Brazoria County Crime Lab

Seized Drugs Section

GC-MS Maintenance Log

Instrument: GCMS-3 **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	Filament switch (1 to 2 due to low 502/69 ratio)	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	✓	Maintenance	Analyst	Lab wide power outage	DS
5	3/26/2025	2500	Pass	N/A	N/A	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

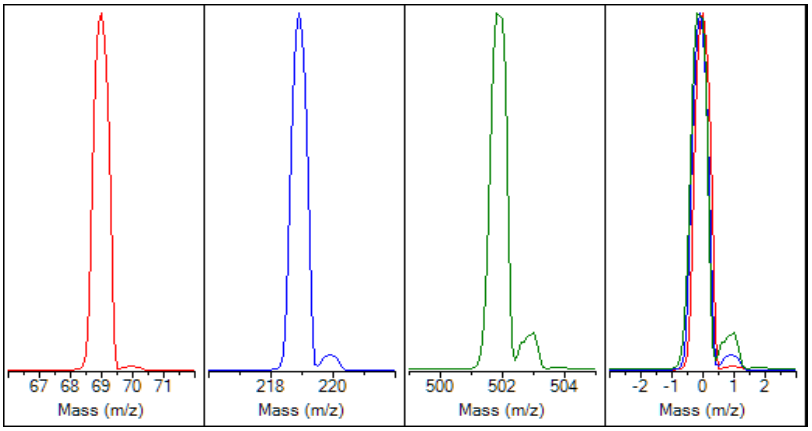
Signature: Derek Sanders **Date:** 31 March 2025

Final tune for 03/04/2025 after switching to filament 2
- DS 03/04/2025

Autotune - 5977

3/4/2025 8:38:49 AM (UTC-6:00) BCCL GCMS #3

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



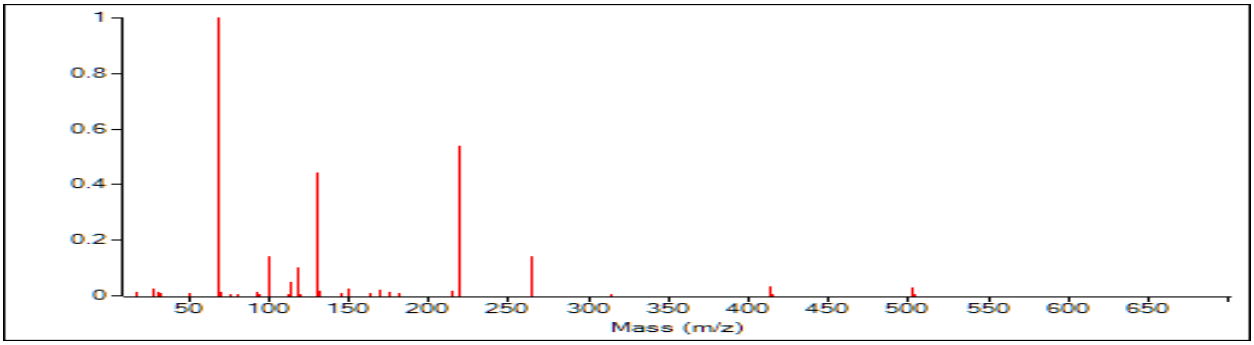
Ion Polarity	Pos	Mass Gain	-370
Emission	34.6	Mass Offset	-34
Electron Energy	70.0	Amu Gain	1678
Filament	2	Amu Offset	119.69
Repeller	30.12	Width219	-0.001
Ion Focus	90.3	DC Polarity	Pos
Entrance Lens	10.1	HED Enable	On
Ent Lens Offset	13.90	EM Volts	1864.7
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Mass	Abund	Rel Abund	Pw50
69.00	482,287	100.0%	0.60
218.90	262,189	54.4%	0.60
501.80	12,933	2.7%	0.60

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	1.05e-05

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	92	69.00	459,392	1,273,701



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	459,392	100.00	70.00	5,575	1.21
219.00	246,720	53.71	220.00	10,795	4.38
502.10	12,189	2.65	503.20	1,110	9.11

Air/Water Check: H20 ~1.1% N2 ~2.3% O2 ~0.8% CO2 ~0.1% N2/H20 ~203.8%

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 80308.676

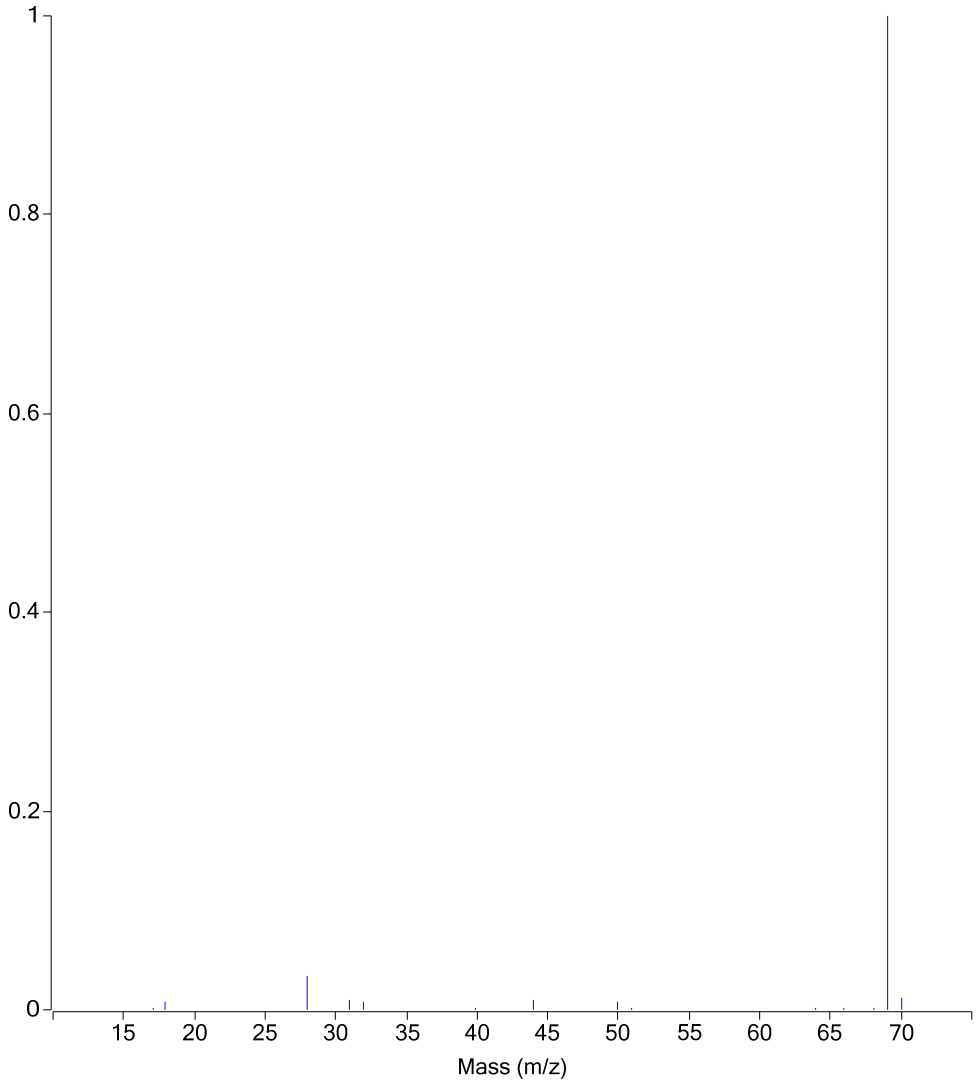
Repeller maximum 35 volts using ion 219; Gain Factor 0.8031

Mass Gain Values(Scan Speed): -346(3) -361(2) -364(1) -362(0) -361(FS1) -335(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	13.9	13.9	13.9	13.9	13.9	13.9	13.9

597x Air and Water Check

Instrument: BCCL GCMS #3
Tue Mar 04 08:33:56 2025 D:\MassHunter\GCMS\1\5977\



Air/water check for filament 2
- DS 03/04/2025

Current Params used: atune.u

Relative abundances:

18/69 =	0.74	Water%	(counts=3898)
28/69 =	3.36	Nitrogen%	(counts=17736)
32/69 =	0.83	Oxygen%	(counts=4354)
44/69 =	1.00	Carbon Dioxide%	(counts=5301)
28/18 =	455.00	Nitrogen/Water%	

Instrument Name : BCCL GCMS #3
DC Polarity : Positive
Filament 2

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	502.10	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	220.00	OK
Position of isotope mass 503	503.09	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%)	4.33	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	55.55	OK
Ratio of 502 to 69 should be > 2.4% and is	2.96	OK
Mass 69 Precursor (<= 3%)	0.09	OK
Mass 219 Precursor (<= 6%)	0.22	OK
Mass 502 Precursor (<= 12%)	0.85	OK

597x Air and Water Check
Tue Mar 04 09:11:49 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%)	1.07	OK
Ratio of 28 to 69 (<10%)	3.59	OK
Electron Multiplier Voltage	1865	OK

Tune portion of System Verification passed.

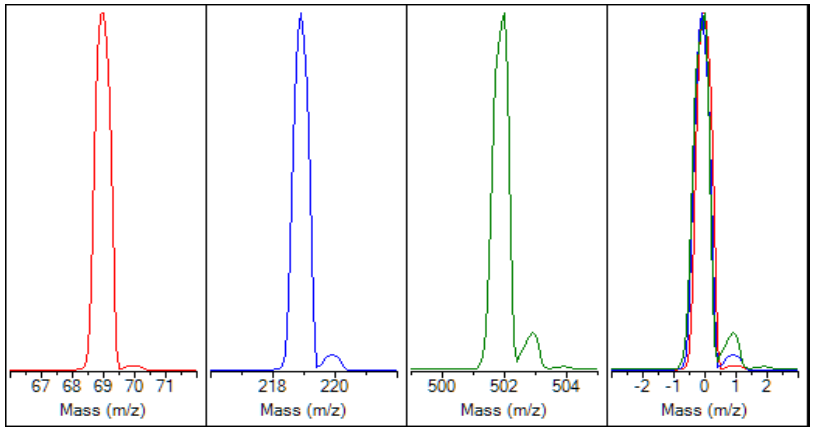
Tune evaluation after switch to filament 2 - see pages 4 - 8 of this tune packet for guidance on why filament was switched from 1 to 2 - DS 03/04/2025

1st attempted tune on 03/04/2025, the ratio of 502 to 69 was slightly decreased (2.3% - should be greater than 2.4%). A 2nd tune was attempted to remedy the issue - DS 03/04/2025

Autotune - 5977

3/4/2025 8:16:04 AM (UTC-6:00) BCCL GCMS #3

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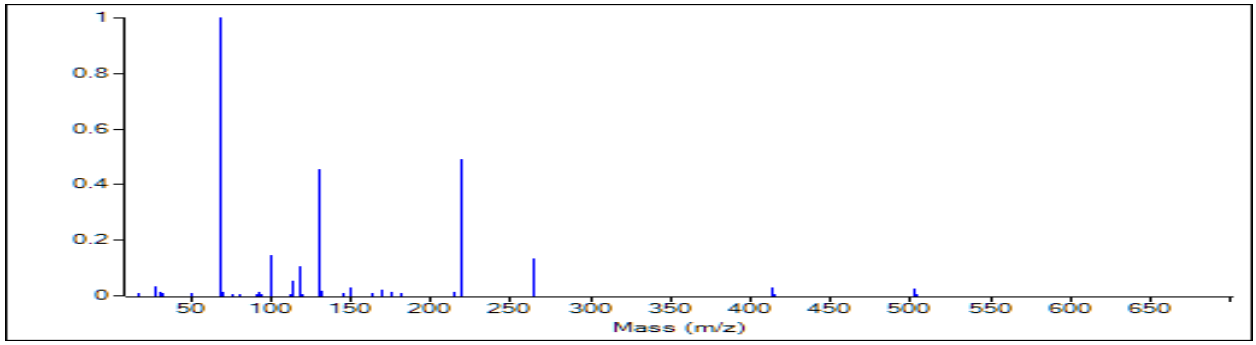
Ion Polarity	Pos	Mass Gain	-367
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1676
Filament	1	Amu Offset	119.63
Repeller	31.51	Width219	-0.005
Ion Focus	75.5	DC Polarity	Pos
Entrance Lens	12.6	HED Enable	On
Ent Lens Offset	11.65	EM Volts	1864.7
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.66e-06

Mass	Abund	Rel Abund	Pw50
69.00	482,131	100.0%	0.61
218.90	244,322	50.7%	0.60
502.00	11,248	2.3%	0.60

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	93	69.00	476,032	1,297,441



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	476,032	100.00	70.00	5,272	1.11
219.00	232,640	48.87	220.00	10,333	4.44
502.10	10,968	2.30	503.10	1,165	10.62

Air/Water Check: H20 ~0.8% N2 ~3.0% O2 ~0.9% CO2 ~0.1% N2/H20 ~355.1%

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 79702.699

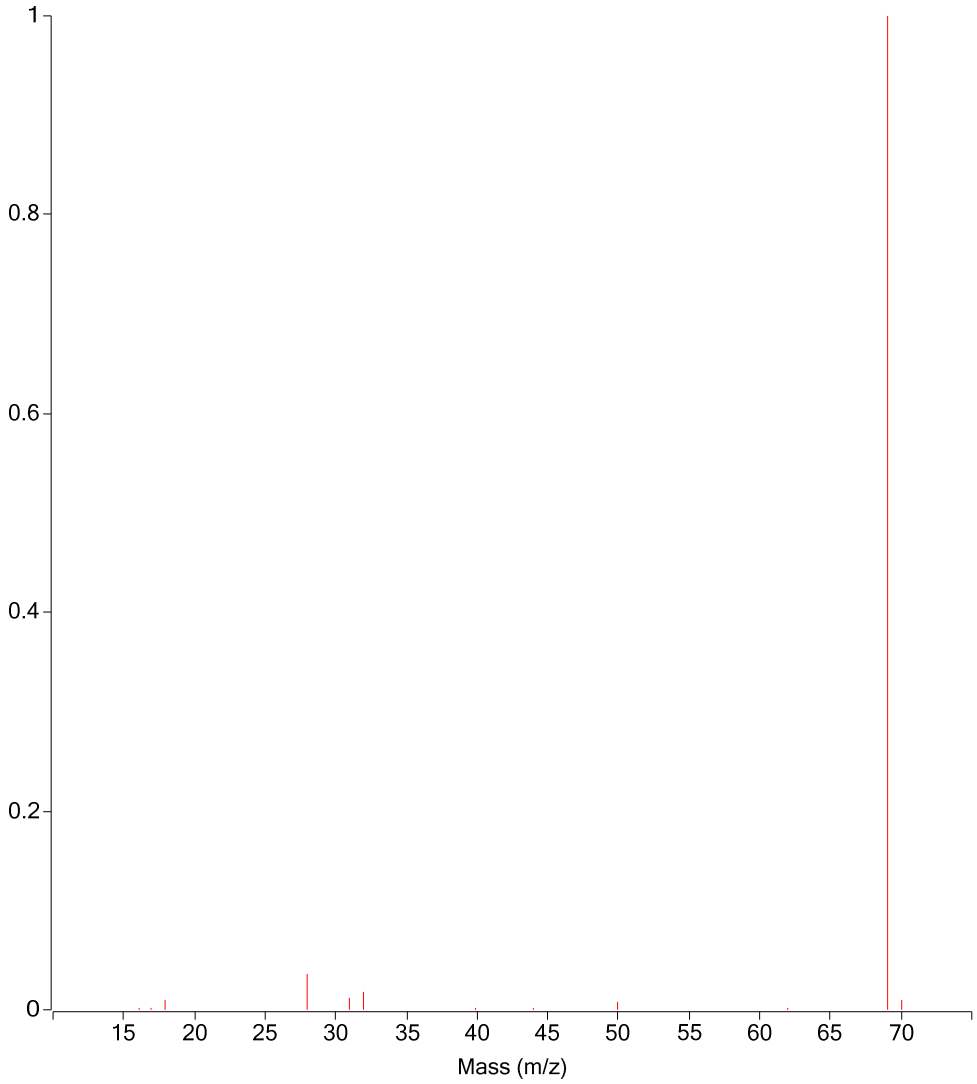
Repeller maximum 35 volts using ion 219; Gain Factor 0.7970

Mass Gain Values(Scan Speed): -346(3) -359(2) -366(1) -363(0) -363(FS1) -346(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.6	119.6	119.6	119.6	119.6	119.6	119.6
Entrance Lens Offset	11.7	11.7	11.7	11.7	11.7	11.7	11.7

597x Air and Water Check 1st attempted tune air/water check

Instrument: BCCL GCMS #3
Tue Mar 04 08:10:26 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.06	Water%	(counts=9210)
28/69 =	3.59	Nitrogen%	(counts=31160)
32/69 =	1.86	Oxygen%	(counts=16147)
44/69 =	0.28	Carbon Dioxide%	(counts=2459)
28/18 =	338.33	Nitrogen/Water%	

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		219.00	OK
Position of mass 502		502.10	OK
Position of isotope mass 70		70.00	OK
Position of isotope mass 220		220.00	OK
Position of isotope mass 503		503.09	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%)		4.34	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)		9.91	OK
Ratio of 219 to 69 should be > 40% and is		49.12	OK
Ratio of 502 to 69 should be > 2.4% and is	Text	2.27	Low

1st attempted tune - tune evaluation - which reveals the low 502/69 ratio. Tune will be reattempted for a 2nd time - DS 03/04/2025

Possible causes include:
- Foreline pressure not between 20 and 100 mTorr
- Bad filament being used
- Dirty ion source

Mass 69 Precursor (<= 3%)	0.08	OK
Mass 219 Precursor (<= 6%)	0.19	OK
Mass 502 Precursor (<= 12%)	1.15	OK

597x Air and Water Check
Tue Mar 04 08:21:00 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%)	0.79	OK
Ratio of 28 to 69 (<10%)	2.75	OK
Electron Multiplier Voltage	1865	OK

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

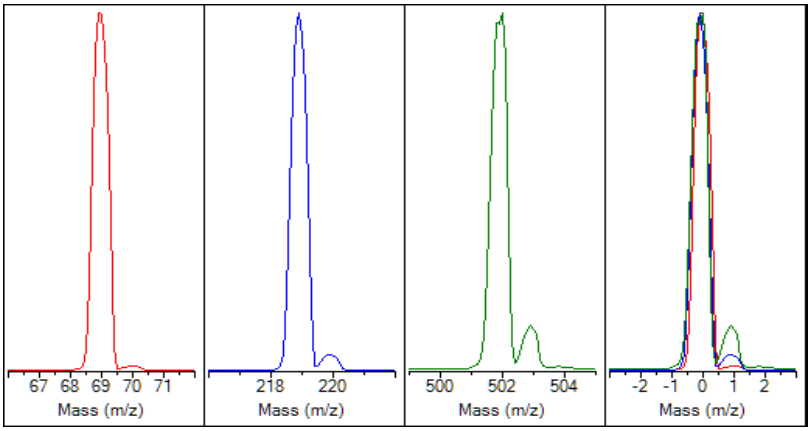
Failure of one or more tests may be caused by
selecting the wrong DC Polarity.
Please verify that the correct DC Polarity has been set
by removing the detector cover and checking the label
at the top of the EID.

2nd attempted tune which reveals the same issue as the 1st attempted tune - 502/69 ratio is too low. The tune will be reattempted for a third time but the filament will be switched from filament 1 to filament 2 - DS 03/04/2025

Autotune - 5977

3/4/2025 8:27:16 AM (UTC-6:00) BCCL GCMS #3

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



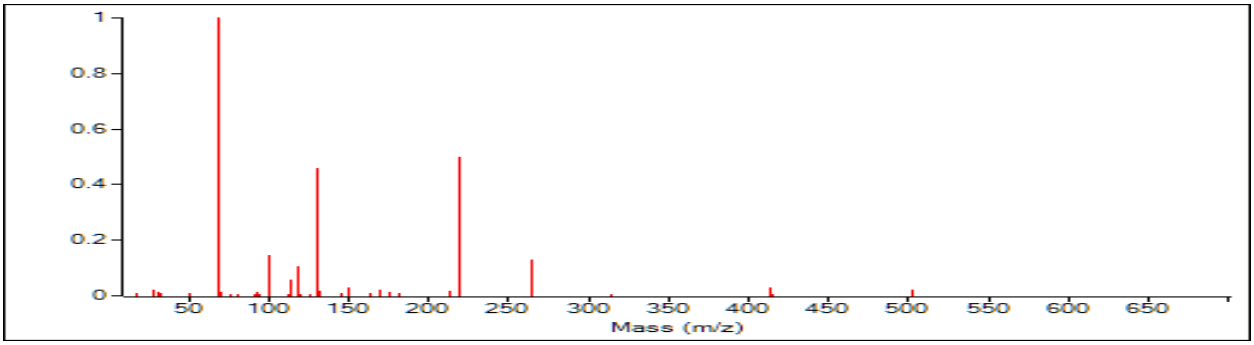
Ion Polarity	Pos	Mass Gain	-366
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1677
Filament	1	Amu Offset	119.38
Repeller	30.91	Width219	-0.002
Ion Focus	73.6	DC Polarity	Pos
Entrance Lens	10.1	HED Enable	On
Ent Lens Offset	11.82	EM Volts	1864.7
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Mass	Abund	Rel Abund	Pw50
68.90	434,023	100.0%	0.61
218.90	211,943	48.8%	0.60
502.00	8,991	2.1%	0.59

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	9.81e-06

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	90	69.00	423,168	1,154,006



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	423,168	100.00	70.00	4,527	1.07
218.90	210,304	49.70	219.90	8,979	4.27
501.80	9,036	2.14	502.80	788	8.72

Air/Water Check: H20 ~0.7% N2 ~2.0% O2 ~0.6% CO2 ~0.1% N2/H20 ~297.1%

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 78284.570

Repeller maximum 35 volts using ion 219; Gain Factor 0.7828

Mass Gain Values(Scan Speed): -379(3) -353(2) -332(1) -310(0) -257(FS1) -256(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	11.8	11.8	11.8	11.8	11.8	11.8	11.8

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	218.90	OK
Position of mass 502	501.83	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	219.90	OK
Position of isotope mass 503	502.83	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%)	4.35	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.93	OK
Ratio of 219 to 69 should be > 40% and is	48.66	OK
Ratio of 502 to 69 should be > 2.4% and is	2.12	Low

2nd Tune evaluation revealing the low ratio - DS 03/04/2025

Possible causes include: Foreline pressure not between 20 and 100 mTorr
Bad filament being used
Dirty ion source

Mass 69 Precursor (<= 3%)	0.08	OK
Mass 219 Precursor (<= 6%)	0.19	OK
Mass 502 Precursor (<= 12%)	1.48	OK

597x Air and Water Check
Tue Mar 04 08:32:25 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%)	0.67	OK
Ratio of 28 to 69 (<10%)	2.65	OK
Electron Multiplier Voltage	1865	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.

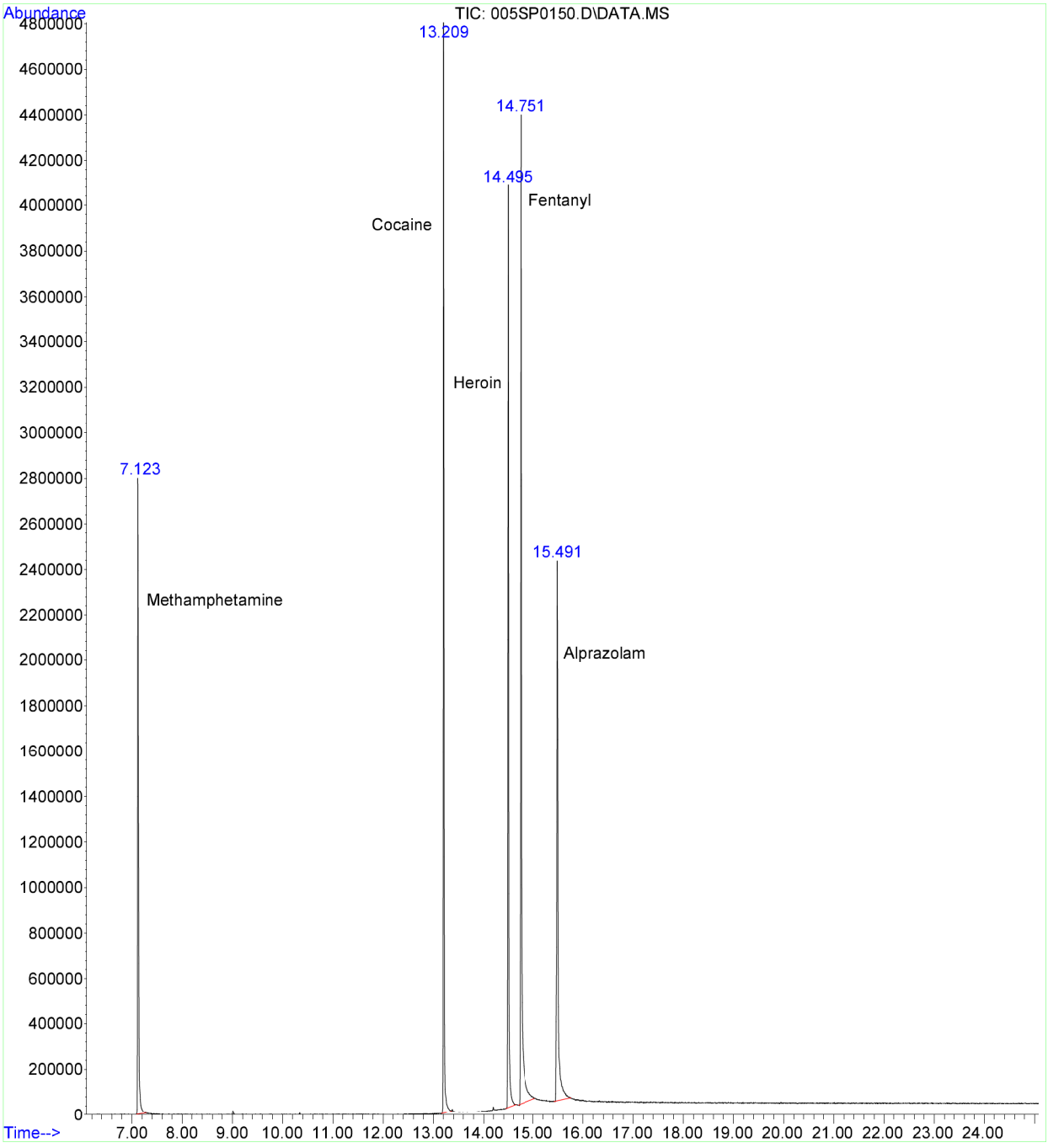
BCCL GC/MS #3
Retention Times for the Week of:

03/03/2025 - 03/09/2025

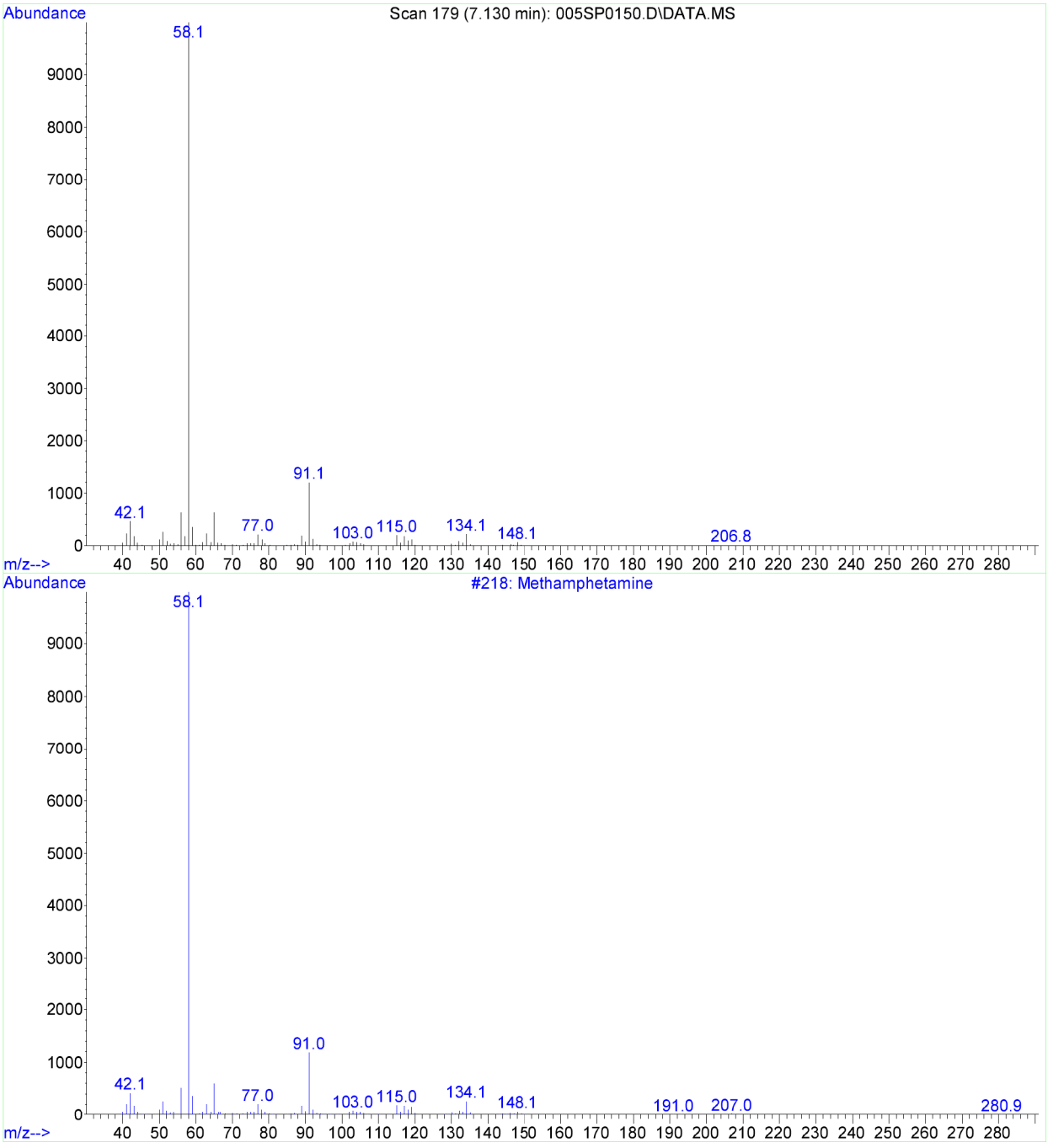
[X] **Tune: DS 03/04/2025 - Autotune**

Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.123	7.051	7.194
Cocaine	R-24-060	DrugTest35	13.209	13.076	13.341
Heroin	R-24-060	DrugTest35	14.495	14.350	14.639
Fentanyl	R-24-060	DrugTest35	14.751	14.603	14.898
Alprazolam	R-24-060	DrugTest35	15.491	15.336	15.645
Buspirone	S-21-030	DrugTest35	17.068	16.897	17.238

