

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051420\
 Data File : VL035028.D
 Acq On : 14 May 2020 20:18
 Operator : SY/AP
 Sample : L2566-03 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

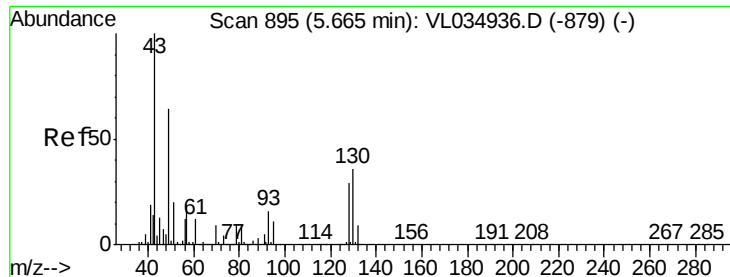
Quant Time: May 15 01:11:31 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 06 14:49:39 2020
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1194162	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.17	114	2837815	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	2732464	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.44	95	2296745	10.38	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.80%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.00	85	9955	0.059 ppbv	96
9) Propene	2.97	41	6138	0.104 ppbv #	69
13) Ethanol	3.56	45	191170	9.792 ppbv	100
15) Acetone	3.82	43	217594	1.378 ppbv	99
17) tert-Butyl alcohol	4.28	59	29555	0.210 ppbv #	88
19) Isopropyl Alcohol	3.94	45	124181	1.179 ppbv #	98
20) Methylene Chloride	4.31	84	37223	0.712 ppbv	94
25) Ethyl Acetate	5.66	43	18004	0.068 ppbv #	82
26) Hexane	5.67	57	29593	0.257 ppbv #	57
34) 2-Butanone	5.23	43	22162	0.126 ppbv	97
38) Trichloroethene	7.83	130	66576	0.735 ppbv	94
39) 1,2-Dichloropropane	7.17	63	747569	7.971 ppbv #	24
44) 2,2,4-Trimethylpentane	7.87	57	62692	0.151 ppbv #	68
52) Tetrachloroethene	11.24	164	553694	6.655 ppbv	97
53) Toluene	9.82	91	202283	0.816 ppbv	100
59) m/p-Xylene	13.01	91	10507	0.035 ppbv #	8
60) o-Xylene	13.71	91	18999	0.065 ppbv #	41
61) Styrene	13.55	104	61622	0.332 ppbv	96
62) Isopropylbenzene	14.69	105	687510	1.570 ppbv	98
74) 1,2,4-Trimethylbenzene	16.79	105	17185	0.049 ppbv #	68

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

ClientSampled :

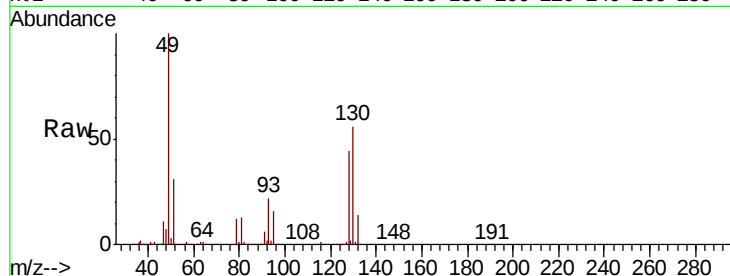
Tot Ion: 49 Resp: 1194162

Ion Ratio Lower Upper

49 100

128 46.0 22.1 66.5

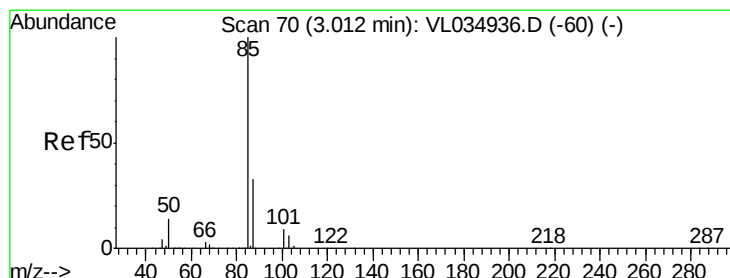
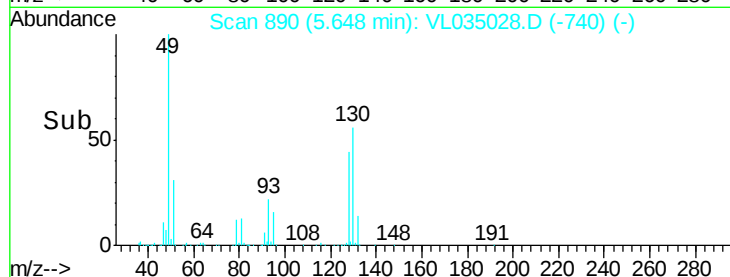
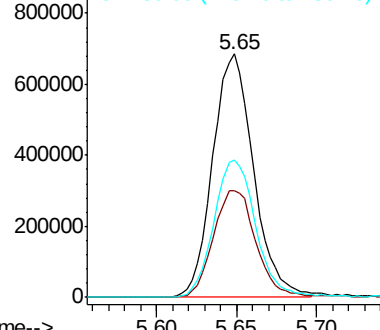
130 58.6 29.1 87.3



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.059 ppbv

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL035028.D

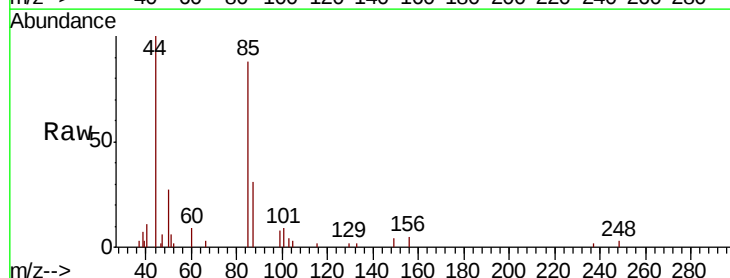
Acq: 14 May 2020 20:18

Tgt Ion: 85 Resp: 9955

Ion Ratio Lower Upper

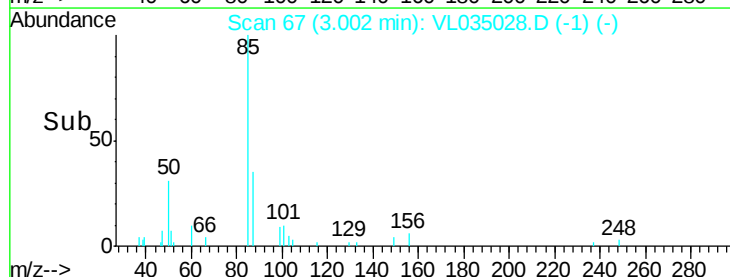
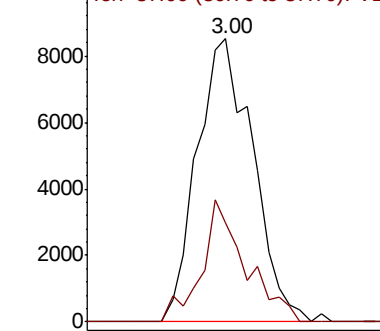
85 100

