



Houston Forensic Science Center
Comparative and Analytical Division - Toxicology

GC-MS Maintenance Log

Instrument: GCMS-3

Date	He Tank Pressure	Auto Tune	Septum Change	Wash Vials Filled	Syringe Washed	Rough Pump Oil Level Checked	Liner Change	Gold Seal Replaced	Column Cut	Computer Restarted	Comments	Analyst
04/13/2021	70 / 1400	✓	✓	✓	✓	✓	✓	X	X	✓	BSD x 36	eur
4/14/2021	70 / 1400	✓	✓	✓	✓	✓	✓	X	X	X	Training/Validation n = 23	agj
4/15/2021	70 / 1400	✓	✓	✓	✓	✓	✓	X	X	X	Training/Validation n = 14	agj
4/16/2021	70 / 1400	✓	X	✓	✓	✓	✓	X	X	X	Training n = 11	agj
						4/21/2021 mh						

Signature: Melvin Henry

Date Completed: 4/21/2021

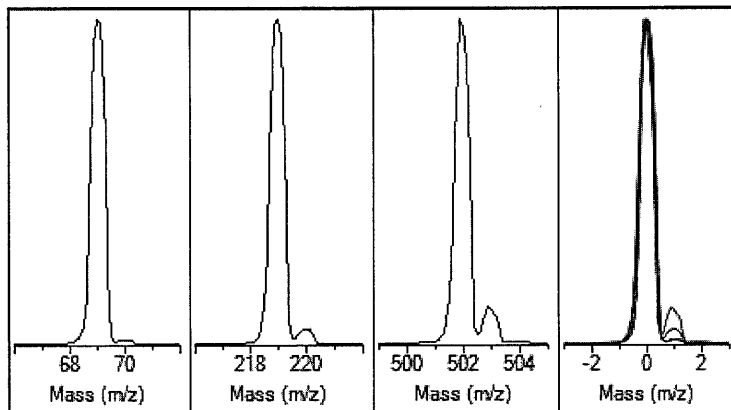
Autotune - 5975

Tune timestamp: 4/13/2021 11:29 AM (UTC-05:00)

GCMS-3

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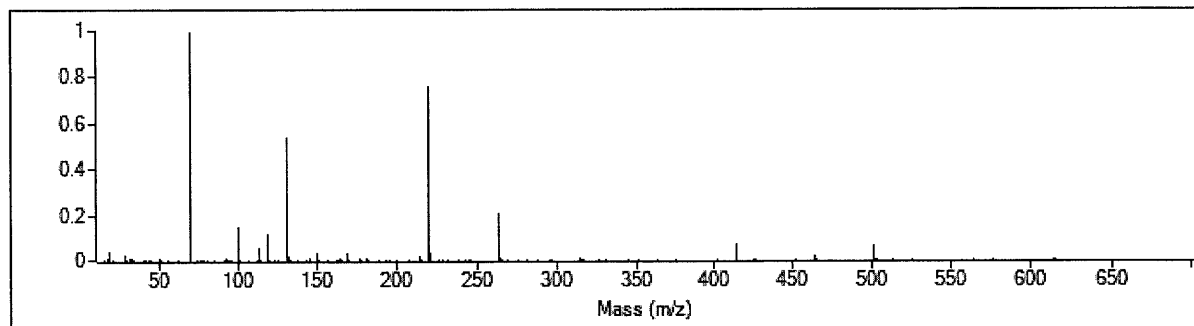


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	-844
Electron Energy	70.3	Mass Offset	-37
Filament	1	Amu Gain	1591
Repeller	28.90	Amu Offset	119.75
Ion Focus	90.2	Width219	-0.024
Entrance Lens	25.5	DC Polarity	Pos
Ent Lens Offset	17.82	HED Enable	On
		EM Volts	1388
		Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.00 ✓	361,459	100.0%	0.60 ✓
219.00 ✓	272,588	75.4%	0.60 ✓
501.90 ✓	24,360	6.7%	0.61 ✓

Temperatures and Pressures		
MS Source	230 Foreline	70.152
MS Quad	150 Hi Vac	Off

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	115	69.00	348,672	1,195,258



