

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072522\
 Data File : VL039525.D
 Acq On : 25 Jul 2022 20:45
 Operator : SY/AP
 Sample : N3842-02 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 SV1

Quant Time: Jul 26 08:06:03 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062922AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 06 02:15:38 2022
 QLast Update : Wed Jul 06 02:15:38 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1157326	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.18	114	3186184	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.09	117	2890168	10.00	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2194173	10.23	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.30%

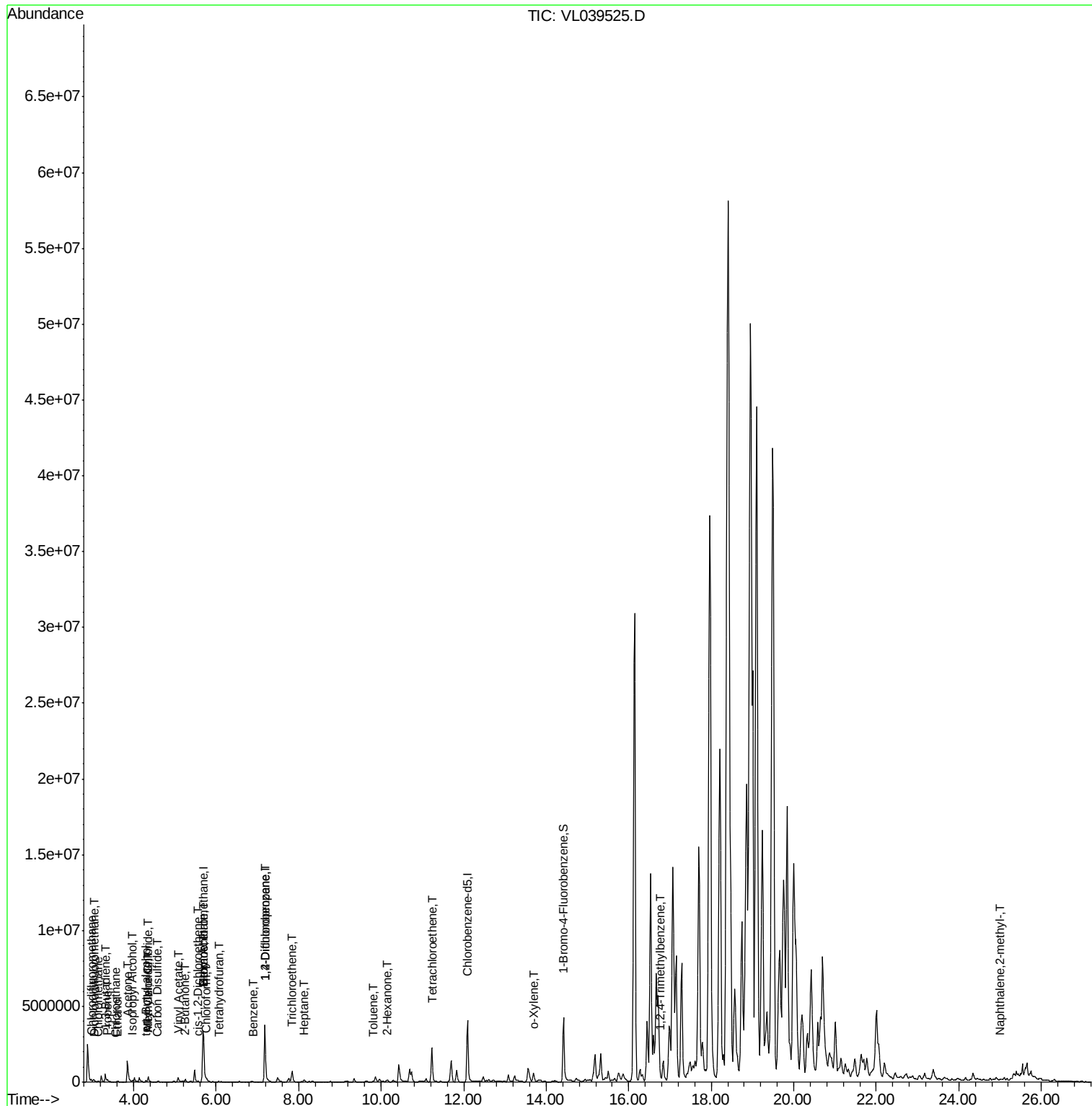
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	14392	0.086	ppbv	94
3) Chlorodifluoromethane	2.97	51	122884	0.837	ppbv #	64
4) Chloromethane	3.15	50	19668	0.245	ppbv	92
7) Chloroethane	3.57	64	2552	0.091	ppbv	99
9) Propene	3.36	41	27458	0.414	ppbv	93
10) Heptane	8.13	43	62875	0.405	ppbv	93
13) Ethanol	3.61	45	29086	7.561	ppbv	83
15) Acetone	3.85	43	1819493	13.289	ppbv	94
16) 1,3-Butadiene	3.31	39	164392	2.314	ppbv #	20
17) tert-Butyl alcohol	4.29	59	78782	0.678	ppbv #	91
19) Isopropyl Alcohol	3.97	45	123179	1.687	ppbv #	88
20) Methylene Chloride	4.35	84	129020	2.364	ppbv	89
21) Allyl Chloride	4.36	41	3019	0.032	ppbv #	19
23) Vinyl Acetate	5.08	43	473743	5.177	ppbv #	98
25) Ethyl Acetate	5.69	43	751639	2.677	ppbv #	77
26) Hexane	5.70	57	1053847	9.312	ppbv #	37
27) Carbon Disulfide	4.56	76	4542	0.033	ppbv #	1
29) Chloroform	5.76	83	99917	0.508	ppbv #	81
31) cis-1,2-Dichloroethene	5.56	61	30929	0.258	ppbv	96
34) 2-Butanone	5.25	43	183541	1.144	ppbv #	86
36) Benzene	6.90	78	11825	0.048	ppbv #	72
38) Trichloroethene	7.84	130	156457	1.173	ppbv	96
39) 1,2-Dichloropropane	7.18	63	774545	8.408	ppbv #	26
41) Tetrahydrofuran	6.06	42	5175	0.056	ppbv #	1
51) 2-Hexanone	10.13	43	42991	0.234	ppbv #	1
52) Tetrachloroethene	11.23	164	620129	6.247	ppbv	94
53) Toluene	9.81	91	36589	0.129	ppbv	96
60) o-Xylene	13.70	91	15336	0.049	ppbv #	31
74) 1,2,4-Trimethylbenzene	16.78	105	25907	0.070	ppbv #	63
80) Naphthalene,2-methyl-	24.99	142	3682	0.042	ppbv #	58

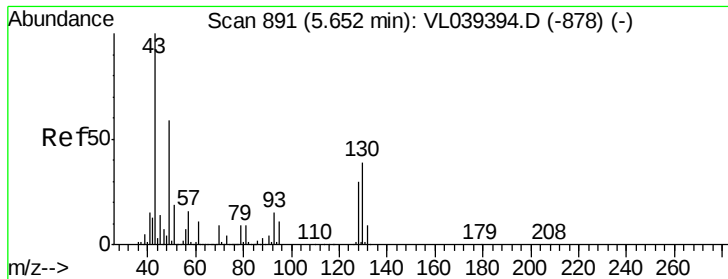
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL072522\
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Instrument :
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ClientSampleId :
SV1

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL062922AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 06 02:15:38 2022
Qlast Update : Wed Jul 06 02:15:38 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId: SV1

Acq: 25 Jul 2022 20:45

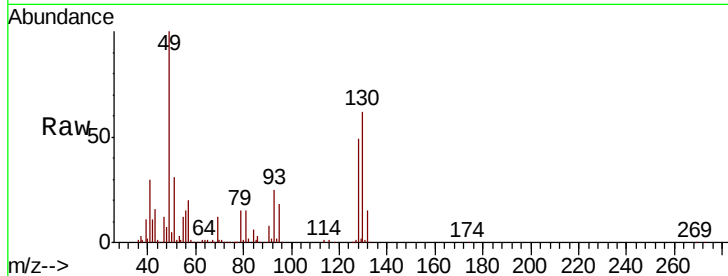
Tot Ion: 49 Resp: 1157326

Ion Ratio Lower Upper

49 100

128 52.7 26.7 80.0

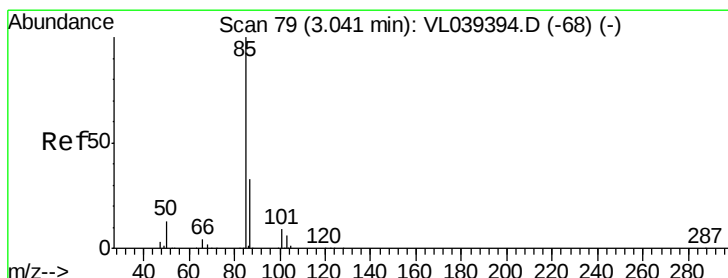
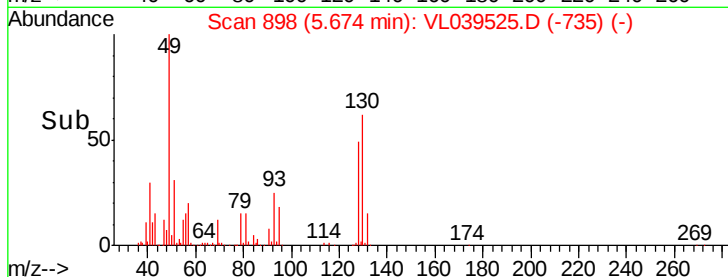
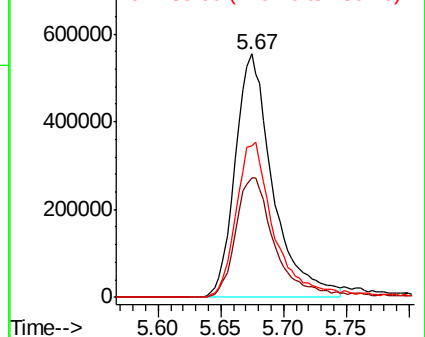
130 66.6 34.3 102.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.086 ppbv

RT: 3.06 min Scan# 84

Delta R.T. 0.02 min

Lab File: VL039525.D

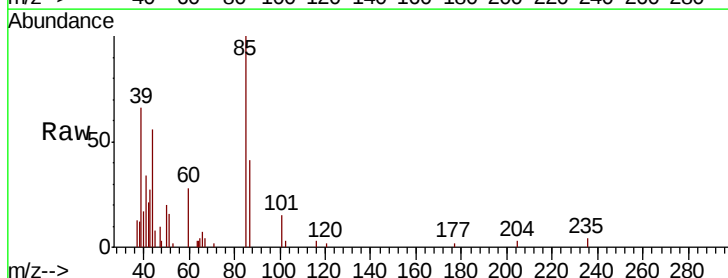
Acq: 25 Jul 2022 20:45

Tgt Ion: 85 Resp: 14392

Ion Ratio Lower Upper

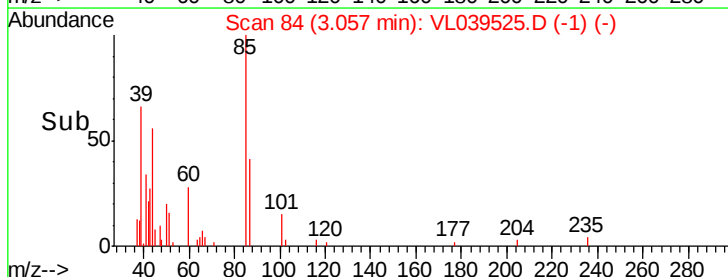
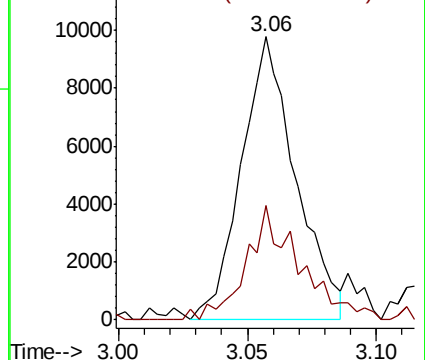
85 100

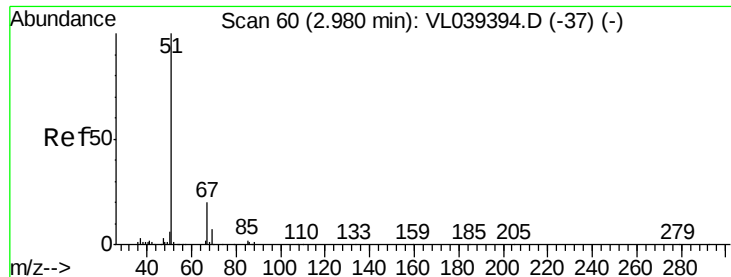
87 36.6 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

