

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072522\
 Data File : VL039526.D
 Acq On : 25 Jul 2022 21:26
 Operator : SY/AP
 Sample : N3842-02DL 20X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

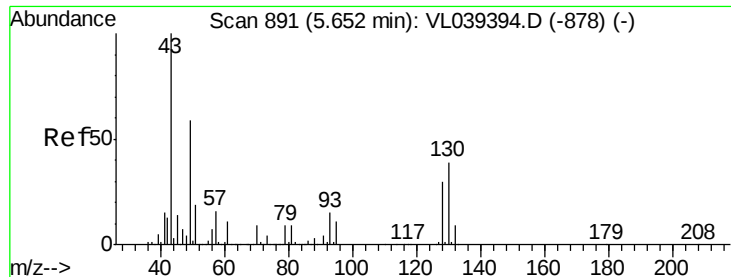
Quant Time: Jul 26 08:06:20 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062922AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul 06 02:15:38 2022
 QLast Update : Wed Jul 06 02:15:38 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1123222	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.18	114	3195227	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.09	117	2789256	10.00	ppbv	0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2066712	9.99	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.98	51	20799	0.146	ppbv #	62
9) Propene	3.03	41	17087	0.266	ppbv	97
13) Ethanol	3.59	45	239	0.064	ppbv #	23
15) Acetone	3.86	43	284297	2.139	ppbv	92
16) 1,3-Butadiene	3.32	39	9110	0.132	ppbv #	49
17) tert-Butyl alcohol	4.31	59	5839	0.052	ppbv #	15
20) Methylene Chloride	4.35	84	71145	1.343	ppbv	96
23) Vinyl Acetate	5.09	43	33972	0.383	ppbv #	96
25) Ethyl Acetate	5.69	43	133980	0.492	ppbv #	76
26) Hexane	5.69	57	192052	1.749	ppbv #	37
31) cis-1,2-Dichloroethene	5.56	61	4050	0.035	ppbv #	78
34) 2-Butanone	5.27	43	13743	0.085	ppbv #	53
38) Trichloroethene	7.84	130	17736	0.133	ppbv #	74
39) 1,2-Dichloropropane	7.18	63	772968	8.367	ppbv #	25
52) Tetrachloroethene	11.23	164	92139	0.926	ppbv	93

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Jul 2022 21:26 SV1DL

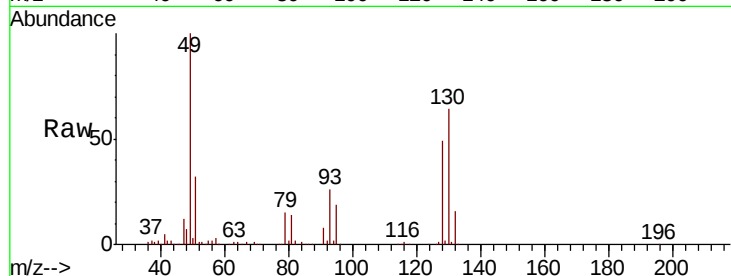
Tot Ion: 49 Resp: 1123222

Ion Ratio Lower Upper

49 100

128 53.8 26.7 80.0

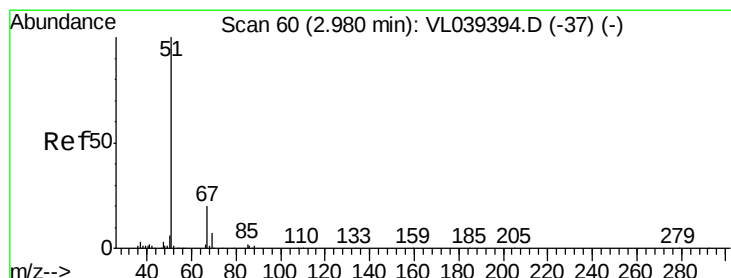
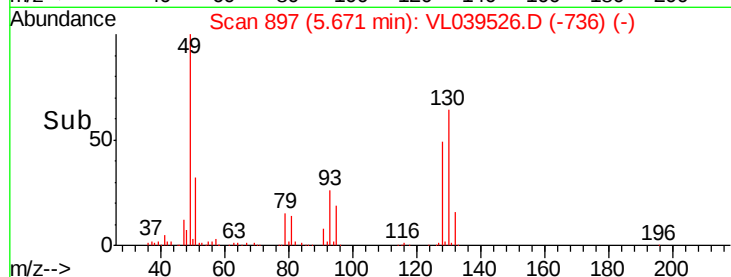
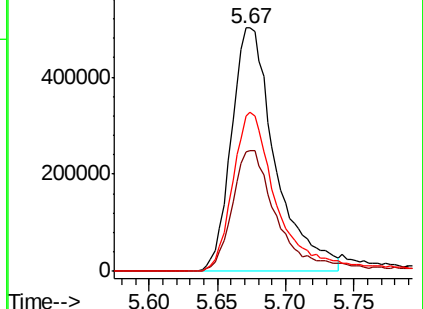
130 68.7 34.3 102.8



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: 0.146 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.00 min

Lab File: VL039526.D

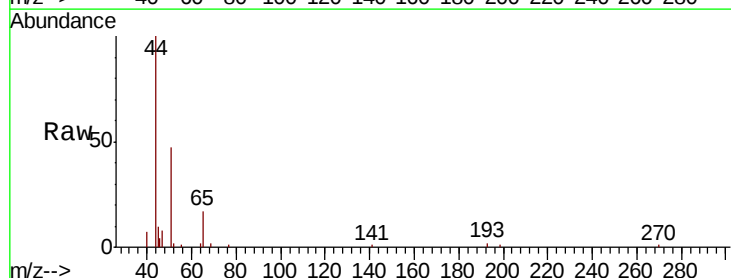
Acq: 25 Jul 2022 21:26

Tgt Ion: 51 Resp: 20799

Ion Ratio Lower Upper

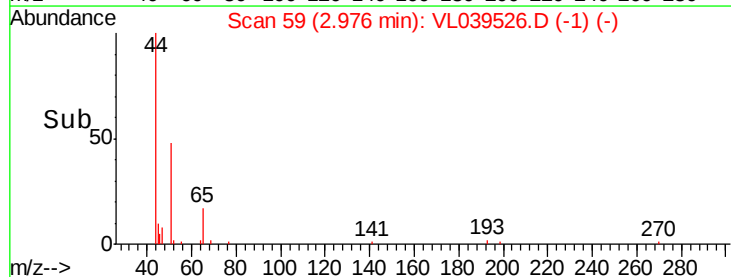
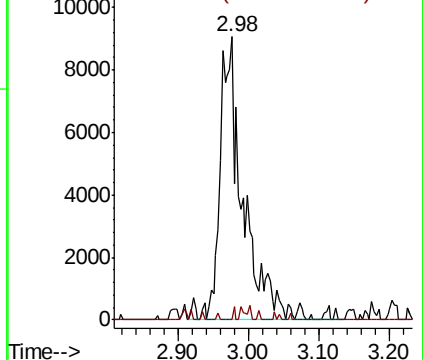
51 100

