

Data File : VL035387.D
Acq On : 12 Aug 2020 15:59
Operator : SY/AP
Sample : VSTDIC015
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Quant Time: Aug 12 16:34:01 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 12 15:19:58 2020
QLast Update : Wed Aug 12 15:19:58 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1326998	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	3285999	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	3383034	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	2631172	9.33	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	1857294	10.522	ppbv	98
3) Chlorodifluoromethane	2.98	51	2075530	13.702	ppbv	98
4) Chloromethane	3.13	50	1192905	13.910	ppbv	97
5) Vinyl Chloride	3.25	62	1129615	12.805	ppbv	100
6) Bromomethane	3.47	94	657433	12.165	ppbv	97
7) Chloroethane	3.55	64	412485	12.590	ppbv	99
8) Dichlorotetrafluoroethane	3.18	85	2284419	10.950	ppbv	100
9) Propene	3.01	41	1035572	19.185	ppbv	99
10) Heptane	8.14	43	2663871	19.321	ppbv	99
11) Trichlorofluoromethane	3.95	101	2570157	11.239	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.49	101	1739700	10.644	ppbv	100
13) Ethanol	3.60	45	272802	14.654	ppbv	96
14) Bromoethene	3.74	108	816908	12.464	ppbv	100
15) Acetone	3.85	43	2039852	10.825	ppbv	100
16) 1,3-Butadiene	3.32	39	1084724	14.955	ppbv	100
17) tert-Butyl alcohol	4.29	59	2578907	14.911	ppbv	100
18) 1,1-Dichloroethene	4.29	96	823715	11.736	ppbv	98
19) Isopropyl Alcohol	3.97	45	1703349	14.260	ppbv	98
20) Methylene Chloride	4.34	84	776295	10.102	ppbv	97
21) Allyl Chloride	4.41	41	1504854	13.938	ppbv	99
22) trans-1,2-Dichloroethene	4.89	96	855644	12.573	ppbv	95
23) Vinyl Acetate	5.08	43	3489641	19.313	ppbv	99
24) 1,1-Dichloroethane	5.02	63	2357962	13.886	ppbv	100
25) Ethyl Acetate	5.69	43	4249795	14.843	ppbv	99
26) Hexane	5.70	57	1900259	15.300	ppbv	98
27) Carbon Disulfide	4.55	76	2259077	13.008	ppbv	99
28) Methyl tert-Butyl Ether	5.04	73	3188490	17.656	ppbv	100
29) Chloroform	5.76	83	2876802	13.436	ppbv	98
30) Cyclohexane	7.14	84	1643028	17.446	ppbv	98
31) cis-1,2-Dichloroethene	5.56	61	2017993	18.277	ppbv	98
32) 1,1,1-Trichloroethane	6.52	97	2932755	13.032	ppbv	100
34) 2-Butanone	5.25	43	2966110	18.332	ppbv	98
35) Carbon Tetrachloride	7.03	117	2921370	12.919	ppbv	97
36) Benzene	6.91	78	3907489	17.610	ppbv	99
37) 1,2-Dichloroethane	6.32	62	2308574	14.893	ppbv	99
38) Trichloroethene	7.85	130	1405068	13.727	ppbv	97
39) 1,2-Dichloropropane	7.63	63	1593036	17.734	ppbv	96
40) 1,4-Dioxane	7.85	88	609048	15.832	ppbv	95
41) Tetrahydrofuran	6.06	42	1807196	22.761	ppbv	99
42) Bromodichloromethane	7.81	83	3190397	15.326	ppbv	99
43) Methyl Methacrylate	8.03	69	1838244	19.692	ppbv	99

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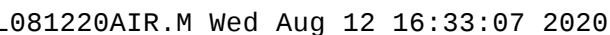
Instrument :
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ClientSampleId :
VSTDIC015

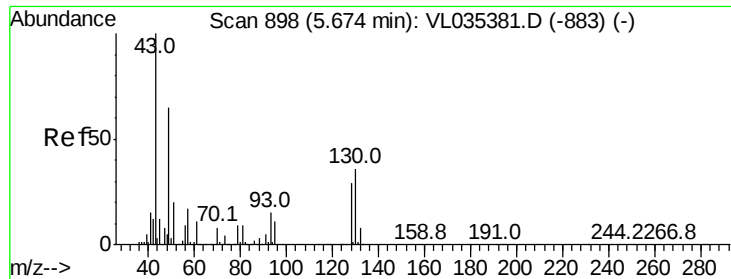
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.88	57	6328070	16.053	ppbv	98
45) t-1,3-Dichloropropene	9.30	75	2259580	23.334	ppbv	98
46) cis-1,3-Dichloropropene	8.72	75	2504653	21.417	ppbv	96
47) 1,1,2-Trichloroethane	9.50	97	1645224	15.233	ppbv	98
48) Dibromochloromethane	10.33	129	2676502	15.128	ppbv	100
49) Bromoform	13.07	173	2273844	14.105	ppbv	99
50) 4-Methyl-2-Pentanone	8.76	43	4350084	17.609	ppbv	99
51) 2-Hexanone	10.15	43	3766700	19.449	ppbv #	99
52) Tetrachloroethene	11.25	164	1292826	14.696	ppbv	97
53) Toluene	9.83	91	4528021	18.759	ppbv	98
54) 1,2-Dibromoethane	10.64	107	2547962	16.443	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.15	131	1961043	12.281	ppbv	97
57) Chlorobenzene	12.18	112	3271455	12.843	ppbv	100
58) Ethyl Benzene	12.74	91	6059413	17.213	ppbv	96
59) m/p-Xylene	13.02	91	4237110	12.926	ppbv #	7
60) o-Xylene	13.73	91	4745475	14.589	ppbv	99
61) Styrene	13.56	104	3810559	19.182	ppbv	99
62) Isopropylbenzene	14.70	105	7052754	14.400	ppbv	99
63) 1,1,2,2-Tetrachloroethane	13.71	83	3355283	12.091	ppbv	99
64) n-propylbenzene	15.59	120	1967637	14.949	ppbv	95
65) tert-Butylbenzene	16.78	119	6047416	13.484	ppbv	99
66) Benzyl Chloride	17.02	91	3267419	18.407	ppbv	100
67) sec-Butylbenzene	17.33	105	8575218	13.518	ppbv	98
69) p-Isopropyltoluene	17.69	119	7250526	14.019	ppbv	97
70) n-Butylbenzene	18.58	91	7886554	14.256	ppbv	99
71) 2-Chlorotoluene	15.48	91	5832148	16.256	ppbv	99
72) 4-Ethyltoluene	15.87	105	5903756	15.919	ppbv	99
73) 1,3,5-Trimethylbenzene	16.03	105	5525084	15.526	ppbv	97
74) 1,2,4-Trimethylbenzene	16.80	105	5402527	13.283	ppbv	96
75) 1,3-Dichlorobenzene	17.03	146	3131828	11.771	ppbv	99
76) 1,4-Dichlorobenzene	17.17	146	3275162	13.292	ppbv	99
77) 1,2-Dichlorobenzene	17.85	146	3184390	12.968	ppbv	99
78) Hexachloro-1,3-Butadiene	23.41	225	2466946	11.808	ppbv	99
79) Naphthalene	22.24	128	7020557	22.441	ppbv	98
80) Naphthalene,2-methyl-	25.00	142	3473250	48.807	ppbv	99
81) 1,2,4-Trichlorobenzene	21.97	180	3268668	16.579	ppbv	99

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

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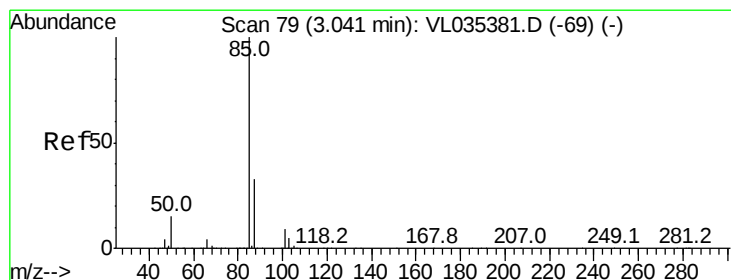
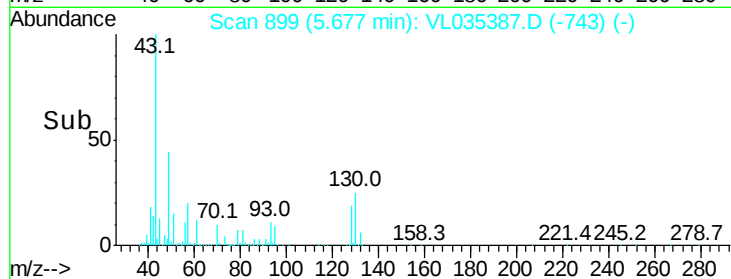
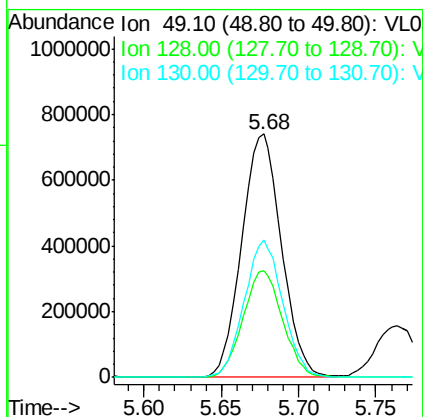
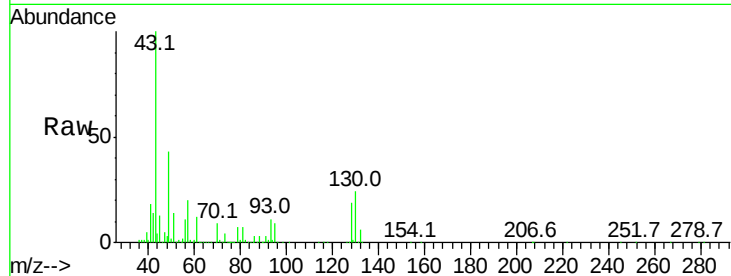




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.68 min Scan# 899
 Delta R.T. 0.00 min
 Lab File: VL035387.D
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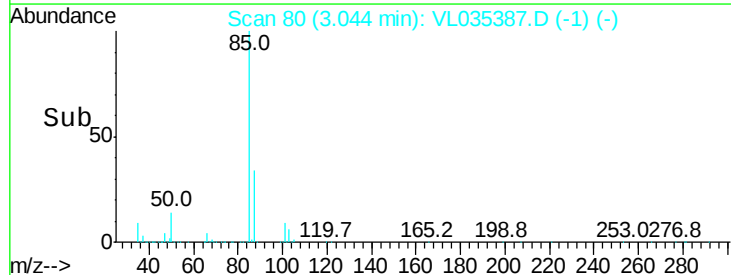
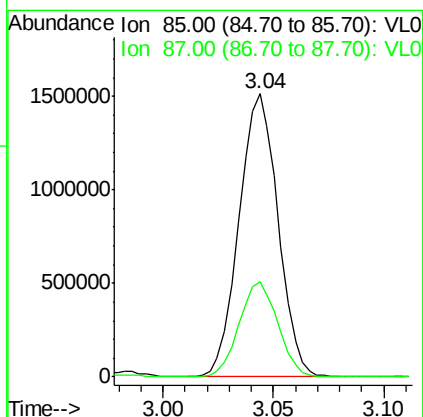
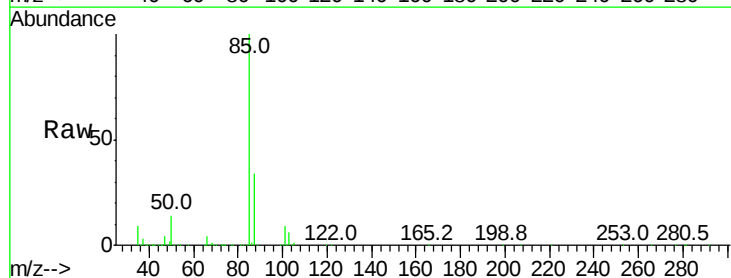
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

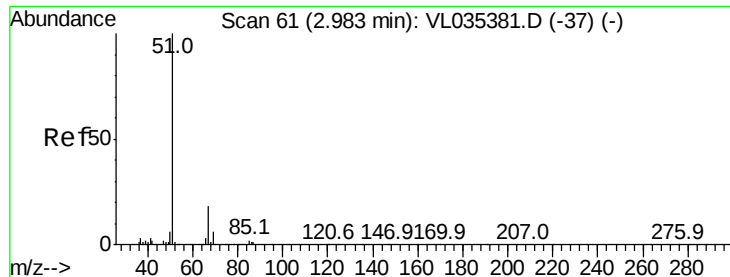
Tgt Ion: 49 Resp: 1326998
 Ion Ratio Lower Upper
 49 100
 128 43.6 21.8 65.3
 130 54.8 27.9 83.6



#2
 Dichlorodifluoromethane
 Concen: 10.522 ppbv
 RT: 3.04 min Scan# 80
 Delta R.T. 0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Tgt Ion: 85 Resp: 1857294
 Ion Ratio Lower Upper
 85 100
 87 33.6 26.1 39.1

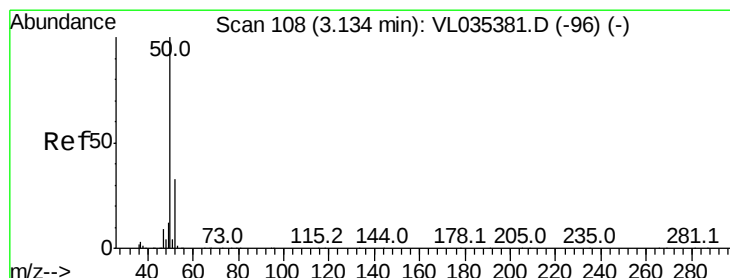
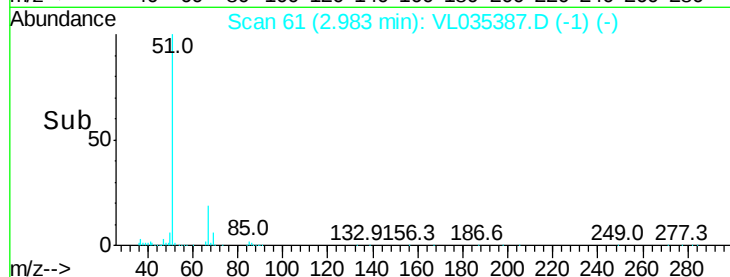
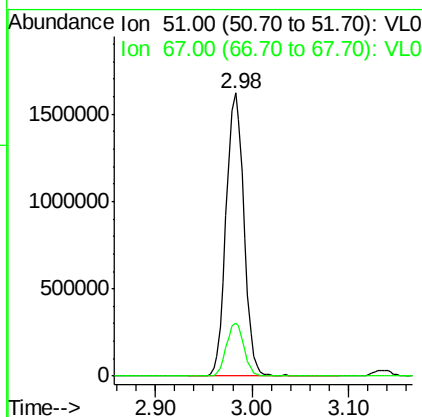
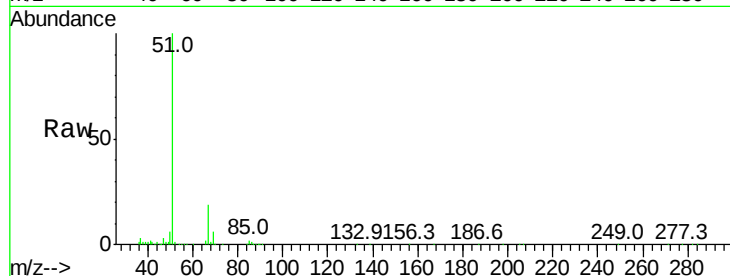




#3
 Chlorodifluoromethane
 Concen: 13.702 ppbv
 RT: 2.98 min Scan# 61
 Delta R.T. -0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

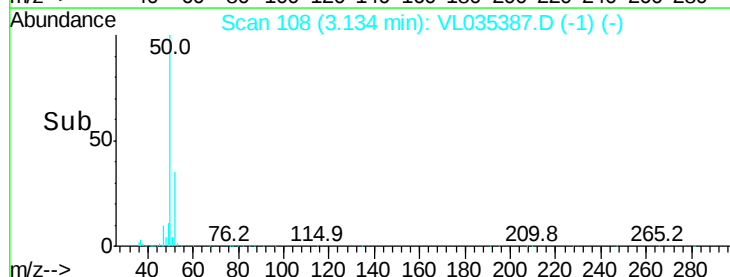
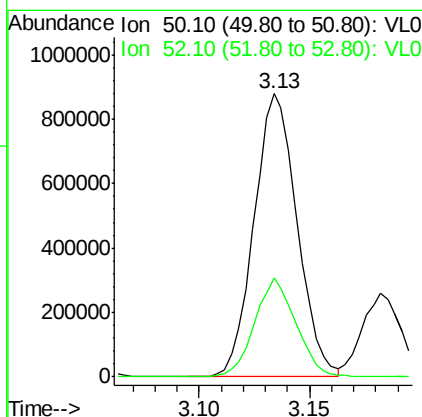
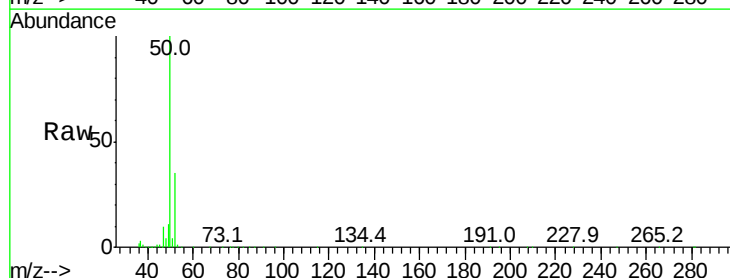
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

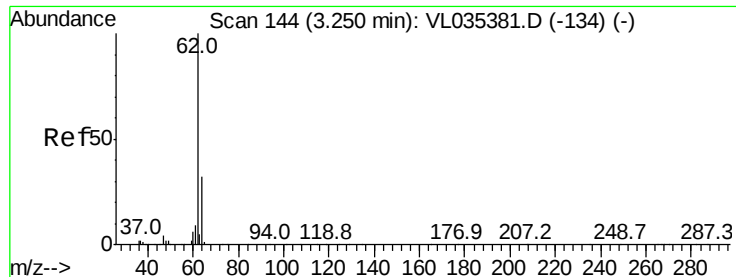
Tgt Ion: 51 Resp: 2075530
 Ion Ratio Lower Upper
 51 100
 67 18.4 14.1 21.1



#4
 Chloromethane
 Concen: 13.910 ppbv
 RT: 3.13 min Scan# 108
 Delta R.T. -0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Tgt Ion: 50 Resp: 1192905
 Ion Ratio Lower Upper
 50 100
 52 35.0 26.6 39.8





#5

Vinyl Chloride

Concen: 12.805 ppbv

RT: 3.25 min Scan# 145

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

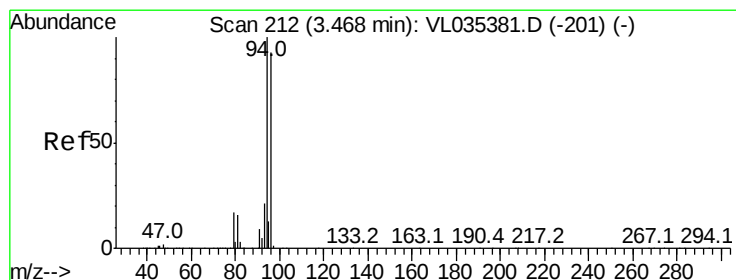
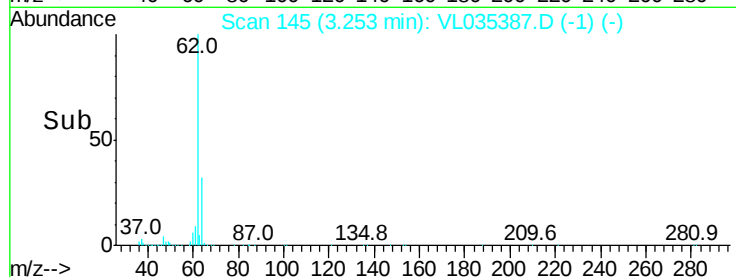
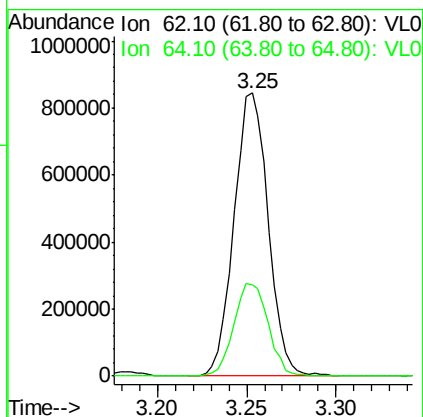
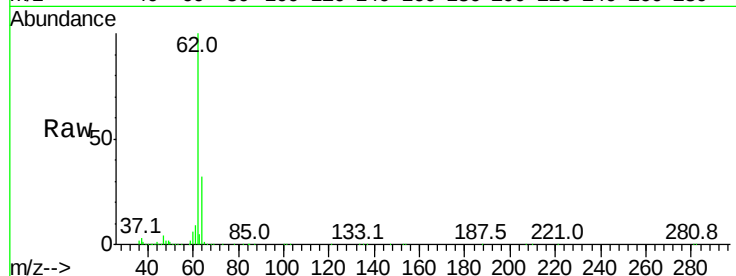
VSTDIC015

