Brazoria County Crime Lab

Seized Drugs Section

GC-MS Maintenance Log

Instrument: GCMS-1 **Month/Year:** July 2025

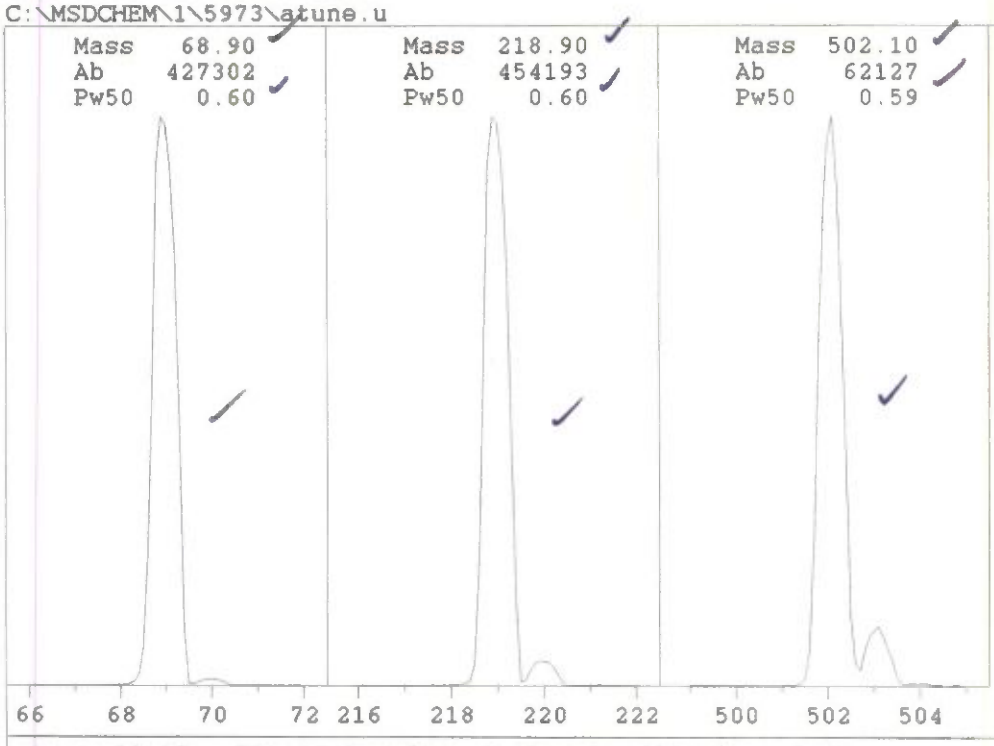
Entry Number	Date	He Tank Pressure	Autotune	Septum Change	Wash Vials Filled	Liner Change	Gold Seal Replaced	Column Cut	Computer Restarted	Maintenance/ PM	Analyst/ Technician	Comments	Initials
1	7/7/2025	1750	Pass	N/A	√	N/A	N/A	N/A	N/A	Maintenance	Analyst	Helium purge for 1.5 hours due to high N2	DS
2	7/16/2025	500	Pass	N/A	√	N/A	N/A	N/A	N/A	Maintenance	Analyst	weekly check did not inject, run on 7/17/2025	KB
3	7/21/2025	2400	Pass	N/A	√	N/A	N/A	N/A	N/A	Maintenance	Analyst	Helium tank change	DS
4	7/28/2025	1500	Pass	√	√	√	N/A	N/A	N/A	Maintenance	Analyst		KB

Signature: _____ **Date:** 10/2/2025

5973 Autotune

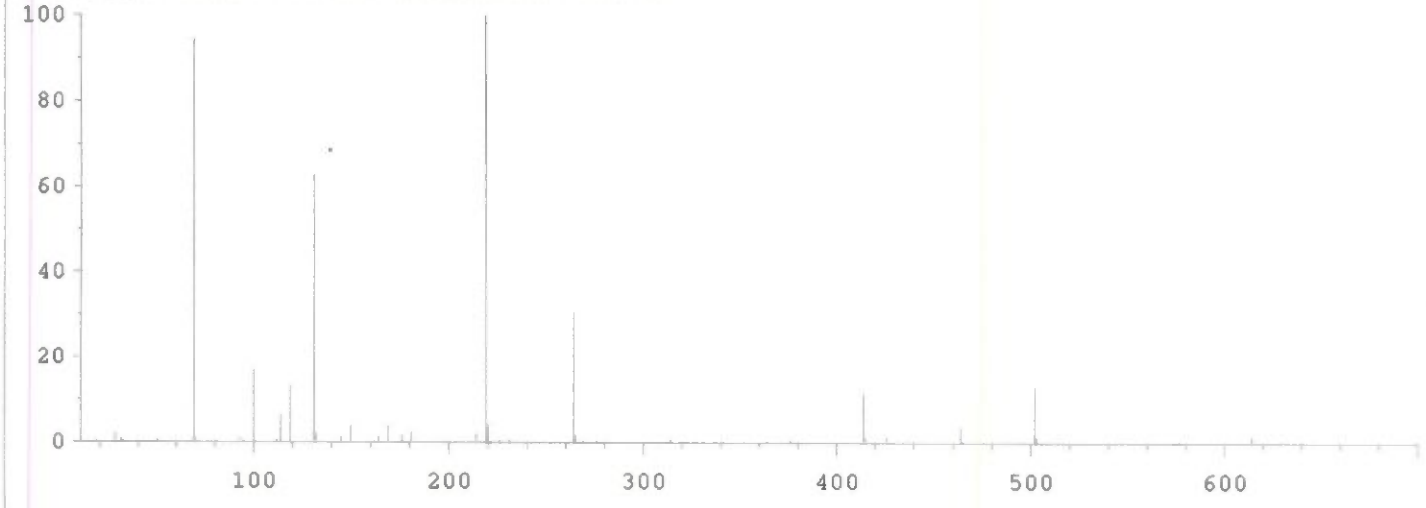
Mon Jul 07 09:58:47 2025 Instrument: SD GCMS 1

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



Ion Pol	POS	MassGain	377
		MassOffs	-12
Emission	34.6	AmuGain	2446
EIEnrgy	69.9	AmuOffs	121
Filament	1	Wid219	-0.043
		DC Pol	POS
Repeller	20.74		
IonFcus	82.6	HEDEnab	ON
EntLens	16.5	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
143 peaks Base: 218.90 Abundance: 420864



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	398912	100.00	70.00	4512	1.13
218.90	420864	105.50	219.90	18720	4.45
502.00	55416	13.89	503.00	5841	10.54

Air/Water Check: H20~0.45% N2~2.19% O2~0.50% CO2~0.09% N2/H2O~483.86%

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

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 147196
Repeller Maximum 35 volts using ion 219;

MassGain Values @Samples: 372@3 372@2 372@1 372@0 377@FS

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	121.0	121.0	121.0	121.0	121.0	121.0	121.0
Entrance Lens Offset:	18.1	18.1	18.1	18.1	18.1	18.1	18.1

DS

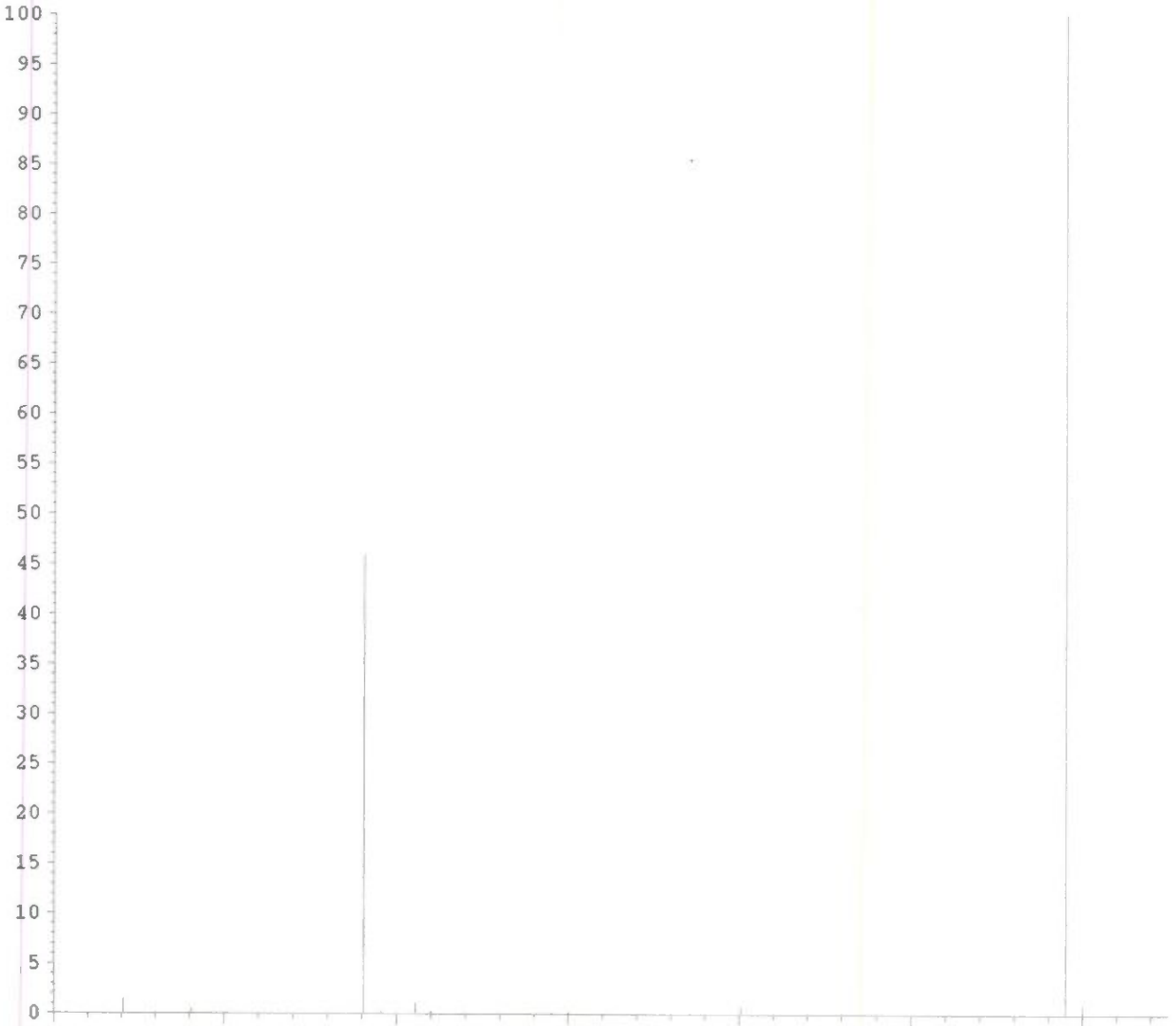
1st Air/Water ✓

597x Air and Water Check

Instrument: SD GCMS 1
Mon Jul 07 08:26:53 2025

C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
70 peaks Base: 69.00 Abundance: 401152



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	401152	100.00	70.00	4348	1.08
18.10	1942	0.48	19.10	72	3.71
28.10	184256	45.93	29.10	1237	0.67

Current Params used: atune.u

Relative abundances:

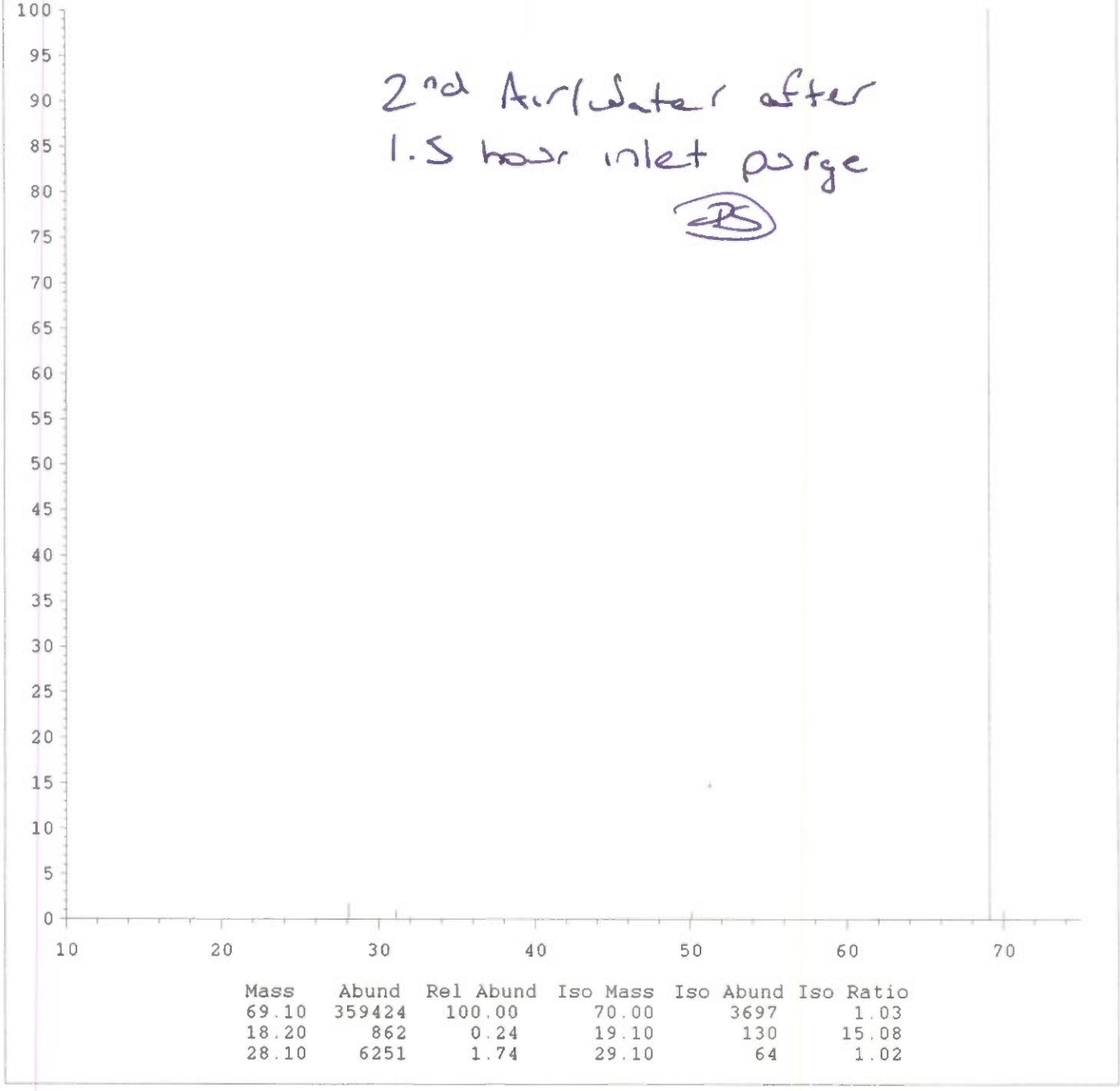
18/69 =	0.48	Water% ✓
28/69 =	45.93	Nitrogen% ✓
32/69 =	0.33	Oxygen% ✓
44/69 =	0.11	Carbon Dioxide% ✓
28/18 =	9487.95	Nitrogen/Water%

DD
OK

597x Air and Water Check

Instrument: SD GCMS 1
Mon Jul 07 09:50:50 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
71 peaks Base: 69.10 Abundance: 359424



2nd Air/Water after 1.5 hour inlet purge
PS

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	359424	100.00	70.00	3697	1.03
18.20	862	0.24	19.10	130	15.08
28.10	6251	1.74	29.10	64	1.02

Current Params used: atune.u

Relative abundances:

18/69 =	0.24	Water% ✓
28/69 =	1.74	Nitrogen% ✓
32/69 =	0.26	Oxygen% ✓
44/69 =	0.06	Carbon Dioxide% ✓
28/18 =	725.17	Nitrogen/Water%

DS

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	69.00	Ok
Position of mass 219	218.96	Ok
Position of mass 502	502.00	Ok
Position of isotope mass 70	69.95	Ok
Position of isotope mass 220	219.96	Ok
Position of isotope mass 503	503.01	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%)	4.32	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.74	Ok
Ratio of 219 to 69 should be > 40% and is	107.01	Ok
Ratio of 502 to 69 should be > 2.4% and is	14.29	Ok
Mass 69 Precursor (<= 3%)	0.10	Ok
Mass 219 Precursor (<= 6%)	0.11	Ok
Mass 502 Precursor (<= 12%)	0.17	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.42	Ok
Ratio of 28 to 69 (<10%)	2.07	Ok
Electron Multiplier Voltage	1624	Ok

Tune portion of System Verification passed.

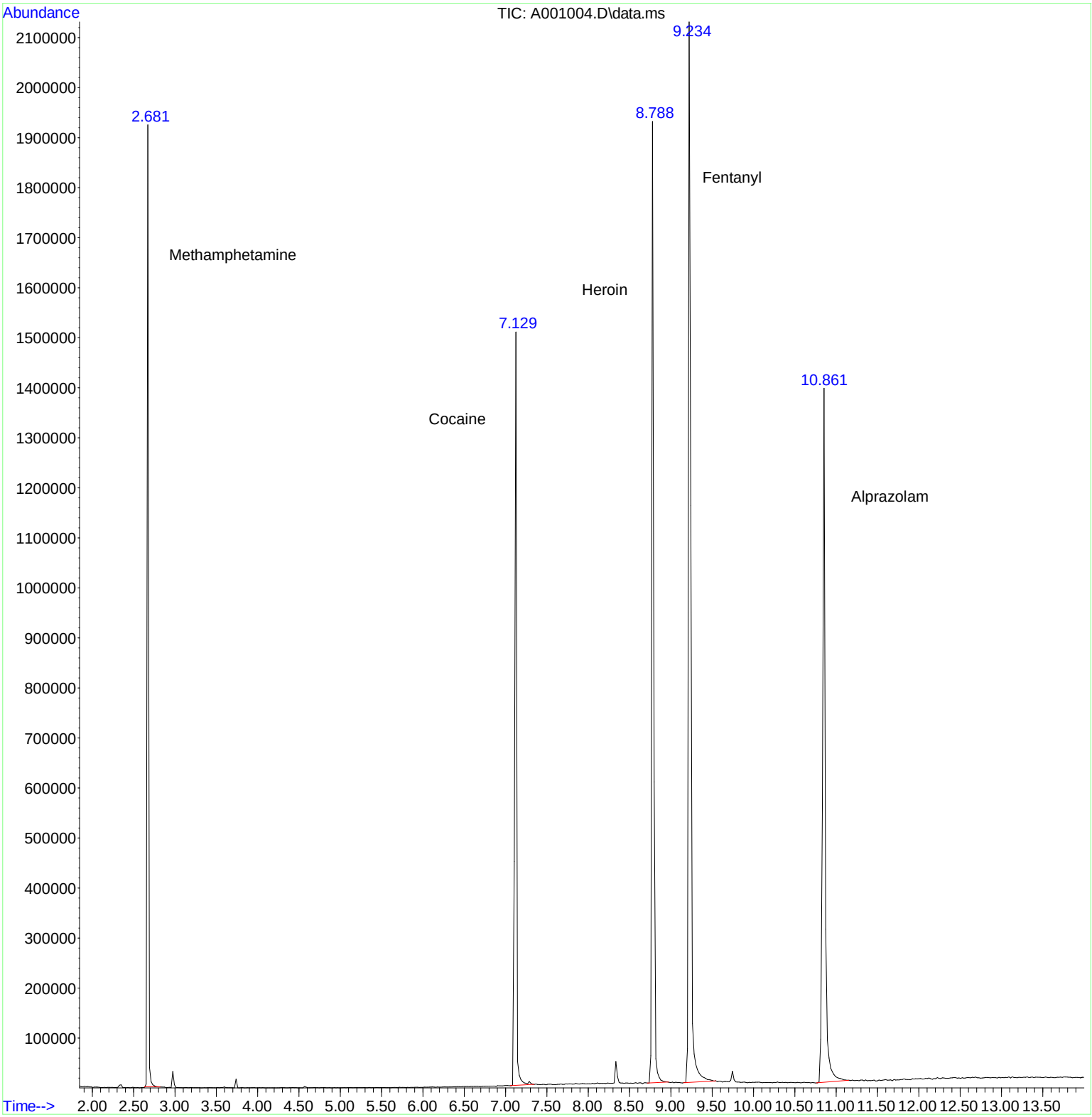
BCCL GC/MS #1
Retention Times for the Week of:

07/07/2025 - 07/13/2025

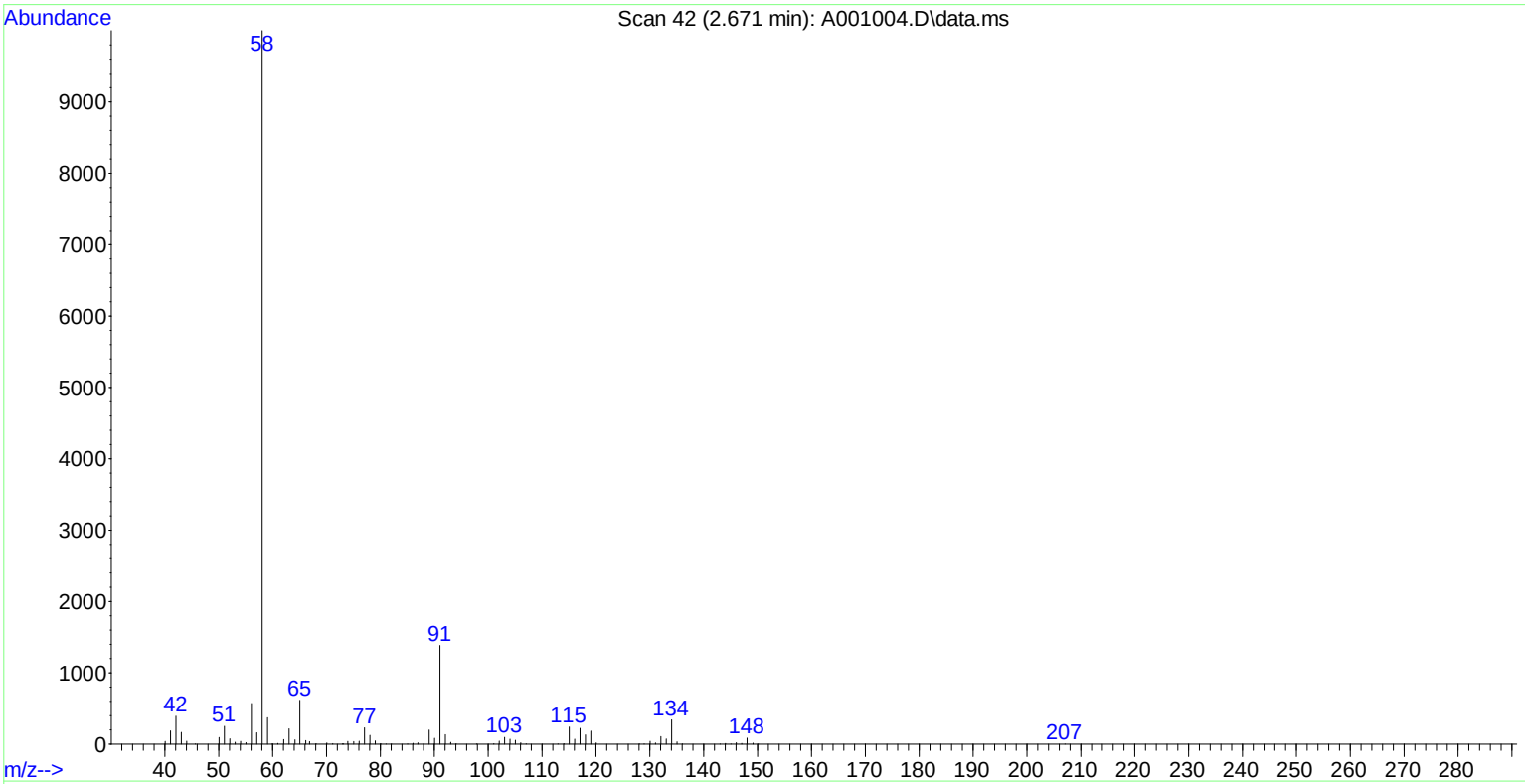
[x] **Tune: 07/07/2025 - Autotune DS**

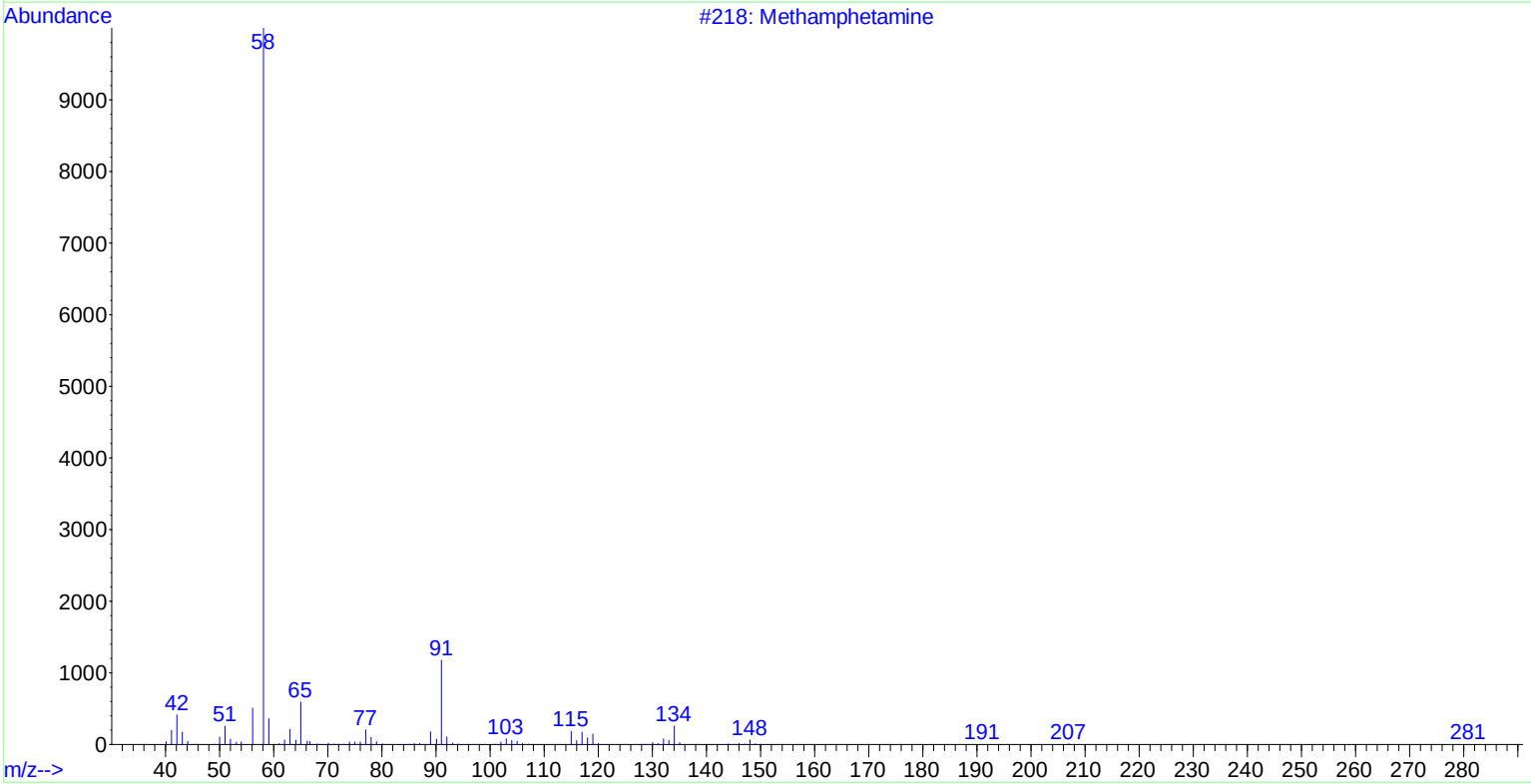
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.681	2.654	2.707
Cocaine	R-24-060	BCCL GenDrug	7.129	7.057	7.200
Heroin	R-24-060	BCCL GenDrug	8.788	8.700	8.875
Fentanyl	R-24-060	BCCL GenDrug	9.234	9.141	9.326
Alprazolam	R-24-060	BCCL GenDrug	10.861	10.752	10.969

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:41 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

