

Data File : VL034819.D
Acq On : 6 Mar 2020 15:57
Operator : SY/AP
Sample : VSTDCCC010
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Mar 06 17:49:48 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL030420AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Mar 04 06:36:39 2020
QLast Update : Wed Mar 04 06:36:39 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	879506	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.20	114	2038779	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.13	117	2531315	10.00	ppbv	-0.02

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1597551 7.57 ppbv -0.02
Spiked Amount 10.000 Range 65 - 135 Recovery = 75.70%

Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.02	85	925697	6.450 ppbv	100
3) Chlorodifluoromethane	2.95	51	849649	8.479 ppbv	97
4) Chloromethane	3.11	50	507960	9.412 ppbv	99
5) Vinyl Chloride	3.23	62	468909	8.224 ppbv	100
6) Bromomethane	3.45	94	269734	8.668 ppbv	98
7) Chloroethane	3.53	64	171363	8.692 ppbv	98
8) Dichlorotetrafluoroethane	3.16	85	1025795	8.227 ppbv	91
9) Propene	2.98	41	432624	10.969 ppbv	99
10) Heptane	8.14	43	1092580	10.900 ppbv	95
11) Trichlorofluoromethane	3.93	101	1050213	8.177 ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.47	101	751140	8.476 ppbv	91
13) Ethanol	3.58	45	114484	8.472 ppbv	100
14) Bromoethene	3.72	108	337871	9.292 ppbv	97
15) Acetone	3.83	43	937301	8.900 ppbv	99
16) 1,3-Butadiene	3.30	39	455841	9.566 ppbv	99
17) tert-Butyl alcohol	4.28	59	1056605	12.723 ppbv	99
18) 1,1-Dichloroethene	4.28	96	350108	8.958 ppbv	95
19) Isopropyl Alcohol	3.95	45	683658	10.834 ppbv	# 1
20) Methylene Chloride	4.33	84	302313	8.043 ppbv	99
21) Allyl Chloride	4.40	41	653325	9.796 ppbv	96
22) trans-1,2-Dichloroethene	4.88	96	353099	9.255 ppbv	98
23) Vinyl Acetate	5.07	43	1580457	11.191 ppbv	99
24) 1,1-Dichloroethane	5.01	63	962784	8.783 ppbv	99
25) Ethyl Acetate	5.68	43	1778804	9.774 ppbv	100
26) Hexane	5.69	57	774193	9.737 ppbv	97
27) Carbon Disulfide	4.54	76	934741	10.064 ppbv	98
28) Methyl tert-Butyl Ether	5.03	73	1286971	10.875 ppbv	99
29) Chloroform	5.76	83	1110948	8.301 ppbv	98
30) Cyclohexane	7.15	84	670607	11.025 ppbv	98
31) cis-1,2-Dichloroethene	5.55	61	793345	9.728 ppbv	100
32) 1,1,1-Trichloroethane	6.52	97	1116998	8.446 ppbv	97
34) 2-Butanone	5.24	43	1219029	9.191 ppbv	99
35) Carbon Tetrachloride	7.03	117	1167731	7.591 ppbv	96
36) Benzene	6.91	78	1589767	9.125 ppbv	98
37) 1,2-Dichloroethane	6.32	62	867118	7.287 ppbv	97
38) Trichloroethene	7.86	130	614140	9.045 ppbv	93
39) 1,2-Dichloropropane	7.64	63	634977	9.031 ppbv	93
40) 1,4-Dioxane	7.85	88	217472	8.943 ppbv	# 97
41) Tetrahydrofuran	6.05	42	708720	10.472 ppbv	94
42) Bromodichloromethane	7.82	83	1230693	8.174 ppbv	99
43) Methyl Methacrylate	8.04	69	707254	9.580 ppbv	96

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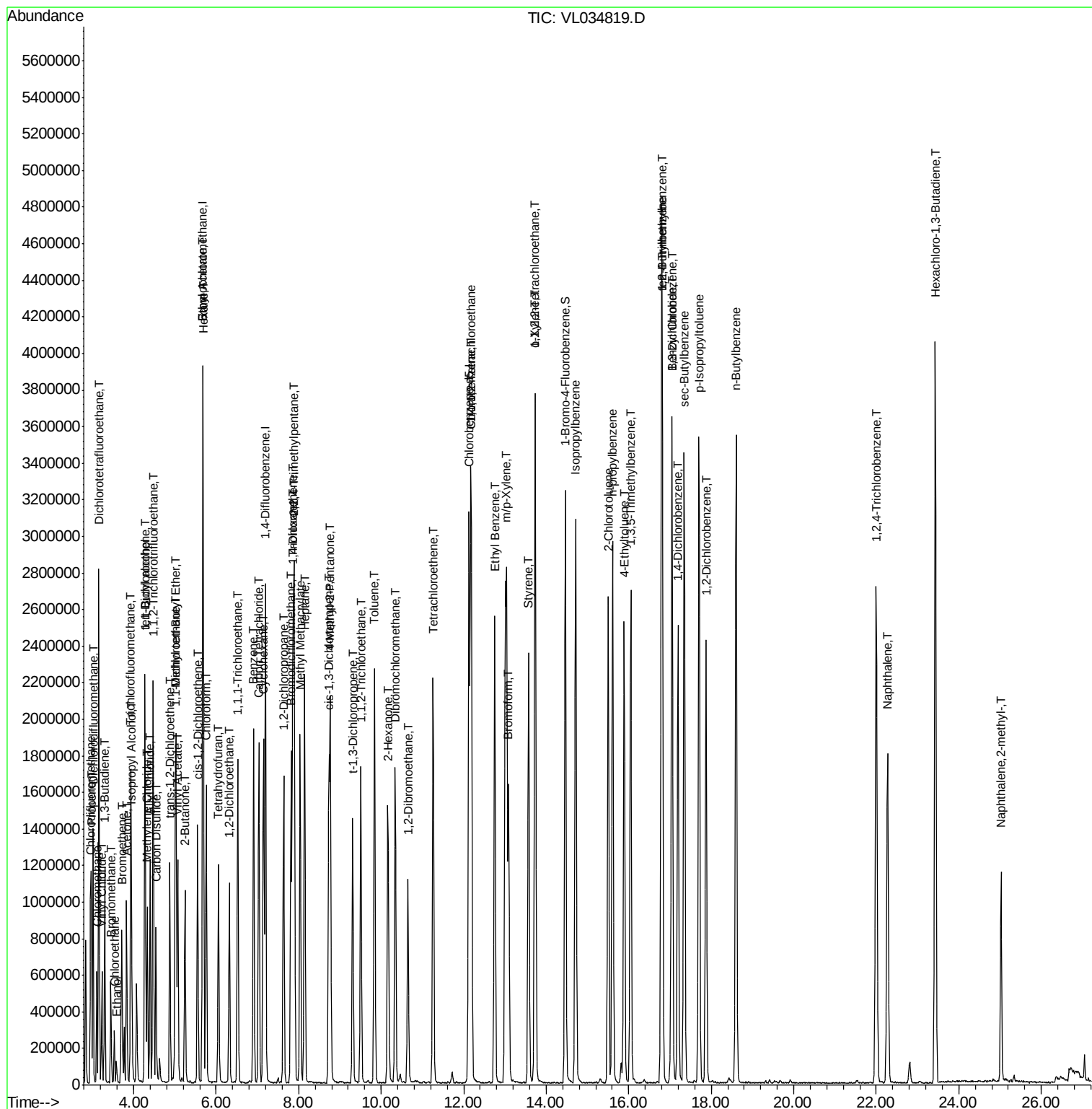
Quant Time: Mar 06 17:49:48 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL030420AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Mar 04 06:36:39 2020
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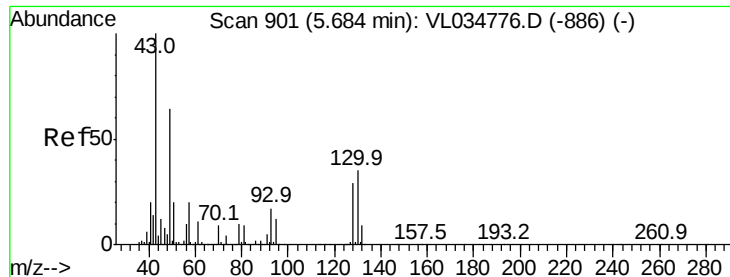
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.89	57	2723835	8.947	ppbv	98
45) t-1,3-Dichloropropene	9.31	75	882542	11.387	ppbv	99
46) cis-1,3-Dichloropropene	8.73	75	1020720	10.786	ppbv	94
47) 1,1,2-Trichloroethane	9.51	97	628958	8.473	ppbv	95
48) Dibromochloromethane	10.34	129	1088992	9.382	ppbv	99
49) Bromoform	13.09	173	976810	9.644	ppbv	100
50) 4-Methyl-2-Pentanone	8.77	43	1756012	9.240	ppbv	99
51) 2-Hexanone	10.17	43	1469203	9.855	ppbv #	99
52) Tetrachloroethene	11.26	164	593229	9.217	ppbv	98
53) Toluene	9.84	91	1841121	9.985	ppbv	99
54) 1,2-Dibromoethane	10.65	107	957935	8.728	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.17	131	808185	7.206	ppbv #	61
57) Chlorobenzene	12.19	112	1336134	6.910	ppbv	98
58) Ethyl Benzene	12.75	91	2406404	7.714	ppbv	93
59) m/p-Xylene	13.04	91	1621874	6.006	ppbv #	1
60) o-Xylene	13.74	91	1854023	6.786	ppbv	96
61) Styrene	13.57	104	1457730	8.601	ppbv	96
62) Isopropylbenzene	14.71	105	2867377	7.131	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.73	83	1248982	5.799	ppbv	99
64) n-propylbenzene	15.61	120	760205	7.540	ppbv	91
65) tert-Butylbenzene	16.79	119	2498526	7.352	ppbv	93
66) Benzyl Chloride	17.04	91	1368632	12.458	ppbv	94
67) sec-Butylbenzene	17.35	105	3497788	7.064	ppbv	99
69) p-Isopropyltoluene	17.71	119	3001422	7.490	ppbv	97
70) n-Butylbenzene	18.60	91	3039560	6.937	ppbv	98
71) 2-Chlorotoluene	15.50	91	2137143	7.037	ppbv	95
72) 4-Ethyltoluene	15.89	105	2322569	7.635	ppbv	98
73) 1,3,5-Trimethylbenzene	16.05	105	2143252	7.345	ppbv	97
74) 1,2,4-Trimethylbenzene	16.82	105	2179211	6.870	ppbv	93
75) 1,3-Dichlorobenzene	17.05	146	1318252	7.020	ppbv	98
76) 1,4-Dichlorobenzene	17.19	146	1333662	7.422	ppbv	99
77) 1,2-Dichlorobenzene	17.87	146	1303878	7.259	ppbv	97
78) Hexachloro-1,3-Butadiene	23.43	225	1158420	7.728	ppbv	99
79) Naphthalene	22.27	128	2404306	10.086	ppbv	97
80) Naphthalene,2-methyl-	25.03	142	683184	12.000	ppbv	99
81) 1,2,4-Trichlorobenzene	22.00	180	1390609	9.228	ppbv	100

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.01 min

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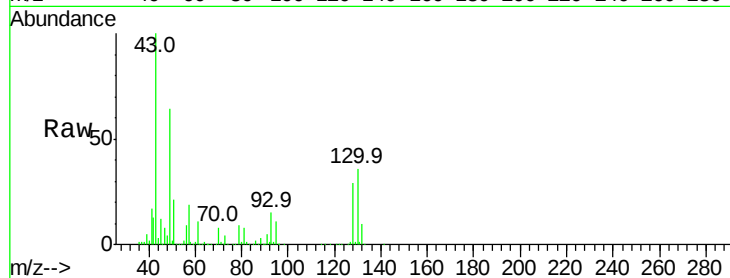
Tgt Ion: 49 Resp: 879506

Ion Ratio Lower Upper

49 100

128 45.7 21.6 64.6

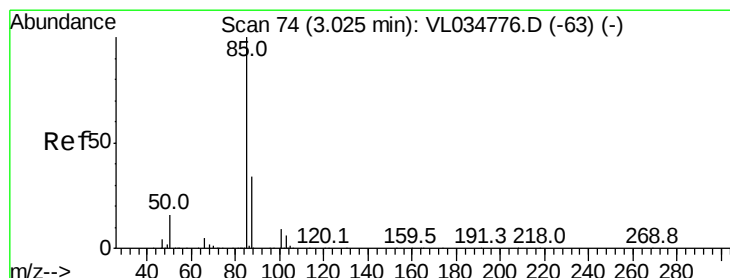
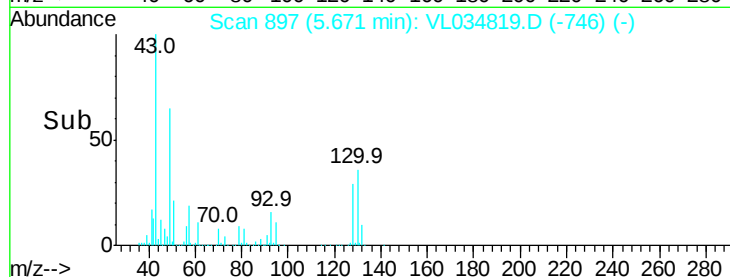
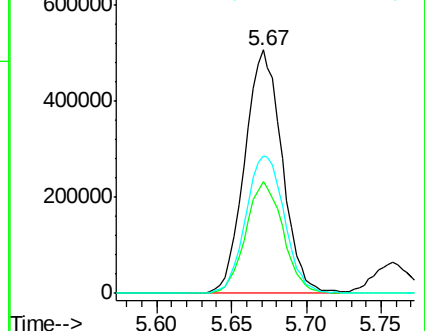
130 59.0 27.4 82.2



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: 6.450 ppbv

RT: 3.02 min Scan# 71

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Tgt Ion: 85 Resp: 925697

Ion Ratio Lower Upper

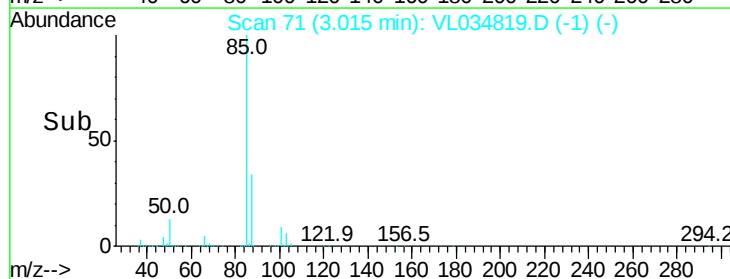
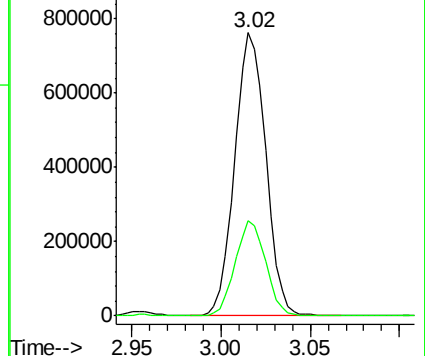
85 100

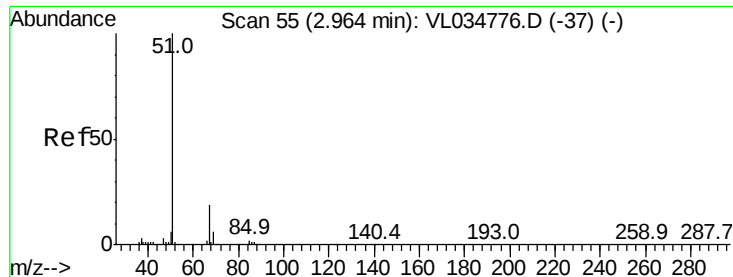
87 33.8 27.2 40.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 8.479 ppbv

RT: 2.95 min Scan# 52

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

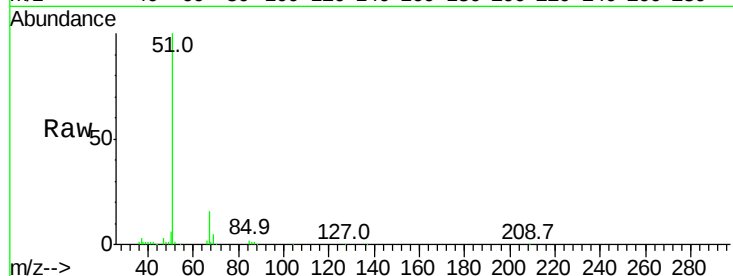
VSTDCCC010

Tgt Ion: 51 Resp: 849649

Ion Ratio Lower Upper

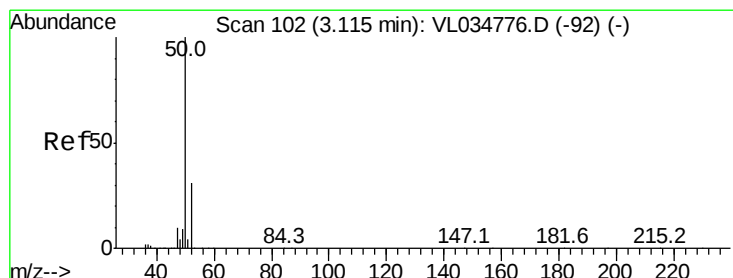
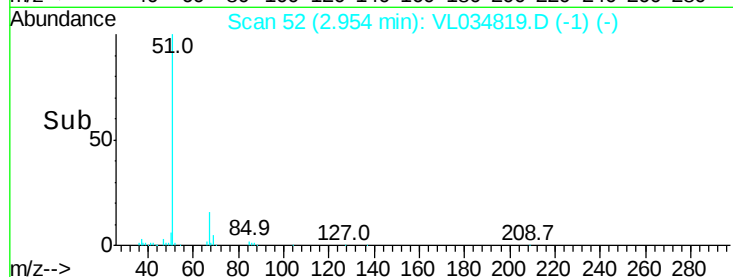
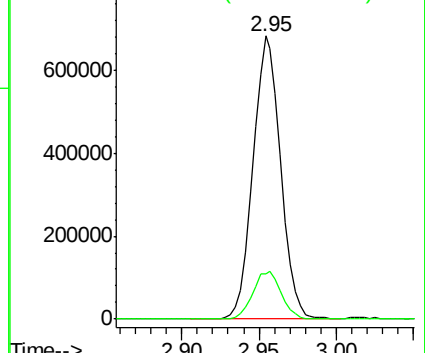
51 100

67 17.5 15.3 22.9



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 9.412 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.00 min

Lab File: VL034819.D

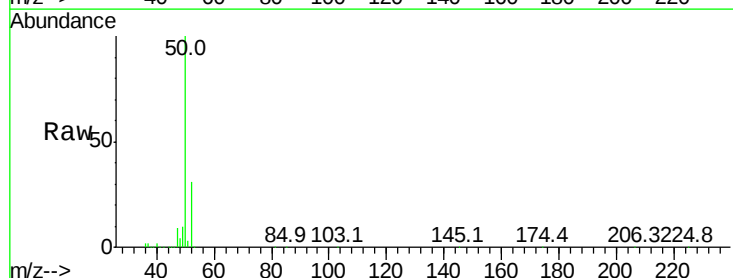
Acq: 6 Mar 2020 15:57

Tgt Ion: 50 Resp: 507960

Ion Ratio Lower Upper

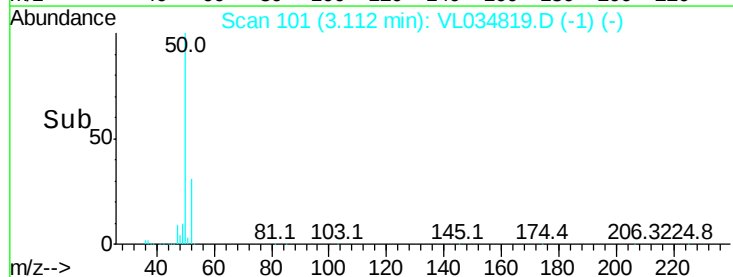
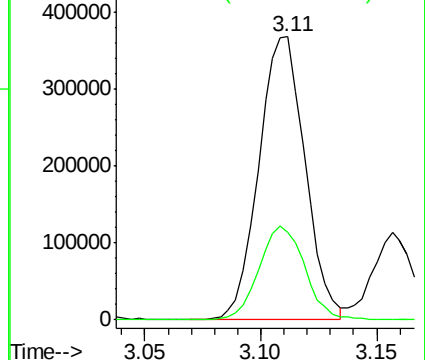
50 100

