Brazoria County Crime Lab

Seized Drugs Section

GC-MS Maintenance Log

Instrument: SD GCMS-1 **Month/Year:** March 2025

Entry Number	Date	He Tank Pressure	Autotune	Septum Change	Wash Vials Filled	Liner Change	Gold Seal Replaced	Column Cut	Computer Restarted	Maintenance/ PM	Analyst/ Technician	Comments	Initials
1	3/4/2025	1300	Pass	N/A	√	N/A	N/A	N/A	N/A	Maintenance	Analyst		DS
2	3/10/2025	2500	Pass	N/A	√	N/A	N/A	N/A	N/A	Maintenance	Analyst	New Helium tank - DS	DS
3	3/17/2025	1600	Pass	N/A	√	N/A	N/A	N/A	N/A	Maintenance	Analyst		DS
4	3/24/2025	600	Pass	N/A	√	N/A	N/A	N/A	Yes	Maintenance	Analyst	Lab wide power outage	DS
5	3/26/2025	2500	Pass	N/A	No	N/A	N/A	N/A	N/A	Maintenance	Analyst	New Helium tank - MH	DS
6	3/31/2025	1800	Pass	√	√	√	N/A	N/A	N/A	Maintenance	Analyst		DS

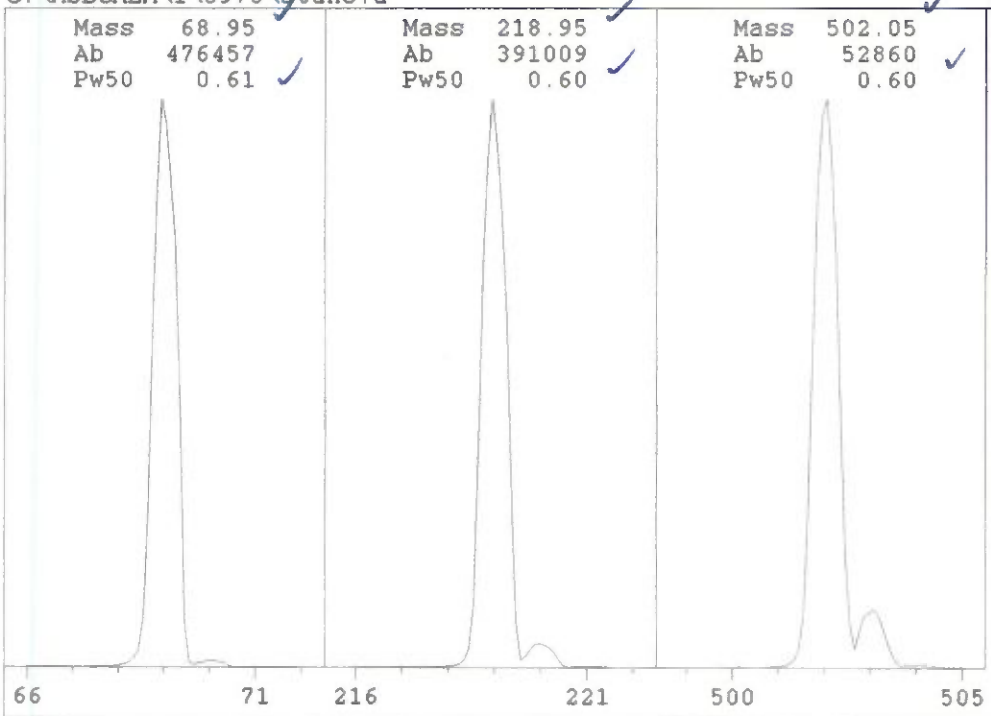
Signature: Derek Sanders **Date:** 31 March 2025

5973 Autotune

Tue Mar 04 08:19:30 2025 Instrument: SD GCMS 1

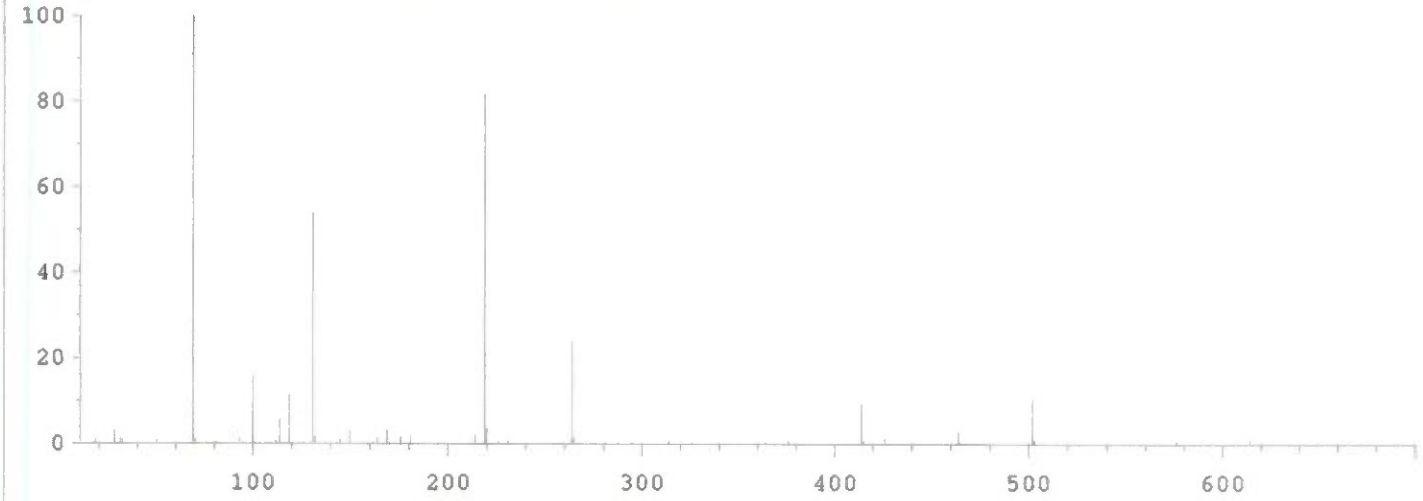
C:\MSDCHEM\1\5973\atune.u

JS OK



Ion Pol	POS	MassGain	365
		MassOffs	-11
Emission	34.6	AmuGain	2442
EIEnrgy	69.9	AmuOffs	123
Filament	1	Wid219	-0.029
		DC Pol	POS
Repeller	29.45		
IonFcus	90.2	HEDEnab	ON
EntLens	14.5	EMVolts	1576
EntOffs	19.07		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
133 peaks Base: 69.05 Abundance: 427904



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	427904	100.00	70.05	4916	1.15
218.95	349824	81.75	219.95	15700	4.49
502.05	46624	10.90	503.05	4671	10.02

Air/Water Check: H20~1.02% N2~3.27% O2~1.05% CO2~0.07% N2/H2O~321.68%

Column Flow: Front: 0.798 Back: 0 ml/min. Interface Temp: 280

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502: EM Gain 120657
Repeller Maximum 35 volts using ion 219:

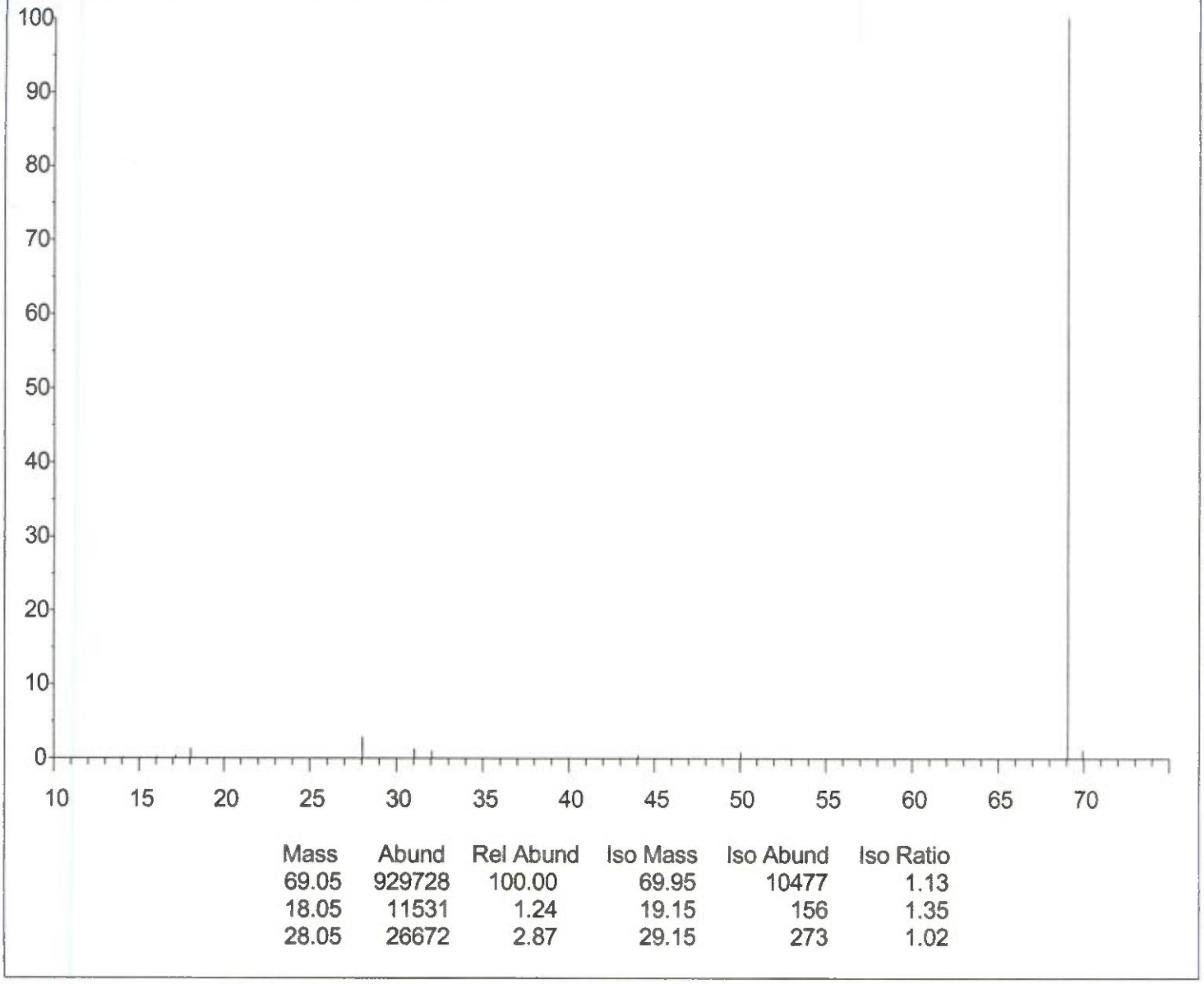
MassGain Values @Samples: 365@3 364@2 363@1 364@0 365@FS

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	123.0	123.0	123.0	123.0	123.0	123.0	123.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

597x Air and Water Check

Instrument: SD GCMS 1
Tue Mar 04 08:13:12 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
61 peaks Base: 69.05 Abundance: 929728



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	929728	100.00	69.95	10477	1.13
18.05	11531	1.24	19.15	156	1.35
28.05	26672	2.87	29.15	273	1.02

Current Params used: atune.u

Relative abundances:

18/69 = 1.24 Water%
28/69 = 2.87 Nitrogen%
32/69 = 0.97 Oxygen%
44/69 = 0.36 Carbon Dioxide%
28/18 = 231.31 Nitrogen/Water%

System Verification - Tune (Detector Optimization) Portion

Instrument Name	: SD GCMS 1	
DC Polarity	: Positive	
Filament	: 1	
BasePeak should be 69 or 219		Ok
Position of mass 69	69.05	Ok
Position of mass 219	218.95	Ok
Position of mass 502	502.05	Ok
Position of isotope mass 70	70.04	Ok
Position of isotope mass 220	219.96	Ok
Position of isotope mass 503	503.05	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.10	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.32	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.94	Ok
Ratio of 219 to 69 should be > 40% and is	81.28	Ok
Ratio of 502 to 69 should be > 2.4% and is	11.34	Ok
Mass 69 Precursor (<= 3%)	0.21	Ok
Mass 219 Precursor (<= 6%)	0.37	Ok
Mass 502 Precursor (<= 12%)	0.55	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.99	Ok
Ratio of 28 to 69 (<10%)	3.40	Ok
Electron Multiplier Voltage	1576	Ok

Tune portion of System Verification passed.

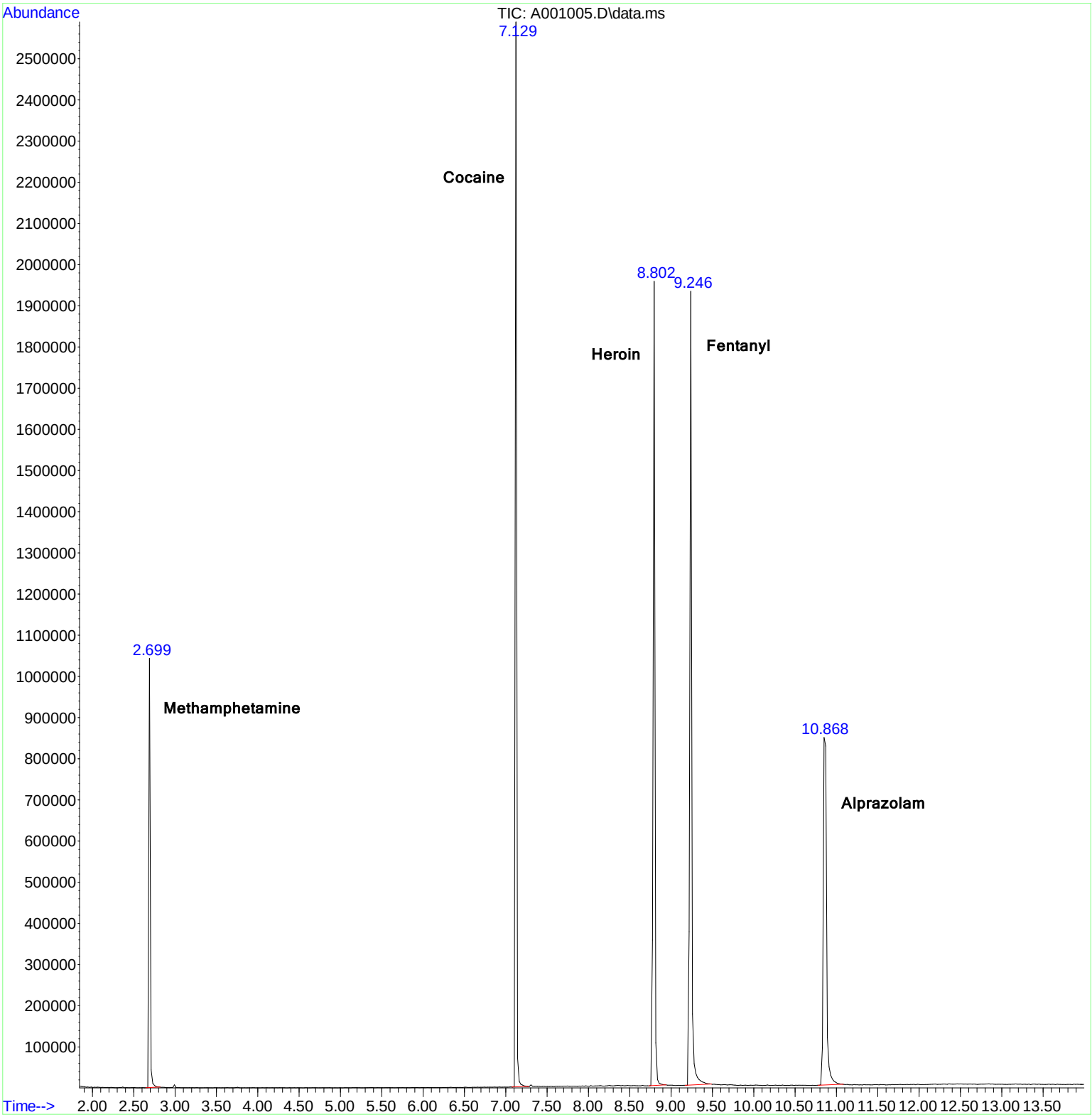
BCCL GC/MS #1
Retention Times for the Week of:

03/03/2025 - 03/09/2025

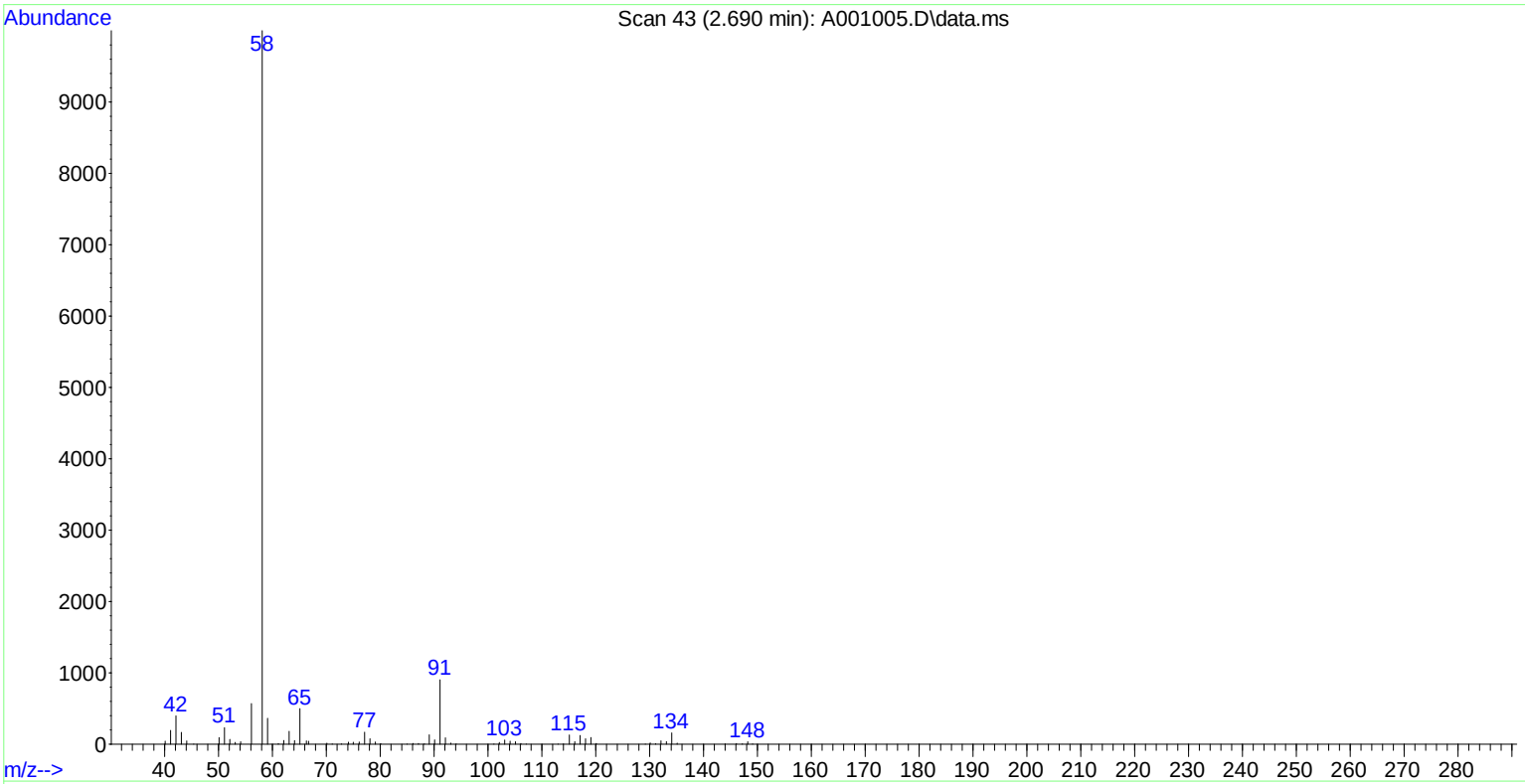
[x] **Tune: 03/04/2025 - Autotune DS**

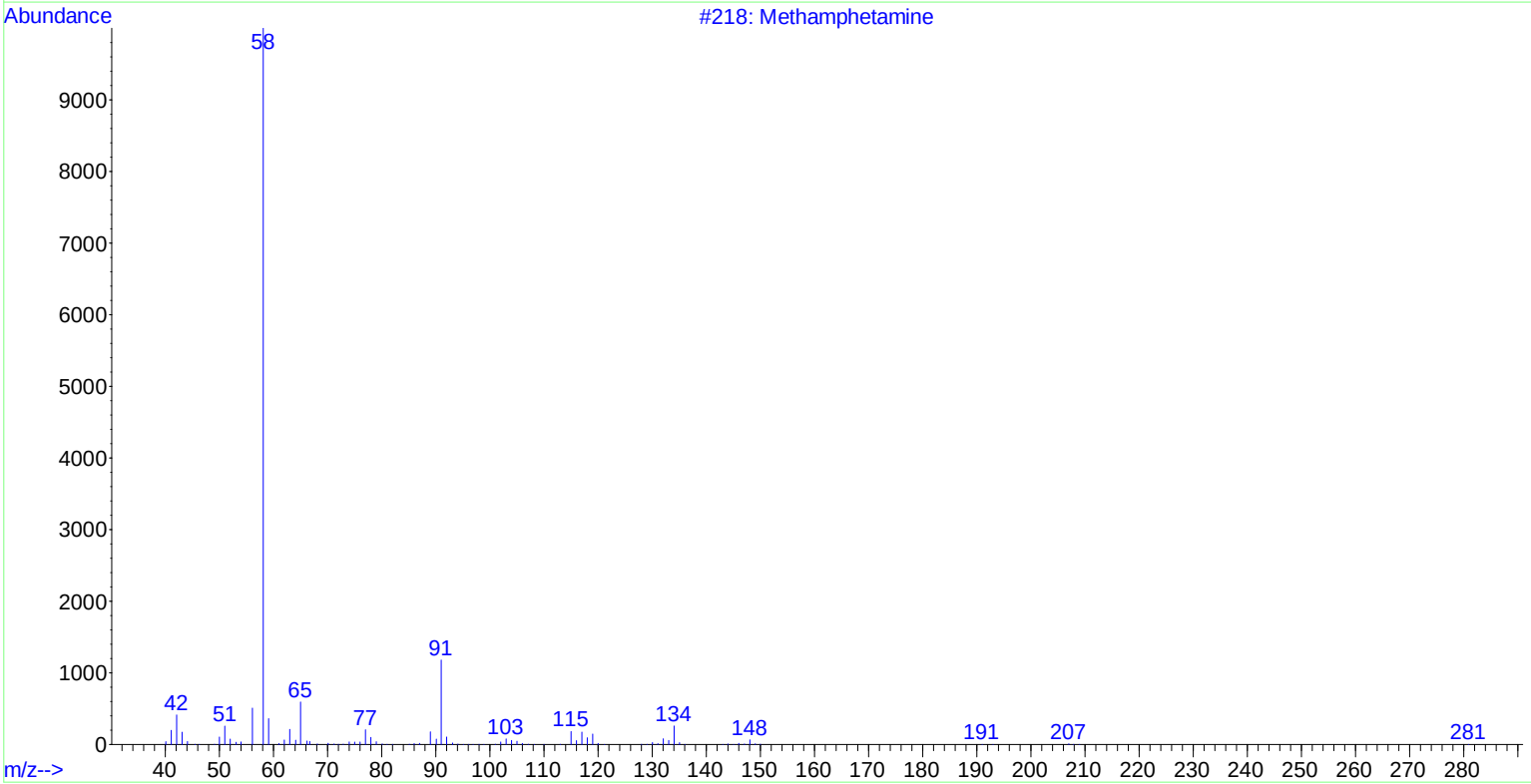
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.699	2.672	2.725
Cocaine	R-24-060	BCCL GenDrug	7.129	7.057	7.200
Heroin	R-24-060	BCCL GenDrug	8.802	8.713	8.890
Fentanyl	R-24-060	BCCL GenDrug	9.246	9.153	9.338
Alprazolam	R-24-060	BCCL GenDrug	10.868	10.759	10.976

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:09 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

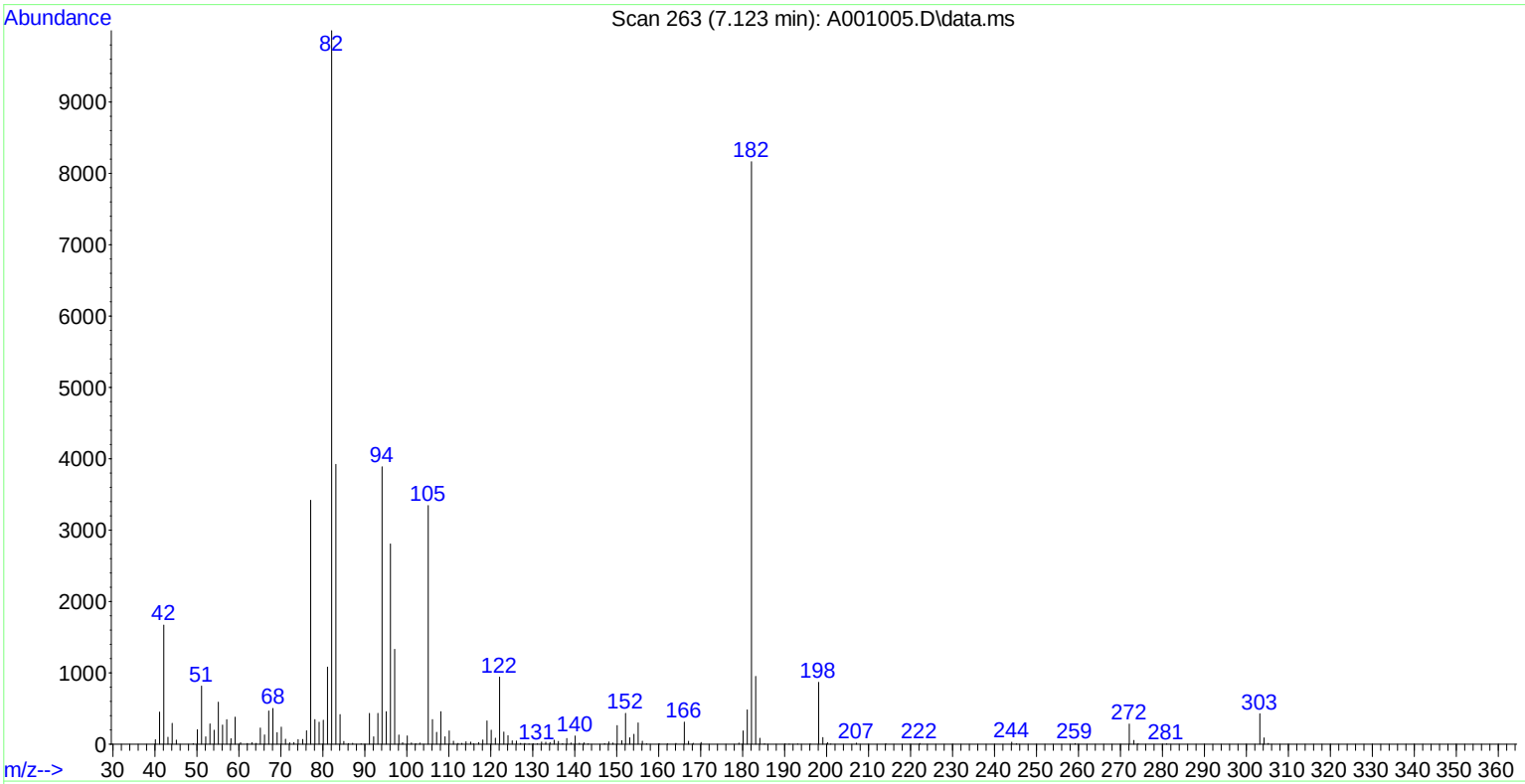


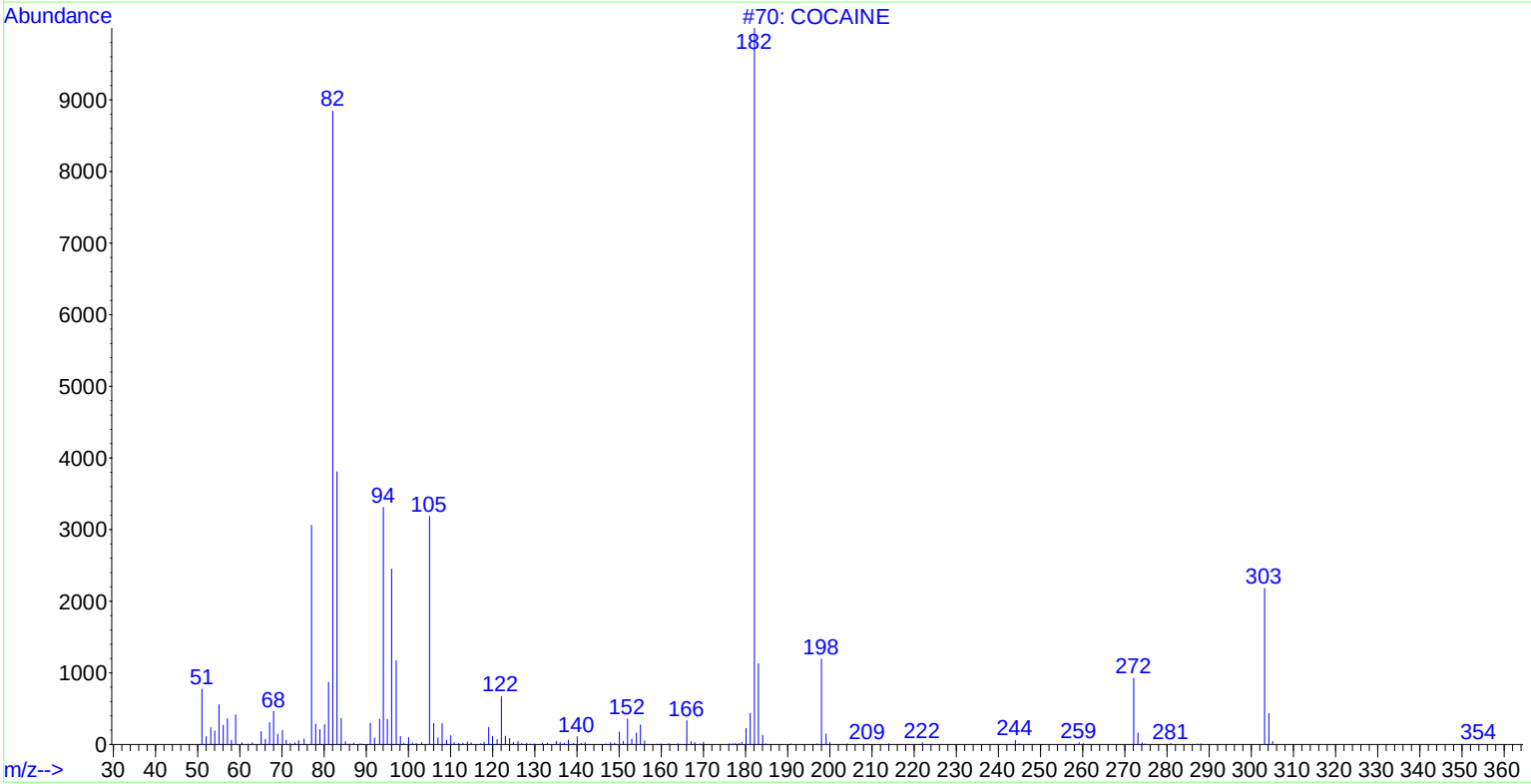
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:09 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



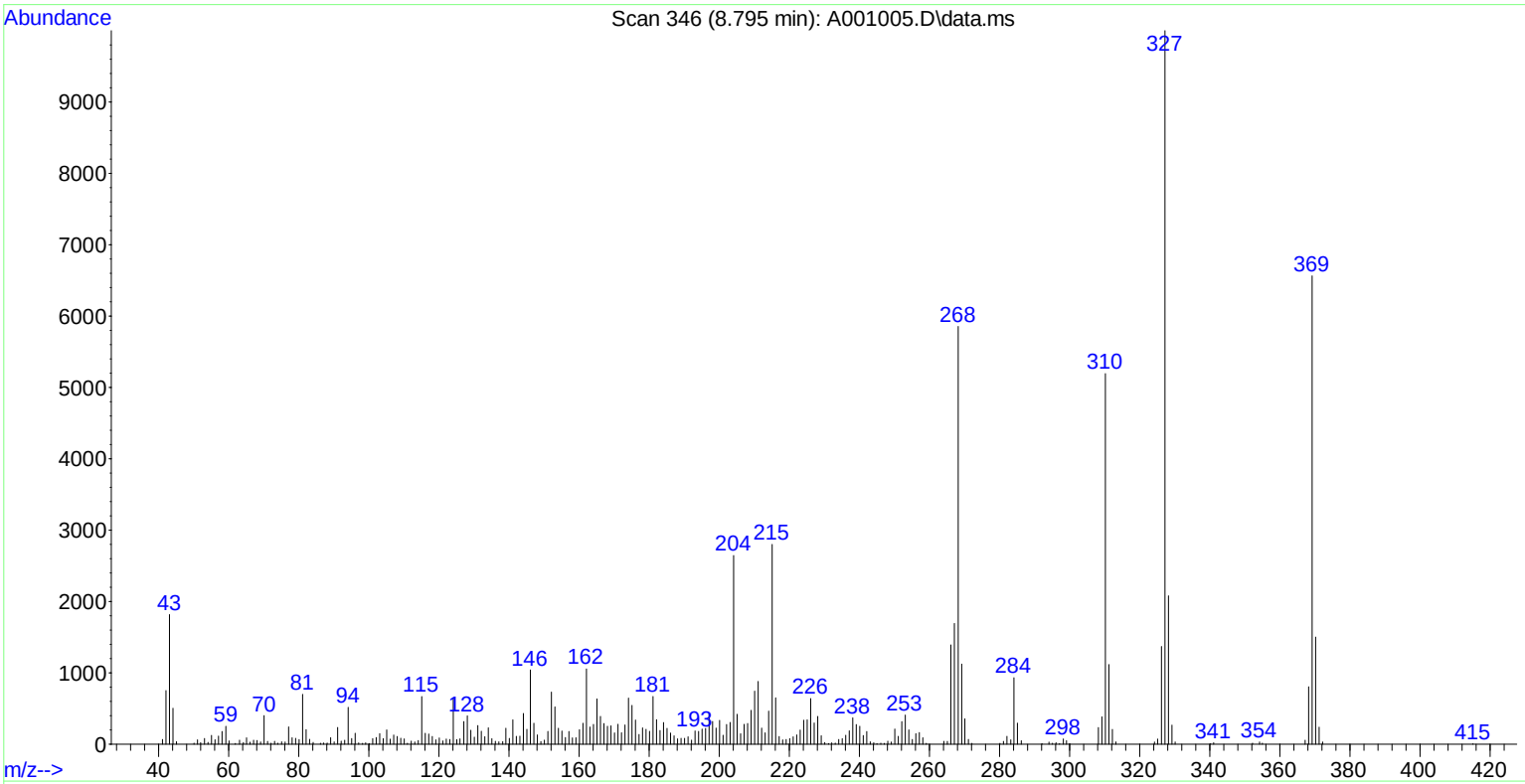


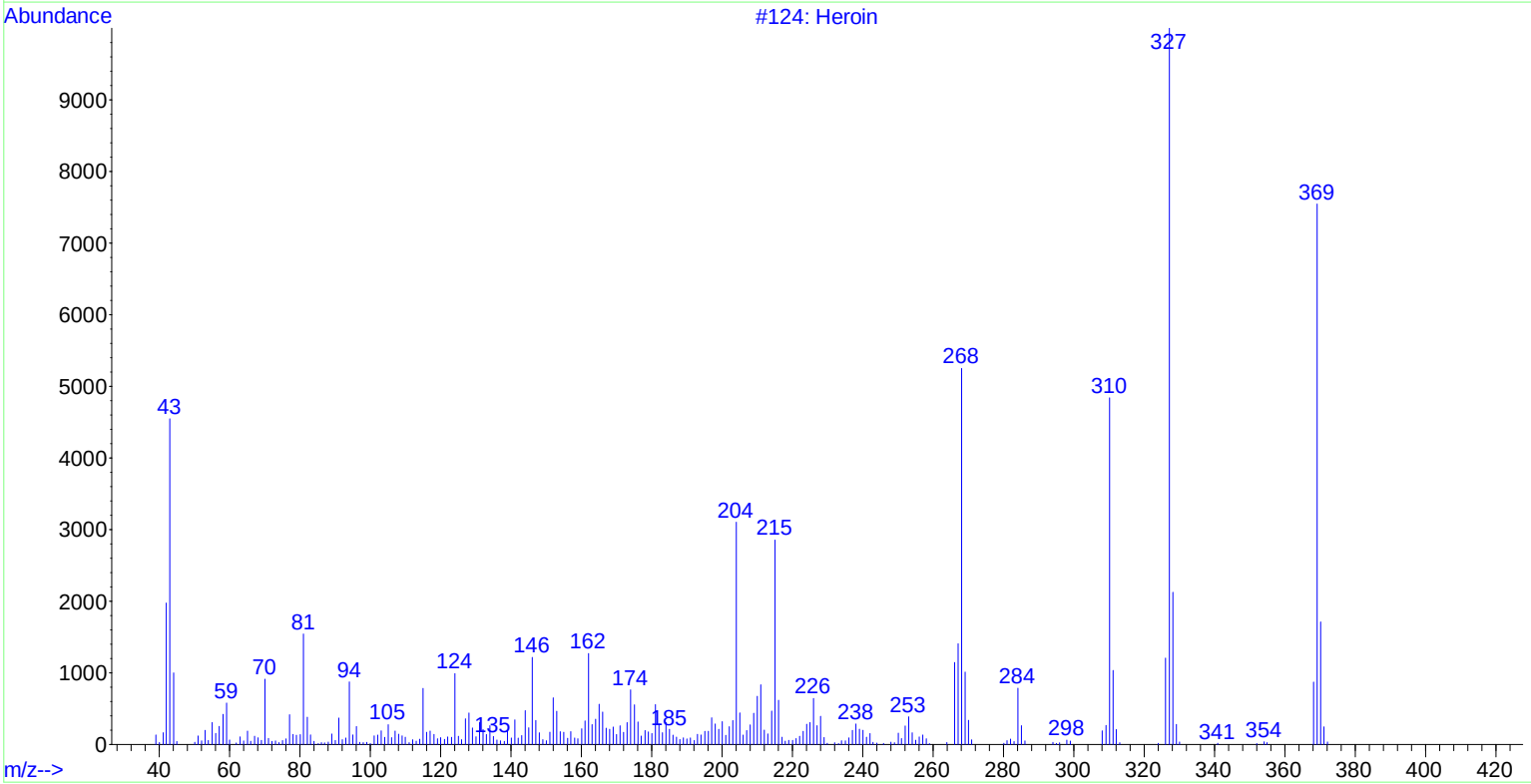
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:09 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



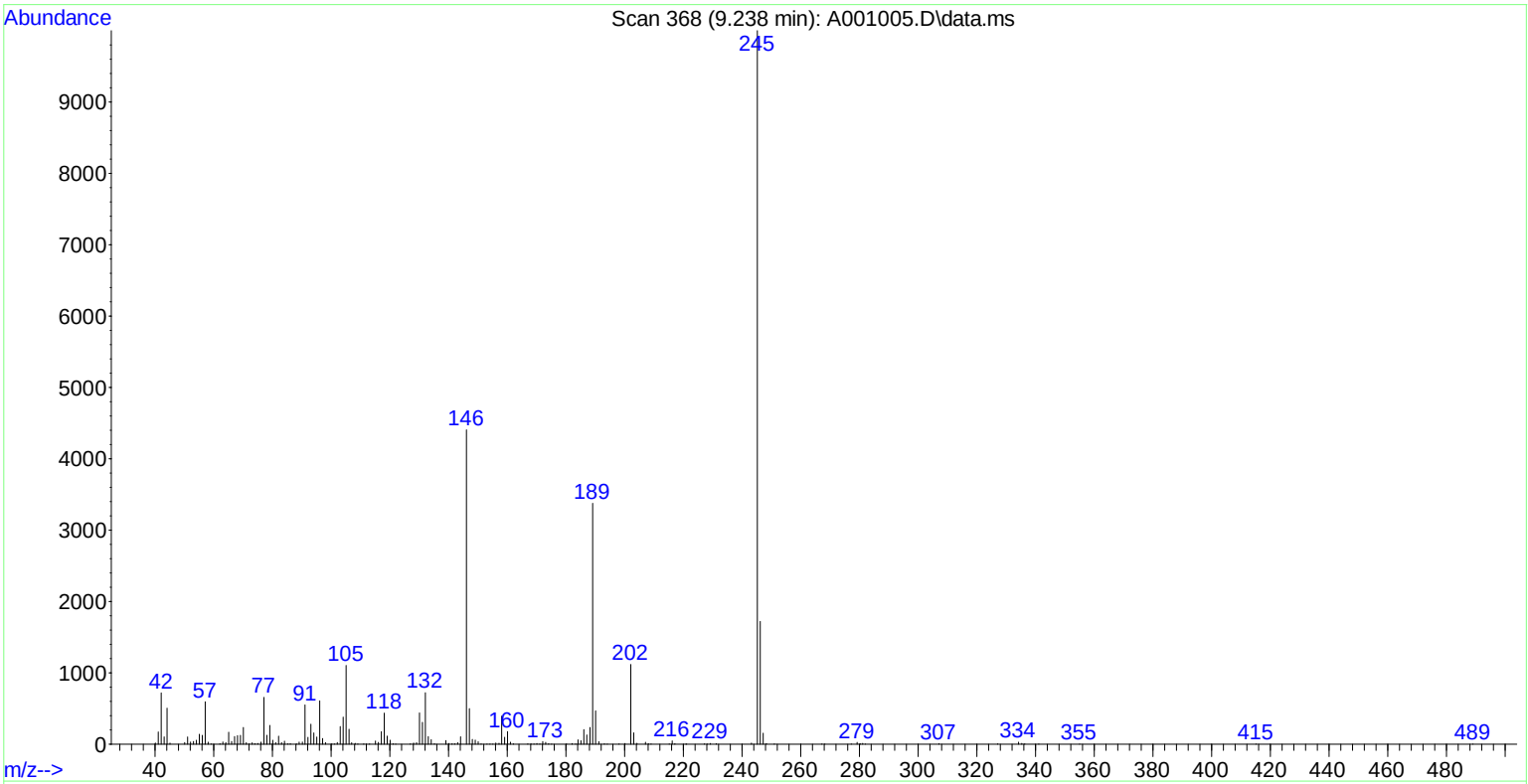


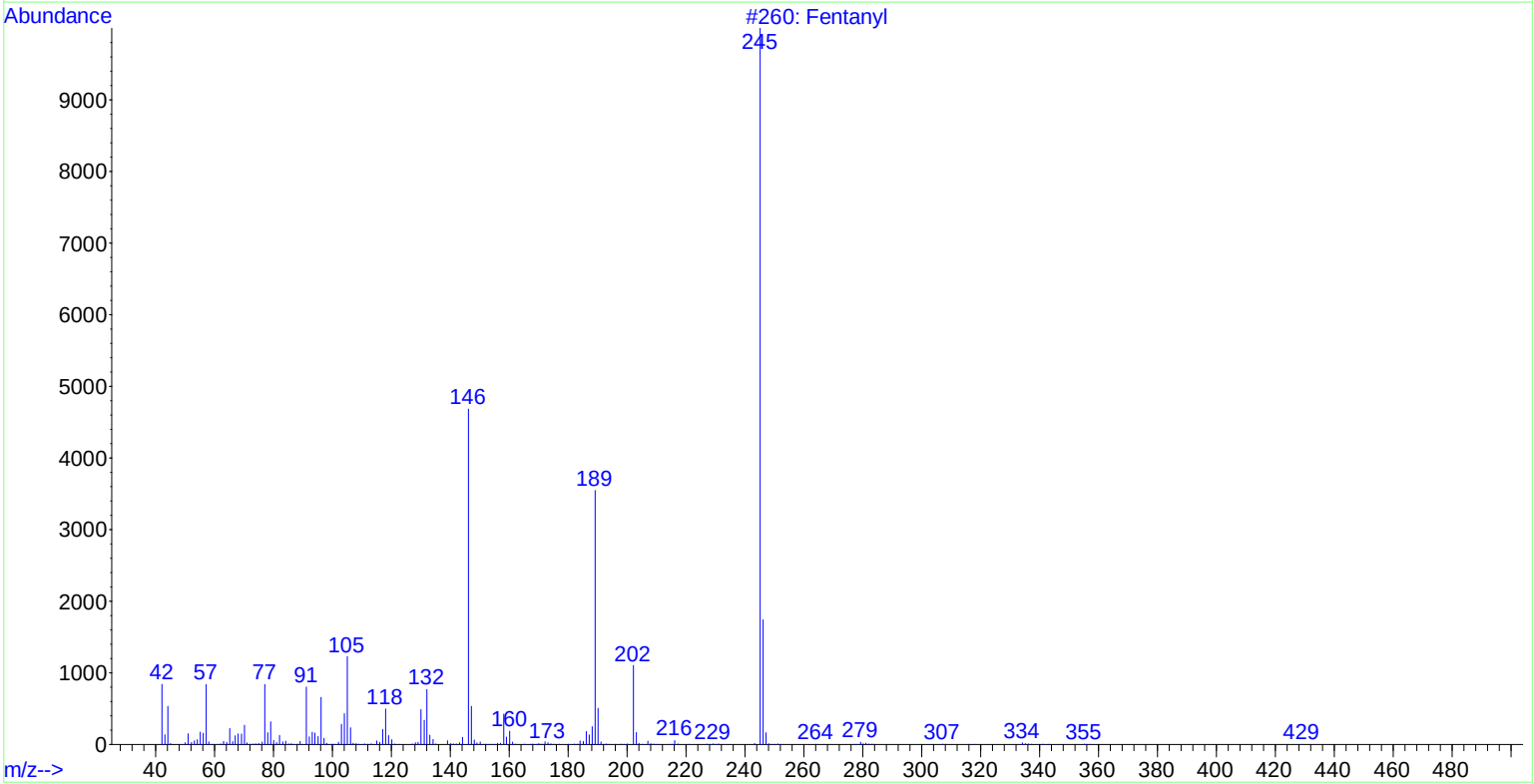
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:09 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



