

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062722\
 Data File : VL039365.D
 Acq On : 27 Jun 2022 19:03
 Operator : SY/AP
 Sample : N3453-03 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-3

Quant Time: Jun 28 02:38:07 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 01 01:22:18 2022
 QLast Update : Wed Jun 01 01:22:18 2022
 Response via : Initial Calibration

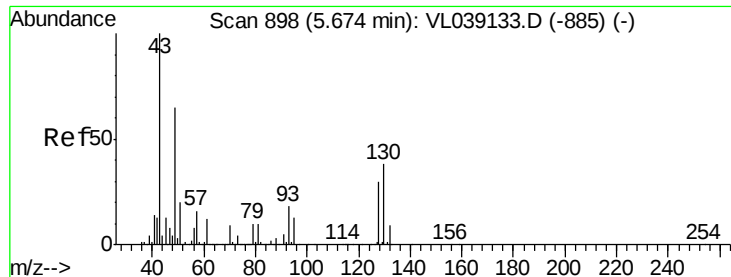
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1050786	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3077288	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2927618	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2382437	9.84	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.40%

Target Compounds					Ovalue
3) Chlorodifluoromethane	2.99	51	18610	0.139	ppbv 97
4) Chloromethane	3.14	50	9681	0.141	ppbv # 87
7) Chloroethane	3.56	64	925	0.041	ppbv # 45
9) Propene	3.01	41	162623	2.789	ppbv 93
10) Heptane	8.11	43	12158	0.089	ppbv # 65
11) Trichlorofluoromethane	3.95	101	5518	0.033	ppbv # 82
13) Ethanol	3.60	45	323381	101.714	ppbv # 100
15) Acetone	3.85	43	353244	3.227	ppbv 93
16) 1,3-Butadiene	3.31	39	74690	1.269	ppbv # 46
17) tert-Butyl alcohol	4.29	59	88956	1.048	ppbv # 93
19) Isopropyl Alcohol	3.97	45	13891	0.271	ppbv # 93
20) Methylene Chloride	4.34	84	115401	2.502	ppbv 91
23) Vinyl Acetate	5.06	43	22877	0.253	ppbv # 44
25) Ethyl Acetate	5.69	43	59640	0.242	ppbv # 85
26) Hexane	5.69	57	77009	0.710	ppbv # 43
27) Carbon Disulfide	4.55	76	7048	0.063	ppbv # 85
34) 2-Butanone	5.25	43	122329	0.732	ppbv 91
36) Benzene	6.89	78	51335	0.205	ppbv # 94
39) 1,2-Dichloropropane	7.17	63	763917	7.687	ppbv # 24
53) Toluene	9.80	91	697263	2.424	ppbv 99
58) Ethyl Benzene	12.71	91	642532	1.593	ppbv 98
59) m/p-Xylene	12.97	91	1783236	5.022	ppbv 93
60) o-Xylene	13.69	91	985264	2.953	ppbv 99
61) Styrene	13.52	104	180067	1.008	ppbv 98
62) Isopropylbenzene	14.67	105	8231029	16.596	ppbv 98
63) 1,1,2,2-Tetrachloroethane	13.67	83	17985	0.096	ppbv # 24
74) 1,2,4-Trimethylbenzene	16.75	105	33098	0.084	ppbv # 67

(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 27 Jun 2022 19:03 SG-3

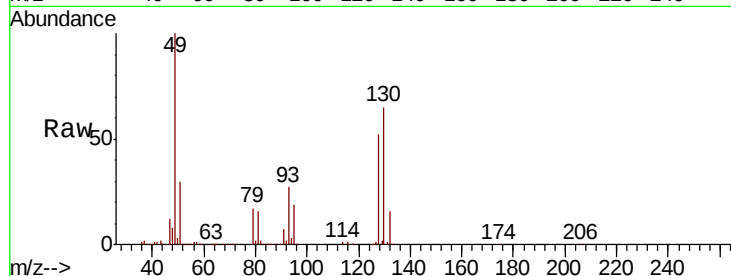
Tot Ion: 49 Resp: 1050786

Ion Ratio Lower Upper

49 100

128 56.4 24.7 74.1

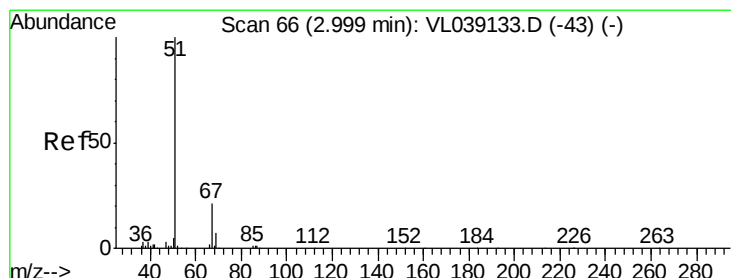
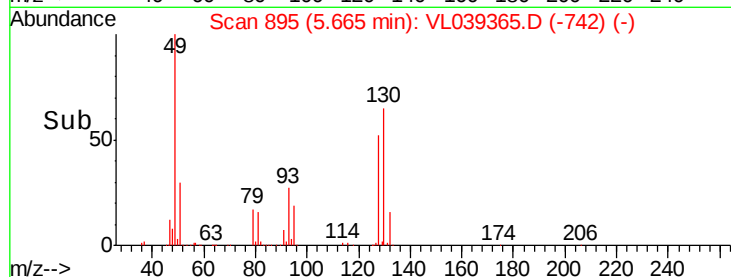
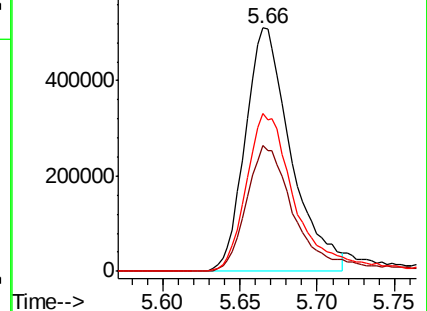
130 71.4 31.4 94.0



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#3

Chlorodifluoromethane

Concen: 0.139 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.01 min

Lab File: VL039365.D

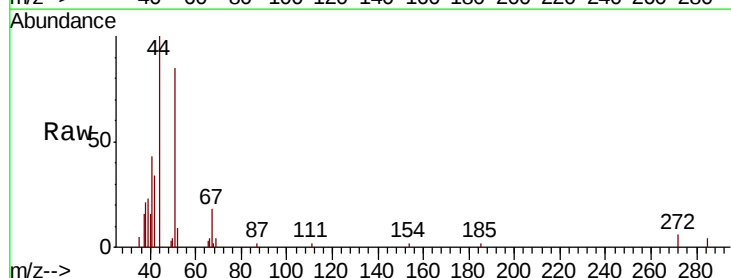
Acq: 27 Jun 2022 19:03

Tgt Ion: 51 Resp: 18610

Ion Ratio Lower Upper

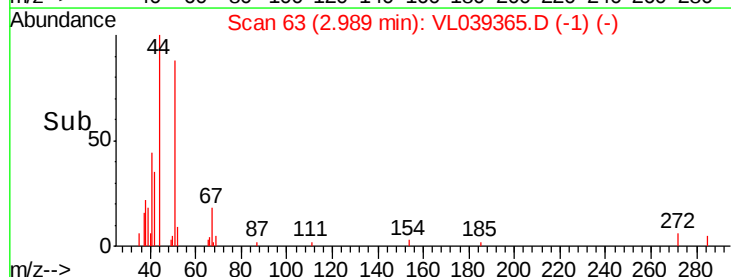
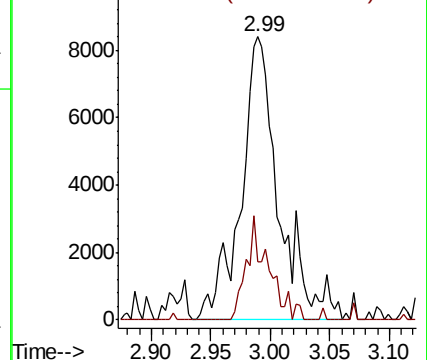
51 100

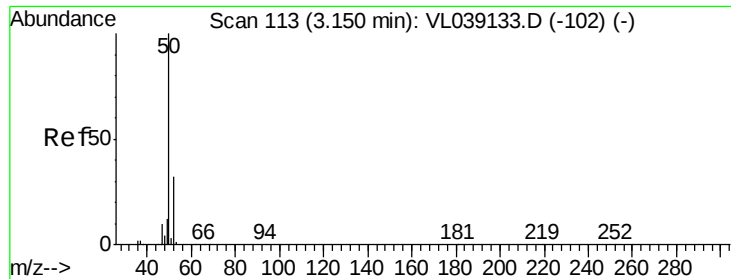
67 21.6 16.2 24.4



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.141 ppbv

RT: 3.14 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

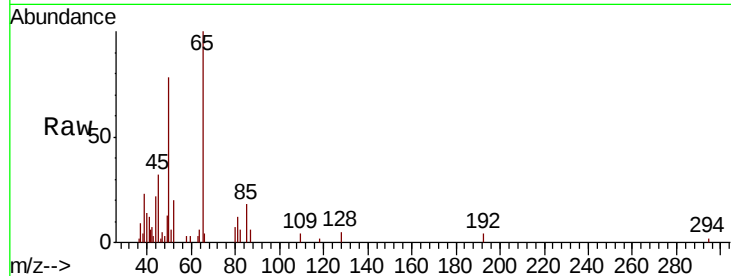
Acq: 27 Jun 2022 19:03 SG-3

Tot Ion: 50 Resp: 9681

Ion Ratio Lower Upper

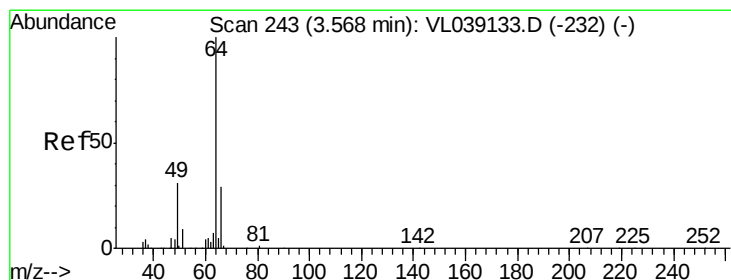
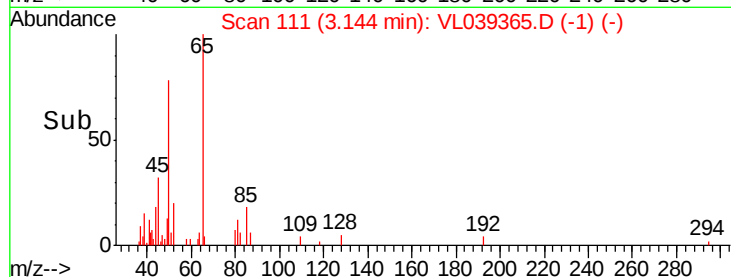
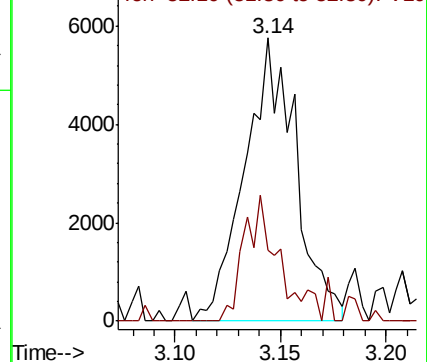
50 100