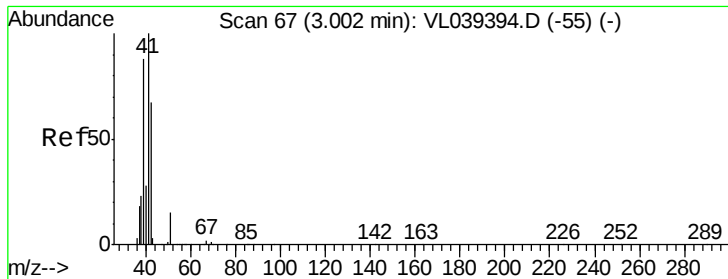
67 2.1 15.7 23.5#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#9

Propene

Concen: 0.266 ppbv

RT: 3.03 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

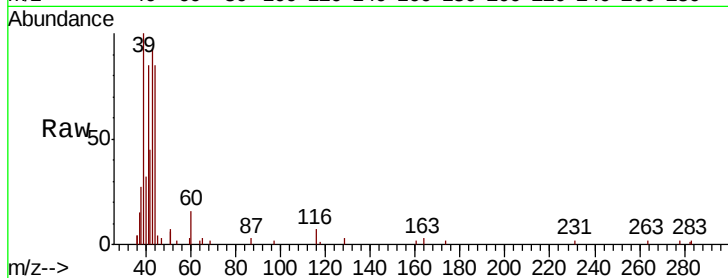
Acq: 25 Jul 2022 21:26 SV1DL

Tot Ion: 41 Resp: 17087

Ion Ratio Lower Upper

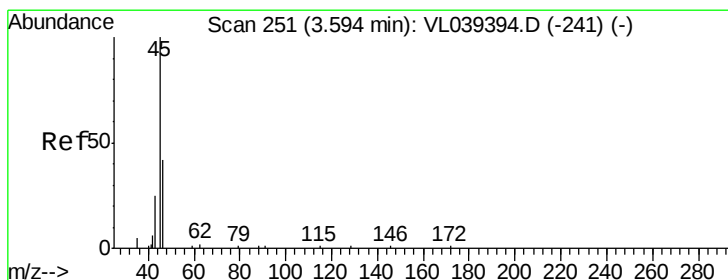
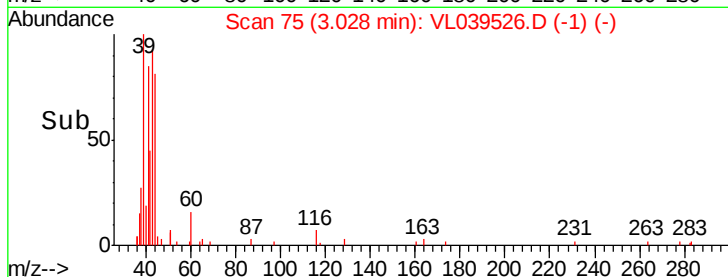
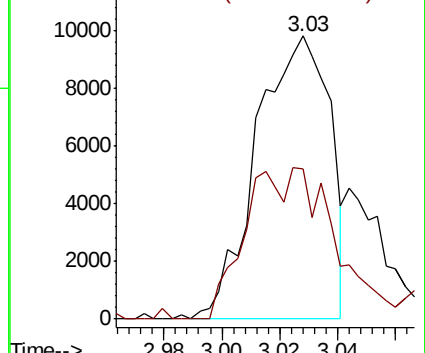
41 100

42 66.8 55.2 82.8



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#13

Ethanol

Concen: 0.064 ppbv

RT: 3.59 min Scan# 250

Delta R.T. -0.00 min

Lab File: VL039526.D

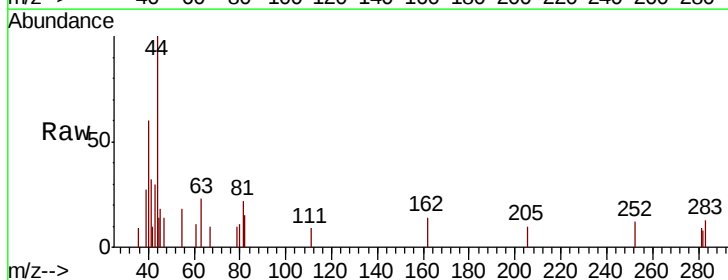
Acq: 25 Jul 2022 21:26

Tgt Ion: 45 Resp: 239

Ion Ratio Lower Upper

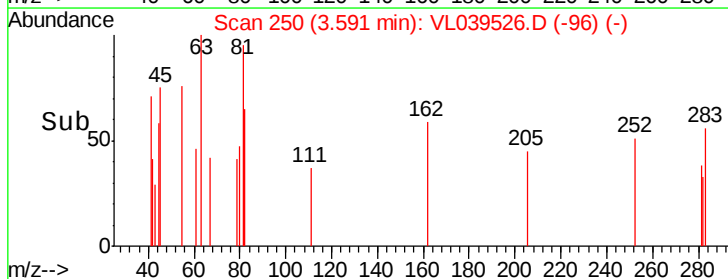
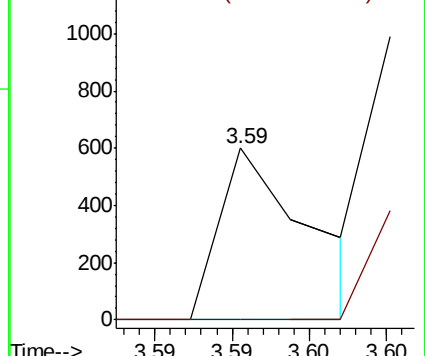
45 100

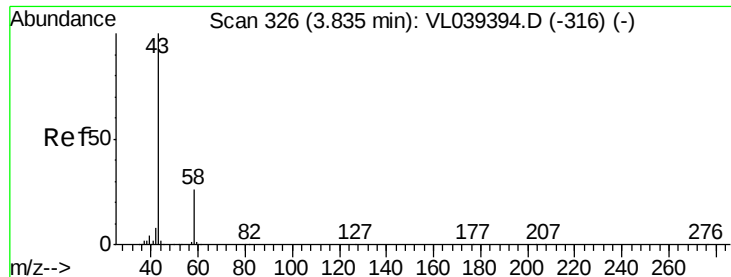
46 0.0 22.8 91.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 2.139 ppbv

