	887	500.71	ND ng/ml	95.8
Fluorene	7.669	166.0	38	19.73	ND ng/ml	98.0
IS-D10-Phenanthrene	9.780	188.0	1475	727.21	ND ng/ml	15.5
Phenanthrene	9.822	178.0	181	76.59	ND ng/ml	13.7
Anthracene	9.822	178.0	181	76.59	ND ng/ml	13.7
Fluoranthene	12.526	202.0	49	25.94	ND ng/ml	16.0
LSS-D10-Pyrene	12.971	212.0	1160	661.62	ND ng/ml	17.6
Pyrene	13.003	202.0	54	26.94	ND ng/ml	
Benz(a)anthracene	15.806	228.0	15	8.05	ND ng/ml	
IS-D12-Chrysene	15.838	240.0	722	291.66	ND ng/ml	18.5
Chrysene	15.887	228.0	46	14.05	ND ng/ml	24.5
Benzo(b)fluoranthene	18.117	252.0	27	8.64	ND ng/ml	
Benzo(k)fluoranthene	18.117	252.0	27	8.64	ND ng/ml	
SS-D12-Benzo(e)pyrene	18.601	264.0	521	241.73	ND ng/ml	25.0
Benzo(e)pyrene	18.651	252.0	13	7.64	ND ng/ml	
Benzo(a)pyrene	18.758	252.0	10	5.64	ND ng/ml	
IS-D12-Perylene	18.872	264.0	490	200.07	ND ng/ml	24.6
Perylene	18.758	252.0	10	5.64	ND ng/ml	
Indeno(1,2,3-c,d)pytene	21.179	276.0	22	7.43	ND ng/ml	
Dibenz(a,h)anthracene	20.835	278.0	17	5.69	ND ng/ml	
Benzo(g,h,i)perylene	21.179	276.0	22	7.43	ND ng/ml	
Coronene	23.439	300.0	20	8.58	ND ng/ml	

## IS-D8-Naphthalene

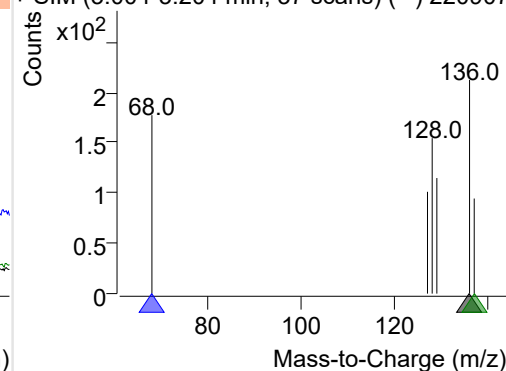
+ Selected Ion (136.0) 220907-PAHs-034.D



136.0, 68.0, 137.0

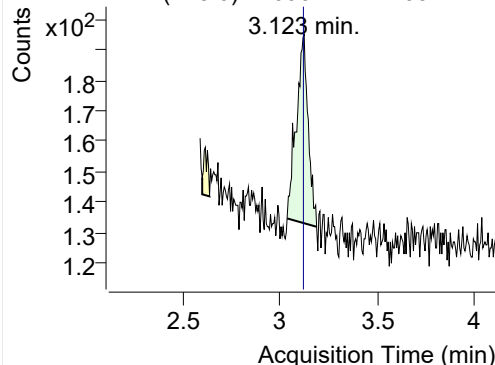


+ SIM (3.004-3.204 min, 37 scans) (\*\*) 220907

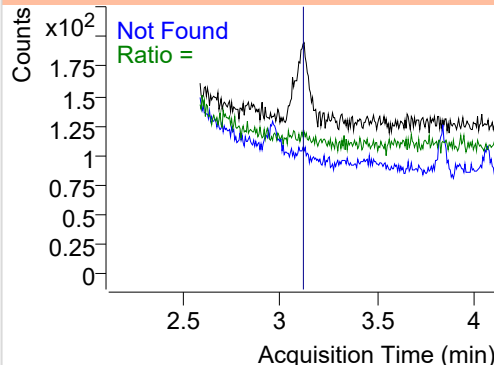


**Naphthalene**

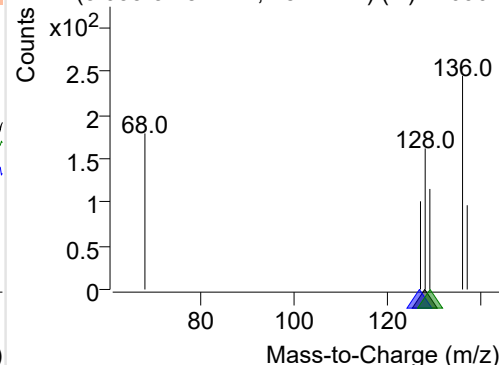
+ Selected Ion (128.0) 220907-PAHs-034.D



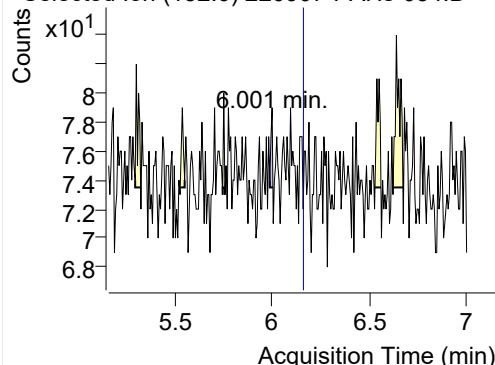
128.0, 127.0, 129.0



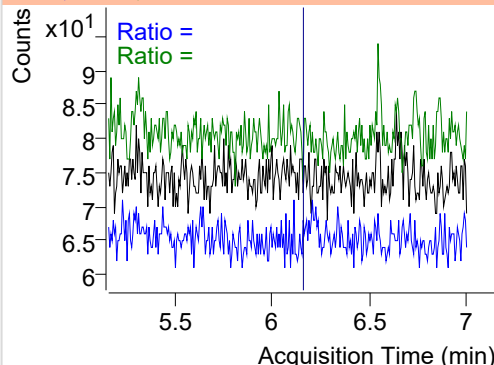
+ SIM (3.035-3.187 min, 28 scans) (\*\*) 220907

**Acenaphthylene**

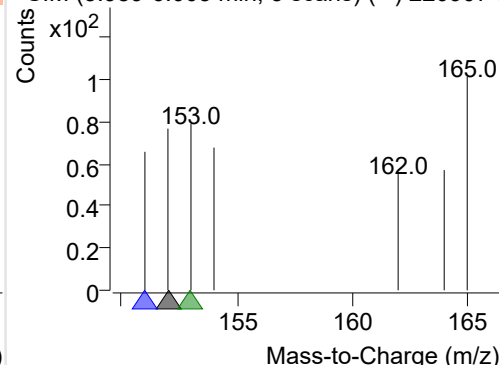
+ Selected Ion (152.0) 220907-PAHs-034.D