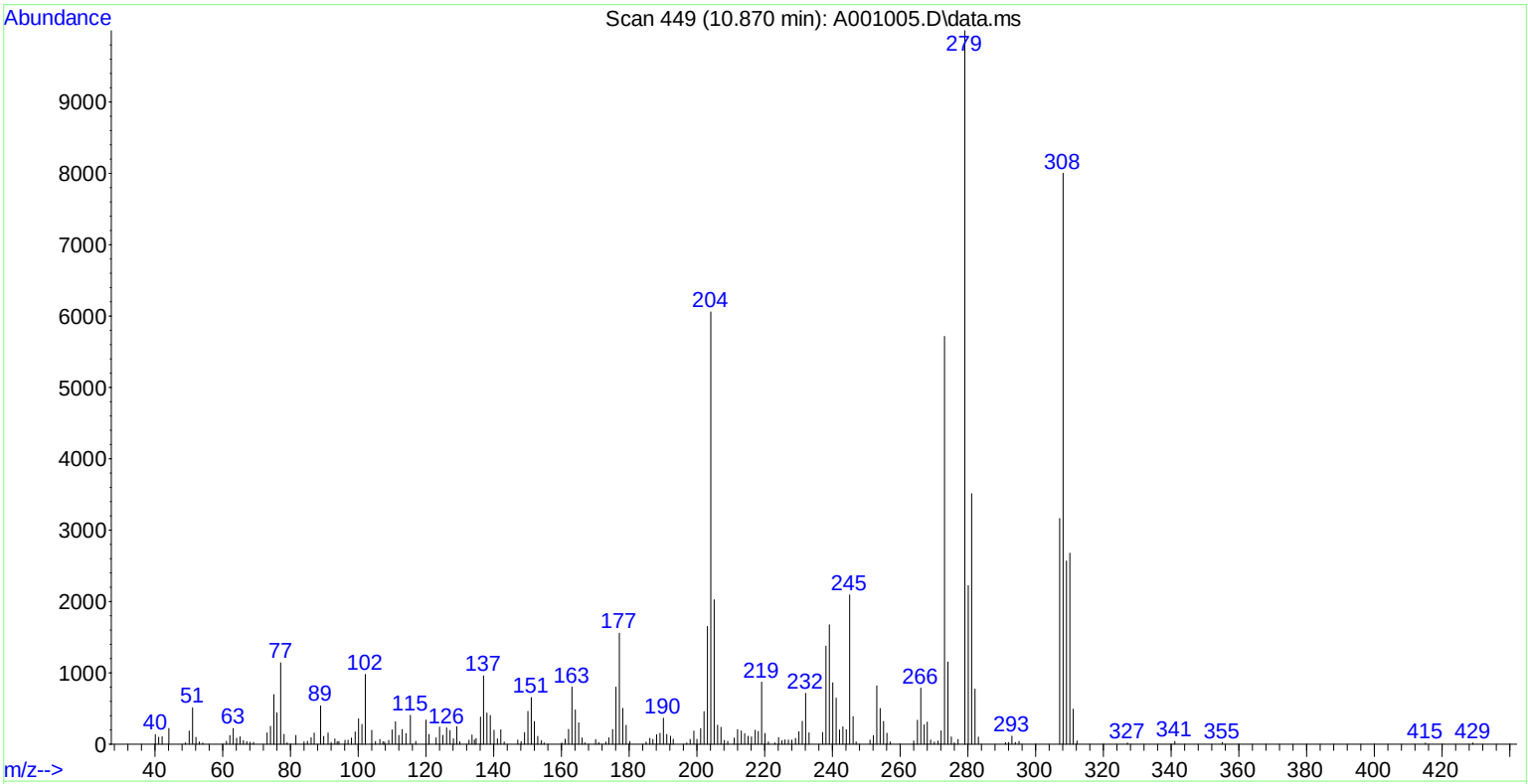


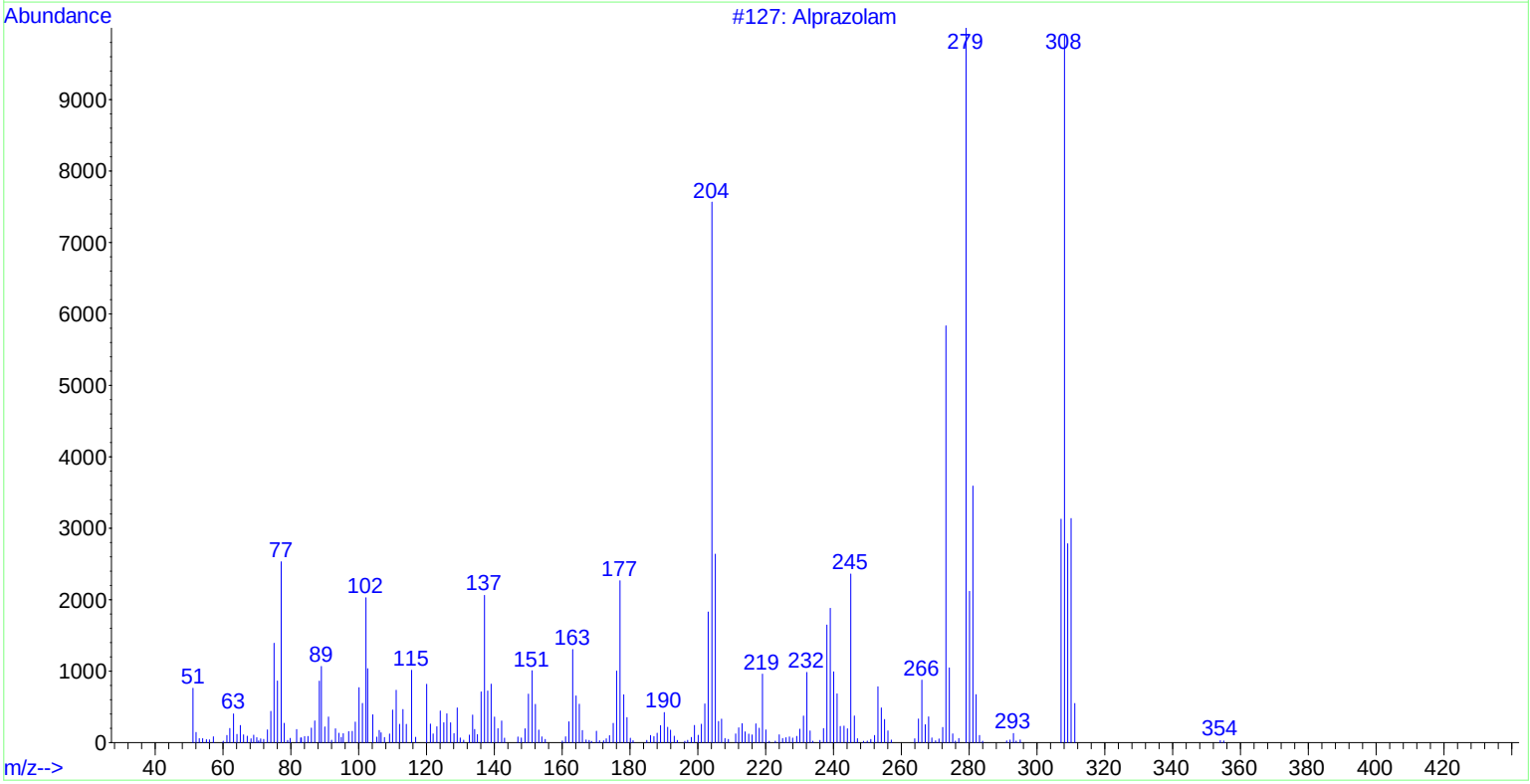
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:09 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



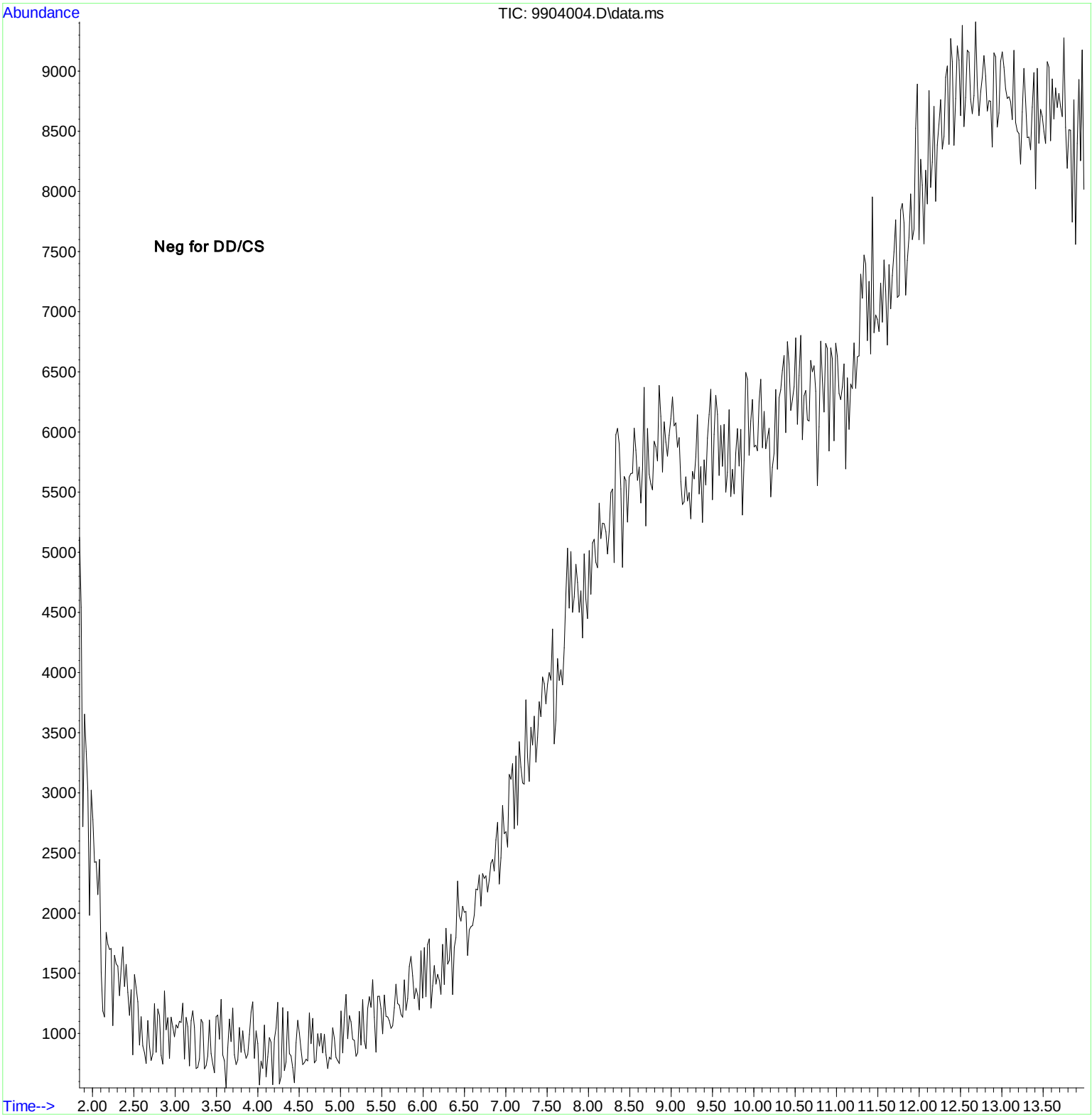


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:09 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

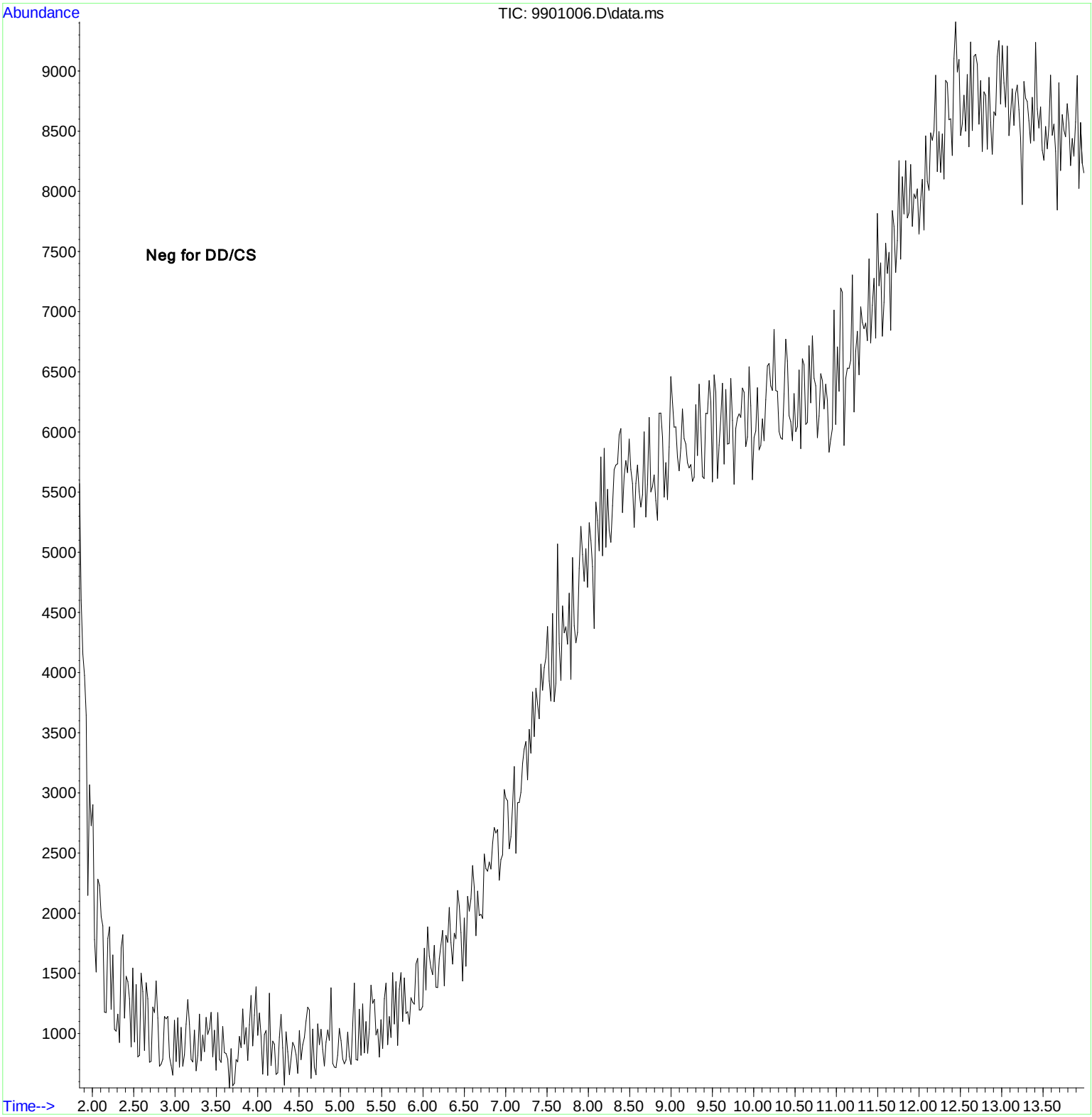




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 9:51 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\030425\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 4 Mar 2025 10:26 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)

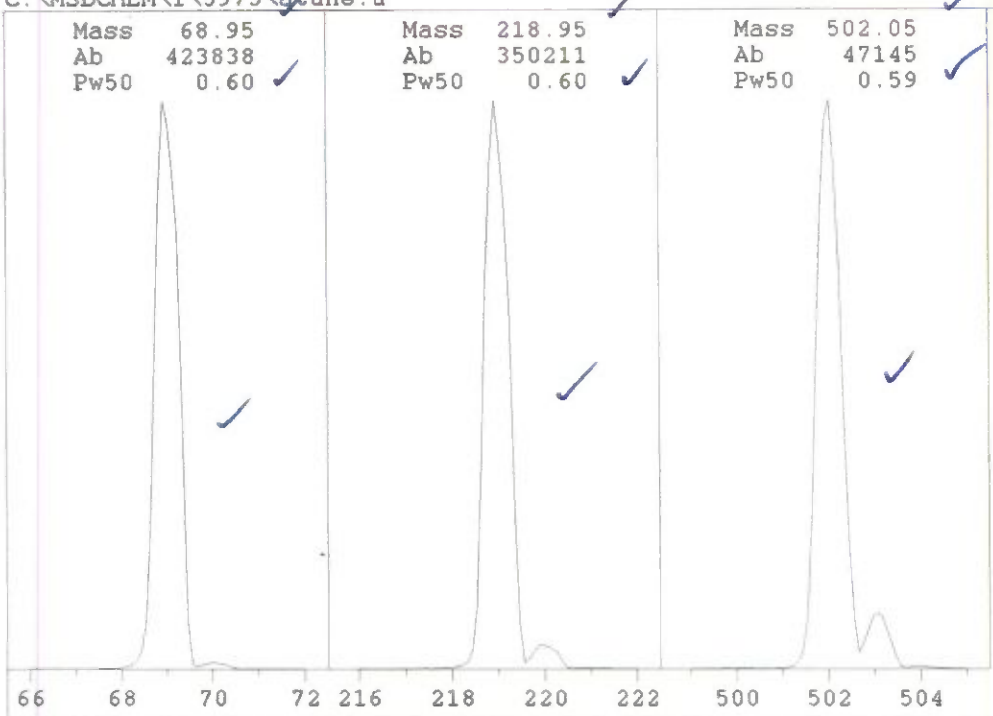


5973 Autotune

Mon Mar 10 08:37:30 2025
C:\MSDCHEM\1\5973\atune.u

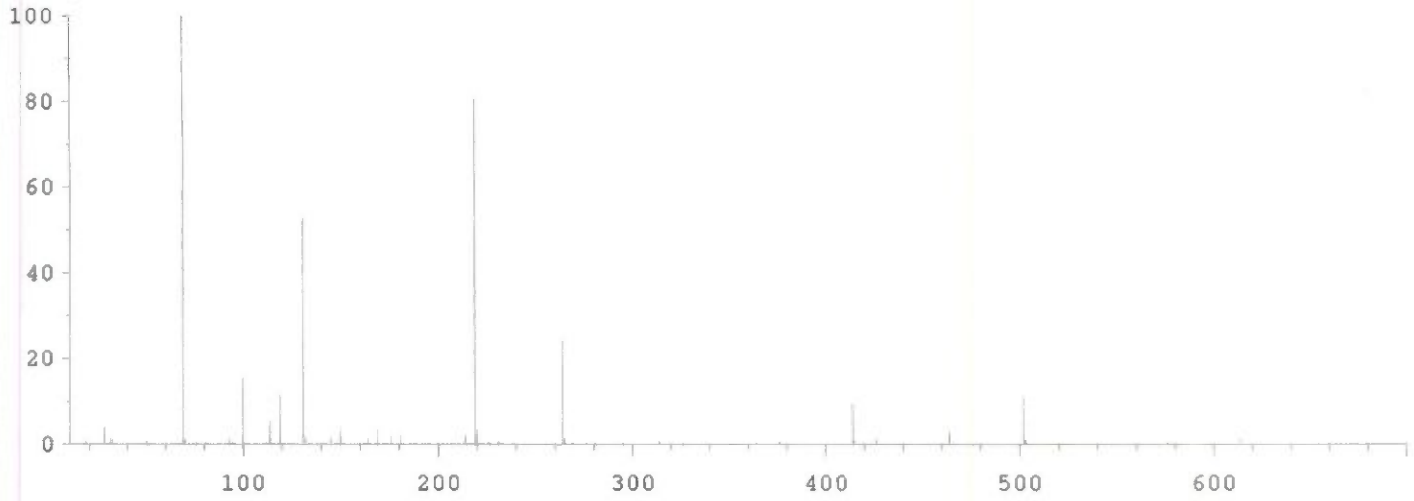
Instrument: SD GCMS 1

JS
QC



Ion Pol	POS	MassGain	365
		MassOffs	-11
Emission	34.6	AmuGain	2441
EIEnrgy	69.9	AmuOffs	123
Filament	1	Wid219	-0.026
		DC Pol	POS
Repeller	29.45		
IonFcus	90.2	HEDEnab	ON
EntLens	14.5	EMVolts	1576
EntOffs	19.07		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
134 peaks Base: 69.05 Abundance: 379776



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	379776	100.00	70.05	4220	1.11
218.95	306624	80.74	219.95	13482	4.40
502.05	42048	11.07	503.05	4331	10.30

Air/Water Check: H20~0.88% N2~3.97% O2~1.29% CO2~0.08% N2/H2O~451.81%

Column Flow: Front: 0.798 Back: 0 ml/min. Interface Temp: 280

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502: EM Gain 114850
Repeller Maximum 35 volts using ion 219:

MassGain Values @Samples: 365@3 365@2 365@1 365@0 365@FS

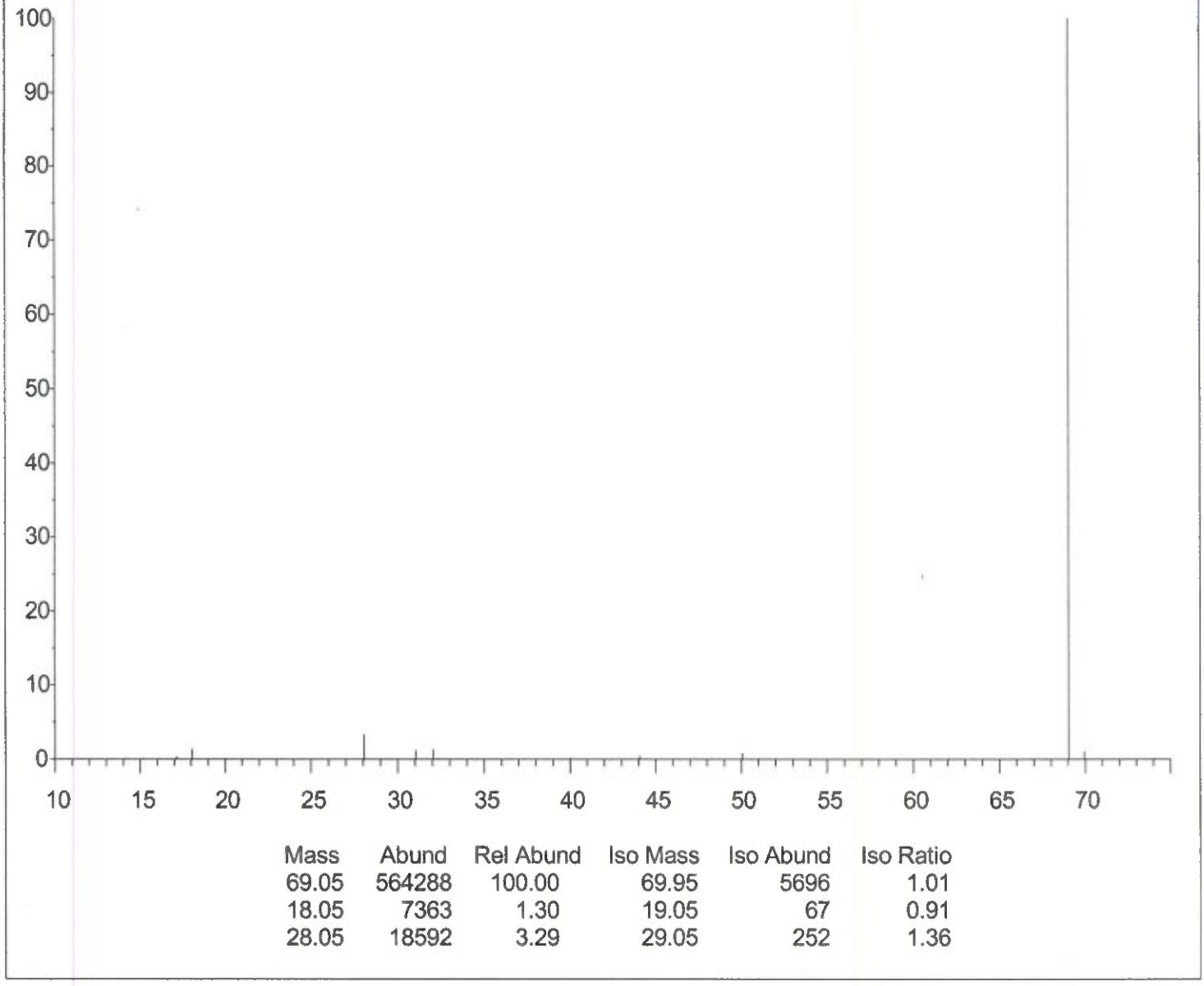
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	123.0	123.0	123.0	123.0	123.0	123.0	123.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

597x Air and Water Check

JS
OK

Instrument: SD GCMS 1
Mon Mar 10 08:29:10 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
66 peaks Base: 69.05 Abundance: 564288



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	564288	100.00	69.95	5696	1.01
18.05	7363	1.30	19.05	67	0.91
28.05	18592	3.29	29.05	252	1.36

Current Params used: atune.u

Relative abundances:
18/69 = 1.30 Water% ✓
28/69 = 3.29 Nitrogen% ✓
32/69 = 1.27 Oxygen% ✓
44/69 = 0.41 Carbon Dioxide%
28/18 = 252.51 Nitrogen/Water%

System Verification - Tune (Detector Optimization) Portion

JD

Instrument Name	: SD GCMS 1	
DC Polarity	: Positive	
Filament	: 1	
BasePeak should be 69 or 219		Ok
Position of mass 69	69.05	Ok
Position of mass 219	218.95	Ok
Position of mass 502	502.05	Ok
Position of isotope mass 70	70.05	Ok
Position of isotope mass 220	219.97	Ok
Position of isotope mass 503	503.05	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.10	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.29	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.15	Ok
Ratio of 219 to 69 should be > 40% and is	82.10	Ok
Ratio of 502 to 69 should be > 2.4% and is	11.36	Ok
Mass 69 Precursor (<= 3%)	0.21	Ok
Mass 219 Precursor (<= 6%)	0.39	Ok
Mass 502 Precursor (<= 12%)	0.58	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.86	Ok
Ratio of 28 to 69 (<10%)	4.16	Ok
Electron Multiplier Voltage	1576	Ok

Tune portion of System Verification passed.

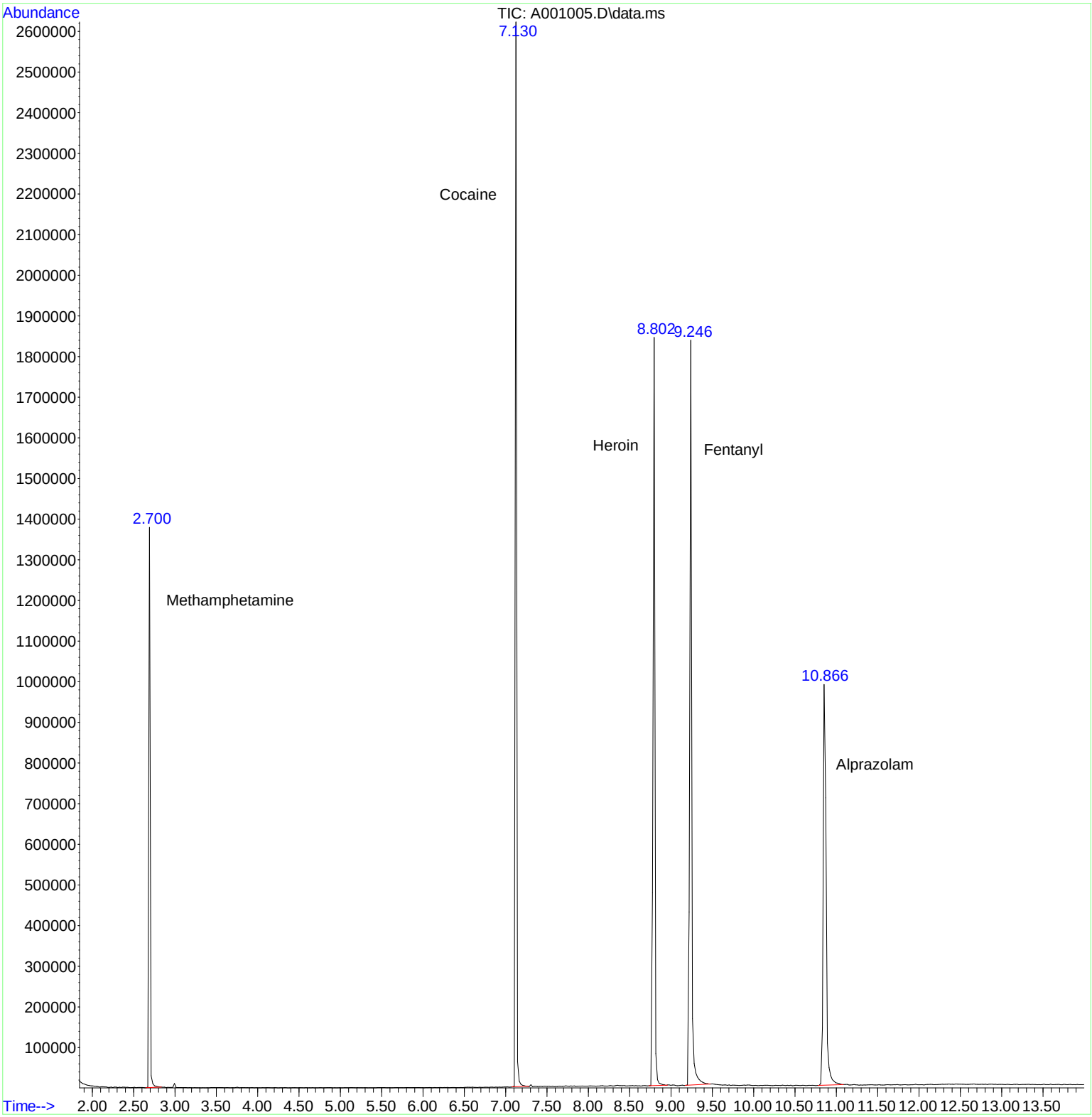
BCCL GC/MS #1
Retention Times for the Week of:

03/10/2025 - 03/16/2025

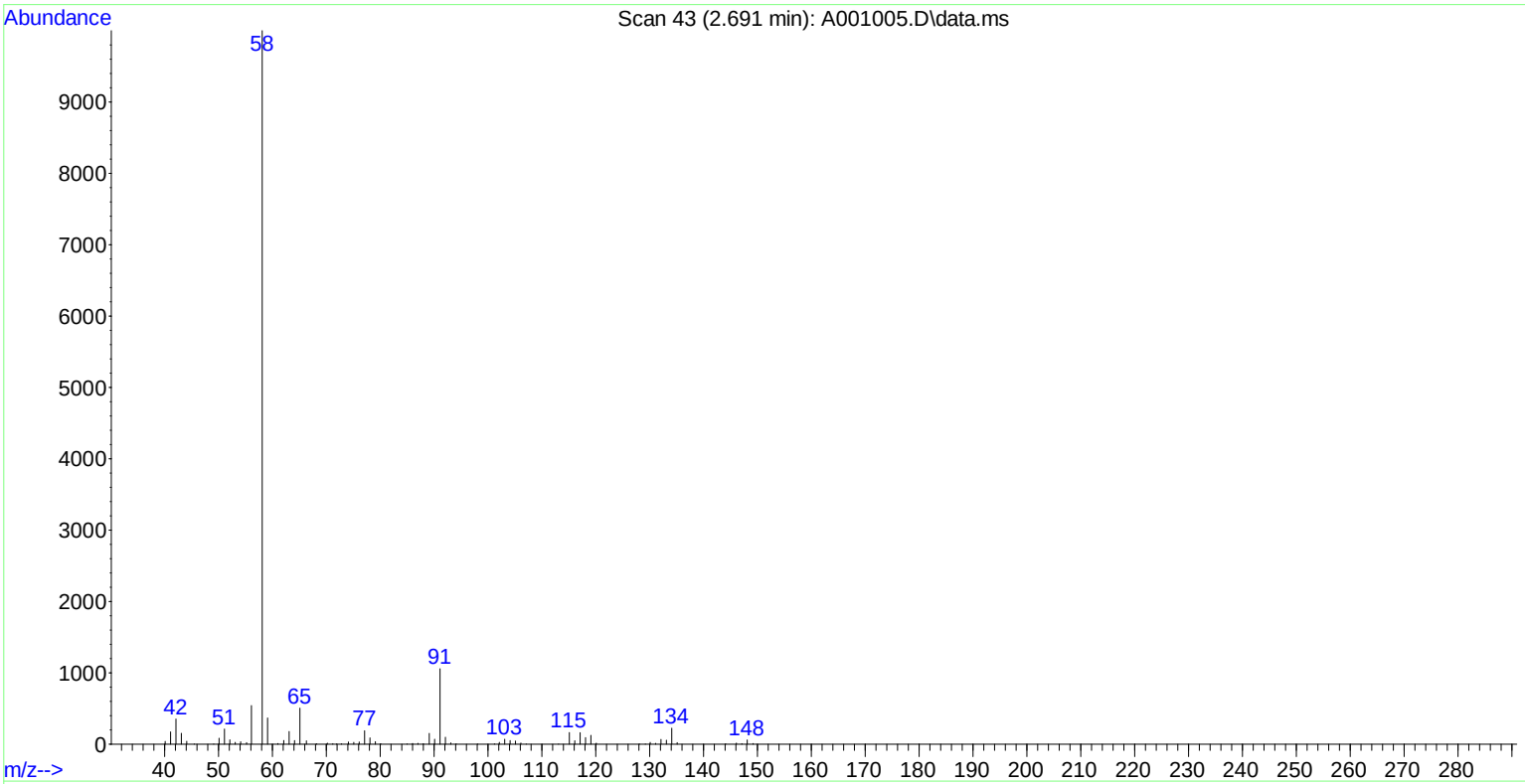
[x] **Tune: 03/10/2025 - Autotune DS**

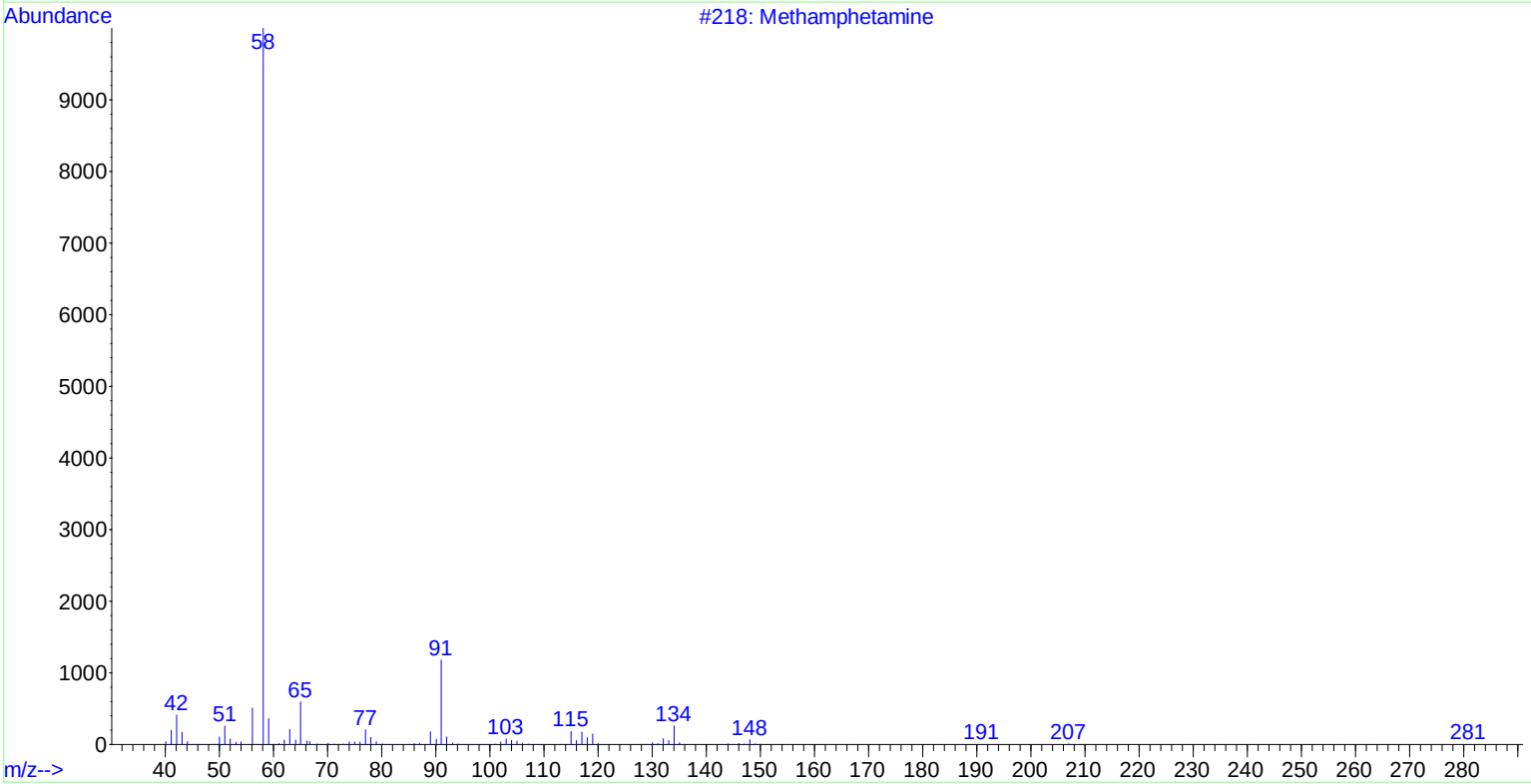
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.700	2.673	2.727
Cocaine	R-24-060	BCCL GenDrug	7.130	7.058	7.201
Heroin	R-24-060	BCCL GenDrug	8.802	8.713	8.890
Fentanyl	R-24-060	BCCL GenDrug	9.246	9.153	9.338
Alprazolam	R-24-060	BCCL GenDrug	10.866	10.757	10.974

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

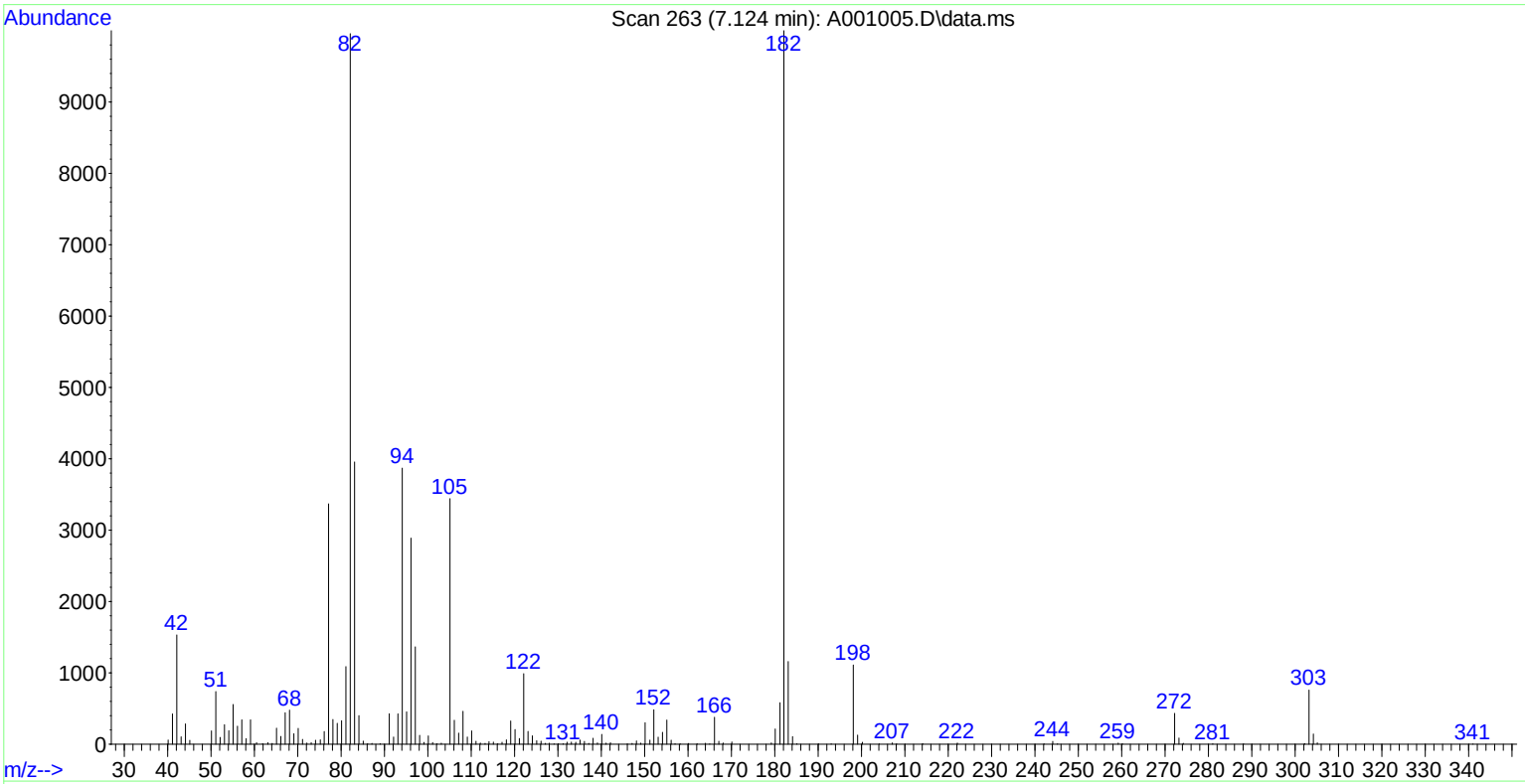


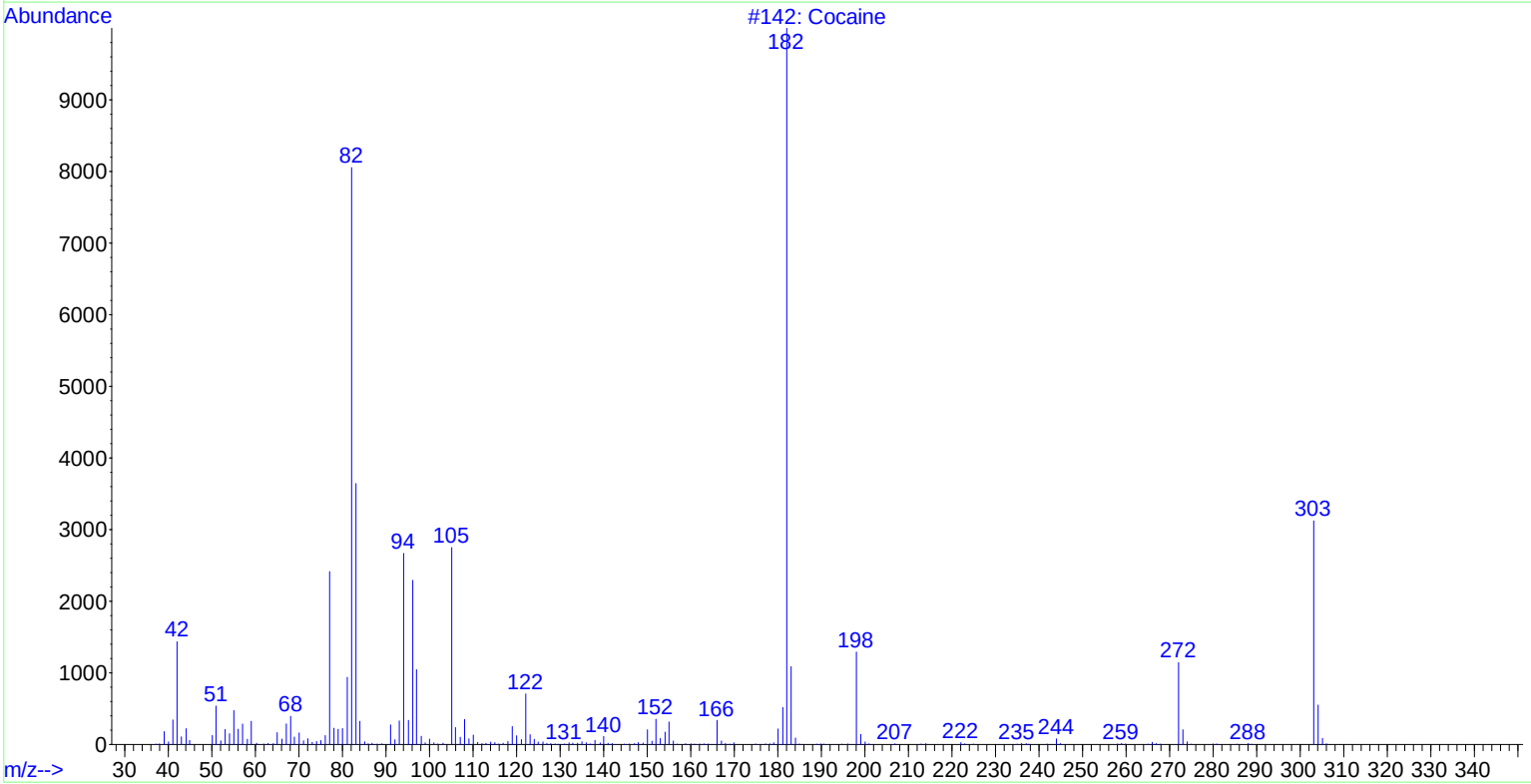
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



