Instrument / Equipment Monitoring and Maintenance

Manufacturer Agilent
Model 7820B SQ7A
S/N CN13293019/ US13290105
Other 3D Cells 3

Date	Maintenance	Analyst
12/30/2024	Autotune attempted on 12/30/2024 failed. Instrument taken out of service and source cleaned and	DS
	filaments changed. Instrument was pumped down and allowed to bake overnight. On December 31, instrument	
	was returned to service due to successful tuning and QCM.	
	See SDS maintenance record dated 12/30/2024	
01/06/2025	helium tank change	DS
01/20/2025	helium tank change	DS

Brazoria County Sheriff's Office Crime Laboratory
GC-MS Tune Log

GC-MS TUNE LOG

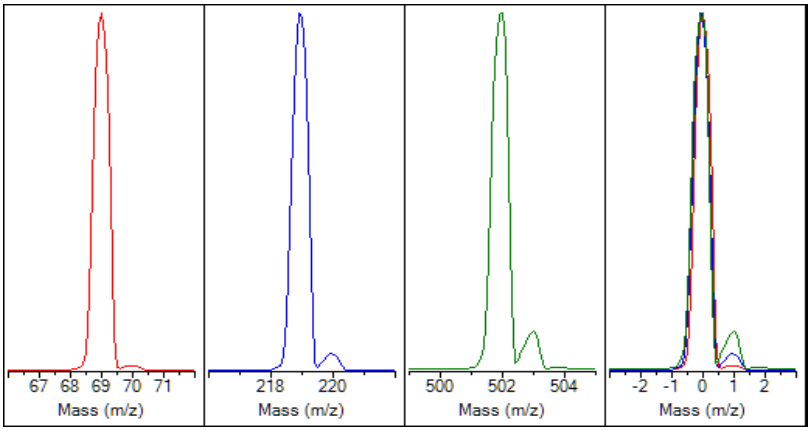
MSD 5977A

Date	Passed (Y/N)	S-tune/ A-tune	Comments	Analyst
11/11/2024	Y	A-Tune		
11/18/2024	Y	A-Tune		
11/25/2024	Y	A-TUNE	LINER AND SEPTUM CHANGE	DN / DS
12/2/2024	Y	A-Tune	helium tank change	
12/09/2024	Y	A-Tune		
12/16/2024	Y	ATUNE		
12/18/2024	Y	ATUNE	HELIUM TANK CHANGE	DN / DS
12/23/2024	Y	A-Tune		KB
12/31/2024	Y	ATune	see SD3 Instrument maint date 12/30/24	DS
01/06/2025	Y	ATune	helium tank change	DS
01/13/2025	Y	A-Tune		DS
01/24/2025	Y	A-Tune	helium tank change - 01/20/2025	DS
01/27/2025	Y	A-Tune		DS

Autotune - 5977

1/6/2025 9:16:23 AM (UTC-6:00) BCCL GCMS #3

D:\MASSHUNTER\GCMS\1\5977\atune.u US1329M205



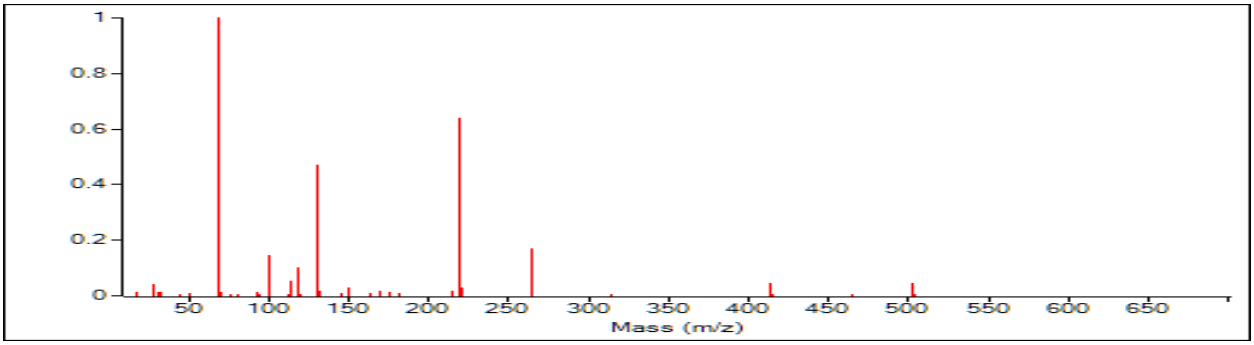
Ion Polarity	Pos	Mass Gain	-362
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1681
Filament	1	Amu Offset	119.44
Repeller	34.90	Width219	-0.008
Ion Focus	87.4	DC Polarity	Pos
Entrance Lens	15.1	HED Enable	On
Ent Lens Offset	13.57	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.10e-06

Mass	Abund	Rel Abund	Pw50
69.00	450,906	100.0%	0.60
218.90	293,119	65.0%	0.60
502.00	19,263	4.3%	0.60

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	96	69.00	434,816	1,305,988



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	434,816	100.00	70.10	4,567	1.05
219.10	276,928	63.69	220.10	12,065	4.36
502.20	18,888	4.34	503.20	1,741	9.22

Air/Water Check: H20 ~1.1% N2 ~3.9% O2 ~1.2% CO2 ~0.3% N2/H20 ~373.6%

Column(1) Flow: 0.80 Column(2): 0.00 ml/min Interface Temp: 280

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 58444.882

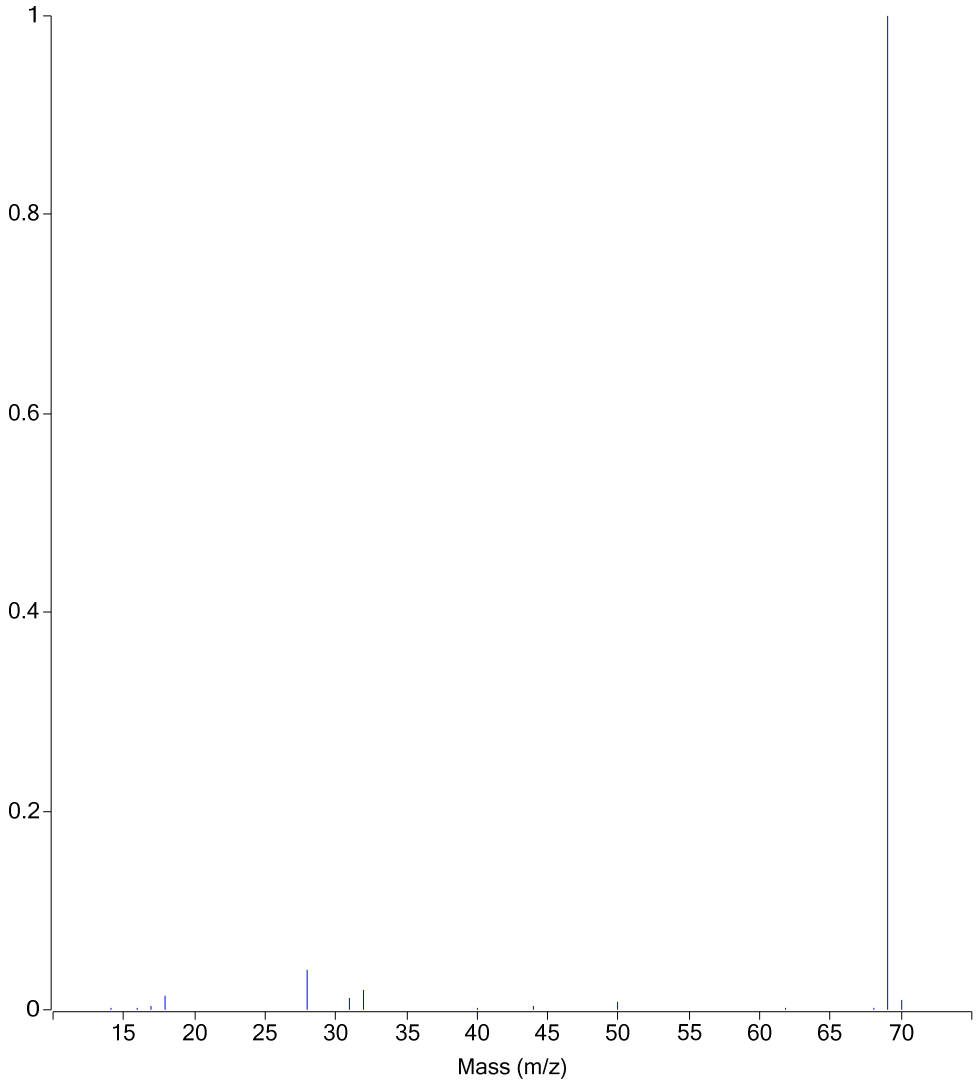
Repeller maximum 35 volts using ion 219; Gain Factor 0.5844

Mass Gain Values(Scan Speed): -333(3) -318(2) -319(1) -253(0) -166(FS1) -51(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.4	119.4	119.4	119.4	119.4	119.4	119.4
Entrance Lens Offset	13.6	13.6	13.6	13.6	13.6	13.6	13.6

597x Air and Water Check

Instrument: BCCL GCMS #3
Mon Jan 06 09:10:12 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.43	Water%	(counts=13310)
28/69 =	4.01	Nitrogen%	(counts=37424)
32/69 =	2.02	Oxygen%	(counts=18824)
44/69 =	0.36	Carbon Dioxide%	(counts=3375)
28/18 =	281.17	Nitrogen/Water%	

Instrument Name : BCCL GCMS #3		
DC Polarity : Positive		
Filament 1		
BasePeak should be 69 or 219		OK
Position of mass 69	69.00	OK
Position of mass 219	219.10	OK
Position of mass 502	502.20	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	220.09	OK
Position of isotope mass 503	503.18	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%)	4.31	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.65	OK
Ratio of 219 to 69 should be > 40% and is	63.65	OK
Ratio of 502 to 69 should be > 2.4% and is	4.38	OK
Mass 69 Precursor (<= 3%)	0.13	OK
Mass 219 Precursor (<= 6%)	0.46	OK
Mass 502 Precursor (<= 12%)	1.88	OK

597x Air and Water Check

Mon Jan 06 09:19:39 2025	Instrument: BCCL GCMS #3
D:\MASSHUNTER\GCMS\1\5977\atune.u	US1329M205

Testing for a leak in the system

Ratio of 18 to 69 (<20%)	0.98	OK
Ratio of 28 to 69 (<10%)	3.46	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

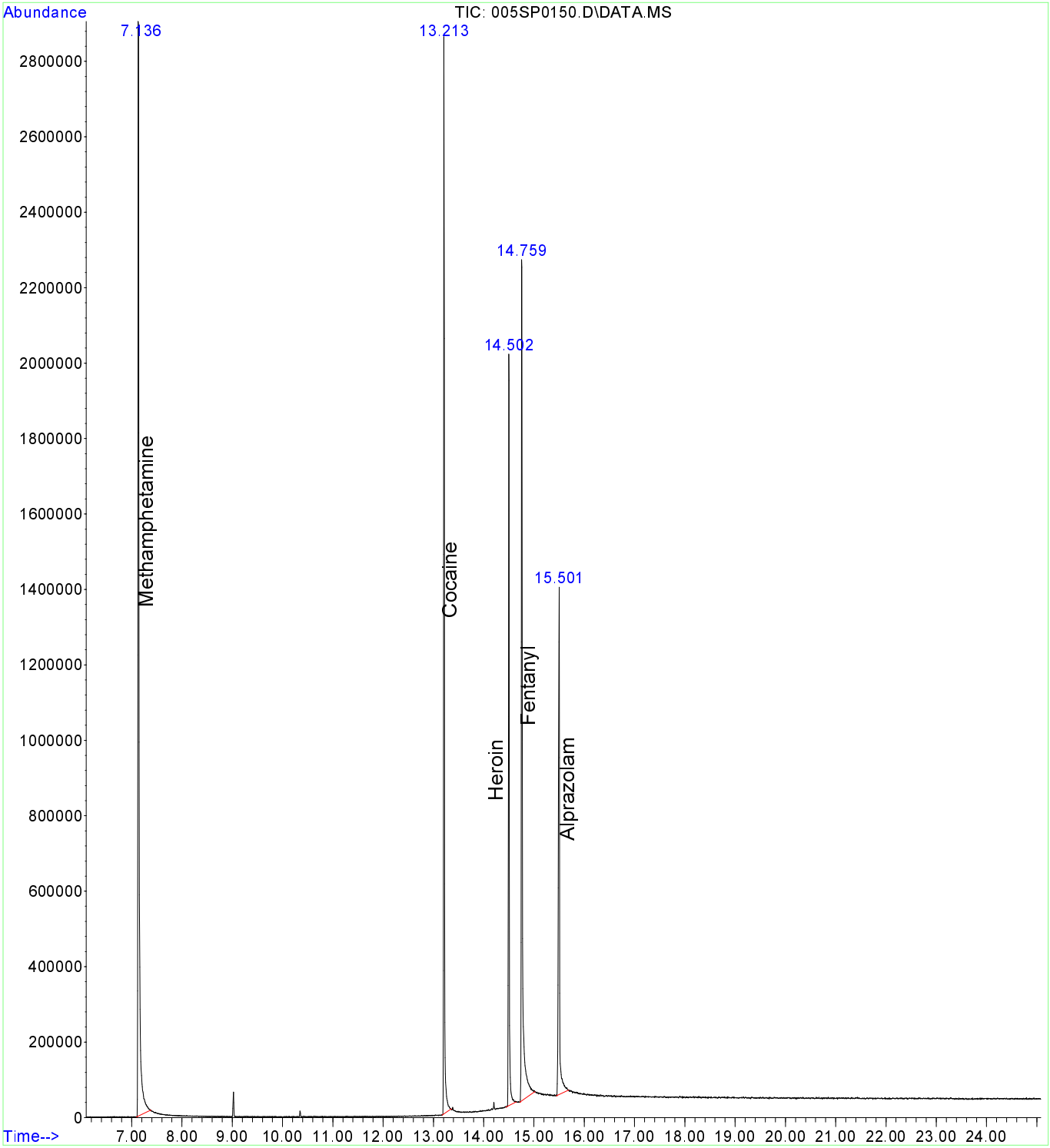
BCCL GC/MS #3
Retention Times for the Week of:

01/06/2025 - 01/12/2025

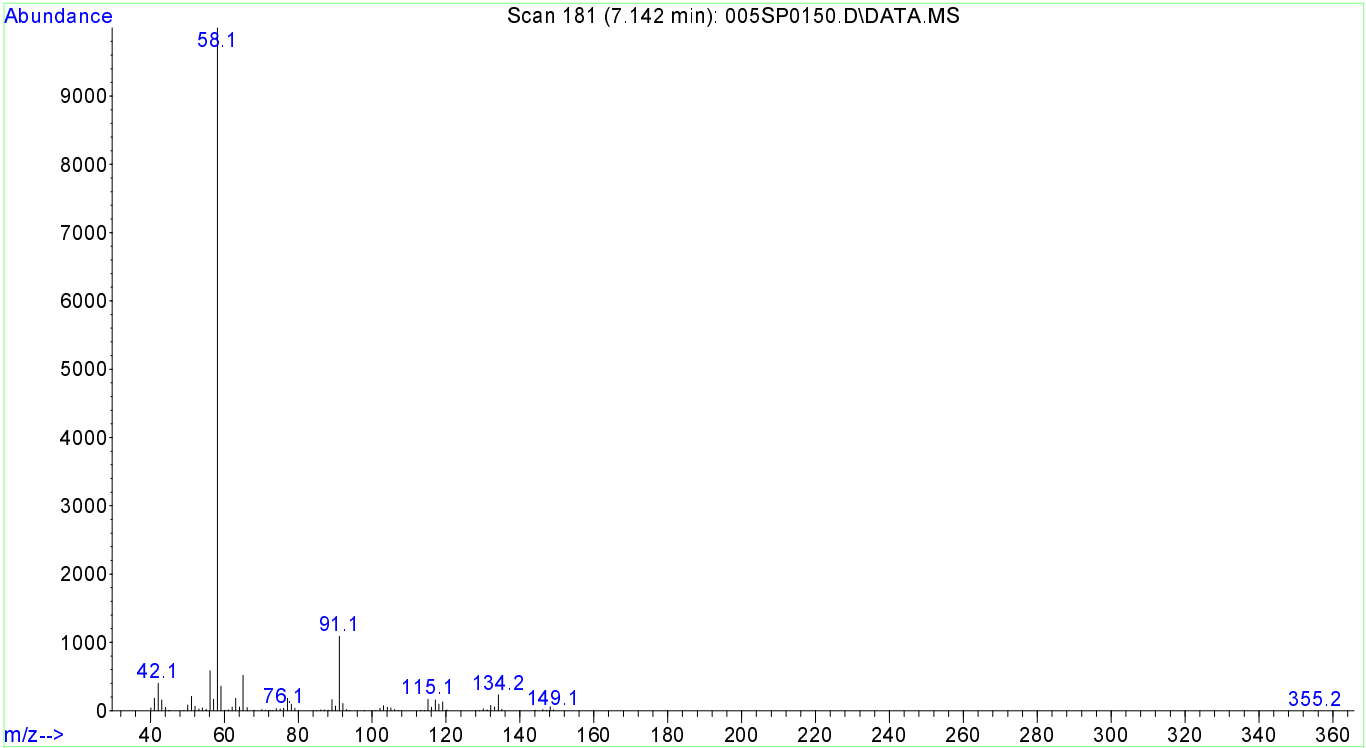
[x] **Tune: _DN/DS__01/06/2025 - Autotune_____**