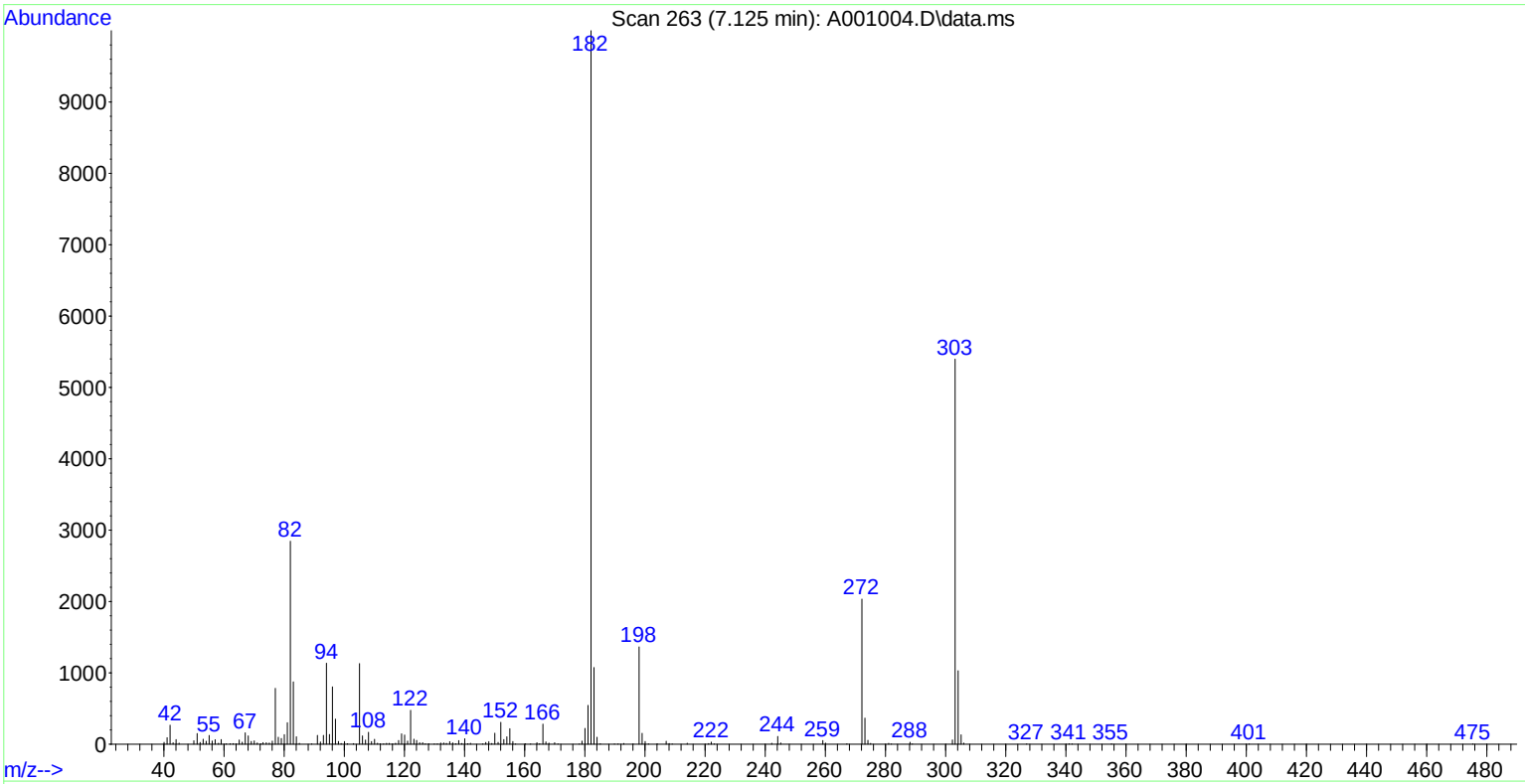


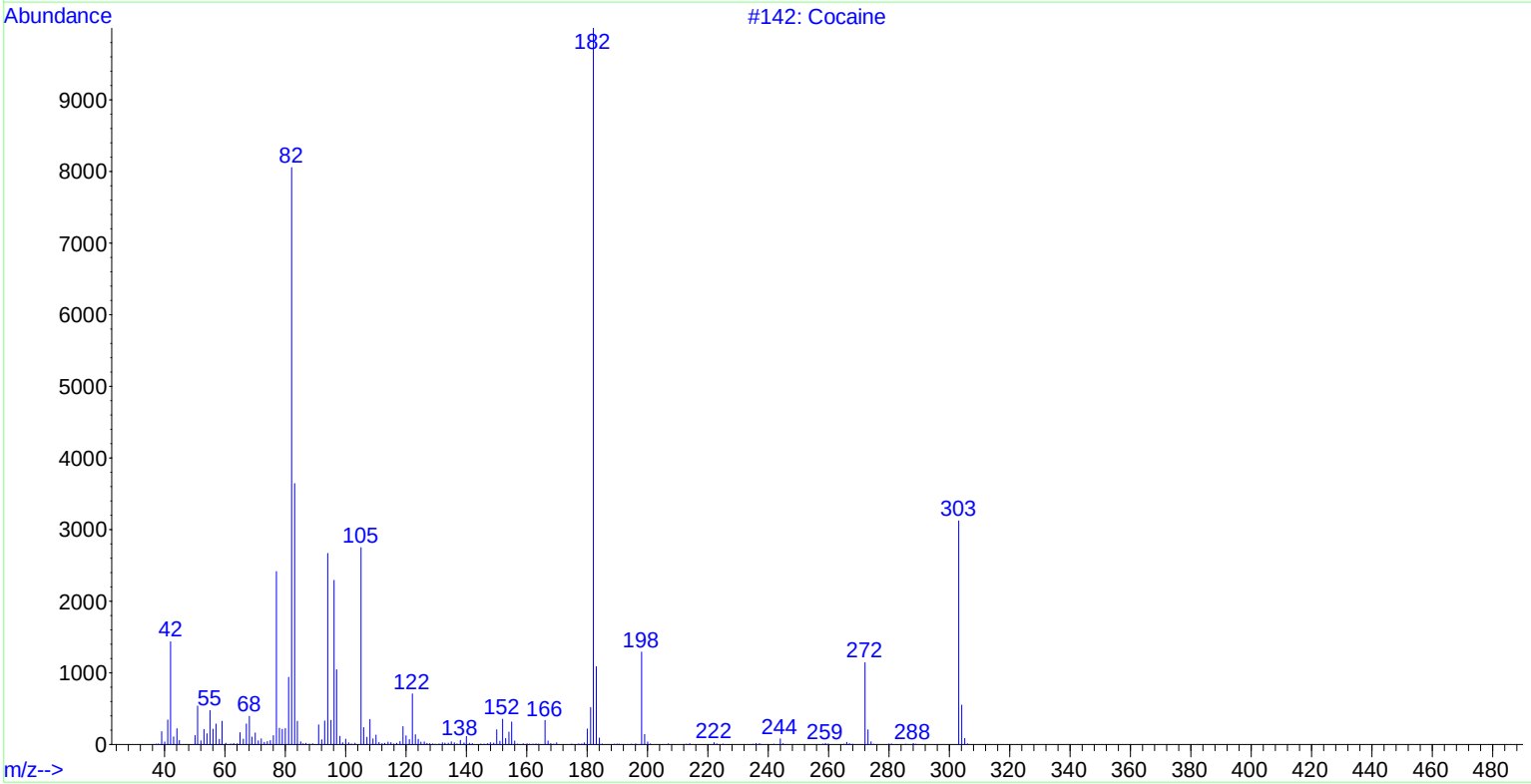
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:41 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



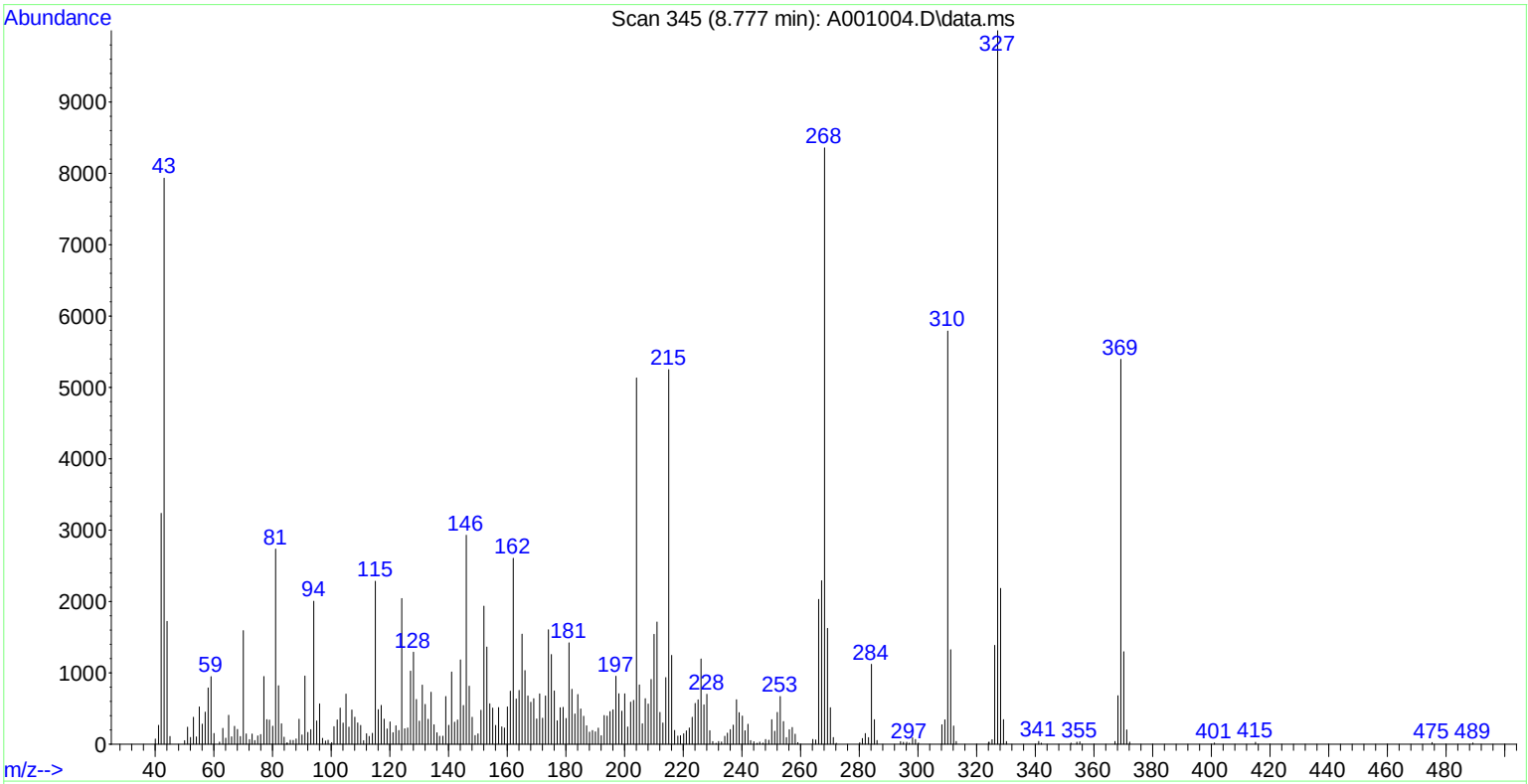


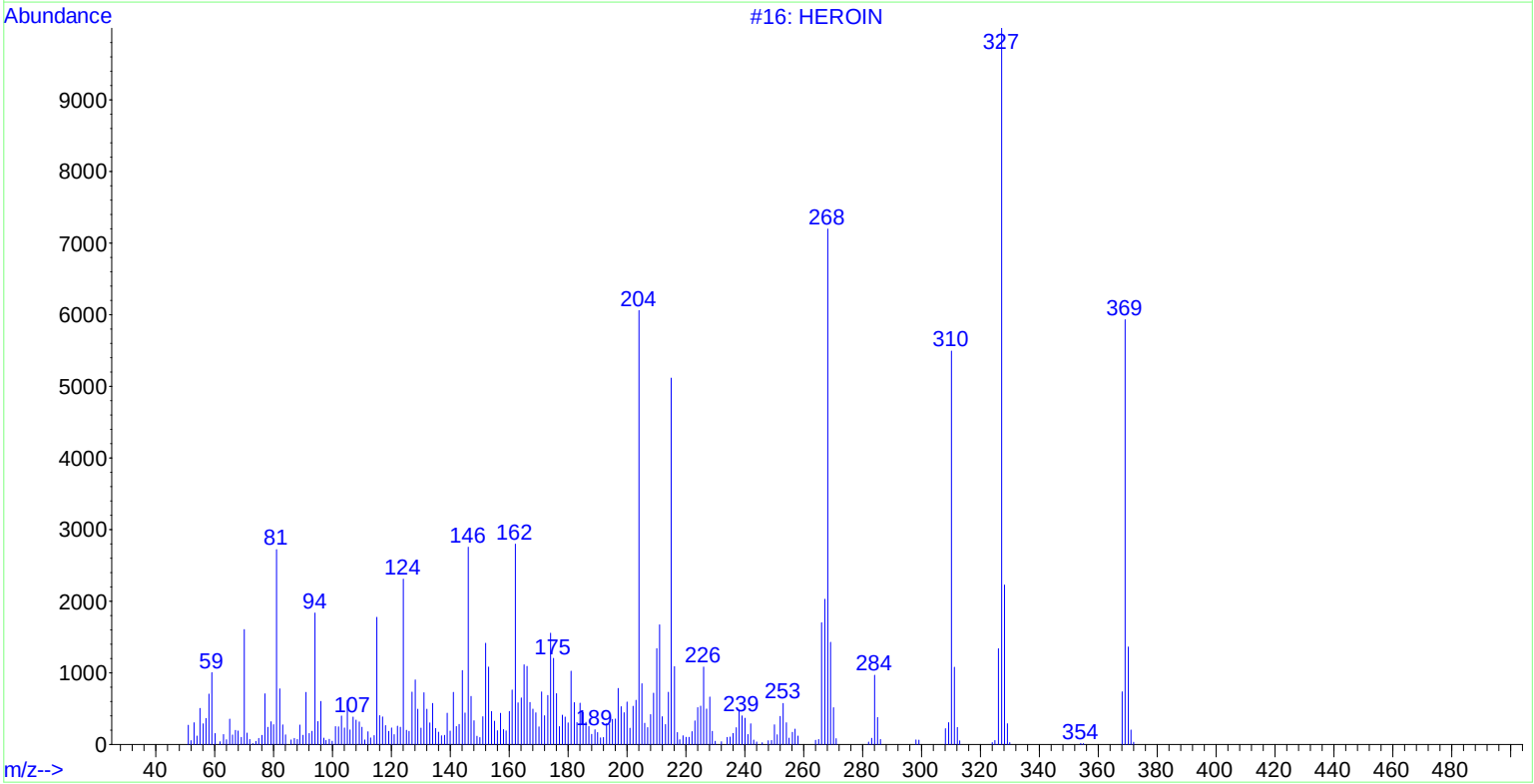
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:41 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



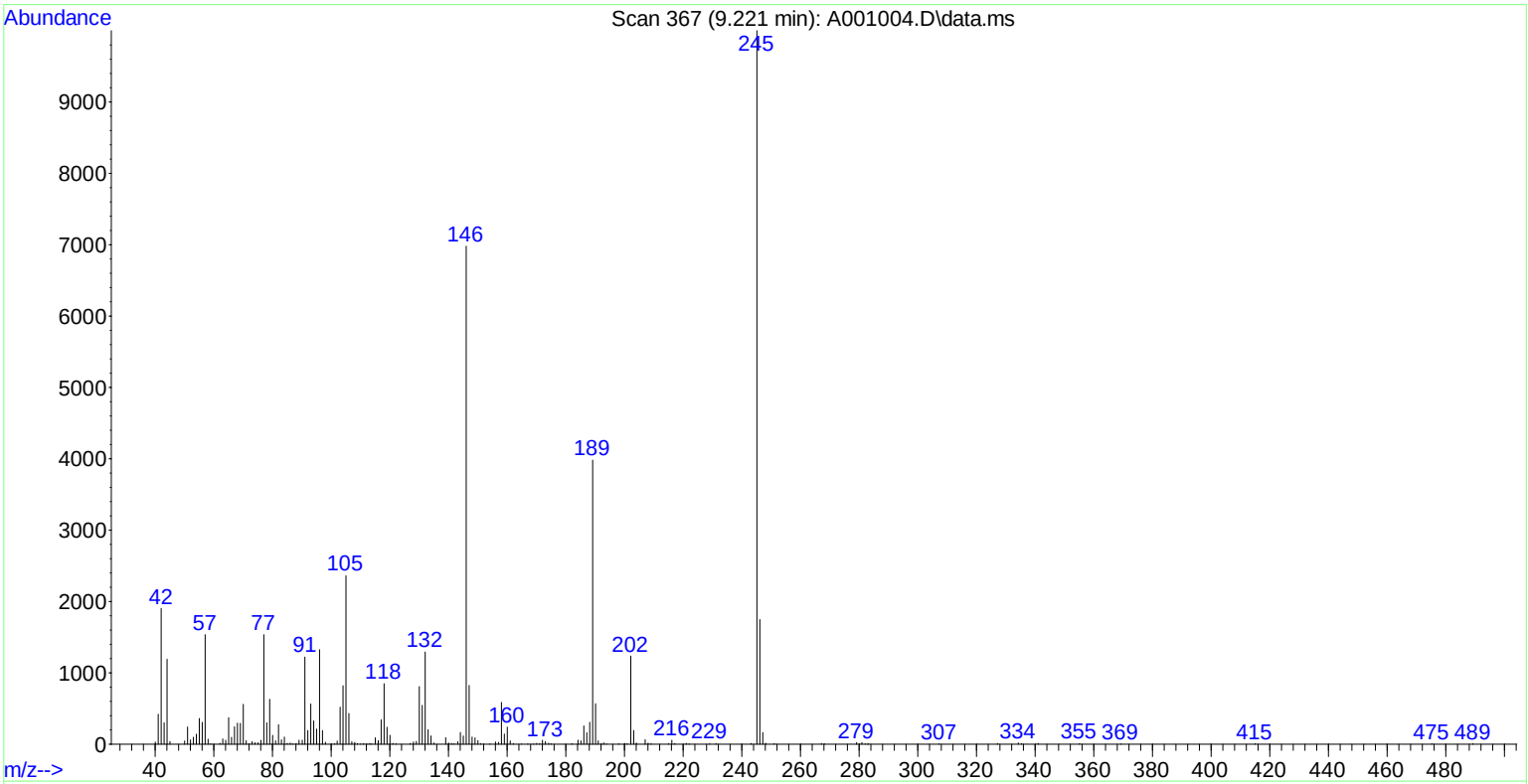


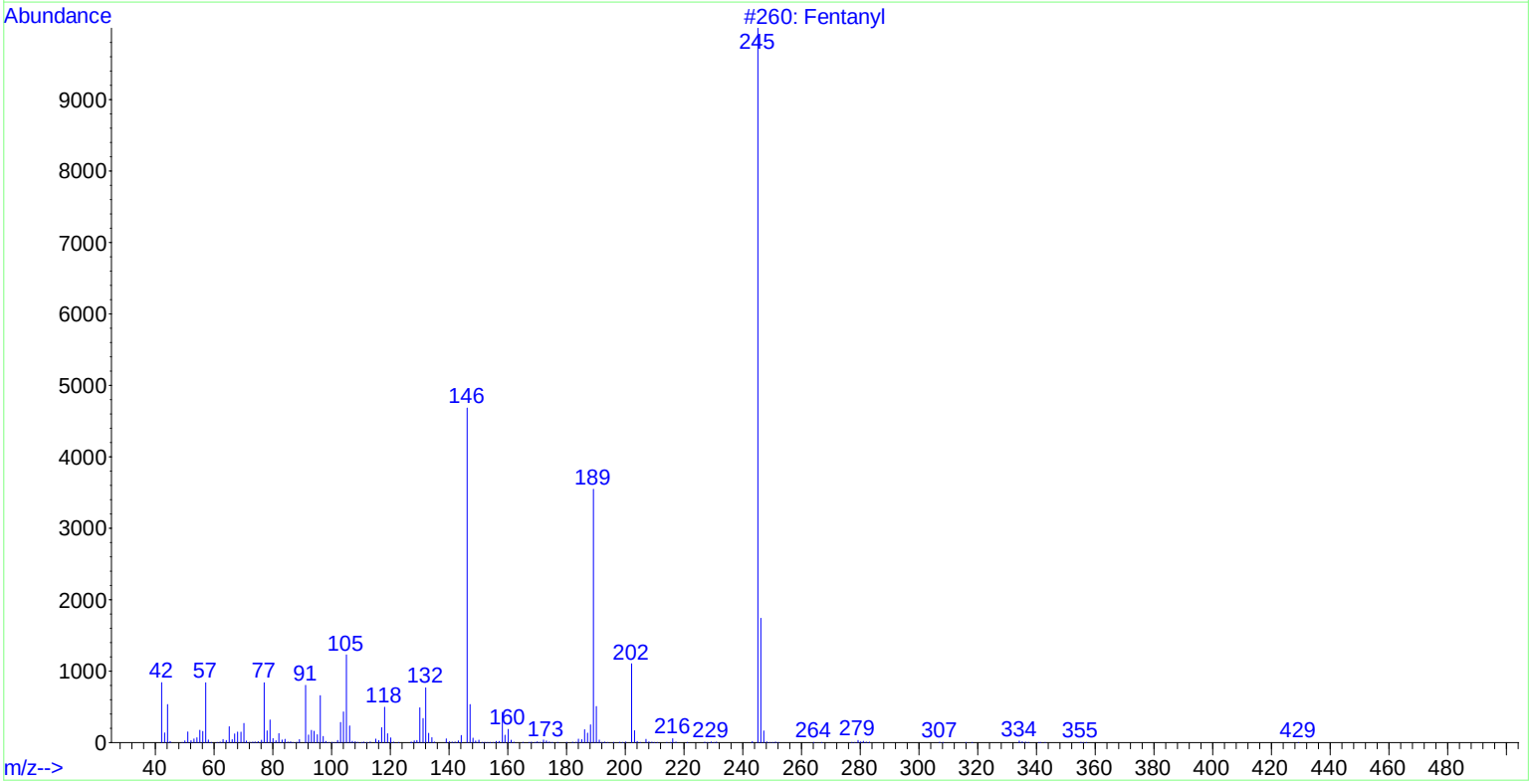
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:41 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



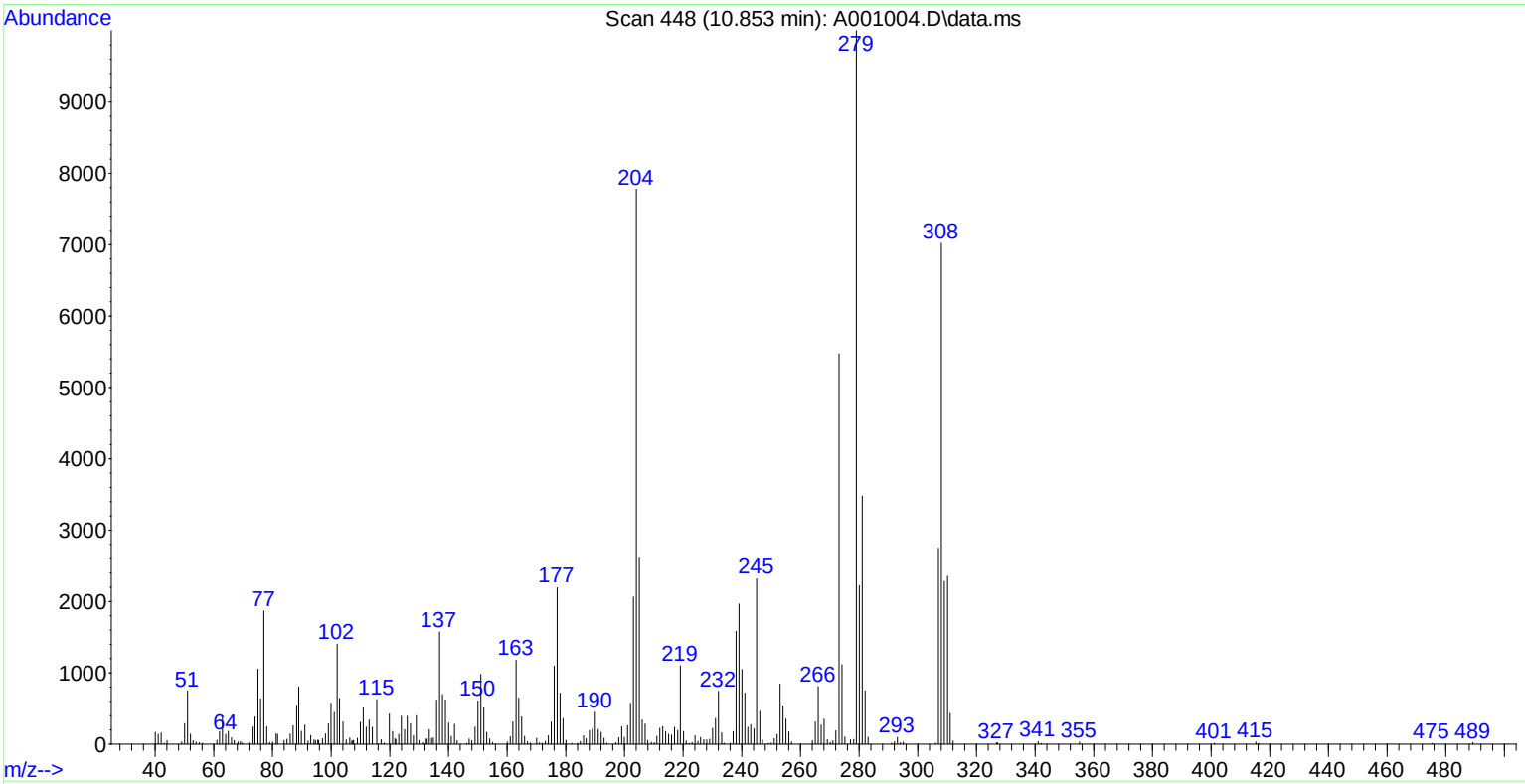


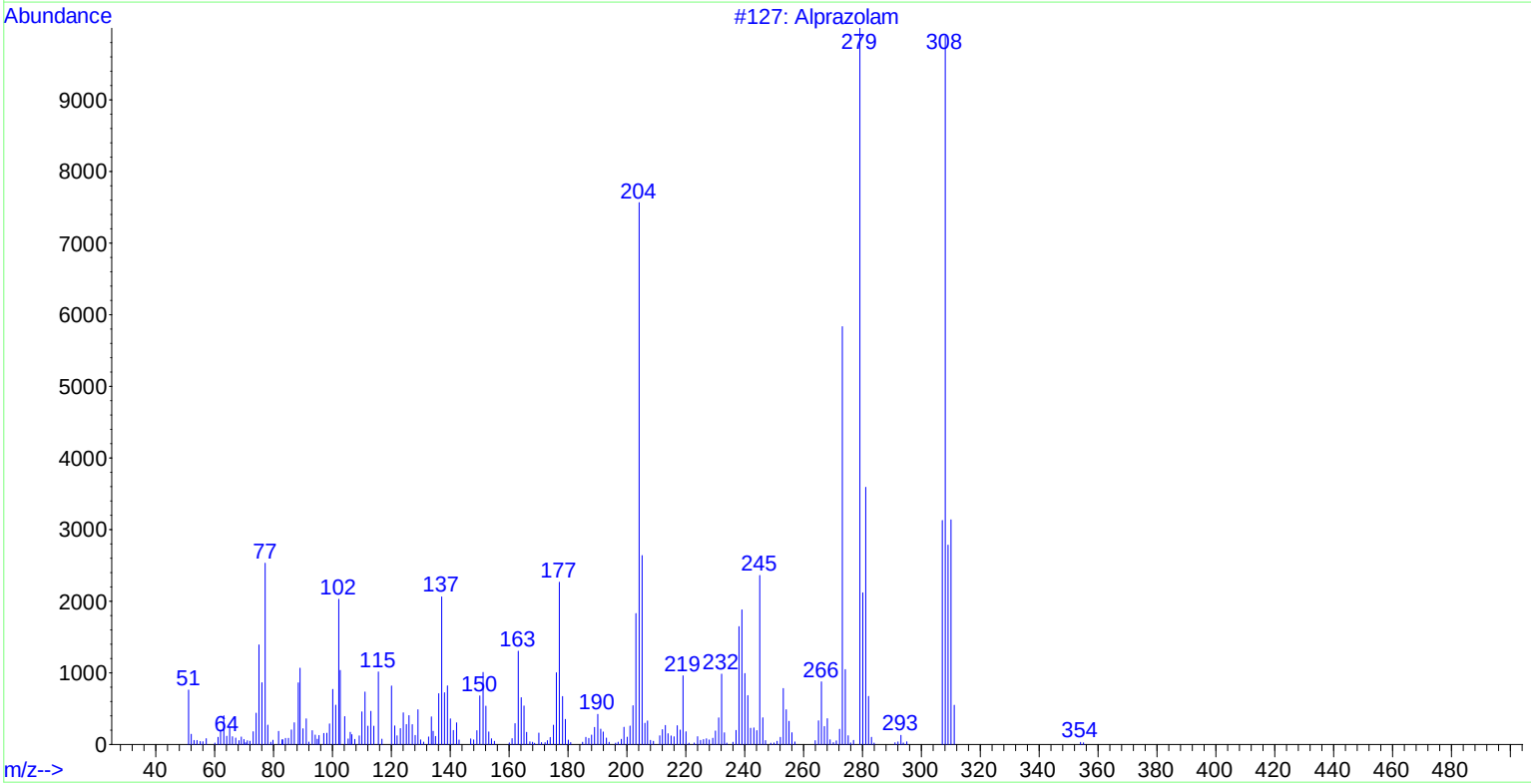
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:41 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



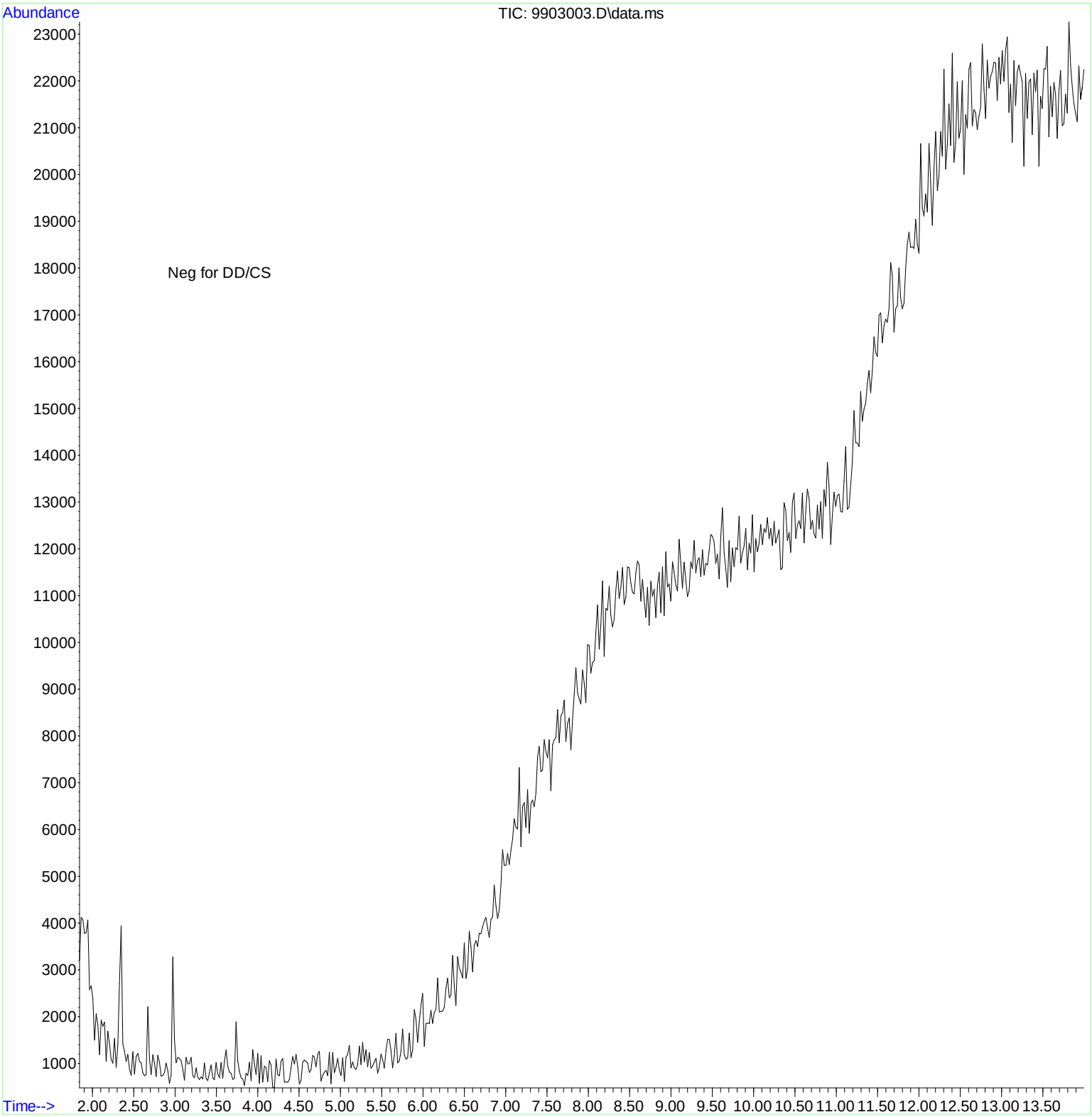


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:41 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