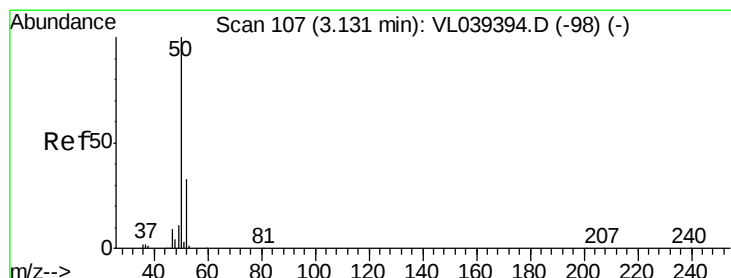
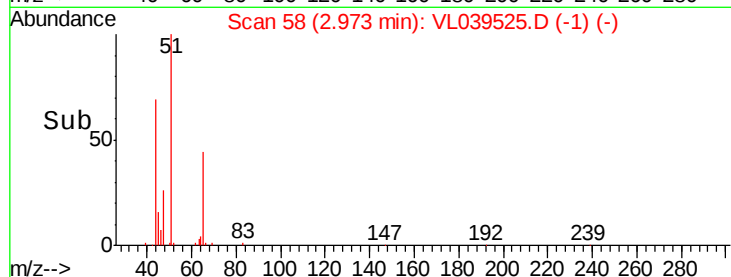
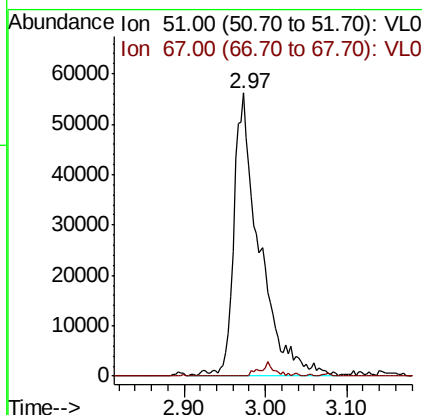
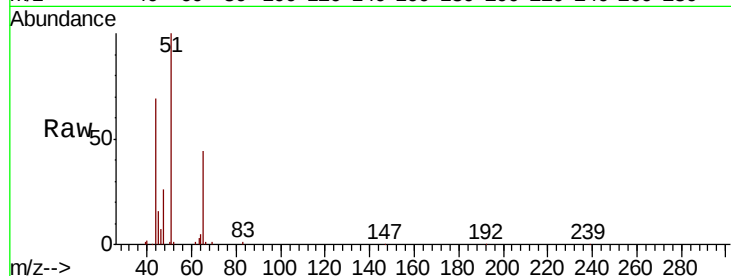
Ion 87.00 (86.70 to 87.70): VL0





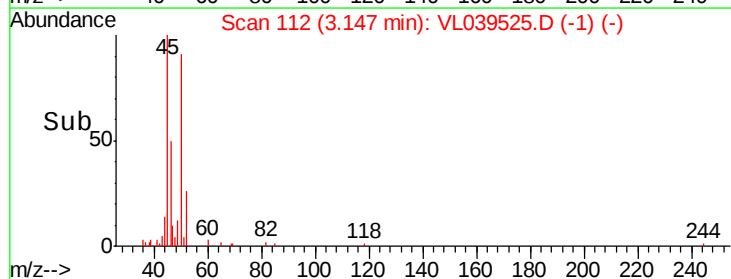
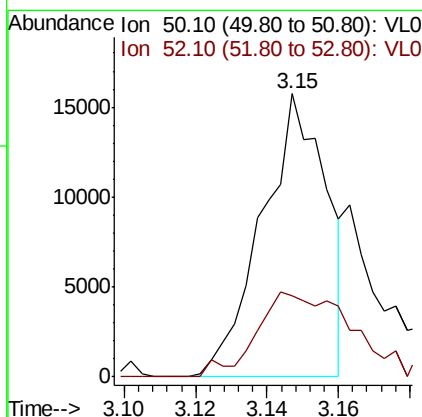
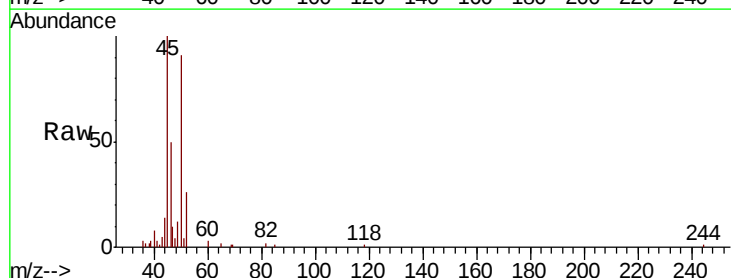
#3
 Chlorodifluoromethane
 Concen: 0.837 ppbv
 RT: 2.97
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV1
 Acq: 25 Jul 2022 20:45

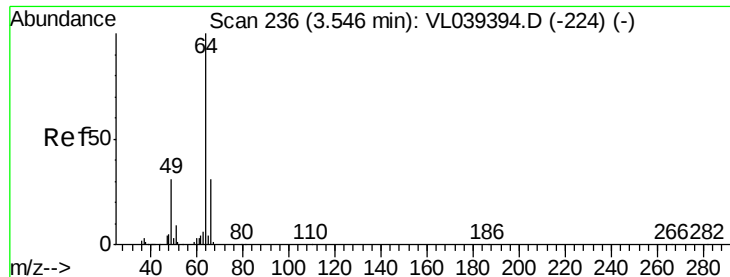
Tot Ion: 51 Resp: 122884
 Ion Ratio Lower Upper
 51 100
 67 3.0 15.7 23.5#



#4
 Chloromethane
 Concen: 0.245 ppbv
 RT: 3.15 min Scan# 112
 Delta R.T. 0.02 min
 Lab File: VL039525.D
 Acq: 25 Jul 2022 20:45

Tgt Ion: 50 Resp: 19668
 Ion Ratio Lower Upper
 50 100
 52 28.5 26.5 39.7





#7

Chloroethane

Concen: 0.091 ppbv

RT: 3.57 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

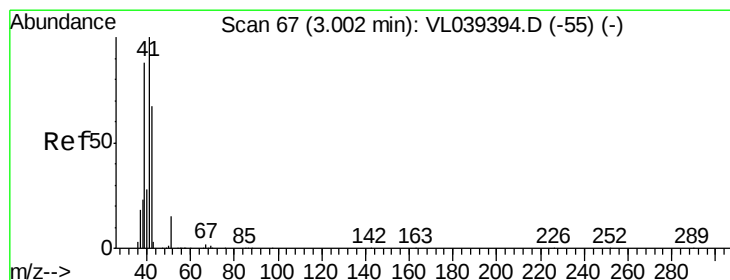
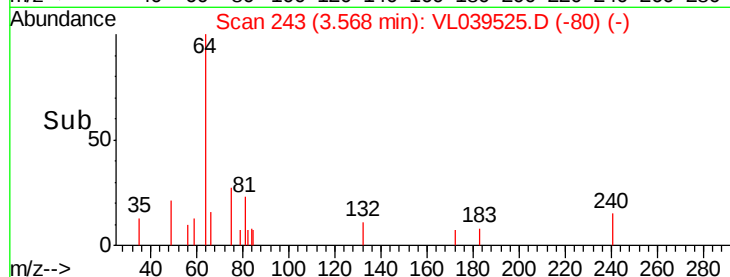
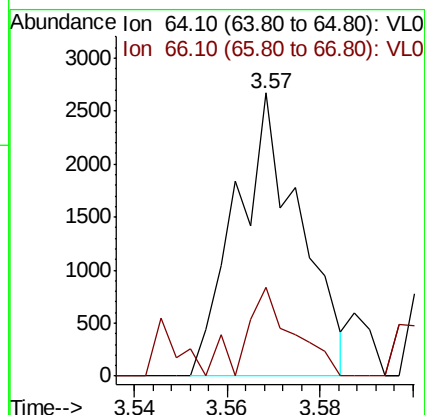
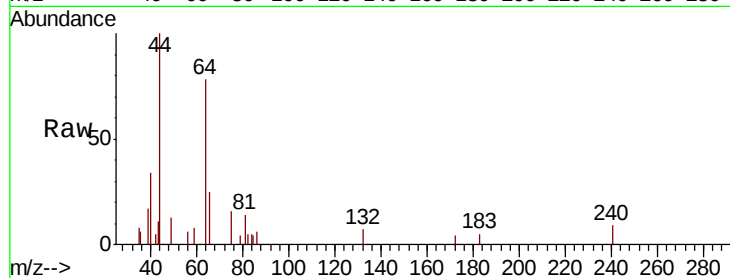
Acq: 25 Jul 2022 20:45

Tot Ion: 64 Resp: 2552

Ion Ratio Lower Upper

64 100

66 31.5 24.7 37.1



#9

Propene

Concen: 0.414 ppbv

RT: 3.36 min Scan# 179

Delta R.T. 0.36 min

Lab File: VL039525.D

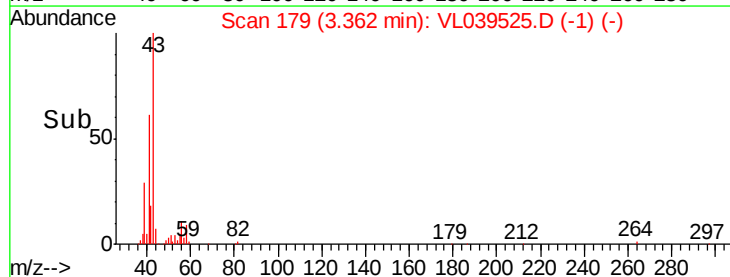
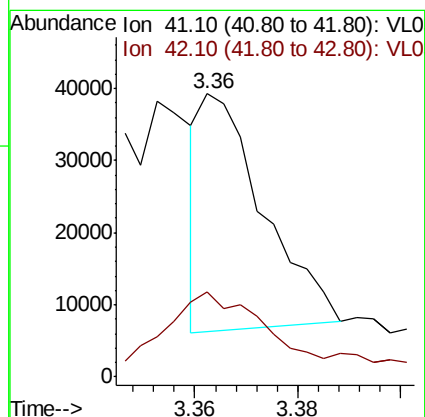
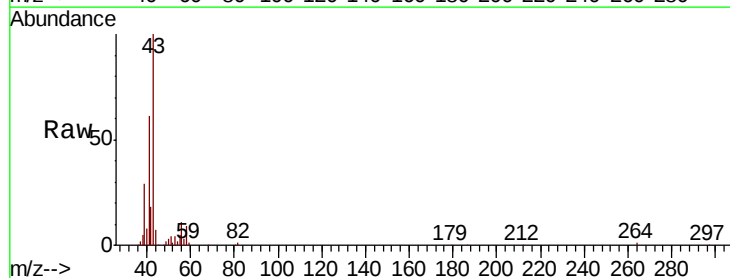
Acq: 25 Jul 2022 20:45

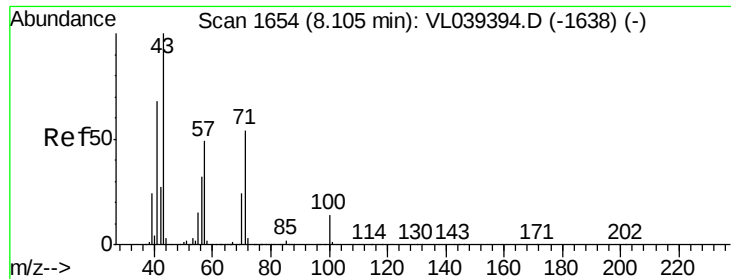
Tgt Ion: 41 Resp: 27458

Ion Ratio Lower Upper

41 100

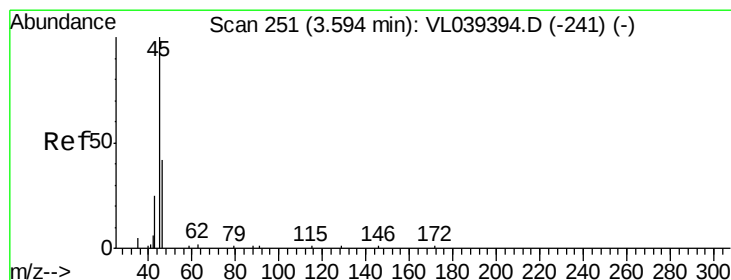
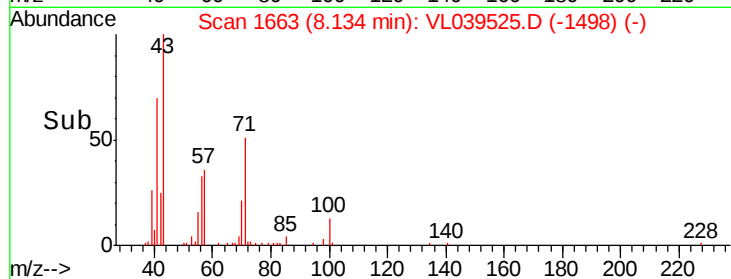
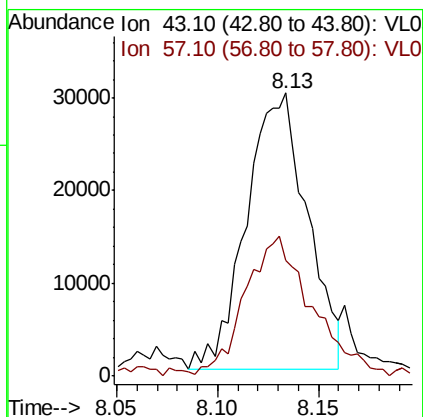
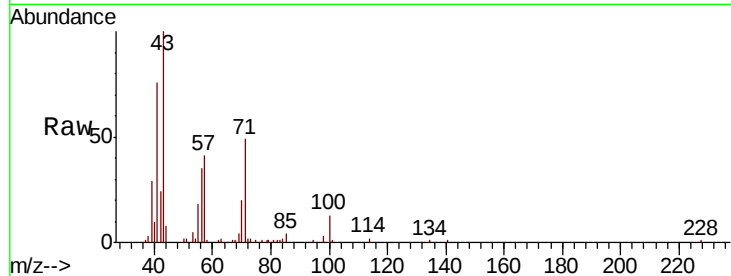
42 63.3 55.2 82.8