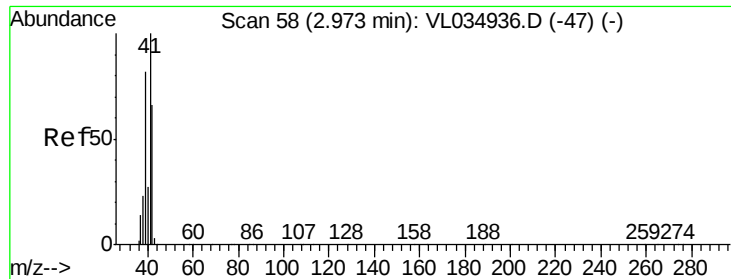
87 34.8 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#9

Propene

Concen: 0.104 ppbv

RT: 2.97 min Scan# 56

Delta R.T. -0.01 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

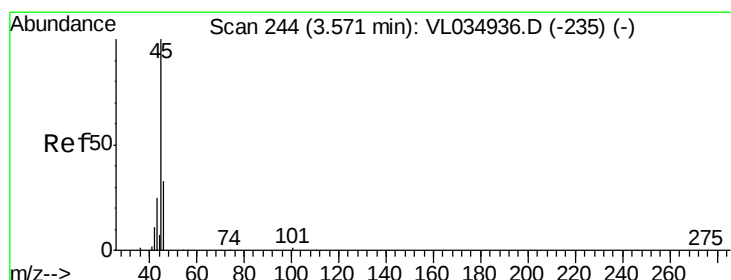
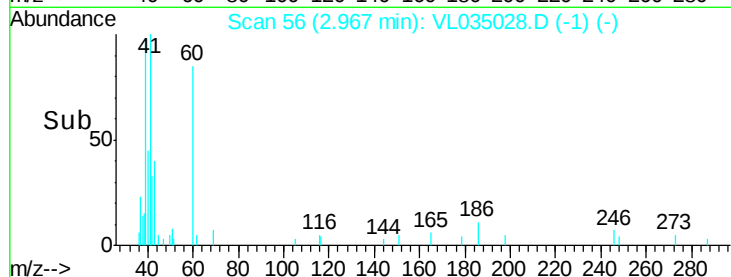
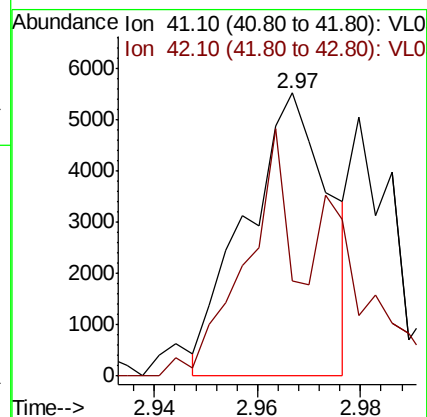
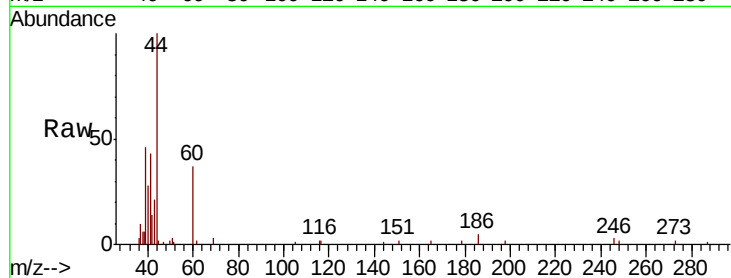
ClientSampleId :

Tot Ion: 41 Resp: 6138

Ion Ratio Lower Upper

41 100

42 93.2 54.5 81.7#



#13

Ethanol

Concen: 9.792 ppbv

RT: 3.56 min Scan# 241

Delta R.T. -0.01 min

Lab File: VL035028.D

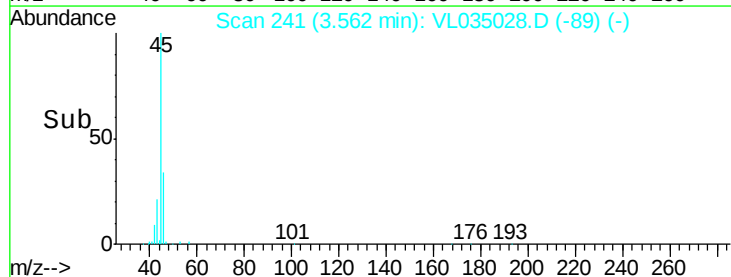
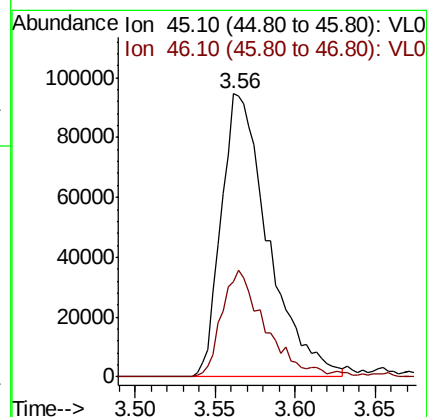
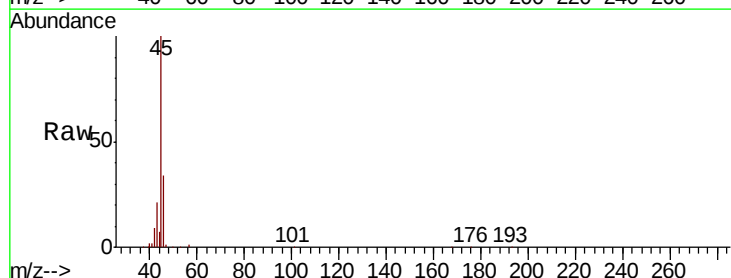
Acq: 14 May 2020 20:18