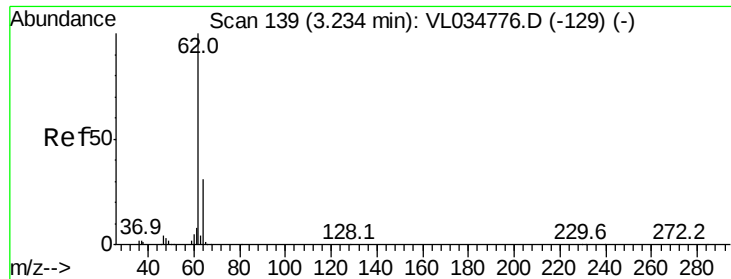
52 30.9 25.0 37.4



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 8.224 ppbv

RT: 3.23 min Scan# 137

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

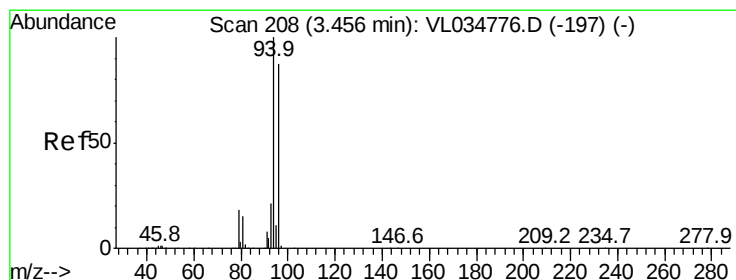
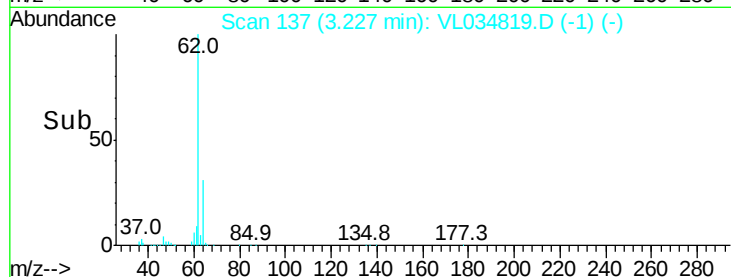
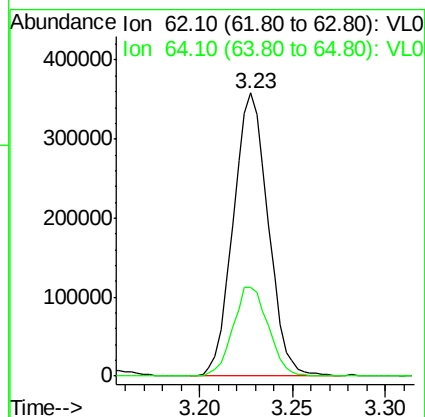
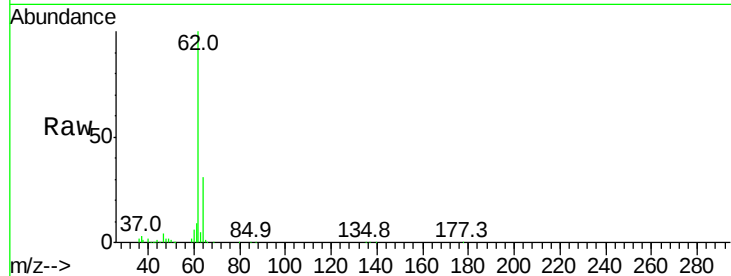
VSTDCCC010

Tgt Ion: 62 Resp: 468909

Ion Ratio Lower Upper

62 100

64 31.4 25.1 37.7



#6

Bromomethane

Concen: 8.668 ppbv

RT: 3.45 min Scan# 206

Delta R.T. -0.01 min

Lab File: VL034819.D

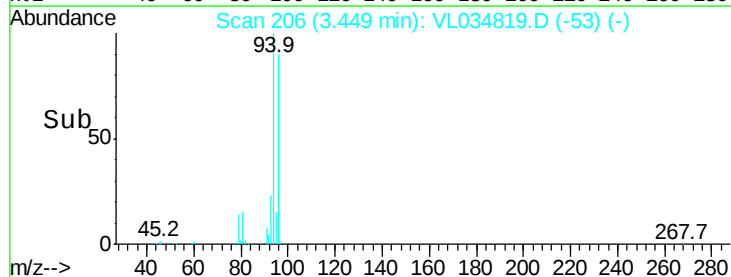
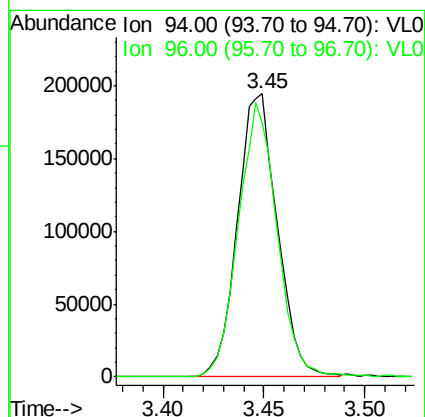
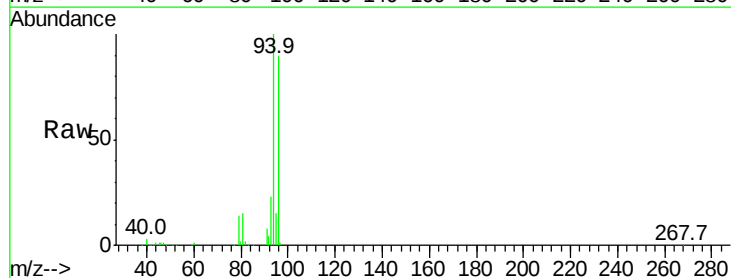
Acq: 6 Mar 2020 15:57

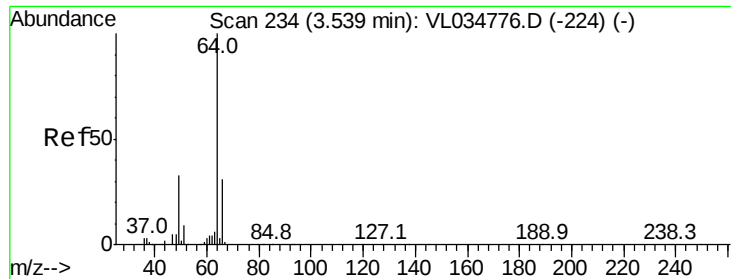
Tgt Ion: 94 Resp: 269734

Ion Ratio Lower Upper

94 100

96 89.8 70.0 105.0





#7

Chloroethane

Concen: 8.692 ppbv

RT: 3.53 min Scan# 231

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

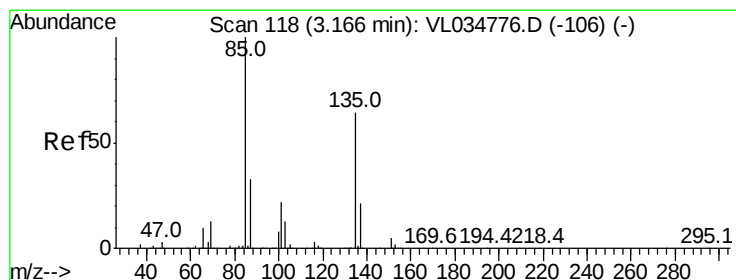
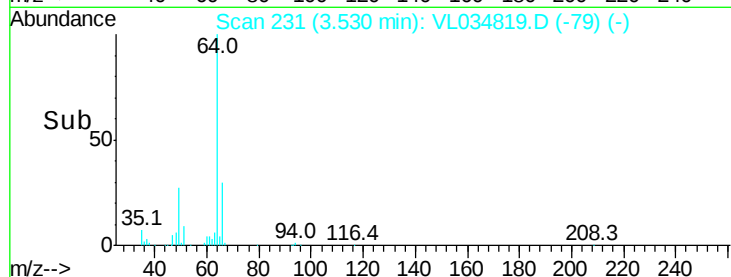
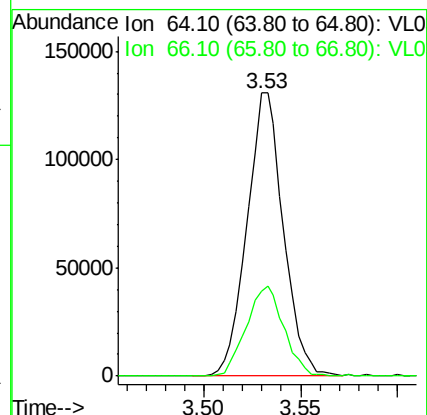
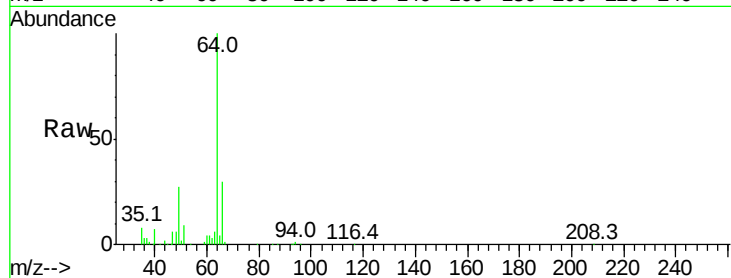
VSTDCCC010

Tgt Ion: 64 Resp: 171363

Ion Ratio Lower Upper

64 100

66 30.0 24.8 37.2



#8

Dichlorotetrafluoroethane

Concen: 8.227 ppbv

RT: 3.16 min Scan# 115

Delta R.T. -0.01 min

Lab File: VL034819.D

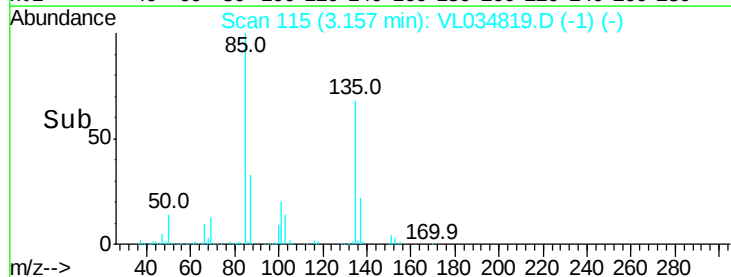
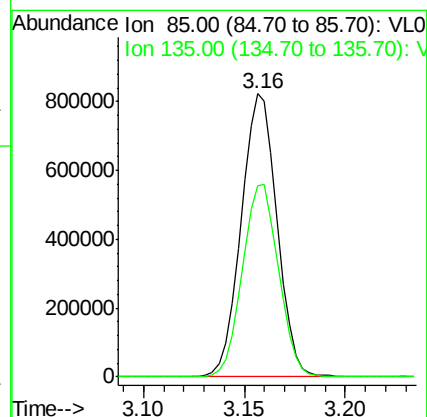
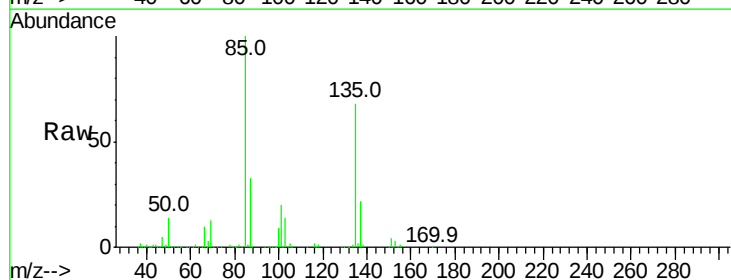
Acq: 6 Mar 2020 15:57

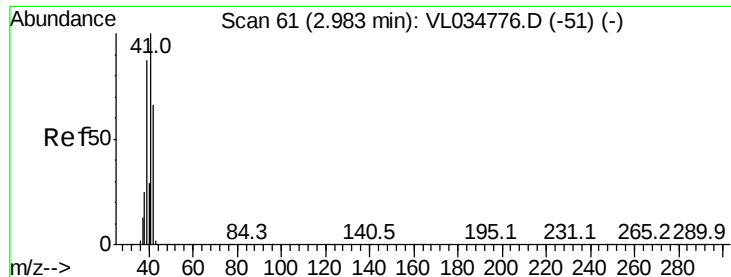
Tgt Ion: 85 Resp: 1025795

Ion Ratio Lower Upper

85 100

135 69.0 49.4 74.2





#9

Propene

Concen: 10.969 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.01 min

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Acq: 6 Mar 2020 15:57

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ClientSampleId :

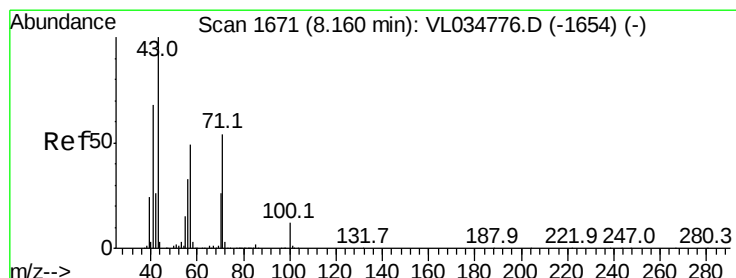
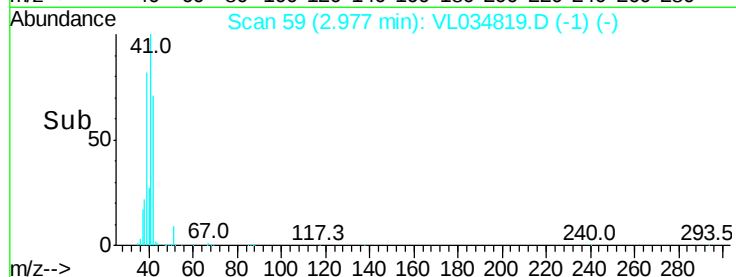
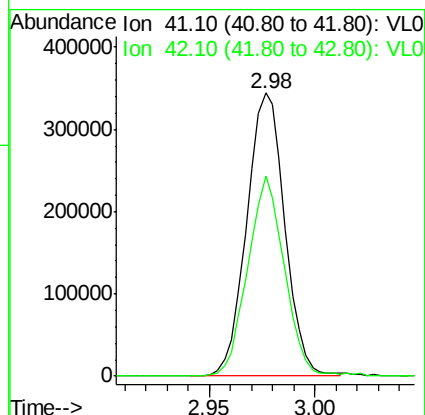
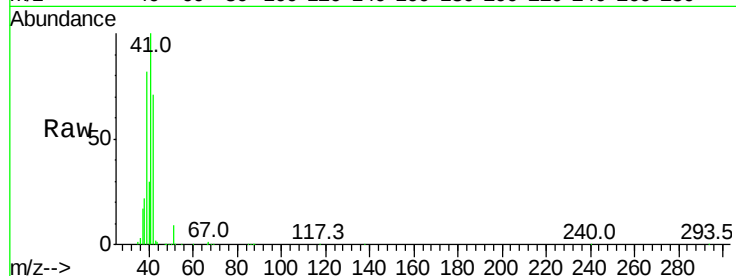
VSTDCCC010

Tgt Ion: 41 Resp: 432624

Ion Ratio Lower Upper

41 100

42 68.5 55.6 83.4



#10

Heptane

Concen: 10.900 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. -0.02 min

Lab File: VL034819.D

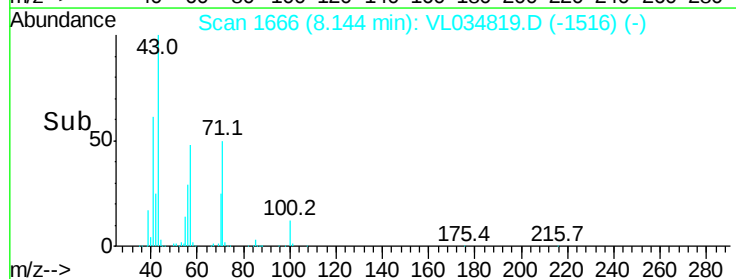
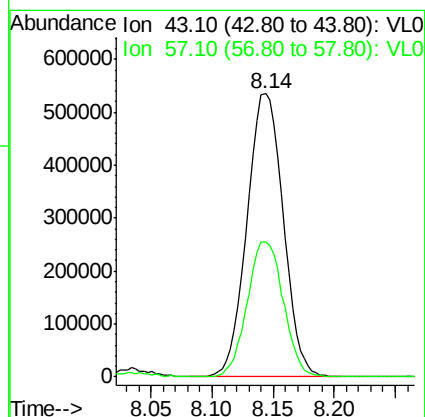
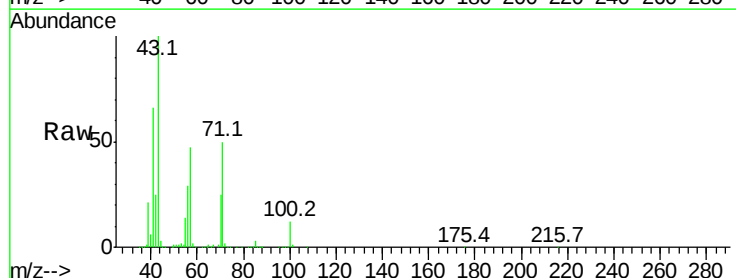
Acq: 6 Mar 2020 15:57

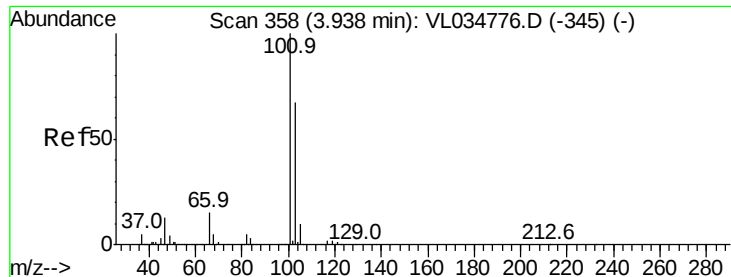
Tgt Ion: 43 Resp: 1092580

Ion Ratio Lower Upper

43 100

57 47.4 40.5 60.7

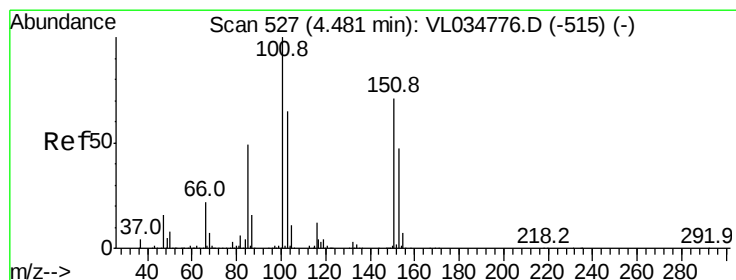
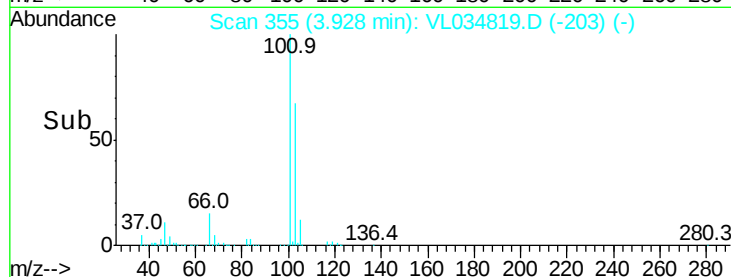
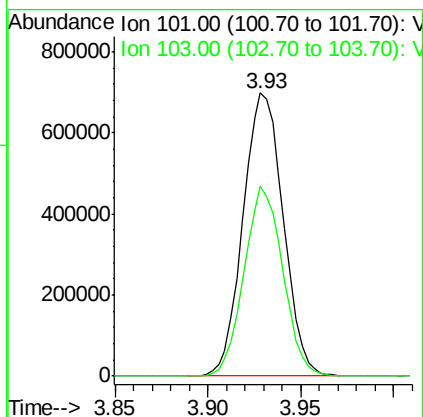
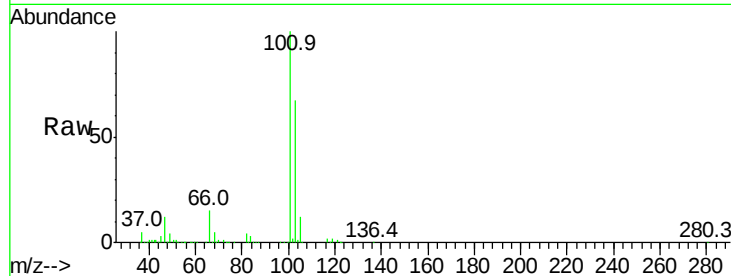




#11
 Trichlorofluoromethane
 Concen: 8.177 ppbv
 RT: 3.93 min Scan# 355
 Delta R.T. -0.01 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

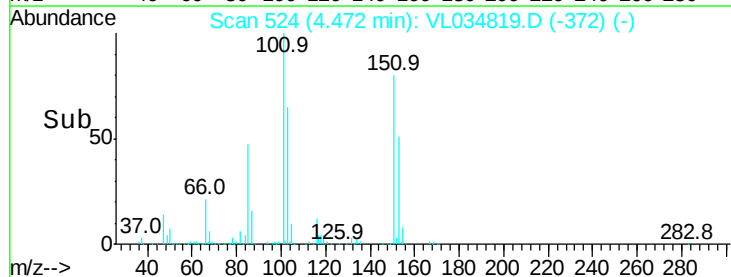
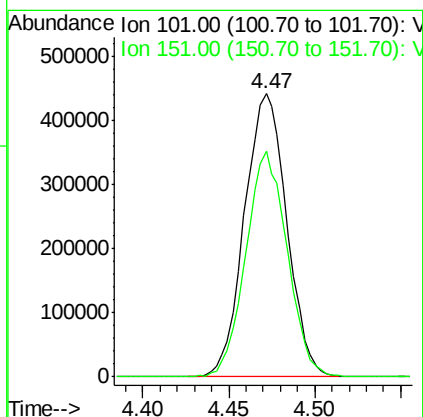
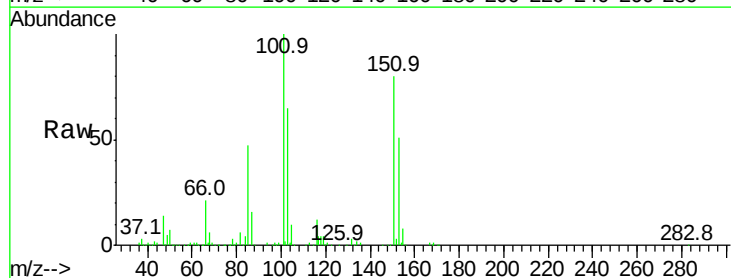
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