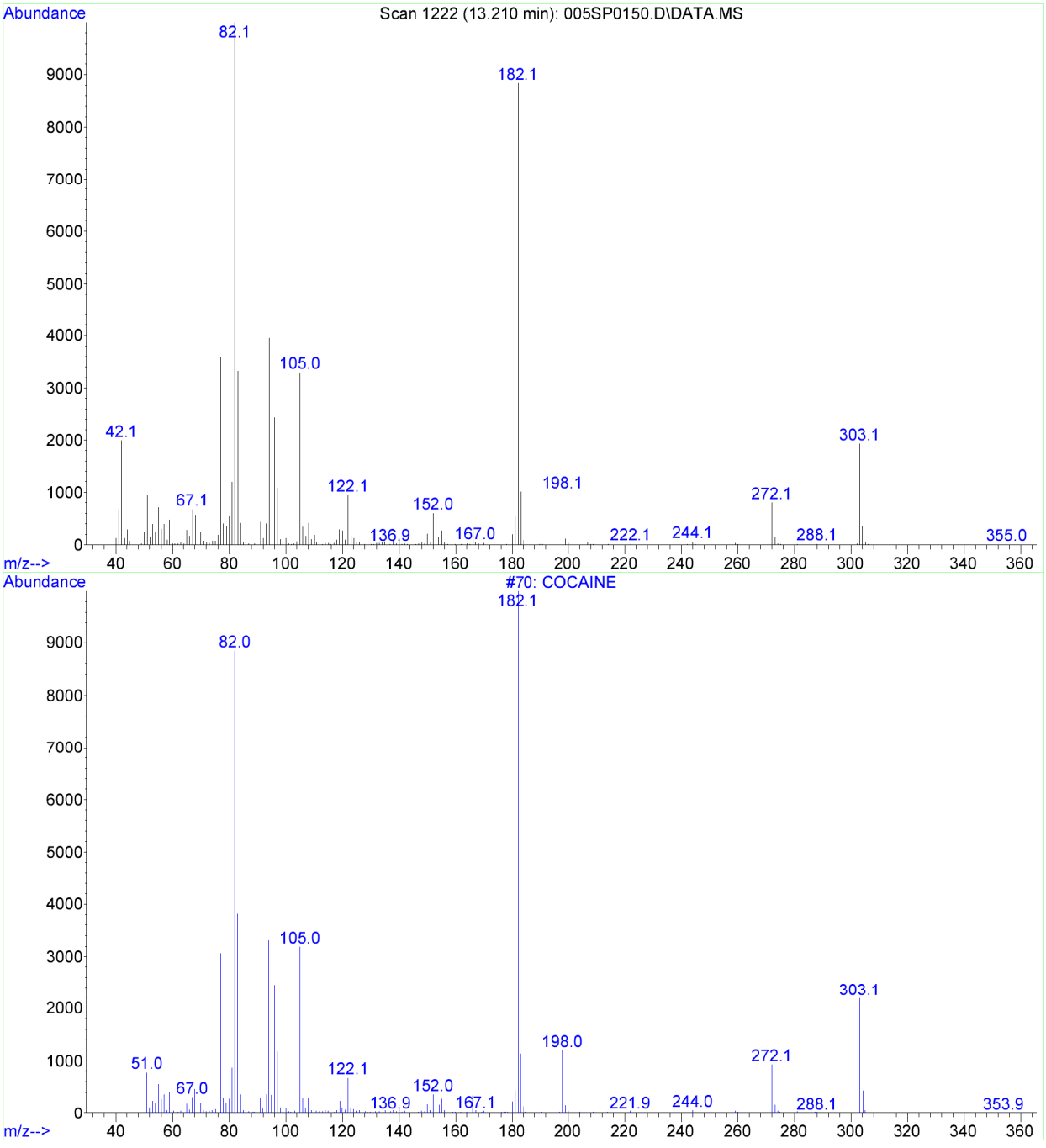
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Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 04 Mar 2025  10:36 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
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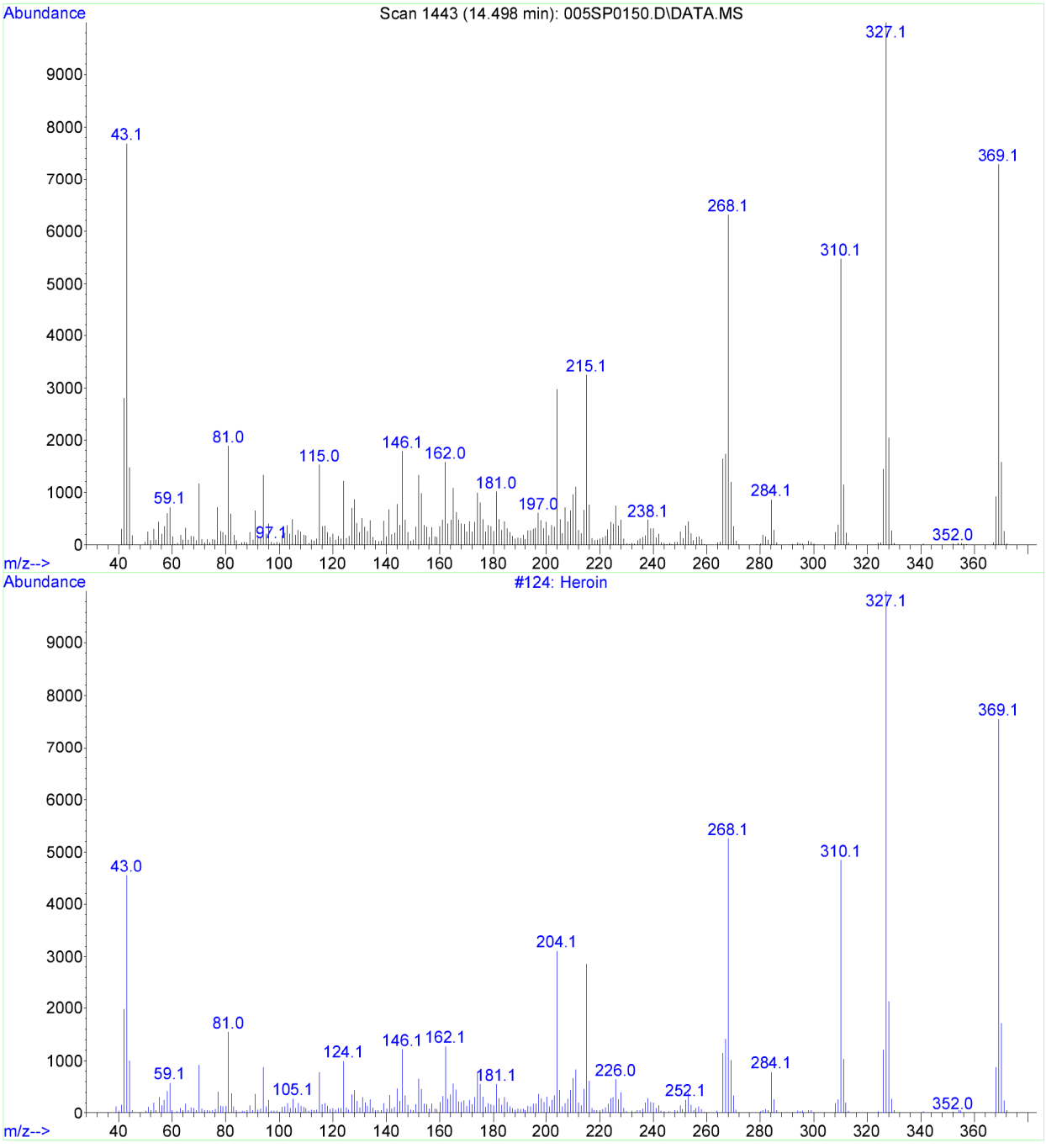
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...          Data\030425\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 04 Mar 2025  10:36 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
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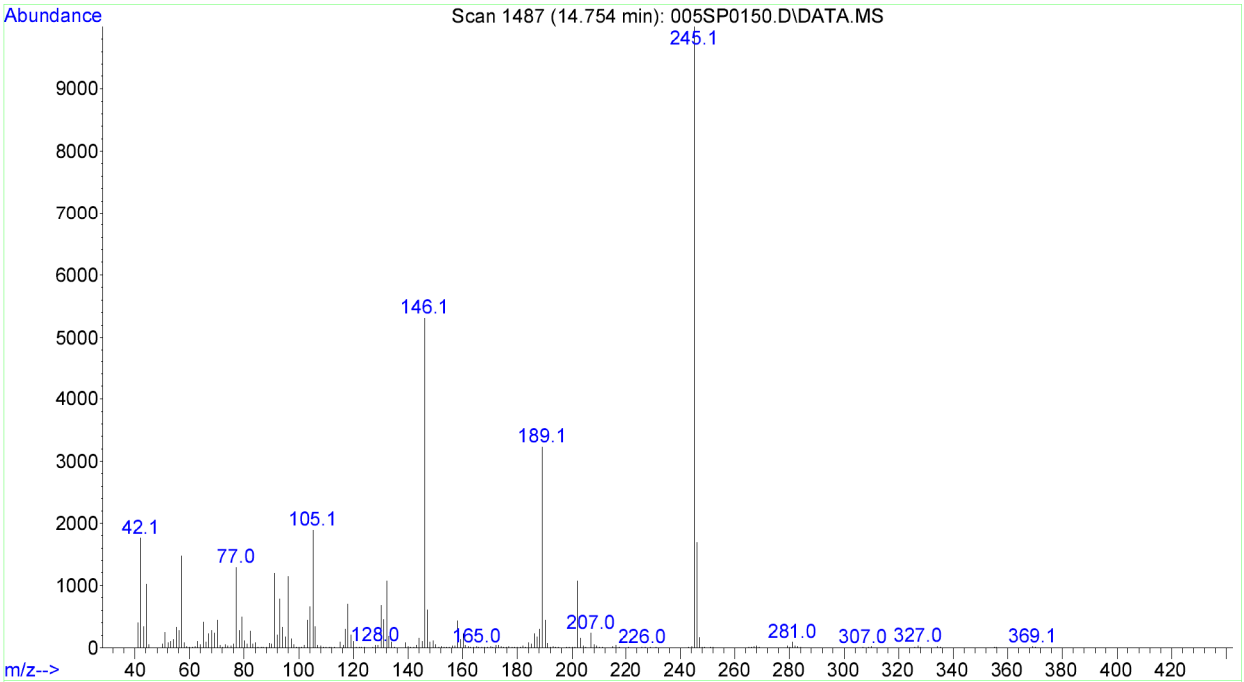
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...          Data\030425\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
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Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
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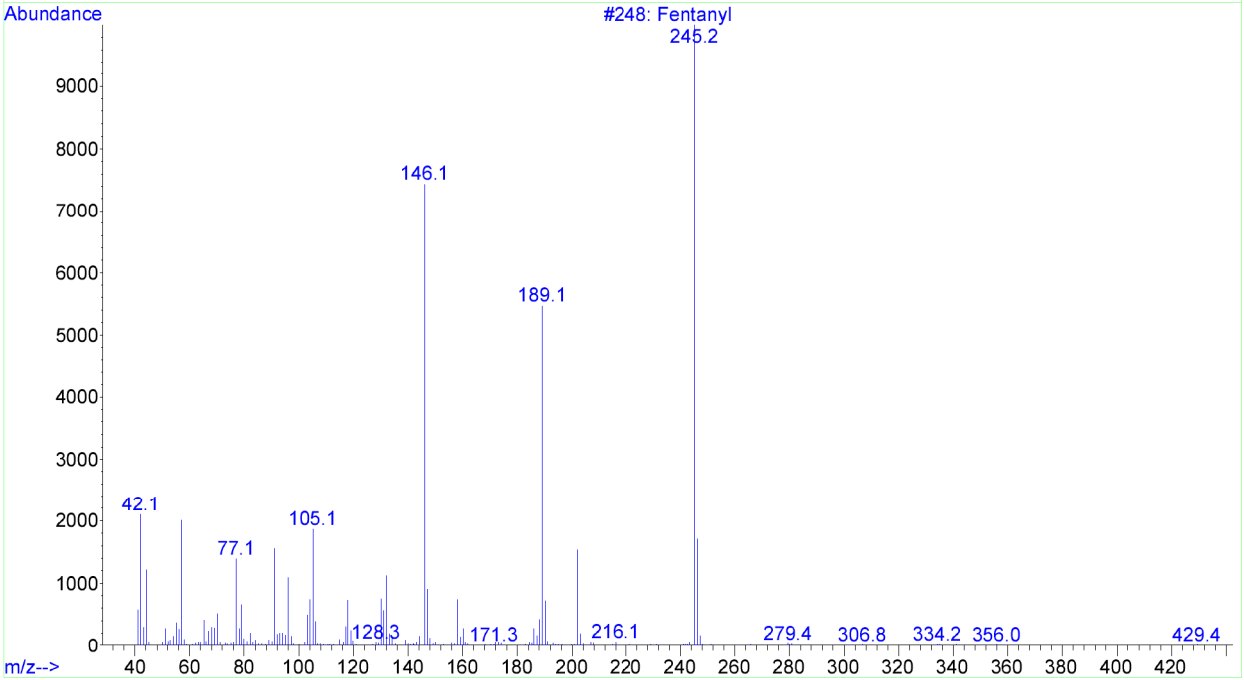


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... Data\030425\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 04 Mar 2025 10:36 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667

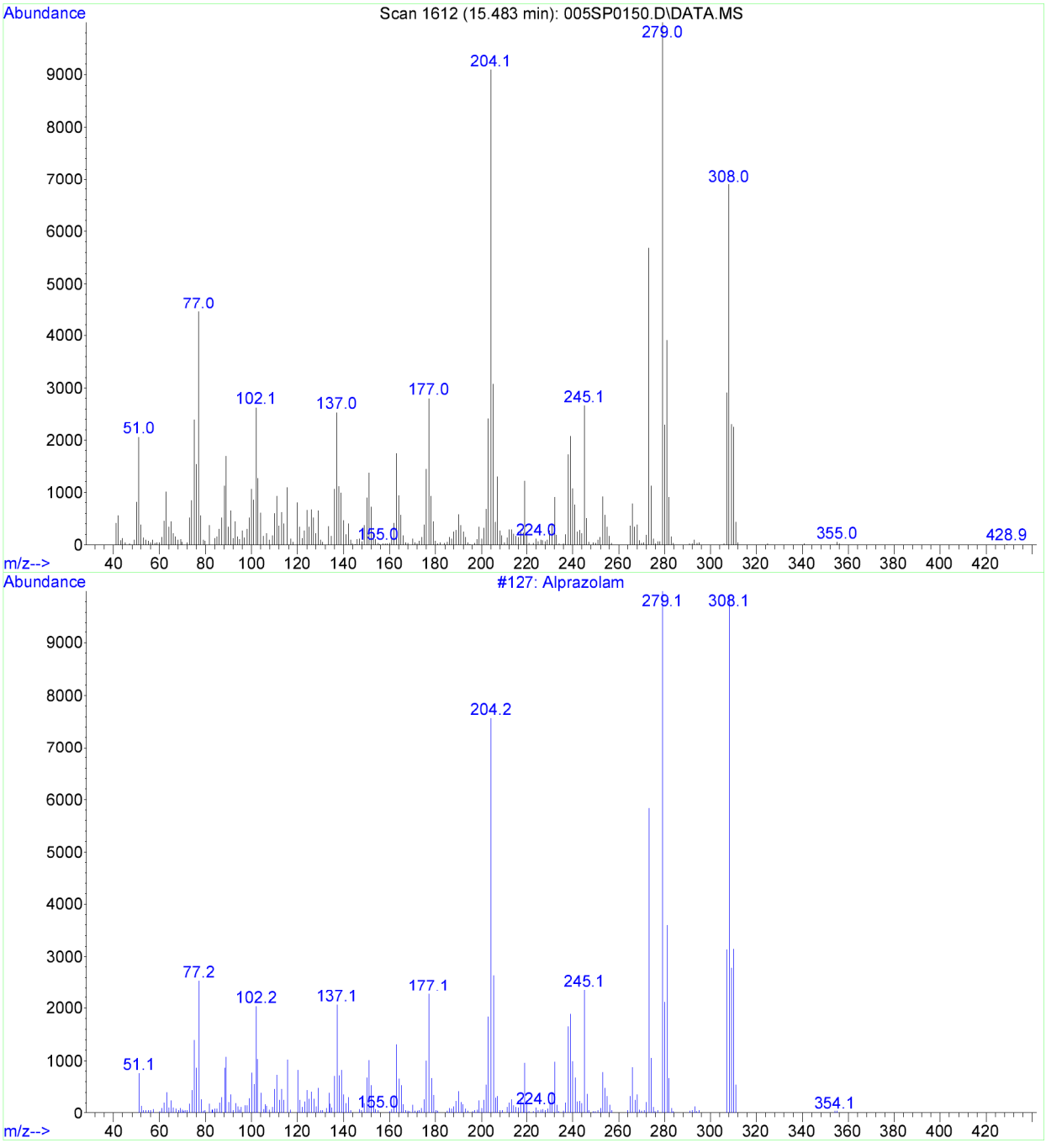


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... Data\030425\005SP0150.D
Operator : DrugChem-HP\admin
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Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667

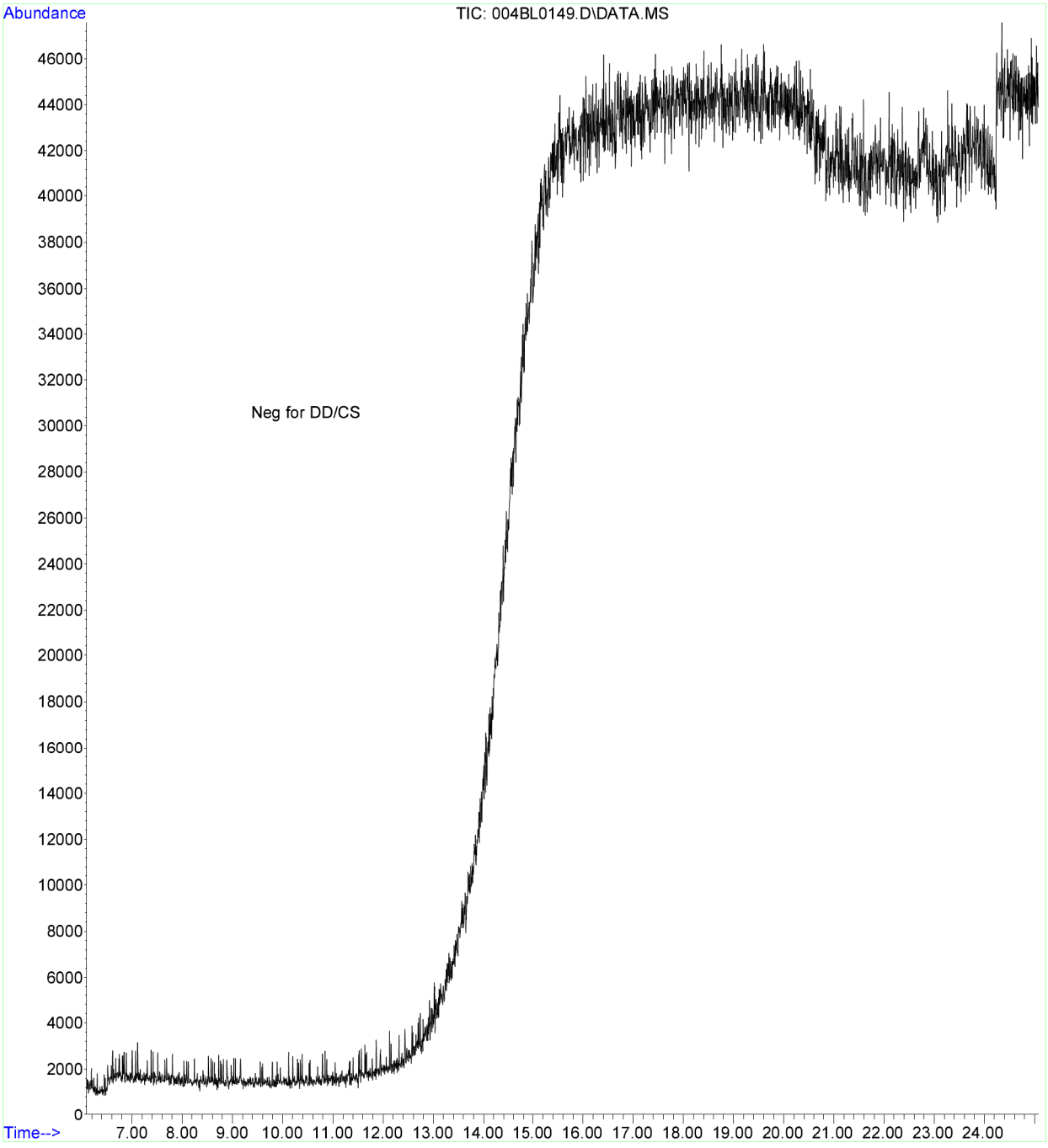




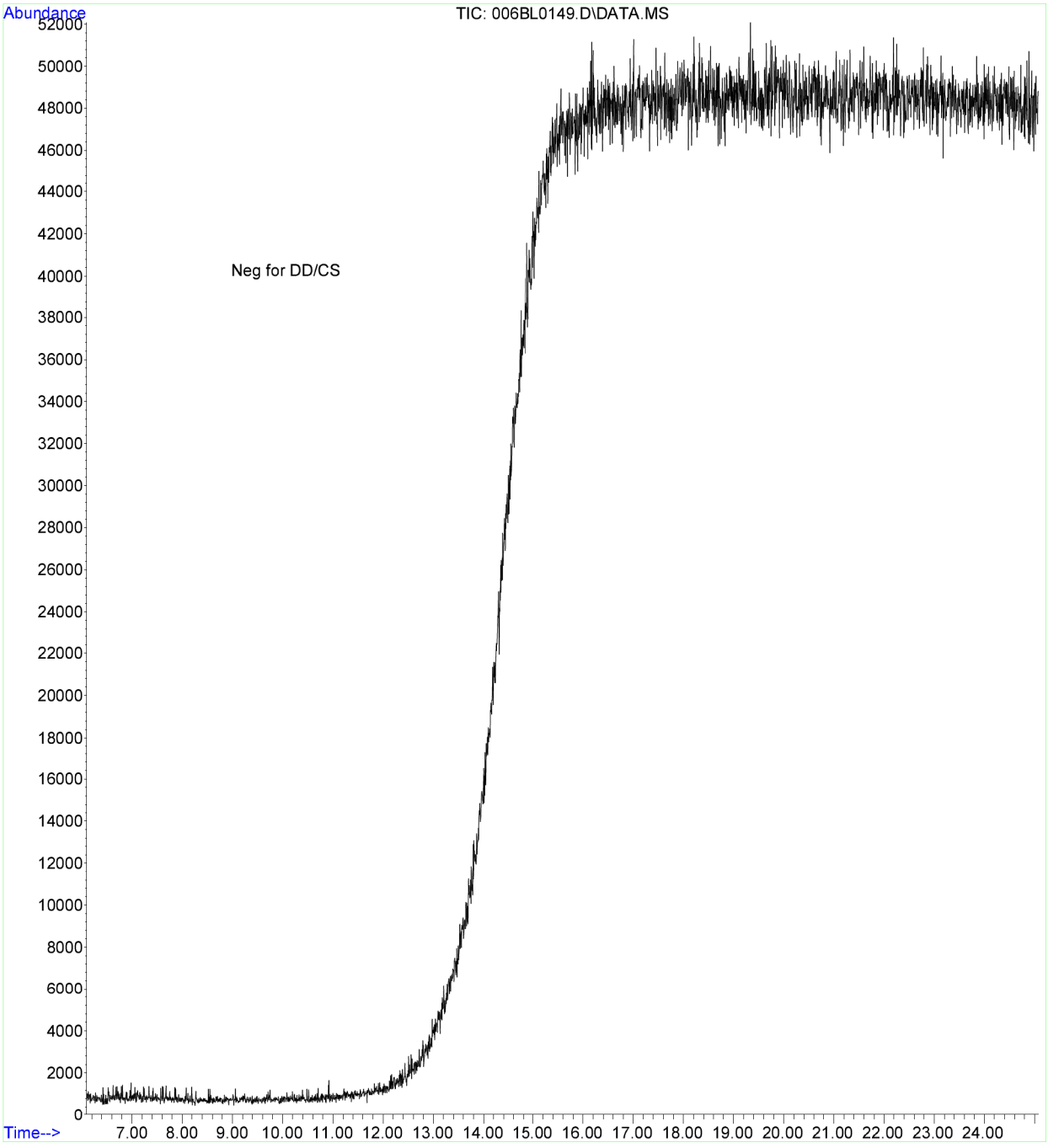
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File        :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...           Data\030425\005SP0150.D
Operator    : DrugChem-HP\admin
Instrument  :   BCCL GCMS #3
Acquired    : 04 Mar 2025  10:36 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info   :                                                 000002667
```



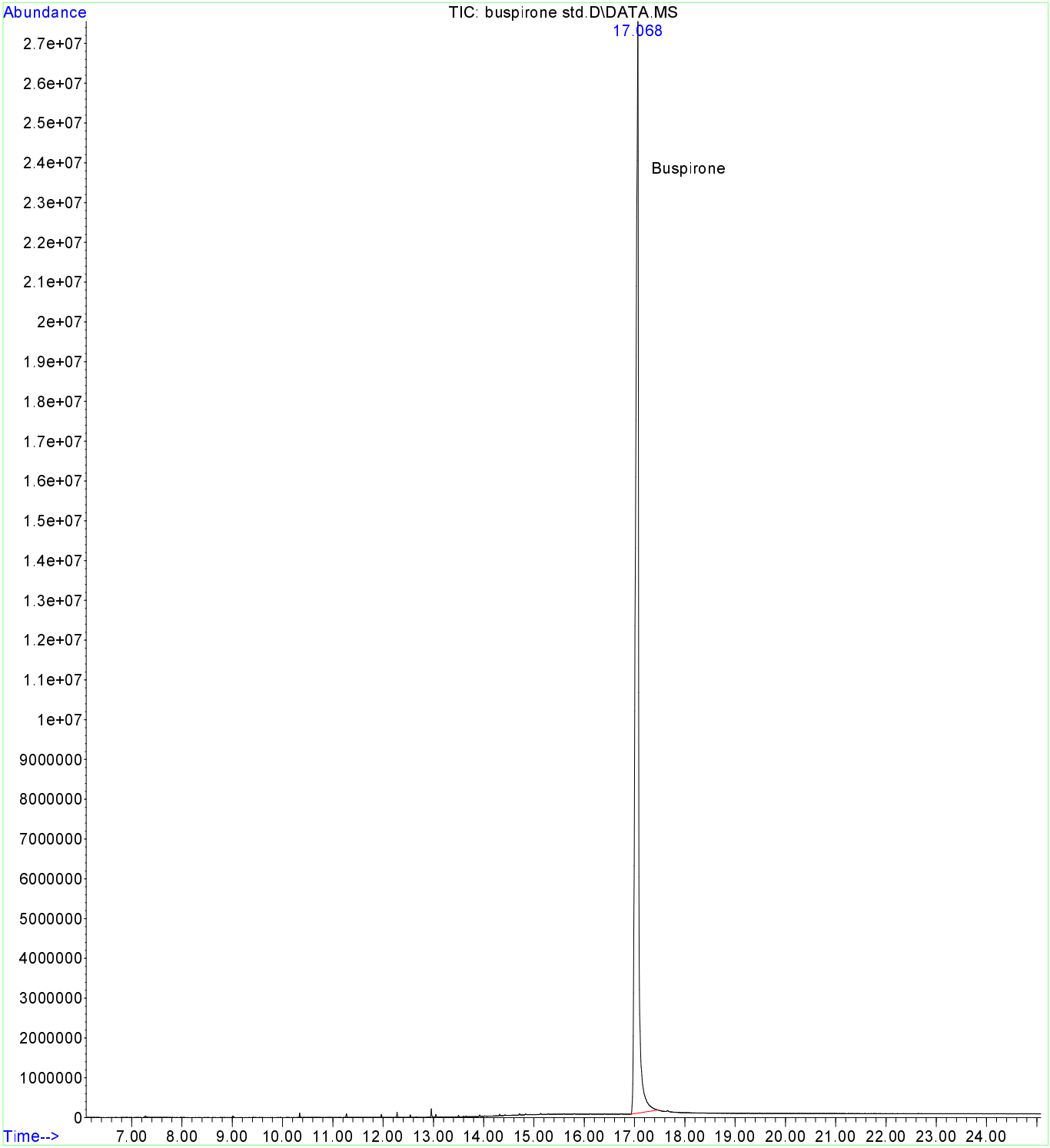
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\030425\004BL0149.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 04 Mar 2025  10:08 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060)  000002666
Misc Info  :                                                  000002666
```



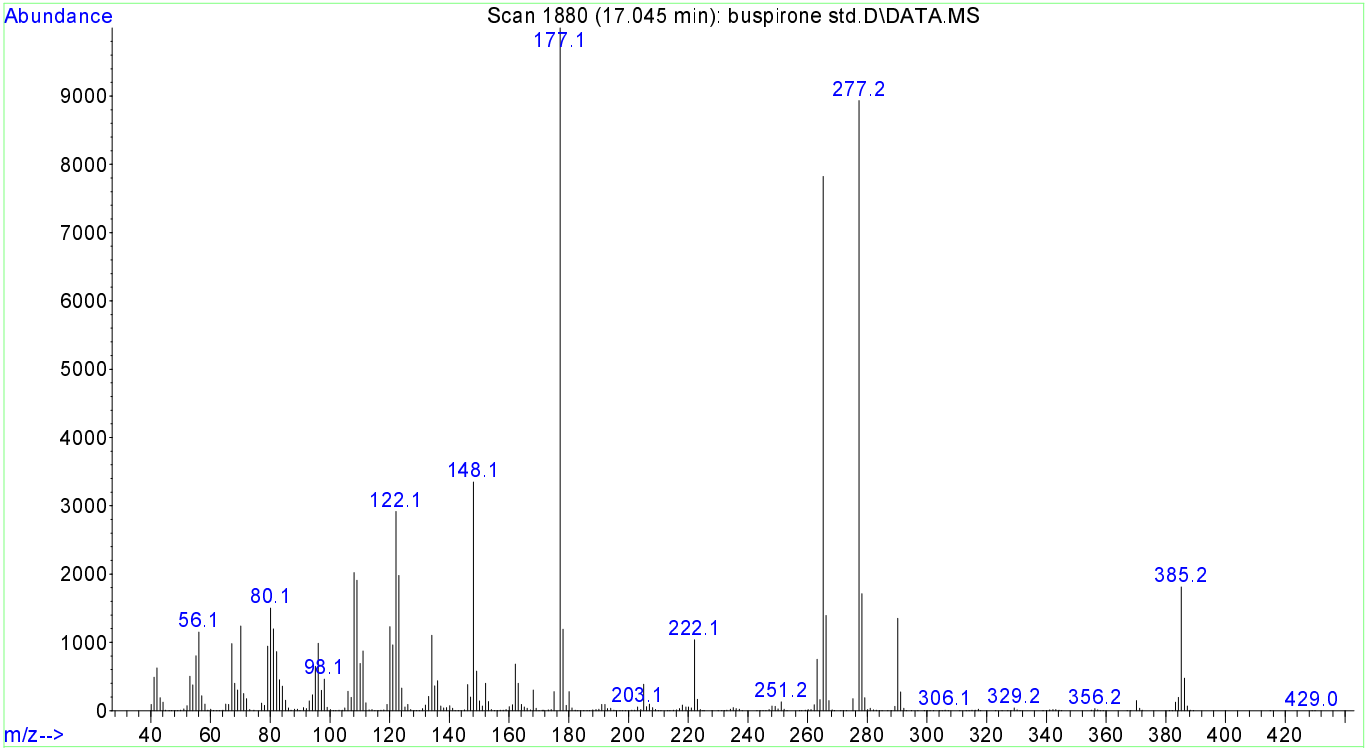
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\030425\006BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 04 Mar 2025 11:05 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666

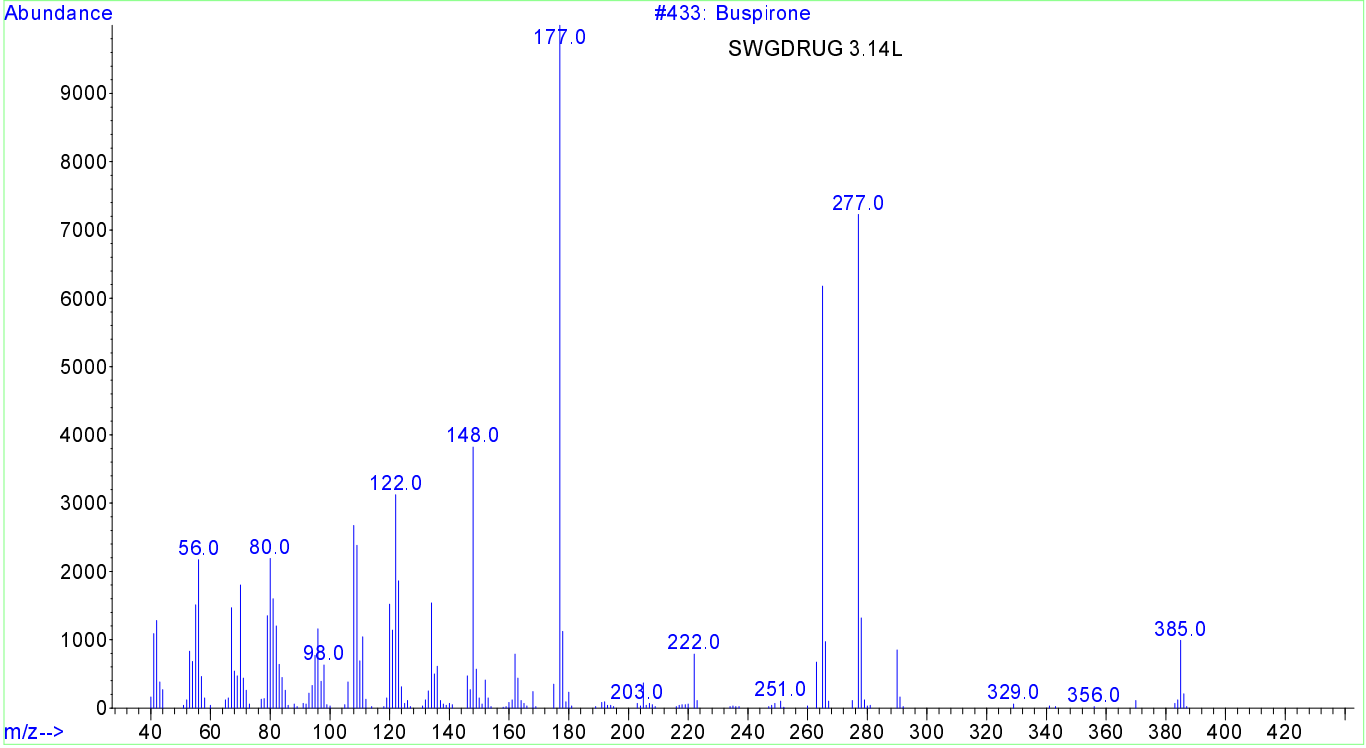


File :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\030725\buspirone ... std.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 07 Mar 2025 11:32 am using AcqMethod DrugTest.M
Sample Name: Buspirone std (S-21-030) 000002395
Misc Info : RT determination ERR

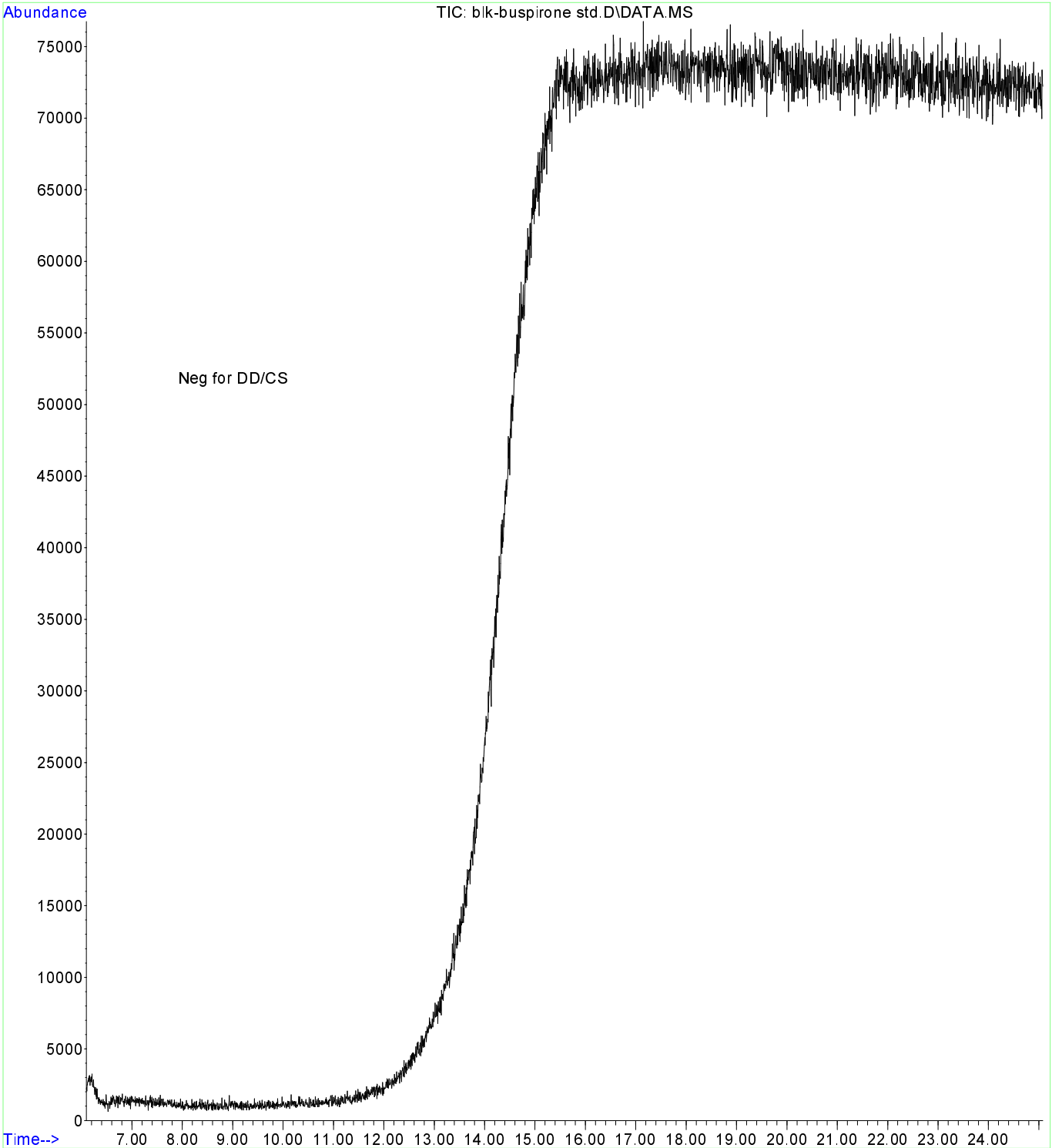


```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\030725\buspirone
...         std.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 07 Mar 2025  11:32 am using AcqMethod DrugTest.M
Sample Name: Buspirone std (S-21-030)                          000002395
Misc Info  : RT determination                                  ERR
```





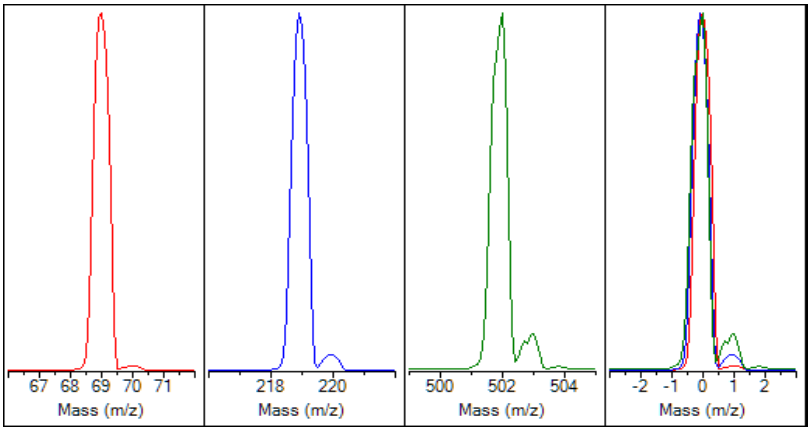
File :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\030725\blk-buspir
... one std.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 07 Mar 2025 11:02 am using AcqMethod DrugTest.M
Sample Name: blank prior to Buspirone std (S-21-030) 000002395
Misc Info : EtAc (C-22-0063A)/base extracted w/ R-24-059 000002395



Autotune - 5977

3/10/2025 8:32:22 AM (UTC-5:00) BCCL GCMS #3

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



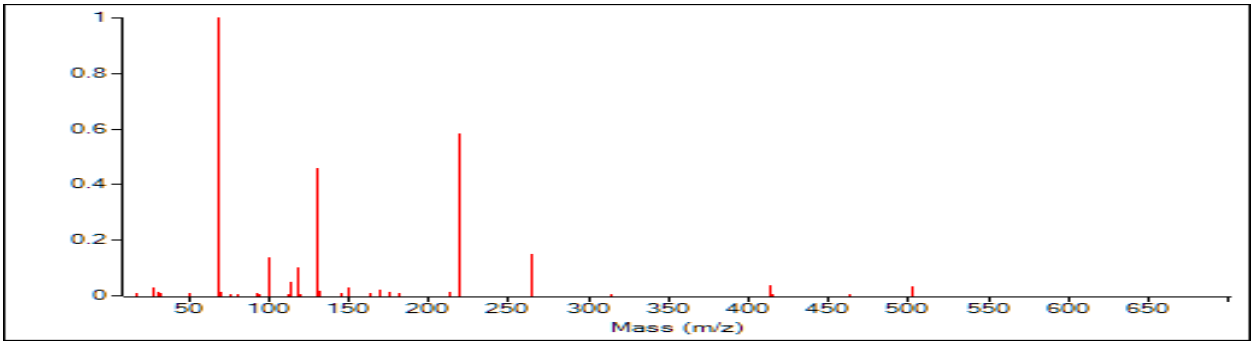
Ion Polarity	Pos	Mass Gain	-370
Emission	34.6	Mass Offset	-34
Electron Energy	70.0	Amu Gain	1678
Filament	2	Amu Offset	119.44
Repeller	30.52	Width219	-0.005
Ion Focus	82.4	DC Polarity	Pos
Entrance Lens	12.6	HED Enable	On
Ent Lens Offset	12.69	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.38e-06

Mass	Abund	Rel Abund	Pw50
69.00	414,013	100.0%	0.60
218.90	245,139	59.2%	0.60
502.00	13,034	3.1%	0.61

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	94	69.00	402,944	1,146,984



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	402,944	100.00	70.00	4,418	1.10
218.90	235,200	58.37	219.90	10,128	4.31
501.90	12,391	3.08	502.80	1,150	9.28