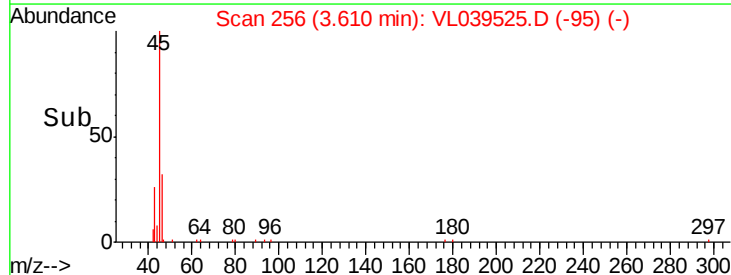
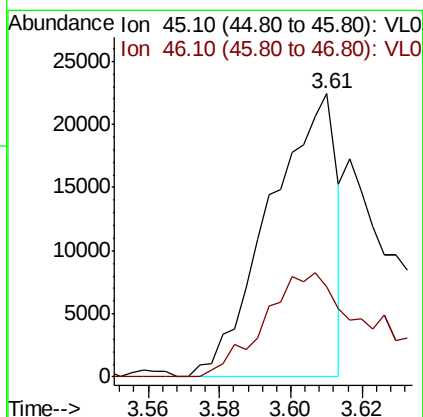
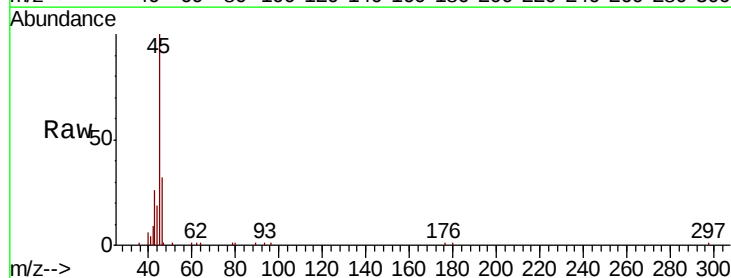
#10
 Heptane
 Concen: 0.405 ppbv
 RT: 8.13
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Jul 2022 20:45

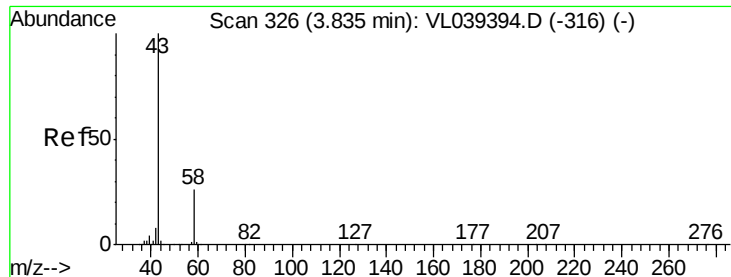
Tot Ion: 43 Resp: 62875
 Ion Ratio Lower Upper
 43 100
 57 55.4 40.5 60.7



#13
 Ethanol
 Concen: 7.561 ppbv
 RT: 3.61 min Scan# 256
 Delta R.T. 0.02 min
 Lab File: VL039525.D
 Acq: 25 Jul 2022 20:45

Tgt Ion: 45 Resp: 29086
 Ion Ratio Lower Upper
 45 100
 46 69.2 22.8 91.2





#15

Acetone

Concen: 13.289 ppbv

RT: 3.85

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

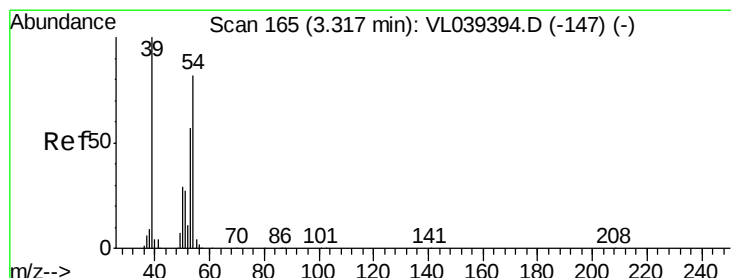
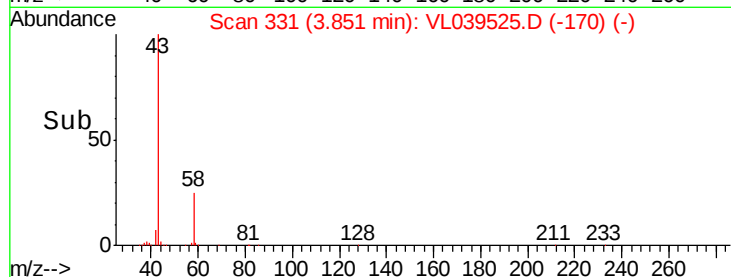
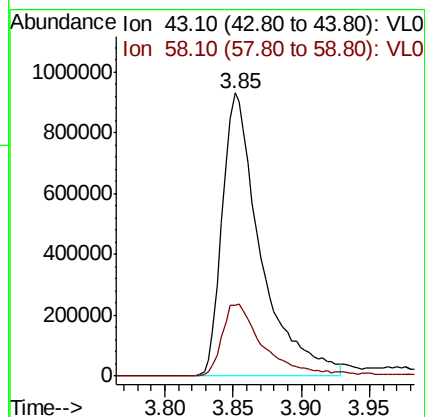
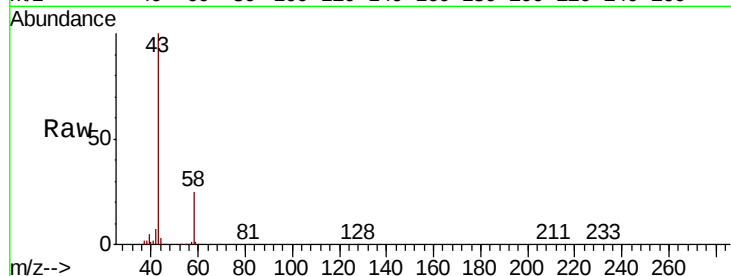
Acq: 25 Jul 2022 20:45

Tot Ion: 43 Resp: 1819493

Ion Ratio Lower Upper

43 100

58 29.3 21.0 31.6



#16

1,3-Butadiene

Concen: 2.314 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.00 min

Lab File: VL039525.D

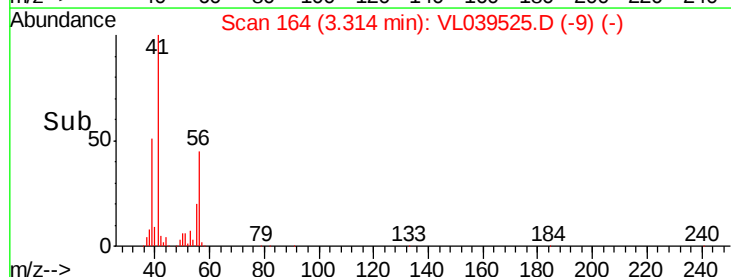
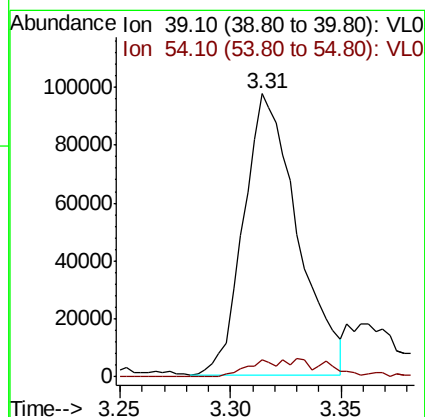
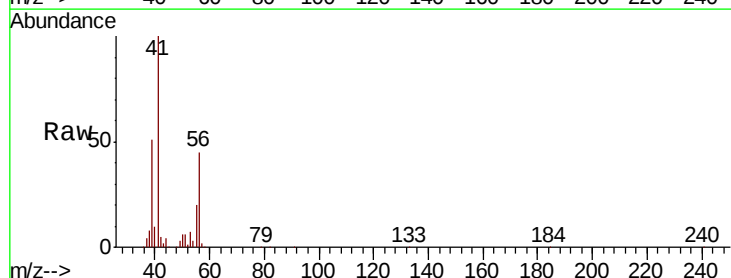
Acq: 25 Jul 2022 20:45

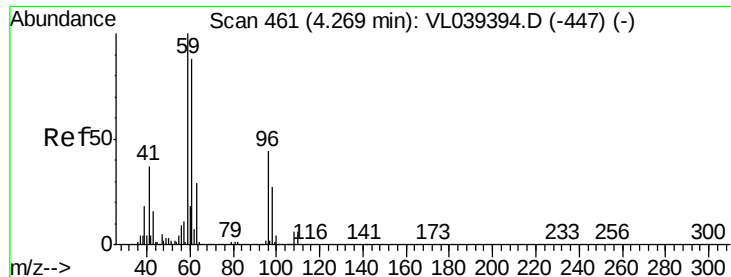
Tgt Ion: 39 Resp: 164392

Ion Ratio Lower Upper

39 100

54 9.3 63.7 95.5#





#17

tert-Butyl alcohol

Concen: 0.678 ppbv

RT: 4.29 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

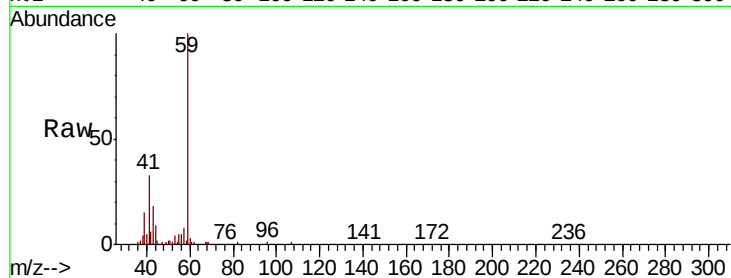
Acq: 25 Jul 2022 20:45 SV1

Tot Ion: 59 Resp: 78782

Ion Ratio Lower Upper

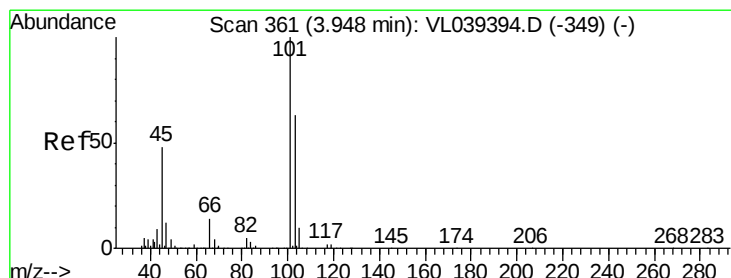
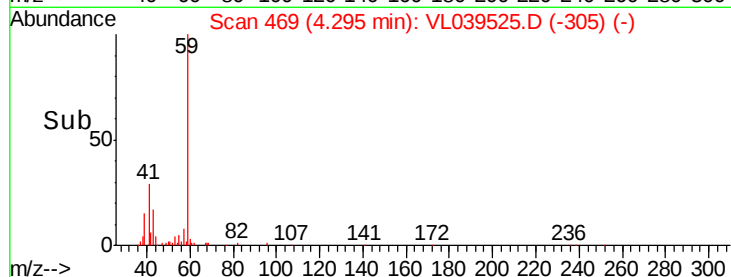
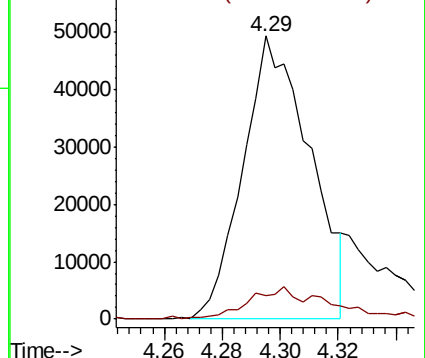
59 100

57 14.5 8.7 13.1#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 1.687 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.02 min