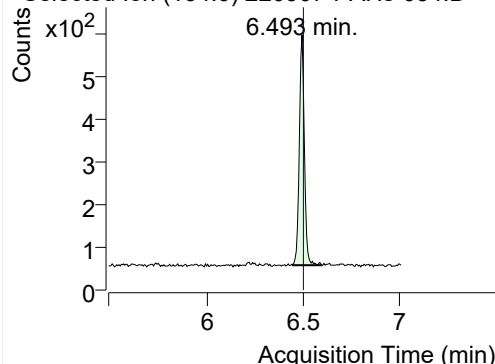
152.0, 151.0, 153.0



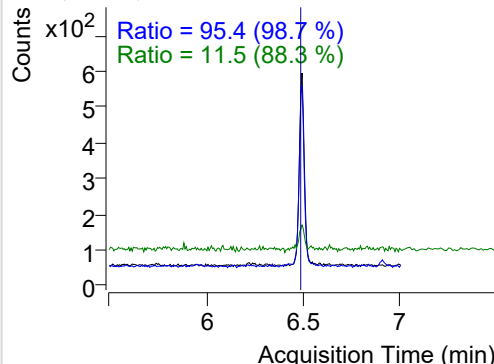
+ SIM (5.989-6.005 min, 3 scans) (\*\*) 220907-I

**IS-D10-Acenaphthene**

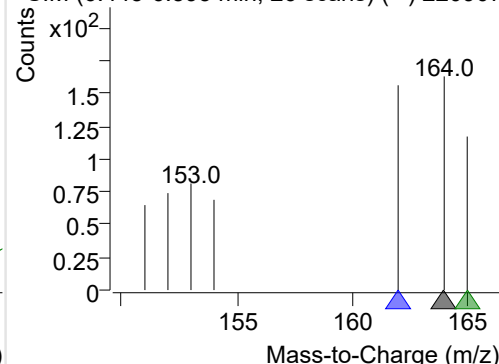
+ Selected Ion (164.0) 220907-PAHs-034.D



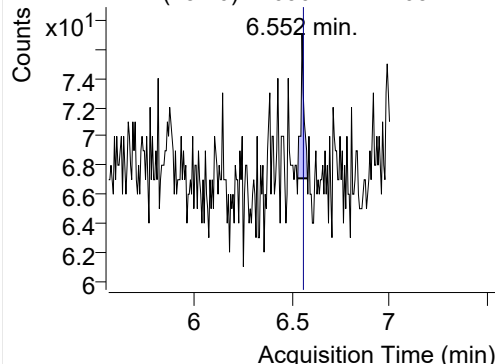
164.0, 162.0, 165.0



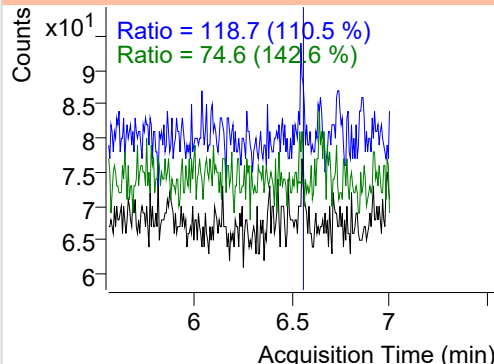
+ SIM (6.445-6.593 min, 26 scans) (\*\*) 220907

**Acenaphthene**

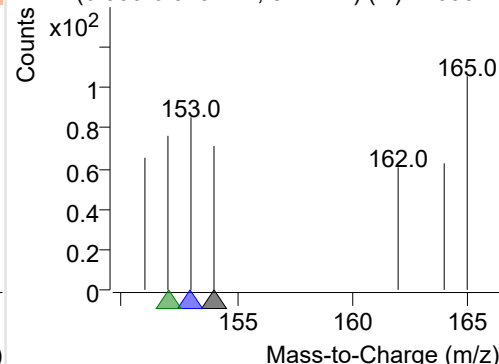
+ Selected Ion (154.0) 220907-PAHs-034.D



154.0, 153.0, 152.0

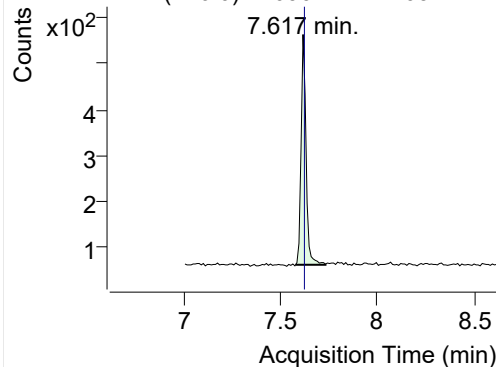


+ SIM (6.530-6.579 min, 8 scans) (\*\*) 220907-I

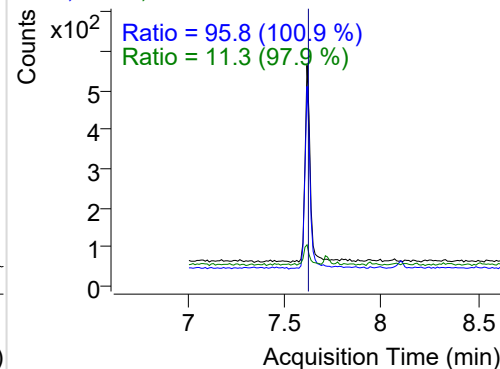


## LSS-D10-Fluorene

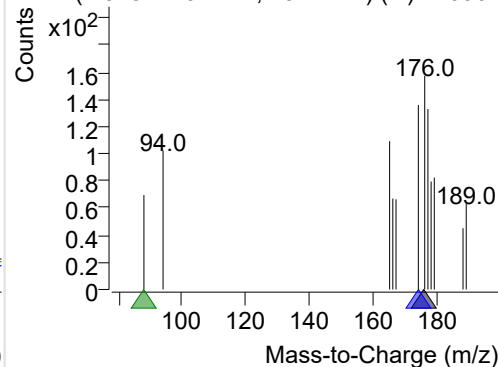
+ Selected Ion (176.0) 220907-PAHs-034.D