Tgt Ion: 62 Resp: 1129615

Ion Ratio Lower Upper

62 100

64 32.1 25.7 38.5



#6

Bromomethane

Concen: 12.165 ppbv

RT: 3.47 min Scan# 213

Delta R.T. 0.00 min

Lab File: VL035387.D

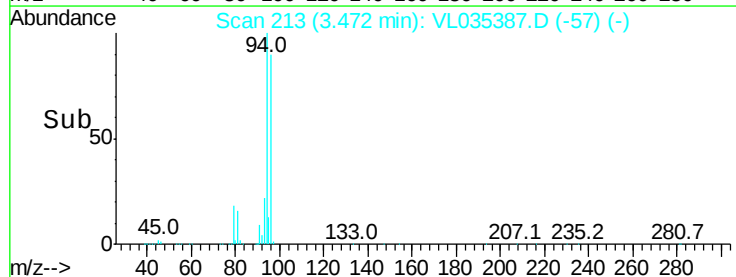
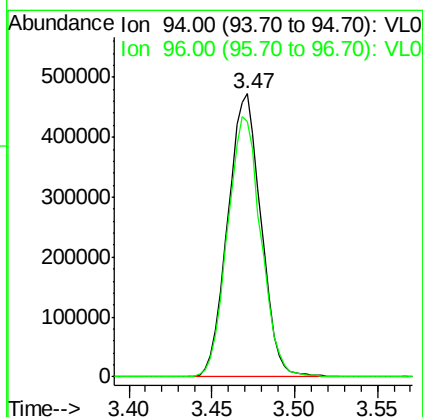
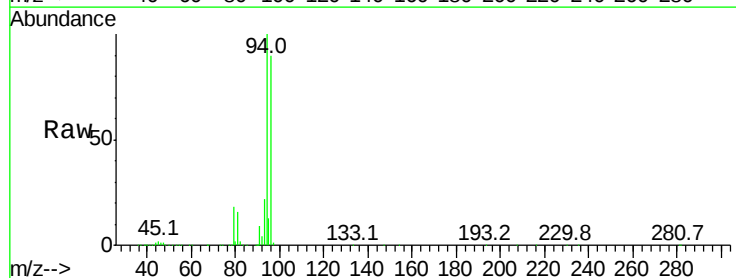
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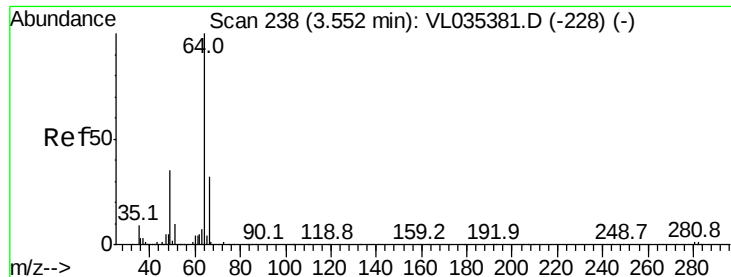
Tgt Ion: 94 Resp: 657433

Ion Ratio Lower Upper

94 100

96 90.2 74.4 111.6





#7

Chloroethane

Concen: 12.590 ppbv

RT: 3.55 min Scan# 238

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

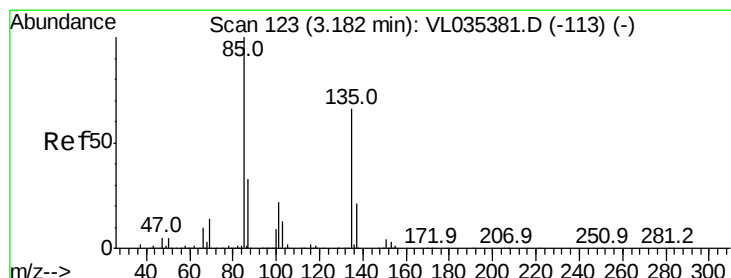
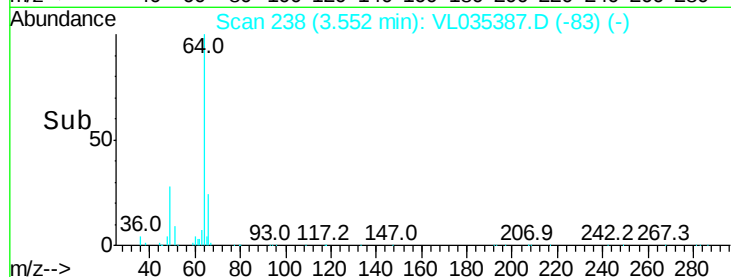
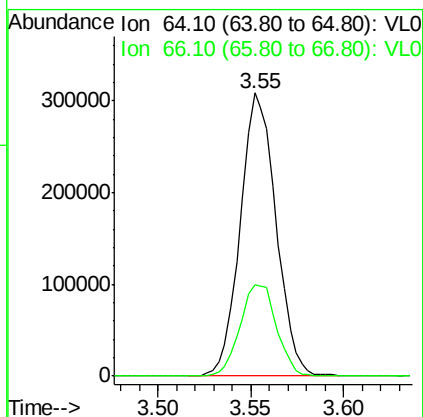
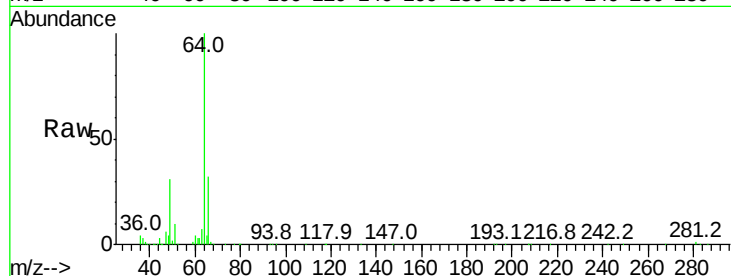
VSTDIC015

Tgt Ion: 64 Resp: 412485

Ion Ratio Lower Upper

64 100

66 32.5 25.7 38.5



#8

Dichlorotetrafluoroethane

Concen: 10.950 ppbv

RT: 3.18 min Scan# 123

Delta R.T. -0.00 min

Lab File: VL035387.D

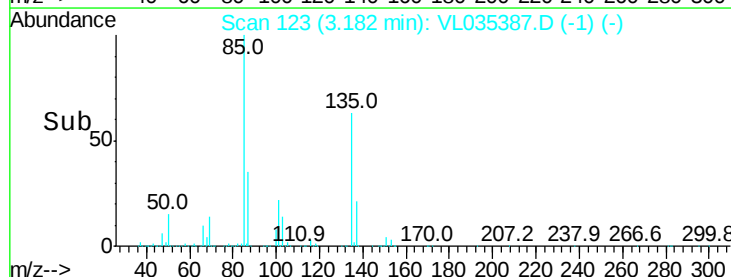
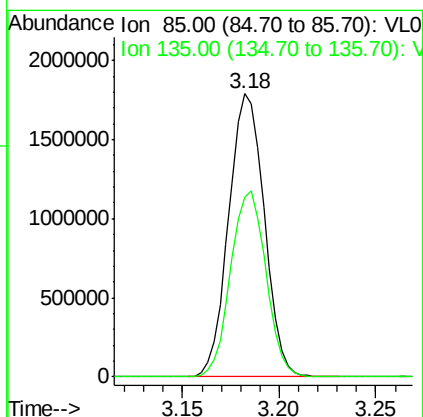
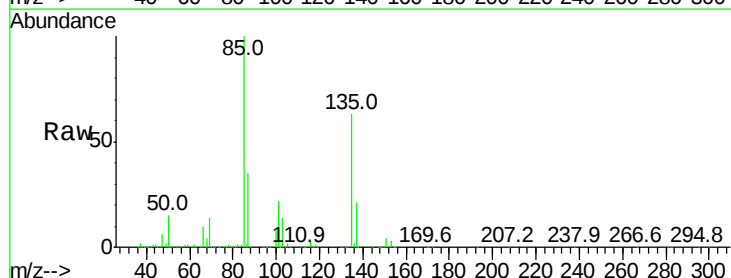
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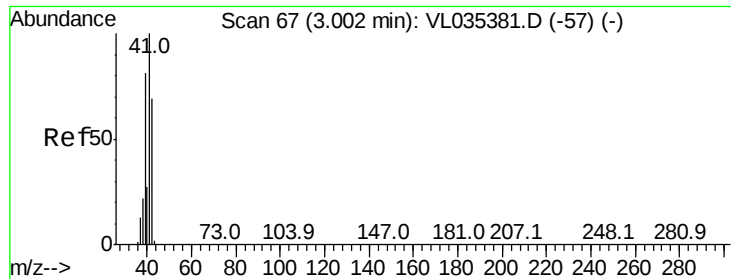
Tgt Ion: 85 Resp: 2284419

Ion Ratio Lower Upper

85 100

135 65.3 52.5 78.7





#9

Propene

Concen: 19.185 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.00 min

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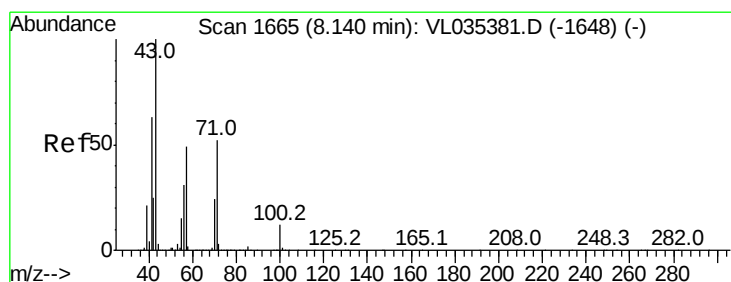
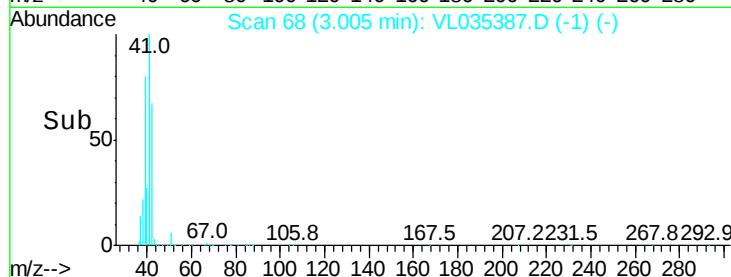
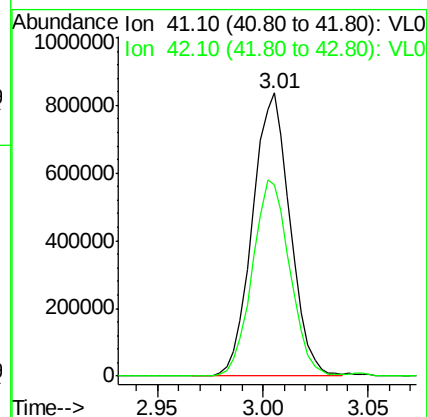
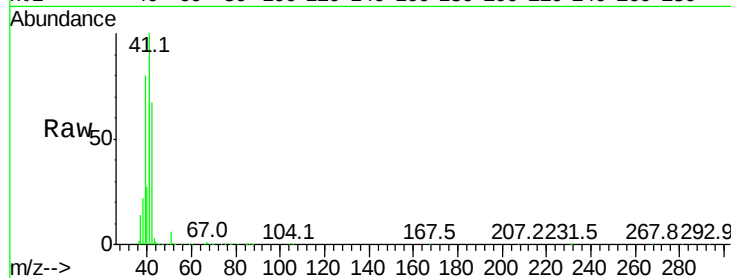
VSTDIC015

Tgt Ion: 41 Resp: 1035572

Ion Ratio Lower Upper

41 100

42 69.7 55.4 83.2



#10

Heptane

Concen: 19.321 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. -0.00 min

Lab File: VL035387.D

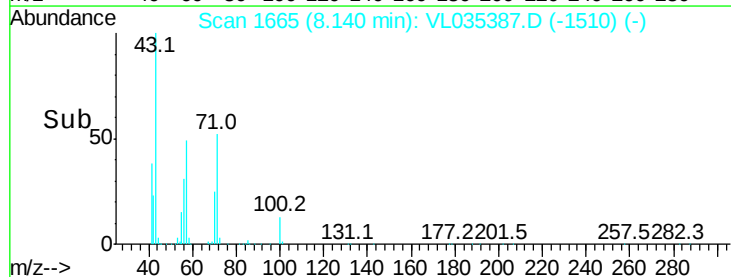
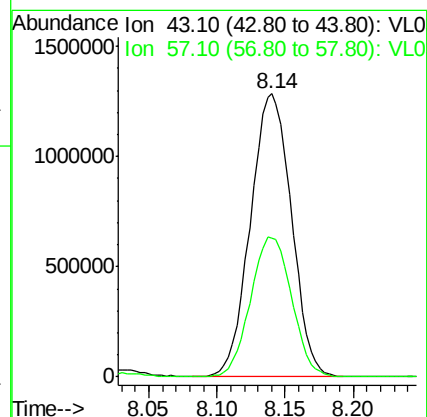
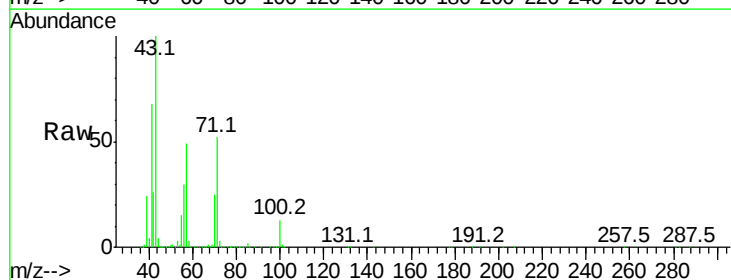
Acq: 12 Aug 2020 15:59

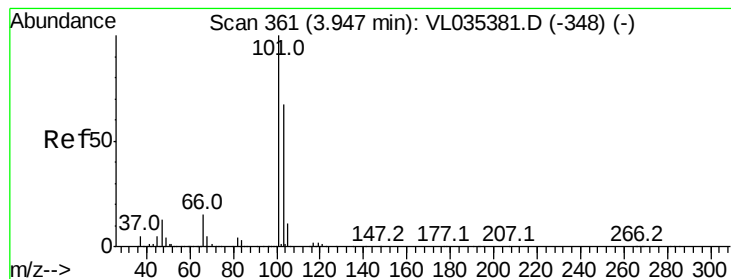
Tgt Ion: 43 Resp: 2663871

Ion Ratio Lower Upper

43 100

57 50.0 39.4 59.2





#11

Trichlorofluoromethane

Concen: 11.239 ppbv

RT: 3.95 min Scan# 362

Delta R.T. 0.00 min

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Acq: 12 Aug 2020 15:59

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ClientSampleId :

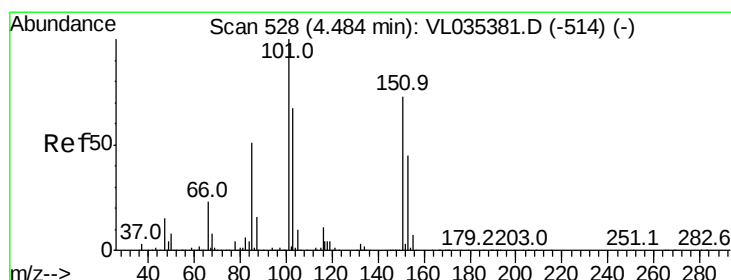
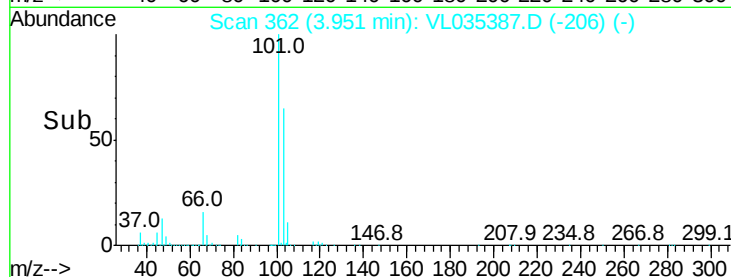
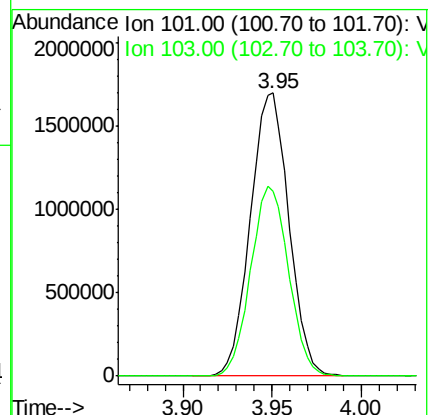
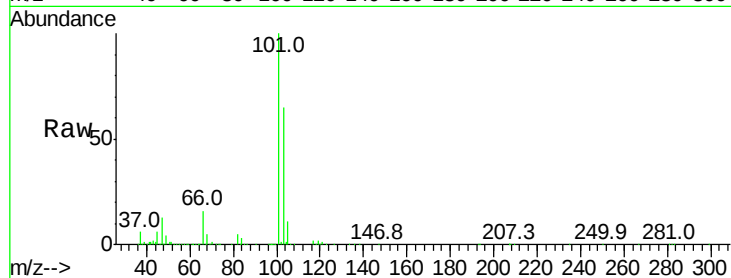
VSTDIC015

Tgt Ion:101 Resp: 2570157

Ion Ratio Lower Upper

101 100

103 65.4 53.3 79.9



#12

1,1,2-Trichlorotrifluoroethane

Concen: 10.644 ppbv

RT: 4.49 min Scan# 529

Delta R.T. 0.00 min

Lab File: VL035387.D

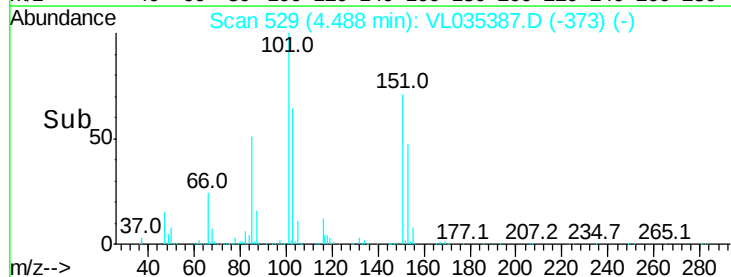
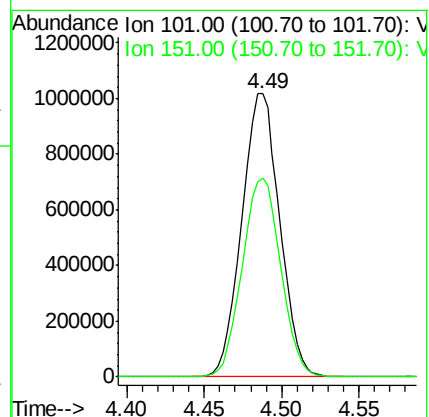
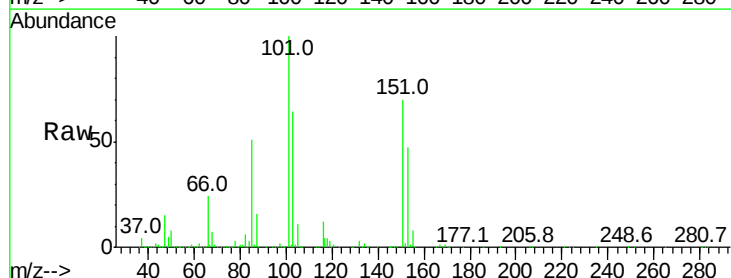
Acq: 12 Aug 2020 15:59