Lab File: VL039525.D

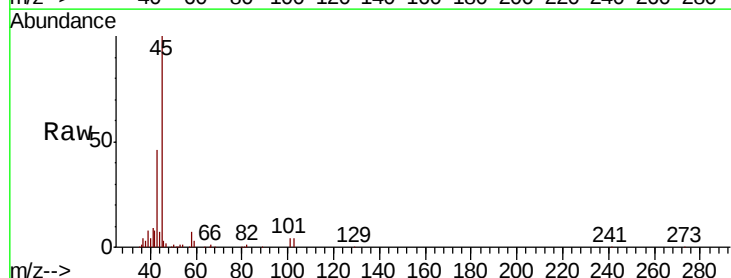
Acq: 25 Jul 2022 20:45

Tgt Ion: 45 Resp: 123179

Ion Ratio Lower Upper

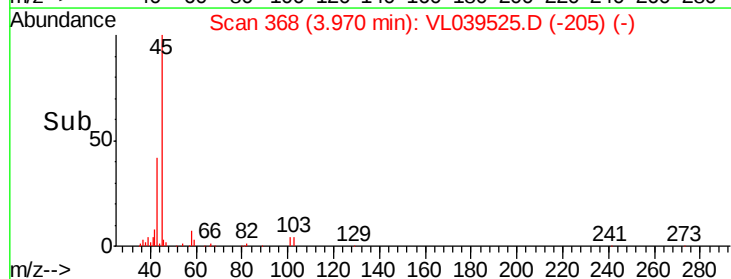
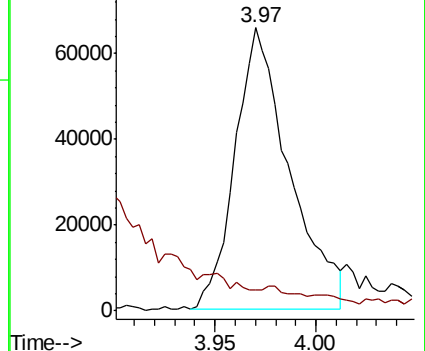
45 100

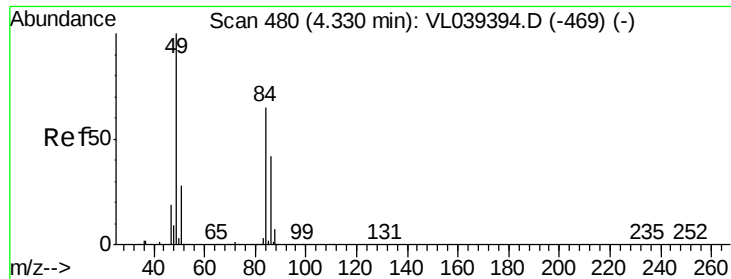
58 0.0 3.2 4.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

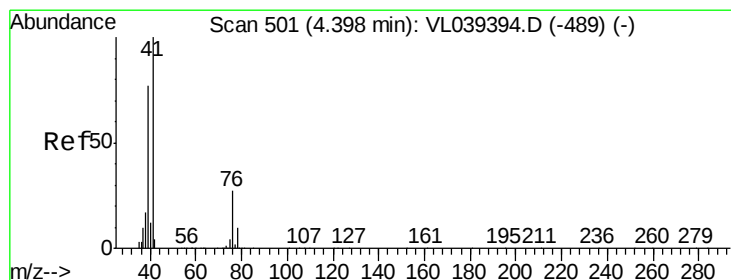
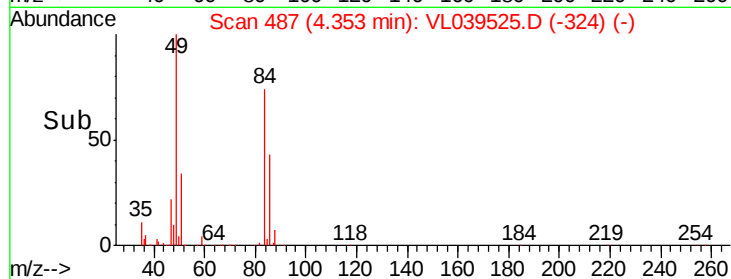
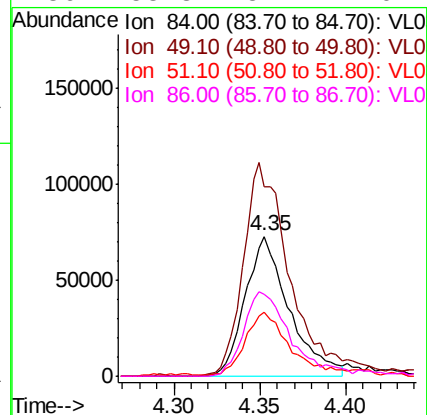
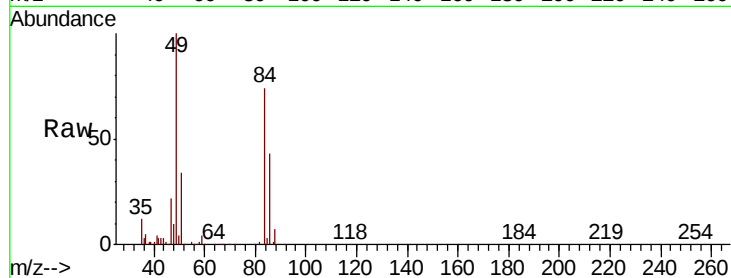
Ion 58.10 (57.80 to 58.80): VL0





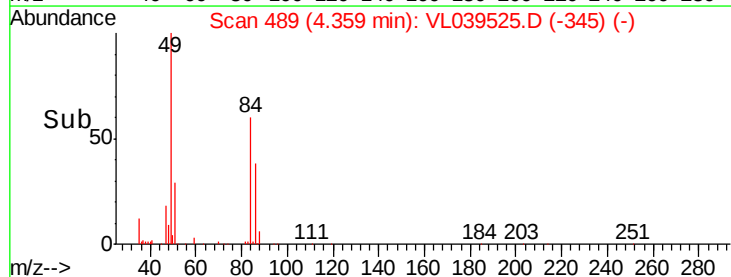
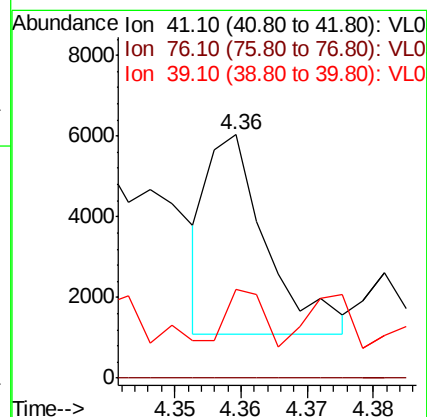
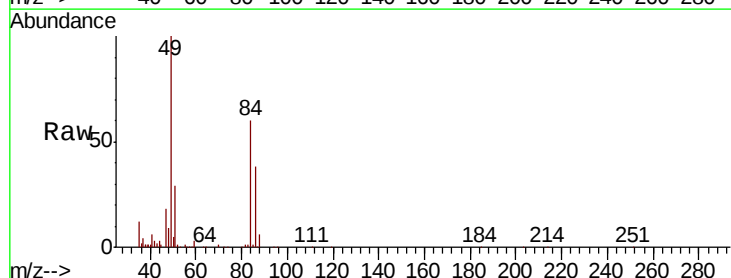
#20
Methylene Chloride
Concen: 2.364 ppbv
RT: 4.35
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV1
Acq: 25 Jul 2022 20:45

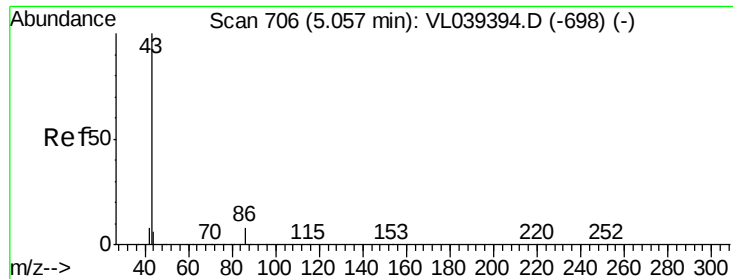
Tot Ion:	84	Resp:	129020
Ion	Ratio	Lower	Upper
84	100		
49	135.5	123.1	184.7
51	44.9	34.4	51.6
86	58.3	51.1	76.7



#21
Allyl Chloride
Concen: 0.032 ppbv
RT: 4.36 min Scan# 489
Delta R.T. -0.04 min
Lab File: VL039525.D
Acq: 25 Jul 2022 20:45

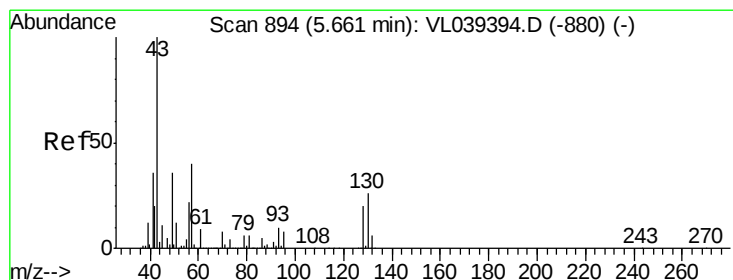
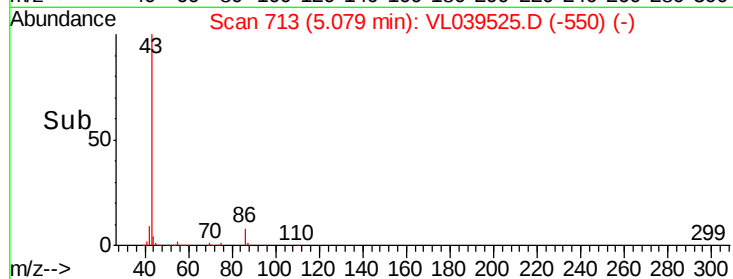
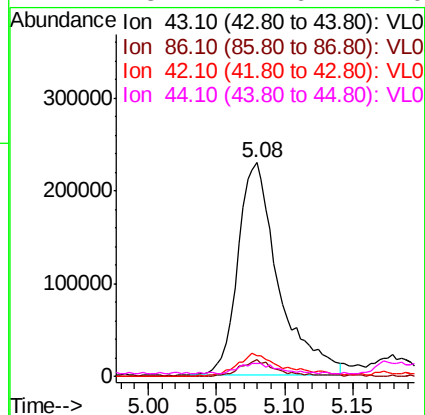
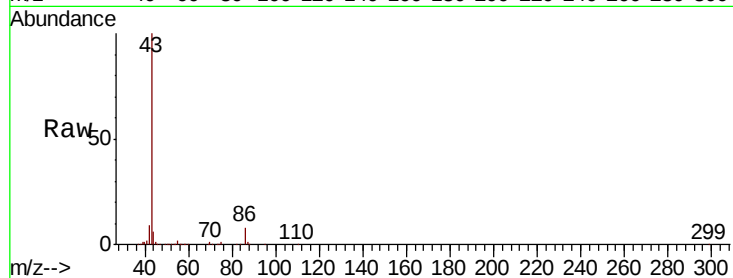
Tgt Ion:	41	Resp:	3019
Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.4	36.6#
39	0.0	63.5	95.3#





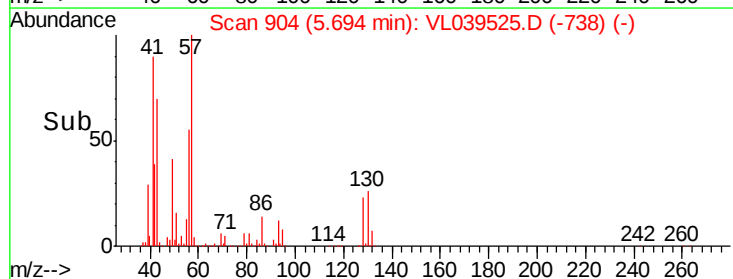
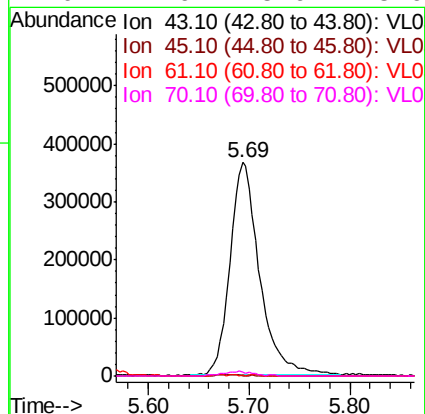
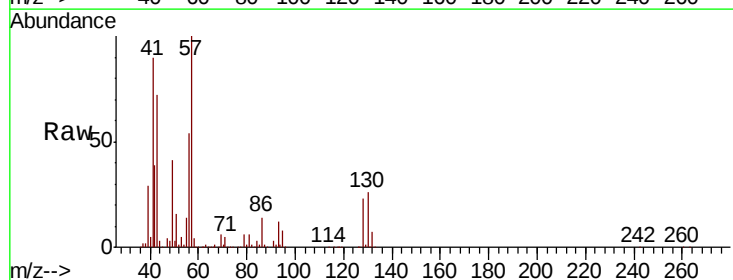
#23
 Vinyl Acetate
 Concen: 5.177 ppbv
 RT: 5.08
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV1
 Acq: 25 Jul 2022 20:45

