



Houston Forensic Science Center

Comparative and Analytical Division - Toxicology

GC-MS Maintenance Log

Instrument: GCMS-5

Date	He Tank Pressure	Air Tank Pressure*	H ₂ Water Level*	Auto Tune	Septum Change	Wash Vials Filled	Syringe Washed	Rough Pump Oil Level Checked	Liner Change	Gold Seal Replaced	Column Cut	Computer Restarted	Output*	Comments	Analyst
			H ₂ Pressure*										Bead Voltage*		
12/28/2020	50 700	70 1000	yes 80	✓	✓	✓	✓	✓	X	X	X	✓	11.3 0.913		mh
12/31/2020	50 600	70 600 <small>12/31/2020 mh</small>	yes 80	✓	✓	✓	✓	✓	X	X	X	X	13.3 0.917	Agilent cleaned source, inlet, replaced splitter and column	mh
12/31/2020 mh															

*For GC-MS/NPD instrument (GCMS-5).

Signature: Melanie Henry

Date Completed: 12/31/2020

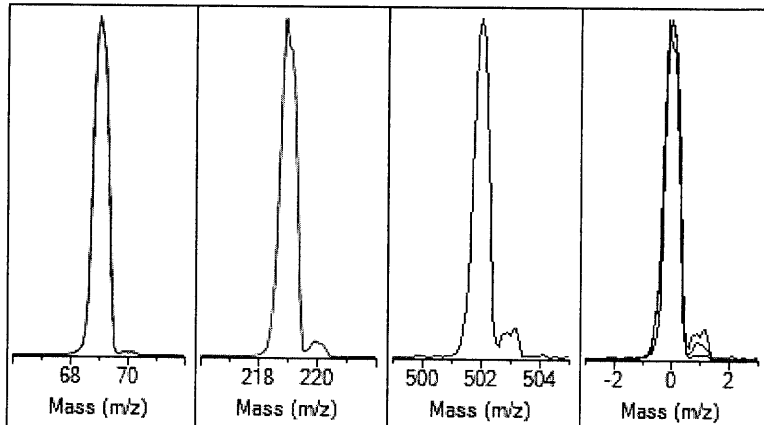
Extraction Source Autotune - 5977

Tune timestamp: 12/28/2020 7:27 AM (UTC-08:00)

GCMS_5 DRS Acquisition

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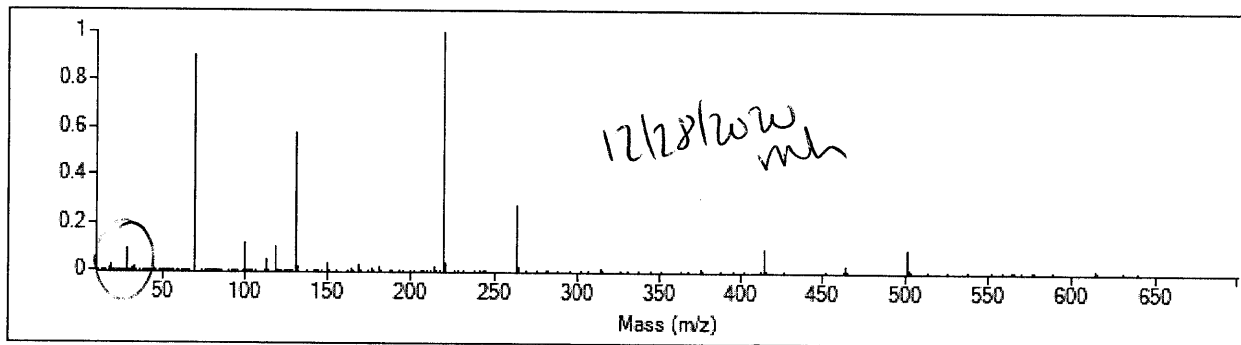


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	148
Electron Energy	70.0	Mass Offset	-23
Filament	1	Amu Gain	2655
Repeller	4.98	Amu Offset	137.75
Ion Focus	89.8	Width219	0.004
Entrance Lens	20.2	DC Polarity	Neg
Ent Lens Offset	12.19	HED Enable	On
Ion Body	6.00	EM Volts	1318.6
Post Extractor 1	0	Extractor Lens	0.30
Post Extractor 2	0	Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.00	280,765	100.0%	0.60
218.90	320,426	114.1%	0.63
502.00	31,359	11.2%	0.60

Temperatures and Pressures		
MS Source	230 Turbo Speed	100.0
MS Quad	150 Hi Vac	N/C

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	193	219.00	300,288	1,149,449



Target m/z	Actual m/z	Abund	Rel Abund	Iso m/z	Iso Abund	Iso Ratio
69.00	69.00	272,704	100.0%	70.00	3,016	1.1%
219.00	219.00	300,288	110.1%	220.00	11,381	3.8%
502.00	502.00	27,376	10.0%	503.00	3,021	11.0%