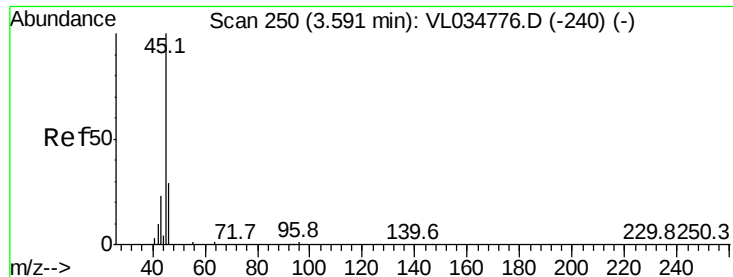
Tgt Ion:101 Resp: 1050213
 Ion Ratio Lower Upper
 101 100
 103 67.0 53.6 80.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 8.476 ppbv
 RT: 4.47 min Scan# 524
 Delta R.T. -0.01 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

Tgt Ion:101 Resp: 751140
 Ion Ratio Lower Upper
 101 100
 151 78.2 56.6 85.0





#13

Ethanol

Concen: 8.472 ppbv

RT: 3.58 min Scan# 246

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

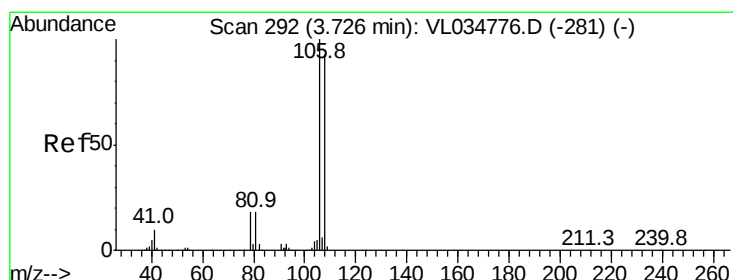
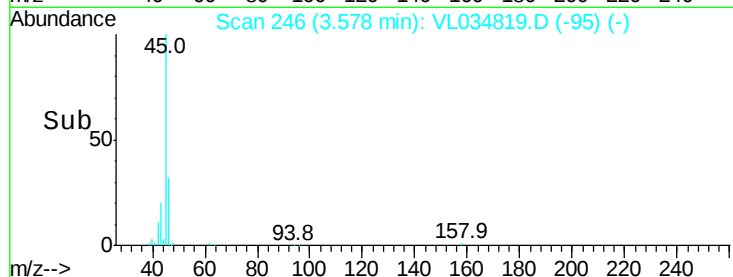
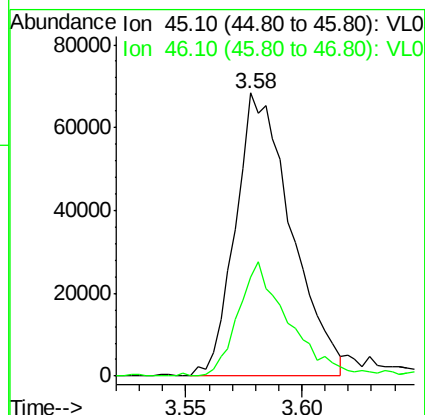
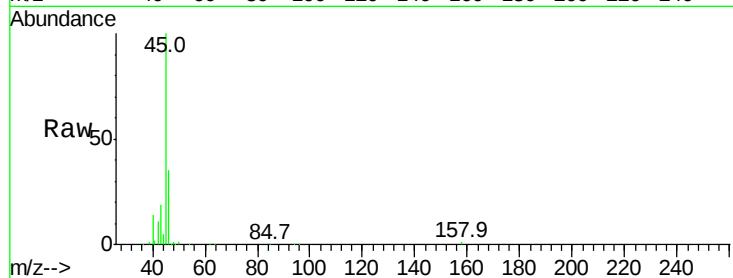
VSTDCCC010

Tgt Ion: 45 Resp: 114484

Ion Ratio Lower Upper

45 100

46 37.0 14.7 58.9



#14

Bromoethene

Concen: 9.292 ppbv

RT: 3.72 min Scan# 289

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

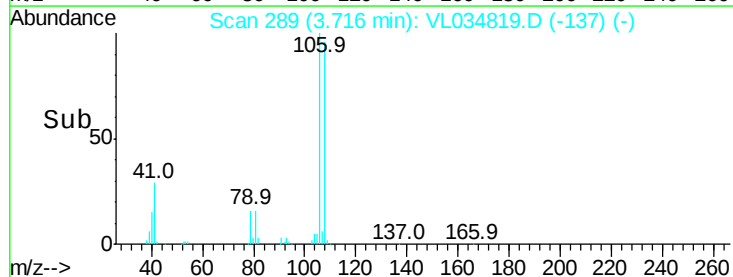
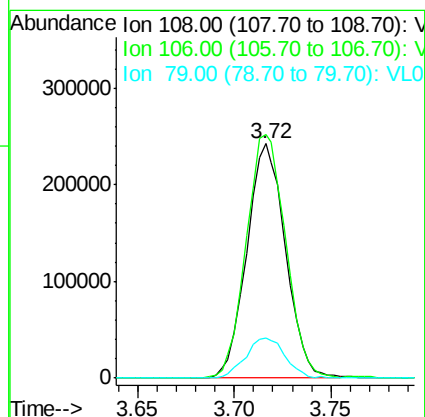
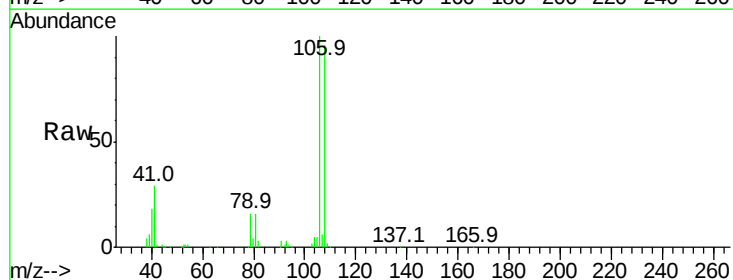
Tgt Ion: 108 Resp: 337871

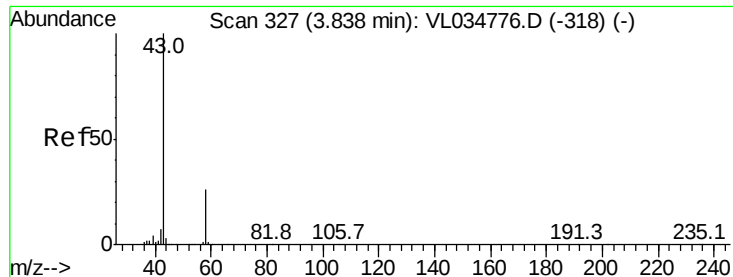
Ion Ratio Lower Upper

108 100

106 106.8 83.5 125.3

79 17.8 15.6 23.4





#15

Acetone

Concen: 8.900 ppbv

RT: 3.83 min Scan# 324

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

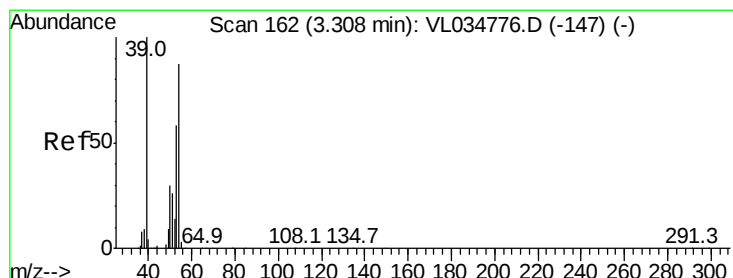
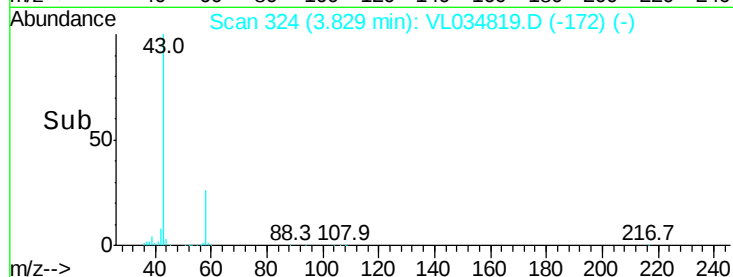
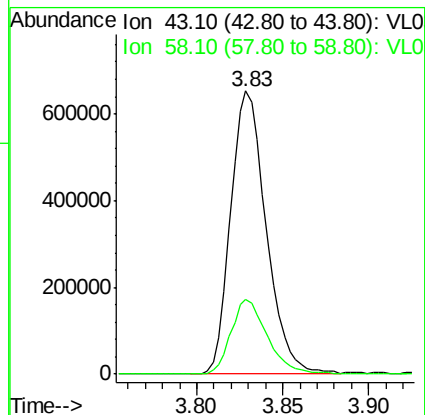
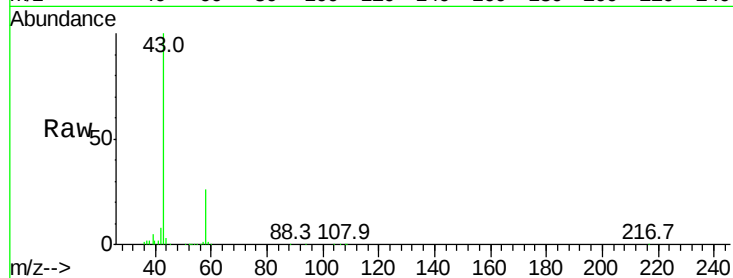
VSTDCCC010

Tgt Ion: 43 Resp: 937301

Ion Ratio Lower Upper

43 100

58 27.0 21.0 31.6



#16

1,3-Butadiene

Concen: 9.566 ppbv

RT: 3.30 min Scan# 159

Delta R.T. -0.01 min

Lab File: VL034819.D

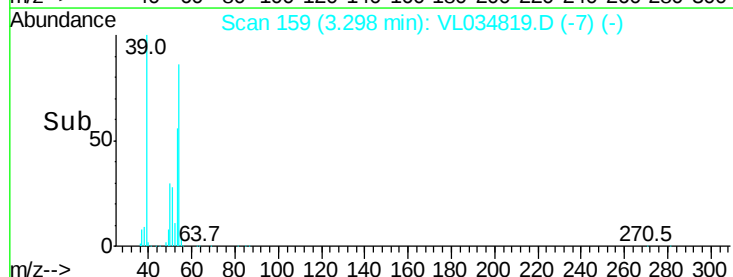
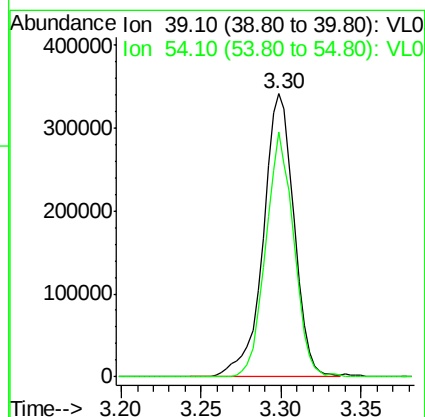
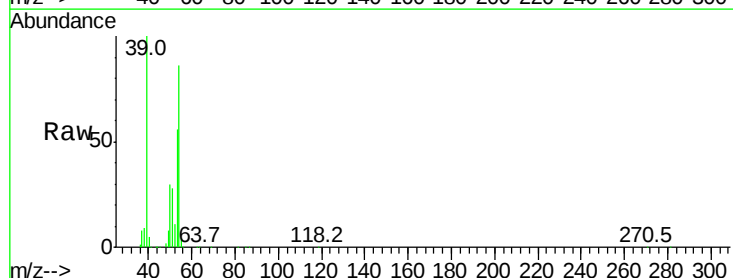
Acq: 6 Mar 2020 15:57

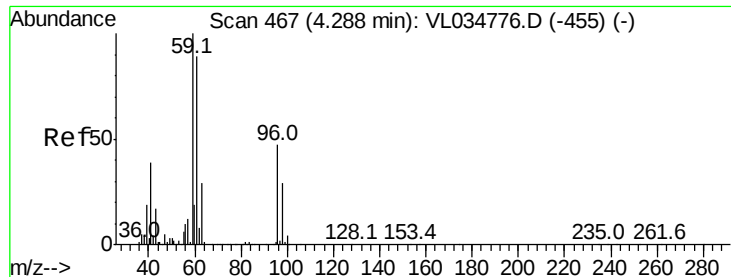
Tgt Ion: 39 Resp: 455841

Ion Ratio Lower Upper

39 100

54 79.1 64.2 96.2



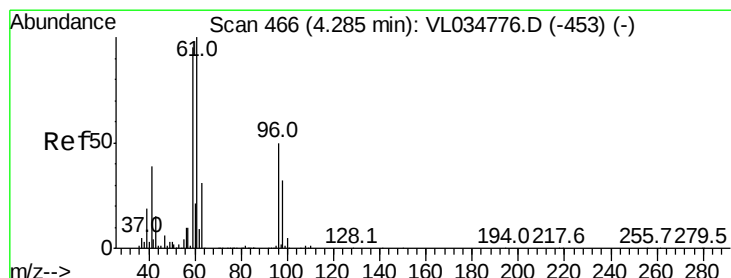
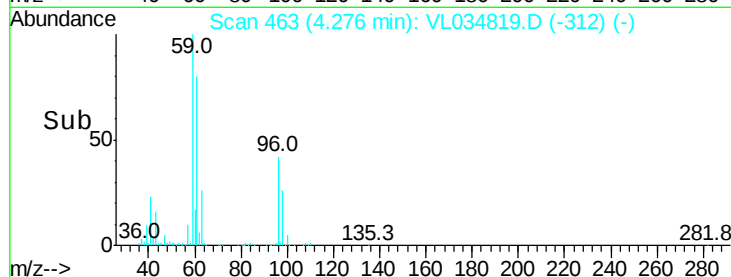
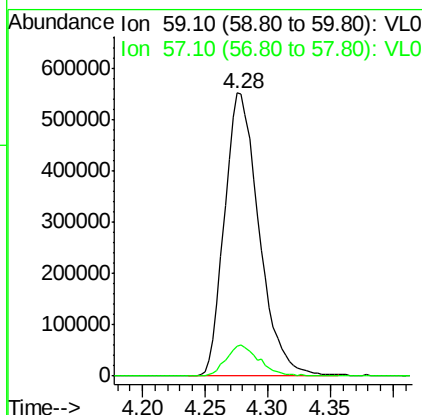
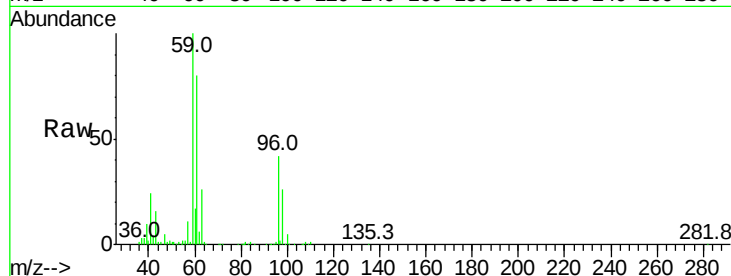


#17

tert-Butyl alcohol
 Concen: 12.723 ppbv
 RT: 4.28 min Scan# 463
 Delta R.T. -0.01 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

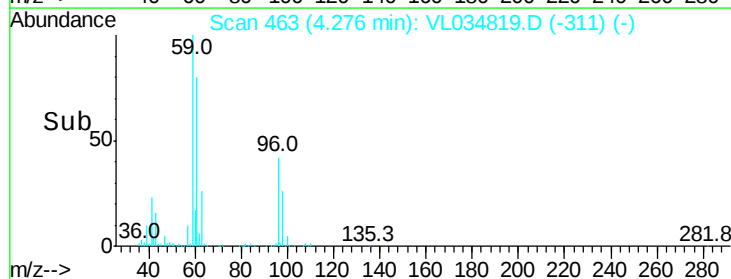
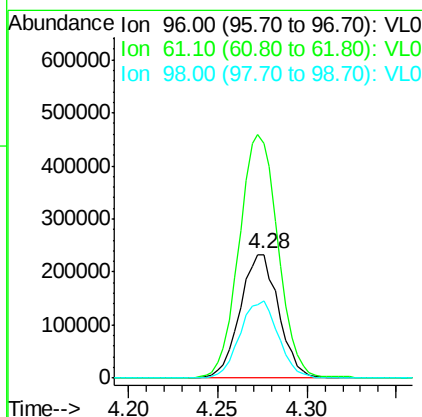
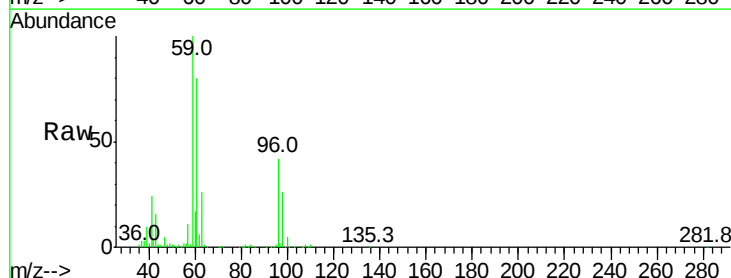
Tgt Ion: 59 Resp: 1056605
 Ion Ratio Lower Upper
 59 100
 57 10.6 8.6 13.0

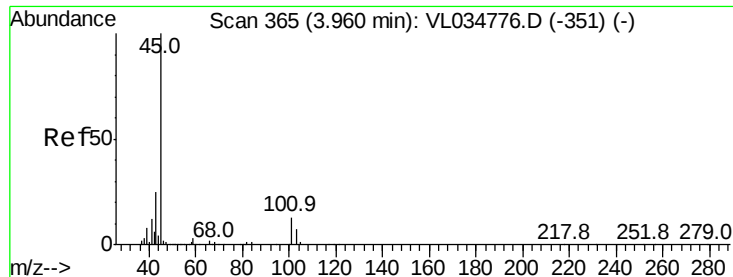


#18

1,1-Dichloroethene
 Concen: 8.958 ppbv
 RT: 4.28 min Scan# 463
 Delta R.T. -0.01 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

Tgt Ion: 96 Resp: 350108
 Ion Ratio Lower Upper
 96 100
 61 189.5 159.5 239.3
 98 62.5 51.1 76.7





#19

Isopropyl Alcohol

Concen: 10.834 ppbv

RT: 3.95 min Scan# 362

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

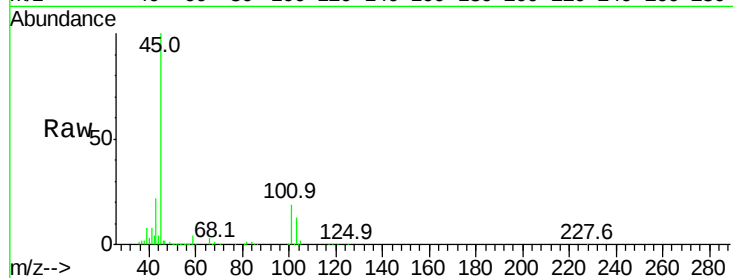
VSTDCCC010

Tgt Ion: 45 Resp: 683658

Ion Ratio Lower Upper

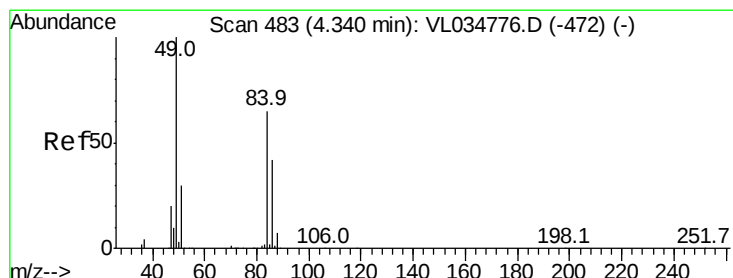
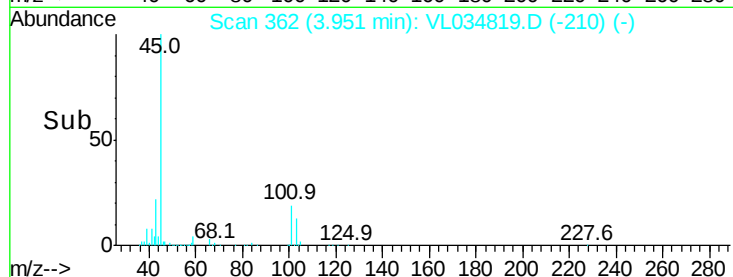
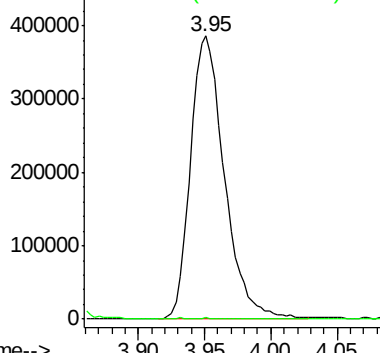
45 100