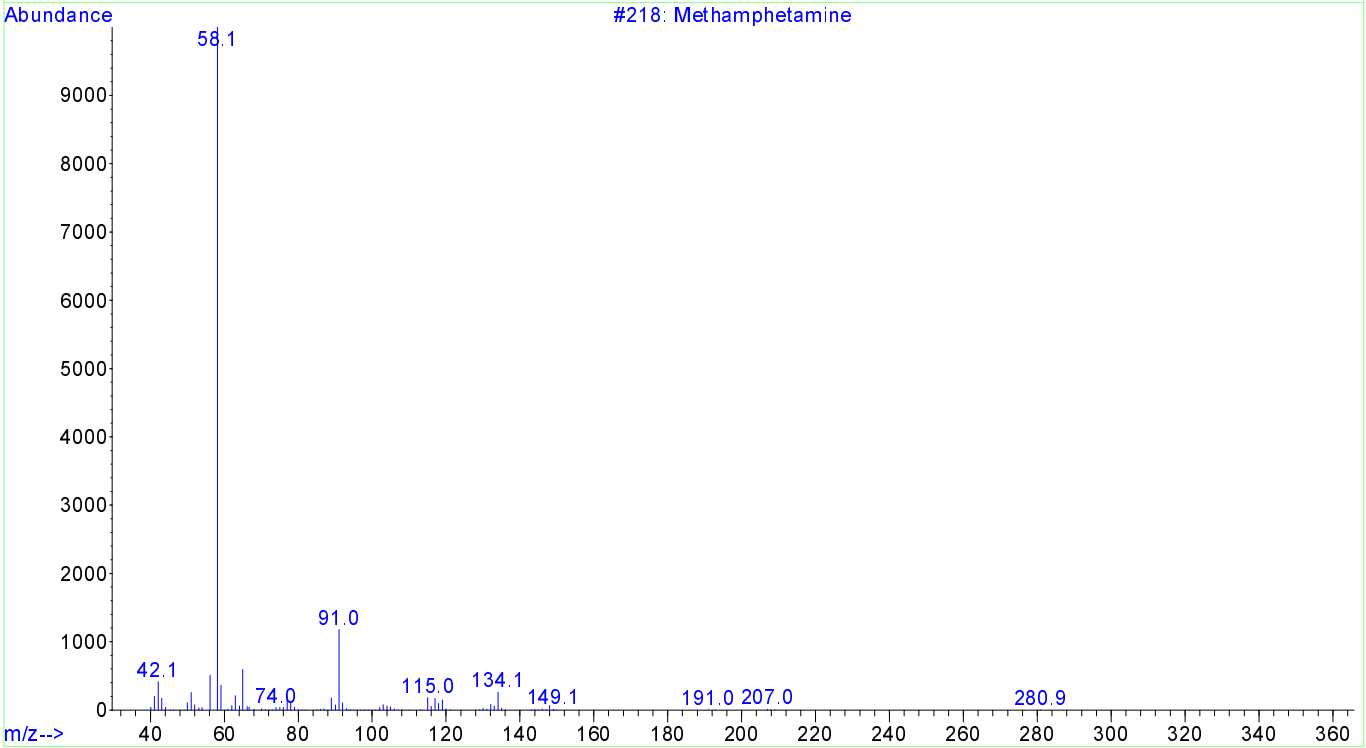
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.136	7.064	7.207
Cocaine	R-24-060	DrugTest35	13.213	13.080	13.345
Heroin	R-24-060	DrugTest35	14.502	14.356	14.647
Fentanyl	R-24-060	DrugTest35	14.759	14.611	14.906
Alprazolam	R-24-060	DrugTest35	15.501	15.345	15.656

```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\010625\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 06 Jan 2025  10:43 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

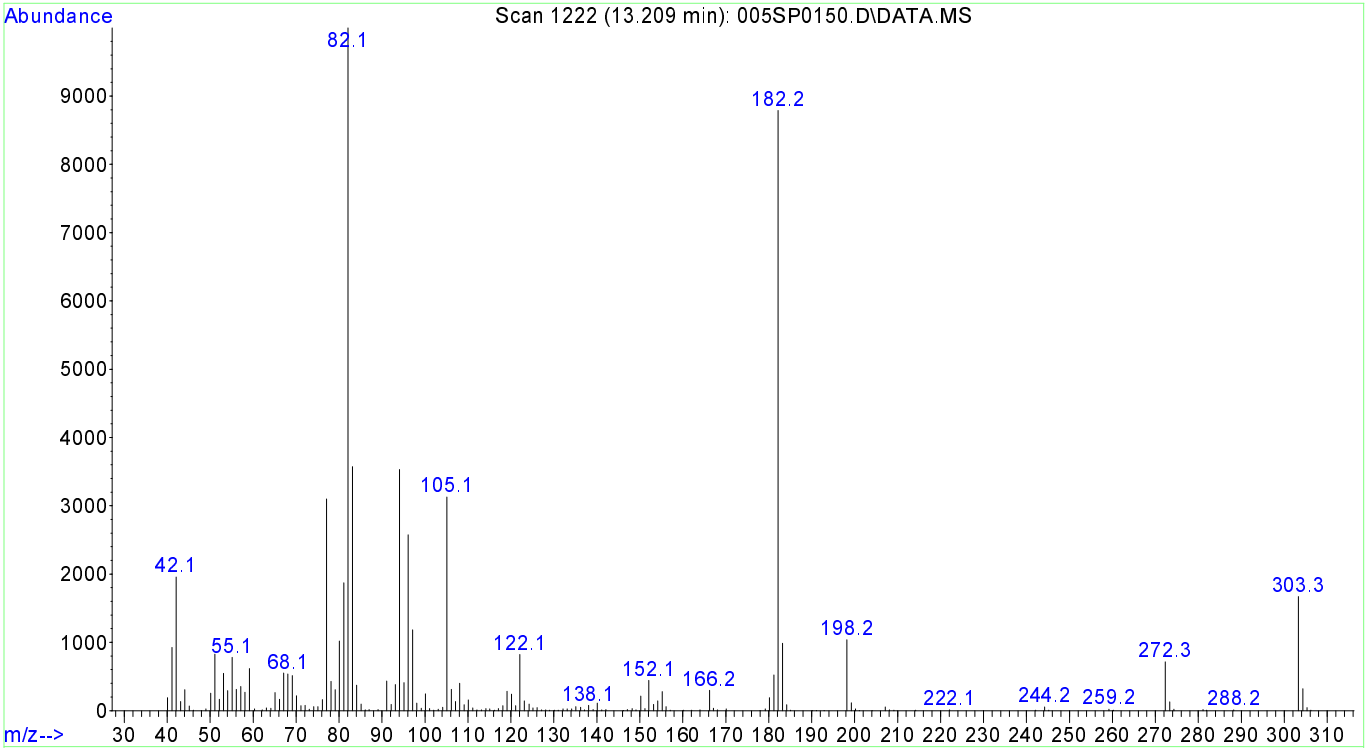


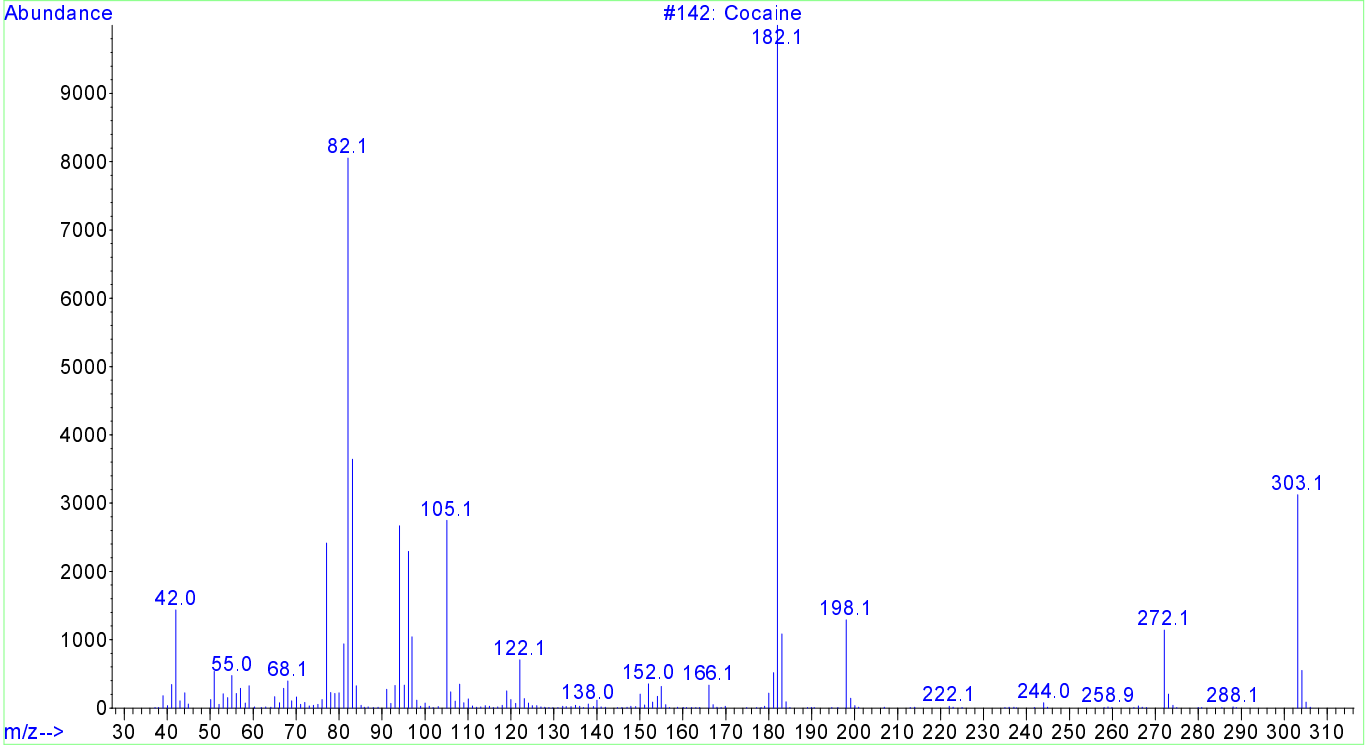
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\010625\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 06 Jan 2025 10:43 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



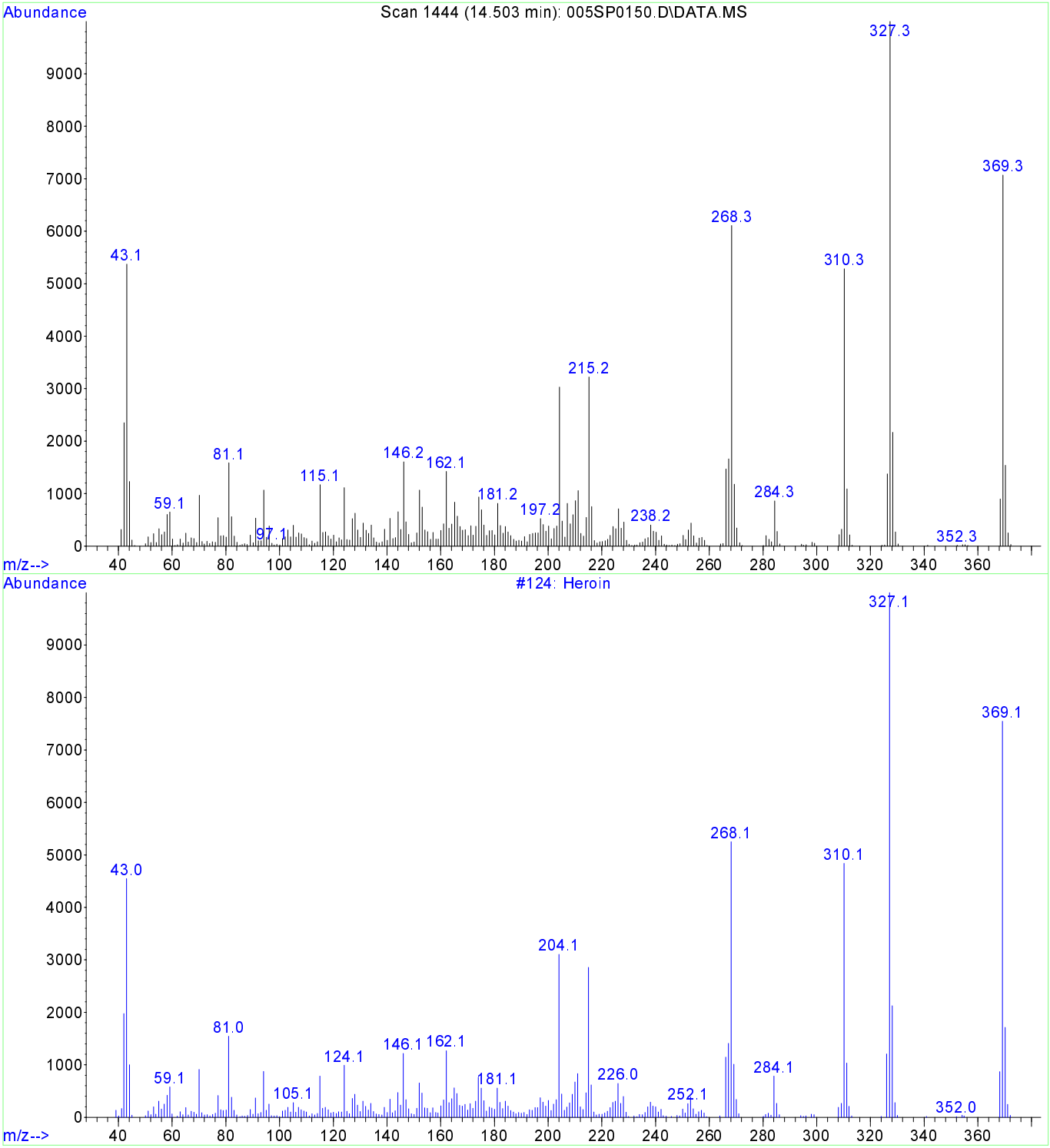


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...          Data\010625\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 06 Jan 2025  10:43 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

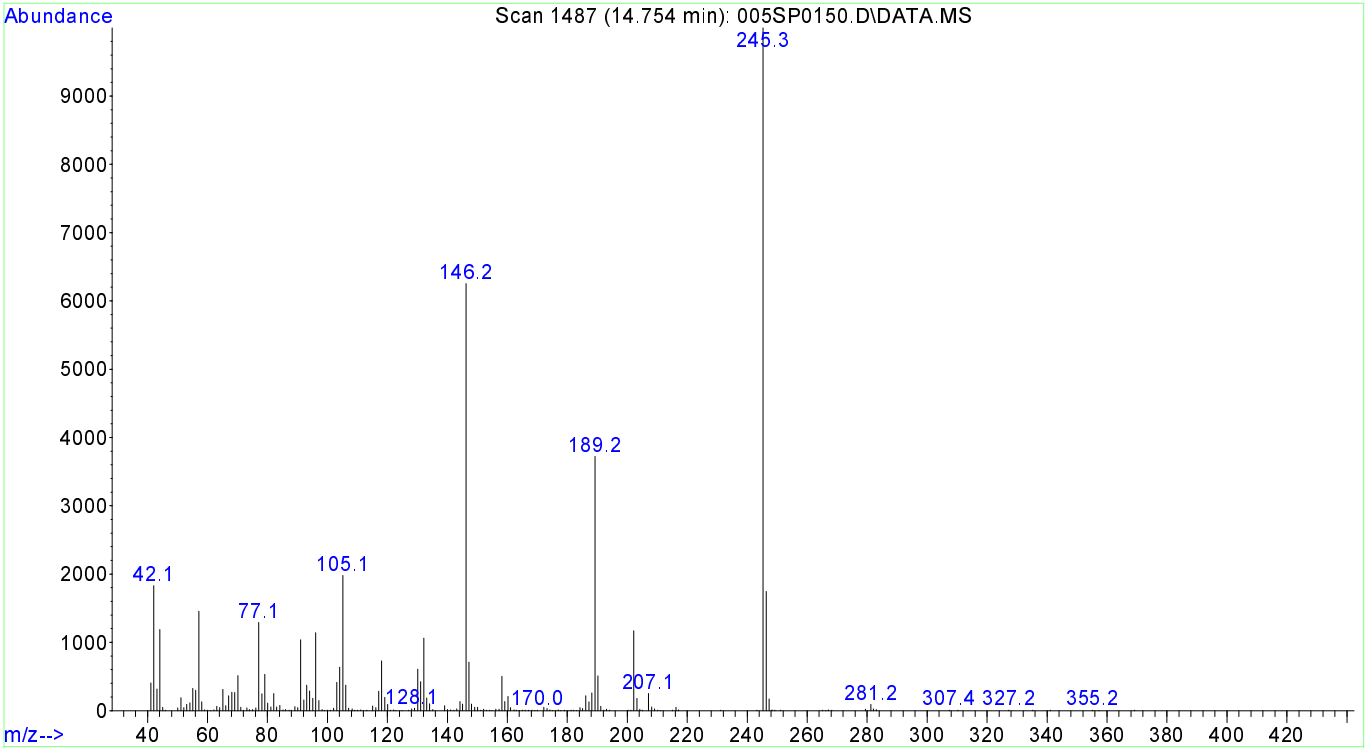


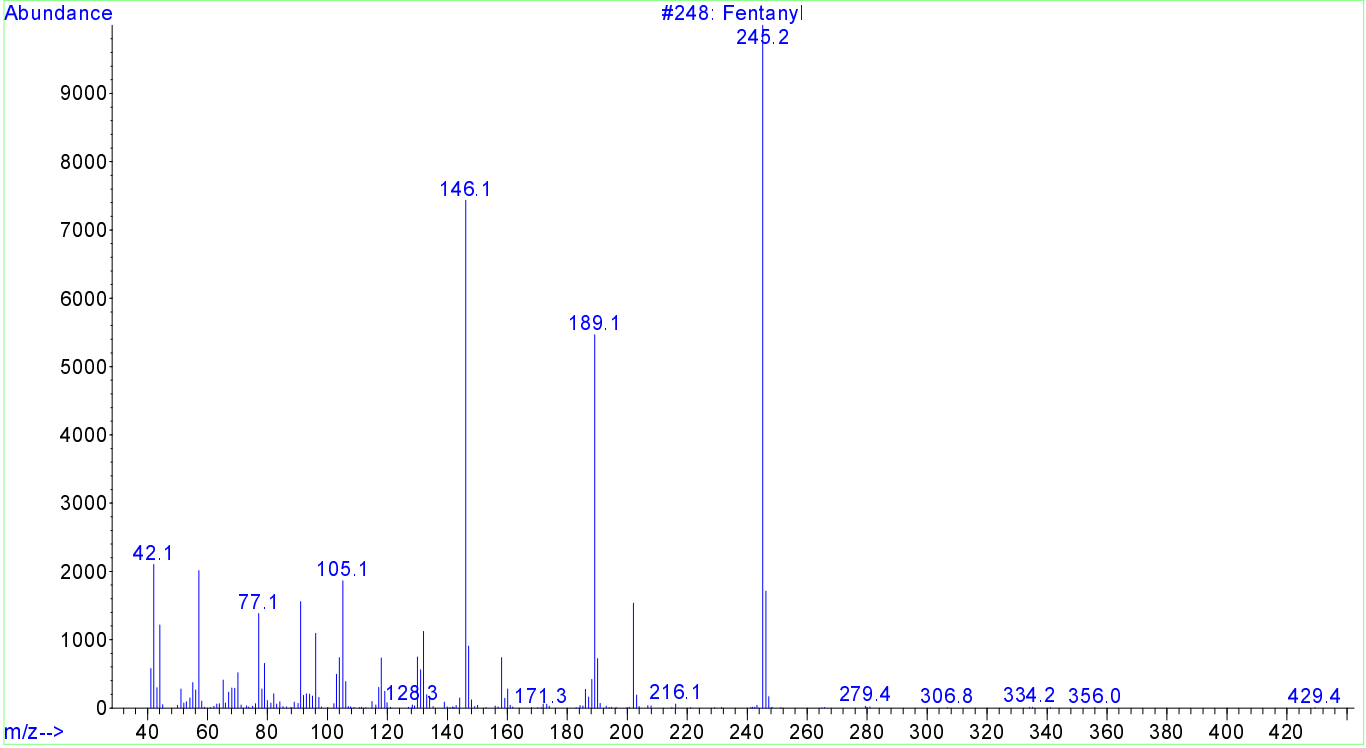


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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\010625\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 06 Jan 2025  10:43 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

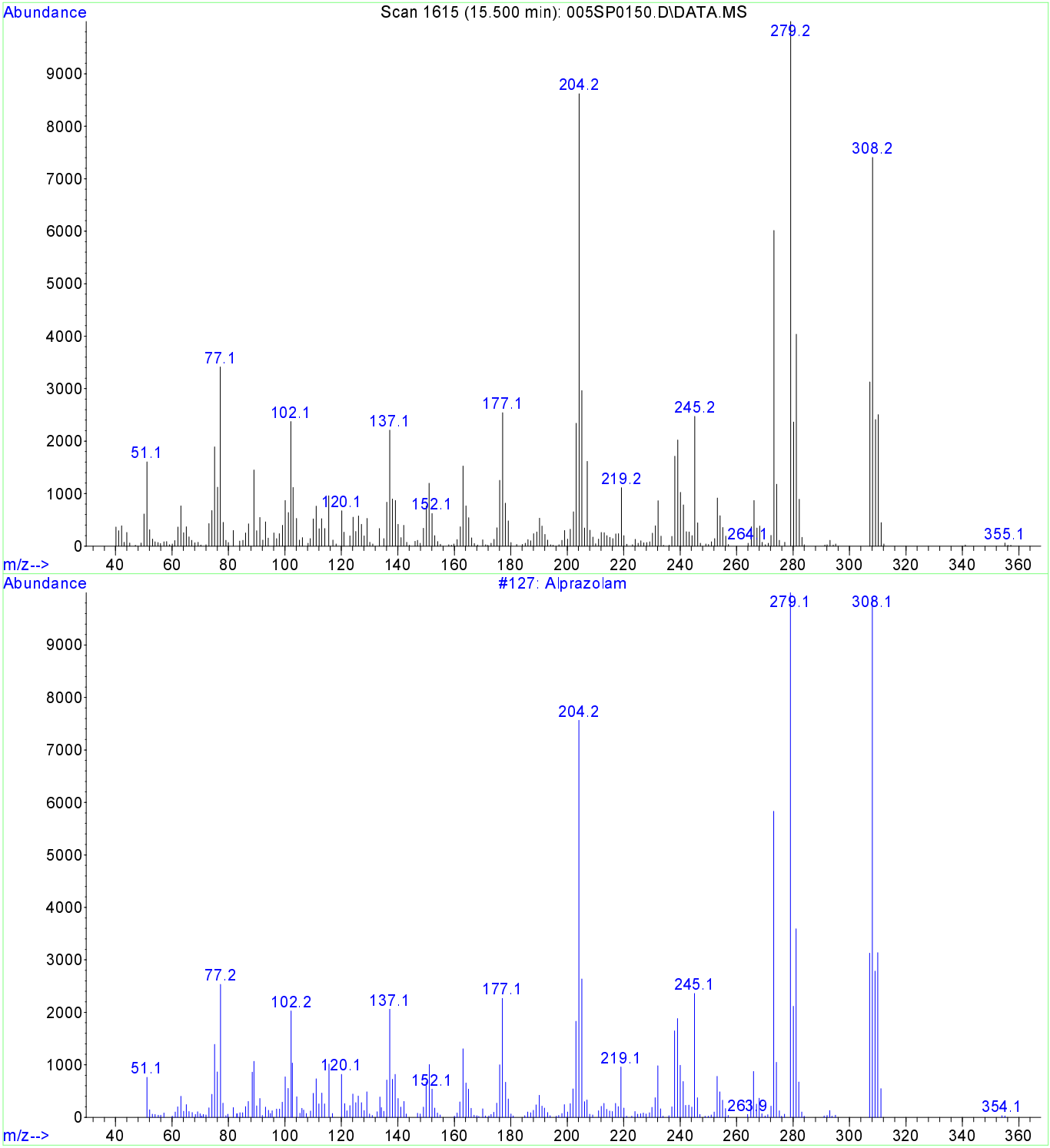


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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\010625\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 06 Jan 2025  10:43 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

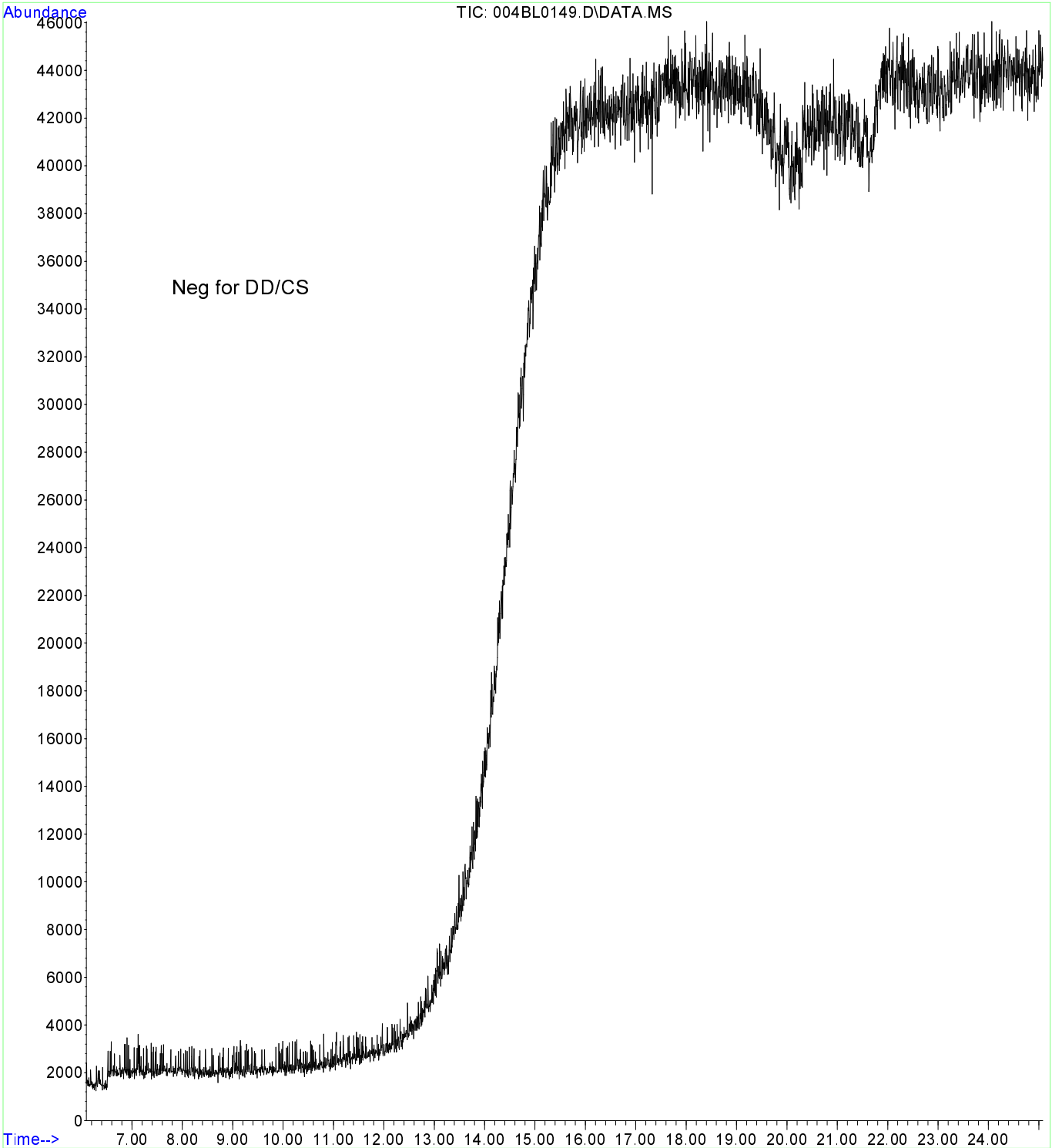




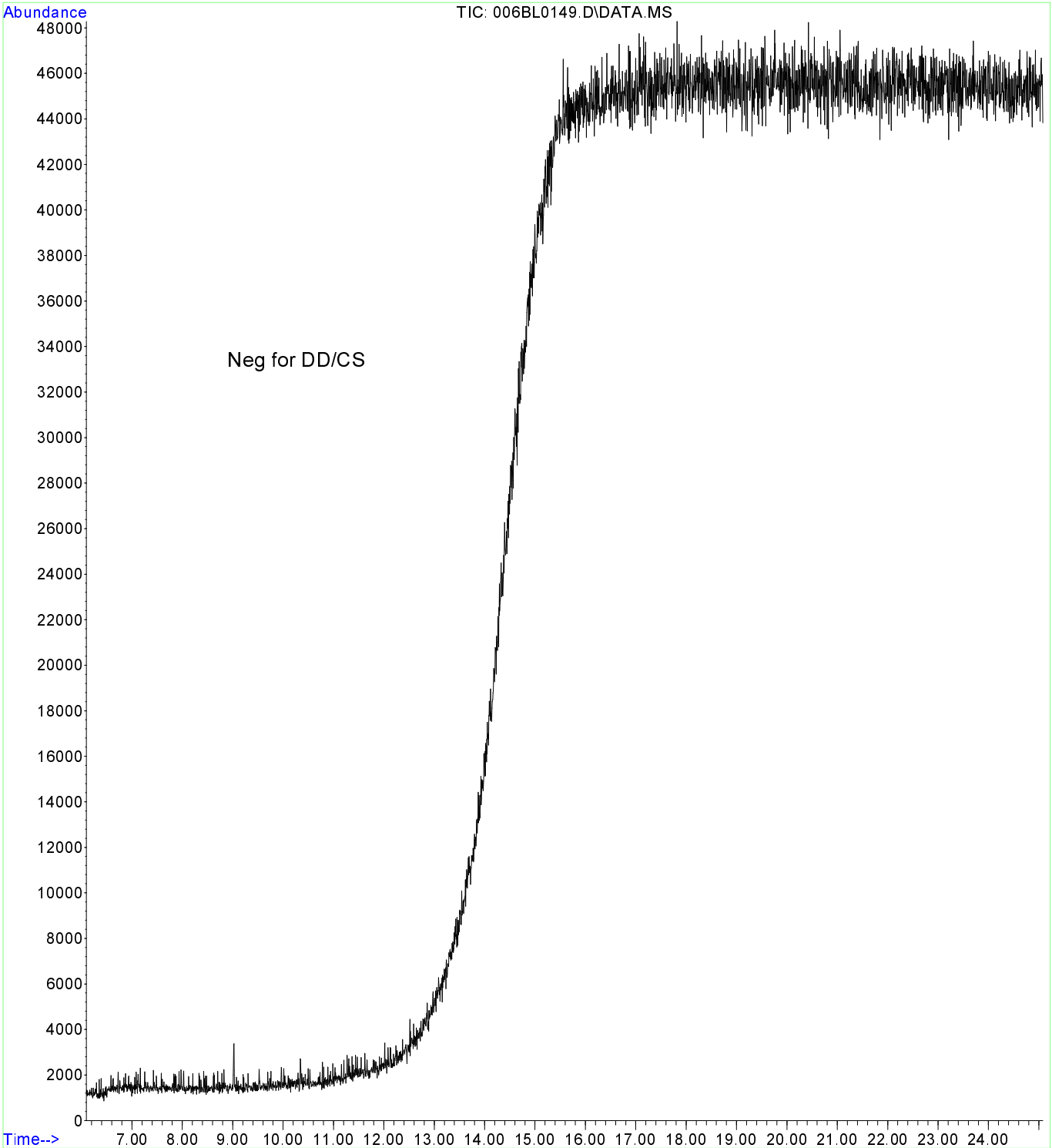
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\010625\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 06 Jan 2025  10:43 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```



File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\010625\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 06 Jan 2025 10:14 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060) 000002666
Misc Info : 000002666