Air/Water Check: H20 ~0.9% N2 ~2.8% O2 ~0.9% CO2 ~0.1% N2/H20 ~322.6%

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 56580.839

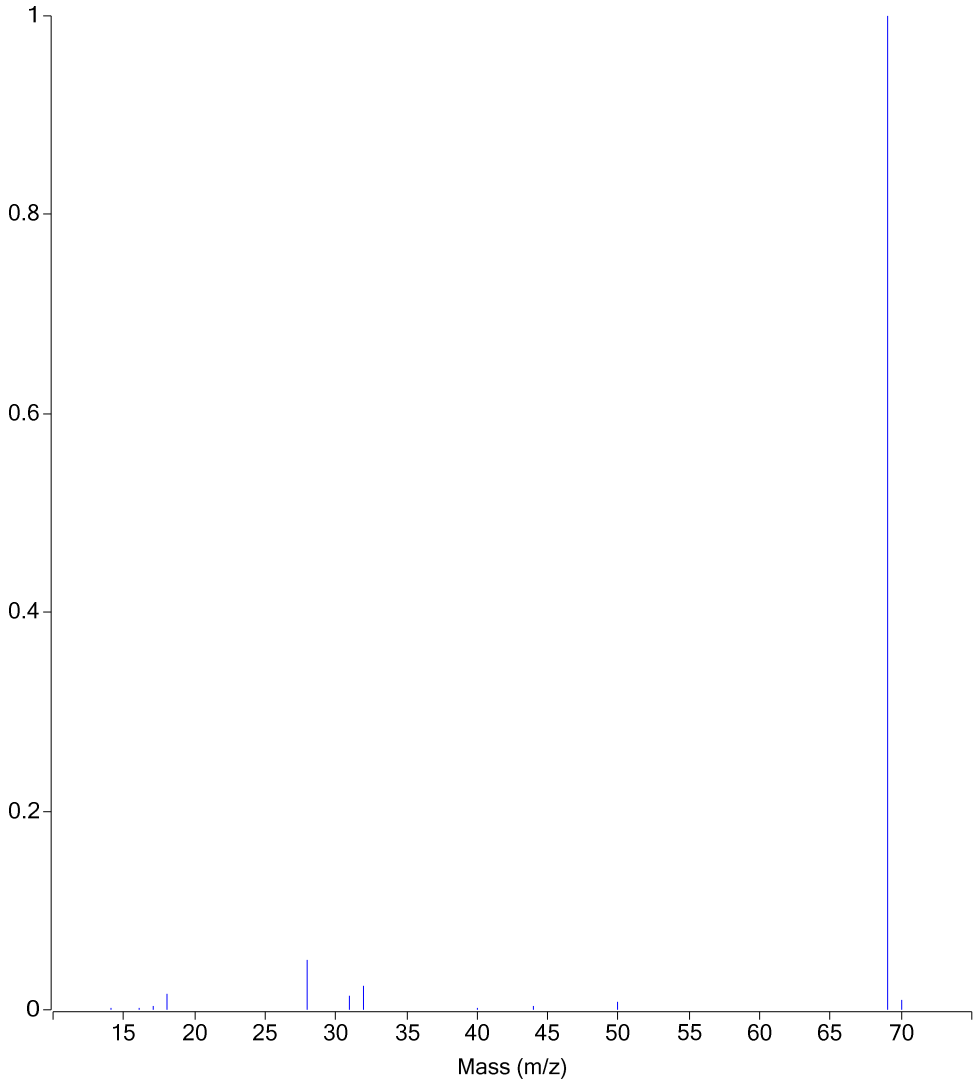
Repeller maximum 35 volts using ion 219; Gain Factor 0.5658

Mass Gain Values(Scan Speed): -381(3) -357(2) -334(1) -323(0) -271(FS1) -270(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	12.7	12.7	12.7	12.7	12.7	12.7	12.7

597x Air and Water Check

Instrument: BCCL GCMS #3
Mon Mar 10 08:26:31 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.60	Water%	(counts=17640)
28/69 =	5.08	Nitrogen%	(counts=55992)
32/69 =	2.48	Oxygen%	(counts=27352)
44/69 =	0.32	Carbon Dioxide%	(counts=3493)
28/18 =	317.41	Nitrogen/Water%	

Instrument Name	: BCCL GCMS #3	
DC Polarity	: Positive	
Filament	2	
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	501.86	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	219.90	OK
Position of isotope mass 503	502.83	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%)	10.24	OK
Ratio of 219 to 69 should be > 40% and is	58.01	OK
Ratio of 502 to 69 should be > 2.4% and is	3.07	OK
Mass 69 Precursor (<= 3%)	0.09	OK
Mass 219 Precursor (<= 6%)	0.23	OK
Mass 502 Precursor (<= 12%)	1.21	OK

597x Air and Water Check

Mon Mar 10 08:36:41 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%)	0.82	OK
Ratio of 28 to 69 (<10%)	3.54	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

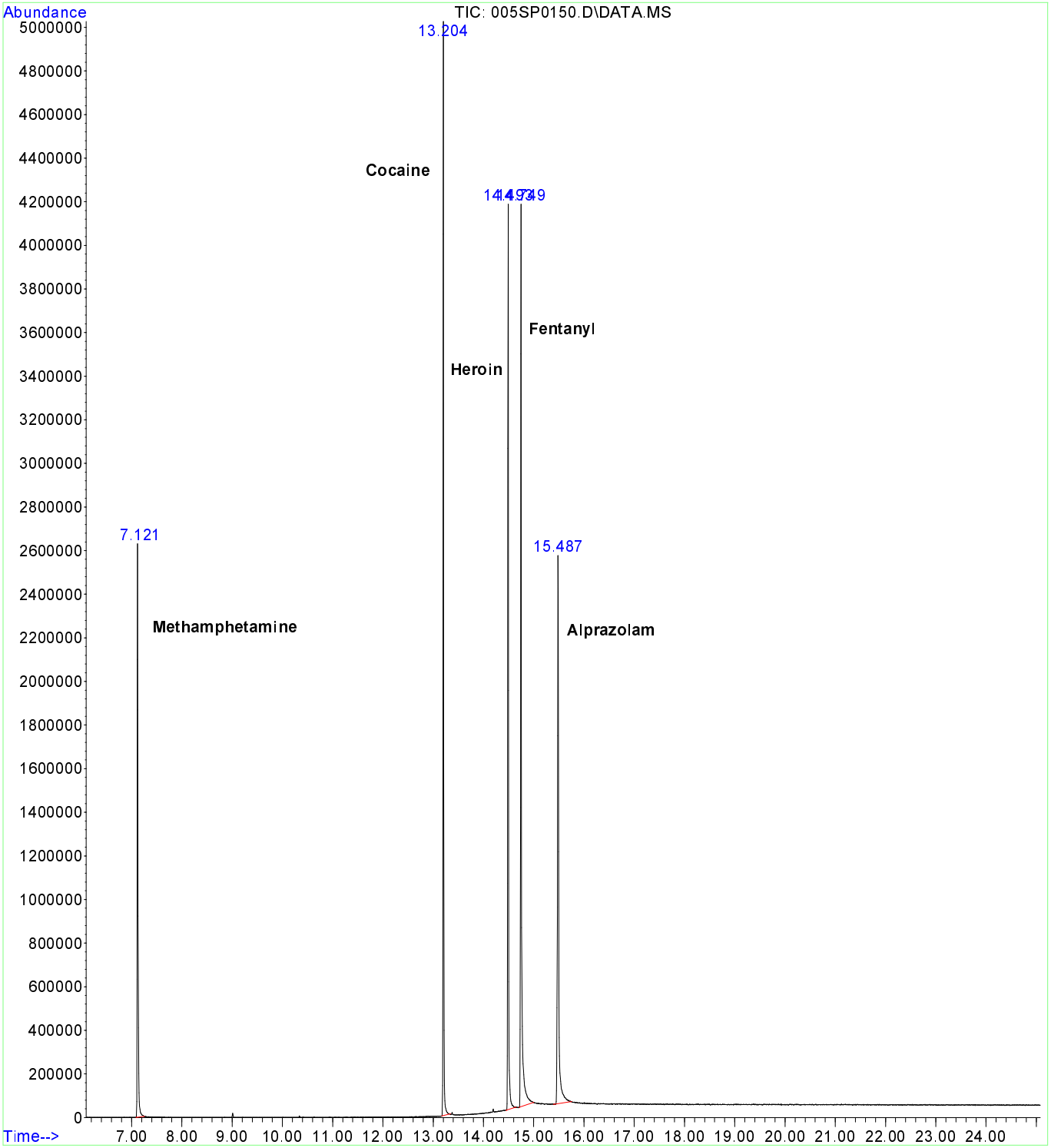
BCCL GC/MS #3
Retention Times for the Week of:

_____03/10/2025 - 03/16/2025_____

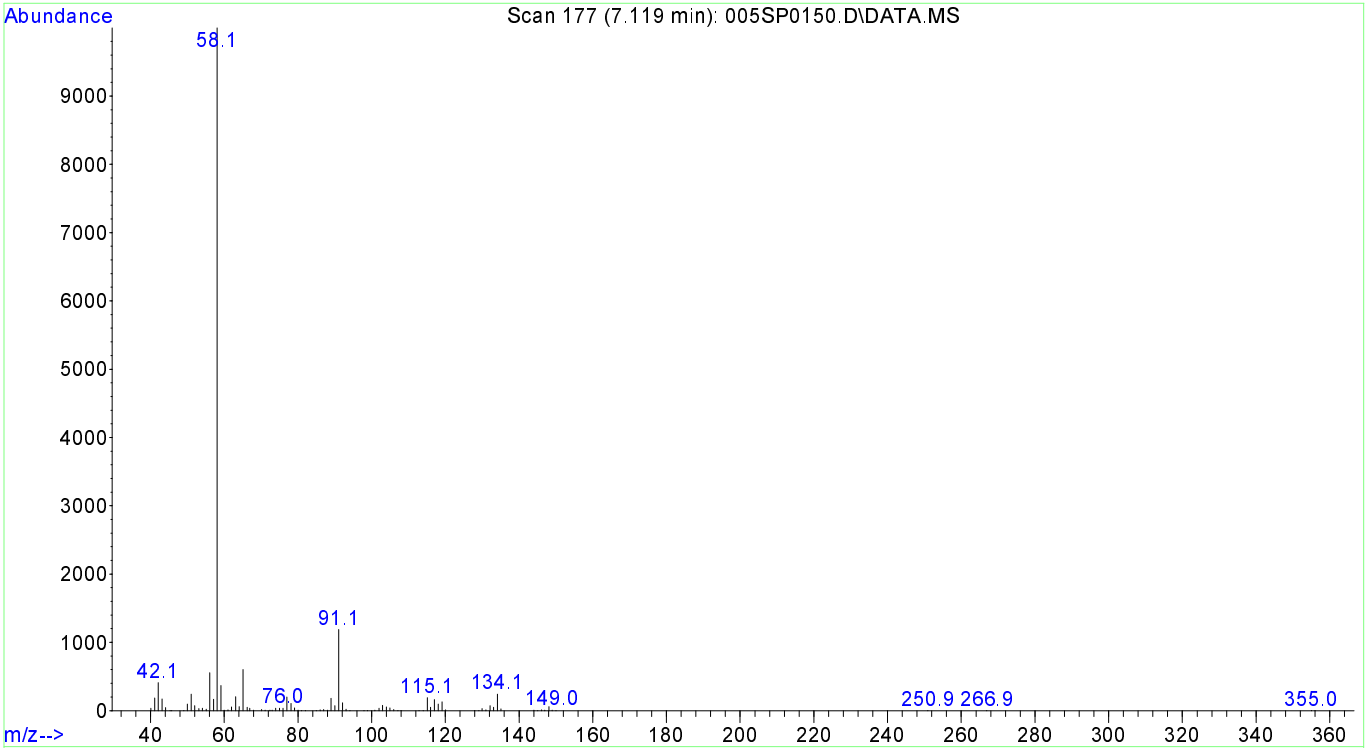
[X] Tune: _DS__03/10/2025 - Autotune_____