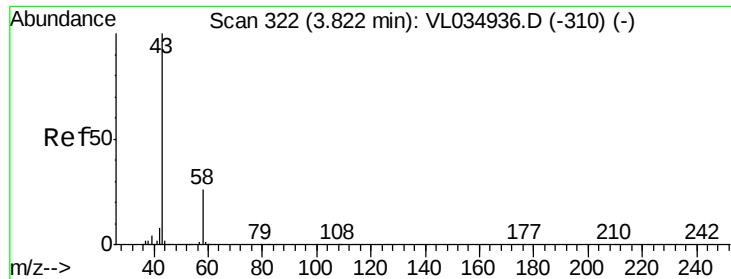
Tgt Ion: 45 Resp: 191170

Ion Ratio Lower Upper

45 100

46 36.0 14.3 57.3





#15

Acetone

Concen: 1.378 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.01 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

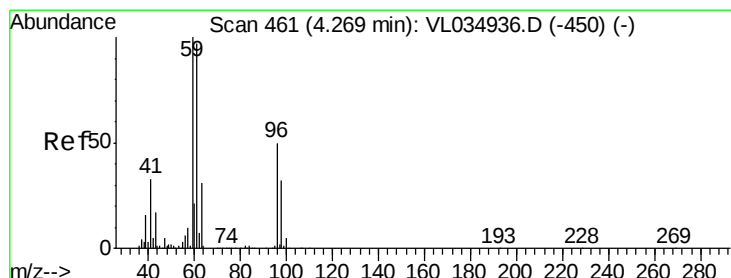
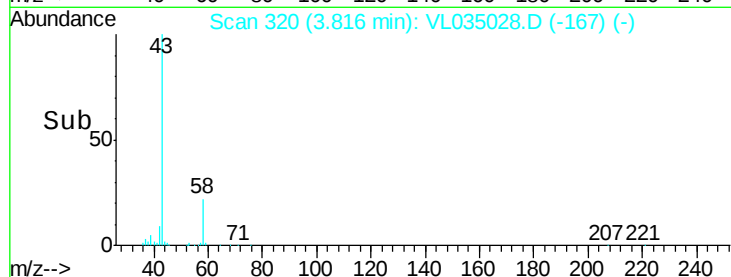
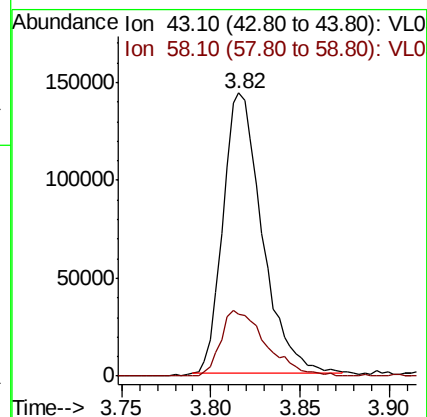
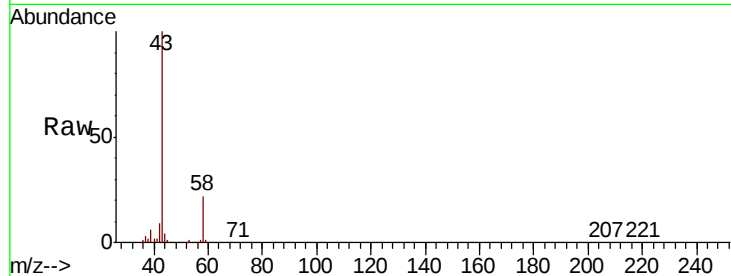
ClientSampleId :

Tot Ion: 43 Resp: 217594

Ion Ratio Lower Upper

43 100

58 27.5 21.7 32.5



#17

tert-Butyl alcohol

Concen: 0.210 ppbv

RT: 4.28 min Scan# 464

Delta R.T. 0.01 min

Lab File: VL035028.D

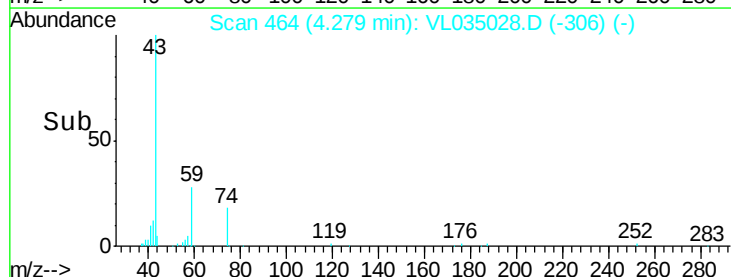
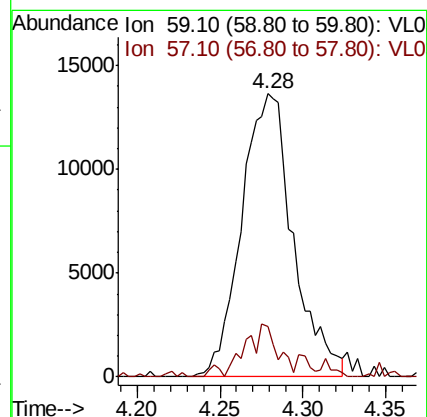
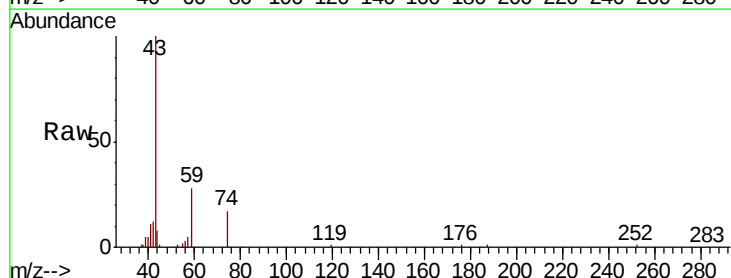
Acq: 14 May 2020 20:18

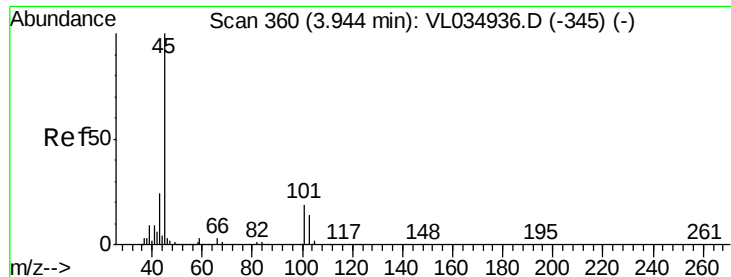
Tgt Ion: 59 Resp: 29555

Ion Ratio Lower Upper

59 100

57 15.3 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 1.179 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