176.0, 174.0, 88.0

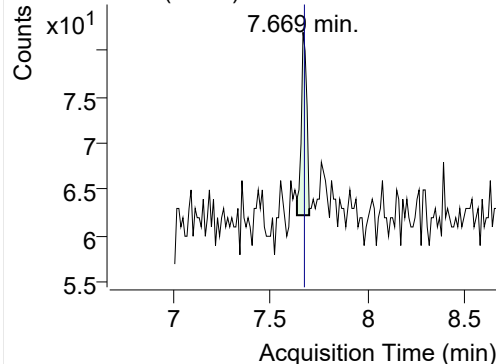


+ SIM (7.578-7.732 min, 15 scans) (\*\*) 220907

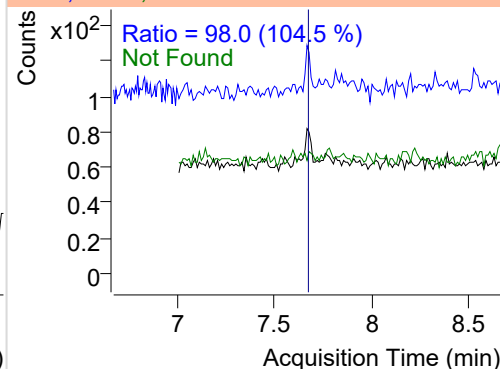


## Fluorene

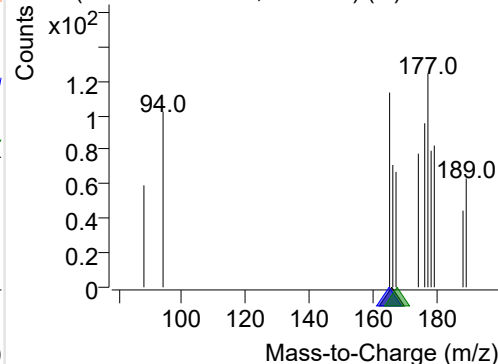
+ Selected Ion (166.0) 220907-PAHs-034.D



166.0, 165.0, 167.0

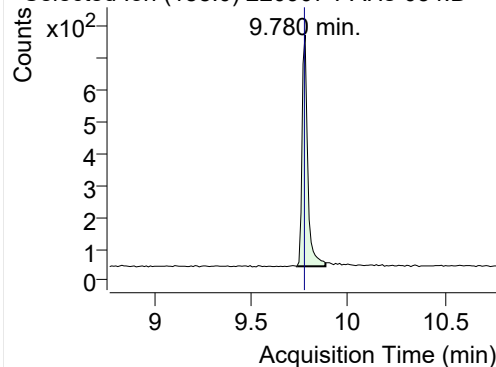


+ SIM (7.638-7.701 min, 7 scans) (\*\*) 220907-I

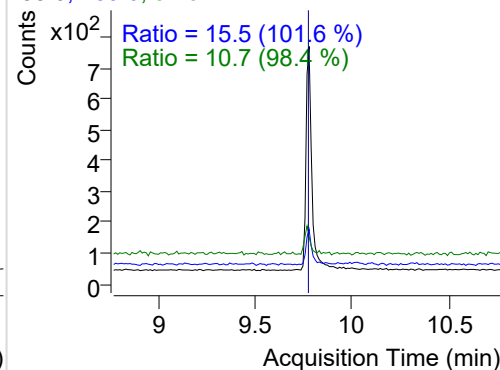


## IS-D10-Phenanthrene

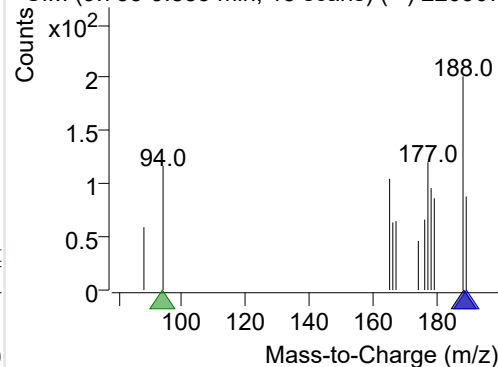
+ Selected Ion (188.0) 220907-PAHs-034.D



188.0, 189.0, 94.0

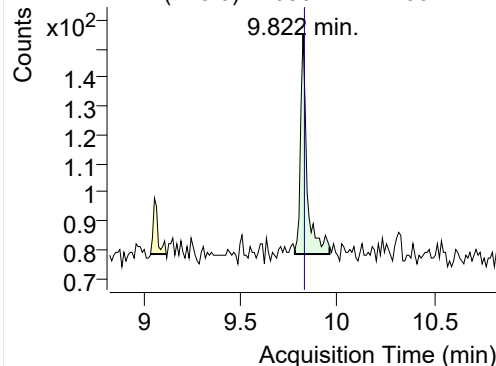


+ SIM (9.738-9.885 min, 15 scans) (\*\*) 220907

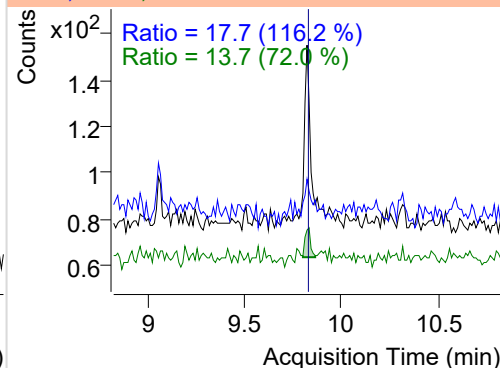


## Phenanthrene

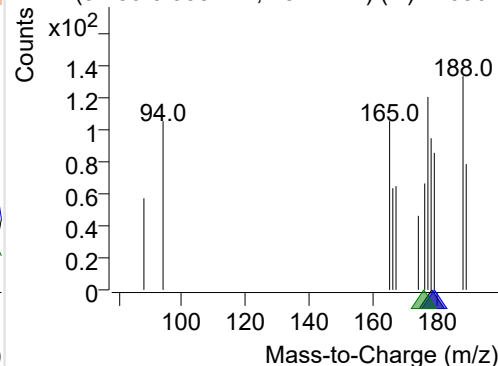
+ Selected Ion (178.0) 220907-PAHs-034.D



178.0, 179.0, 176.0

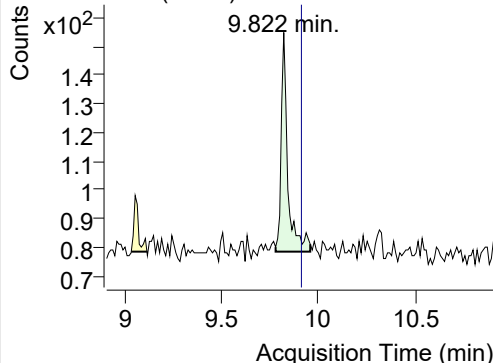


+ SIM (9.780-9.958 min, 18 scans) (\*\*) 220907

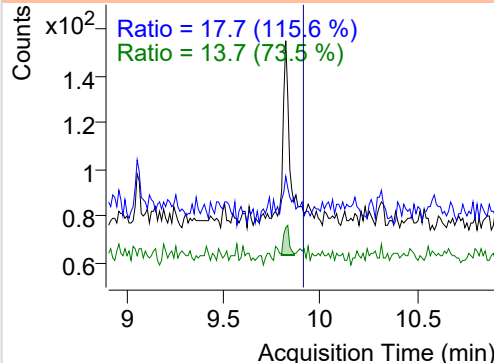


**Anthracene**

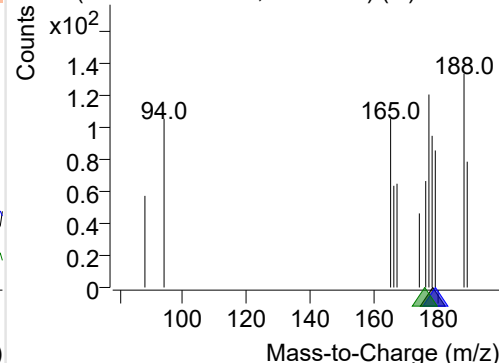
+ Selected Ion (178.0) 220907-PAHs-034.D