Target m/z	Actual m/z	Abund	Rel Abund	Iso m/z	Iso Abund	Iso Ratio
69.00	69.00	348,672	100.0% ✓	70.00	3,958	1.1% ✓
219.00	219.00	263,872	75.7% ✓	220.00	11,432	4.3% ✓
502.00	502.00	23,680	6.8% ✓	503.00	2,253	9.5% ✓

Air/Water Check: H2O ~3.9% N2 ~2.9% O2 ~0.9% CO2 ~0.2% N2/H2O ~73.8%
 Column(1) Flow: 1.42 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 44347.851
 Repeller maximum 35 volts using ion 219; Gain Factor 0.4435

Mass Gain Values(Scan Speed): -835(3) -829(2) -811(1) -793(0) -707(FS1) -758(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		119.8	119.8	119.8	119.8	119.8	119.8
Entrance Lens Offset		17.8	17.8	17.8	17.8	17.8	17.8

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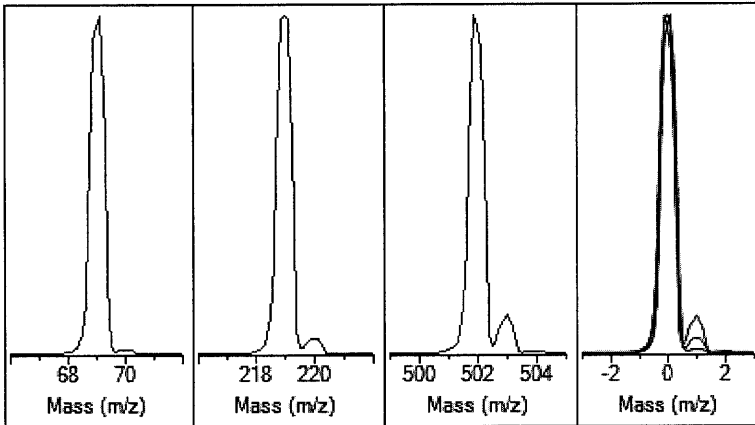
Autotune - 5975

Tune timestamp: 4/14/2021 12:22 PM (UTC-05:00)

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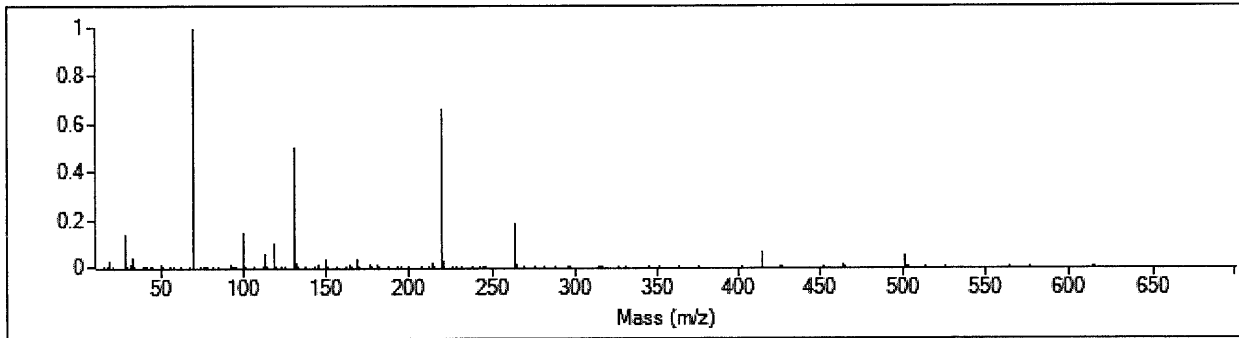


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	-844
Electron Energy	70.3	Mass Offset	-37
Filament	1	Amu Gain	1595
Repeller	30.76	Amu Offset	119.81
Ion Focus	90.2	Width219	-0.028
Entrance Lens	22.0	DC Polarity	Pos
Ent Lens Offset	18.07	HED Enable	On
		EM Volts	1412
		Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.10	467,512	100.0%	0.60
219.00	299,220	64.0%	0.60
501.90	24,871	5.3%	0.60

Temperatures and Pressures		
MS Source	230 Foreline	70.461
MS Quad	150 Hi Vac	Off

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	115	69.00	444,160	1,473,719



Target m/z	Actual m/z	Abund	Rel Abund	Iso m/z	Iso Abund	Iso Ratio
69.00	69.00	444,160	100.0%	70.00	4,832	1.1%
219.00	219.00	293,888	66.2%	220.00	12,889	4.4%
502.00	502.00	23,416	5.3%	503.00	2,230	9.5%