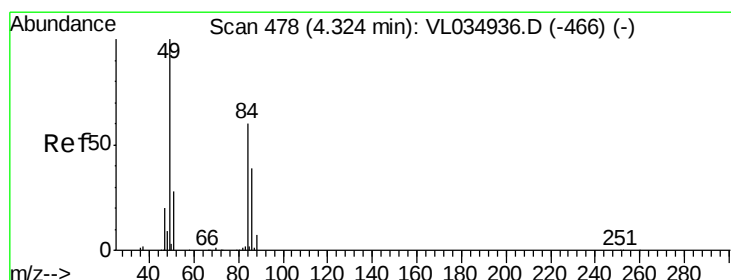
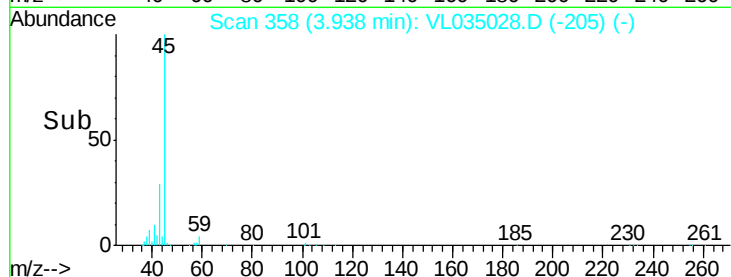
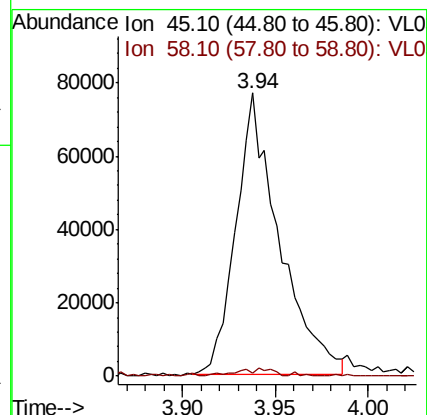
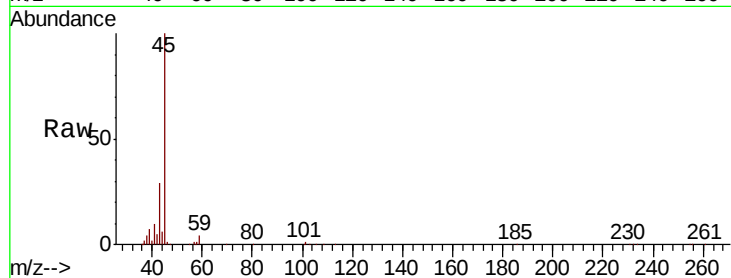
ClientSampled :

Tot Ion: 45 Resp: 124181

Ion Ratio Lower Upper

45 100

58 2.9 1.7 2.5#



#20

Methylene Chloride

Concen: 0.712 ppbv

RT: 4.31 min Scan# 474

Delta R.T. -0.01 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Tgt Ion: 84 Resp: 37223

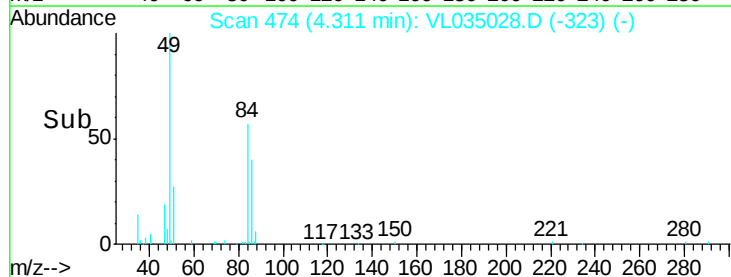
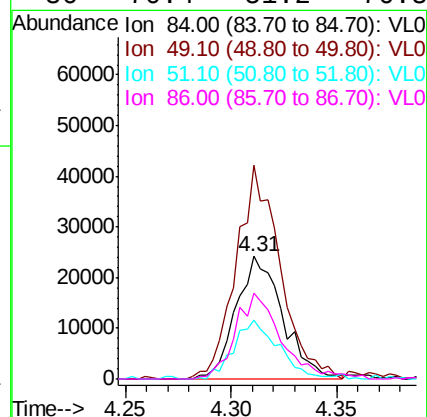
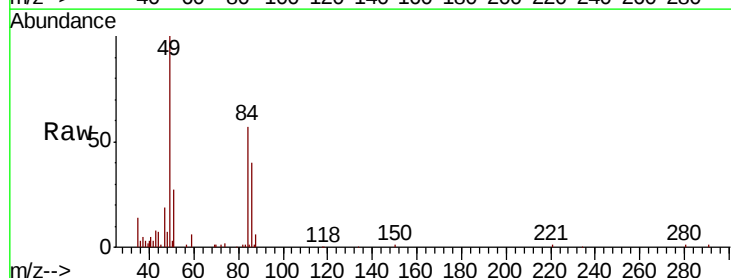
Ion Ratio Lower Upper