RT: 3.86 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

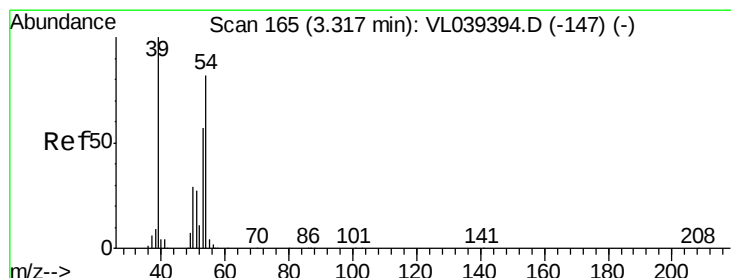
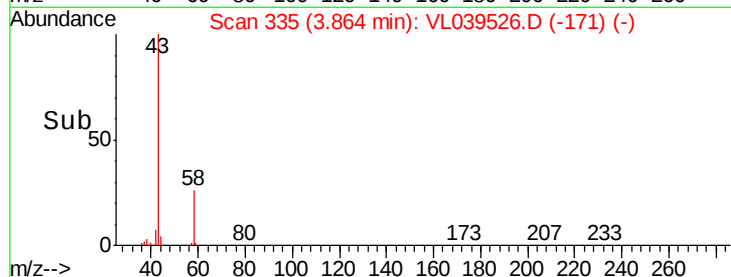
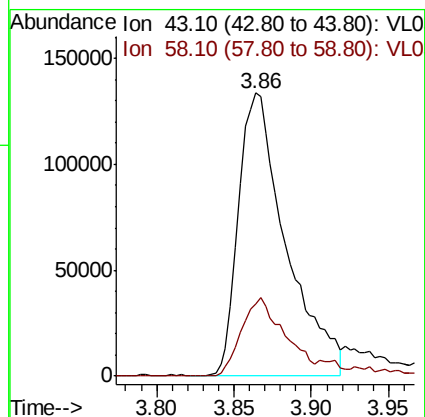
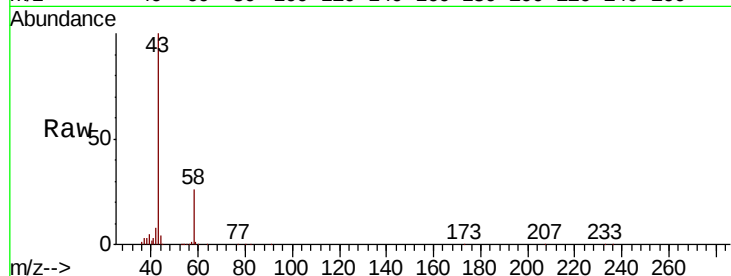
Acq: 25 Jul 2022 21:26 SV1DL

Tot Ion: 43 Resp: 284297

Ion Ratio Lower Upper

43 100

58 30.6 21.0 31.6



#16

1,3-Butadiene

Concen: 0.132 ppbv

RT: 3.32 min Scan# 166

Delta R.T. 0.00 min

Lab File: VL039526.D

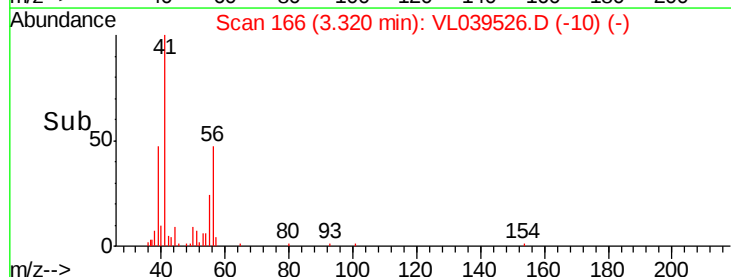
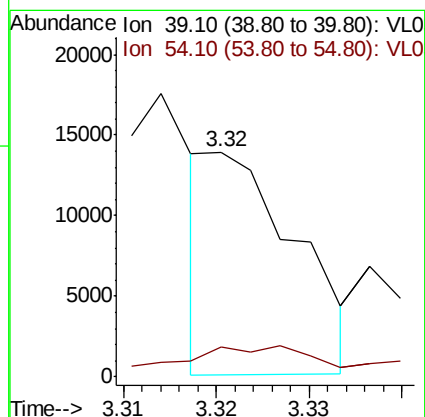
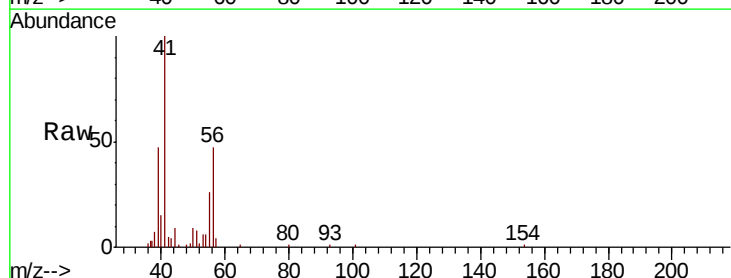
Acq: 25 Jul 2022 21:26

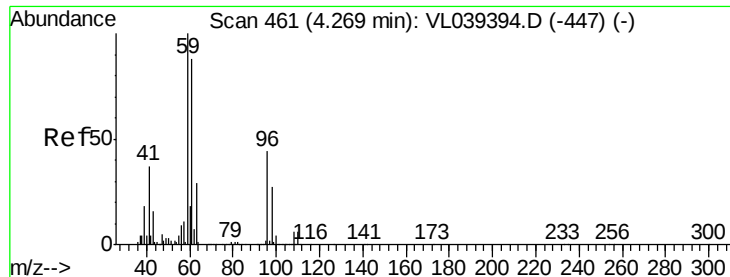
Tgt Ion: 39 Resp: 9110

Ion Ratio Lower Upper

39 100

54 35.1 63.7 95.5#





#17

tert-Butyl alcohol

Concen: 0.052 ppbv

RT: 4.31 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

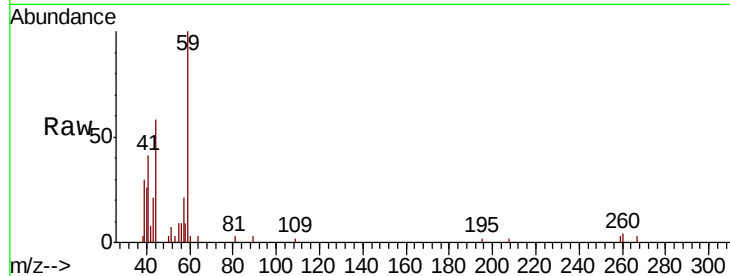
Acq: 25 Jul 2022 21:26

Tot Ion: 59 Resp: 5839

Ion Ratio Lower Upper

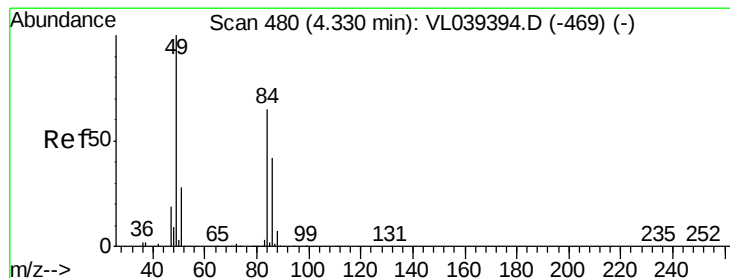
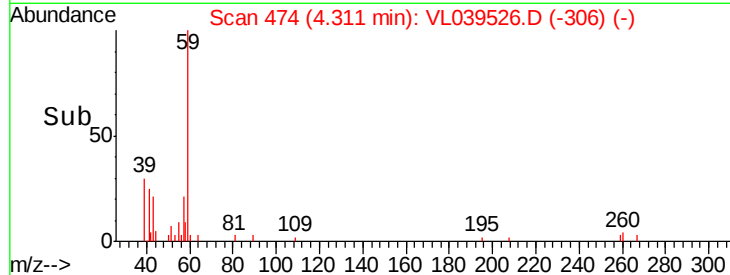
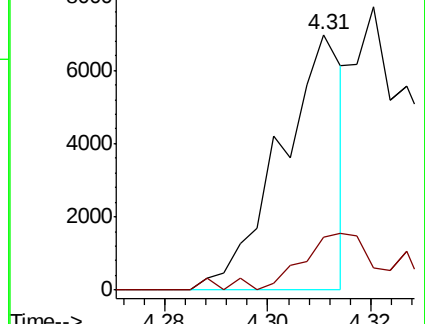
59 100