52 25.3 25.9 38.9#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#7

Chloroethane

Concen: 0.041 ppbv

RT: 3.56 min Scan# 240

Delta R.T. -0.01 min

Lab File: VL039365.D

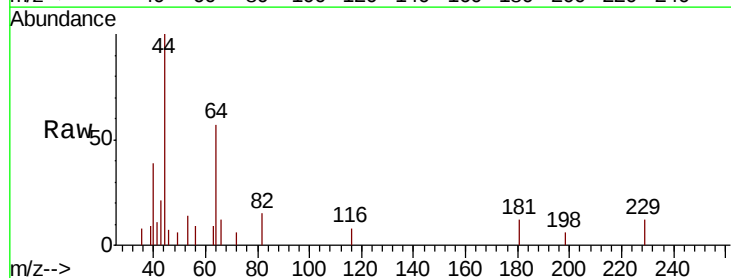
Acq: 27 Jun 2022 19:03

Tgt Ion: 64 Resp: 925

Ion Ratio Lower Upper

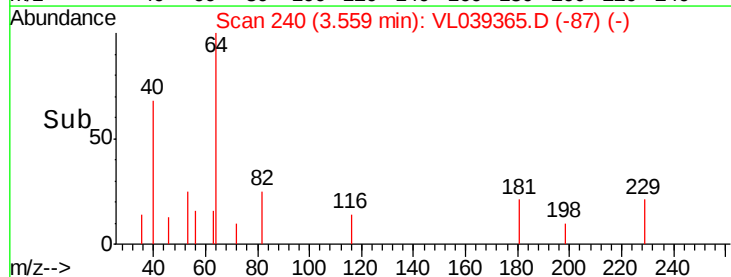
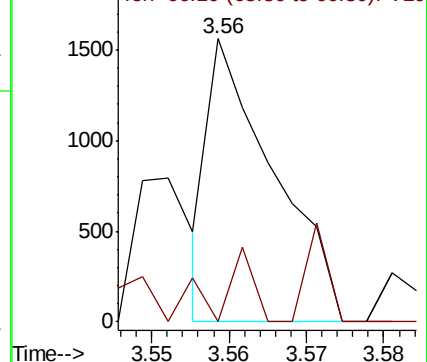
64 100

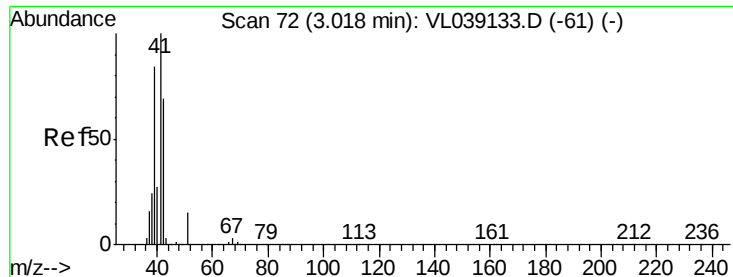
66 0.0 23.6 35.4#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 2.789 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

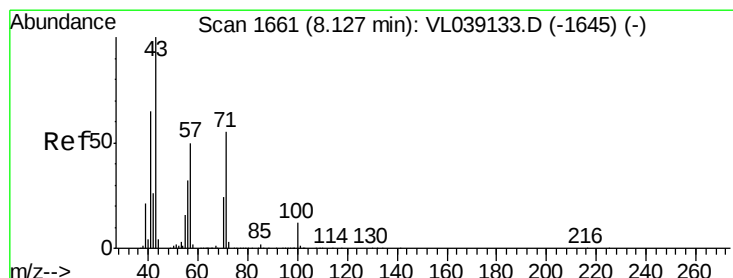
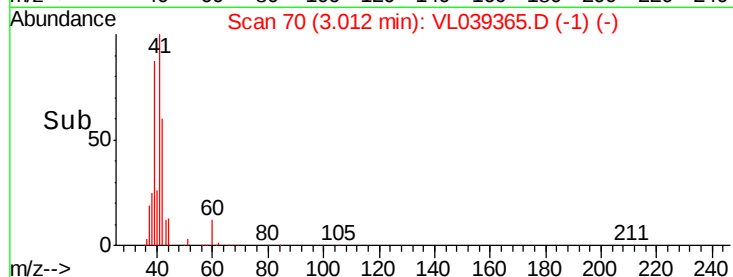
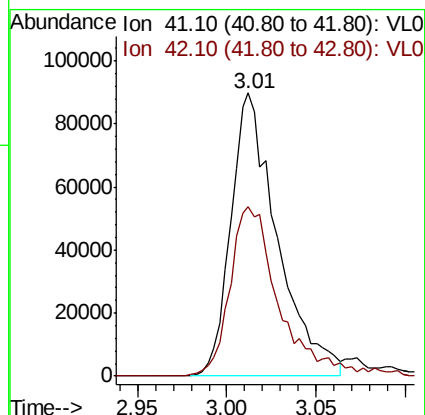
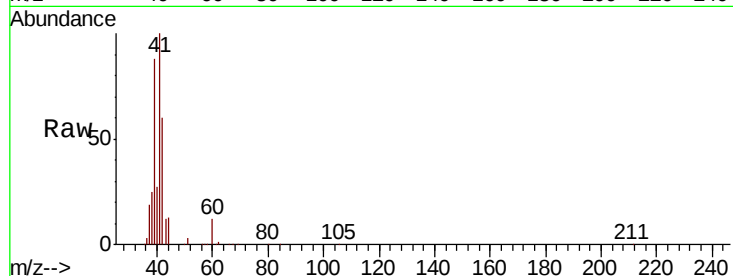
Acq: 27 Jun 2022 19:03

Tot Ion: 41 Resp: 162623

Ion Ratio Lower Upper

41 100

42 63.6 55.4 83.2



#10

Heptane

Concen: 0.089 ppbv

RT: 8.11 min Scan# 1656

Delta R.T. -0.02 min

Lab File: VL039365.D

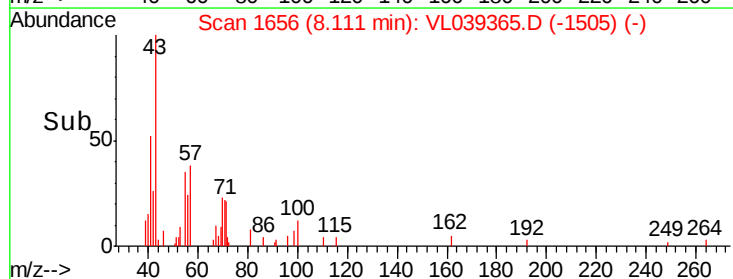
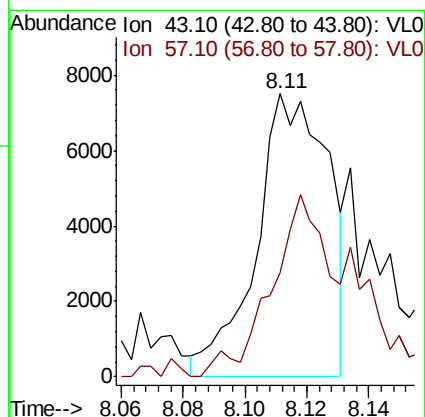
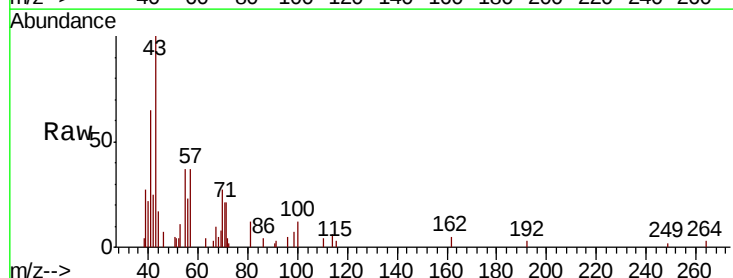
Acq: 27 Jun 2022 19:03

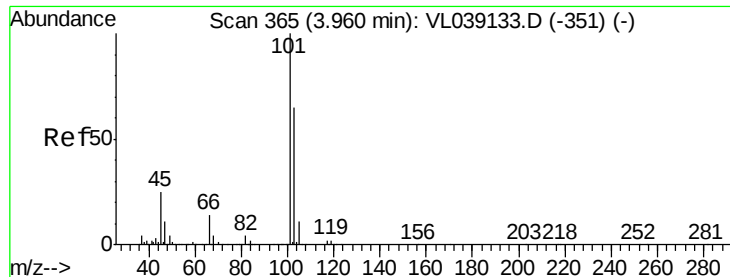
Tgt Ion: 43 Resp: 12158

Ion Ratio Lower Upper

43 100

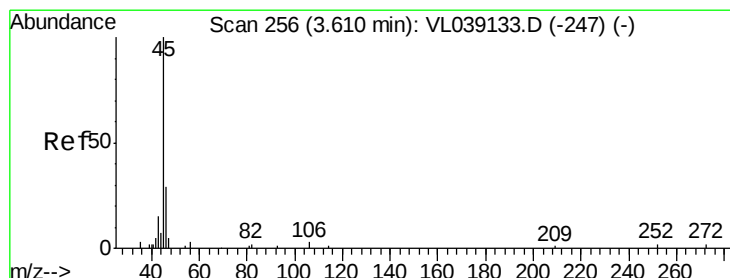
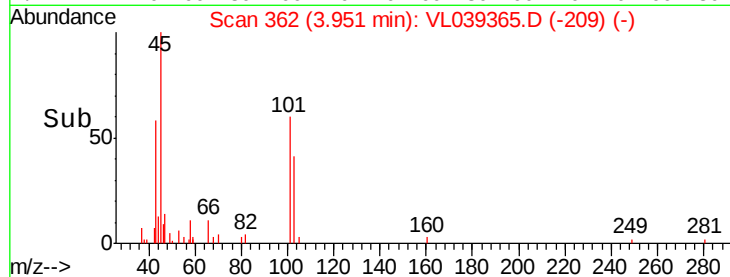
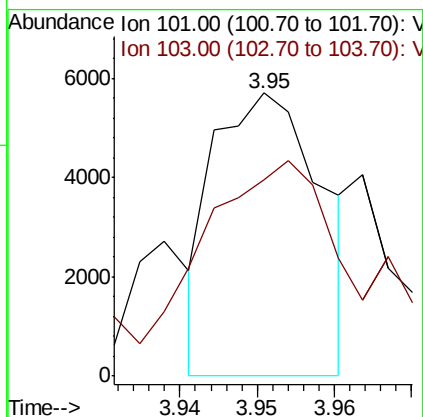
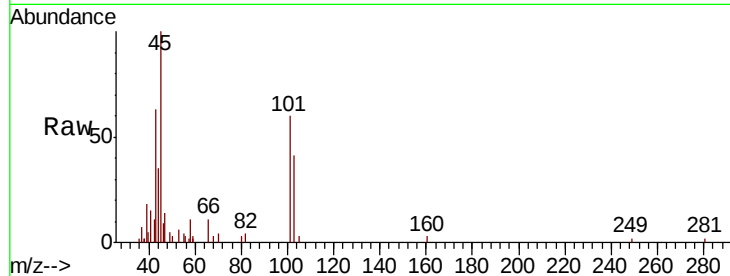
57 76.2 41.4 62.2#