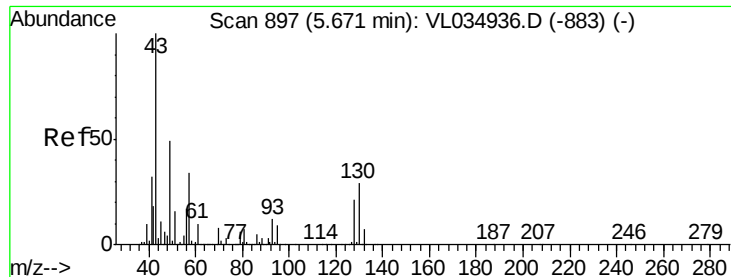
84 100

49 174.3 132.5 198.7

51 47.6 38.4 57.6

86 70.4 51.2 76.8

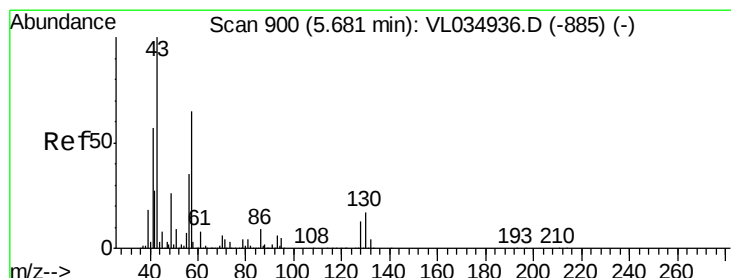
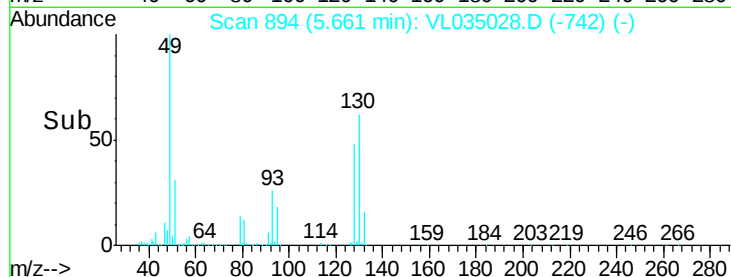
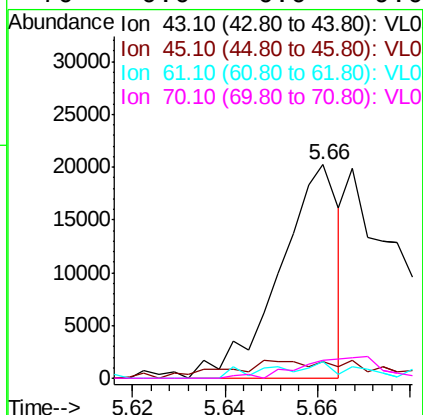
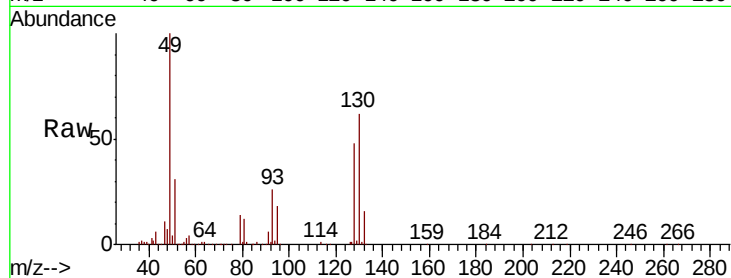




#25
Ethyl Acetate
Concen: 0.068 ppbv
RT: 5.66 min Scan# 894
Delta R.T. -0.01 min
Lab File: VL035028.D
Acq: 14 May 2020 20:18

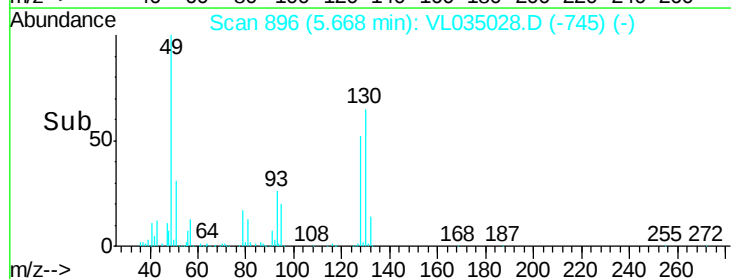
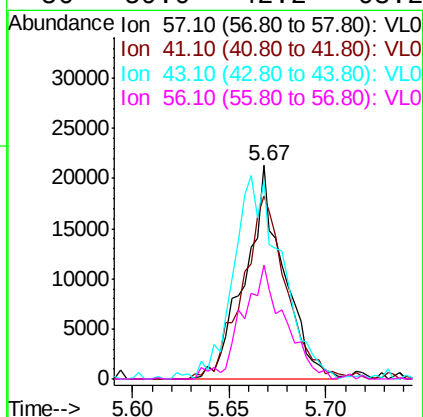
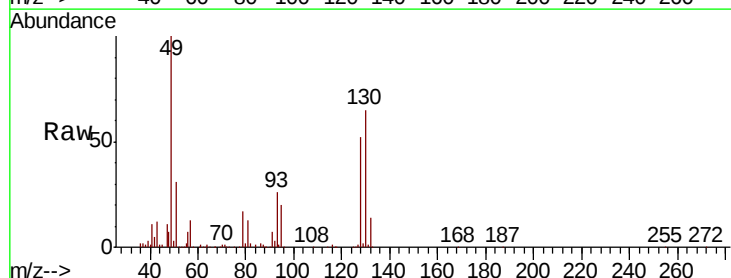
Instrument :
MSVOA_L
ClientSampleId :

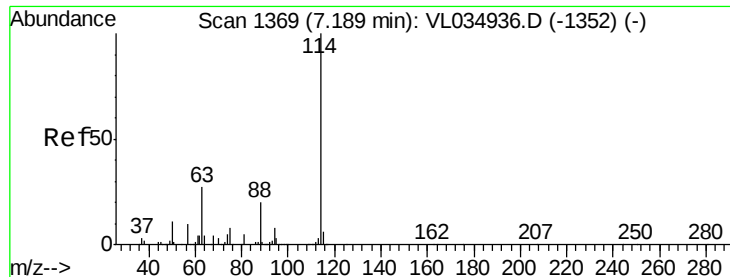
Tot Ion:	43	Resp:	18004
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.1	12.1#
61	11.5	7.8	11.8
70	0.0	6.0	9.0#



#26
Hexane
Concen: 0.257 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.01 min
Lab File: VL035028.D
Acq: 14 May 2020 20:18

Tgt Ion:	57	Resp:	29593
Ion	Ratio	Lower	Upper
57	100		
41	98.7	72.7	109.1
43	119.9	182.1	273.1#
56	59.0	42.2	63.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