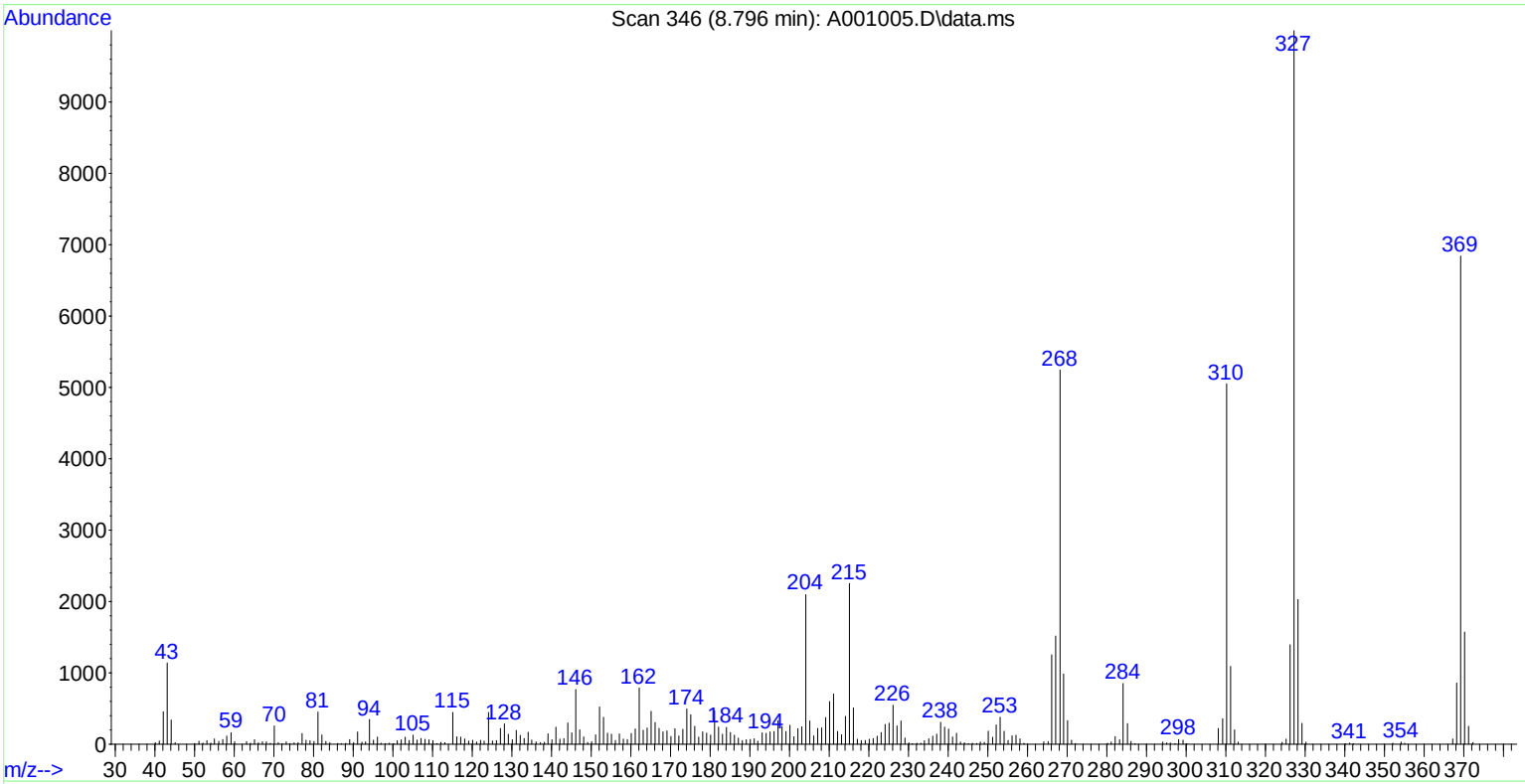


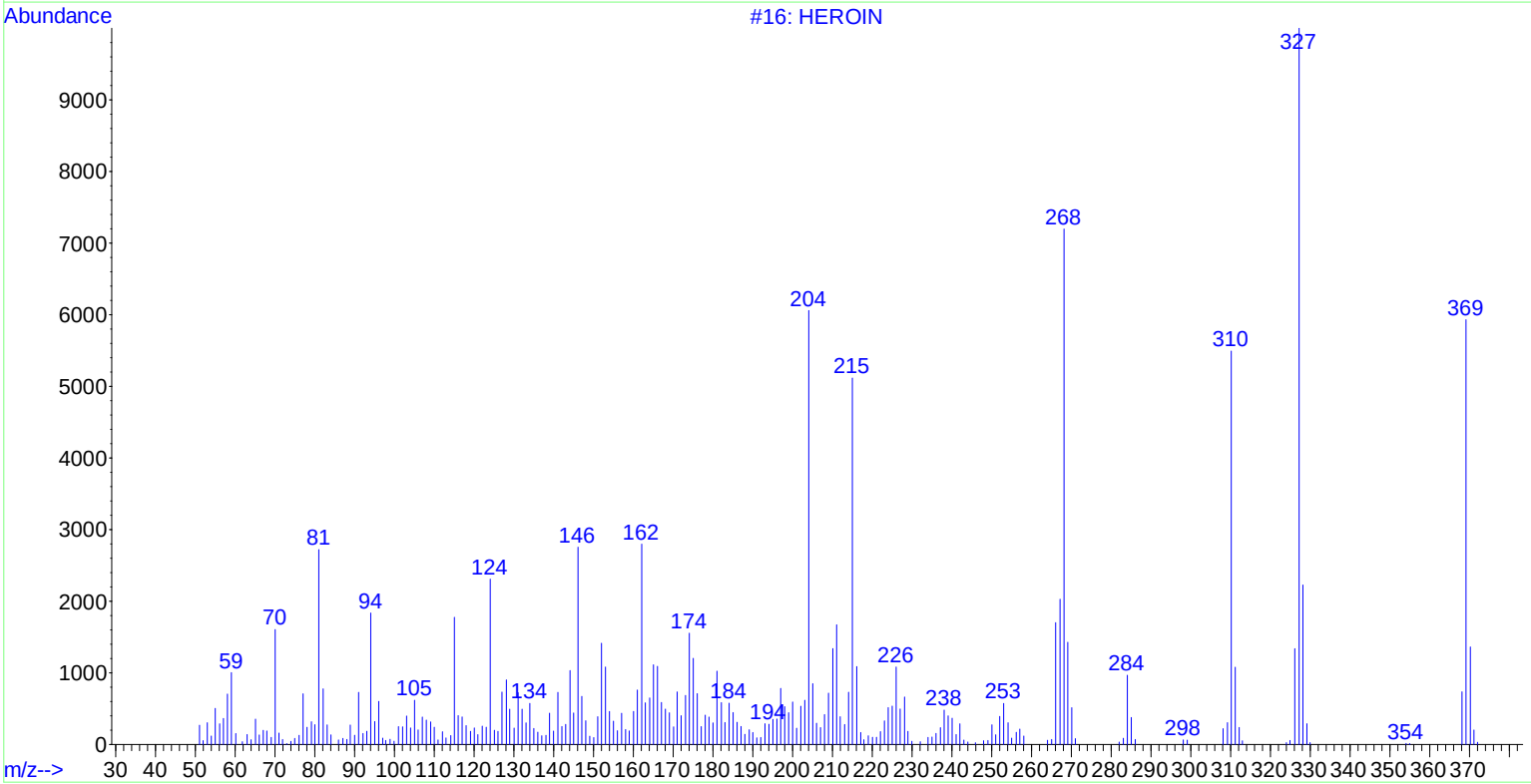
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



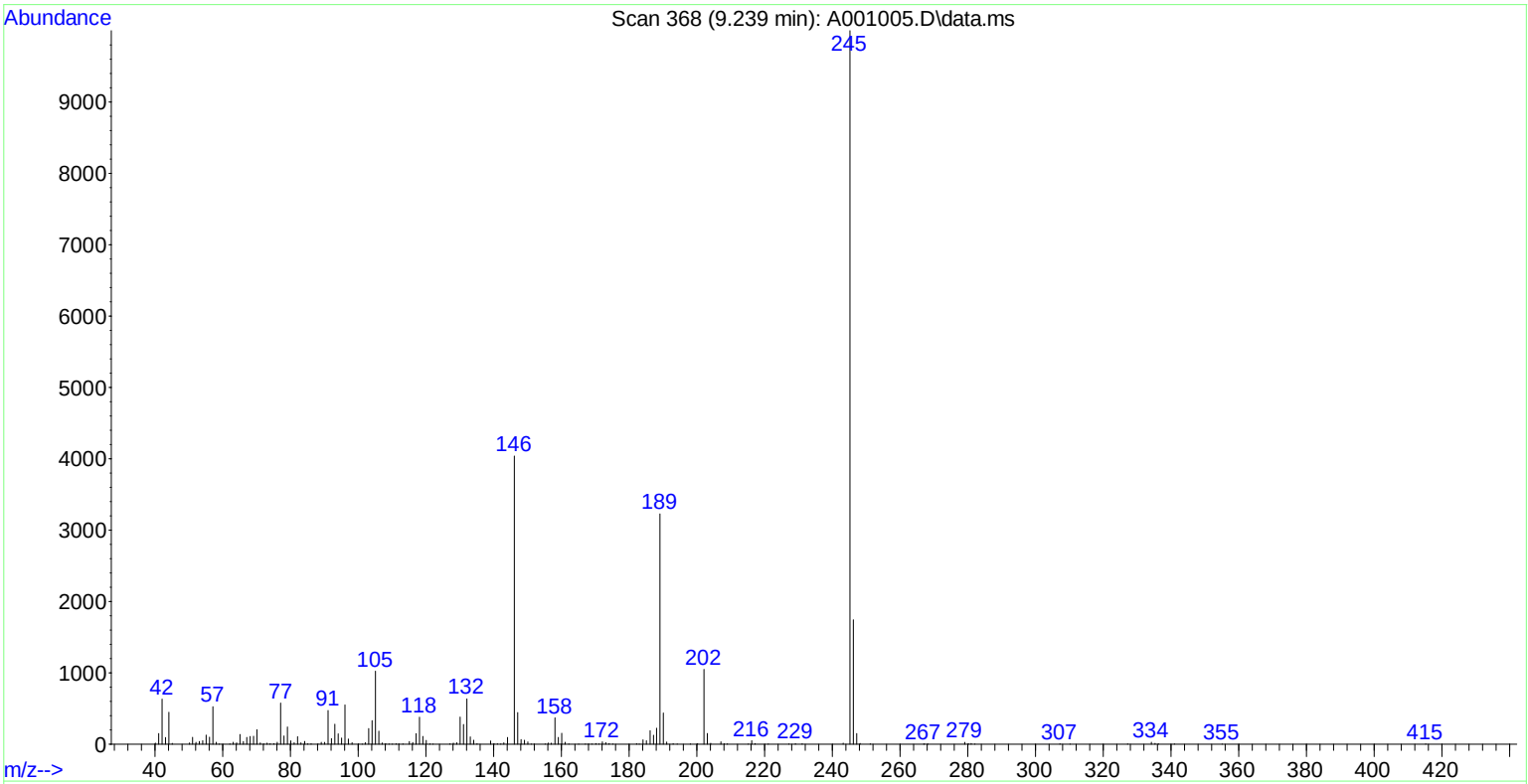


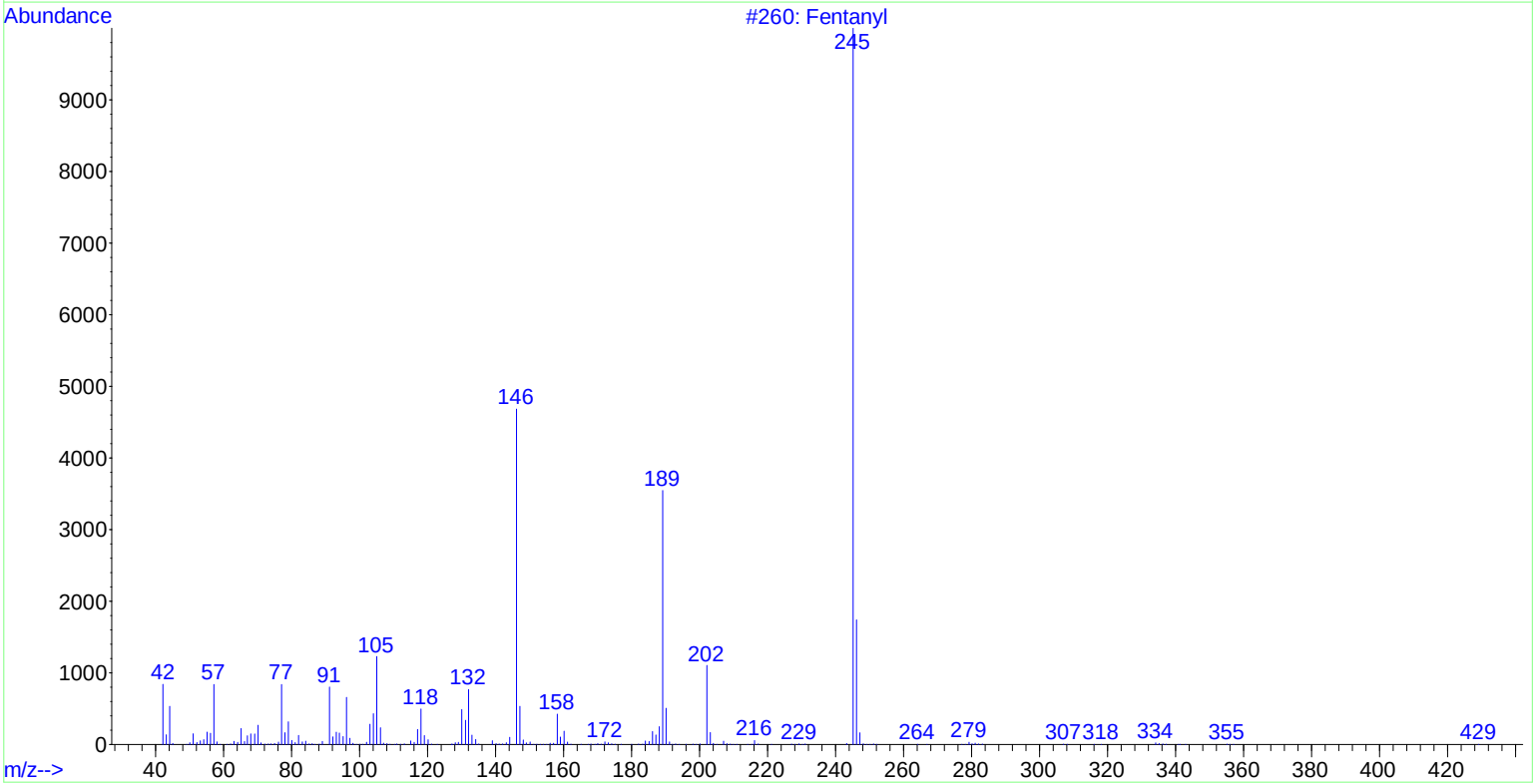
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



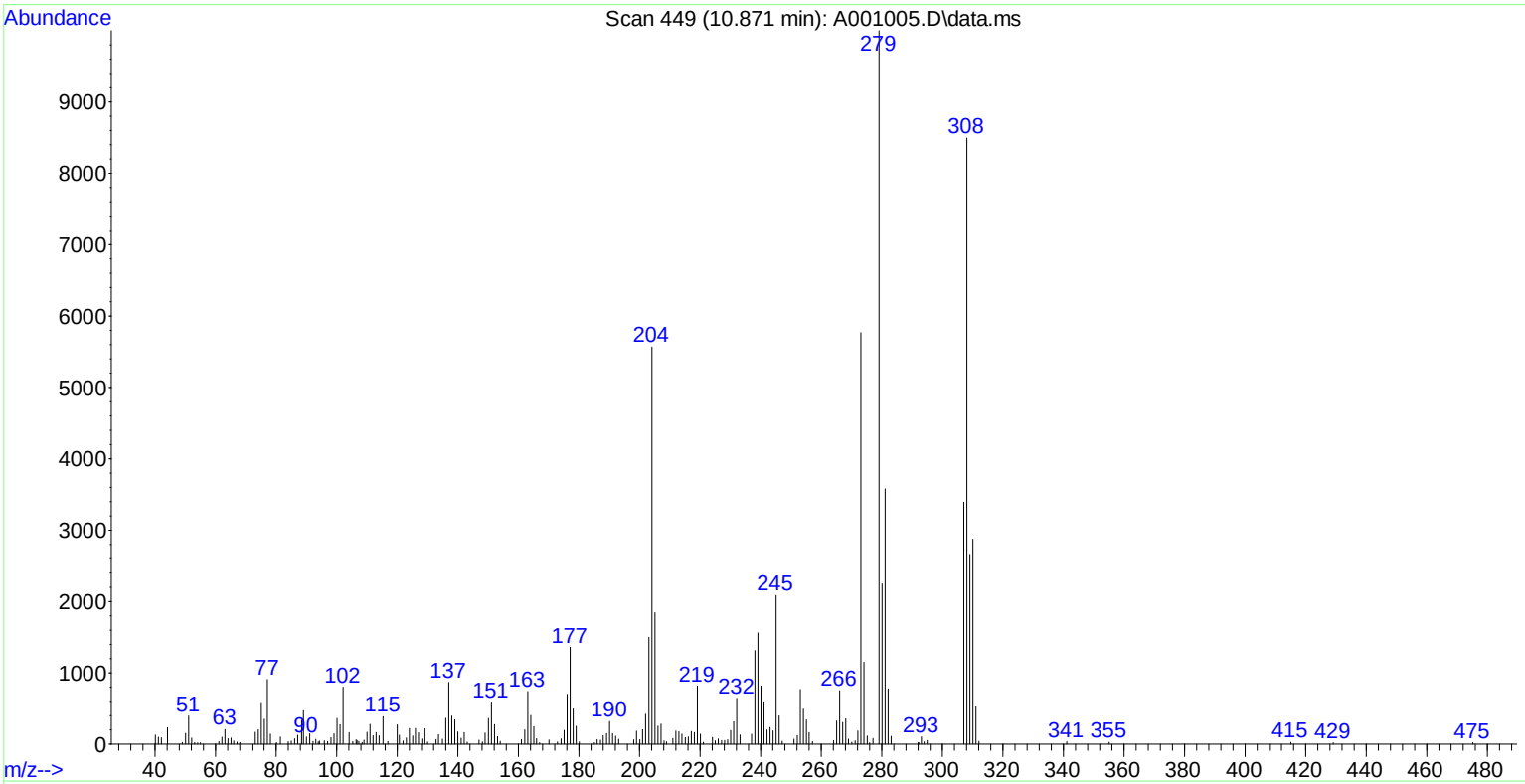


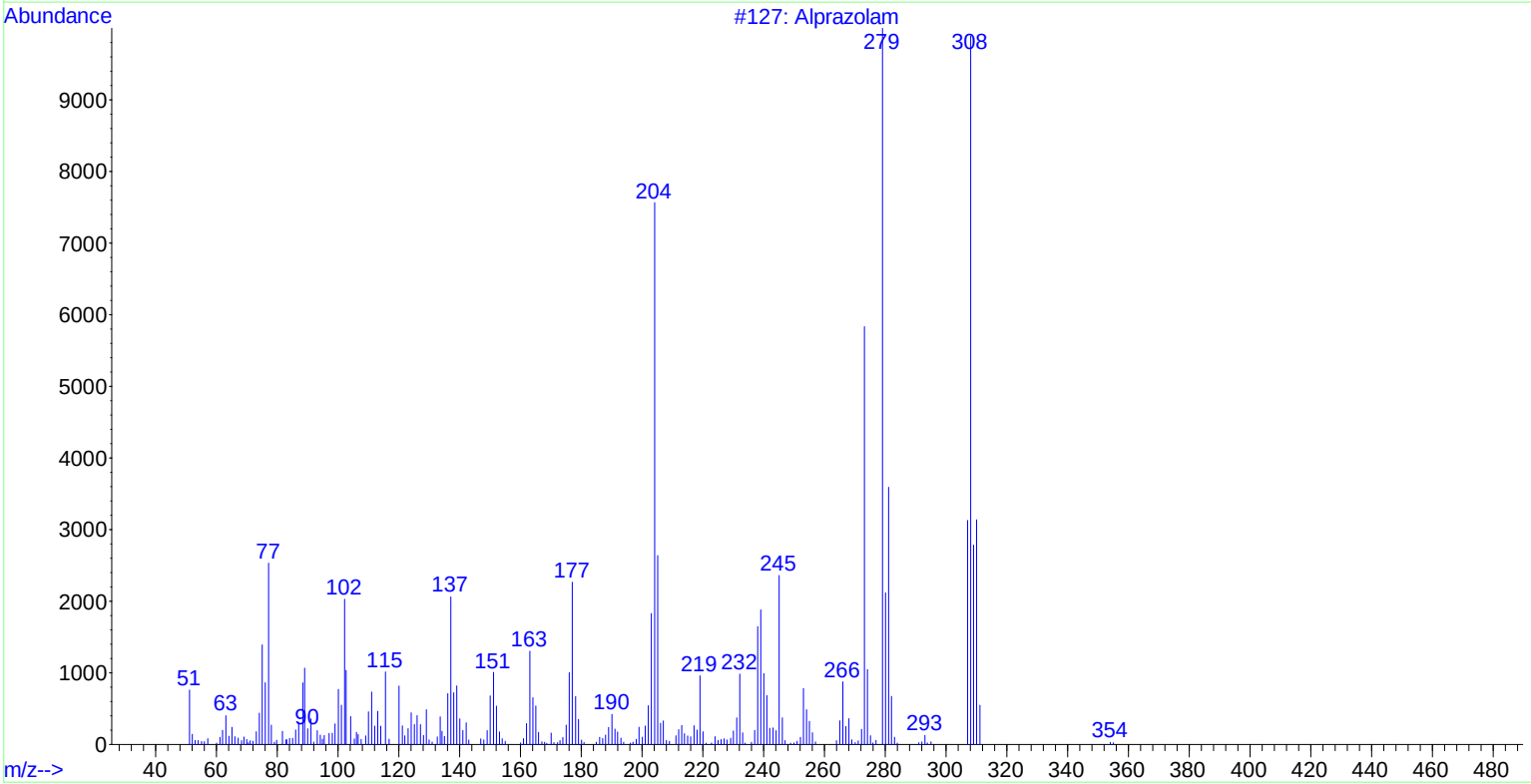
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



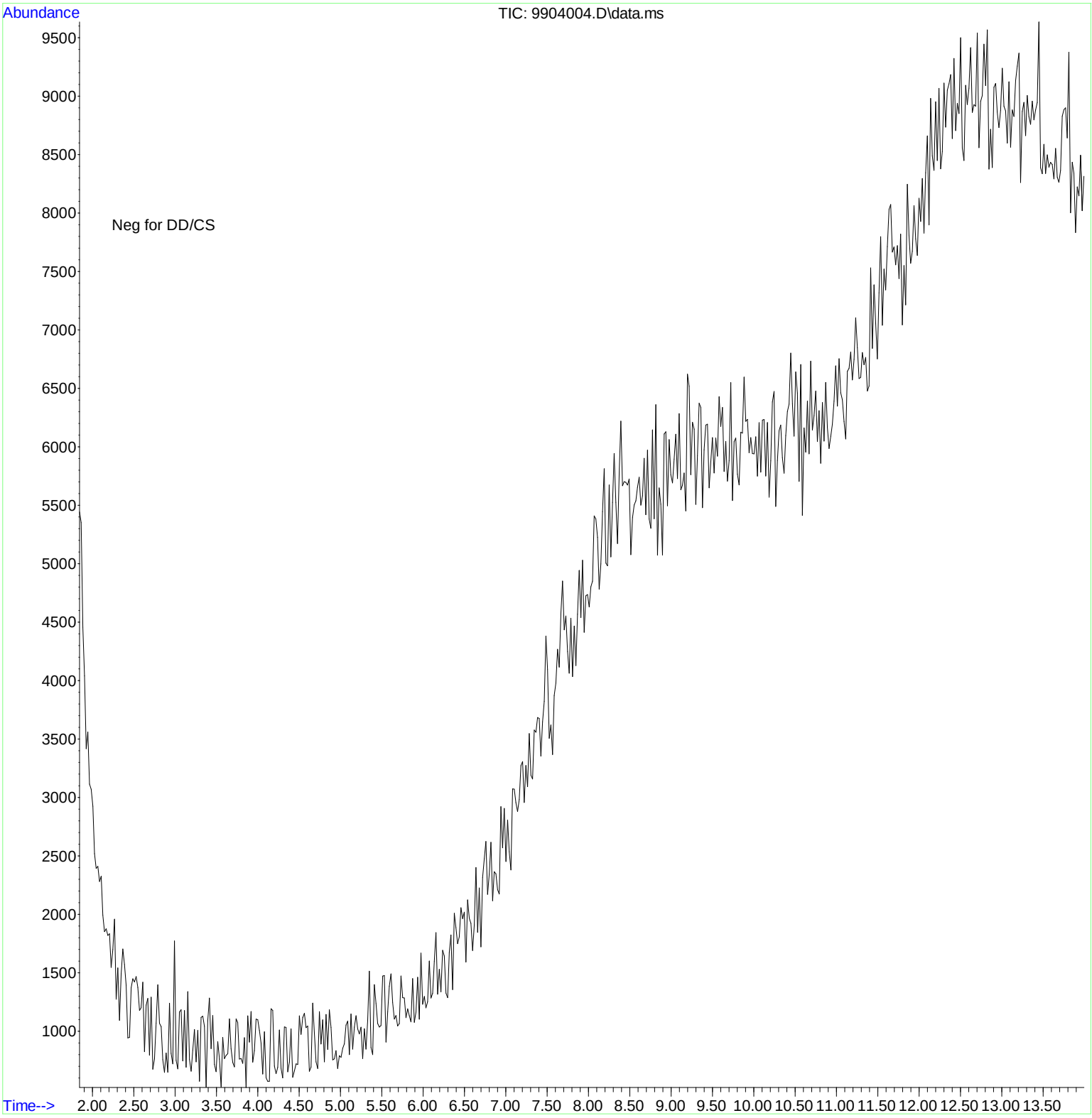


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

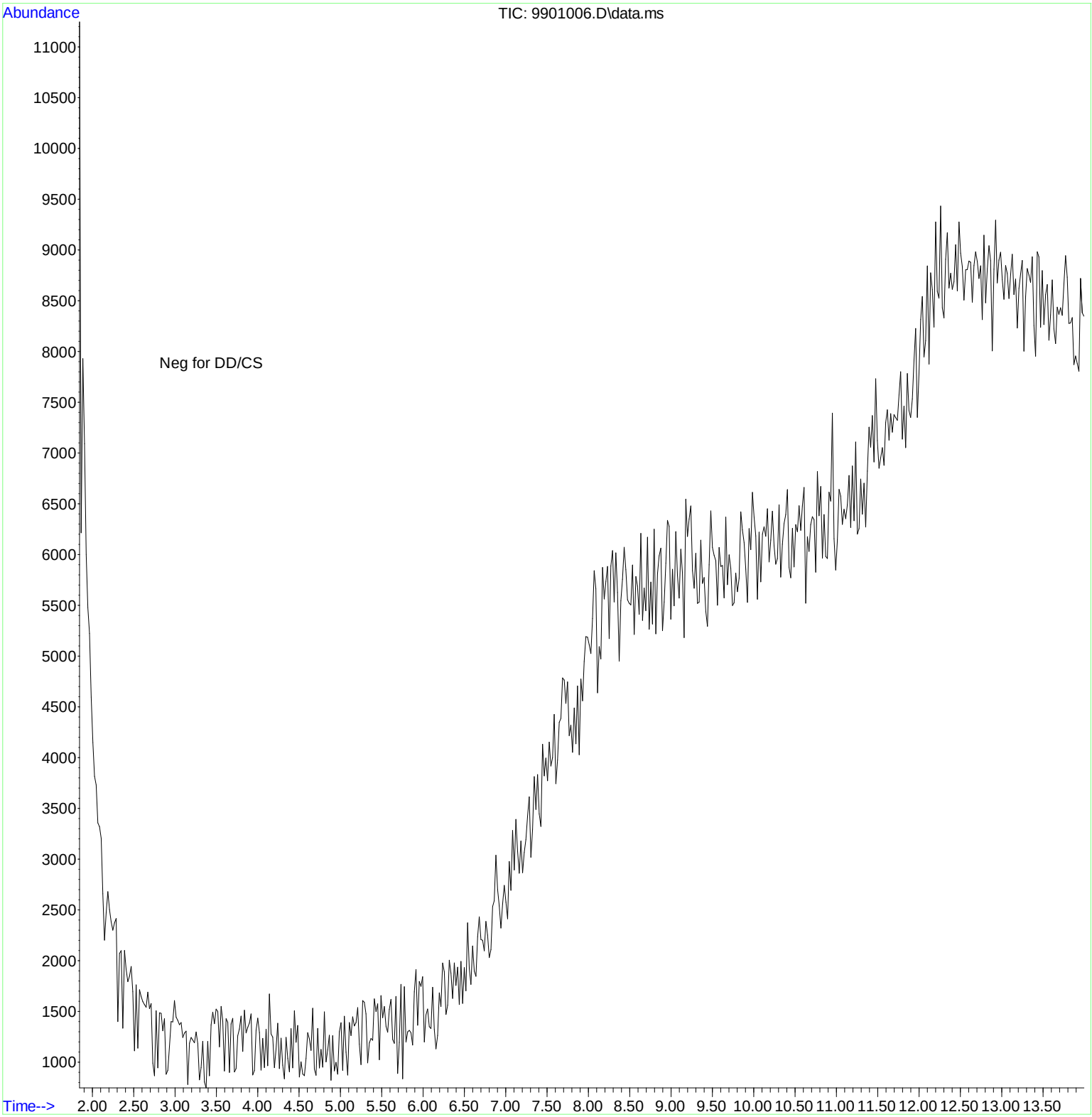




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 9:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



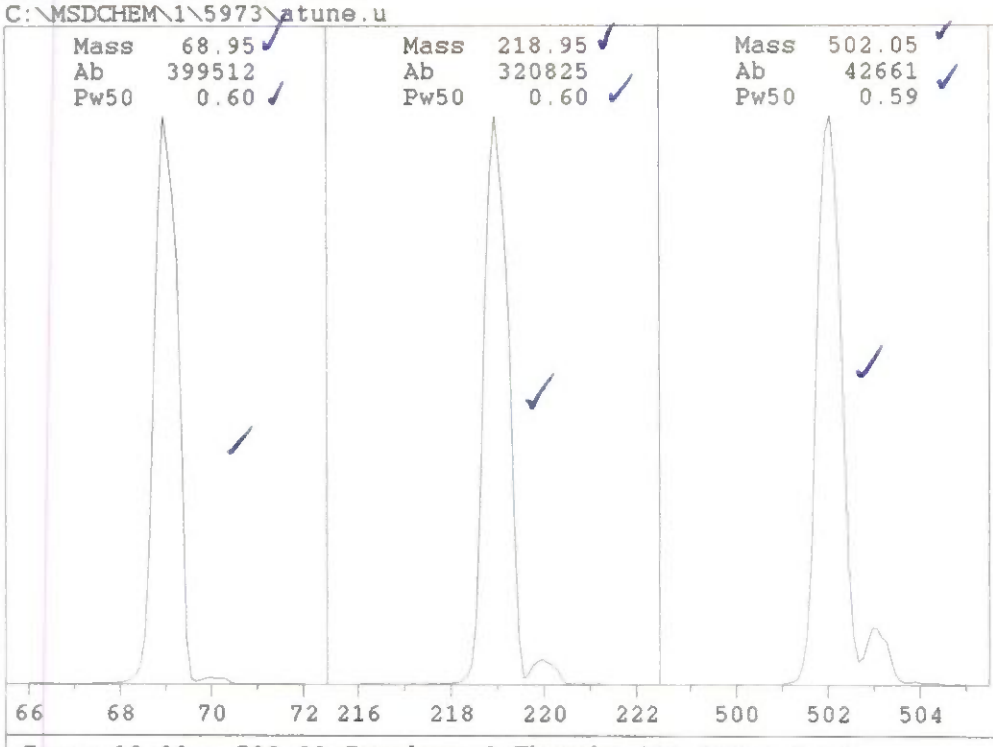
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031025\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 10 Mar 2025 10:05 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)



5973 Autotune

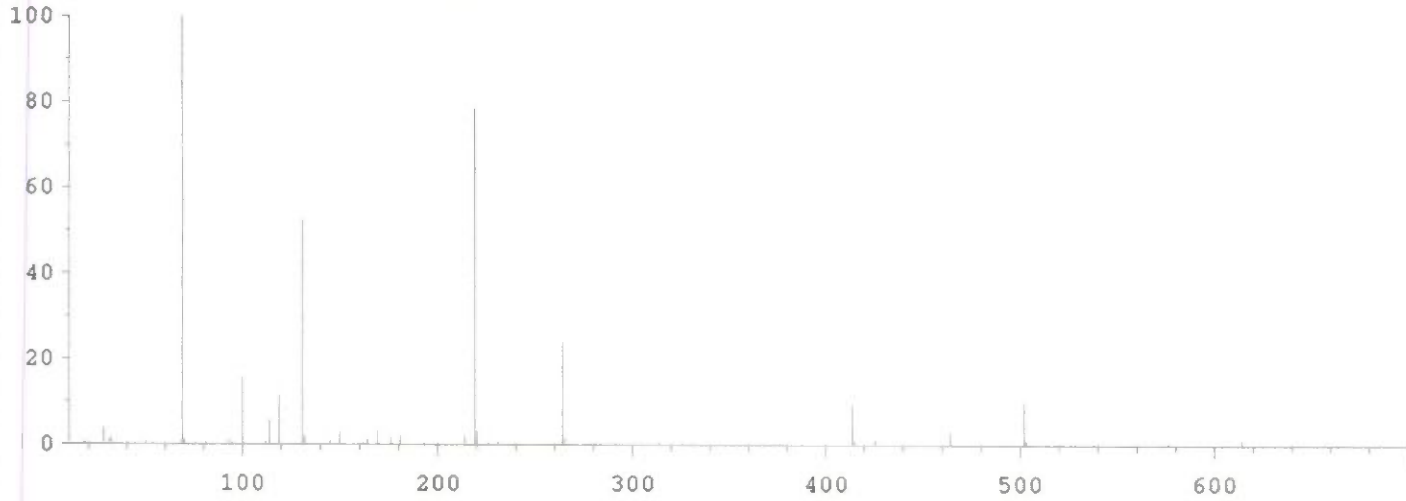
Mon Mar 17 08:34:24 2025 Instrument: SD GCMS 1
C:\MSDCHEM\1\5973\atune.u

DS
OK



Ion Pol	POS	MassGain	365
		MassOffs	-11
Emission	34.6	AmuGain	2443
EIEnrgy	69.9	AmuOffs	123
Filament	1	Wid219	-0.024
		DC Pol	POS
Repeller	30.12		
IonFcus	90.2	HEDEnab	ON
EntLens	14.5	EMVolts	1576
EntOffs	19.07		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
124 peaks Base: 69.05 Abundance: 356928



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	356928	100.00	70.05	4125	1.16
218.95	279744	78.38	219.95	11953	4.27
502.05	37288	10.45	503.05	3733	10.01

Air/Water Check: H2O~0.80% N2~3.82% O2~1.20% CO2~0.07% N2/H2O~478.38%

Column Flow: Front: 0.798 Back: 0 ml/min. Interface Temp: 280

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502: EM Gain 116095
Repeller Maximum 35 volts using ion 219:

MassGain Values @Samples: 365@3 365@2 365@1 365@0 365@FS

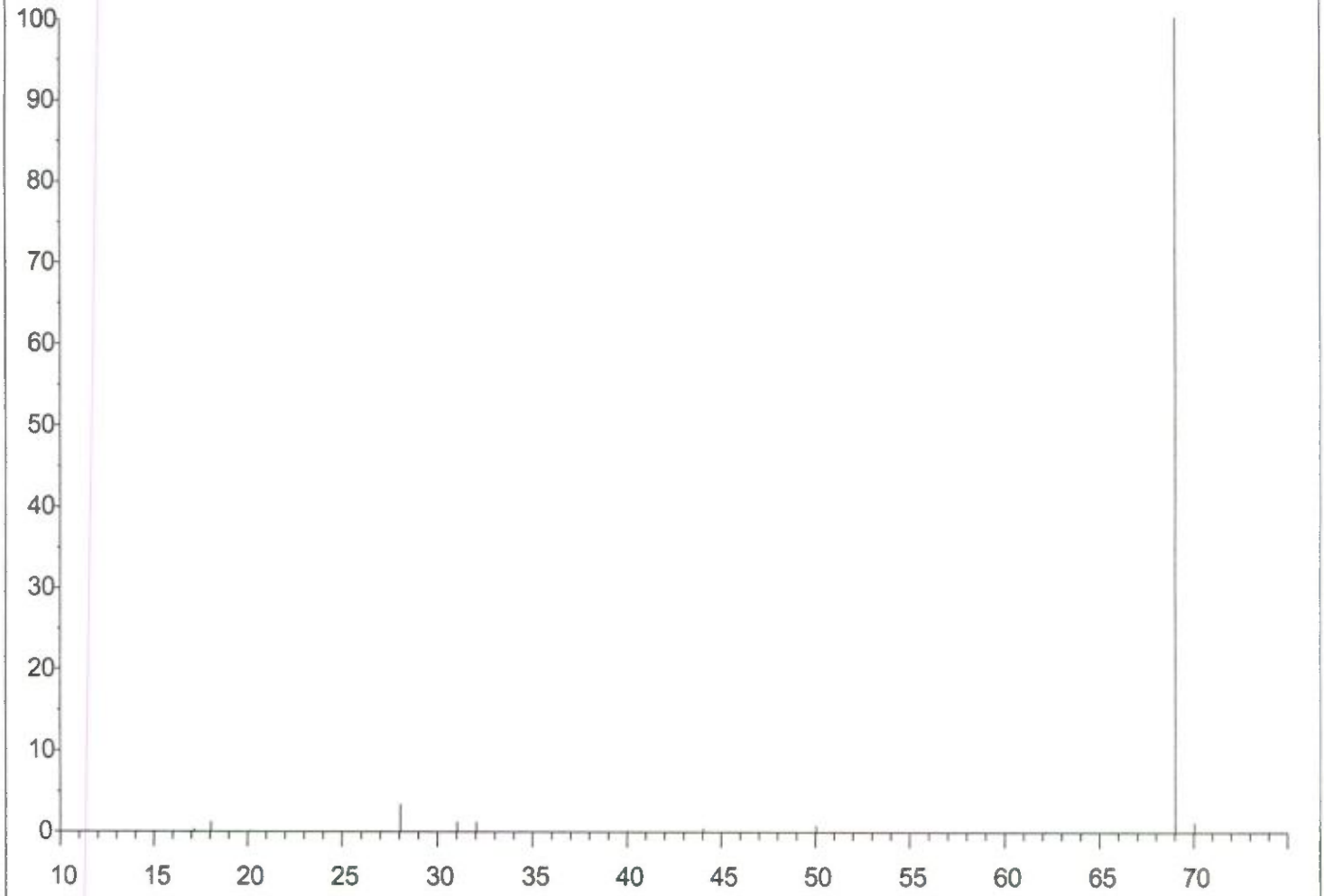
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	123.0	123.0	123.0	123.0	123.0	123.0	123.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

597x Air and Water Check

JS
OK

Instrument: SD GCMS 1
Mon Mar 17 08:24:00 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
69 peaks Base: 69.05 Abundance: 546496



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	546496	100.00	70.05	6505	1.19
18.05	6553	1.20	18.95	64	0.98
28.05	18280	3.34	29.05	238	1.30

Current Params used: atune.u

Relative abundances:
- 18/69 = 1.20 Water% ✓
- 28/69 = 3.34 Nitrogen% ✓
- 32/69 = 1.17 Oxygen% ✓
- 44/69 = 0.44 Carbon Dioxide% ✓
- 28/18 = 278.96 Nitrogen/Water%

System Verification - Tune (Detector Optimization) Portion

Instrument Name	: SD GCMS 1	
DC Polarity	: Positive	
Filament	: 1	
BasePeak should be 69 or 219		Ok
Position of mass 69	69.05	Ok
Position of mass 219	218.95	Ok
Position of mass 502	502.05	Ok
Position of isotope mass 70	70.04	Ok
Position of isotope mass 220	219.96	Ok
Position of isotope mass 503	503.04	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.09	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.30	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.03	Ok
Ratio of 219 to 69 should be > 40% and is	79.25	Ok
Ratio of 502 to 69 should be > 2.4% and is	10.79	Ok
Mass 69 Precursor (<= 3%)	0.22	Ok
Mass 219 Precursor (<= 6%)	0.42	Ok
Mass 502 Precursor (<= 12%)	0.58	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.78	Ok
Ratio of 28 to 69 (<10%)	3.74	Ok
Electron Multiplier Voltage	1576	Ok

Tune portion of System Verification passed.