58 37.1 1.8 2.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 8.043 ppbv

RT: 4.33 min Scan# 480

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Tgt Ion: 84 Resp: 302313

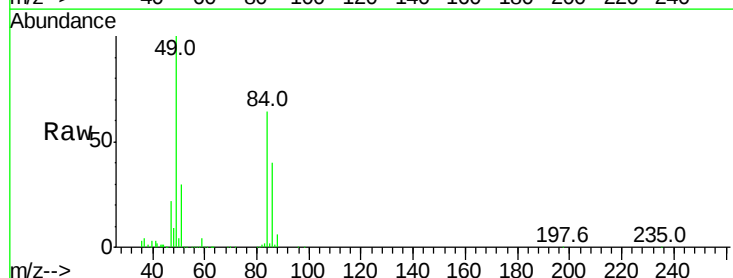
Ion Ratio Lower Upper

84 100

49 155.6 123.2 184.8

51 47.1 37.4 56.2

86 62.6 51.6 77.4

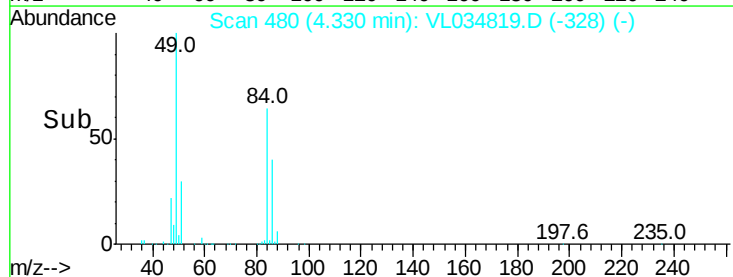
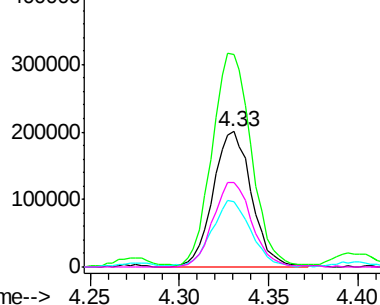


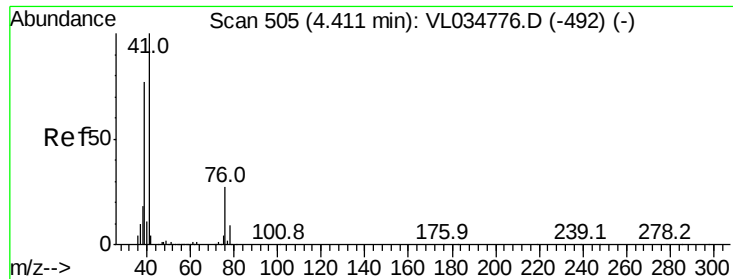
Abundance Ion 84.00 (83.70 to 84.70): VL0

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





#21

Allyl Chloride

Concen: 9.796 ppbv

RT: 4.40 min Scan# 501

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

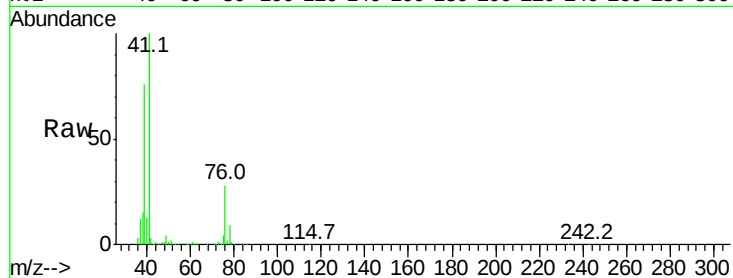
Tgt Ion: 41 Resp: 653325

Ion Ratio Lower Upper

41 100

76 27.8 22.5 33.7

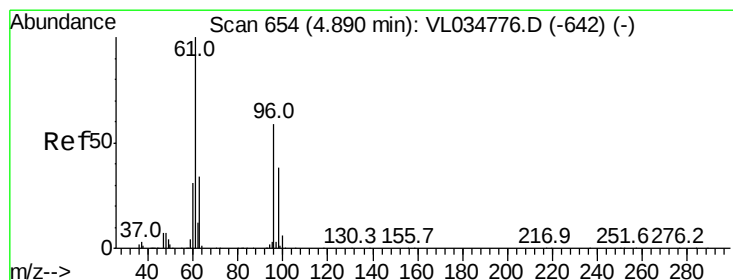
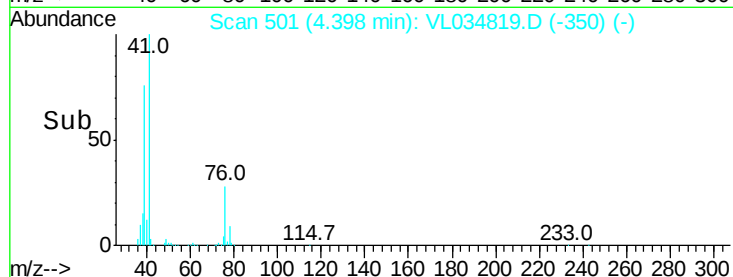
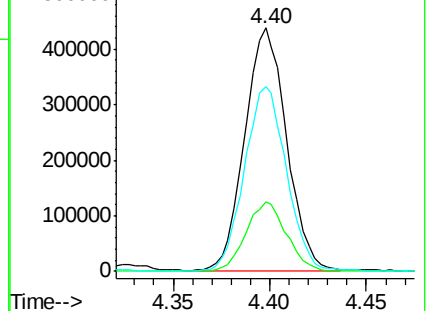
39 77.3 65.0 97.6



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: 9.255 ppbv

RT: 4.88 min Scan# 650

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

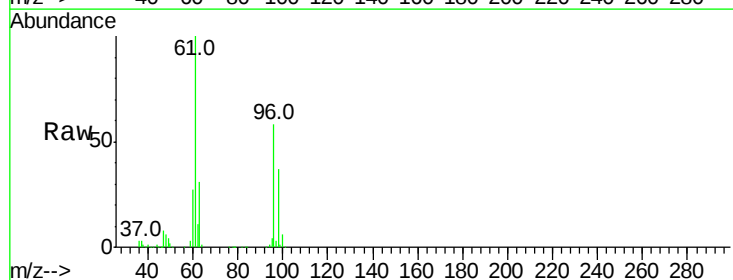
Tgt Ion: 96 Resp: 353099

Ion Ratio Lower Upper

96 100

61 172.7 135.2 202.8

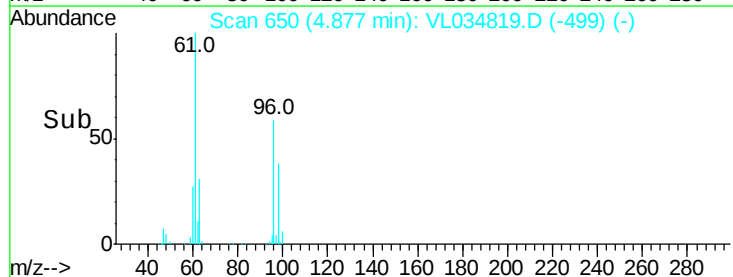
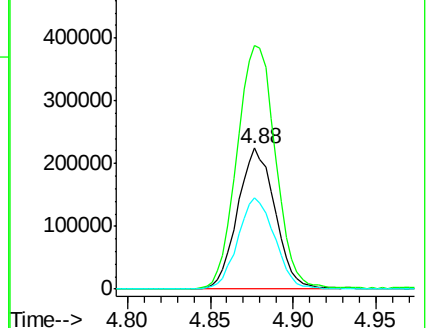
98 64.5 50.8 76.2

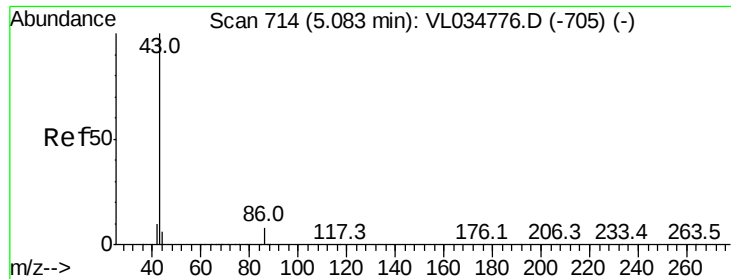


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 11.191 ppbv

RT: 5.07 min Scan# 710

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 43 Resp: 1580457

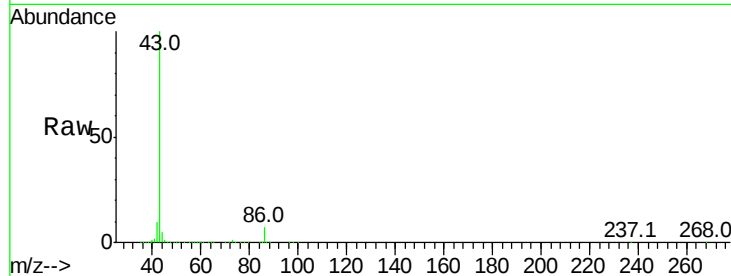
Ion Ratio Lower Upper

43 100

86 7.0 5.9 8.9

42 10.0 8.2 12.2

44 4.8 4.5 6.7

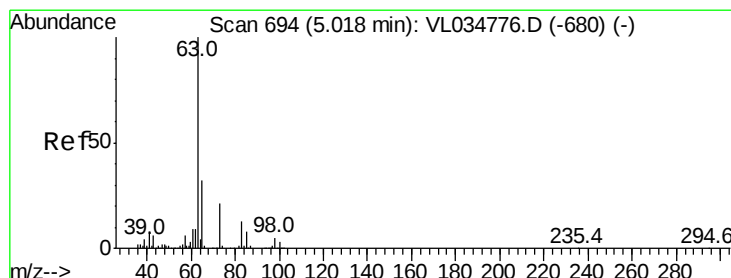
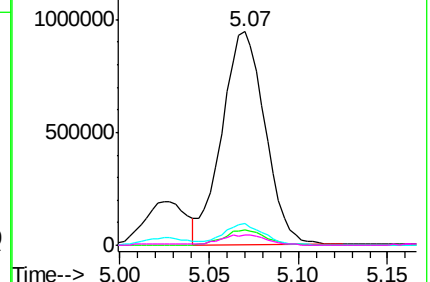
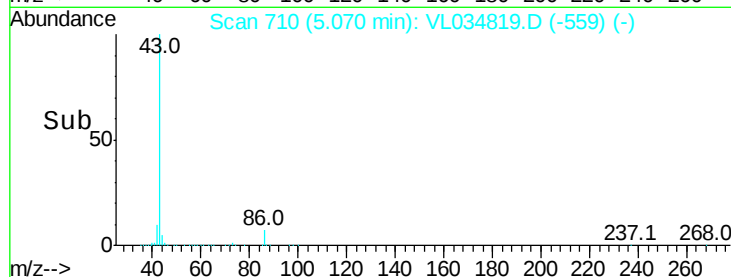


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 8.783 ppbv

RT: 5.01 min Scan# 690

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

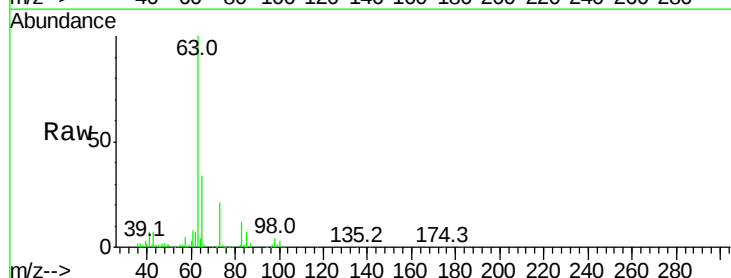
Tgt Ion: 63 Resp: 962784

Ion Ratio Lower Upper

63 100

98 3.9 2.3 6.8

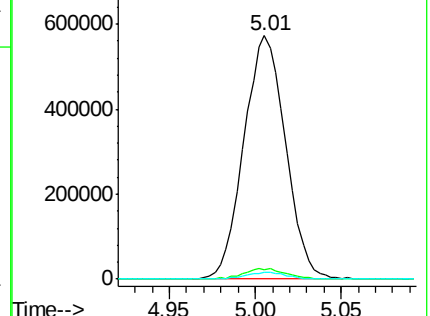
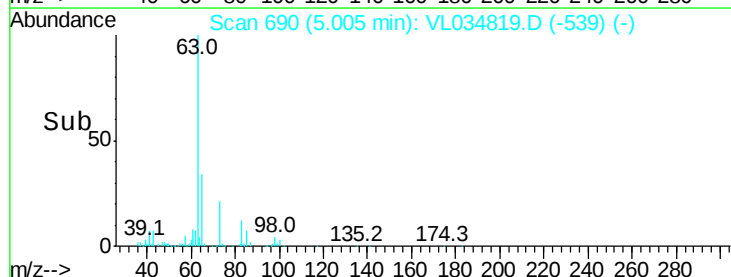
100 2.6 1.5 4.4

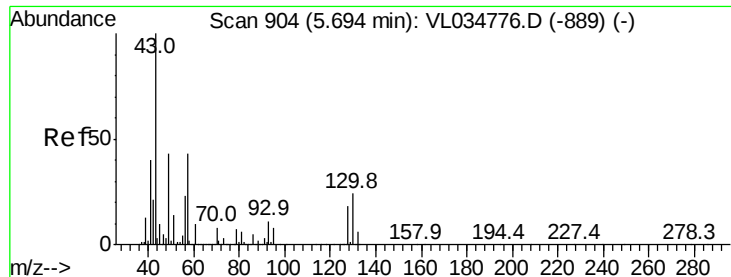


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



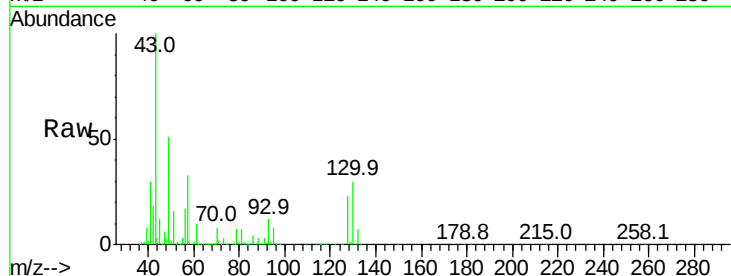


#25
Ethyl Acetate
Concen: 9.774 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.02 min
Lab File: VL034819.D
Acq: 6 Mar 2020 15:57

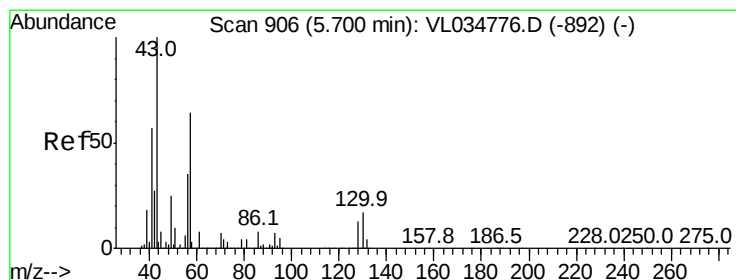
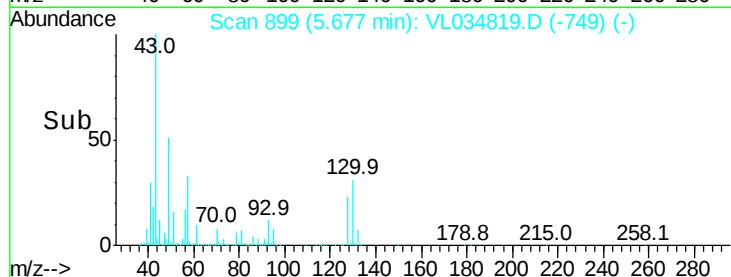
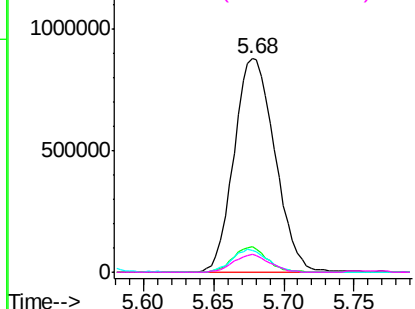
Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 1778804

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.2	12.4
61	9.6	7.5	11.3
70	7.4	6.0	9.0



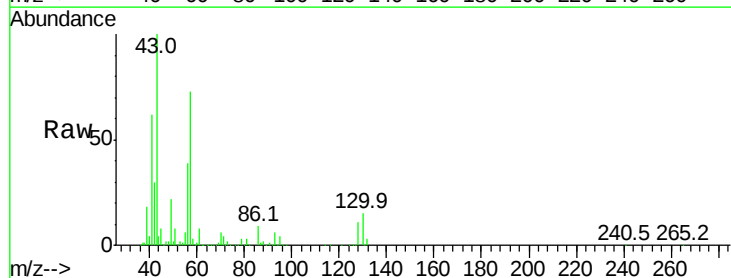
Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0



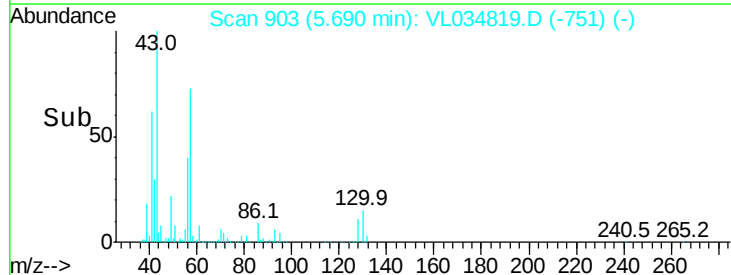
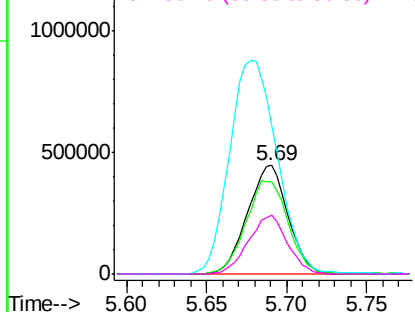
#26
Hexane
Concen: 9.737 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL034819.D
Acq: 6 Mar 2020 15:57

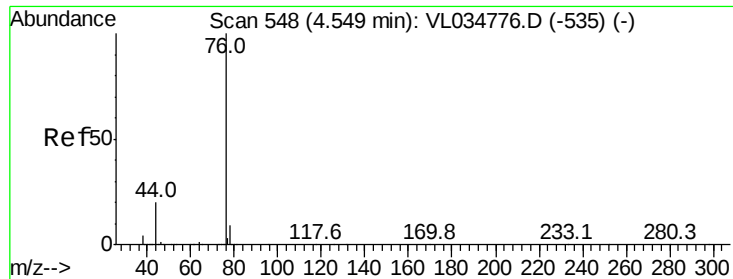
Tgt Ion: 57 Resp: 774193

Ion	Ratio	Lower	Upper
57	100		
41	89.3	72.0	108.0
43	231.0	179.1	268.7
56	52.2	42.6	63.8



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: 10.064 ppbv

RT: 4.54 min Scan# 545

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

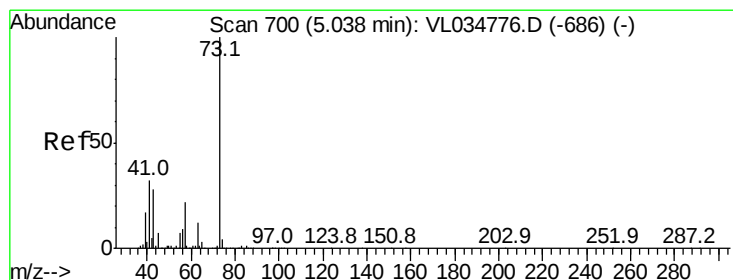
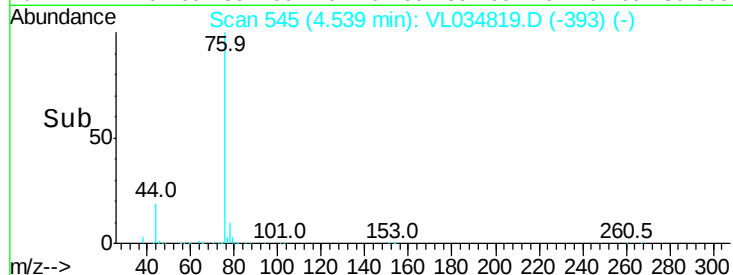
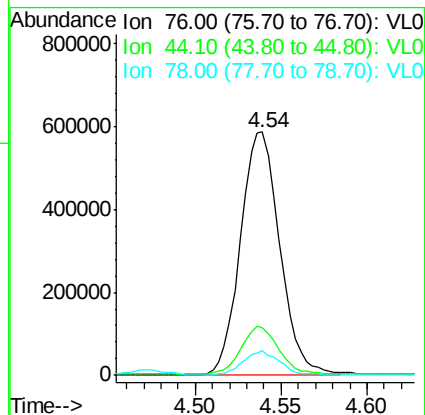
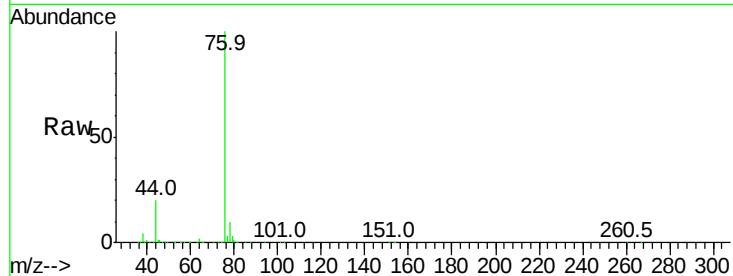
Tgt Ion: 76 Resp: 934741