```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\010625\006BL0149.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 06 Jan 2025  11:11 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY           000002666
Misc Info  :                                                000002666
```

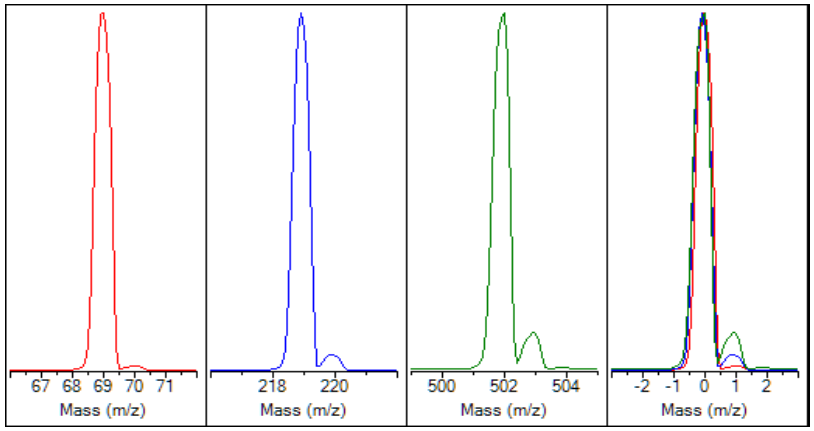


First attempt at autotune on January 13, 2025 - due to 503 isotope position being too low, autotune will be reattempted for a second time - Air/Water check is OK - DS

Autotune - 5977

1/13/2025 8:33:39 AM (UTC-6:00) BCCL GCMS #3

D:\MASSHUNTER\GCMS\1\5977\atune.u US1329M205



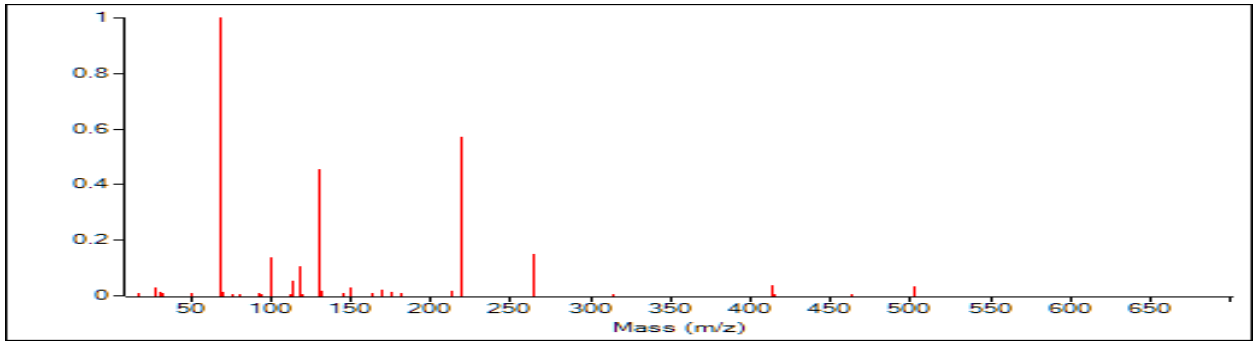
Ion Polarity	Pos	Mass Gain	-363
Emission	34.6	Mass Offset	-36
Electron Energy	70.0	Amu Gain	1679
Filament	1	Amu Offset	119.44
Repeller	34.90	Width219	-0.002
Ion Focus	89.3	DC Polarity	Pos
Entrance Lens	12.6	HED Enable	On
Ent Lens Offset	13.73	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Mass	Abund	Rel Abund	Pw50
69.00	428,399	100.0%	0.61
218.90	249,694	58.3%	0.61
502.00	13,896	3.2%	0.60

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.47e-06

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	89	69.00	421,440	1,198,505



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	421,440	100.00	70.00	4,709	1.12
218.90	240,192	56.99	219.90	10,400	4.33
502.70	1,557	0.37	502.70	1,557	100.00

position too low

Air/Water Check: H20 ~0.8% N2 ~2.9% O2 ~0.9% CO2 ~0.2% N2/H20 ~378.6%

Column(1) Flow: 0.80 Column(2): 0.00 ml/min Interface Temp: 280

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 58952.281

Repeller maximum 35 volts using ion 219; Gain Factor 0.5895

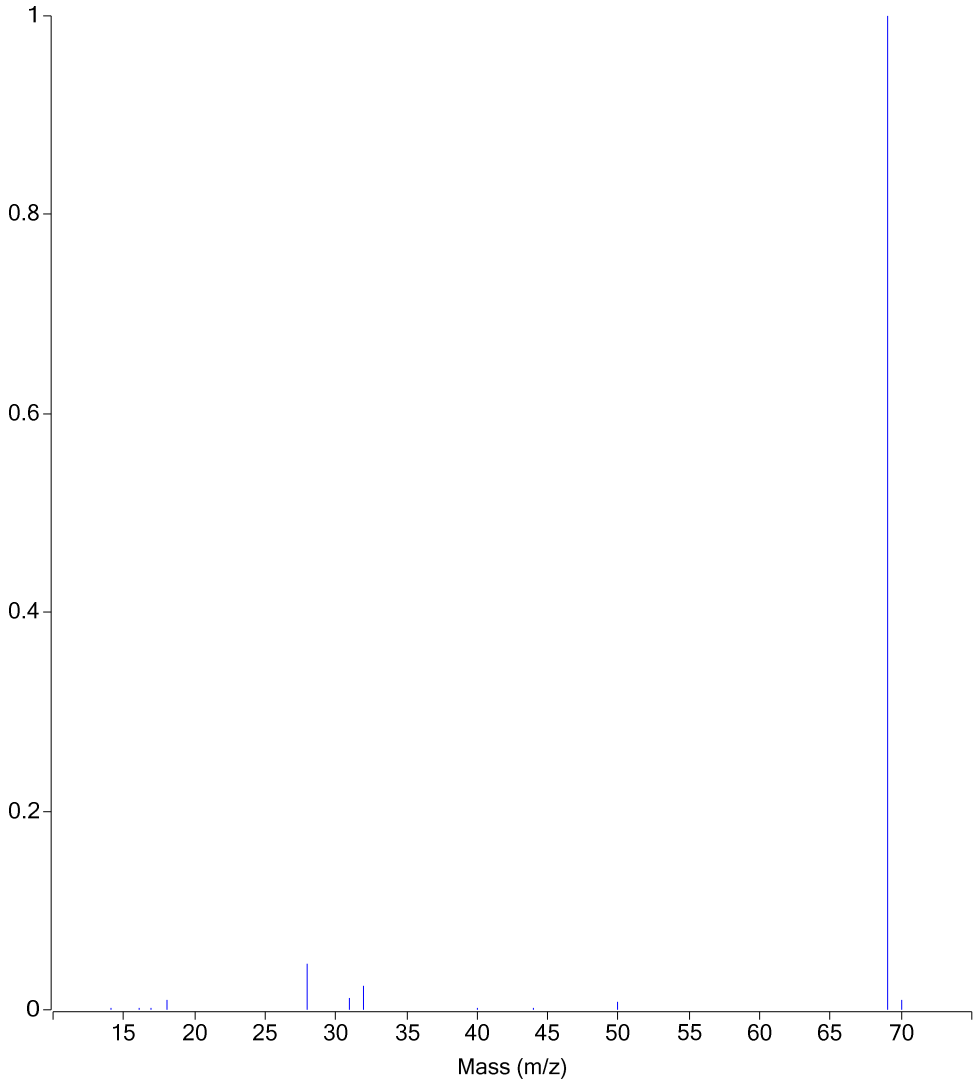
Mass Gain Values(Scan Speed): -385(3) -391(2) -369(1) -418(0) -461(FS1) -573(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.4	119.4	119.4	119.4	119.4	119.4	119.4
Entrance Lens Offset	13.7	13.7	13.7	13.7	13.7	13.7	13.7

597x Air and Water Check

OK

Instrument: BCCL GCMS #3
Mon Jan 13 08:28:41 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.05	Water%	(counts=9244)
28/69 =	4.57	Nitrogen%	(counts=40464)
32/69 =	2.46	Oxygen%	(counts=21784)
44/69 =	0.29	Carbon Dioxide%	(counts=2604)
28/18 =	437.73	Nitrogen/Water%	

Instrument Name : BCCL GCMS #3
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	501.80	OK
Position of isotope mass 70	69.99	OK
Position of isotope mass 220	219.89	OK
Position of isotope mass 503	502.79	Low
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%)	4.34	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.03	OK
Possible causes include: Dirty ion source		
Ratio of 219 to 69 should be > 40% and is	57.61	OK
Ratio of 502 to 69 should be > 2.4% and is	3.40	OK
Mass 69 Precursor (<= 3%)	0.13	OK
Mass 219 Precursor (<= 6%)	0.34	OK
Mass 502 Precursor (<= 12%)	1.54	OK

Positioning is too low

597x Air and Water Check
Mon Jan 13 08:38:11 2025 Instrument: BCCL GCMS #3
D:\MASSHUNTER\GCMS\1\5977\atune.u US1329M205

Testing for a leak in the system

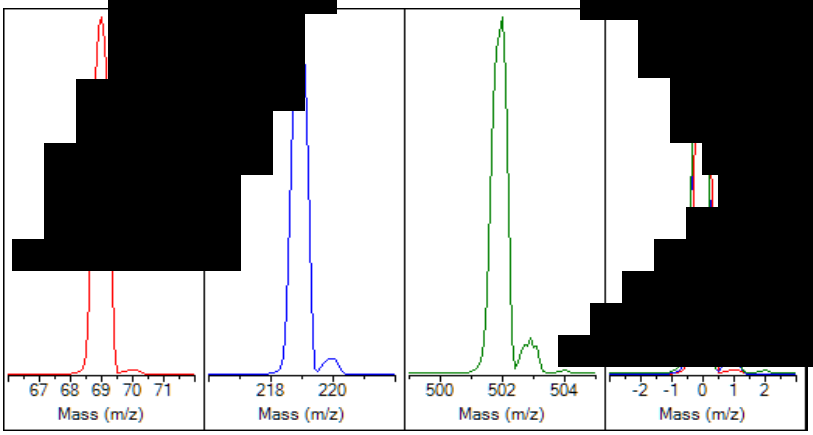
Ratio of 18 to 69 (<20%)	0.74	OK
Ratio of 28 to 69 (<10%)	3.74	OK
Electron Multiplier Voltage	1818	OK

One or more specifications was out of range.
Please correct before continuing.

Failure of one or more tests may be caused by
selecting the wrong DC Polarity.
Please verify that the correct DC Polarity has been set
by removing the detector cover and checking the label
at the top of the EID.

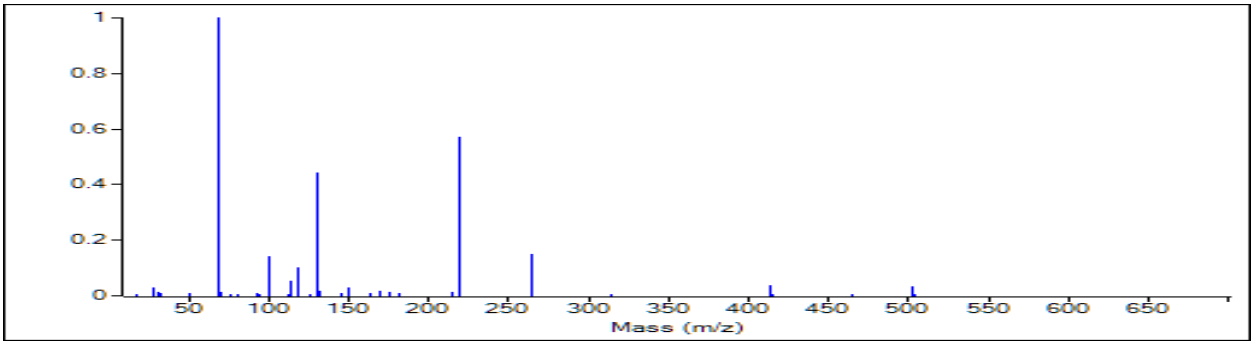
The 2nd attempt at tuning was successful; however, the upload of the tune documents (autotune and tune evaluation) was corrupted and the imaged copy of the successful autotune and its evaluation was not captured in this document (pages 4 and 5). Due to these images not being captured, a generate report function was initiated that shows the tune parameters that were run on the morning of January 13 and the instrument using those parameters to "check" those parameters. After this generate report was achieved, an addition tune evaluation was run to show that the tune was indeed OK - DS

[redacted]



[redacted]

[redacted]



[redacted]

[redacted]

UU

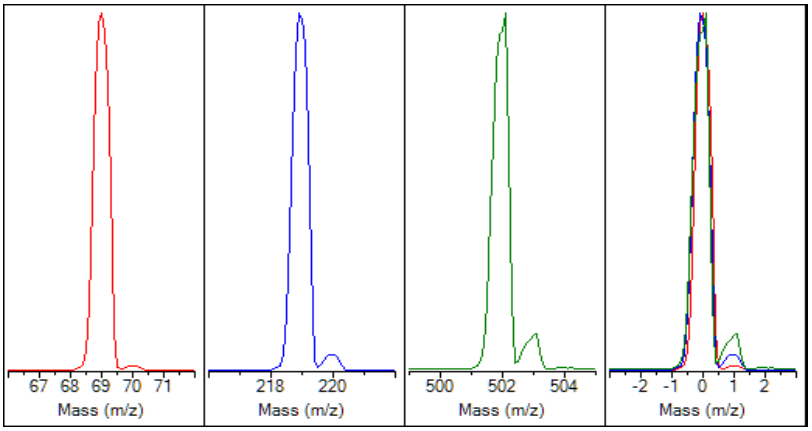


Generate tune report after successful tune document was corrupted and did not image

Tune Report - 5977

1/13/2025 10:08:39 AM (UTC-6:00) BCCL GCMS #3

D:\MassHunter\GCMS\1\5977\atune.u US1329M205



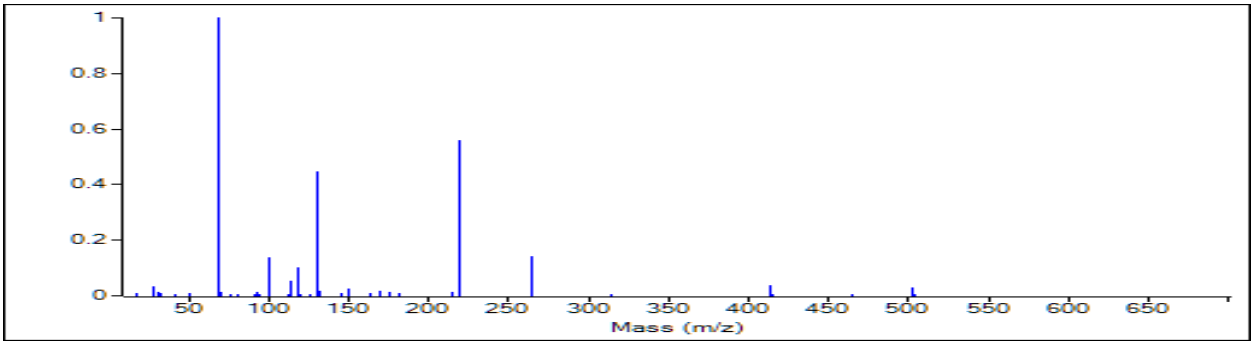
Ion Polarity	Pos	Mass Gain	-364
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1679
Filament	1	Amu Offset	119.44
Repeller	34.90	Width219	-0.002
Ion Focus	85.4	DC Polarity	Pos
Entrance Lens	10.1	HED Enable	On
Ent Lens Offset	13.90	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.86e-06

Mass	Abund	Rel Abund	Pw50
69.00	511,076	100.0%	0.60