Air/Water Check: H2O ~2.7% N2 ~13.7% O2 ~3.5% CO2 ~0.2% N2/H2O ~514.2%
 Column(1) Flow: 1.42 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 55353.873
 Repeller maximum 35 volts using ion 219; Gain Factor 0.5535

Mass Gain Values(Scan Speed): -835(3) -828(2) -816(1) -792(0) -757(FS1) -757(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		119.8	119.8	119.8	119.8	119.8	119.8
Entrance Lens Offset		18.1	18.1	18.1	18.1	18.1	18.1

*Tightened nut.
 day 4/14/2021*

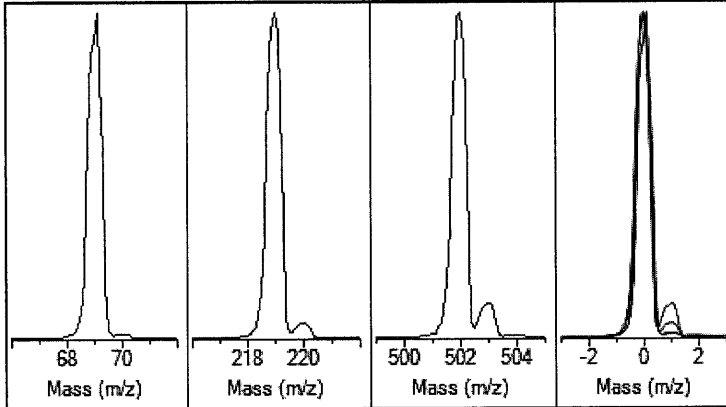
Autotune - 5975

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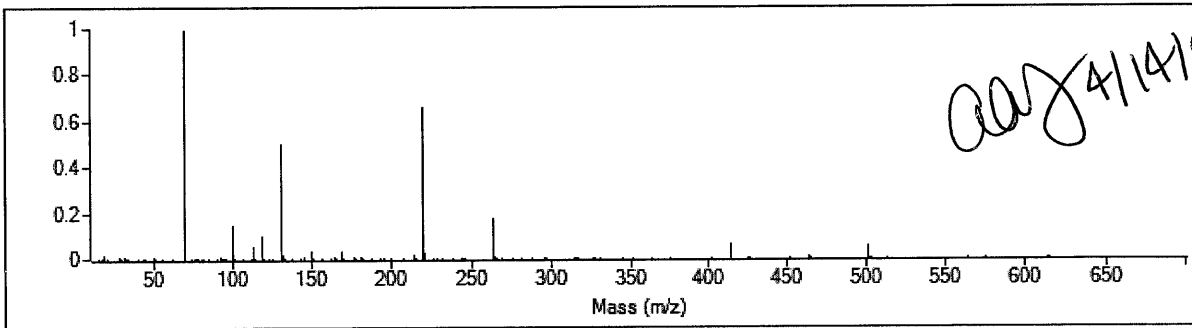


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	-845
Electron Energy	70.3	Mass Offset	-38
Filament	1	Amu Gain	1598
Repeller	32.94	Amu Offset	119.44
Ion Focus	90.2	Width219	-0.026
Entrance Lens	19.0	DC Polarity	Pos
Ent Lens Offset	18.07	HED Enable	On
		EM Volts	1412
		Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.10	456,826	100.0%	0.60
219.00	287,469	62.9%	0.60
502.00	24,461	5.4%	0.59

Temperatures and Pressures		
MS Source	230 Foreline	70.152
MS Quad	150 Hi Vac	Off

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	114	69.00	424,768	1,324,466



Target m/z	Actual m/z ✓	Abund	Rel Abund ✓	Iso m/z	Iso Abund	Iso Ratio ✓
69.00	69.00	424,768	100.0%	70.00	4,957	1.2%
219.00	219.00	280,000	65.9%	220.00	11,728	4.2%
502.00	502.00	23,216	5.5%	503.00	2,193	9.4%

Air/Water Check: H2O ~1.5% N2 ~1.0% O2 ~0.4% CO2 ~0.1% N2/H2O ~66.2%

Column(1) Flow: 1.42 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 54584.619