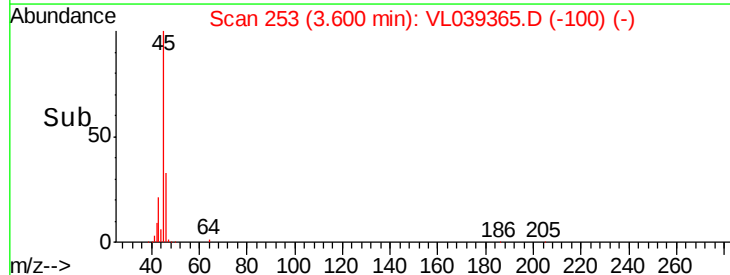
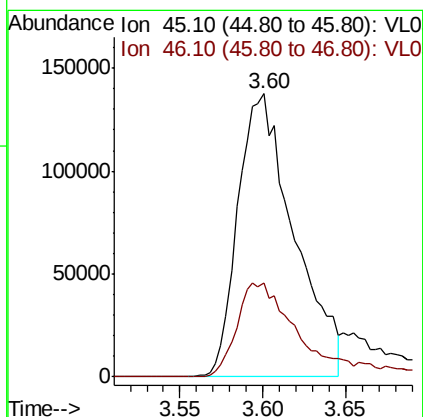
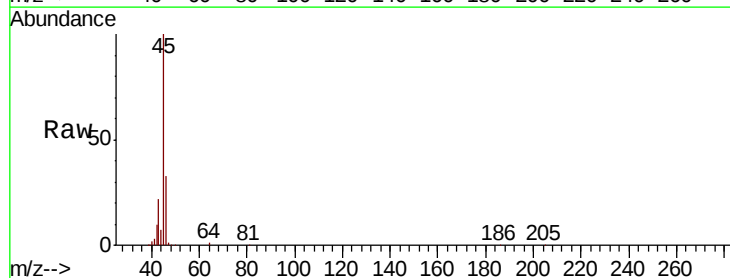
#11
 Trichlorofluoromethane
 Concen: 0.033 ppbv
 RT: 3.95
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId : SG-3
 Acq: 27 Jun 2022 19:03

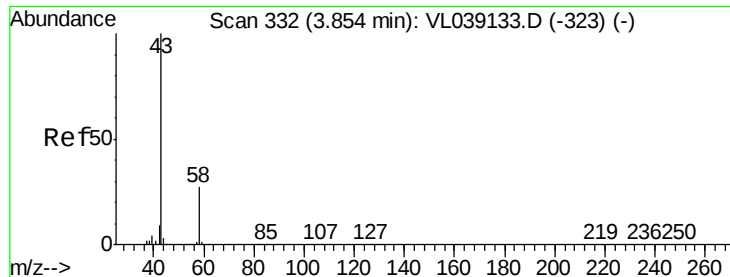
Tot Ion: 101 Resp: 5518
 Ion Ratio Lower Upper
 101 100
 103 50.2 51.7 77.5#



#13
 Ethanol
 Concen: 101.714 ppbv
 RT: 3.60 min Scan# 253
 Delta R.T. -0.01 min
 Lab File: VL039365.D
 Acq: 27 Jun 2022 19:03

Tgt Ion: 45 Resp: 323381
 Ion Ratio Lower Upper
 45 100
 46 40.4 0.0 0.0#





#15

Acetone

Concen: 3.227 ppbv

RT: 3.85

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

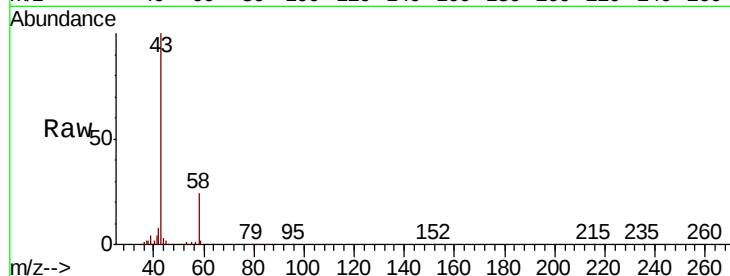
Acq: 27 Jun 2022 19:03

Tot Ion: 43 Resp: 353244

Ion Ratio Lower Upper

43 100

58 32.0 22.5 33.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.85

200000

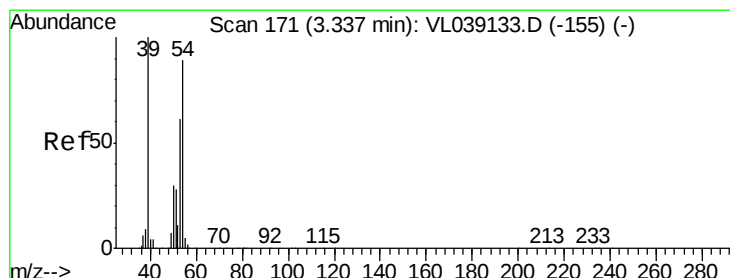
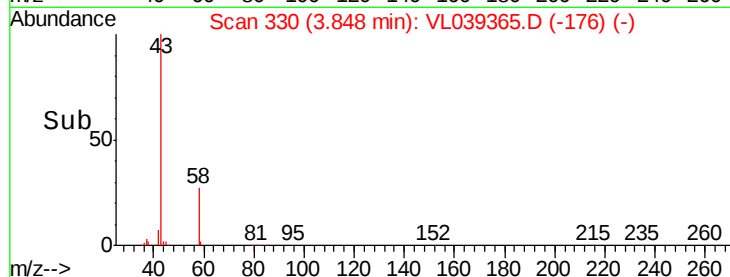
150000

100000

50000

0

Time-->



#16

1,3-Butadiene

Concen: 1.269 ppbv

RT: 3.31 min Scan# 163

Delta R.T. -0.03 min

Lab File: VL039365.D

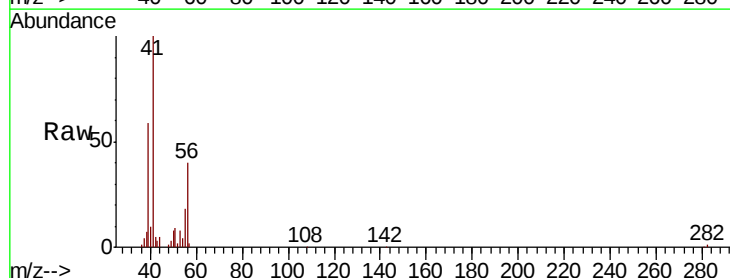
Acq: 27 Jun 2022 19:03

Tgt Ion: 39 Resp: 74690

Ion Ratio Lower Upper

39 100

54 34.2 65.8 98.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.31

40000

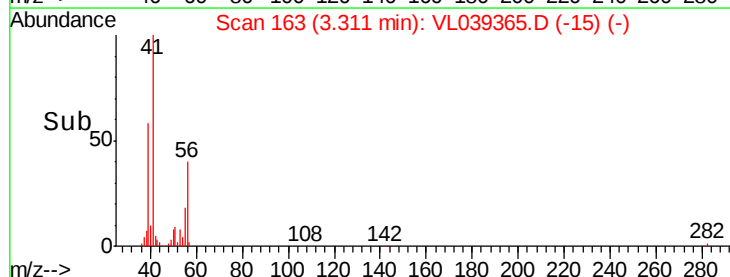
30000

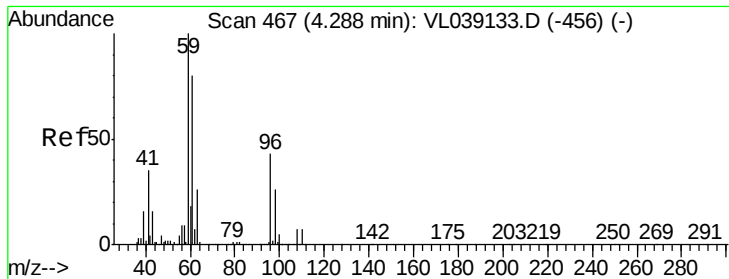
20000

10000

0

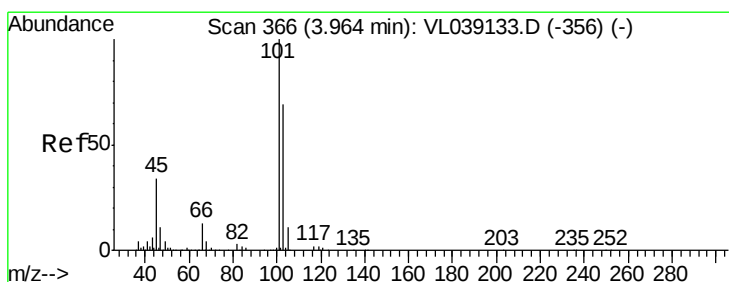
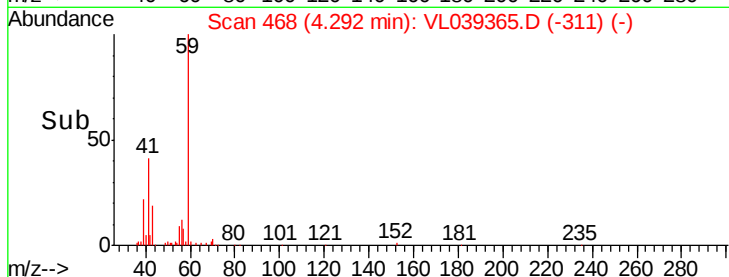
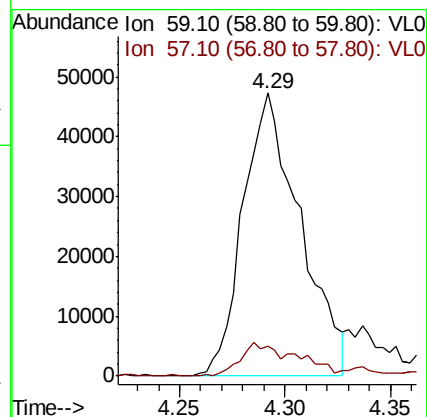
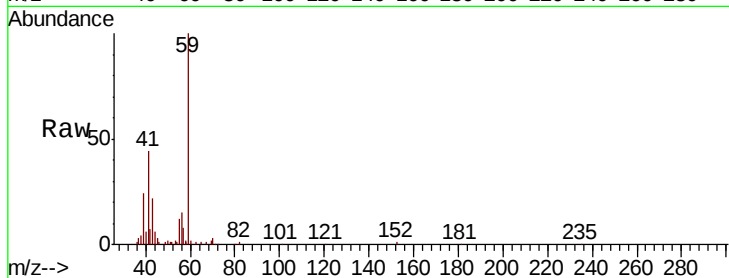
Time-->