218.90	289,003	56.5%	0.60
502.10	16,004	3.1%	0.59

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	91	69.00	488,320	1,368,889



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	488,320	100.00	70.00	5,240	1.07
219.00	271,808	55.66	220.00	11,359	4.18
502.20	14,425	2.95	503.20	1,557	10.79

Air/Water Check: H20 ~0.7% N2 ~3.1% O2 ~1.0% CO2 ~0.1% N2/H20 ~438.5%

Column(1) Flow: 0.80 Column(2): 0.00 ml/min Interface Temp: 280

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 13624.387

Repeller maximum 35 volts using ion 219; Gain Factor 0.1362

Mass Gain Values(Scan Speed): -335(3) -321(2) -324(1) -247(0) -186(FS1) -63(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.4	119.4	119.4	119.4	119.4	119.4	119.4
Entrance Lens Offset	13.9	13.9	13.9	13.9	13.9	13.9	13.9

Tune evaluation after generate report tuning

System Verification - Tune (Detector Optimization) Portion

Instrument Name : BCCL GCMS #3		
DC Polarity : Positive		
Filament 1		
BasePeak should be 69 or 219		OK
Position of mass 69	69.00	OK
Position of mass 219	219.01	OK
Position of mass 502	502.20	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	220.03	OK
Position of isotope mass 503	503.18	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%)	4.34	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.90	OK
Ratio of 219 to 69 should be > 40% and is	55.40	OK
Ratio of 502 to 69 should be > 2.4% and is	2.98	OK
Mass 69 Precursor (<= 3%)	0.11	OK
Mass 219 Precursor (<= 6%)	0.28	OK
Mass 502 Precursor (<= 12%)	2.23	OK

597x Air and Water Check

Mon Jan 13 10:12:35 2025	Instrument: BCCL GCMS #3
D:\MASSHUNTER\GCMS\1\5977\atune.u	US1329M205

Testing for a leak in the system

Ratio of 18 to 69 (<20%)	0.57	OK
Ratio of 28 to 69 (<10%)	3.44	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

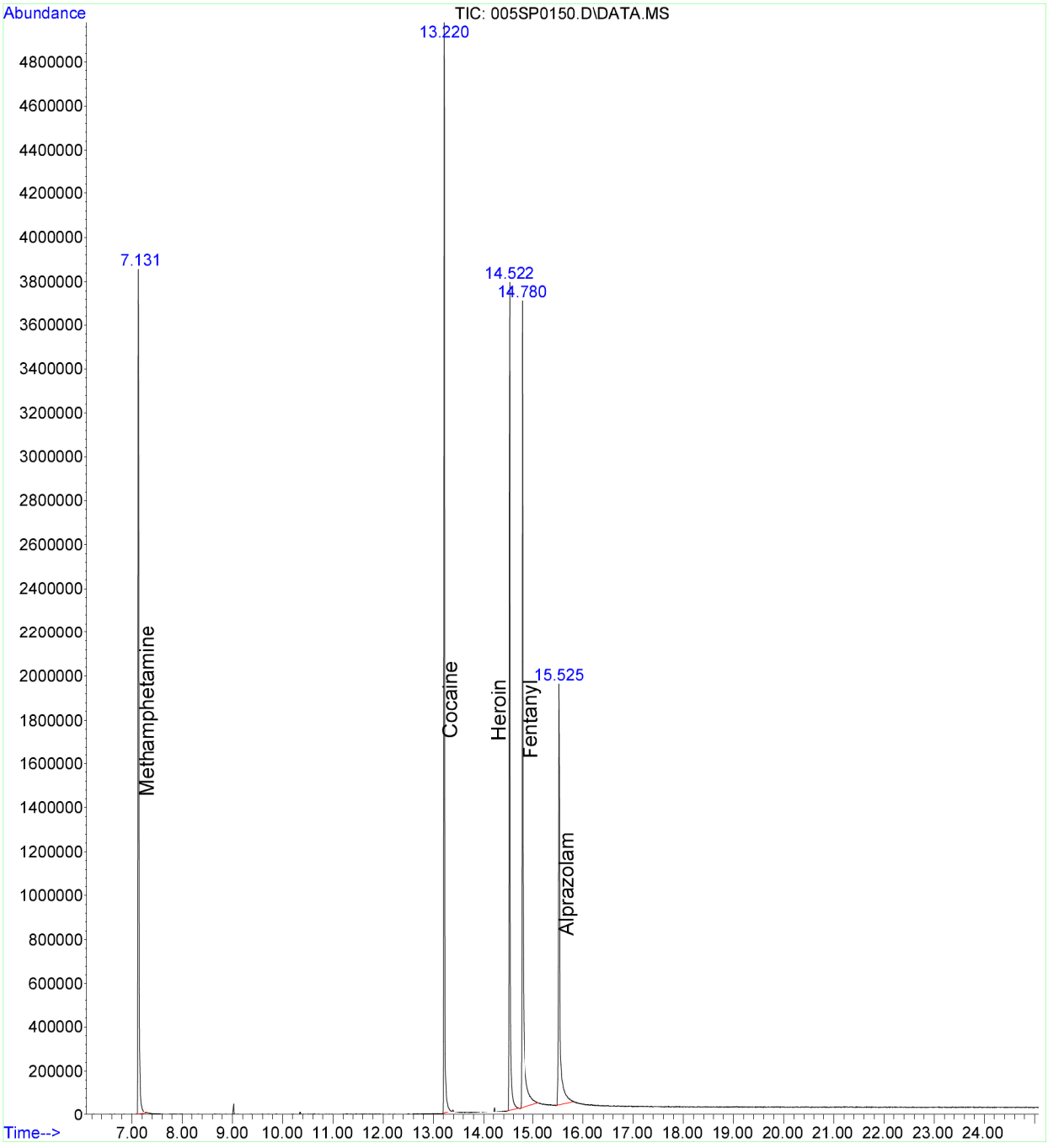
BCCL GC/MS #3
Retention Times for the Week of:

01/13/2025 - 01/19/2025

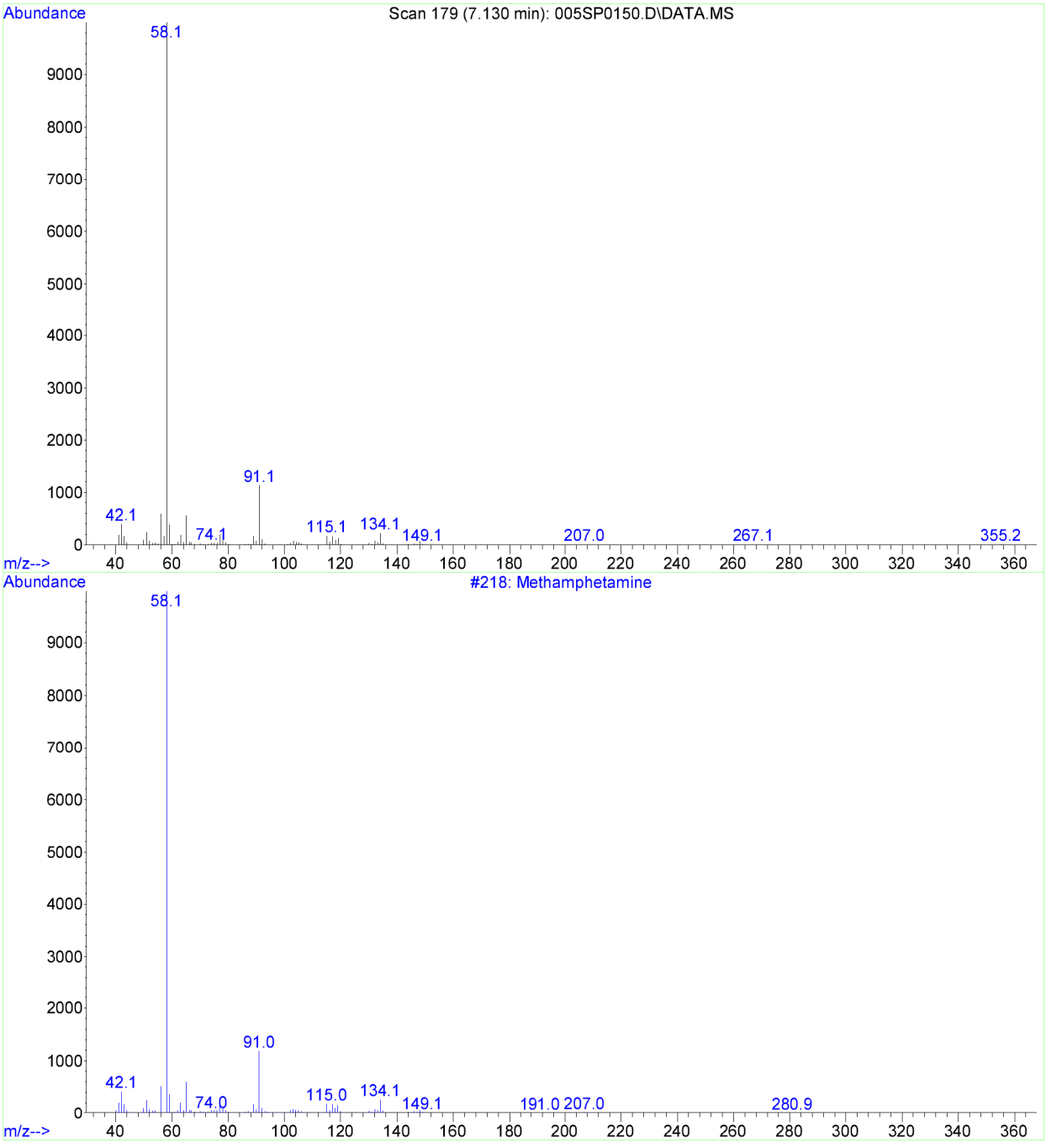
[x] **Tune: DS 01/13/2025 - Autotune**

Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.131	7.059	7.202
Cocaine	R-24-060	DrugTest35	13.220	13.087	13.352
Heroin	R-24-060	DrugTest35	14.522	14.376	14.667
Fentanyl	R-24-060	DrugTest35	14.780	14.632	14.927
Alprazolam	R-24-060	DrugTest35	15.525	15.369	15.680
Sildenafil	R-22-029	DrugTest35	21.780	21.562	21.997
Tadalafil	R-22-030	DrugTest35	19.846	19.647	20.044

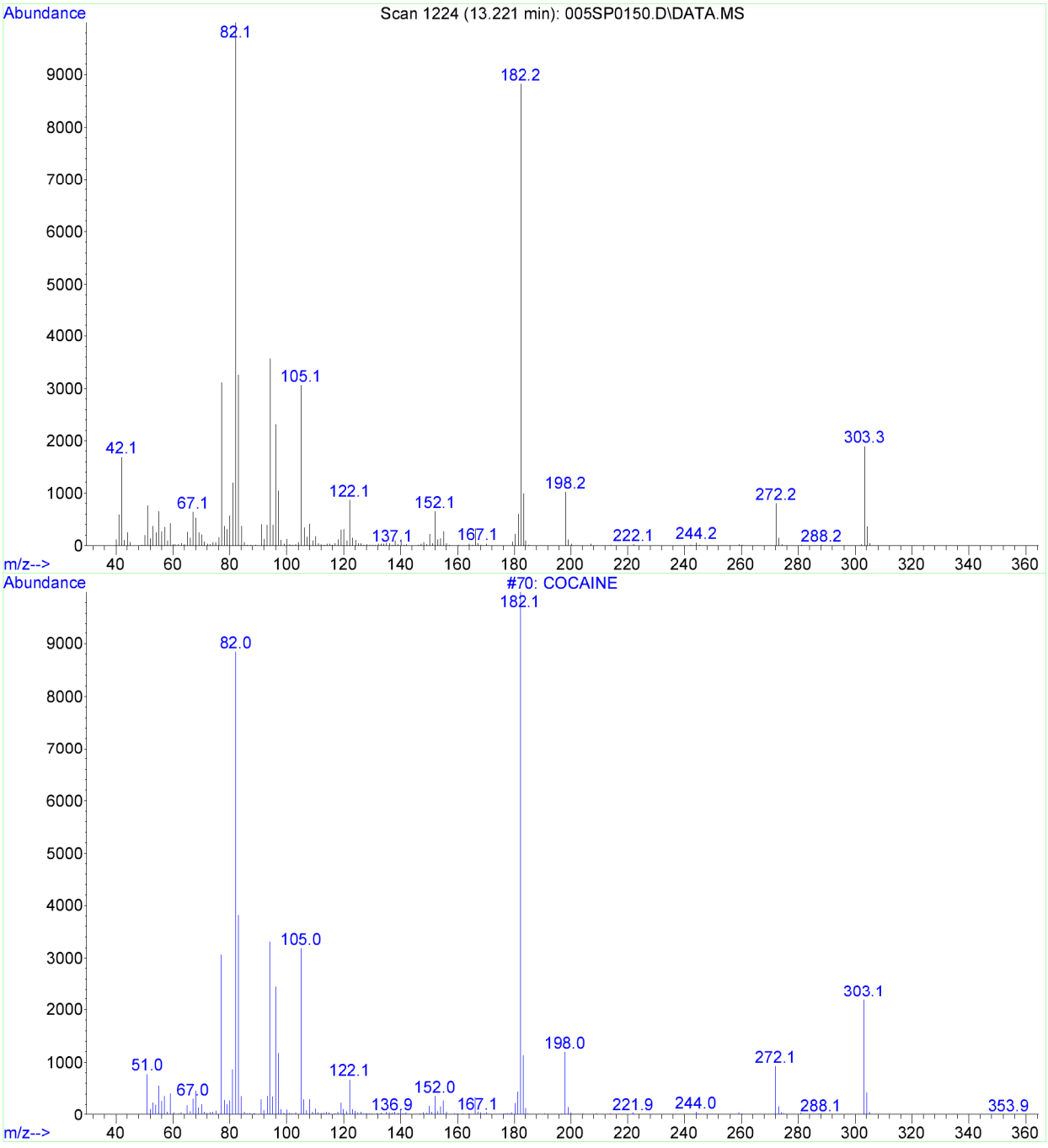
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\011325\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 13 Jan 2025  10:15 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



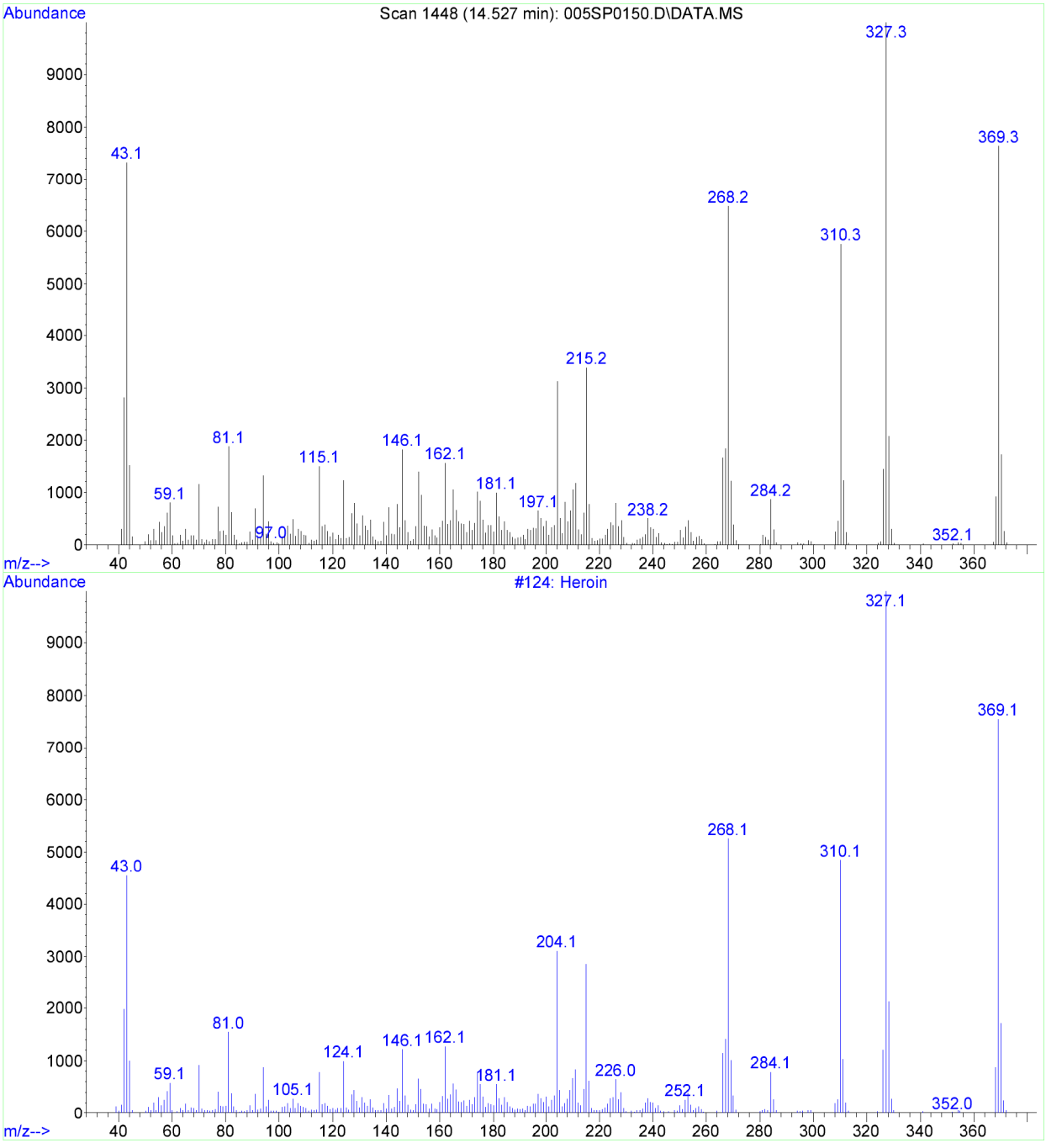
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...          Data\011325\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 13 Jan 2025  10:15 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



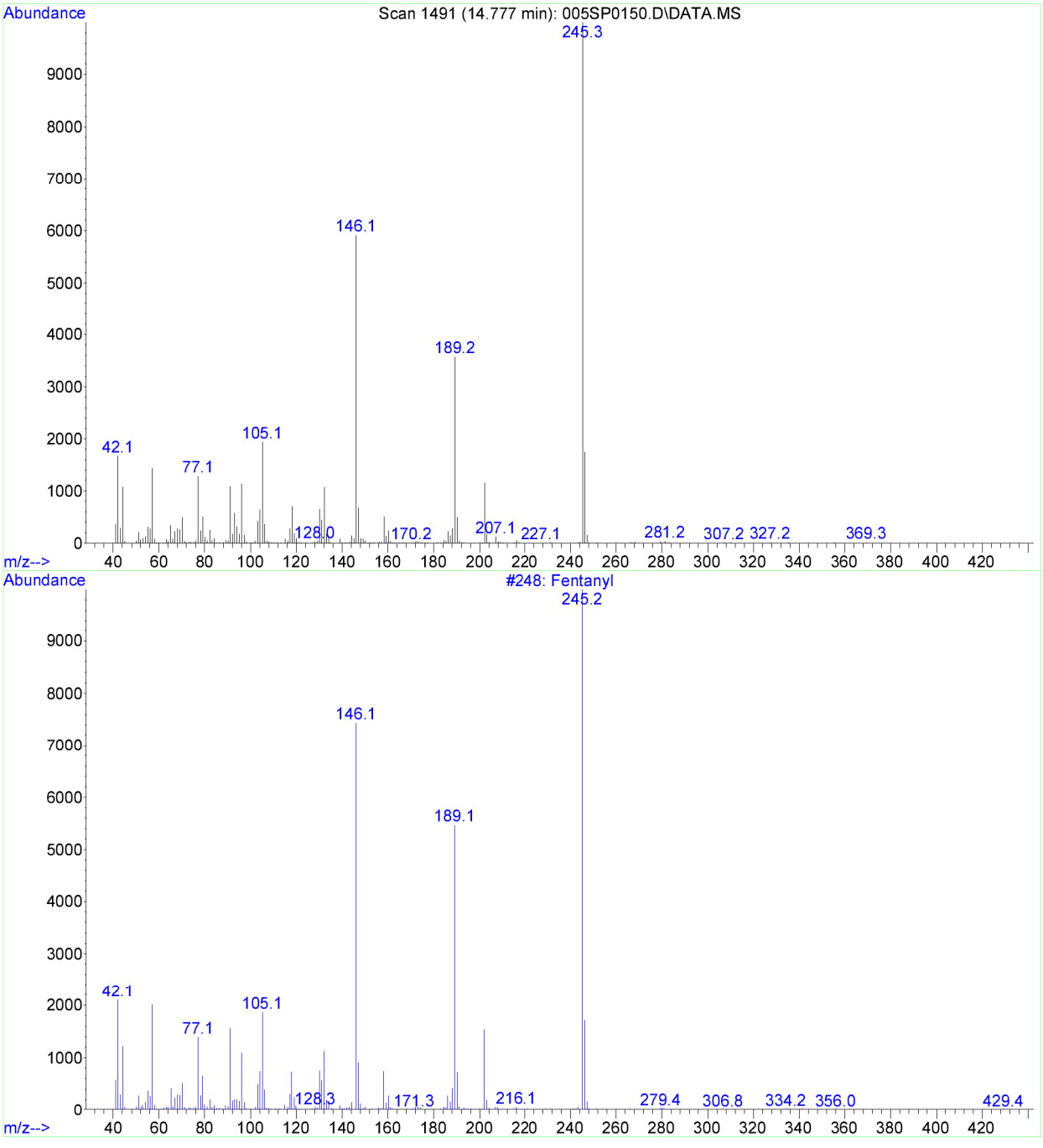
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Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 13 Jan 2025  10:15 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
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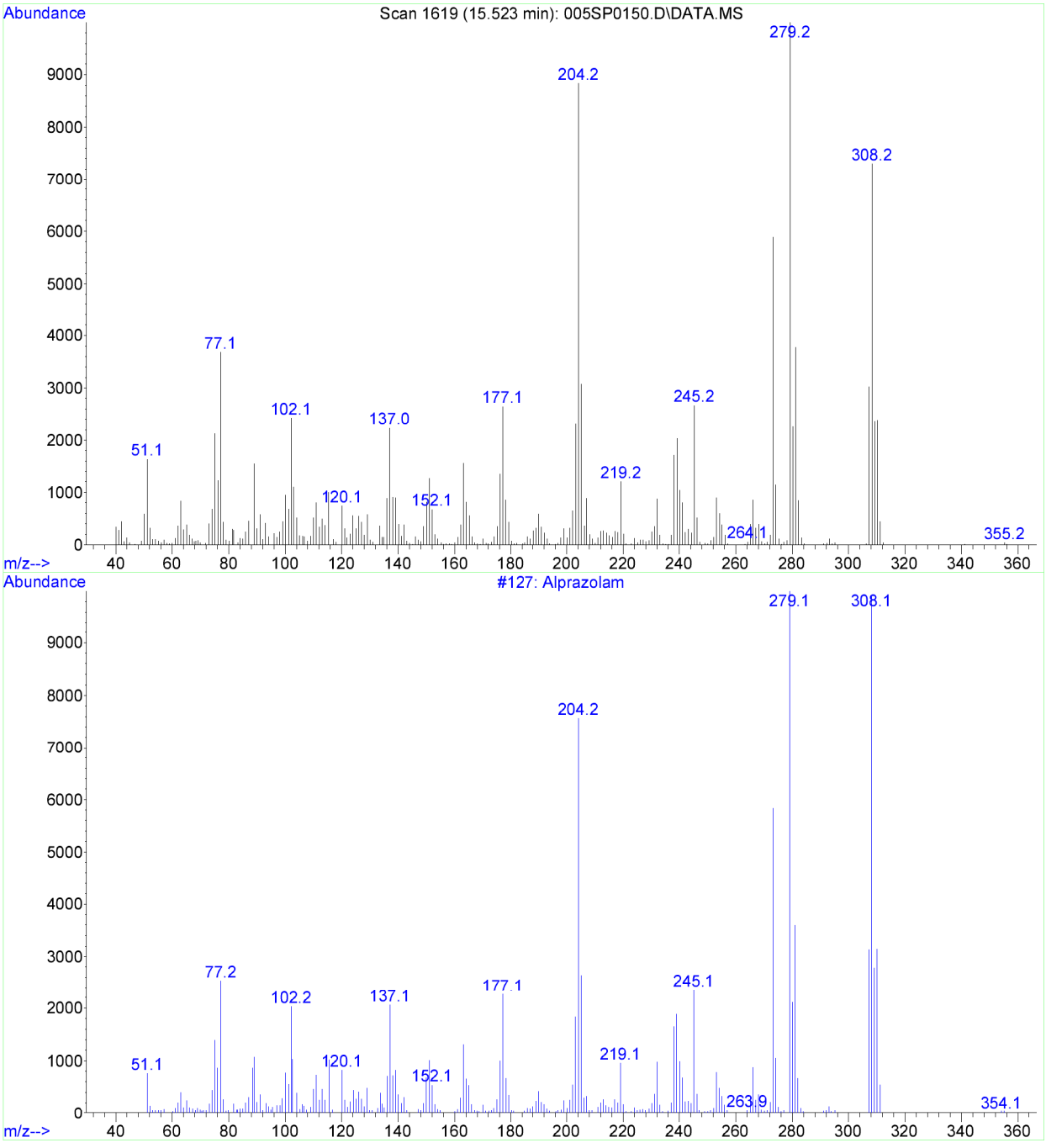
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... Data\011325\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 13 Jan 2025 10:15 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



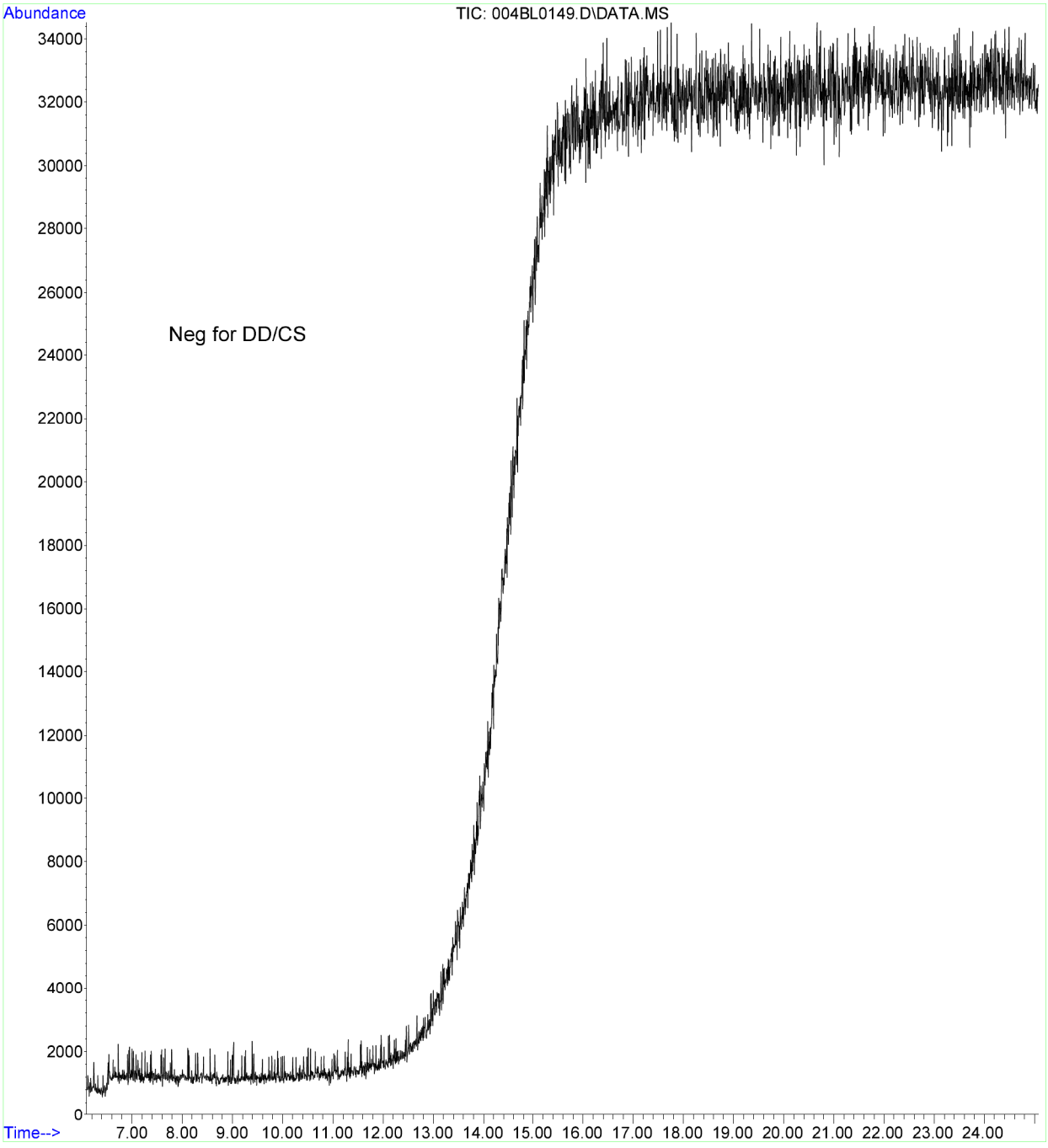
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... Data\011325\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 13 Jan 2025 10:15 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



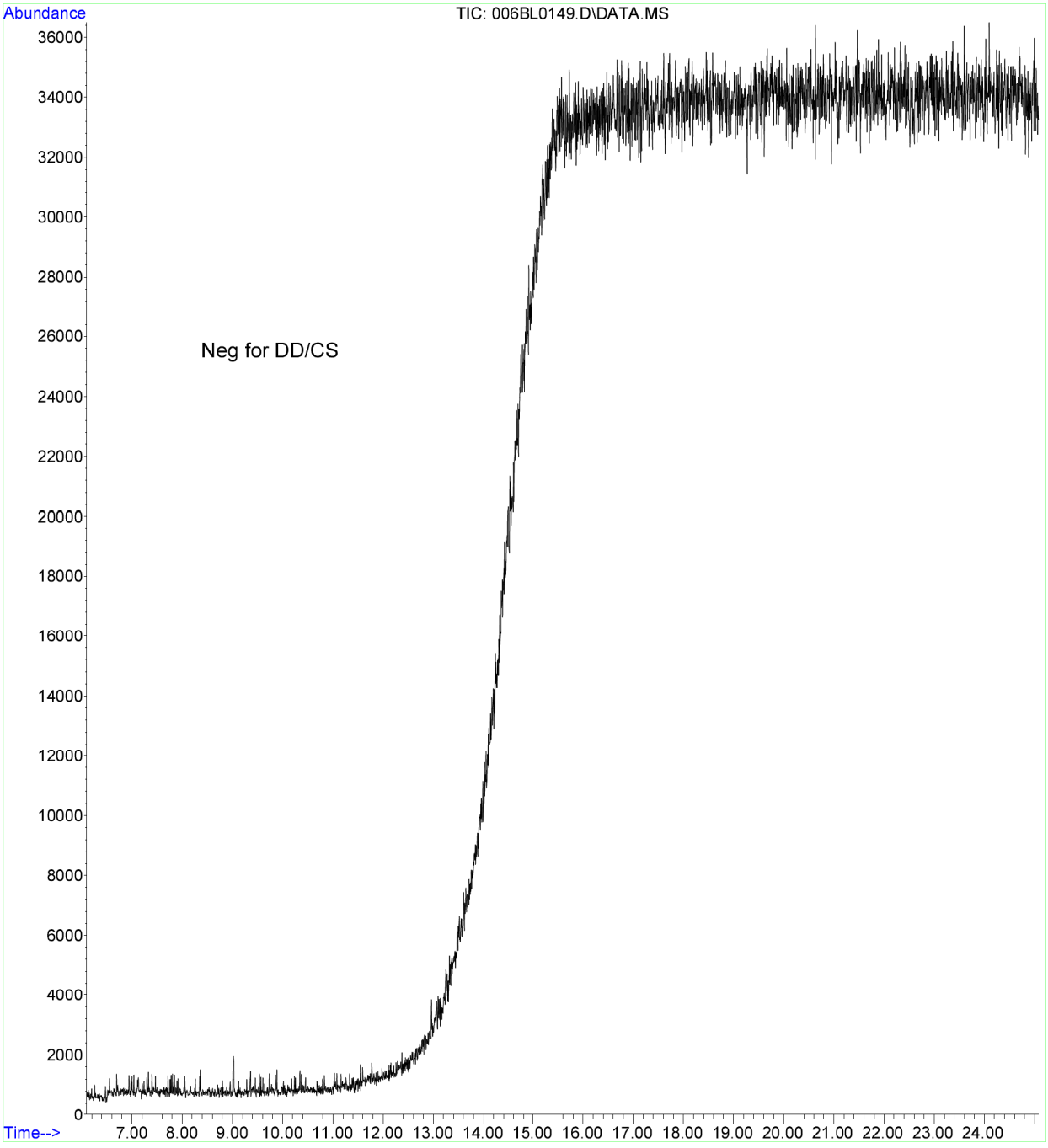
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\011325\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 13 Jan 2025  10:15 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



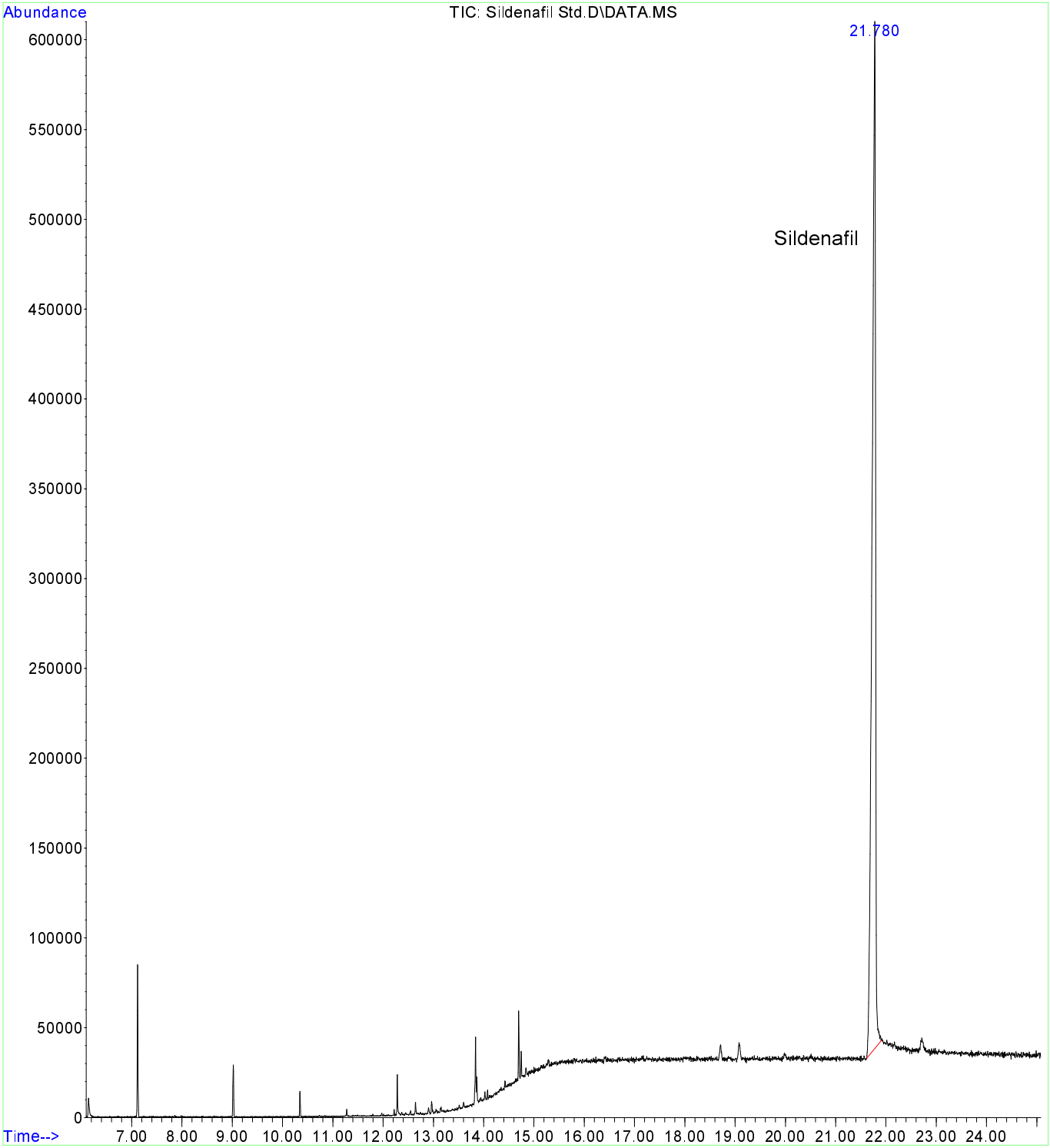
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... Data\011325\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 13 Jan 2025 09:39 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060) 000002666
Misc Info : 000002666



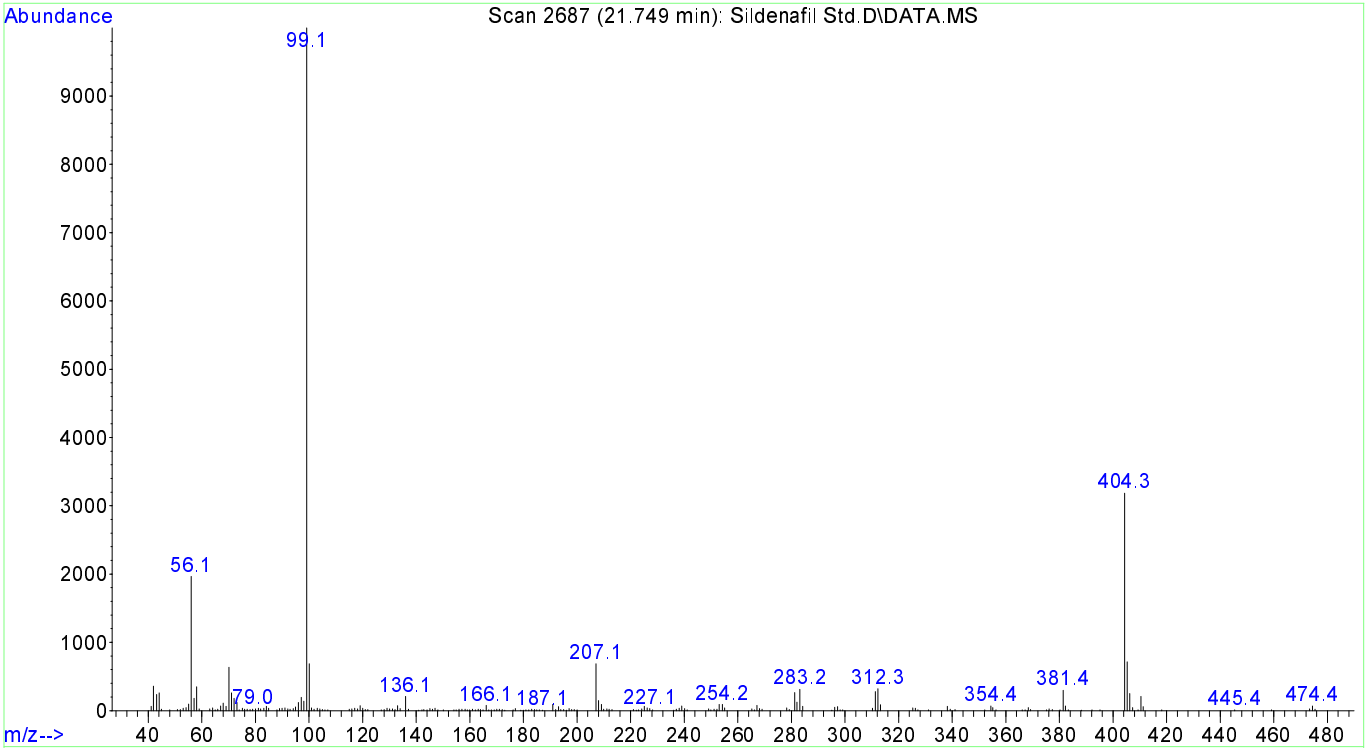
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\011325\006BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 13 Jan 2025 10:43 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666

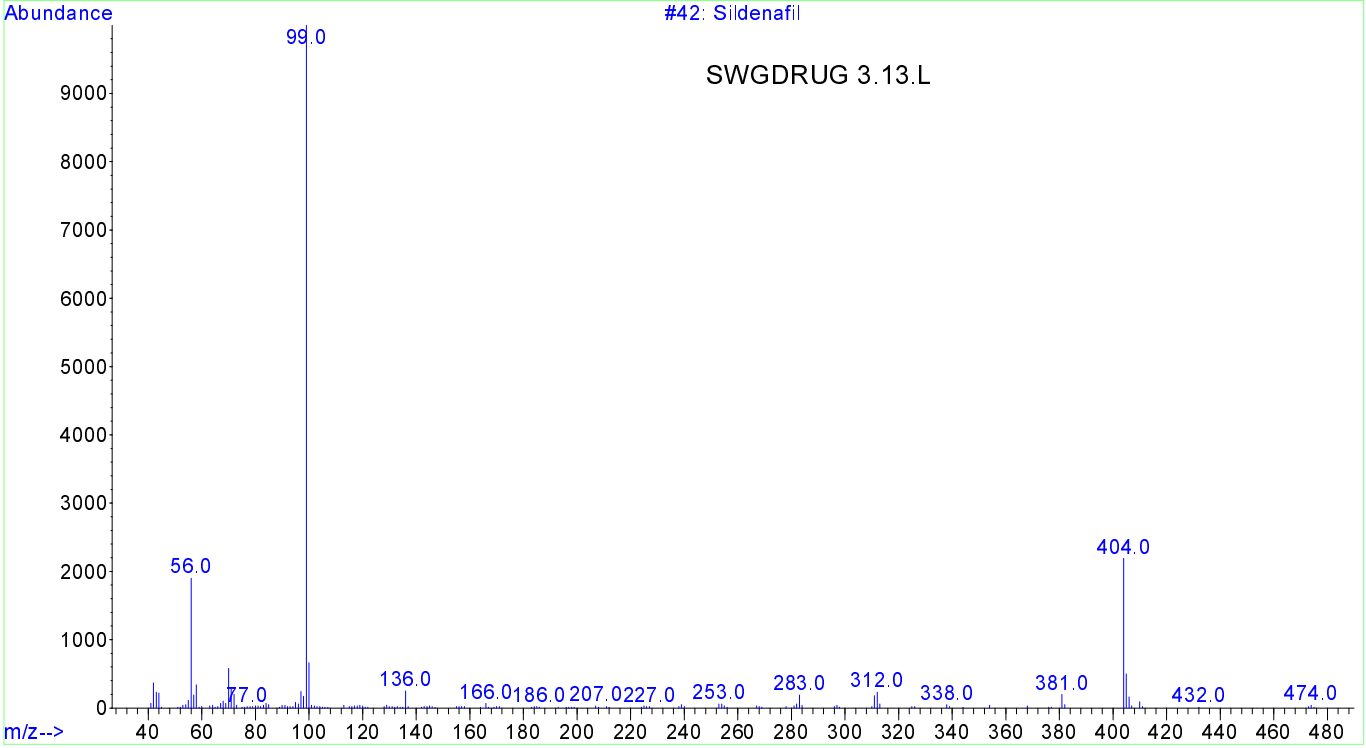


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File       :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\011725\Sildenafil
...          Std.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Jan 2025  04:12 pm using AcqMethod DrugTest.M
Sample Name: Sildenafil Std (R-22-029)                        000001333
Misc Info  : Rt determination                                 000001333
```