Ion Ratio Lower Upper

76 100

44 18.8 16.1 24.1

78 9.6 7.5 11.3



#28

Methyl tert-Butyl Ether

Concen: 10.875 ppbv

RT: 5.03 min Scan# 697

Delta R.T. -0.01 min

Lab File: VL034819.D

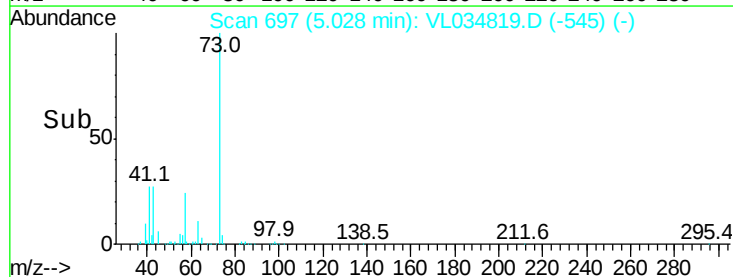
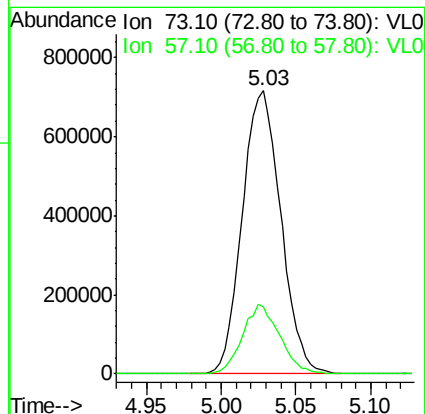
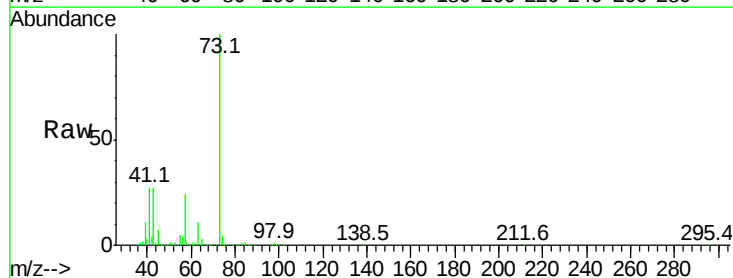
Acq: 6 Mar 2020 15:57

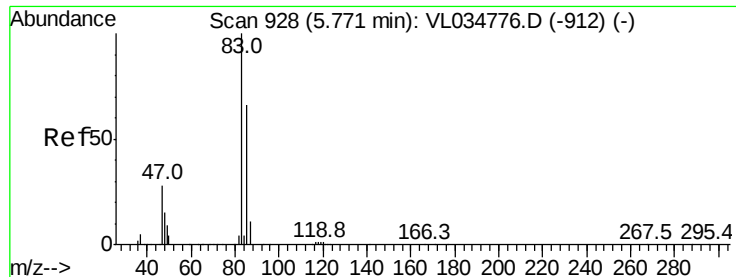
Tgt Ion: 73 Resp: 1286971

Ion Ratio Lower Upper

73 100

57 23.8 18.5 27.7





#29

Chloroform

Concen: 8.301 ppbv

RT: 5.76 min Scan# 924

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

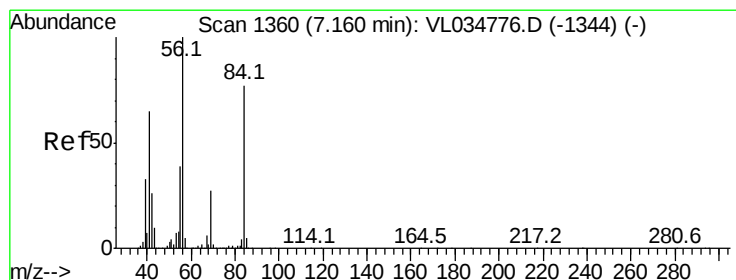
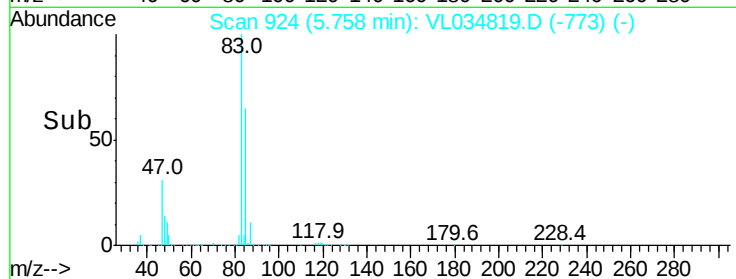
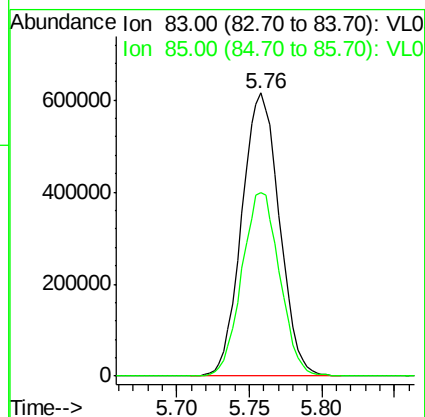
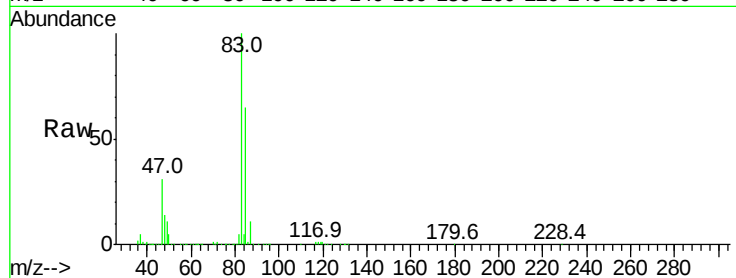
VSTDCCC010

Tgt Ion: 83 Resp: 1110948

Ion Ratio Lower Upper

83 100

85 64.6 53.0 79.4



#30

Cyclohexane

Concen: 11.025 ppbv

RT: 7.15 min Scan# 1356

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

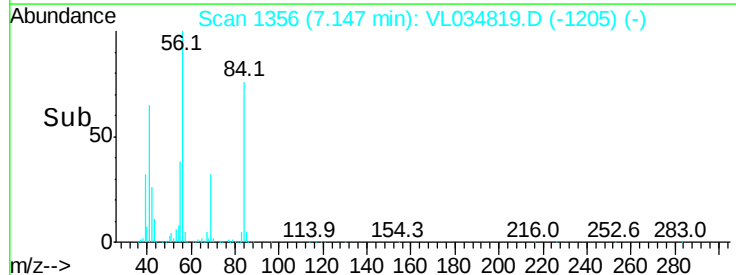
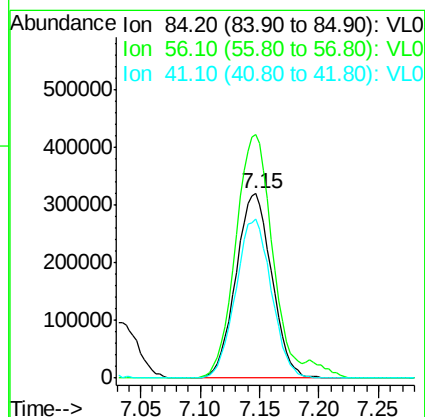
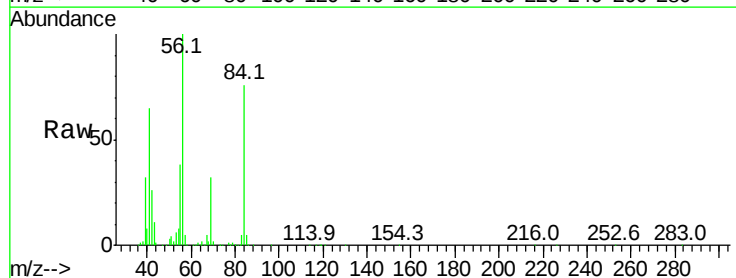
Tgt Ion: 84 Resp: 670607

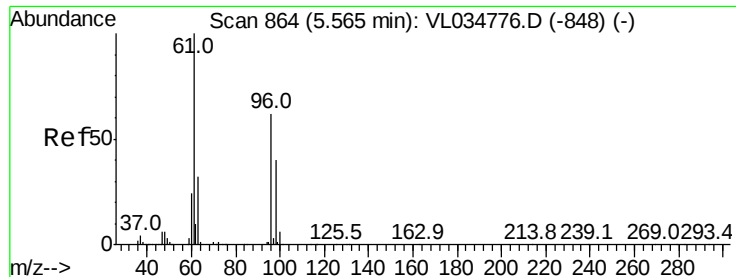
Ion Ratio Lower Upper

84 100

56 139.6 113.2 169.8

41 85.5 70.2 105.4



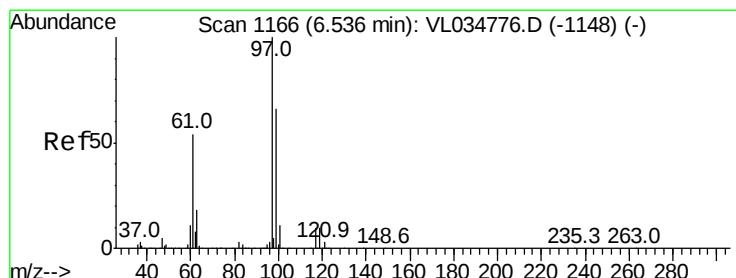
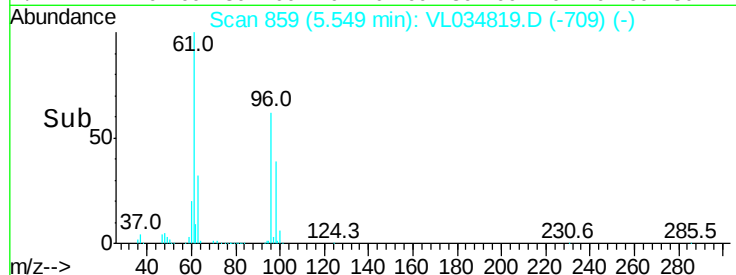
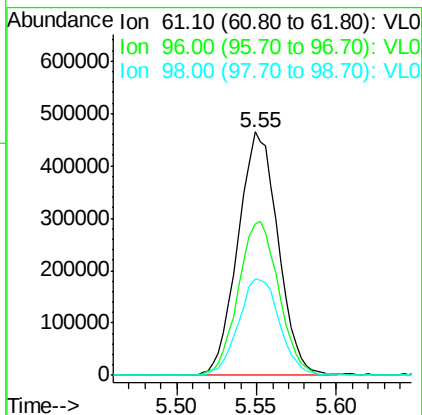
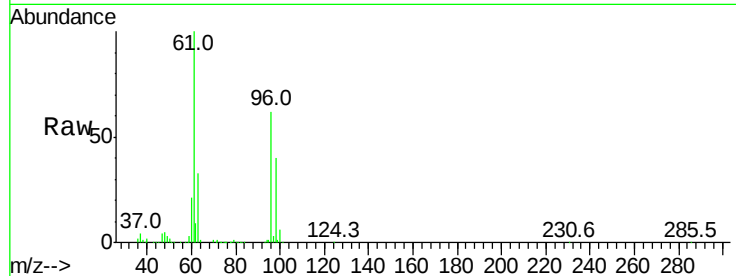


#31

cis-1,2-Dichloroethene
 Concen: 9.728 ppbv
 RT: 5.55 min Scan# 859
 Delta R.T. -0.02 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

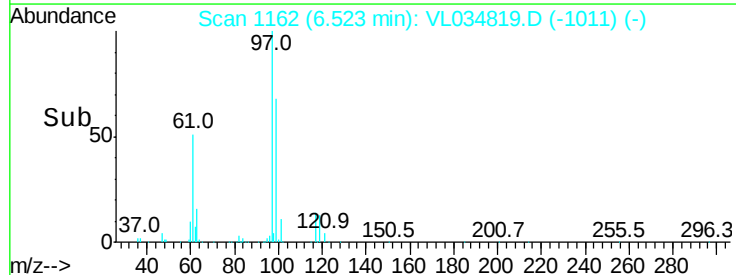
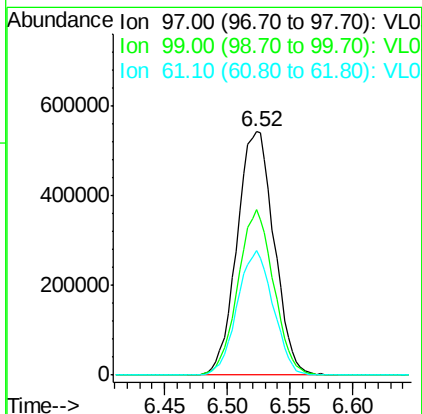
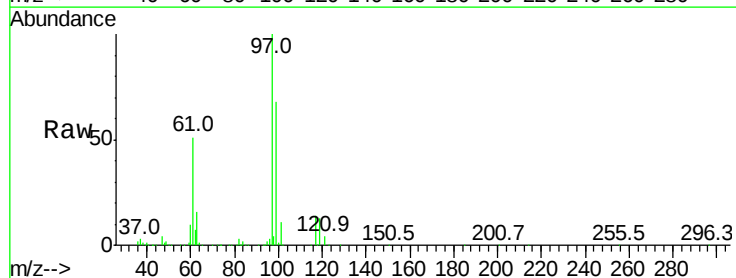
Tgt Ion	Ratio	Lower	Upper
61	100		
96	61.9	49.7	74.5
98	39.6	31.9	47.9

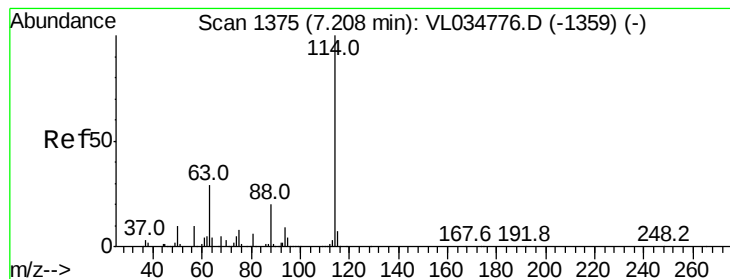


#32

1,1,1-Trichloroethane
 Concen: 8.446 ppbv
 RT: 6.52 min Scan# 1162
 Delta R.T. -0.01 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

Tgt Ion	Ratio	Lower	Upper
97	100		
99	65.3	51.7	77.5
61	49.6	43.4	65.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.20 min Scan# 1371

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

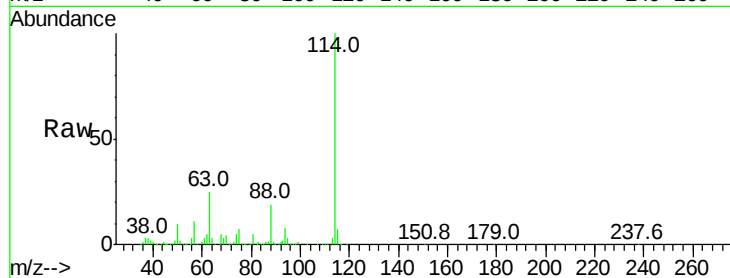
Tgt Ion:114 Resp: 2038779

Ion Ratio Lower Upper

114 100

63 26.0 23.6 35.4

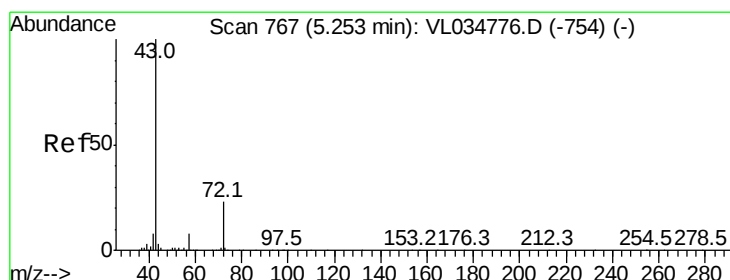
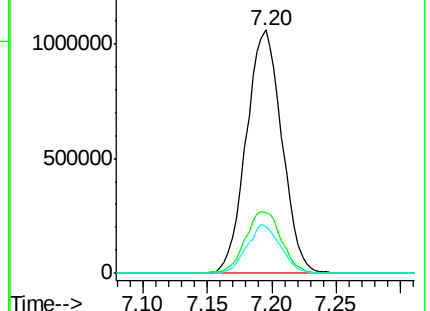
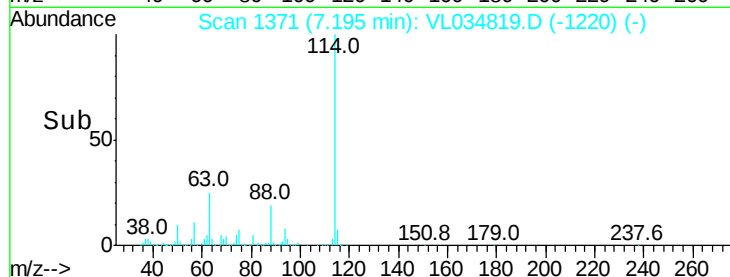
88 18.8 15.8 23.8



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 9.191 ppbv

RT: 5.24 min Scan# 764

Delta R.T. -0.01 min

Lab File: VL034819.D

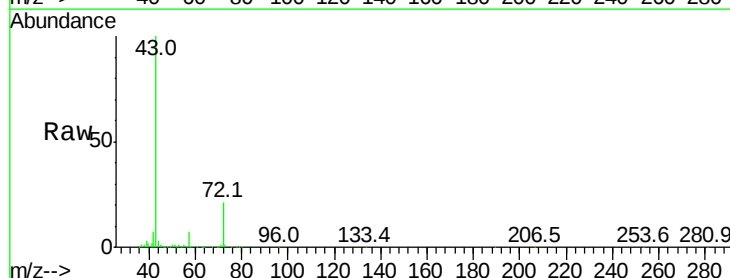
Acq: 6 Mar 2020 15:57

Tgt Ion: 43 Resp: 1219029

Ion Ratio Lower Upper

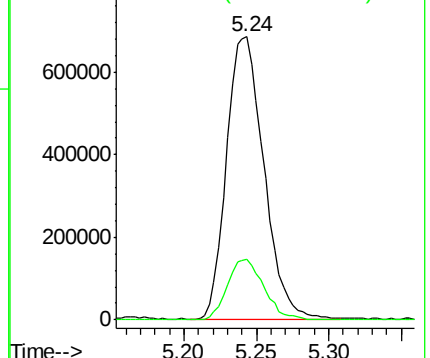
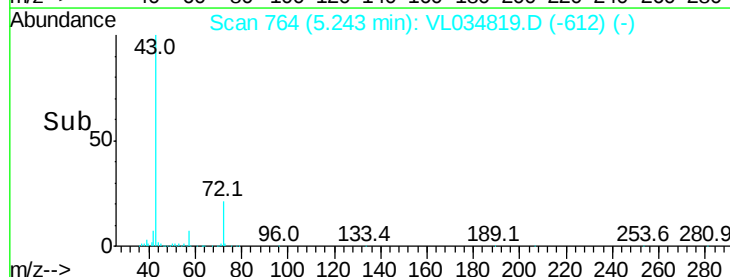
43 100

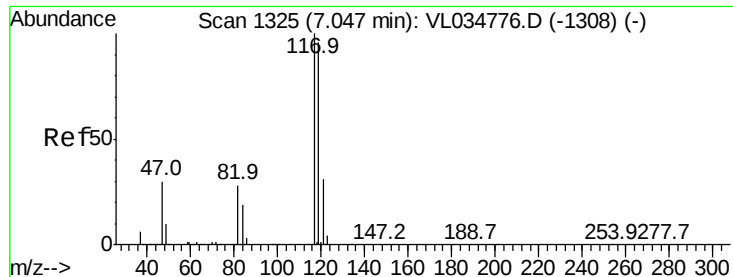
72 21.2 17.5 26.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 7.591 ppbv