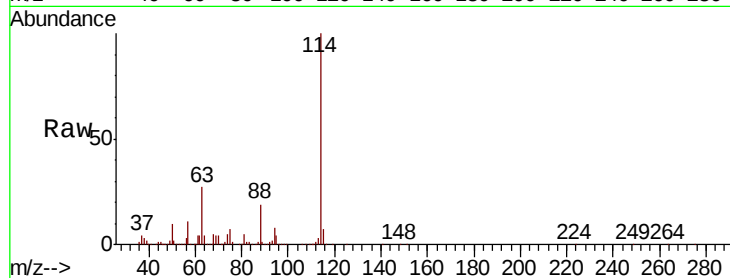
Tot Ion:114 Resp: 2837815

Ion Ratio Lower Upper

114 100

63 26.6 22.2 33.4

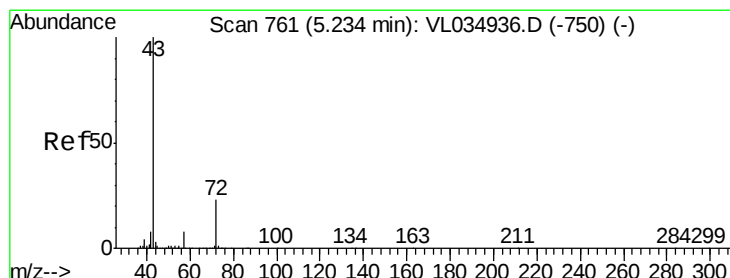
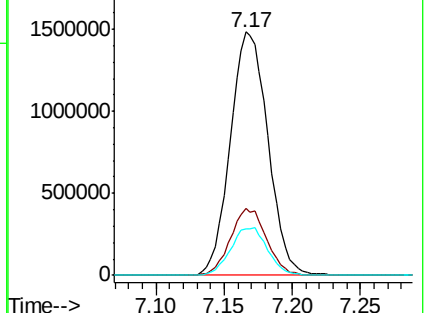
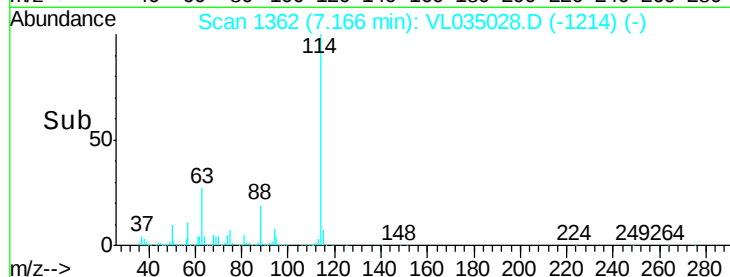
88 19.4 15.5 23.3



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: 0.126 ppbv

RT: 5.23 min Scan# 761

Delta R.T. -0.00 min

Lab File: VL035028.D

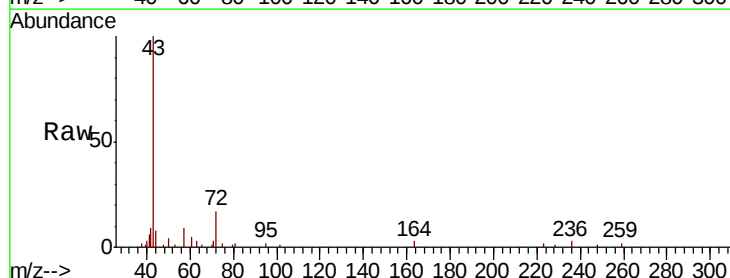
Acq: 14 May 2020 20:18

Tgt Ion: 43 Resp: 22162

Ion Ratio Lower Upper

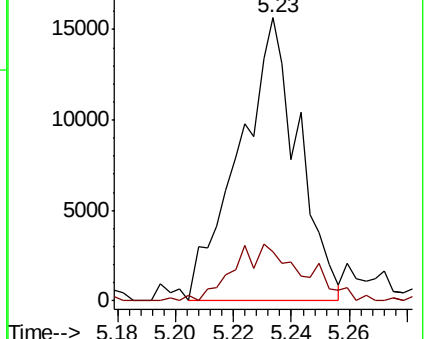
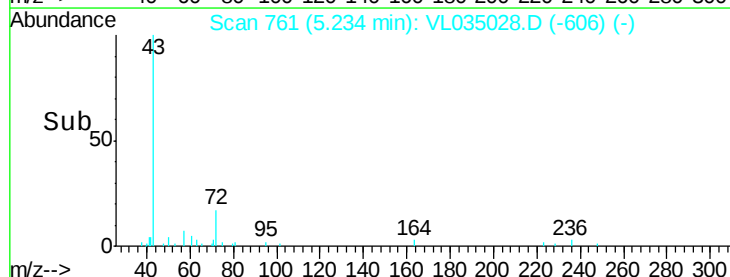
43 100

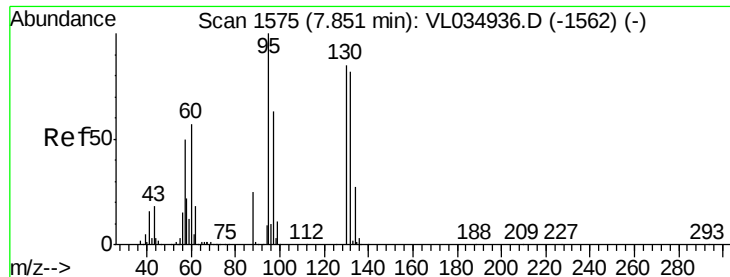
72 23.8 18.0 27.0



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#38

Trichloroethene

Concen: 0.735 ppbv

RT: 7.83 min Scan# 1569

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:130 Resp: 66576

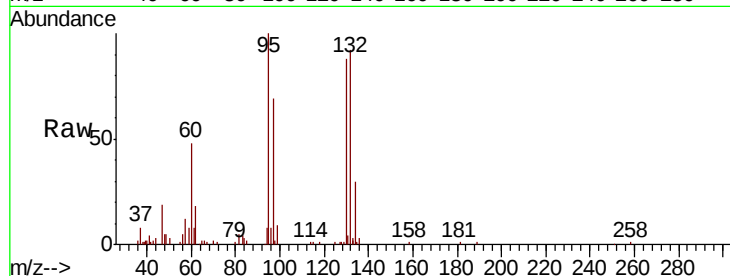
Ion Ratio Lower Upper

130 100

95 113.4 93.4 140.0

132 105.6 76.4 114.6

97 76.9 58.5 87.7

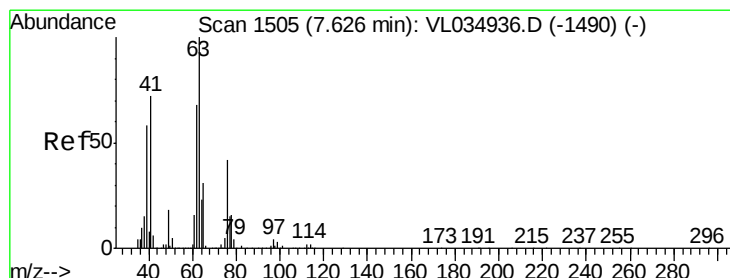
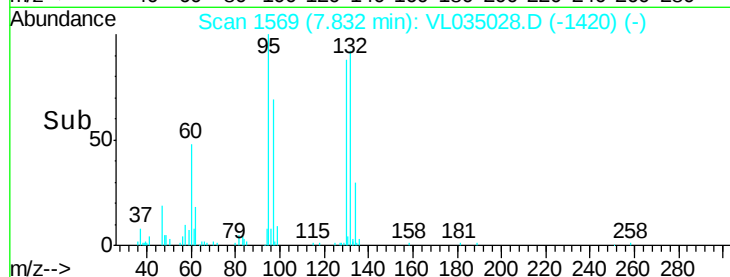
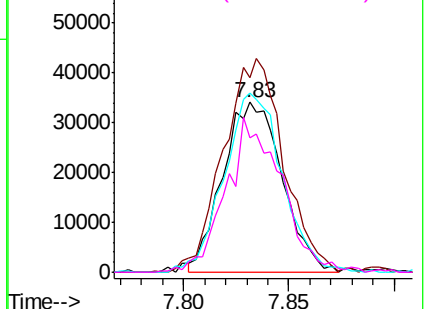