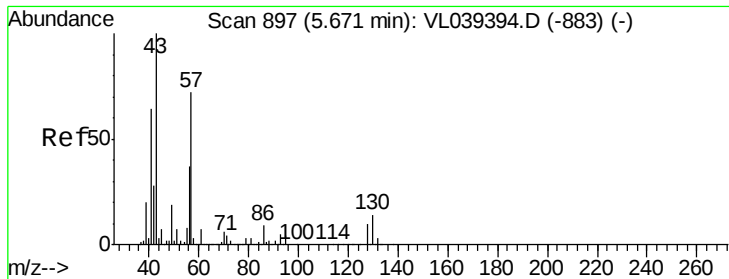
Tot Ion:	43	Resp:	473743
Ion	Ratio	Lower	Upper
43	100		
86	7.6	5.0	7.6#
42	9.4	7.7	11.5
44	5.1	4.6	7.0



#25
 Ethyl Acetate
 Concen: 2.677 ppbv
 RT: 5.69 min Scan# 904
 Delta R.T. 0.03 min
 Lab File: VL039525.D
 Acq: 25 Jul 2022 20:45

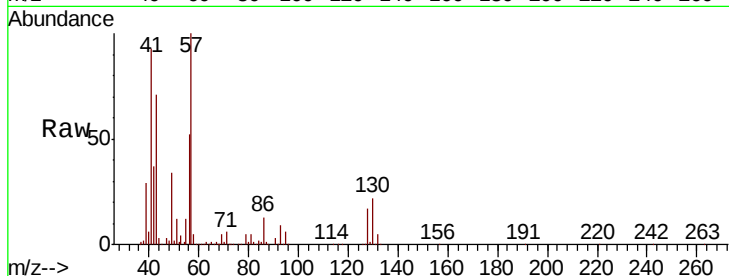
Tgt Ion:	43	Resp:	751639
Ion	Ratio	Lower	Upper
43	100		
45	0.8	8.2	12.4#
61	0.7	8.3	12.5#
70	2.6	5.9	8.9#



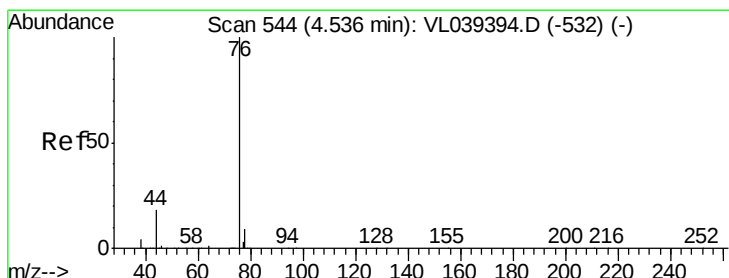
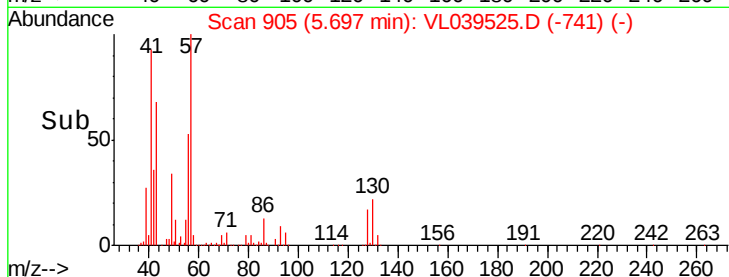
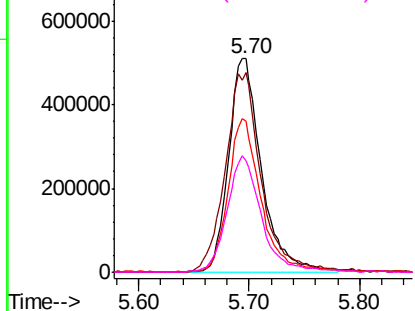


#26
Hexane
Concen: 9.312 ppbv
RT: 5.70
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV1
Acq: 25 Jul 2022 20:45

Tot Ion: 57 Resp: 1053847
Ion Ratio Lower Upper
57 100
41 103.0 76.9 115.3
43 72.3 191.0 286.6#
56 57.1 43.2 64.8

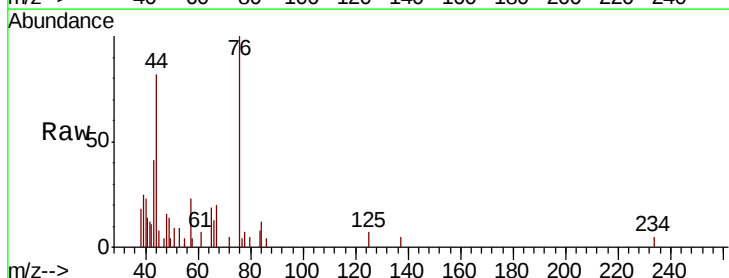


Abundance Ion 57.10 (56.80 to 57.80): VL0
800000
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

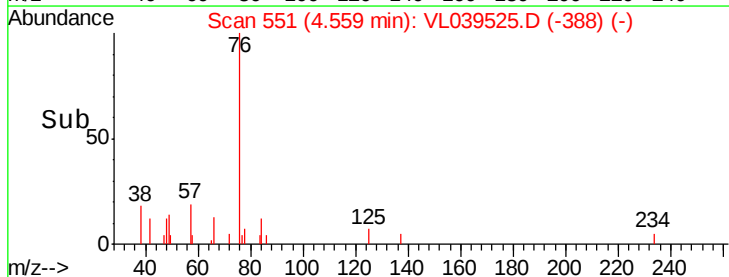
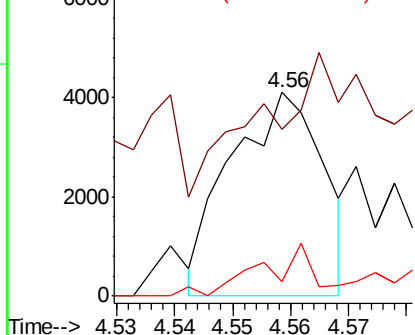


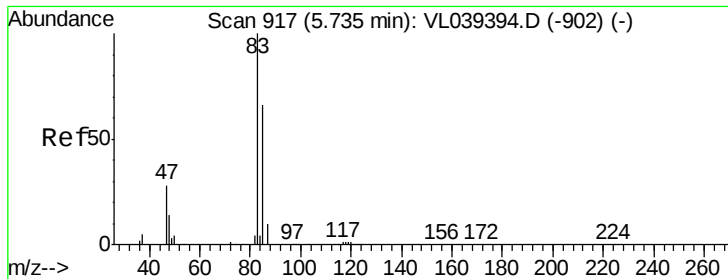
#27
Carbon Disulfide
Concen: 0.033 ppbv
RT: 4.56 min Scan# 551
Delta R.T. 0.02 min
Lab File: VL039525.D
Acq: 25 Jul 2022 20:45

Tgt Ion: 76 Resp: 4542
Ion Ratio Lower Upper
76 100
44 177.0 14.6 21.8#
78 28.7 7.8 11.6#



Abundance Ion 76.00 (75.70 to 76.70): VL0
6000
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0





#29

Chloroform

Concen: 0.508 ppbv

RT: 5.76 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

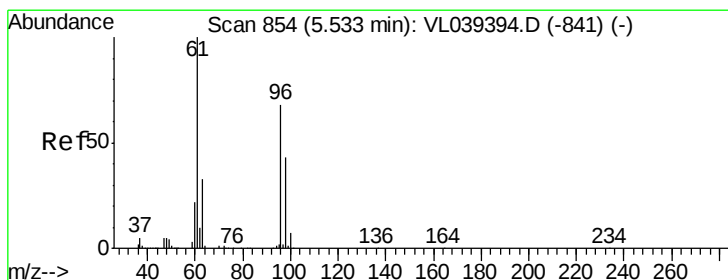
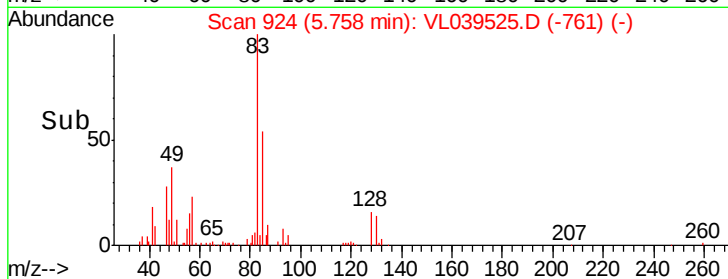
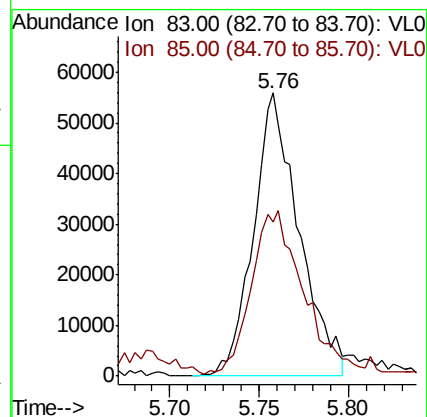
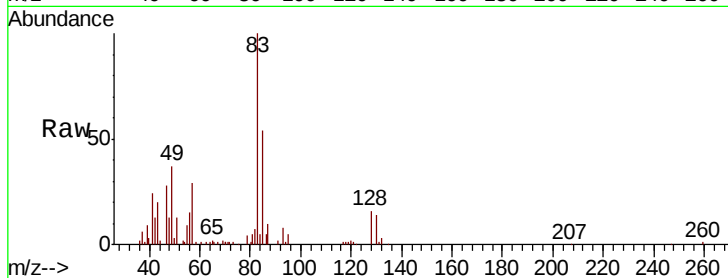
Acq: 25 Jul 2022 20:45 SV1

Tot Ion: 83 Resp: 99917

Ion Ratio Lower Upper

83 100

85 51.2 52.8 79.2#



#31

cis-1,2-Dichloroethene

Concen: 0.258 ppbv

RT: 5.56 min Scan# 862

Delta R.T. 0.03 min

Lab File: VL039525.D

Acq: 25 Jul 2022 20:45

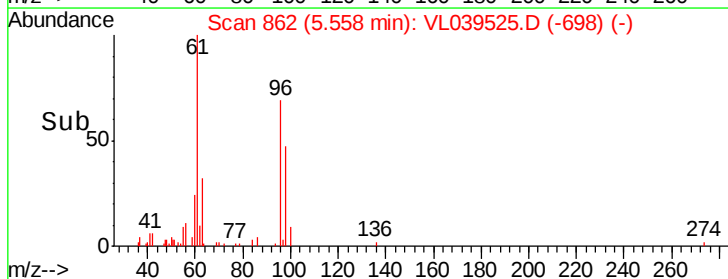
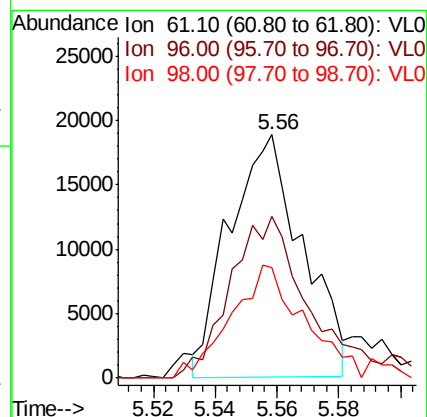
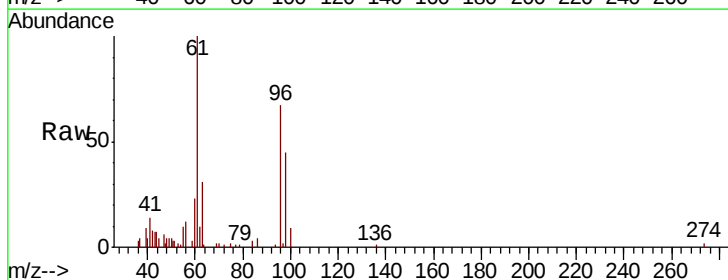
Tgt Ion: 61 Resp: 30929