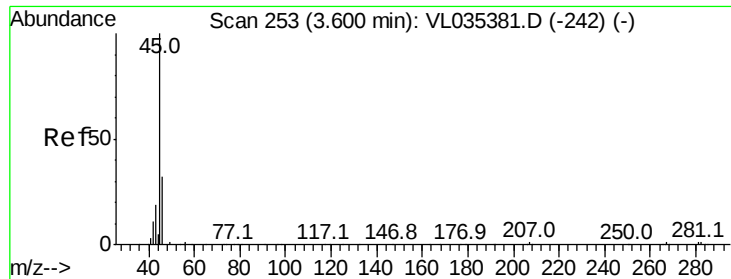
Tgt Ion:101 Resp: 1739700

Ion Ratio Lower Upper

101 100

151 71.2 57.0 85.6





#13

Ethanol

Concen: 14.654 ppbv

RT: 3.60 min Scan# 254

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

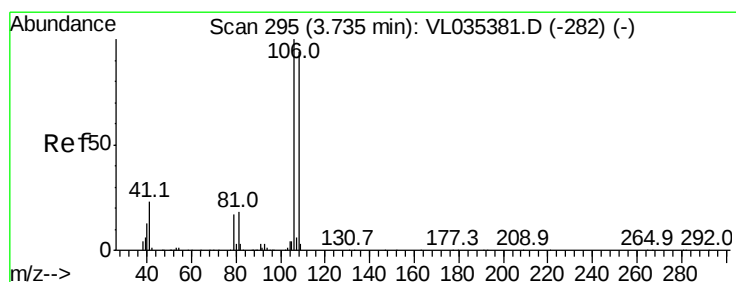
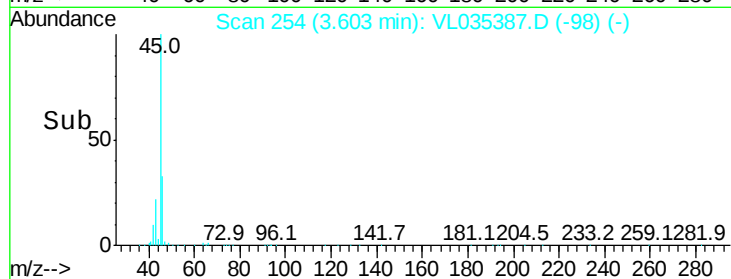
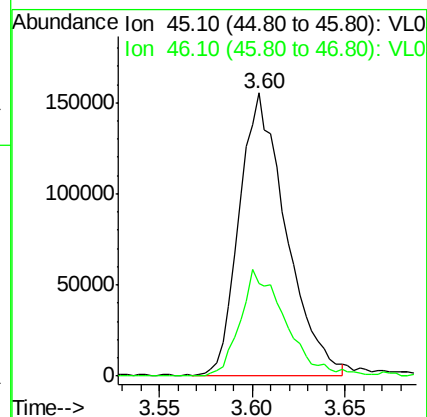
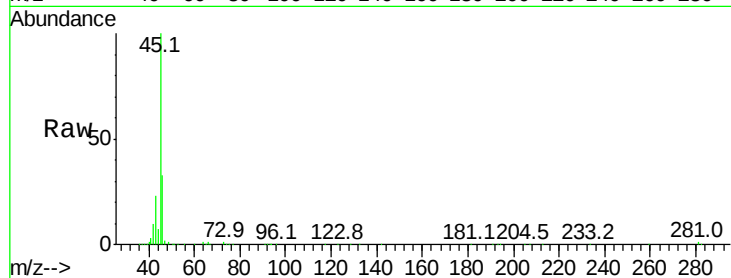
VSTDIC015

Tgt Ion: 45 Resp: 272802

Ion Ratio Lower Upper

45 100

46 37.3 14.1 56.3



#14

Bromoethene

Concen: 12.464 ppbv

RT: 3.74 min Scan# 295

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

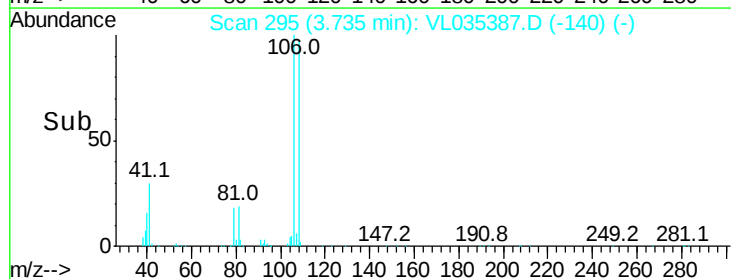
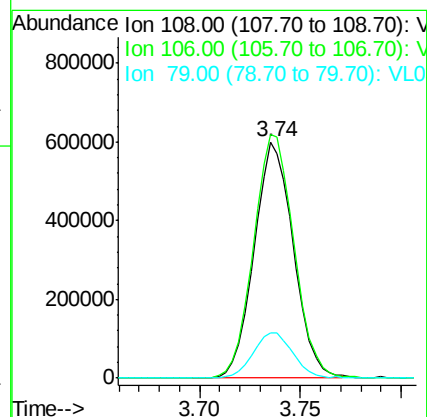
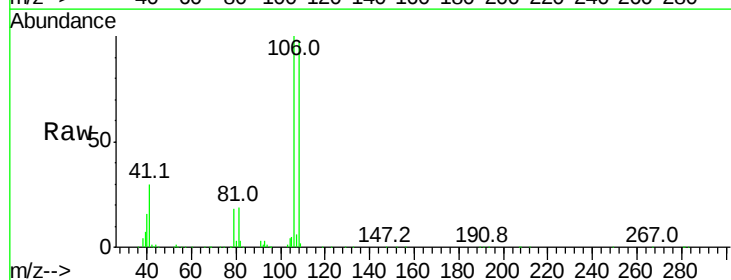
Tgt Ion: 108 Resp: 816908

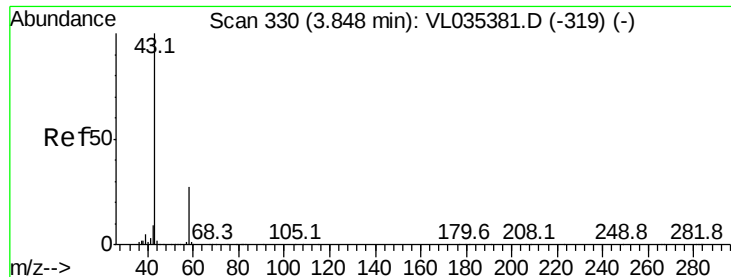
Ion Ratio Lower Upper

108 100

106 106.6 84.9 127.3

79 19.9 15.8 23.8





#15

Acetone

Concen: 10.825 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

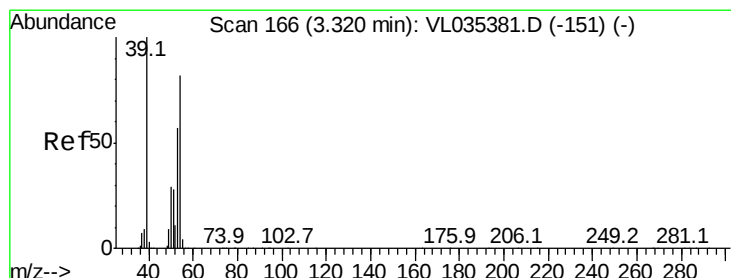
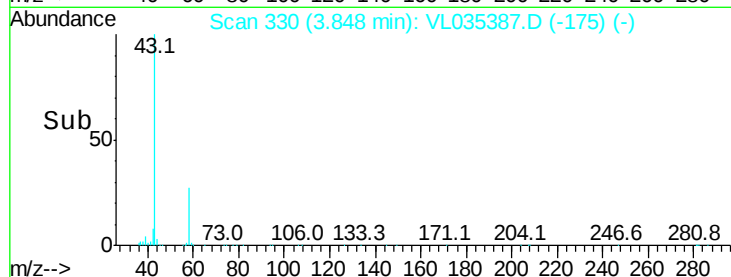
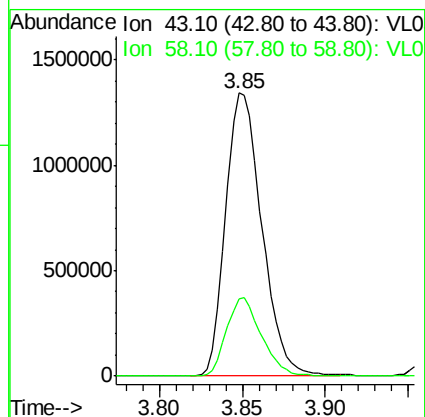
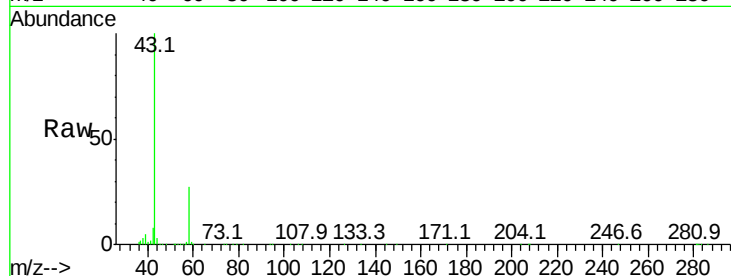
VSTDIC015

Tgt Ion: 43 Resp: 2039852

Ion Ratio Lower Upper

43 100

58 27.0 21.7 32.5



#16

1,3-Butadiene

Concen: 14.955 ppbv

RT: 3.32 min Scan# 167

Delta R.T. 0.00 min

Lab File: VL035387.D

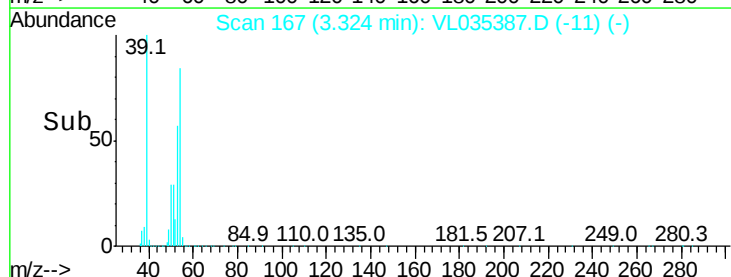
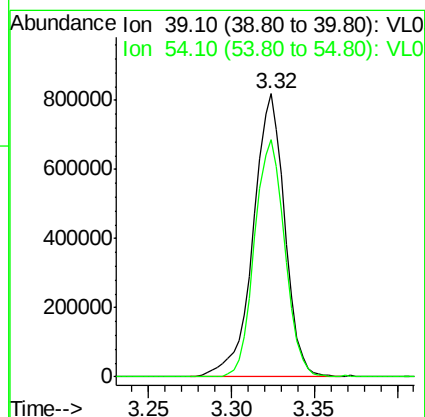
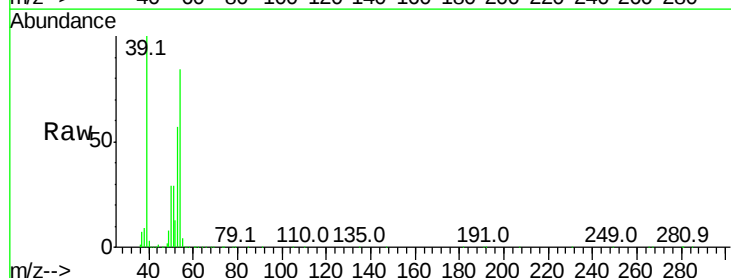
Acq: 12 Aug 2020 15:59

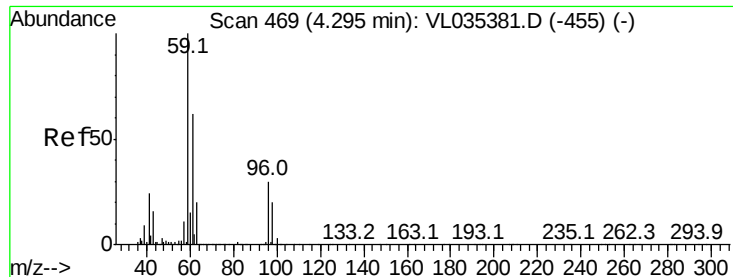
Tgt Ion: 39 Resp: 1084724

Ion Ratio Lower Upper

39 100

54 81.0 64.9 97.3





#17

tert-Butyl alcohol

Concen: 14.911 ppbv

RT: 4.29 min Scan# 469

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

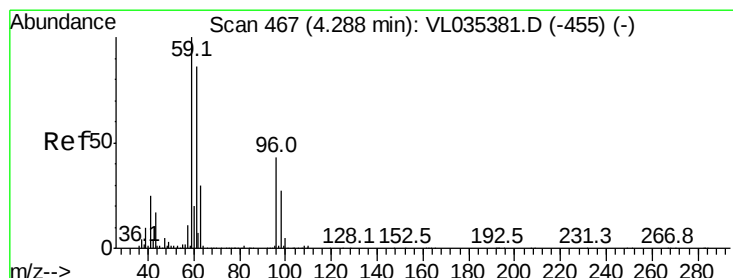
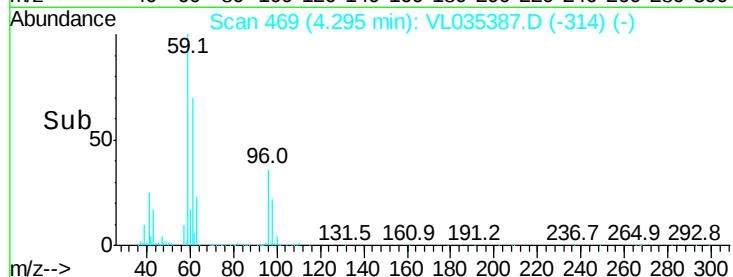
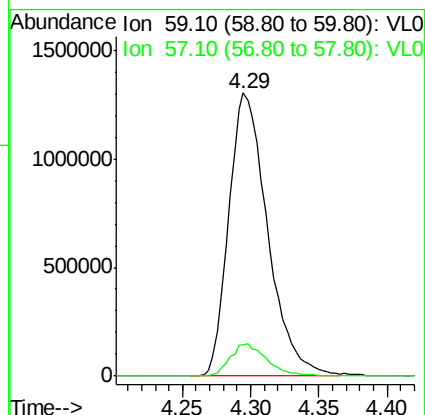
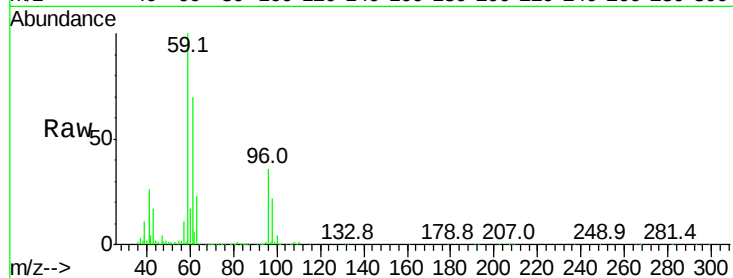
VSTDIC015

Tgt Ion: 59 Resp: 2578907

Ion Ratio Lower Upper

59 100

57 11.0 8.6 13.0



#18

1,1-Dichloroethene

Concen: 11.736 ppbv

RT: 4.29 min Scan# 467

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

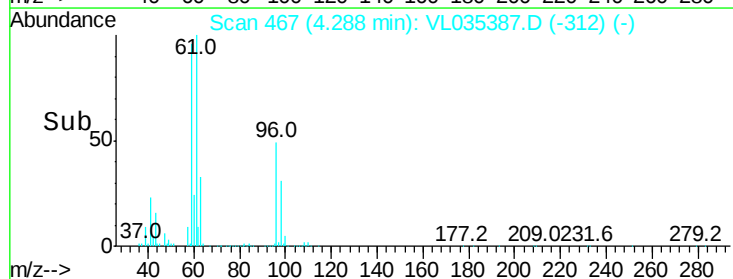
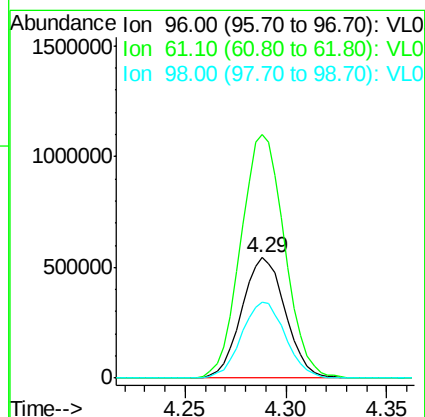
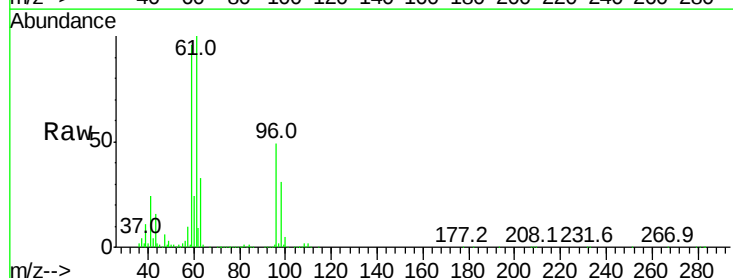
Tgt Ion: 96 Resp: 823715

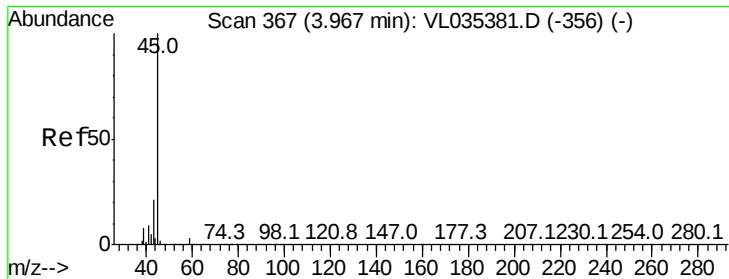
Ion Ratio Lower Upper

96 100

61 201.9 159.0 238.4

98 63.2 50.3 75.5



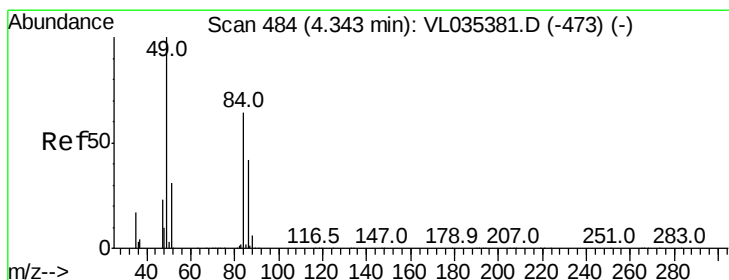
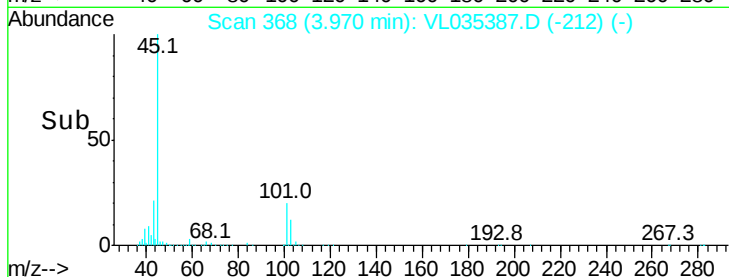
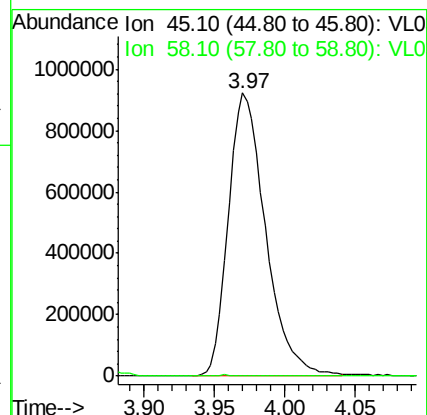
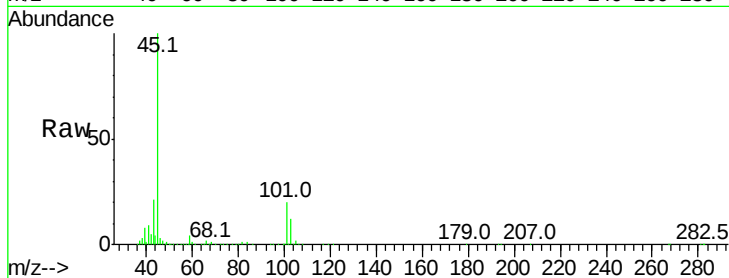


#19

Isopropyl Alcohol
 Concen: 14.260 ppbv
 RT: 3.97 min Scan# 368
 Delta R.T. 0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

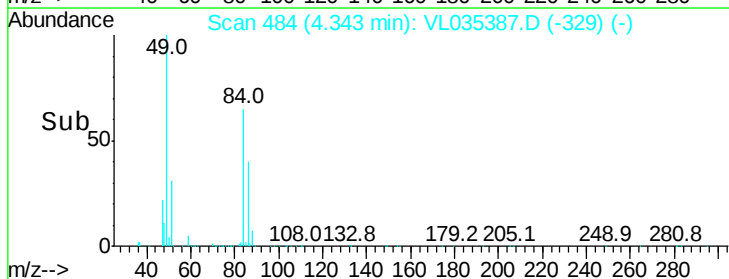
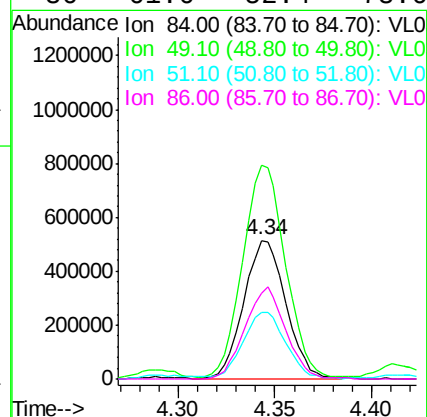
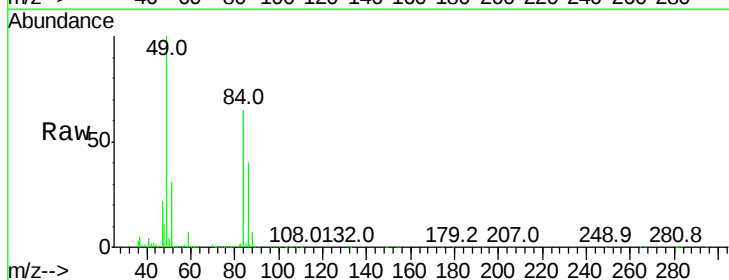
Tgt Ion: 45 Resp: 1703349
 Ion Ratio Lower Upper
 45 100
 58 32.3 24.9 37.3