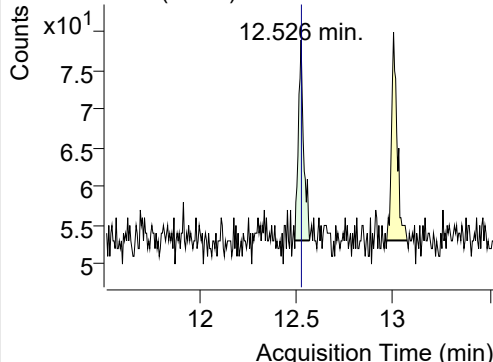
178.0, 179.0, 176.0



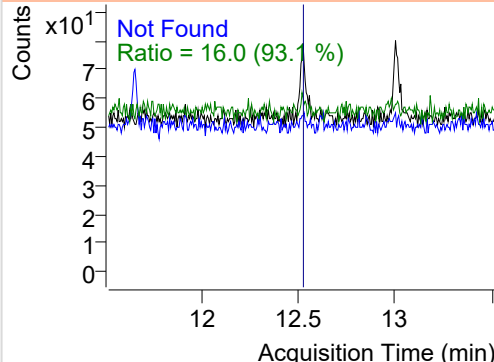
+ SIM (9.780-9.958 min, 18 scans) (\*\*) 220907

**Fluoranthene**

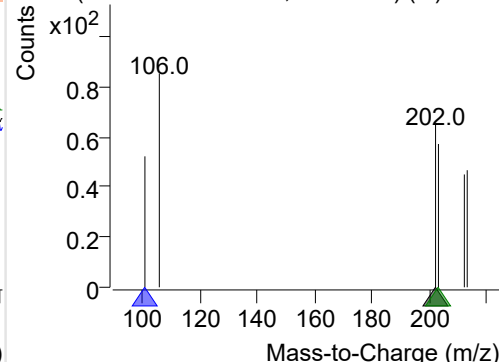
+ Selected Ion (202.0) 220907-PAHs-034.D



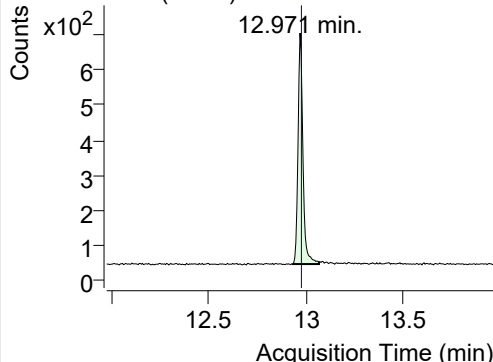
202.0, 101.0, 203.0



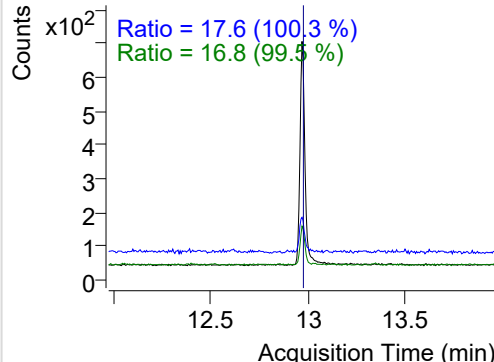
+ SIM (12.495-12.569 min, 13 scans) (\*\*) 2209

**LSS-D10-Pyrene**

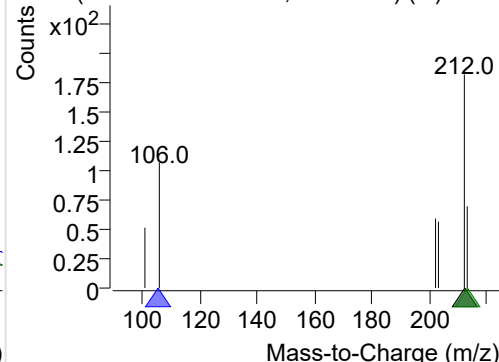
+ Selected Ion (212.0) 220907-PAHs-034.D



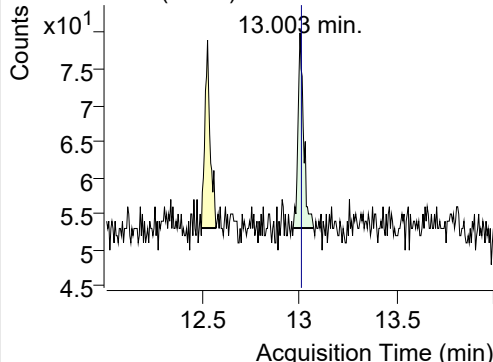
212.0, 106.0, 213.0



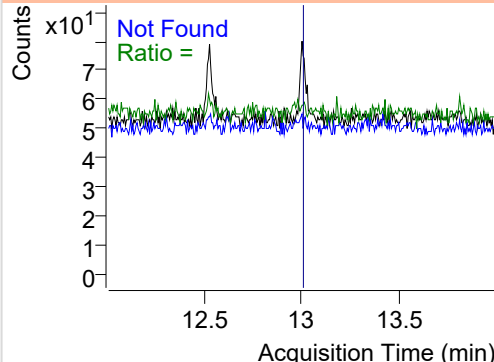
+ SIM (12.933-13.068 min, 26 scans) (\*\*) 2209

**Pyrene**

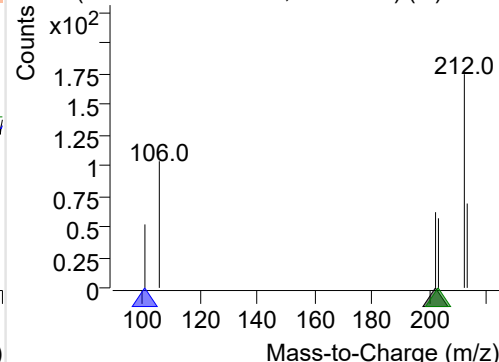
+ Selected Ion (202.0) 220907-PAHs-034.D



202.0, 101.0, 203.0



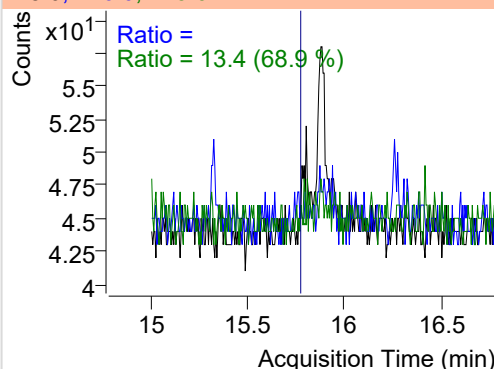
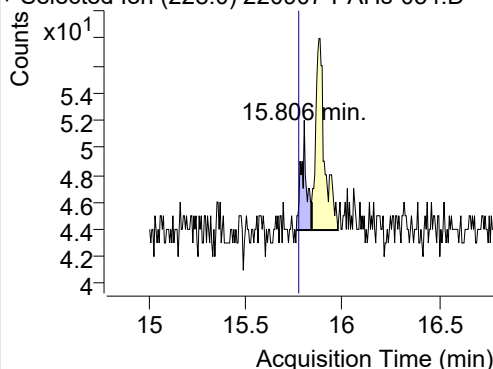
+ SIM (12.968-13.073 min, 19 scans) (\*\*) 2209