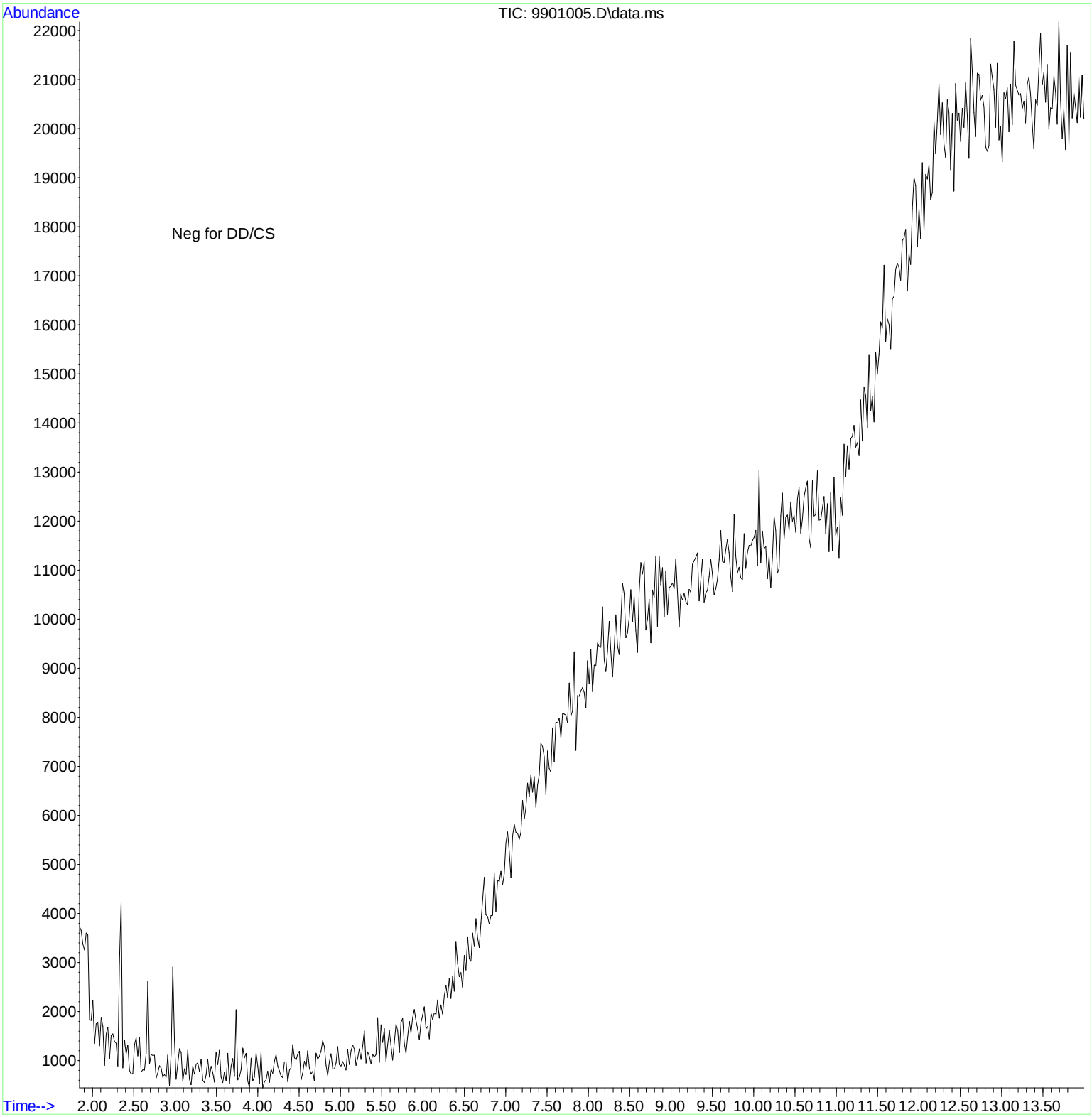




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\9903003.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:24 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\070725\9901005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 7 Jul 2025 13:59 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)

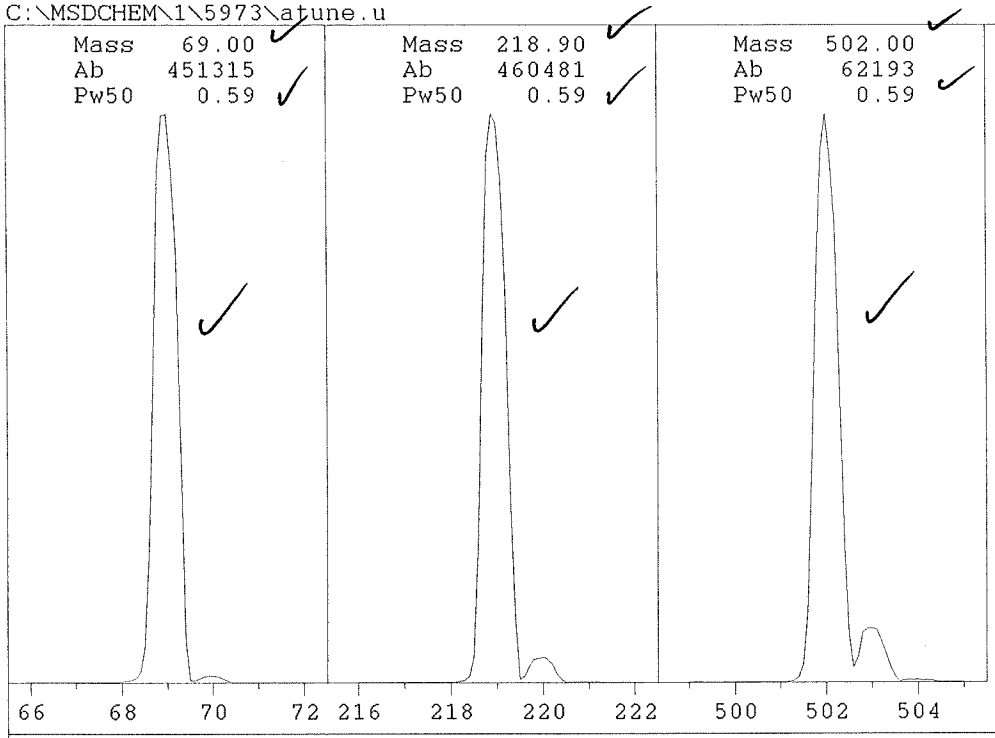


5973 Autotune

Wed Jul 16 13:59:26 2025 Instrument: SD GCMS 1

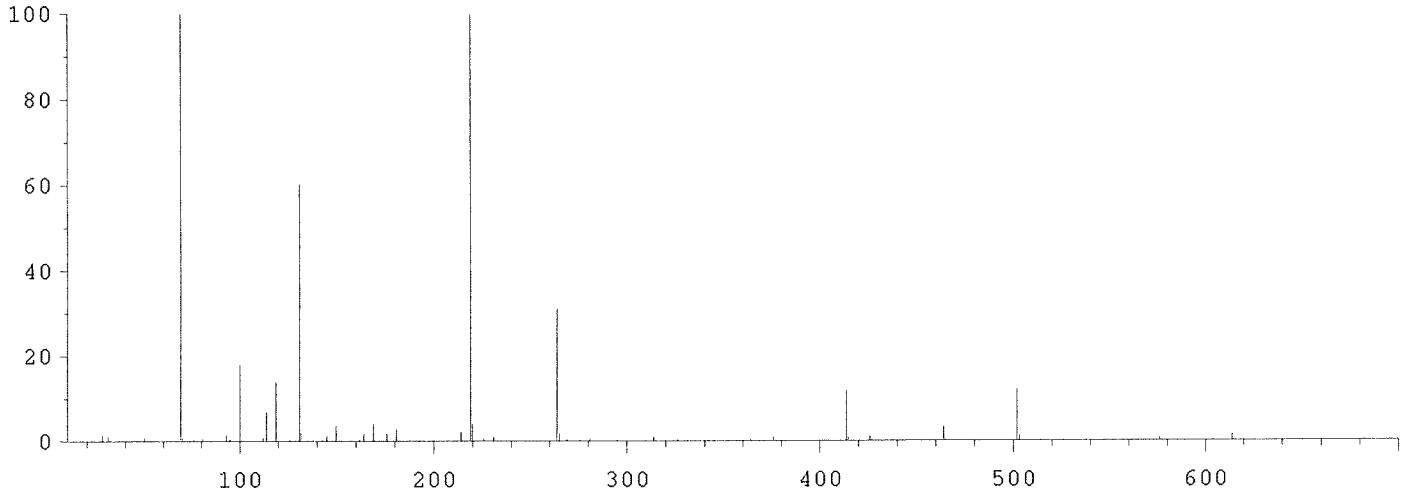
C:\MSDCHEM\1\5973\atune.u

KB OK



Ion Pol	POS	MassGain	372
		MassOffs	-12
Emission	34.6	AmuGain	2441
EIEnrgy	69.9	AmuOffs	123
Filament	1	Wid219	-0.042
		DC Pol	POS
Repeller	21.58		
IonFcus	84.5	HEDEnab	ON
EntLens	21.5	EMVolts	1624
EntOffs	17.57		
		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
138 peaks Base: 69.00 Abundance: 421120



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	421120	100.00	70.00	4446	1.06
218.90	420544	99.86	219.90	18232	4.34
501.90	51088	12.13	503.00	5518	10.80

Air/Water Check: H20~0.33% N2~1.31% O2~0.31% CO2~0.09% N2/H2O~392.24%

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

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 231259
Repeller Maximum 35 volts using ion 219;

MassGain Values @Samples: 366@3 370@2 376@1 376@0 372@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:	17.6	17.6	17.6	17.6	17.6	17.6	17.6

System Verification - Tune (Detector Optimization) Portion

KB ok

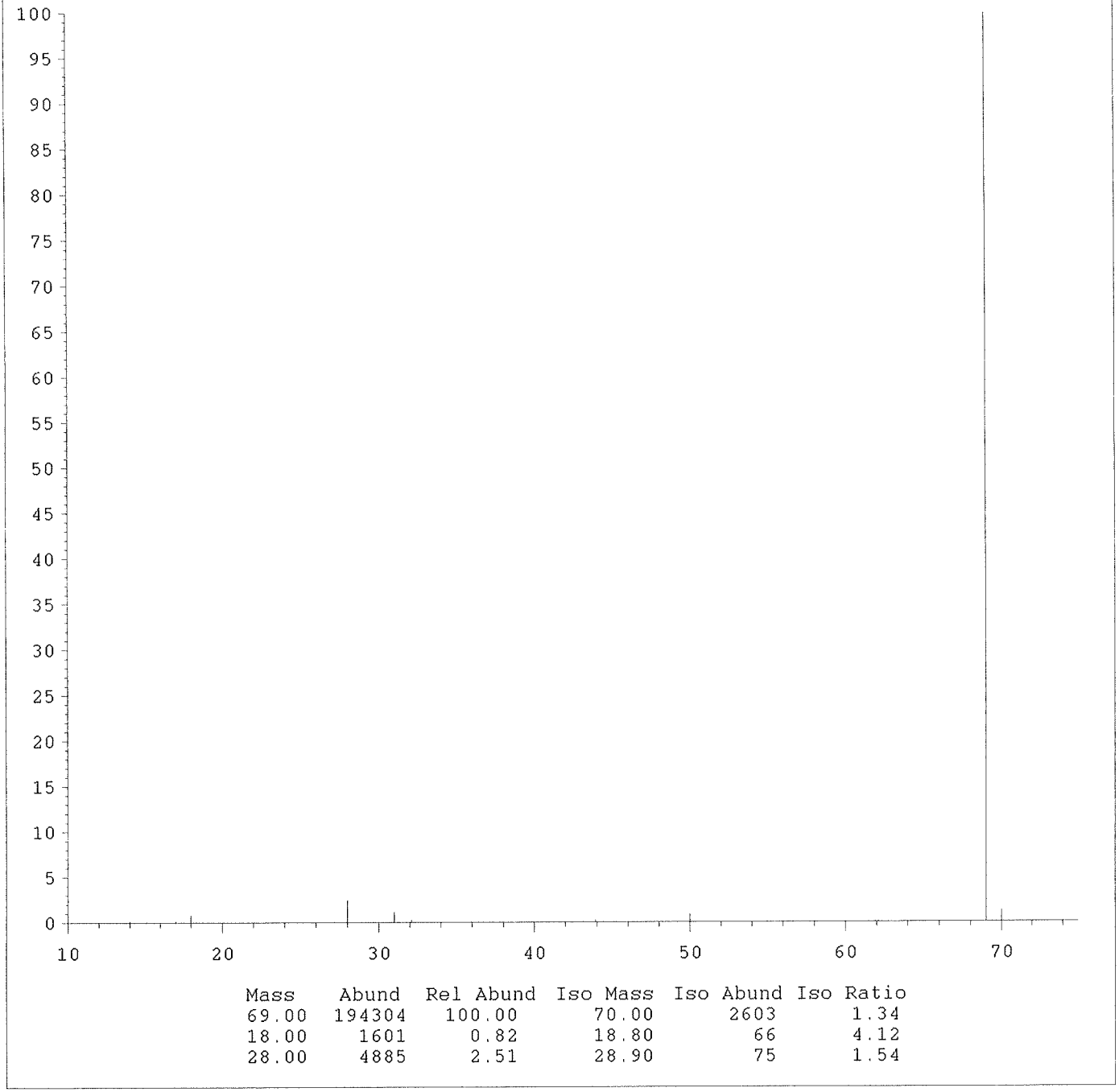
Instrument Name : SD GCMS 1		
DC Polarity : Positive		
Filament : 1		
BasePeak should be 69 or 219		Ok
Position of mass 69	68.99	Ok
Position of mass 219	218.93	Ok
Position of mass 502	501.99	Ok
Position of isotope mass 70	69.97	Ok
Position of isotope mass 220	219.94	Ok
Position of isotope mass 503	502.98	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.11	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%)	9.98	Ok
Ratio of 219 to 69 should be > 40% and is	99.93	Ok
Ratio of 502 to 69 should be > 2.4% and is	13.80	Ok
Mass 69 Precursor (<= 3%)	0.11	Ok
Mass 219 Precursor (<= 6%)	0.14	Ok
Mass 502 Precursor (<= 12%)	0.20	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.37	Ok
Ratio of 28 to 69 (<10%)	1.41	Ok
Electron Multiplier Voltage	1624	Ok

Tune portion of System Verification passed.

597x Air and Water Check

Instrument: SD GCMS 1
Wed Jul 16 13:45:16 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
75 peaks Base: 69.00 Abundance: 194304



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	194304	100.00	70.00	2603	1.34
18.00	1601	0.82	18.80	66	4.12
28.00	4885	2.51	28.90	75	1.54

Current Params used: atune.u

Relative abundances:

18/69 =	0.82	Water%
28/69 =	2.51	Nitrogen%
32/69 =	0.27	Oxygen%
44/69 =	0.29	Carbon Dioxide%
28/18 =	305.12	Nitrogen/Water%

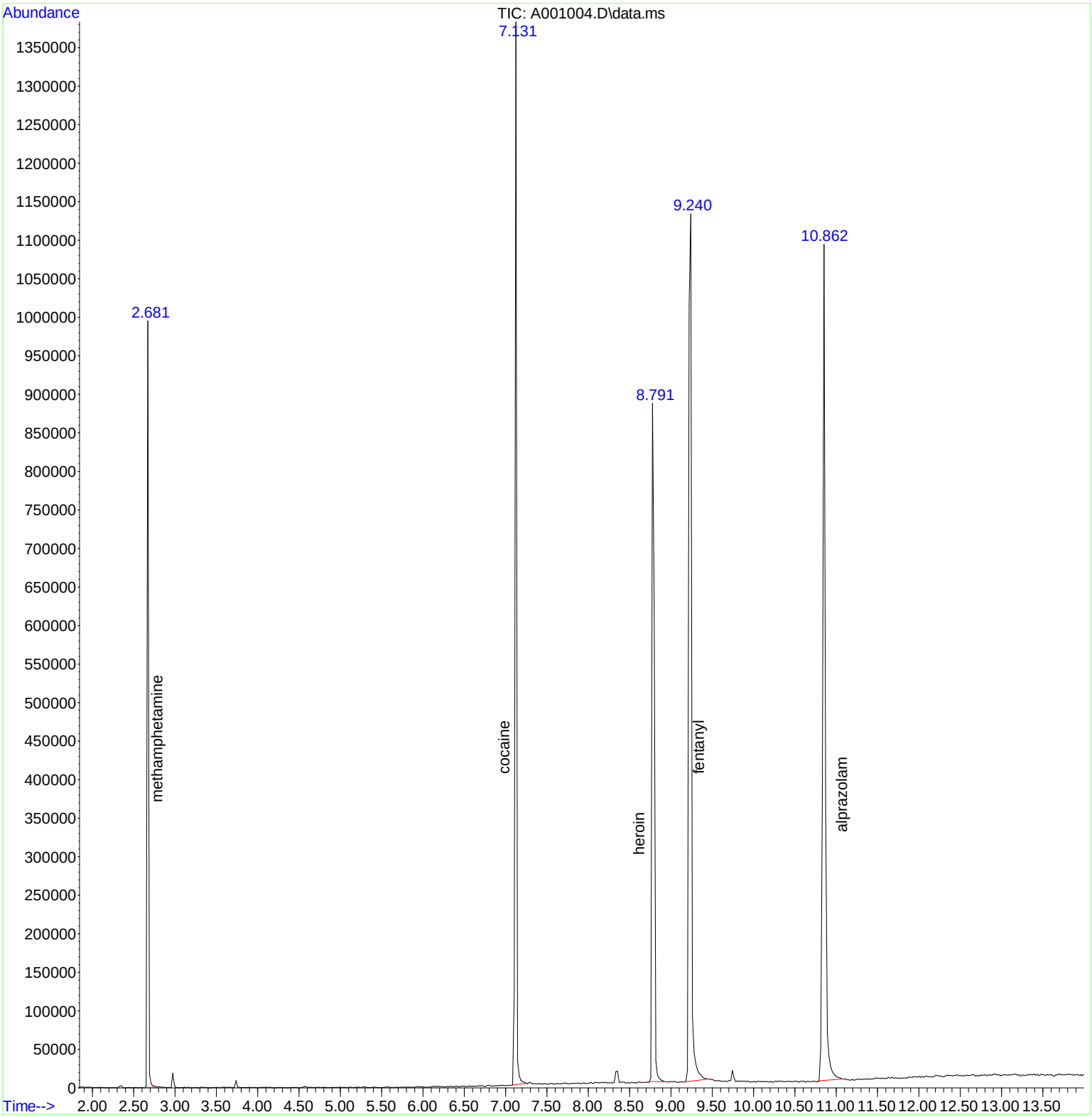
BCCL GC/MS #1
Retention Times for the Week of:

07/16/2025 - 07/20/2025

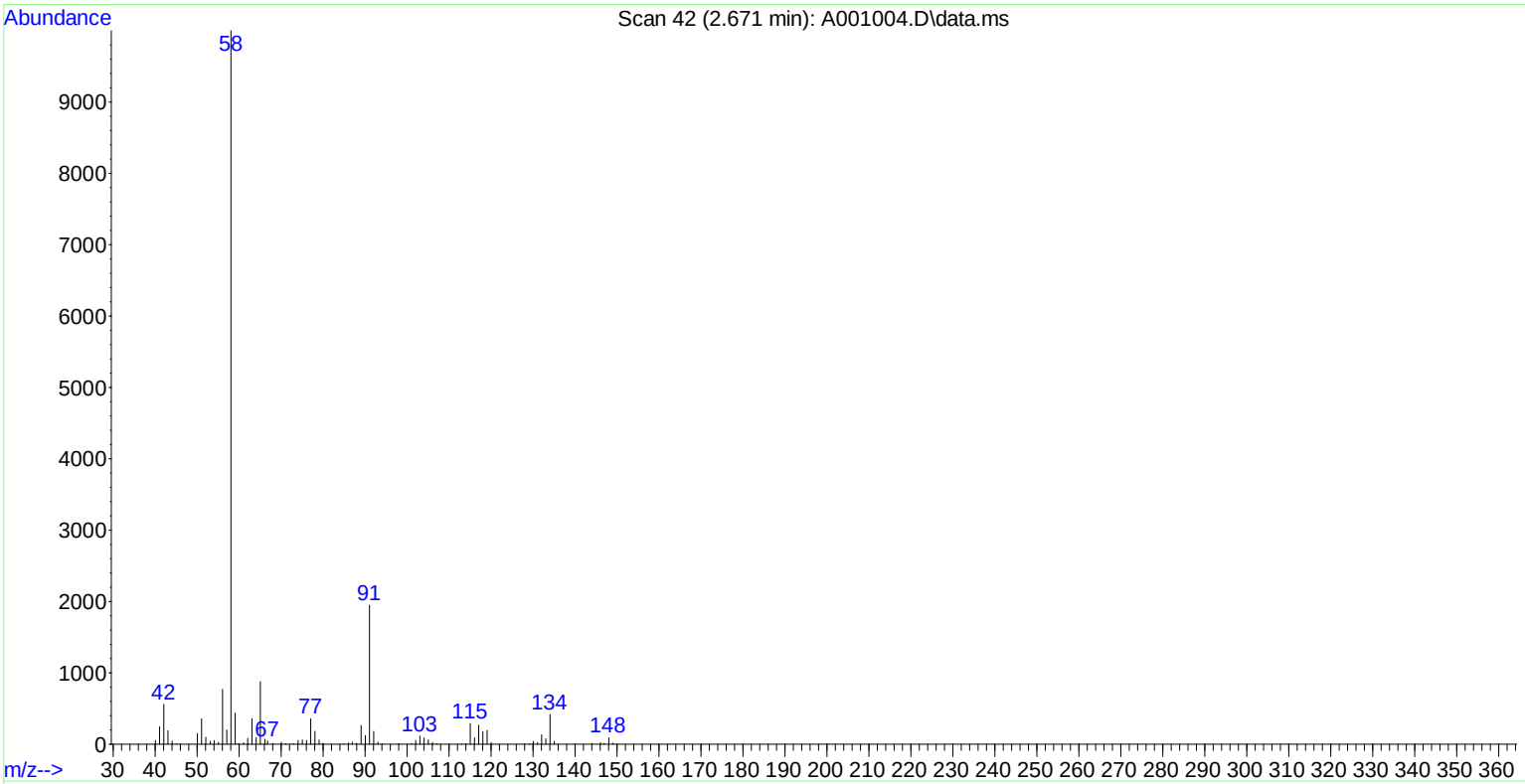
[x] **Tune: 07/16/2025 - Autotune KB**

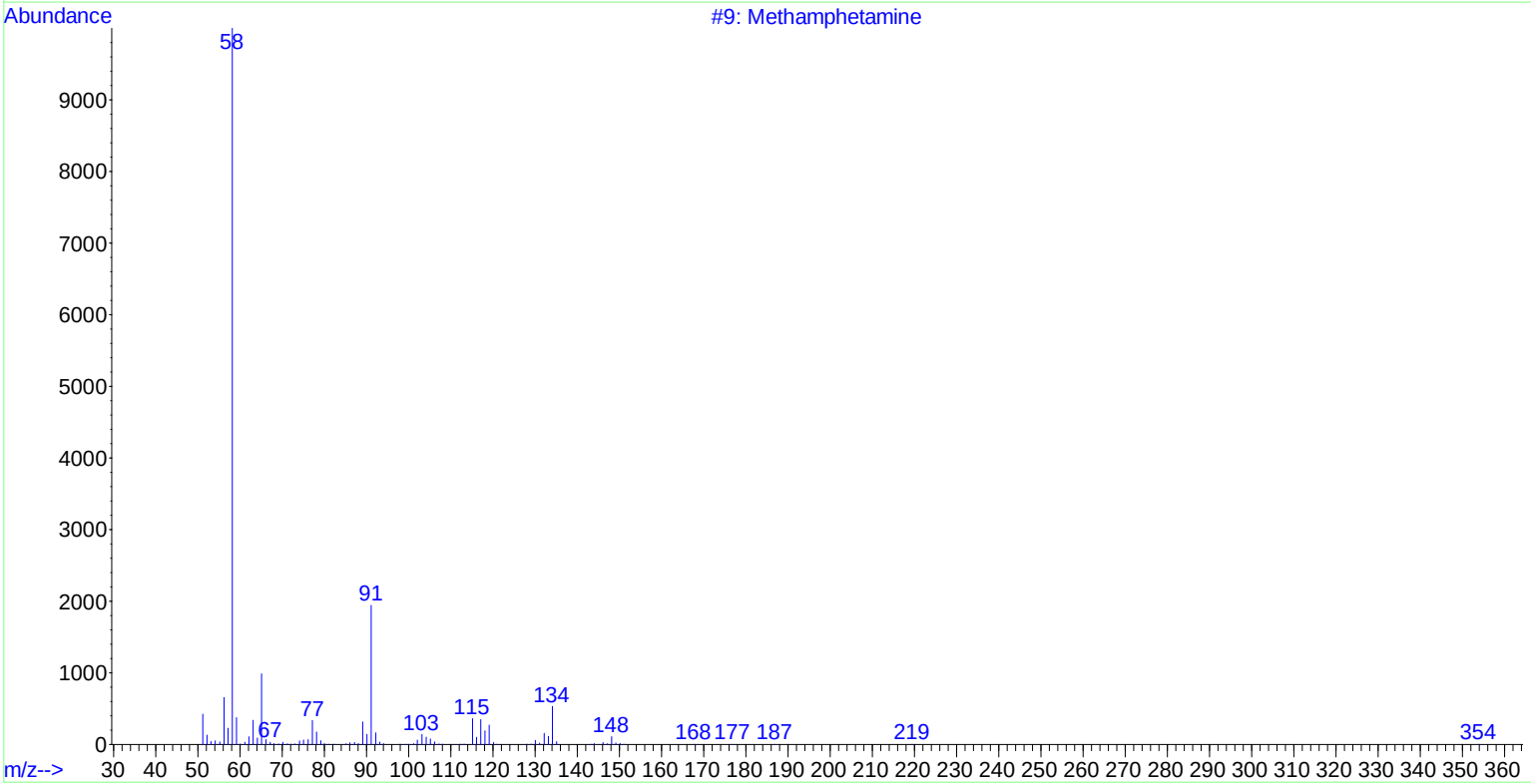
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.681	2.654	2.707
Cocaine	R-24-060	BCCL GenDrug	7.131	7.059	7.202
Heroin	R-24-060	BCCL GenDrug	8.791	8.703	8.878
Fentanyl	R-24-060	BCCL GenDrug	9.240	9.147	9.332
Alprazolam	R-24-060	BCCL GenDrug	10.862	10.753	10.970

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:42 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

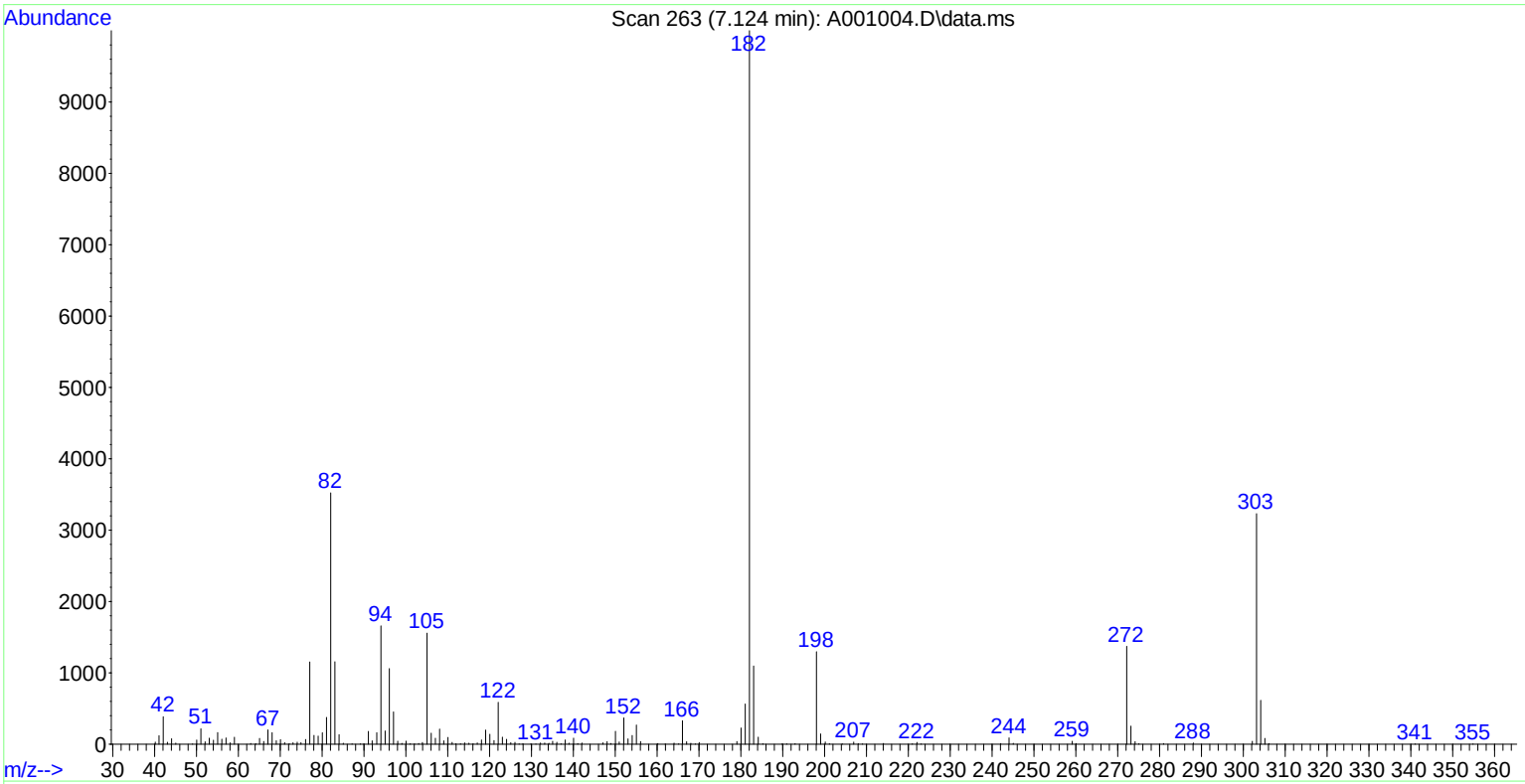


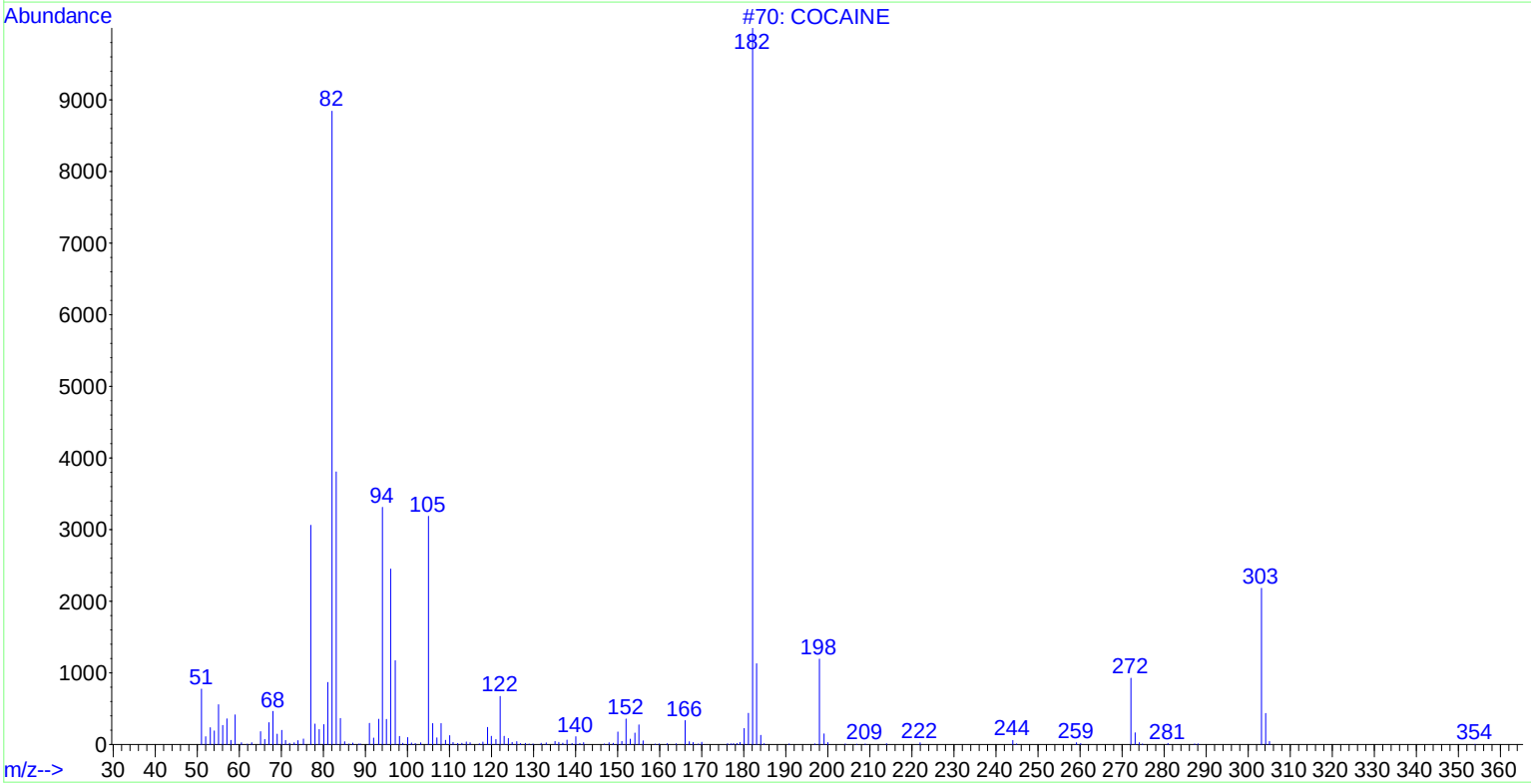
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:42 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