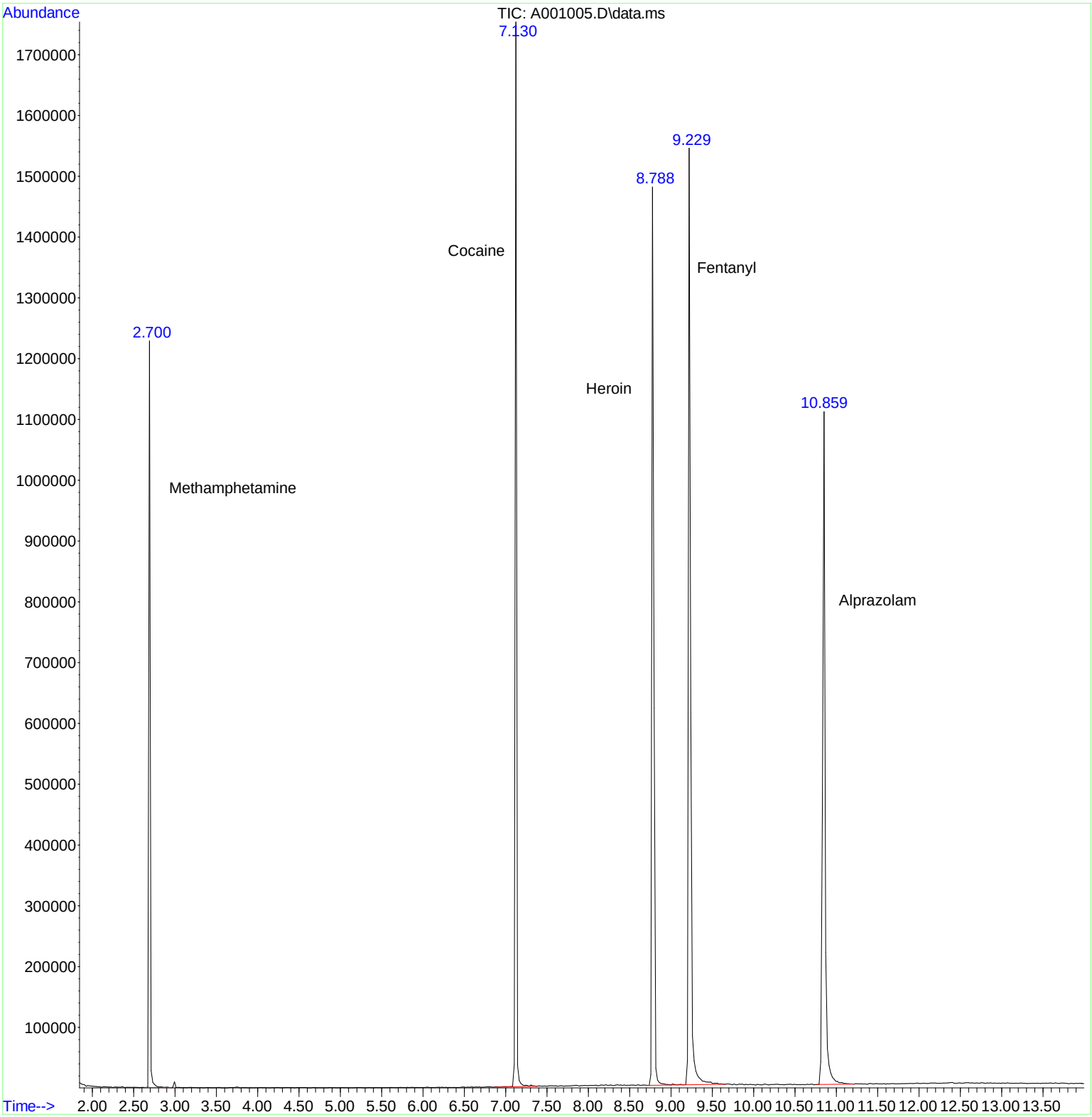
BCCL GC/MS #1
Retention Times for the Week of:

03/17/2025 - 03/23/2025

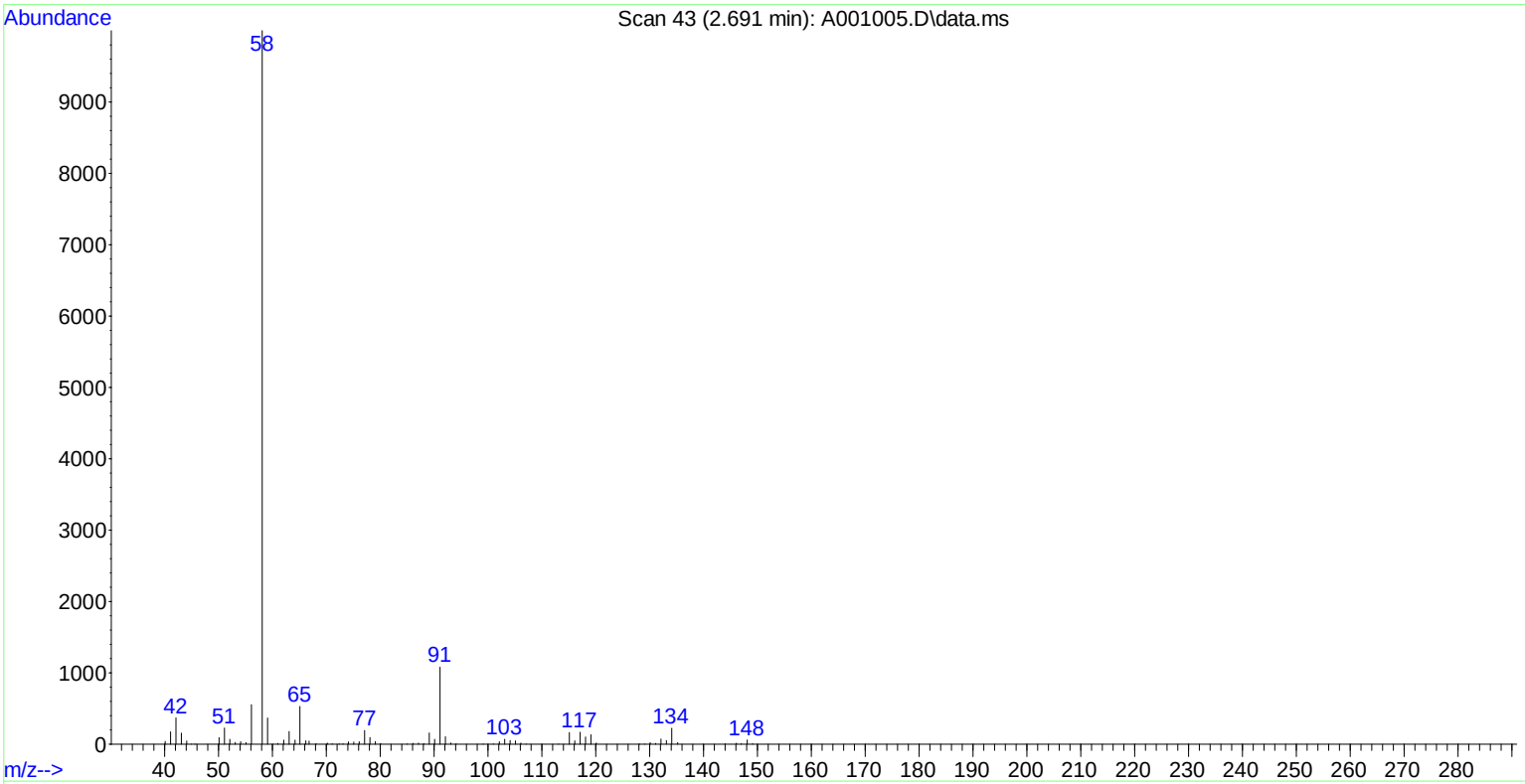
[x] **Tune: 03/17/2025 - Autotune DS**

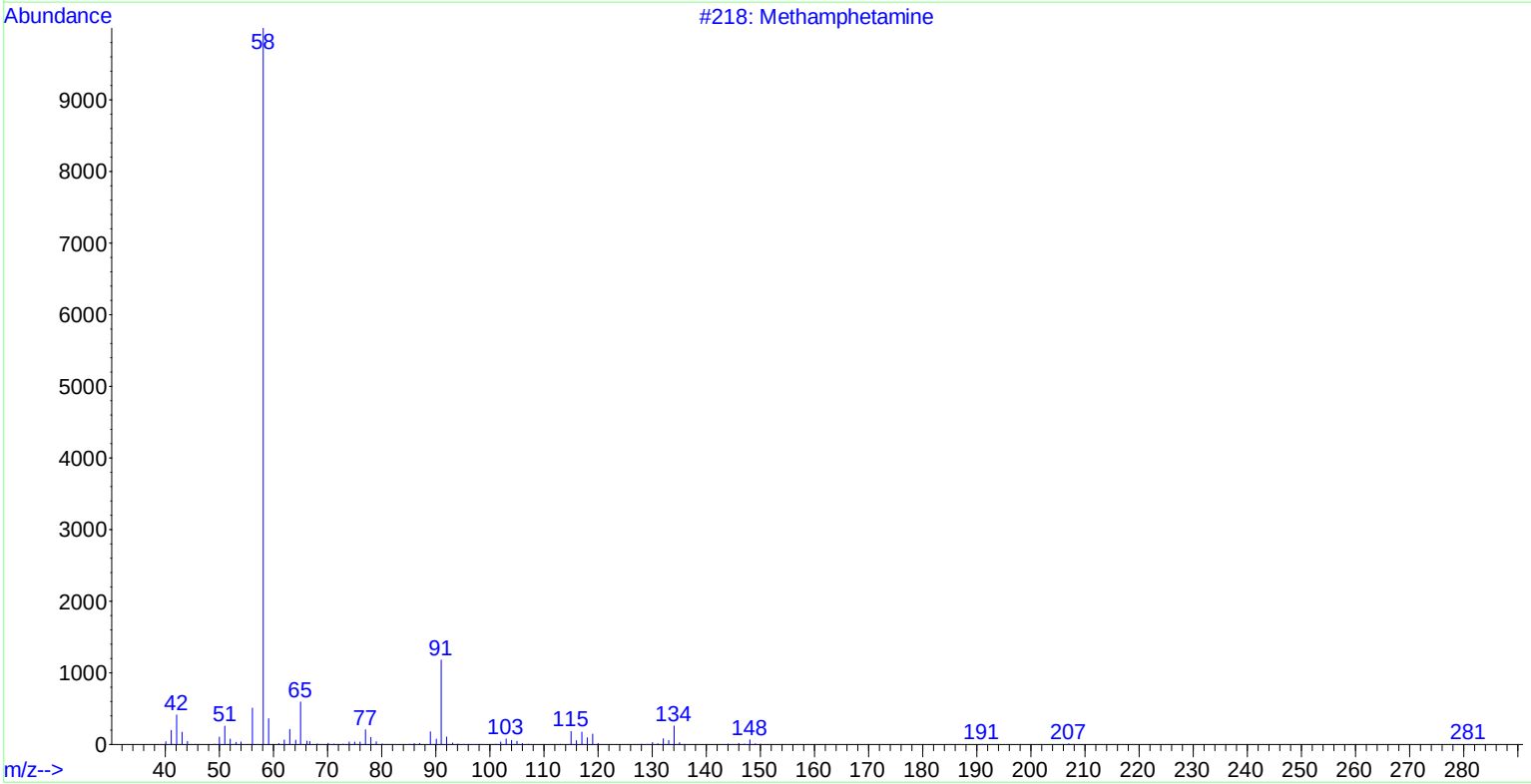
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.700	2.673	2.727
Cocaine	R-24-060	BCCL GenDrug	7.130	7.058	7.201
Heroin	R-24-060	BCCL GenDrug	8.788	8.700	8.875
Fentanyl	R-24-060	BCCL GenDrug	9.229	9.136	9.321
Alprazolam	R-24-060	BCCL GenDrug	10.859	10.750	10.967

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

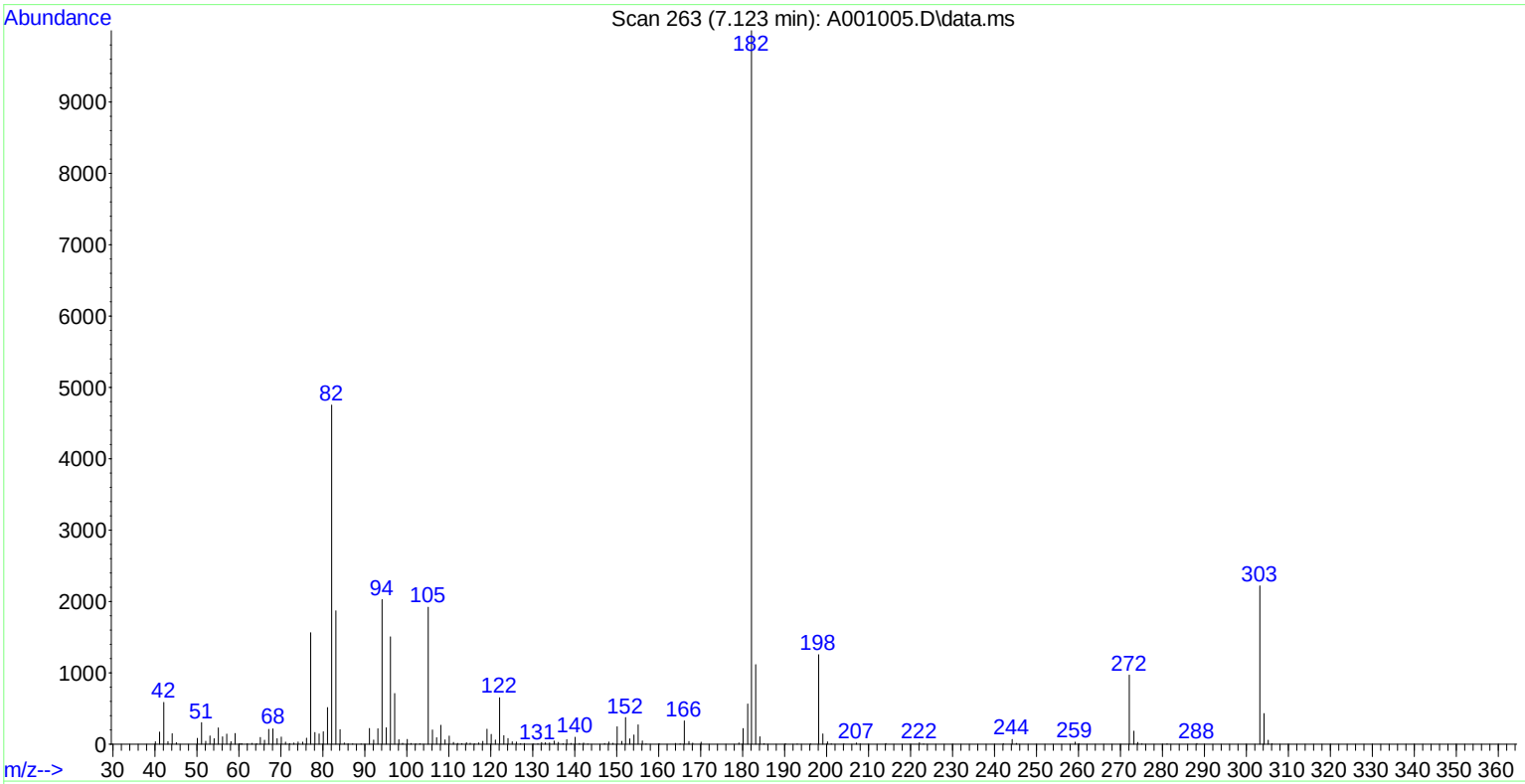


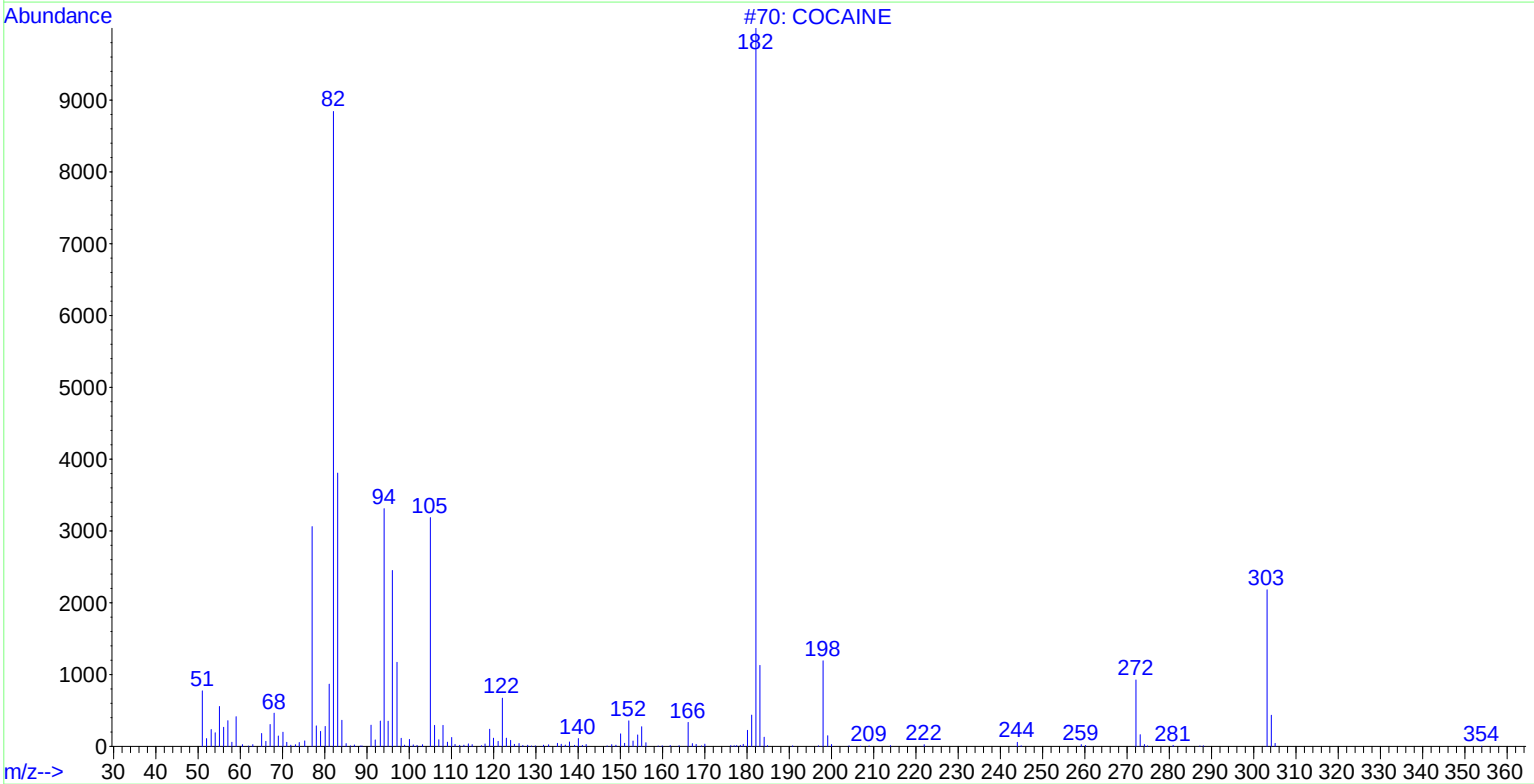
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



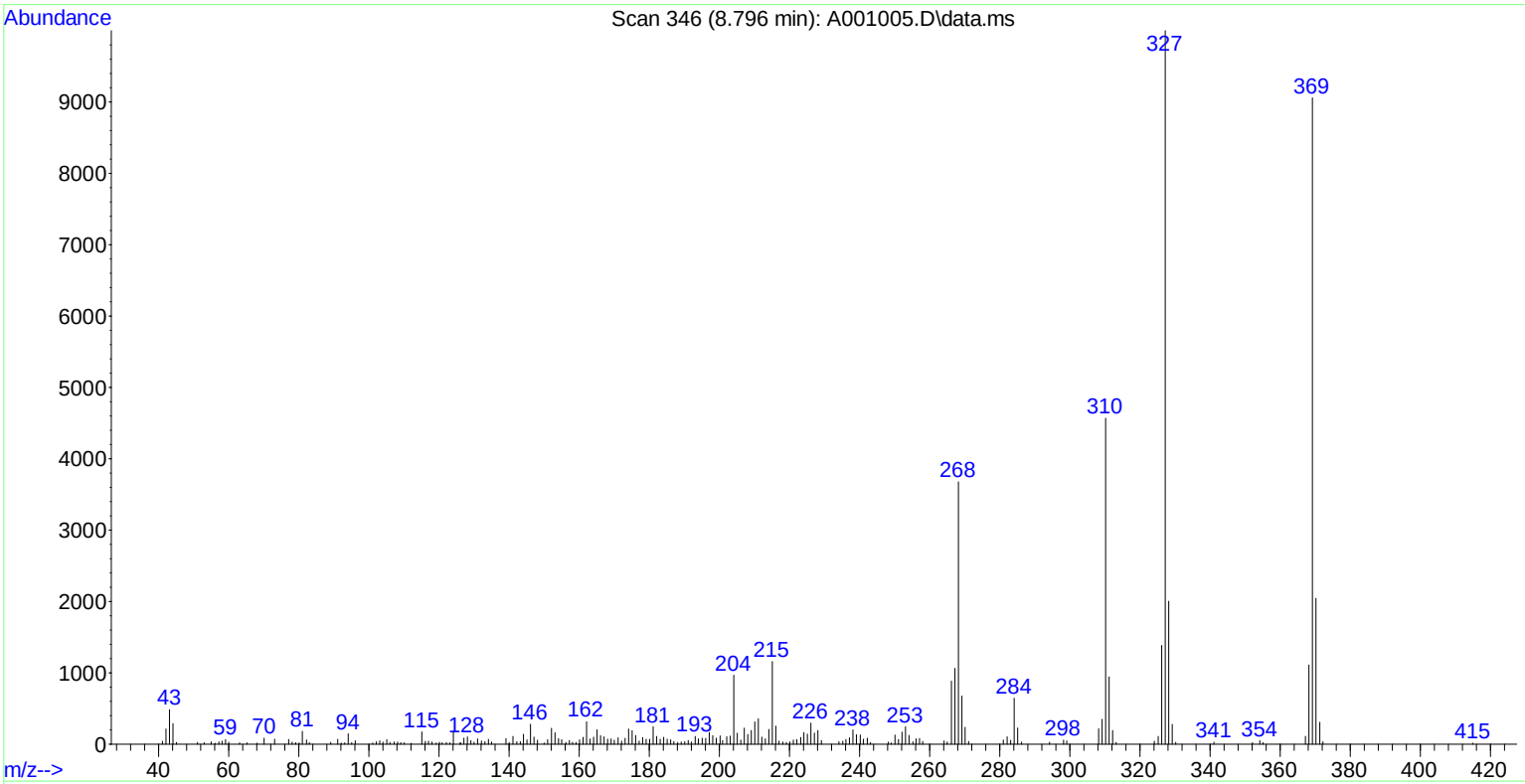


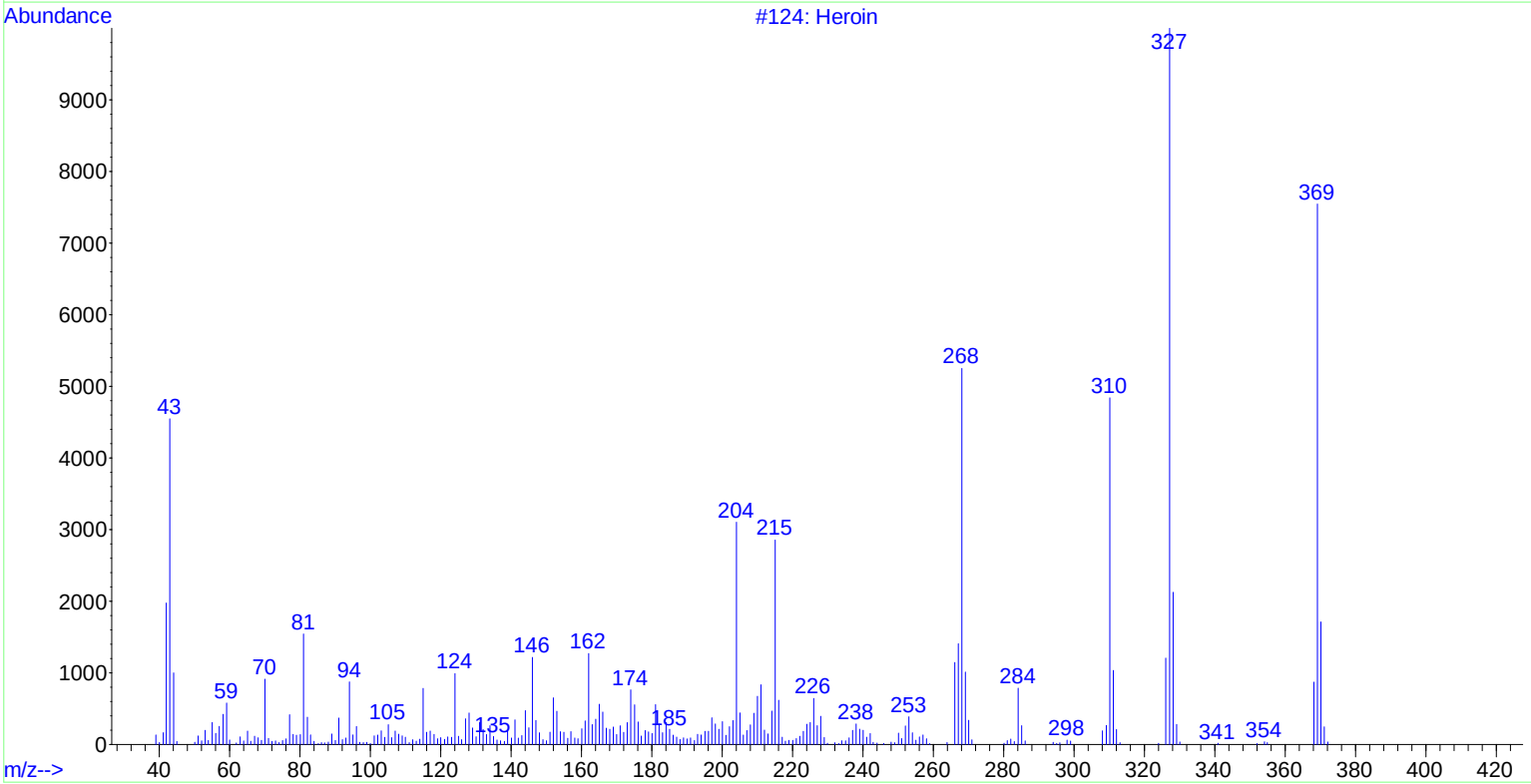
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



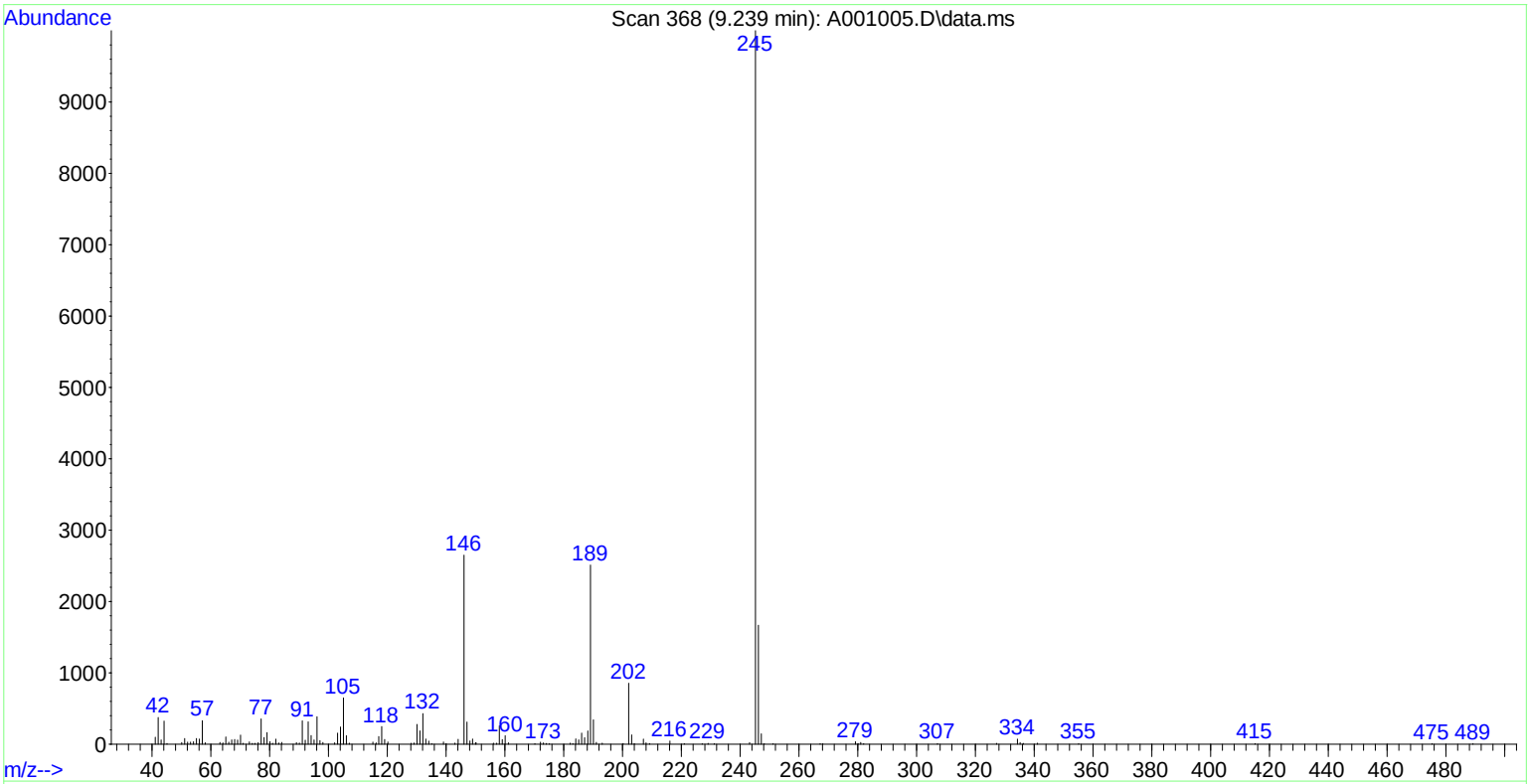


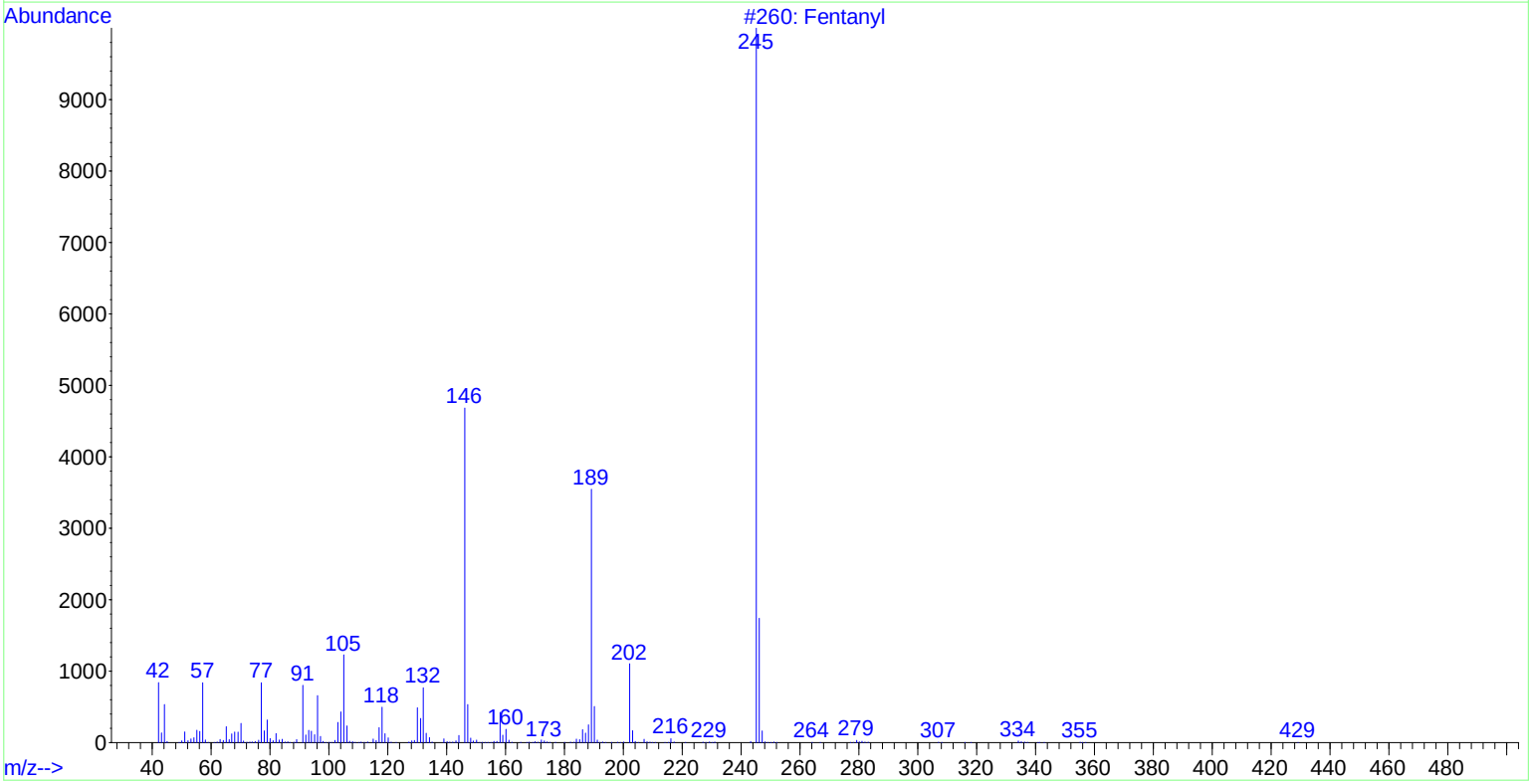
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



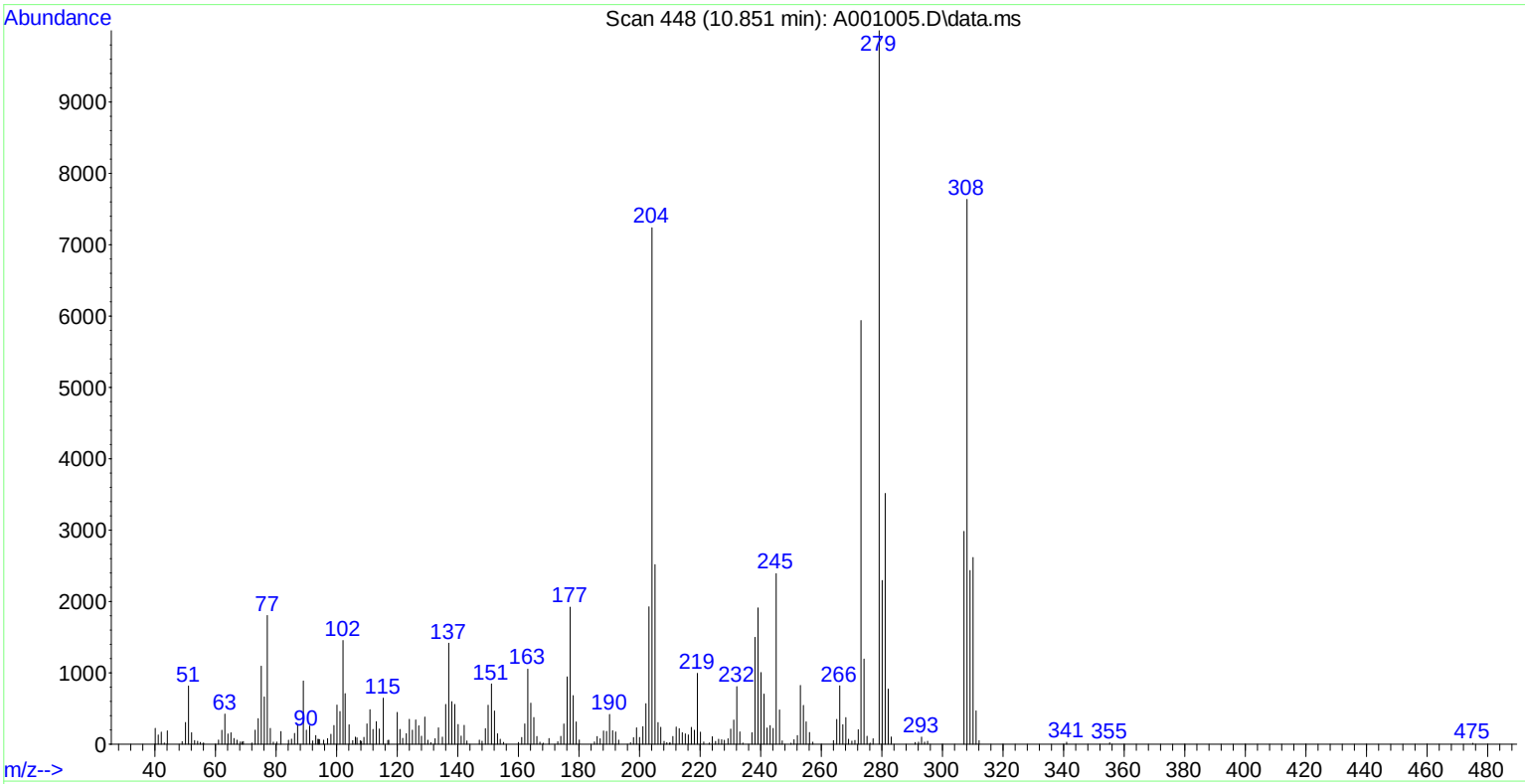


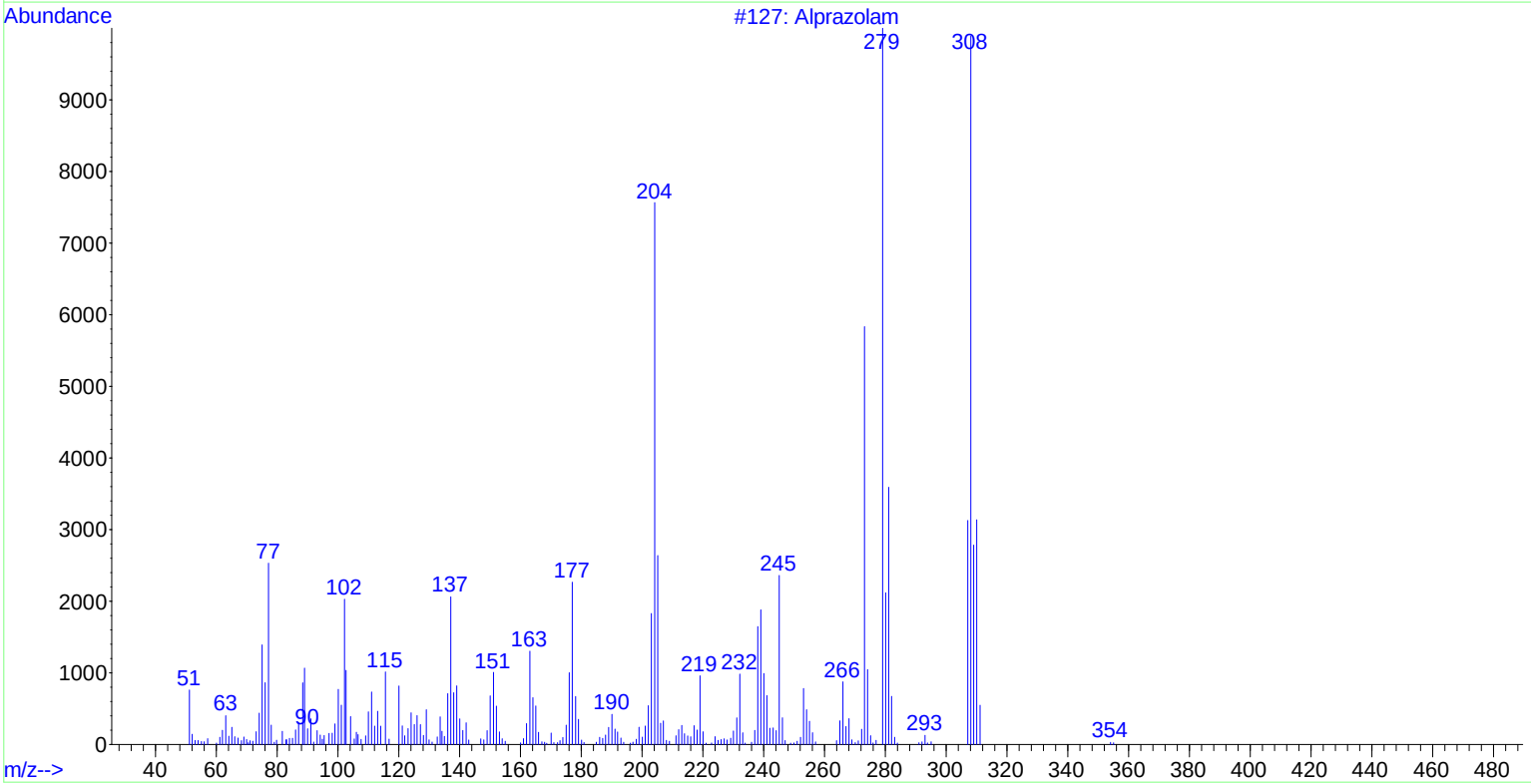
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



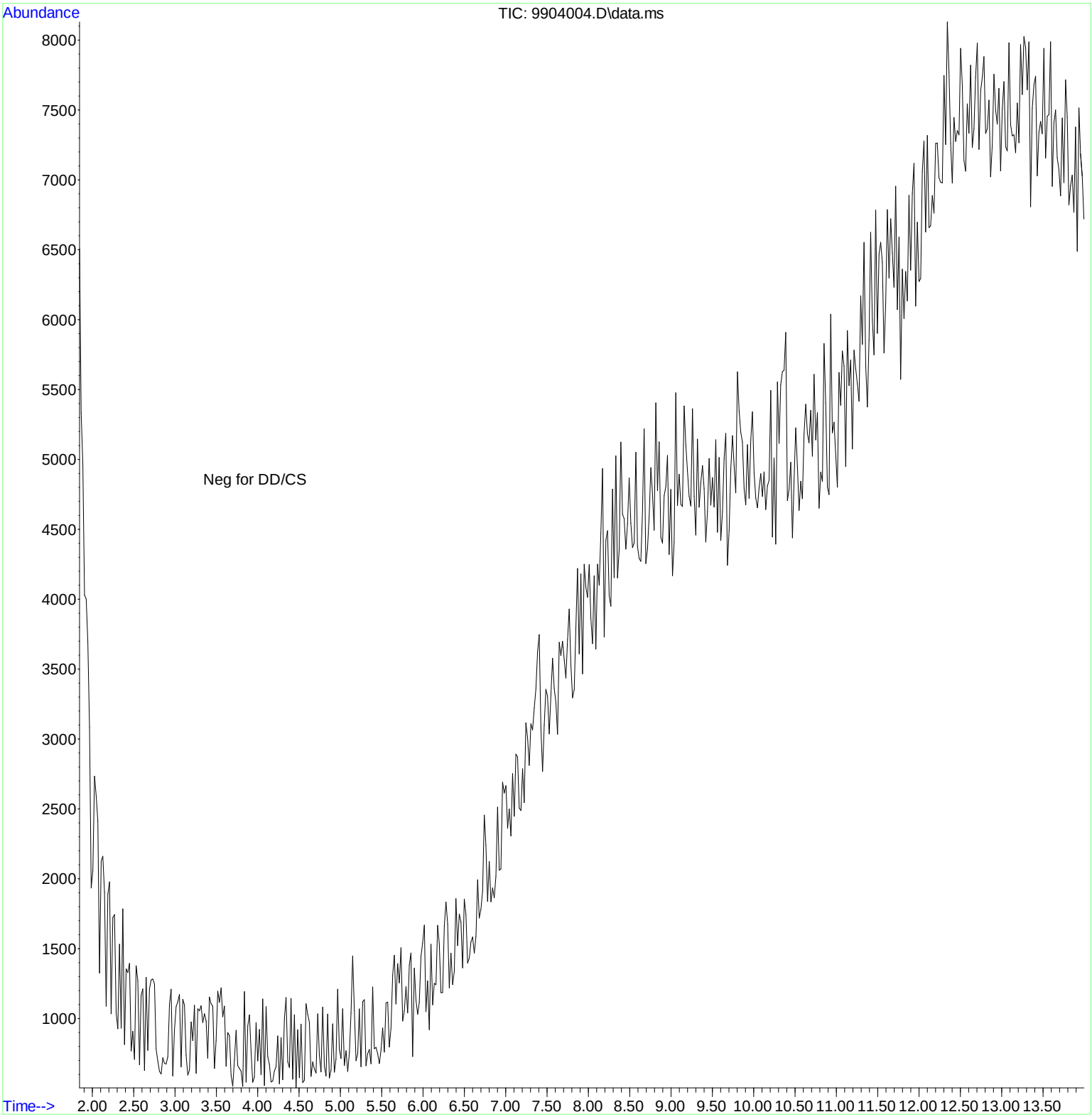


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

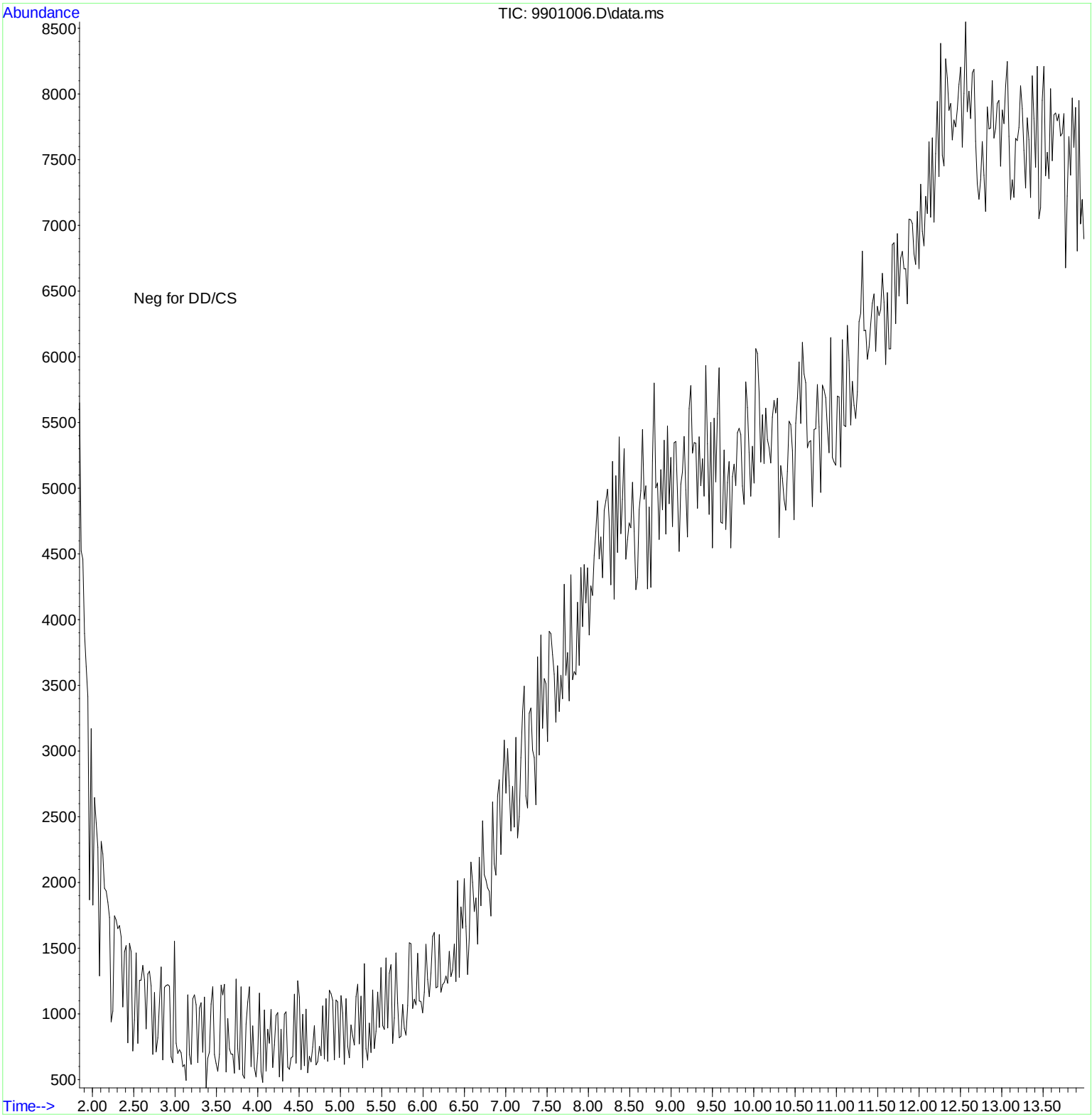




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:19 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\031725\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Mar 2025 9:54 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)