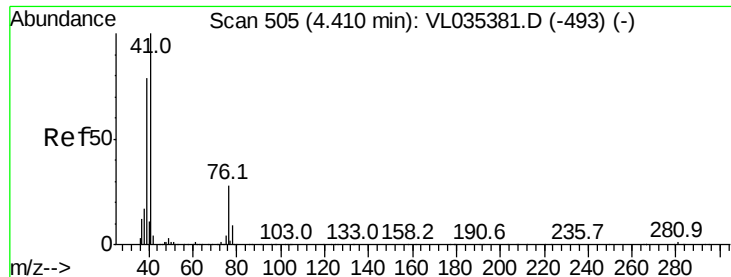


#20

Methylene Chloride
 Concen: 10.102 ppbv
 RT: 4.34 min Scan# 484
 Delta R.T. -0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Tgt Ion: 84 Resp: 776295
 Ion Ratio Lower Upper
 84 100
 49 153.4 125.7 188.5
 51 48.1 38.5 57.7
 86 61.6 52.4 78.6





#21

Allyl Chloride

Concen: 13.938 ppbv

RT: 4.41 min Scan# 506

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

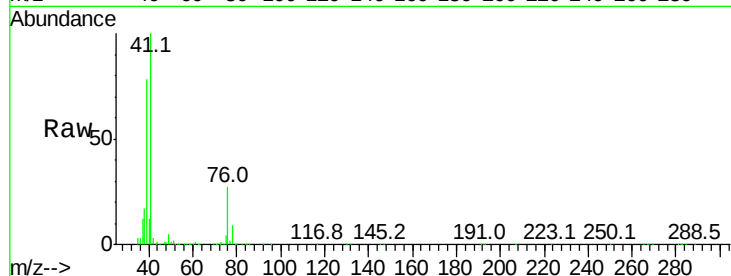
Tgt Ion: 41 Resp: 1504854

Ion Ratio Lower Upper

41 100

76 28.2 22.4 33.6

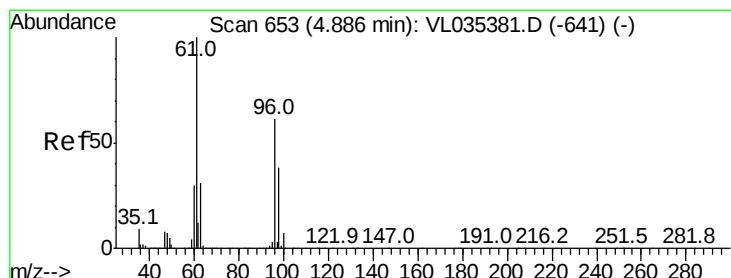
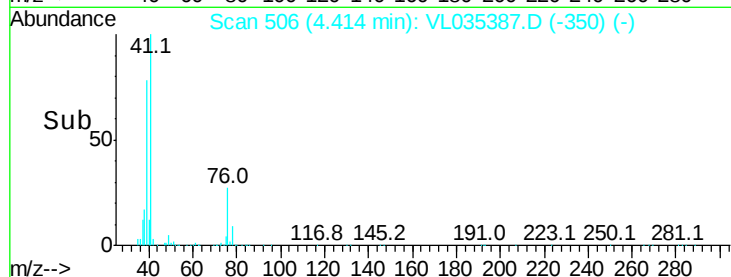
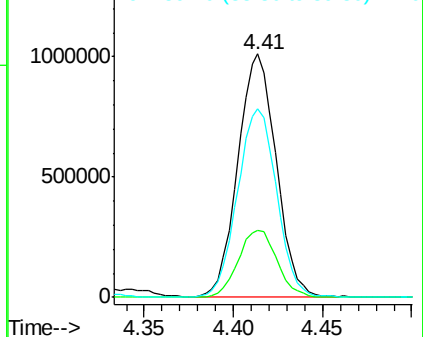
39 79.5 63.0 94.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0



#22

trans-1,2-Dichloroethene

Concen: 12.573 ppbv

RT: 4.89 min Scan# 654

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

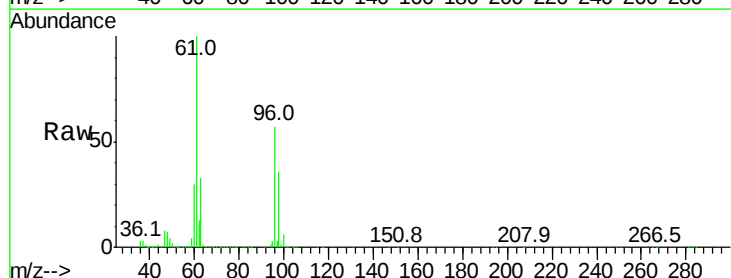
Tgt Ion: 96 Resp: 855644

Ion Ratio Lower Upper

96 100

61 174.1 131.8 197.6

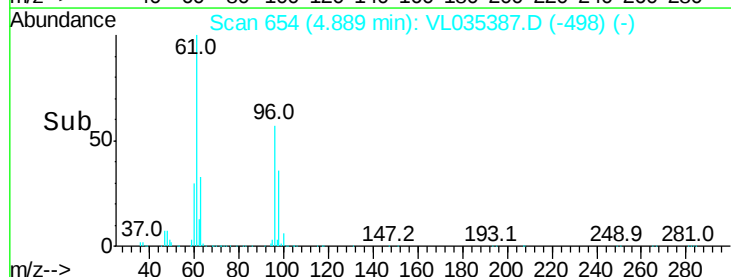
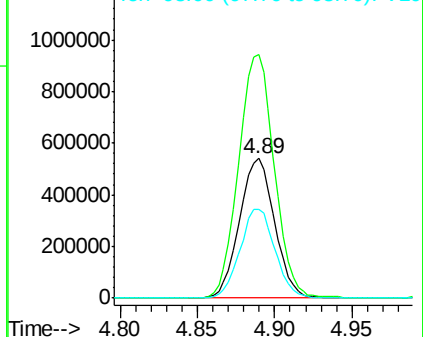
98 63.0 49.6 74.4

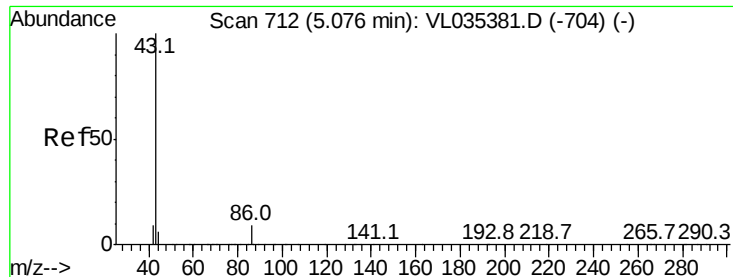


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 19.313 ppbv

RT: 5.08 min Scan# 714

Delta R.T. 0.01 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tgt Ion: 43 Resp: 3489641

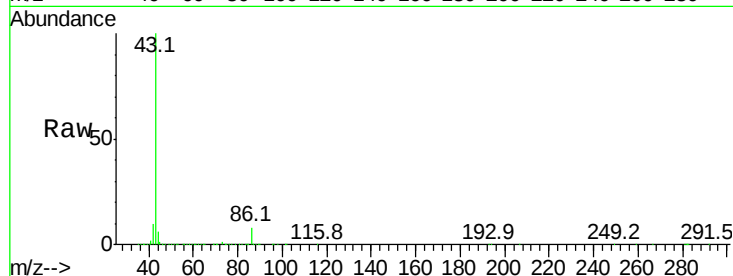
Ion Ratio Lower Upper

43 100

86 7.6 5.8 8.8

42 10.2 8.0 12.0

44 5.2 4.2 6.2

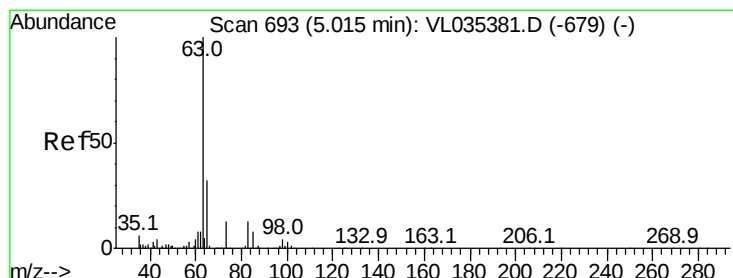
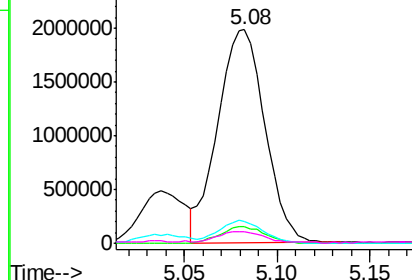
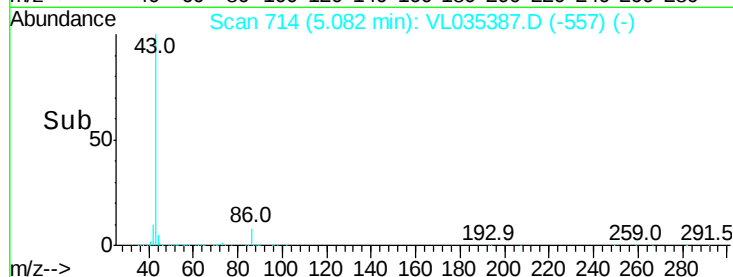


Abundance Ion 43.10 (42.80 to 43.80): VL0

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



#24

1,1-Dichloroethane

Concen: 13.886 ppbv

RT: 5.02 min Scan# 694

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

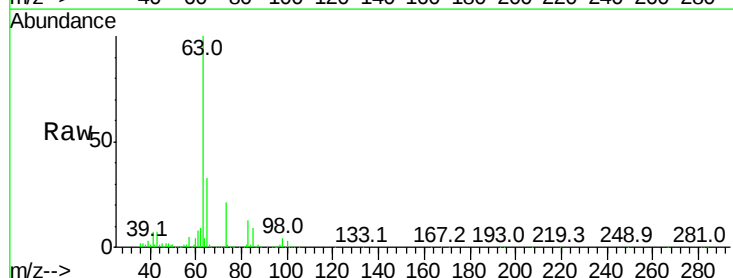
Tgt Ion: 63 Resp: 2357962

Ion Ratio Lower Upper

63 100

98 4.4 2.2 6.6

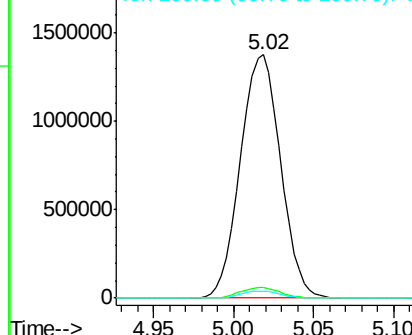
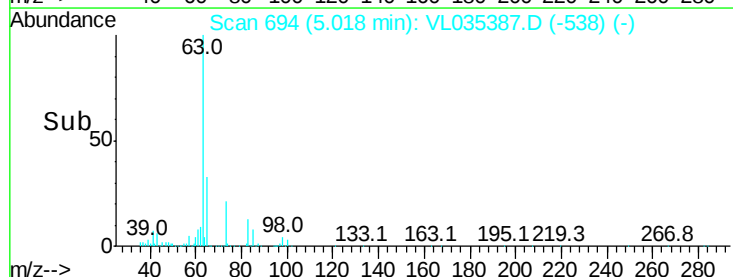
100 2.9 1.4 4.0

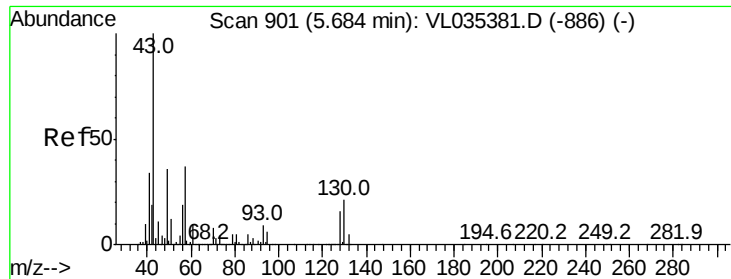


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 14.843 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tgt Ion: 43 Resp: 4249795

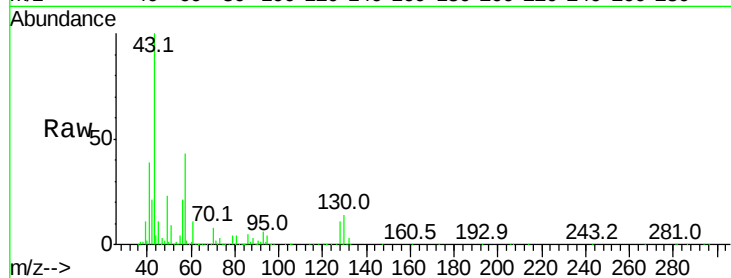
Ion Ratio Lower Upper

43 100

45 10.5 8.0 12.0

61 9.8 7.4 11.2

70 7.9 5.9 8.9

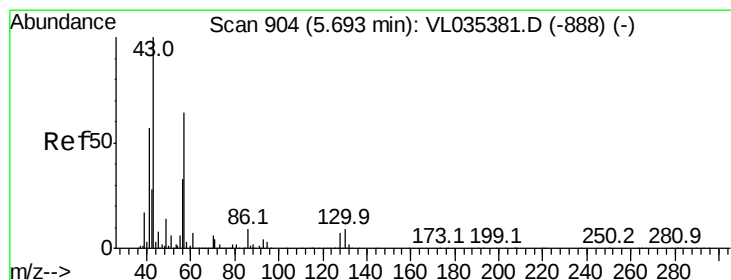
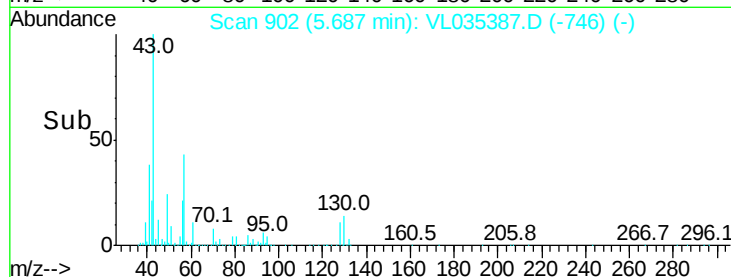
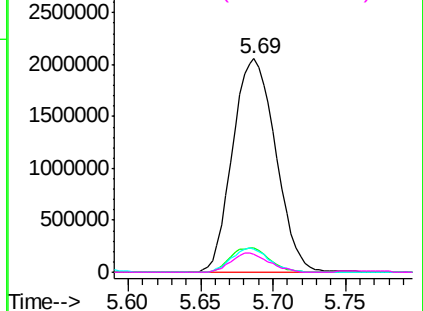


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 15.300 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Tgt Ion: 57 Resp: 1900259

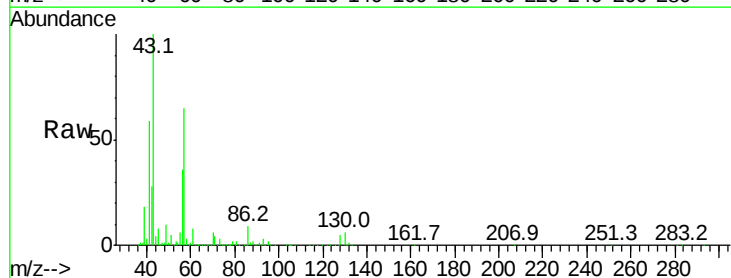
Ion Ratio Lower Upper

57 100

41 95.2 75.4 113.2

43 225.0 184.1 276.1

56 53.0 42.2 63.4

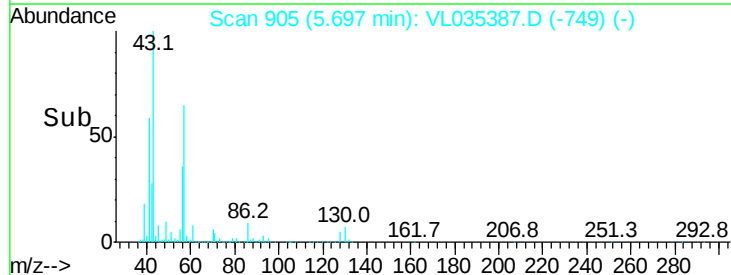
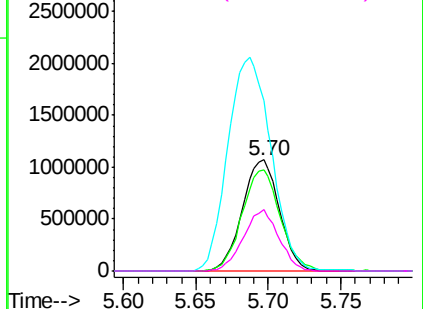


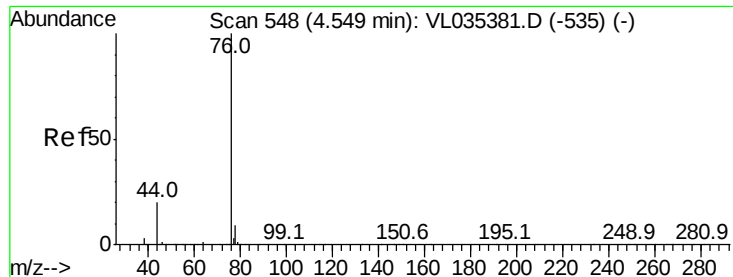
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 13.008 ppbv

RT: 4.55 min Scan# 548

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

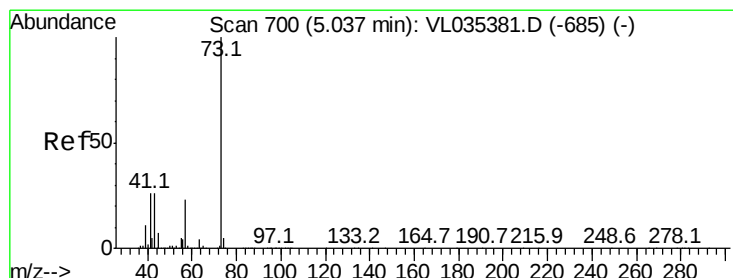
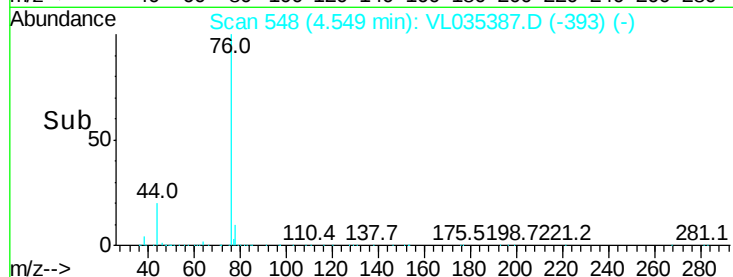
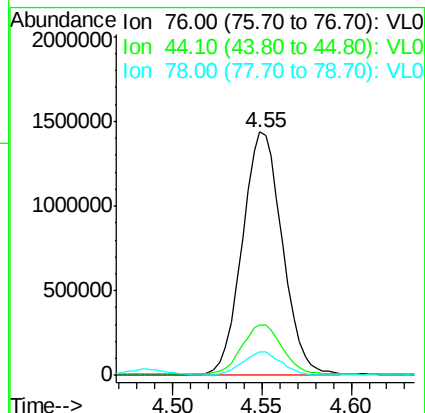
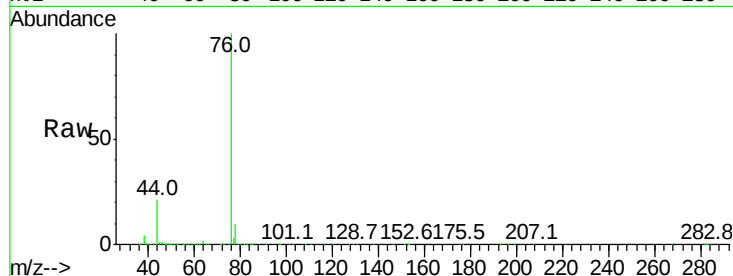
Tgt Ion: 76 Resp: 2259077

Ion Ratio Lower Upper

76 100

44 20.8 17.0 25.4

78 9.4 7.5 11.3



#28

Methyl tert-Butyl Ether

Concen: 17.656 ppbv

RT: 5.04 min Scan# 700

Delta R.T. -0.00 min

Lab File: VL035387.D

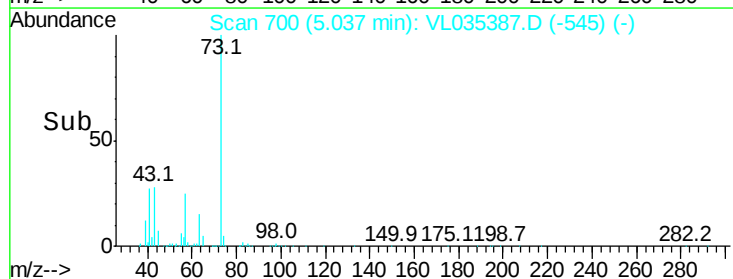
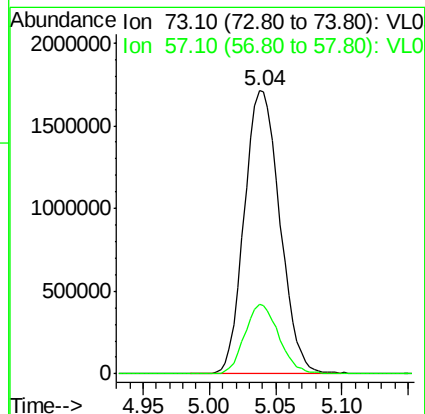
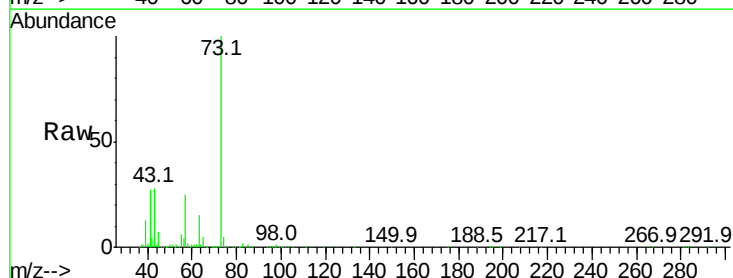
Acq: 12 Aug 2020 15:59