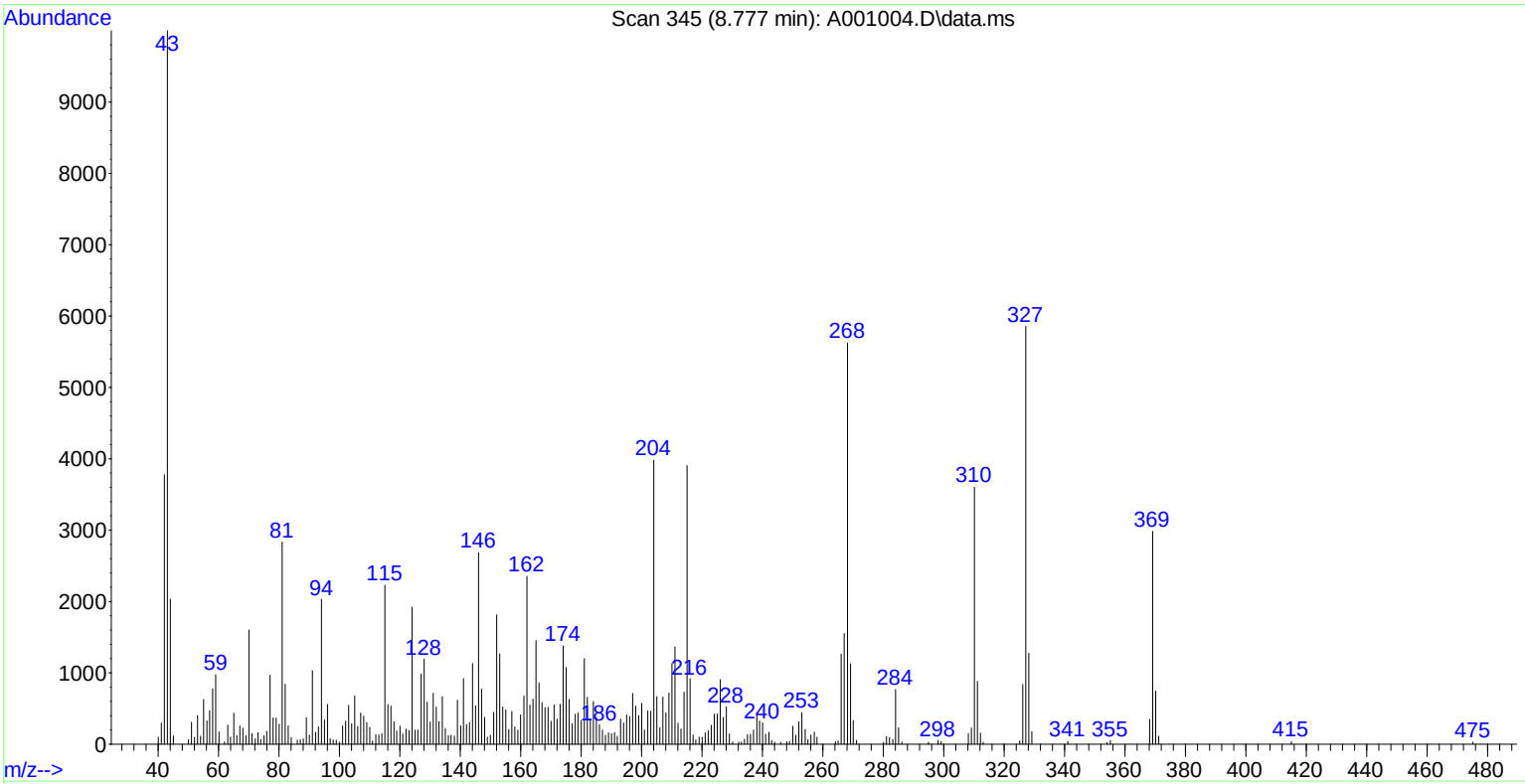


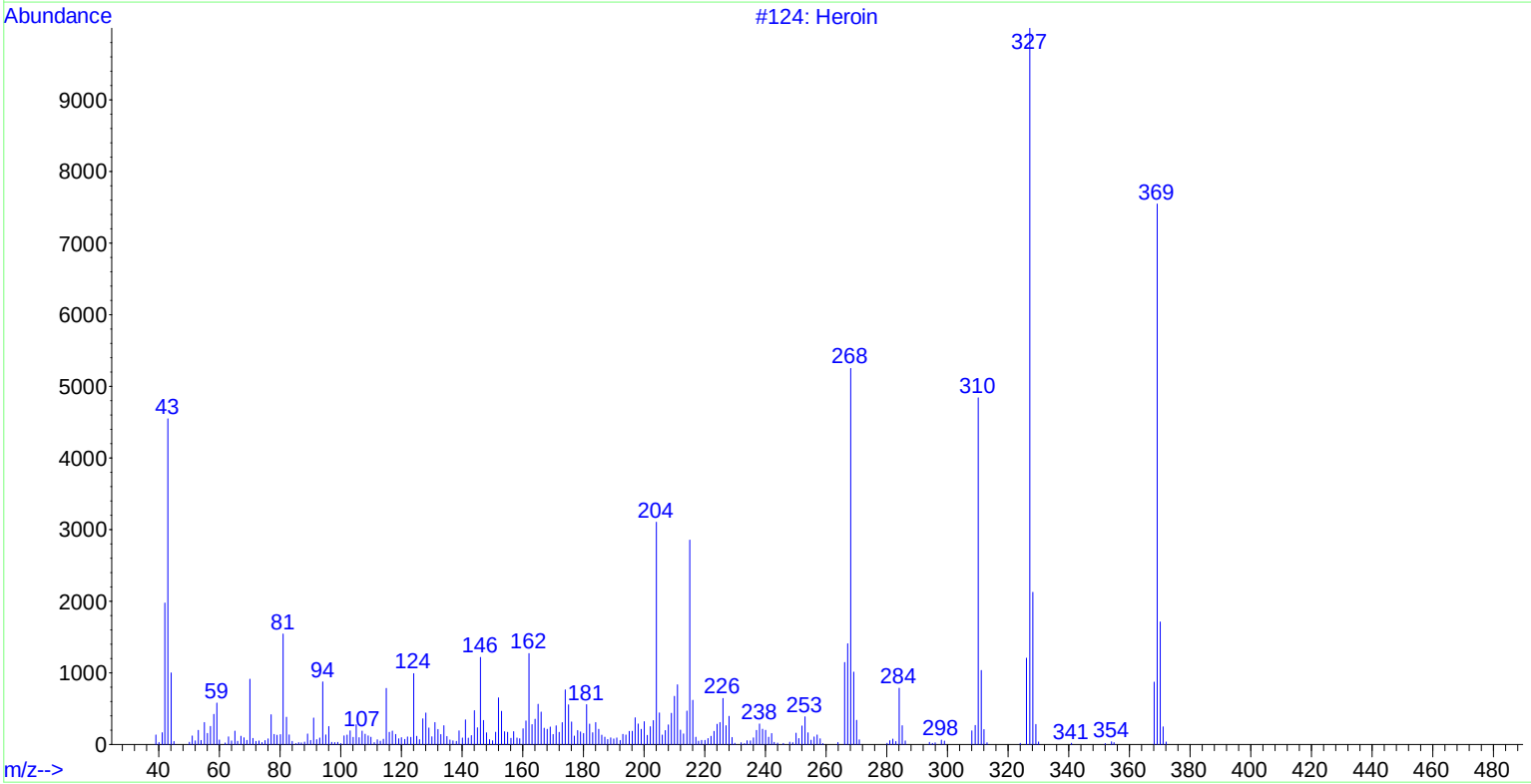
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:42 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



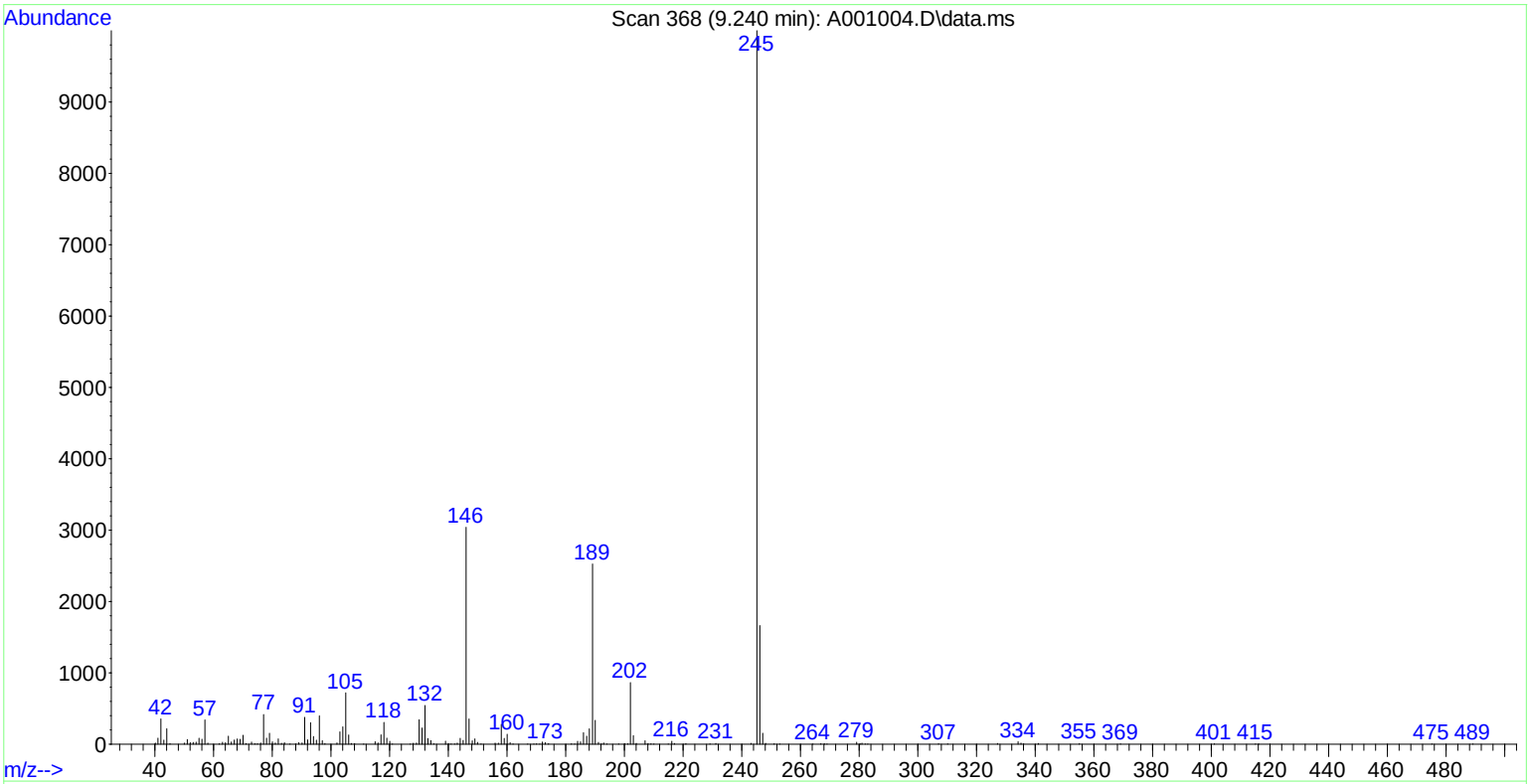


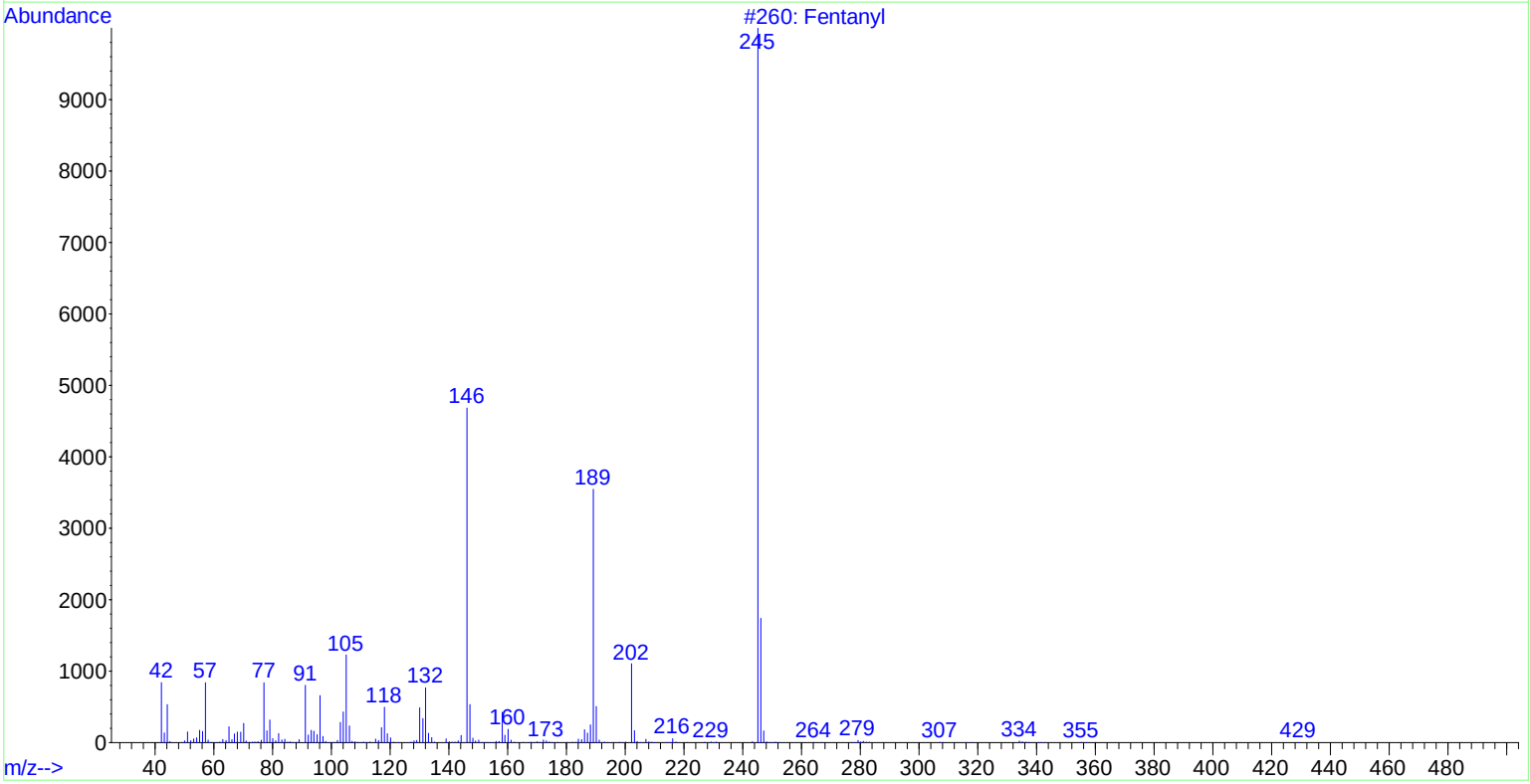
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:42 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



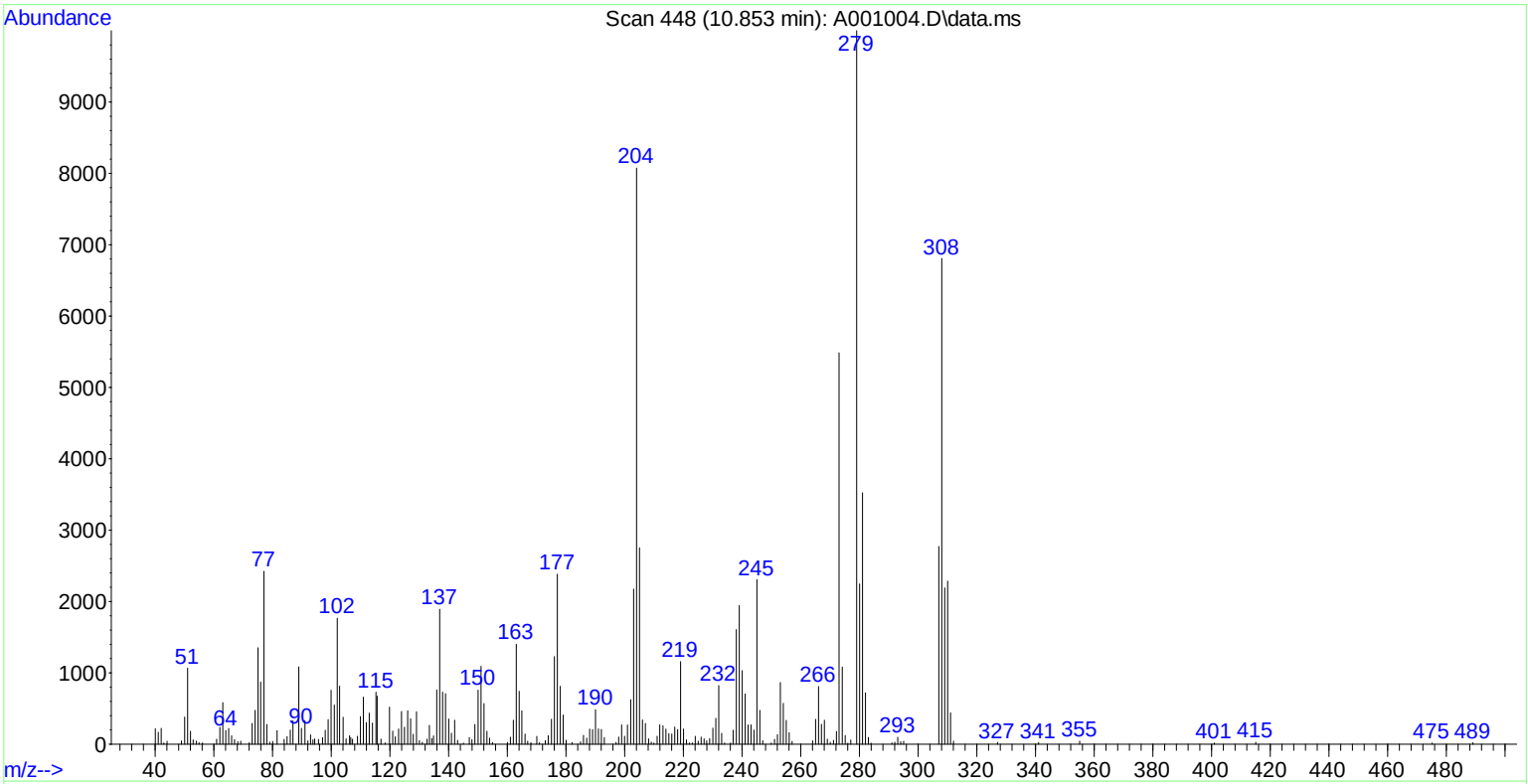


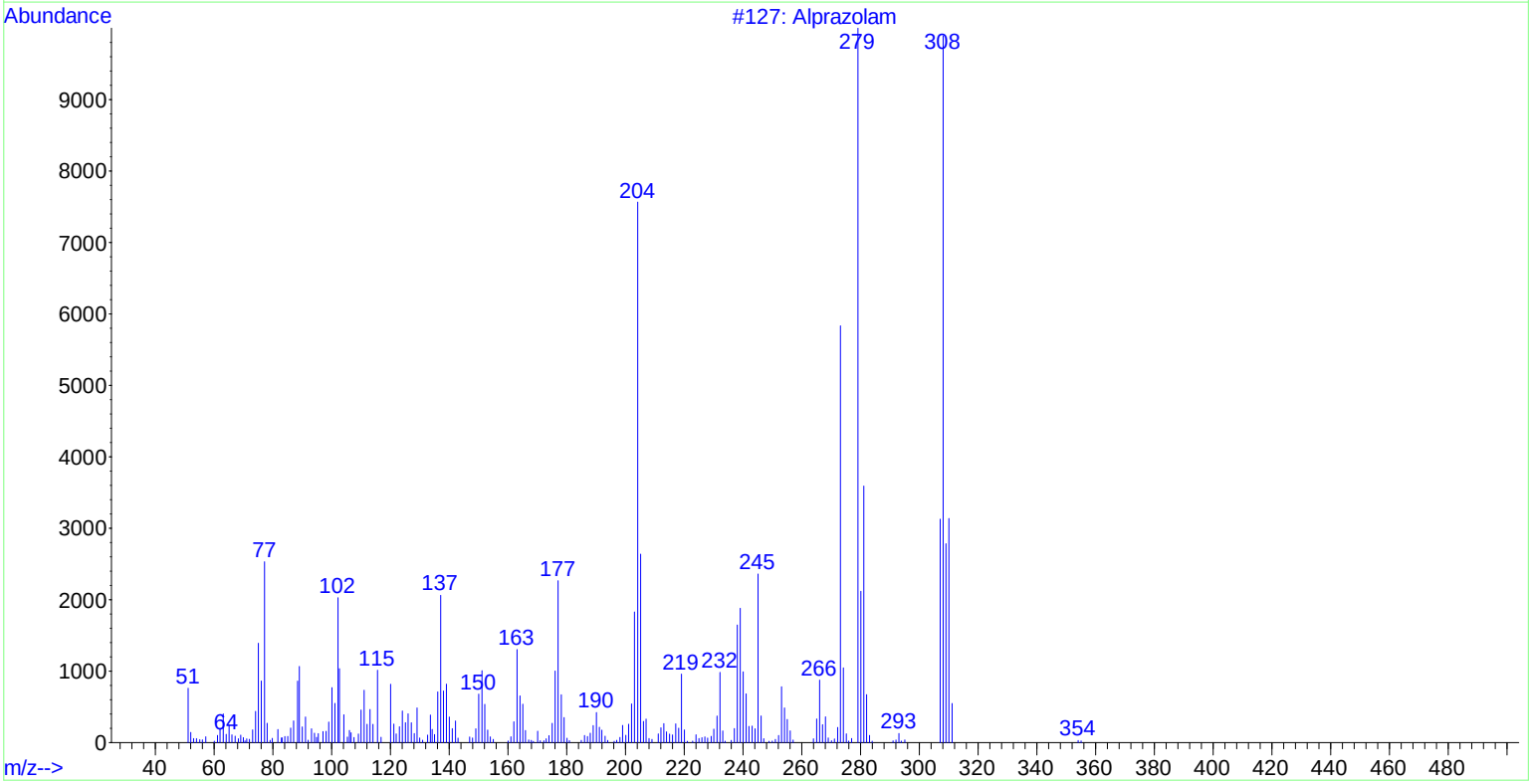
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:42 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



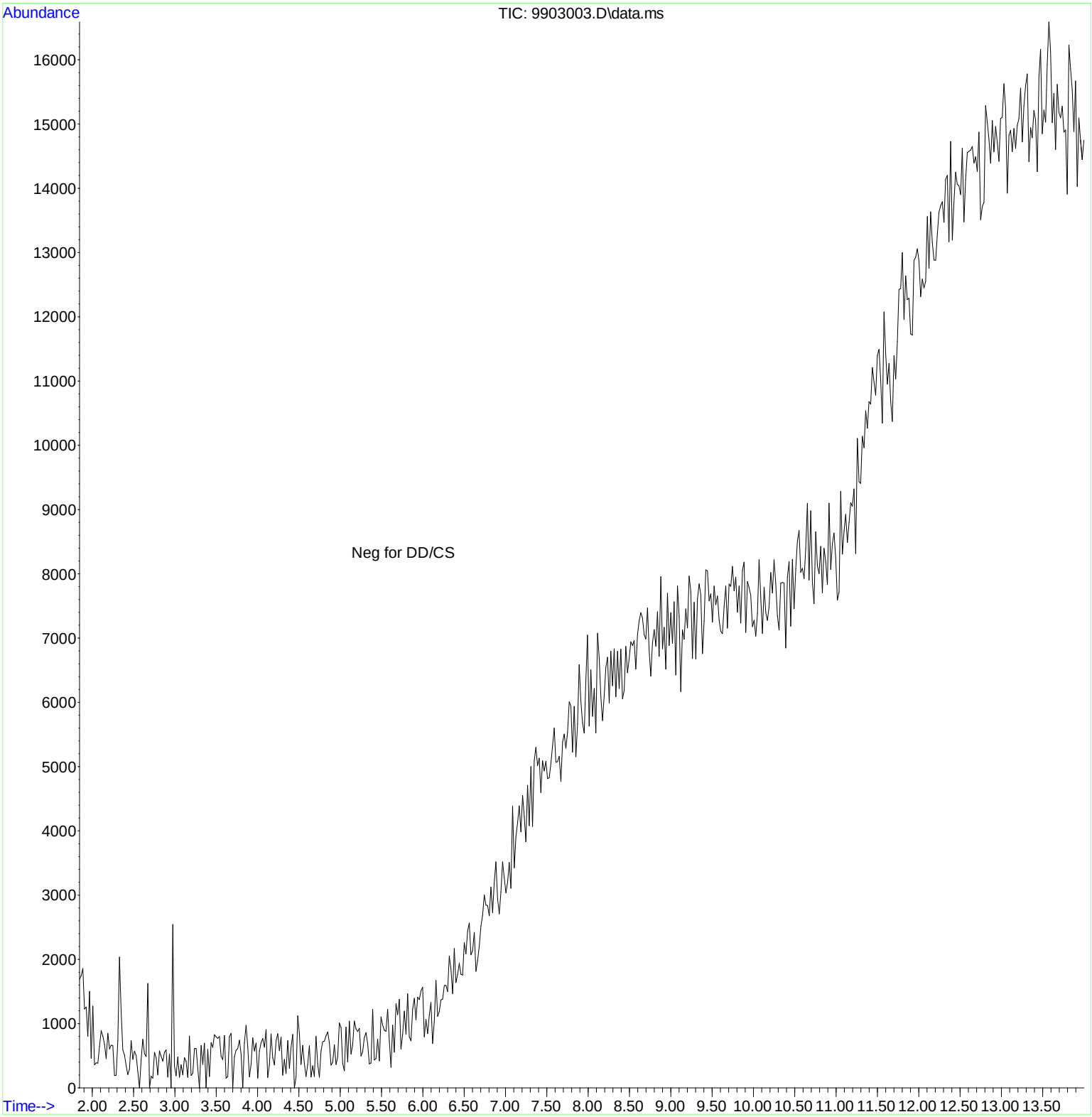


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:42 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