Abundance Ion 130.00 (129.70 to 130.70): V

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: 7.971 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. -0.46 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

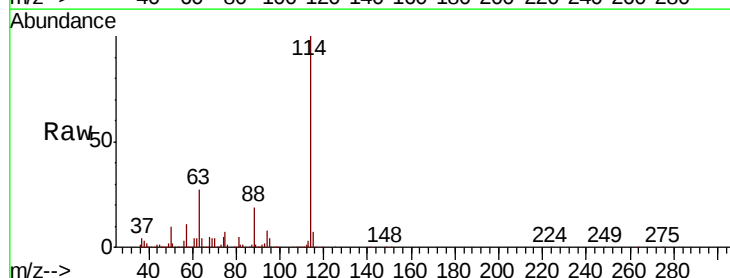
Tgt Ion: 63 Resp: 747569

Ion Ratio Lower Upper

63 100

41 0.0 57.8 86.8#

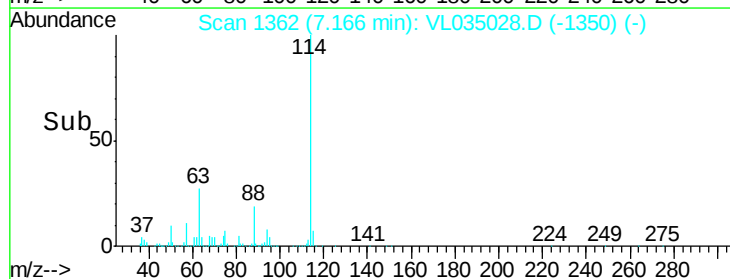
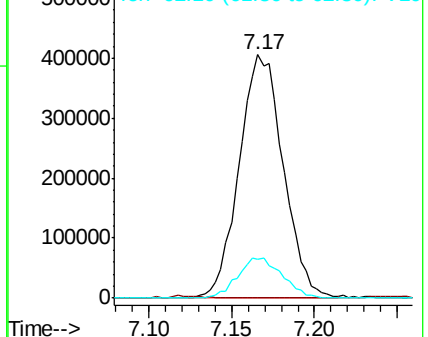
62 15.7 54.2 81.2#

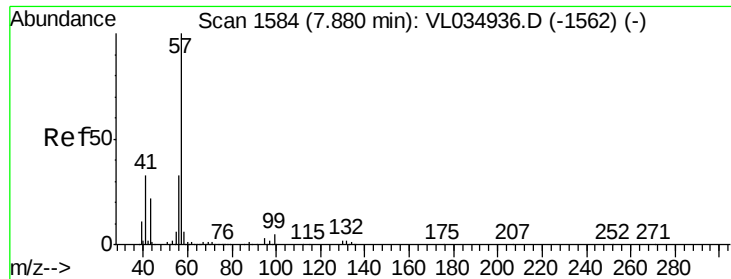


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

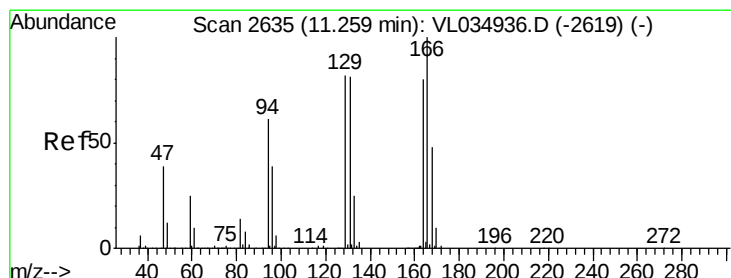
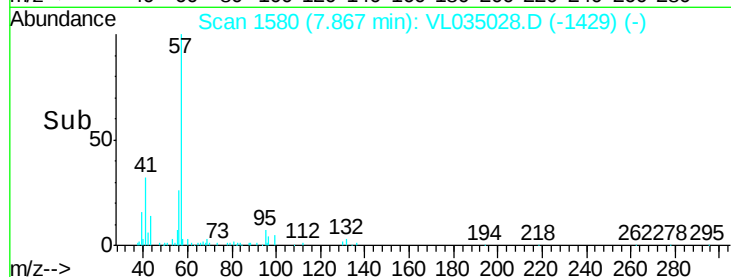
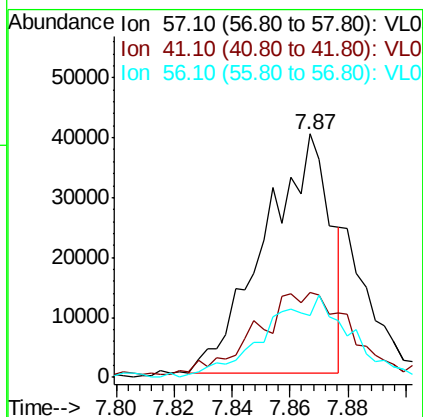
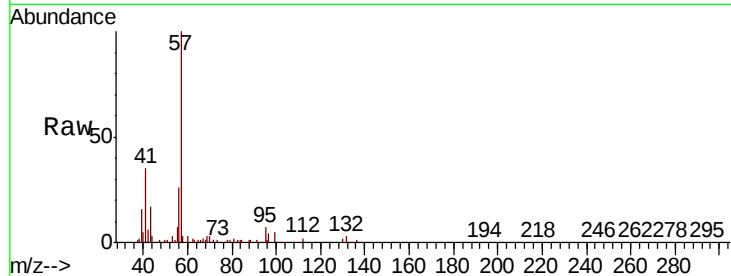




#44
 2,2,4-Trimethylpentane
 Concen: 0.151 ppbv
 RT: 7.87 min Scan# 1580
 Delta R.T. -0.01 min
 Lab File: VL035028.D
 Acq: 14 May 2020 20:18