Air/Water Check: H2O ~3.2% N2 ~10.6% O2 ~1.9% CO2 ~0.6% N2/H2O ~333.2%

Column(1) Flow: 3.69 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 322049.586

Repeller maximum 35 volts using ion 219; Gain Factor 3.2205

Mass Gain Values(Scan Speed): 150(3) 155(2) 166(1) 182(0) 269(FS1) 259(FS2) 259(FS3)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		137.8	137.8	137.8	137.8	137.8	137.8
Entrance Lens Offset		12.2	12.2	12.2	12.2	12.2	12.2

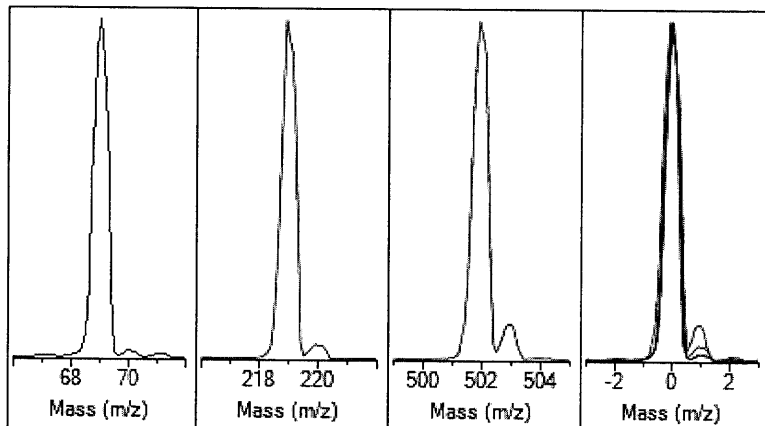
Extraction Source Autotune - 5977

Tune timestamp: 12/31/2020 2:36 PM (UTC-06:00)

GCMS_5 DRS Acquisition

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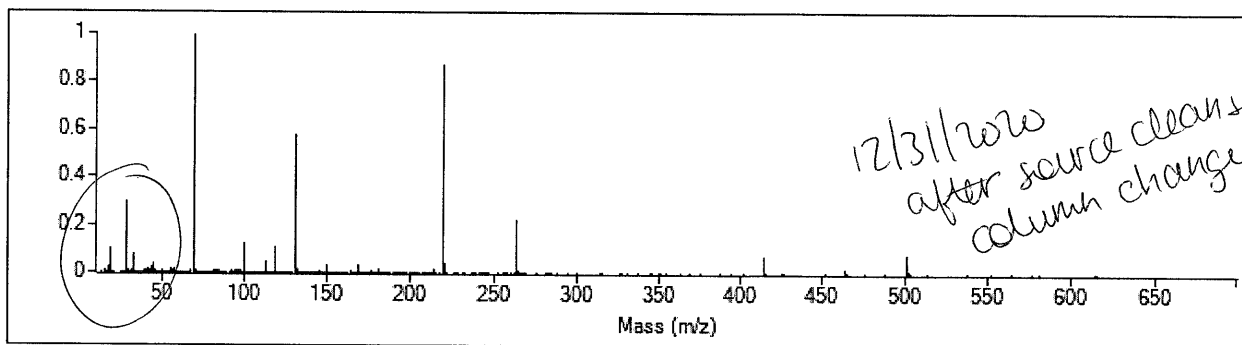


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	145
Electron Energy	70.0	Mass Offset	-23
Filament	1	Amu Gain	2649
Repeller	4.98	Amu Offset	133.69
Ion Focus	89.8	Width219	-0.061
Entrance Lens	17.6	DC Polarity	Neg
Ent Lens Offset	13.40	HED Enable	On
Ion Body	4.75	EM Volts	1275.2
Post Extractor 1	0	Extractor Lens	0.40
Post Extractor 2	0	Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.00	438,063	100.0%	0.62
218.90	381,023	87.0%	0.57
501.90	33,832	7.7%	0.60

Temperatures and Pressures		
MS Source	230 Turbo Speed	100.0
MS Quad	150 Hi Vac	N/C

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	274	69.00	413,440	1,825,458



Target m/z	Actual m/z	Abund	Rel Abund	Iso m/z	Iso Abund	Iso Ratio
69.00	69.00	413,440	100.0%	70.00	7,454	1.8%
219.00	219.00	360,192	87.1%	220.00	16,025	4.4%
502.00	502.00	31,496	7.6%	503.00	3,219	10.2%

Air/Water Check: H2O ~10.5% N2 ~29.9% O2 ~7.8% CO2 ~3.6% N2/H2O ~285.9%

Column(1) Flow: 3.29 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 226629.242