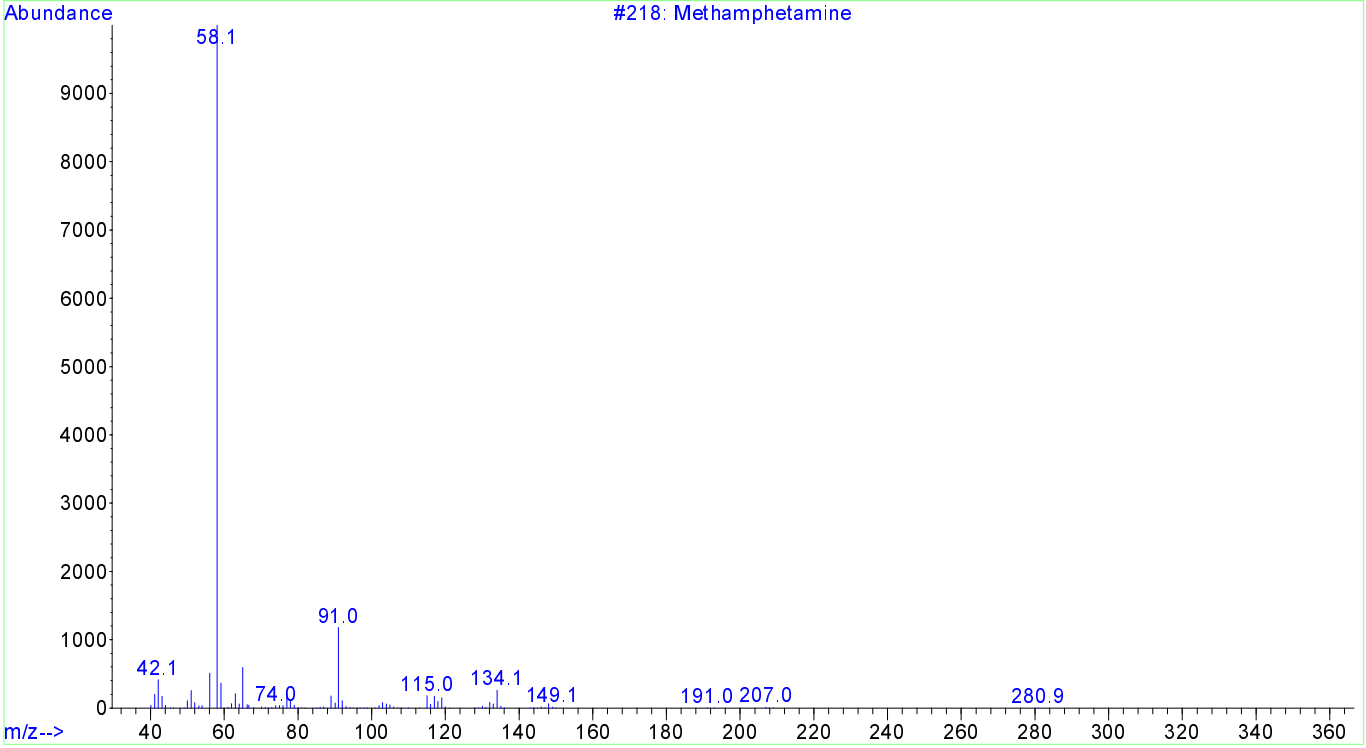
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.121	7.049	7.192
Cocaine	R-24-060	DrugTest35	13.204	13.071	13.336
Heroin	R-24-060	DrugTest35	14.493	14.348	14.637
Fentanyl	R-24-060	DrugTest35	14.749	14.601	14.896
Alprazolam	R-24-060	DrugTest35	15.487	15.332	15.641

```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031025\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 10 Mar 2025  10:03 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

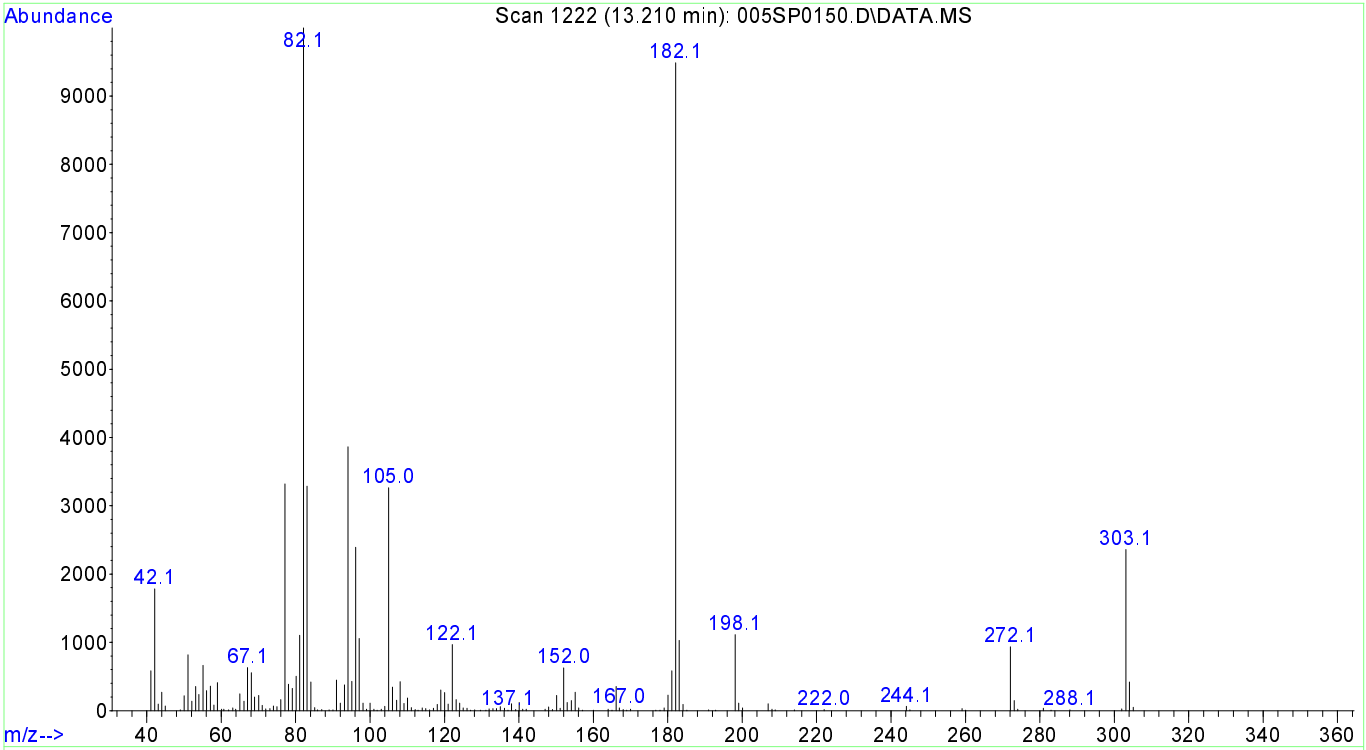


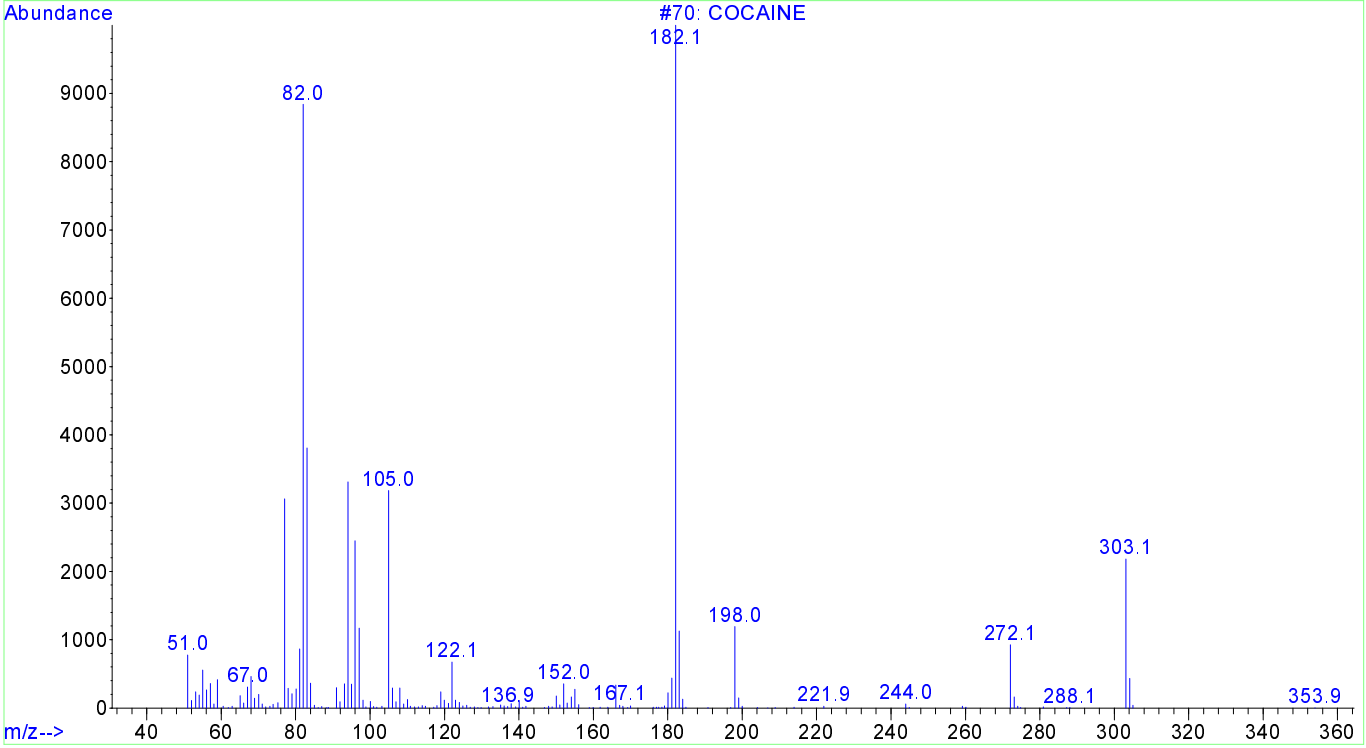
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031025\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 10 Mar 2025  10:03 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```



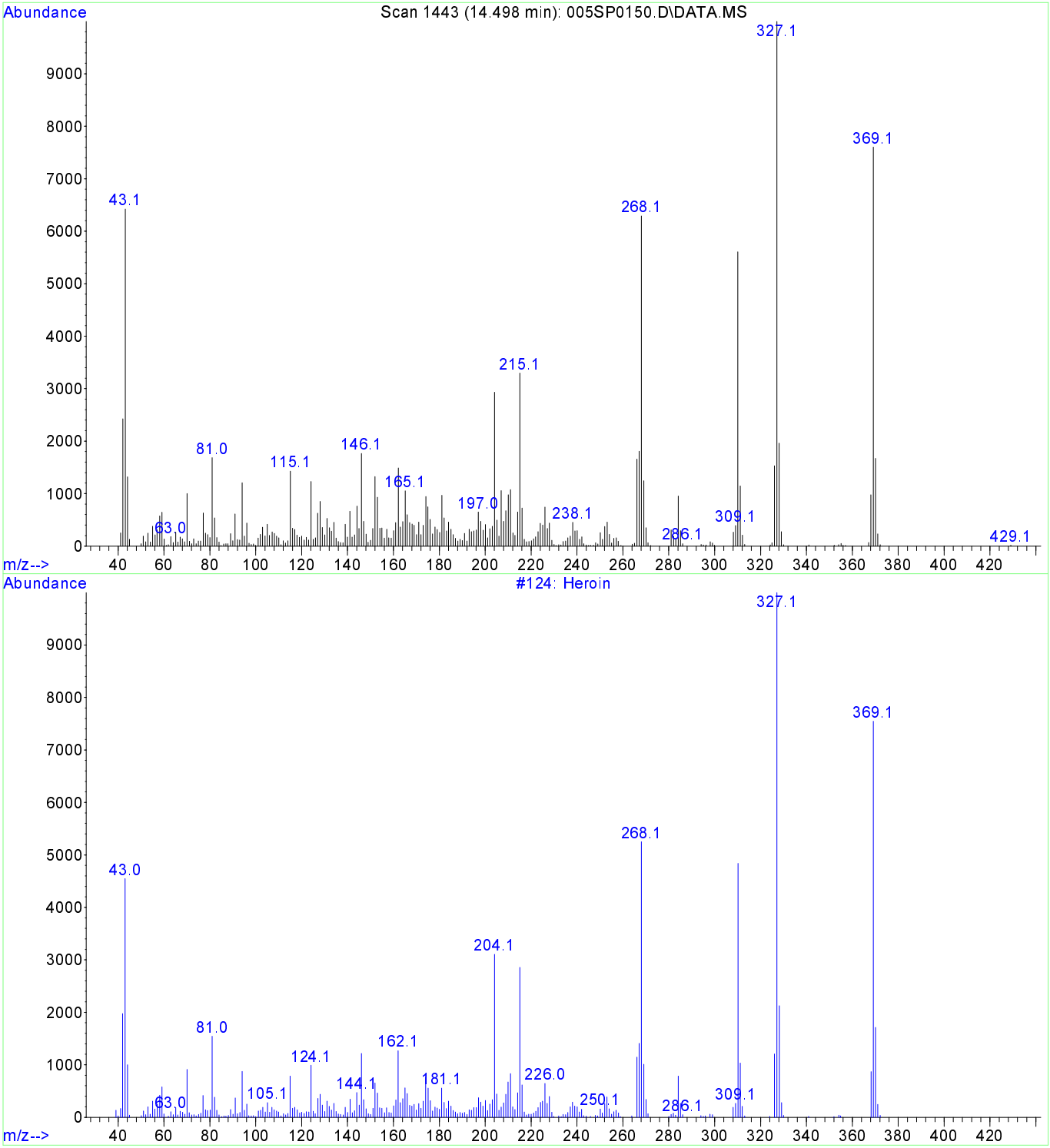


File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\031025\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 10 Mar 2025 10:03 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667

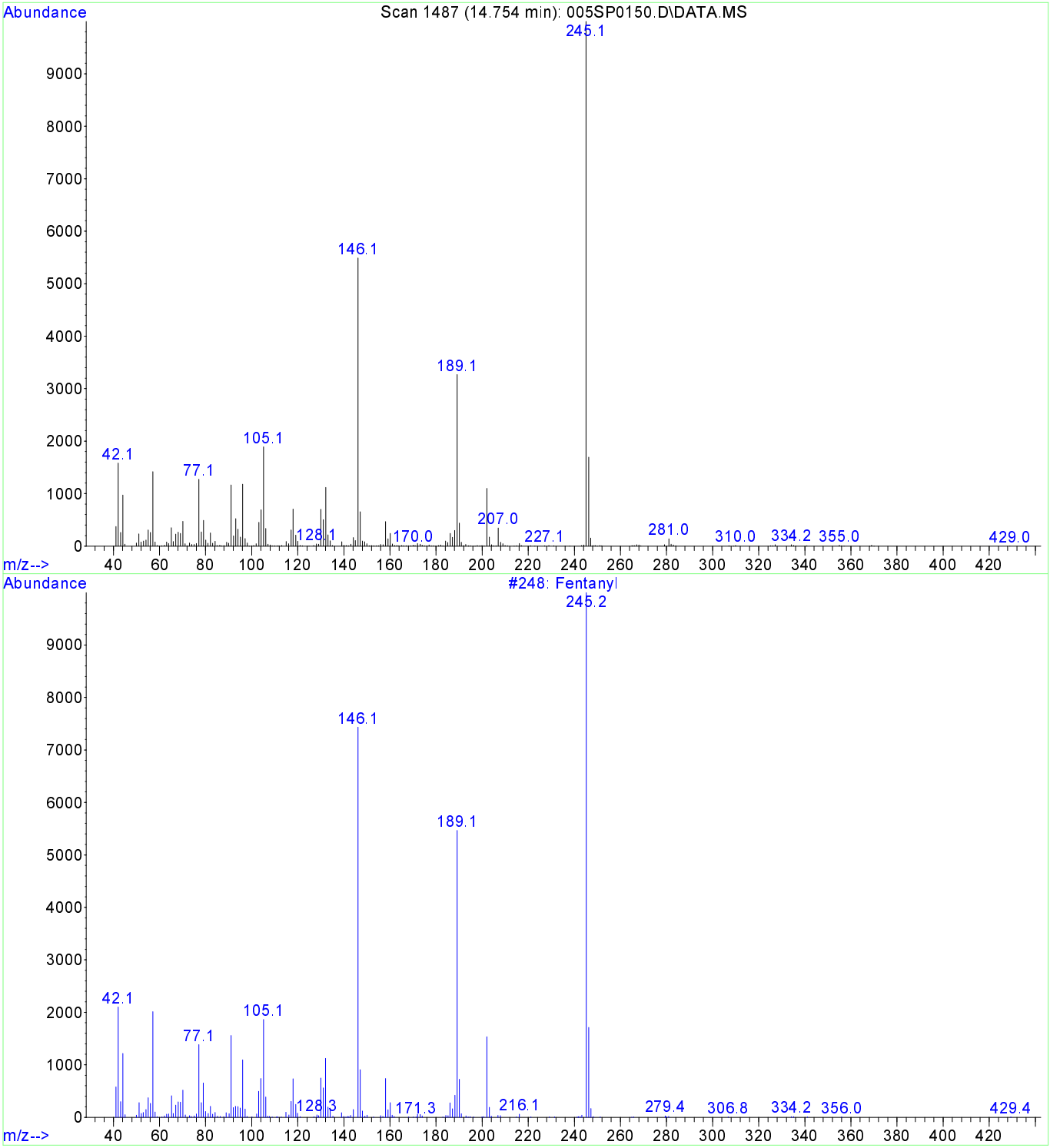




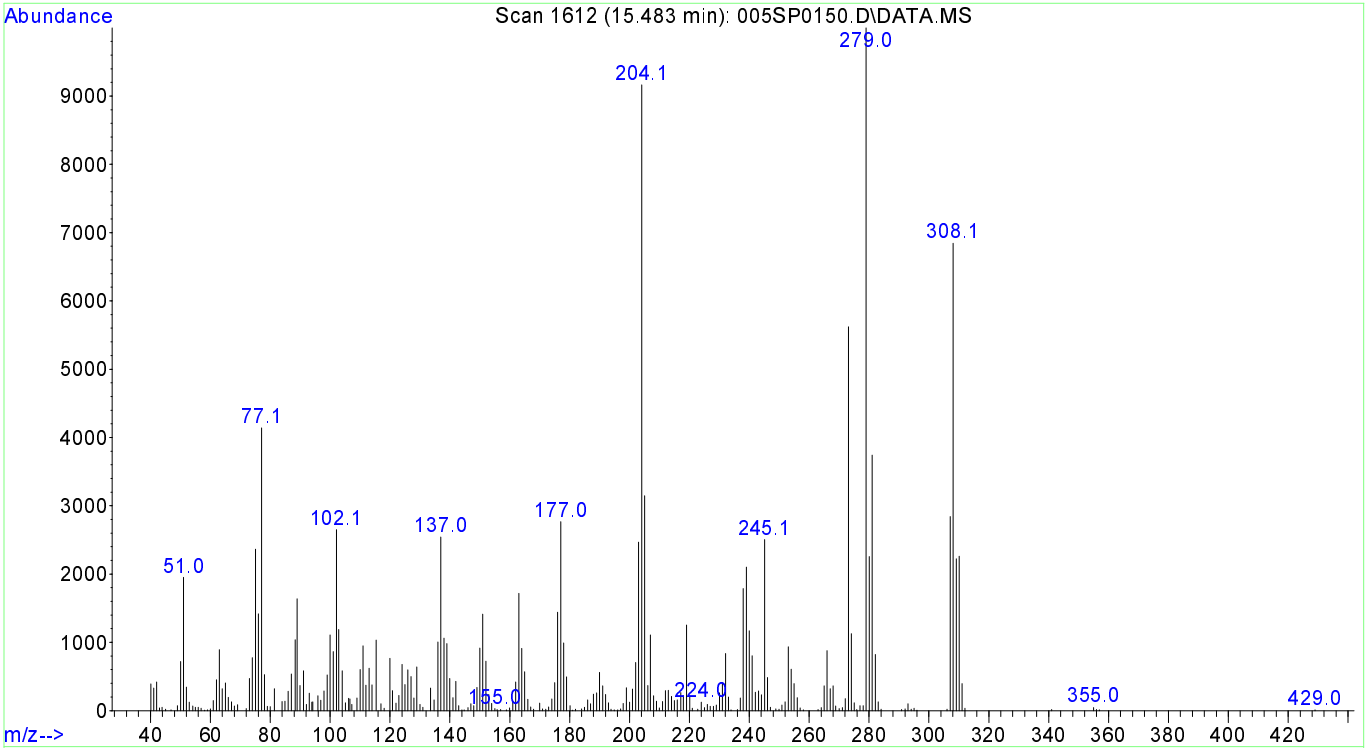
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031025\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 10 Mar 2025  10:03 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

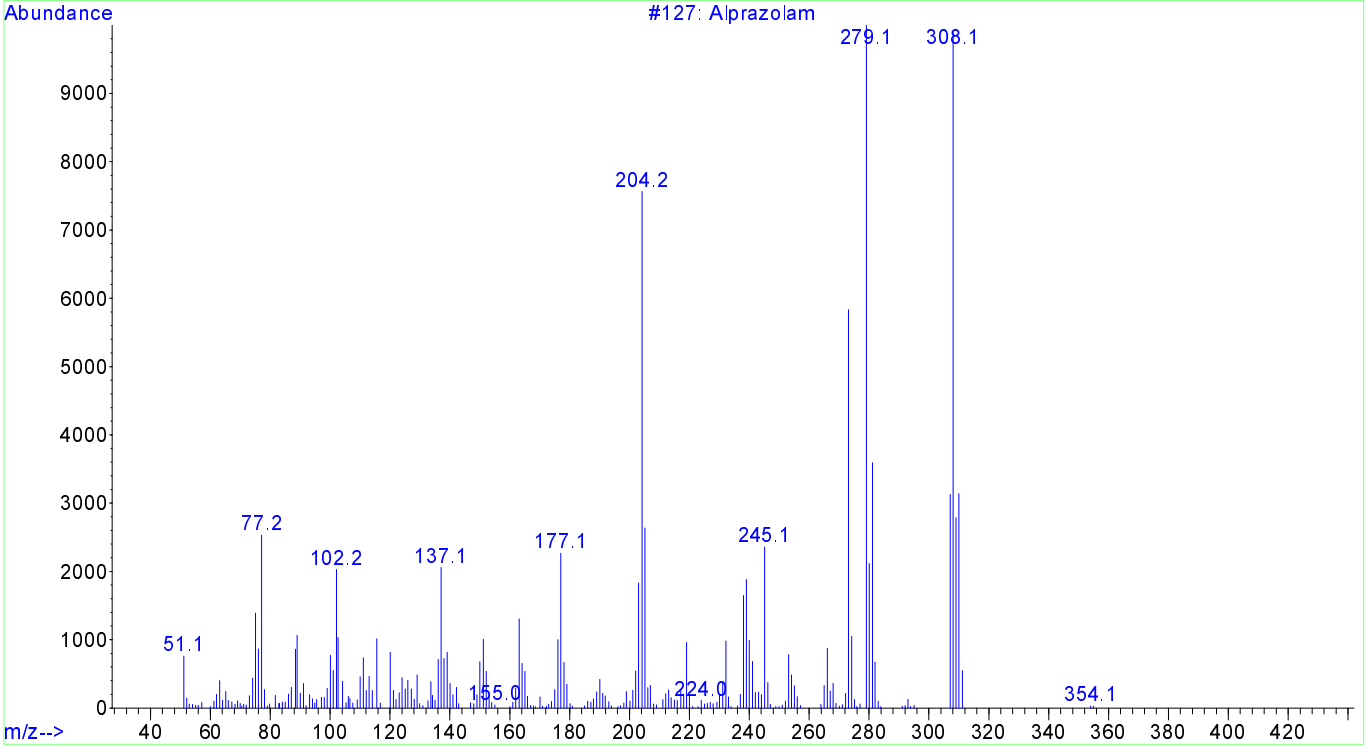


File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\031025\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 10 Mar 2025 10:03 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667

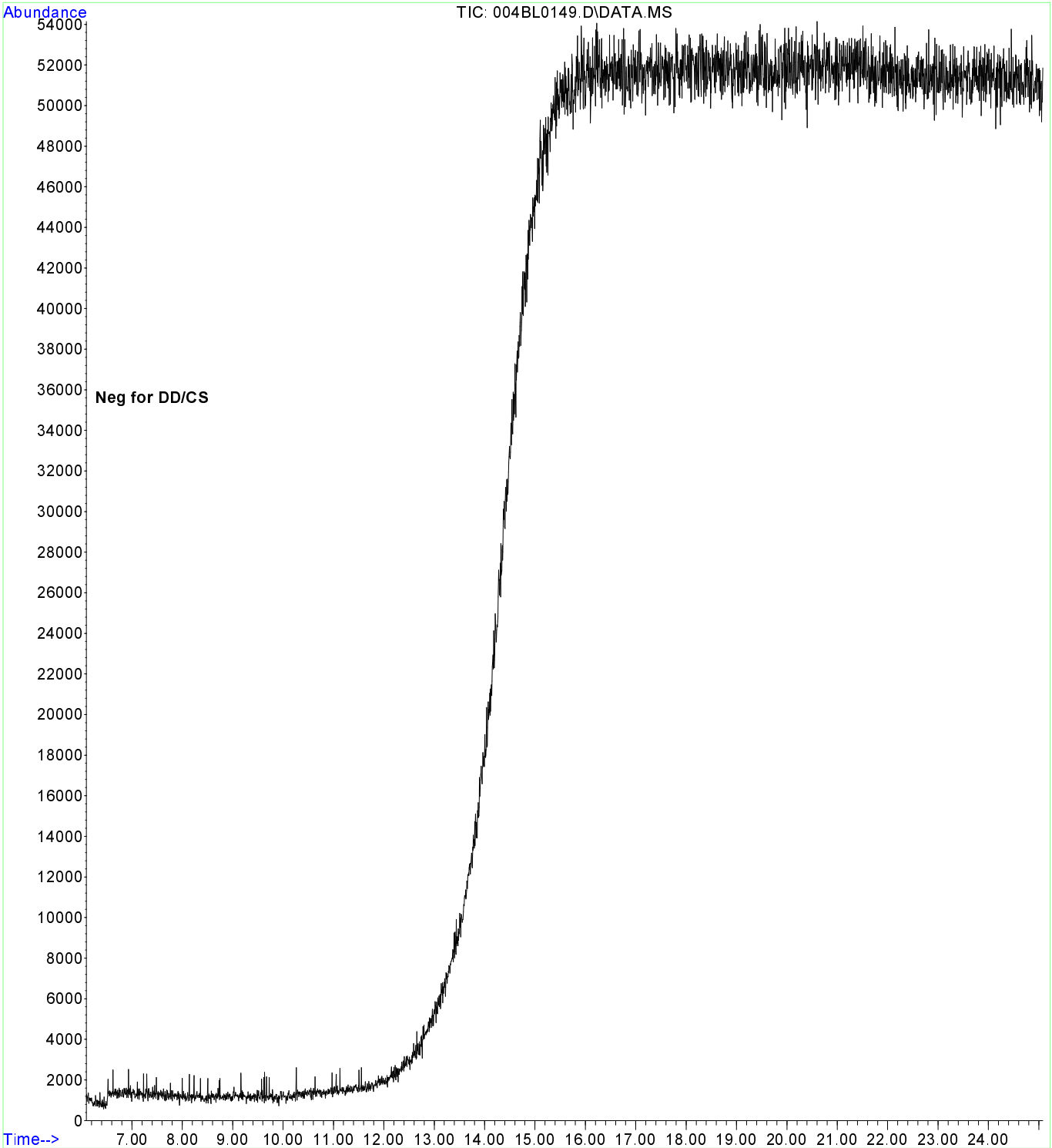


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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031025\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 10 Mar 2025  10:03 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```

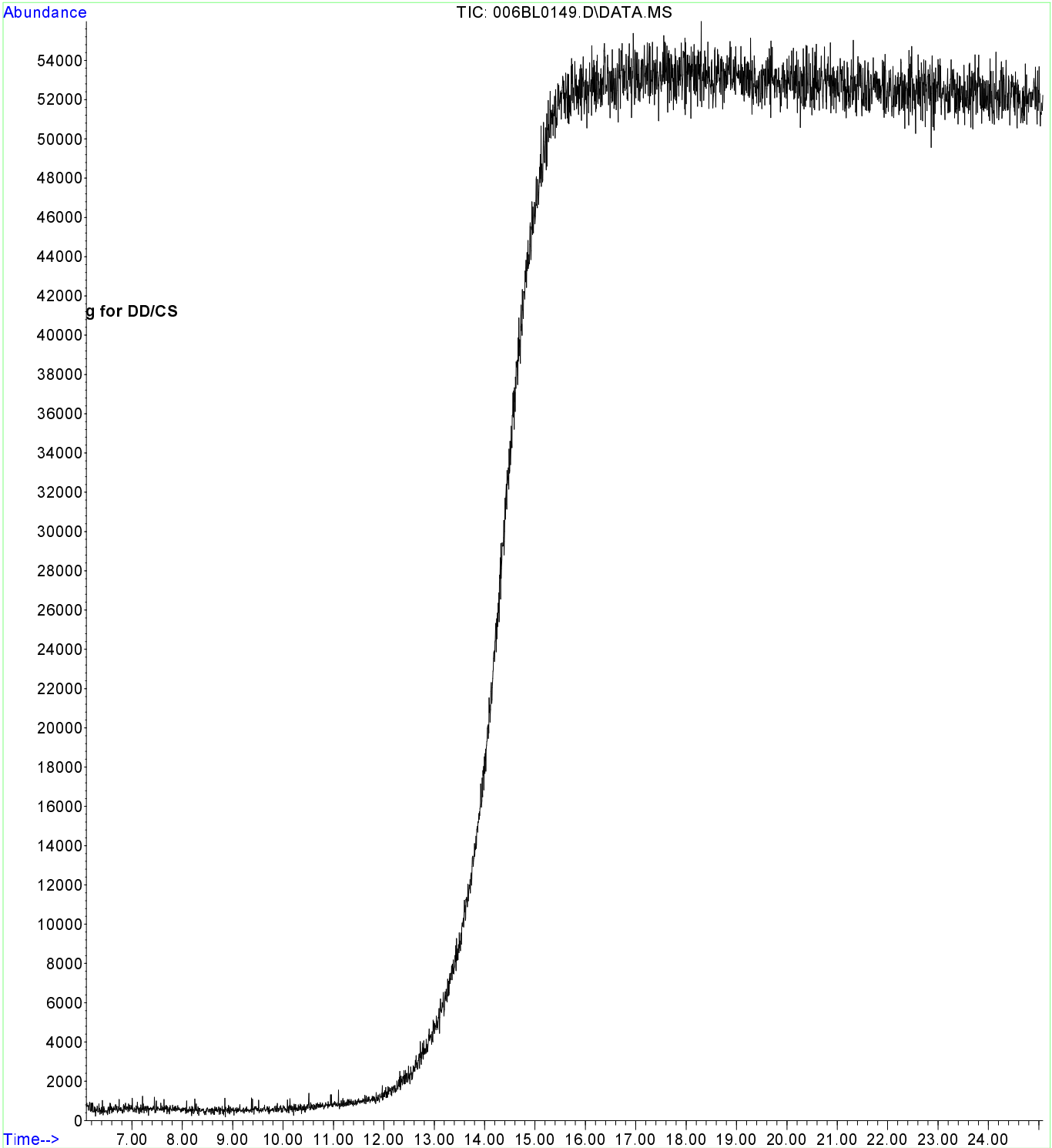




File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\031025\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 10 Mar 2025 09:34 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060) 000002666
Misc Info : 000002666



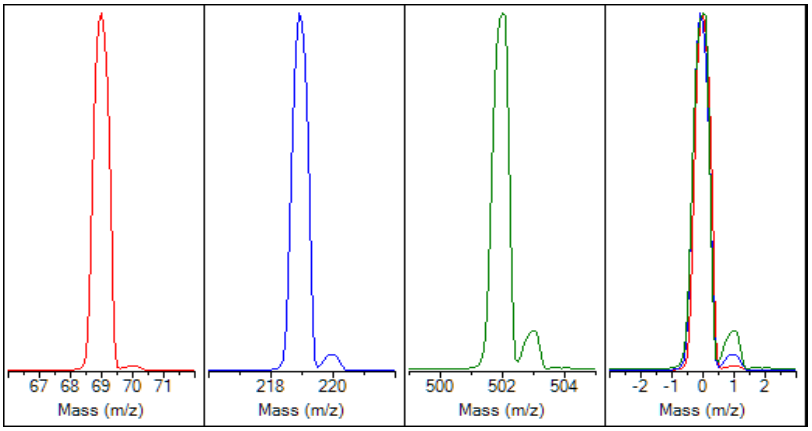
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\031025\006BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 10 Mar 2025 10:31 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666



Autotune - 5977

3/17/2025 8:26:33 AM (UTC-5:00) BCCL GCMS #3

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



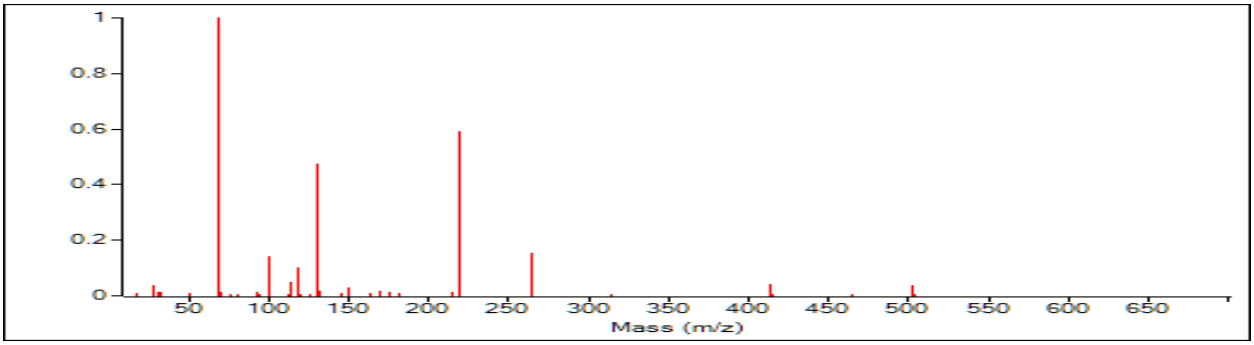
Ion Polarity	Pos	Mass Gain	-362
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1677
Filament	2	Amu Offset	120.38
Repeller	32.31	Width219	-0.004
Ion Focus	81.4	DC Polarity	Pos
Entrance Lens	12.6	HED Enable	On
Ent Lens Offset	12.69	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

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

Mass	Abund	Rel Abund	Pw50
69.00	461,040	100.0%	0.60
218.90	276,360	59.9%	0.60
502.00	15,953	3.5%	0.60

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	91	69.00	447,424	1,294,919



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	447,424	100.00	70.00	4,768	1.07
219.00	263,616	58.92	220.00	11,191	4.25
502.10	16,177	3.62	503.10	1,584	9.79

Air/Water Check: H20 ~0.7% N2 ~3.5% O2 ~1.0% CO2 ~0.1% N2/H20 ~501.9%

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 58134.744

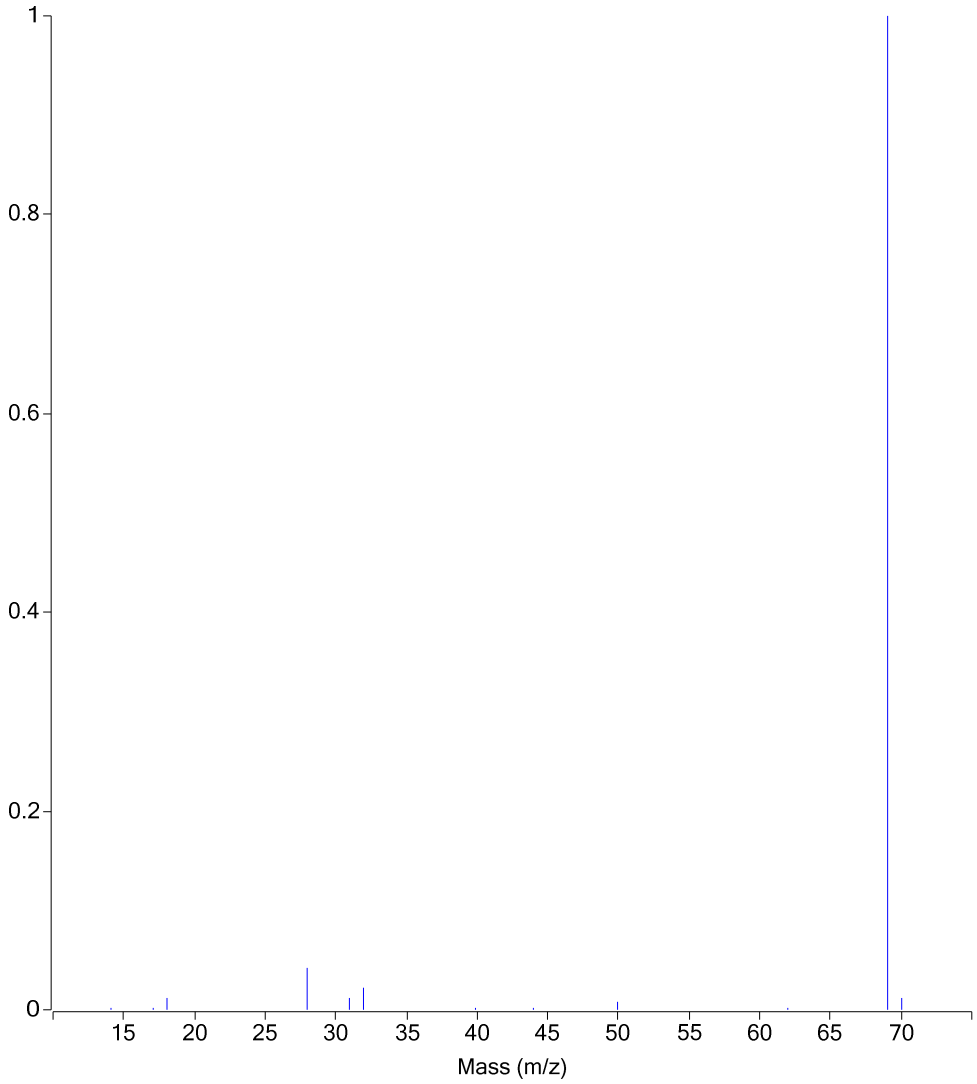
Repeller maximum 35 volts using ion 219; Gain Factor 0.5813

Mass Gain Values(Scan Speed): -345(3) -363(2) -369(1) -355(0) -355(FS1) -354(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	120.4	120.4	120.4	120.4	120.4	120.4	120.4
Entrance Lens Offset	12.7	12.7	12.7	12.7	12.7	12.7	12.7

597x Air and Water Check

Instrument: BCCL GCMS #3
Mon Mar 17 08:21:18 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.15	Water%	(counts=11096)
28/69 =	4.20	Nitrogen%	(counts=40432)
32/69 =	2.16	Oxygen%	(counts=20784)
44/69 =	0.29	Carbon Dioxide%	(counts=2770)
28/18 =	364.38	Nitrogen/Water%	

Instrument Name	: BCCL GCMS #3	
DC Polarity	: Positive	
Filament	2	
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	502.10	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	220.00	OK
Position of isotope mass 503	503.10	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%)	4.33	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.07	OK
Ratio of 219 to 69 should be > 40% and is	58.87	OK
Ratio of 502 to 69 should be > 2.4% and is	3.56	OK
Mass 69 Precursor (<= 3%)	0.09	OK
Mass 219 Precursor (<= 6%)	0.24	OK
Mass 502 Precursor (<= 12%)	1.37	OK

597x Air and Water Check

Mon Mar 17 08:30:13 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%)	0.67	OK
Ratio of 28 to 69 (<10%)	3.44	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

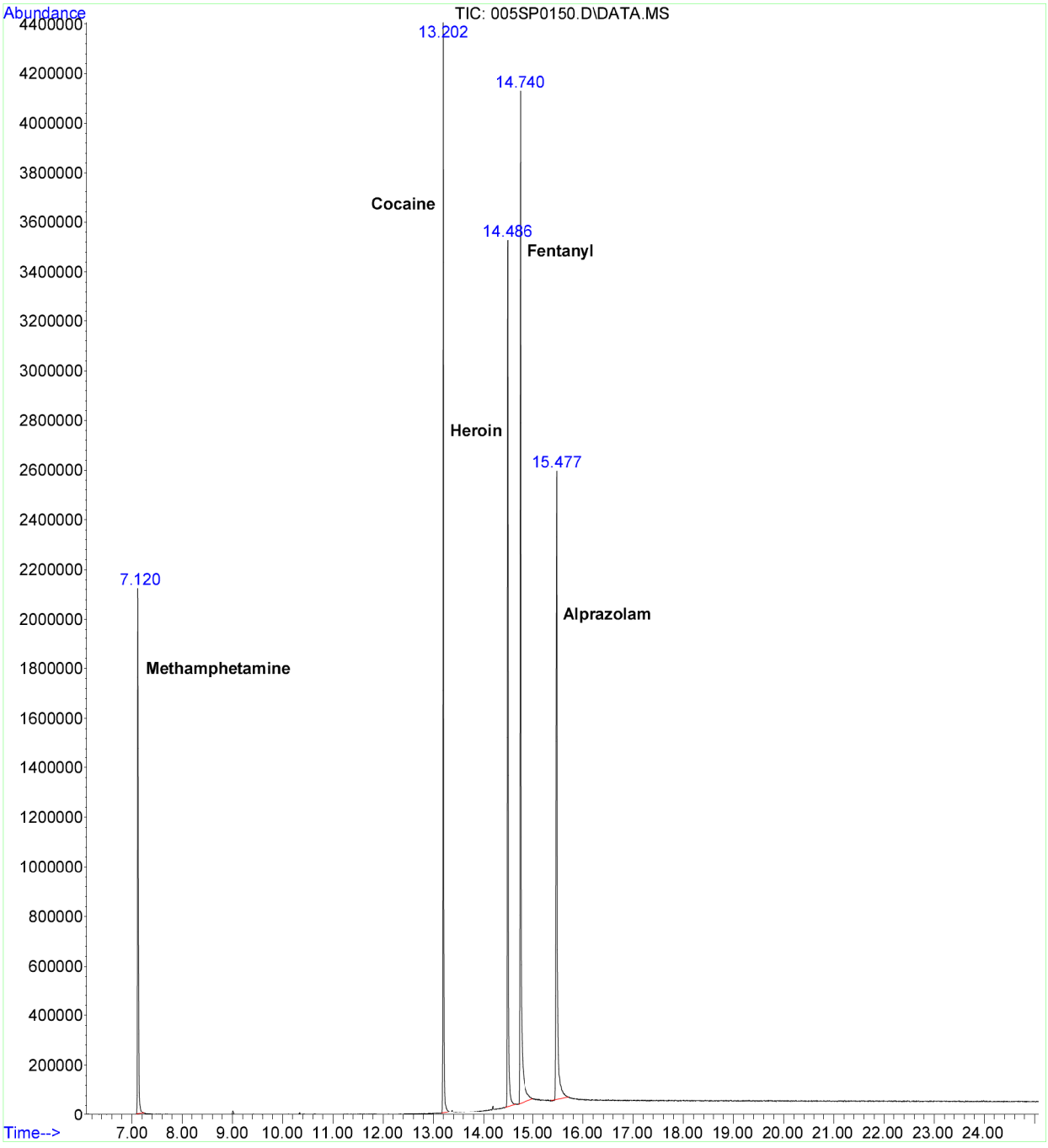
BCCL GC/MS #3
Retention Times for the Week of:

03/17/2025 - 03/23/2025

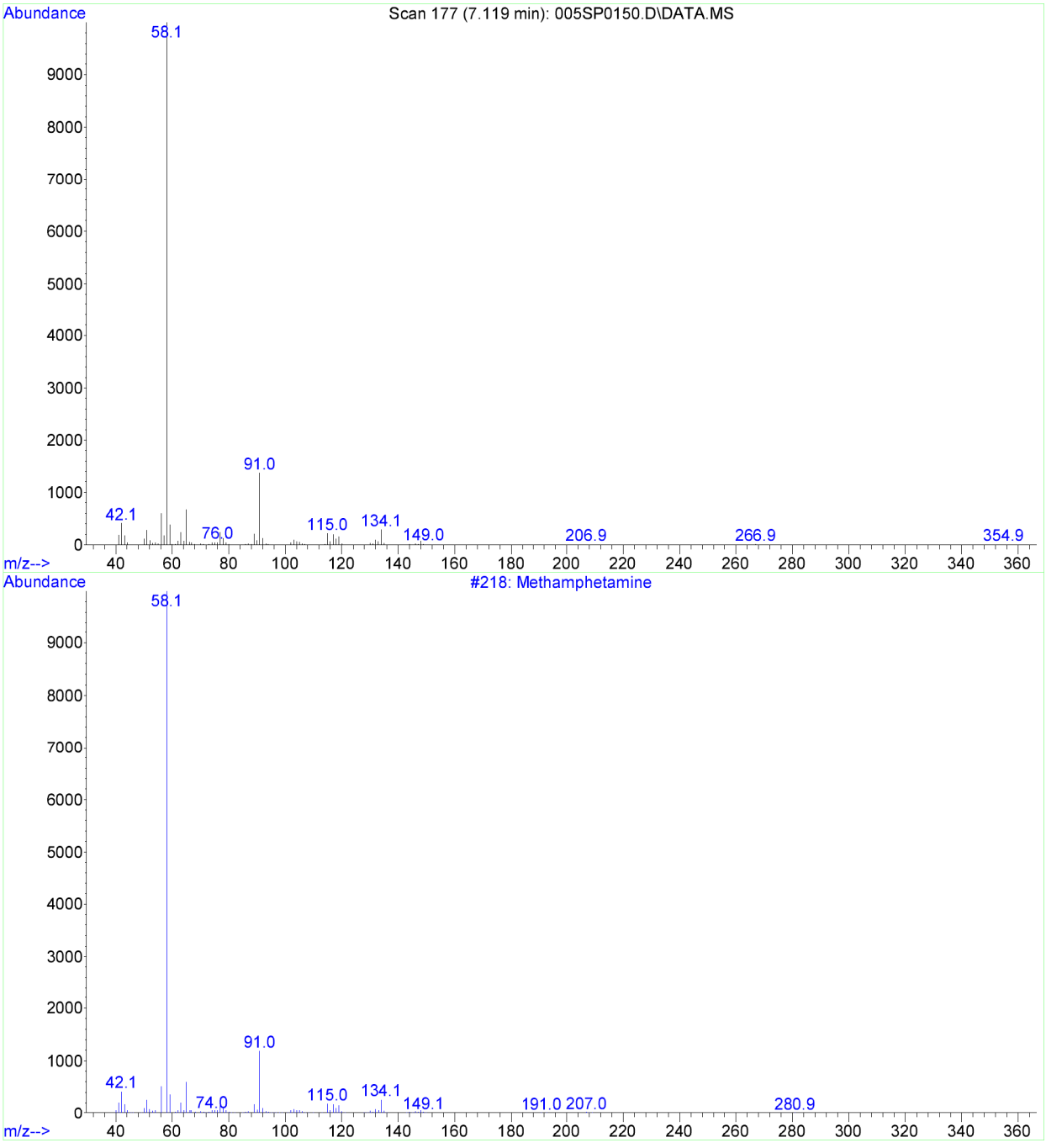
[X] **Tune: DS 03/17/2025 - Autotune**

Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.120	7.048	7.191
Cocaine	R-24-060	DrugTest35	13.202	13.069	13.334
Heroin	R-24-060	DrugTest35	14.486	14.341	14.630
Fentanyl	R-24-060	DrugTest35	14.740	14.592	14.887
Alprazolam	R-24-060	DrugTest35	15.477	15.322	15.631
Codeine	R-23-022	DrugTest35	13.818	13.679	13.956

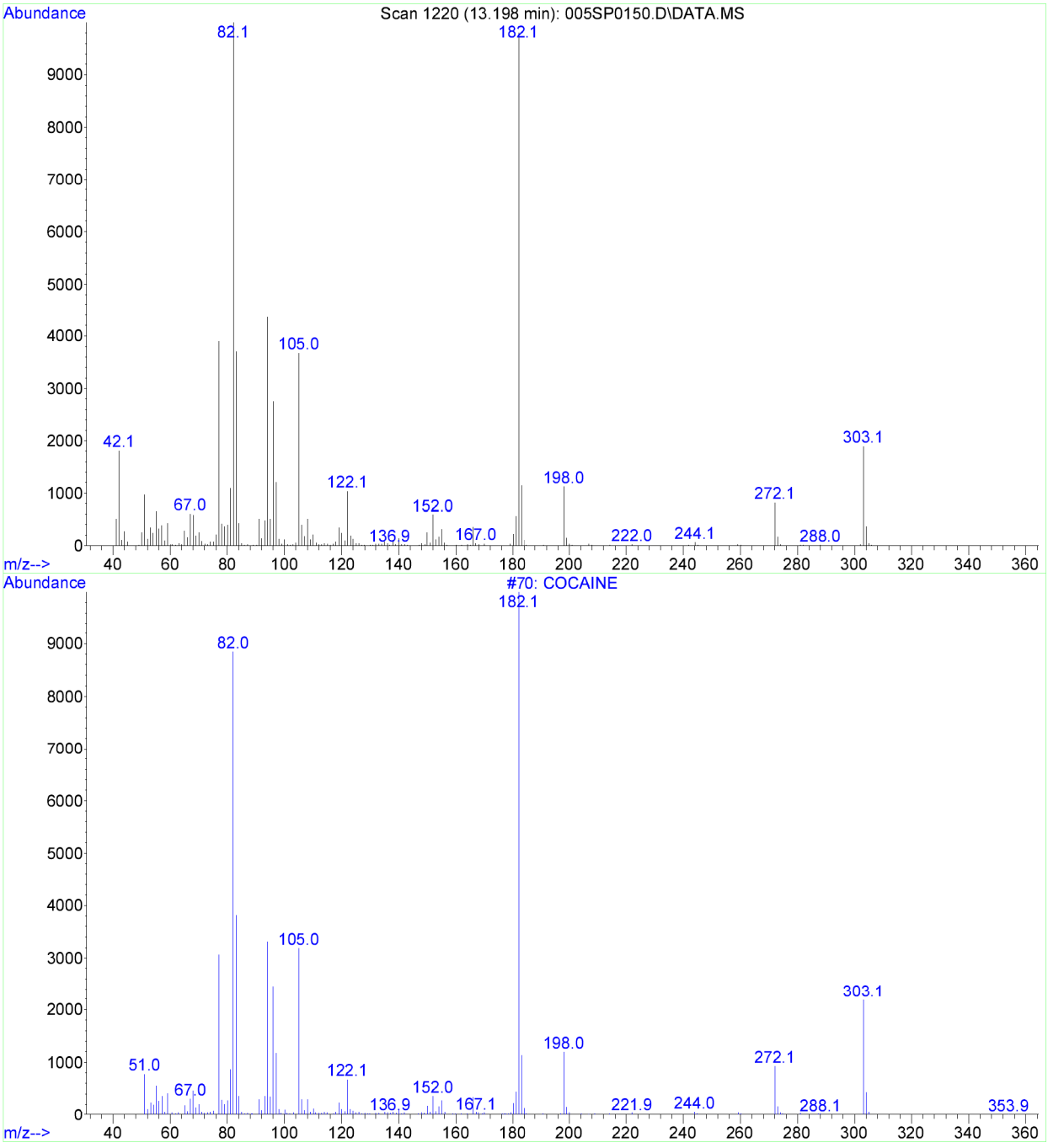
```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031725\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Mar 2025  09:53 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



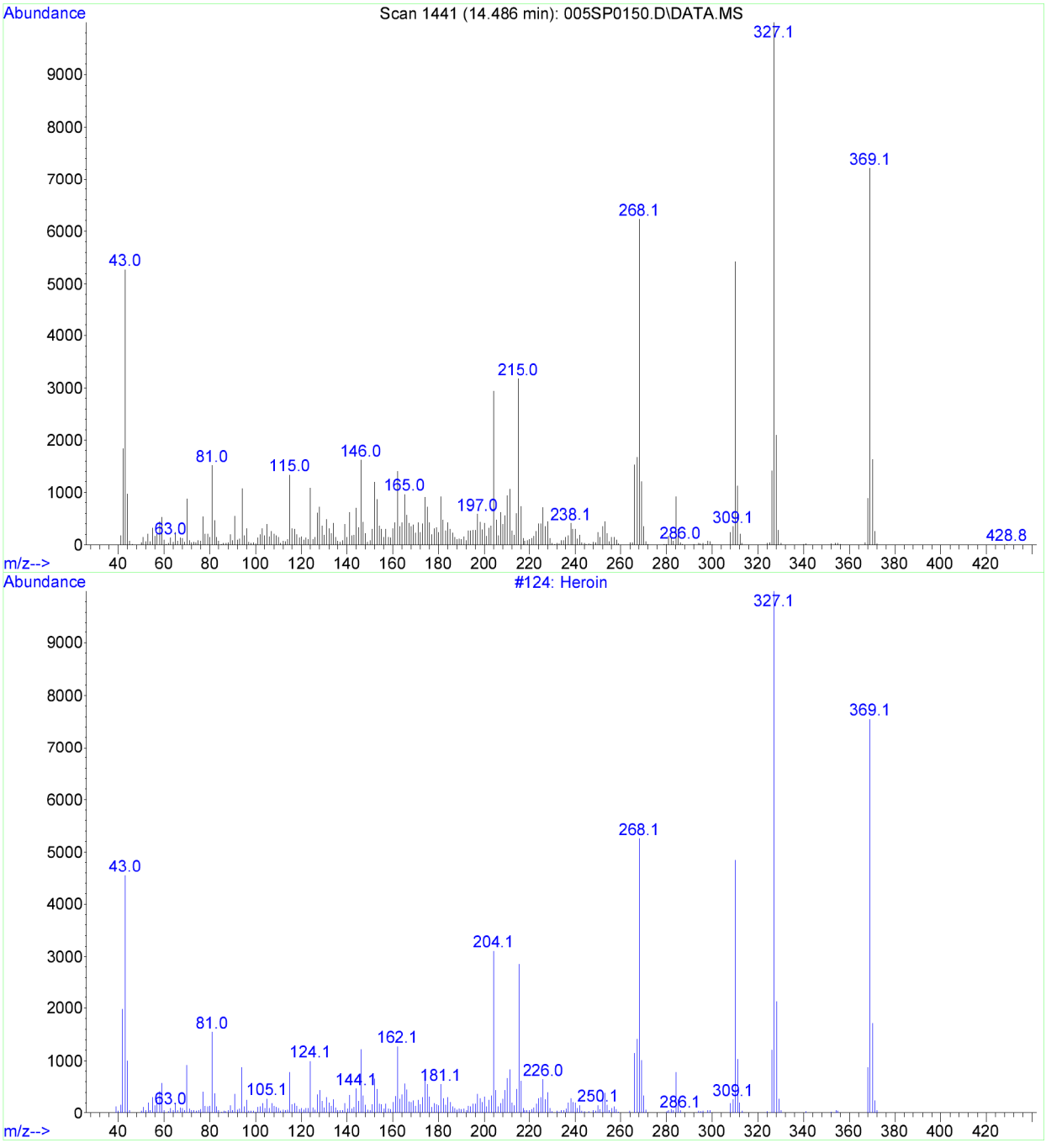
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031725\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Mar 2025  09:53 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



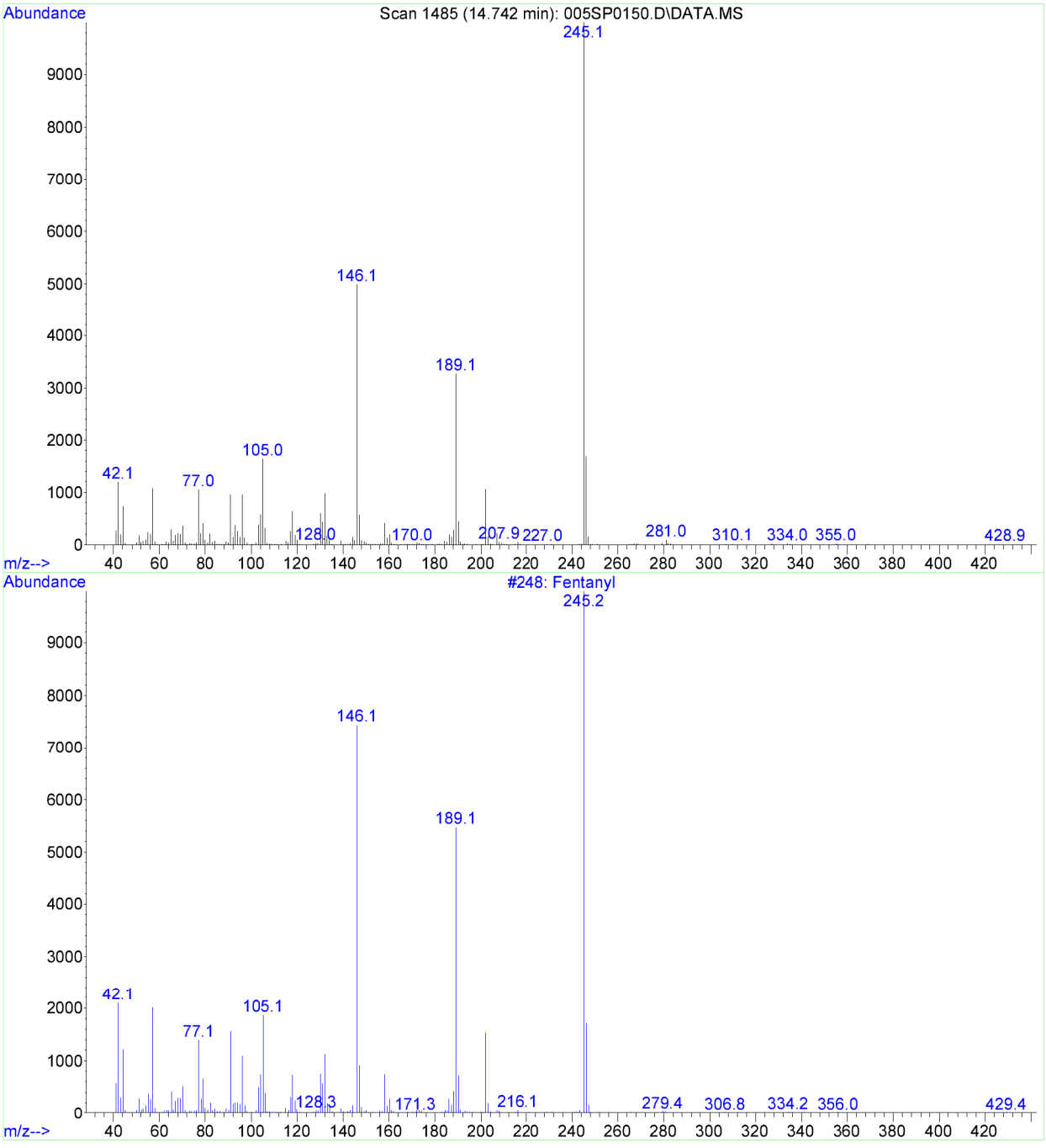
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031725\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Mar 2025  09:53 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```



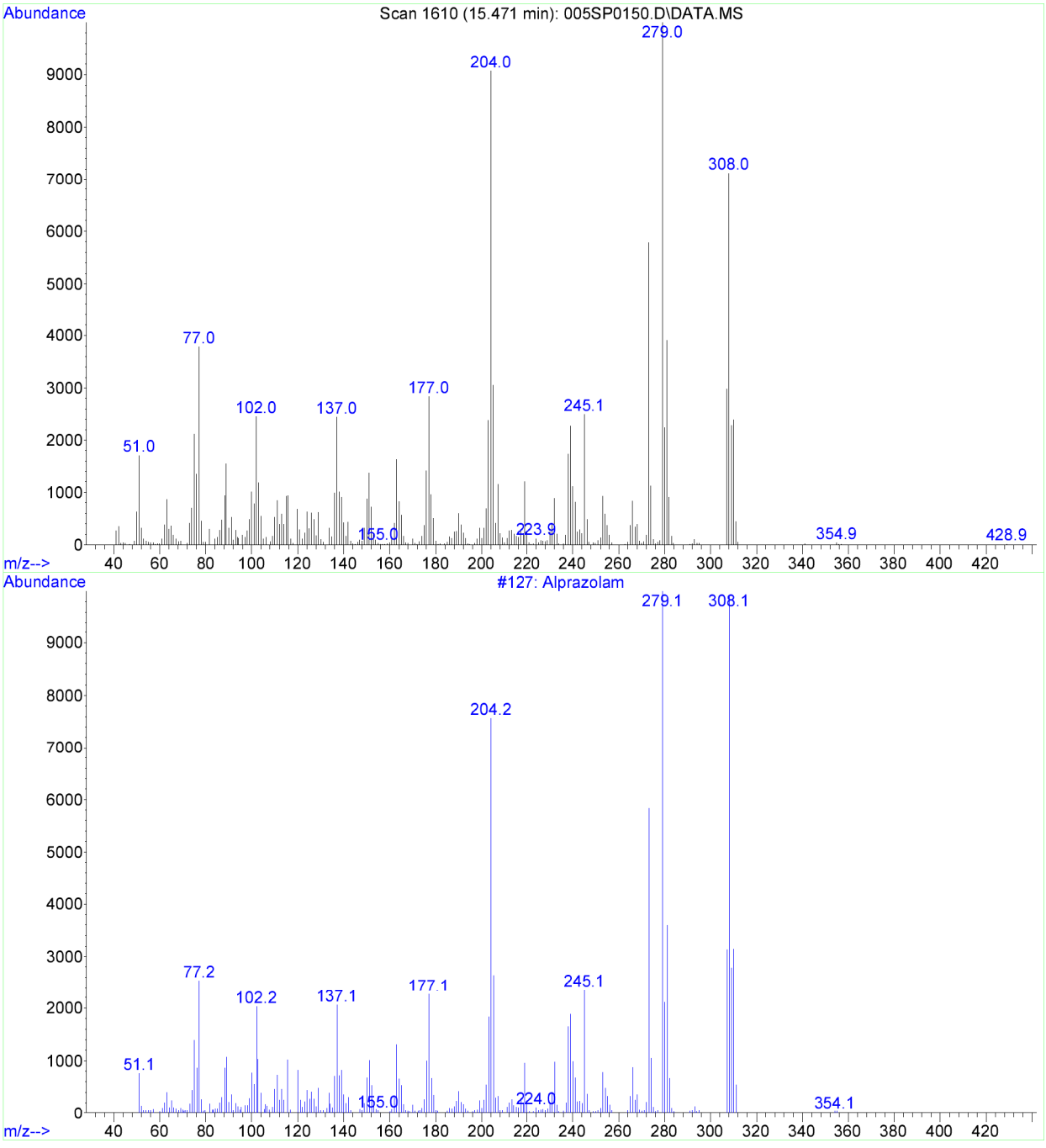
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031725\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Mar 2025  09:53 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