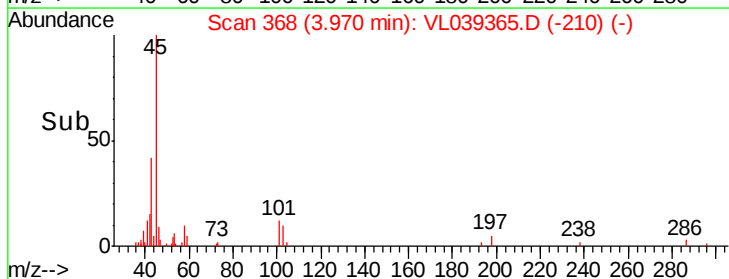
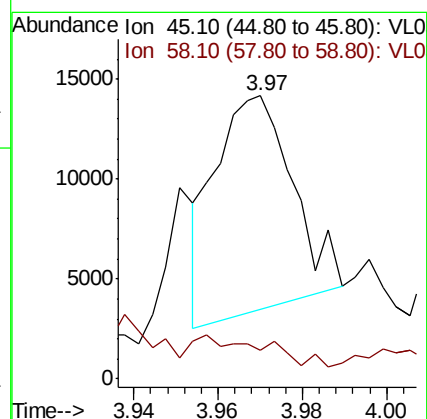
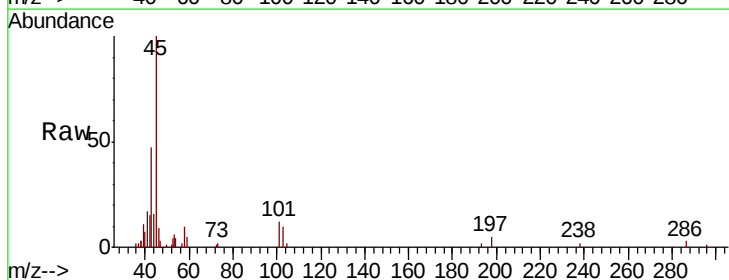
#17
 tert-Butyl alcohol
 Concen: 1.048 ppbv
 RT: 4.29
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 27 Jun 2022 19:03

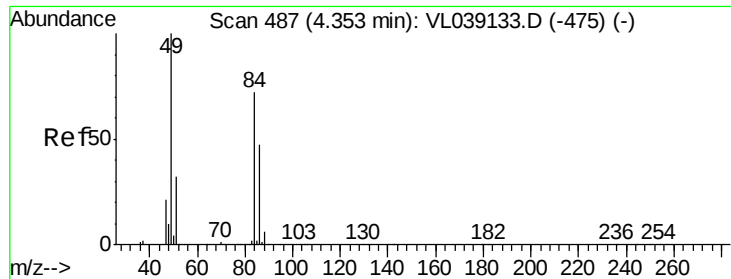
Tot Ion: 59 Resp: 88956
 Ion Ratio Lower Upper
 59 100
 57 14.2 9.1 13.7#



#19
 Isopropyl Alcohol
 Concen: 0.271 ppbv
 RT: 3.97 min Scan# 368
 Delta R.T. 0.01 min
 Lab File: VL039365.D
 Acq: 27 Jun 2022 19:03

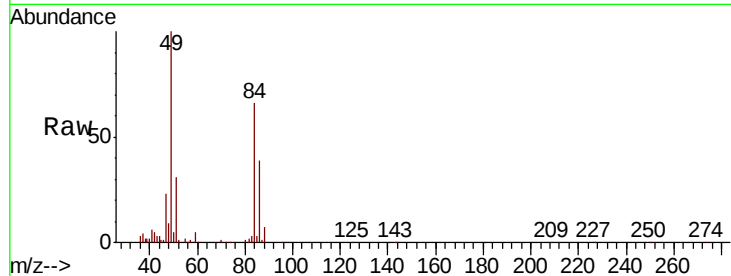
Tgt Ion: 45 Resp: 13891
 Ion Ratio Lower Upper
 45 100
 58 0.0 1.8 2.8#



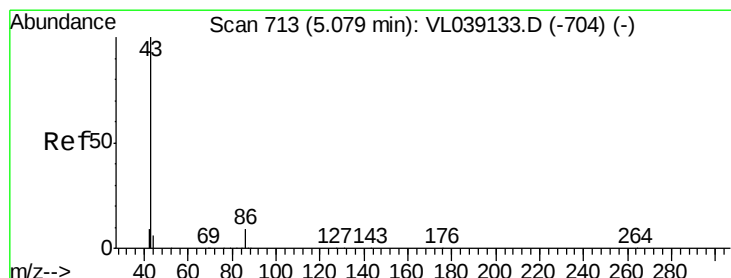
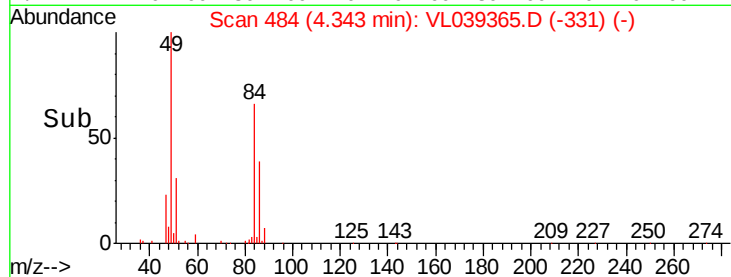
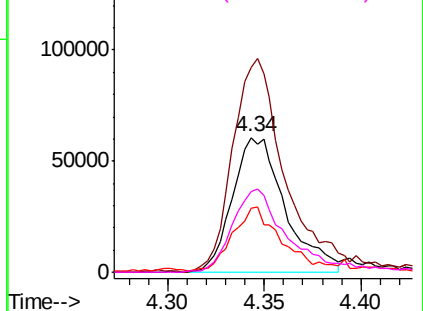


#20
Methvlene Chloride
Concen: 2.502 ppbv
RT: 4.34
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId : SG-3
Acq: 27 Jun 2022 19:03

Tot Ion:	84	Resp:	115401
Ion	Ratio	Lower	Upper
84	100		
49	152.0	111.1	166.7
51	46.3	35.3	52.9
86	59.0	51.9	77.9

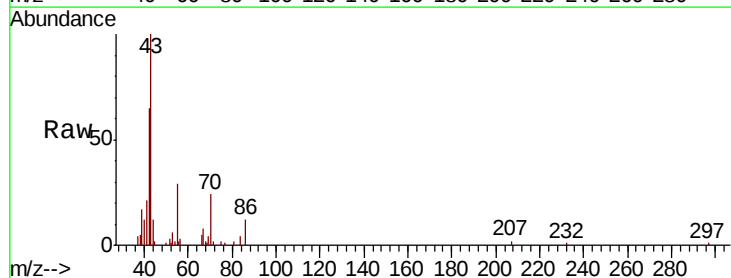


Abundance Ion 84.00 (83.70 to 84.70): VL0
150000 Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

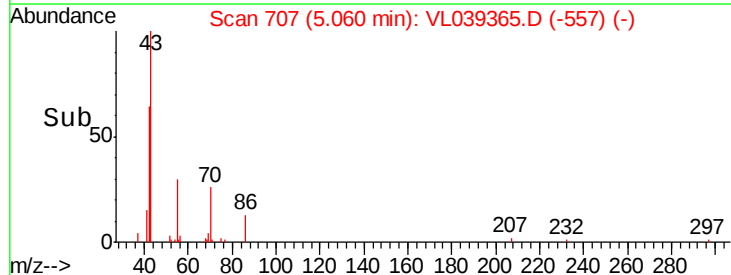
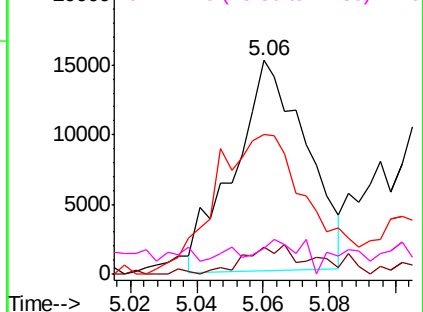


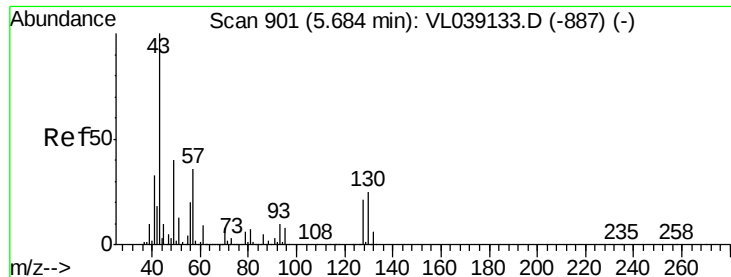
#23
Vinyl Acetate
Concen: 0.253 ppbv
RT: 5.06 min Scan# 707
Delta R.T. -0.02 min
Lab File: VL039365.D
Acq: 27 Jun 2022 19:03

Tgt Ion:	43	Resp:	22877
Ion	Ratio	Lower	Upper
43	100		
86	11.9	6.0	9.0#
42	52.9	8.2	12.4#
44	6.5	4.3	6.5#



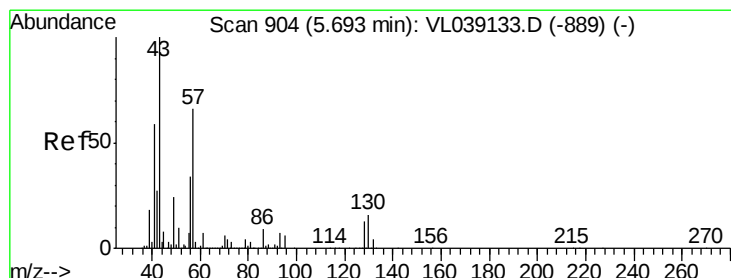
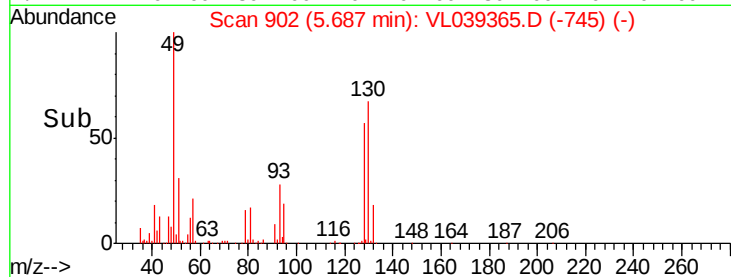
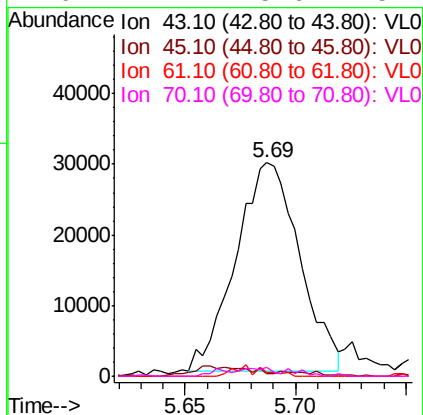
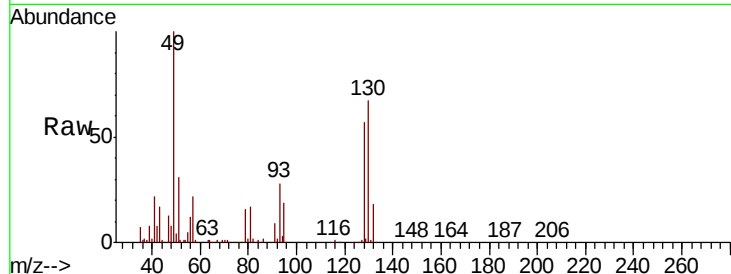
Abundance Ion 43.10 (42.80 to 43.80): VL0
20000 Ion 86.10 (85.80 to 86.80): VL0
Ion 42.10 (41.80 to 42.80): VL0
Ion 44.10 (43.80 to 44.80): VL0