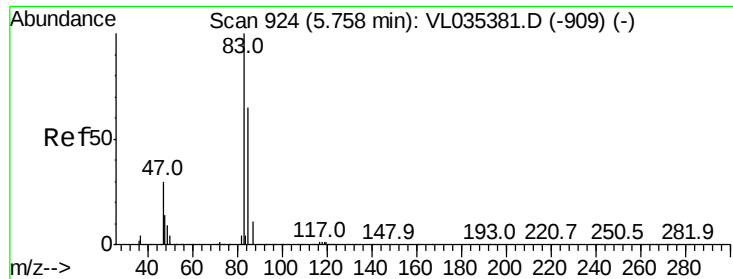
Tgt Ion: 73 Resp: 3188490

Ion Ratio Lower Upper

73 100

57 23.9 19.0 28.4





#29

Chloroform

Concen: 13.436 ppbv

RT: 5.76 min Scan# 926

Delta R.T. 0.01 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

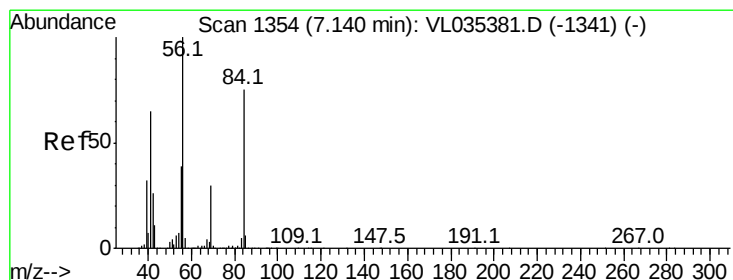
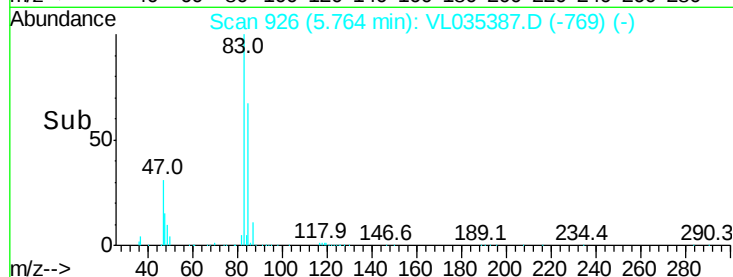
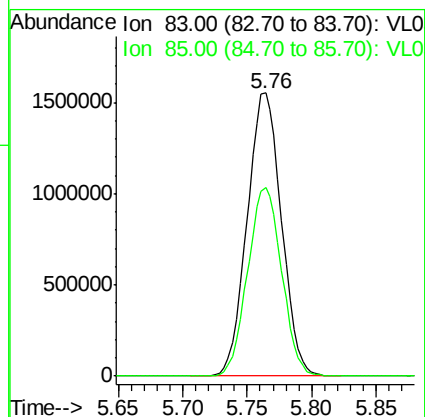
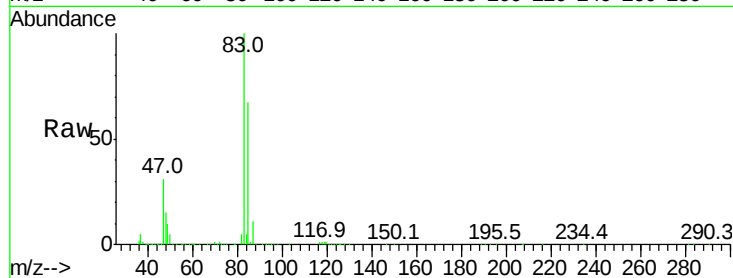
VSTDIC015

Tgt Ion: 83 Resp: 2876802

Ion Ratio Lower Upper

83 100

85 66.3 51.7 77.5



#30

Cyclohexane

Concen: 17.446 ppbv

RT: 7.14 min Scan# 1354

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

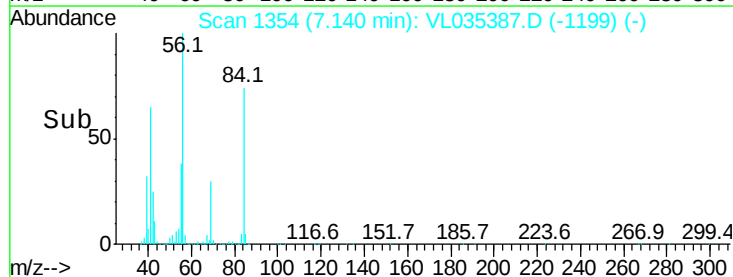
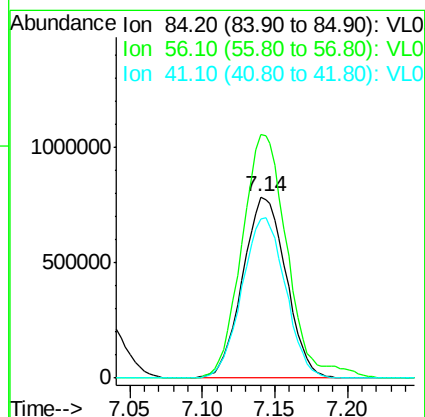
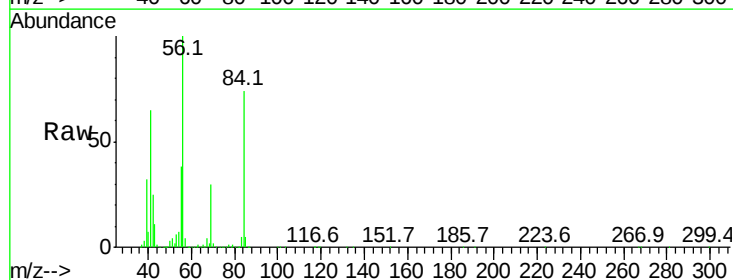
Tgt Ion: 84 Resp: 1643028

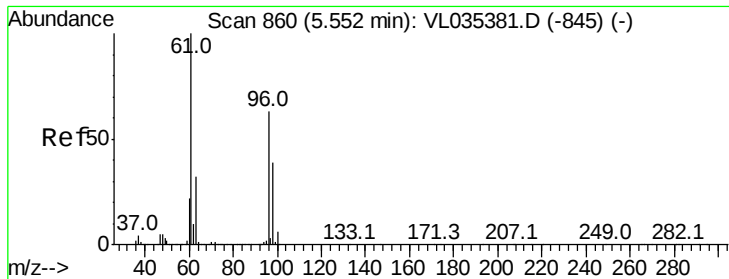
Ion Ratio Lower Upper

84 100

56 140.5 115.8 173.6

41 88.5 71.4 107.0



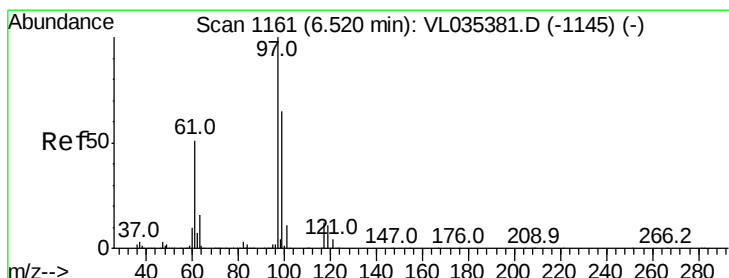
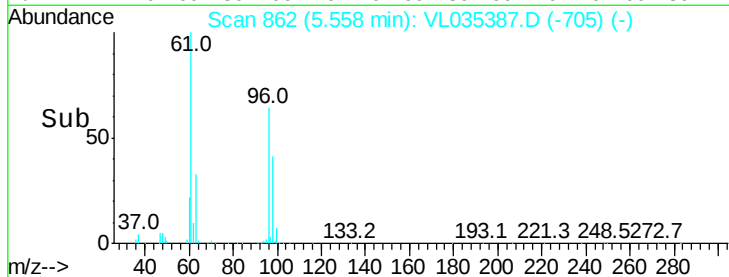
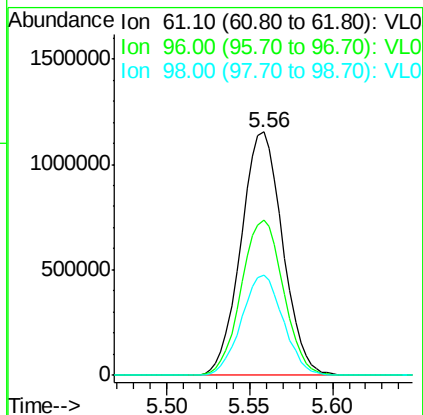
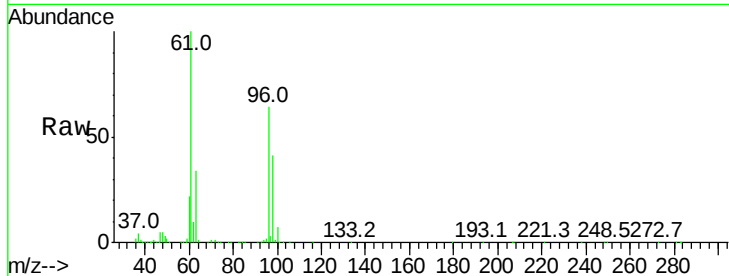


#31

cis-1,2-Dichloroethene
Concen: 18.277 ppbv
RT: 5.56 min Scan# 862
Delta R.T. 0.01 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

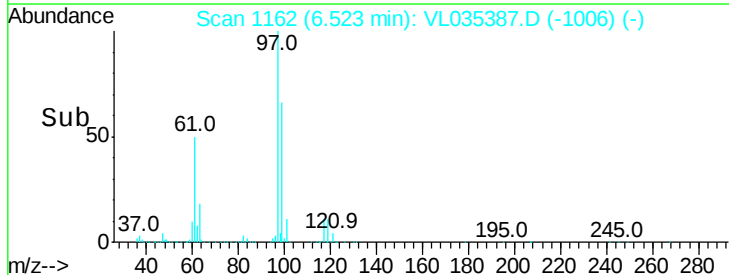
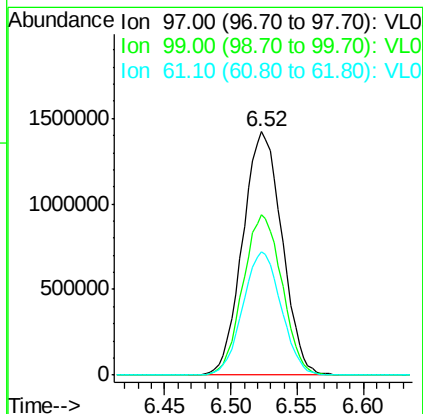
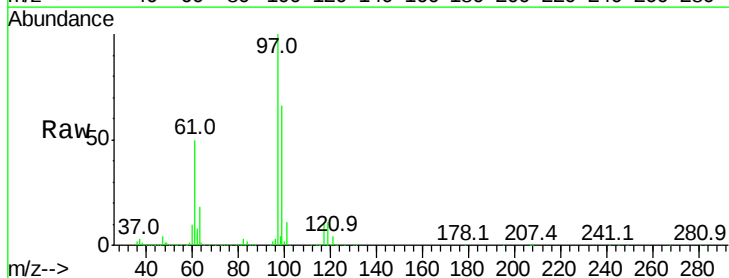
Tgt Ion: 61 Resp: 2017993
Ion Ratio Lower Upper
61 100
96 63.9 50.5 75.7
98 41.2 31.5 47.3

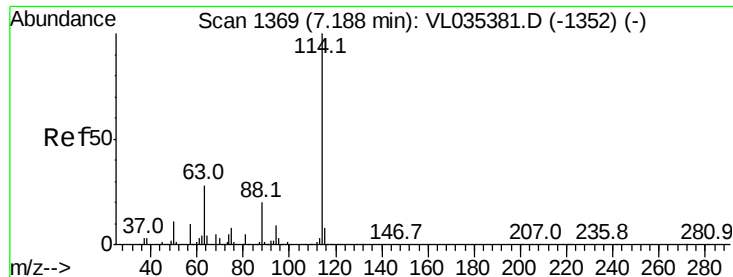


#32

1,1,1-Trichloroethane
Concen: 13.032 ppbv
RT: 6.52 min Scan# 1162
Delta R.T. 0.00 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

Tgt Ion: 97 Resp: 2932755
Ion Ratio Lower Upper
97 100
99 65.4 51.8 77.8
61 49.5 39.6 59.4

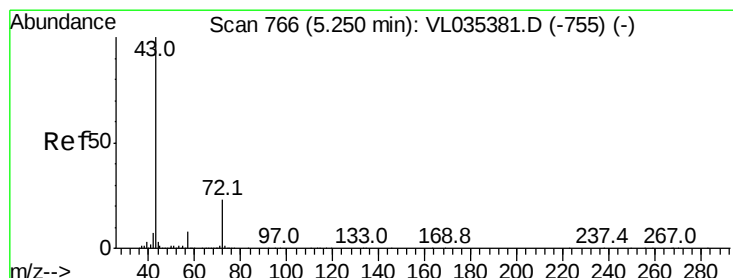
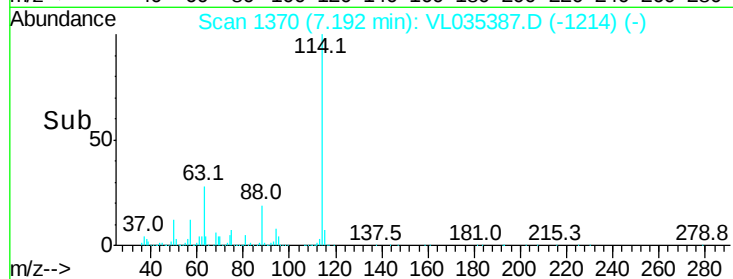
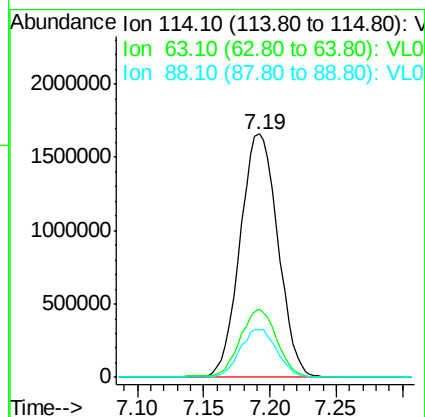
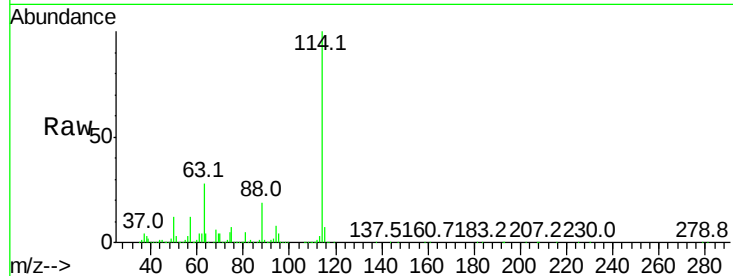




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1370
 Delta R.T. 0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

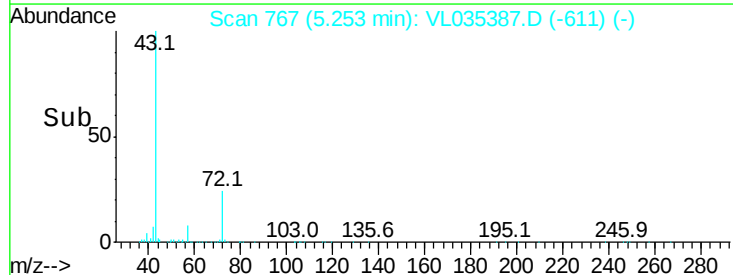
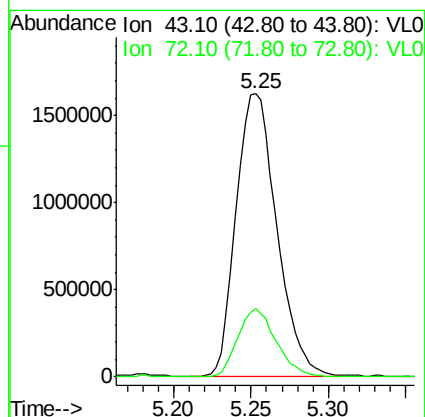
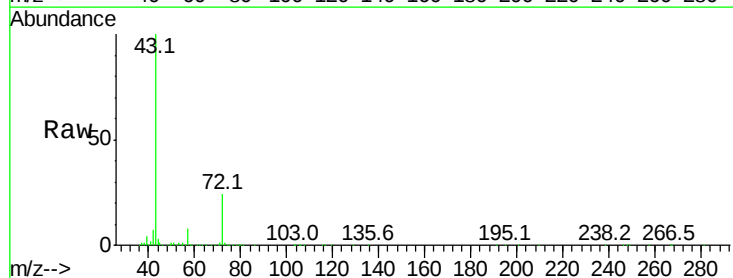
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

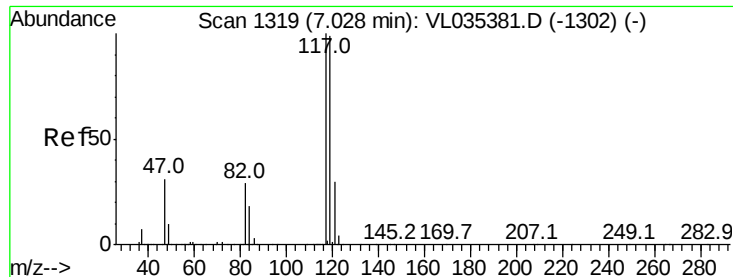
Tgt Ion:114 Resp: 3285999
 Ion Ratio Lower Upper
 114 100
 63 27.5 21.5 32.3
 88 19.5 15.6 23.4



#34
 2-Butanone
 Concen: 18.332 ppbv
 RT: 5.25 min Scan# 767
 Delta R.T. 0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Tgt Ion: 43 Resp: 2966110
 Ion Ratio Lower Upper
 43 100
 72 22.9 17.7 26.5





#35

Carbon Tetrachloride

Concen: 12.919 ppbv

RT: 7.03 min Scan# 1320

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

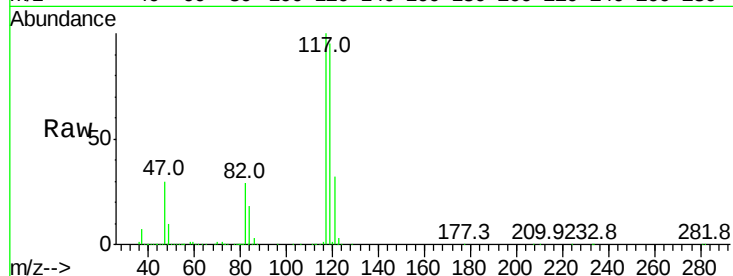
Tgt Ion:117 Resp: 2921370

Ion Ratio Lower Upper

117 100

119 95.5 79.4 119.0

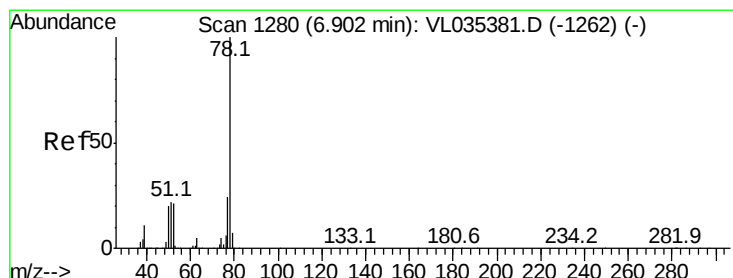
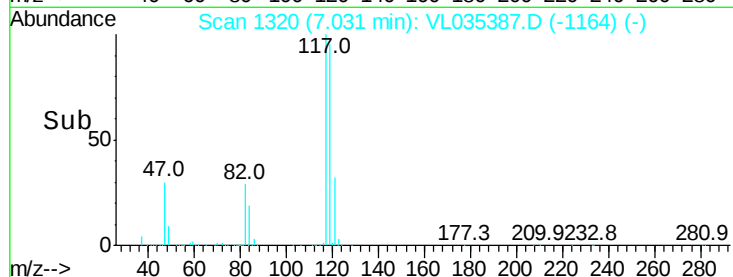
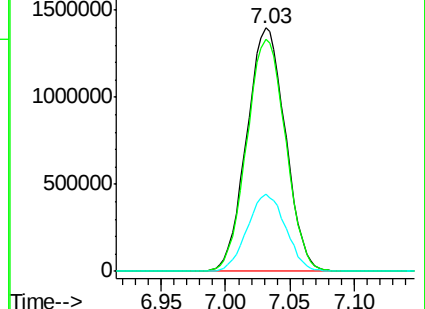
121 31.8 24.3 36.5