RT: 7.03 min Scan# 1321

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

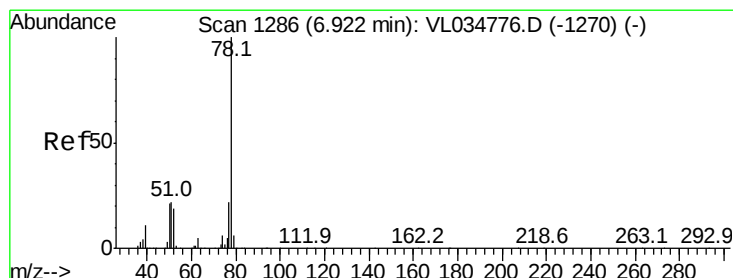
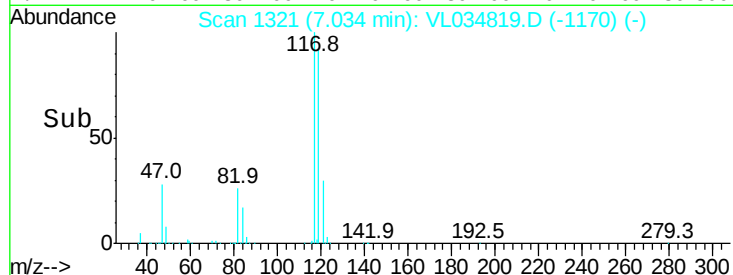
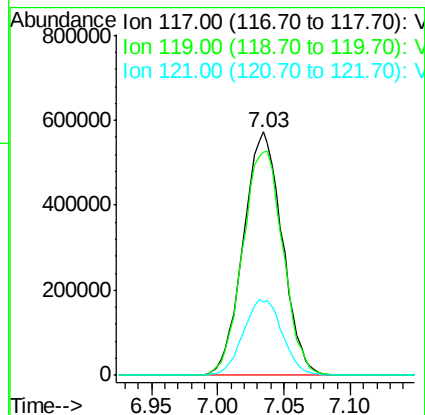
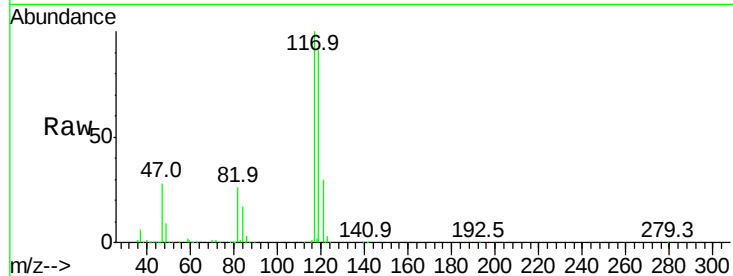
Tgt Ion:117 Resp: 1167731

Ion Ratio Lower Upper

117 100

119 91.4 76.8 115.2

121 30.4 24.6 37.0



#36

Benzene

Concen: 9.125 ppbv

RT: 6.91 min Scan# 1282

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

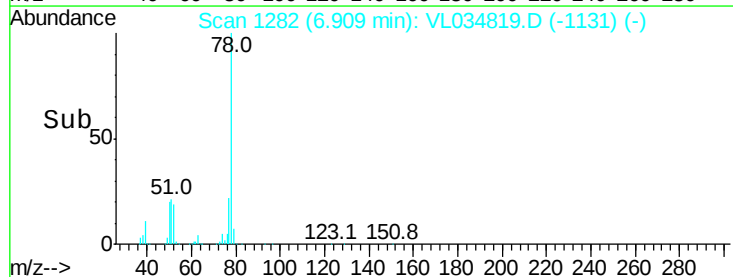
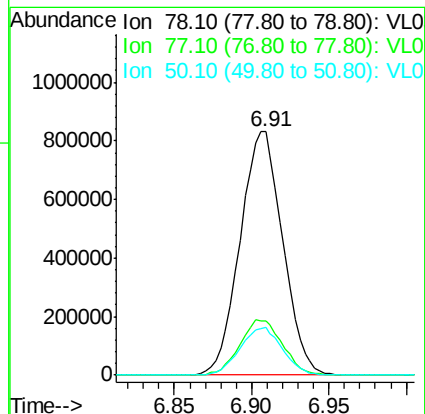
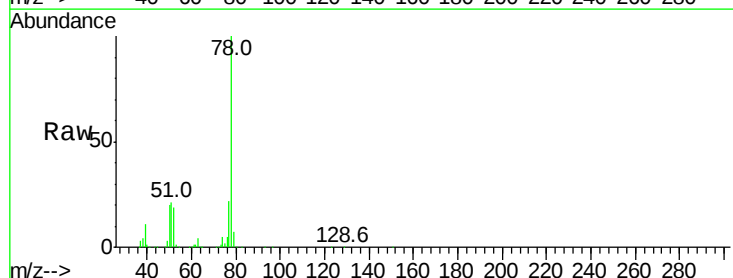
Tgt Ion: 78 Resp: 1589767

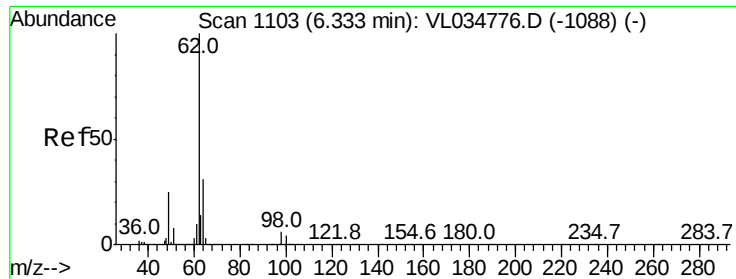
Ion Ratio Lower Upper

78 100

77 22.1 18.0 27.0

50 19.7 16.9 25.3

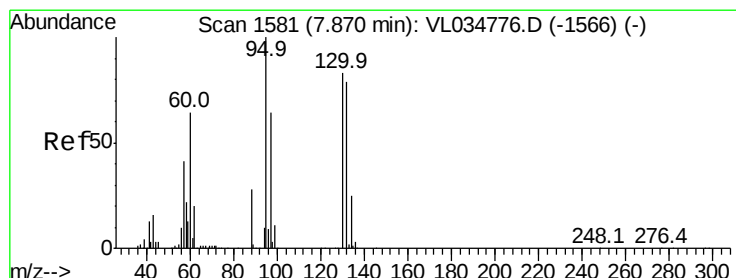
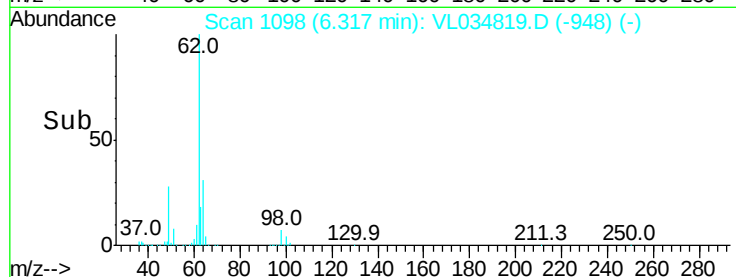
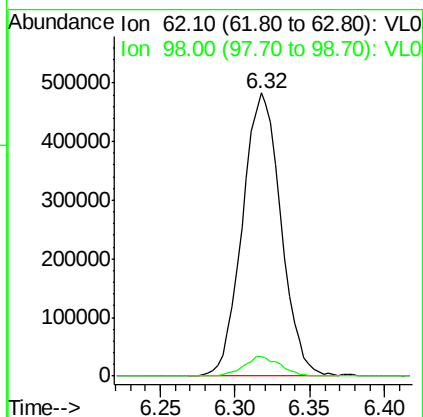
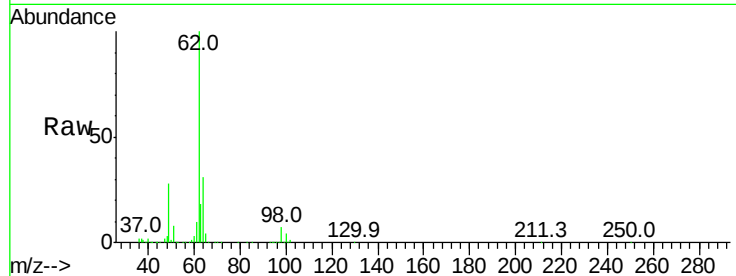




#37
 1,2-Dichloroethane
 Concen: 7.287 ppbv
 RT: 6.32 min Scan# 1098
 Delta R.T. -0.02 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

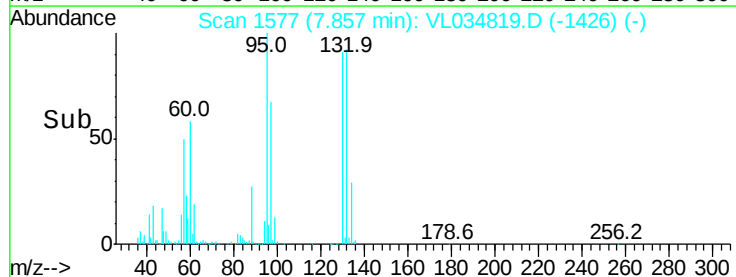
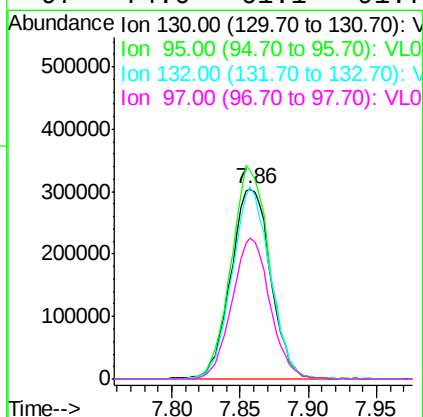
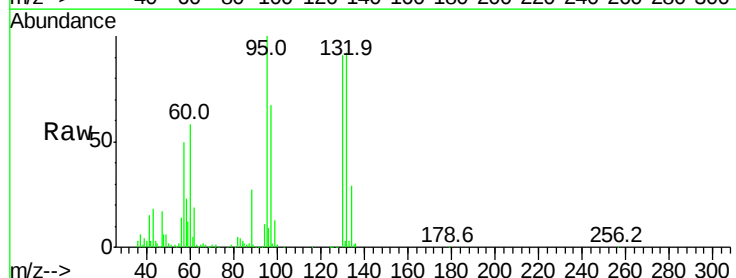
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

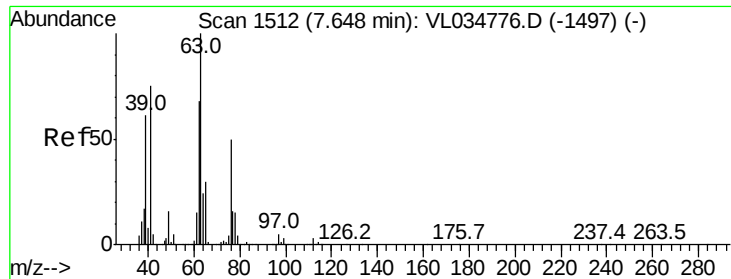
Tgt Ion: 62 Resp: 867118
 Ion Ratio Lower Upper
 62 100
 98 6.6 4.4 6.6



#38
 Trichloroethene
 Concen: 9.045 ppbv
 RT: 7.86 min Scan# 1577
 Delta R.T. -0.01 min
 Lab File: VL034819.D
 Acq: 6 Mar 2020 15:57

Tgt Ion: 130 Resp: 614140
 Ion Ratio Lower Upper
 130 100
 95 109.7 95.8 143.8
 132 101.4 76.1 114.1
 97 74.0 61.1 91.7





#39

1,2-Dichloropropane

Concen: 9.031 ppbv

RT: 7.64 min Scan# 1508

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

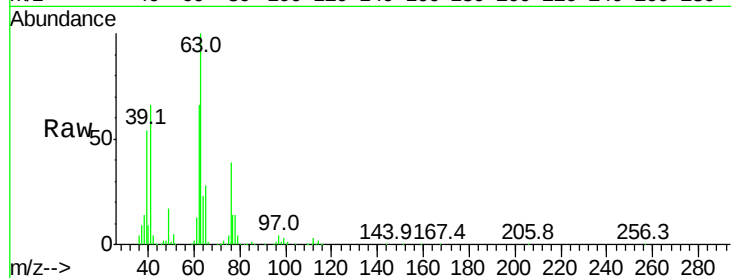
Tgt Ion: 63 Resp: 634977

Ion Ratio Lower Upper

63 100

41 65.9 60.3 90.5

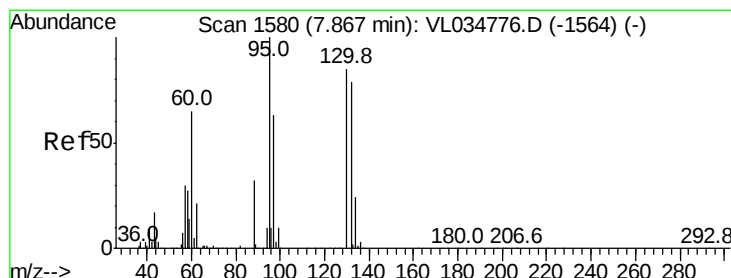
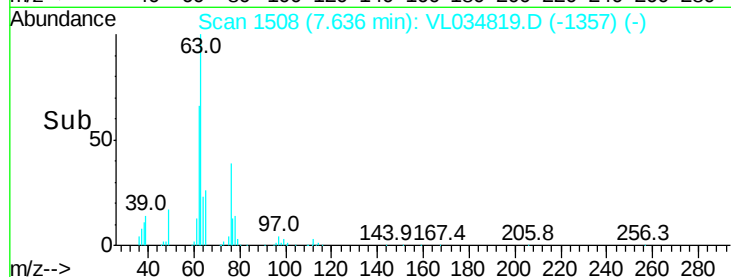
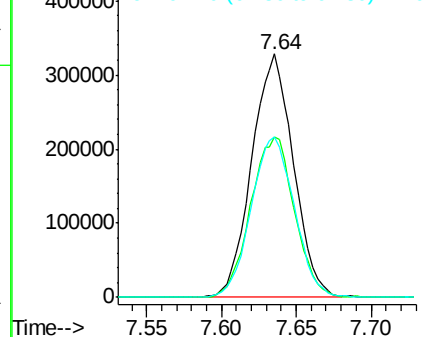
62 66.1 54.5 81.7



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#40

1,4-Dioxane

Concen: 8.943 ppbv

RT: 7.85 min Scan# 1575

Delta R.T. -0.02 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Tgt Ion: 88 Resp: 217472

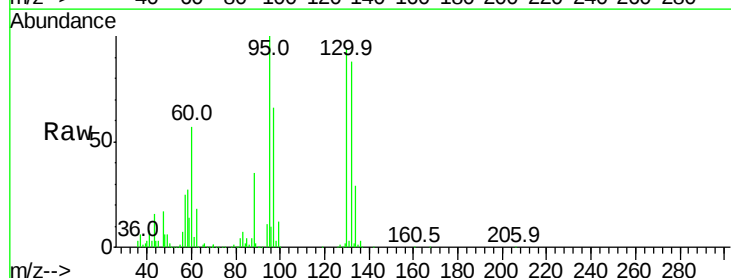
Ion Ratio Lower Upper

88 100

58 141.7 110.6 166.0

43 0.0 0.0 0.0

57 0.0 0.0 0.0

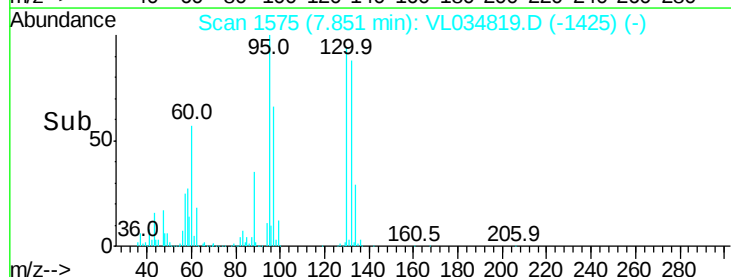
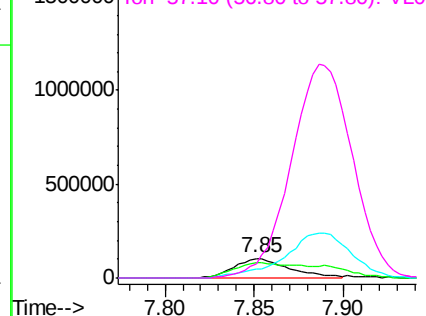


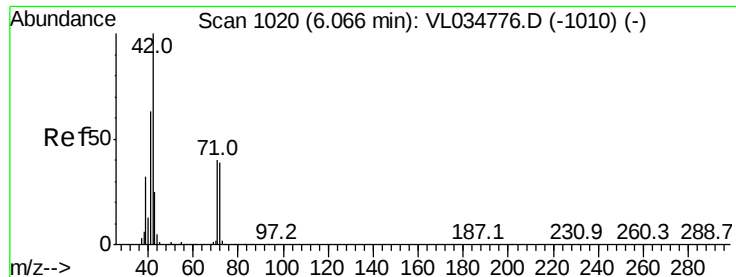
Abundance Ion 88.10 (87.80 to 88.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#41

Tetrahydrofuran

Concen: 10.472 ppbv

RT: 6.05 min Scan# 1016

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

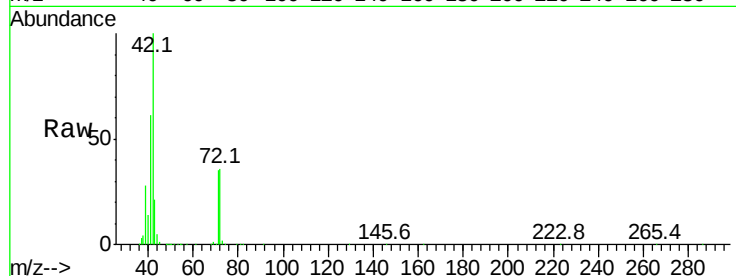
Tgt Ion: 42 Resp: 708720

Ion Ratio Lower Upper

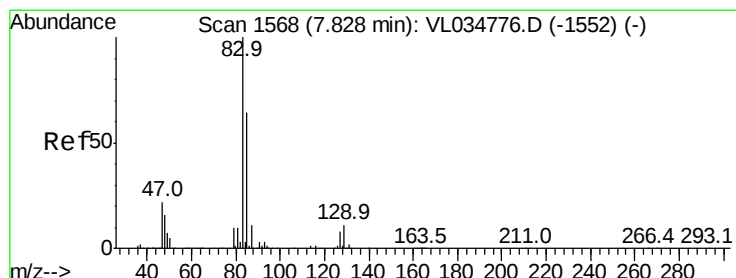
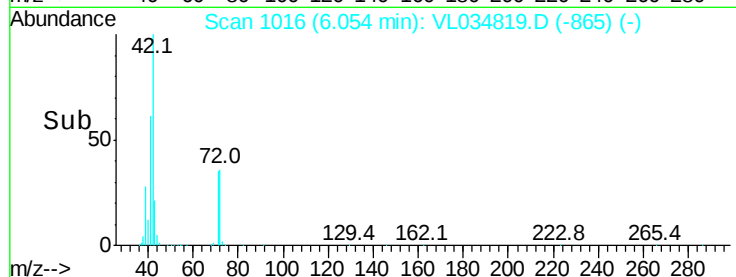
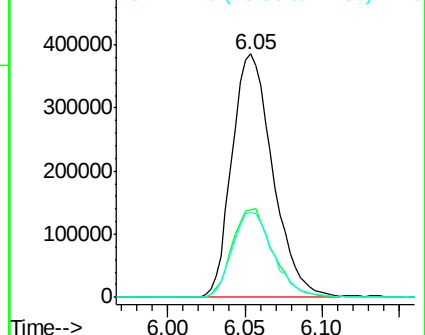
42 100

72 36.4 32.0 48.0

71 35.2 31.3 46.9



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0



#42

Bromodichloromethane

Concen: 8.174 ppbv

RT: 7.82 min Scan# 1564

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

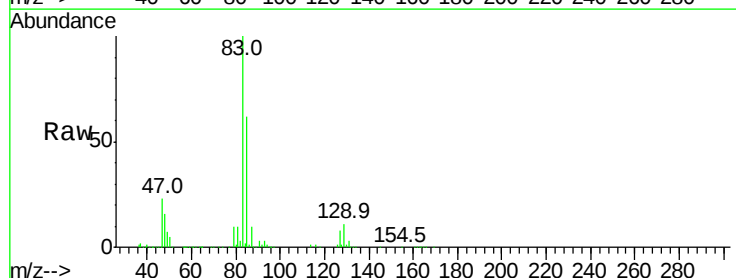
Tgt Ion: 83 Resp: 1230693

Ion Ratio Lower Upper

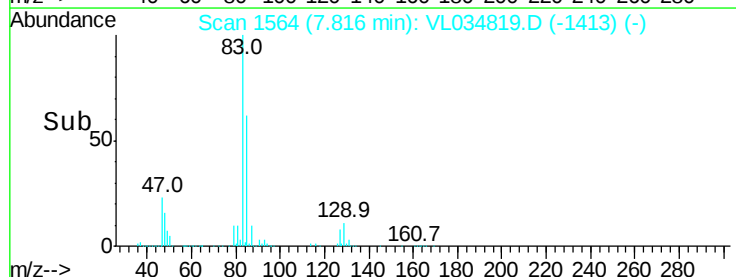
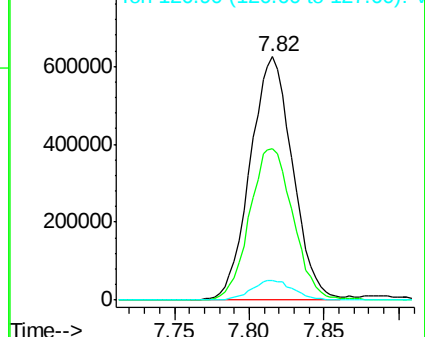
83 100