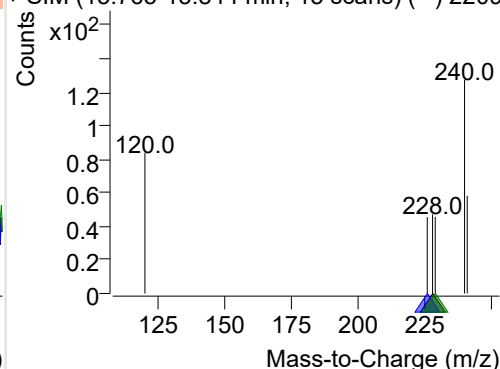
**Benz(a)anthracene**

+ Selected Ion (228.0) 220907-PAHs-034.D

228.0, 226.0, 229.0

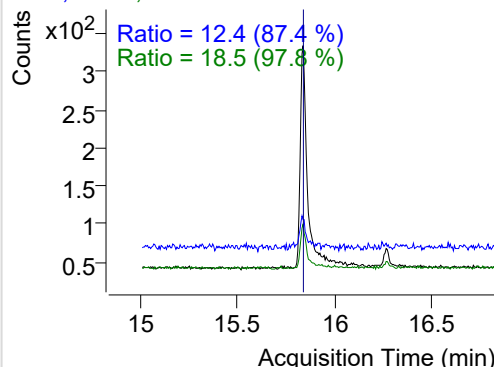
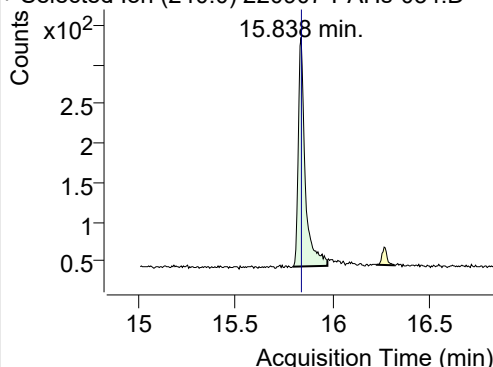


+ SIM (15.765-15.844 min, 15 scans) (\*\*) 2209

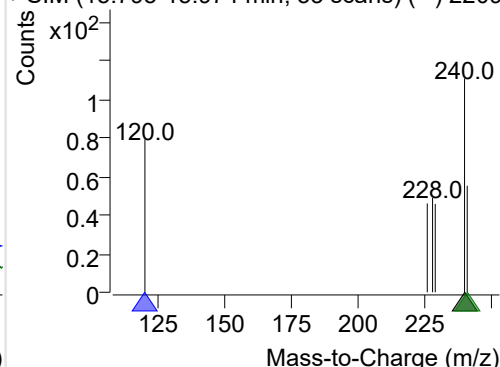
**IS-D12-Chrysene**

+ Selected Ion (240.0) 220907-PAHs-034.D

240.0, 120.0, 241.0

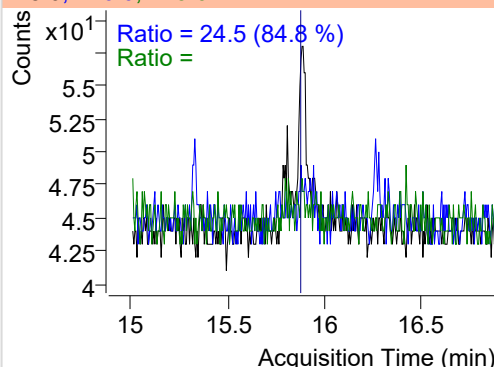
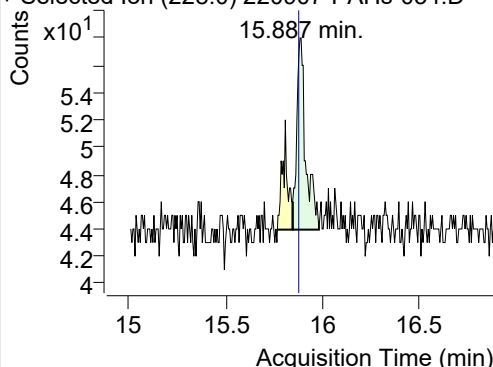


+ SIM (15.795-15.974 min, 33 scans) (\*\*) 2209

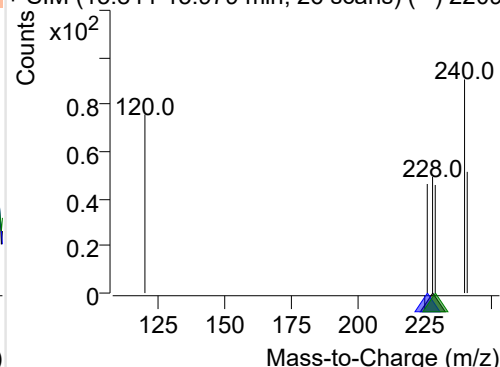
**Chrysene**

+ Selected Ion (228.0) 220907-PAHs-034.D

228.0, 226.0, 229.0

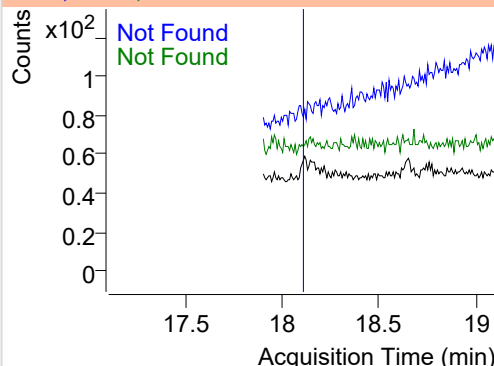
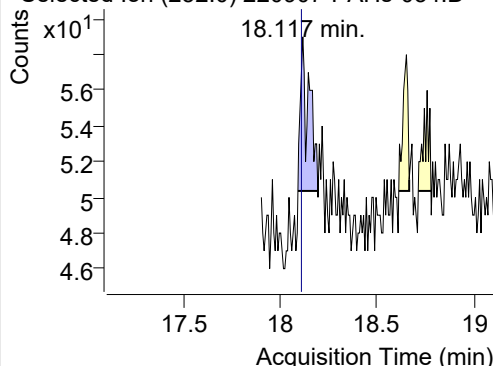