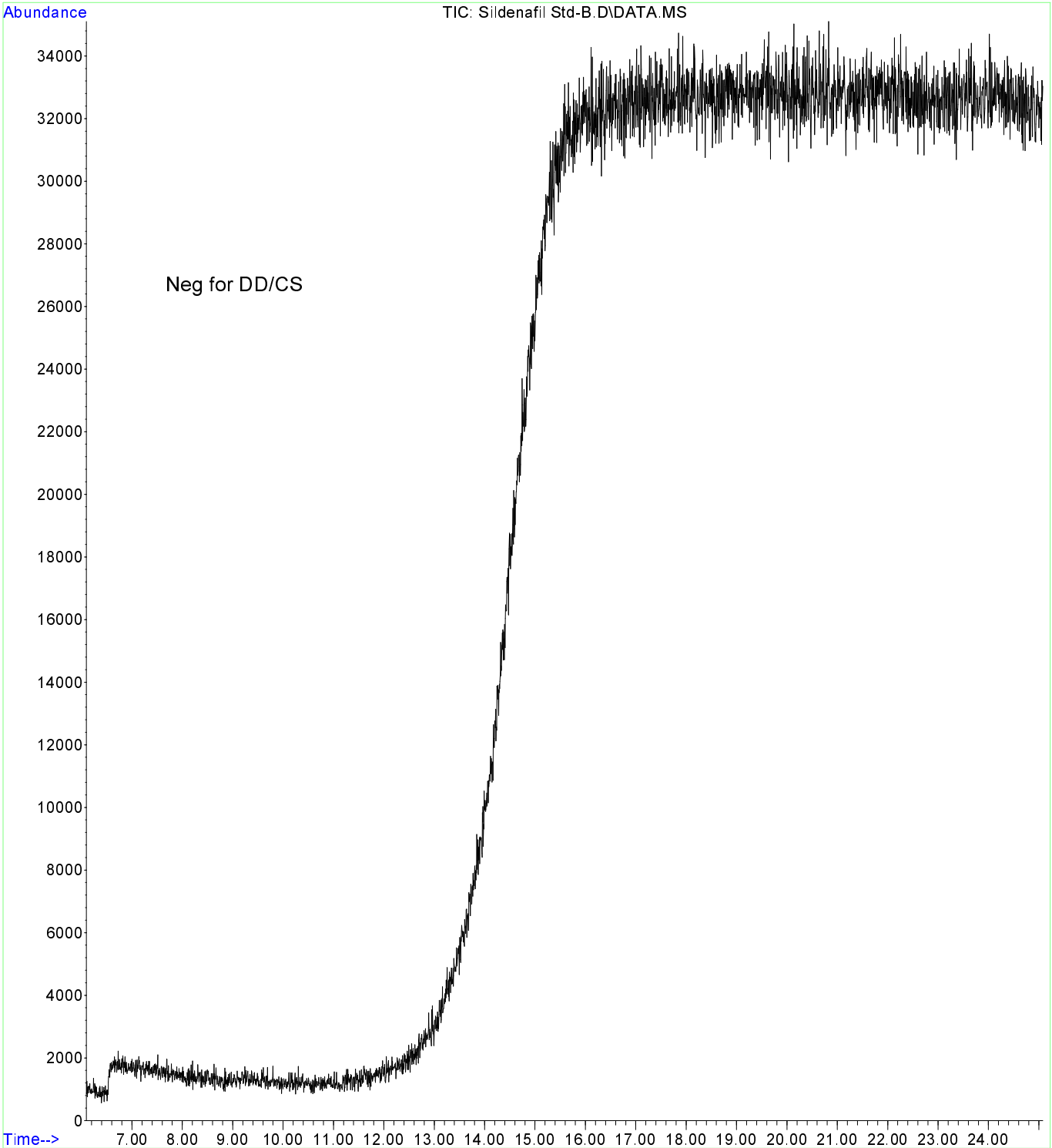


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File       :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\011725\Sildenafil
...          Std.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Jan 2025  04:12 pm using AcqMethod DrugTest.M
Sample Name: Sildenafil Std (R-22-029)                          000001333
Misc Info  : Rt determination                                   000001333
```

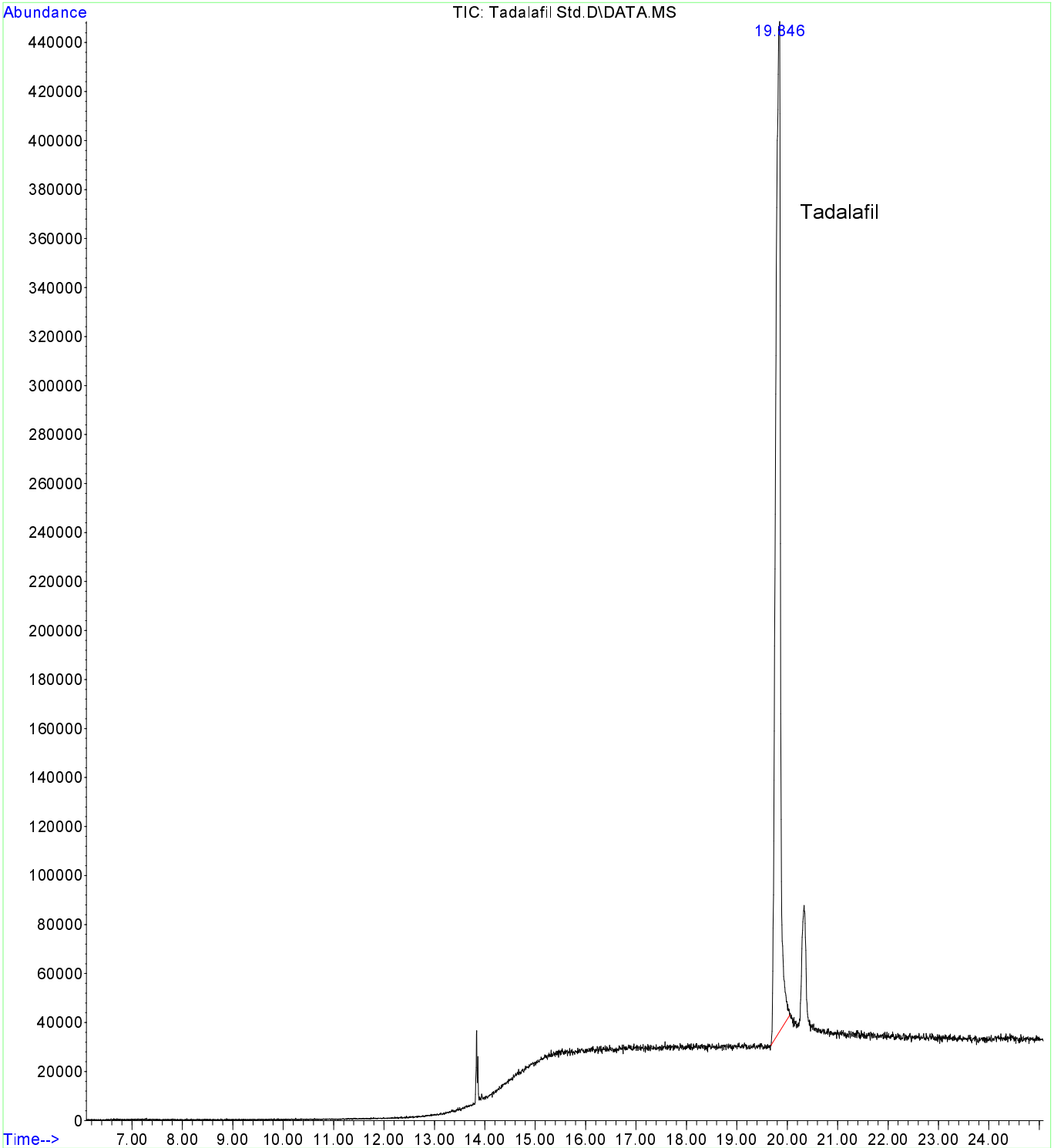




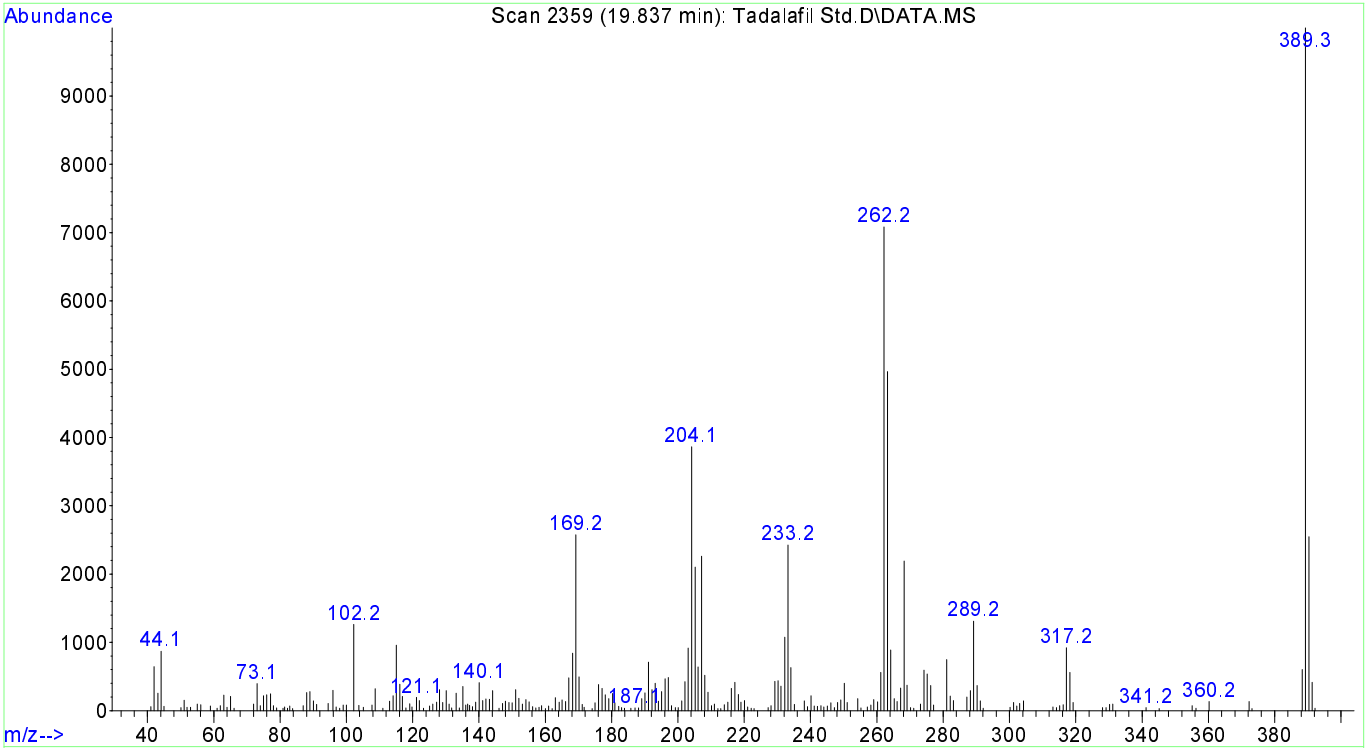
File :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\011725\Sildenafil ... Std-B.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 17 Jan 2025 03:43 pm using AcqMethod DrugTest.M
Sample Name: blank prior to Sildenafil Std (R-22-029) 000002632
Misc Info : DCM (C-22-0015B) MeOH (C-20-0050B) 000002632

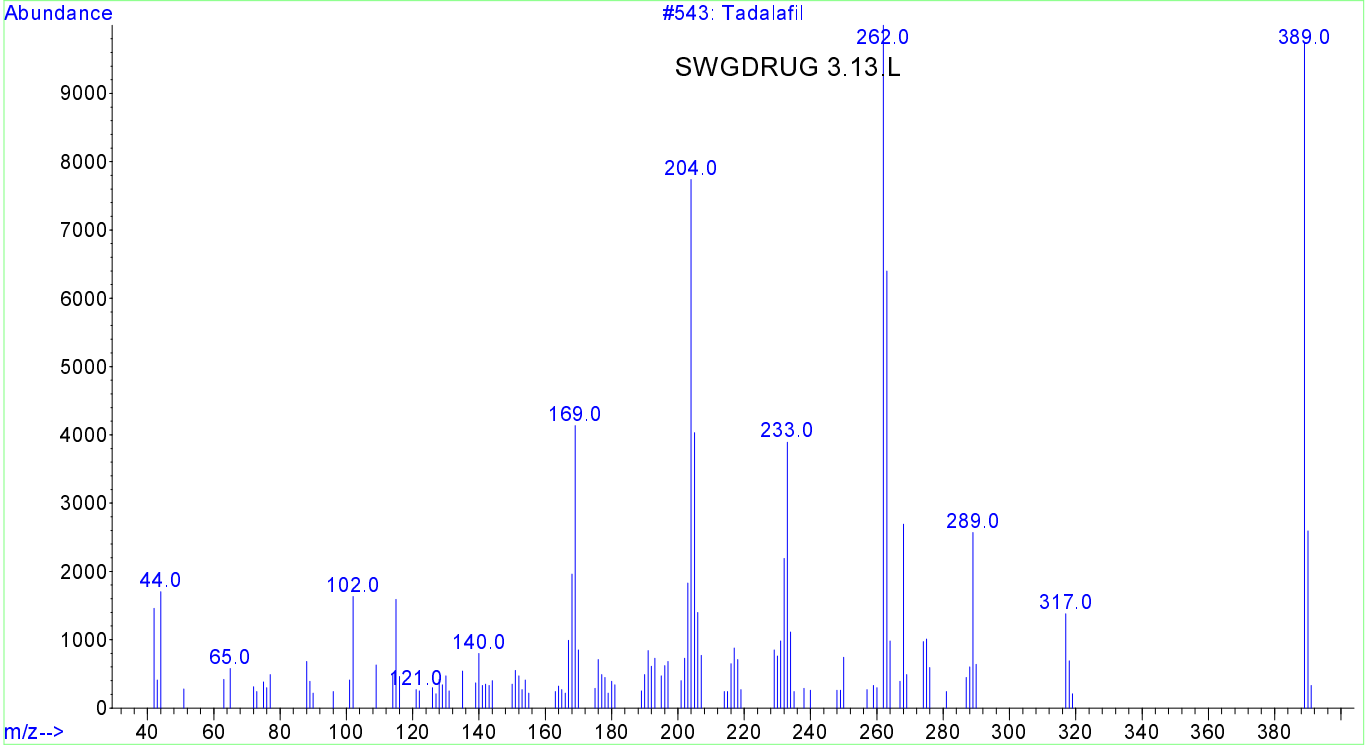


File :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\011725\Tadalafil ... Std.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 17 Jan 2025 05:09 pm using AcqMethod DrugTest.M
Sample Name: Tadalafil Std (R-22-030) 000002633
Misc Info : Rt determination 000002633

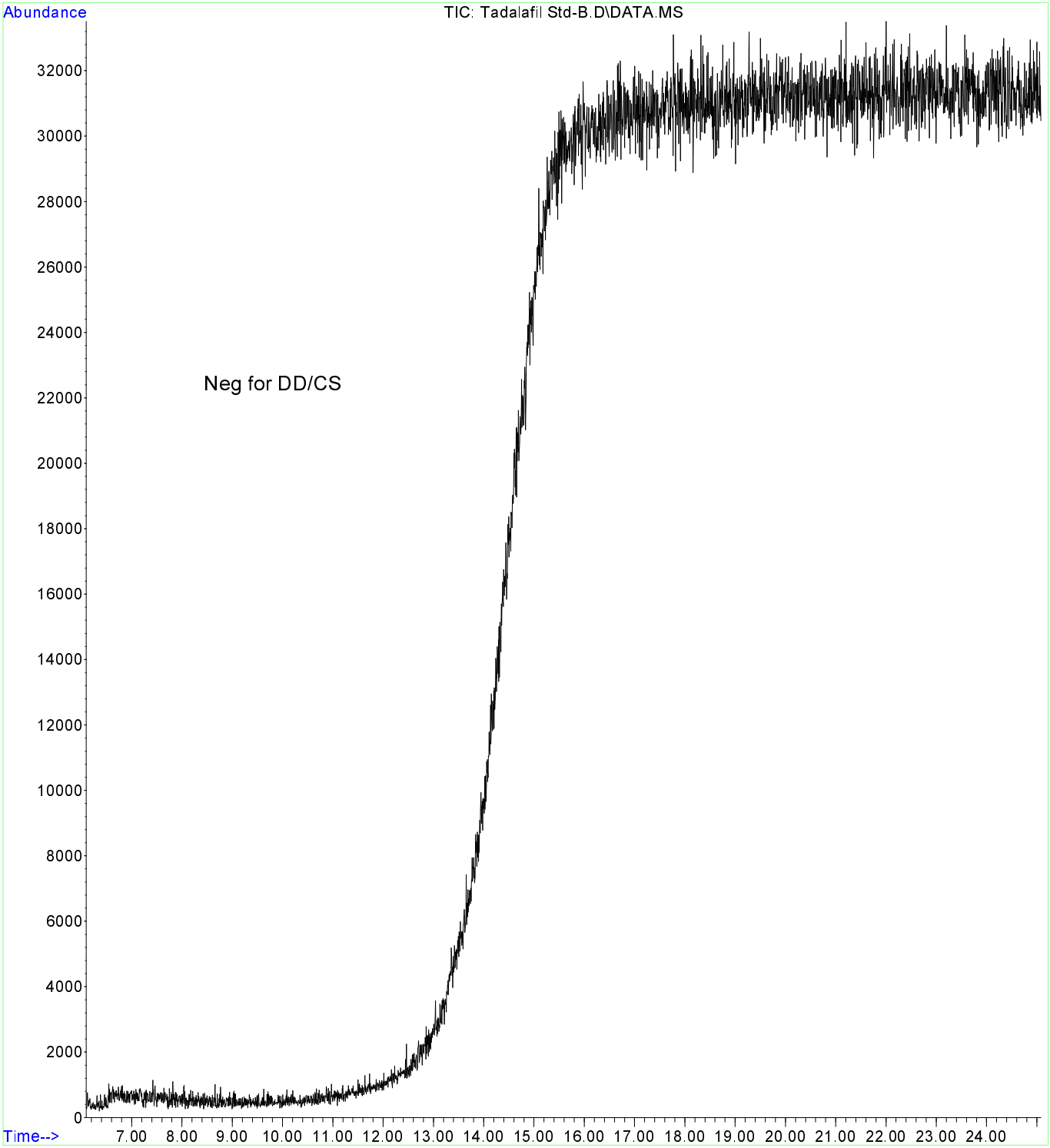


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File       :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\011725\Tadalafil
...         Std.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Jan 2025  05:09 pm using AcqMethod DrugTest.M
Sample Name: Tadalafil Std (R-22-030)                          000002633
Misc Info  : Rt determination                                  000002633
```





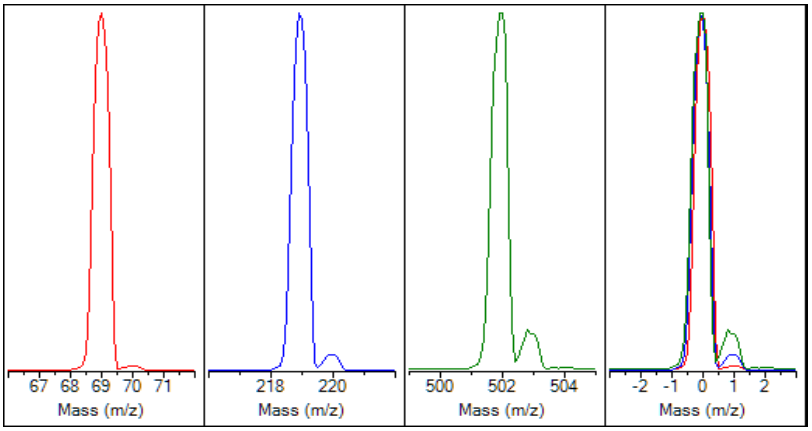
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... Std-B.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 17 Jan 2025 04:40 pm using AcqMethod DrugTest.M
Sample Name: blank prior to Tadalafil Std (R-22-030) 000002632
Misc Info : DCM (C-22-0015B) MeOH (C-20-0050B) 000002632