57 43.0 8.7 13.1#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#20

Methylene Chloride

Concen: 1.343 ppbv

RT: 4.35 min Scan# 487

Delta R.T. 0.02 min

Lab File: VL039526.D

Acq: 25 Jul 2022 21:26

Tgt Ion: 84 Resp: 71145

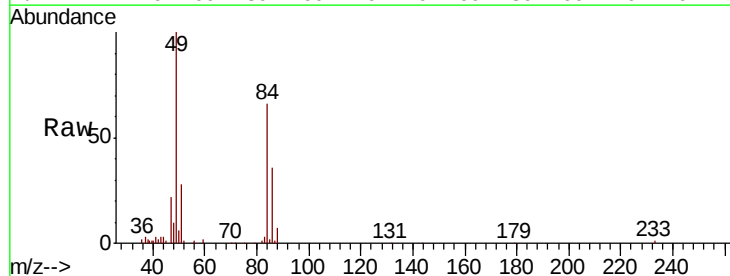
Ion Ratio Lower Upper

84 100

49 152.2 123.1 184.7

51 42.9 34.4 51.6

86 54.3 51.1 76.7

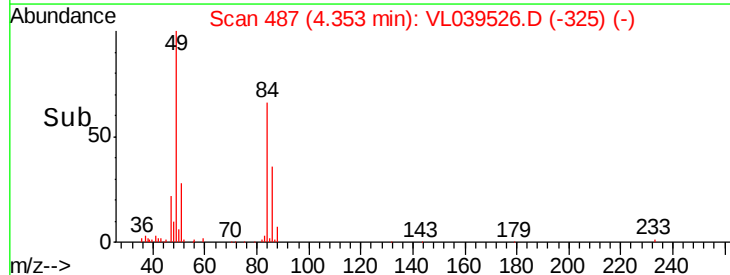
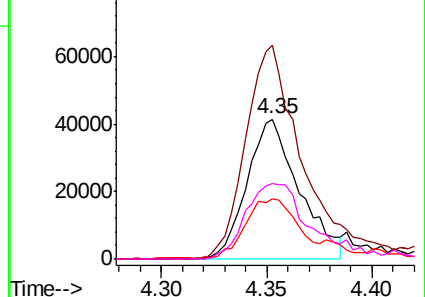


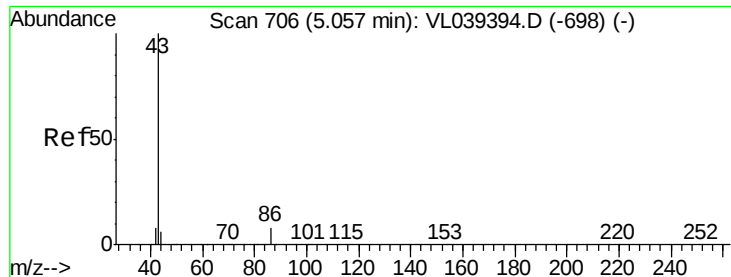
Abundance Ion 84.00 (83.70 to 84.70): VL0

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: 0.383 ppbv

RT: 5.09 Instrument:

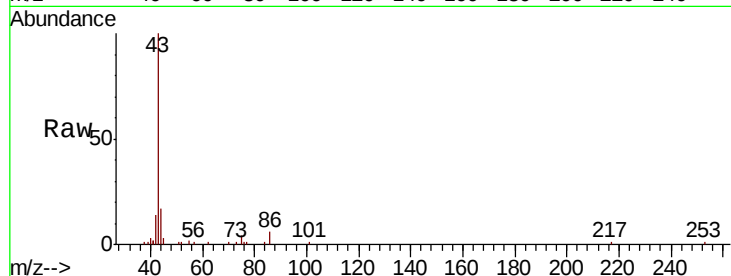
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

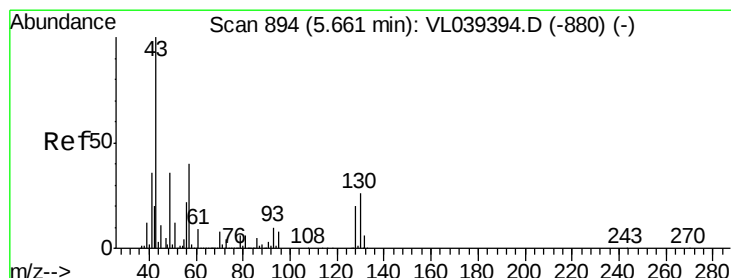
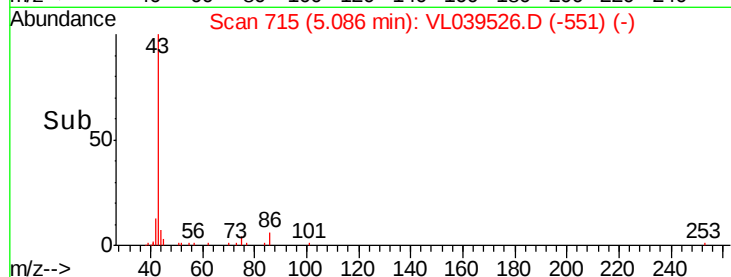
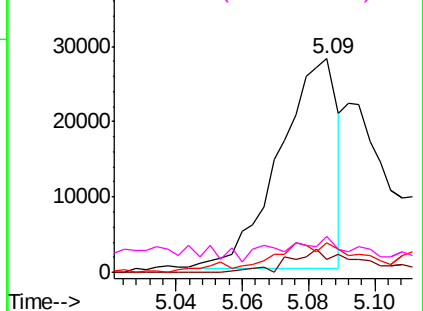
Acq: 25 Jul 2022 21:20 SV1DL

Tot Ion: 43 Resp: 33972

Ion	Ratio	Lower	Upper
43	100		
86	6.1	5.0	7.6
42	12.2	7.7	11.5#
44	6.1	4.6	7.0



Abundance Ion 43.10 (42.80 to 43.80): VL0
 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: 0.492 ppbv