+ SIM (15.844-15.979 min, 26 scans) (\*\*) 2209

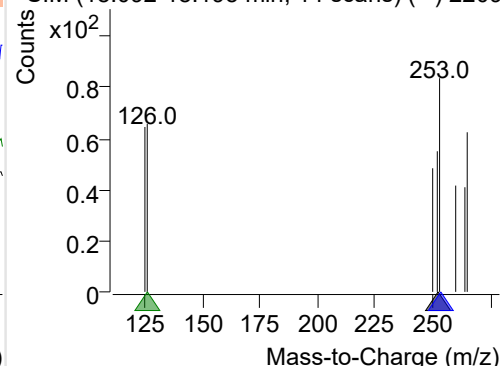
**Benzo(b)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-034.D

252.0, 253.0, 126.0



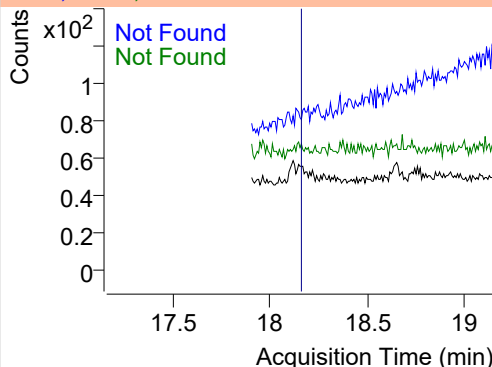
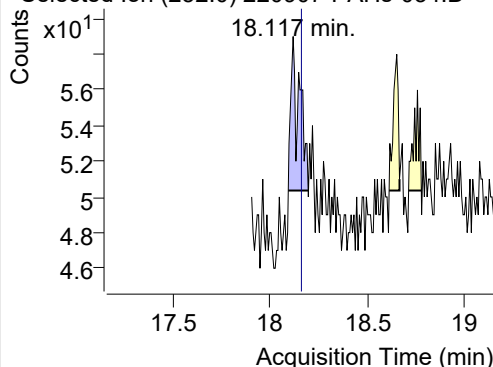
+ SIM (18.092-18.195 min, 14 scans) (\*\*) 2209



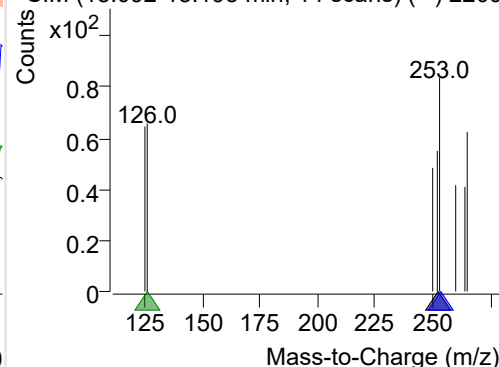
**Benzo(k)fluoranthene**

+ Selected Ion (252.0) 220907-PAHs-034.D

252.0, 253.0, 126.0

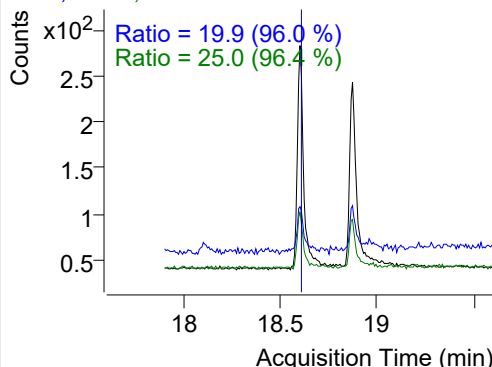
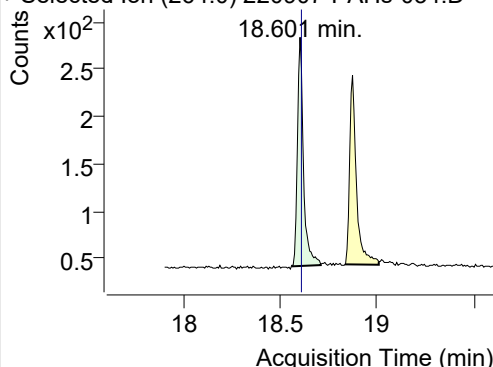


+ SIM (18.092-18.195 min, 14 scans) (\*\*) 2209

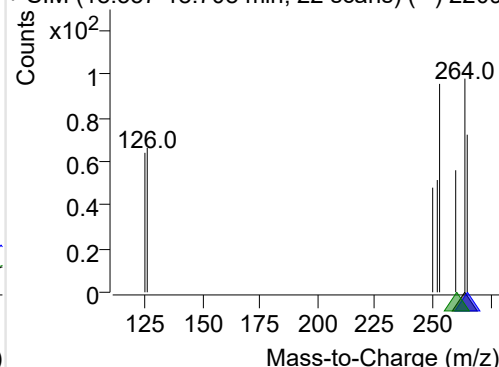
**SS-D12-Benzo(e)pyrene**

+ Selected Ion (264.0) 220907-PAHs-034.D

264.0, 265.0, 260.0

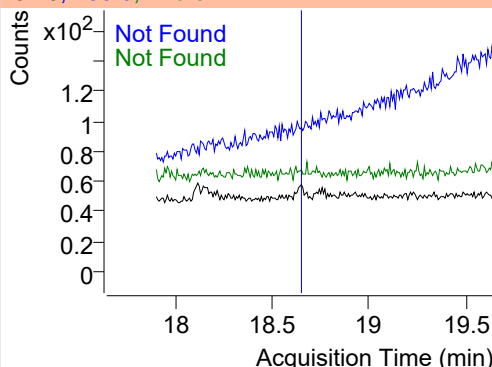
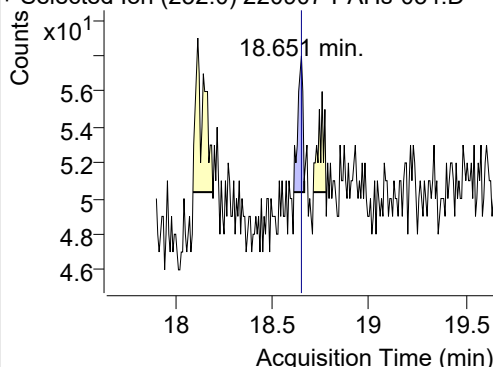