Autotune - 5977

1/24/2025 9:22:26 AM (UTC-6:00) BCCL GCMS #3

D:\MASSHUNTER\GCMS\1\5977\atune.u US1329M205



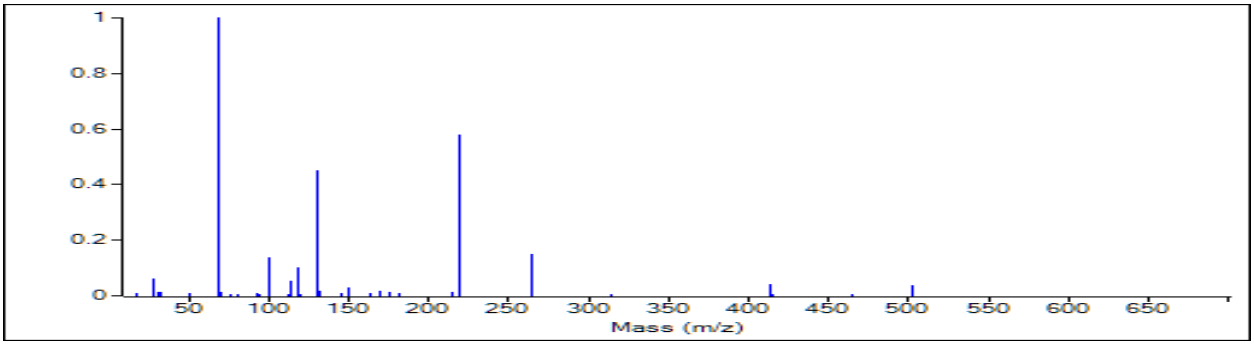
Ion Polarity	Pos	Mass Gain	-364
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1677
Filament	1	Amu Offset	119.69
Repeller	34.90	Width219	-0.005
Ion Focus	89.3	DC Polarity	Pos
Entrance Lens	12.6	HED Enable	On
Ent Lens Offset	13.73	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Mass	Abund	Rel Abund	Pw50
69.00	428,801	100.0%	0.61
218.90	249,644	58.2%	0.60
502.00	14,841	3.5%	0.60

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.24e-06

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	89	69.00	417,856	1,203,859



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	417,856	100.00	70.00	4,238	1.01
219.00	241,024	57.68	220.00	10,453	4.34
502.00	14,448	3.46	503.00	1,526	10.56

Air/Water Check: H20 ~0.7% N2 ~6.0% O2 ~1.4% CO2 ~0.2% N2/H20 ~838.2%

Column(1) Flow: 0.80 Column(2): 0.00 ml/min Interface Temp: 280

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 57641.764

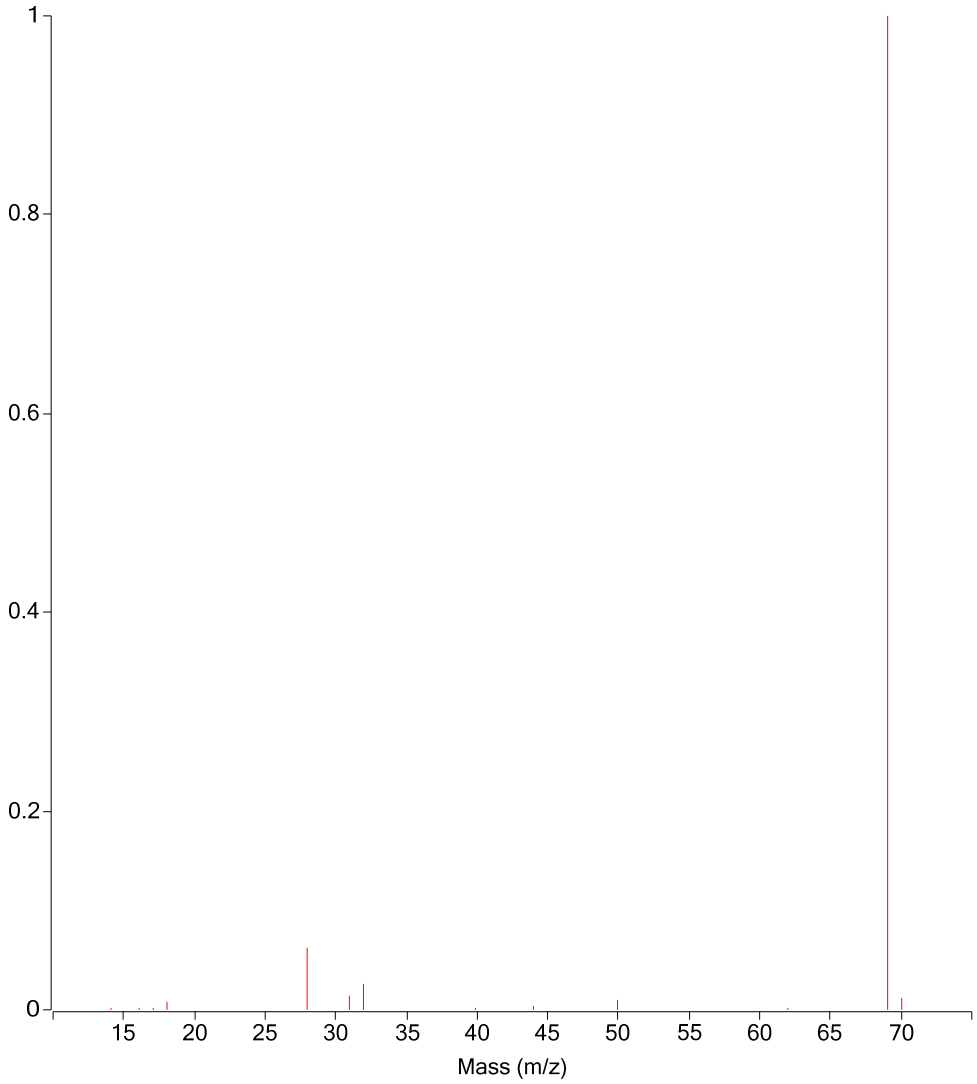
Repeller maximum 35 volts using ion 219; Gain Factor 0.5764

Mass Gain Values(Scan Speed): -353(3) -348(2) -331(1) -304(0) -251(FS1) -250(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.7	119.7	119.7	119.7	119.7	119.7	119.7
Entrance Lens Offset	13.7	13.7	13.7	13.7	13.7	13.7	13.7

597x Air and Water Check

Instrument: BCCL GCMS #3
Fri Jan 24 09:17:35 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	0.87	Water%	(counts=4614)
28/69 =	6.15	Nitrogen%	(counts=32760)
32/69 =	2.65	Oxygen%	(counts=14108)
44/69 =	0.44	Carbon Dioxide%	(counts=2362)
28/18 =	710.01	Nitrogen/Water%	

Instrument Name : BCCL GCMS #3
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	220.00	OK
Position of isotope mass 503	503.01	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%)	4.34	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.49	OK
Ratio of 219 to 69 should be > 40% and is	57.17	OK
Ratio of 502 to 69 should be > 2.4% and is	3.49	OK
Mass 69 Precursor (<= 3%)	0.11	OK
Mass 219 Precursor (<= 6%)	0.27	OK
Mass 502 Precursor (<= 12%)	1.77	OK

597x Air and Water Check
Fri Jan 24 09:25:46 2025 Instrument: BCCL GCMS #3
D:\MASSHUNTER\GCMS\1\5977\atune.u US1329M205

Testing for a leak in the system

Ratio of 18 to 69 (<20%)	0.61	OK
Ratio of 28 to 69 (<10%)	5.88	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

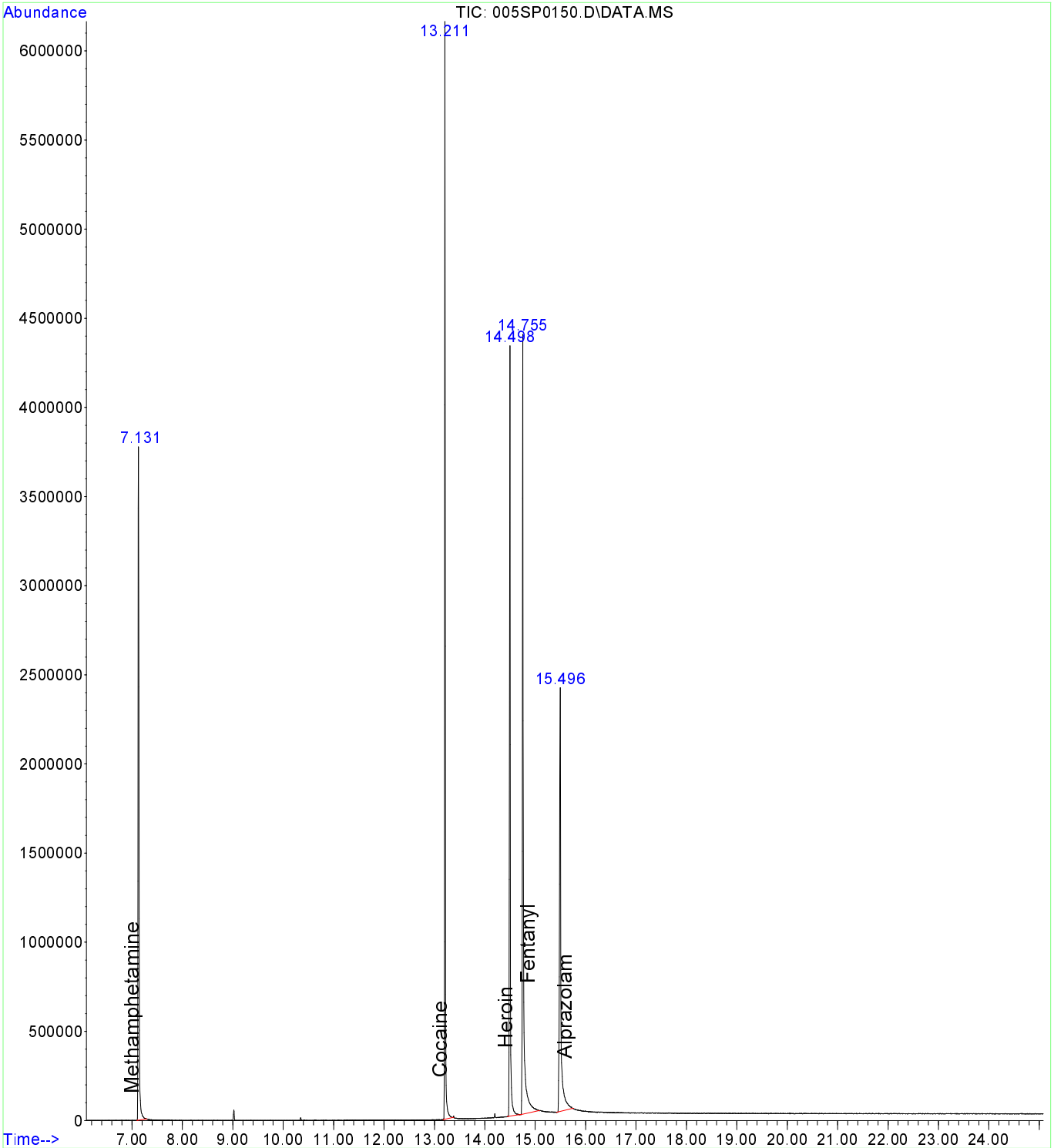
BCCL GC/MS #3
Retention Times for the Week of:

01/20/2025 - 01/26/2025

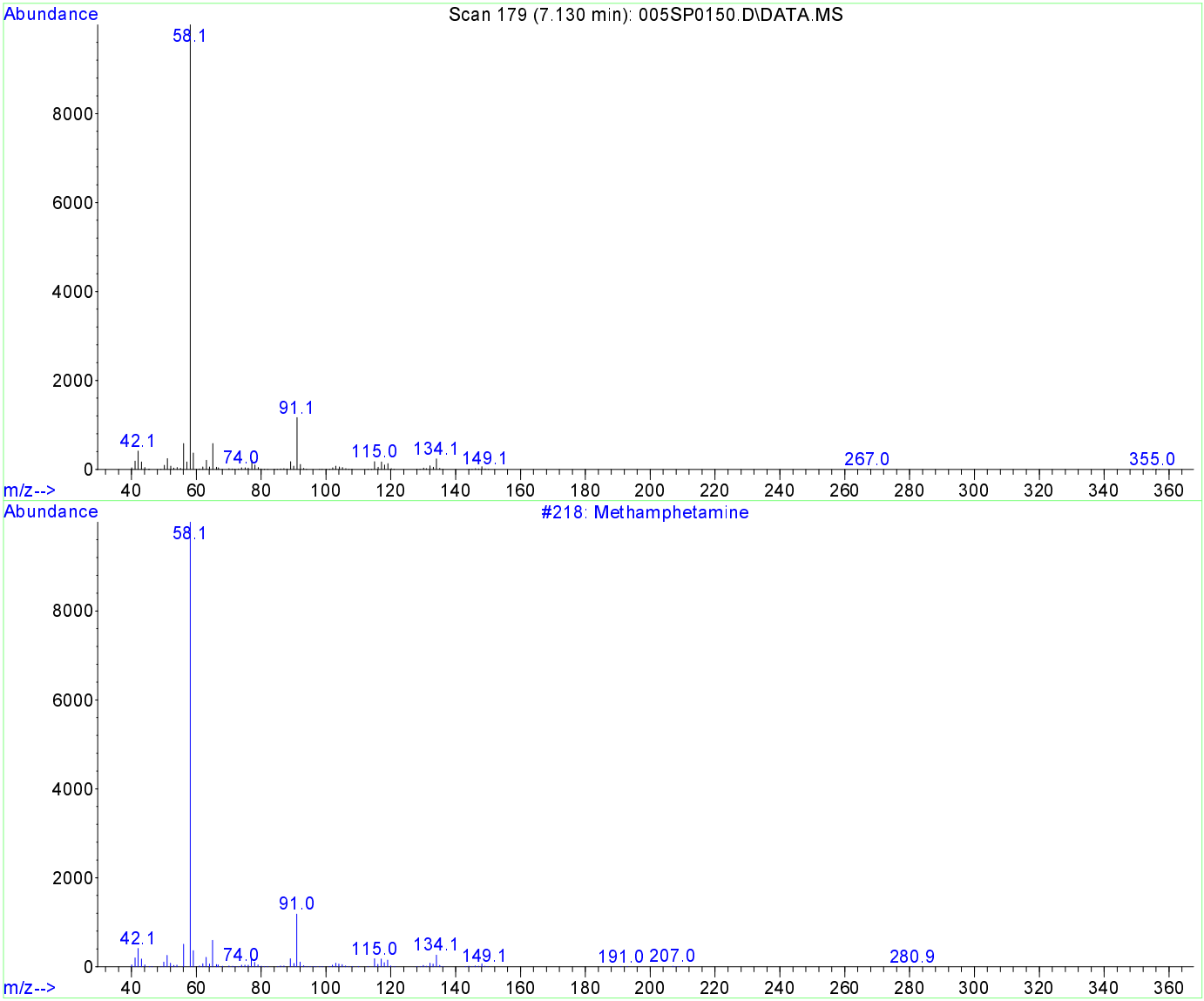
[X] **Tune: _DN/DS__01/24/2025 - Autotune_____**

Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.131	7.059	7.202
Cocaine	R-24-060	DrugTest35	13.211	13.078	13.343
Heroin	R-24-060	DrugTest35	14.498	14.353	14.642
Fentanyl	R-24-060	DrugTest35	14.755	14.607	14.902
Alprazolam	R-24-060	DrugTest35	15.496	15.341	15.650

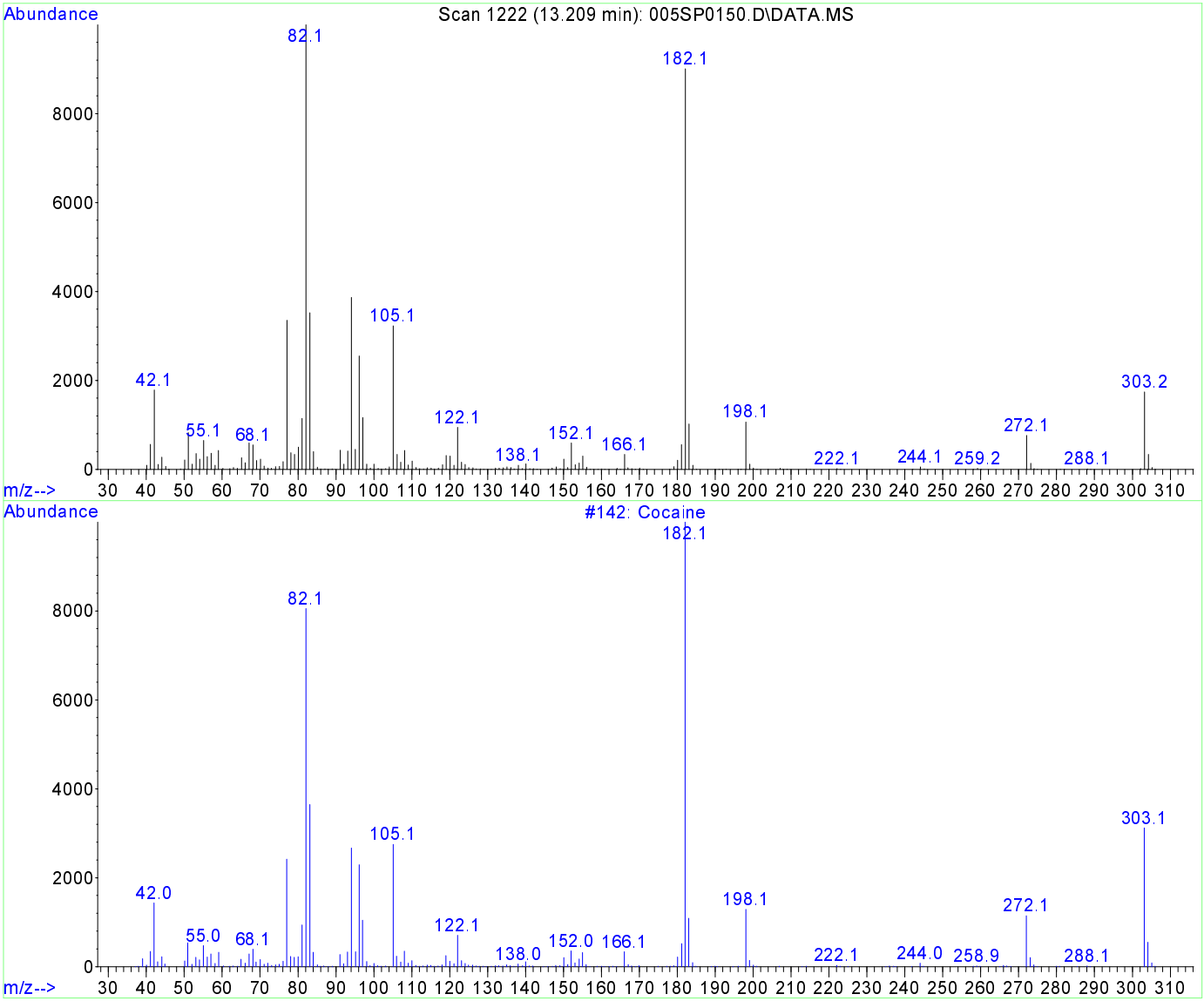
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\012425\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 24 Jan 2025 10:48 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



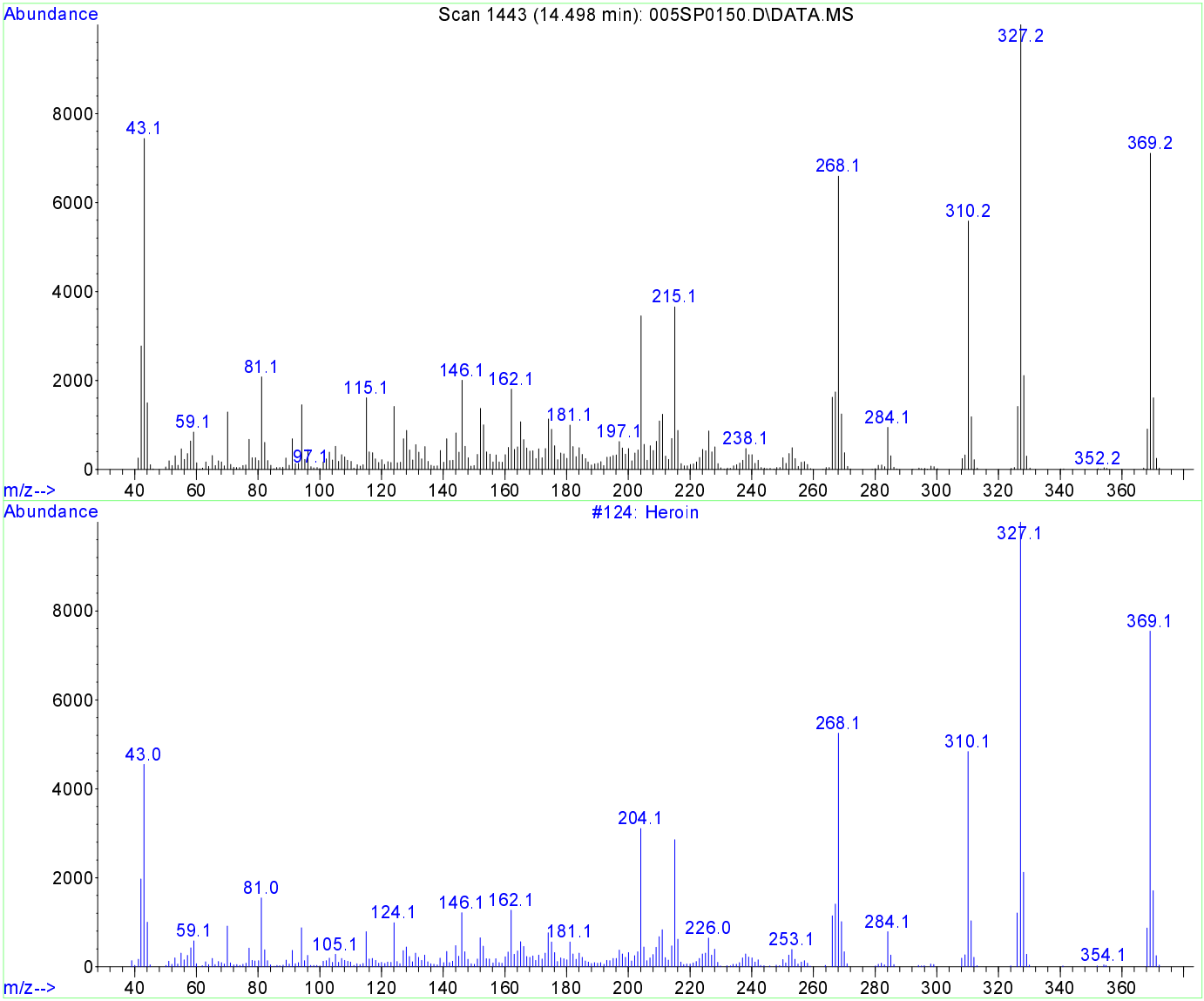
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 90
ID : Methamphetamine



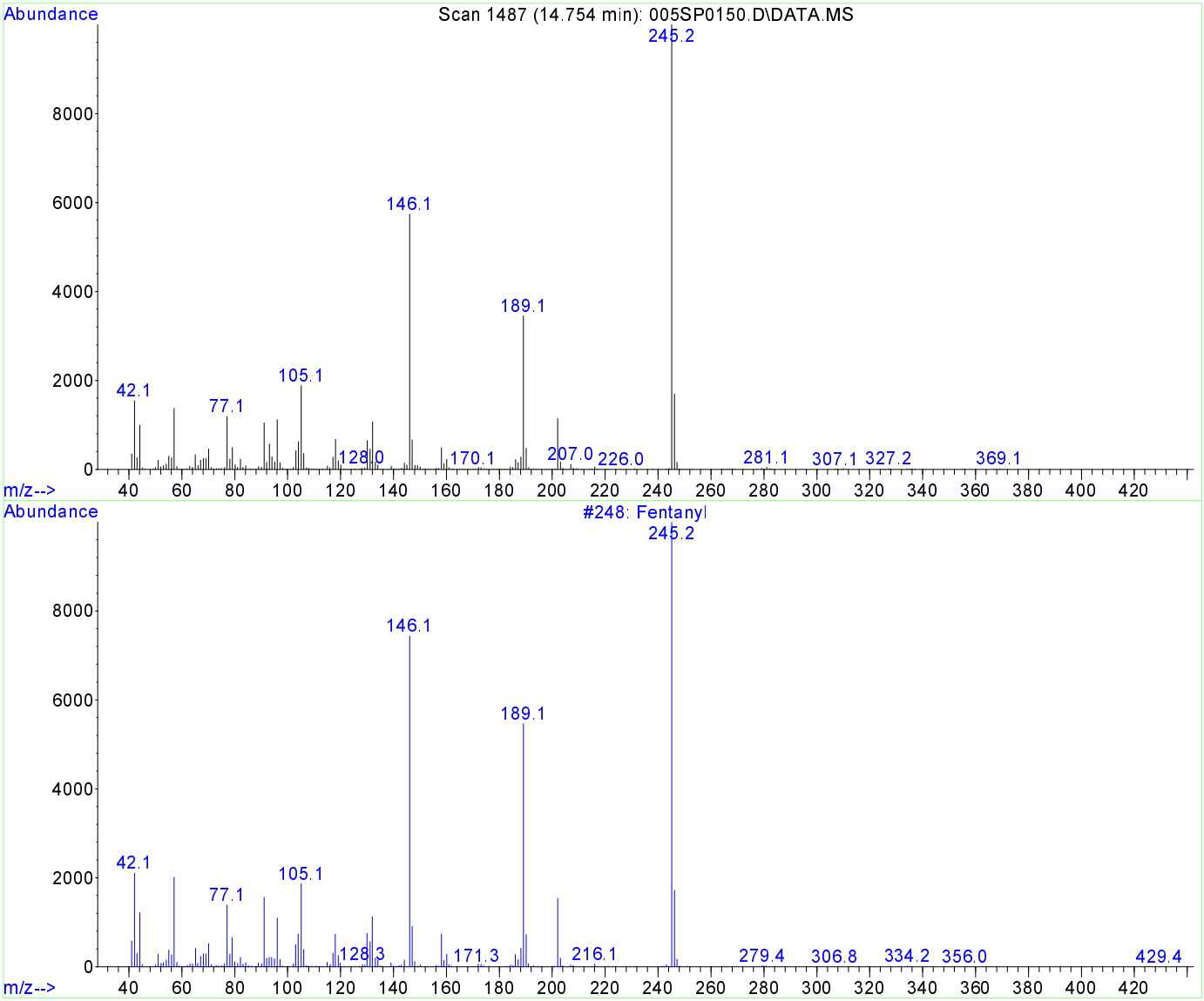
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Cocaine