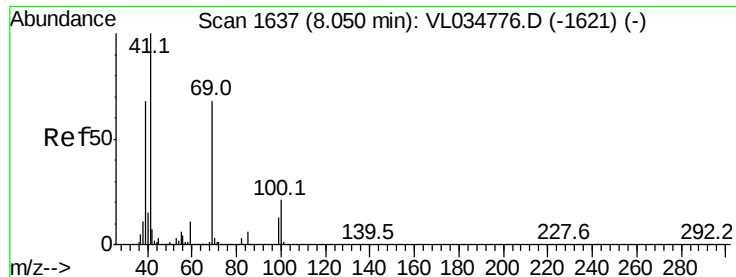
85 62.3 50.8 76.2

127 8.2 6.5 9.7



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 126.90 (126.60 to 127.60): V

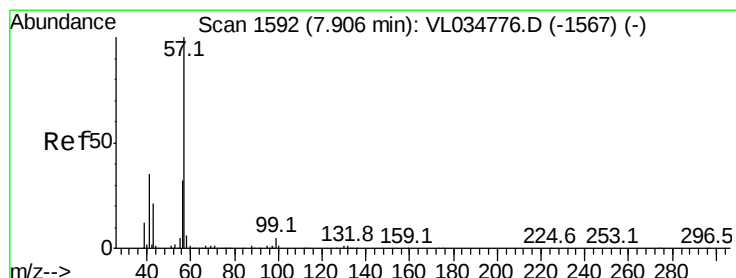
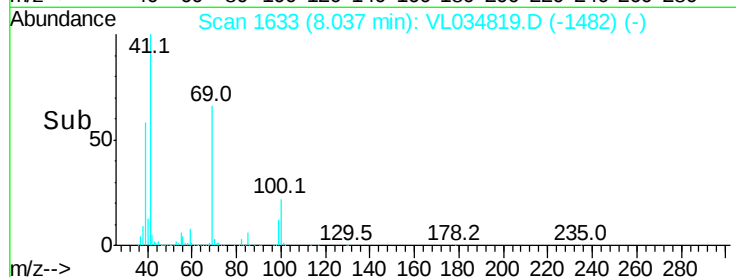
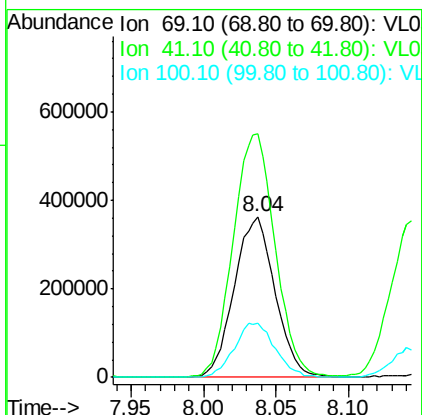
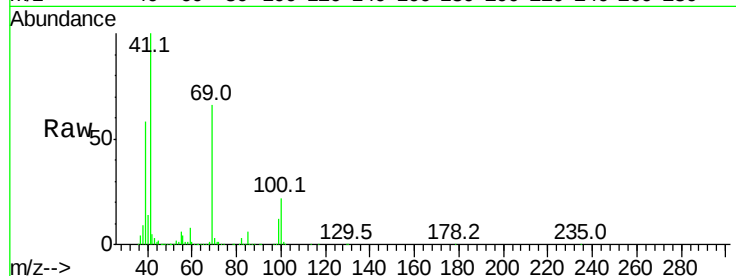




#43
Methyl Methacrylate
Concen: 9.580 ppbv
RT: 8.04 min Scan# 1633
Delta R.T. -0.01 min
Lab File: VL034819.D
Acq: 6 Mar 2020 15:57

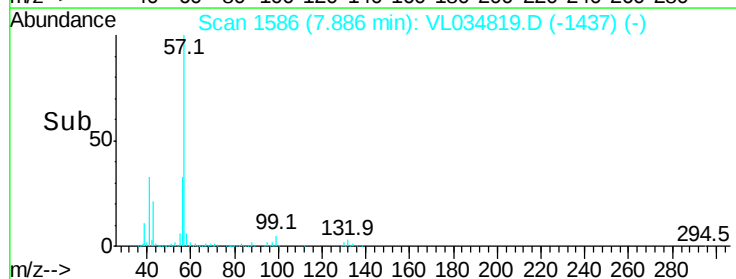
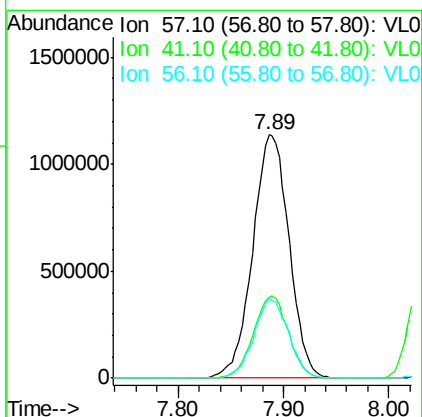
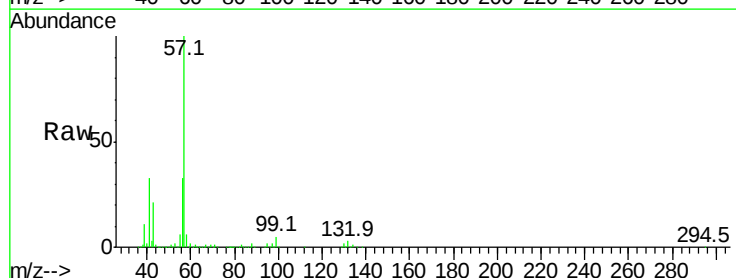
Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

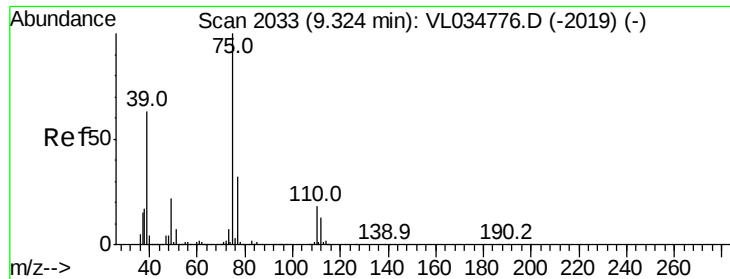
Tgt Ion: 69 Resp: 707254
Ion Ratio Lower Upper
69 100
41 156.3 121.6 182.4
100 34.0 23.8 35.8



#44
2,2,4-Trimethylpentane
Concen: 8.947 ppbv
RT: 7.89 min Scan# 1586
Delta R.T. -0.02 min
Lab File: VL034819.D
Acq: 6 Mar 2020 15:57

Tgt Ion: 57 Resp: 2723835
Ion Ratio Lower Upper
57 100
41 32.5 27.4 41.0
56 31.2 25.0 37.6





#45

t-1,3-Dichloropropene

Concen: 11.387 ppbv

RT: 9.31 min Scan# 2029

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

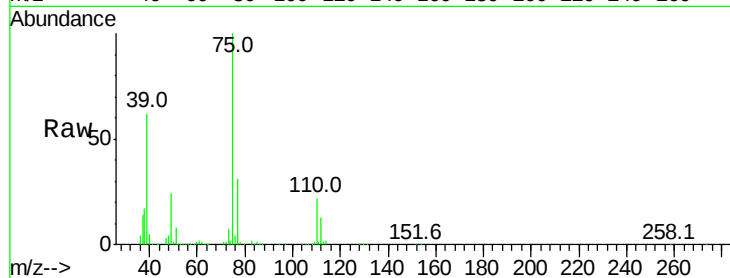
VSTDCCC010

Tgt Ion: 75 Resp: 882542

Ion Ratio Lower Upper

75 100

77 31.2 25.6 38.4



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

9.31

400000

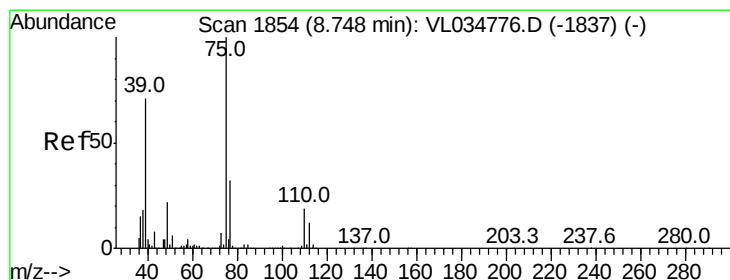
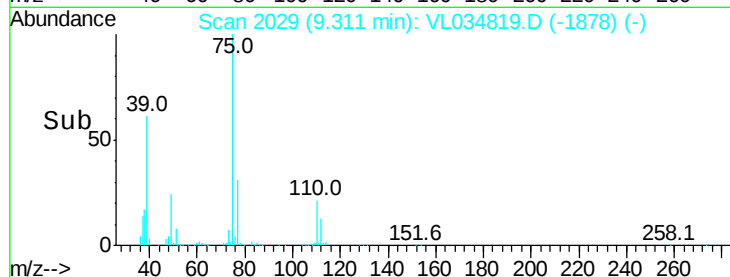
300000

200000

100000

0

Time--> 9.20 9.25 9.30 9.35 9.40



#46

cis-1,3-Dichloropropene

Concen: 10.786 ppbv

RT: 8.73 min Scan# 1848

Delta R.T. -0.02 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

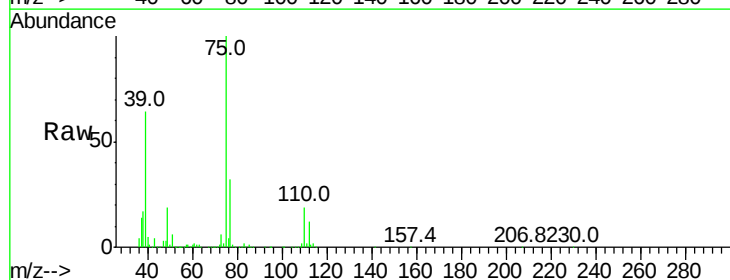
Tgt Ion: 75 Resp: 1020720

Ion Ratio Lower Upper

75 100

39 64.1 56.9 85.3

77 32.0 25.7 38.5



Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0

8.73

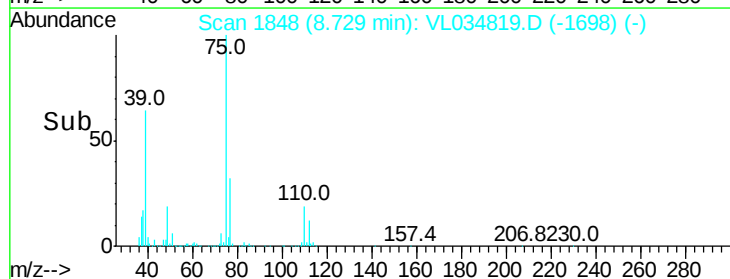
600000

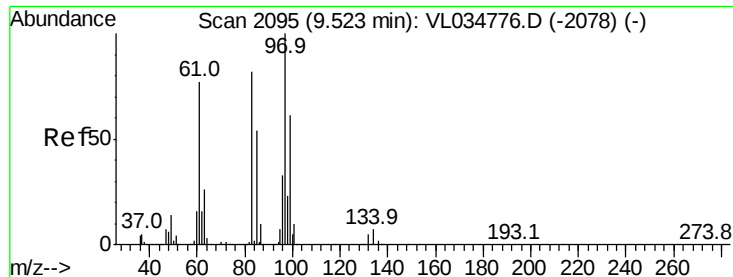
400000

200000

0

Time--> 8.65 8.70 8.75 8.80





#47

1,1,2-Trichloroethane

Concen: 8.473 ppbv

RT: 9.51 min Scan# 2091

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

Tgt Ion: 97 Resp: 628958

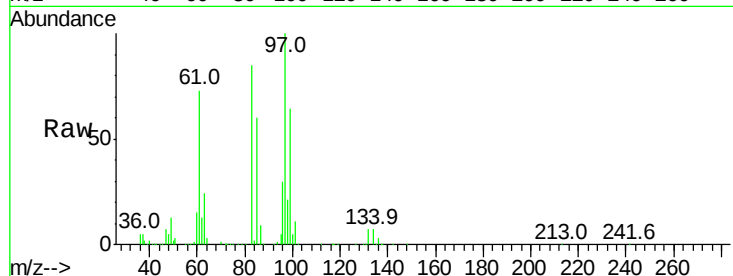
Ion Ratio Lower Upper

97 100

83 85.4 65.2 97.8

85 59.6 43.6 65.4

99 64.0 48.9 73.3

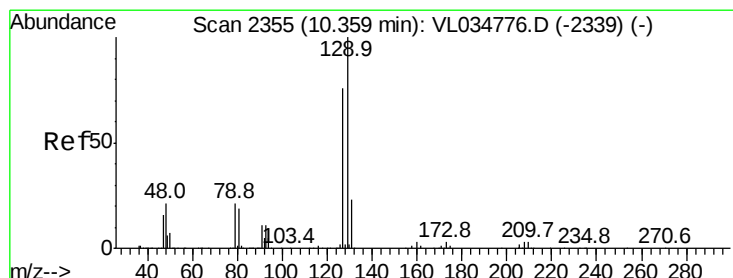
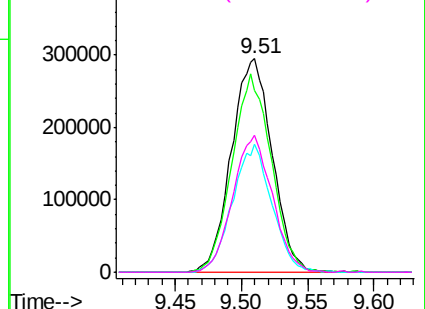
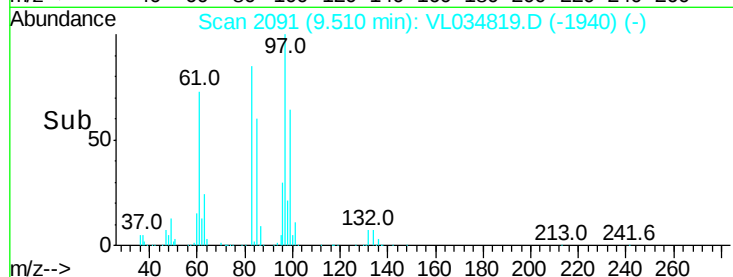


Abundance Ion 97.00 (96.70 to 97.70): VL0

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: 9.382 ppbv

RT: 10.34 min Scan# 2349

Delta R.T. -0.02 min

Lab File: VL034819.D

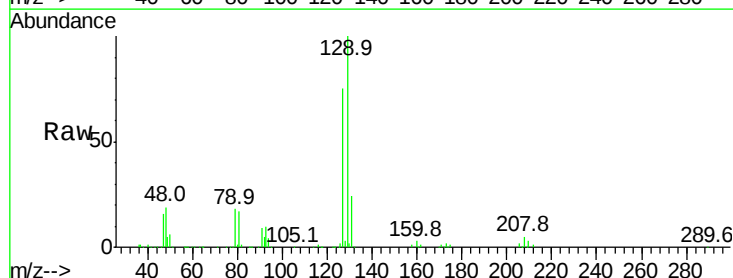
Acq: 6 Mar 2020 15:57

Tgt Ion: 129 Resp: 1088992

Ion Ratio Lower Upper

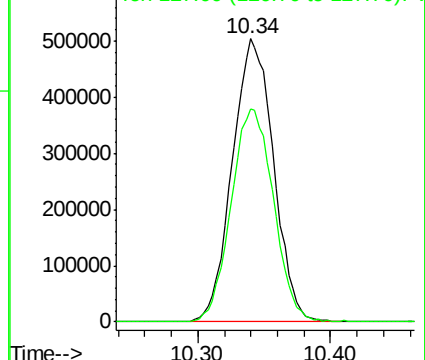
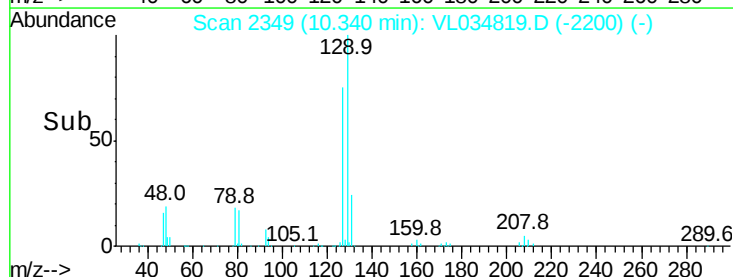
129 100

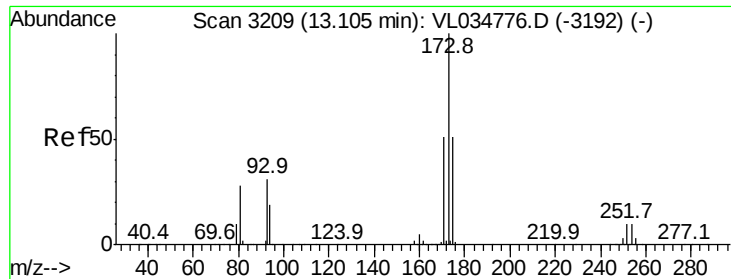
127 77.4 39.0 117.0



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#49

Bromoform

Concen: 9.644 ppbv

RT: 13.09 min Scan# 3204

Delta R.T. -0.02 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

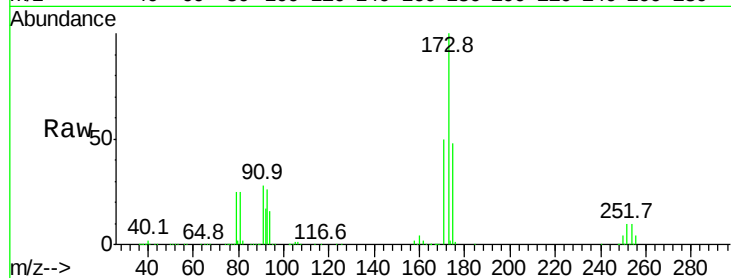
Tgt Ion:173 Resp: 976810

Ion Ratio Lower Upper

173 100

175 49.5 39.8 59.6

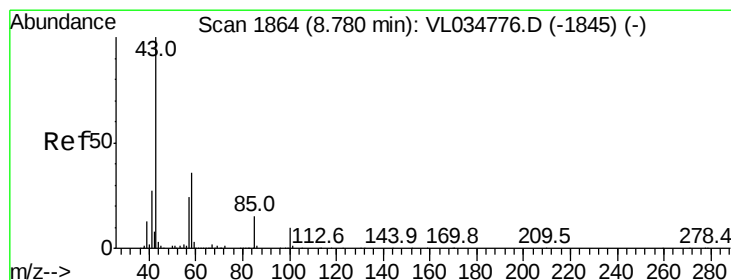
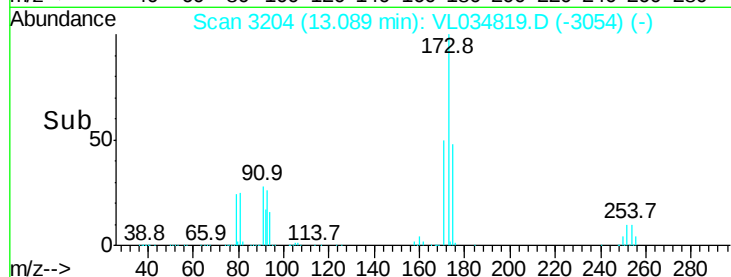
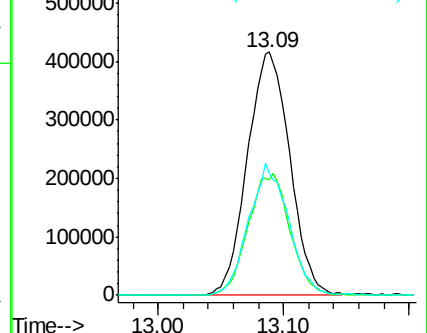
171 51.2 41.0 61.4



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: 9.240 ppbv

RT: 8.77 min Scan# 1860

Delta R.T. -0.01 min

Lab File: VL034819.D

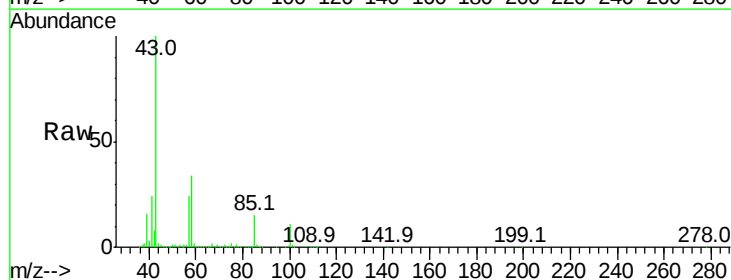
Acq: 6 Mar 2020 15:57

Tgt Ion: 43 Resp: 1756012

Ion Ratio Lower Upper

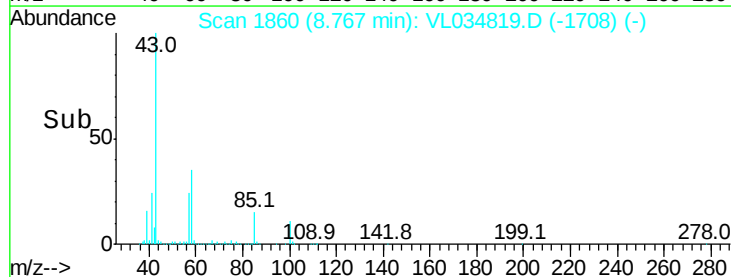
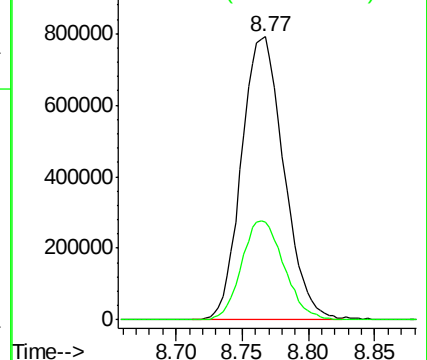
43 100