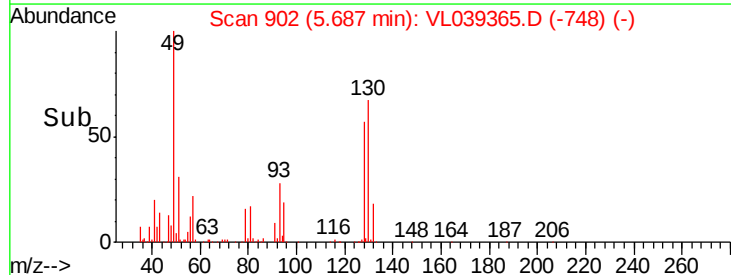
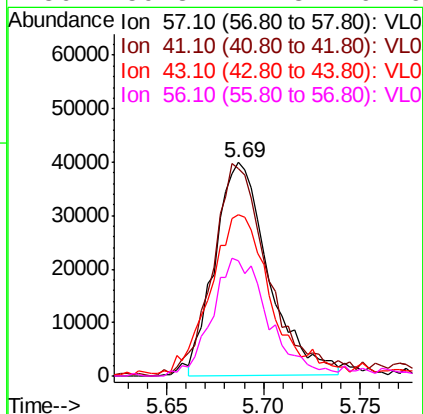
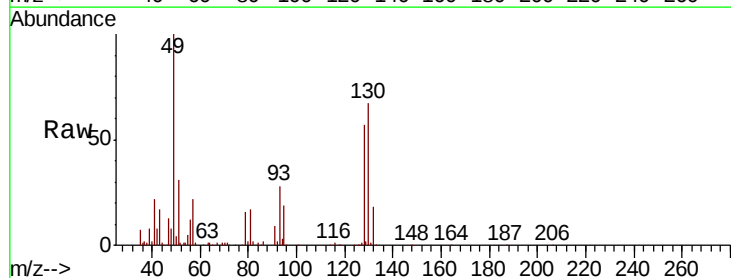
#25
Ethyl Acetate
Concen: 0.242 ppbv
RT: 5.69 min
Delta R.T.: -0.01 min
Lab File: VL039133.D
Acq: 27 Jun 2022 19:03

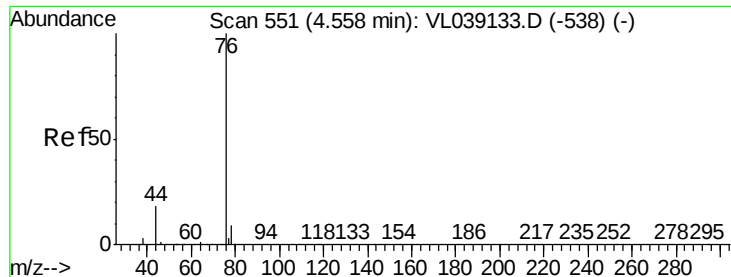
Tot Ion:	43	Resp:	59640
Ion	Ratio	Lower	Upper
43	100		
45	5.8	8.2	12.2#
61	2.4	8.4	12.6#
70	4.1	5.6	8.4#



#26
Hexane
Concen: 0.710 ppbv
RT: 5.69 min Scan# 902
Delta R.T.: -0.01 min
Lab File: VL039365.D
Acq: 27 Jun 2022 19:03

Tgt Ion:	57	Resp:	77009
Ion	Ratio	Lower	Upper
57	100		
41	107.3	72.4	108.6
43	94.5	187.0	280.6#
56	59.3	41.8	62.6





#27

Carbon Disulfide

Concen: 0.063 ppbv

RT: 4.55 Instrument: MSVOA_1

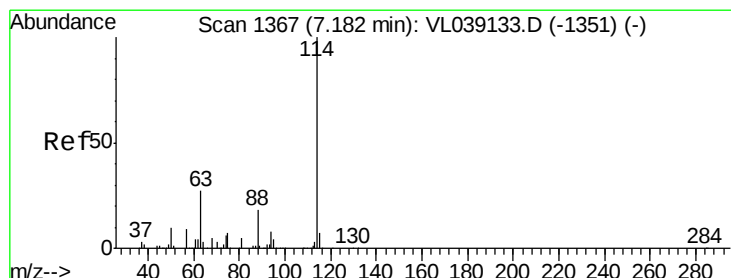
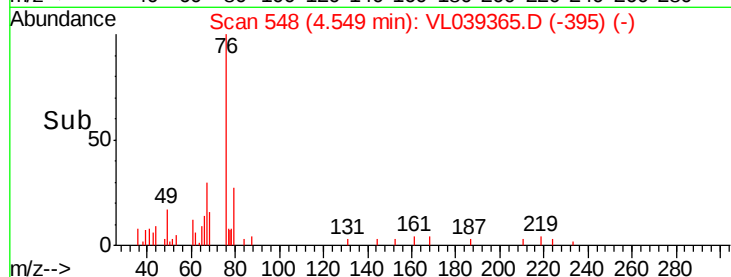
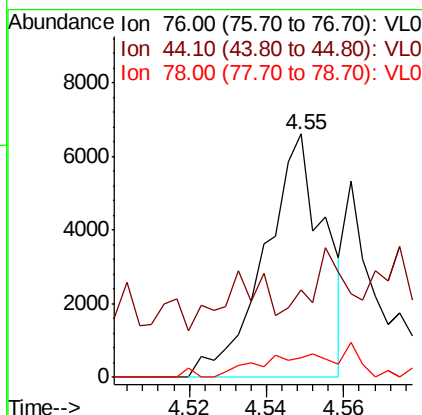
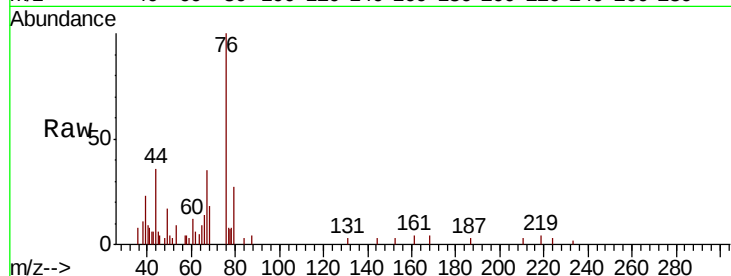
Delta R.T. ClientSampleId:

Lab File: SG-3

Acq: 27 Jun 2022 19:03

Tot Ion: 76 Resp: 7048

Ion	Ratio	Lower	Upper
76	100		
44	14.2	14.4	21.6#
78	0.0	7.7	11.5#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1364

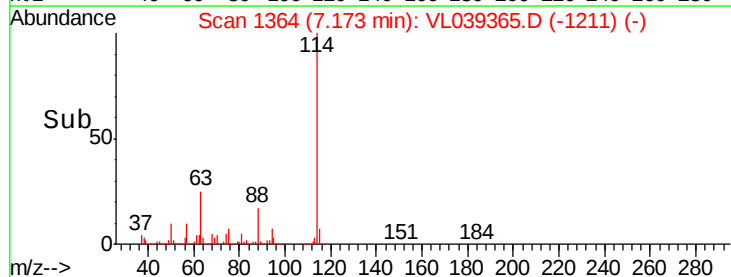
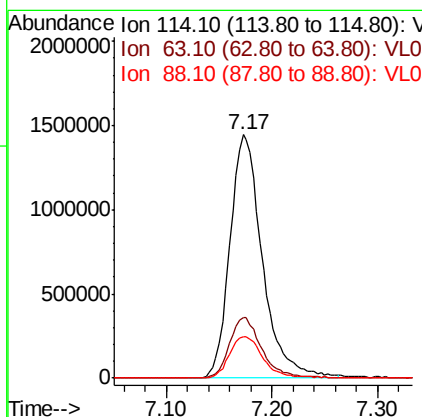
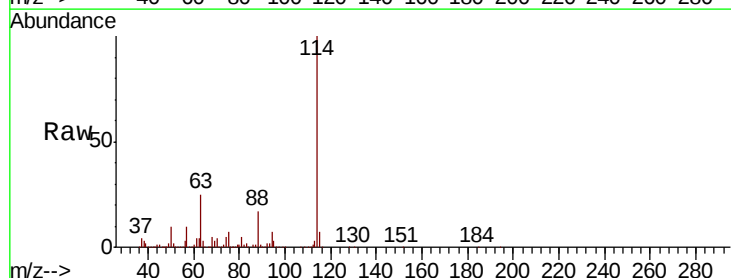
Delta R.T. -0.01 min

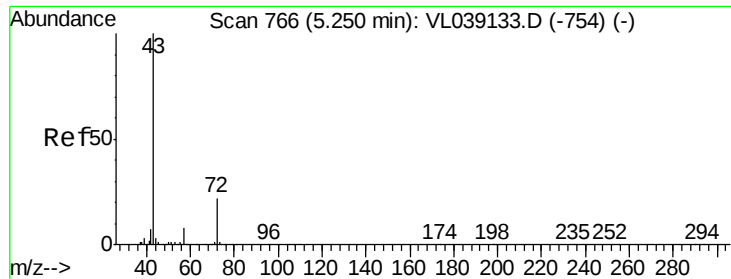
Lab File: VL039365.D

Acq: 27 Jun 2022 19:03

Tgt Ion: 114 Resp: 3077288

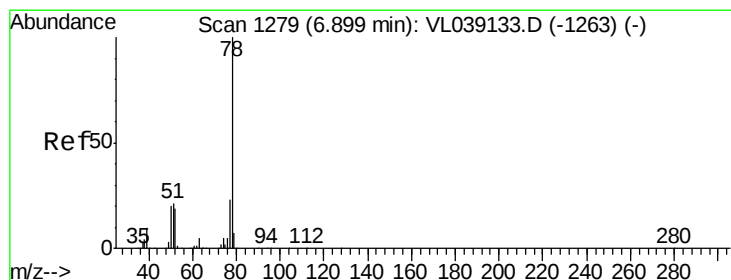
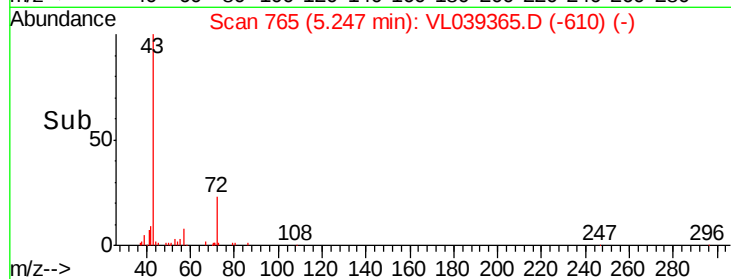
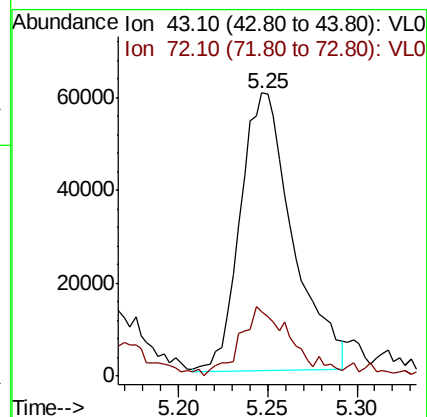
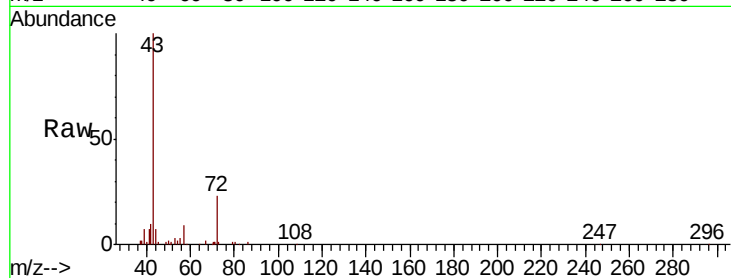
Ion	Ratio	Lower	Upper
114	100		
63	25.0	21.7	32.5
88	18.0	14.8	22.2