RT: 5.69 min Scan# 904

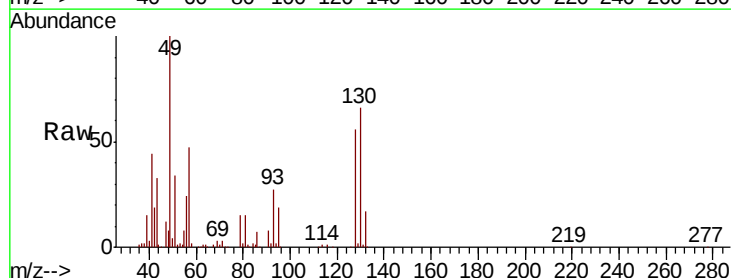
Delta R.T. 0.03 min

Lab File: VL039526.D

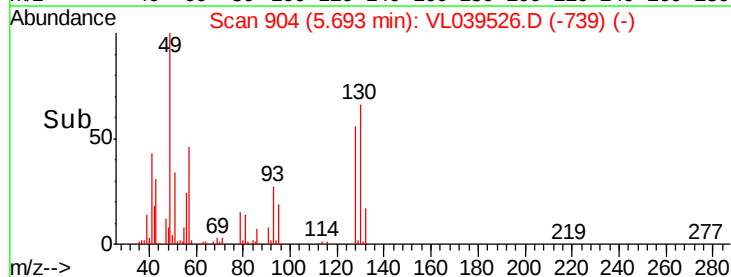
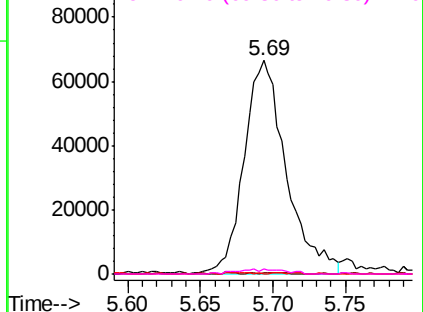
Acq: 25 Jul 2022 21:26

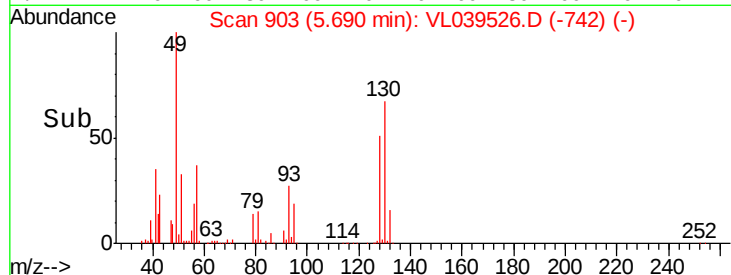
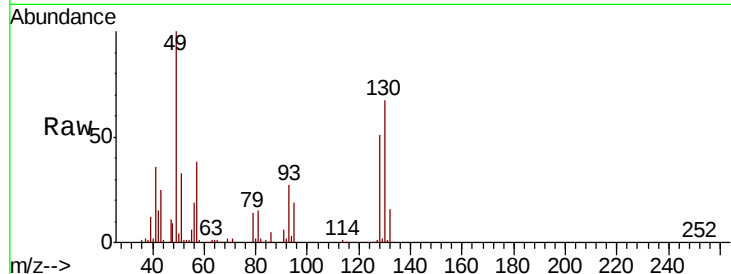
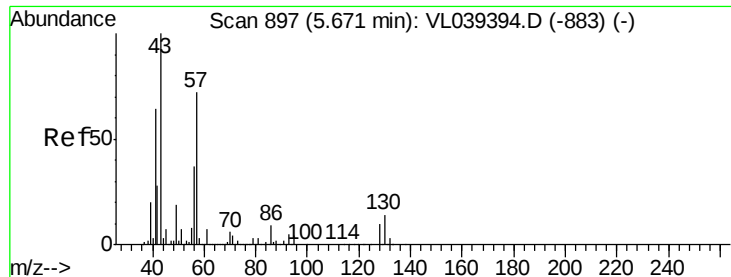
Tgt Ion: 43 Resp: 133980

Ion	Ratio	Lower	Upper
43	100		
45	0.4	8.2	12.4#
61	0.8	8.3	12.5#
70	1.2	5.9	8.9#



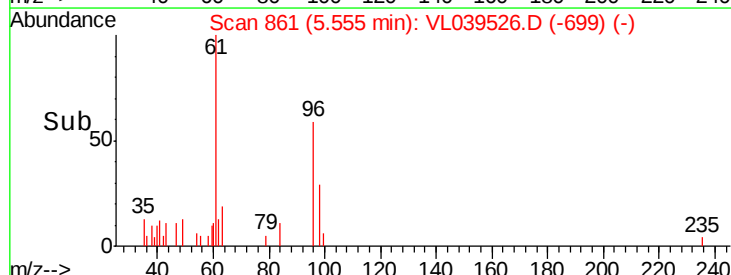
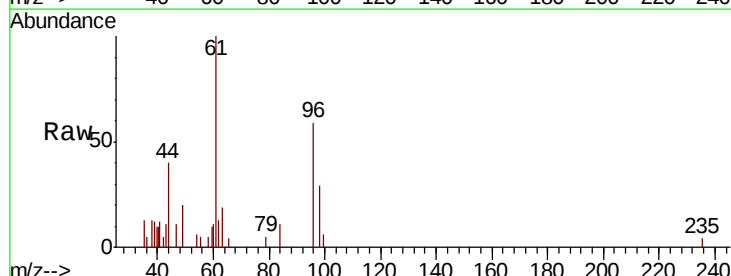
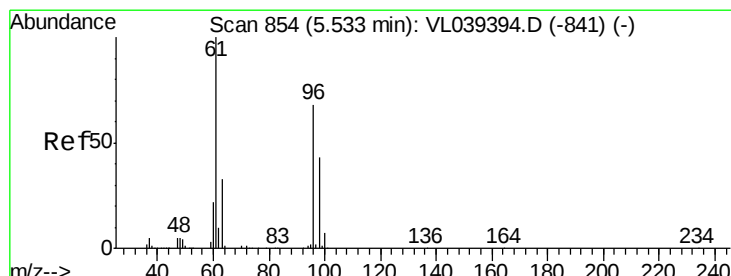
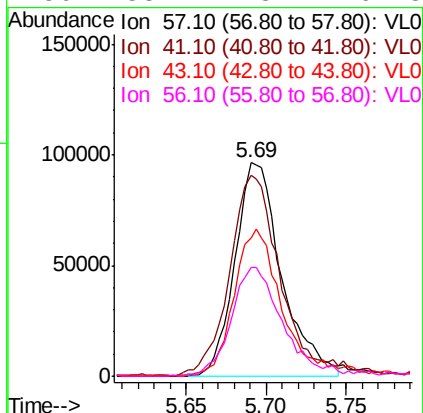
Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 45.10 (44.80 to 45.80): VL0
 Ion 61.10 (60.80 to 61.80): VL0
 Ion 70.10 (69.80 to 70.80): VL0