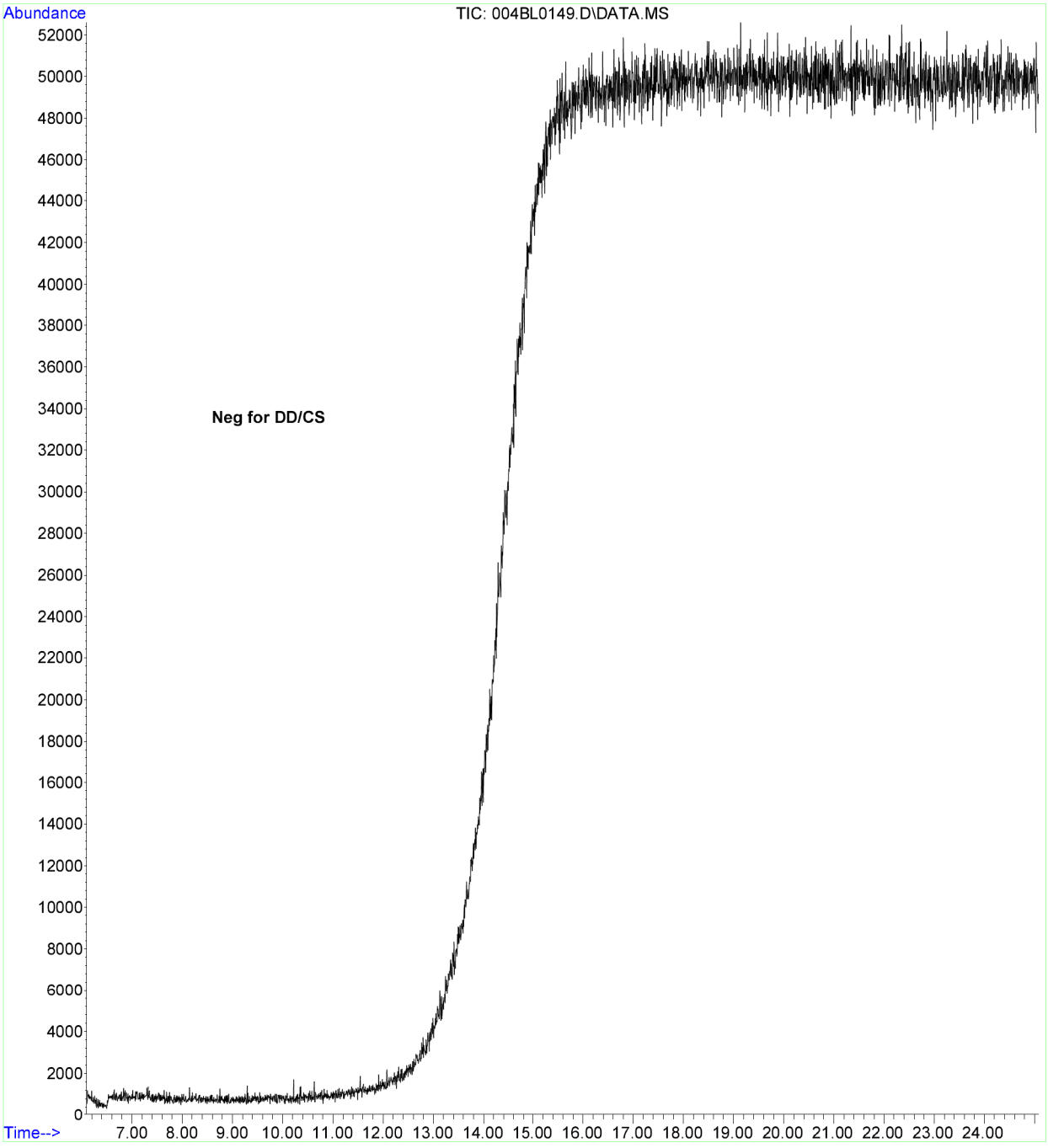
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\031725\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 17 Mar 2025 09:53 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



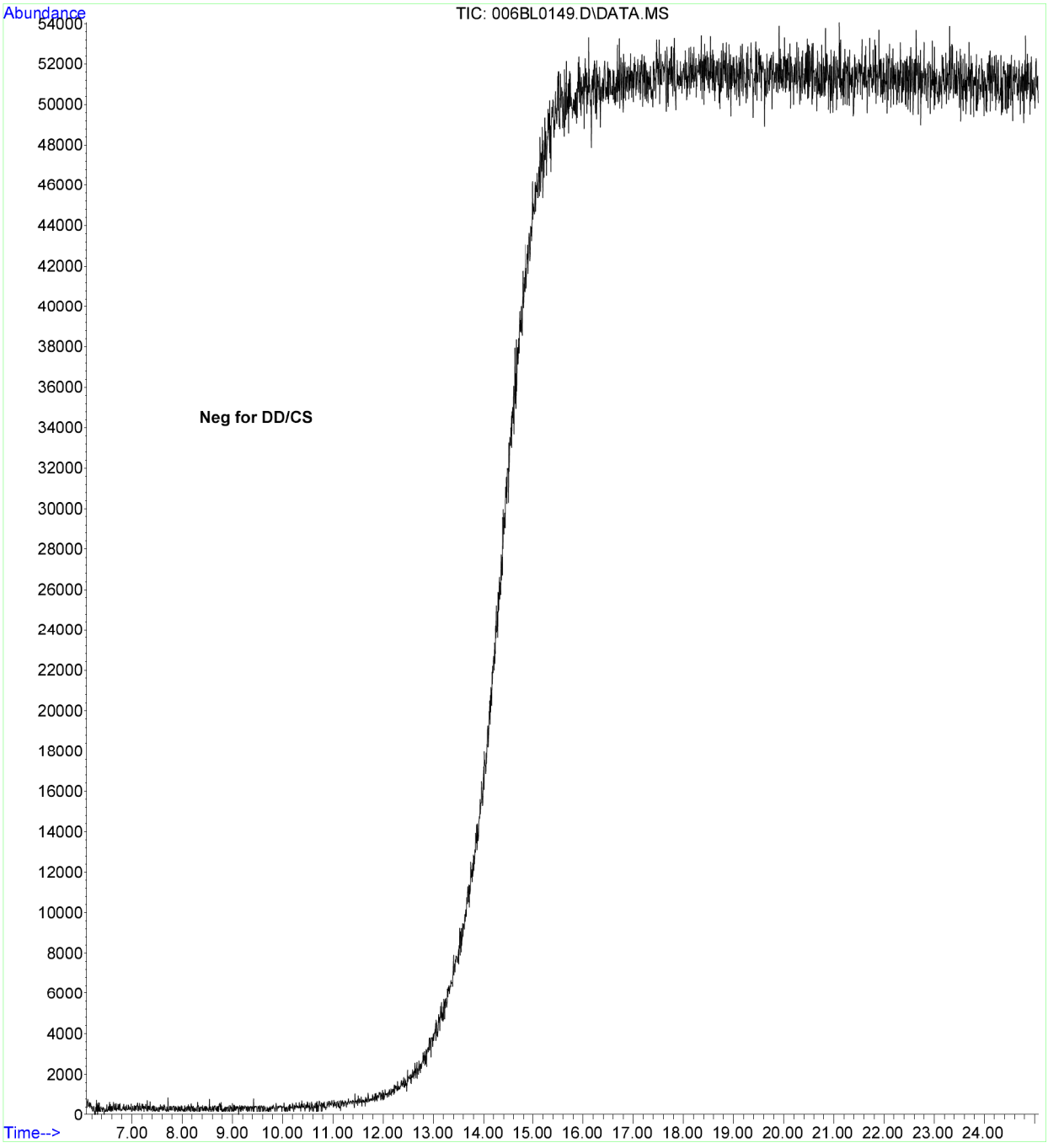
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031725\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Mar 2025  09:53 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
```



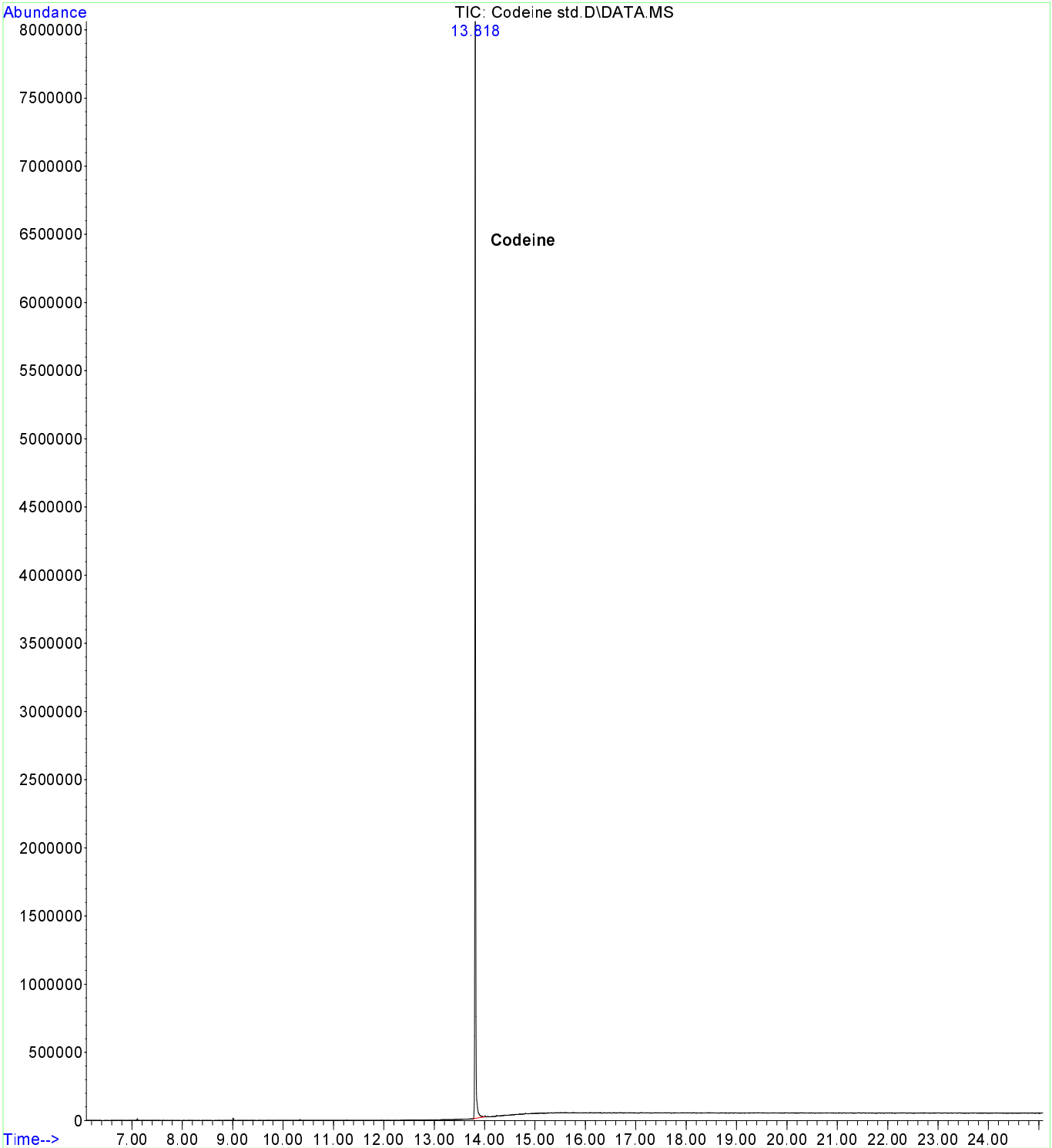
File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\031725\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 17 Mar 2025 09:25 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) PRIOR TO CAYMAN GC/MS MIX 3 (R-24-060) 000002666
Misc Info : 000002666



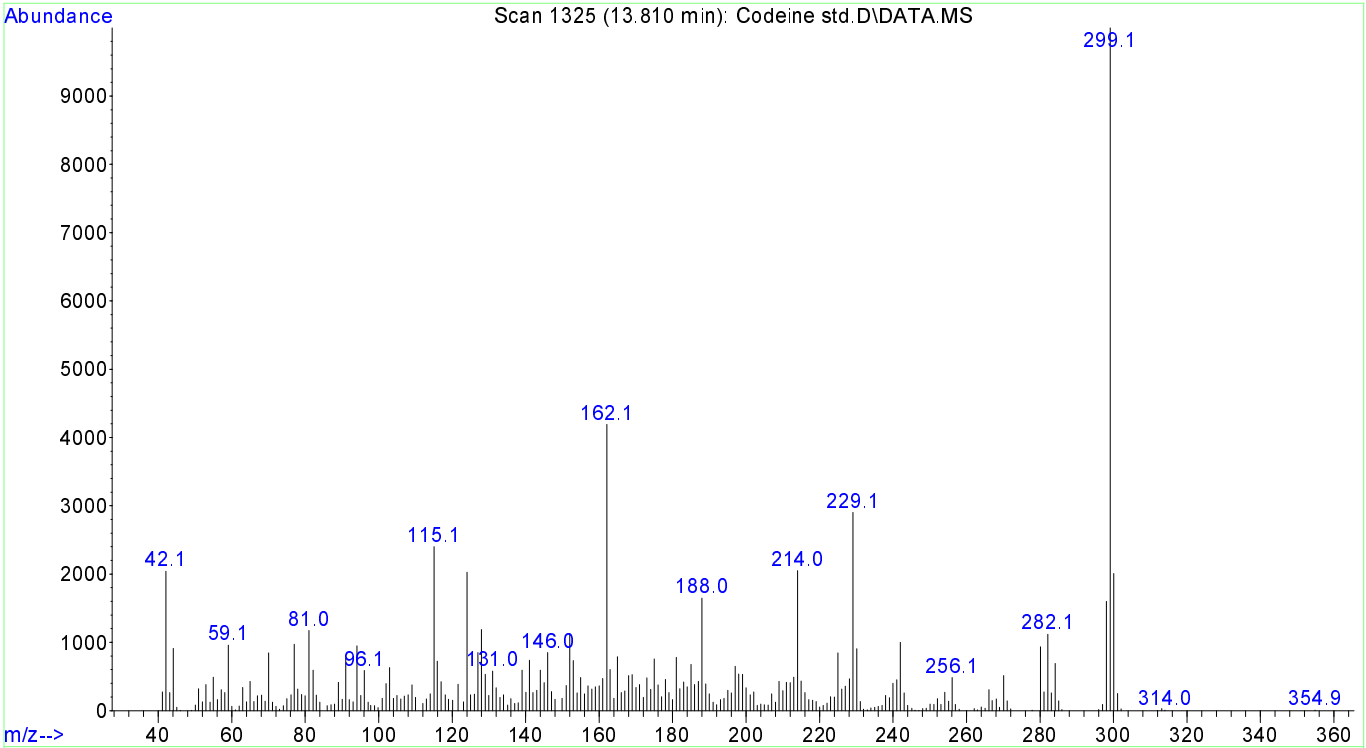
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File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\031725\006BL0149.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 17 Mar 2025  10:22 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY          000002666
Misc Info  :                                               000002666
```

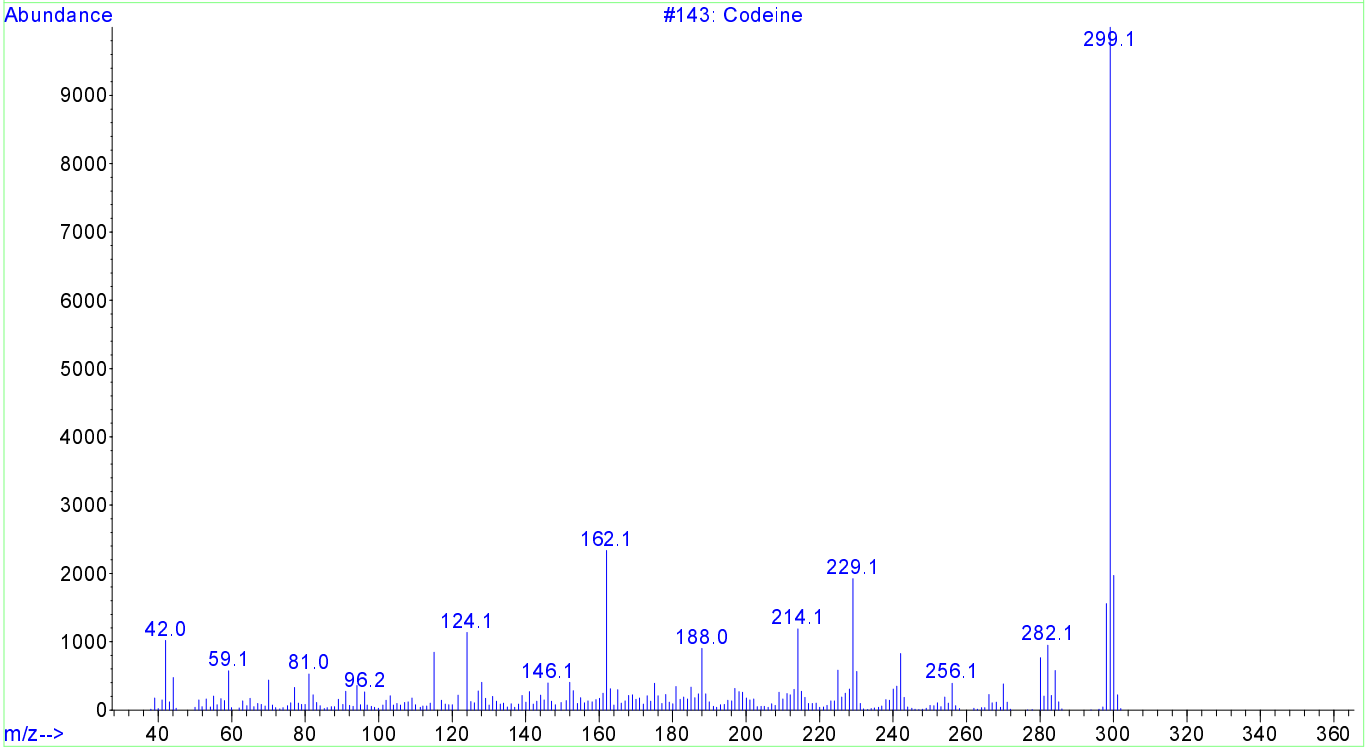


```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\032025\Codeine st
...         d.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 20 Mar 2025  07:35 pm using AcqMethod DrugTest.M
Sample Name: Codeine std (R-23-022)                          000005945
Misc Info  : RT determination                                000005945
```

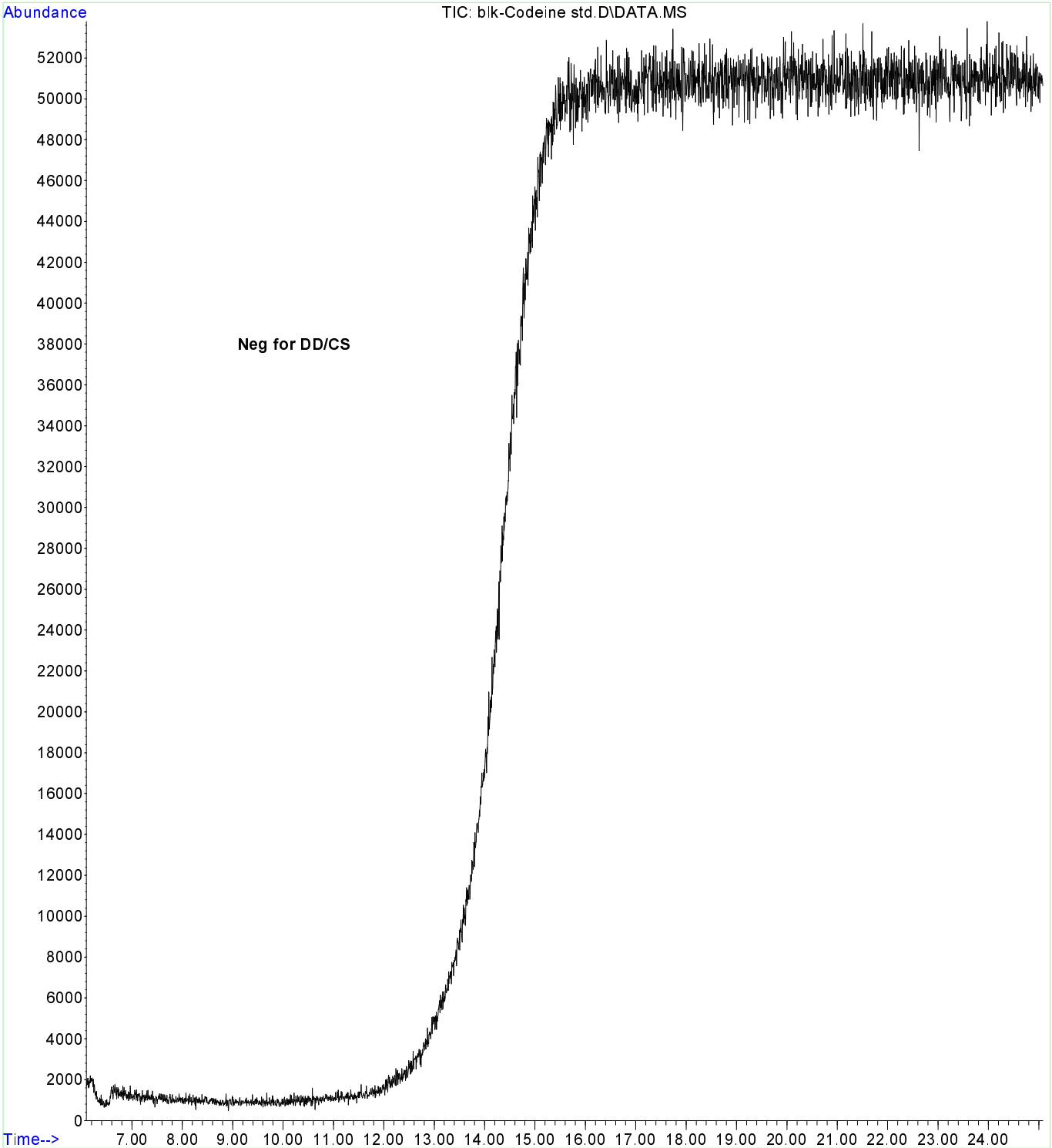


```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\032025\Codeine st
...         d.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 20 Mar 2025  07:35 pm using AcqMethod DrugTest.M
Sample Name: Codeine std (R-23-022)                              000005945
Misc Info  : RT determination                                    000005945
```





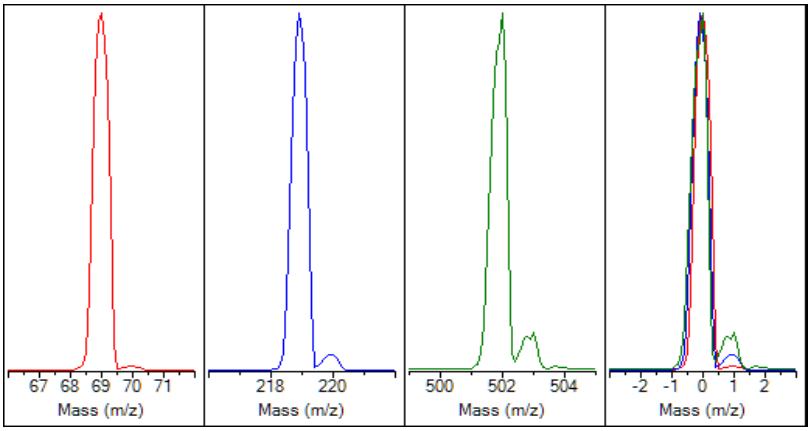
File :D:\MassHunter\GCMS\1\GCMS 3 data\2025 Data\032025\blk-Codein
... e std.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 20 Mar 2025 07:06 pm using AcqMethod DrugTest.M
Sample Name: blank prior to Codeine std (R-23-022) 000002387
Misc Info : EtAc(C-22-0063A) /base ext w/ R-24-059 000002387



Autotune - 5977

3/24/2025 8:31:26 AM (UTC-5:00) BCCL GCMS #3

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



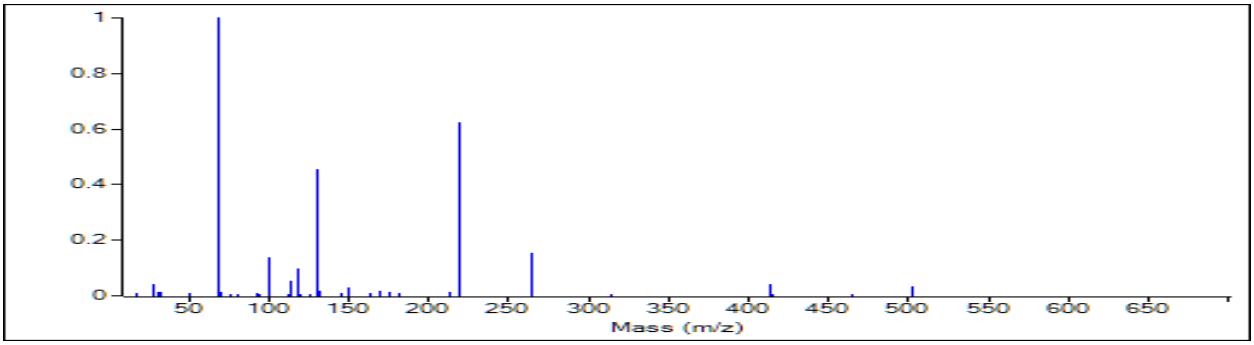
Ion Polarity	Pos	Mass Gain	-360
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1674
Filament	2	Amu Offset	120.13
Repeller	34.90	Width219	-0.009
Ion Focus	79.5	DC Polarity	Pos
Entrance Lens	10.1	HED Enable	On
Ent Lens Offset	12.86	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.38e-06

Mass	Abund	Rel Abund	Pw50
69.00	540,696	100.0%	0.60
218.90	339,037	62.7%	0.60
502.00	17,908	3.3%	0.59

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	105	69.00	525,504	1,525,260



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	525,504	100.00	70.00	6,095	1.16
218.90	328,064	62.43	219.90	14,508	4.42
501.90	17,808	3.39	502.90	1,599	8.98

Air/Water Check: H20 ~0.8% N2 ~3.8% O2 ~1.1% CO2 ~0.1% N2/H20 ~477.2%

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 58310.192

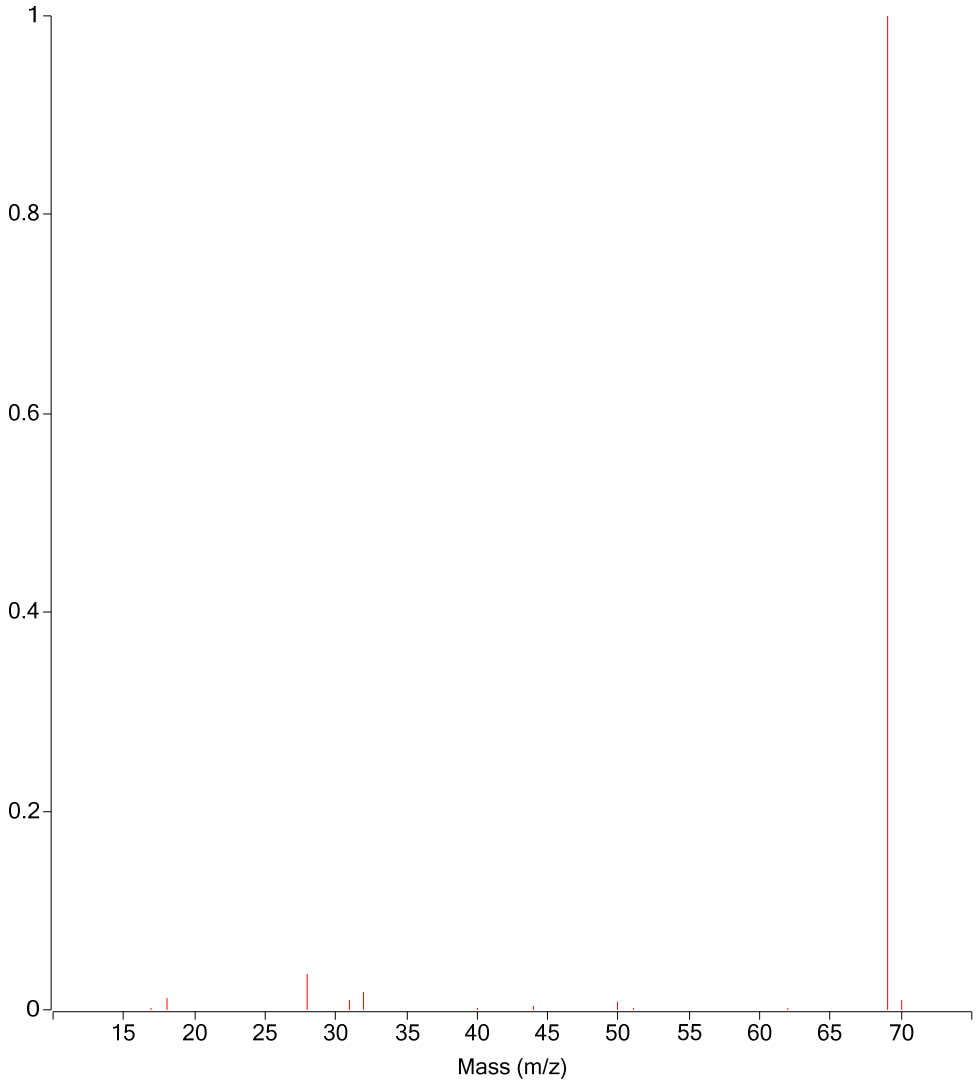
Repeller maximum 35 volts using ion 219; Gain Factor 0.5831

Mass Gain Values(Scan Speed): -368(3) -340(2) -311(1) -309(0) -256(FS1) -256(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	120.1	120.1	120.1	120.1	120.1	120.1	120.1
Entrance Lens Offset	12.9	12.9	12.9	12.9	12.9	12.9	12.9

597x Air and Water Check

Instrument: BCCL GCMS #3
Mon Mar 24 08:26:38 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.22	Water%	(counts=10512)
28/69 =	3.55	Nitrogen%	(counts=30616)
32/69 =	1.90	Oxygen%	(counts=16334)
44/69 =	0.32	Carbon Dioxide%	(counts=2743)
28/18 =	291.25	Nitrogen/Water%	

Instrument Name : BCCL GCMS #3
DC Polarity : Positive
Filament 2

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	501.90	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	219.90	OK
Position of isotope mass 503	502.88	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%)	4.37	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.00	OK
Ratio of 219 to 69 should be > 40% and is	61.21	OK
Ratio of 502 to 69 should be > 2.4% and is	3.15	OK
Mass 69 Precursor (<= 3%)	0.10	OK
Mass 219 Precursor (<= 6%)	0.24	OK
Mass 502 Precursor (<= 12%)	1.52	OK

597x Air and Water Check
Mon Mar 24 08:35:48 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%)	0.72	OK
Ratio of 28 to 69 (<10%)	3.00	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

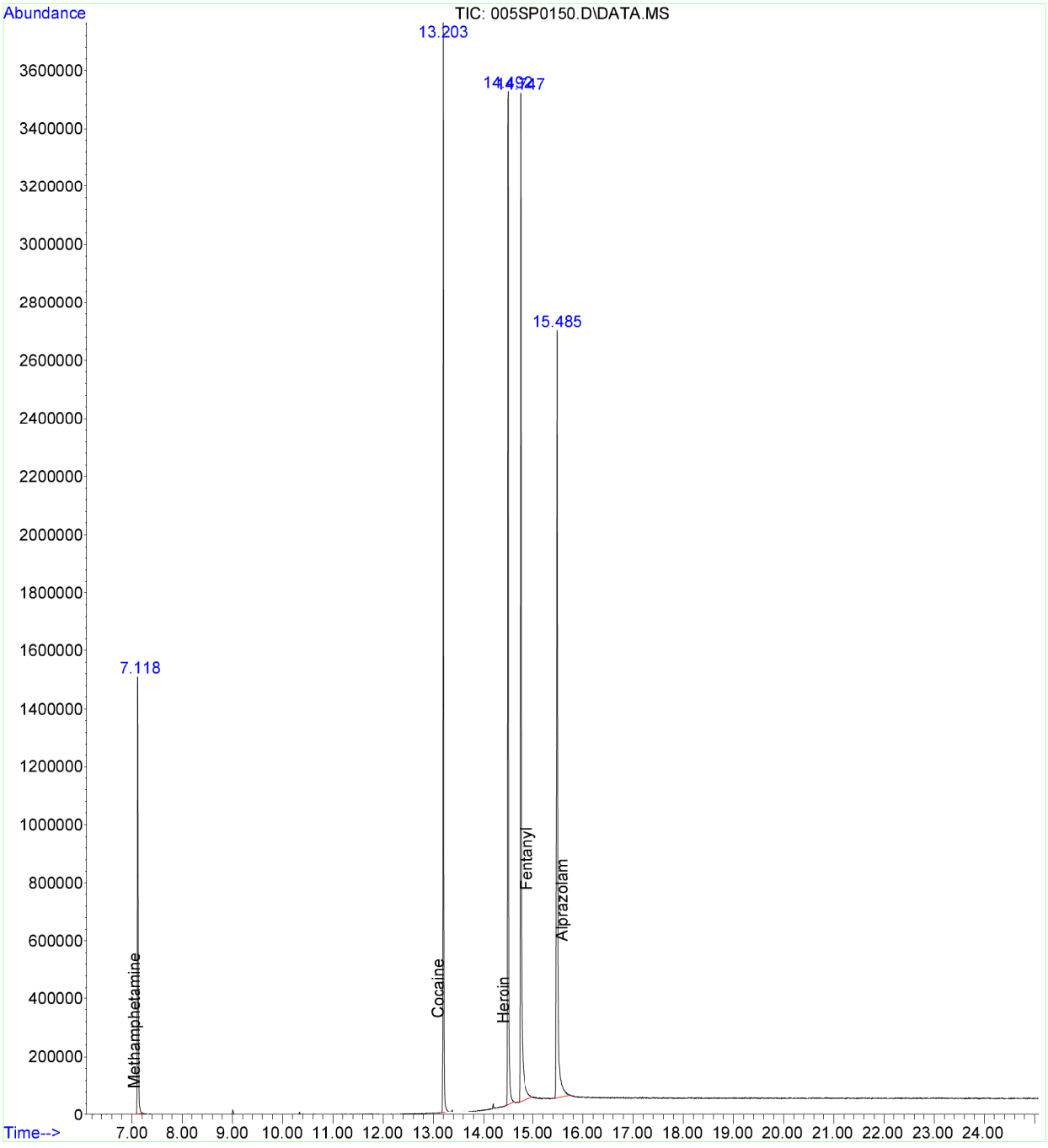
BCCL GC/MS #3
Retention Times for the Week of:

03/24/2025 - 03/25/2025

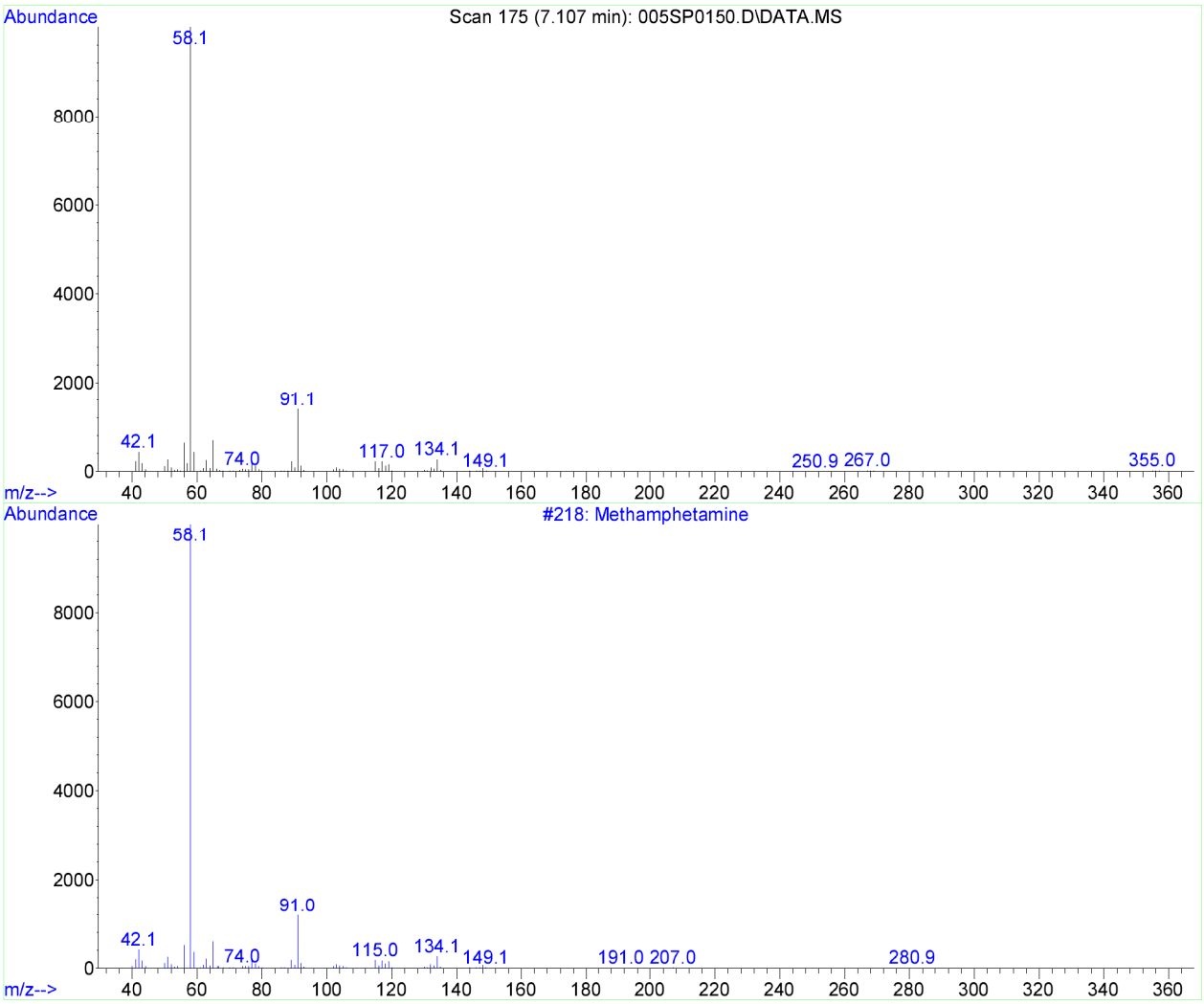
[X] **Tune: DS 03/24/2025 - Autotune**

Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.118	7.046	7.189
Cocaine	R-24-060	DrugTest35	13.203	13.070	13.335
Heroin	R-24-060	DrugTest35	14.492	14.347	14.636
Fentanyl	R-24-060	DrugTest35	14.747	14.599	14.894
Alprazolam	R-24-060	DrugTest35	15.485	15.330	15.639

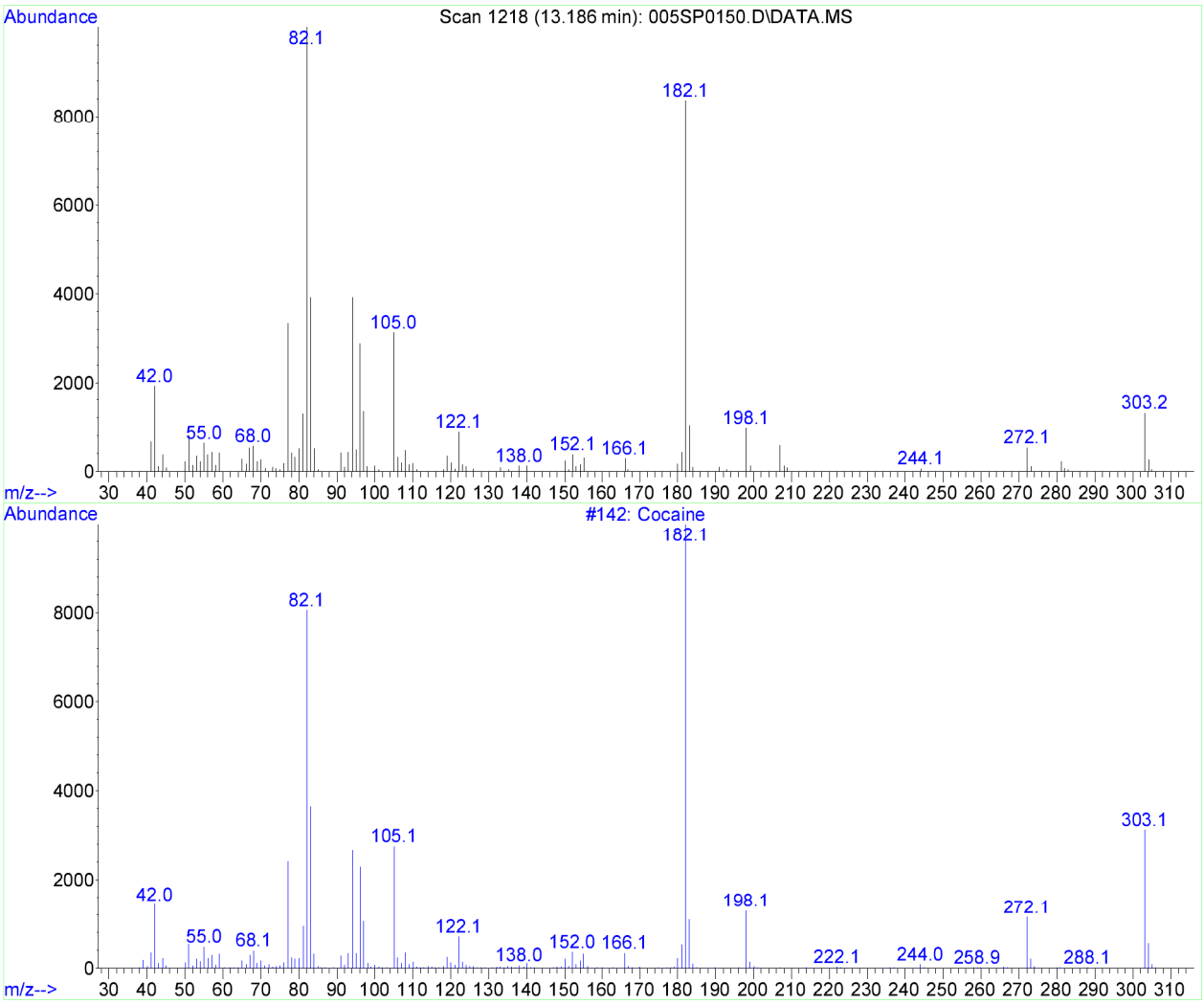
```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\032425\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 24 Mar 2025  09:57 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                  000002667
Misc Info  :                                                000002667
```



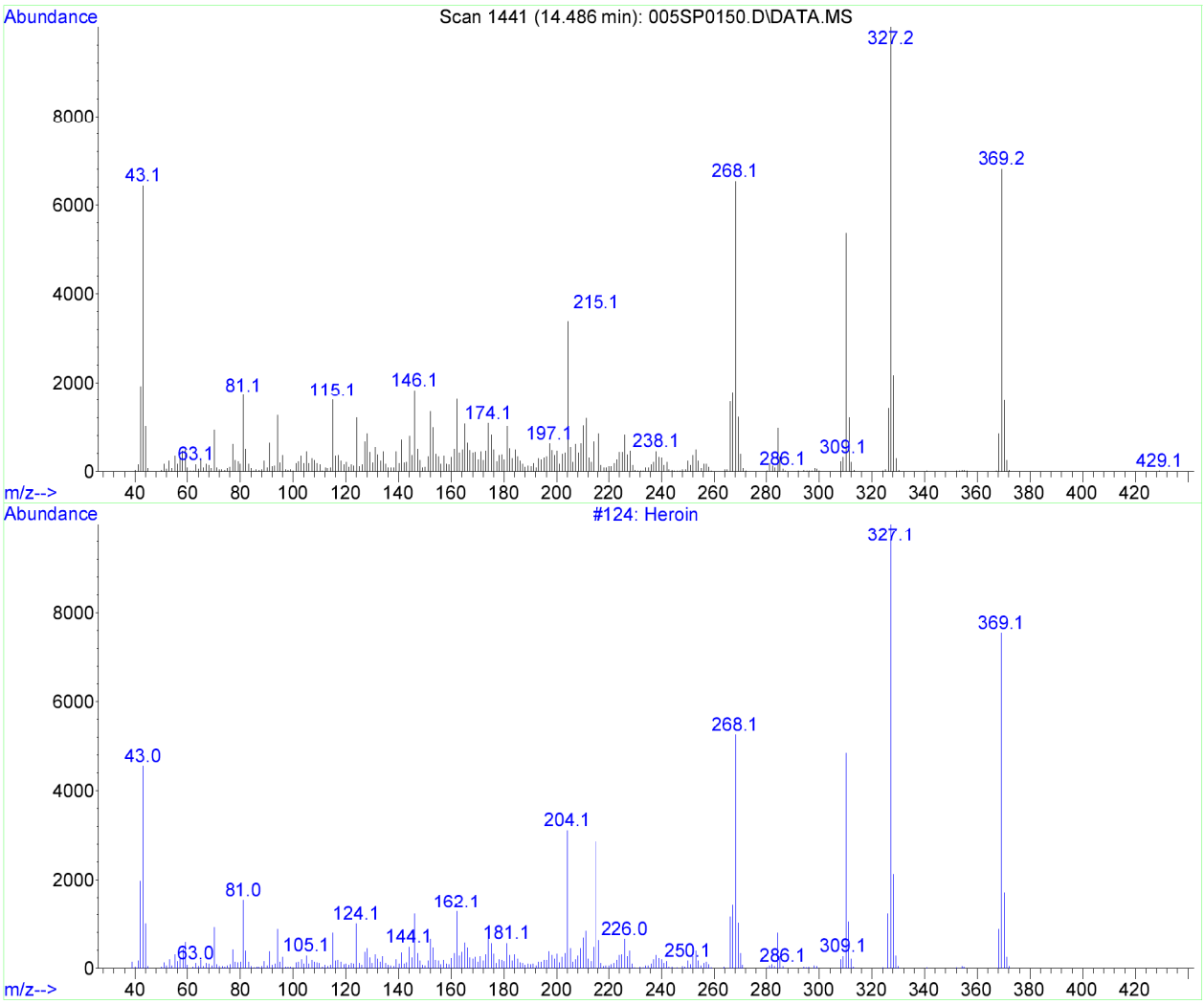
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 90
ID : Methamphetamine



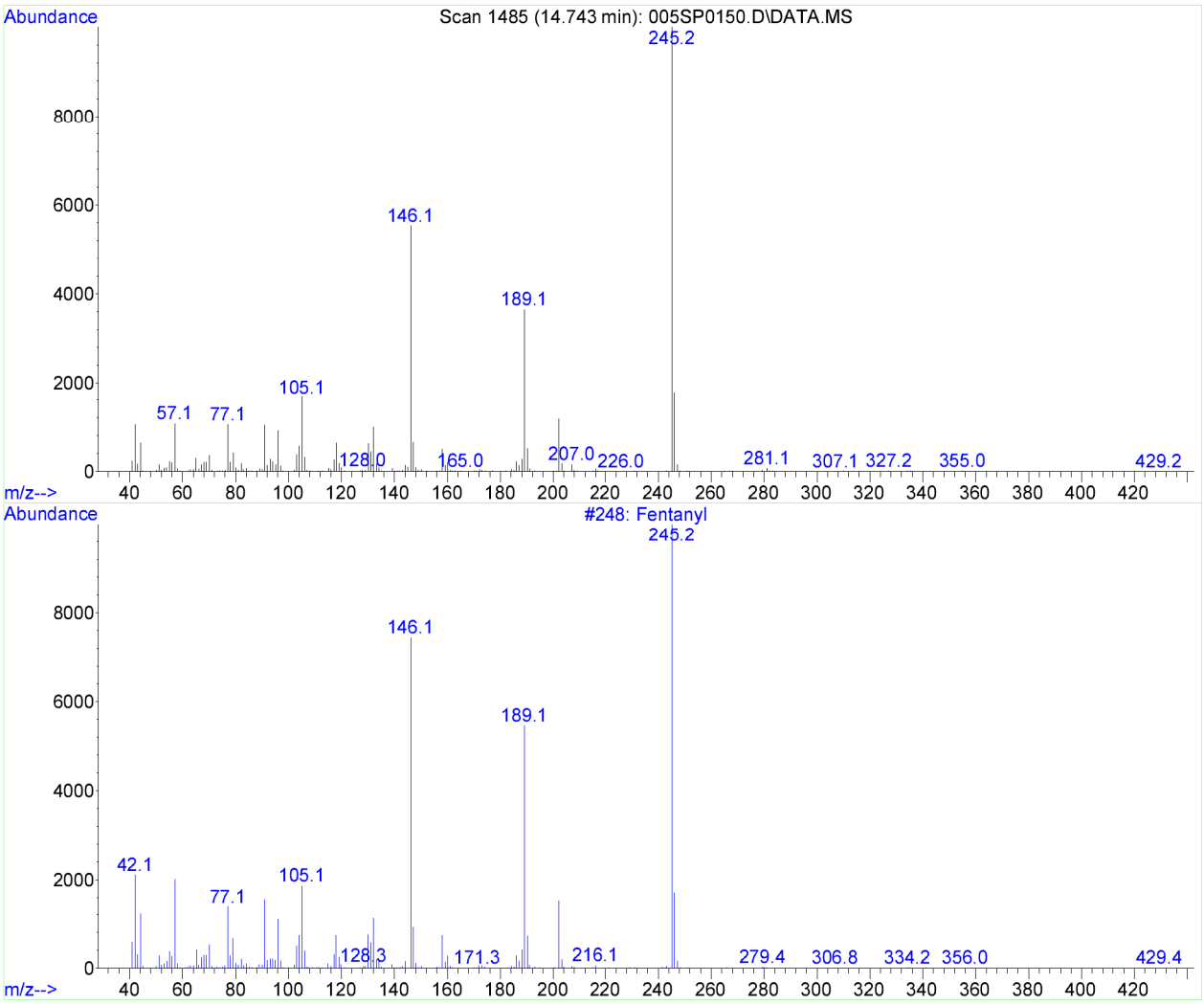
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Cocaine



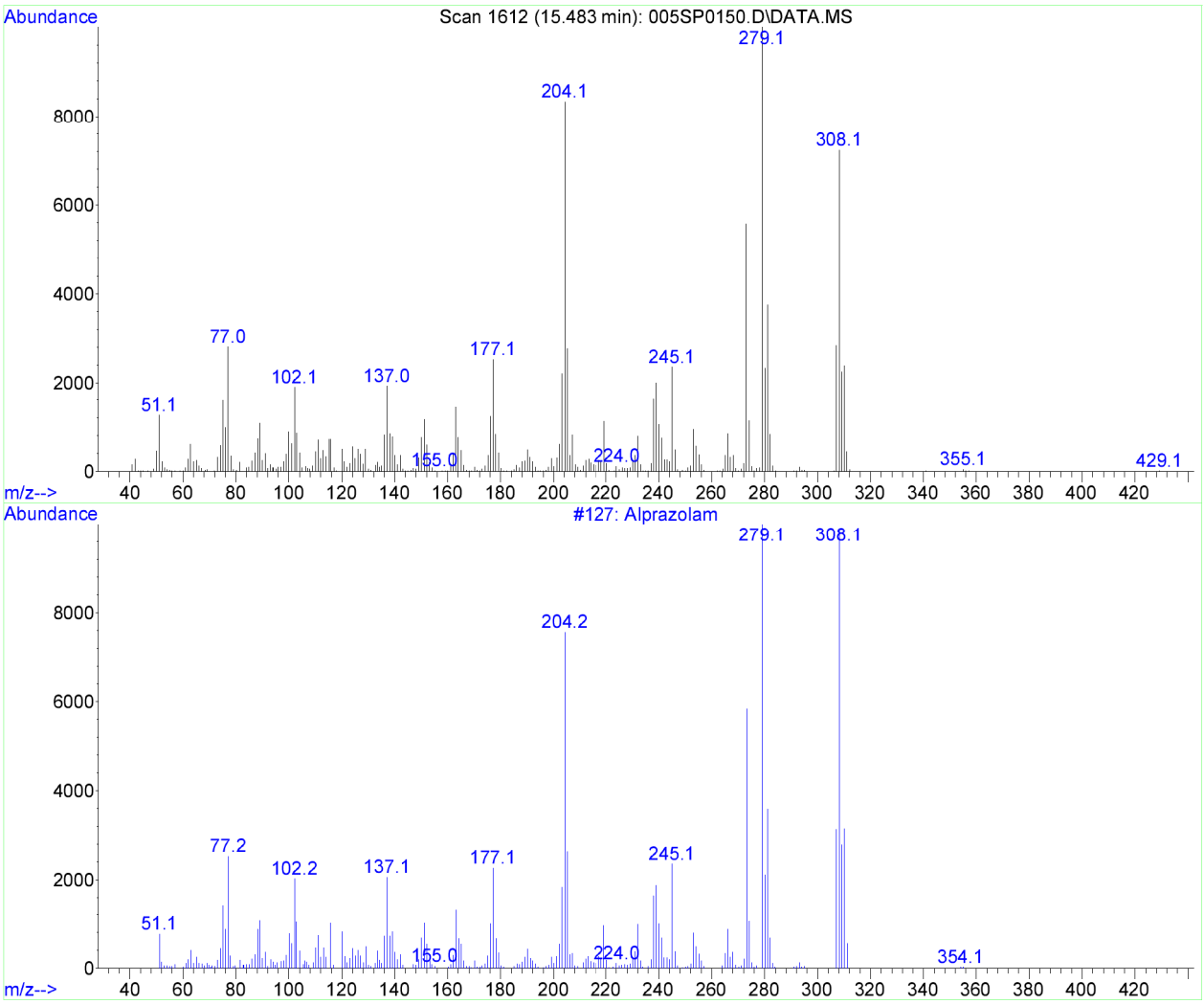
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Heroin



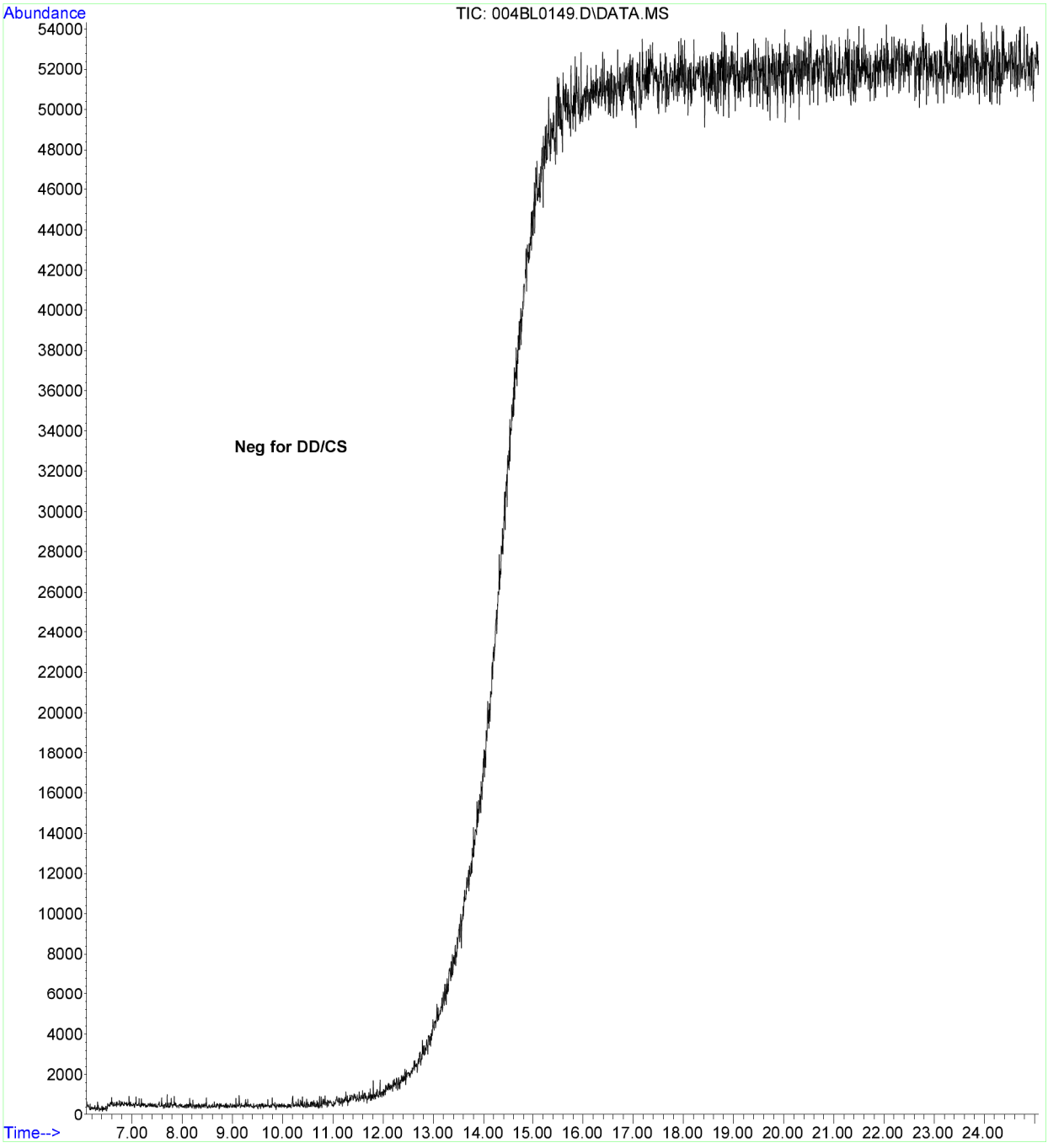
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 76
ID : Fentanyl



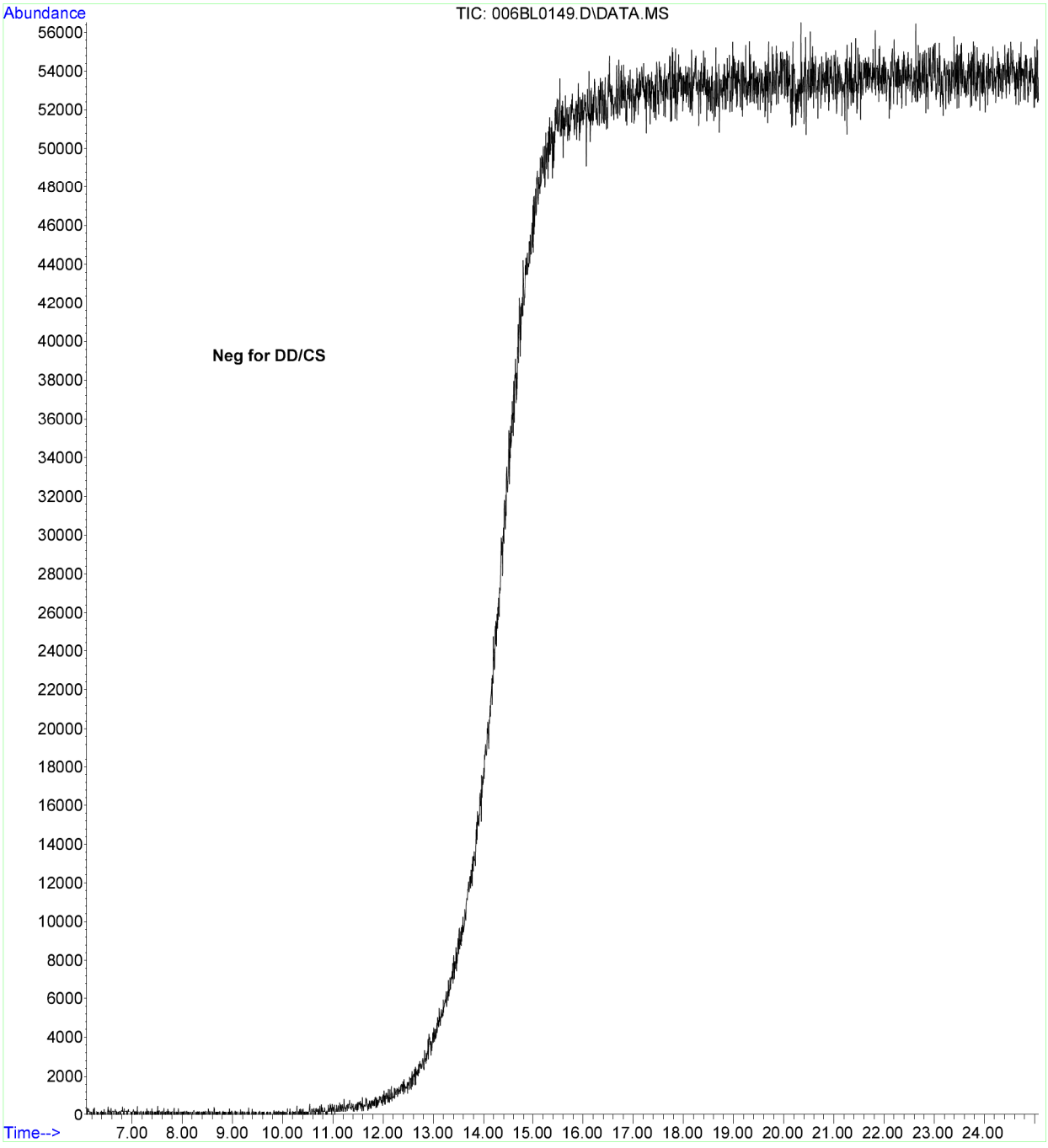
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Alprazolam



File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\032425\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 24 Mar 2025 09:29 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\032425\006BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 24 Mar 2025 10:26 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666

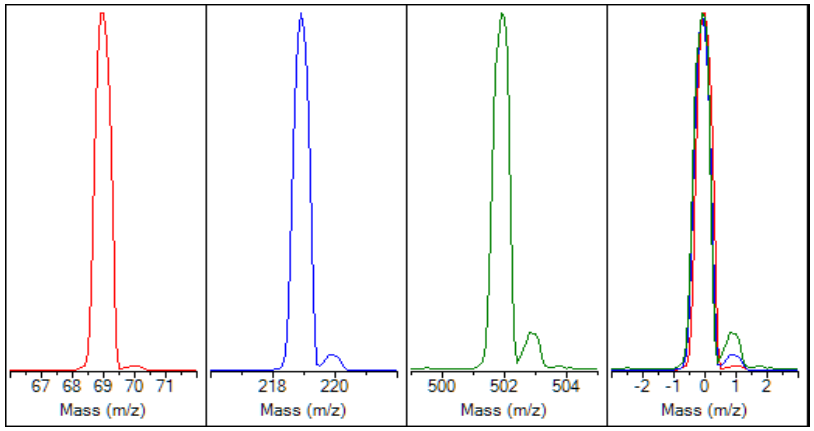


2nd Tune of the day, see page 4 and 5 of this document to reference why this tune was performed - DS

Autotune - 5977

3/26/2025 10:41:42 AM (UTC-5:00) BCCL GCMS #3

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



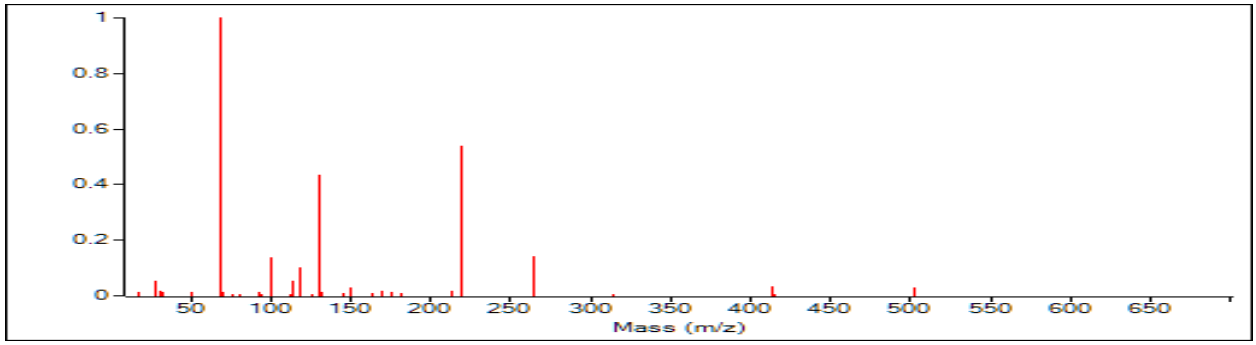
Ion Polarity	Pos	Mass Gain	-365
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1677
Filament	2	Amu Offset	119.88
Repeller	31.31	Width219	0.003
Ion Focus	90.3	DC Polarity	Pos
Entrance Lens	7.5	HED Enable	On
Ent Lens Offset	13.02	EM Volts	1864.7
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	9.81e-06

Mass	Abund	Rel Abund	Pw50
69.00	512,337	100.0%	0.61
218.90	276,790	54.0%	0.60
501.90	12,348	2.4%	0.60

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	100	69.00	503,232	1,408,389



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	503,232	100.00	70.00	5,266	1.05
218.90	270,336	53.72	219.90	11,820	4.37
501.80	13,193	2.62	502.80	1,322	10.02

Air/Water Check: H20 ~1.2% N2 ~5.3% O2 ~1.4% CO2 ~0.1% N2/H20 ~437.3%

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 76780.330

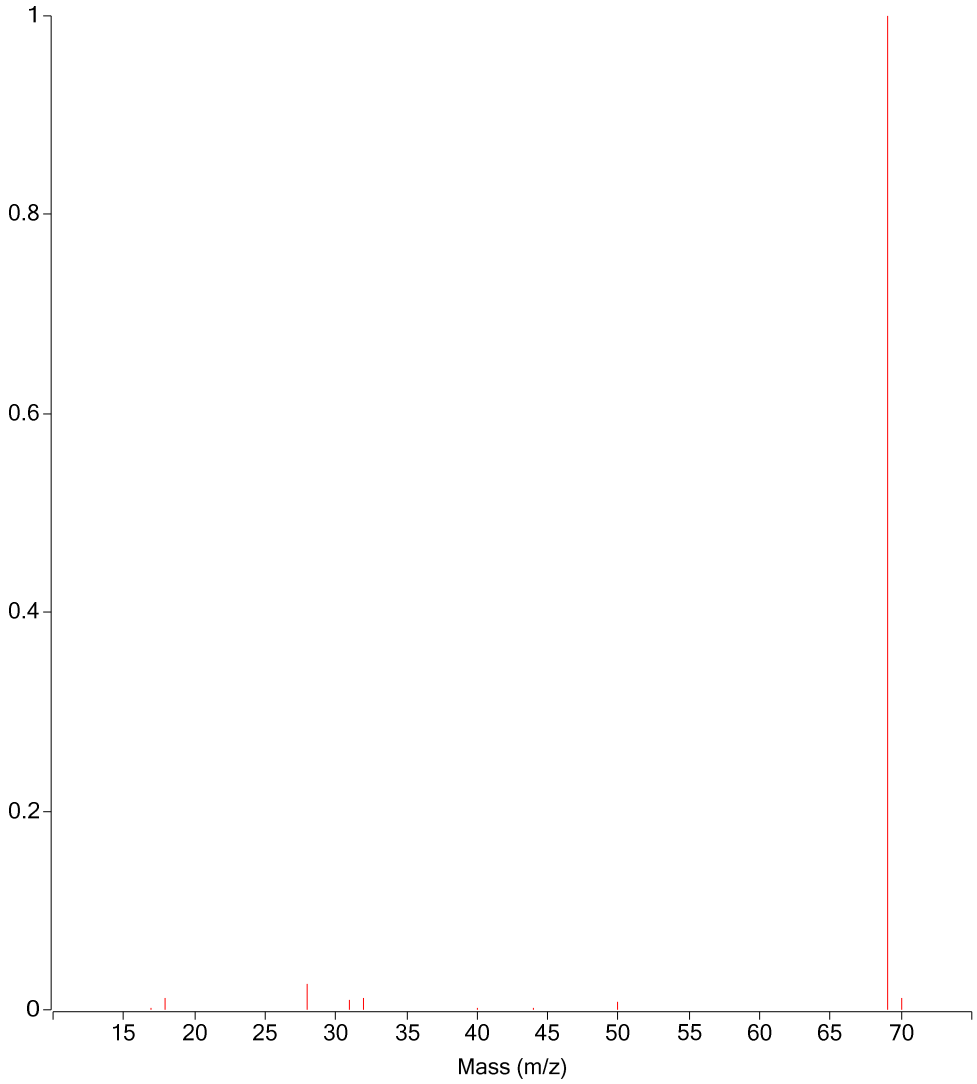
Repeller maximum 35 volts using ion 219; Gain Factor 0.7678

Mass Gain Values(Scan Speed): -378(3) -342(2) -324(1) -318(0) -265(FS1) -264(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	119.9	119.9	119.9	119.9	119.9	119.9	119.9
Entrance Lens Offset	13.0	13.0	13.0	13.0	13.0	13.0	13.0

597x Air and Water Check

Instrument: BCCL GCMS #3
Wed Mar 26 10:22:56 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	1.11	Water%	(counts=8005)
28/69 =	2.52	Nitrogen%	(counts=18176)
32/69 =	1.11	Oxygen%	(counts=8027)
44/69 =	0.15	Carbon Dioxide%	(counts=1088)
28/18 =	227.06	Nitrogen/Water%	

Instrument Name : BCCL GCMS #3
DC Polarity : Positive
Filament 2

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	501.83	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	219.90	OK
Position of isotope mass 503	502.86	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%)	4.34	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	10.36	OK
Ratio of 219 to 69 should be > 40% and is	54.11	OK
Ratio of 502 to 69 should be > 2.4% and is	2.62	OK
Mass 69 Precursor (<= 3%)	0.08	OK
Mass 219 Precursor (<= 6%)	0.21	OK
Mass 502 Precursor (<= 12%)	1.06	OK

597x Air and Water Check
Wed Mar 26 11:01:32 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%)	1.24	OK
Ratio of 28 to 69 (<10%)	4.29	OK
Electron Multiplier Voltage	1865	OK

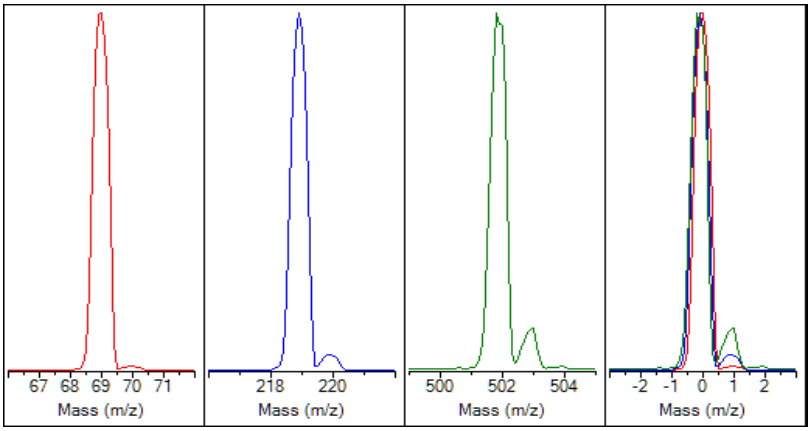
Tune portion of System Verification passed.

1st Tune of the day - low 502 to 69 ratio (should be 2.4%, was 2.39%) - 2nd tune will be performed to ensure instrument is within operational parameters. Refer to page 5 of this document for operational parameters - DS

Autotune - 5977

3/26/2025 10:28:13 AM (UTC-5:00) BCCL GCMS #3

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



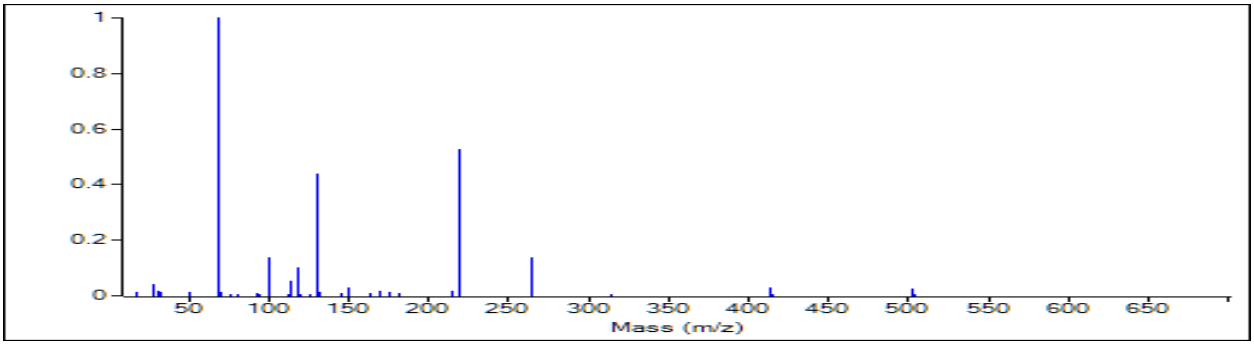
Ion Polarity	Pos	Mass Gain	-369
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1677
Filament	2	Amu Offset	119.75
Repeller	31.31	Width219	0.001
Ion Focus	90.3	DC Polarity	Pos
Entrance Lens	10.1	HED Enable	On
Ent Lens Offset	12.86	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.76e-06

Mass	Abund	Rel Abund	Pw50
69.00	424,452	100.0%	0.60
218.90	224,122	52.8%	0.60
501.80	10,118	2.4%	0.59

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	89	69.00	418,176	1,155,794



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	418,176	100.00	70.00	4,799	1.15
219.00	220,160	52.65	220.00	9,517	4.32
502.10	9,916	2.37	503.10	984	9.92

Air/Water Check: H20 ~1.4% N2 ~4.0% O2 ~1.1% CO2 ~0.1% N2/H20 ~295.0%

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 57125.784

Repeller maximum 35 volts using ion 219; Gain Factor 0.5713

Mass Gain Values(Scan Speed): -348(3) -371(2) -377(1) -344(0) -343(FS1) -343(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	12.9	12.9	12.9	12.9	12.9	12.9	12.9

Instrument Name	: BCCL GCMS #3	
DC Polarity	: Positive	
Filament	2	
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	502.10	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	220.00	OK
Position of isotope mass 503	503.06	OK
Ratio of mass 70 to mass 69(0.5 - 1.6%)	1.12	OK
Ratio of mass 220 to mass 219(3.2 - 5.4%)	4.33	OK
Ratio of mass 503 to mass 502(7.9 - 12.3%)	9.93	OK
Ratio of 219 to 69 should be > 40% and is	52.15	OK
Ratio of 502 to 69 should be > 2.4% and is	2.39	Low

Possible causes include:
- Foreline pressure not between 20 and 100 mTorr
- Bad filament being used
- Dirty ion source

Due to low 502 to 69 ratio, tune will be repeated to ensure instrument is within operational parameters - DS

Mass 69 Precursor (<= 3%)	0.09	OK
Mass 219 Precursor (<= 6%)	0.25	OK
Mass 502 Precursor (<= 12%)	1.20	OK

597x Air and Water Check
Wed Mar 26 10:34:41 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%)	1.27	OK
Ratio of 28 to 69 (<10%)	4.04	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.