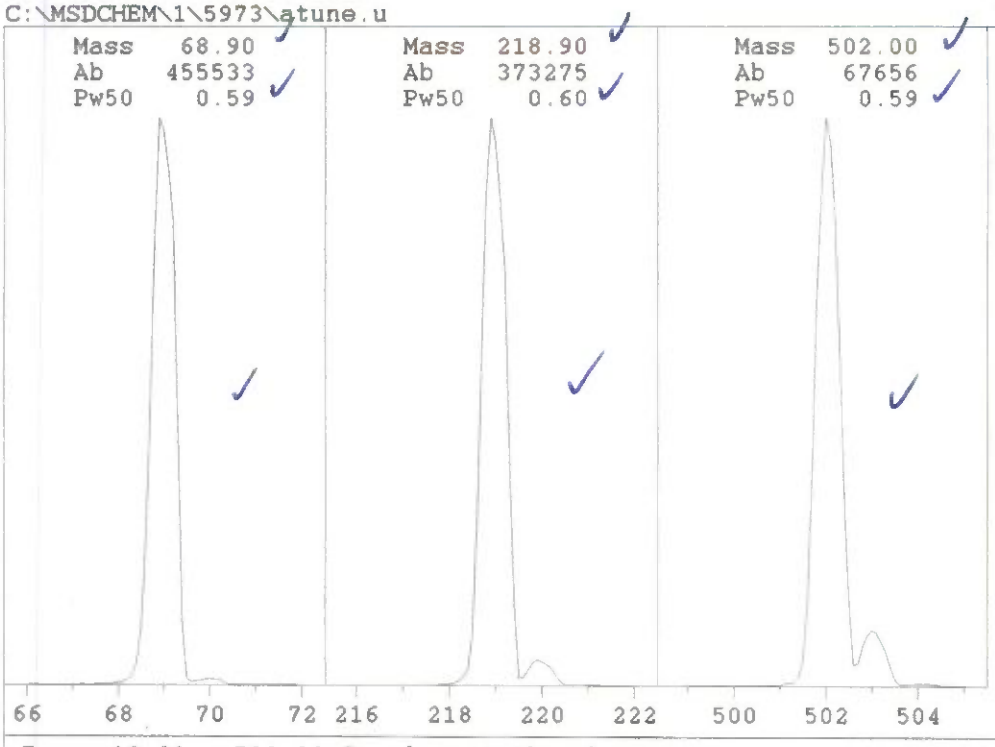


5973 Autotune

Mon Mar 24 08:46:27 2025
C:\MSDCHEM\1\5973\atune.u

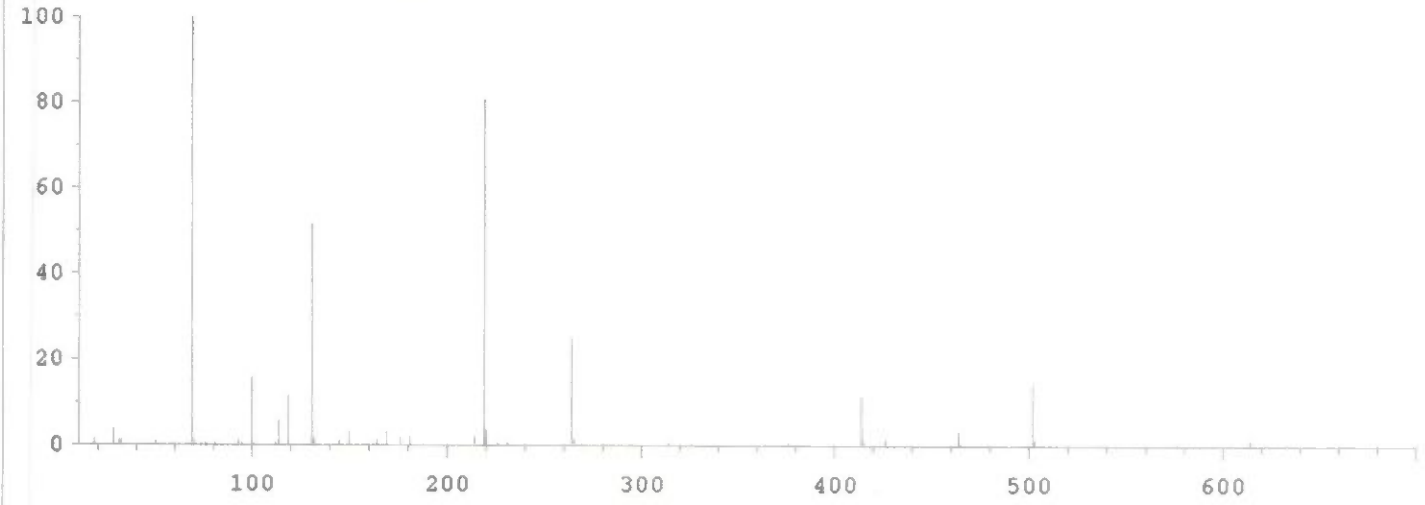
Instrument: SD GCMS 1

JS OK



Ion Pol	POS	MassGain	380
		MassOffs	-12
Emission	34.6	AmuGain	2447
EIEnrgy	69.9	AmuOffs	122
Filament	1	Wid219	-0.032
		DC Pol	POS
Repeller	31.63		
IonFcus	89.2	HEDEnab	ON
EntLens	14.5	EMVolts	1624
EntOffs	18.07		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
142 peaks Base: 69.00 Abundance: 416128



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	416128	100.00	70.00	4282	1.03
219.00	336448	80.85	220.00	14874	4.42
502.00	59544	14.31	503.00	6148	10.33

Air/Water Check: H2O~1.42% N2~3.92% O2~1.25% CO2~0.14% N2/H2O~276.91%

Column Flow: Front: 0.798 Back: 0 ml/min. Interface Temp: 280

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502: EM Gain 140116
Repeller Maximum 35 volts using ion 219:

MassGain Values @Samples: 380@3 380@2 380@1 380@0 380@FS

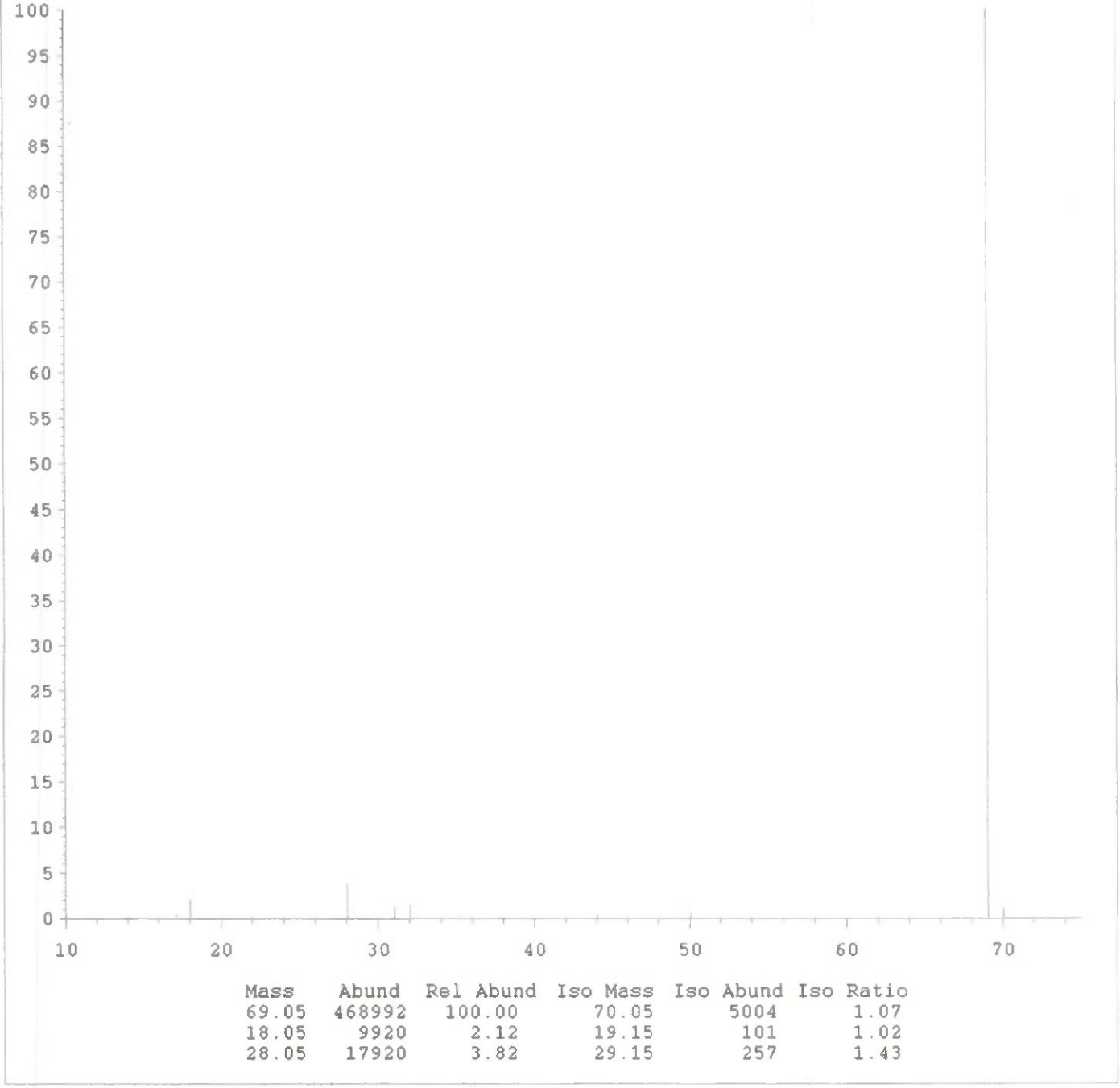
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	122.0	122.0	122.0	122.0	122.0	122.0	122.0
Entrance Lens Offset:	18.1	18.1	18.1	18.1	18.1	18.1	18.1

DS
OK

597x Air and Water Check

Instrument: SD GCMS 1
Mon Mar 24 08:38:00 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
68 peaks Base: 69.05 Abundance: 468992



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	468992	100.00	70.05	5004	1.07
18.05	9920	2.12	19.15	101	1.02
28.05	17920	3.82	29.15	257	1.43

Current Params used: atune.u

Relative abundances:
18/69 = 2.12 Water%
28/69 = 3.82 Nitrogen%
32/69 = 1.46 Oxygen%
44/69 = 0.51 Carbon Dioxide%
28/18 = 180.65 Nitrogen/Water%

System Verification - Tune (Detector Optimization) Portion

DS

Instrument Name	: SD GCMS 1	
DC Polarity	: Positive	
Filament	: 1	
BasePeak should be 69 or 219		Ok
Position of mass 69	69.00	Ok
Position of mass 219	219.00	Ok
Position of mass 502	502.01	Ok
Position of isotope mass 70	70.00	Ok
Position of isotope mass 220	219.99	Ok
Position of isotope mass 503	503.03	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.10	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.34	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.98	Ok
Ratio of 219 to 69 should be > 40% and is	81.22	Ok
Ratio of 502 to 69 should be > 2.4% and is	14.02	Ok
Mass 69 Precursor (<= 3%)	0.27	Ok
Mass 219 Precursor (<= 6%)	0.43	Ok
Mass 502 Precursor (<= 12%)	0.41	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	1.31	Ok
Ratio of 28 to 69 (<10%)	3.99	Ok
Electron Multiplier Voltage	1624	Ok

Tune portion of System Verification passed.

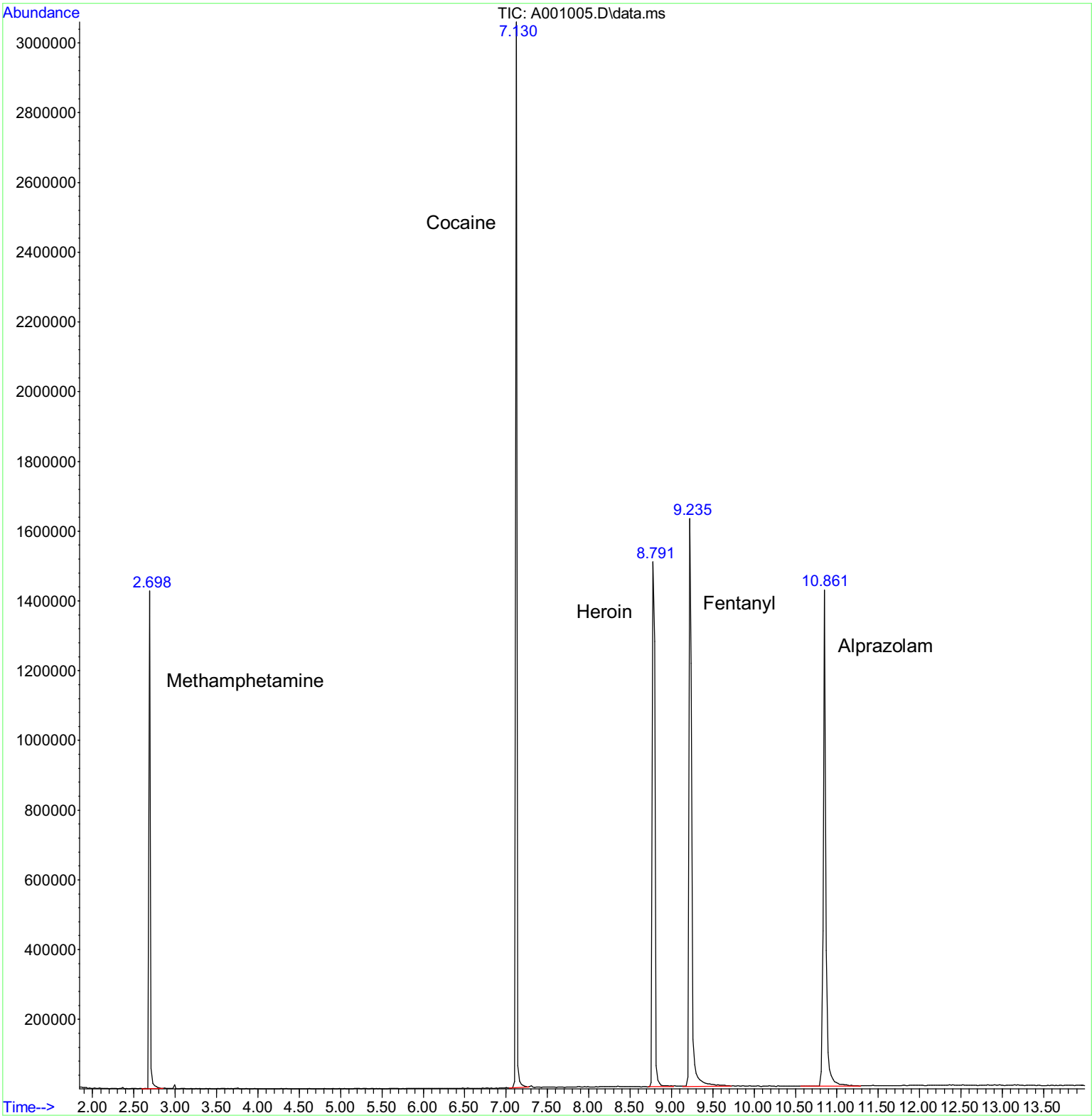
BCCL GC/MS #1
Retention Times for the Week of:

03/24/2025 - 03/25/2025

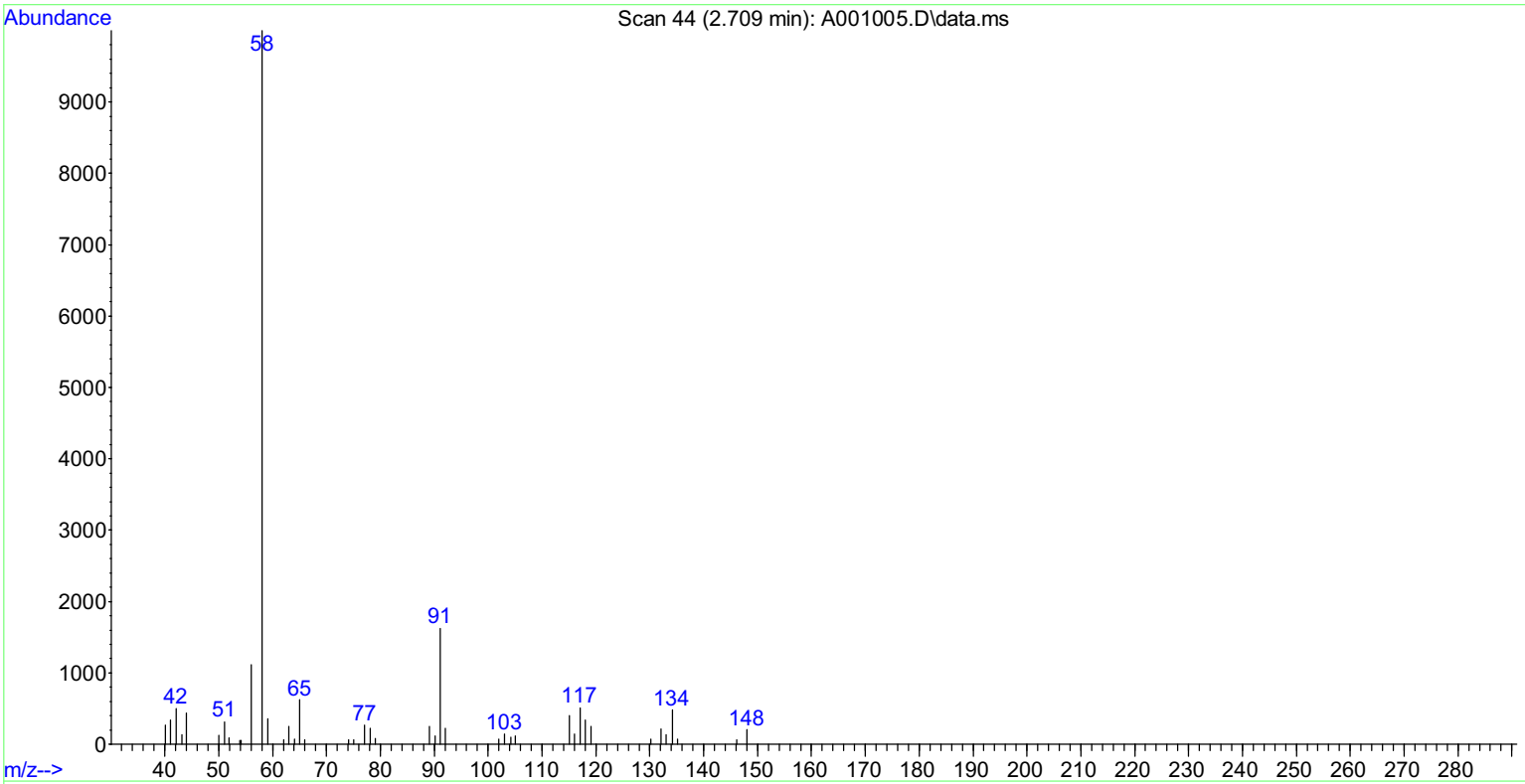
[x] **Tune: 03/24/2025 - Autotune DS**

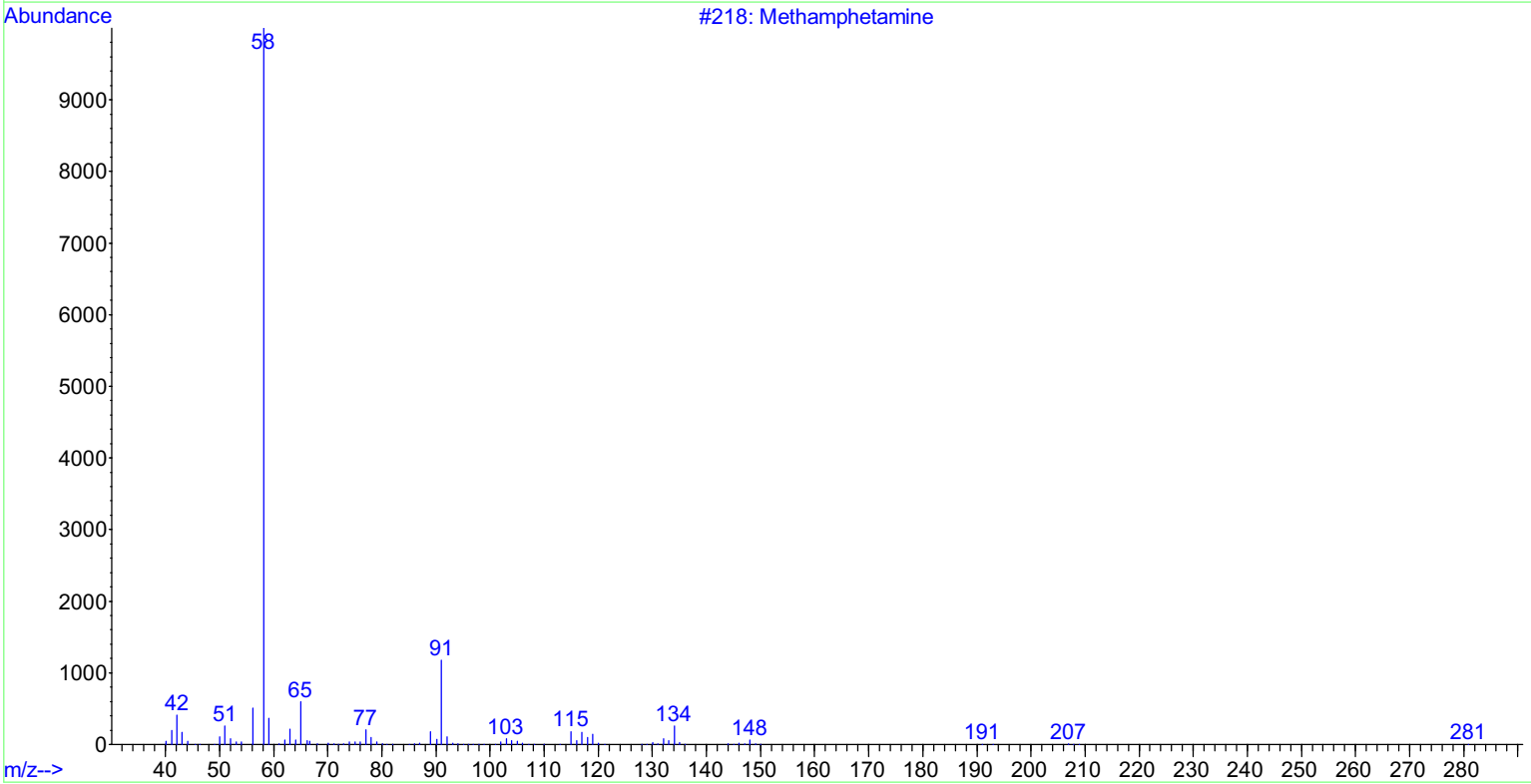
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.698	2.671	2.724
Cocaine	R-24-060	BCCL GenDrug	7.130	7.058	7.201
Heroin	R-24-060	BCCL GenDrug	8.791	8.703	8.878
Fentanyl	R-24-060	BCCL GenDrug	9.235	9.142	9.327
Alprazolam	R-24-060	BCCL GenDrug	10.861	10.752	10.969

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:46 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

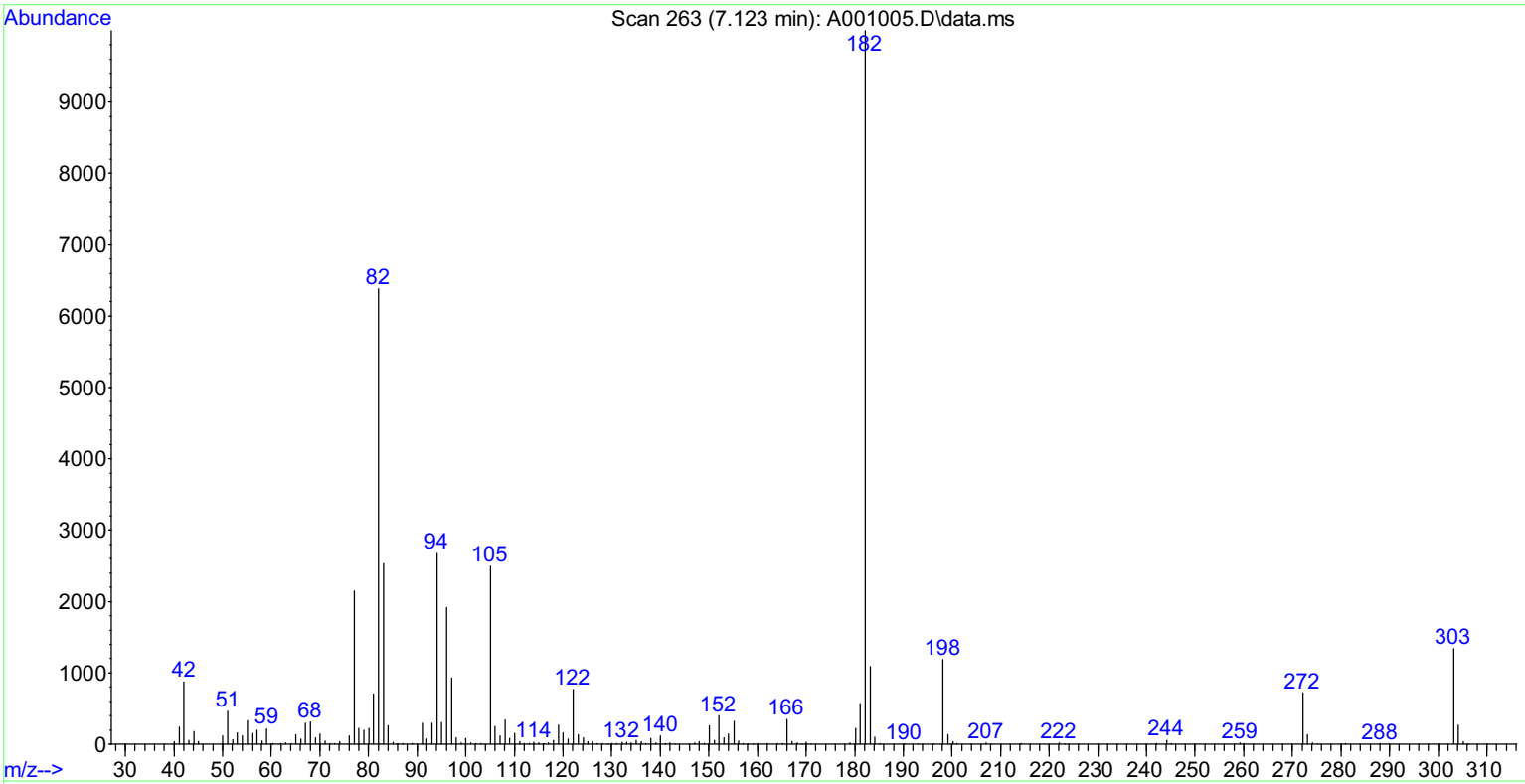


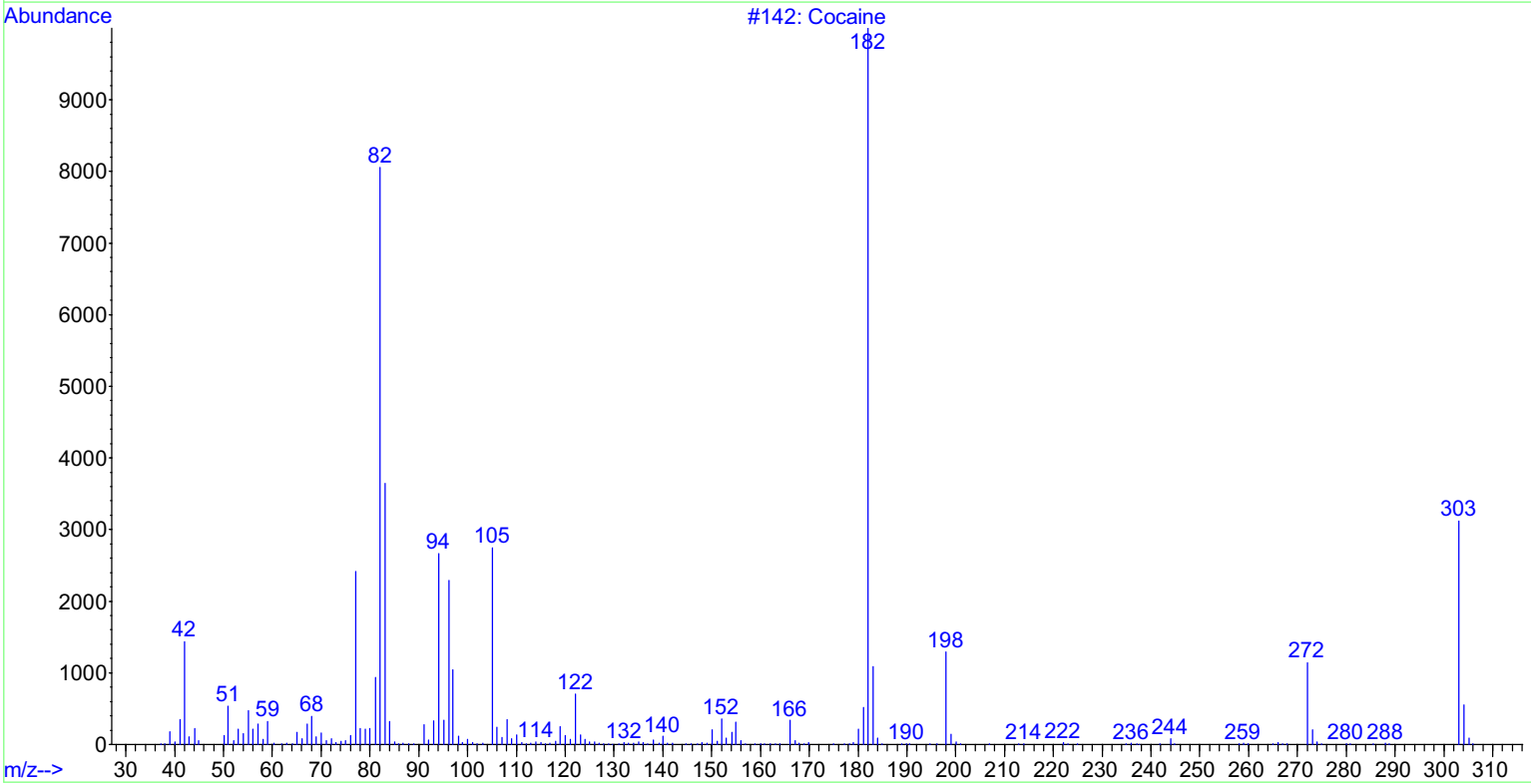
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:46 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



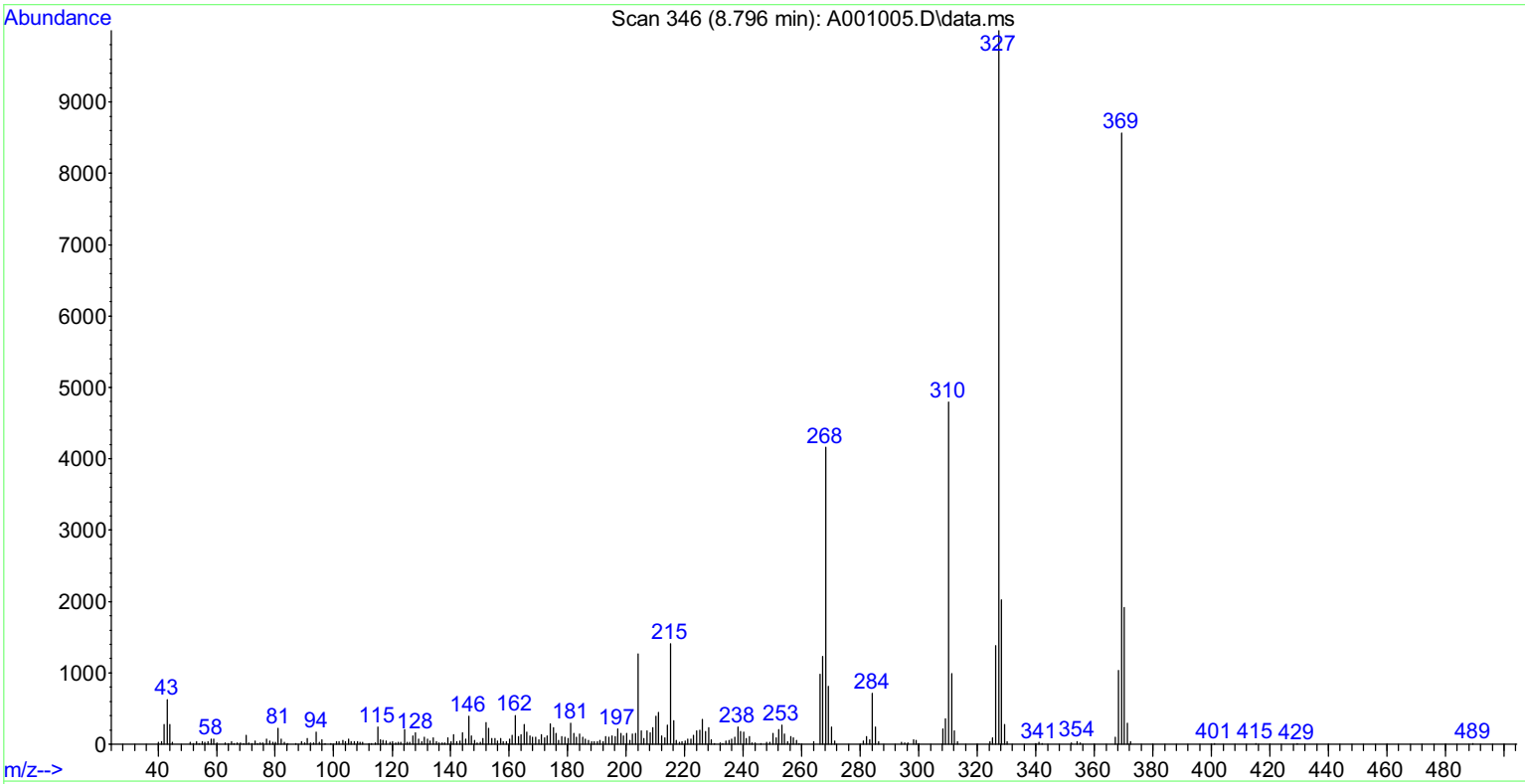


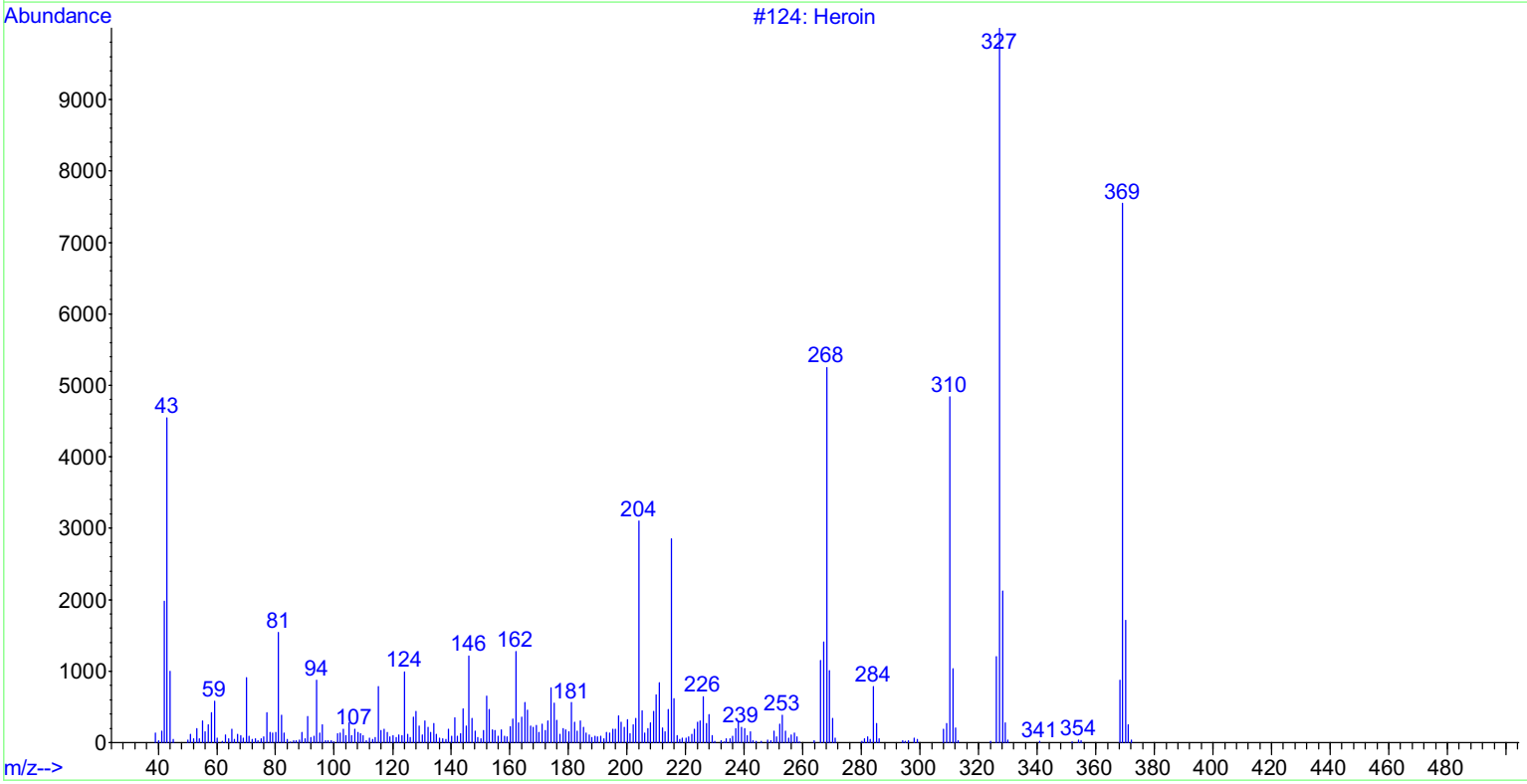
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:46 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



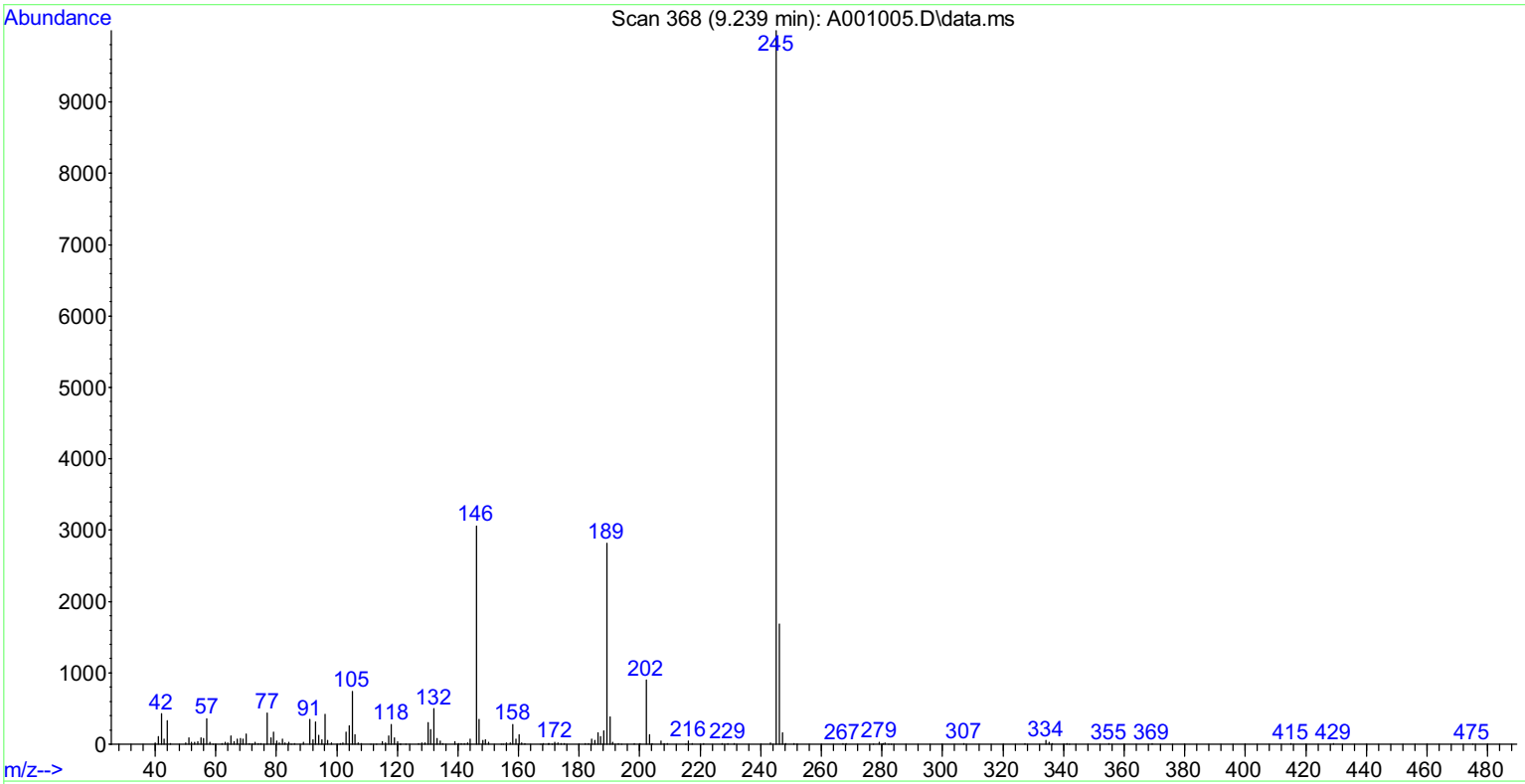


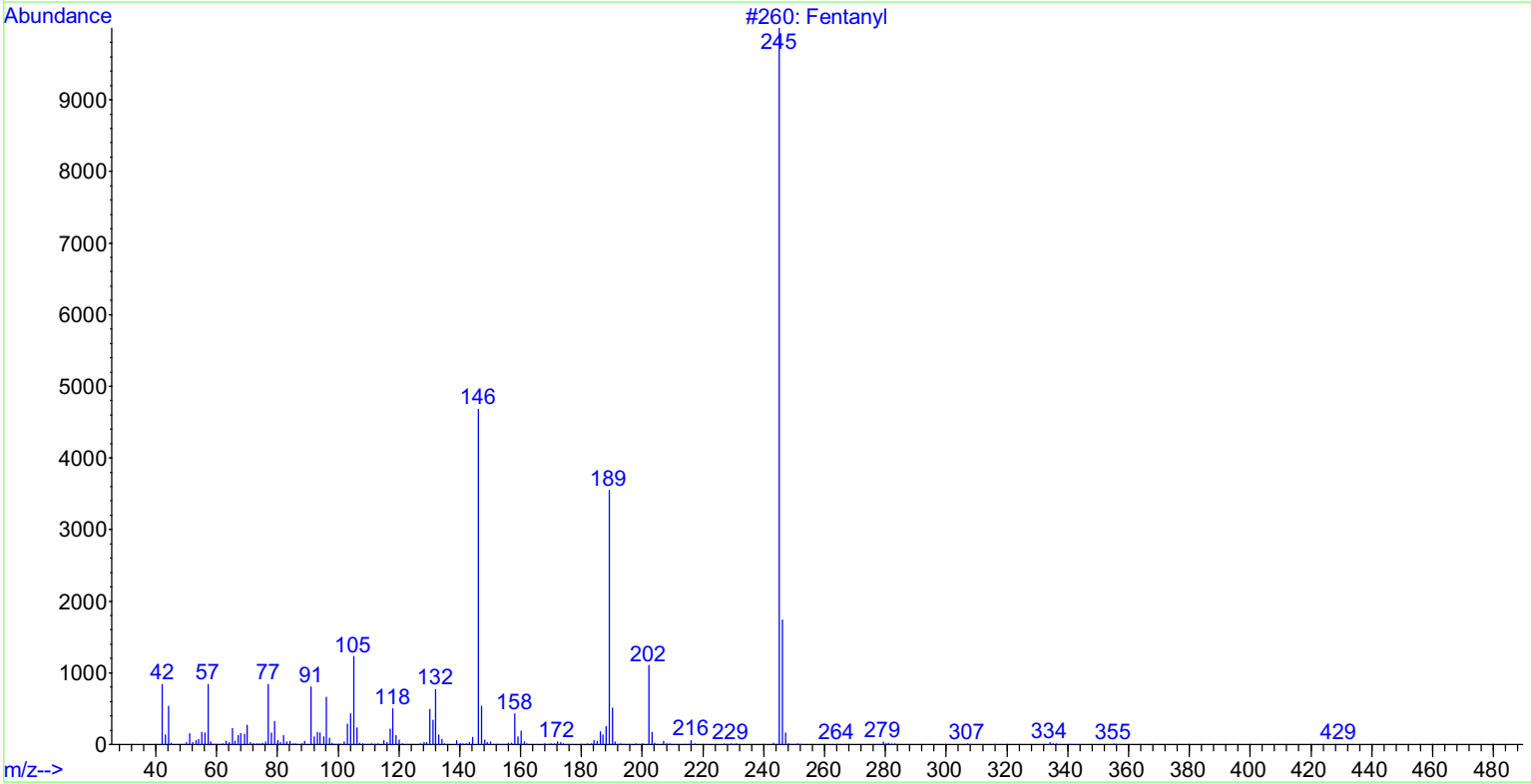
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:46 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