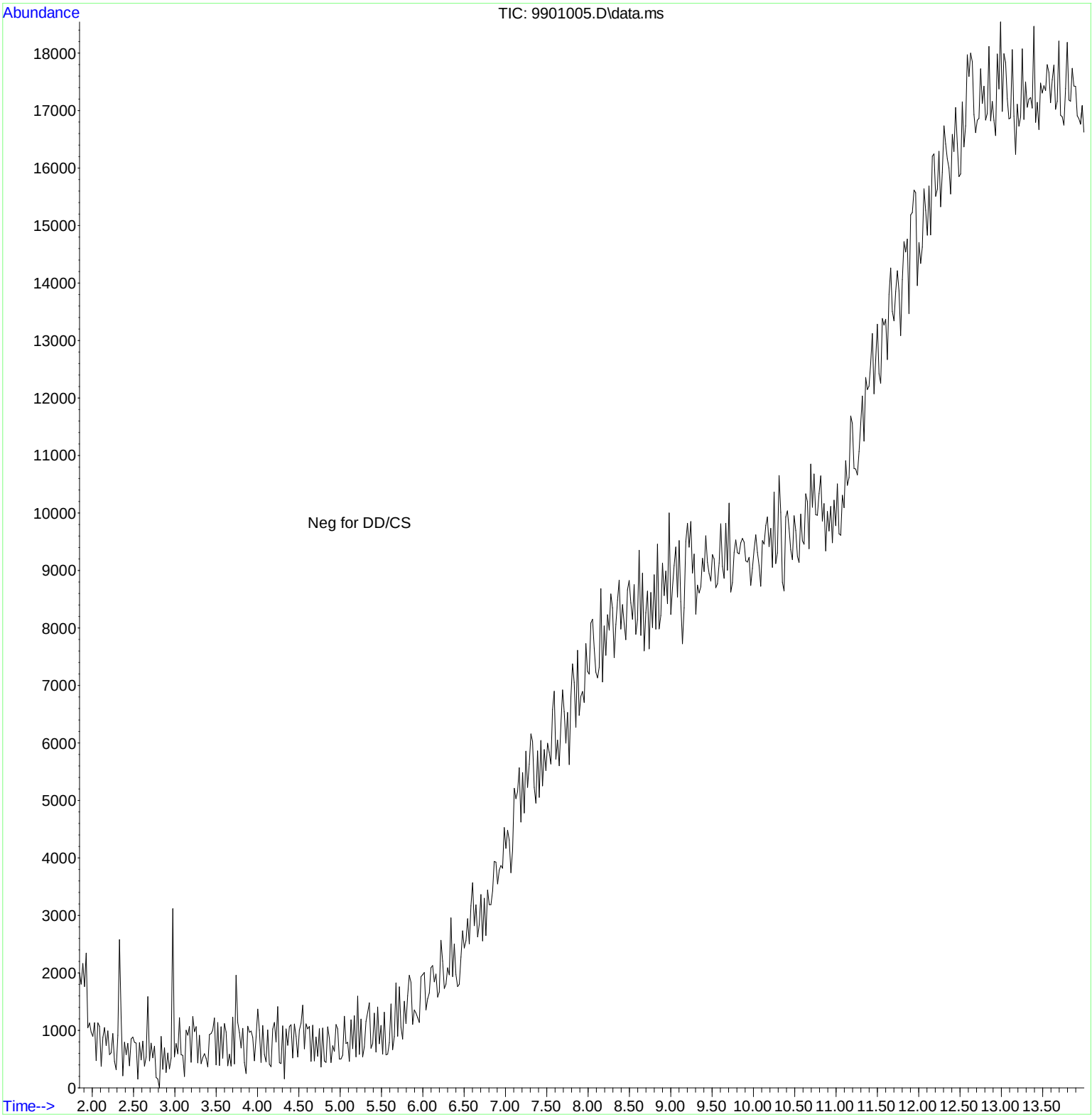




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\9903003.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 15:25 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



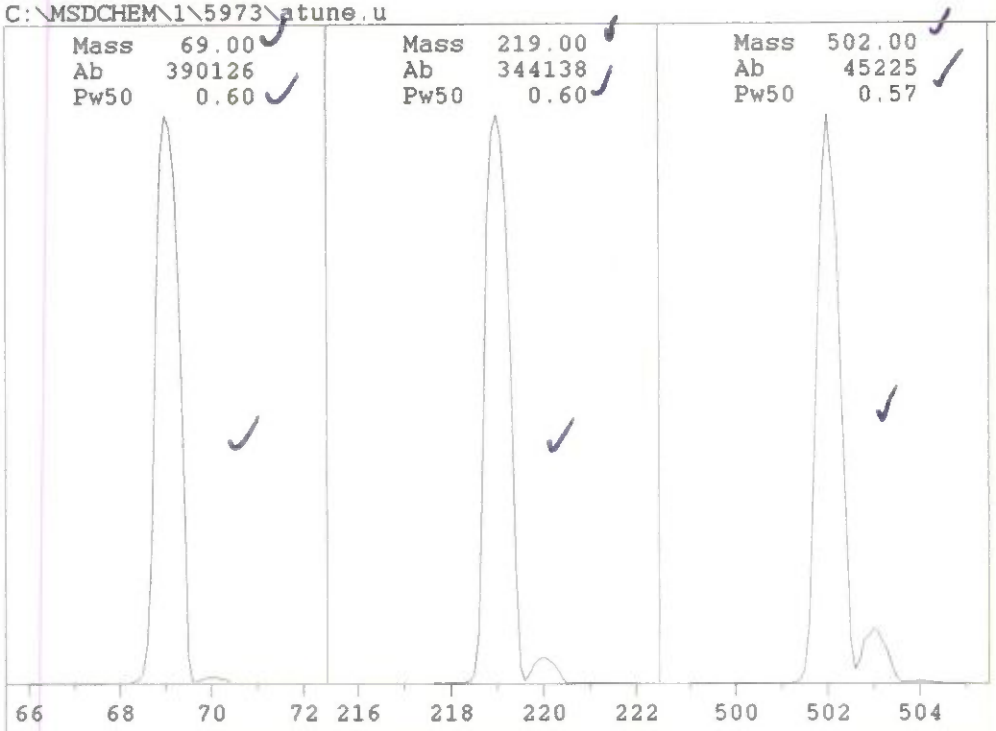
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\071725\9901005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 17 Jul 2025 16:00 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)



5973 Autotune

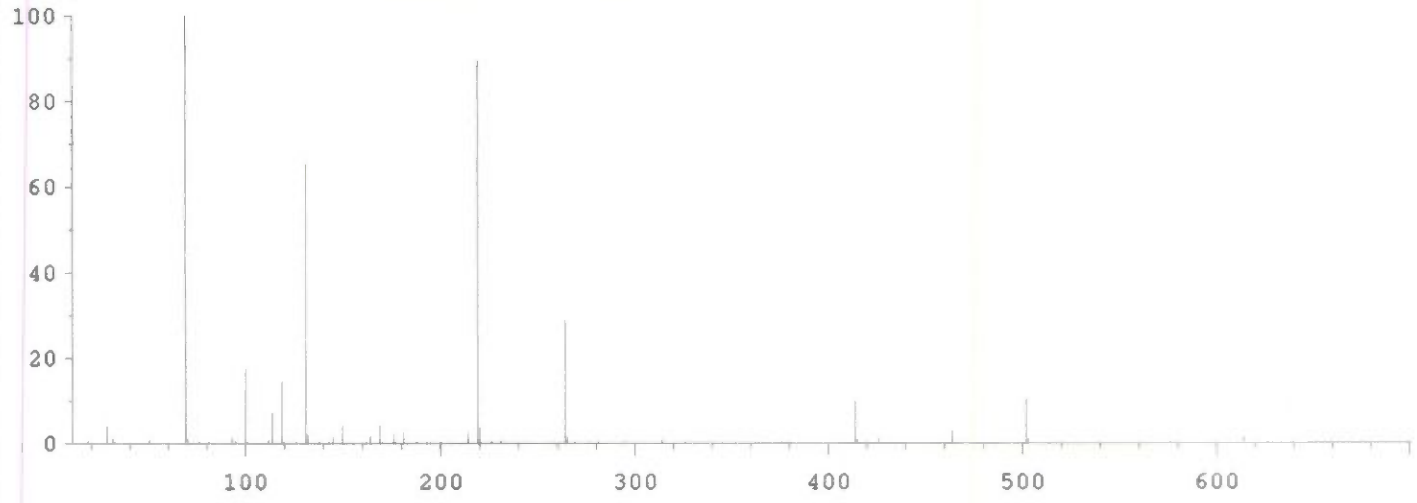
Mon Jul 21 08:52:05 2025
C:\MSDCHEM\1\5973\atune.u

Instrument: SD GCMS 1



Ion Pol	POS	MassGain	361
		MassOffs	-10
Emission	34.6	AmuGain	2442
EIEnrgy	69.9	AmuOffs	122
Filament	1	Wid219	-0.046
		DC Pol	POS
Repeller	19.23		
IonFcus	77.8	HEDEnab	ON
EntLens	16.5	EMVolts	1624
EntOffs	17.07		
		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
135 peaks Base: 69.10 Abundance: 356800



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	356800	100.00	70.00	3694	1.04
219.00	319488	89.54	220.00	13805	4.32
502.00	38176	10.70	503.10	3890	10.19

Air/Water Check: H2O~0.54% N2~4.05% O2~0.38% CO2~0.07% N2/H2O~750.65%

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

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 147007
Repeller Maximum 35 volts using ion 219;

MassGain Values @Samples: 361@3 361@2 361@1 361@0 361@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:	17.1	17.1	17.1	17.1	17.1	17.1	17.1

597x Air and Water Check

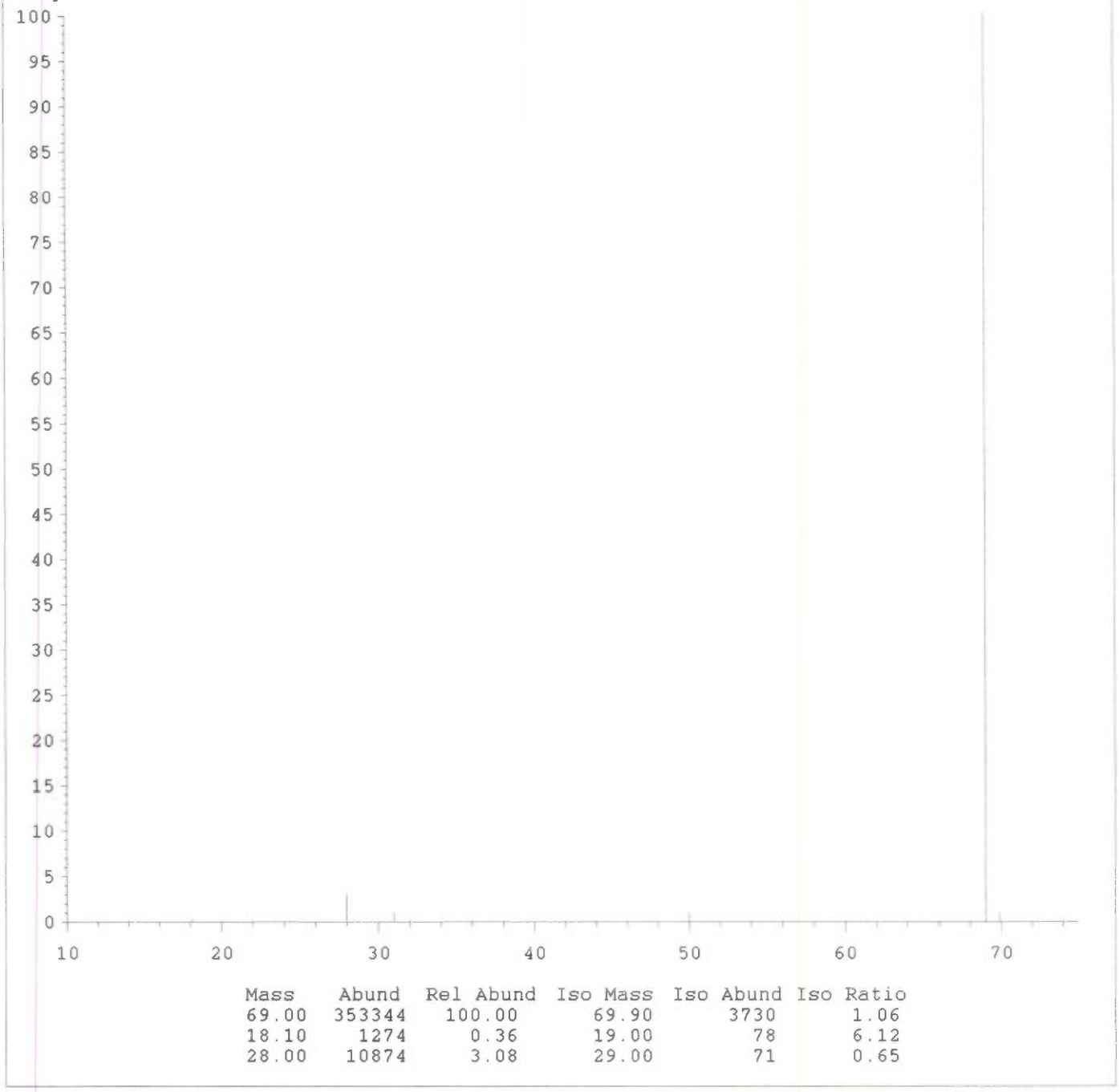
DS
OK

Instrument: SD GCMS 1
Mon Jul 21 08:45:35 2025

Final Air/Water

C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
82 peaks Base: 69.00 Abundance: 353344



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	353344	100.00	69.90	3730	1.06
18.10	1274	0.36	19.00	78	6.12
28.00	10874	3.08	29.00	71	0.65

Current Params used: atune.u

Relative abundances:

18/69 =	0.36	Water% ✓
28/69 =	3.08	Nitrogen% ✓
32/69 =	0.17	Oxygen% ✓
44/69 =	0.10	Carbon Dioxide% ✓
28/18 =	853.53	Nitrogen/Water%

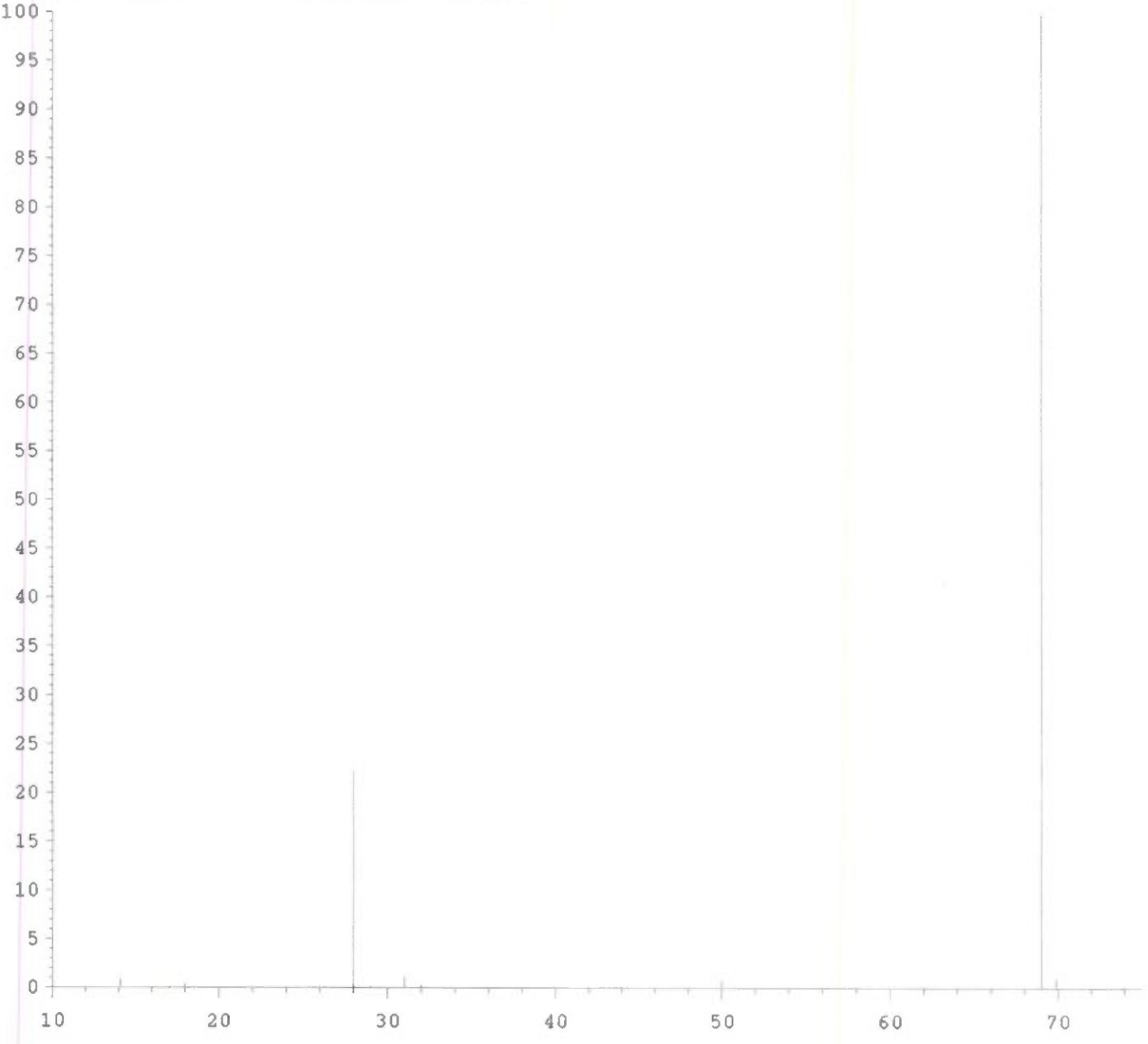
597x Air and Water Check

Instrument: SD GCMS 1
Mon Jul 21 06:48:33 2025

1st Air / Water

C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
85 peaks Base: 69.00 Abundance: 324480



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	324480	100.00	69.90	3377	1.04
18.00	1334	0.41	18.90	25	1.87
28.00	72408	22.32	29.00	452	0.62

Current Params used: atune.u

Relative abundances:

18/69 = 0.41	Water%	✓
28/69 = 22.32	Nitrogen%	– nitrogen too high
32/69 = 0.33	Oxygen%	✓
44/69 = 0.06	Carbon Dioxide%	✓
28/18 = 5427.89	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	69.08	Ok
Position of mass 219	219.00	Ok
Position of mass 502	502.01	Ok
Position of isotope mass 70	70.04	Ok
Position of isotope mass 220	220.00	Ok
Position of isotope mass 503	503.04	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%)	4.30	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.14	Ok
Ratio of 219 to 69 should be > 40% and is	90.61	Ok
Ratio of 502 to 69 should be > 2.4% and is	11.19	Ok
Mass 69 Precursor (<= 3%)	0.07	Ok
Mass 219 Precursor (<= 6%)	0.09	Ok
Mass 502 Precursor (<= 12%)	0.18	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.52	Ok
Ratio of 28 to 69 (<10%)	3.33	Ok
Electron Multiplier Voltage	1624	Ok

Tune portion of System Verification passed.

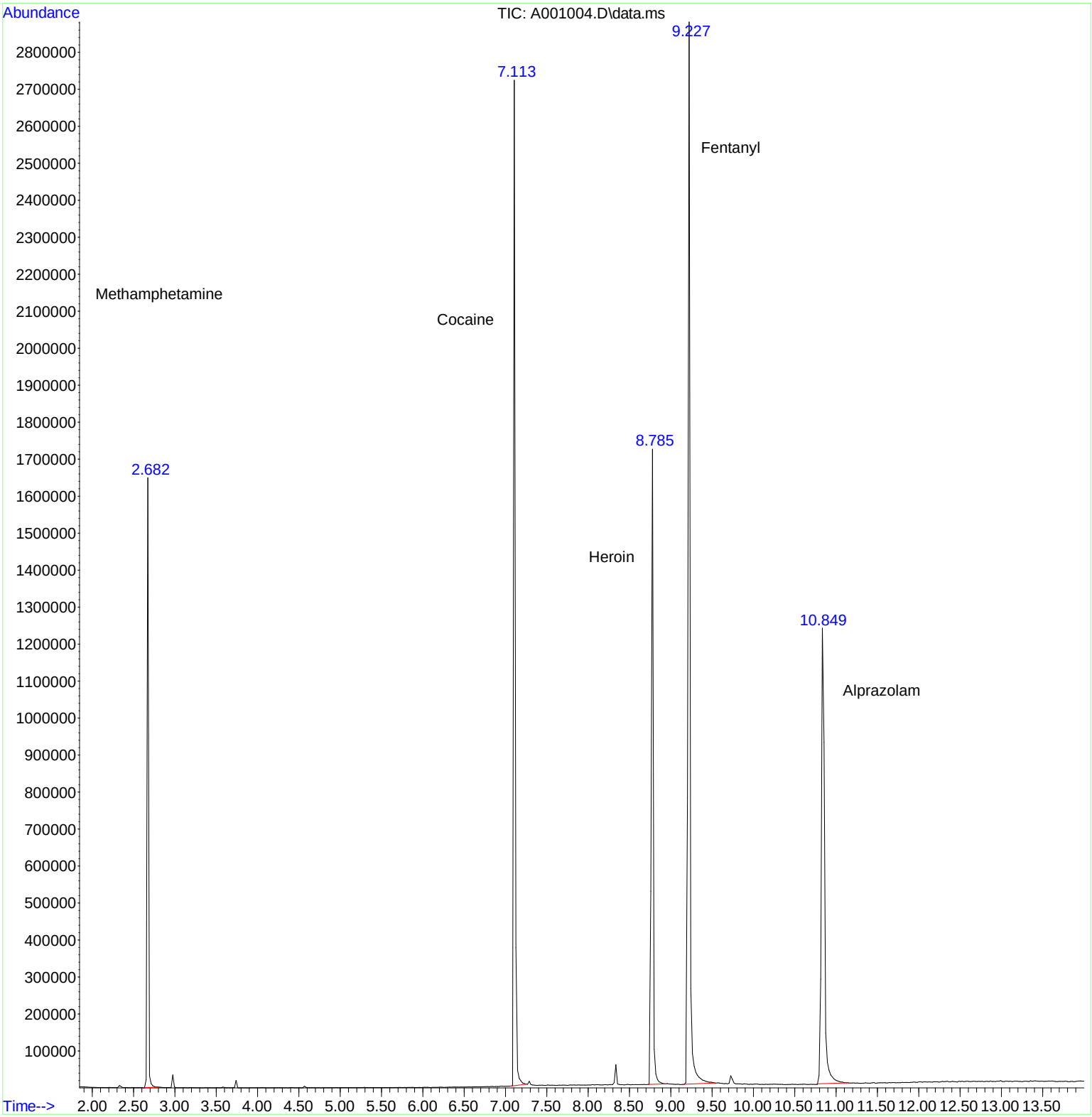
BCCL GC/MS #1
Retention Times for the Week of:

07/21/2025 - 07/27/2025

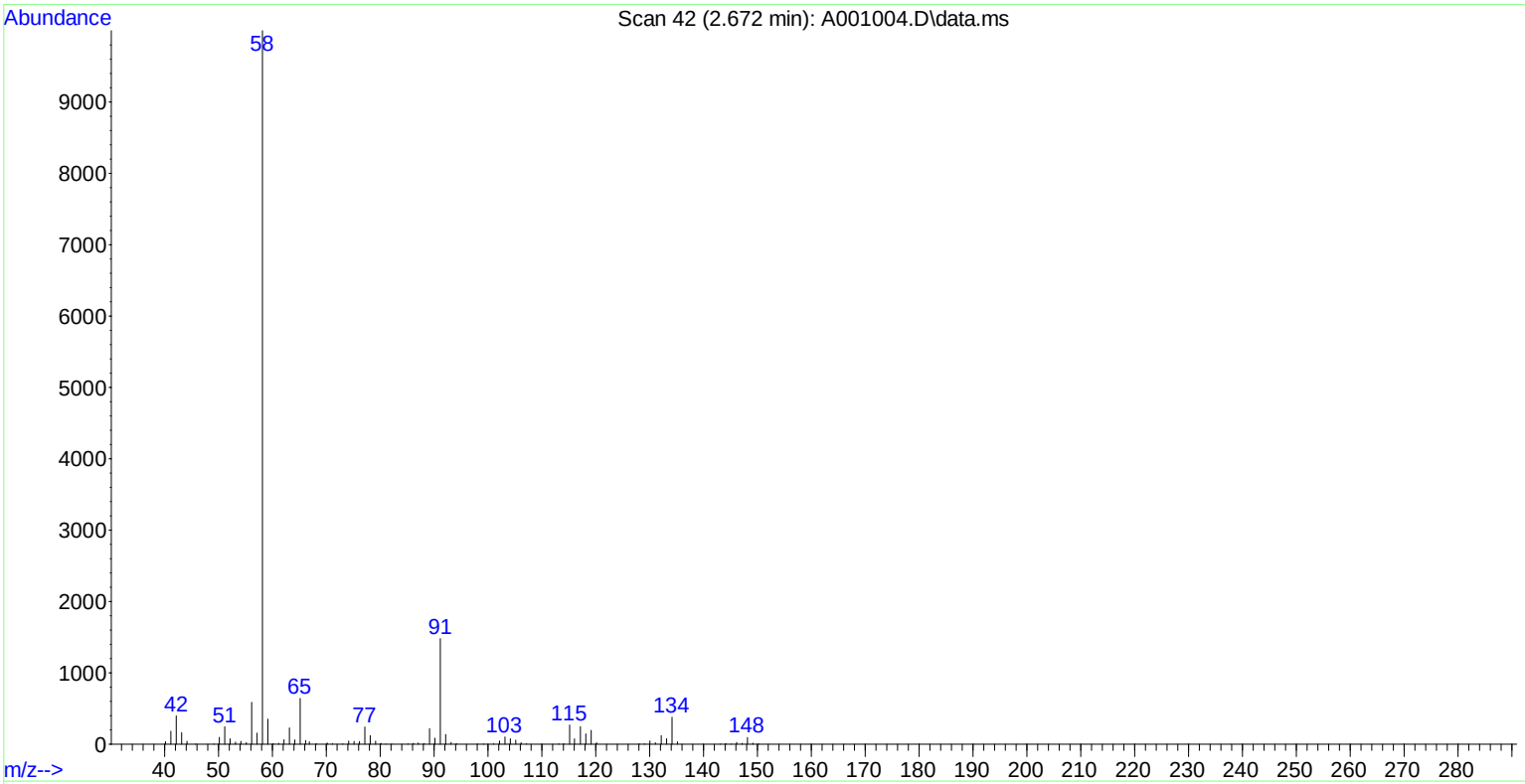
[x] **Tune: 07/21/2025 - Autotune DS**

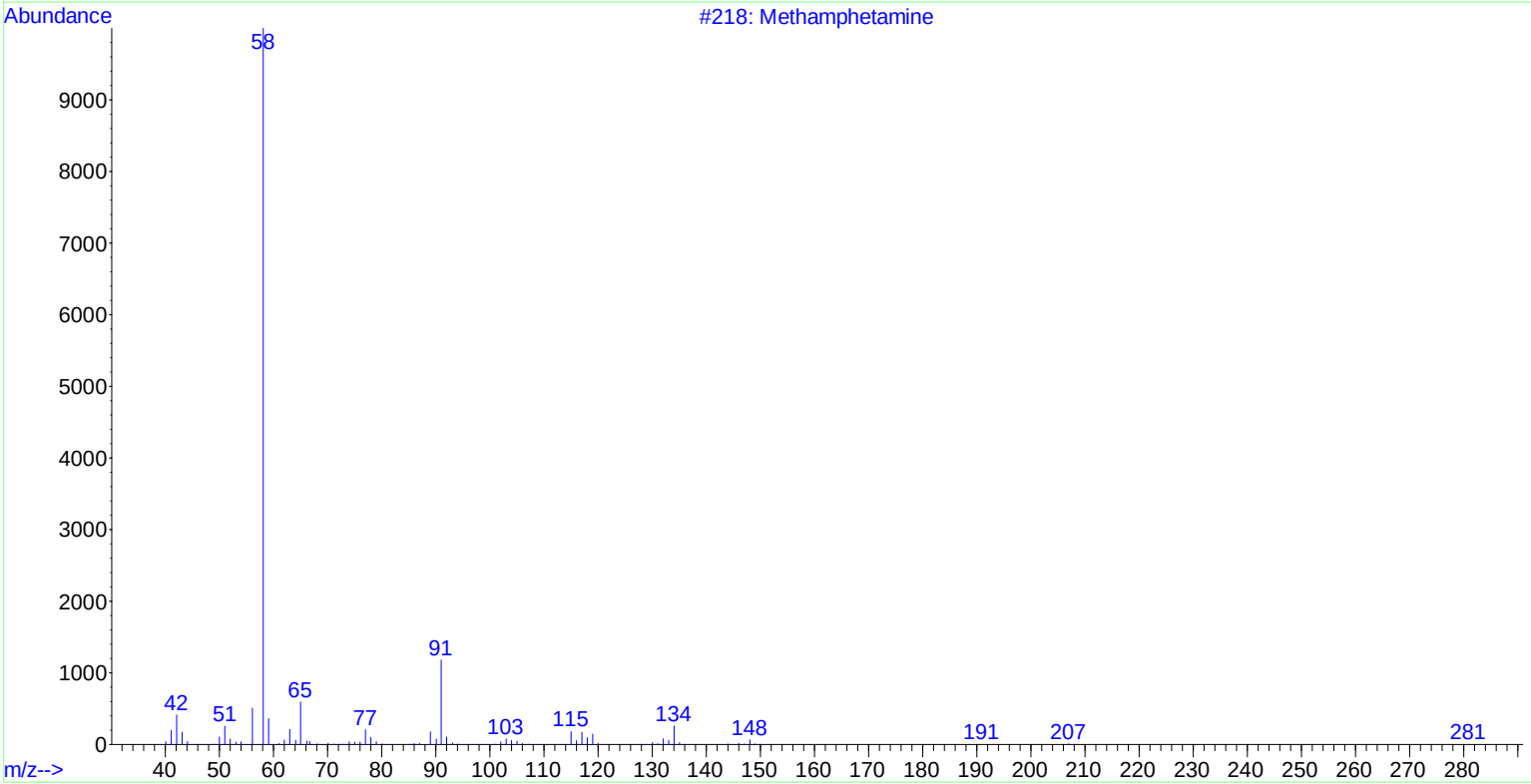
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.682	2.655	2.708
Cocaine	R-24-060	BCCL GenDrug	7.113	7.041	7.184
Heroin	R-24-060	BCCL GenDrug	8.785	8.697	8.872
Fentanyl	R-24-060	BCCL GenDrug	9.227	9.134	9.319
Alprazolam	R-24-060	BCCL GenDrug	10.849	10.740	10.957

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:12 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