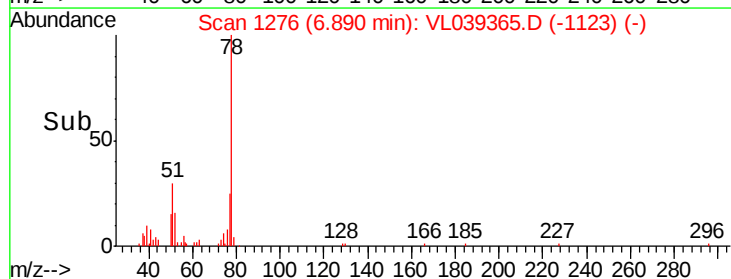
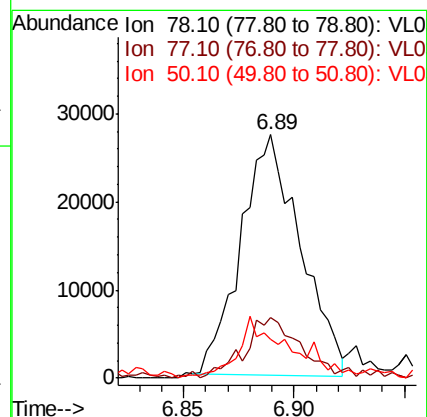
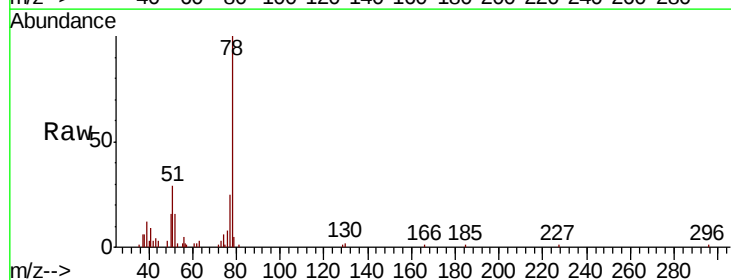
#34
 2-Butanone
 Concen: 0.732 ppbv
 RT: 5.25
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SG-3
 Acq: 27 Jun 2022 19:03

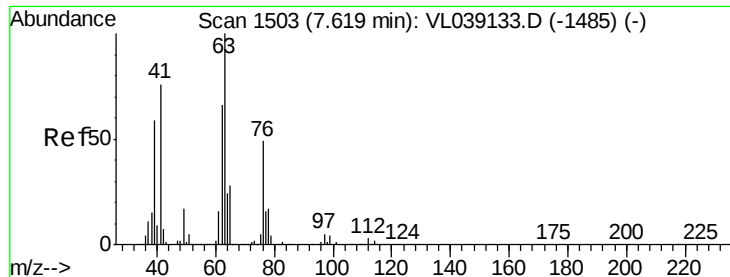
Tot Ion: 43 Resp: 122329
 Ion Ratio Lower Upper
 43 100
 72 27.1 18.2 27.2



#36
 Benzene
 Concen: 0.205 ppbv
 RT: 6.89 min Scan# 1276
 Delta R.T. -0.01 min
 Lab File: VL039365.D
 Acq: 27 Jun 2022 19:03

Tgt Ion: 78 Resp: 51335
 Ion Ratio Lower Upper
 78 100
 77 22.5 18.6 27.8
 50 14.6 15.8 23.8#





#39

1,2-Dichloropropane

Concen: 7.687 ppbv

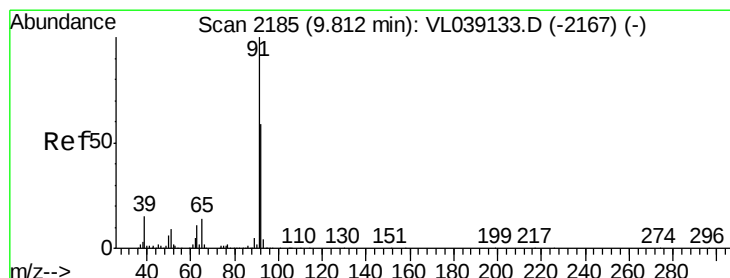
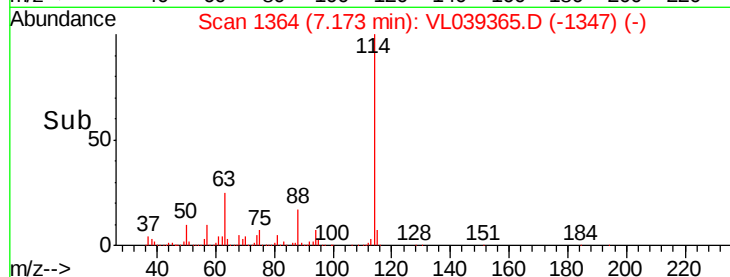
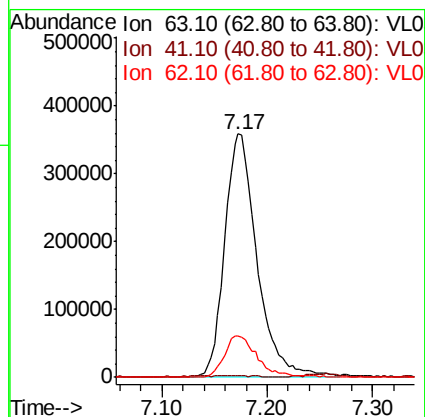
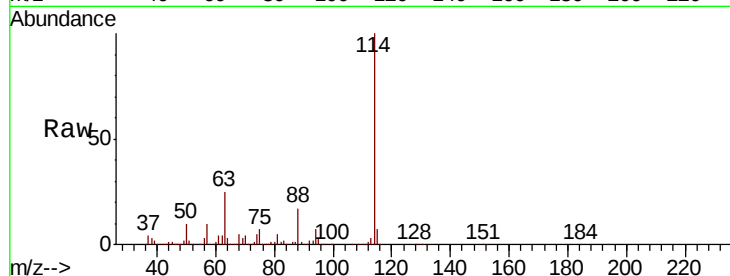
RT: 7.17 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Jun 2022 19:03 SG-3

Tot Ion:	63	Resp:	763917
Ion	Ratio	Lower	Upper
63	100		
41	0.0	60.8	91.2#
62	16.7	52.9	79.3#



#53

Toluene

Concen: 2.424 ppbv

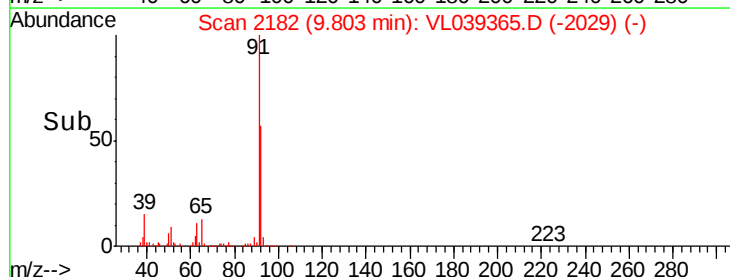
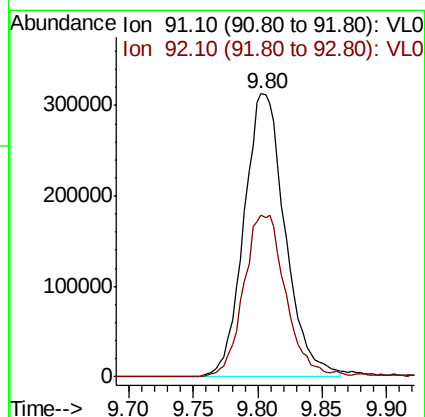
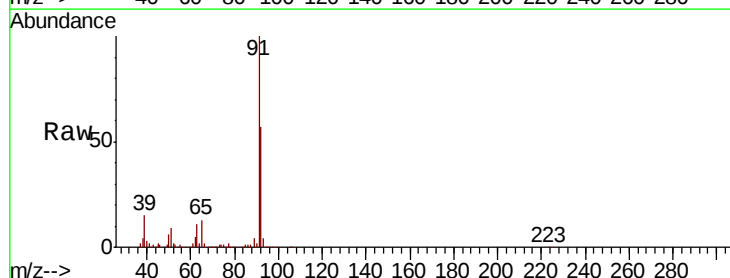
RT: 9.80 min Scan# 2182

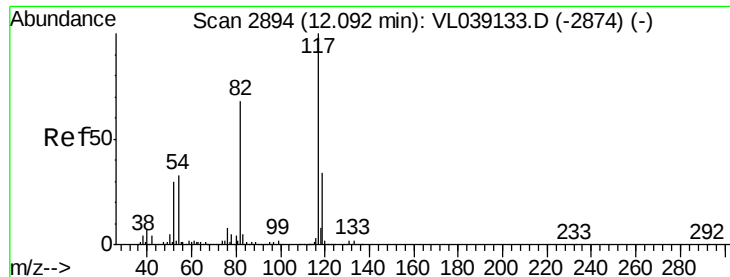
Delta R.T. -0.01 min

Lab File: VL039365.D

Acq: 27 Jun 2022 19:03

Tgt Ion:	91	Resp:	697263
Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.1	72.1