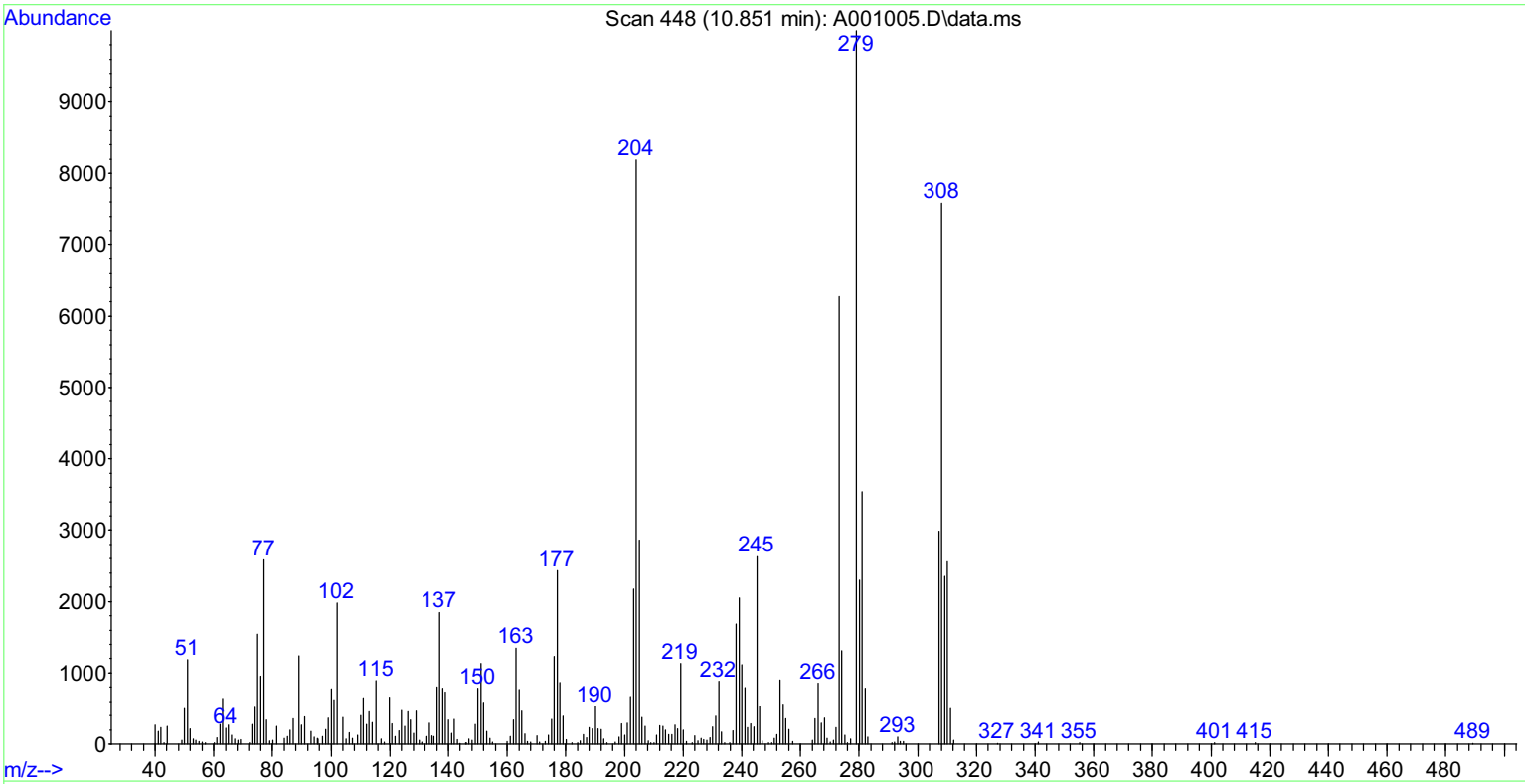


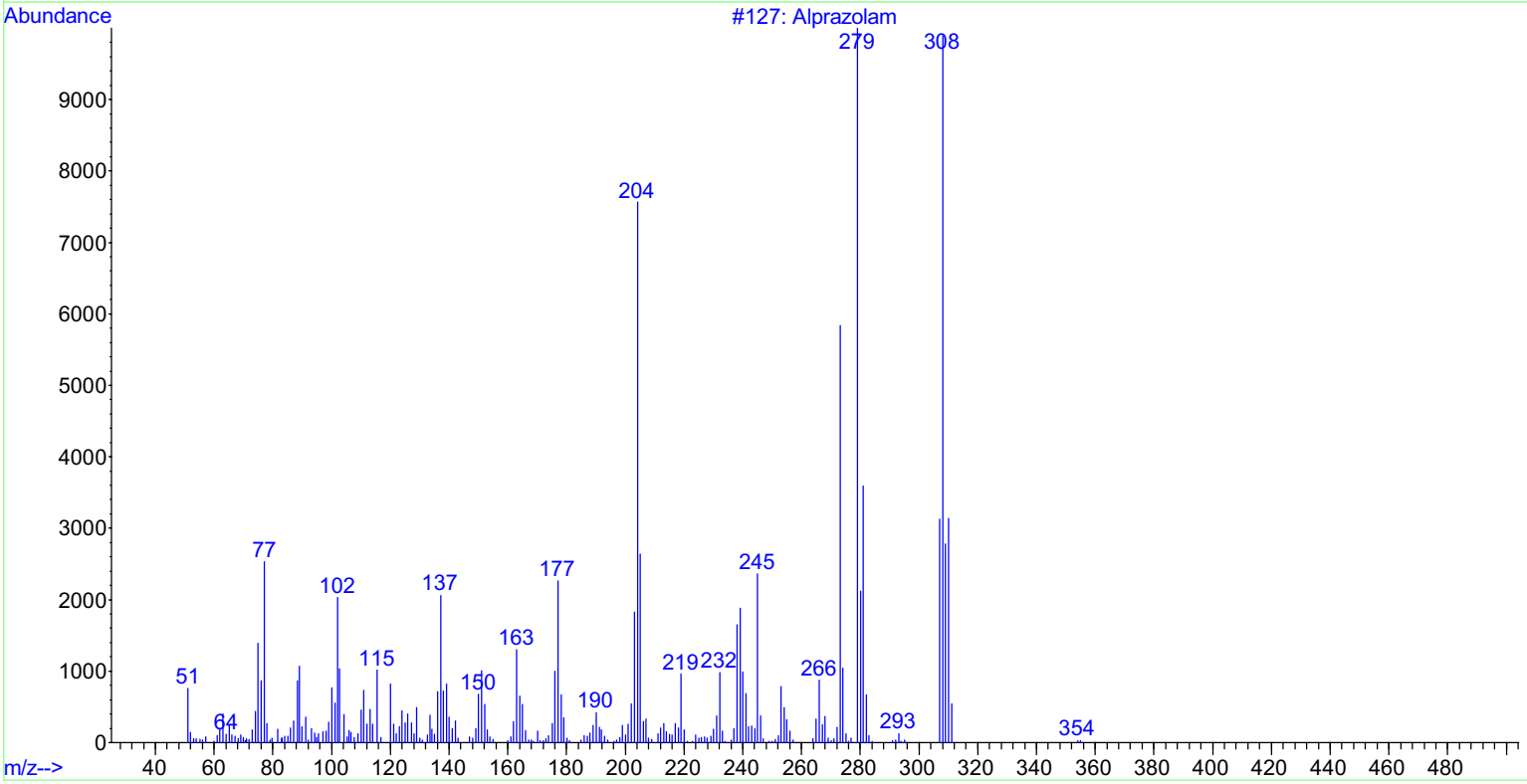
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:46 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



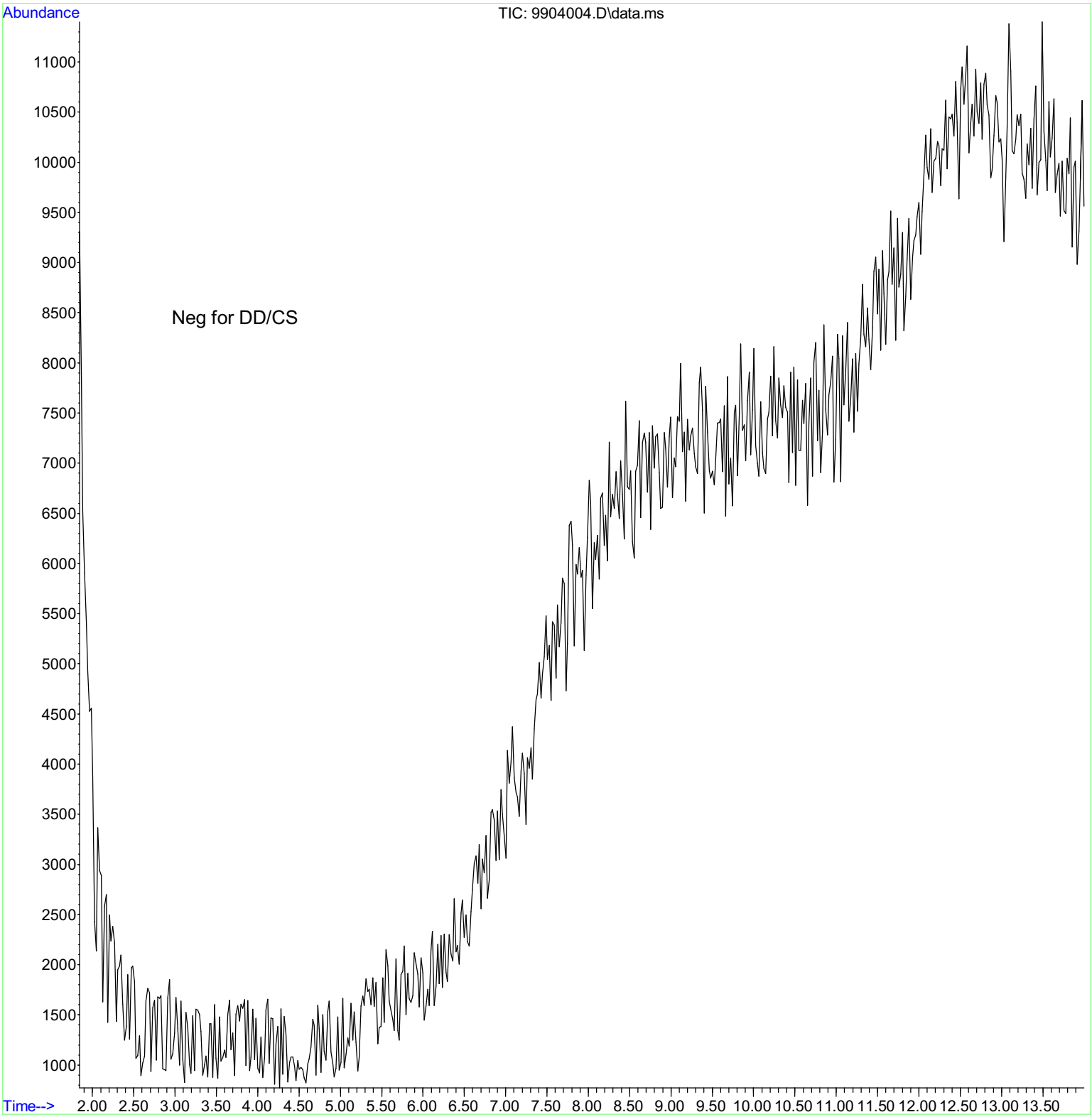


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:46 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

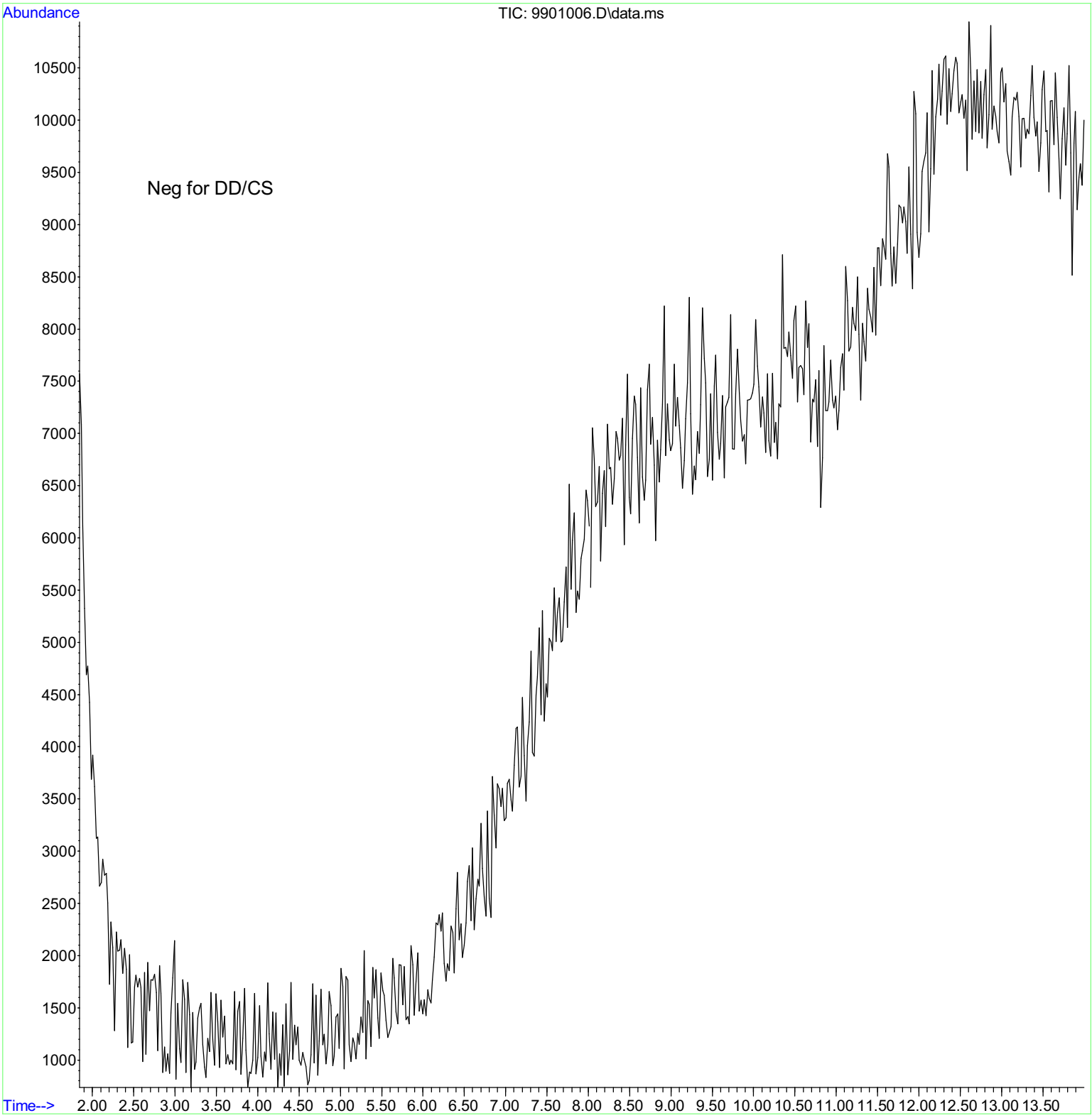




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 9:29 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



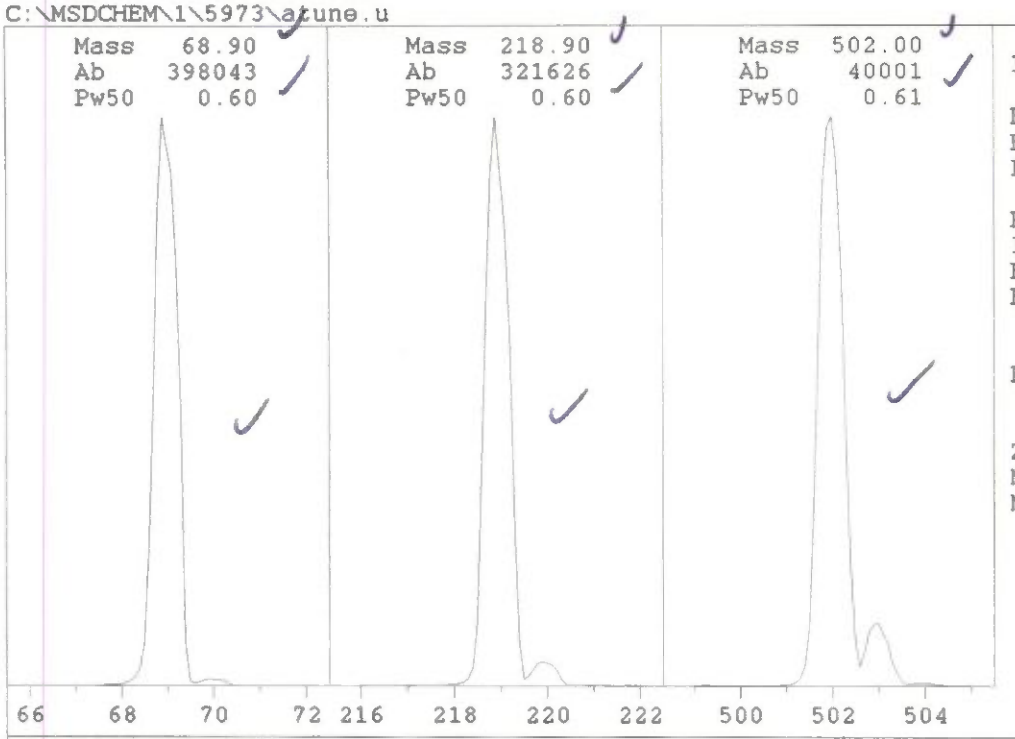
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032425\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 24 Mar 2025 10:03 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)



5973 Autotune

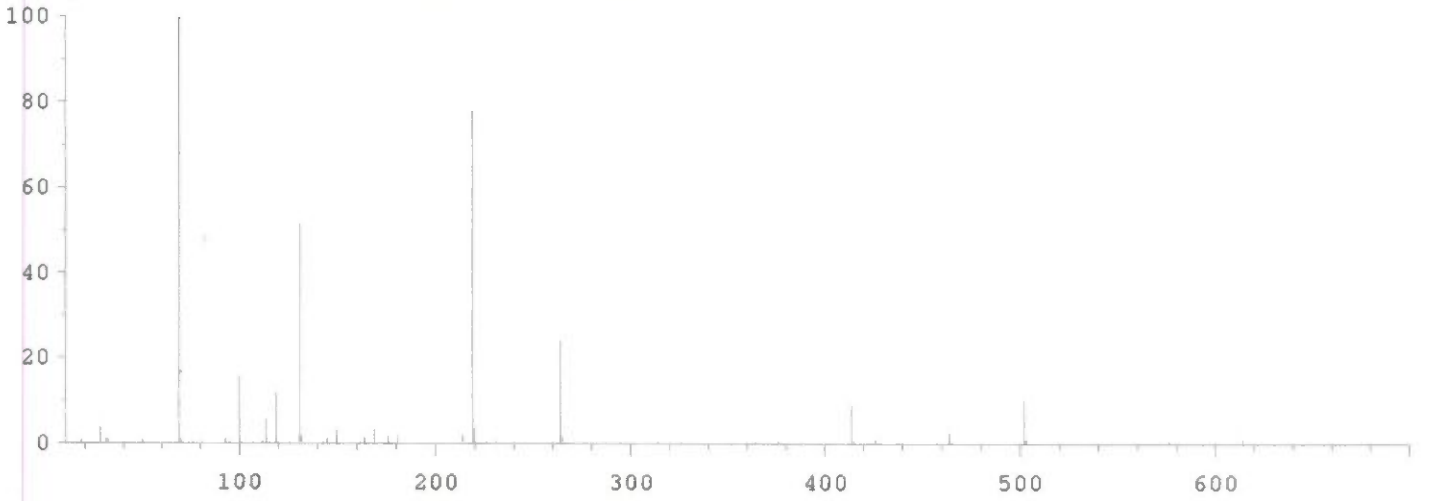
Wed Mar 26 11:34:22 2025 Instrument: SD GCMS 1

C:\MSDCHEM\1\5973\atune.u



Ion Pol	POS	MassGain	365
		MassOffs	-12
Emission	34.6	AmuGain	2439
EIEnrgy	69.9	AmuOffs	125
Filament	1	Wid219	-0.022
		DC Pol	POS
Repeller	30.29		
IonFcus	90.2	HEDEnab	ON
EntLens	14.5	EMVolts	1576
EntOffs	18.07		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
121 peaks Base: 69.00 Abundance: 360256



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	360256	100.00	70.00	4100	1.14
218.90	280576	77.88	219.90	12437	4.43
502.00	36608	10.16	503.00	4189	11.44

Air/Water Check: H2O~0.91% N2~3.90% O2~1.08% CO2~0.07% N2/H2O~430.67%

Column Flow: Front: 0.8 Back: 0 ml/min. Interface Temp: 280

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502: EM Gain 110794
Repeller Maximum 35 volts using ion 219:

MassGain Values @Samples: 365@3 365@2 365@1 365@0 365@FS

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	125.0	125.0	125.0	125.0	125.0	125.0	125.0
Entrance Lens Offset:	18.1	18.1	18.1	18.1	18.1	18.1	18.1

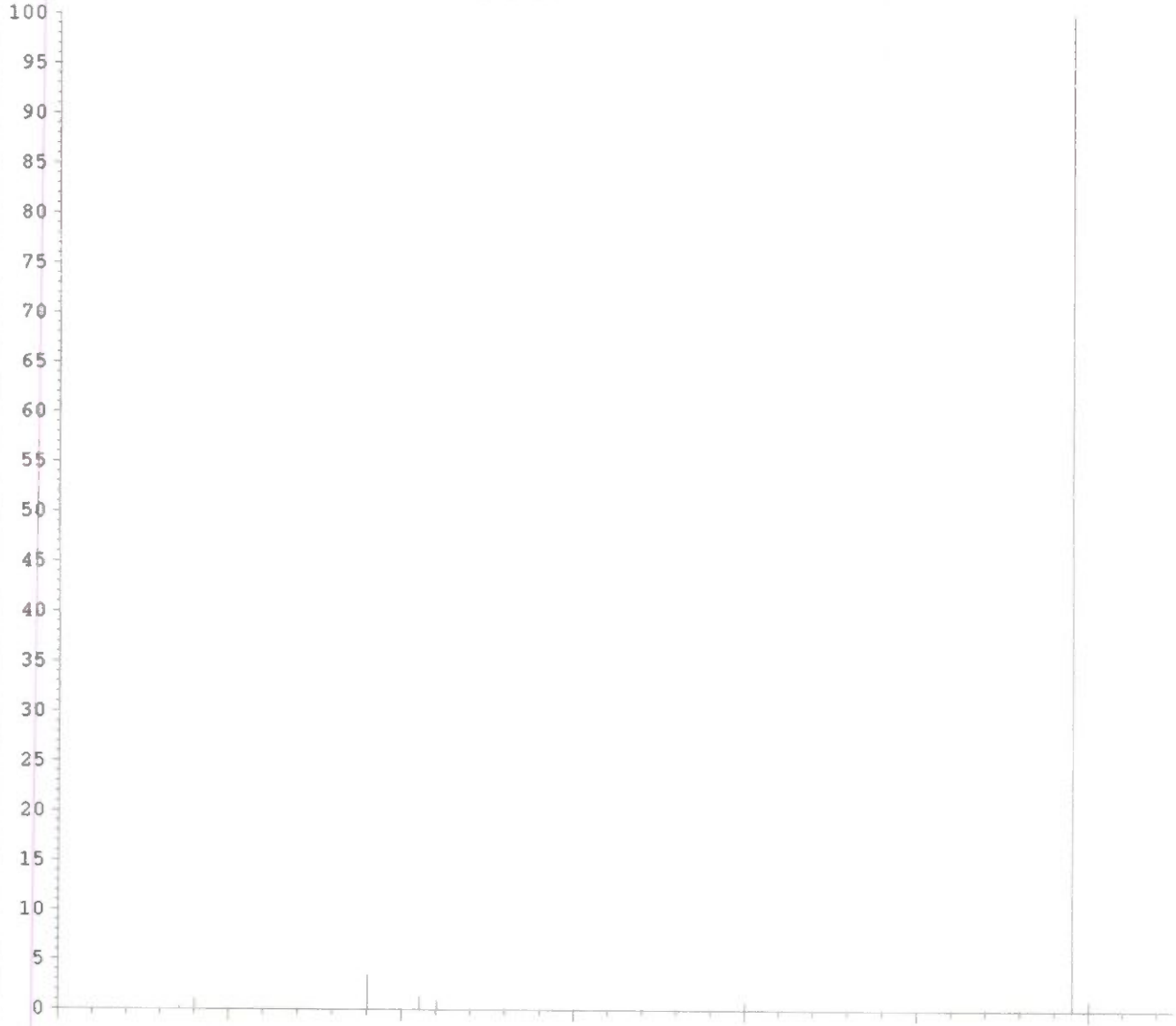
597x Air and Water Check

Instrument: SD GCMS 1
Wed Mar 26 11:27:56 2025

2nd air / water check

C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
77 peaks Base: 69.05 Abundance: 434560



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	434560	100.00	70.05	4719	1.09
18.05	4869	1.12	19.15	125	2.57
28.05	15328	3.53	29.05	207	1.35

Current Params used: atune.u

Relative abundances:

18/69 =	1.12	Water%
28/69 =	3.53	Nitrogen%
32/69 =	0.95	Oxygen%
44/69 =	0.09	Carbon Dioxide%
28/18 =	314.81	Nitrogen/Water%

DS

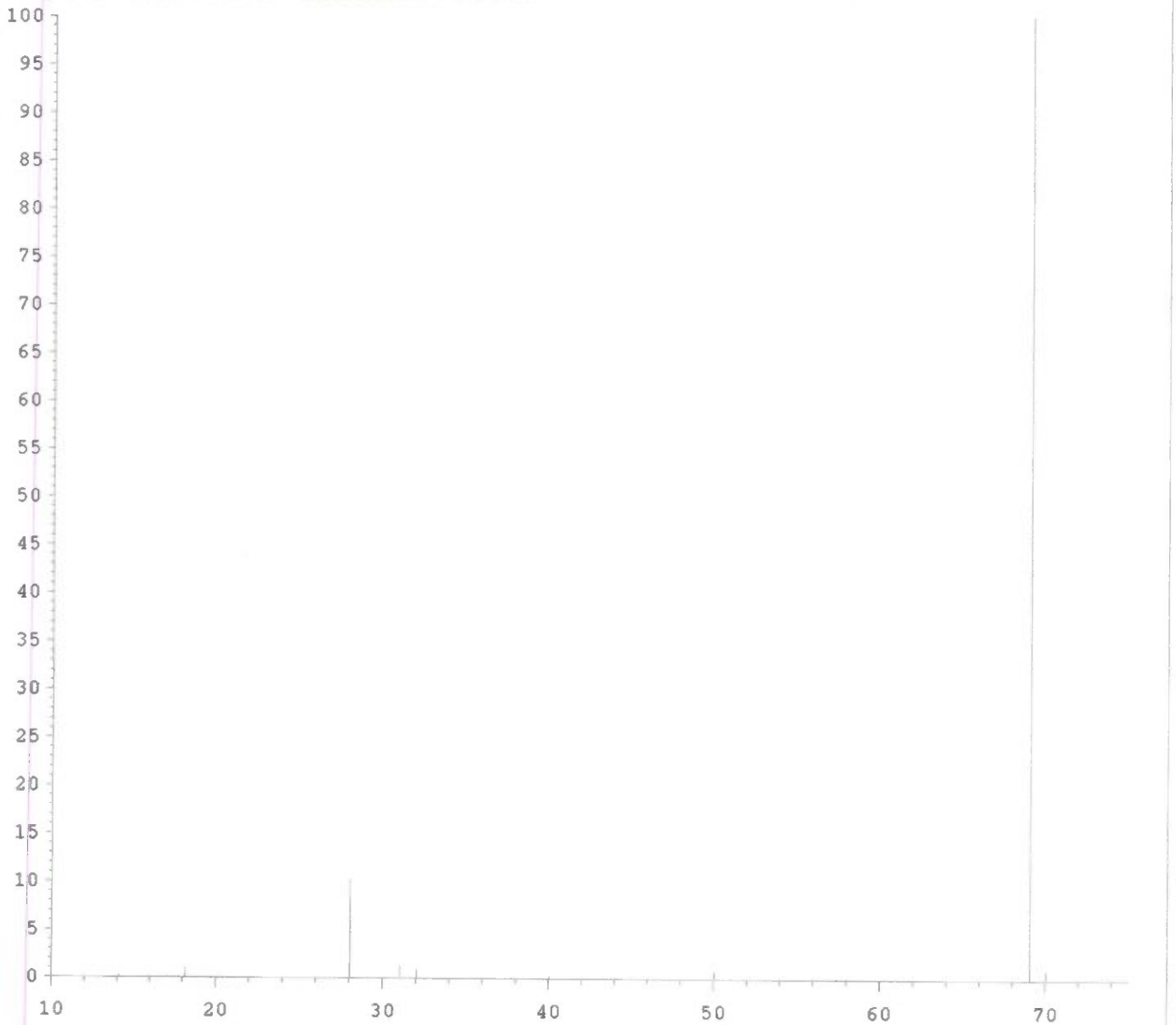
597x Air and Water Check

Instrument: SD GCMS 1
Wed Mar 26 10:38:58 2025

1st air/water check

C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
75 peaks Base: 69.05 Abundance: 417344



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	417344	100.00	70.05	4471	1.07
18.15	4334	1.04	19.05	100	2.31
28.05	43112	10.33	29.15	509	1.18

Current Params used: atune.u

Relative abundances:

18/69 =	1.04 ✓	Water%
28/69 =	10.33	Nitrogen%
32/69 =	1.01 ✓	Oxygen%
44/69 =	0.06 ✓	Carbon Dioxide%
28/18 =	994.74	Nitrogen/Water%

— nitrogen level too high after helium tank change. System will be allowed to purge. After purge, Air/water check and Autotune will be attempted.

DS

System Verification - Tune (Detector Optimization) Portion

25

Instrument Name	: SD GCMS 1	
DC Polarity	: Positive	
Filament	: 1	
BasePeak should be 69 or 219		Ok
Position of mass 69	69.00	Ok
Position of mass 219	218.90	Ok
Position of mass 502	502.00	Ok
Position of isotope mass 70	70.00	Ok
Position of isotope mass 220	219.91	Ok
Position of isotope mass 503	502.97	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.09	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.35	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.12	Ok
Ratio of 219 to 69 should be > 40% and is	78.56	Ok
Ratio of 502 to 69 should be > 2.4% and is	10.45	Ok
Mass 69 Precursor (<= 3%)	0.21	Ok
Mass 219 Precursor (<= 6%)	0.39	Ok
Mass 502 Precursor (<= 12%)	0.60	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.82	Ok
Ratio of 28 to 69 (<10%)	3.75	Ok
Electron Multiplier Voltage	1576	Ok

Tune portion of System Verification passed.

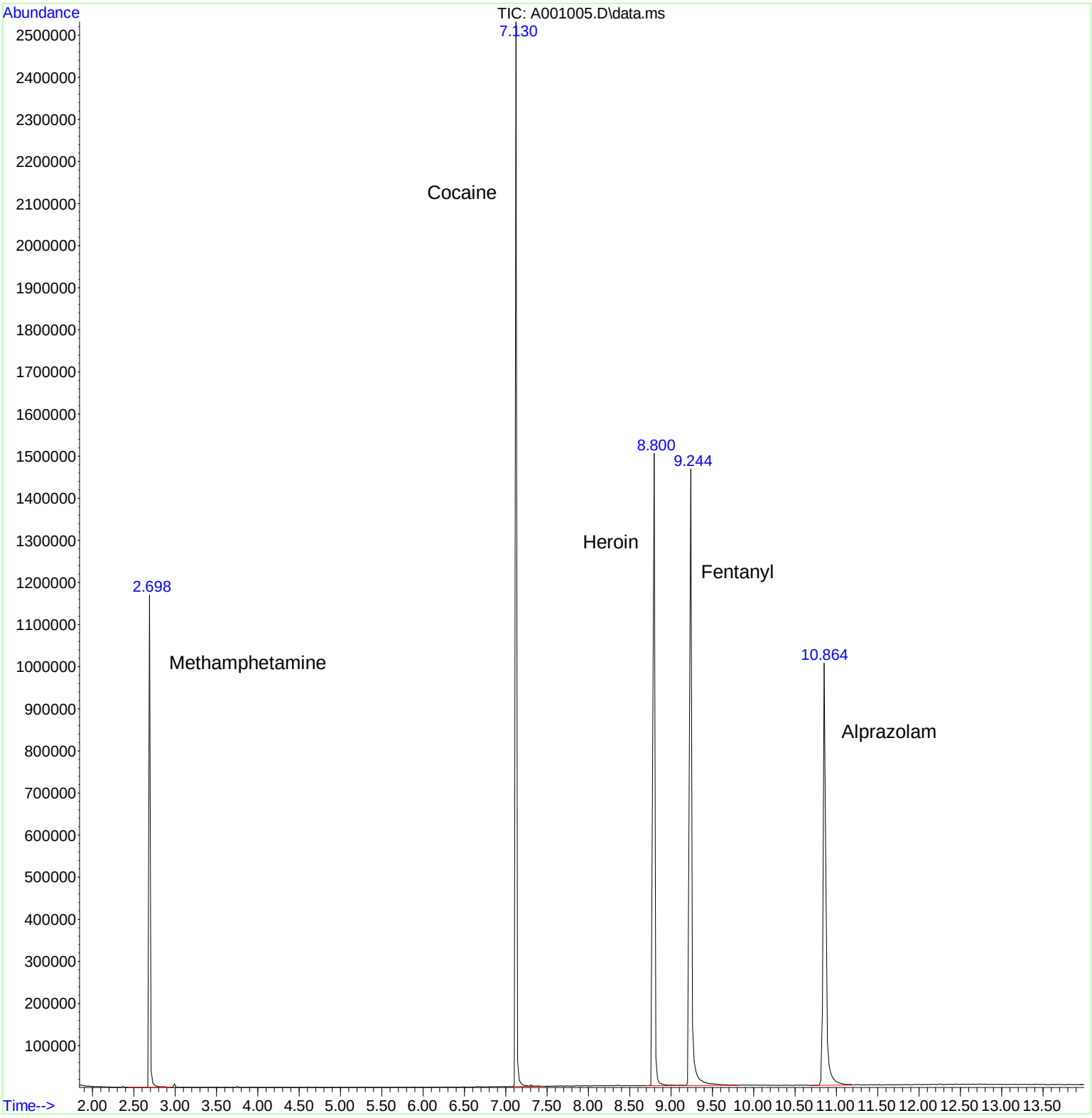
BCCL GC/MS #1
Retention Times for the Week of:

03/26/2025 - 03/30/2025

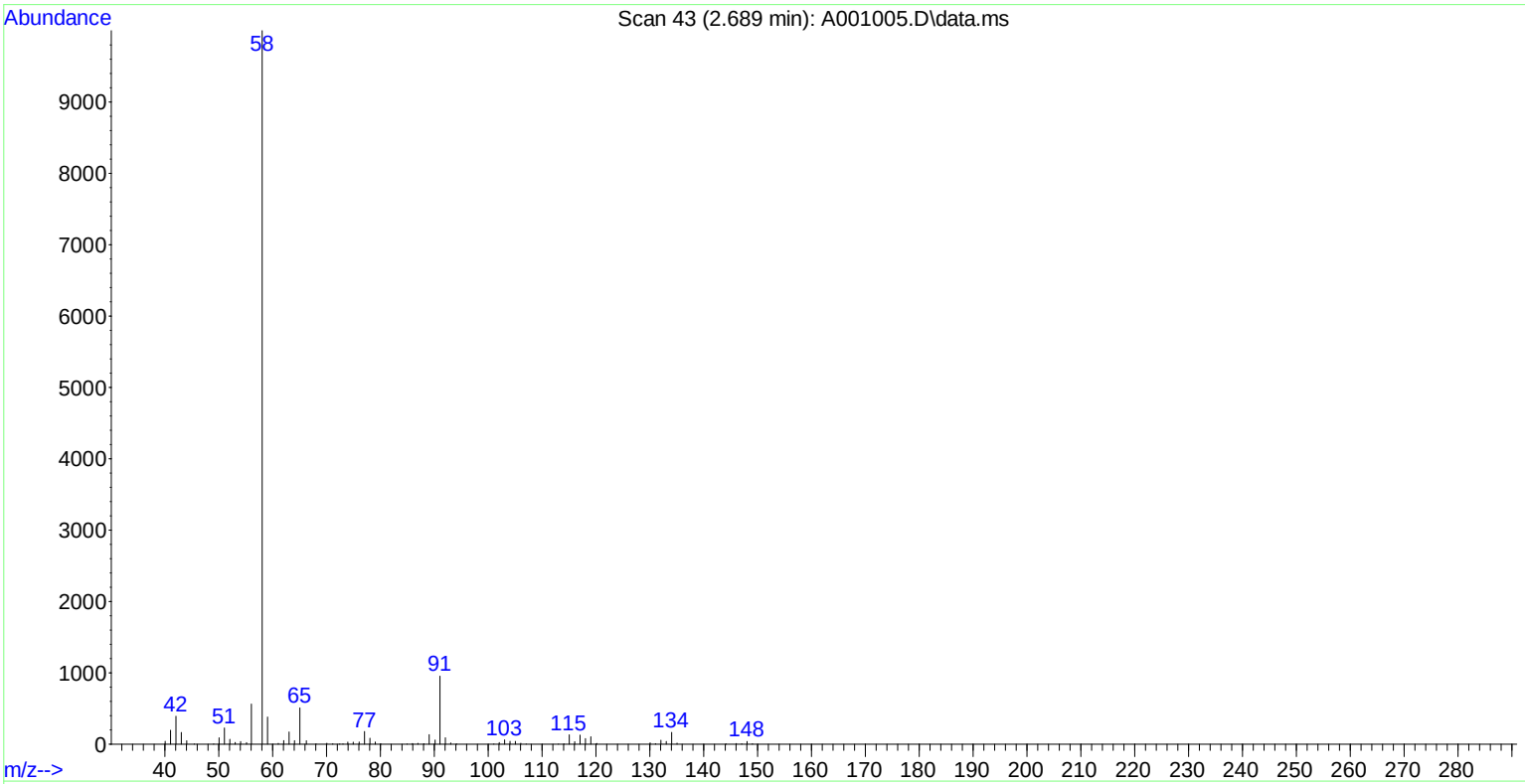
[x] **Tune: 03/26/2025 - Autotune DS**

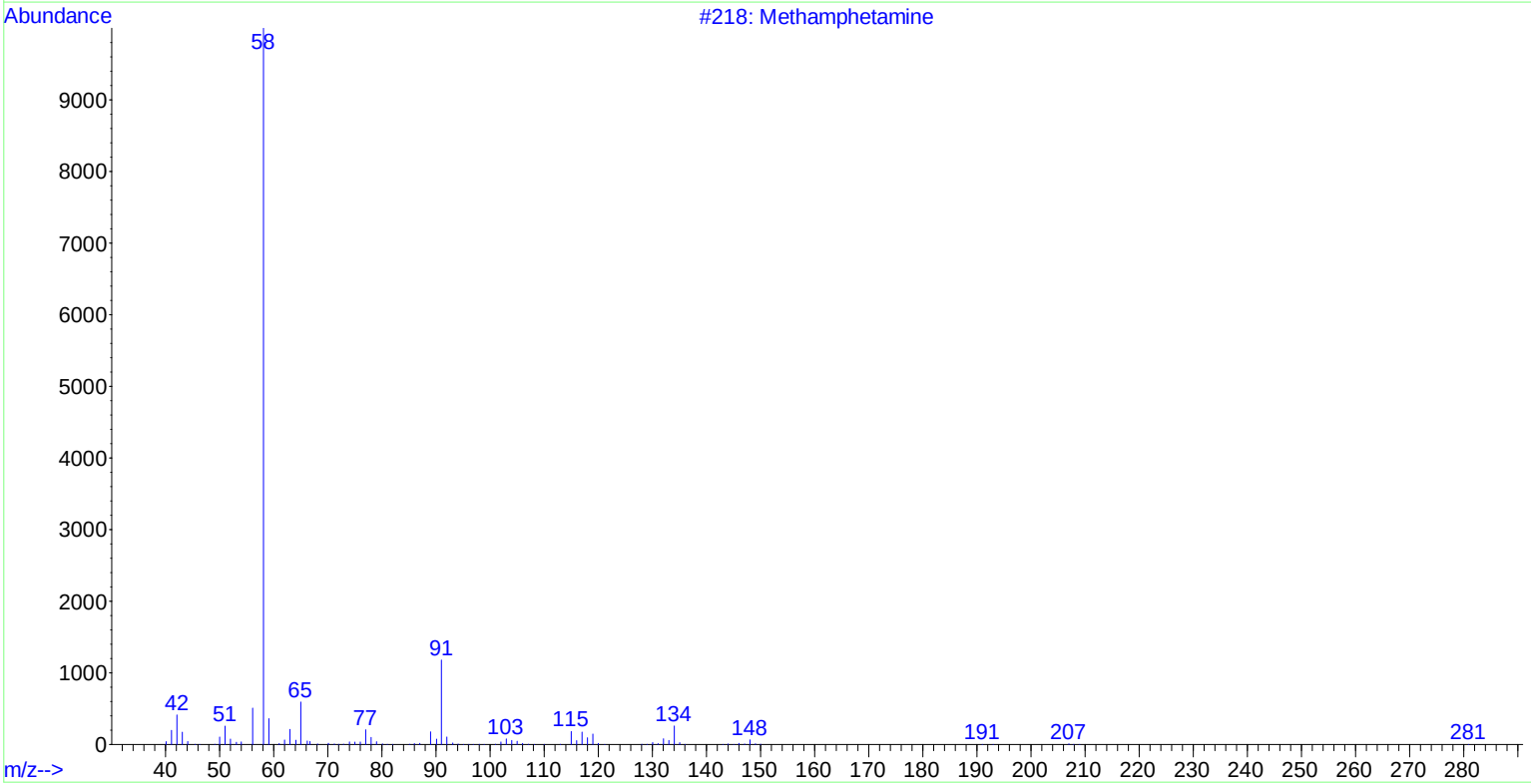
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.698	2.671	2.724
Cocaine	R-24-060	BCCL GenDrug	7.130	7.058	7.201
Heroin	R-24-060	BCCL GenDrug	8.800	8.712	8.888
Fentanyl	R-24-060	BCCL GenDrug	9.244	9.151	9.336
Alprazolam	R-24-060	BCCL GenDrug	10.864	10.755	10.972