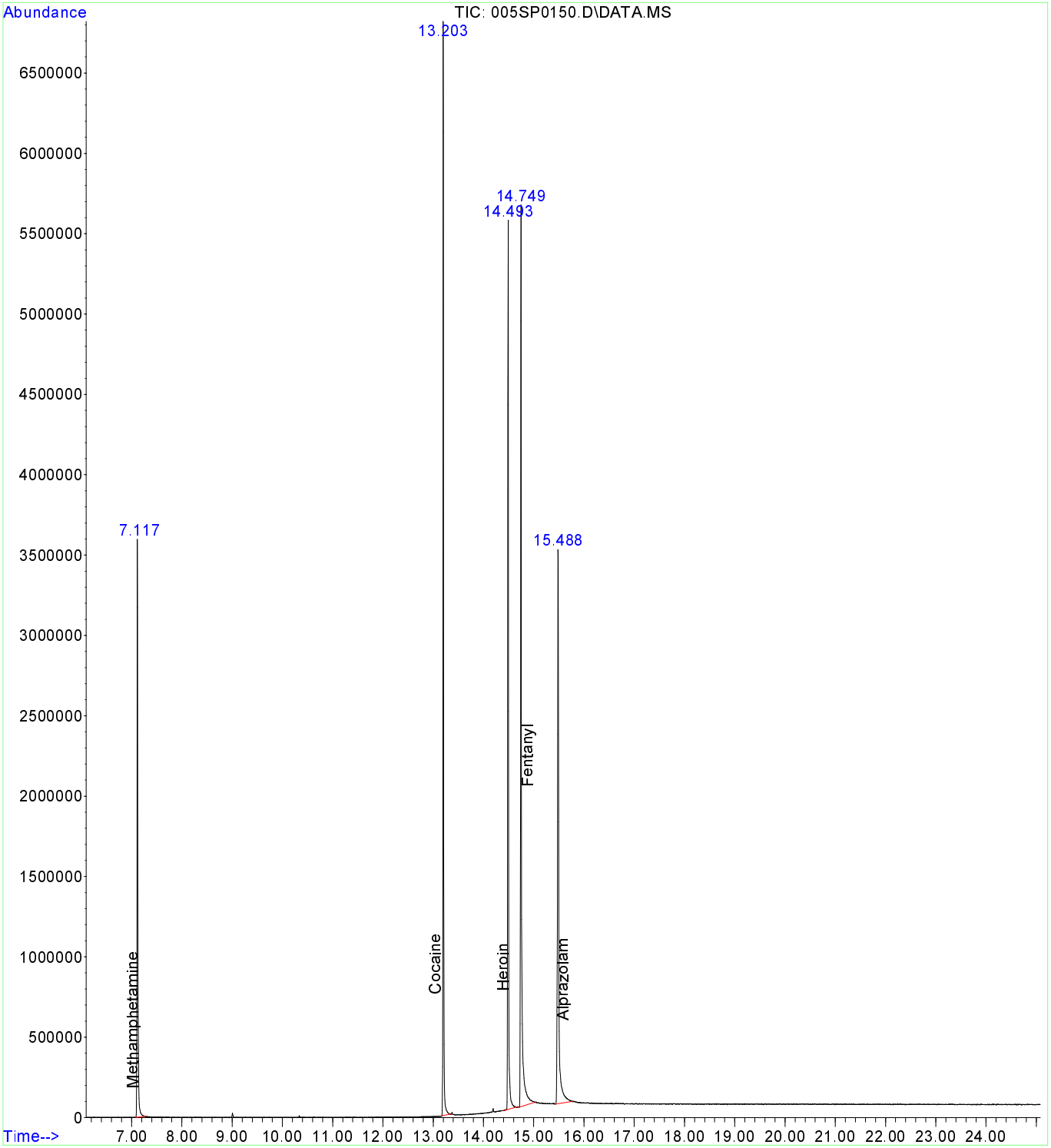
BCCL GC/MS #3
Retention Times for the Week of:

03/26/2025 - 03/30/2025

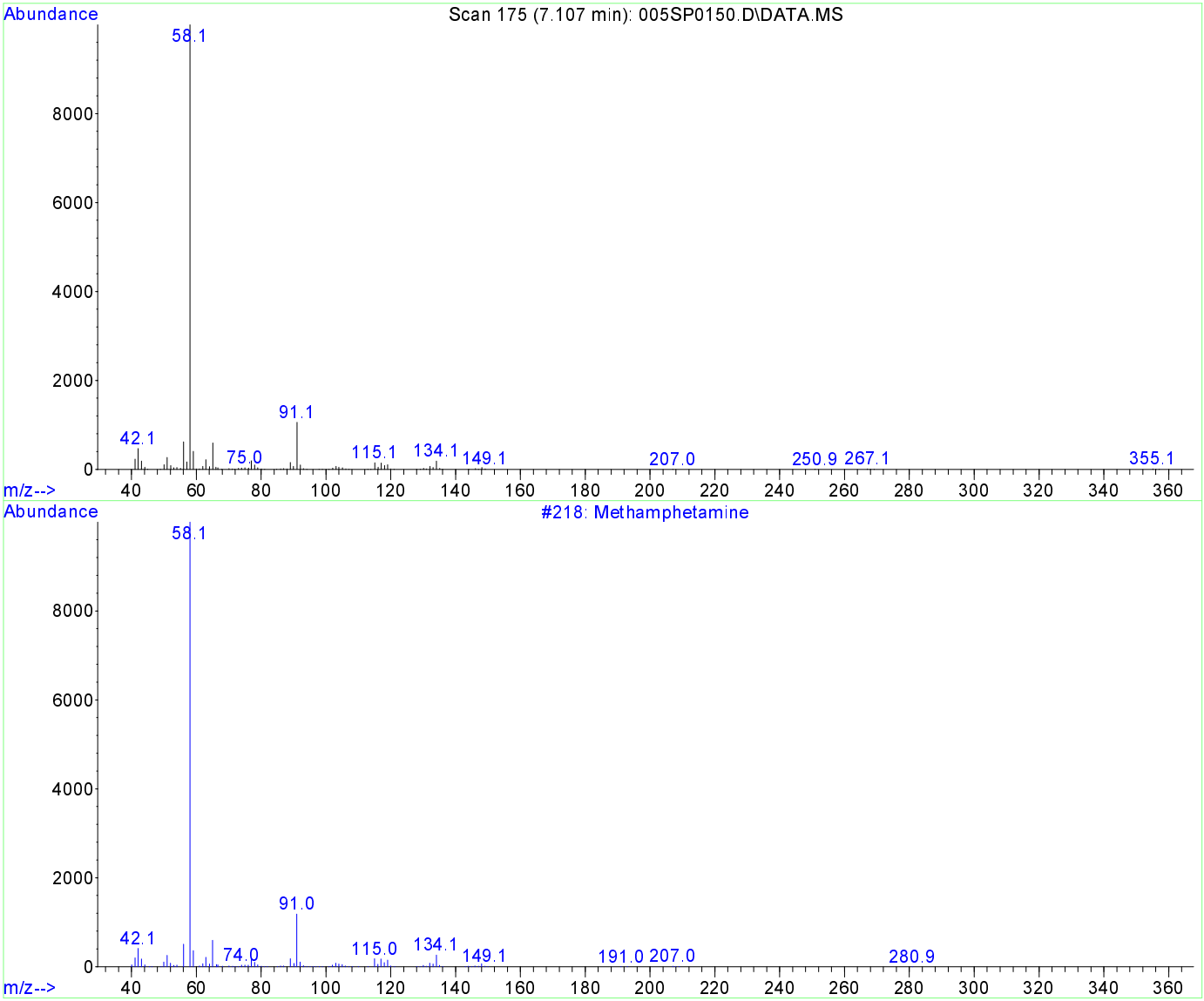
[X] **Tune: DS 03/26/2025 - Autotune**

Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.117	7.045	7.188
Cocaine	R-24-060	DrugTest35	13.203	13.070	13.335
Heroin	R-24-060	DrugTest35	14.493	14.348	14.637
Fentanyl	R-24-060	DrugTest35	14.749	14.601	14.896
Alprazolam	R-24-060	DrugTest35	15.488	15.333	15.642

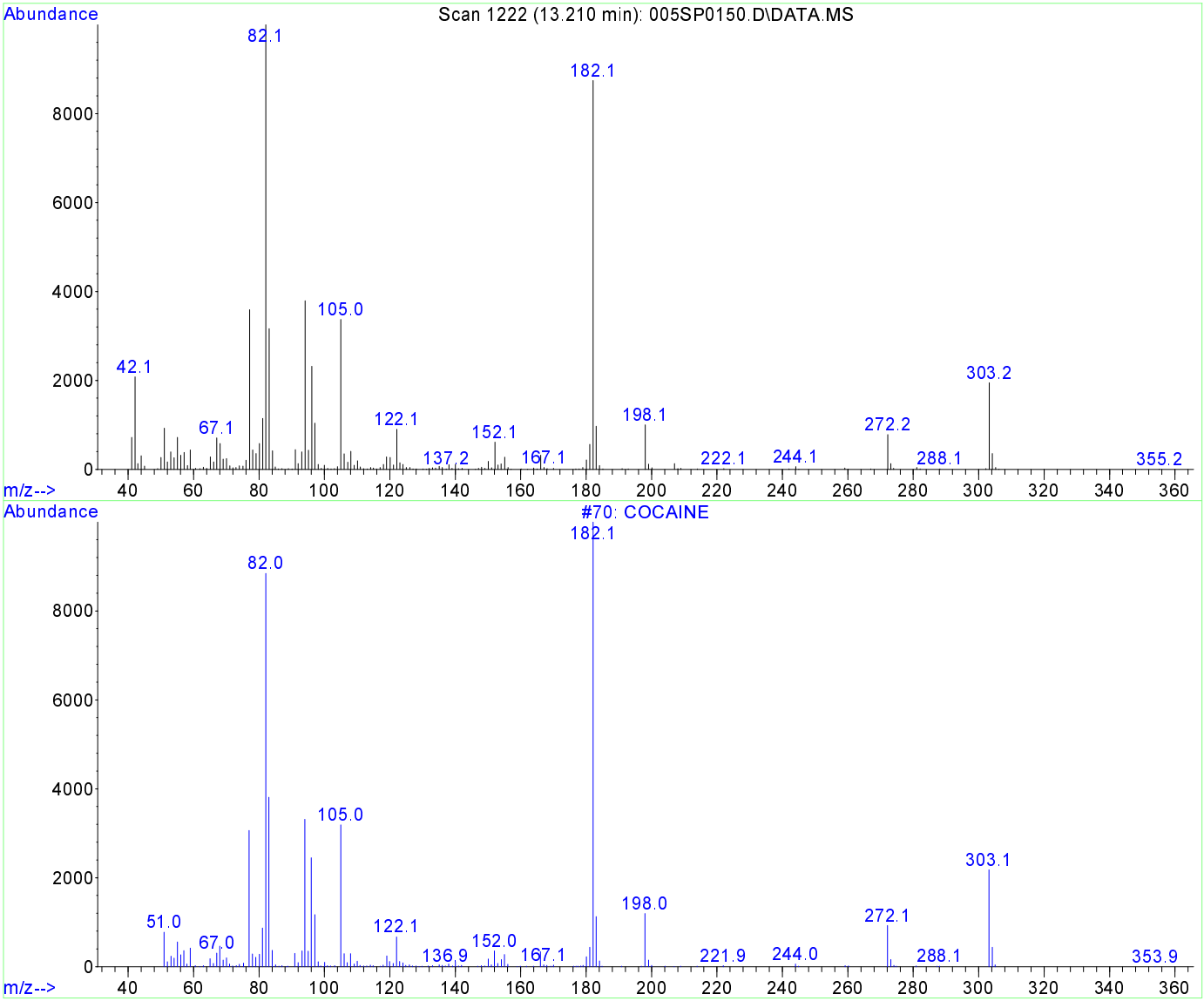
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...          Data\032625\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 26 Mar 2025  12:24 pm using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
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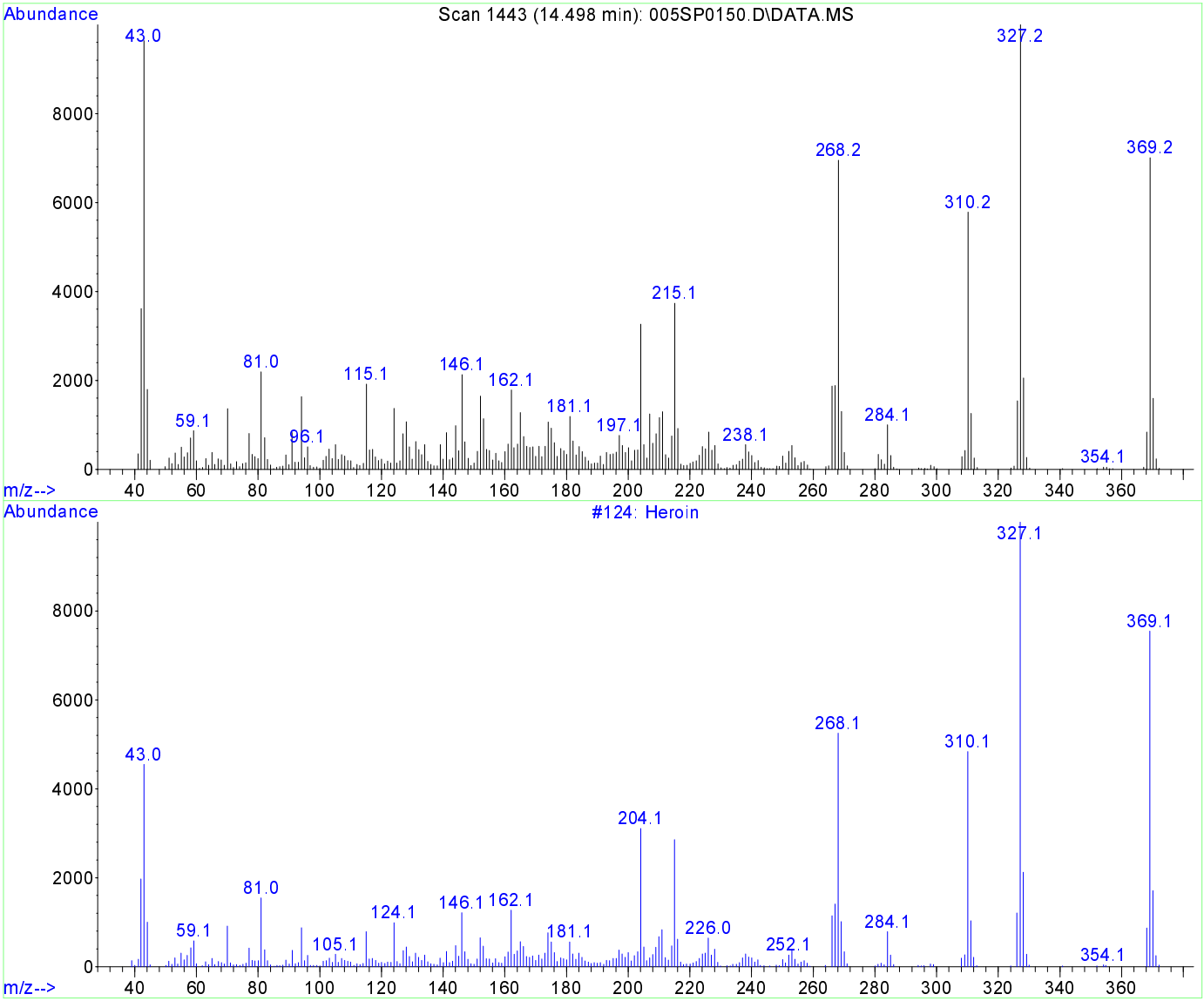
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 90
ID : Methamphetamine



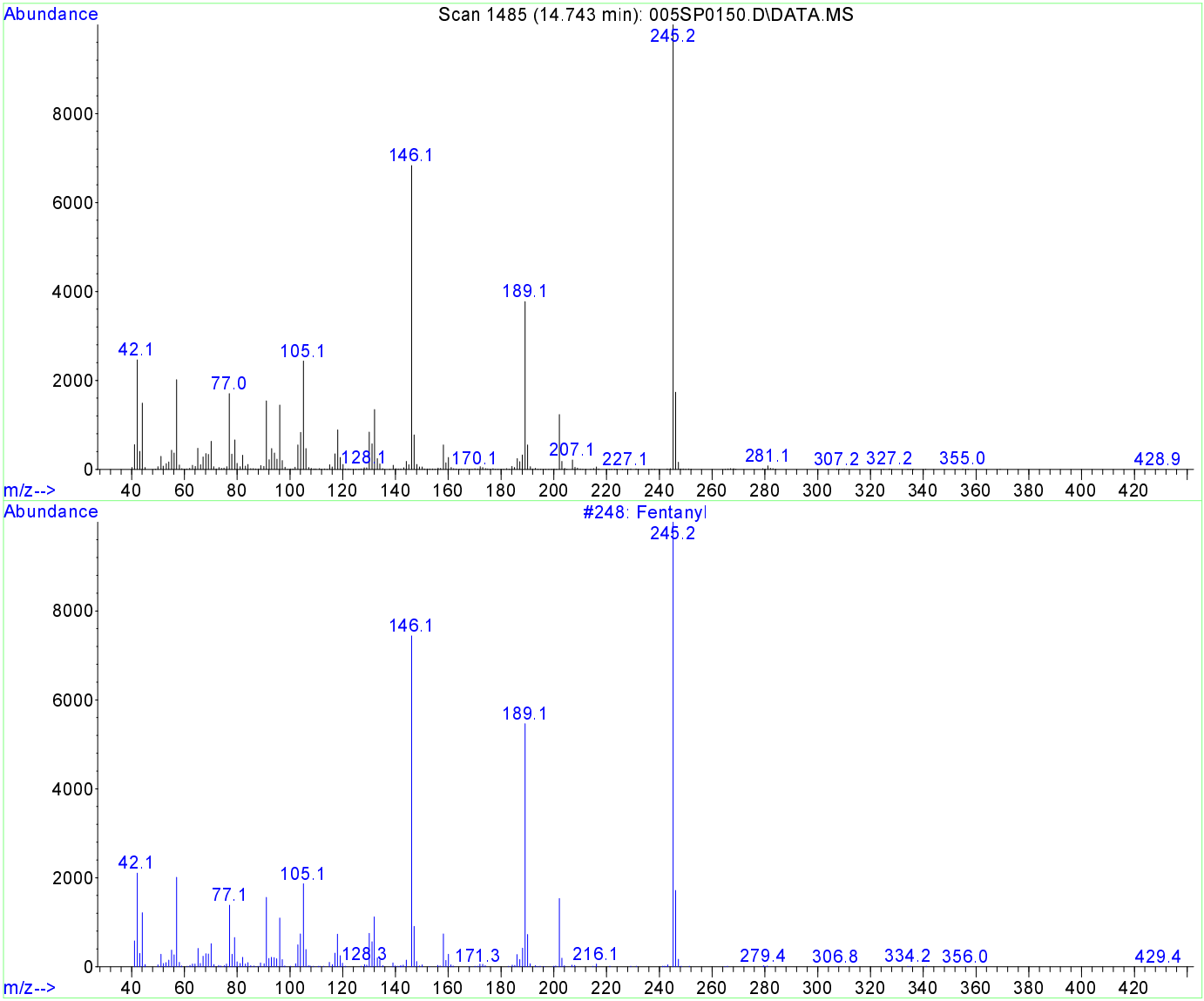
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : COCAINE



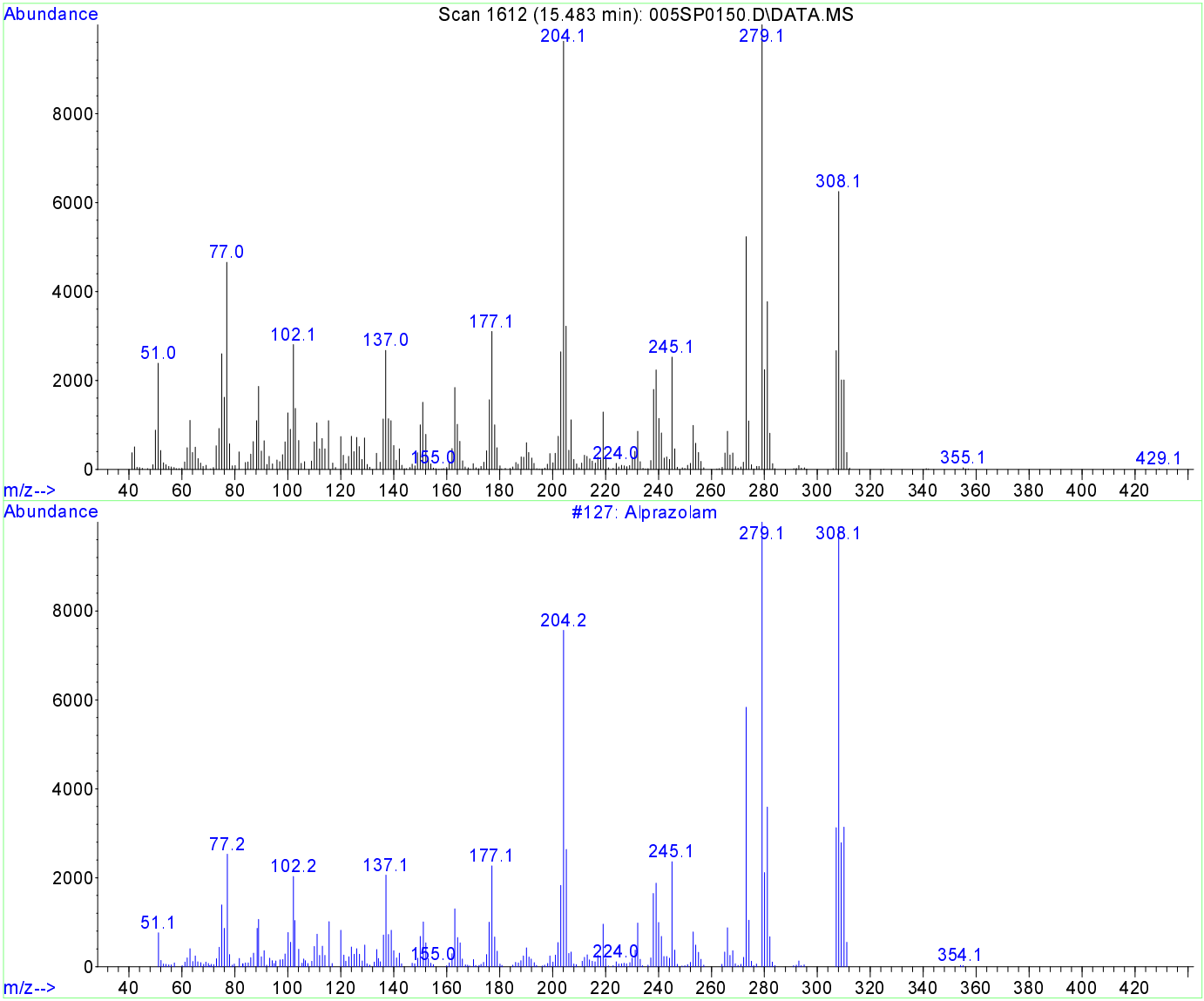
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Heroin



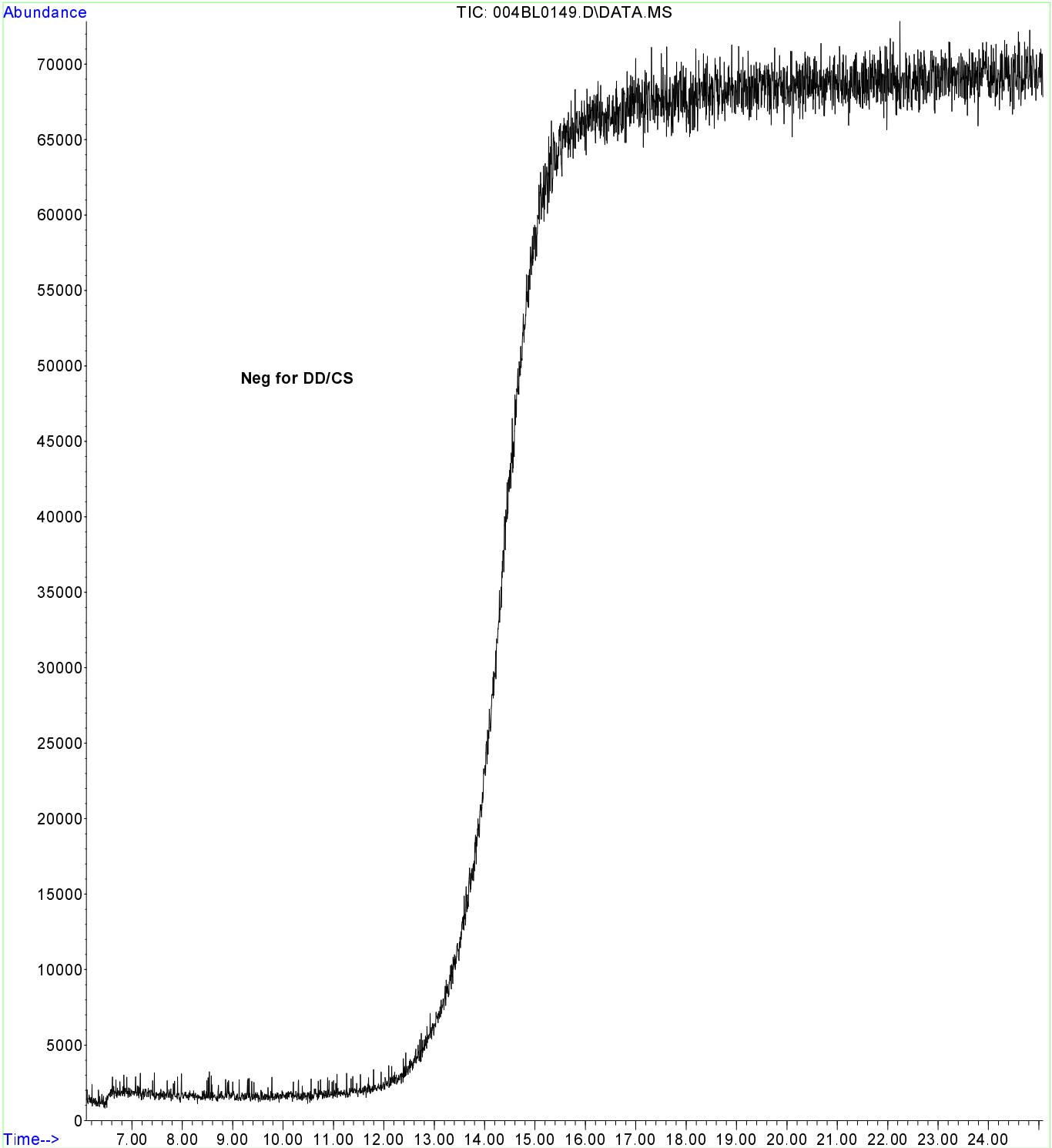
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Quality : 91
ID : Fentanyl



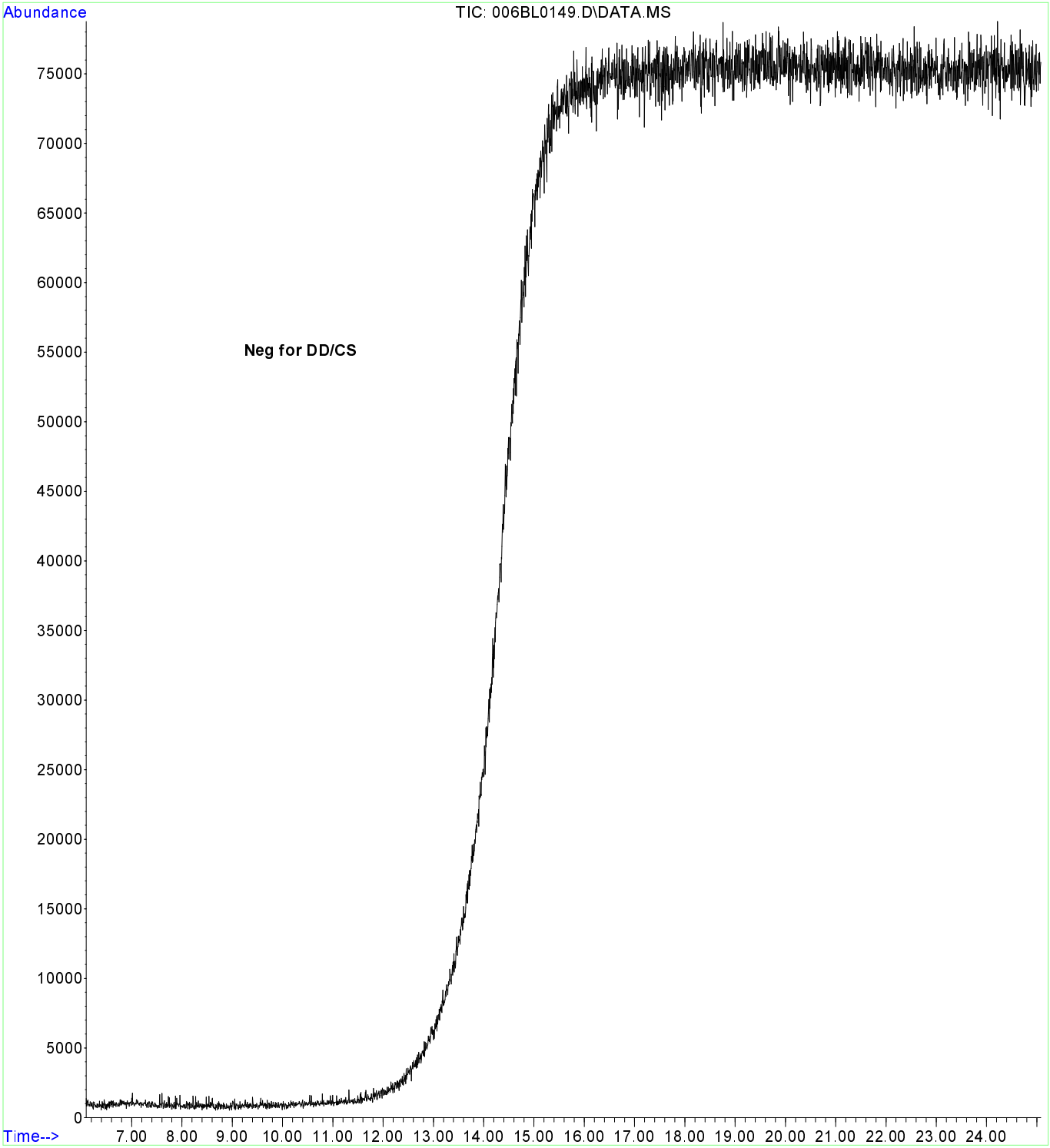
Library Searched : D:\MassHunter\Library\DRUG.L Sample Name: CAYMAN GC/MS MIX 3 (R-2
Quality : 99
ID : Alprazolam



File :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
... Data\032625\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 26 Mar 2025 11:55 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



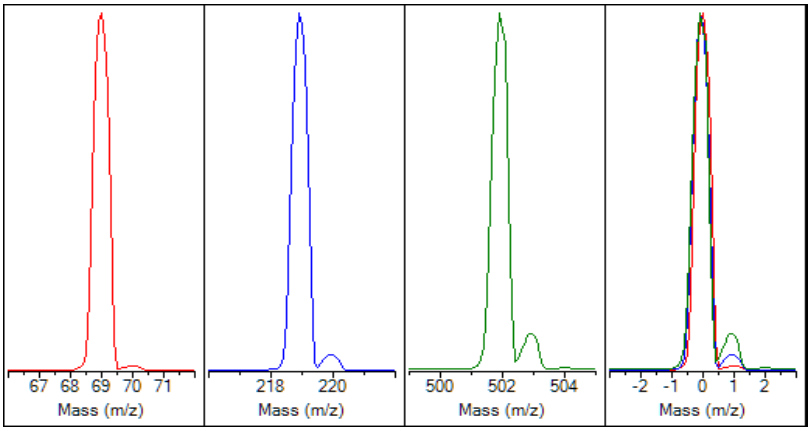
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... Data\032625\006BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 26 Mar 2025 12:52 pm using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666



Autotune - 5977

3/31/2025 8:24:04 AM (UTC-5:00) BCCL GCMS #3

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



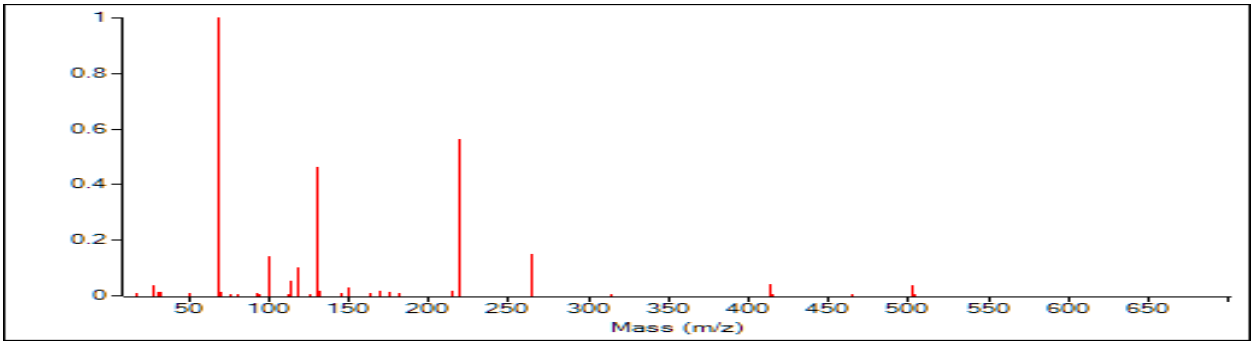
Ion Polarity	Pos	Mass Gain	-365
Emission	34.6	Mass Offset	-35
Electron Energy	70.0	Amu Gain	1675
Filament	2	Amu Offset	120.69
Repeller	34.90	Width219	-0.015
Ion Focus	80.5	DC Polarity	Pos
Entrance Lens	15.1	HED Enable	On
Ent Lens Offset	12.53	EM Volts	1817.6
Ion Body	0.00	Extractor Lens	0.00
		Scan Speed	3
		Averages	3
PFTBA	Open	Step Size	0.10

Temperatures and Pressures

MS Source	230	Turbo Speed	100.0
MS Quad	150	Hi Vac	8.76e-06

Mass	Abund	Rel Abund	Pw50
69.00	458,225	100.0%	0.60
218.90	259,434	56.6%	0.60
501.90	16,100	3.5%	0.58

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	94	69.00	445,696	1,275,503



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	445,696	100.00	70.00	4,821	1.08
219.00	251,200	56.36	220.00	10,489	4.18
502.10	16,042	3.60	503.10	1,520	9.48

Air/Water Check: H20 ~0.9% N2 ~3.5% O2 ~1.0% CO2 ~0.1% N2/H20 ~372.3%

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 57042.708

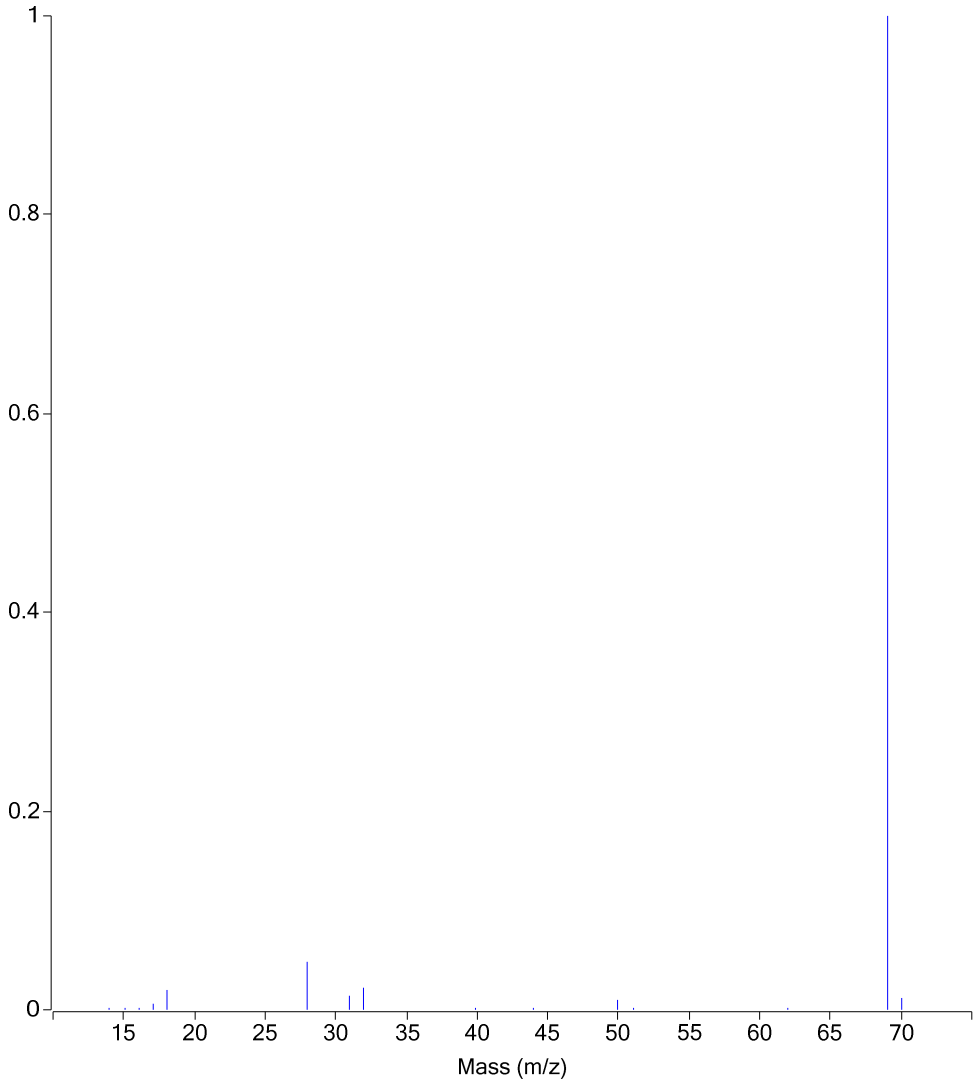
Repeller maximum 35 volts using ion 219; Gain Factor 0.5704

Mass Gain Values(Scan Speed): -345(3) -375(2) -377(1) -358(0) -357(FS1) -357(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset	120.7	120.7	120.7	120.7	120.7	120.7	120.7
Entrance Lens Offset	12.5	12.5	12.5	12.5	12.5	12.5	12.5

597x Air and Water Check

Instrument: BCCL GCMS #3
Mon Mar 31 08:19:13 2025 D:\MassHunter\GCMS\1\5977\



Current Params used: atune.u

Relative abundances:

18/69 =	2.09	Water%	(counts=26496)
28/69 =	4.79	Nitrogen%	(counts=60912)
32/69 =	2.18	Oxygen%	(counts=27680)
44/69 =	0.28	Carbon Dioxide%	(counts=3572)
28/18 =	229.89	Nitrogen/Water%	

Instrument Name	: BCCL GCMS #3	
DC Polarity	: Positive	
Filament	2	
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	502.10	OK
Position of isotope mass 70	70.00	OK
Position of isotope mass 220	220.00	OK
Position of isotope mass 503	503.09	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%)	4.36	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	53.92	OK
Ratio of 502 to 69 should be > 2.4% and is	3.35	OK
Mass 69 Precursor (<= 3%)	0.11	OK
Mass 219 Precursor (<= 6%)	0.26	OK
Mass 502 Precursor (<= 12%)	0.98	OK

597x Air and Water Check

Mon Mar 31 08:27:29 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%)	0.87	OK
Ratio of 28 to 69 (<10%)	3.00	OK
Electron Multiplier Voltage	1818	OK

Tune portion of System Verification passed.