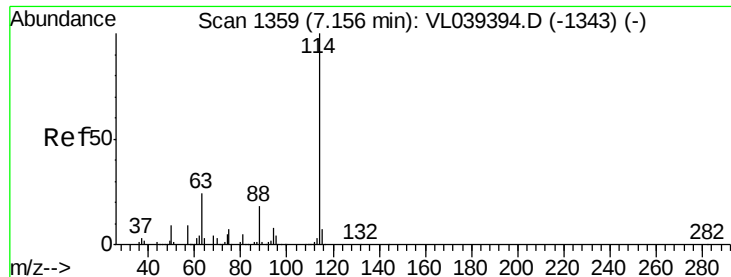
Ion Ratio Lower Upper

61 100

96 64.1 54.1 81.1

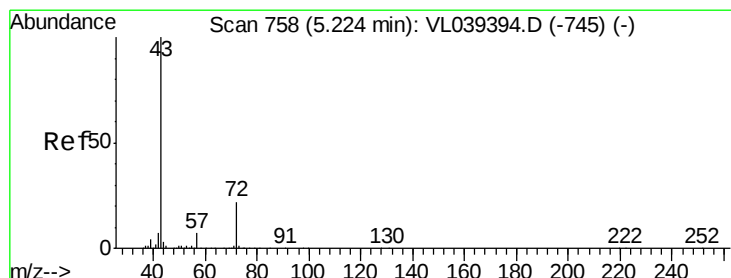
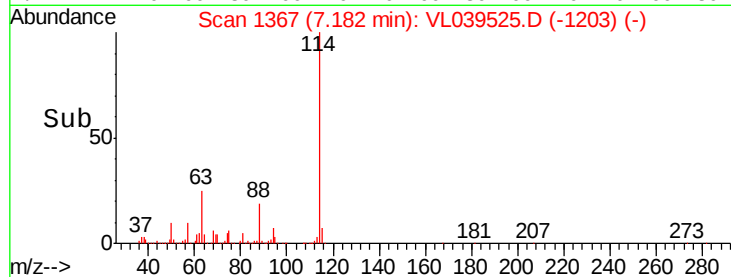
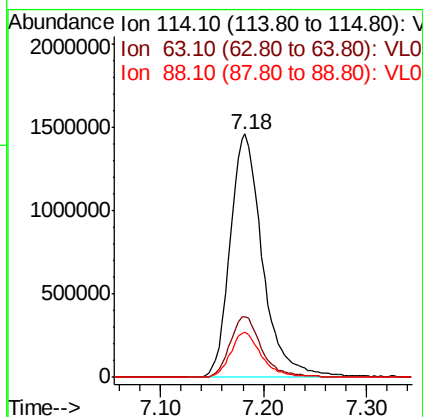
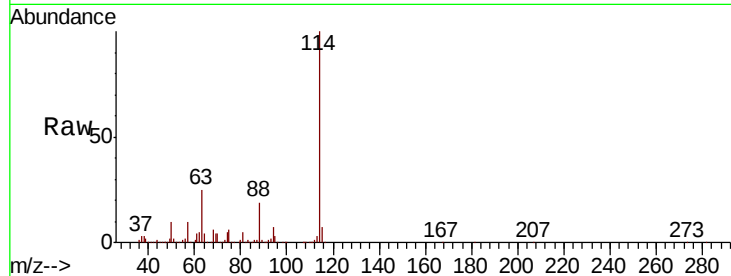
98 46.1 34.6 52.0





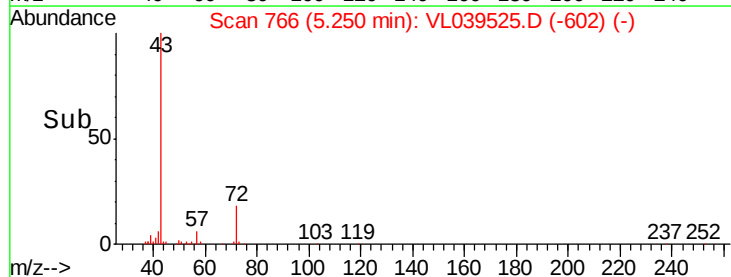
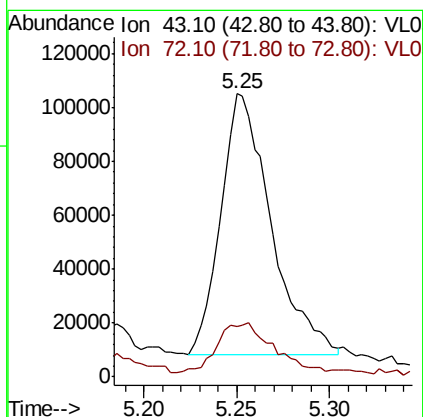
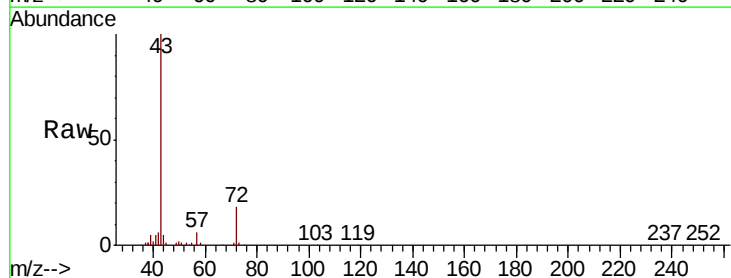
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 SV1
 Acq: 25 Jul 2022 20:45

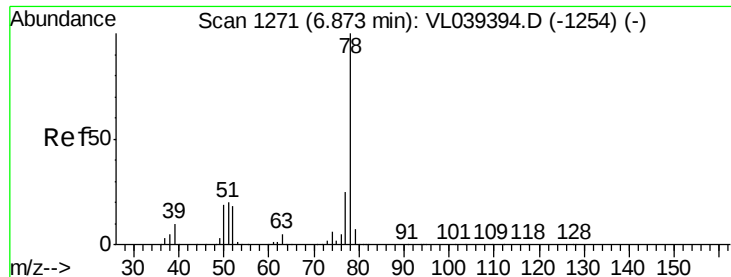
Tot Ion:114 Resp: 3186184
 Ion Ratio Lower Upper
 114 100
 63 24.9 20.2 30.4
 88 18.3 14.5 21.7



#34
 2-Butanone
 Concen: 1.144 ppbv
 RT: 5.25 min Scan# 766
 Delta R.T.: 0.03 min
 Lab File: VL039525.D
 Acq: 25 Jul 2022 20:45

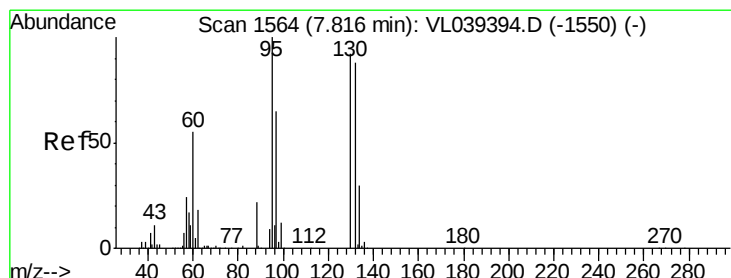
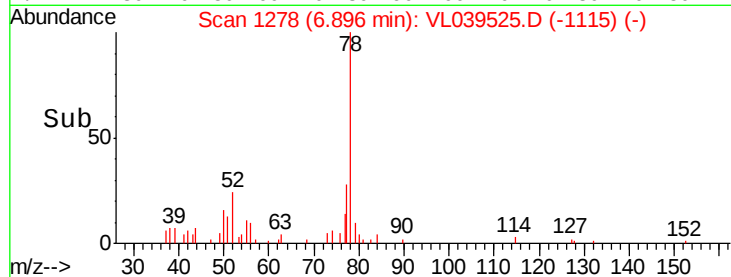
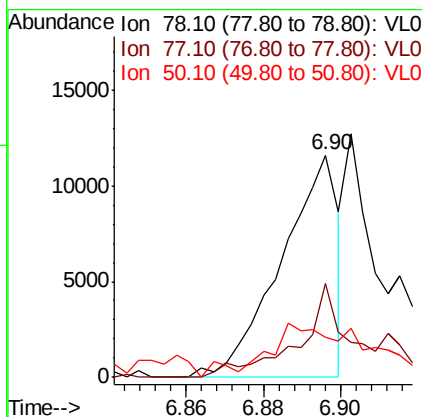
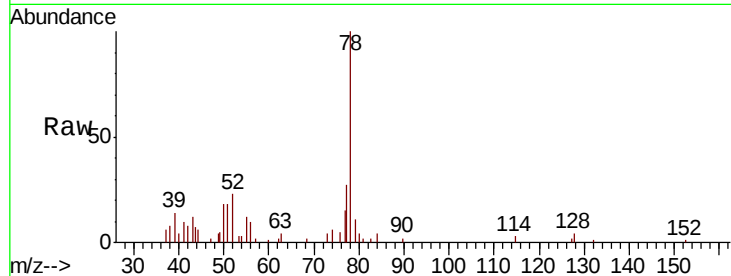
Tgt Ion: 43 Resp: 183541
 Ion Ratio Lower Upper
 43 100
 72 29.2 17.9 26.9#





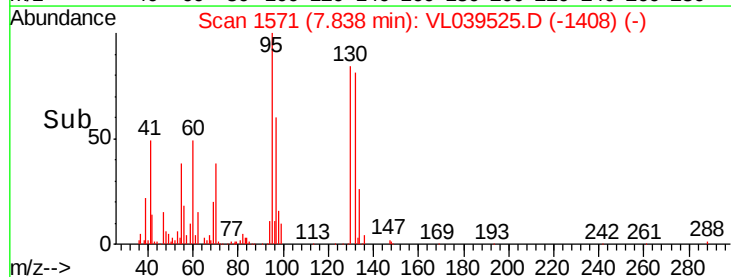
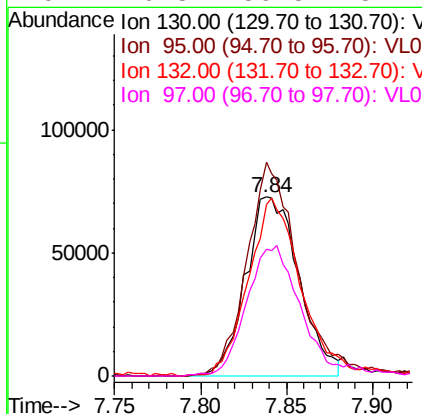
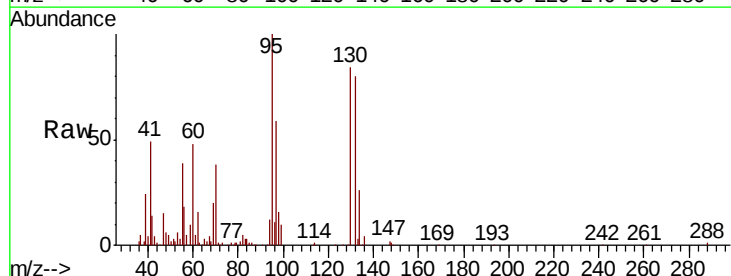
#36
Benzene
Concen: 0.048 ppbv
RT: 6.90
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV1
Acq: 25 Jul 2022 20:45

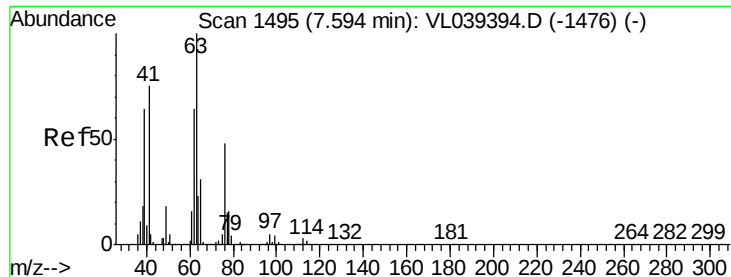
Tot Ion: 78 Resp: 11825
Ion Ratio Lower Upper
78 100
77 42.2 20.3 30.5#
50 28.6 15.5 23.3#



#38
Trichloroethene
Concen: 1.173 ppbv
RT: 7.84 min Scan# 1571
Delta R.T. 0.02 min
Lab File: VL039525.D
Acq: 25 Jul 2022 20:45

Tgt Ion:130 Resp: 156457
Ion Ratio Lower Upper
130 100
95 120.3 87.3 130.9
132 96.3 76.7 115.1
97 70.8 56.5 84.7





#39

1,2-Dichloropropane

Concen: 8.408 ppbv

RT: 7.18 Instrument: MSVOA_1

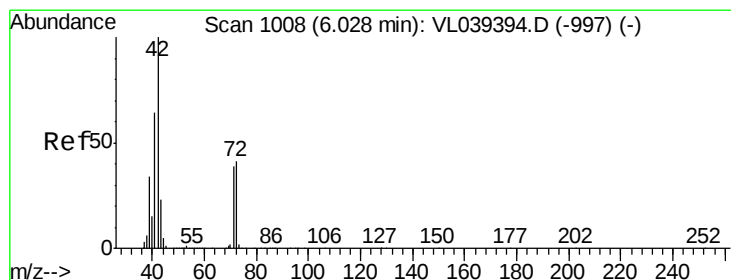
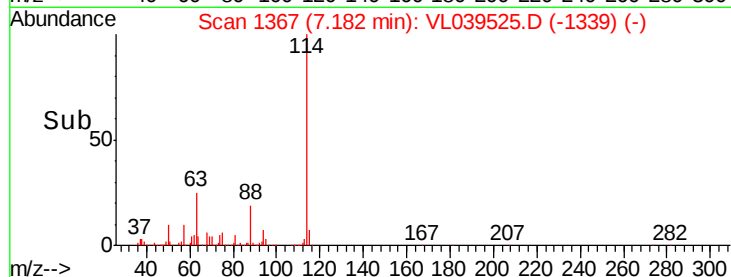
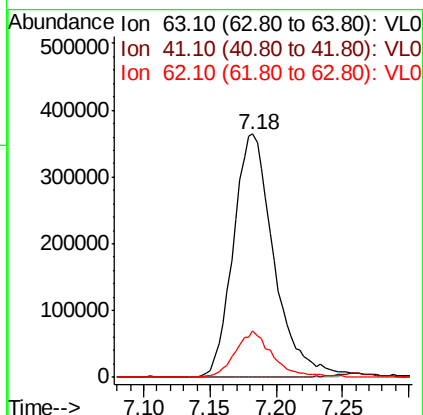
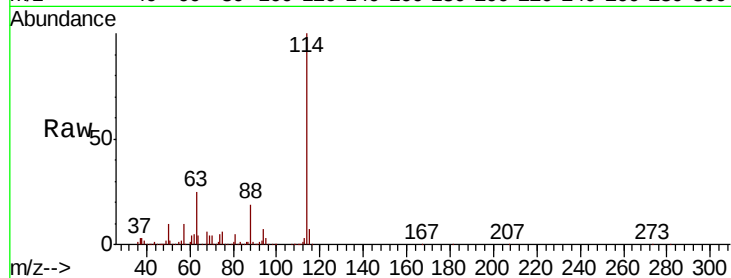
Delta R.T.