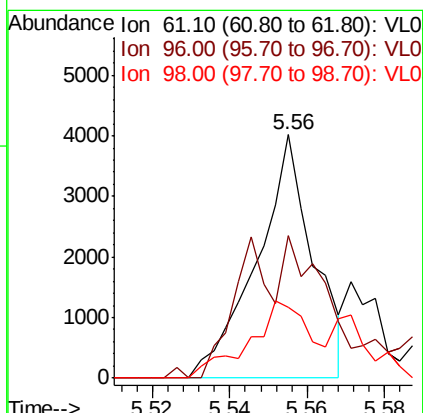
#26
Hexane
Concen: 1.749 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
SV1DL
Acq: 25 Jul 2022 21:20

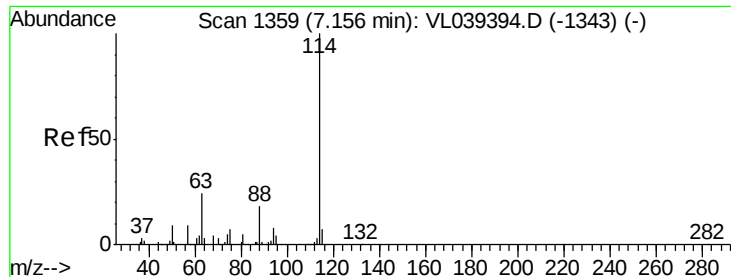
Tot Ion:	57	Resp:	192052
Ion	Ratio	Lower	Upper
57	100		
41	106.1	76.9	115.3
43	73.4	191.0	286.6#
56	58.2	43.2	64.8



#31
cis-1,2-Dichloroethene
Concen: 0.035 ppbv
RT: 5.56 min Scan# 861
Delta R.T. 0.02 min
Lab File: VL039526.D
Acq: 25 Jul 2022 21:26

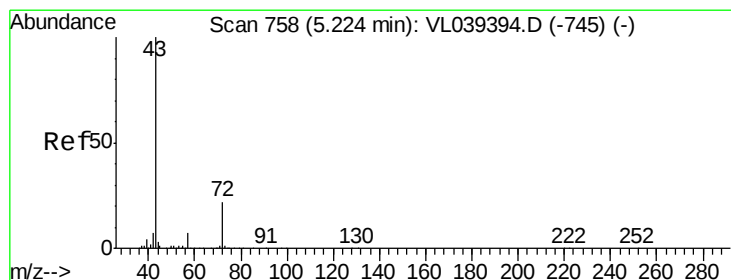
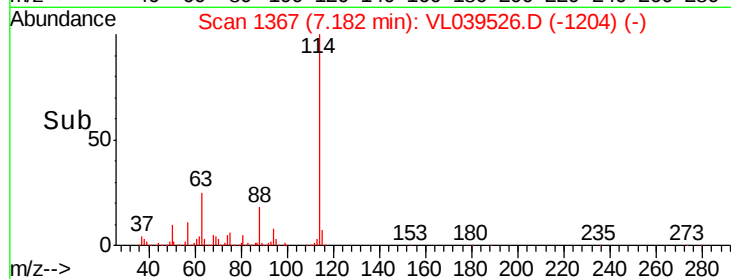
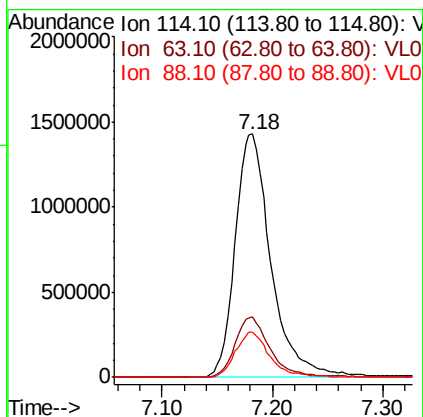
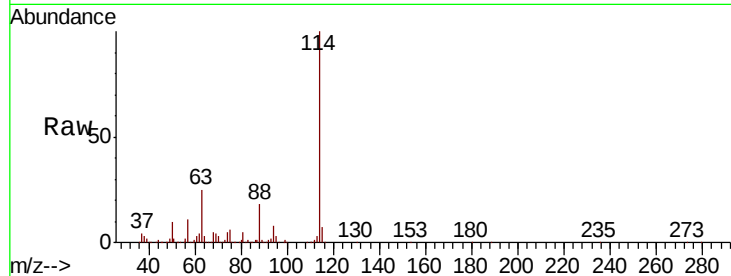
Tgt Ion:	61	Resp:	4050
Ion	Ratio	Lower	Upper
61	100		
96	52.0	54.1	81.1#
98	26.0	34.6	52.0#





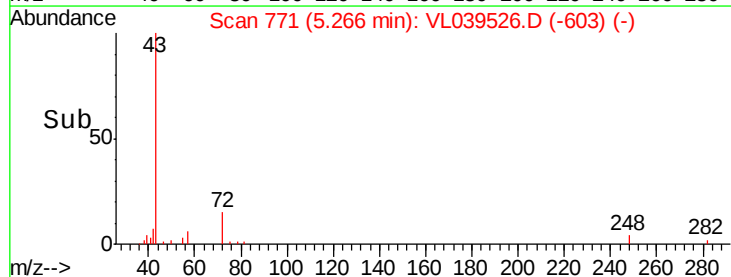
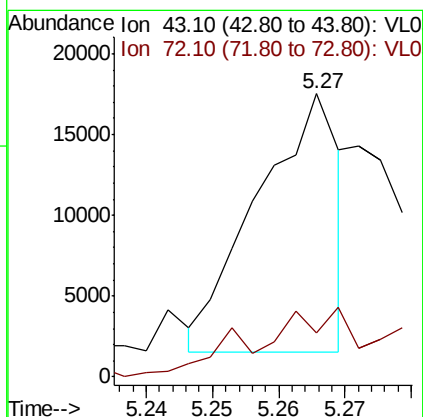
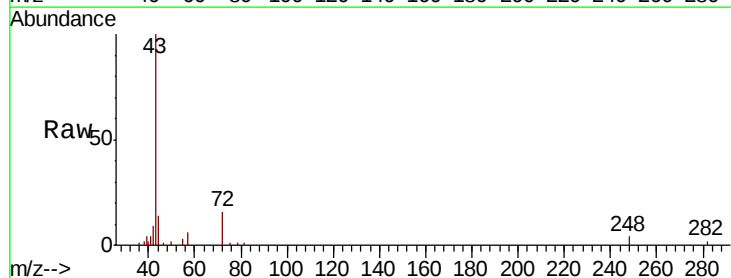
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV1DL
 Acq: 25 Jul 2022 21:20

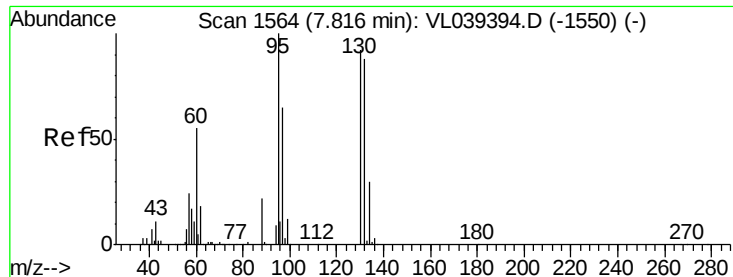
Tot Ion:114 Resp: 3195227
 Ion Ratio Lower Upper
 114 100
 63 24.7 20.2 30.4
 88 18.3 14.5 21.7