+ SIM (18.557-18.708 min, 22 scans) (\*\*) 2209

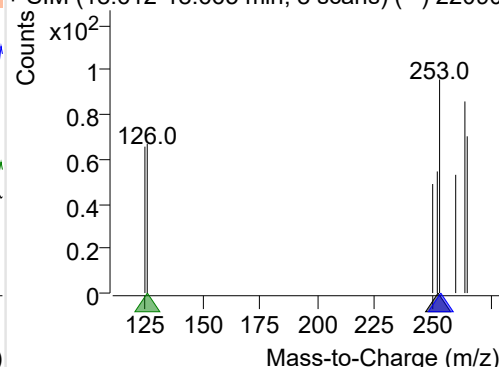
**Benzo(e)pyrene**

+ Selected Ion (252.0) 220907-PAHs-034.D

252.0, 253.0, 126.0

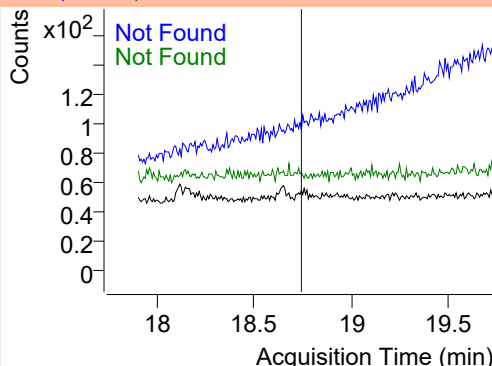
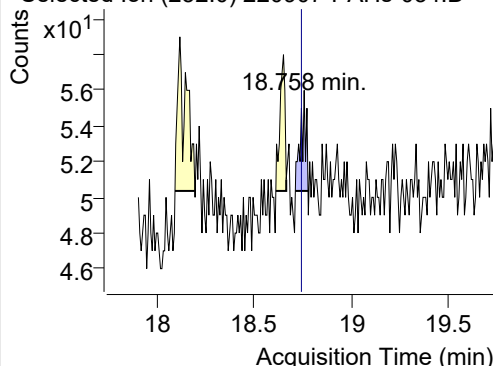


+ SIM (18.612-18.665 min, 8 scans) (\*\*) 22090

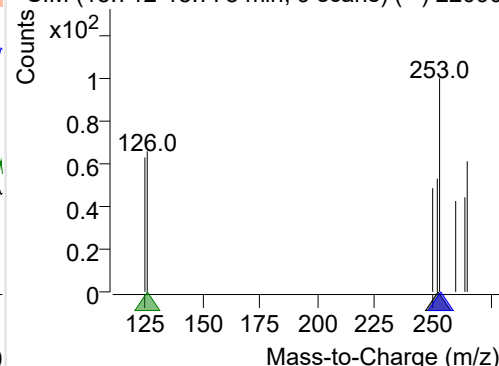
**Benzo(a)pyrene**

+ Selected Ion (252.0) 220907-PAHs-034.D

252.0, 253.0, 126.0

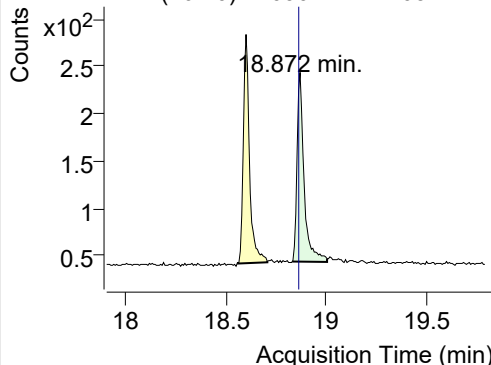


+ SIM (18.712-18.778 min, 9 scans) (\*\*) 22090

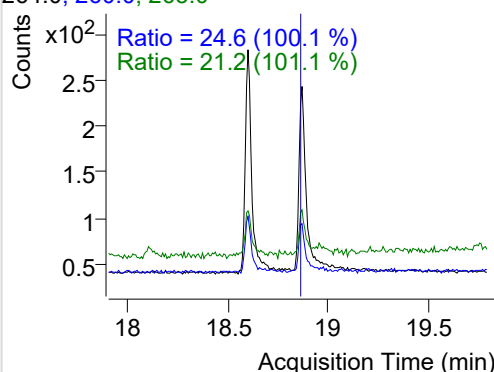


## IS-D12-Perylene

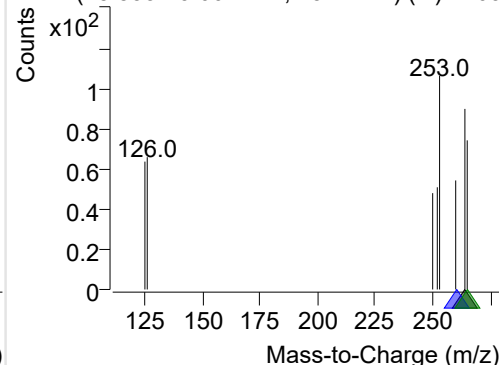
+ Selected Ion (264.0) 220907-PAHs-034.D



264.0, 260.0, 265.0

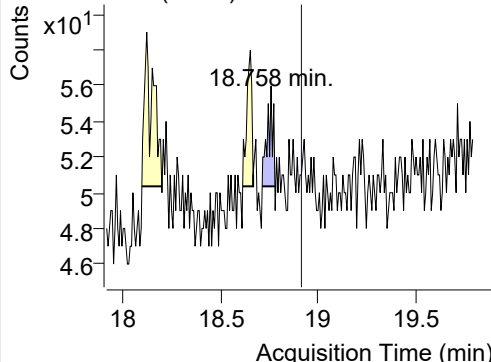


+ SIM (18.833-19.007 min, 25 scans) (\*\*) 2209

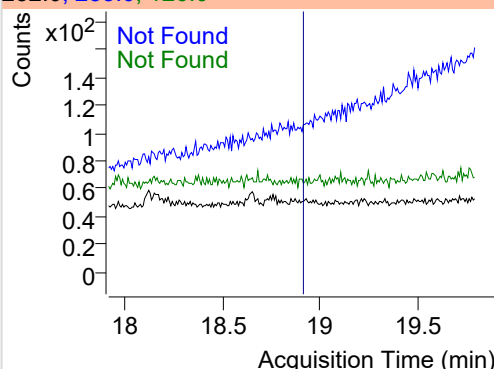


## Perylene

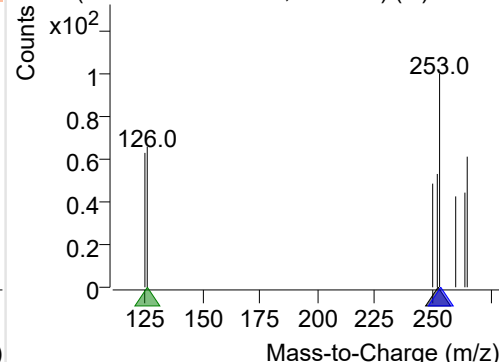
+ Selected Ion (252.0) 220907-PAHs-034.D