Repeller maximum 35 volts using ion 219; Gain Factor 2.2663

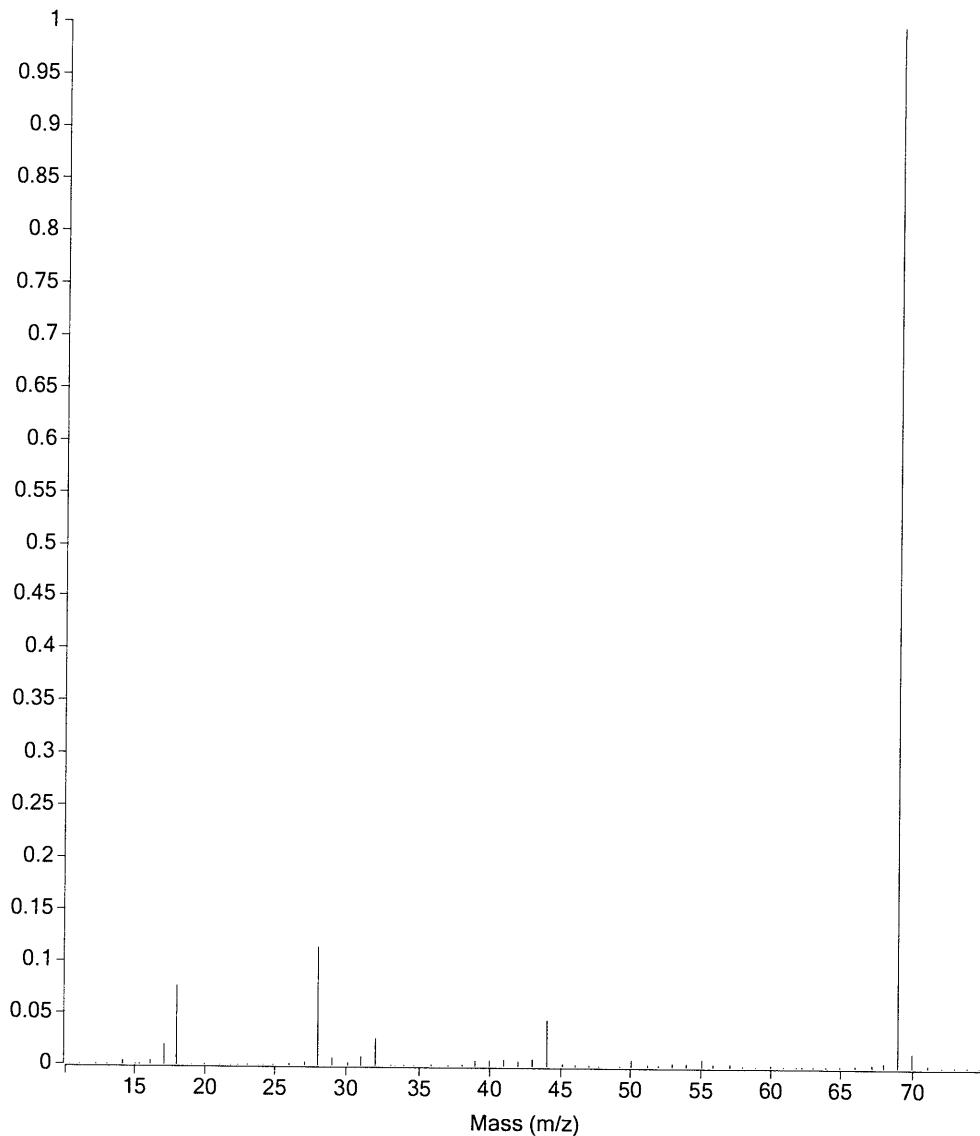
Mass Gain Values(Scan Speed): 154(3) 162(2) 171(1) 194(0) 246(FS1) 245(FS2) 245(FS3)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		133.7	133.7	133.7	133.7	133.7	133.7
Entrance Lens Offset		13.4	13.4	13.4	13.4	13.4	13.4

597x Air and Water Check

Instrument: GCMS_5 DRS Acquisition
Thu Dec 31 15:05:35 2020

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*12/31/2020
min*

Current Params used: etune.u

Relative abundances:

18/69 =	7.73	Water%	(counts=32128)
28/69 =	11.48	Nitrogen%	(counts=47696)
32/69 =	2.60	Oxygen%	(counts=10819)
44/69 =	4.49	Carbon Dioxide%	(counts=18656)
28/18 =	148.46	Nitrogen/Water%	