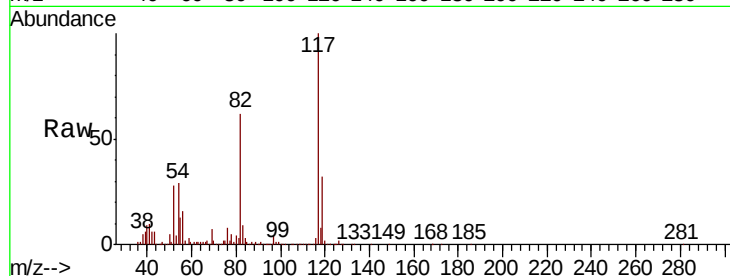




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 27 Jun 2022 19:03

Tot Ion: 117 Resp: 2927618

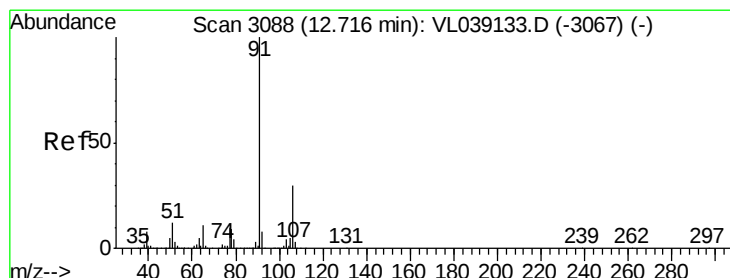
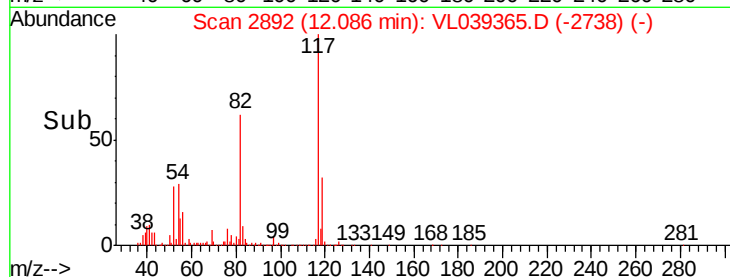
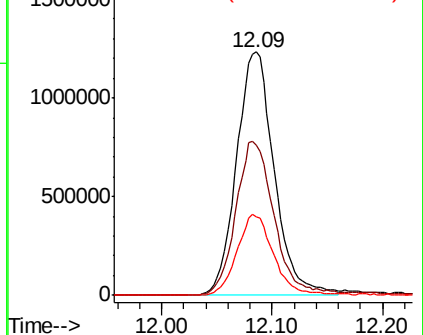
Ion	Ratio	Lower	Upper
117	100		
82	66.4	55.1	82.7
119	32.8	24.7	37.1



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

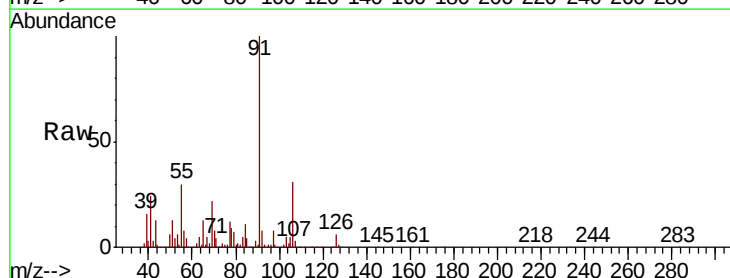
Ion 119.10 (118.80 to 119.80): V



#58
Ethyl Benzene
Concen: 1.593 ppbv
RT: 12.71 min Scan# 3086
Delta R.T.: -0.01 min
Lab File: VL039365.D
Acq: 27 Jun 2022 19:03

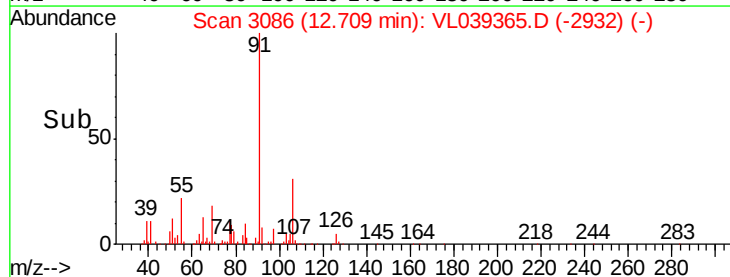
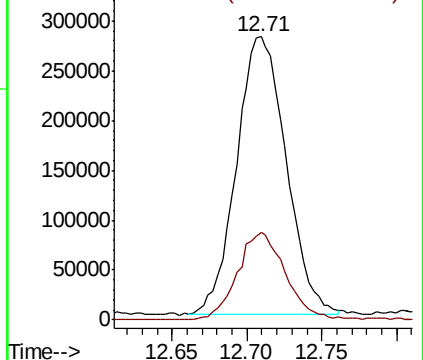
Tgt Ion: 91 Resp: 642532

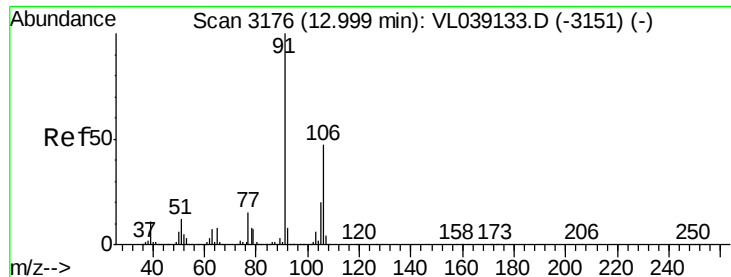
Ion	Ratio	Lower	Upper
91	100		
106	31.7	24.2	36.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

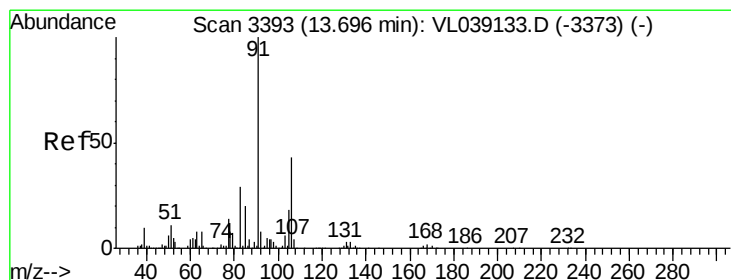
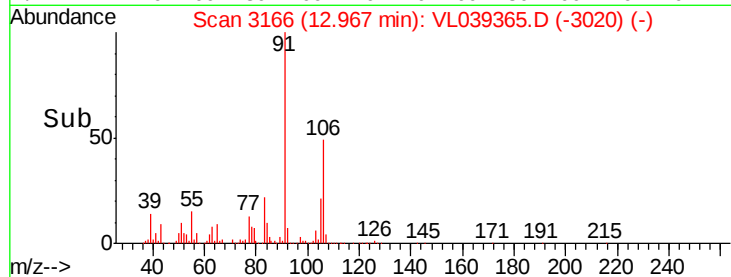
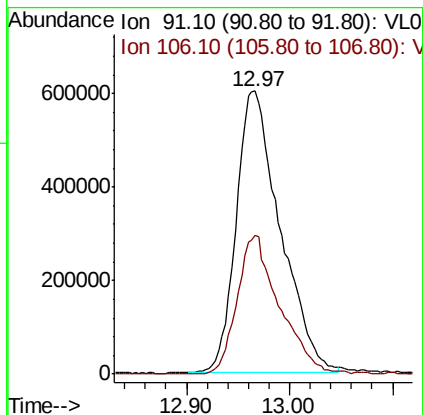
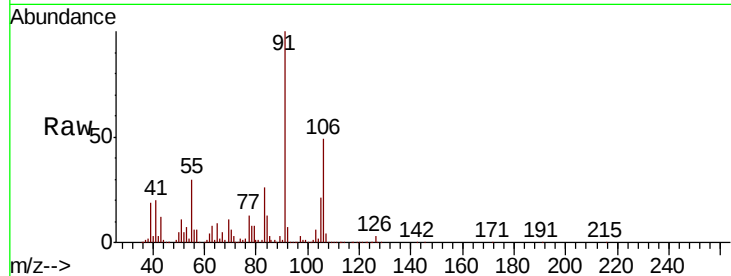
Ion 106.10 (105.80 to 106.80): V





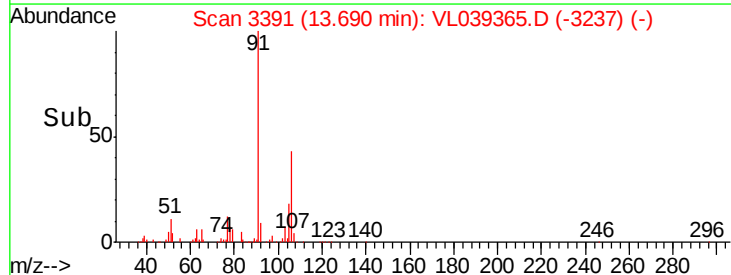
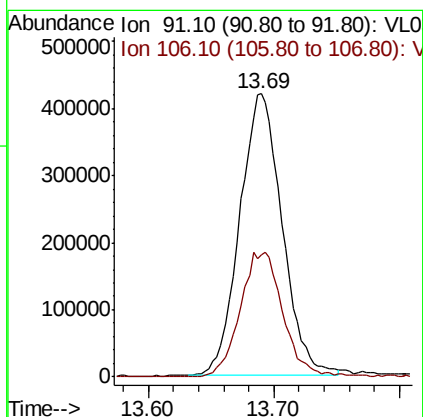
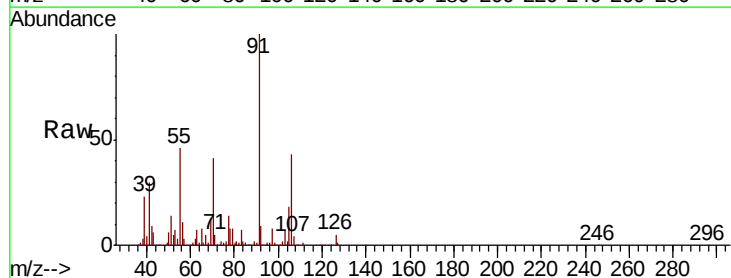
#59
m/p-Xylene
Concen: 5.022 ppbv
RT: 12.97
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SG-3
Acq: 27 Jun 2022 19:03

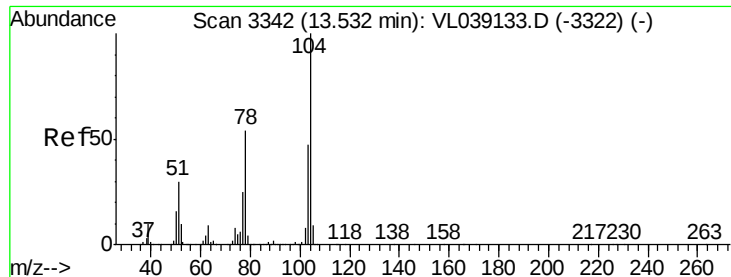
Tot Ion: 91 Resp: 1783236
Ion Ratio Lower Upper
91 100
106 47.6 34.3 51.5



#60
o-Xylene
Concen: 2.953 ppbv
RT: 13.69 min Scan# 3391
Delta R.T.: -0.01 min
Lab File: VL039365.D
Acq: 27 Jun 2022 19:03