#34
 2-Butanone
 Concen: 0.085 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. 0.04 min
 Lab File: VL039526.D
 Acq: 25 Jul 2022 21:26

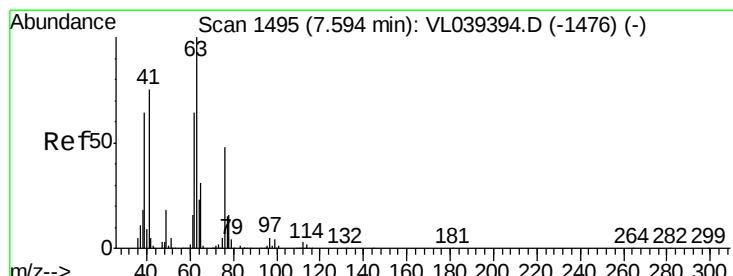
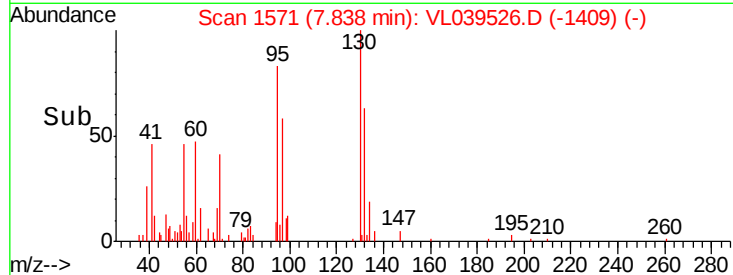
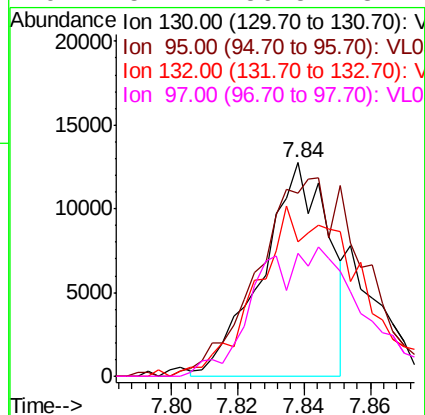
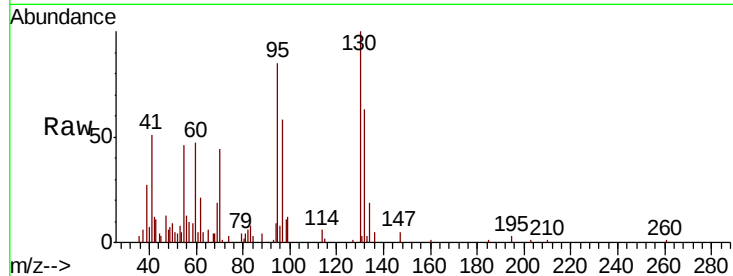
Tgt Ion: 43 Resp: 13743
 Ion Ratio Lower Upper
 43 100
 72 0.0 17.9 26.9#





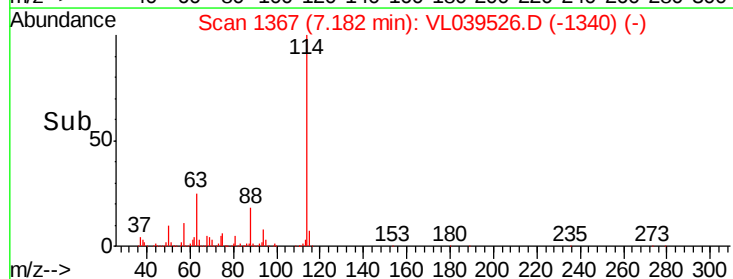
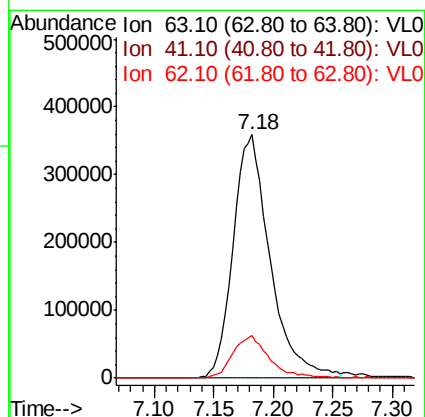
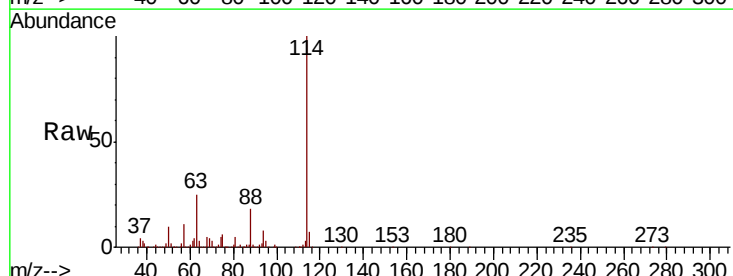
#38
 Trichloroethene
 Concen: 0.133 ppbv
 RT: 7.84
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 SV1DL
 Acq: 25 Jul 2022 21:26

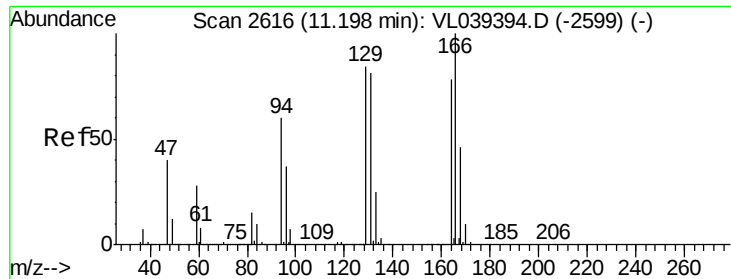
Tot Ion:	130	Resp:	17736
Ion	Ratio	Lower	Upper
130	100		
95	83.7	87.3	130.9#
132	60.3	76.7	115.1#
97	57.1	56.5	84.7



#39
 1,2-Dichloropropane
 Concen: 8.367 ppbv
 RT: 7.18 min Scan# 1367
 Delta R.T. -0.41 min
 Lab File: VL039526.D
 Acq: 25 Jul 2022 21:26

Tgt Ion:	63	Resp:	772968
Ion	Ratio	Lower	Upper
63	100		
41	0.0	59.6	89.4#
62	17.6	51.4	77.0#