Lab File: ClientSampleId:

Acq: 25 Jul 2022 20:45 SV1

Tot Ion: 63 Resp: 774545

Ion	Ratio	Lower	Upper
63	100		
41	0.0	59.6	89.4#
62	18.8	51.4	77.0#



#41

Tetrahydrofuran

Concen: 0.056 ppbv

RT: 6.06 min Scan# 1019

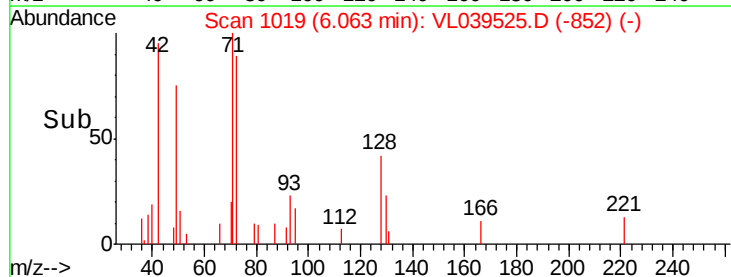
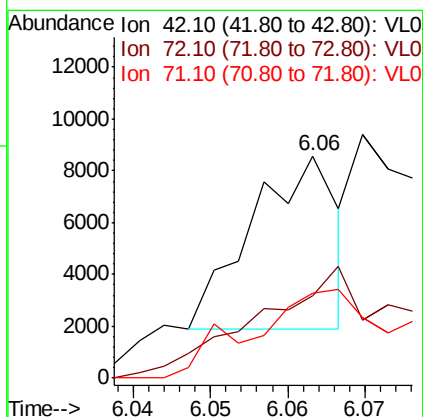
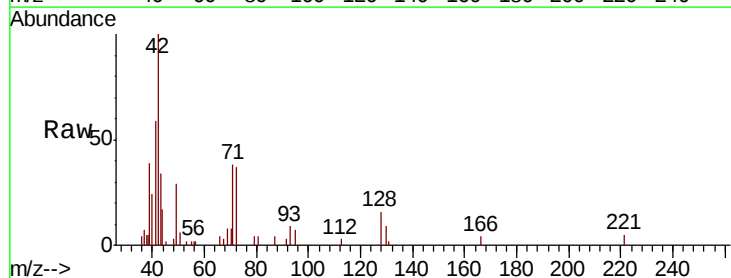
Delta R.T. 0.04 min

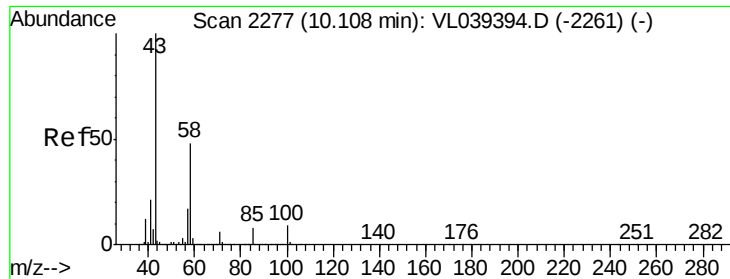
Lab File: VL039525.D

Acq: 25 Jul 2022 20:45

Tgt Ion: 42 Resp: 5175

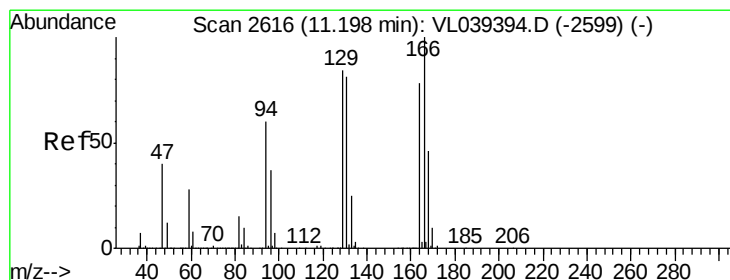
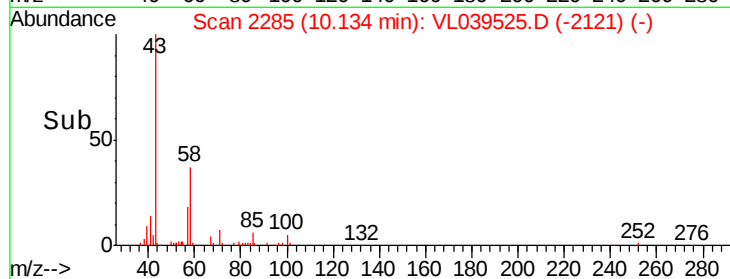
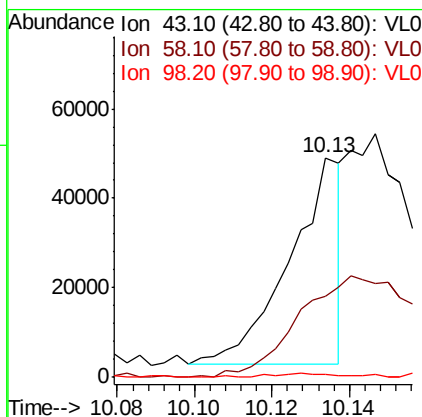
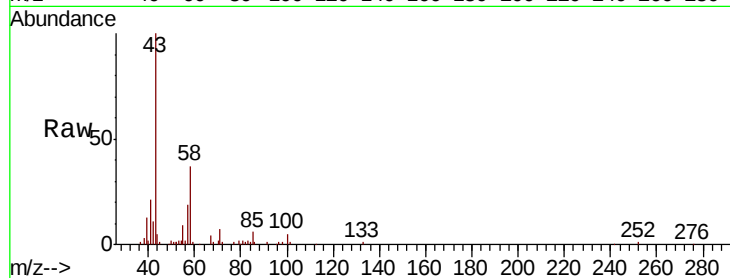
Ion	Ratio	Lower	Upper
42	100		
72	152.6	31.8	47.8#
71	146.7	31.8	47.8#





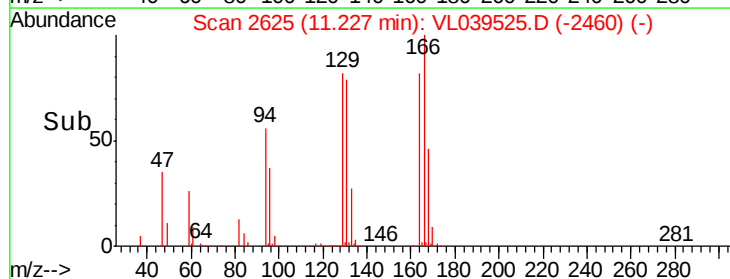
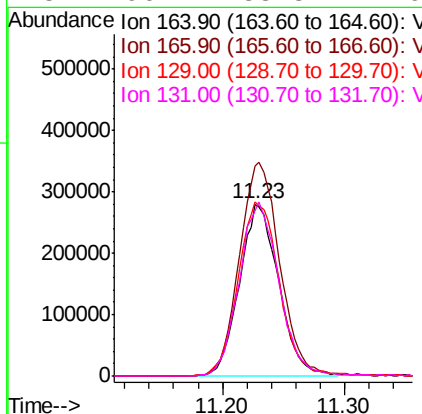
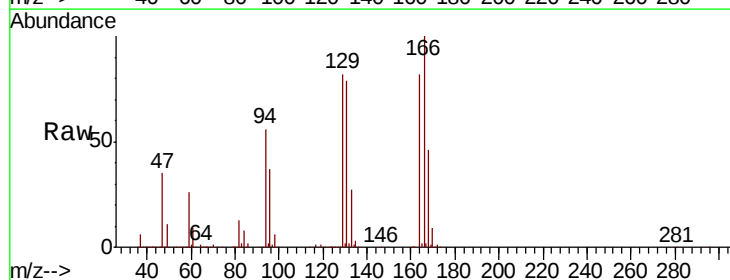
#51
 2-Hexanone
 Concen: 0.234 ppbv
 RT: 10.13 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV1
 Acq: 25 Jul 2022 20:45

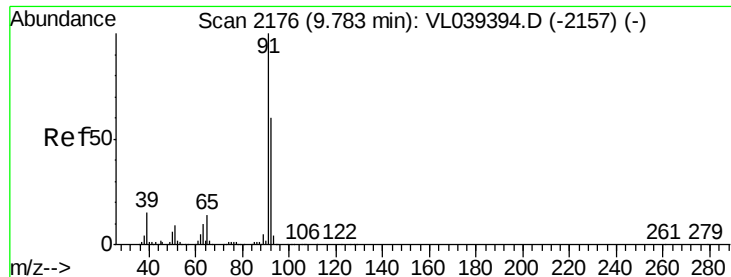
Tot Ion:	43	Resp:	42991
Ion	Ratio	Lower	Upper
43	100		
58	136.1	38.4	57.6#
98	3.1	0.3	0.5#



#52
 Tetrachloroethene
 Concen: 6.247 ppbv
 RT: 11.23 min Scan# 2625
 Delta R.T. 0.03 min
 Lab File: VL039525.D
 Acq: 25 Jul 2022 20:45

Tgt Ion:	164	Resp:	620129
Ion	Ratio	Lower	Upper
164	100		
166	122.3	102.2	153.2
129	100.8	85.8	128.8
131	96.1	83.3	124.9





#53

Toluene

Concen: 0.129 ppbv

RT: 9.81 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

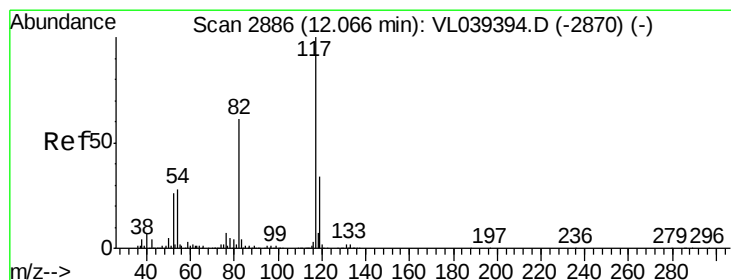
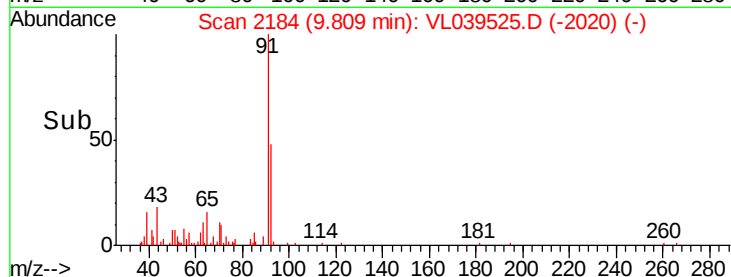
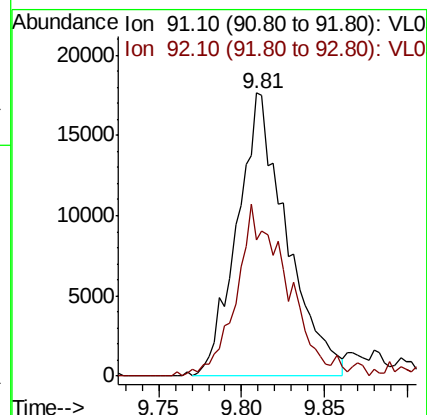
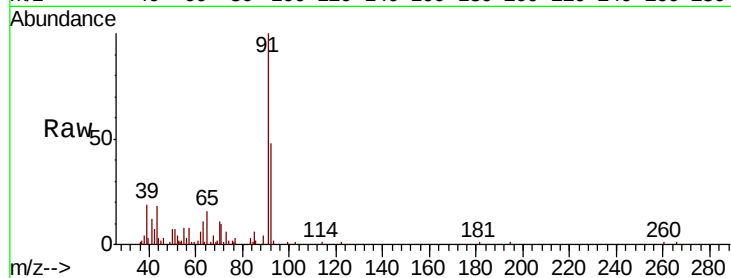
Acq: 25 Jul 2022 20:45 SV1