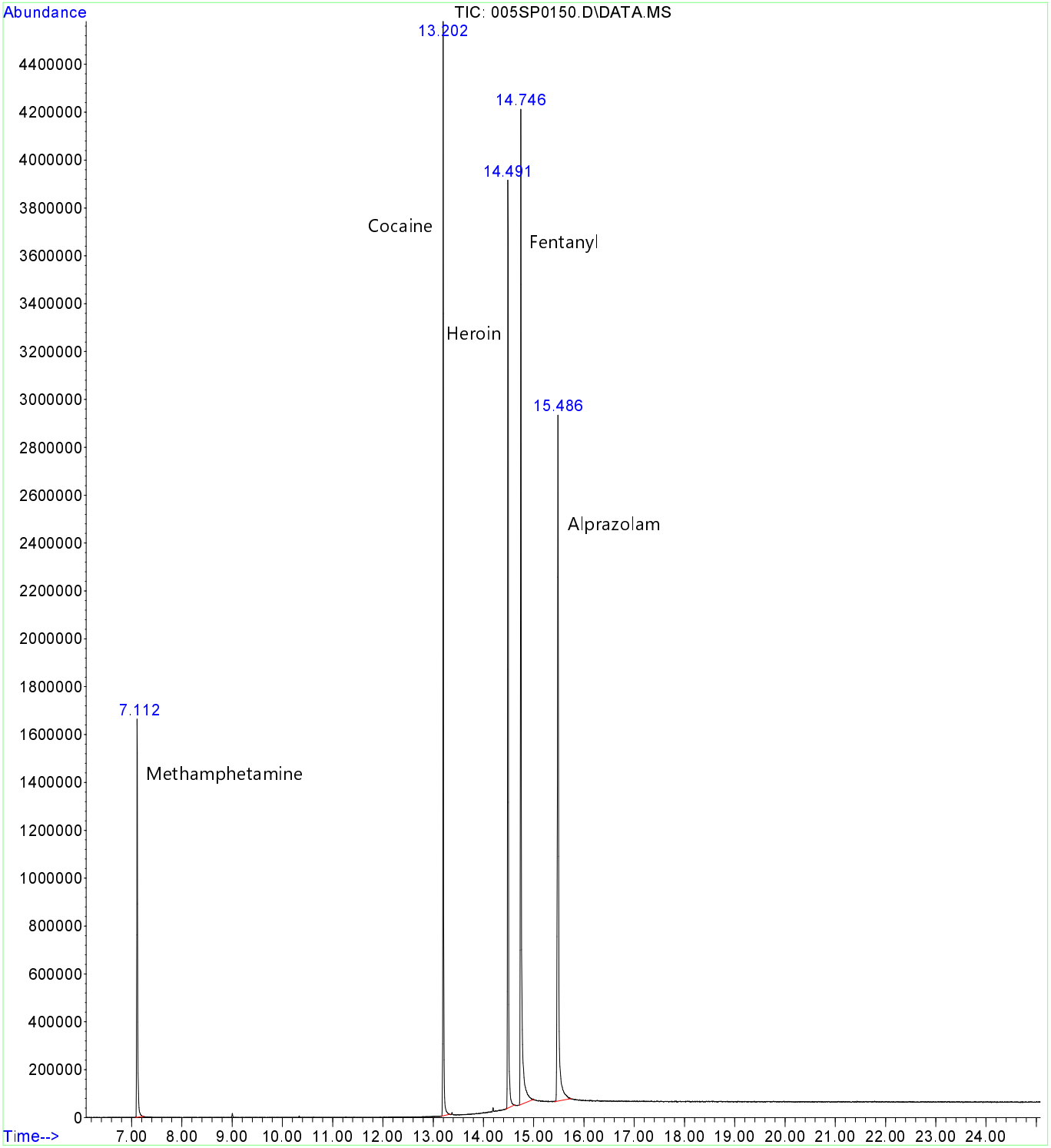
BCCL GC/MS #3
Retention Times for the Week of:

03/31/2025 - 04/06/2025

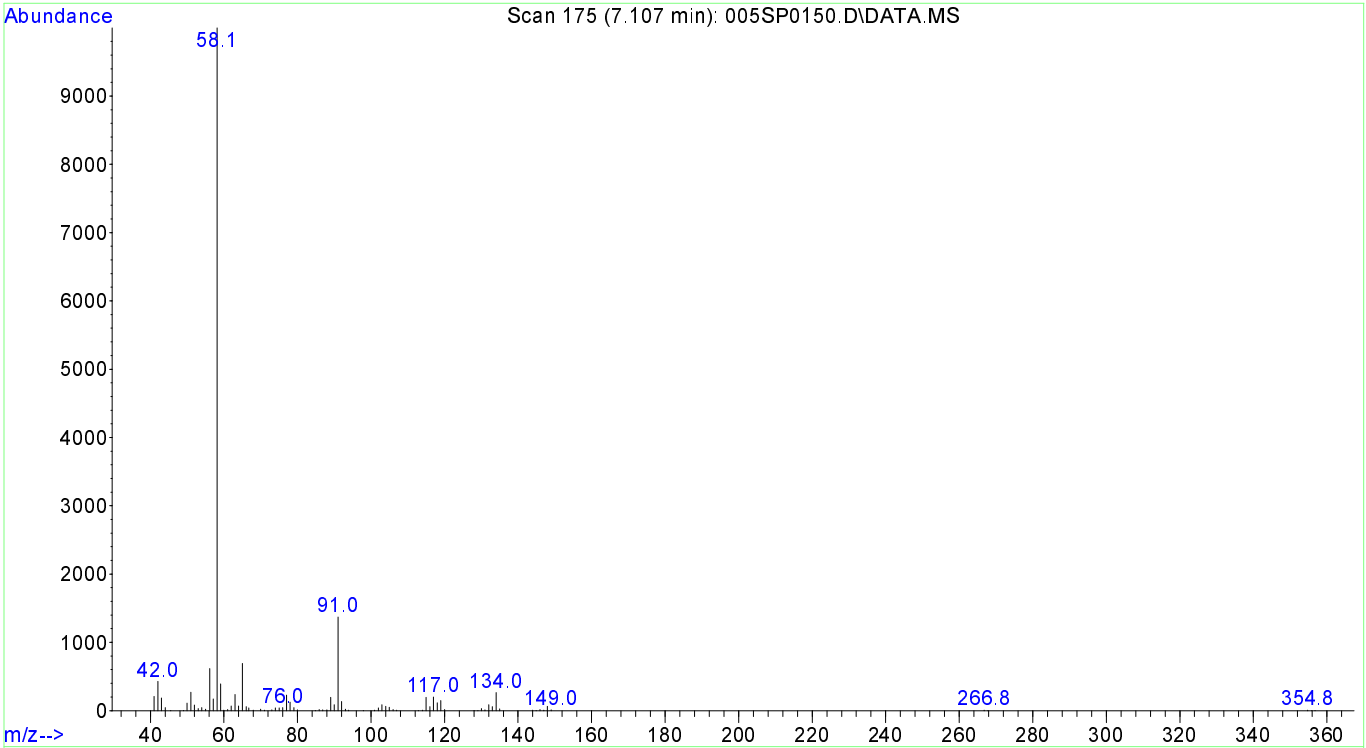
[X] **Tune: DS 03/31/2025 - Autotune**

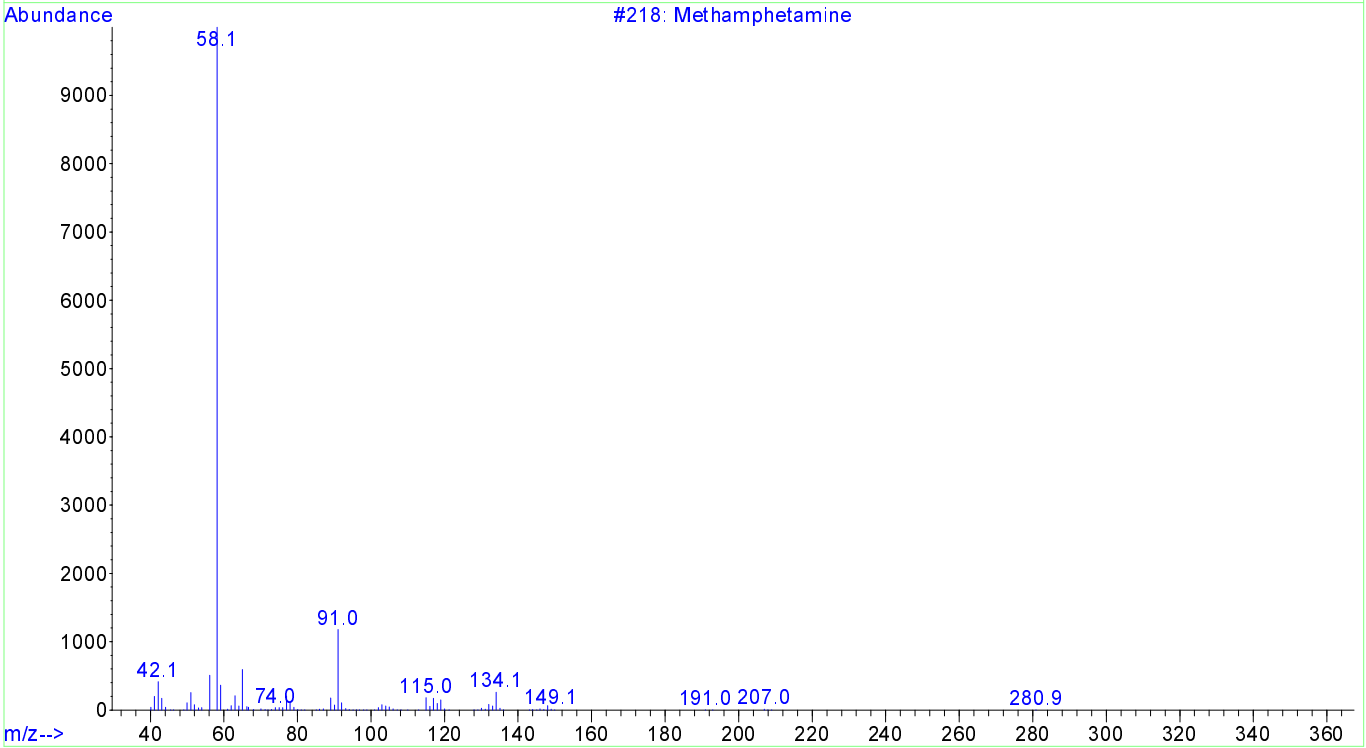
Standard	Standard #	Method	Retention Time	1% Window	
Methamphetamine	R-24-060	DrugTest35	7.112	7.040	7.183
Cocaine	R-24-060	DrugTest35	13.202	13.069	13.334
Heroin	R-24-060	DrugTest35	14.491	14.346	14.635
Fentanyl	R-24-060	DrugTest35	14.746	14.598	14.893
Alprazolam	R-24-060	DrugTest35	15.486	15.331	15.640

```
File       :D:\MassHunter\GCMS\1\GCMS 3 data\Standards\Weekly Check\2025
...          Data\033125\005SP0150.D
Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 31 Mar 2025  10:30 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
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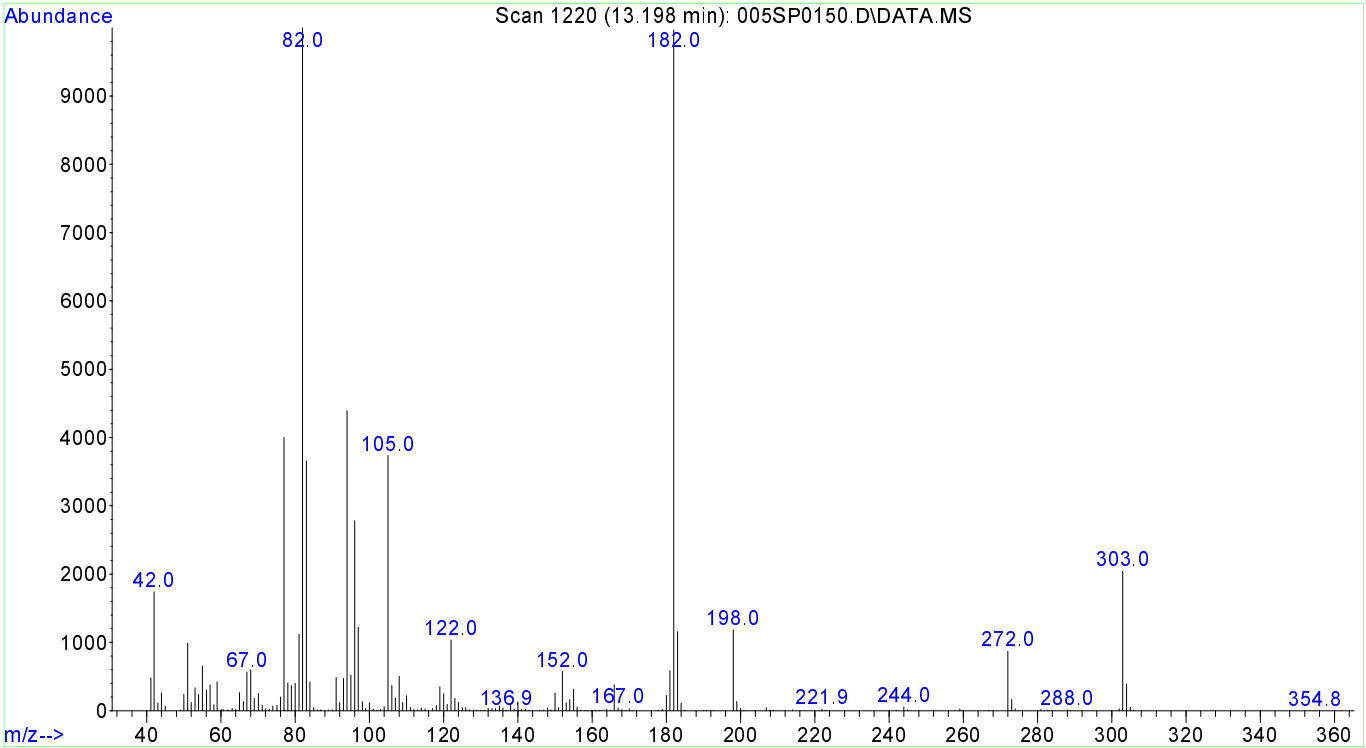


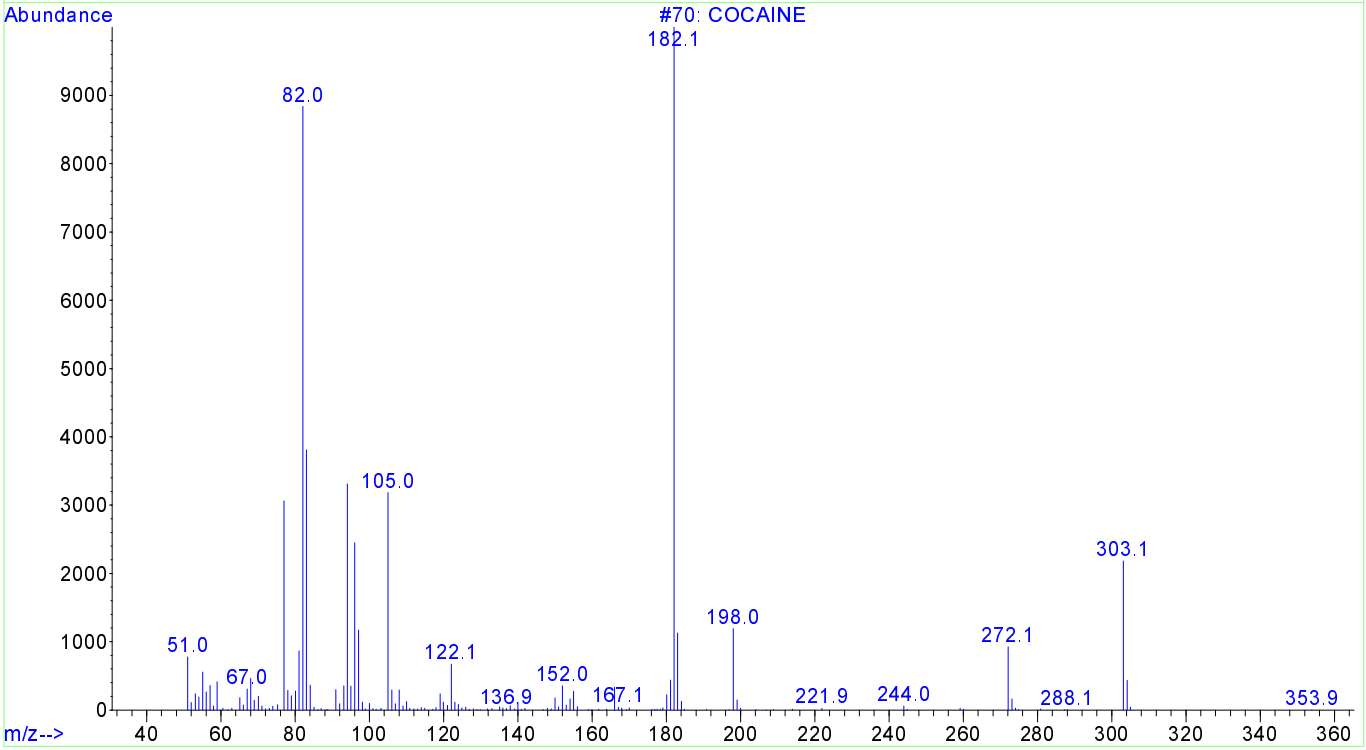
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... Data\033125\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 31 Mar 2025 10:30 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



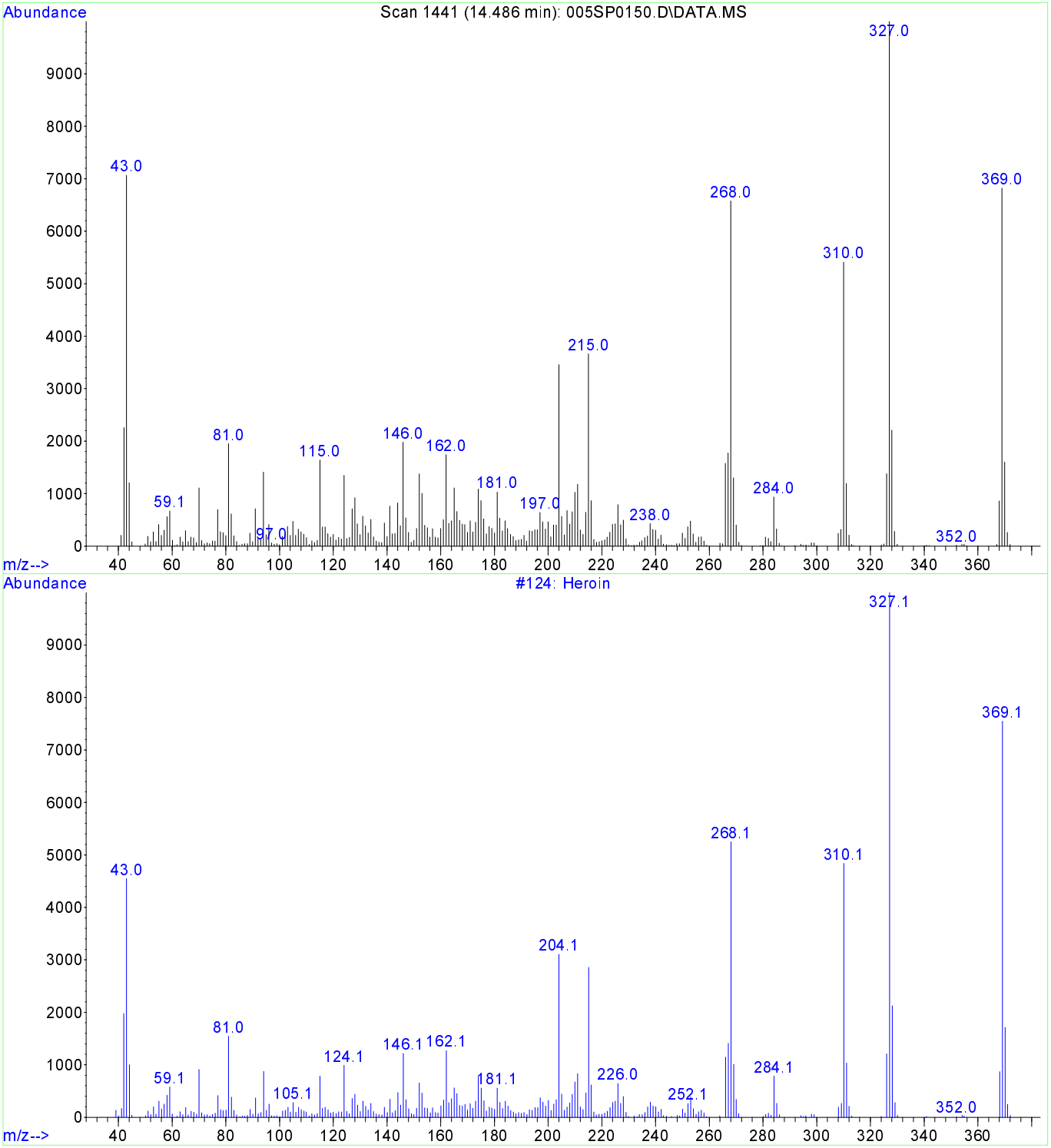


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... Data\033125\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 31 Mar 2025 10:30 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667

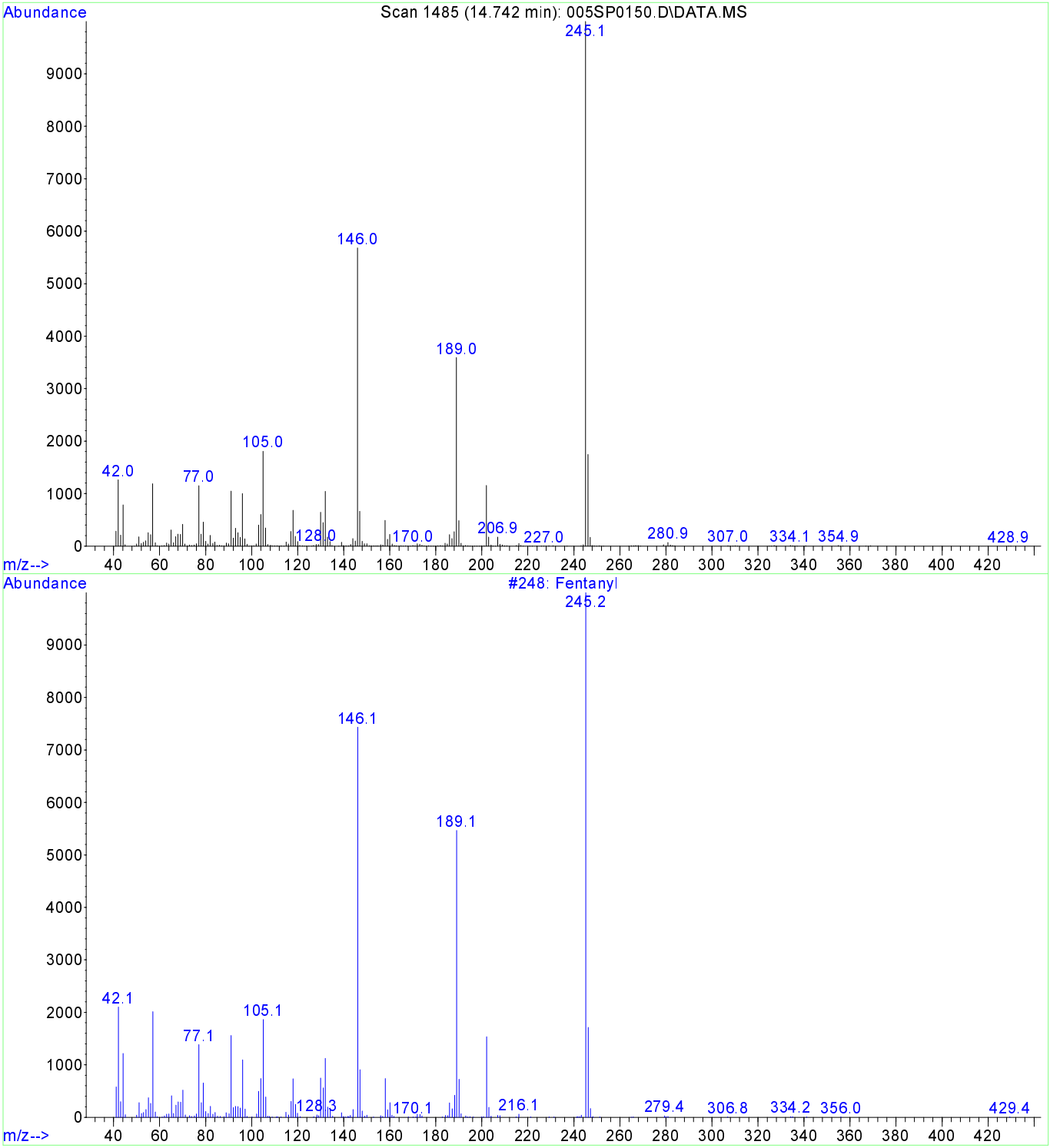




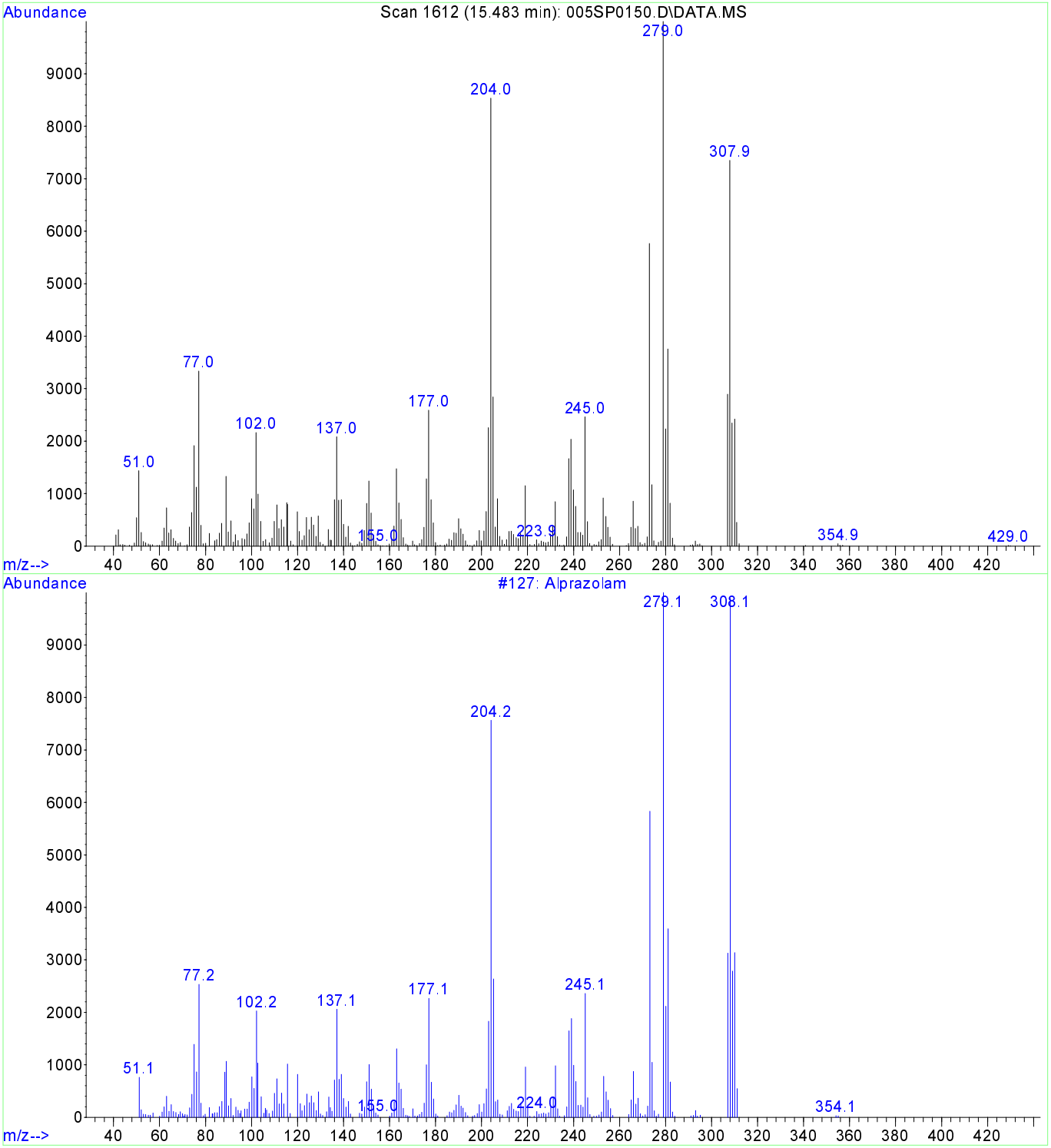
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... Data\033125\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 31 Mar 2025 10:30 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060) 000002667
Misc Info : 000002667



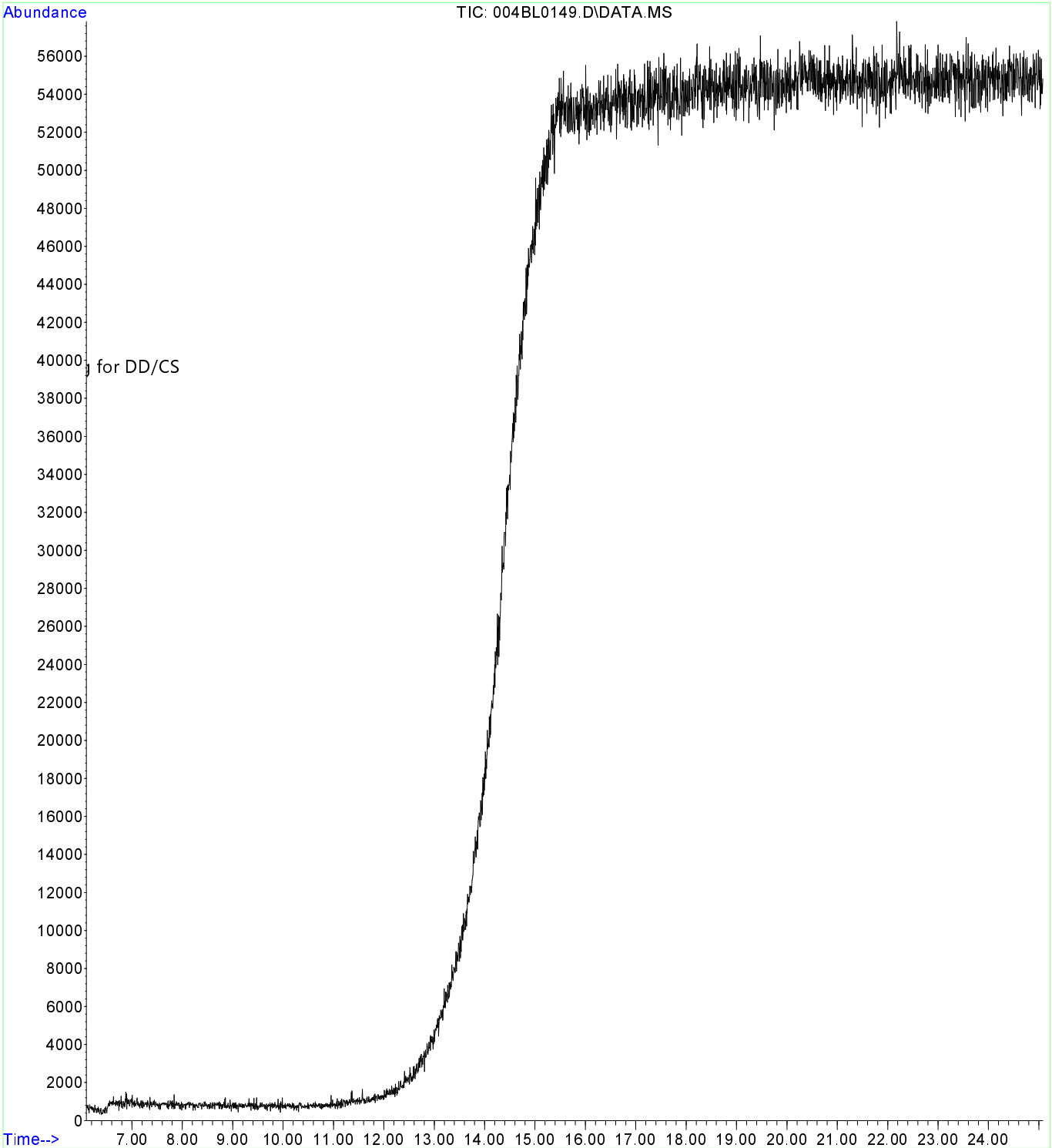
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Operator   : DrugChem-HP\admin
Instrument :   BCCL GCMS #3
Acquired   : 31 Mar 2025  10:30 am using AcqMethod DrugTest.M
Sample Name: CAYMAN GC/MS MIX 3 (R-24-060)                    000002667
Misc Info  :                                                  000002667
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... Data\033125\005SP0150.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 31 Mar 2025 10:30 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\033125\004BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 31 Mar 2025 10:01 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\033125\006BL0149.D
Operator : DrugChem-HP\admin
Instrument : BCCL GCMS #3
Acquired : 31 Mar 2025 10:58 am using AcqMethod DrugTest.M
Sample Name: BLANK (C-19-0068) - INSTRUMENT READY 000002666
Misc Info : 000002666