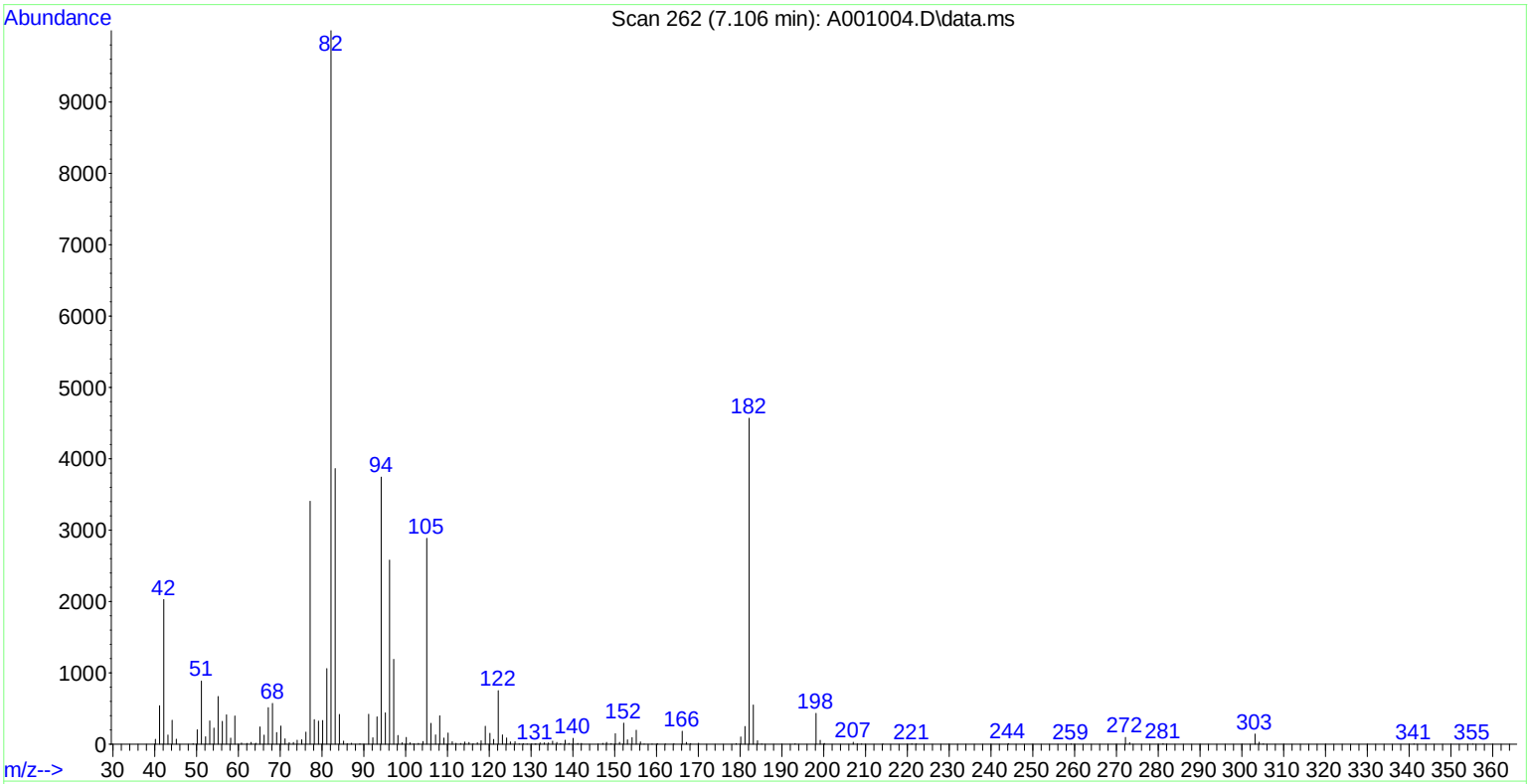


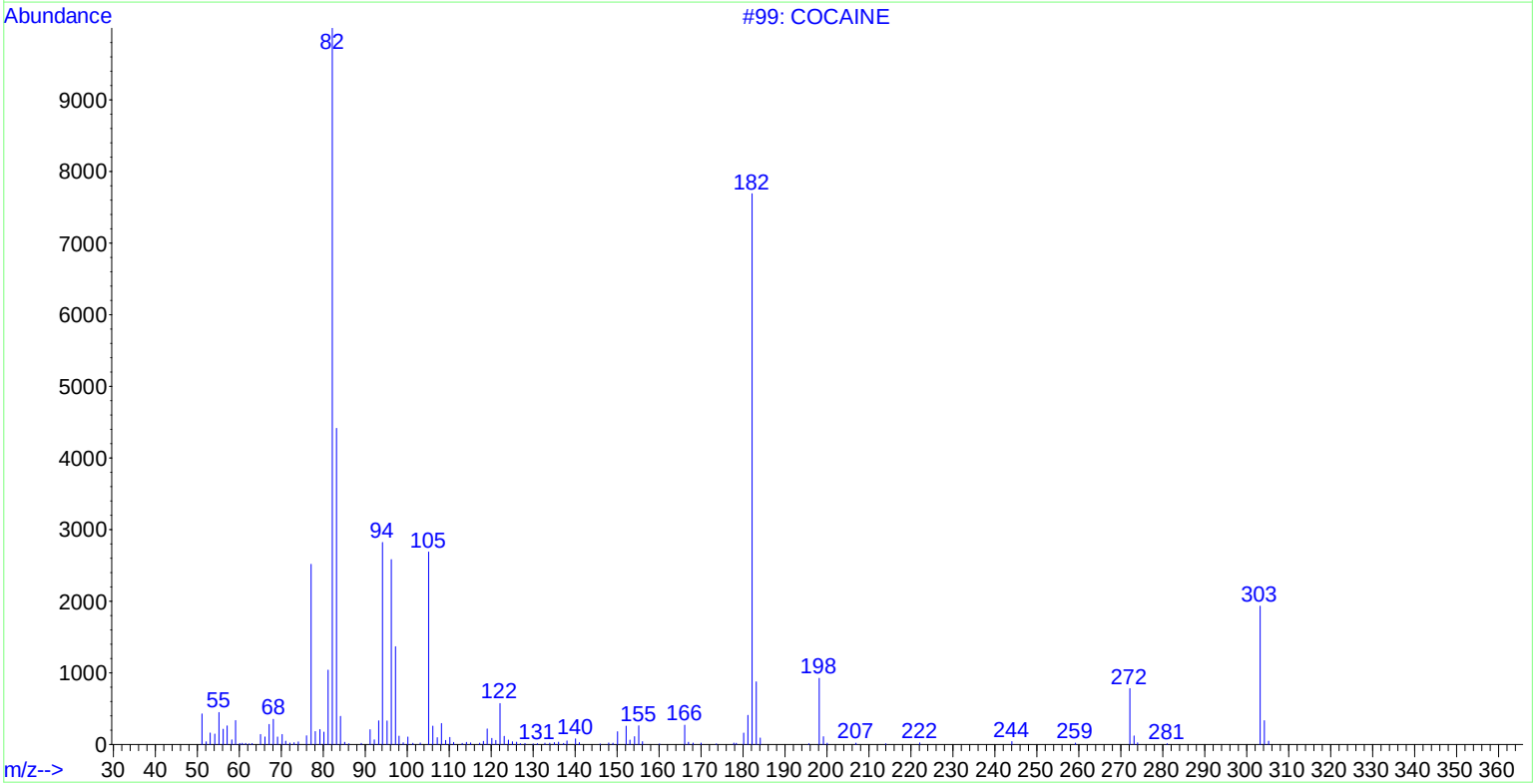
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:12 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



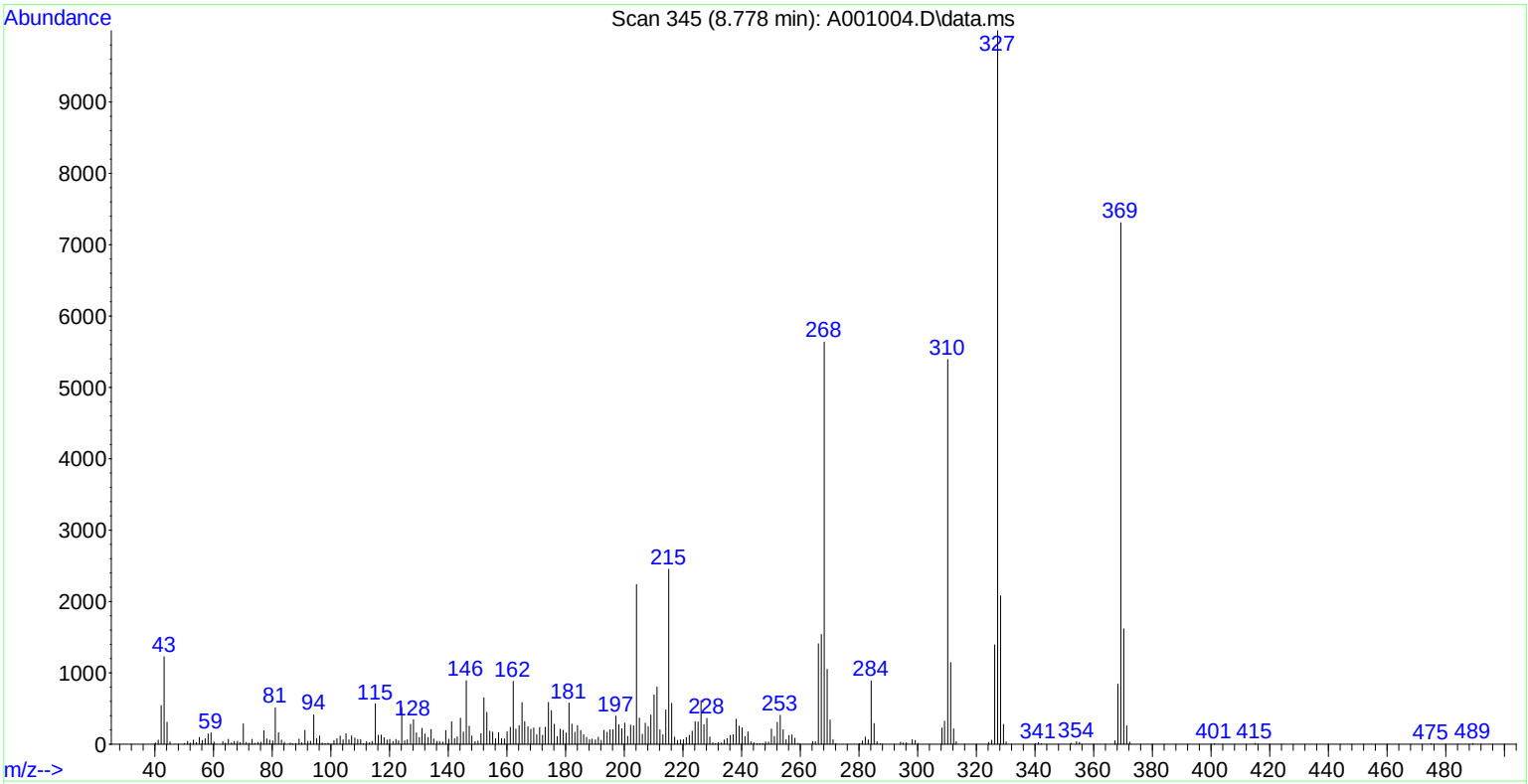


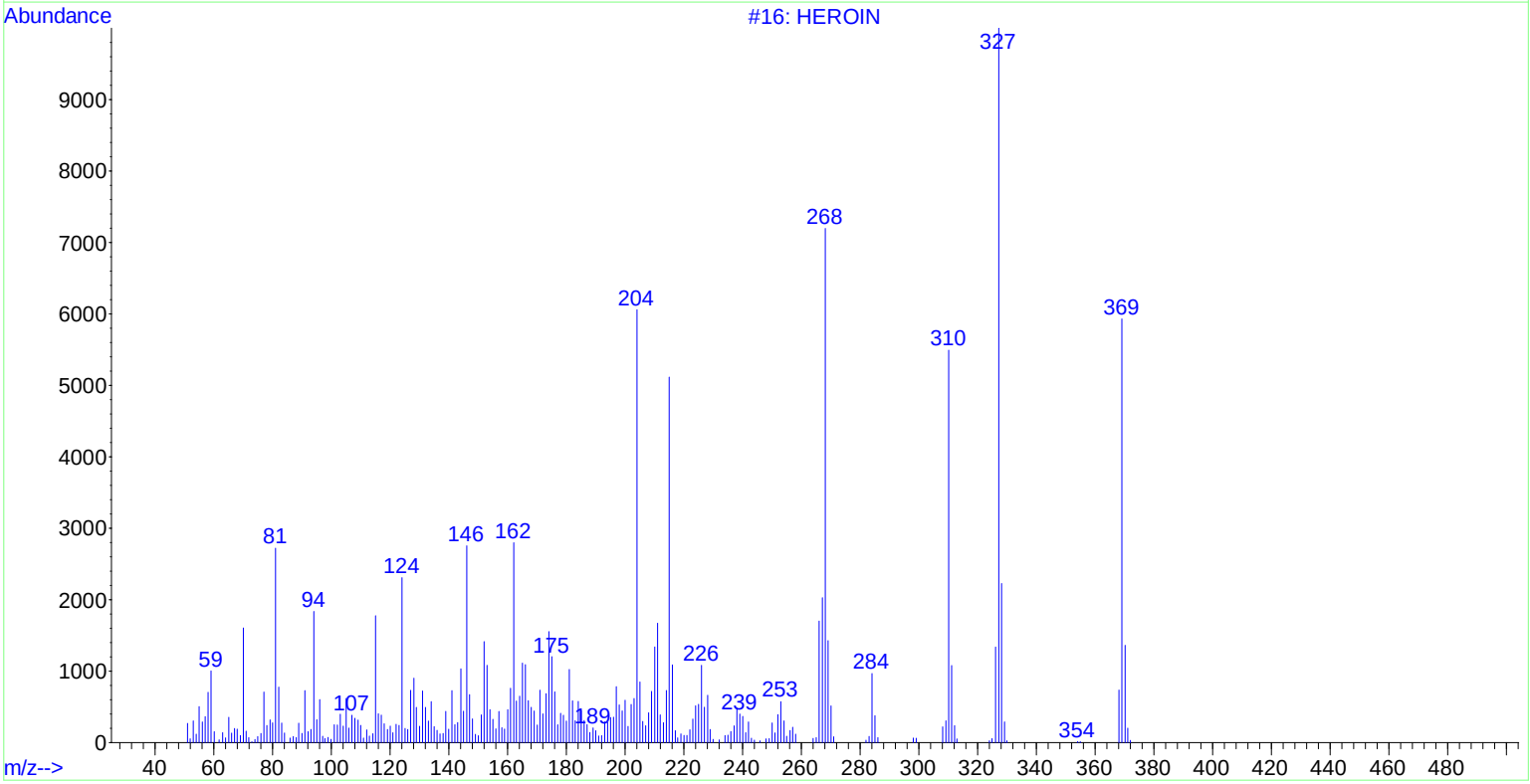
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:12 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



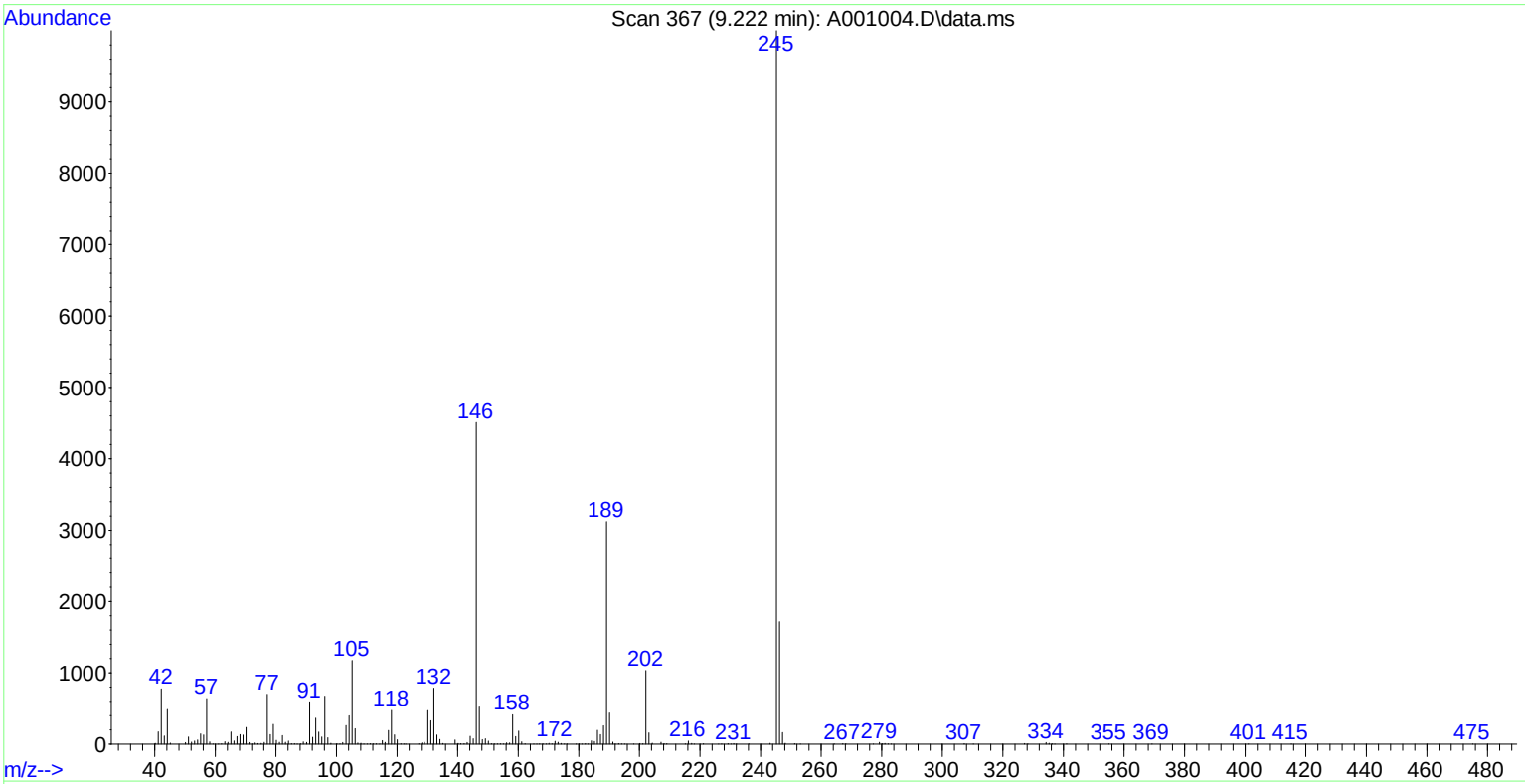


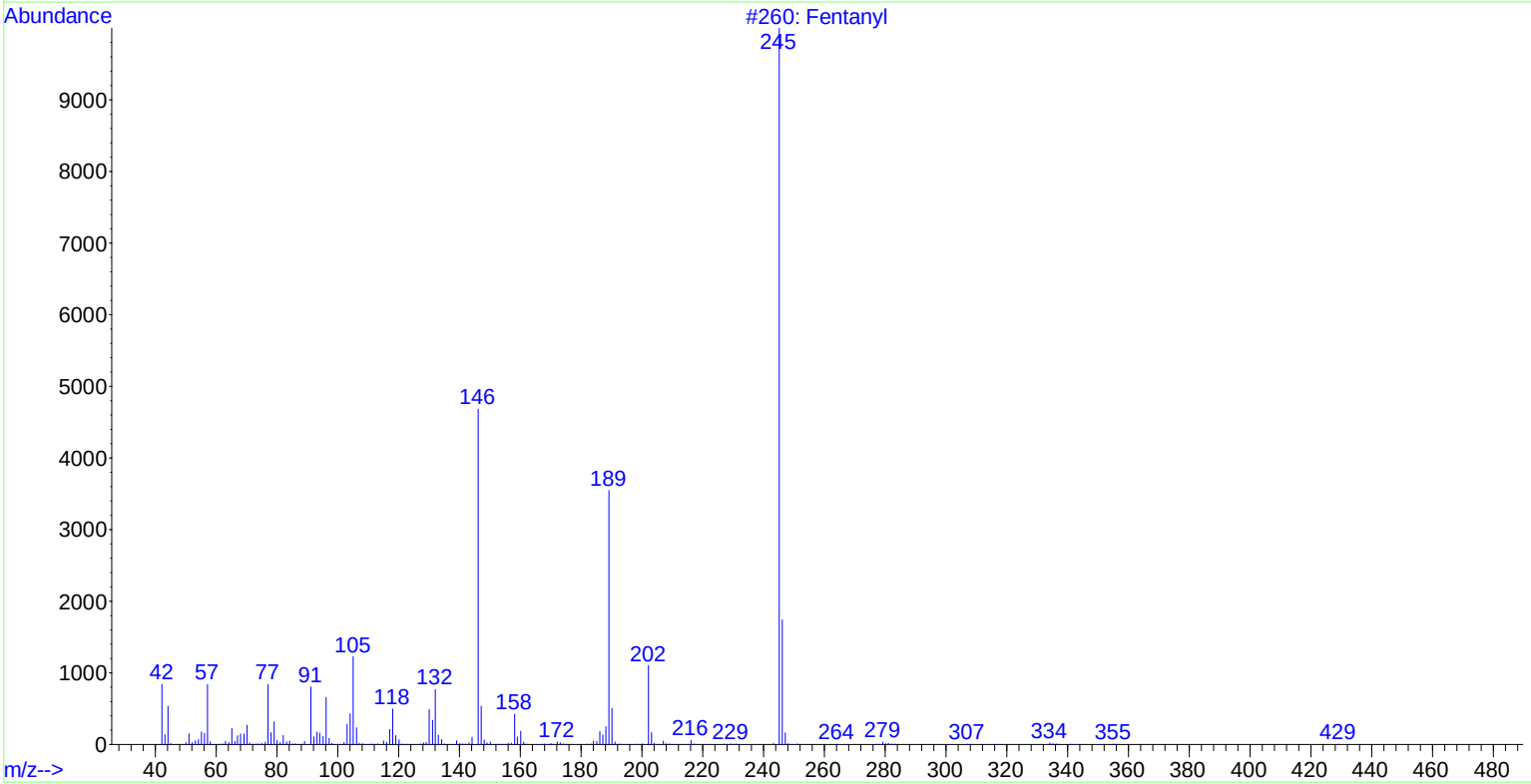
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:12 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



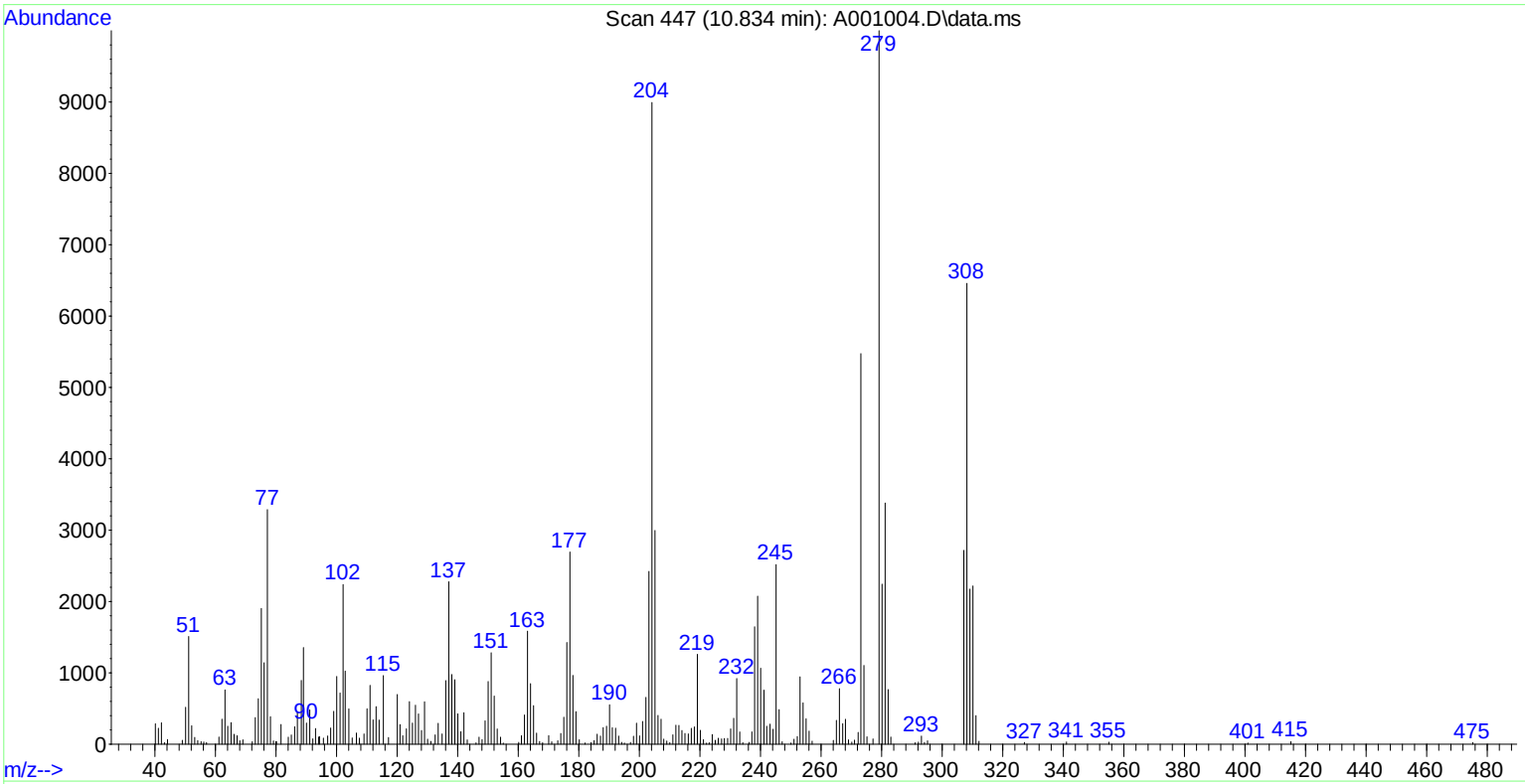


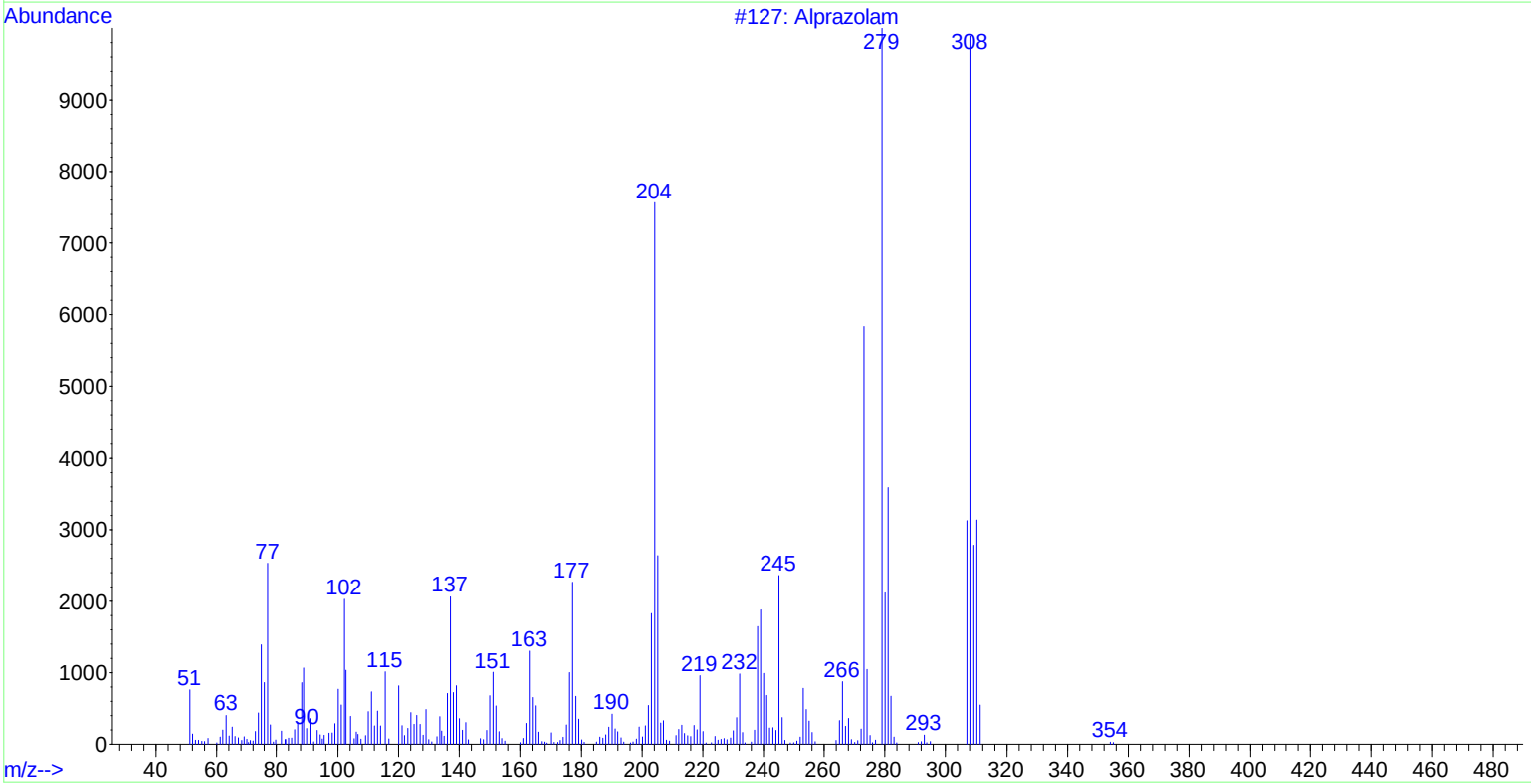
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:12 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



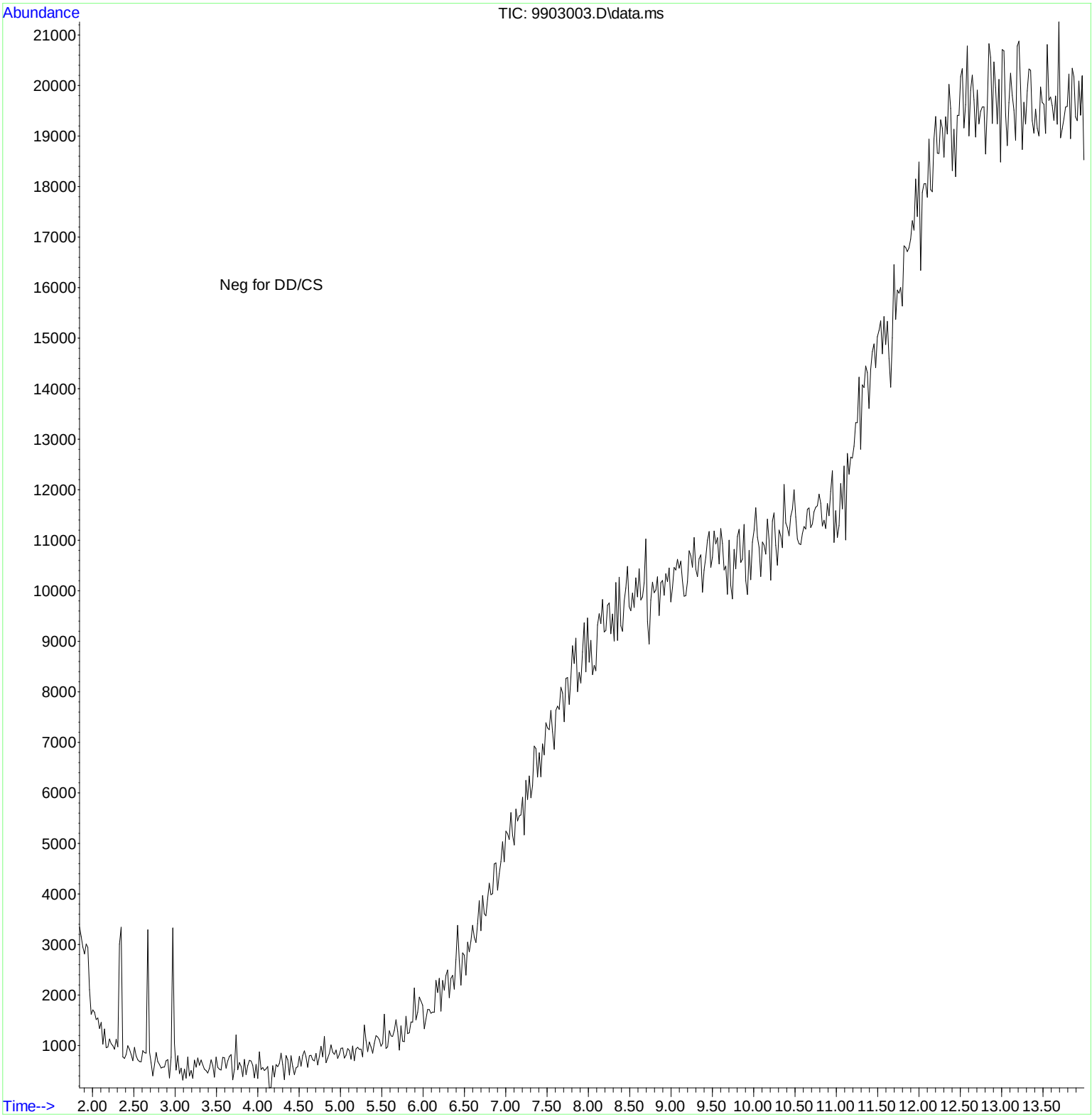


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\A001004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:12 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