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 17.610 ppbv

RT: 6.91 min Scan# 1281

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

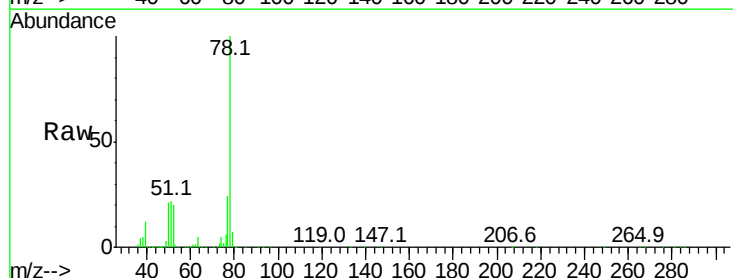
Tgt Ion: 78 Resp: 3907489

Ion Ratio Lower Upper

78 100

77 23.9 19.1 28.7

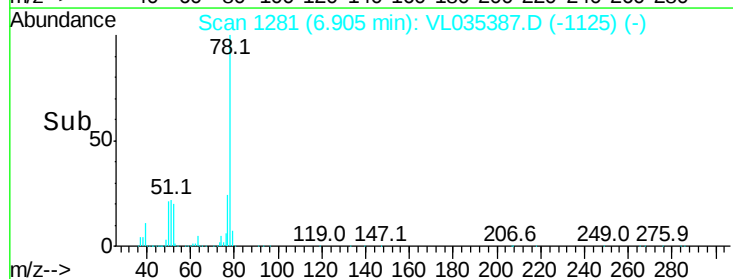
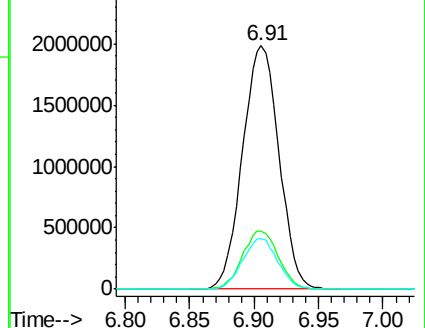
50 20.8 15.8 23.6

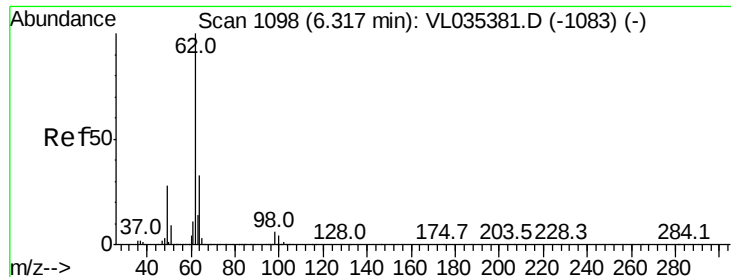


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 14.893 ppbv

RT: 6.32 min Scan# 1099

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

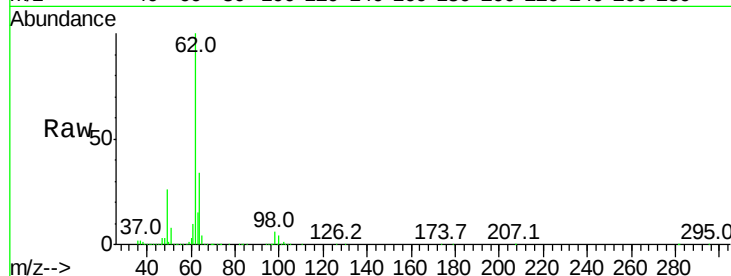
VSTDIC015

Tgt Ion: 62 Resp: 2308574

Ion Ratio Lower Upper

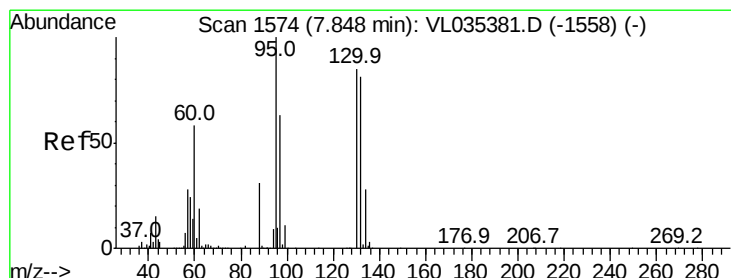
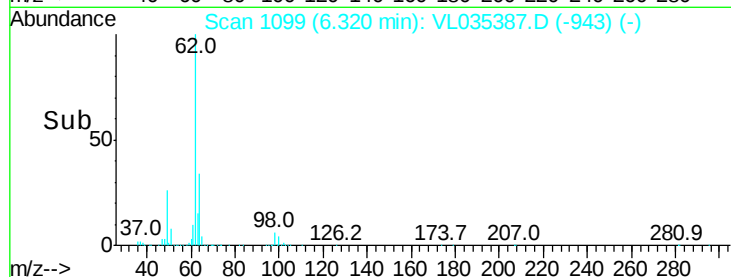
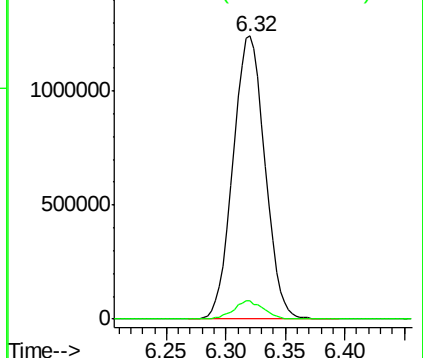
62 100

98 6.2 5.1 7.7



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#38

Trichloroethene

Concen: 13.727 ppbv

RT: 7.85 min Scan# 1576

Delta R.T. 0.01 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Tgt Ion: 130 Resp: 1405068

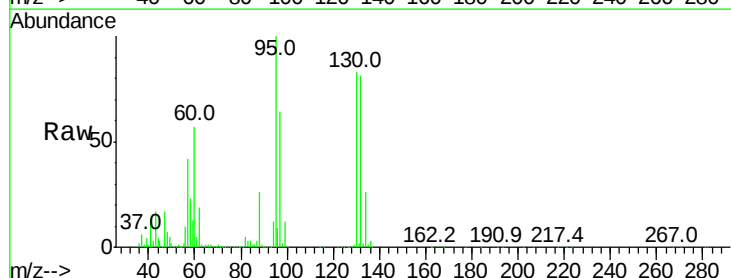
Ion Ratio Lower Upper

130 100

95 120.5 94.2 141.4

132 97.8 76.6 114.8

97 77.6 59.3 88.9

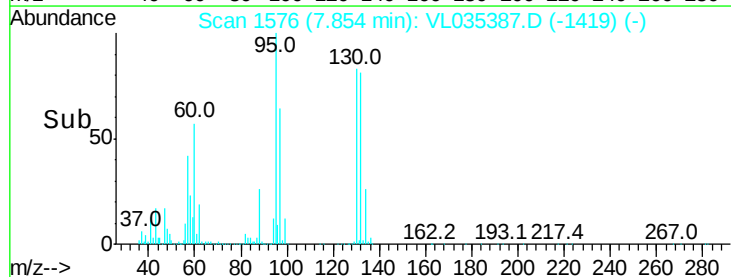
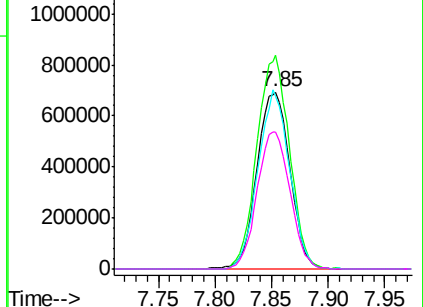


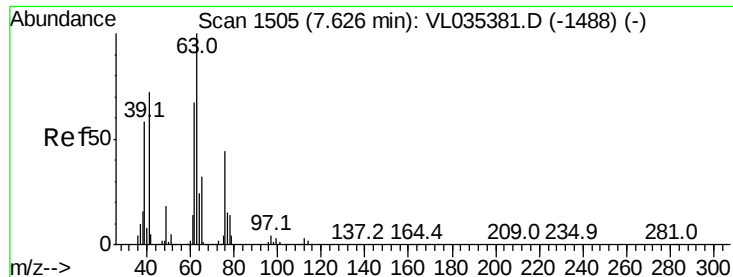
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0





#39

1,2-Dichloropropane

Concen: 17.734 ppbv

RT: 7.63 min Scan# 1506

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

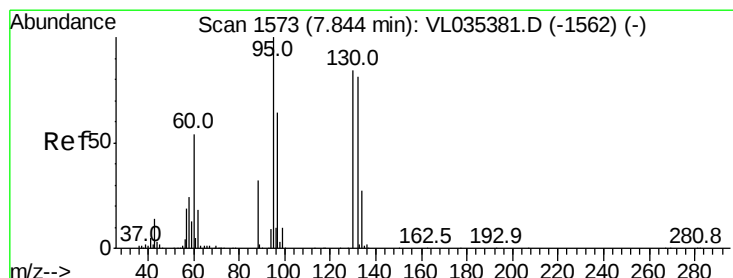
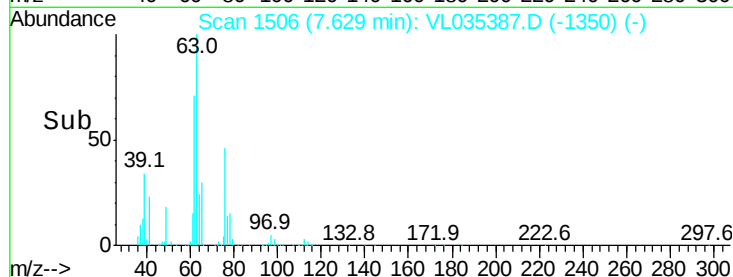
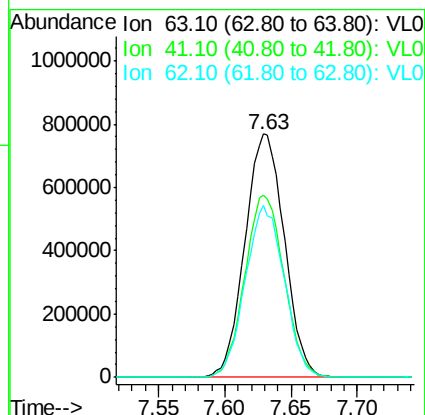
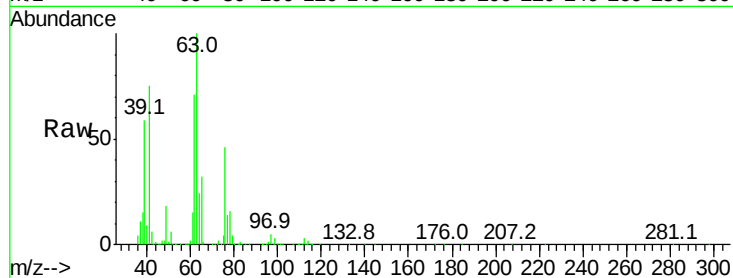
Tgt Ion: 63 Resp: 1593036

Ion Ratio Lower Upper

63 100

41 74.6 57.4 86.2

62 70.5 53.6 80.4



#40

1,4-Dioxane

Concen: 15.832 ppbv

RT: 7.85 min Scan# 1574

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Tgt Ion: 88 Resp: 609048

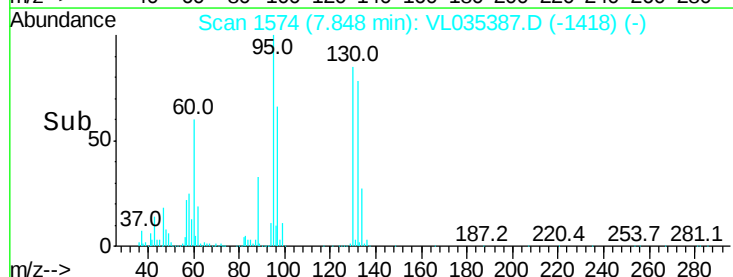
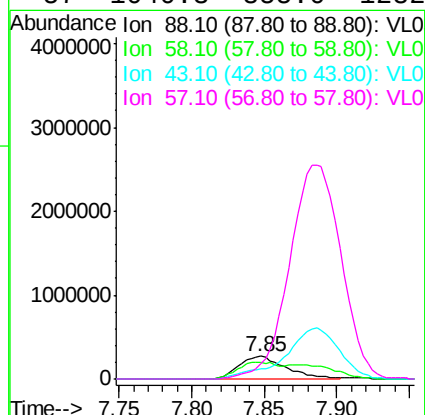
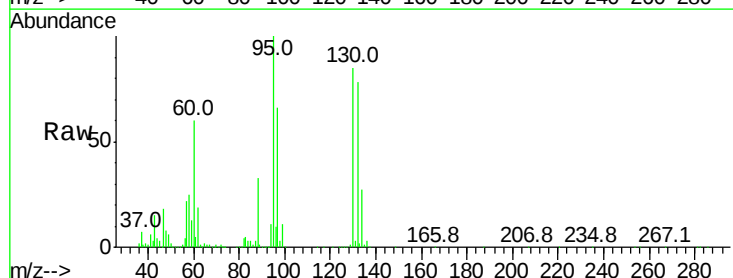
Ion Ratio Lower Upper

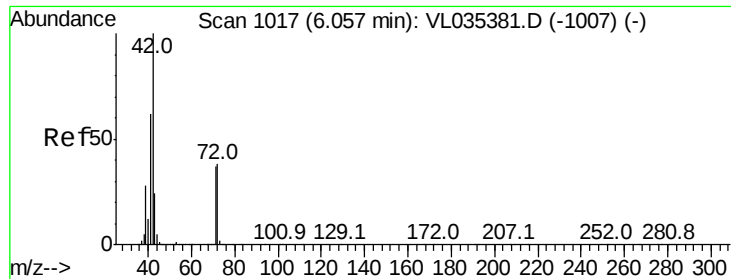
88 100

58 129.9 105.0 157.6

43 259.0 204.2 306.2

57 1040.3 855.0 1282.4





#41

Tetrahydrofuran

Concen: 22.761 ppbv

RT: 6.06 min Scan# 1017

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

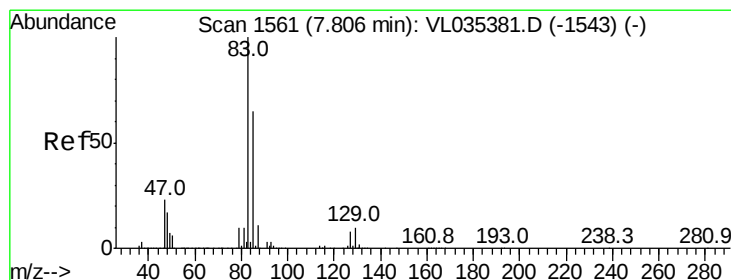
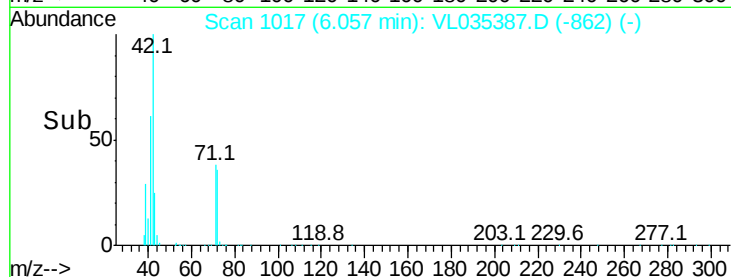
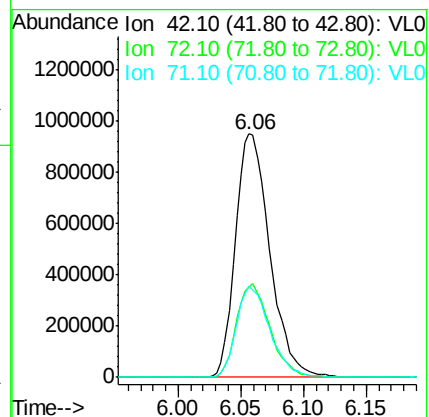
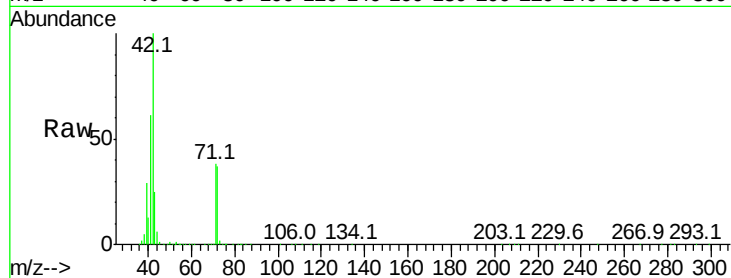
Tgt Ion: 42 Resp: 1807196

Ion Ratio Lower Upper

42 100

72 38.0 30.2 45.2

71 36.8 28.6 42.8



#42

Bromodichloromethane

Concen: 15.326 ppbv

RT: 7.81 min Scan# 1562

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

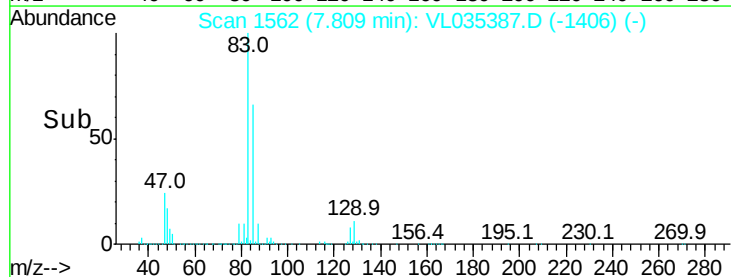
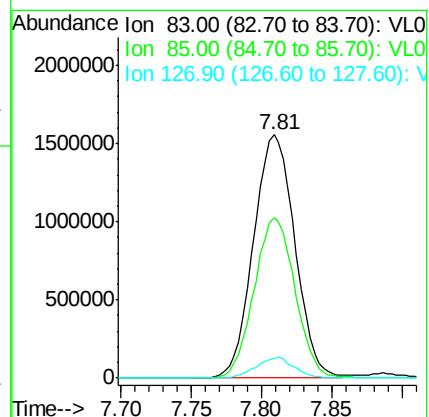
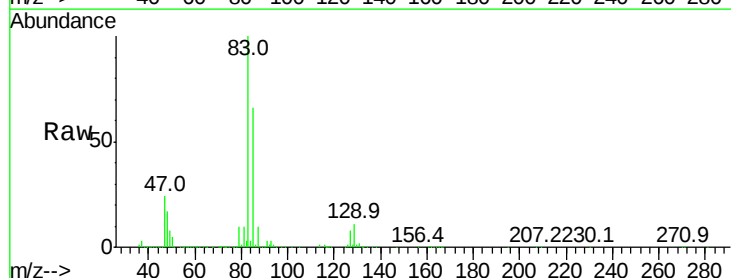
Tgt Ion: 83 Resp: 3190397

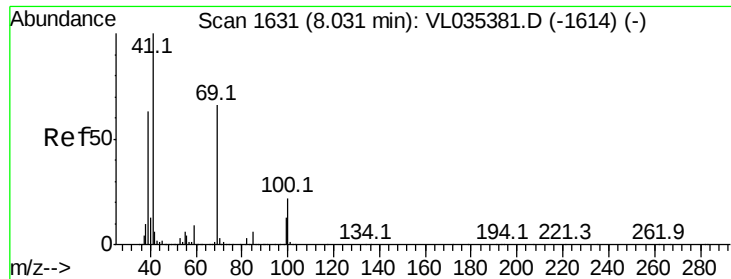
Ion Ratio Lower Upper

83 100

85 66.0 52.2 78.4

127 8.0 6.3 9.5

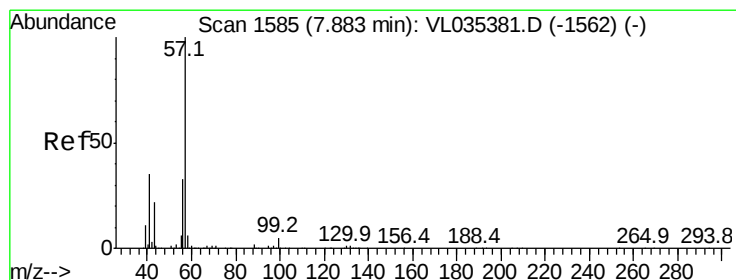
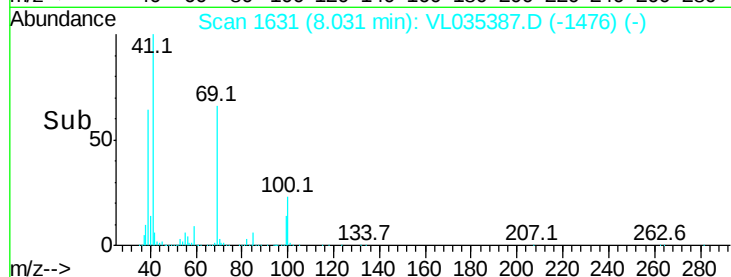
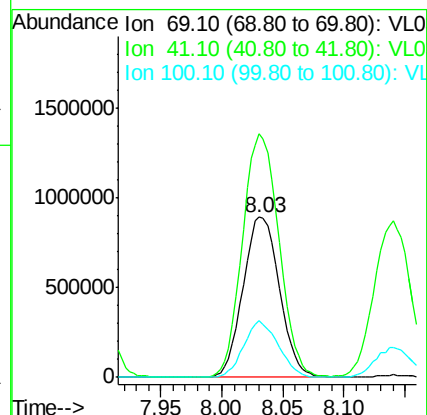
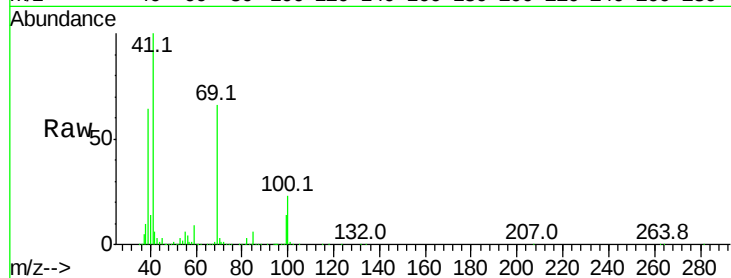