#52

Tetrachloroethene

Concen: 0.926 ppbv

RT: 11.23

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Jul 2022 21:26

Tot Ion:164 Resp: 92139

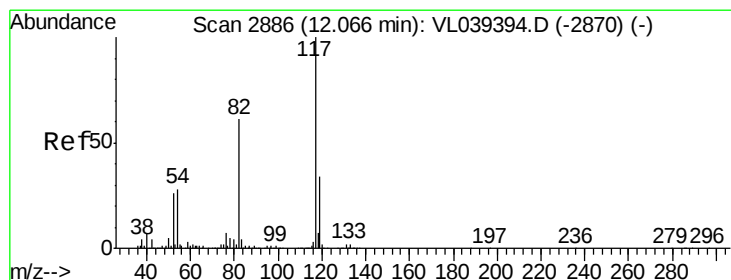
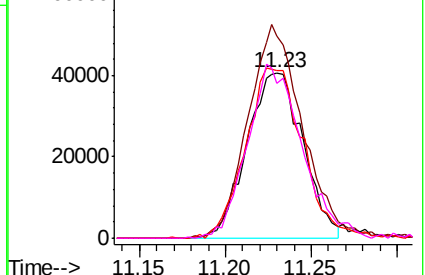
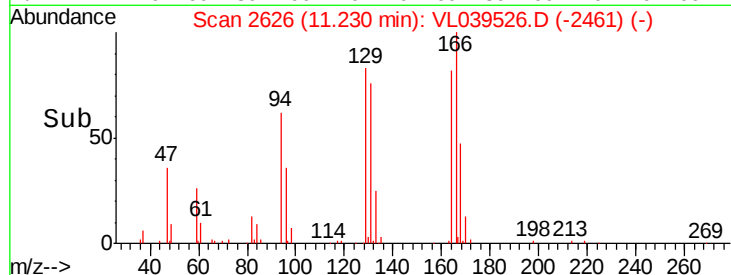
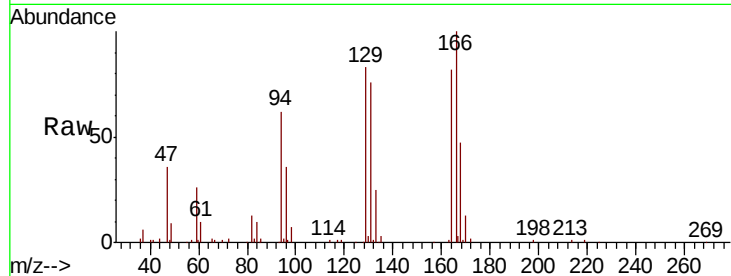
Ion Ratio Lower Upper

164 100

166 122.6 102.2 153.2

129 101.2 85.8 128.8

131 93.0 83.3 124.9



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. 0.03 min

Lab File: VL039526.D

Acq: 25 Jul 2022 21:26

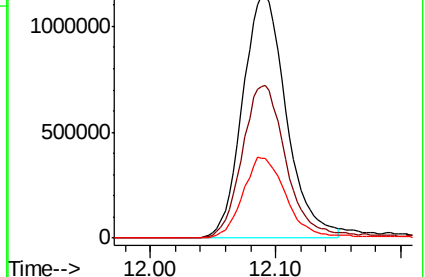
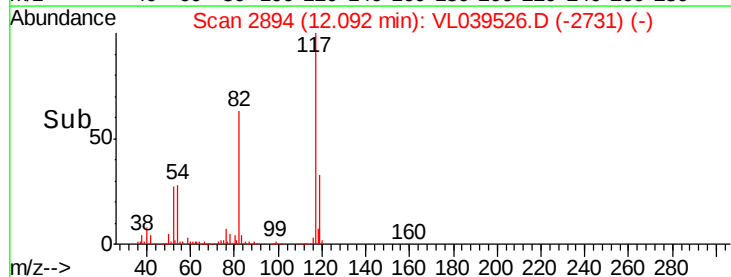
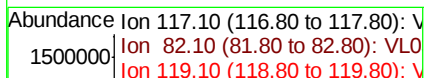
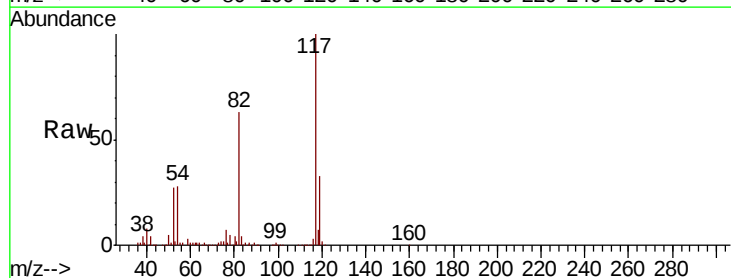
Tgt Ion:117 Resp: 2789256

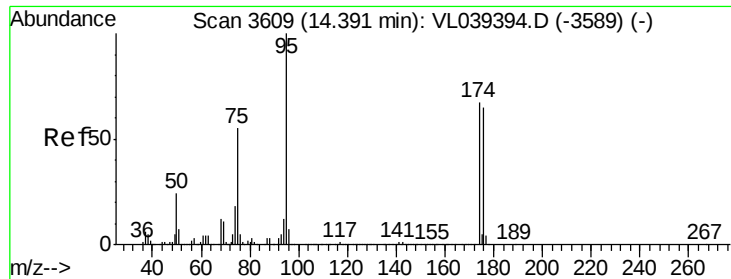
Ion Ratio Lower Upper

117 100

82 65.5 50.8 76.2

119 34.0 24.1 36.1





#68

1-Bromo-4-Fluorobenzene

Concen: 9.988 ppbv

RT: 14.42

Delta R.T: MSVOA_L

Lab File: ClientSampleId :

SV1DL

Acq: 25 Jul 2022 21:20

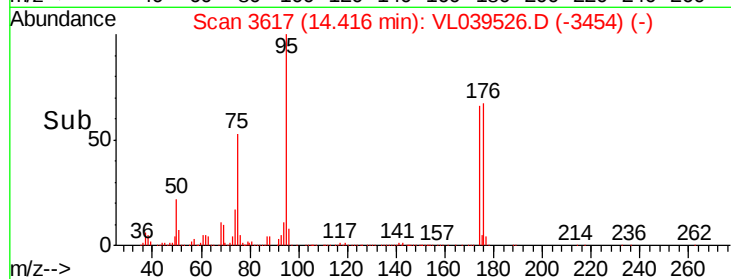
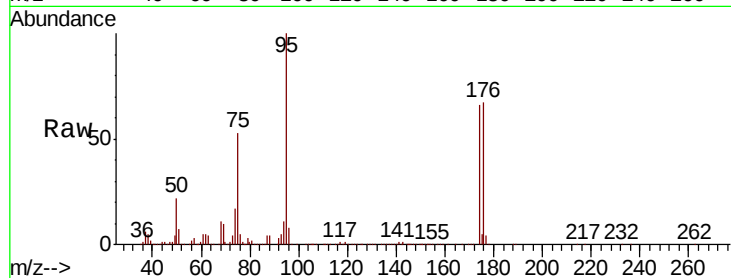
Tot Ion: 95 Resp: 2066712

Ion Ratio Lower Upper

95 100

174 73.8 55.9 83.9

175 5.8 4.2 6.4



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