Repeller maximum 35 volts using ion 219; Gain Factor 0.5458

Mass Gain Values(Scan Speed): -835(3) -830(2) -816(1) -793(0) -757(FS1) -757(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		119.4	119.4	119.4	119.4	119.4	119.4
Entrance Lens Offset		18.1	18.1	18.1	18.1	18.1	18.1

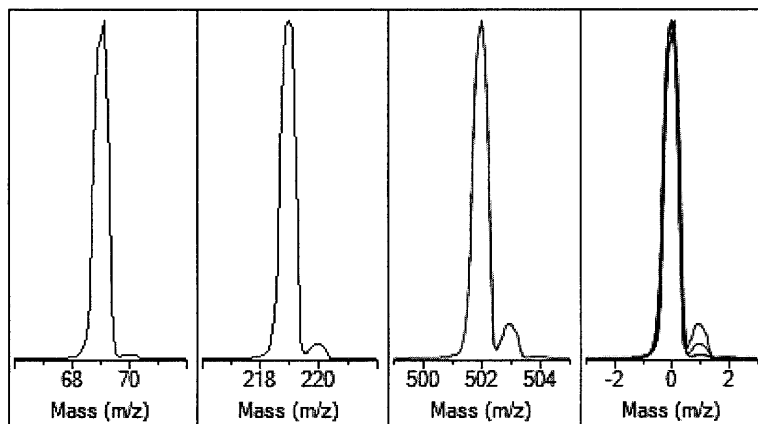
Autotune - 5975

Tune timestamp: 4/15/2021 11:13 AM (UTC-05:00)

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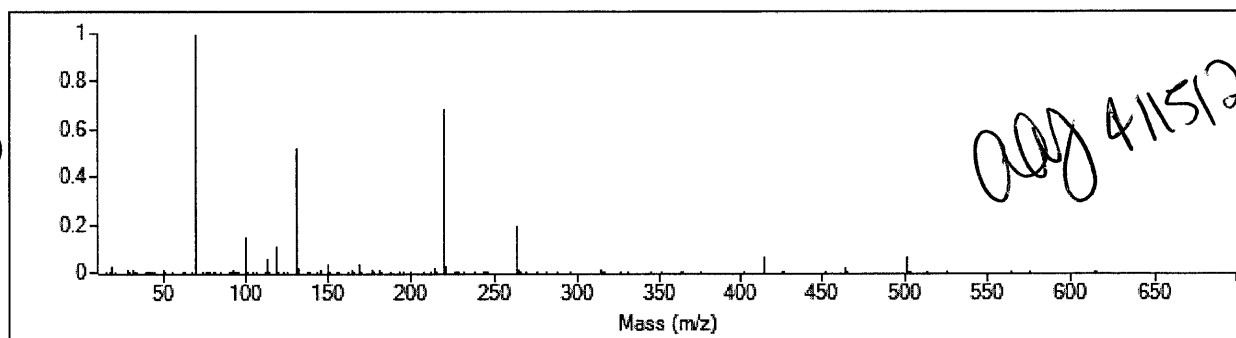


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	-843
Electron Energy	70.3	Mass Offset	-38
Filament	1	Amu Gain	1595
Repeller	31.09	Amu Offset	119.81
Ion Focus	90.2	Width219	-0.028
Entrance Lens	22.0	DC Polarity	Pos
Ent Lens Offset	18.07	HED Enable	On
		EM Volts	1447
		Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.10	504,067	100.0%	0.60
219.00	341,931	67.8%	0.60
502.00	30,071	6.0%	0.60

Temperatures and Pressures		
MS Source	230 Foreline	70.152
MS Quad	150 Hi Vac	Off

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	124	69.00	478,336	1,544,640



Target m/z	Actual m/z	Abund	Rel Abund	Iso m/z	Iso Abund	Iso Ratio
69.00	69.00	478,336	100.0%	70.00	5,089	1.1%
219.00	219.00	329,088	68.8%	220.00	13,846	4.2%
502.00	502.00	29,224	6.1%	503.00	2,642	9.0%

Air/Water Check: H2O ~2.3% N2 ~1.1% O2 ~0.4% CO2 ~0.1% N2/H2O ~47.8%

Column(1) Flow: 1.42 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 72345.610