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

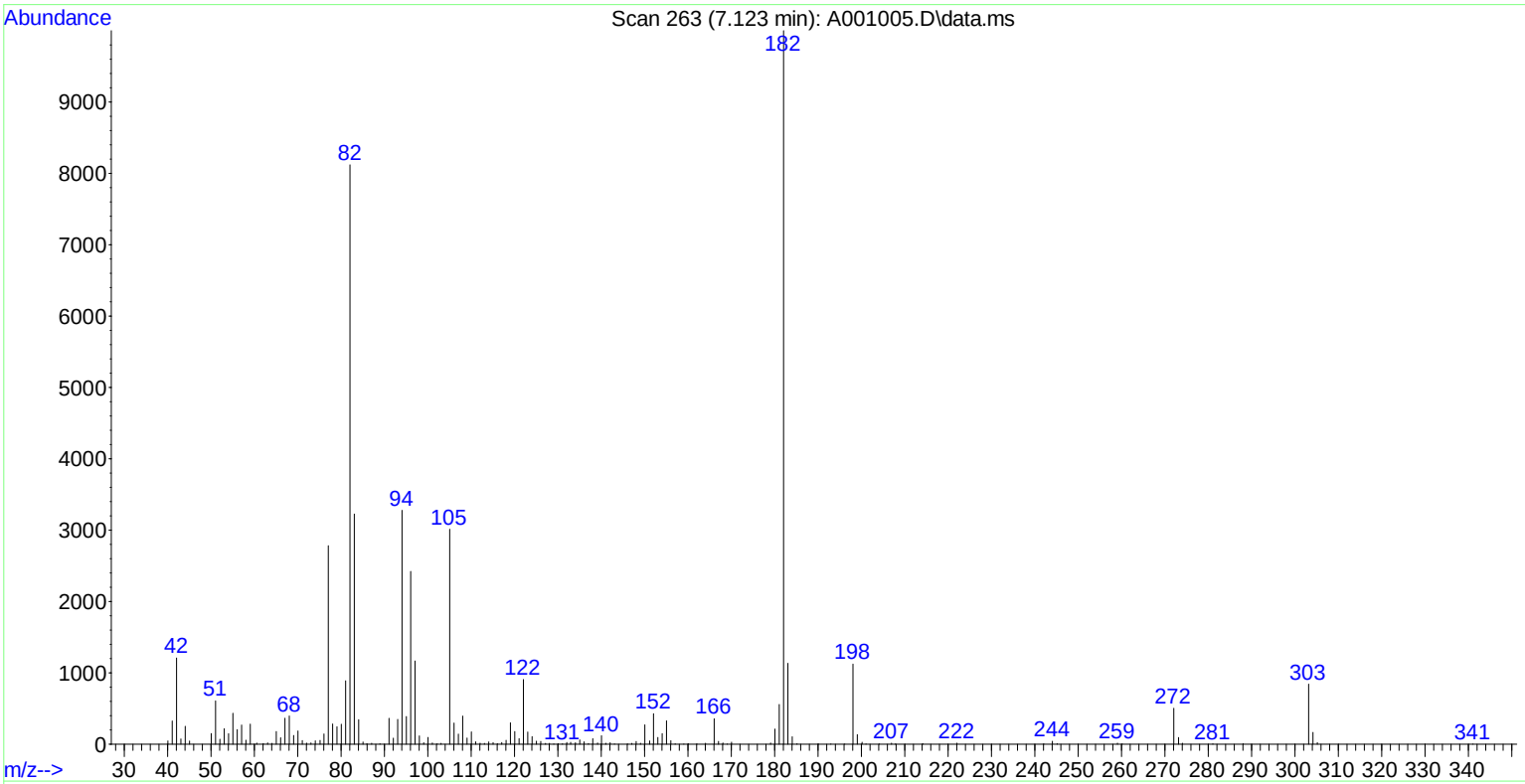


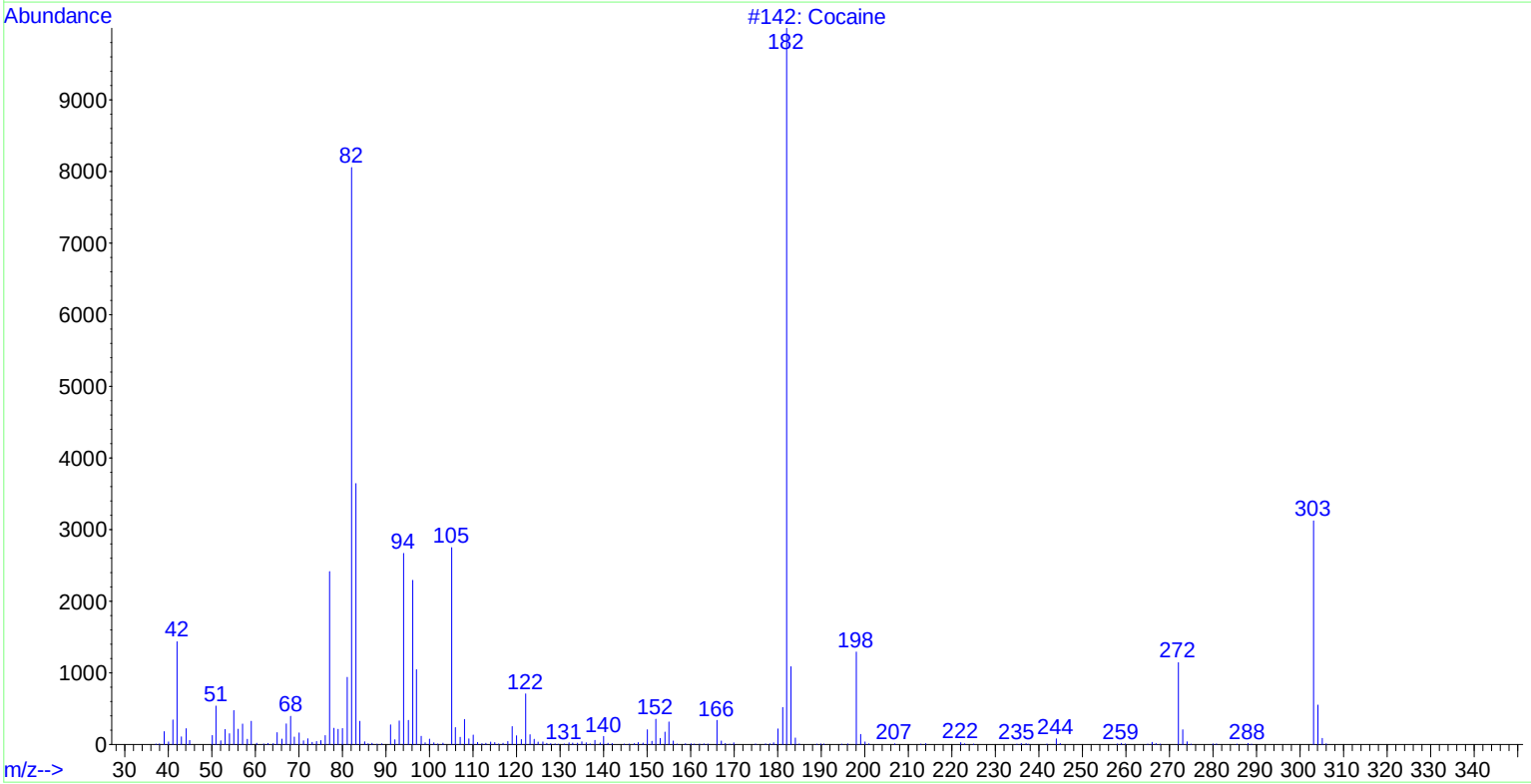
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



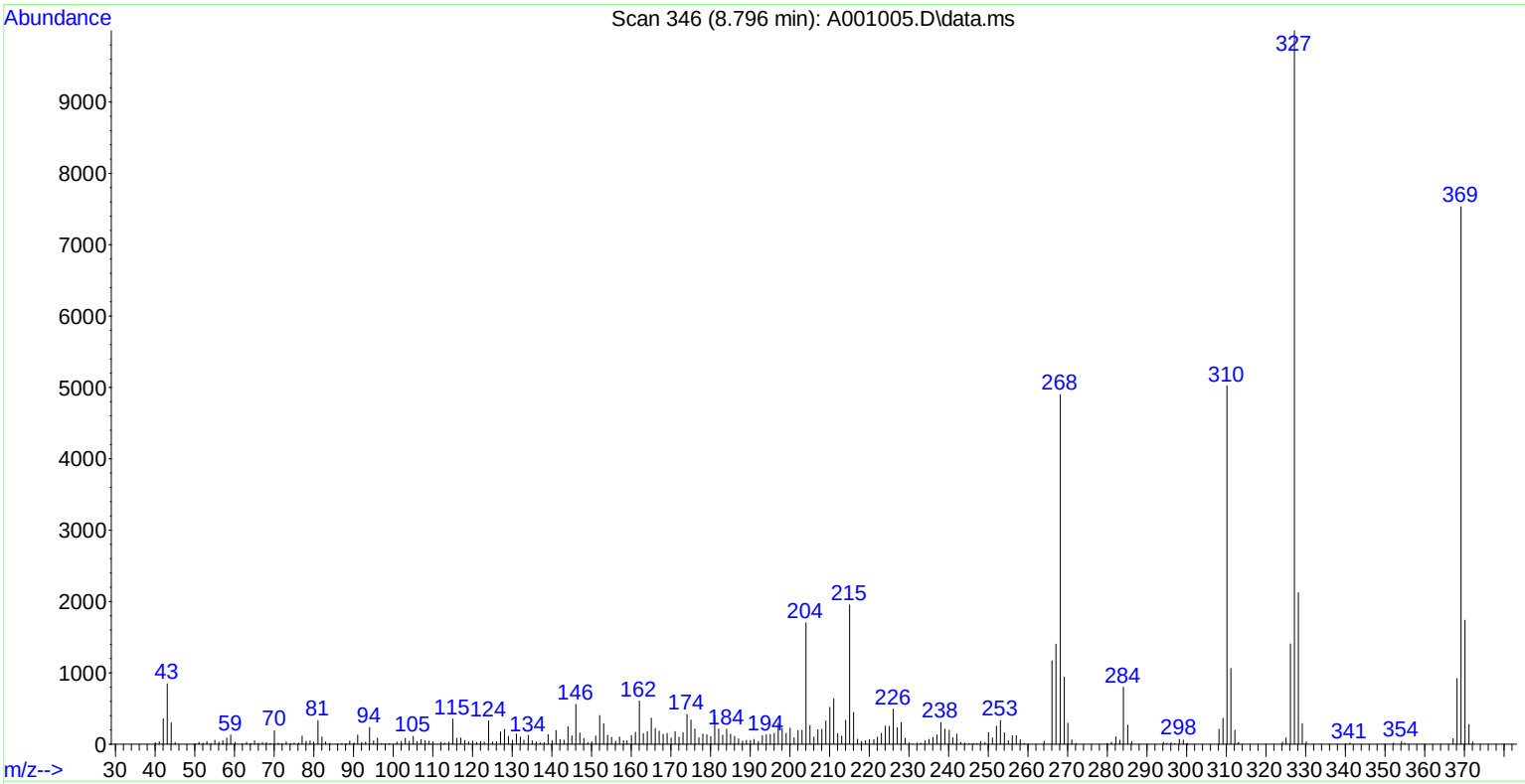


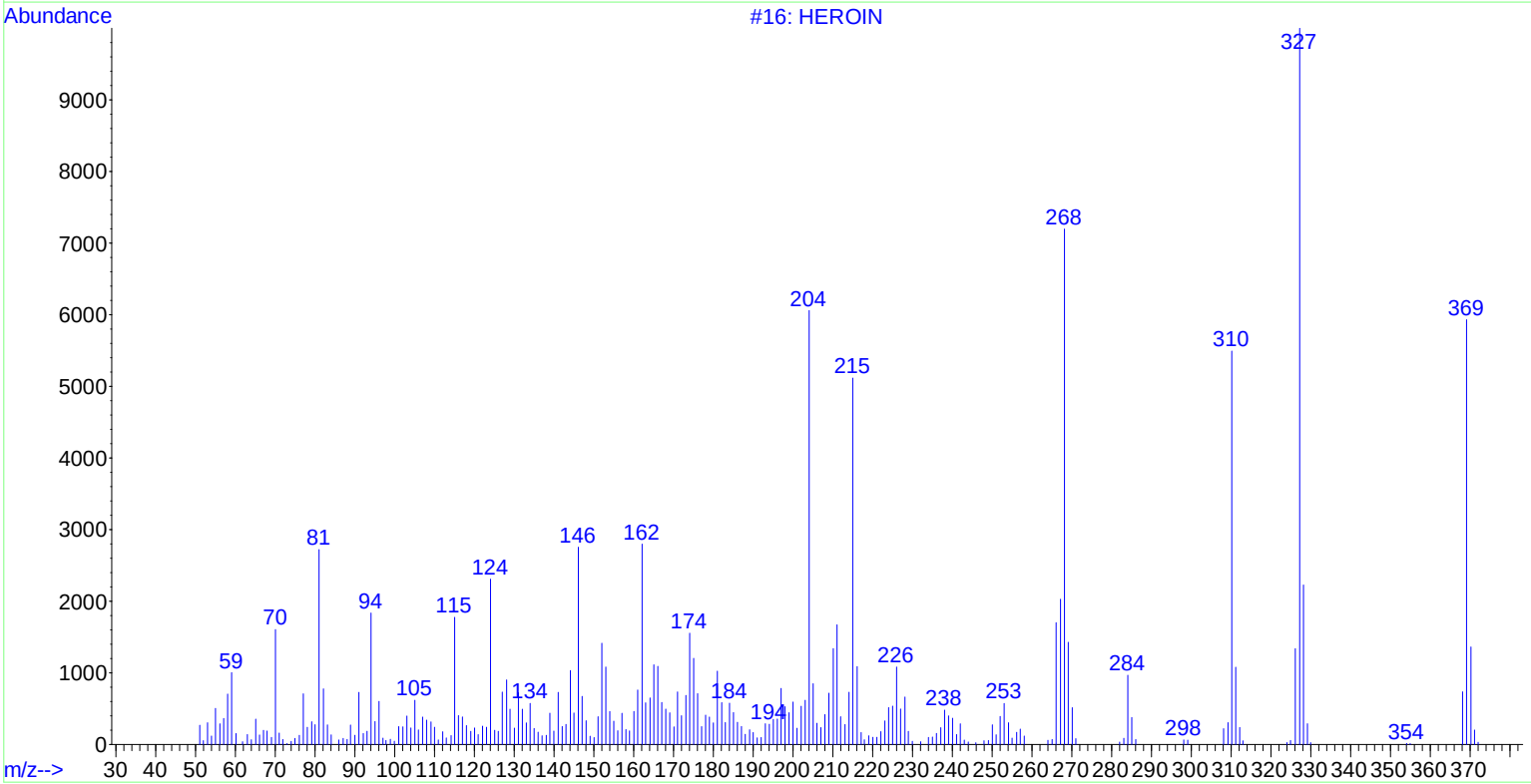
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



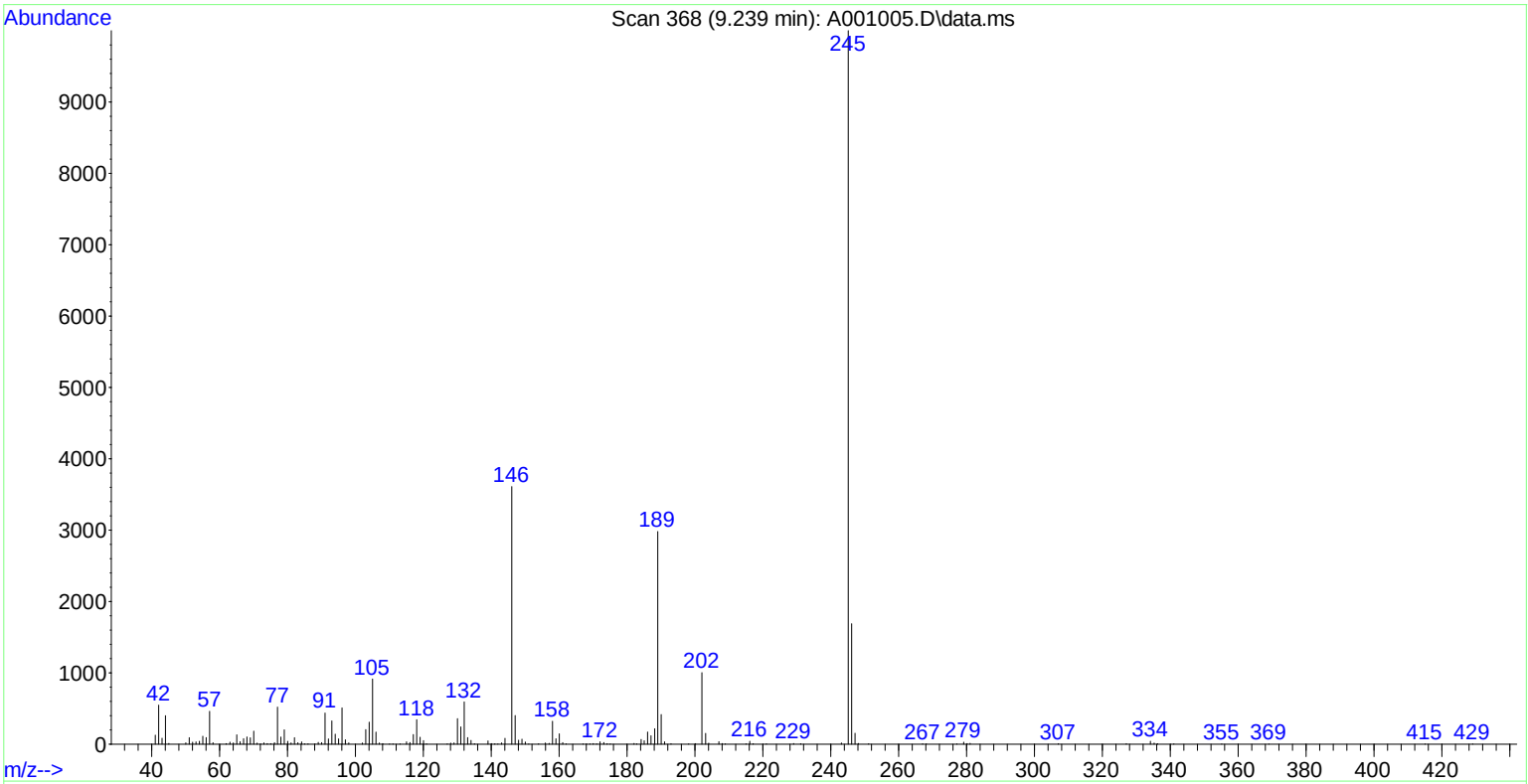


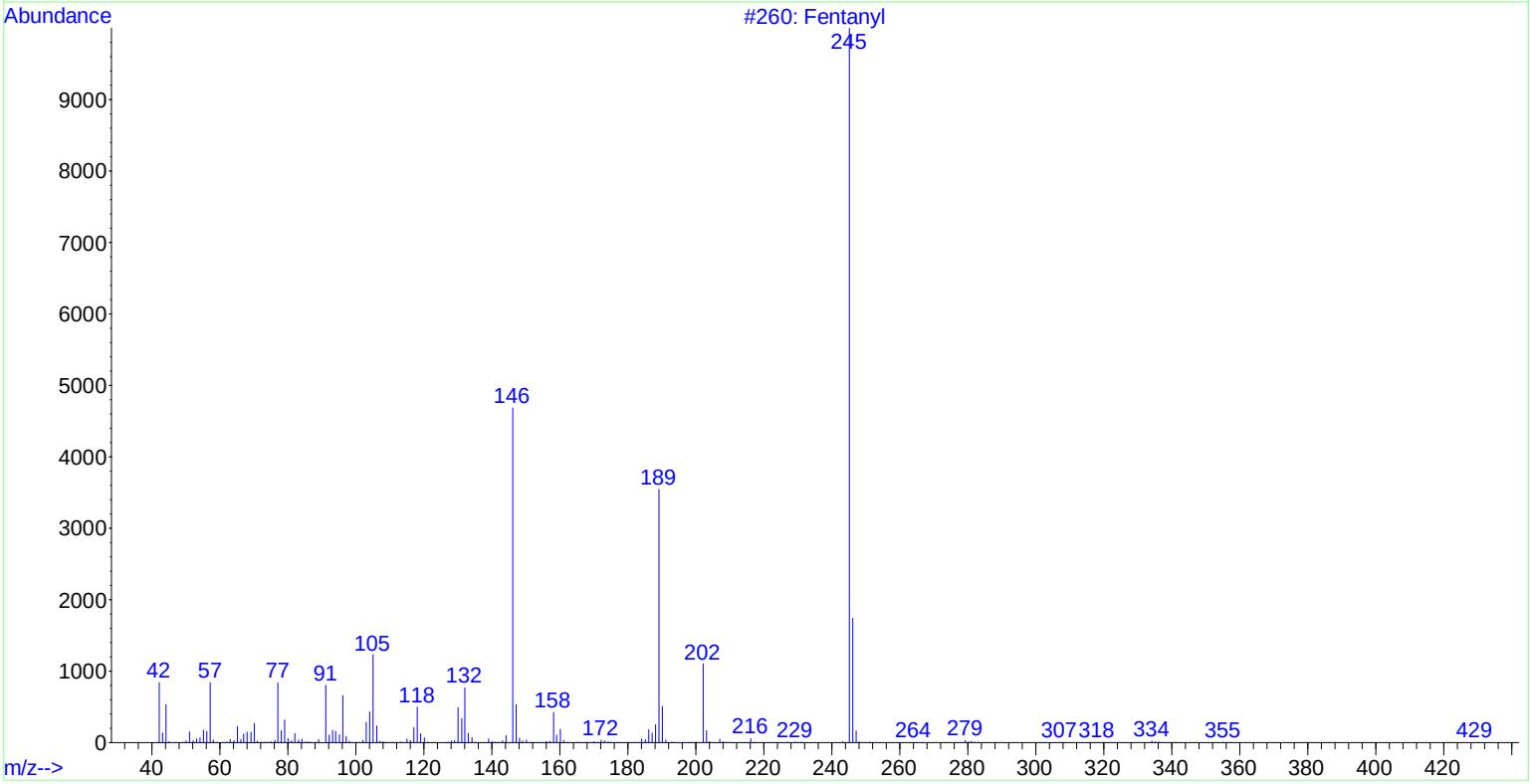
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



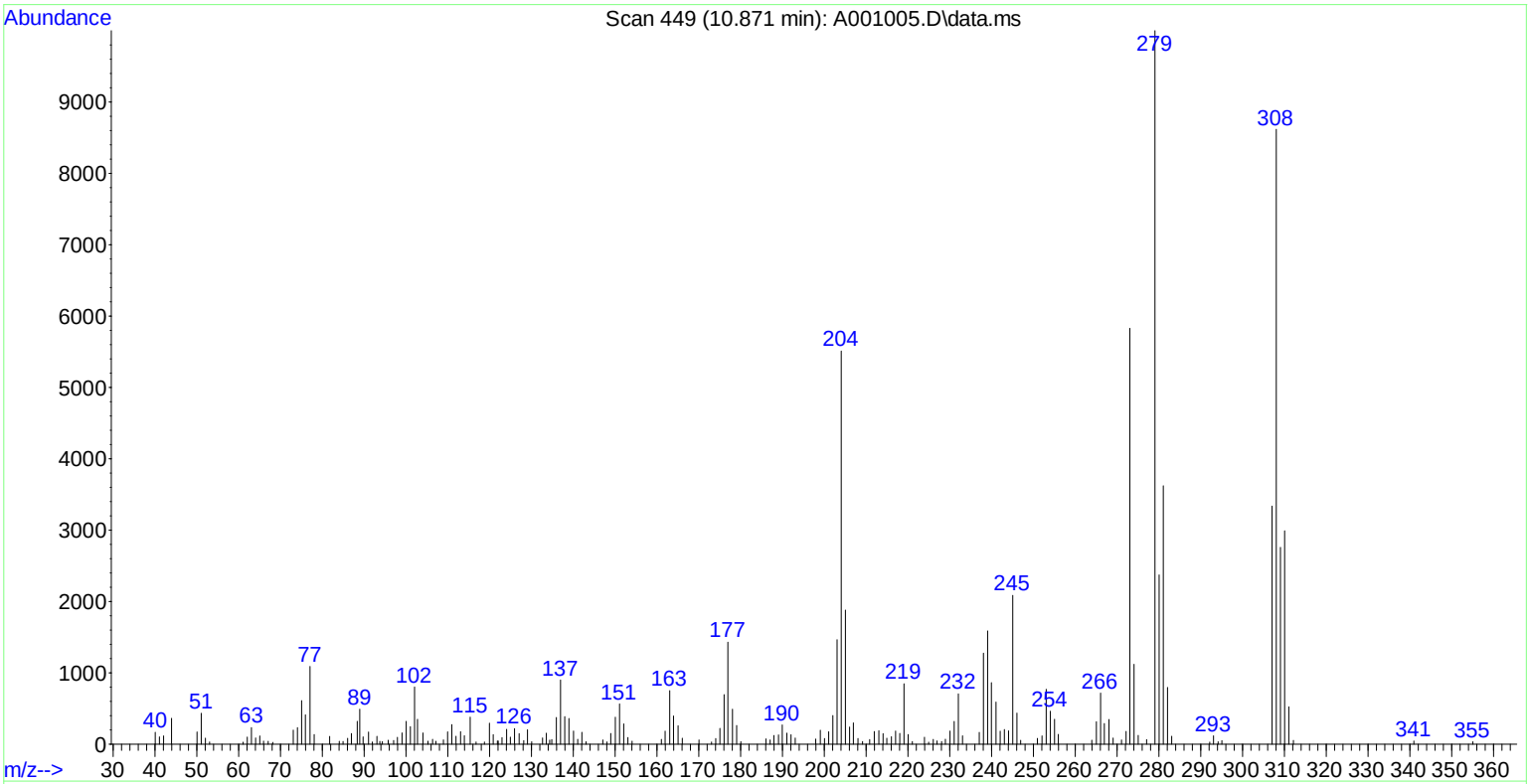


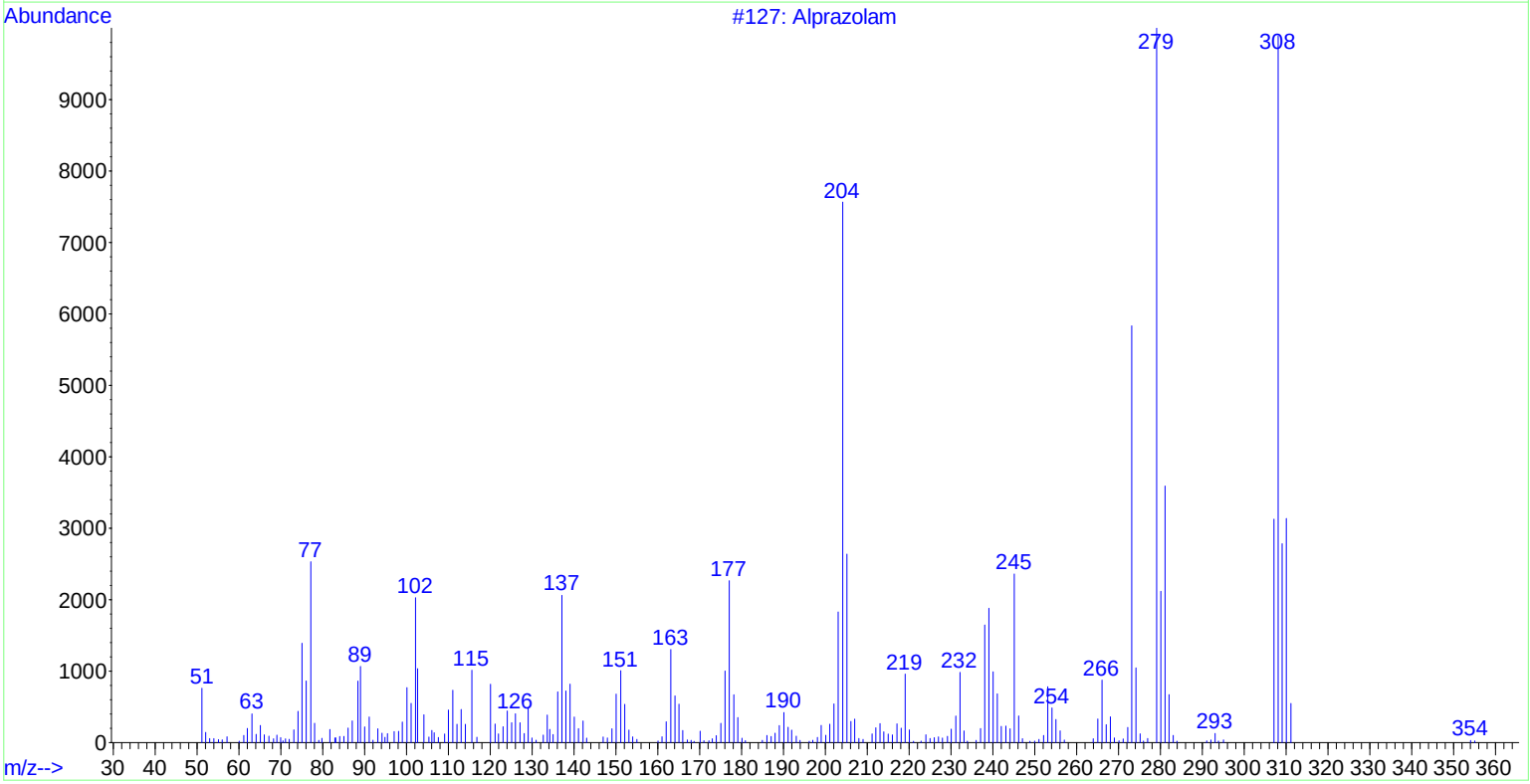
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



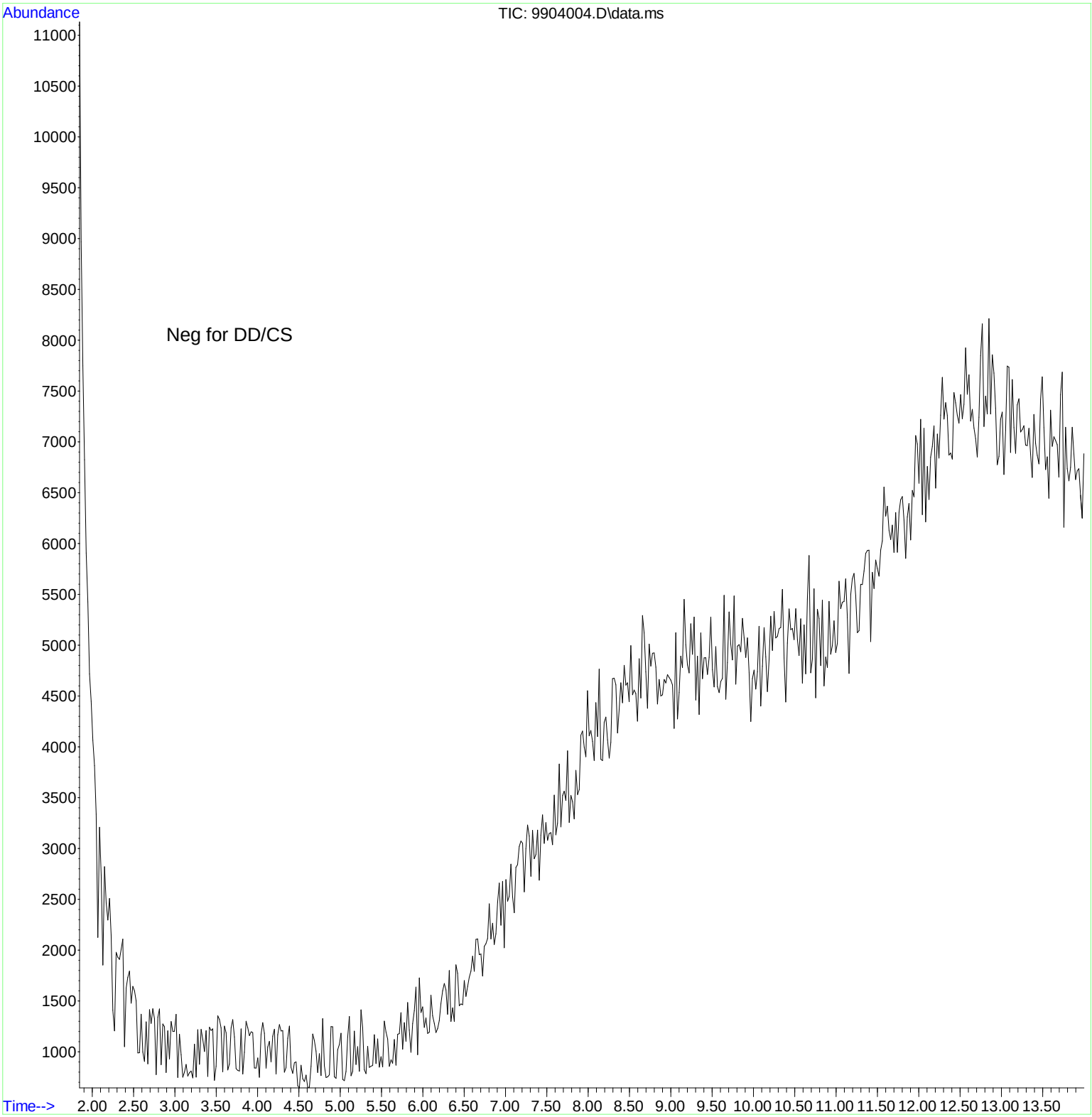


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:36 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

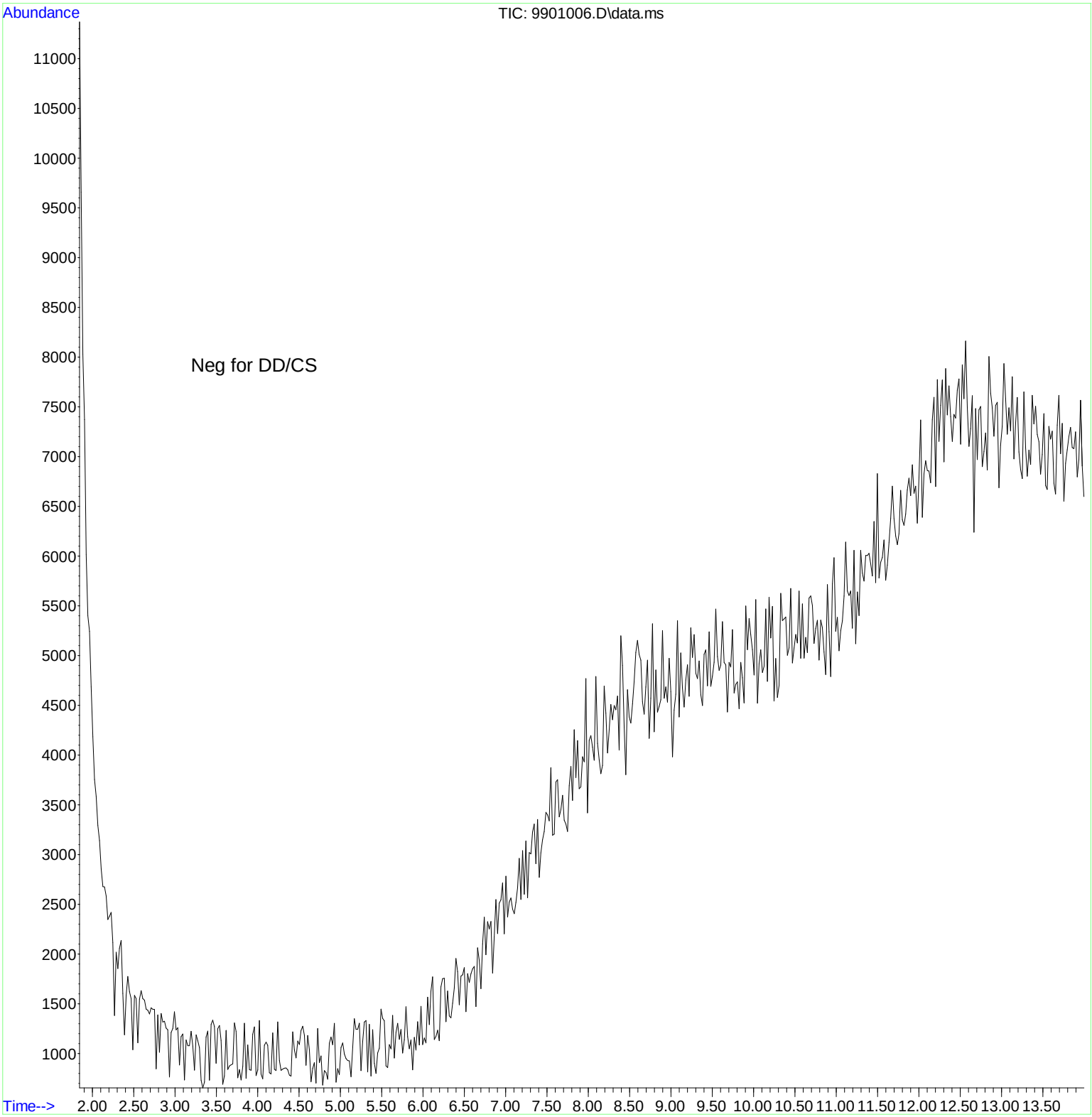




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:19 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)

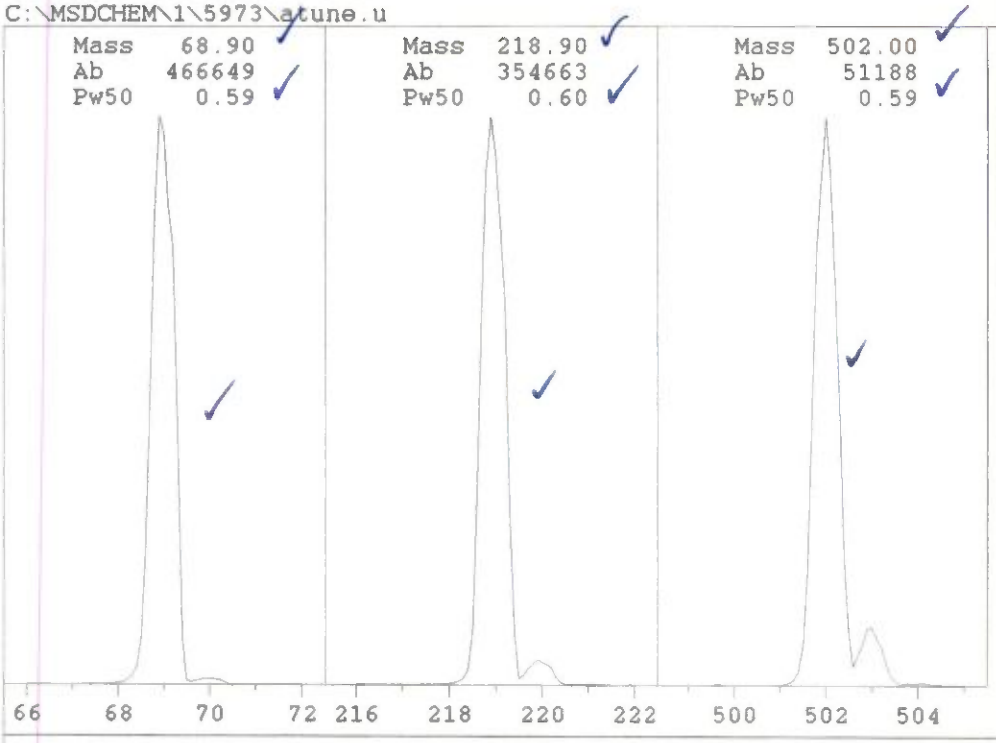


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\032625\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 26 Mar 2025 12:54 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)



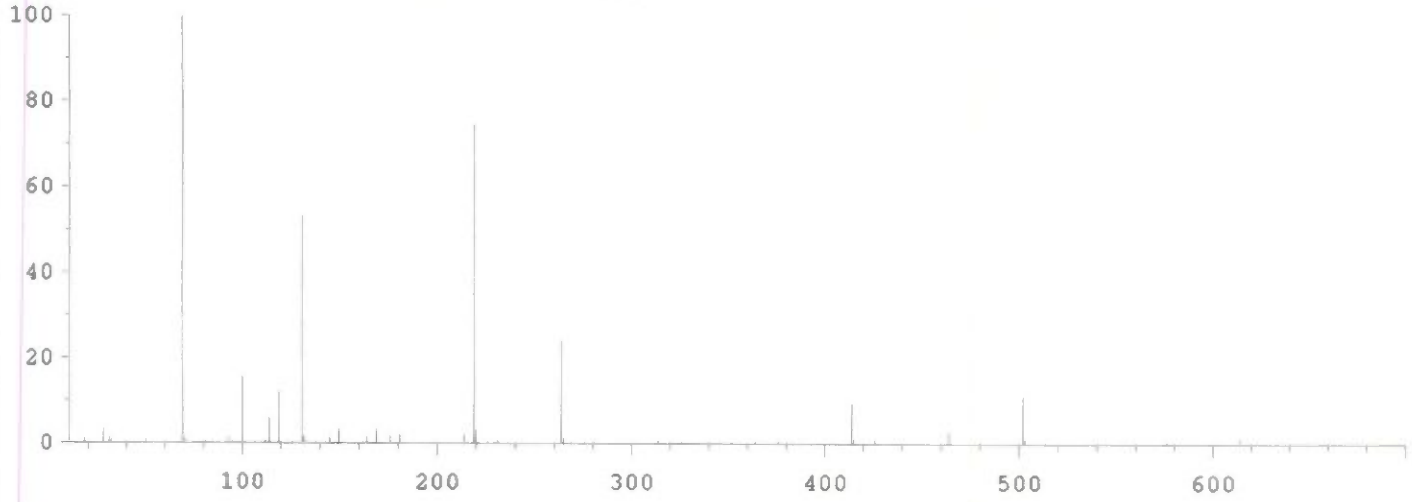
5973 Autotune

Mon Mar 31 08:29:11 2025 Instrument: SD GCMS 1
C:\MSDCHEM\1\5973\atune.u



Ion Pol	POS	MassGain	368
		MassOffs	-12
Emission	34.6	AmuGain	2443
EIEnrgy	69.9	AmuOffs	123
Filament	1	Wid219	-0.030
		DC Pol	POS
Repeller	29.29		
IonFcus	89.2	HEDEnab	ON
EntLens	14.5	EMVolts	1624
EntOffs	19.07		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
142 peaks Base: 69.00 Abundance: 417472



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	417472	100.00	70.00	4609	1.10
218.90	311424	74.60	219.90	13393	4.30
502.00	46280	11.09	503.00	4472	9.66

Air/Water Check: H20~1.04% N2~3.37% O2~1.01% CO2~0.05% N2/H2O~325.19%

Column Flow: Front: 0.798 Back: 0 ml/min. Interface Temp: 280

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502: EM Gain 140792
Repeller Maximum 35 volts using ion 219:

MassGain Values @Samples: 368@3 368@2 368@1 368@0 368@FS

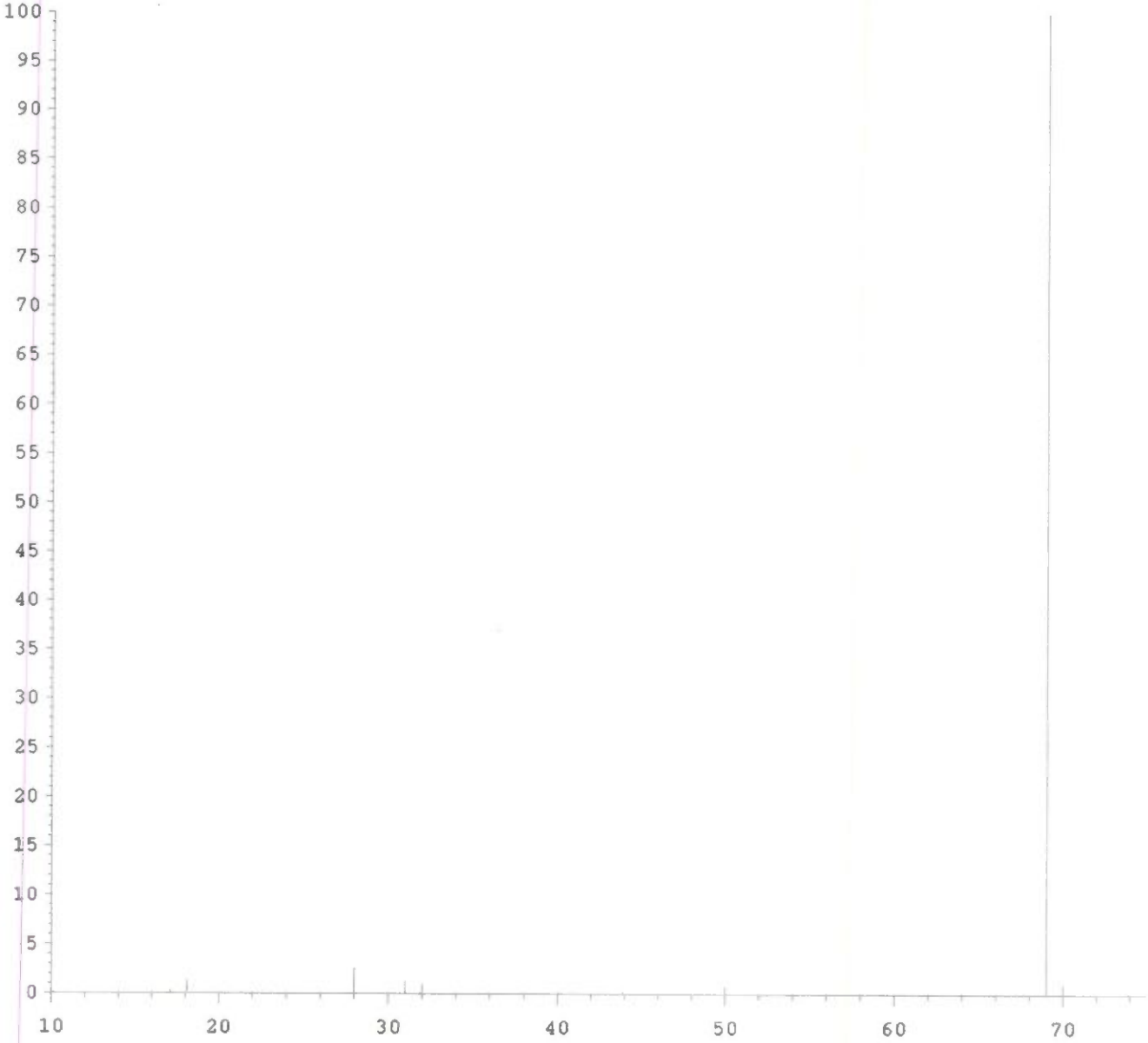
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	123.0	123.0	123.0	123.0	123.0	123.0	123.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

597x Air and Water Check

DS
OK

Instrument: SD GCMS 1
Mon Mar 31 08:21:49 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
70 peaks Base: 69.00 Abundance: 464128



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	464128	100.00	70.00	5244	1.13
18.10	6356	1.37	19.10	46	0.72
28.00	12432	2.68	29.10	164	1.32

Current Params used: atune.u

Relative abundances:✓

18/69 =	1.37 ✓	Water%
28/69 =	2.68 ✓	Nitrogen%
32/69 =	0.97 ✓	Oxygen%
44/69 =	0.25 ✓	Carbon Dioxide%
28/18 =	195.59	Nitrogen/Water%

System Verification - Tune (Detector Optimization) Portion

05

Instrument Name	: SD GCMS 1	
DC Polarity	: Positive	
Filament	: 1	
BasePeak should be 69 or 219		Ok
Position of mass 69	69.00	Ok
Position of mass 219	218.90	Ok
Position of mass 502	502.00	Ok
Position of isotope mass 70	69.99	Ok
Position of isotope mass 220	219.93	Ok
Position of isotope mass 503	503.00	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.08	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.38	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.27	Ok
Ratio of 219 to 69 should be > 40% and is	75.89	Ok
Ratio of 502 to 69 should be > 2.4% and is	11.00	Ok
Mass 69 Precursor (<= 3%)	0.19	Ok
Mass 219 Precursor (<= 6%)	0.36	Ok
Mass 502 Precursor (<= 12%)	0.49	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.95	Ok
Ratio of 28 to 69 (<10%)	3.29	Ok
Electron Multiplier Voltage	1624	Ok

Tune portion of System Verification passed.