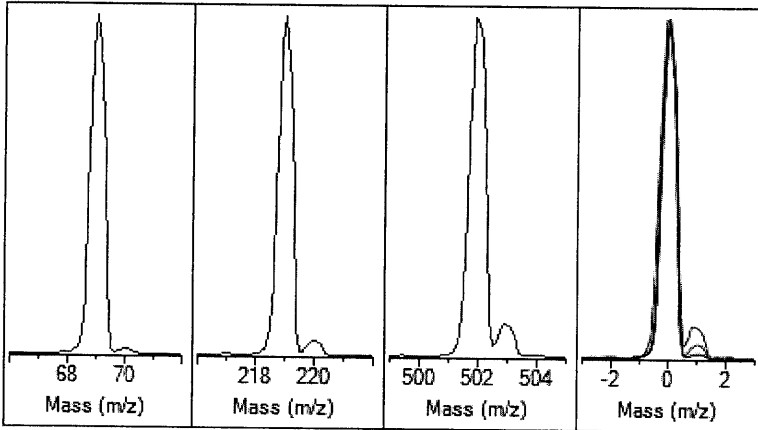
Extraction Source Autotune - 5977

Tune timestamp: 12/31/2020 3:15 PM (UTC-06:00)

GCMS_5 DRS Acquisition

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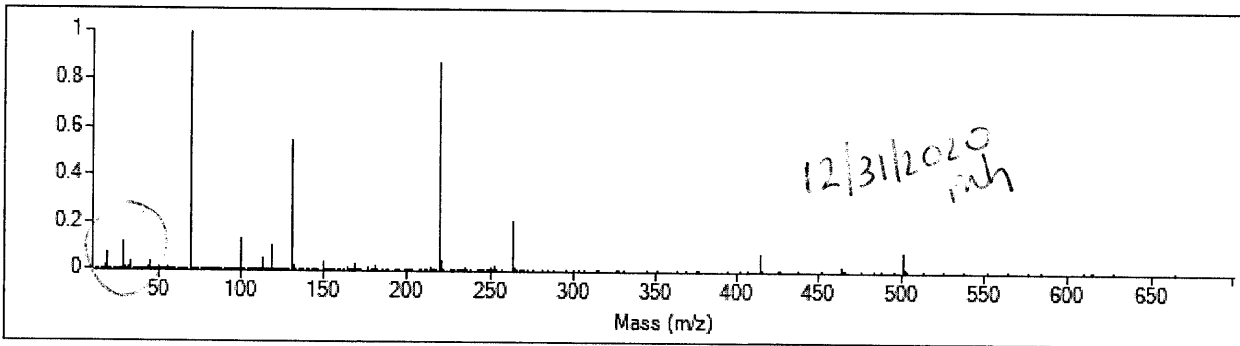


Ion Polarity	Pos	PFTBA	Open
Emission	34.6	Mass Gain	151
Electron Energy	70.0	Mass Offset	-23
Filament	1	Amu Gain	2635
Repeller	4.98	Amu Offset	135.13
Ion Focus	89.8	Width219	-0.061
Entrance Lens	15.1	DC Polarity	Neg
Ent Lens Offset	14.61	HED Enable	On
Ion Body	6.00	EM Volts	1297.6
Post Extractor 1	0	Extractor Lens	1.00
Post Extractor 2	0	Scan Speed	3
JetClean Flow Actual/[Setpoint]	0.00 [0.00]	Averages	3

Actual m/z	Abund	Rel Abund	Pw50
69.00	496,487	100.0%	0.61
219.00	445,674	89.8%	0.59
501.90	38,355	7.7%	0.64

Temperatures and Pressures		
MS Source	230 Turbo Speed	100.0
MS Quad	150 Hi Vac	N/C

Low	High	Step	Speed	Threshold	Peaks	Base	Abundance	Total Ion
10.00	701.00	0.10	3	100	266	69.00	475,008	1,846,423



Target m/z	Actual m/z	Abund	Rel Abund	Iso m/z	Iso Abund	Iso Ratio
69.00	69.00	475,008	100.0%	70.00	6,589	1.4%
219.00	219.00	413,440	87.0%	220.00	19,016	4.6%
502.00	502.00	37,904	8.0%	503.00	3,537	9.3%

Air/Water Check: H2O ~7.3% N2 ~11.9% O2 ~2.7% CO2 ~3.1% N2/H2O ~163.1%

Column(1) Flow: 3.29 Column(2): 0.00 ml/min Interface Temp: 300

Ramp Criteria:

Ion Focus maximum 90 volts using ion 502; Electron Multiplier Gain 291317.918

Repeller maximum 35 volts using ion 219; Gain Factor 2.9132

Mass Gain Values(Scan Speed): 157(3) 166(2) 175(1) 193(0) 281(FS1) 271(FS2) 271(FS3)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset		135.1	135.1	135.1	135.1	135.1	135.1
Entrance Lens Offset		14.6	14.6	14.6	14.6	14.6	14.6