252.0, 253.0, 126.0

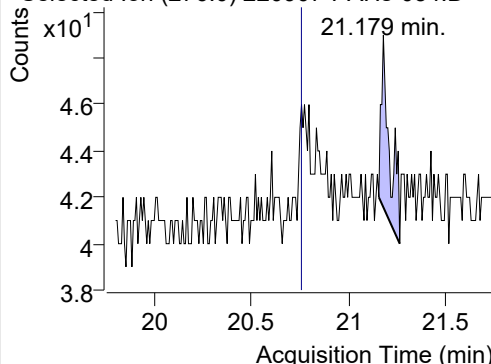


+ SIM (18.712-18.778 min, 9 scans) (\*\*) 22090

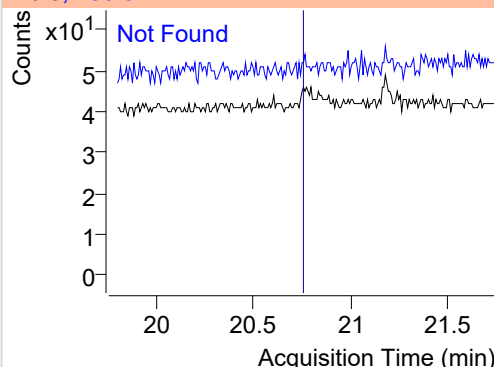


## Indeno(1,2,3-c,d)pyrene

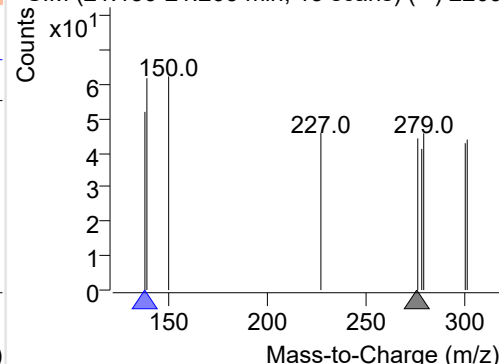
+ Selected Ion (276.0) 220907-PAHs-034.D



276.0, 138.0

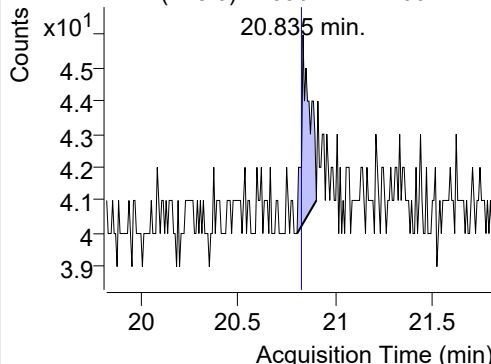


+ SIM (21.156-21.263 min, 15 scans) (\*\*) 2209

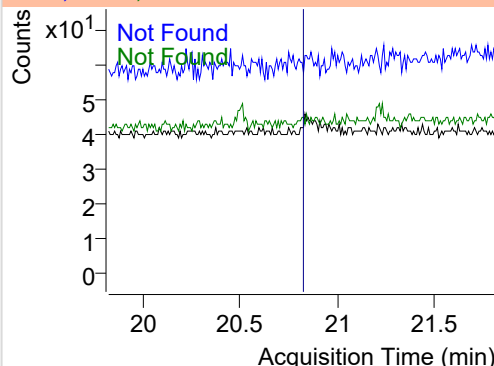


## Dibenz(a,h)anthracene

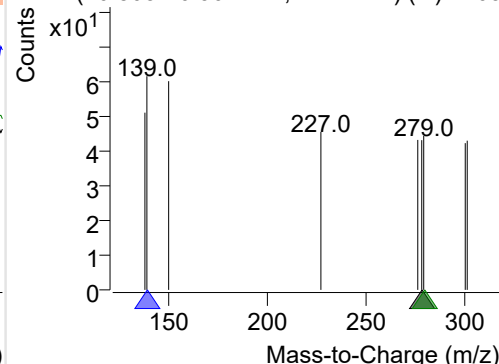
+ Selected Ion (278.0) 220907-PAHs-034.D



278.0, 139.0, 279.0



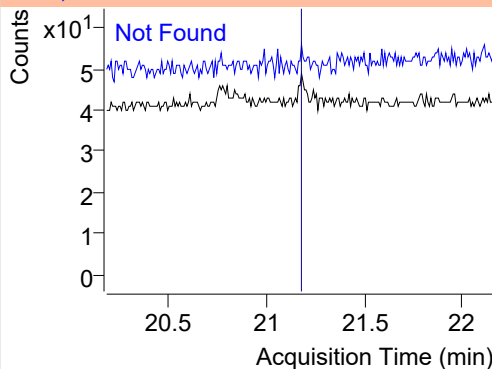
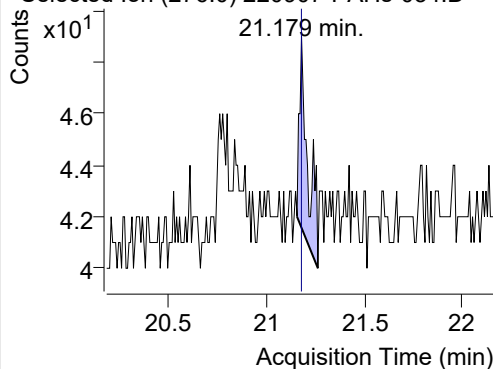
+ SIM (20.805-20.904 min, 14 scans) (\*\*) 2209



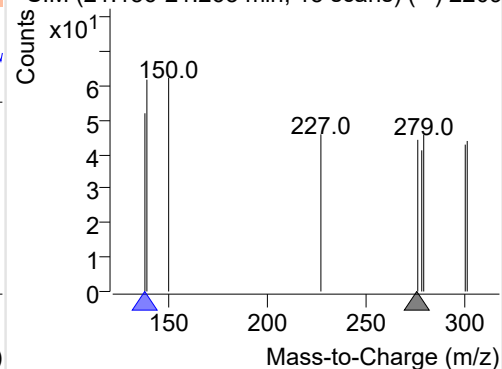
**Benzo(g,h,i)perylene**

+ Selected Ion (276.0) 220907-PAHs-034.D

276.0, 138.0

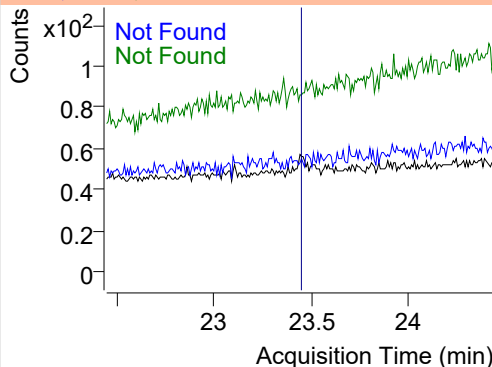
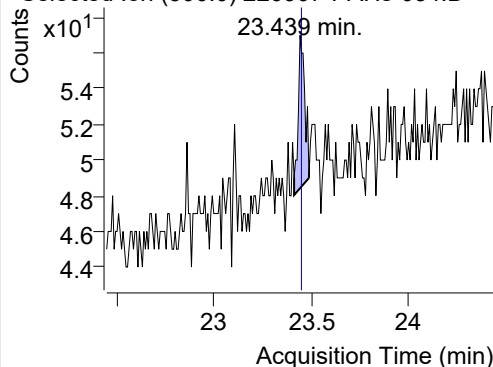


+ SIM (21.156-21.263 min, 15 scans) (\*\*) 2209

**Coronene**

+ Selected Ion (300.0) 220907-PAHs-034.D

300.0, 301.0, 150.0



+ SIM (23.408-23.485 min, 11 scans) (\*\*) 2209