Repeller maximum 35 volts using ion 219; Gain Factor 0.7235

Mass Gain Values(Scan Speed): -835(3) -828(2) -814(1) -794(0) -724(FS1) -740(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		119.8	119.8	119.8	119.8	119.8	119.8
Entrance Lens Offset		18.1	18.1	18.1	18.1	18.1	18.1

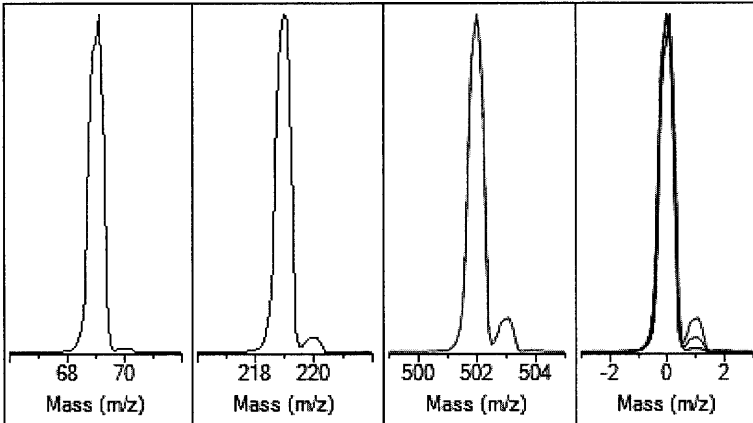
Autotune - 5975

Tune timestamp: 4/16/2021 10:11 AM (UTC-05:00)

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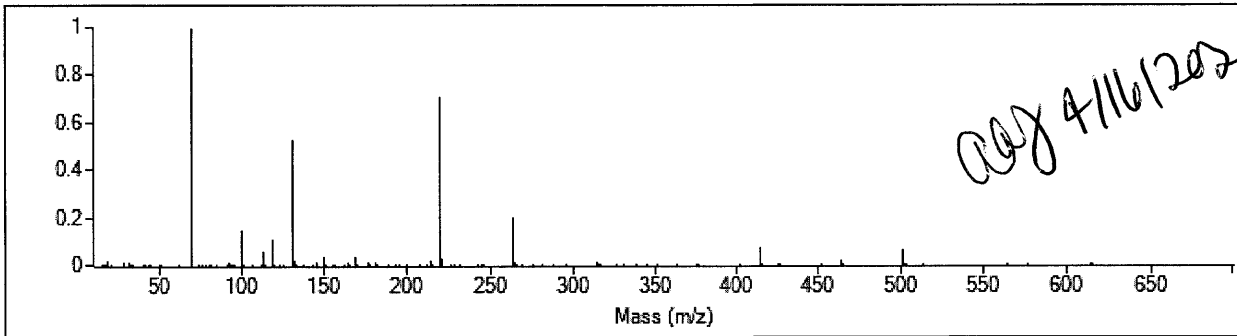


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	-842
Electron Energy	70.3	Mass Offset	-38
Filament	1	Amu Gain	1596
Repeller	32.61	Amu Offset	119.31
Ion Focus	90.2	Width219	-0.031
Entrance Lens	19.0	DC Polarity	Pos
Ent Lens Offset	18.07	HED Enable	On
		EM Volts	1435
		Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50 ✓
69.10	461,007	100.0%	0.60
219.00	303,038	65.7%	0.60
502.00	27,526	6.0%	0.60

Temperatures and Pressures		
MS Source	230 Foreline	69.843
MS Quad	150 Hi Vac	Off

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	114	69.00	411,712	1,337,511



Target m/z	Actual m/z ✓	Abund	Rel Abund ✓	Iso m/z	Iso Abund	Iso Ratio ✓
69.00	69.00	411,712	100.0%	70.00	4,365	1.1%
219.00	219.00	290,624	70.6%	220.00	12,318	4.2%
502.00	502.00	25,824	6.3%	503.00	2,359	9.1%

Air/Water Check: H2O ~1.5% N2 ~1.1% O2 ~0.4% CO2 ~0.1% N2/H2O ~72.1%

Column(1) Flow: 1.42 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 64968.568

Repeller maximum 35 volts using ion 219; Gain Factor 0.6497

Mass Gain Values(Scan Speed): -834(3) -828(2) -815(1) -795(0) -759(FS1) -759(FS2)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		119.3	119.3	119.3	119.3	119.3	119.3
Entrance Lens Offset		18.1	18.1	18.1	18.1	18.1	18.1