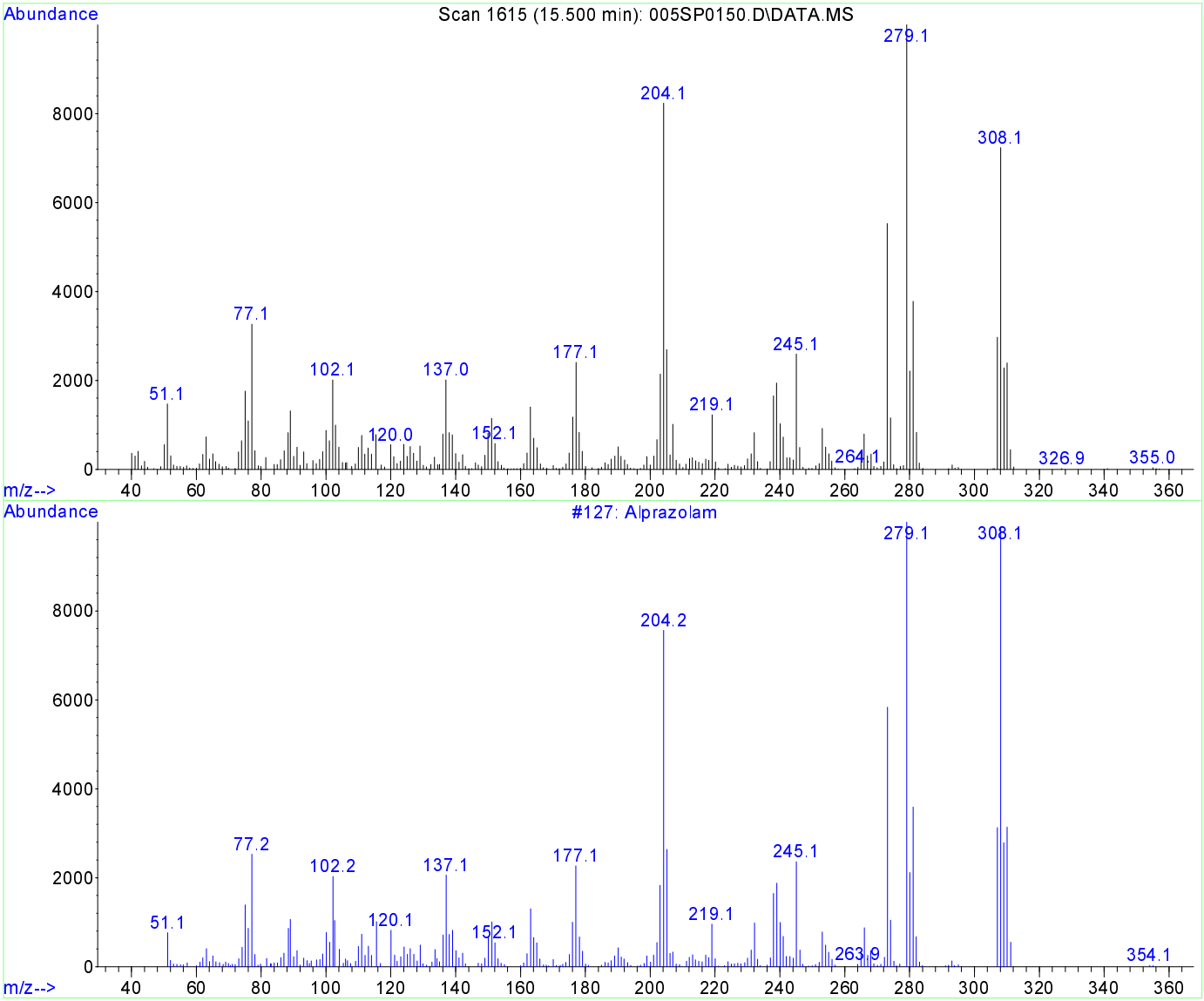
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Heroin



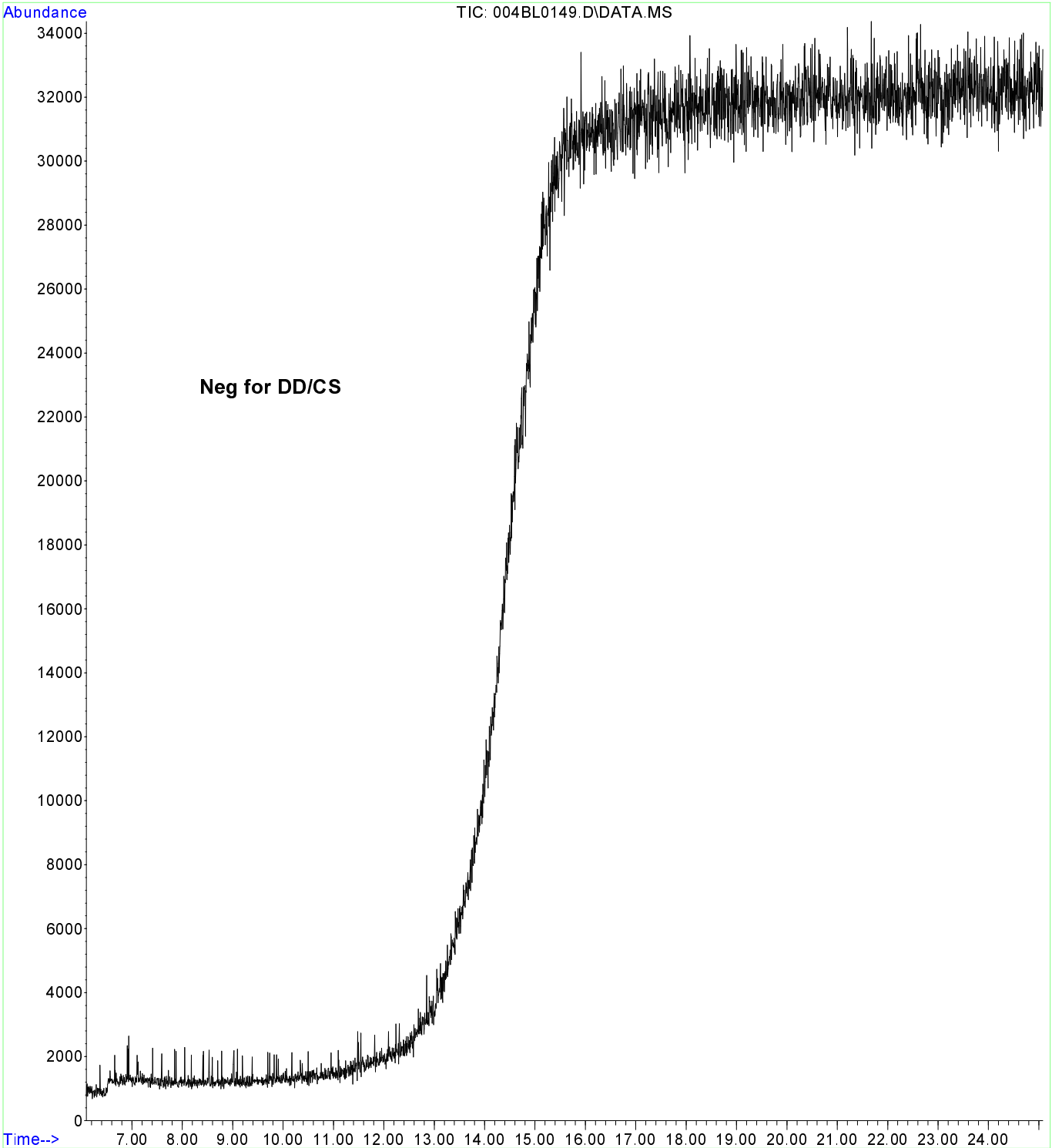
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 76
ID : Fentanyl



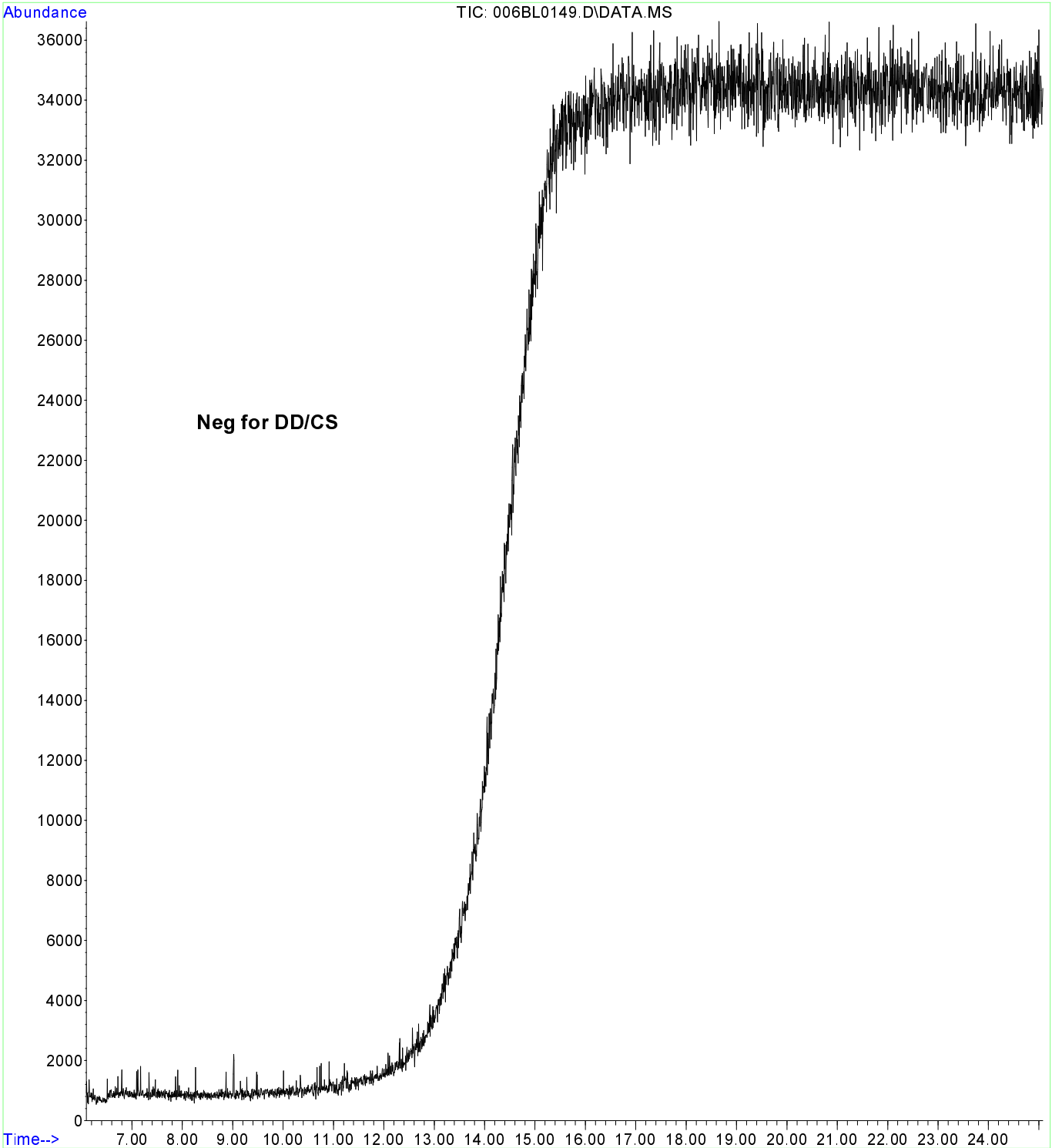
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Alprazolam



File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\012425\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 24 Jan 2025 10:19 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060) 000002666
Misc Info : 000002666



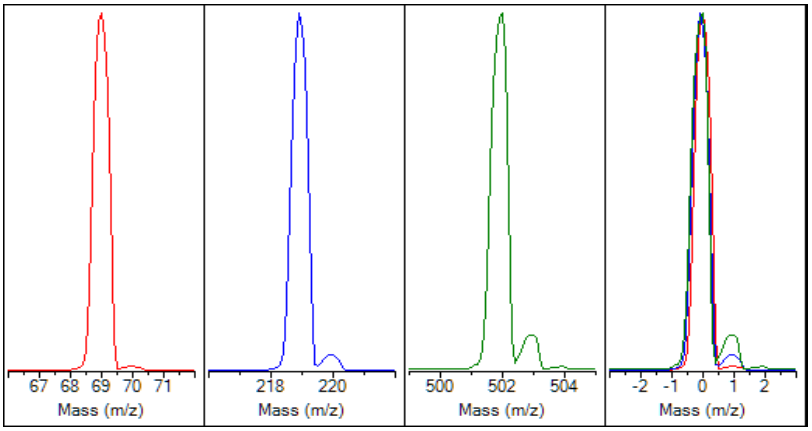
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Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 24 Jan 2025 11:16 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666



Autotune - 5977

1/27/2025 8:11:59 AM (UTC-6:00) BCCL GCMS #3

D:\MASSHUNTER\GCMS\1\5977\atune.u US1329M205



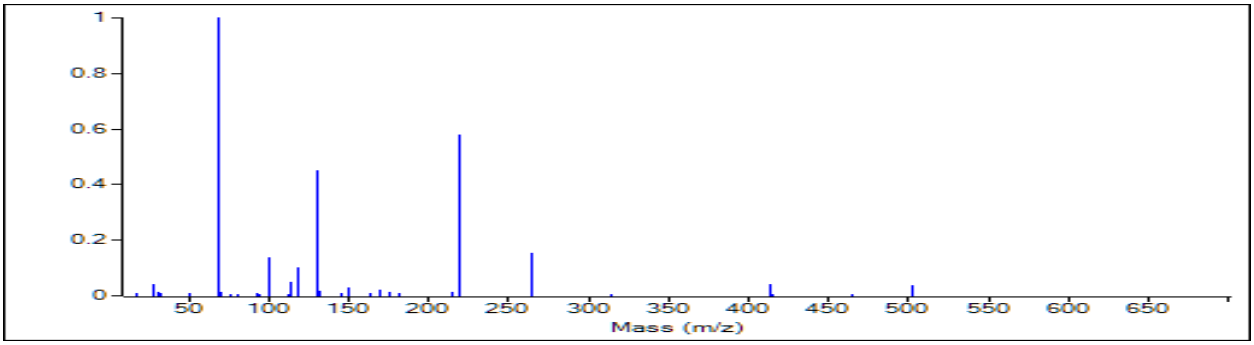
Ion Polarity	Pos	Mass Gain	-365
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1680
Filament	1	Amu Offset	119.75
Repeller	34.90	Width219	-0.005
Ion Focus	86.4	DC Polarity	Pos
Entrance Lens	12.6	HED Enable	On
Ent Lens Offset	13.73	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Mass	Abund	Rel Abund	Pw50
69.00	467,152	100.0%	0.60
218.90	279,536	59.8%	0.60
502.00	16,912	3.6%	0.61

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.42e-06

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	93	69.00	457,408	1,304,200



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	457,408	100.00	70.00	4,929	1.08
219.00	264,064	57.73	220.00	11,393	4.31
502.00	16,264	3.56	503.00	1,611	9.91

Air/Water Check: H20 ~0.8% N2 ~4.0% O2 ~0.8% CO2 ~0.1% N2/H20 ~526.6%

Column(1) Flow: 0.80 Column(2): 0.00 ml/min Interface Temp: 280

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 56134.872

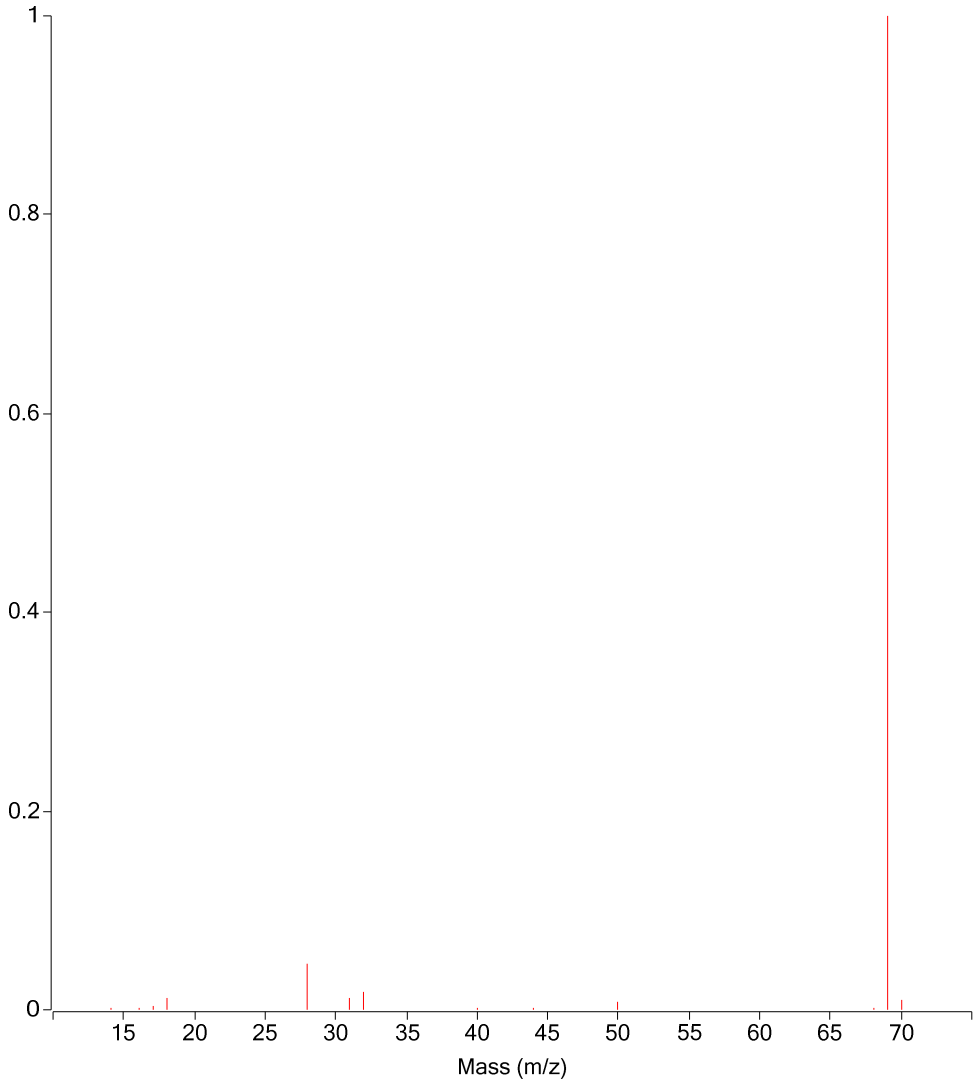
Repeller maximum 35 volts using ion 219; Gain Factor 0.5613

Mass Gain Values(Scan Speed): -362(3) -362(2) -365(1) -368(0) -367(FS1) -366(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.8	119.8	119.8	119.8	119.8	119.8	119.8
Entrance Lens Offset	13.7	13.7	13.7	13.7	13.7	13.7	13.7

597x Air and Water Check

Instrument: BCCL GCMS #3
Mon Jan 27 08:07:02 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.27	Water%	(counts=11979)
28/69 =	4.70	Nitrogen%	(counts=44280)
32/69 =	1.81	Oxygen%	(counts=17064)
44/69 =	0.30	Carbon Dioxide%	(counts=2783)
28/18 =	369.65	Nitrogen/Water%	

Instrument Name	: BCCL GCMS #3	
DC Polarity	: Positive	
Filament	1	
BasePeak should be 69 or 219		OK
Position of mass 69	69.00	OK
Position of mass 219	218.98	OK
Position of mass 502	502.00	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	219.97	OK
Position of isotope mass 503	502.96	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%)	4.38	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.33	OK
Ratio of 219 to 69 should be > 40% and is	57.95	OK
Ratio of 502 to 69 should be > 2.4% and is	3.62	OK
Mass 69 Precursor (<= 3%)	0.12	OK
Mass 219 Precursor (<= 6%)	0.29	OK
Mass 502 Precursor (<= 12%)	1.58	OK

597x Air and Water Check

Mon Jan 27 08:15:23 2025	Instrument: BCCL GCMS #3
D:\MASSHUNTER\GCMS\1\5977\atune.u	US1329M205

Testing for a leak in the system

Ratio of 18 to 69 (<20%)	0.73	OK
Ratio of 28 to 69 (<10%)	4.94	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

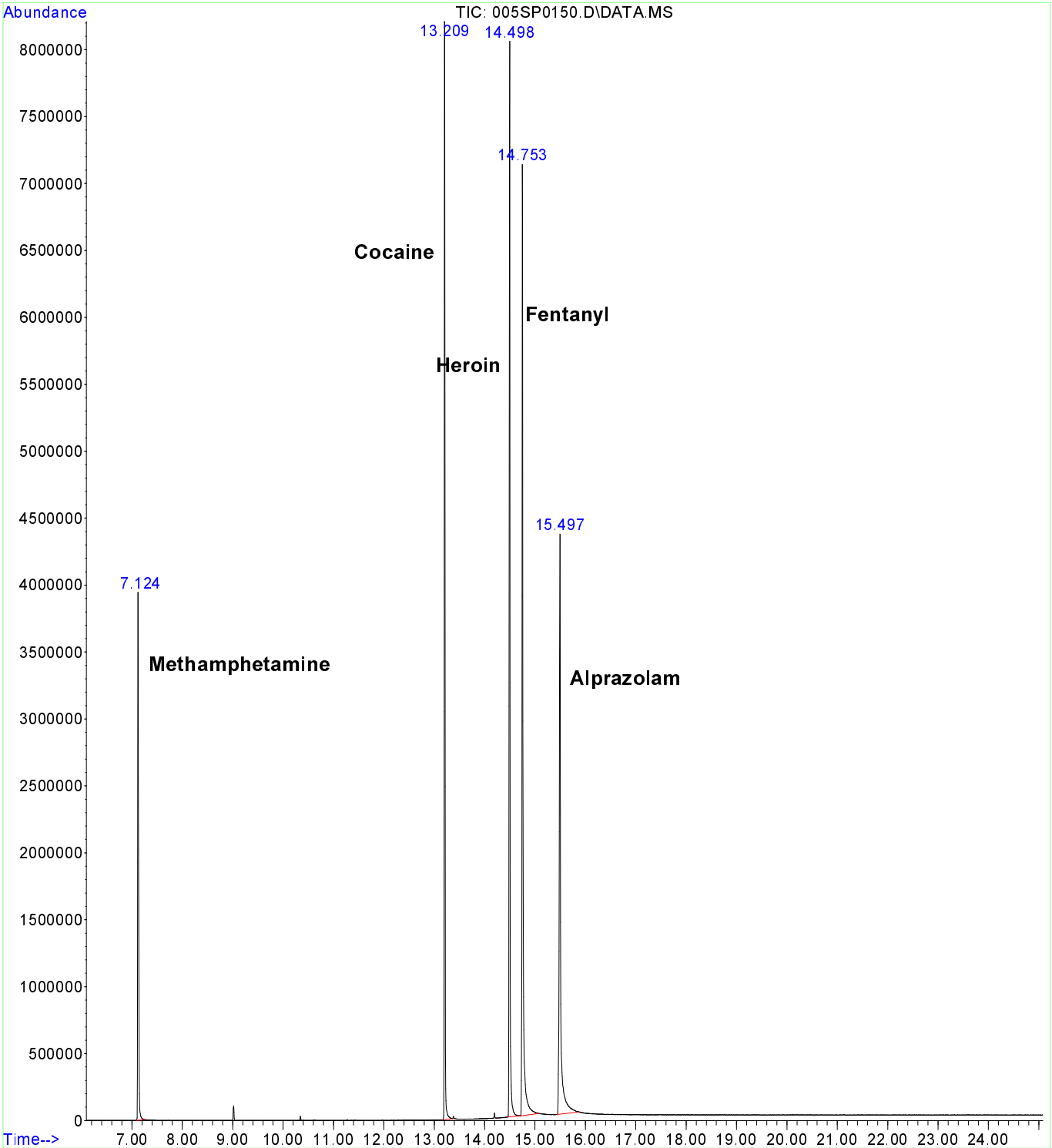
BCCL GC/MS #3
Retention Times for the Week of:

01/27/2025 - 02/02/2025

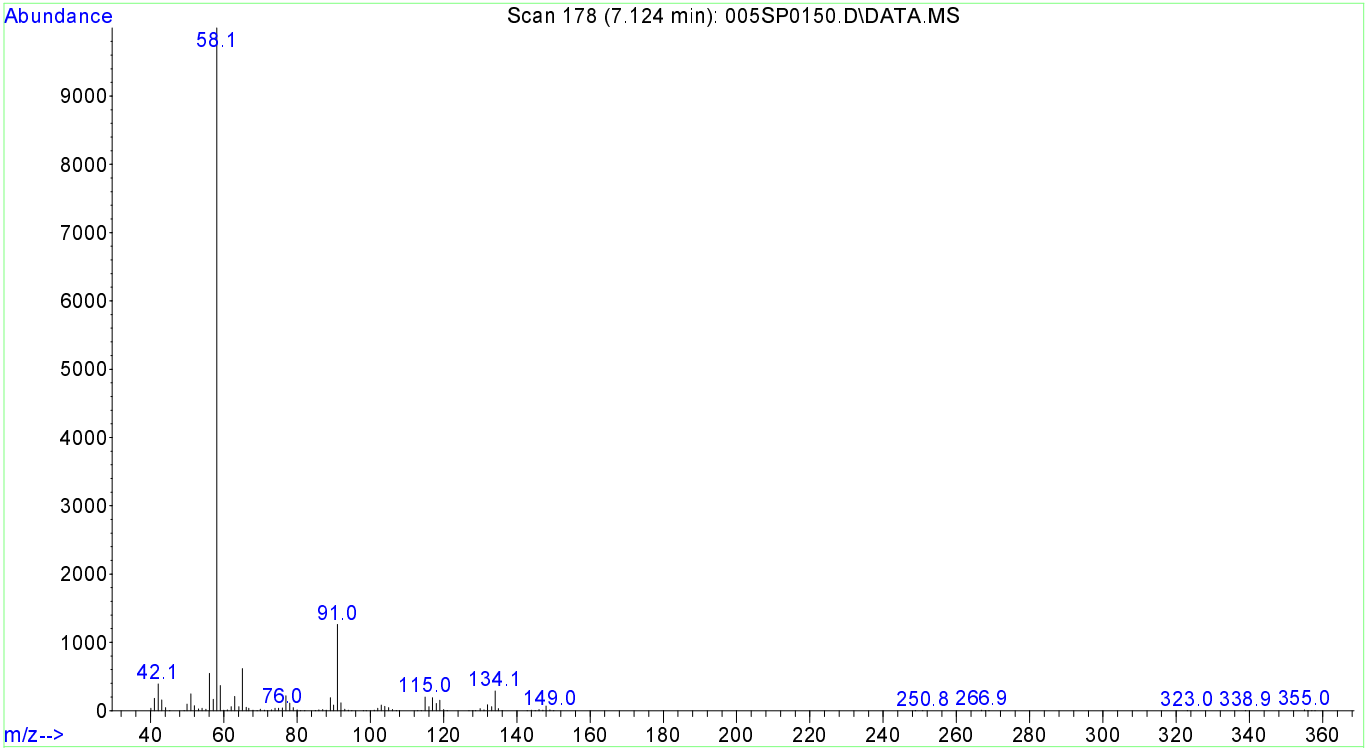
[X] **Tune: _DN/DS__01/27/2025 - Autotune_____**

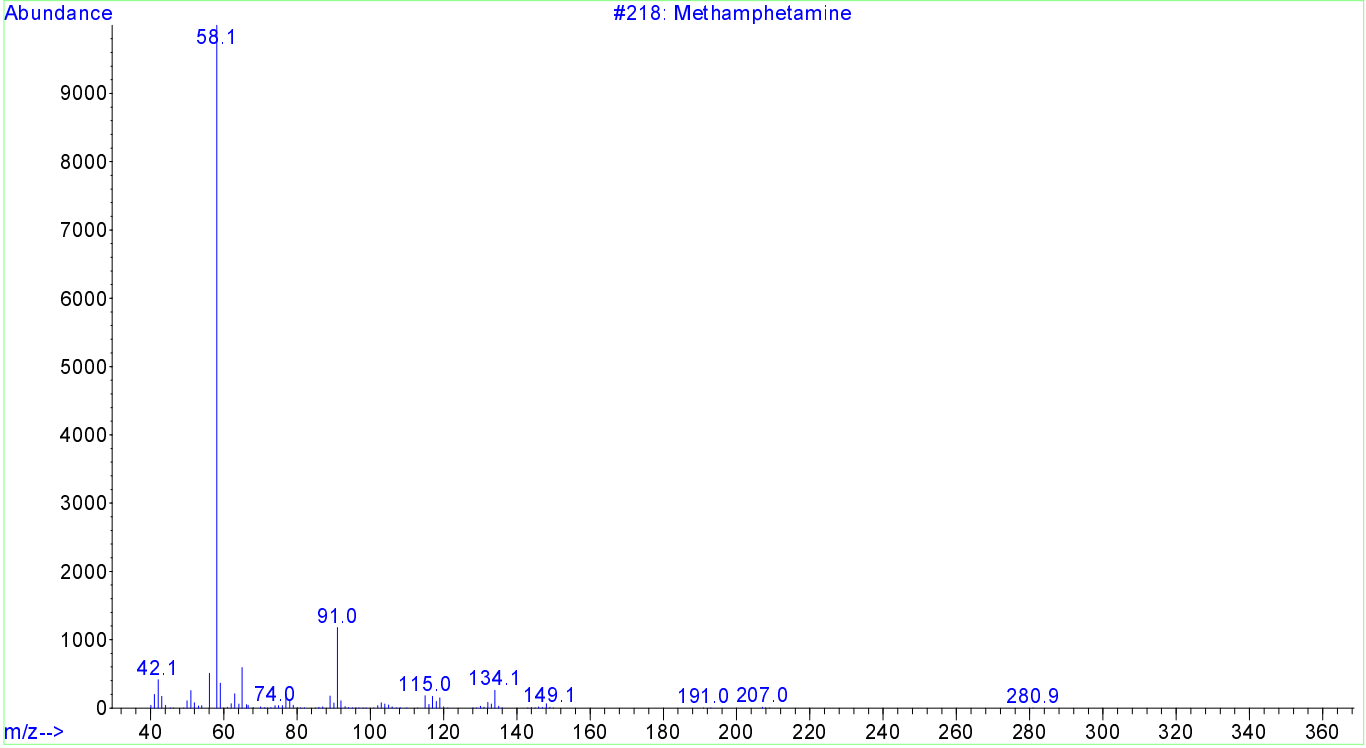
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.124	7.052	7.195
Cocaine	R-24-060	DrugTest35	13.209	13.076	13.341
Heroin	R-24-060	DrugTest35	14.498	14.353	14.642
Fentanyl	R-24-060	DrugTest35	14.753	14.605	14.900
Alprazolam	R-24-060	DrugTest35	15.497	15.342	15.651

File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\012725\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 27 Jan 2025 11:05 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667

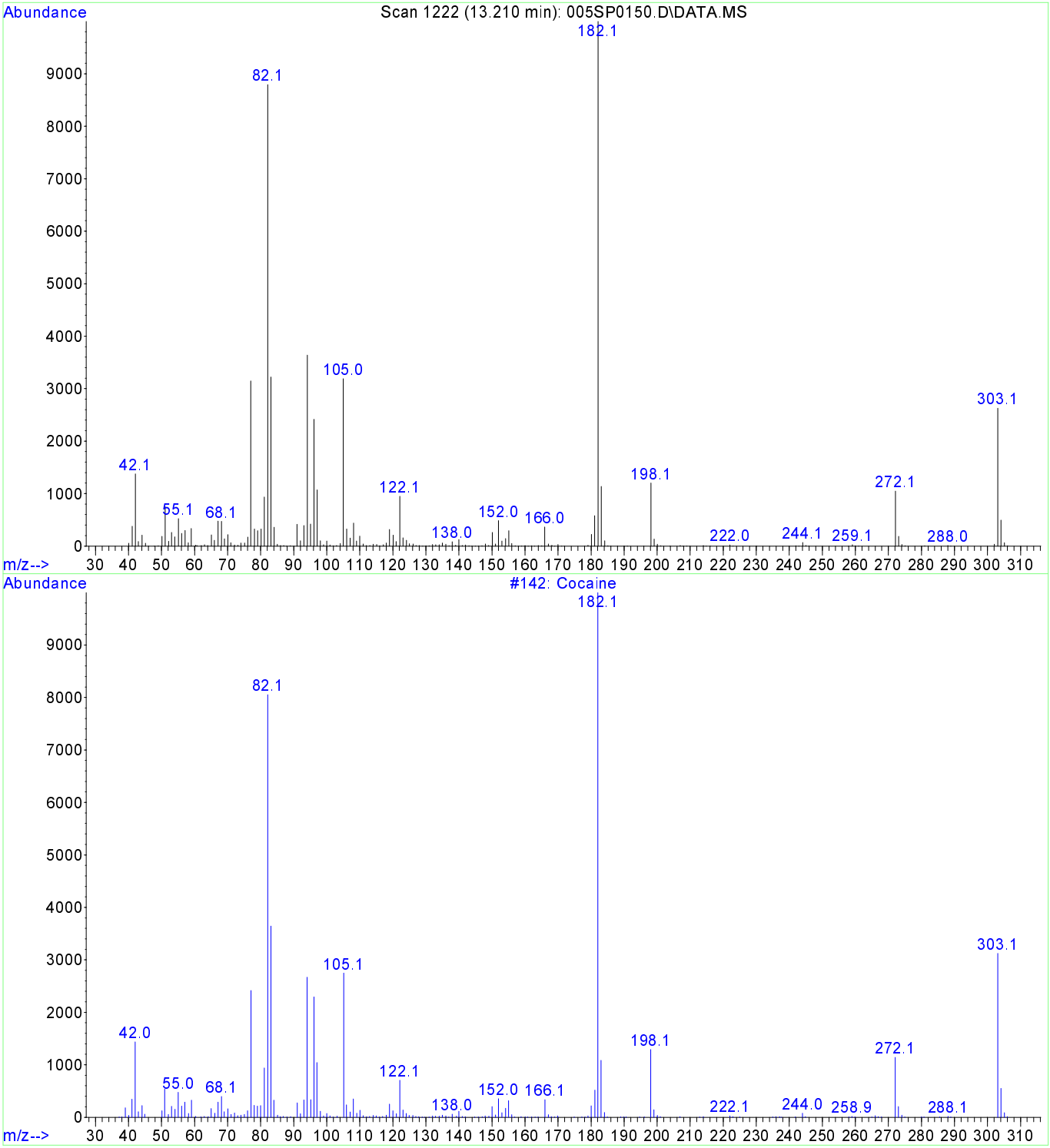


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Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 27 Jan 2025 11:05 am using AcqMethod DrugTest.M
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Misc Info : 000002667

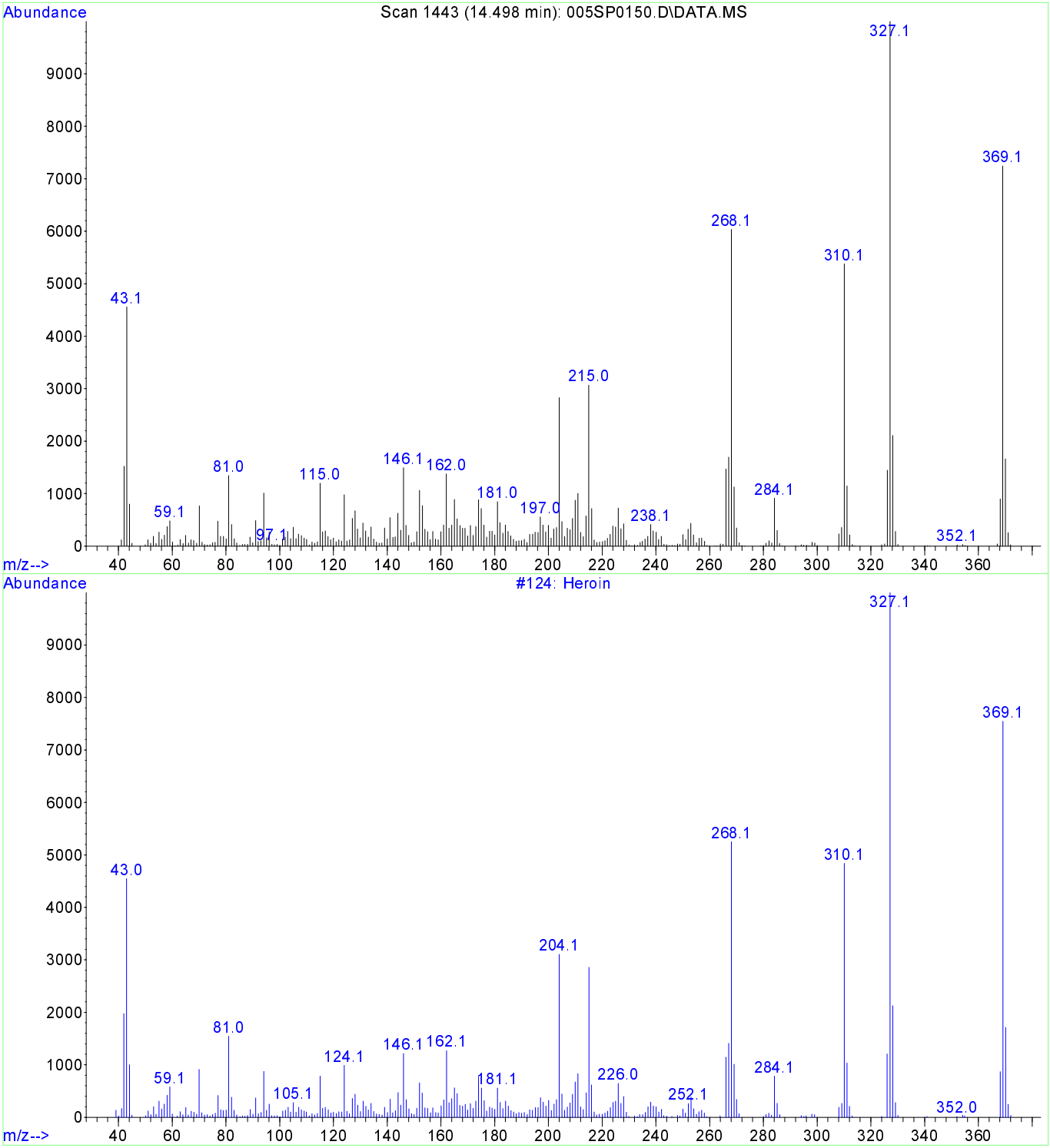




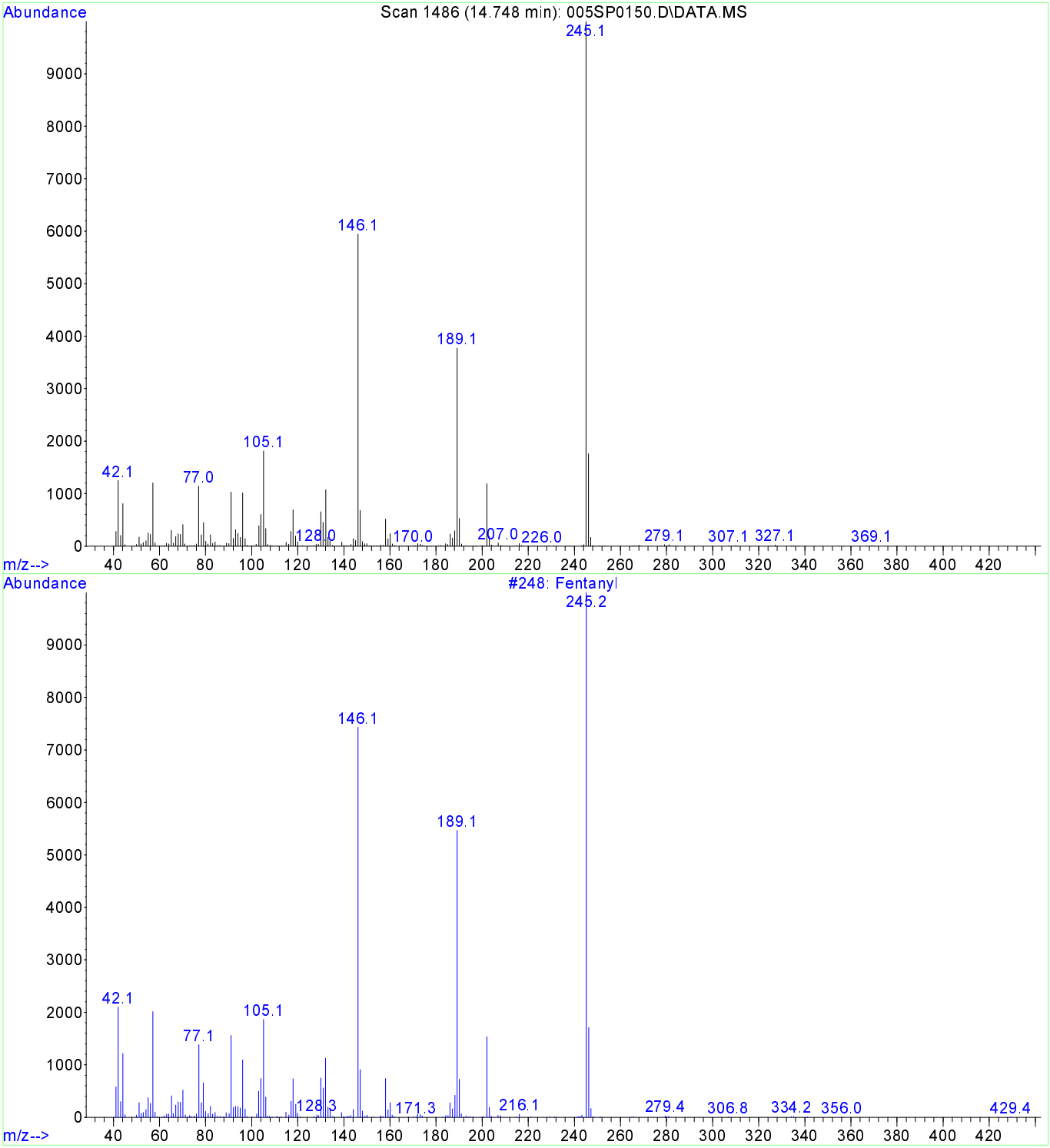
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Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 27 Jan 2025  11:05 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
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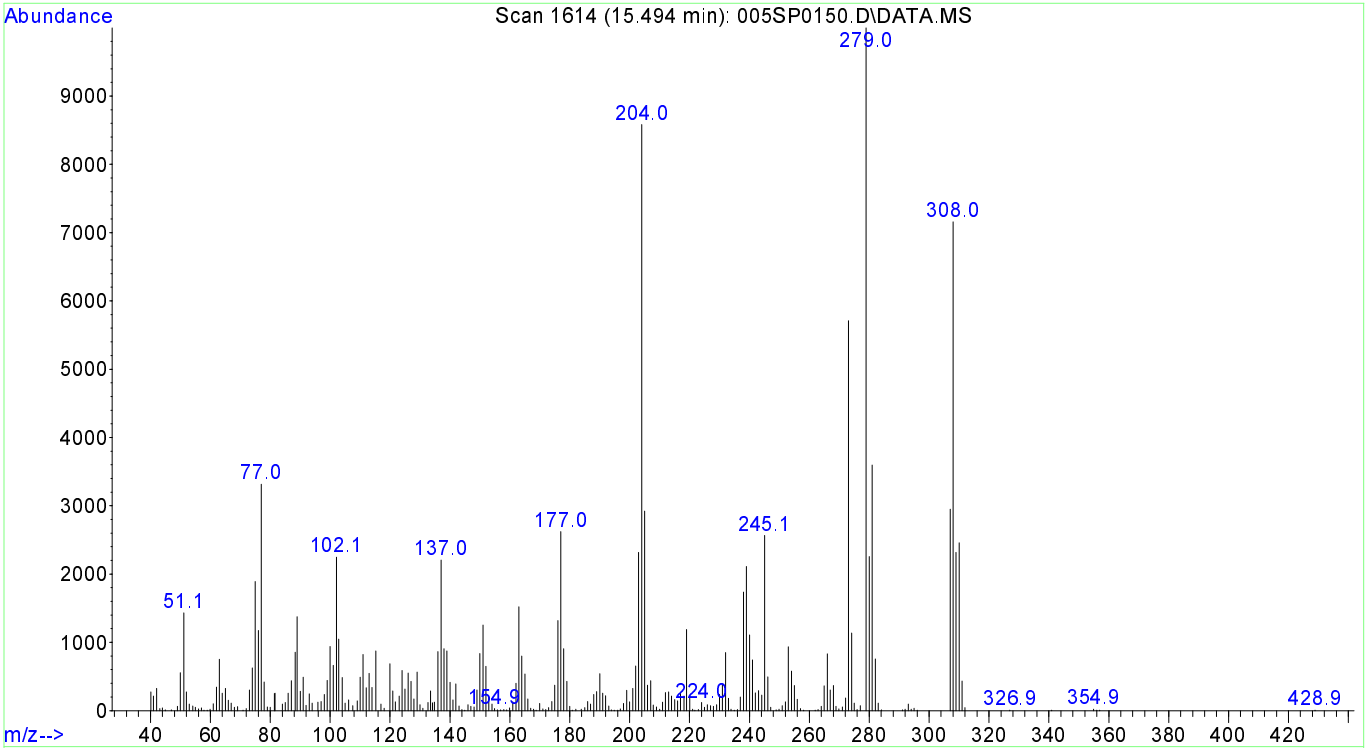
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Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 27 Jan 2025  11:05 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```



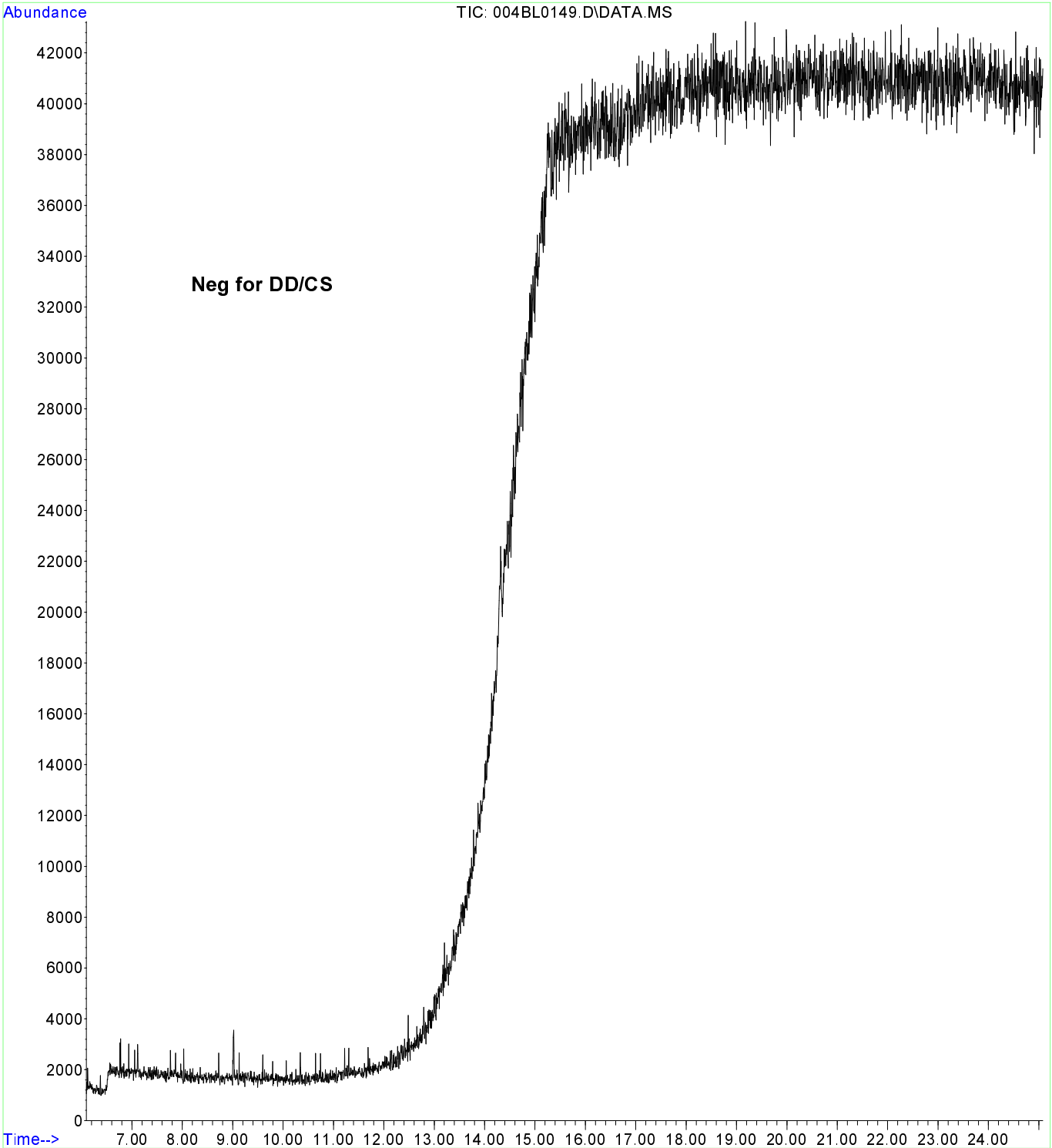
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Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
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Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 27 Jan 2025  11:05 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```



File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\012725\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 27 Jan 2025 10:37 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060) 000002666
Misc Info : 000002666



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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\012725\006BL0149.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 27 Jan 2025  11:34 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY           000002666
Misc Info  :                                                000002666
```