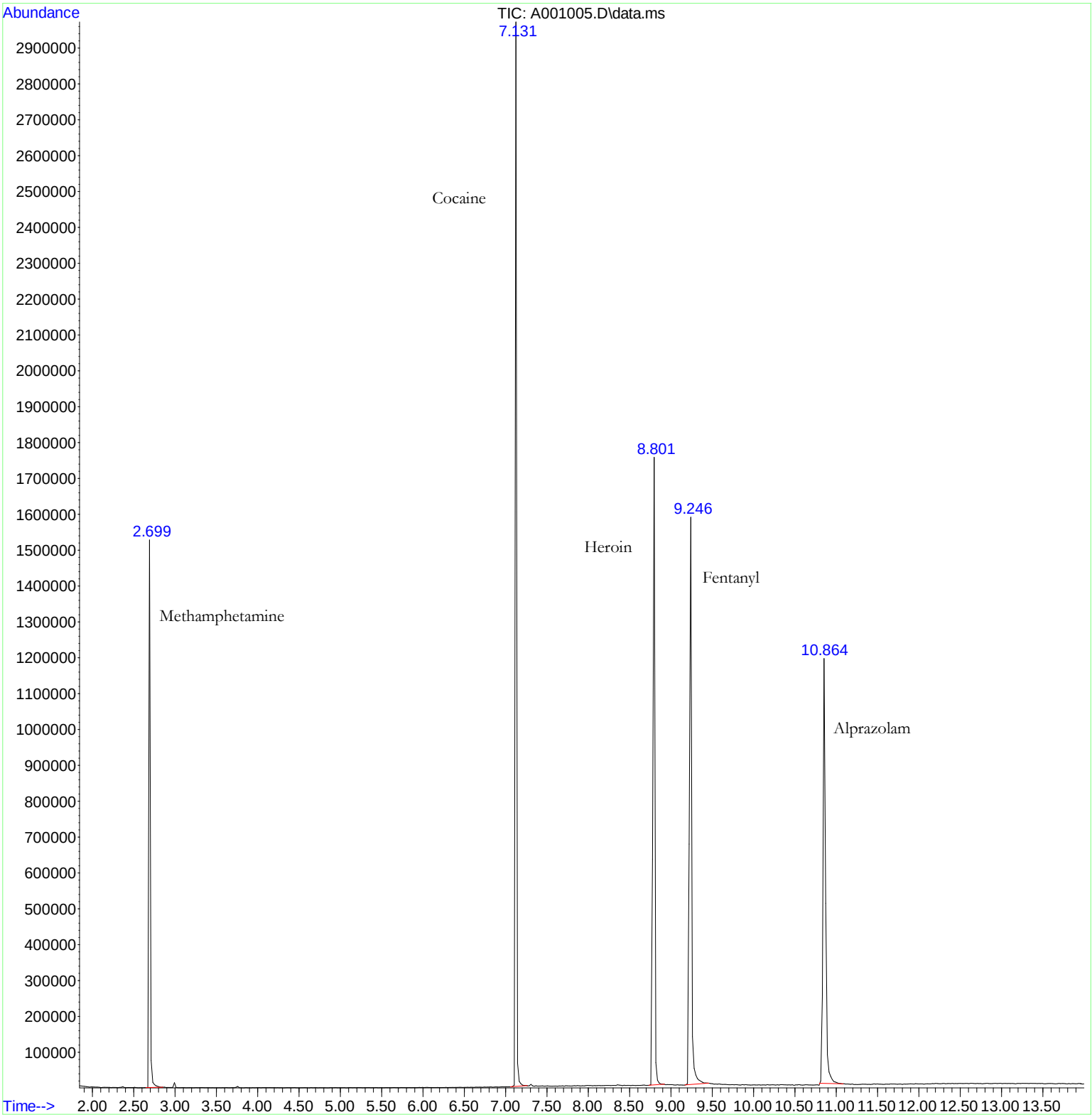
BCCL GC/MS #1
Retention Times for the Week of:

03/31/2025 - 04/06/2025

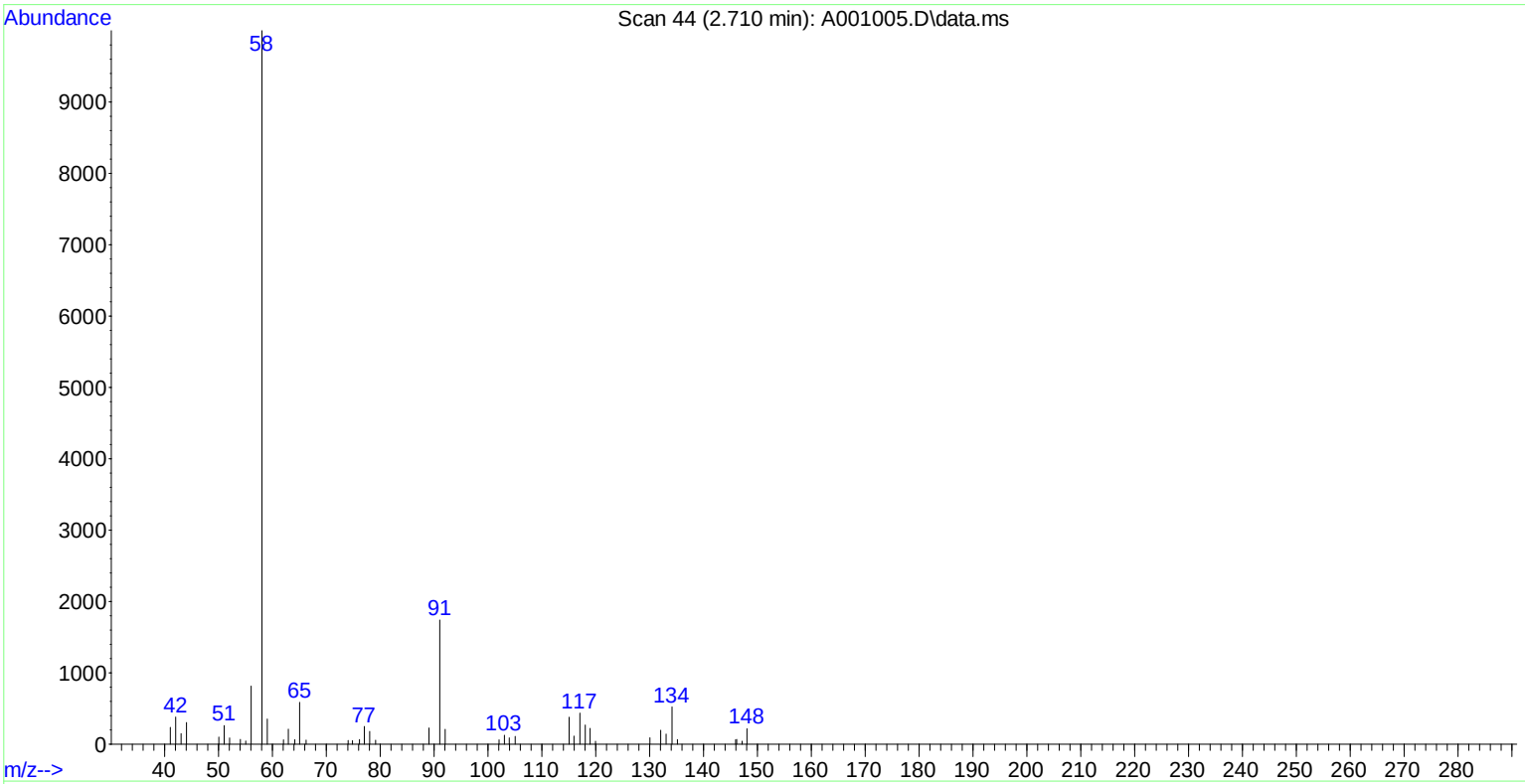
[x] **Tune: 03/31/2025 - Autotune DS**

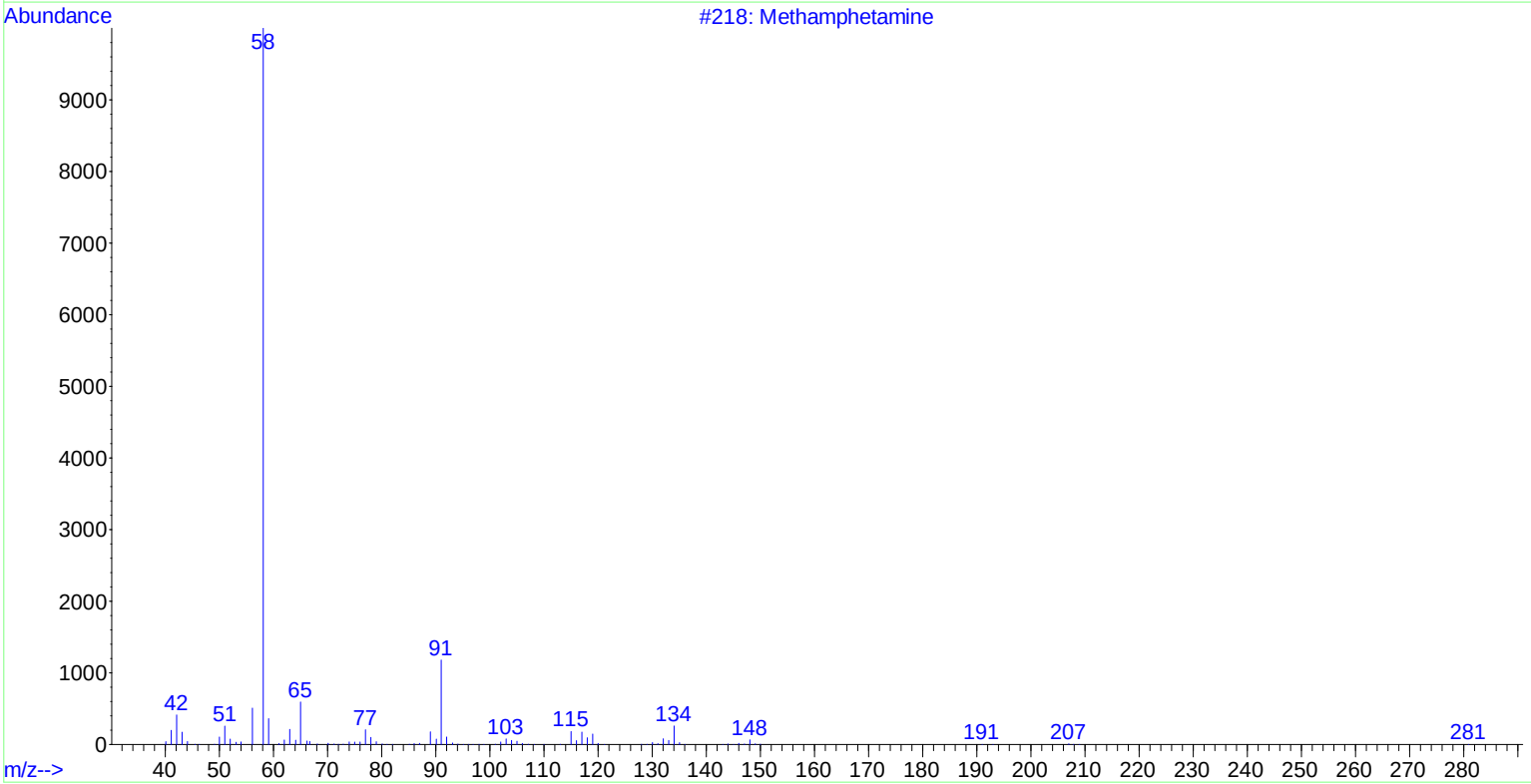
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.699	2.672	2.725
Cocaine	R-24-060	BCCL GenDrug	7.131	7.059	7.202
Heroin	R-24-060	BCCL GenDrug	8.801	8.712	8.889
Fentanyl	R-24-060	BCCL GenDrug	9.246	9.153	9.338
Alprazolam	R-24-060	BCCL GenDrug	10.864	10.755	10.972

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

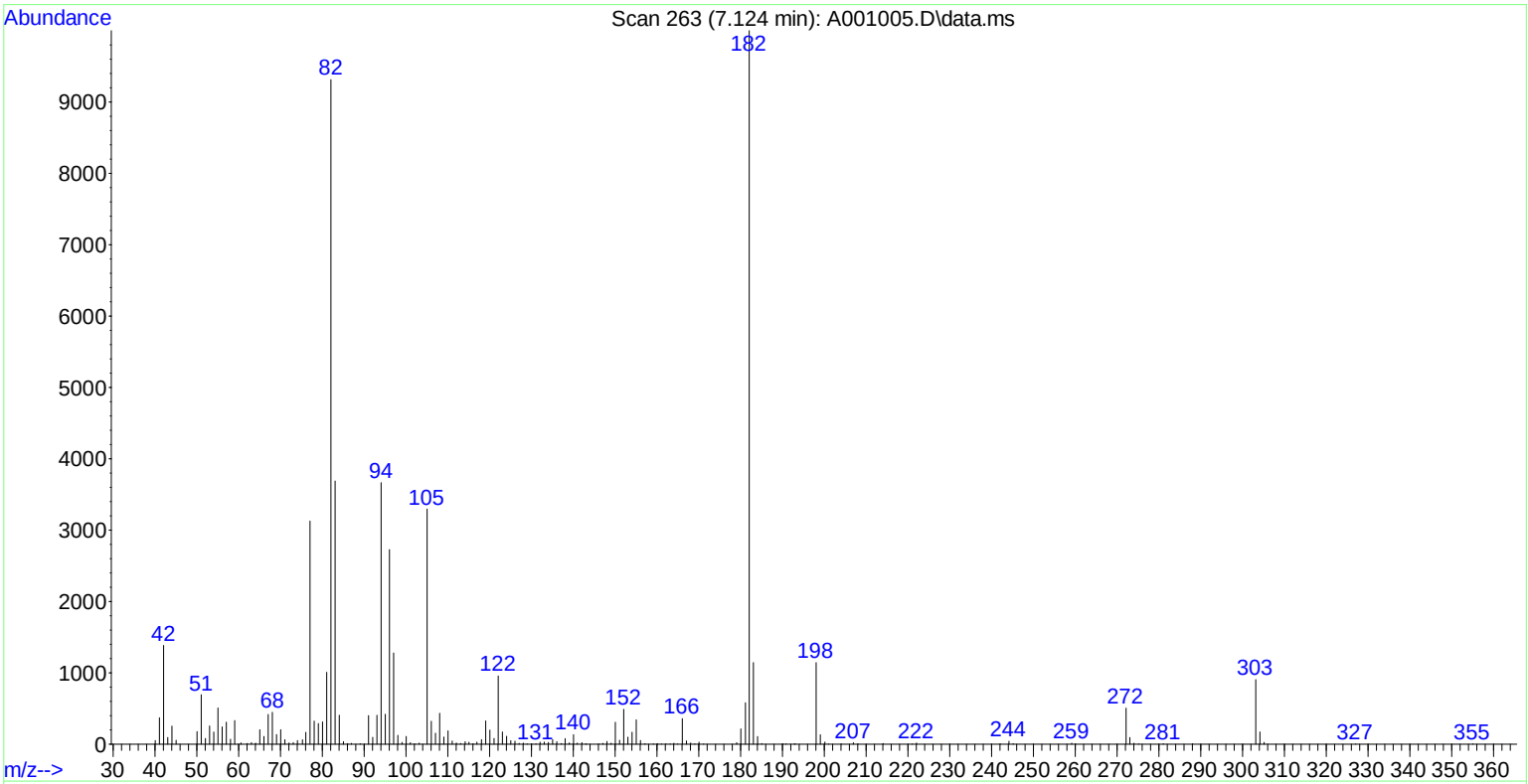


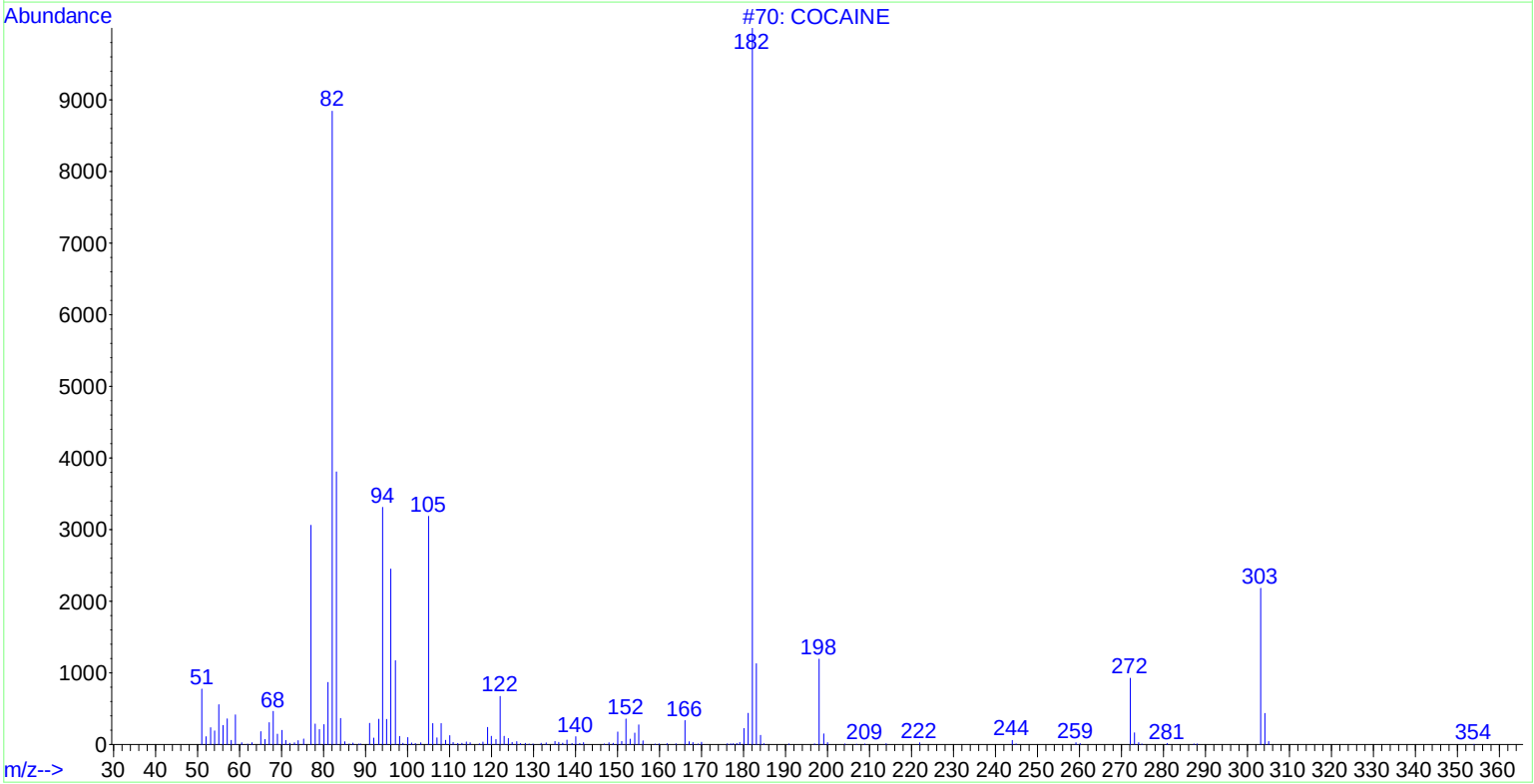
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



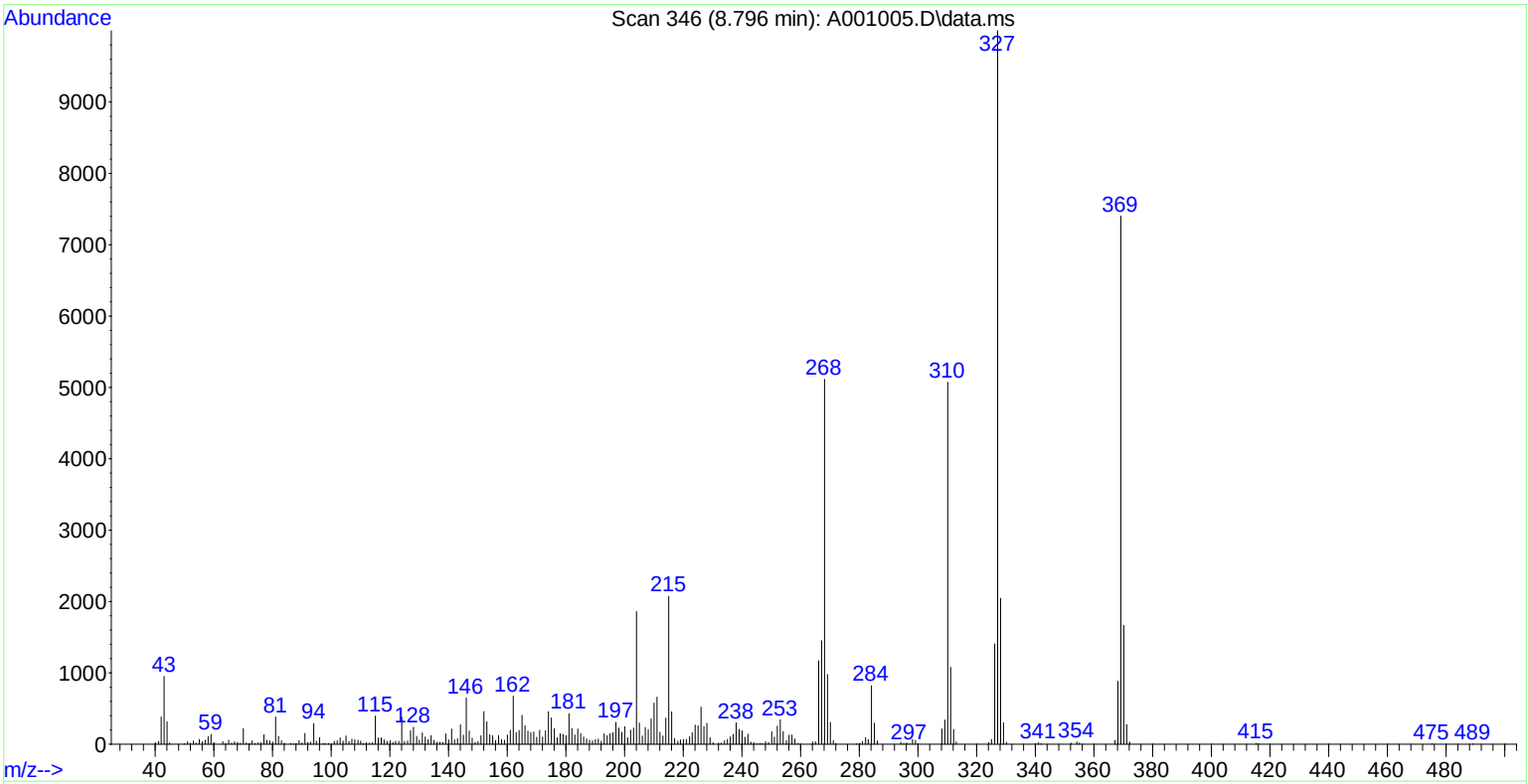


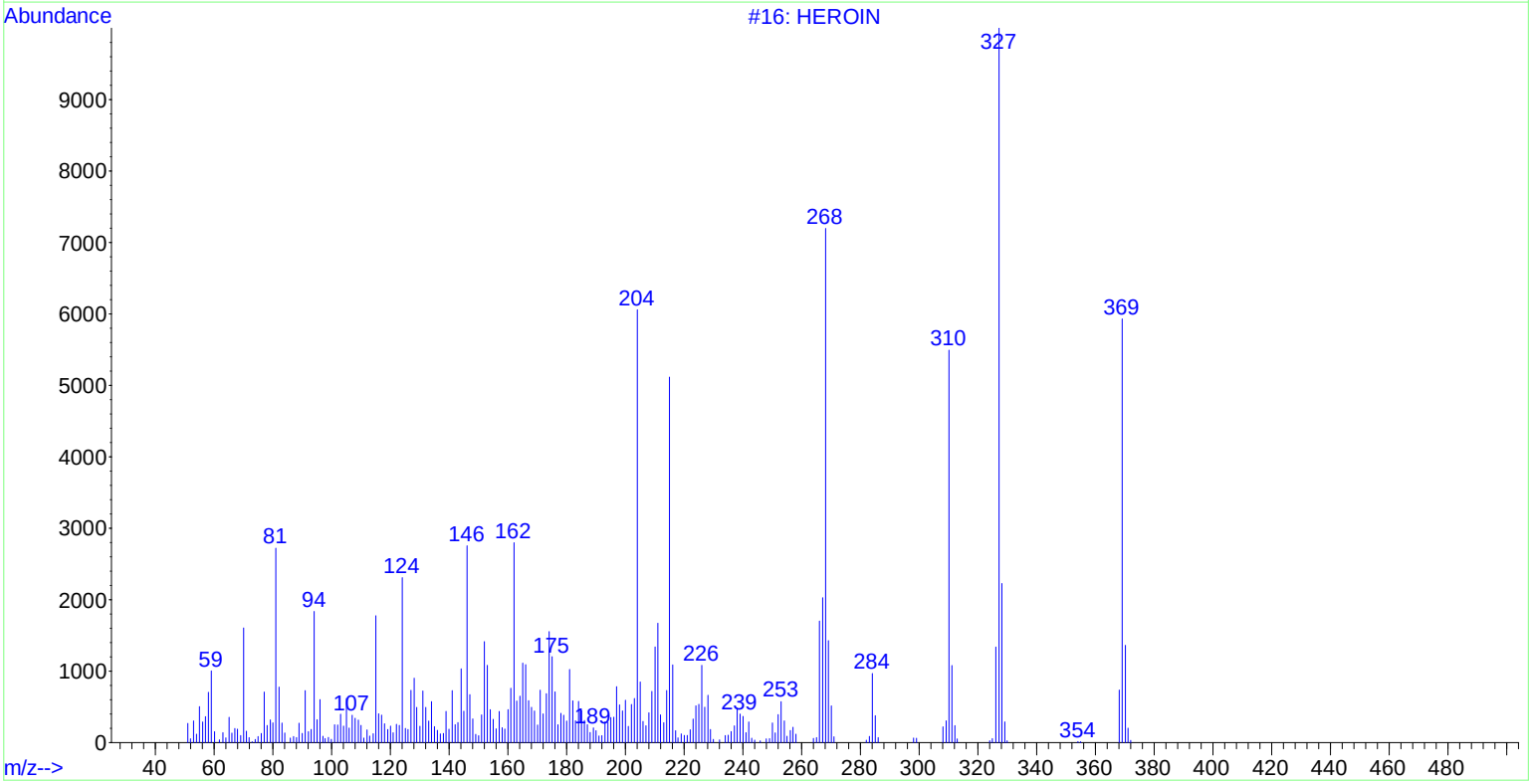
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



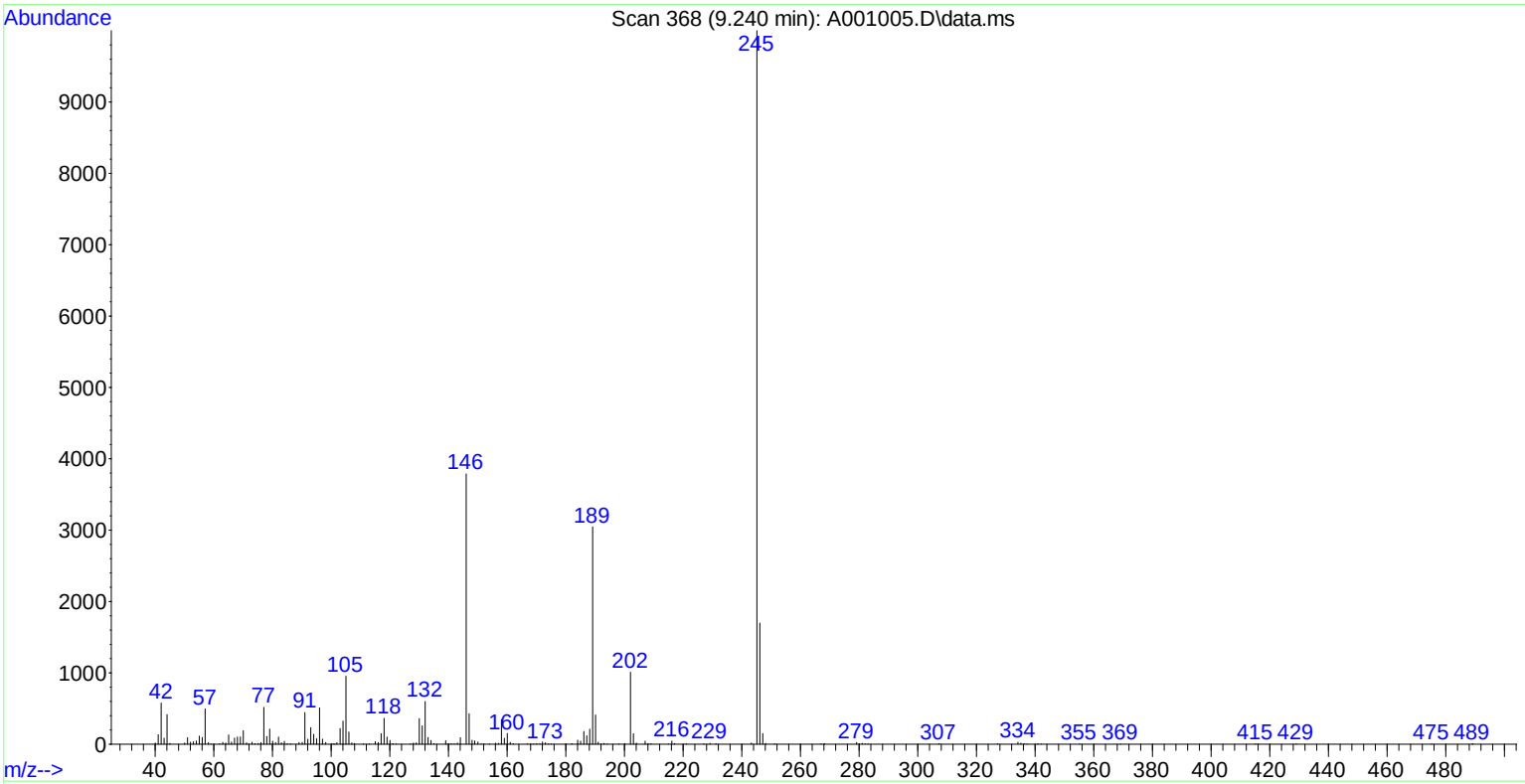


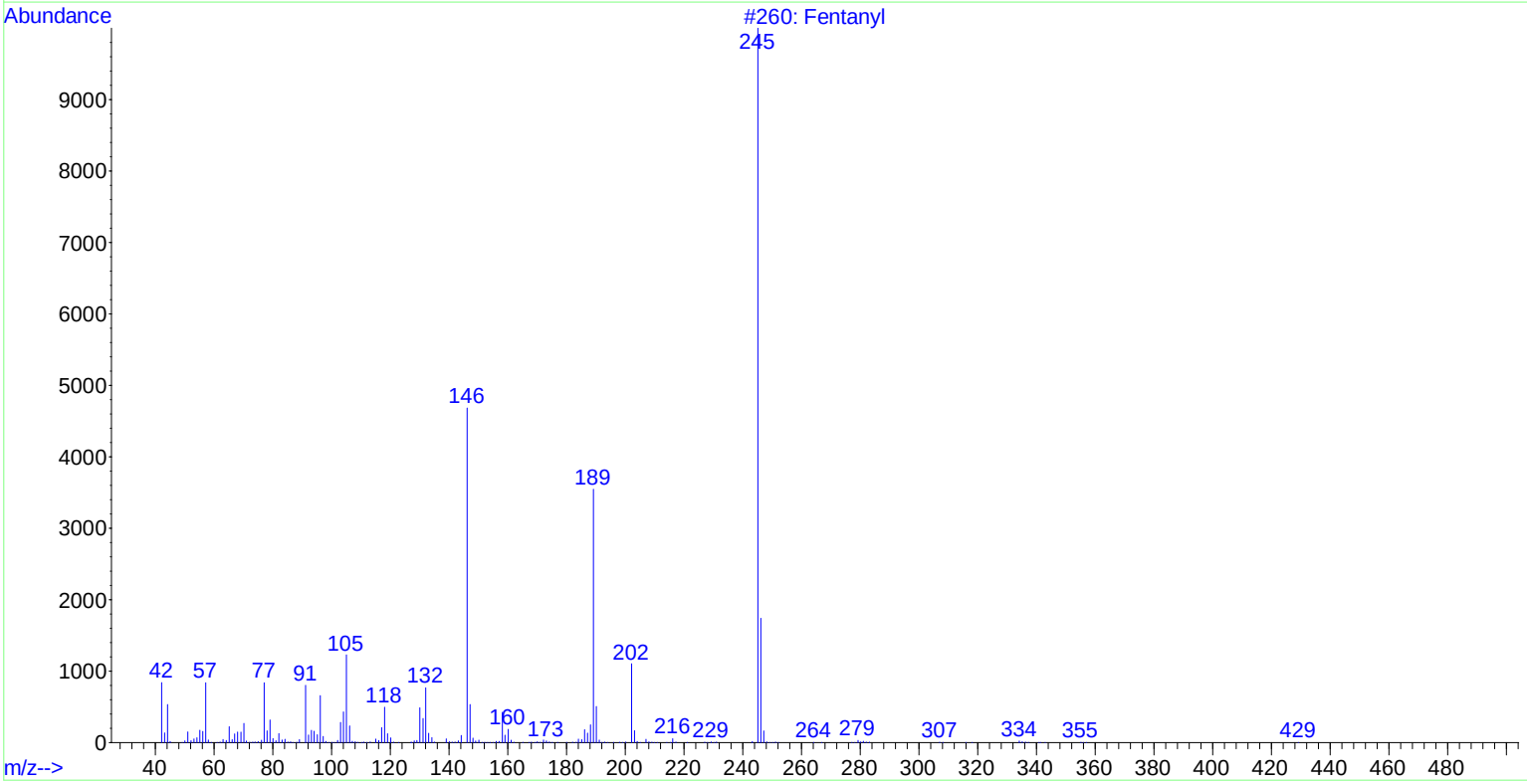
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



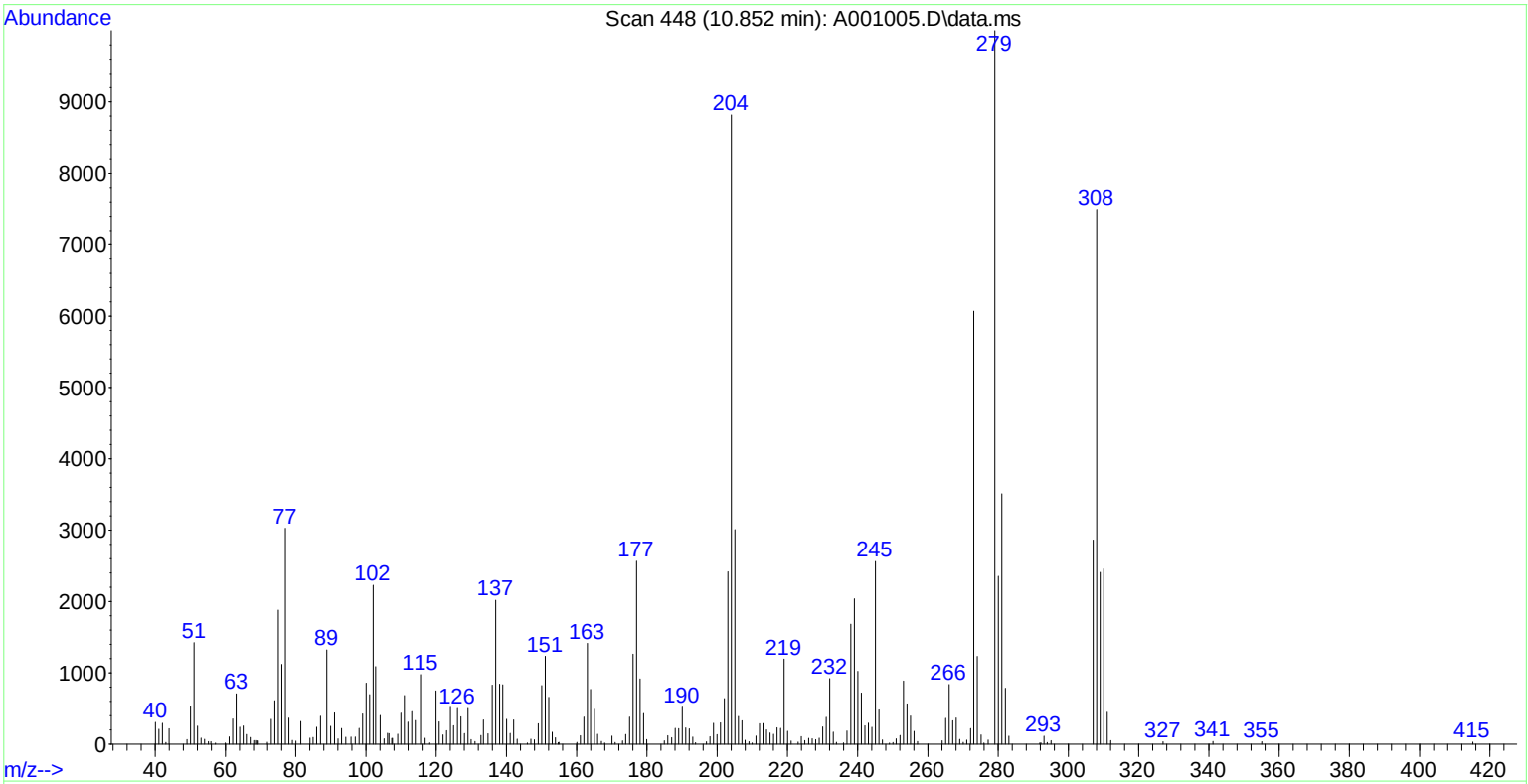


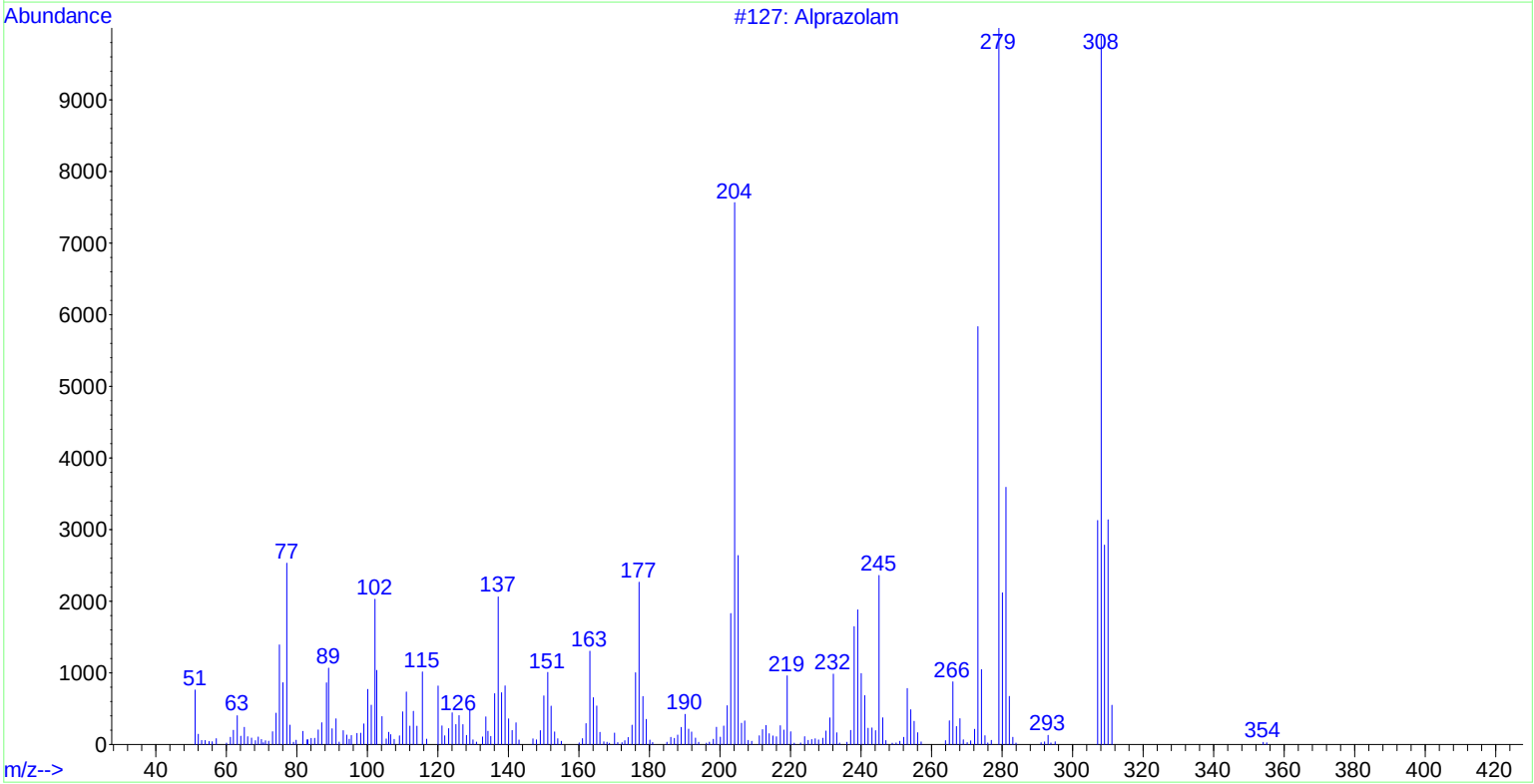
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



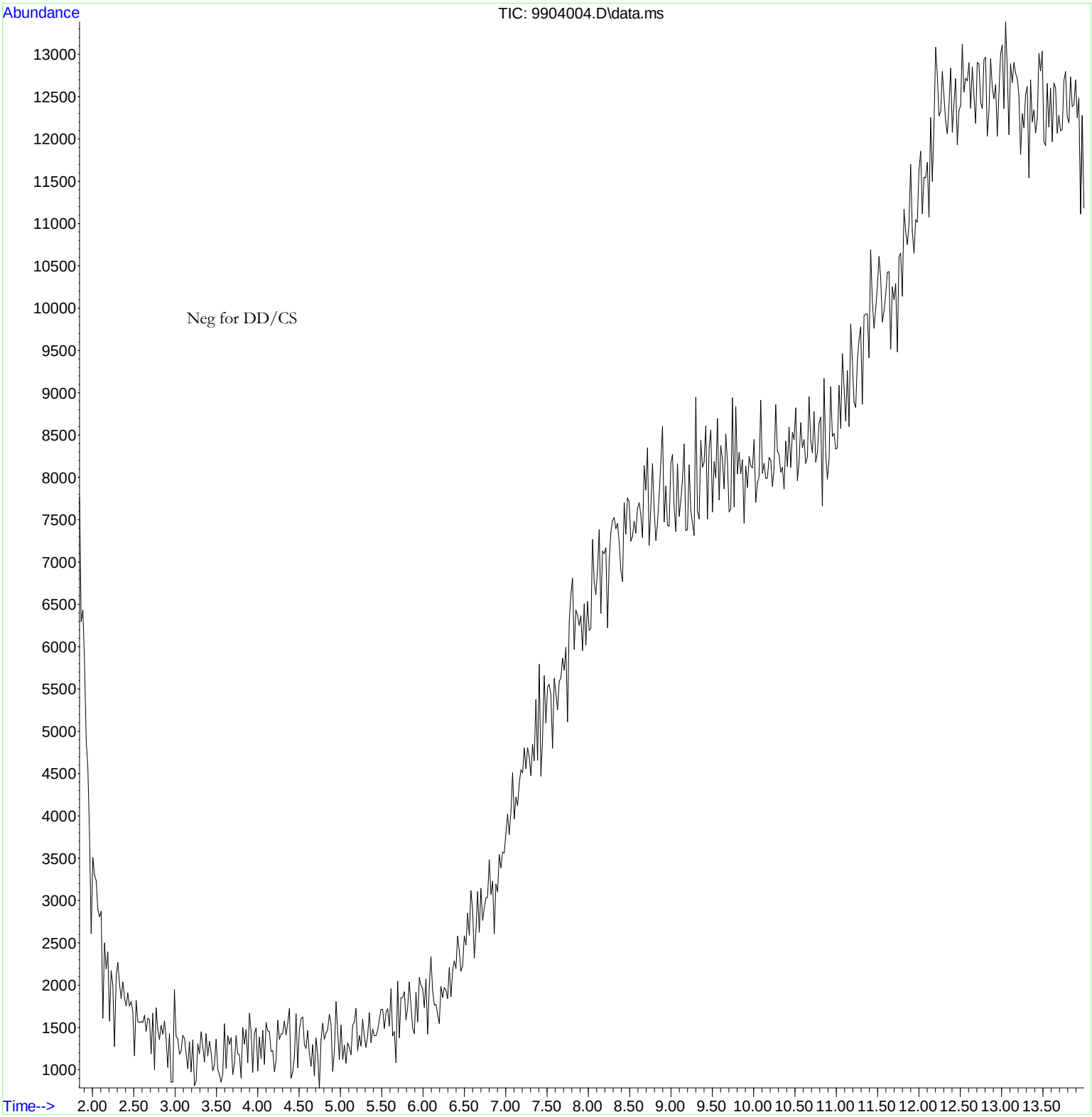


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN





File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:13 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\033125\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 31 Mar 2025 10:48 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)