#43
Methyl Methacrylate
Concen: 19.692 ppbv
RT: 8.03 min Scan# 1631
Delta R.T. -0.00 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

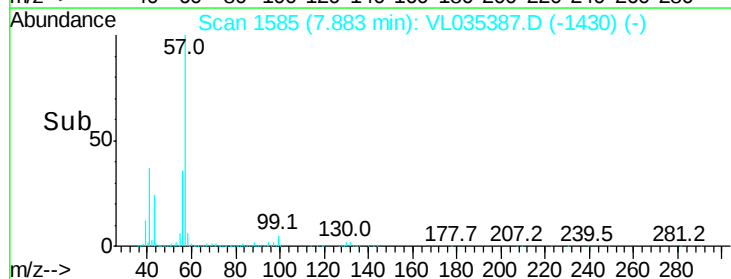
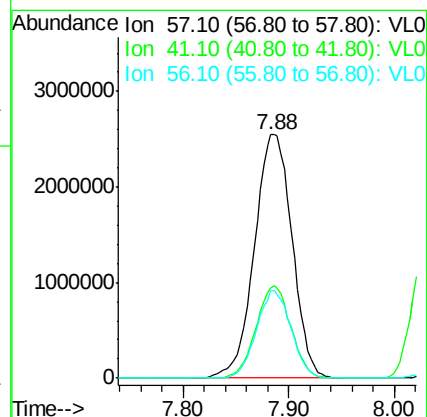
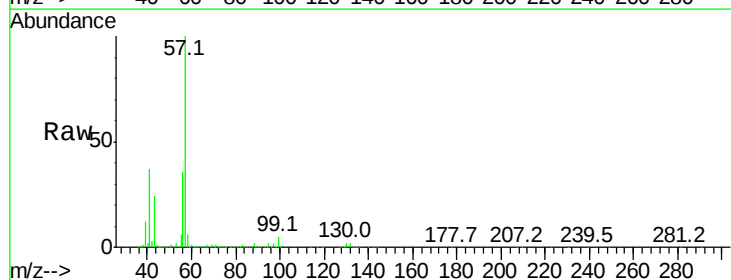
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

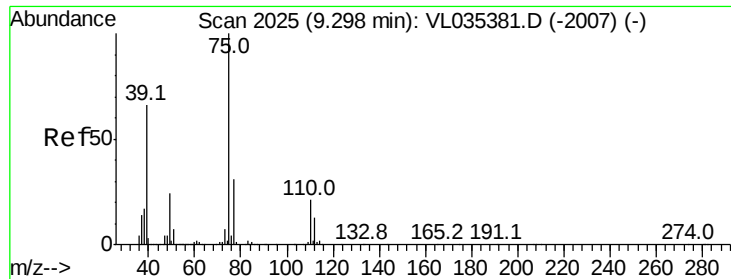
Tgt Ion: 69 Resp: 1838244
Ion Ratio Lower Upper
69 100
41 152.1 123.4 185.2
100 33.6 26.7 40.1



#44
2,2,4-Trimethylpentane
Concen: 16.053 ppbv
RT: 7.88 min Scan# 1585
Delta R.T. -0.00 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

Tgt Ion: 57 Resp: 6328070
Ion Ratio Lower Upper
57 100
41 35.1 26.9 40.3
56 33.0 25.6 38.4





#45

t-1,3-Dichloropropene

Concen: 23.334 ppbv

RT: 9.30 min Scan# 2025

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

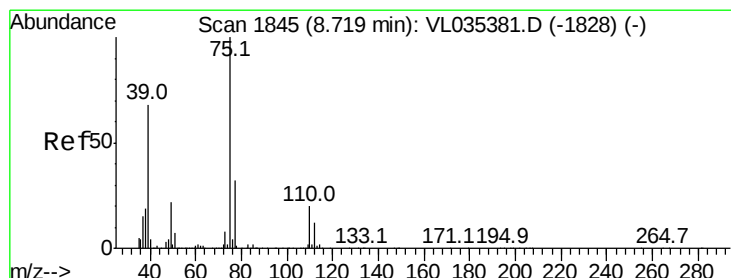
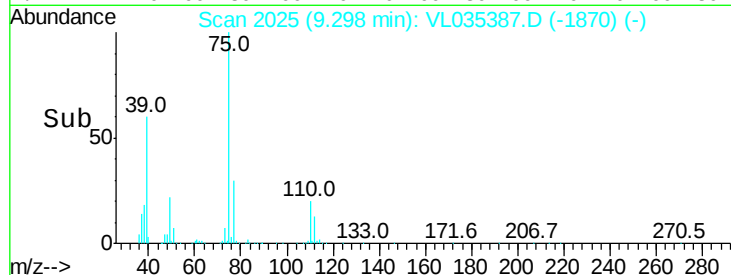
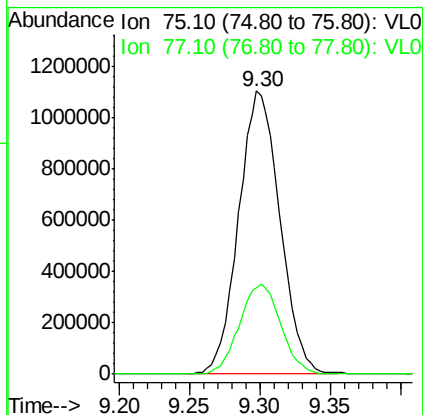
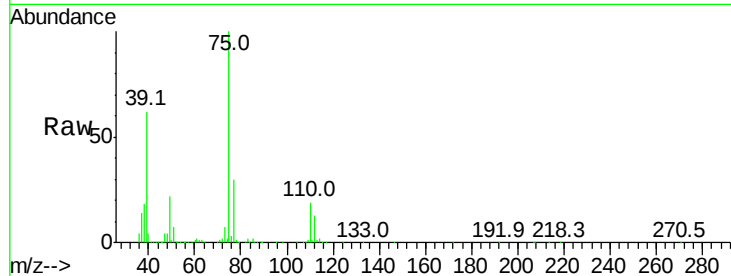
VSTDIC015

Tgt Ion: 75 Resp: 2259580

Ion Ratio Lower Upper

75 100

77 30.3 25.2 37.8



#46

cis-1,3-Dichloropropene

Concen: 21.417 ppbv

RT: 8.72 min Scan# 1846

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

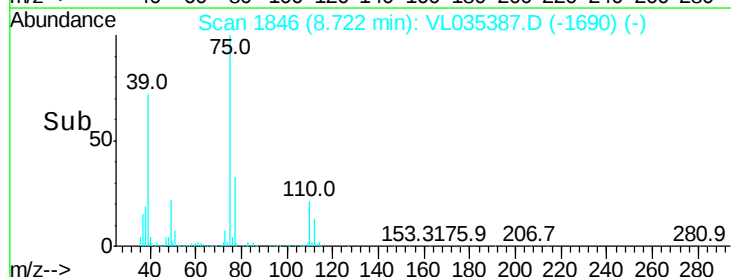
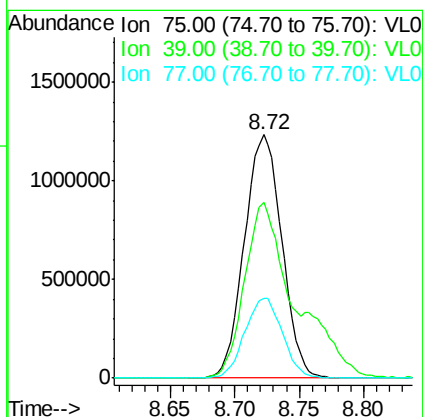
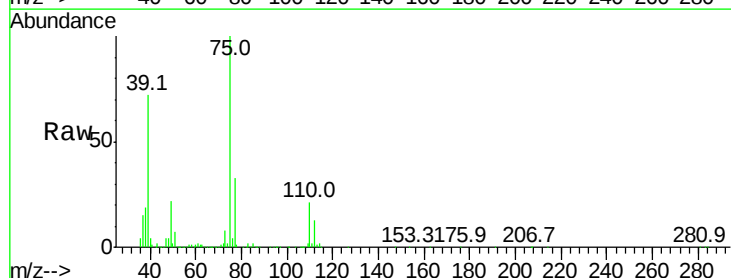
Tgt Ion: 75 Resp: 2504653

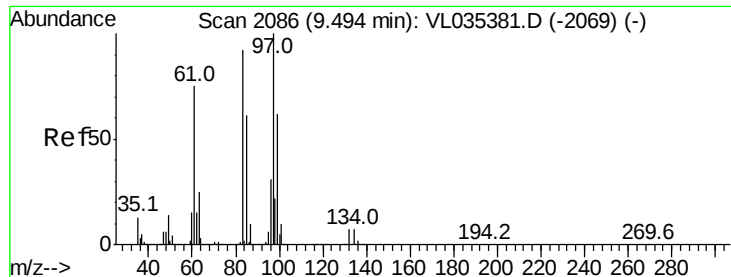
Ion Ratio Lower Upper

75 100

39 72.0 54.2 81.2

77 32.7 25.7 38.5

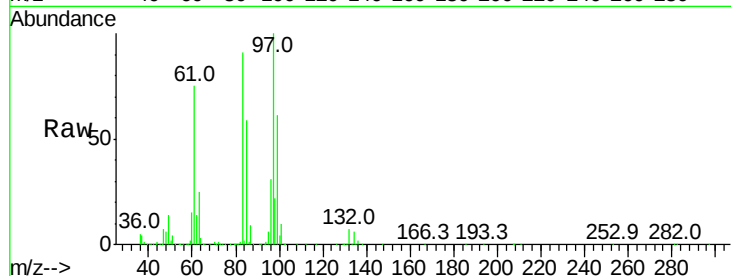




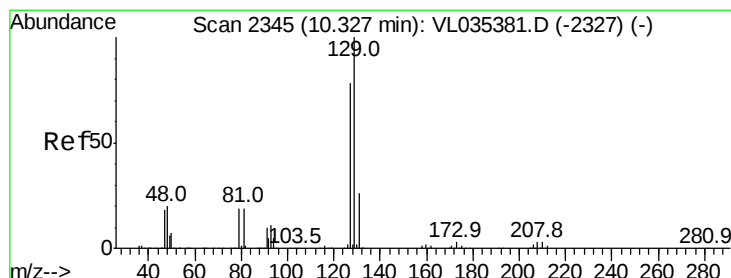
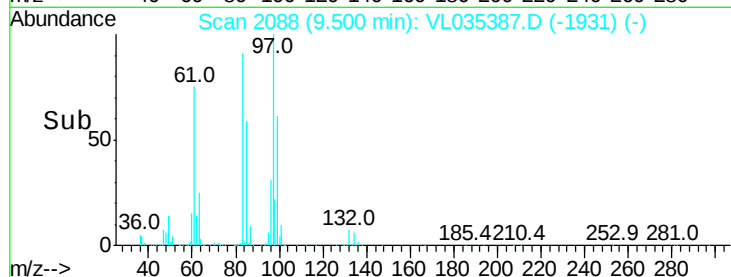
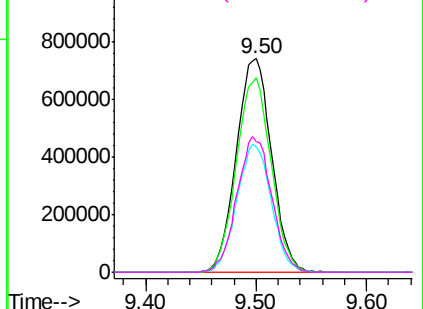
#47
 1,1,2-Trichloroethane
 Concen: 15.233 ppbv
 RT: 9.50 min Scan# 2088
 Delta R.T. 0.01 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tgt Ion: 97 Resp: 1645224
 Ion Ratio Lower Upper
 97 100
 83 91.0 73.9 110.9
 85 58.6 49.0 73.6
 99 61.1 49.9 74.9

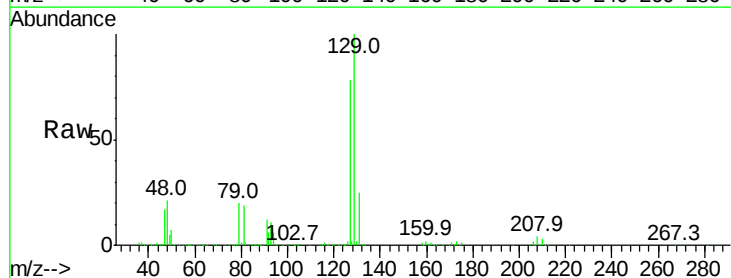


Abundance Ion 97.00 (96.70 to 97.70): VL0
 Ion 83.00 (82.70 to 83.70): VL0
 Ion 85.00 (84.70 to 85.70): VL0
 Ion 99.00 (98.70 to 99.70): VL0

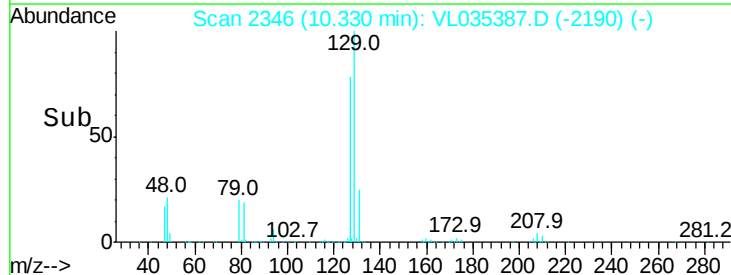
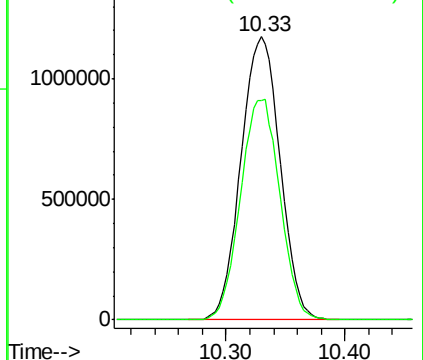


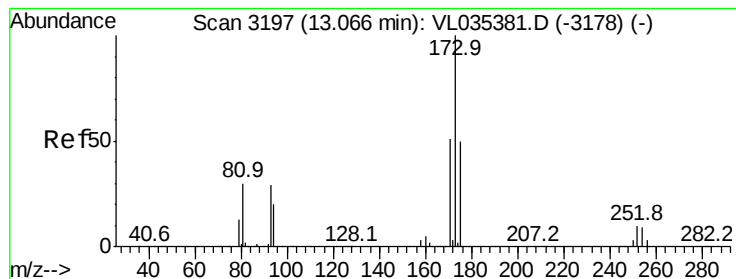
#48
 Dibromochloromethane
 Concen: 15.128 ppbv
 RT: 10.33 min Scan# 2346
 Delta R.T. 0.00 min
 Lab File: VL035387.D
 Acq: 12 Aug 2020 15:59

Tgt Ion: 129 Resp: 2676502
 Ion Ratio Lower Upper
 129 100
 127 78.7 39.3 117.8



Abundance Ion 129.00 (128.70 to 129.70): V
 Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 14.105 ppbv

RT: 13.07 min Scan# 3199

Delta R.T. 0.01 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

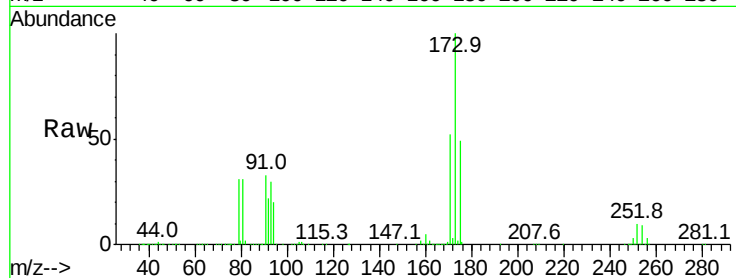
Tgt Ion:173 Resp: 2273844

Ion Ratio Lower Upper

173 100

175 49.1 39.9 59.9

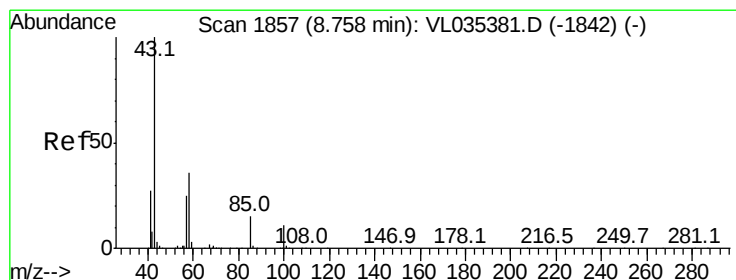
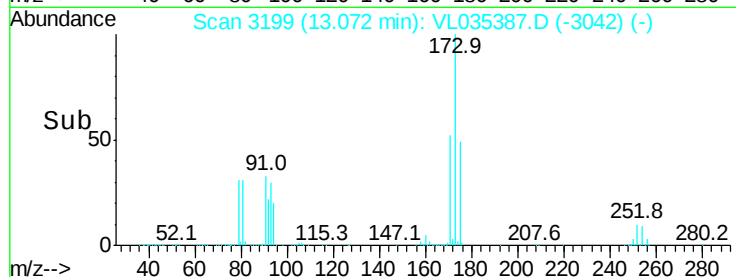
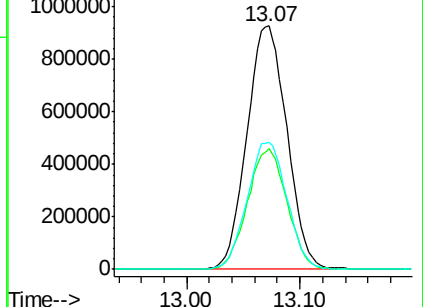
171 52.3 41.8 62.8



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 17.609 ppbv

RT: 8.76 min Scan# 1858

Delta R.T. 0.00 min

Lab File: VL035387.D

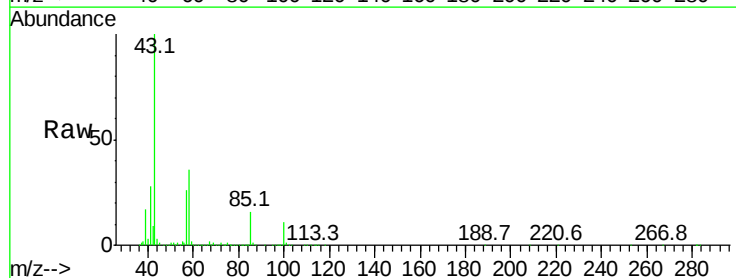
Acq: 12 Aug 2020 15:59

Tgt Ion: 43 Resp: 4350084

Ion Ratio Lower Upper

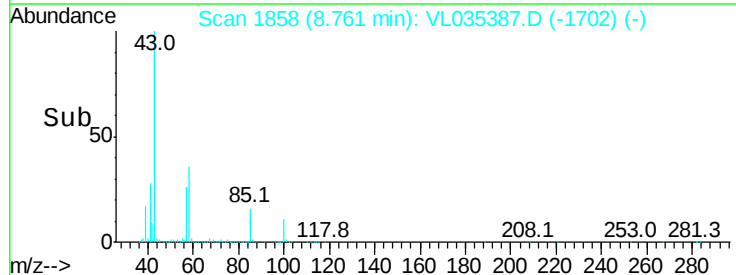
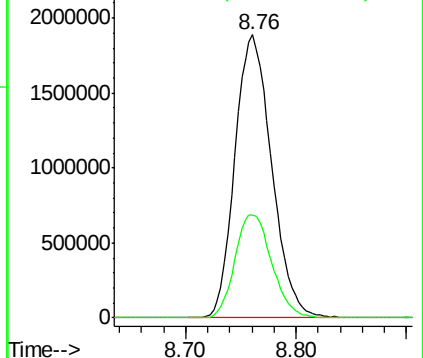
43 100

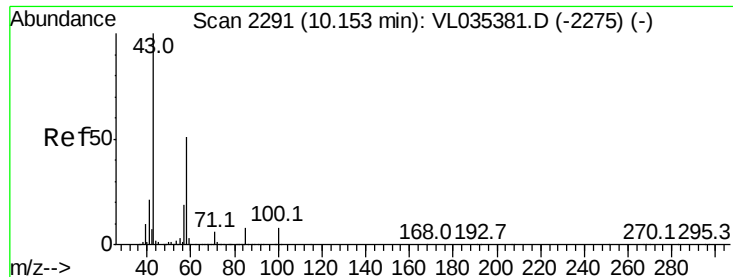
58 36.8 29.0 43.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 19.449 ppbv