Tgt Ion: 91 Resp: 985264
Ion Ratio Lower Upper
91 100
106 45.1 22.3 66.9





#61

Stvrene

Concen: 1.008 ppbv

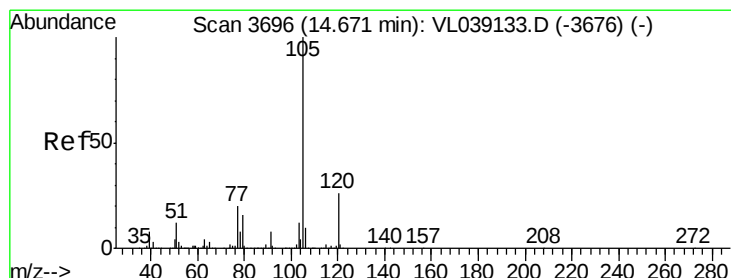
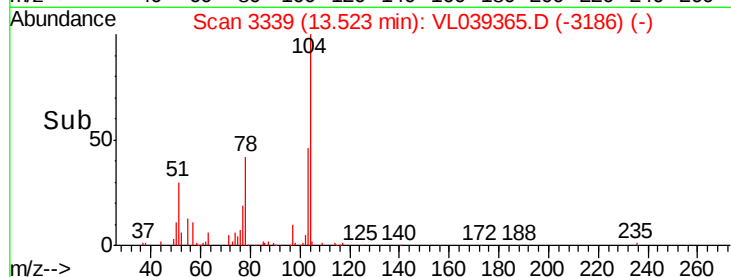
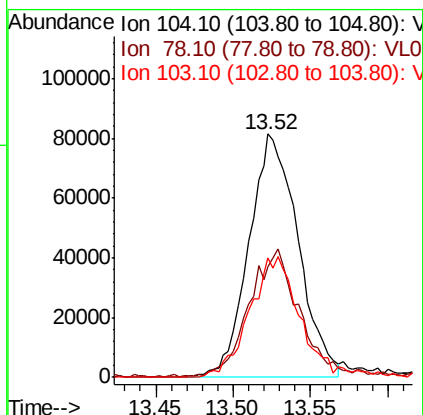
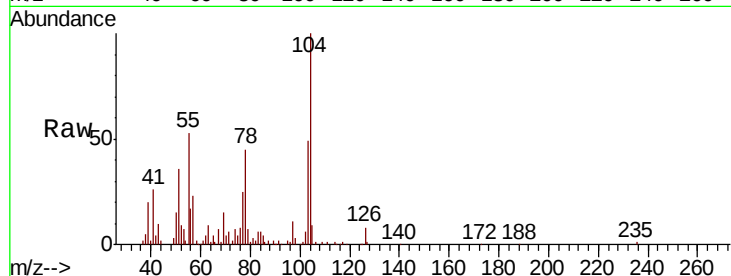
RT: 13.52

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Jun 2022 19:03

Tot Ion:	104	Resp:	180067
Ion	Ratio	Lower	Upper
104	100		
78	55.4	45.7	68.5
103	50.6	39.6	59.4



#62

Isopropylbenzene

Concen: 16.596 ppbv

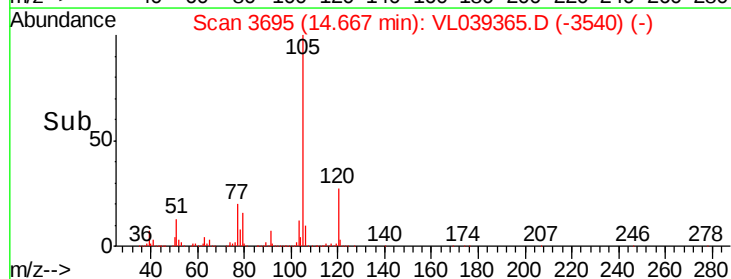
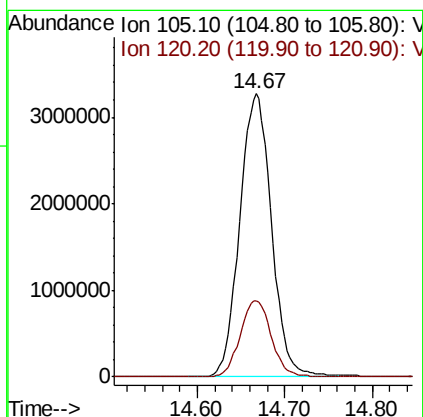
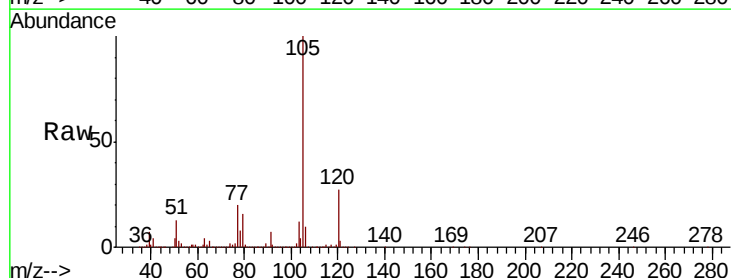
RT: 14.67 min Scan# 3695

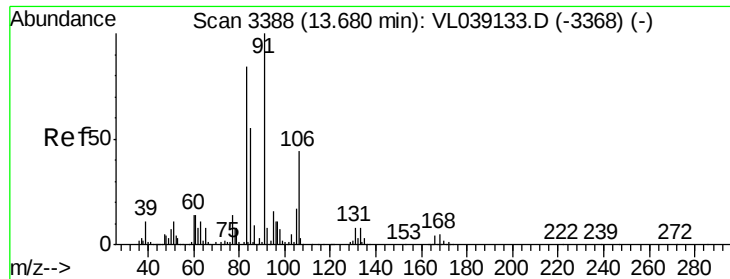
Delta R.T. -0.00 min

Lab File: VL039365.D

Acq: 27 Jun 2022 19:03

Tgt Ion:	105	Resp:	8231029
Ion	Ratio	Lower	Upper
105	100		
120	26.6	20.3	30.5





#63

1,1,2,2-Tetrachloroethane

Concen: 0.096 ppbv

RT: 13.67

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Jun 2022 19:03

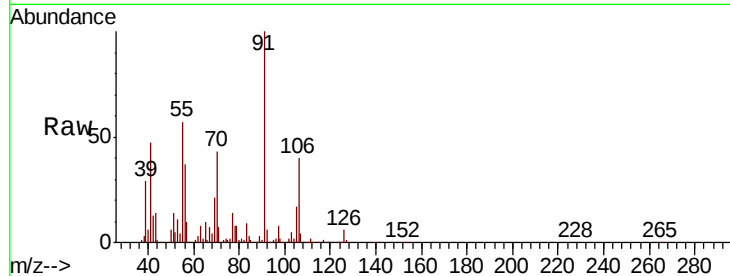
Tot Ion: 83 Resp: 17985

Ion Ratio Lower Upper

83 100

131 0.0 4.8 14.3#

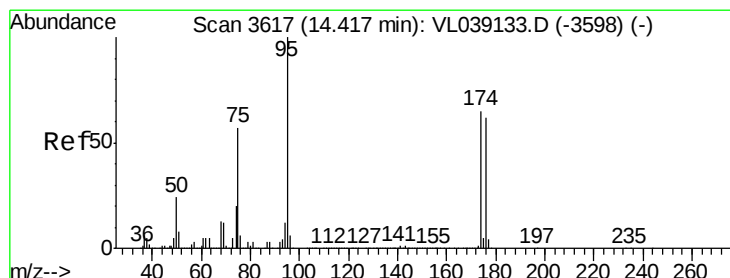
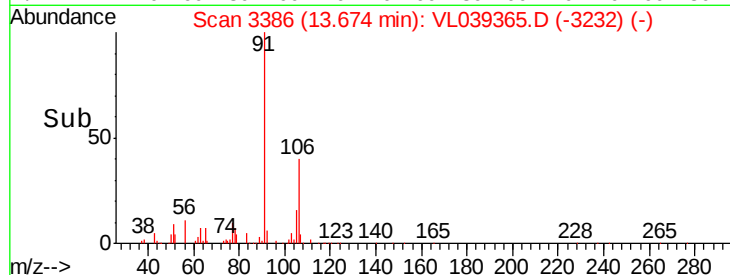
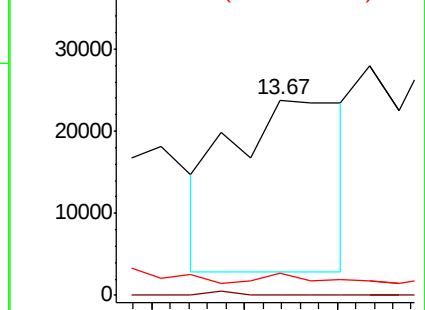
85 0.0 33.0 99.0#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0



#68

1-Bromo-4-Fluorobenzene

Concen: 9.843 ppbv

RT: 14.41 min Scan# 3615

Delta R.T. -0.01 min

Lab File: VL039365.D

Acq: 27 Jun 2022 19:03

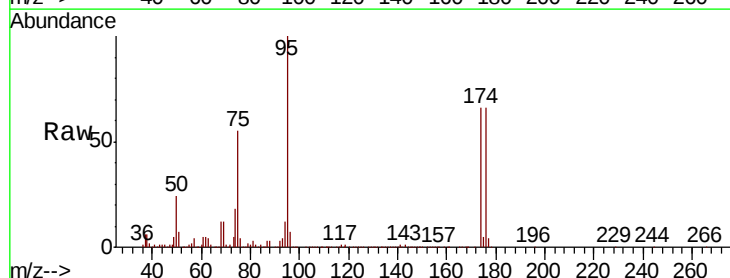
Tgt Ion: 95 Resp: 2382437

Ion Ratio Lower Upper

95 100

174 69.2 53.8 80.8

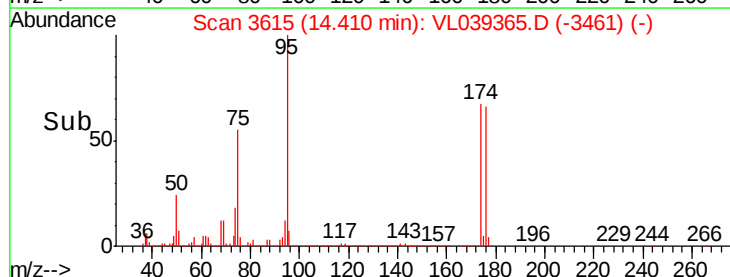
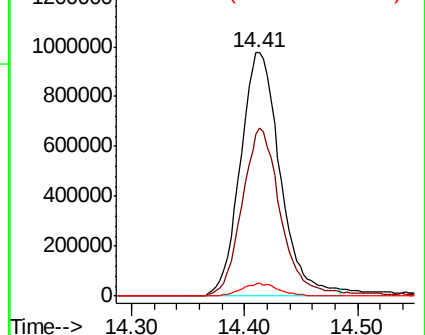
175 5.0 4.1 6.1

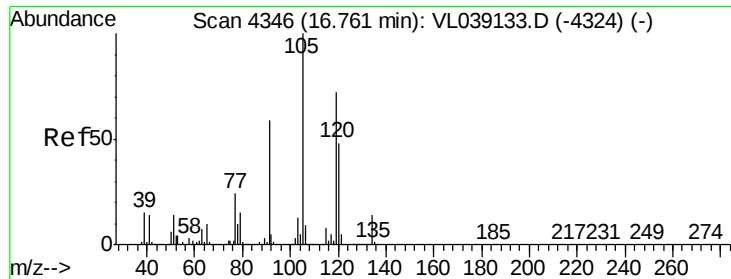


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.084 ppbv
 RT: 16.75
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 SG-3
 Acq: 27 Jun 2022 19:05

Tot Ion:	105	Resp:	33098
Ion	Ratio	Lower	Upper
105	100		
120	42.4	38.1	57.1
91	17.5	47.4	71.0#
77	10.8	19.5	29.3#