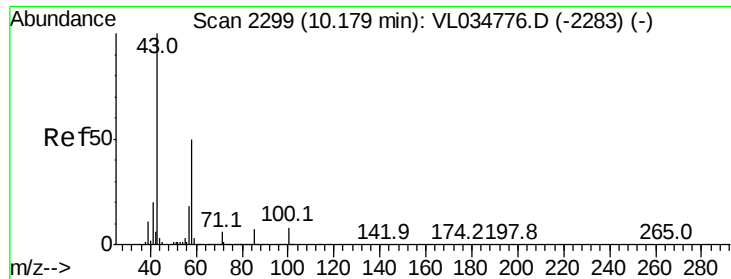
58 35.5 28.7 43.1



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 9.855 ppbv

RT: 10.17 min Scan# 2295

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

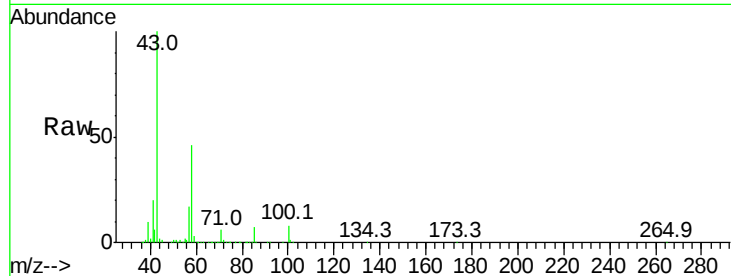
Tgt Ion: 43 Resp: 1469203

Ion Ratio Lower Upper

43 100

58 47.4 38.6 58.0

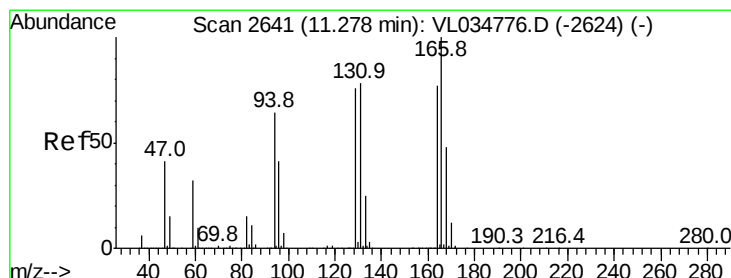
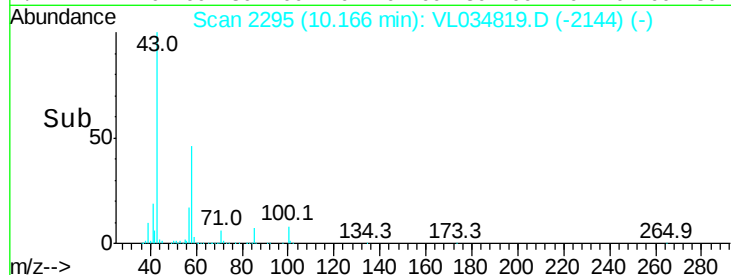
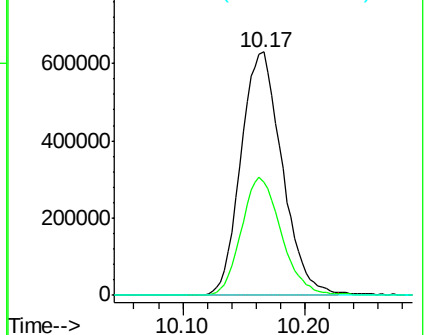
98 0.0 0.2 0.4#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 9.217 ppbv

RT: 11.26 min Scan# 2635

Delta R.T. -0.02 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Tgt Ion: 164 Resp: 593229

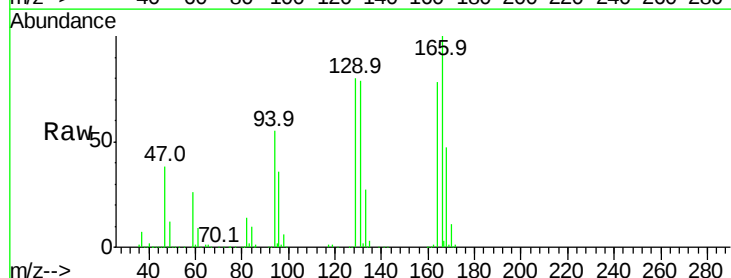
Ion Ratio Lower Upper

164 100

166 128.0 103.3 154.9

129 103.0 79.0 118.4

131 100.7 81.0 121.4

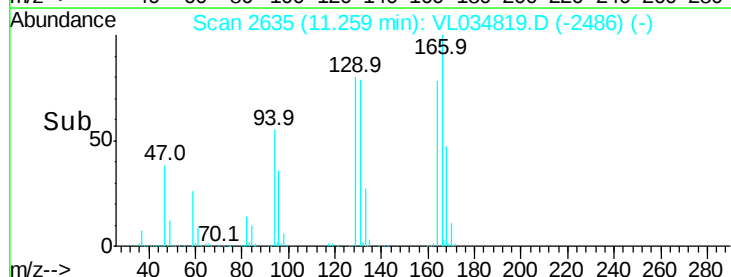
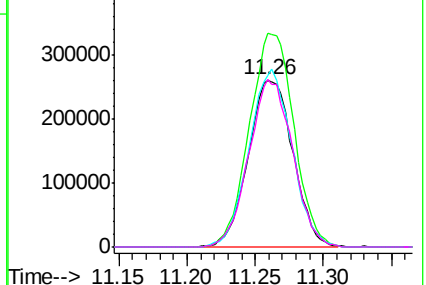


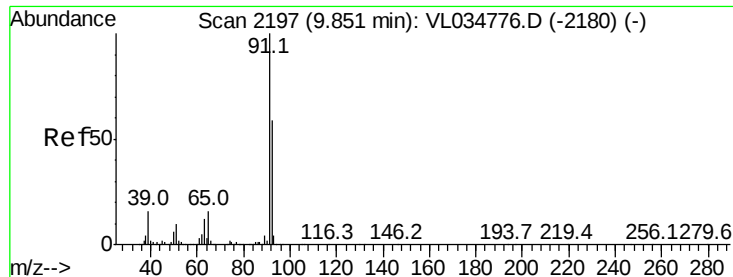
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 9.985 ppbv

RT: 9.84 min Scan# 2193

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

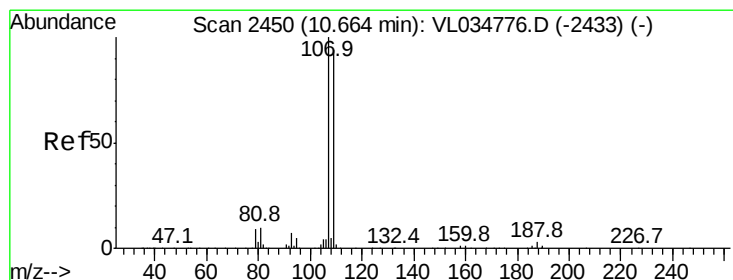
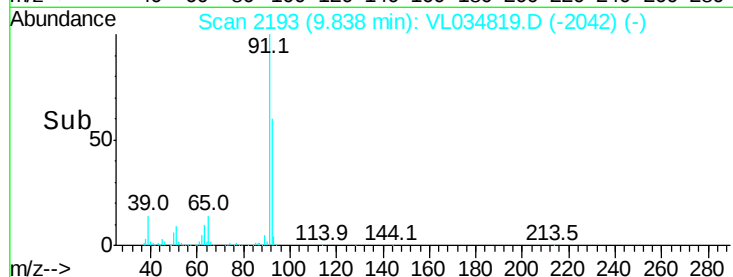
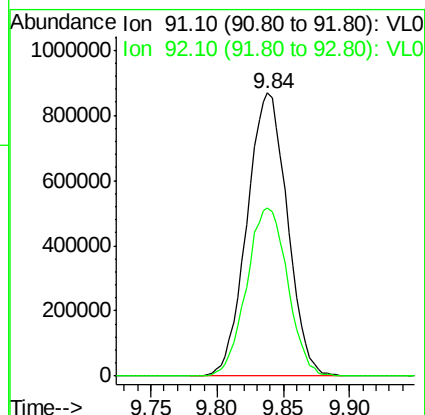
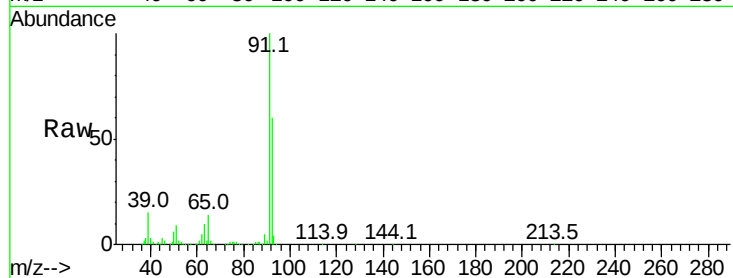
VSTDCCC010

Tgt Ion: 91 Resp: 1841121

Ion Ratio Lower Upper

91 100

92 60.7 48.2 72.2



#54

1,2-Dibromoethane

Concen: 8.728 ppbv

RT: 10.65 min Scan# 2445

Delta R.T. -0.02 min

Lab File: VL034819.D

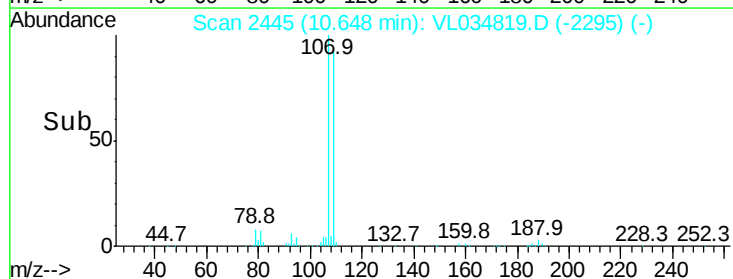
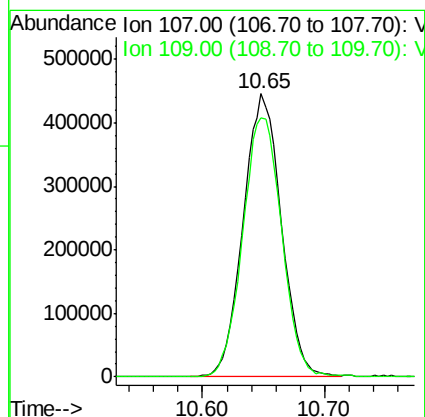
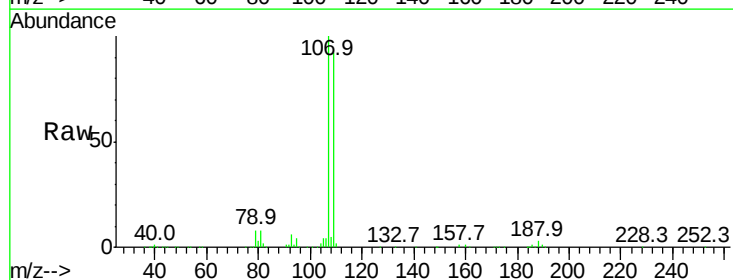
Acq: 6 Mar 2020 15:57

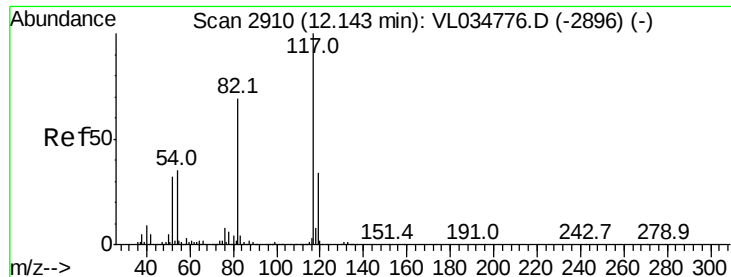
Tgt Ion: 107 Resp: 957935

Ion Ratio Lower Upper

107 100

109 91.6 75.0 112.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.13 min Scan# 2905

Delta R.T. -0.02 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

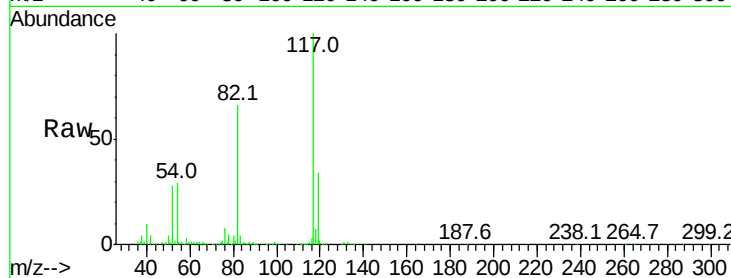
Tgt Ion:117 Resp: 2531315

Ion Ratio Lower Upper

117 100

82 52.9 53.9 80.9#

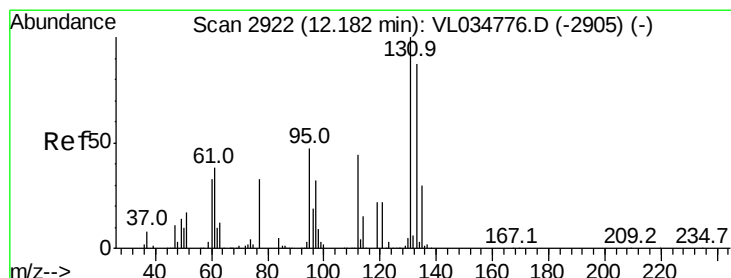
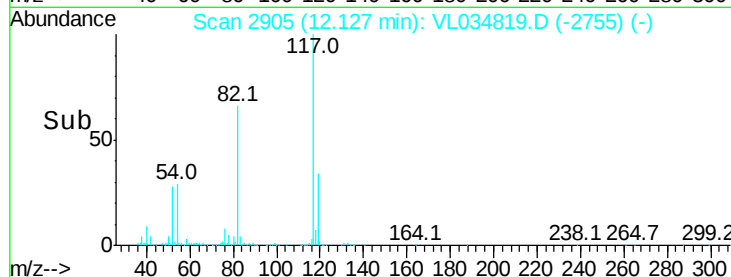
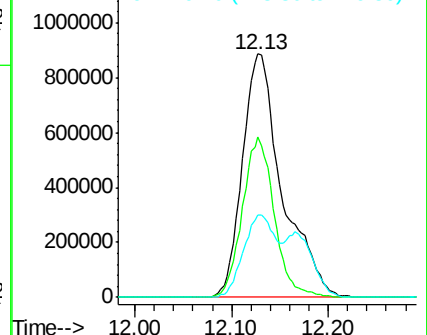
119 46.2 25.0 37.4#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 7.206 ppbv

RT: 12.17 min Scan# 2918

Delta R.T. -0.01 min

Lab File: VL034819.D

Acq: 6 Mar 2020 15:57

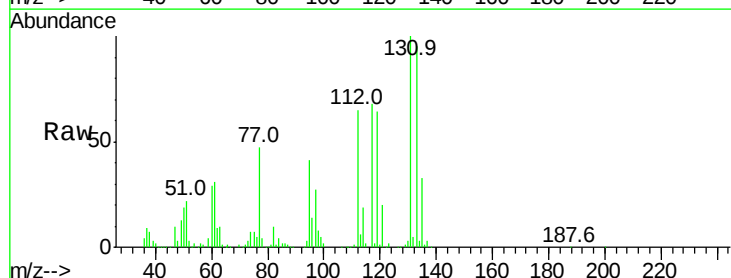
Tgt Ion:131 Resp: 808185

Ion Ratio Lower Upper

131 100

133 95.1 75.4 113.0

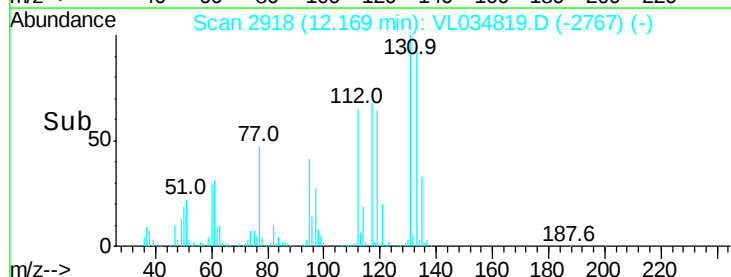
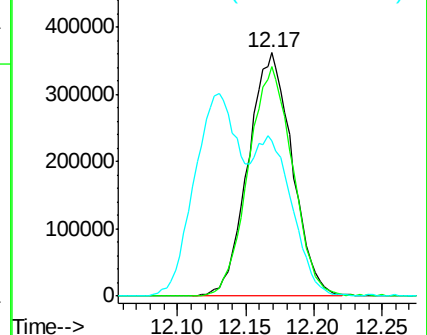
119 60.1 110.5 165.7#

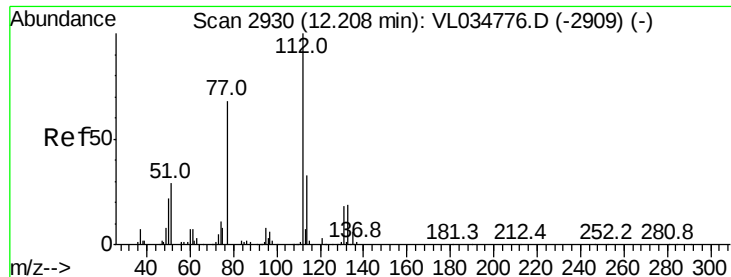


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V

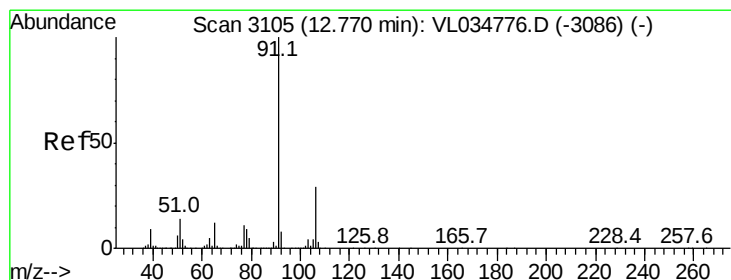
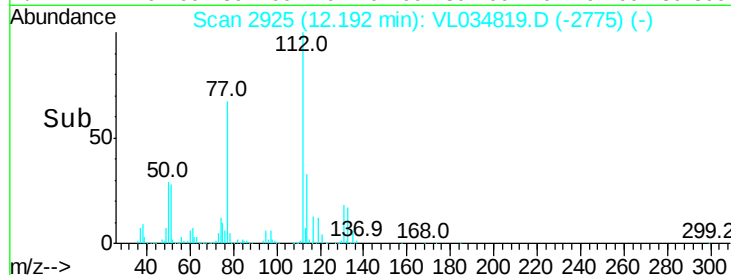
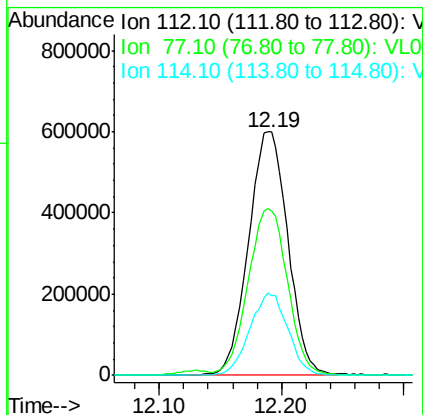
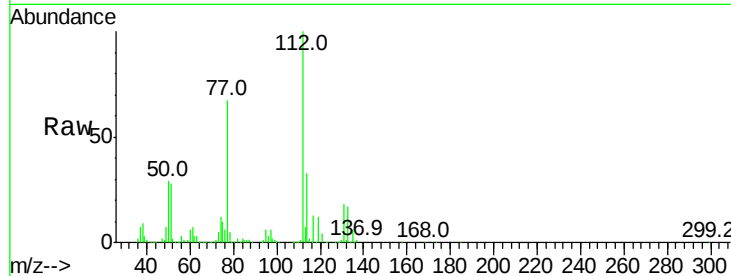




#57
Chlorobenzene
Concen: 6.910 ppbv
RT: 12.19 min Scan# 2925
Delta R.T. -0.02 min
Lab File: VL034819.D
Acq: 6 Mar 2020 15:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 1336134
Ion Ratio Lower Upper
112 100
77 67.1 55.6 83.4
114 32.6 29.4 36.0



#58
Ethyl Benzene
Concen: 7.714 ppbv
RT: 12.75 min Scan# 3099
Delta R.T. -0.02 min
Lab File: VL034819.D
Acq: 6 Mar 2020 15:57

Tgt Ion: 91 Resp: 2406404
Ion Ratio Lower Upper
91 100
106 32.3 22.8 34.2