Tot Ion: 91 Resp: 36589

Ion Ratio Lower Upper

91 100

92 63.0 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. 0.03 min

Lab File: VL039525.D

Acq: 25 Jul 2022 20:45

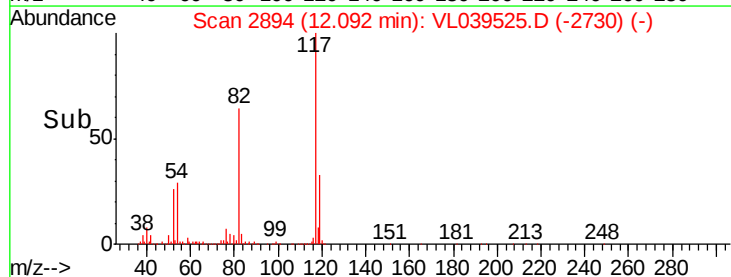
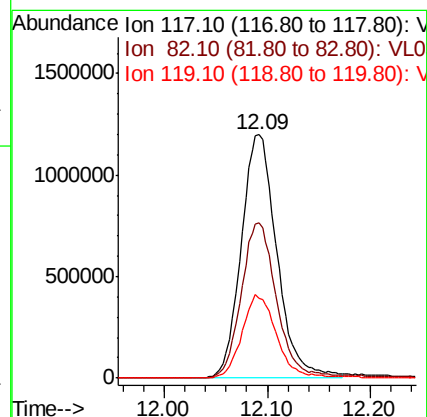
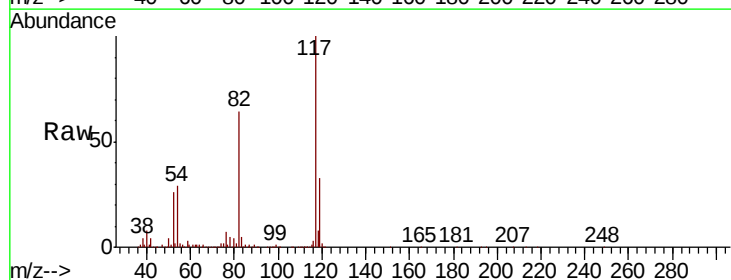
Tgt Ion: 117 Resp: 2890168

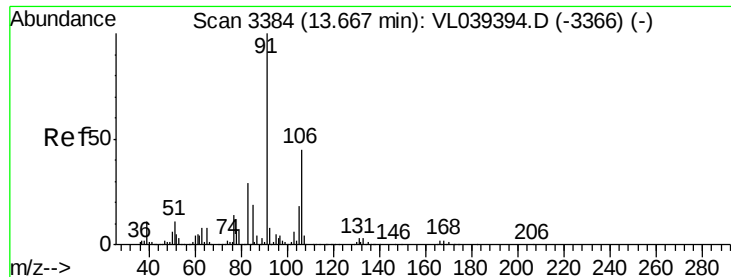
Ion Ratio Lower Upper

117 100

82 64.4 50.8 76.2

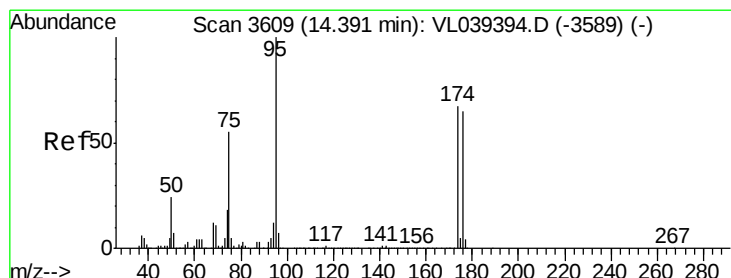
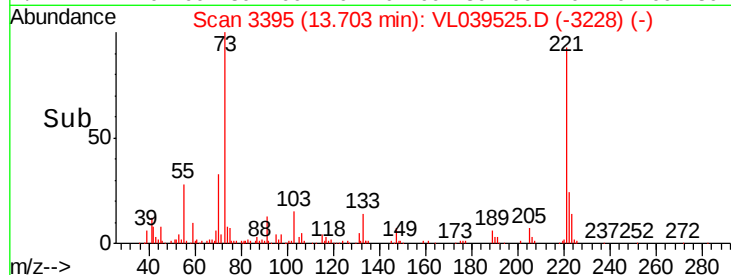
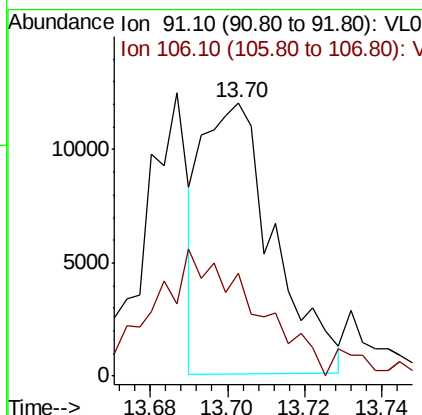
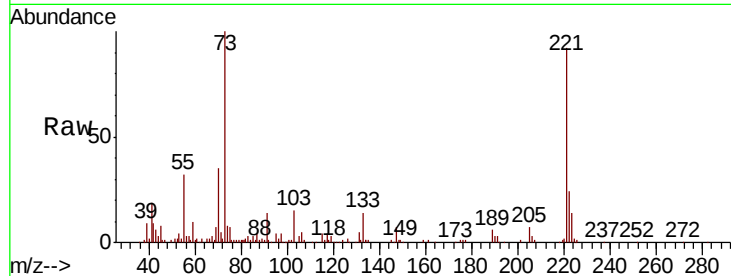
119 33.7 24.1 36.1





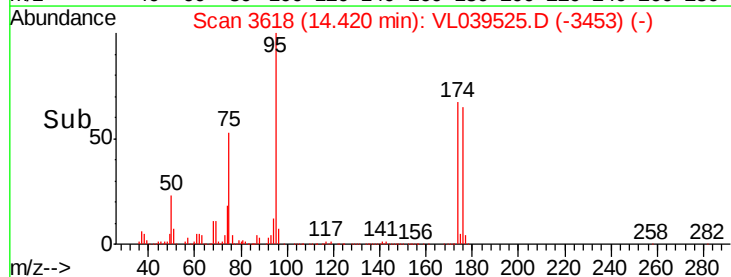
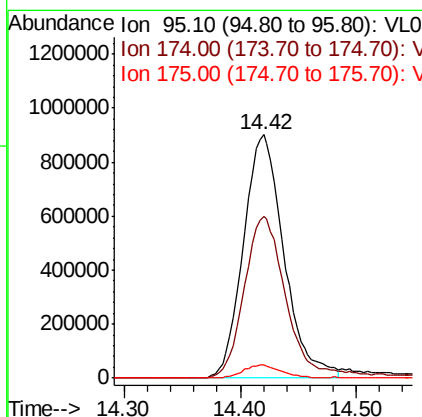
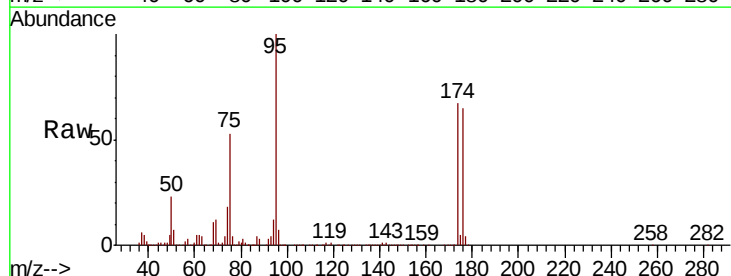
#60
o-Xylene
Concen: 0.049 ppbv
RT: 13.70
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV1
Acq: 25 Jul 2022 20:45

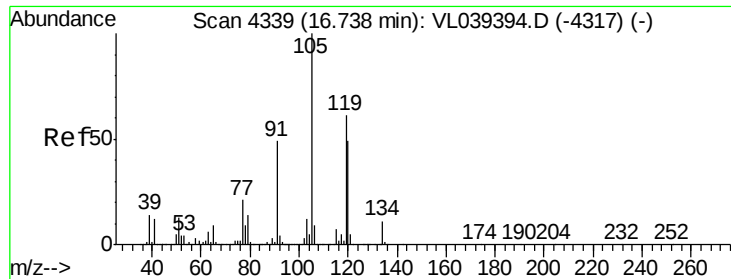
Tot Ion: 91 Resp: 15336
Ion Ratio Lower Upper
91 100
106 0.0 22.4 67.3#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.234 ppbv
RT: 14.42 min Scan# 3618
Delta R.T. 0.03 min
Lab File: VL039525.D
Acq: 25 Jul 2022 20:45

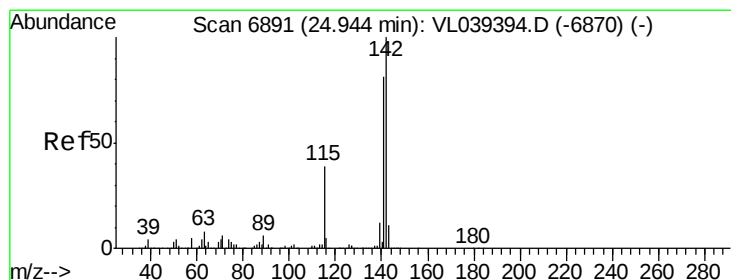
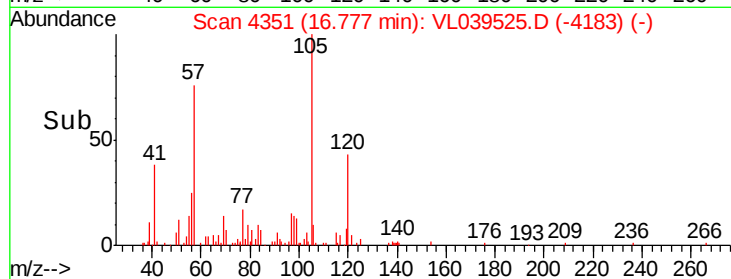
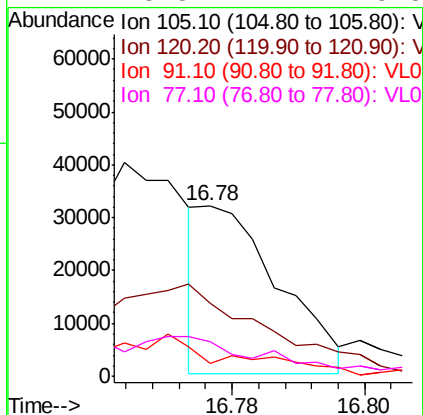
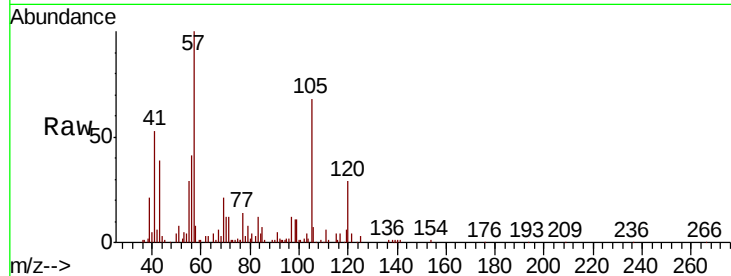
Tgt Ion: 95 Resp: 2194173
Ion Ratio Lower Upper
95 100
174 71.4 55.9 83.9
175 5.4 4.2 6.4





#74
 1,2,4-Trimethylbenzene
 Concen: 0.070 ppbv
 RT: 16.78 min
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId : SV1
 Acq: 25 Jul 2022 20:45

Tot Ion:	105	Resp:	25907
Ion Ratio	Lower	Upper	
105	100		
120	34.9	39.5	59.3#
91	3.1	39.2	58.8#
77	18.8	17.2	25.8



#80
 Naphthalene, 2-methyl-
 Concen: 0.042 ppbv
 RT: 24.99 min Scan# 6905
 Delta R.T. 0.05 min
 Lab File: VL039525.D
 Acq: 25 Jul 2022 20:45

Tgt Ion:	142	Resp:	3682
Ion Ratio	Lower	Upper	
142	100		
141	52.6	68.9	103.3#
115	71.0	30.0	45.0#