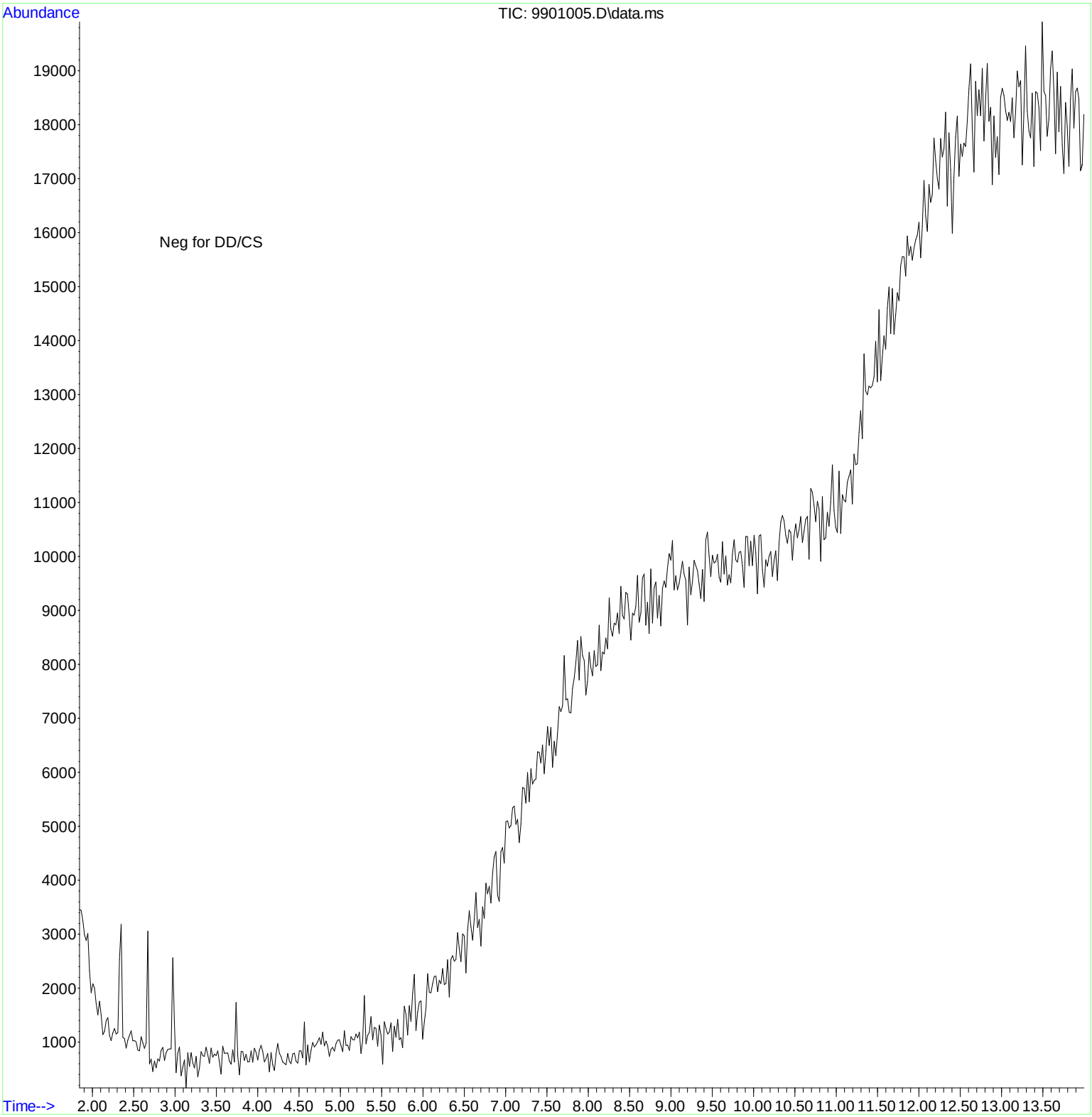




File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\9903003.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 9:55 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK PRIOR TO CAYMAN GC/MS 000002664
Misc Info : ACN (C-19-0068)



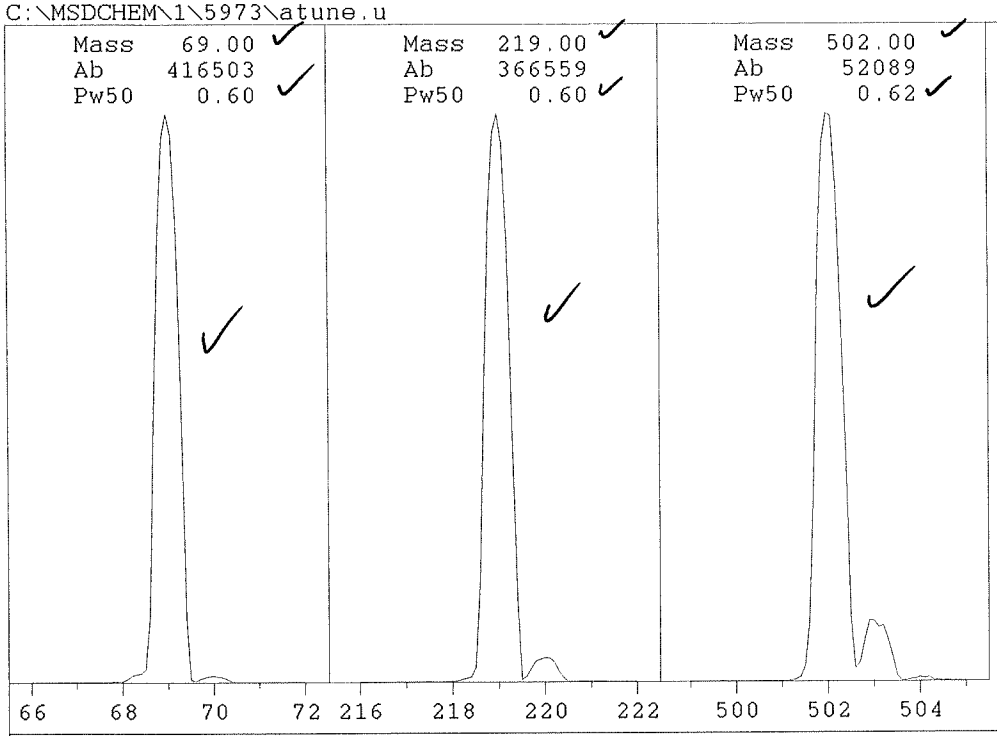
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072125\9901005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 21 Jul 2025 10:30 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)



5973 Autotune

Mon Jul 28 09:03:21 2025 Instrument: SD GCMS 1

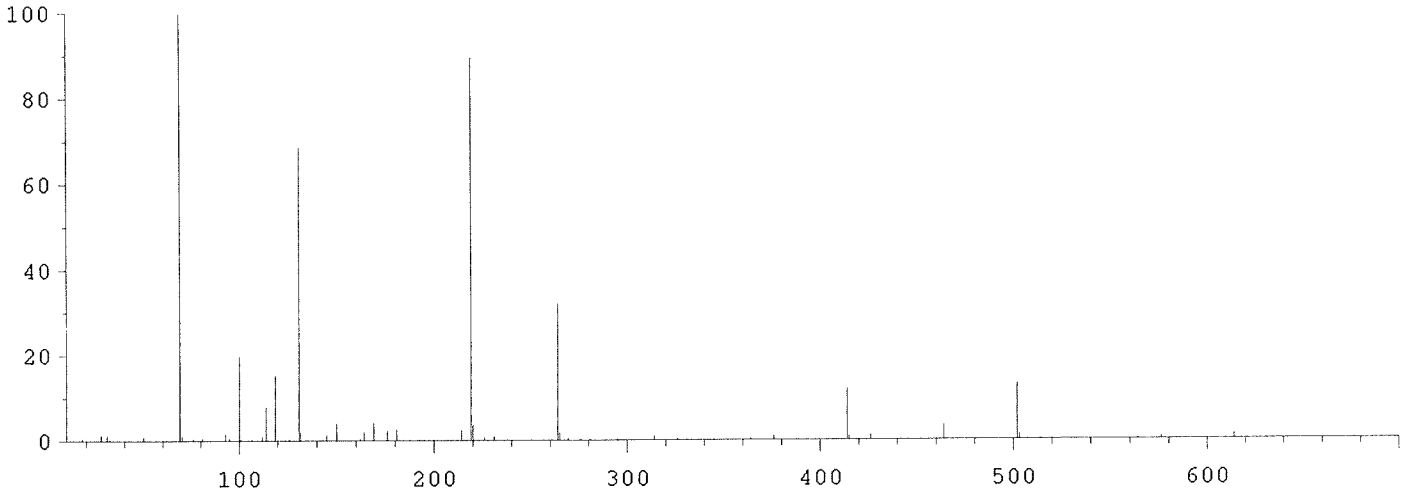
C:\MSDCHEM\1\5973\atune.u



Ion Pol	POS	MassGain	376
		MassOffs	-12
Emission	34.6	AmuGain	2447
EIEnrgy	69.9	AmuOffs	120
Filament	1	Wid219	-0.050
		DC Pol	POS
Repeller	19.57		
IonFcus	75.0	HEDEnab	ON
EntLens	14.5	EMVolts	1718
EntOffs	17.07		
		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

144 peaks Base: 69.00 Abundance: 378944



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	378944	100.00	70.00	4068	1.07
219.00	339072	89.48	220.00	14177	4.18
502.00	50208	13.25	503.00	4840	9.64

Air/Water Check: H2O~0.52% N2~1.25% O2~0.32% CO2~0.07% N2/H2O~238.66%

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

Ramp Criteria:

Ion Focus Maximum 90 volts using ion 502; EM Gain 239064

Repeller Maximum 35 volts using ion 219;

MassGain Values @Samples: 374@3 374@2 374@1 374@0 376@FS

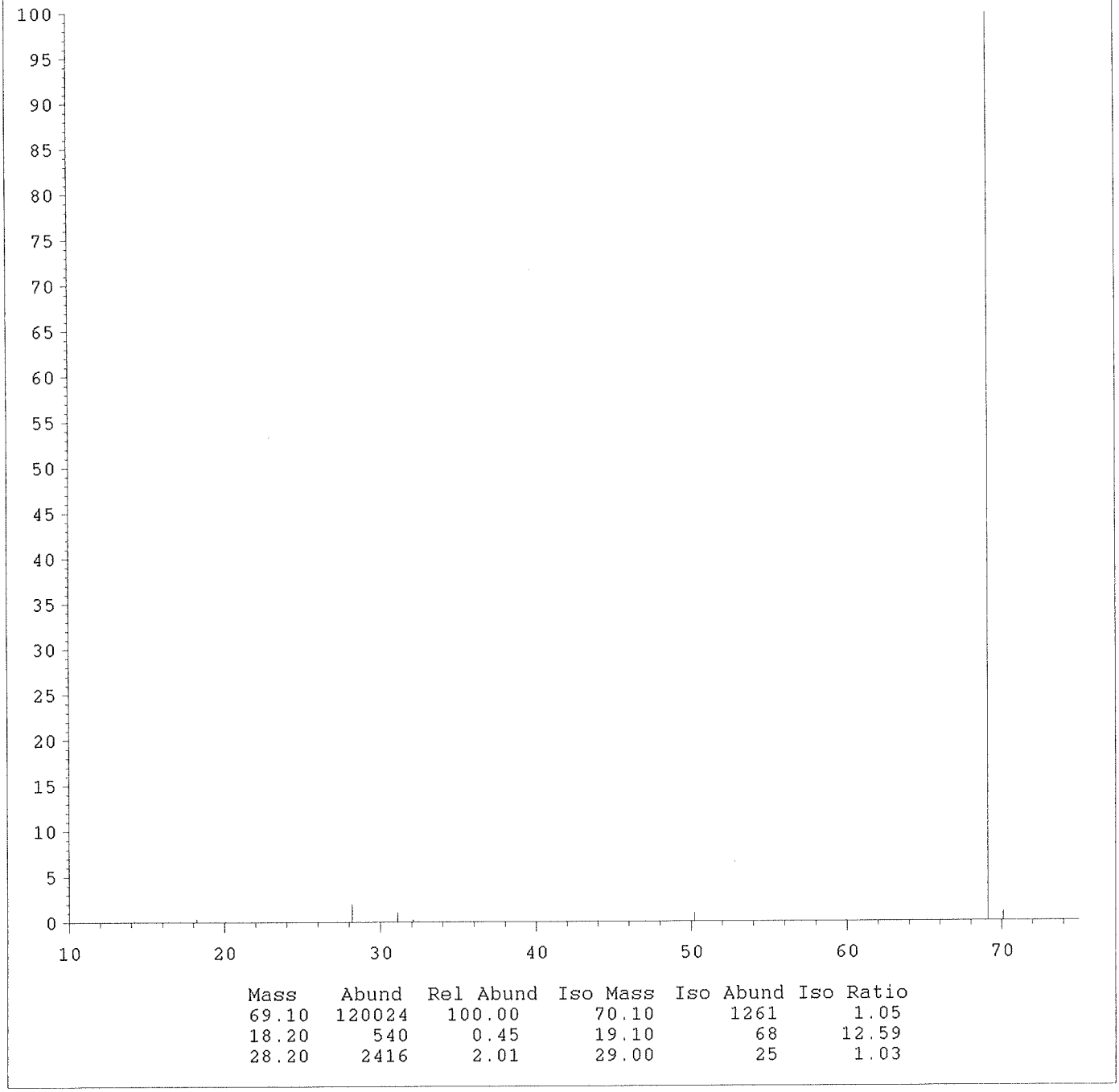
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	120.0	120.0	120.0	120.0	120.0	120.0	120.0
Entrance Lens Offset:	17.1	17.1	17.1	17.1	17.1	17.1	17.1

597x Air and Water Check

KB
OK

Instrument: SD GCMS 1
Mon Jul 28 08:56:05 2025 C:\MSDCHEM\1\5973\

Scan: 10.00 - 75.00 Samples: 8 Thresh: 0 Step: 0.10
79 peaks Base: 69.10 Abundance: 120024



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	120024	100.00	70.10	1261	1.05
18.20	540	0.45	19.10	68	12.59
28.20	2416	2.01	29.00	25	1.03

Current Params used: atune.u

Relative abundances:

18/69 =	0.45 ✓	Water%
28/69 =	2.01 ✓✓	Nitrogen%
32/69 =	0.29 ✓	Oxygen%
44/69 =	0.10	Carbon Dioxide%
28/18 =	447.41	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	69.00	Ok
Position of mass 219	219.00	Ok
Position of mass 502	502.00	Ok
Position of isotope mass 70	70.00	Ok
Position of isotope mass 220	220.00	Ok
Position of isotope mass 503	503.01	Ok
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.06	Ok
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.22	Ok
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.99	Ok
Ratio of 219 to 69 should be > 40% and is	89.14	Ok
Ratio of 502 to 69 should be > 2.4% and is	13.15	Ok
Mass 69 Precursor (<= 3%)	0.24	Ok
Mass 219 Precursor (<= 6%)	0.42	Ok
Mass 502 Precursor (<= 12%)	0.26	Ok
Testing for a leak in the system		
Ratio of 18 to 69 (<20%)	0.50	Ok
Ratio of 28 to 69 (<10%)	1.30	Ok
Electron Multiplier Voltage	1718	Ok

Tune portion of System Verification passed.

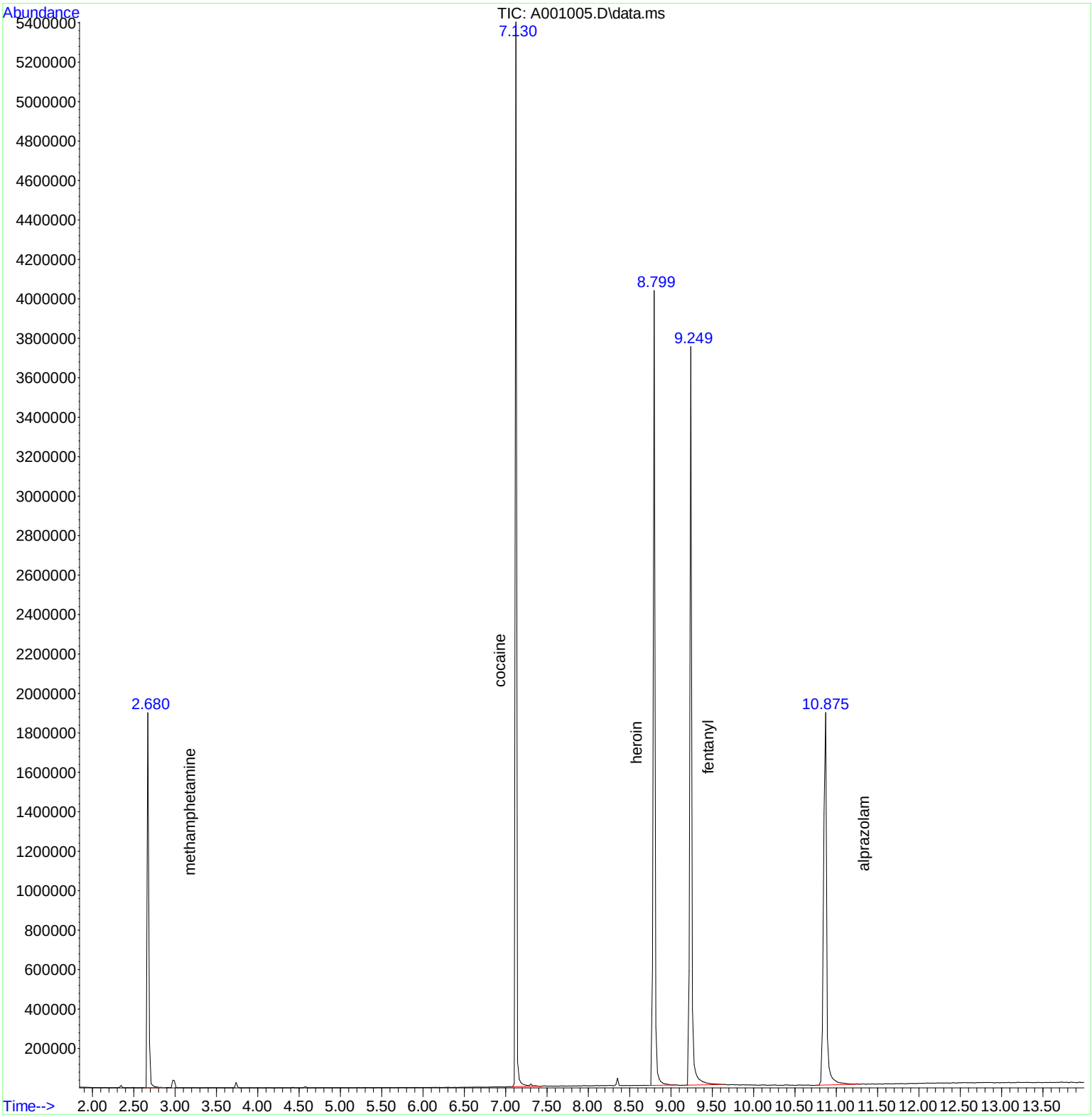
BCCL GC/MS #1
Retention Times for the Week of:

07/28/2025 - 08/03/2025

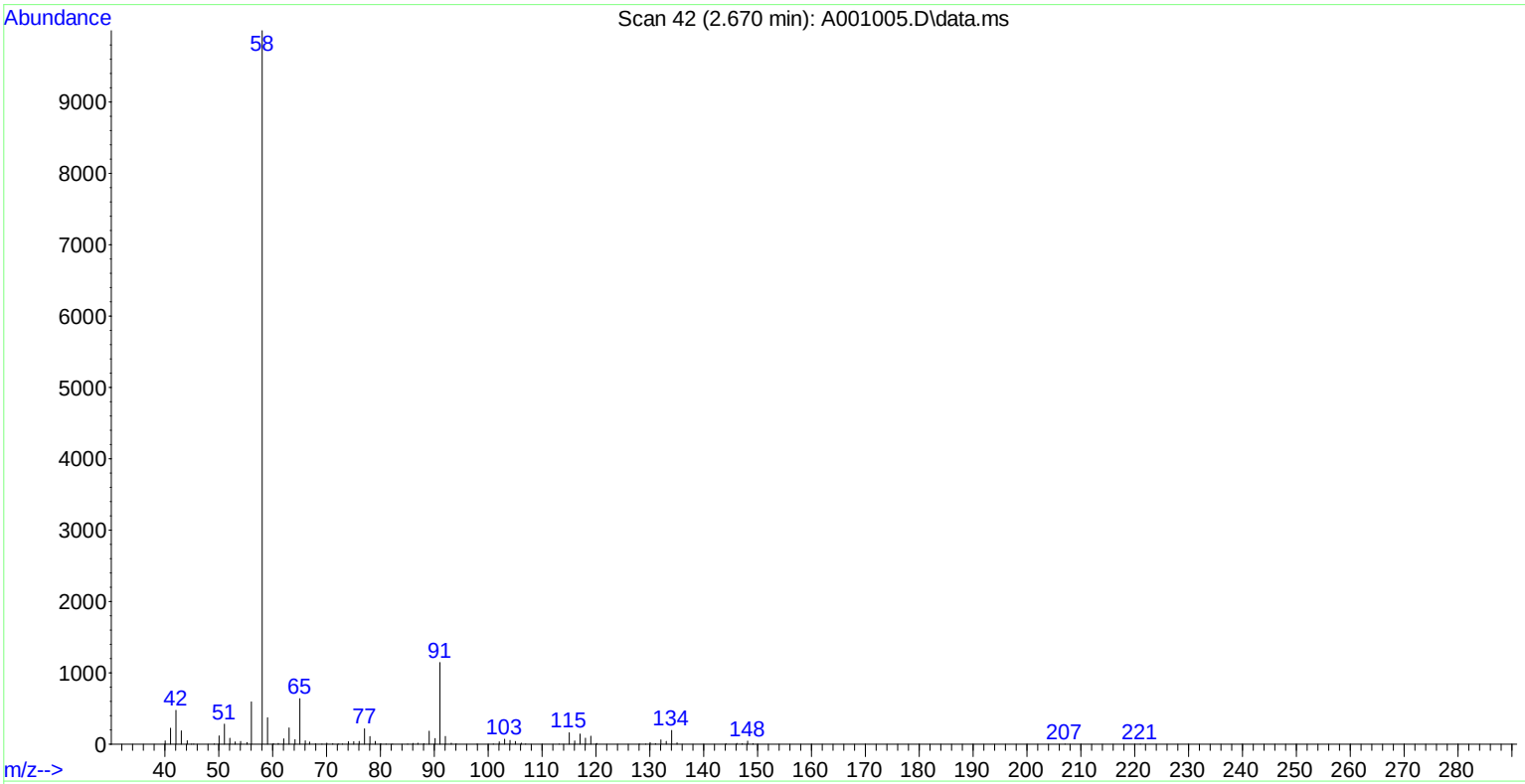
[x] **Tune: 07/28/2025 - Autotune KB**

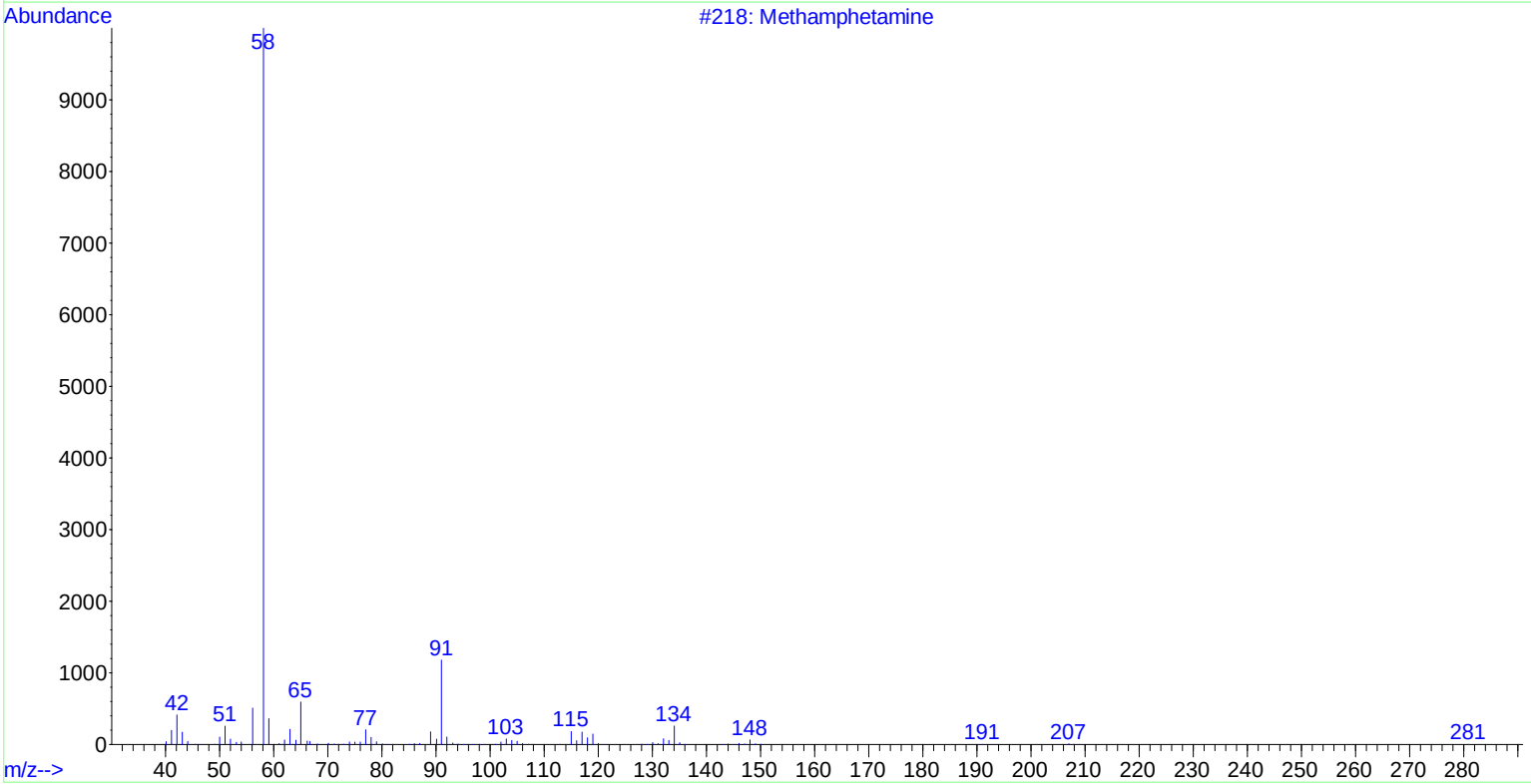
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	BCCL GenDrug	2.680	2.653	2.706
Cocaine	R-24-060	BCCL GenDrug	7.130	7.058	7.201
Heroin	R-24-060	BCCL GenDrug	8.799	8.711	8.886
Fentanyl	R-24-060	BCCL GenDrug	9.249	9.156	9.341
Alprazolam	R-24-060	BCCL GenDrug	10.875	10.766	10.983

File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:08 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN

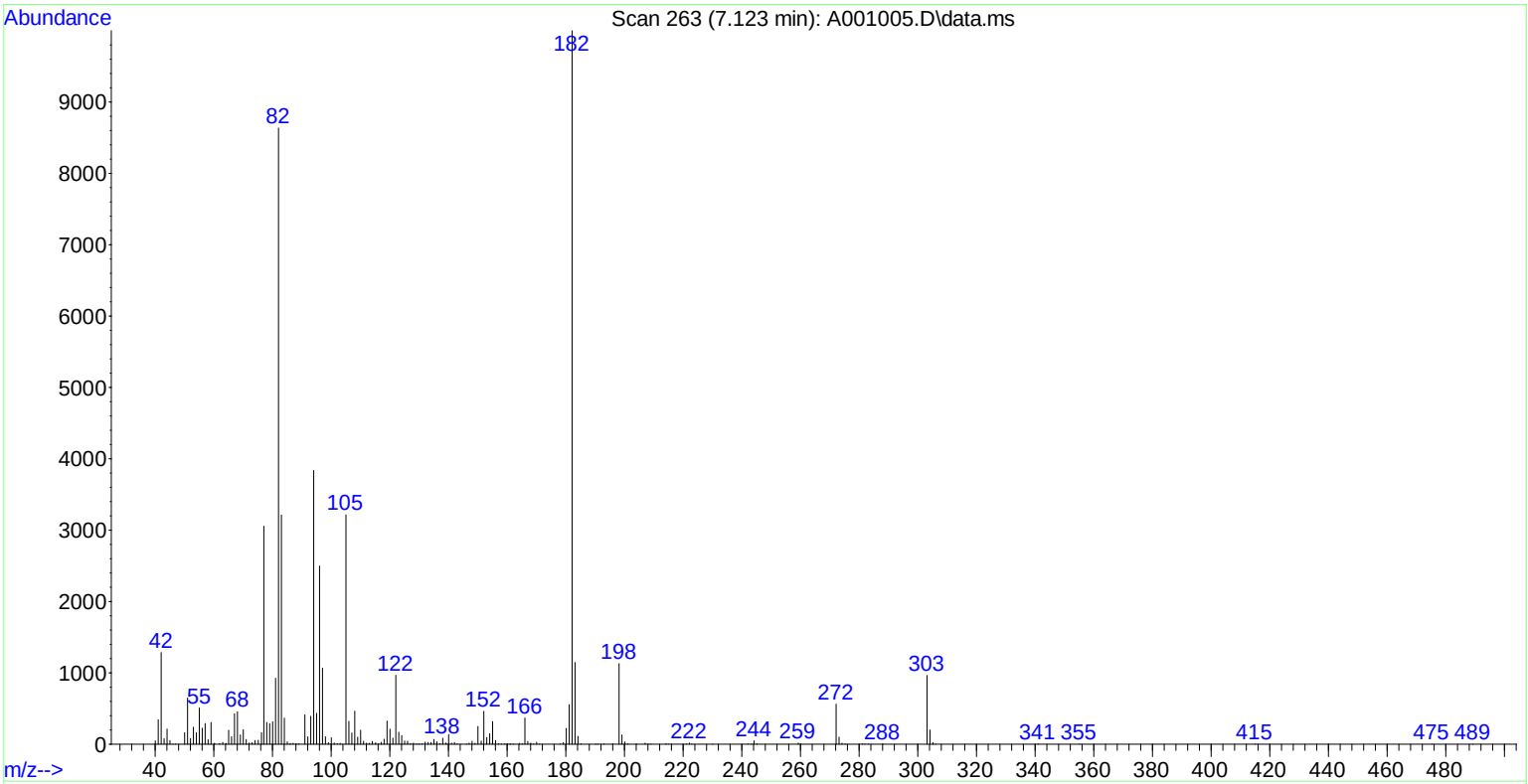


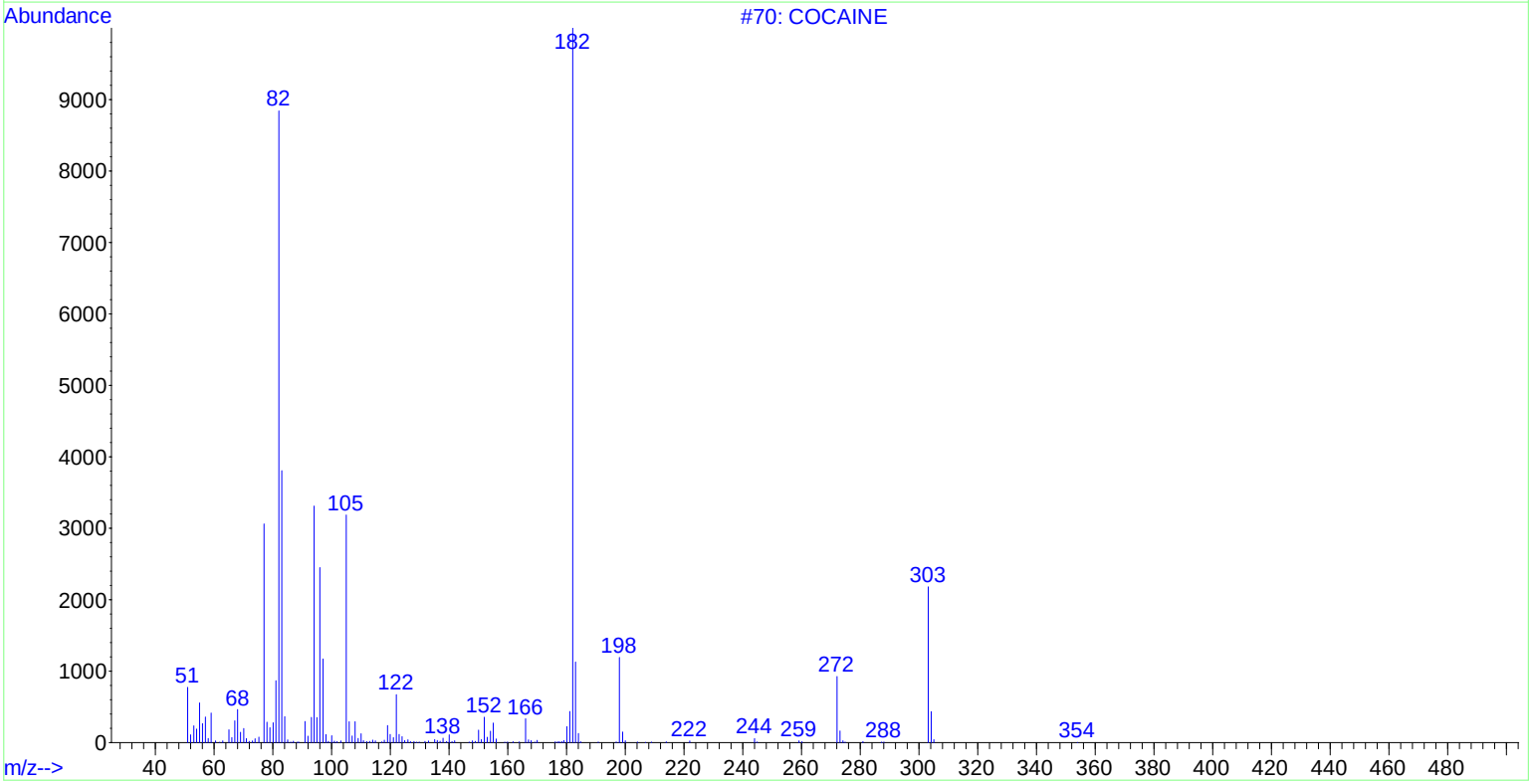
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:08 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



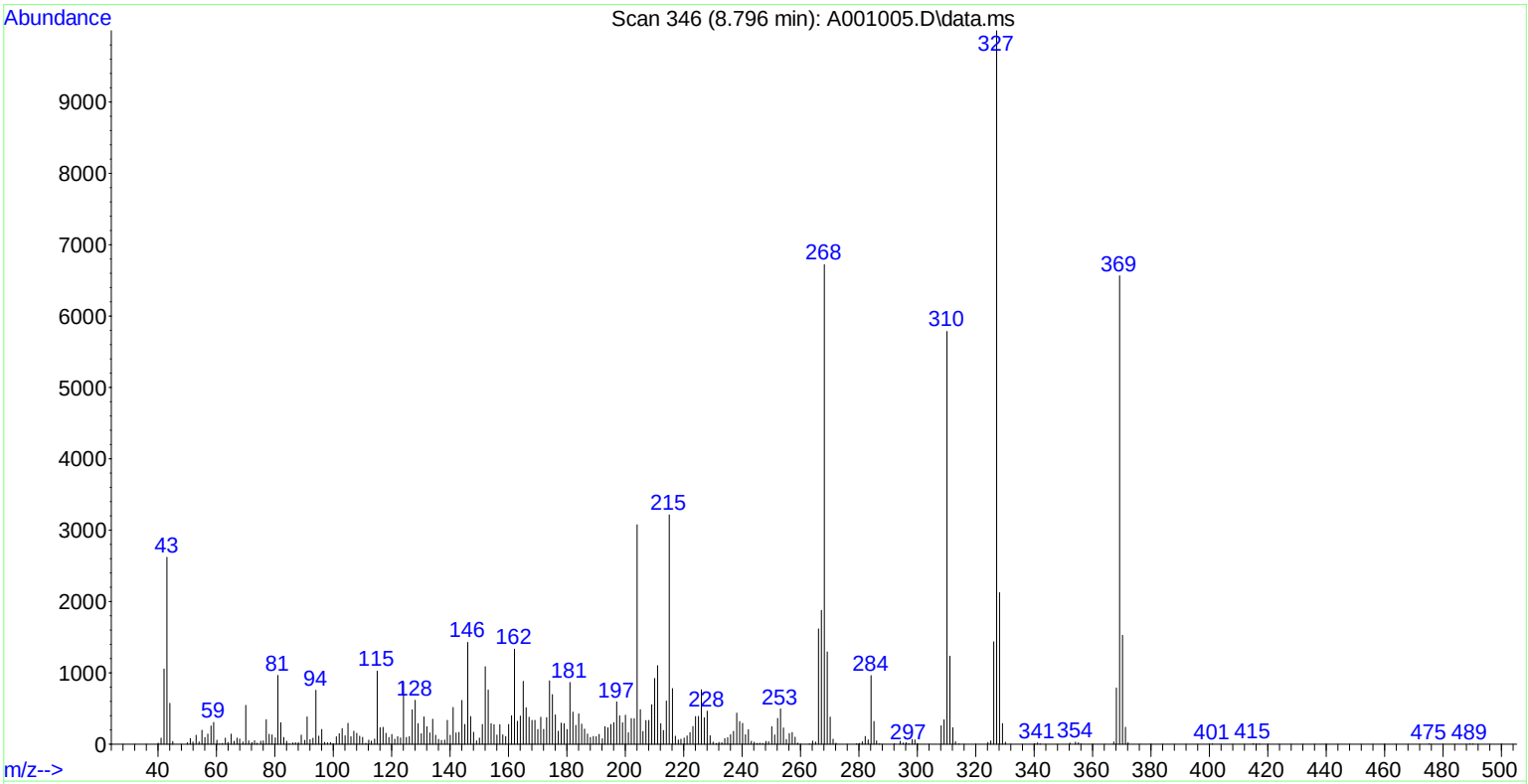


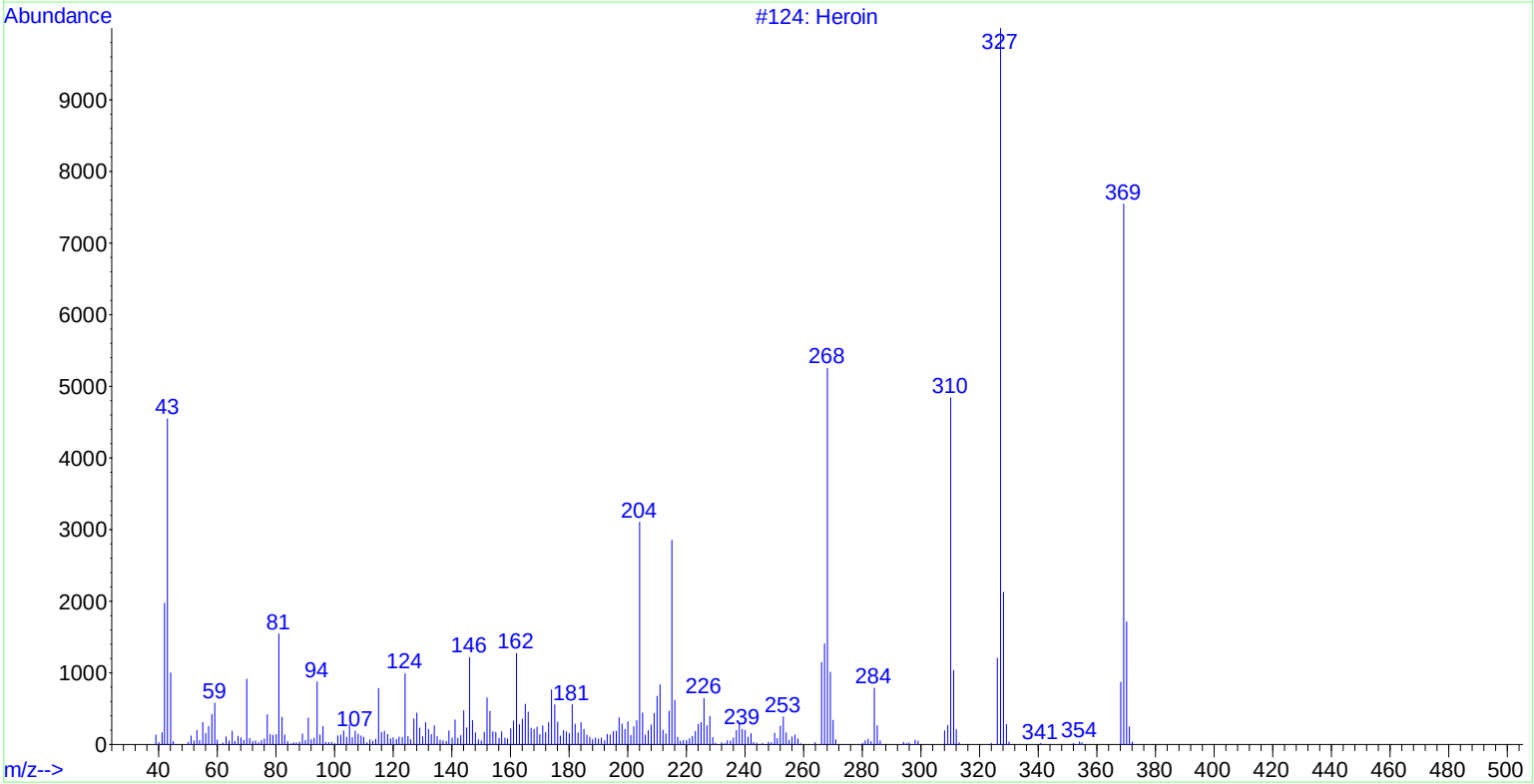
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:08 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



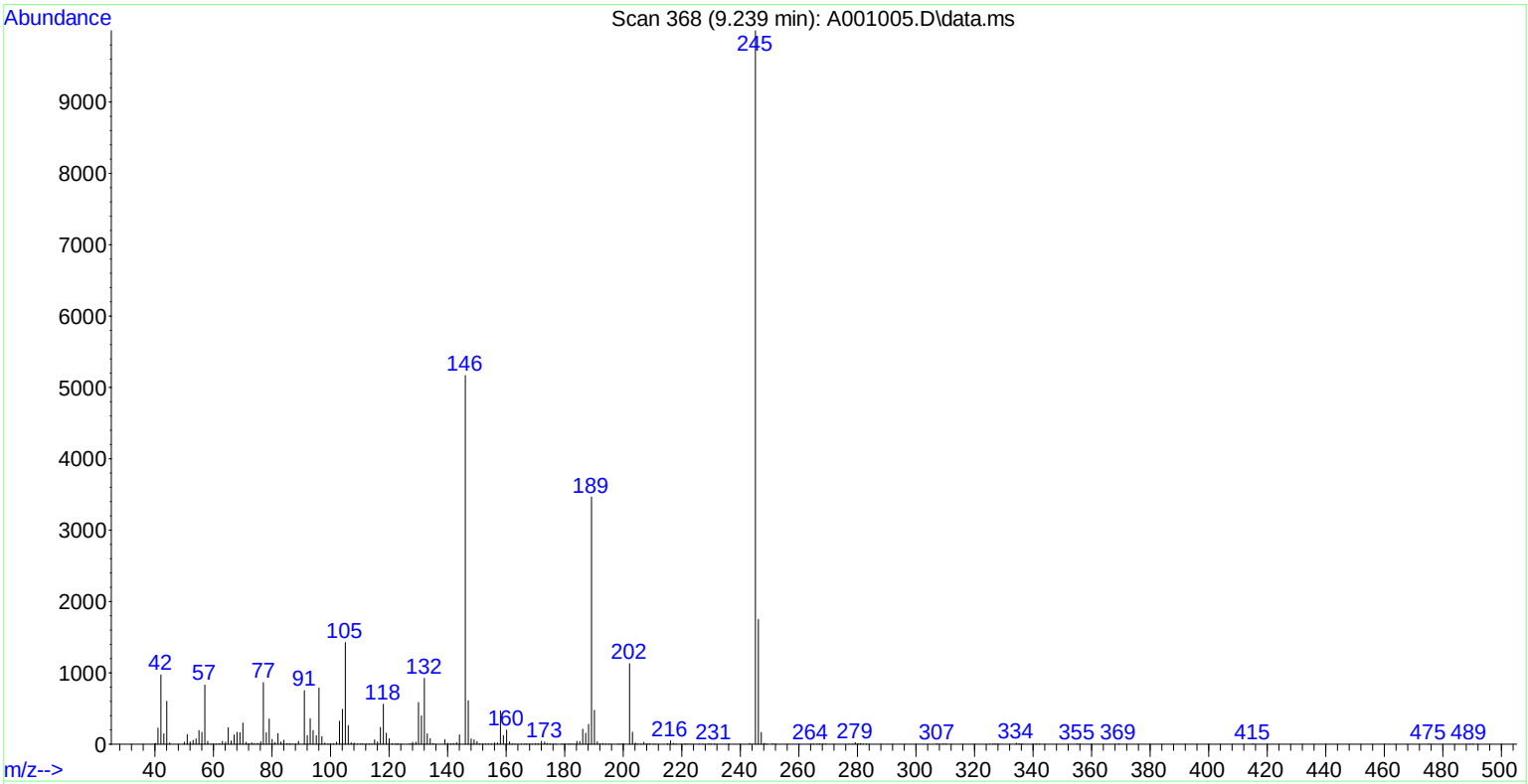


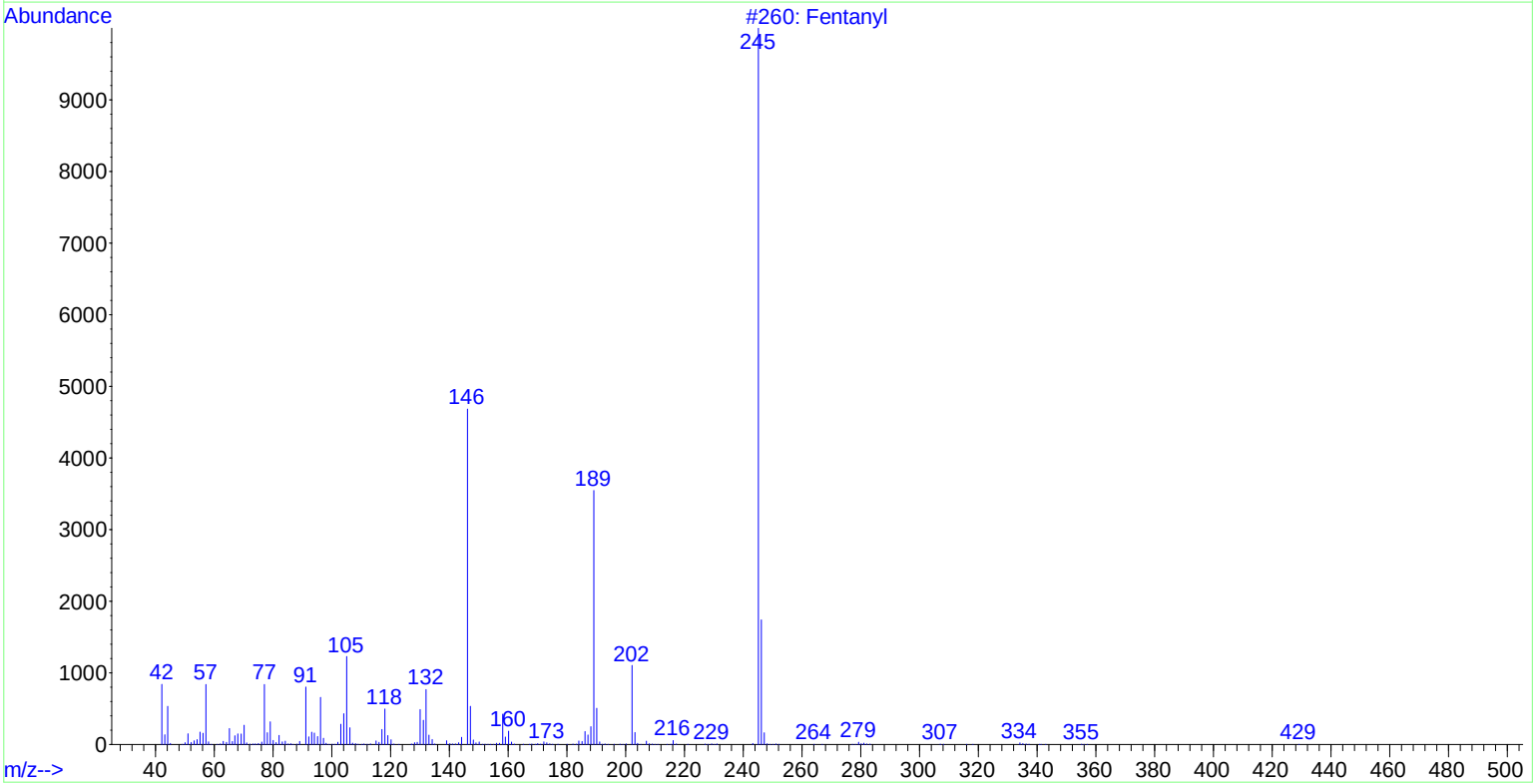
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:08 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



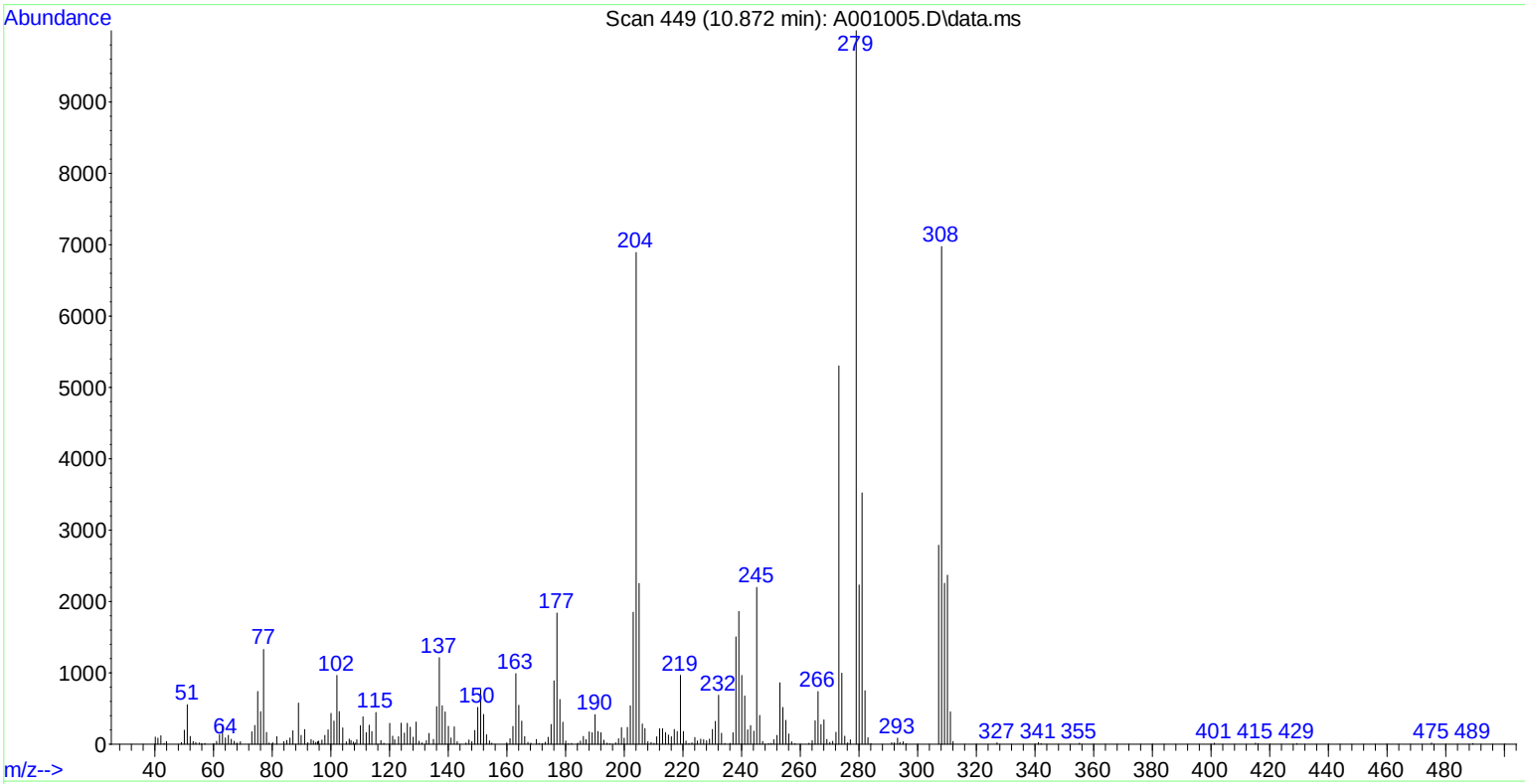


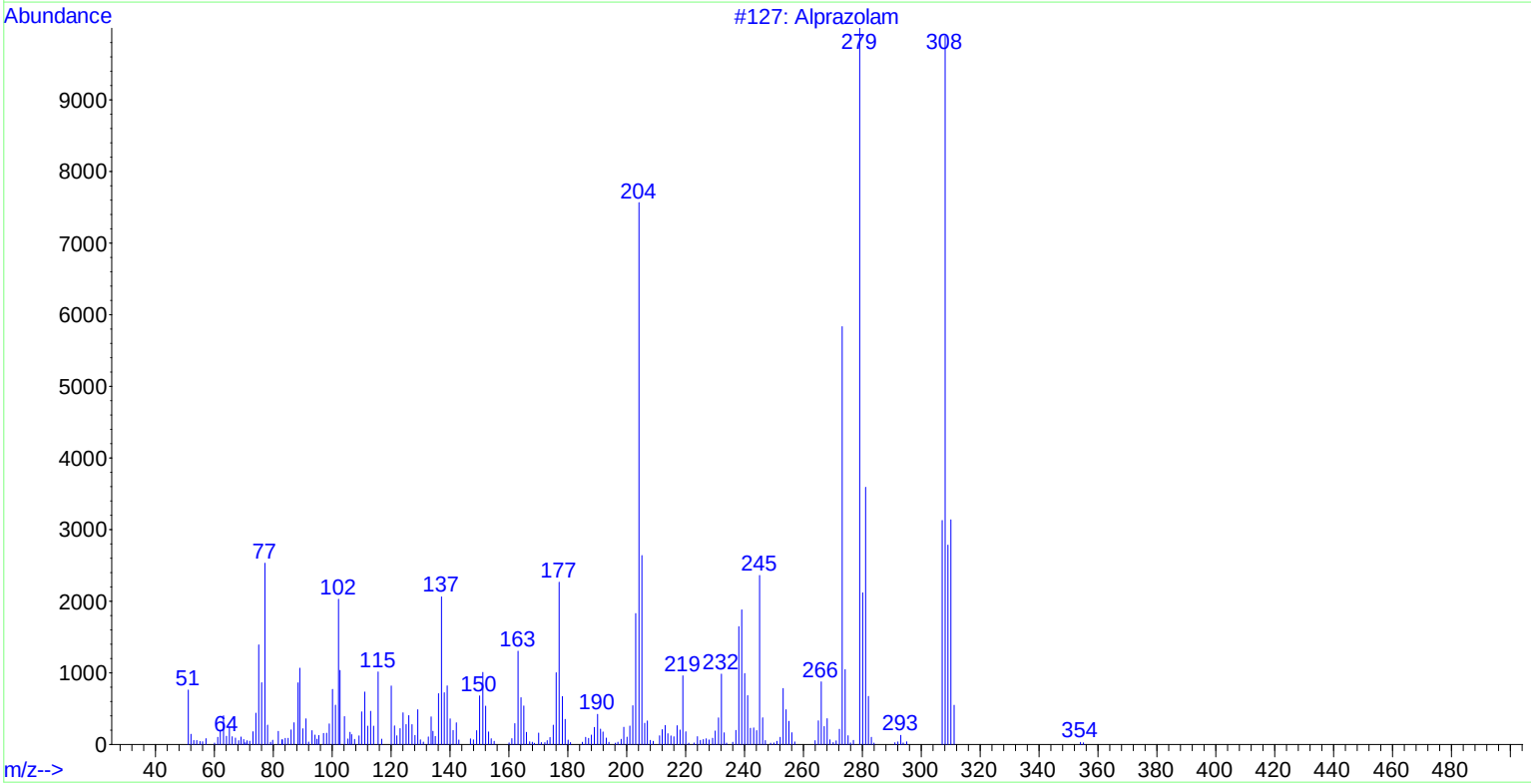
File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:08 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN



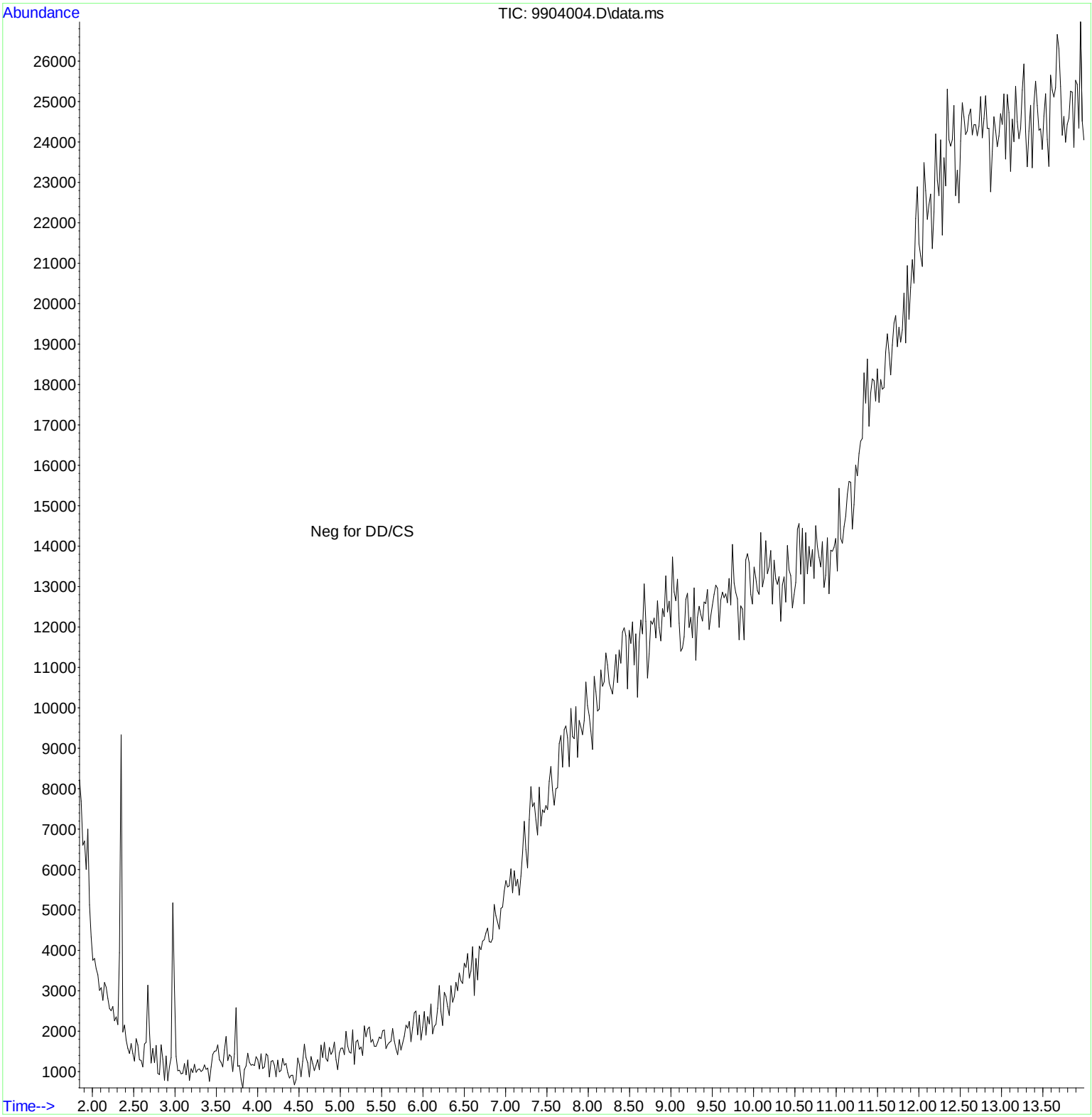


File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\A001005.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:08 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002665
Misc Info : In ACN





File :D:\GCMS1Data\Stds and Chemical Verification\Weekly Check Mix
... 2025\072825\9904004.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 16:50 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\072825\9901006.D
Operator : AGILENT SD GCMS #1
Instrument : SD GCMS 1
Acquired : 28 Jul 2025 17:25 using AcqMethod BCCL GENDRUG METHOD.M
Sample Name: BLANK - INSTRUMENT READY 000002664
Misc Info : ACN (C-19-0068)