RT: 10.15 min Scan# 2291

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

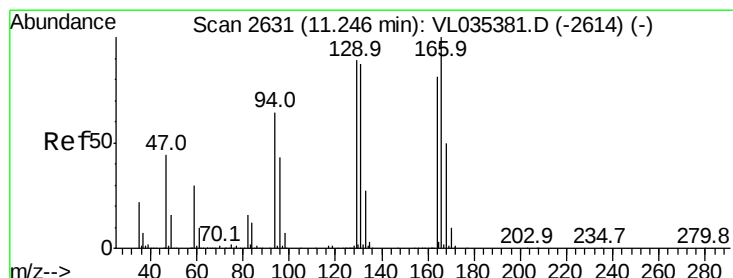
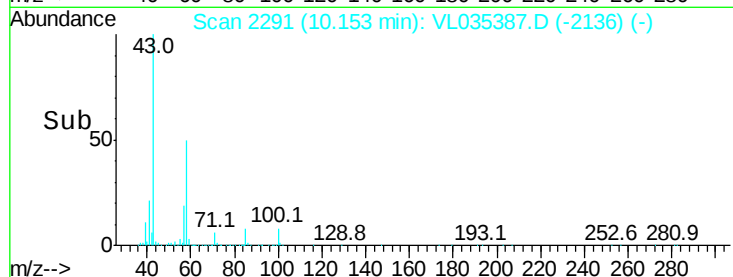
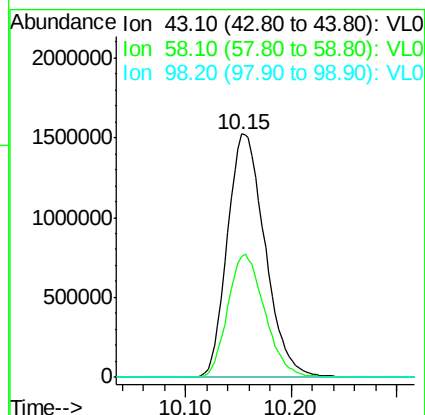
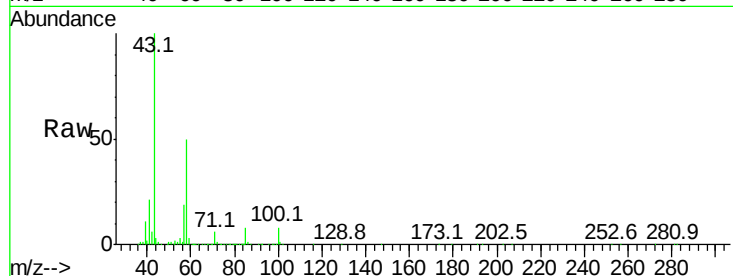
Tgt Ion: 43 Resp: 3766700

Ion Ratio Lower Upper

43 100

58 49.8 39.5 59.3

98 0.1 0.1 0.1#



#52

Tetrachloroethene

Concen: 14.696 ppbv

RT: 11.25 min Scan# 2631

Delta R.T. -0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Tgt Ion: 164 Resp: 1292826

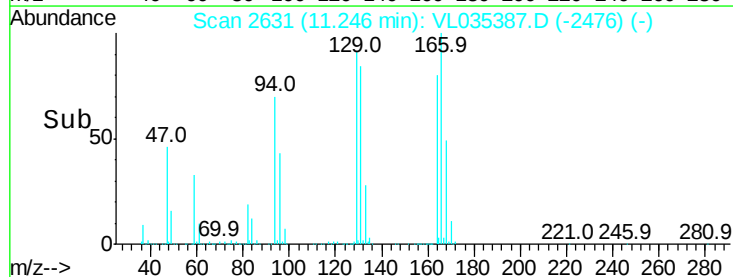
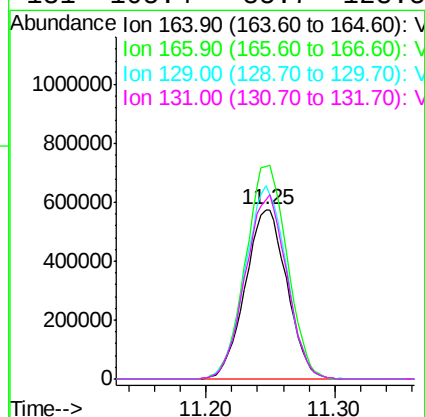
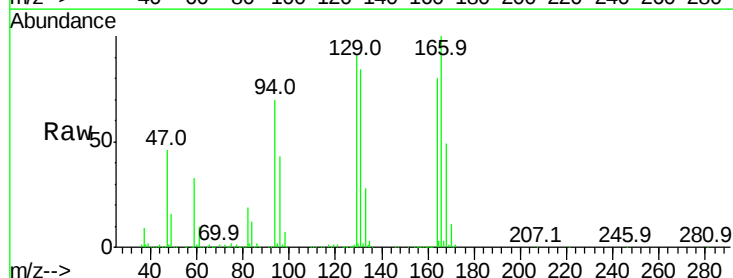
Ion Ratio Lower Upper

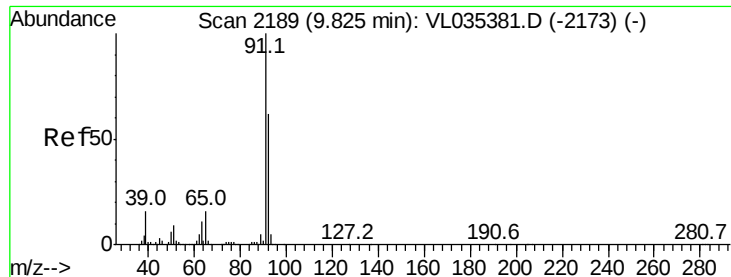
164 100

166 125.2 98.2 147.2

129 114.1 87.3 130.9

131 105.4 85.7 128.5





#53

Toluene

Concen: 18.759 ppbv

RT: 9.83 min Scan# 2190

Delta R.T. 0.00 min

Lab File: VL035387.D

Acq: 12 Aug 2020 15:59

Instrument :

MSVOA_L

ClientSampleId :

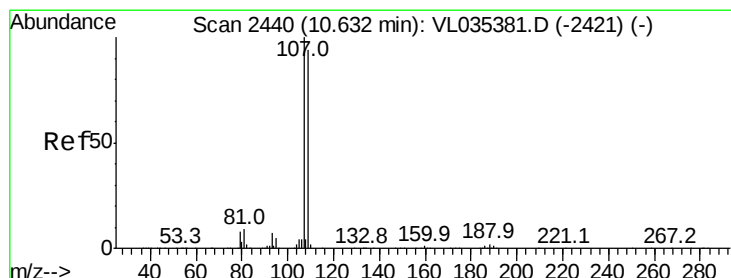
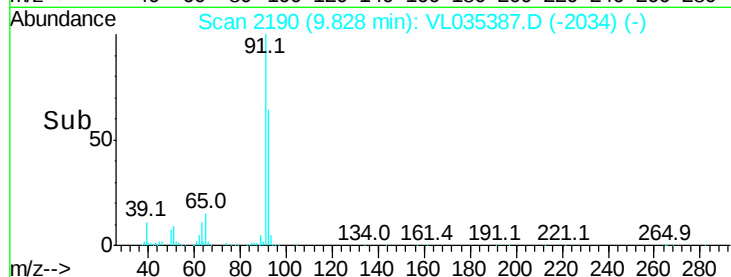
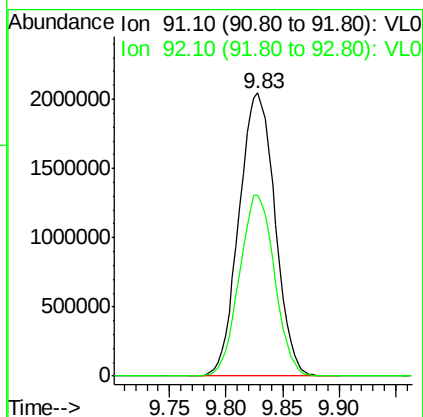
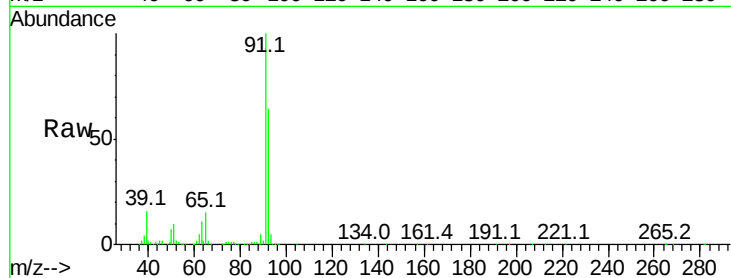
VSTDIC015

Tgt Ion: 91 Resp: 4528021

Ion Ratio Lower Upper

91 100

92 62.6 49.1 73.7



#54

1,2-Dibromoethane

Concen: 16.443 ppbv

RT: 10.64 min Scan# 2442

Delta R.T. 0.01 min

Lab File: VL035387.D

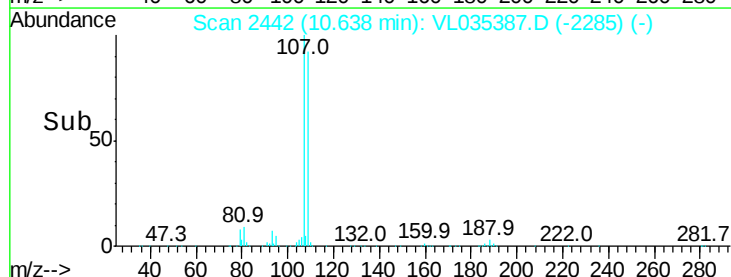
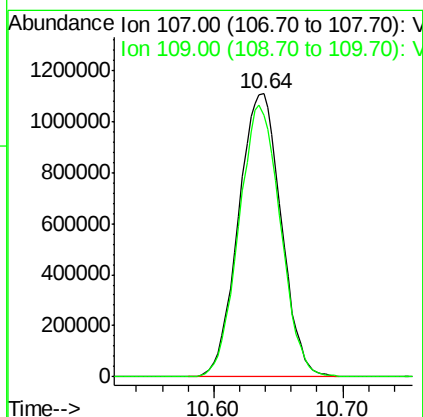
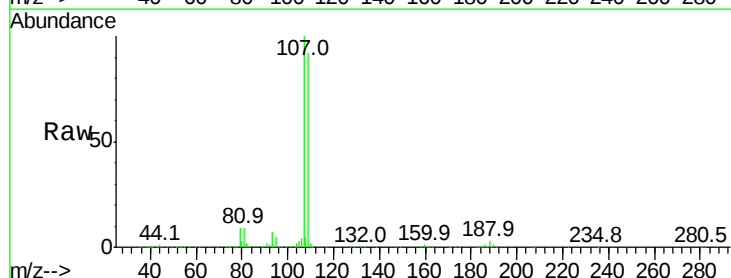
Acq: 12 Aug 2020 15:59

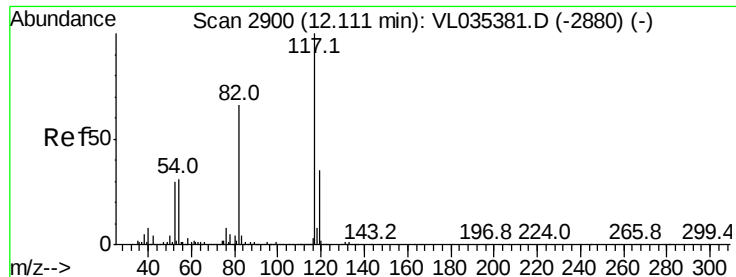
Tgt Ion: 107 Resp: 2547962

Ion Ratio Lower Upper

107 100

109 92.4 75.2 112.8

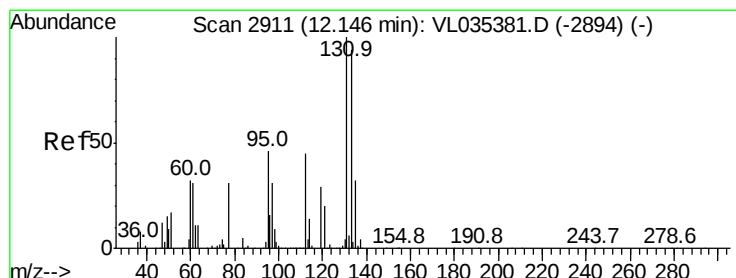
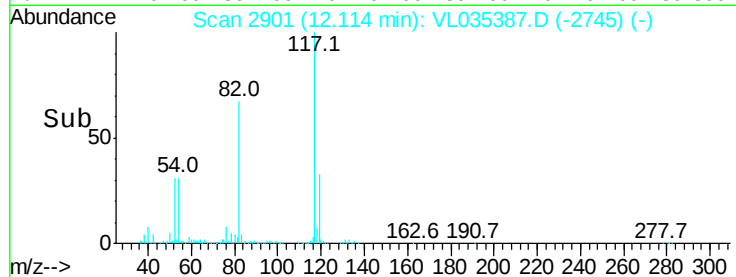
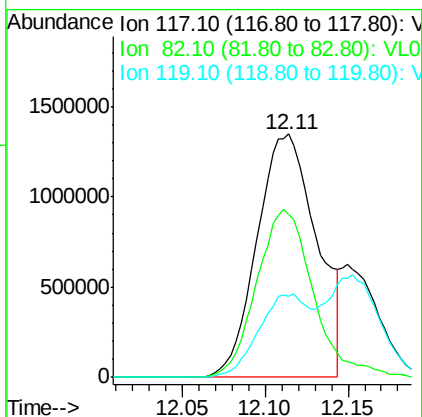
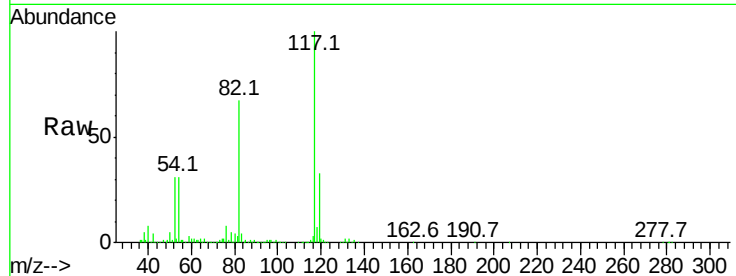




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2901
Delta R.T. 0.00 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

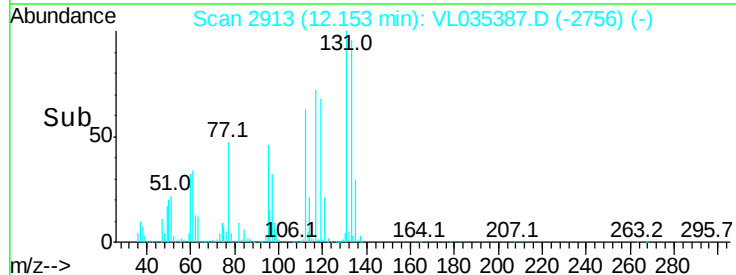
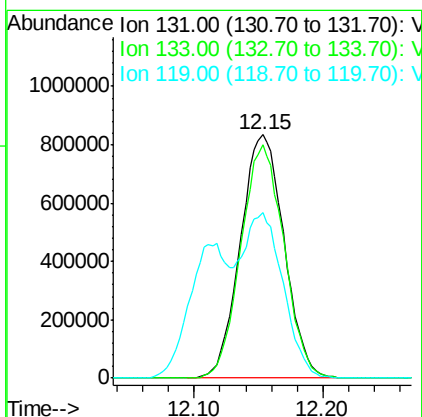
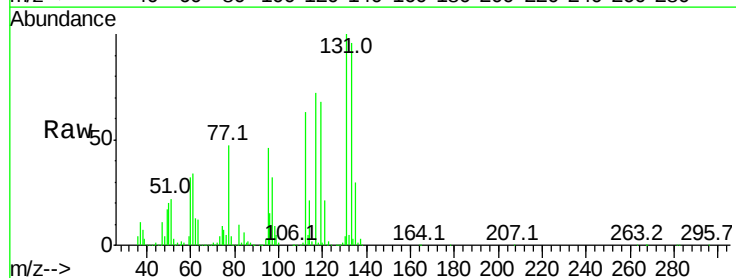
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

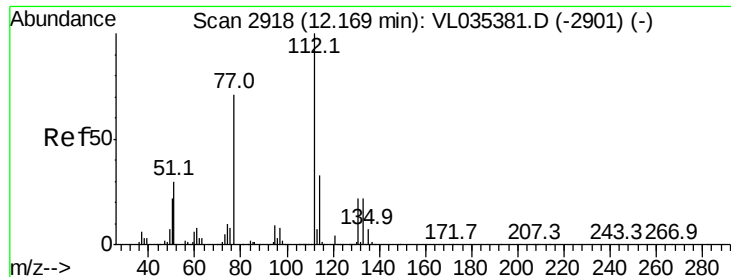
Tgt Ion:117 Resp: 3383034
Ion Ratio Lower Upper
117 100
82 65.9 53.0 79.6
119 27.9 25.7 38.5



#56
1,1,1,2-Tetrachloroethane
Concen: 12.281 ppbv
RT: 12.15 min Scan# 2913
Delta R.T. 0.01 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

Tgt Ion:131 Resp: 1961043
Ion Ratio Lower Upper
131 100
133 94.7 76.1 114.1
119 64.1 47.0 70.4

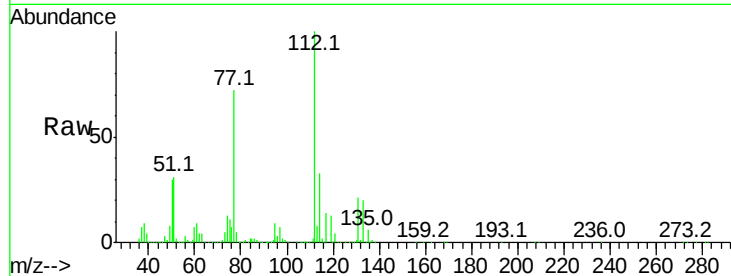




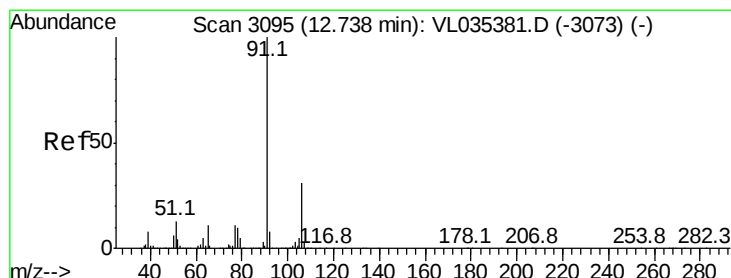
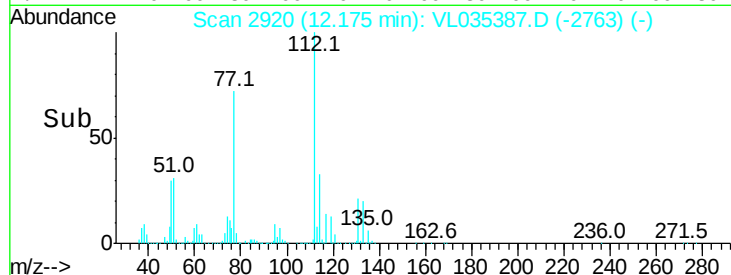
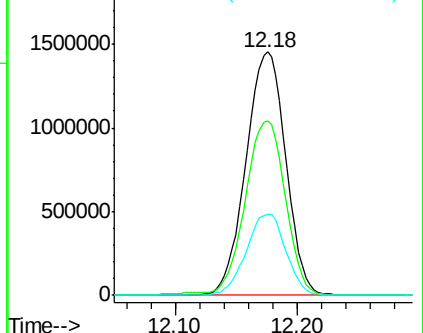
#57
Chlorobenzene
Concen: 12.843 ppbv
RT: 12.18 min Scan# 2920
Delta R.T. 0.01 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tgt Ion: 112 Resp: 3271455
Ion Ratio Lower Upper
112 100
77 71.7 57.6 86.4
114 33.3 30.0 36.6

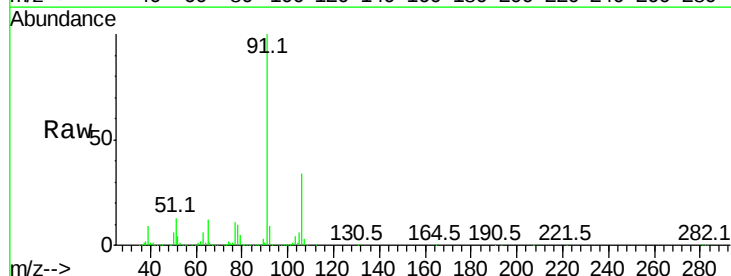


Abundance Ion 112.10 (111.80 to 112.80): V
Ion 77.10 (76.80 to 77.80): VL0
Ion 114.10 (113.80 to 114.80): V



#58
Ethyl Benzene
Concen: 17.213 ppbv
RT: 12.74 min Scan# 3095
Delta R.T. -0.00 min
Lab File: VL035387.D
Acq: 12 Aug 2020 15:59

Tgt Ion: 91 Resp: 6059413
Ion Ratio Lower Upper
91 100
106 33.5 25.1 37.7



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V