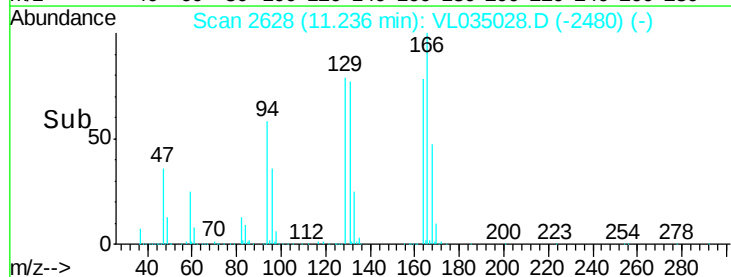
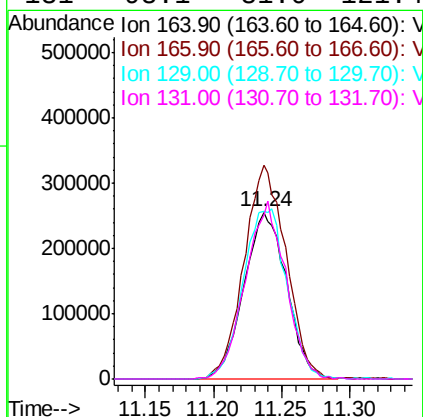
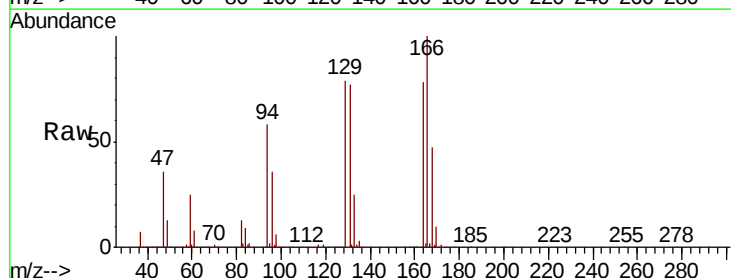
Instrument :
 MSVOA_L
 ClientSampleID :

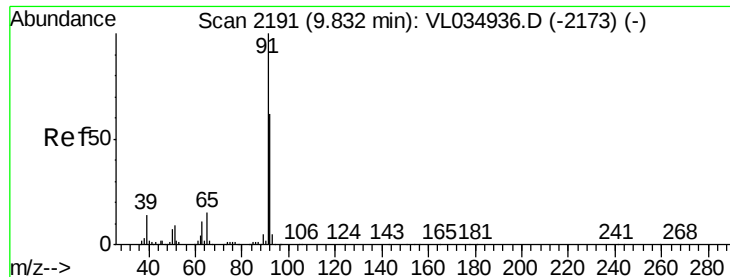
Tot Ion	57	Resp	62692
Ion Ratio	Lower	Upper	
57	100		
41	55.1	26.4	39.6#
56	45.5	25.5	38.3#



#52
 Tetrachloroethene
 Concen: 6.655 ppbv
 RT: 11.24 min Scan# 2628
 Delta R.T. -0.02 min
 Lab File: VL035028.D
 Acq: 14 May 2020 20:18

Tgt Ion	164	Resp	553694
Ion Ratio	Lower	Upper	
164	100		
166	128.2	100.7	151.1
129	100.8	83.0	124.4
131	98.1	81.0	121.4





#53

Toluene

Concen: 0.816 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

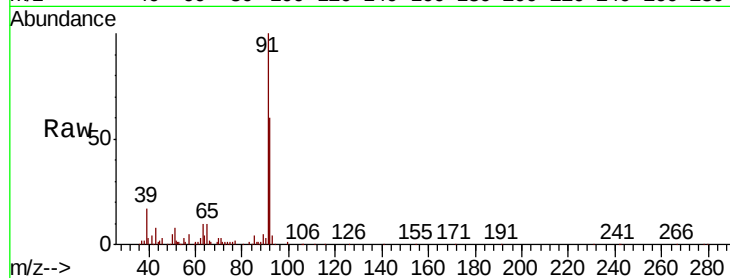
ClientSampleId :

Tot Ion: 91 Resp: 202283

Ion Ratio Lower Upper

91 100

92 60.5 48.6 73.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.82

100000

80000

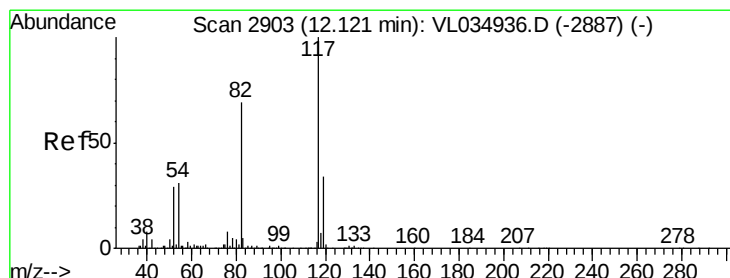
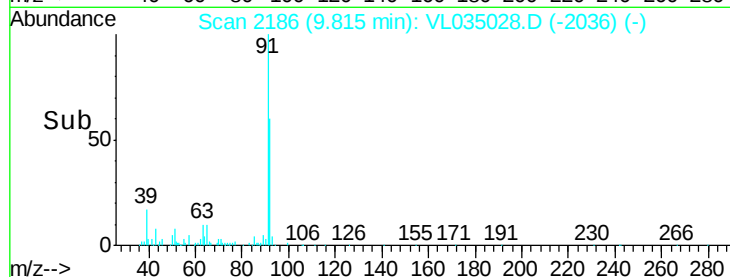
60000

40000

20000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2897

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

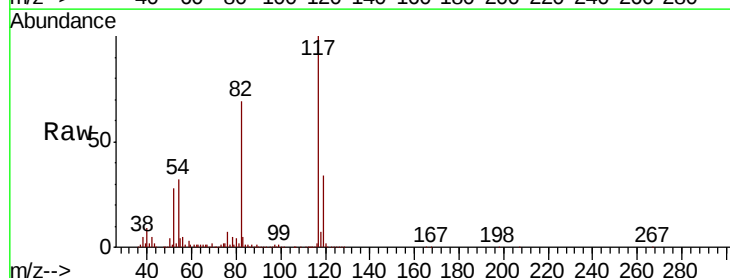
Tgt Ion: 117 Resp: 2732464

Ion Ratio Lower Upper

117 100

82 67.9 53.1 79.7

119 33.2 26.7 40.1



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

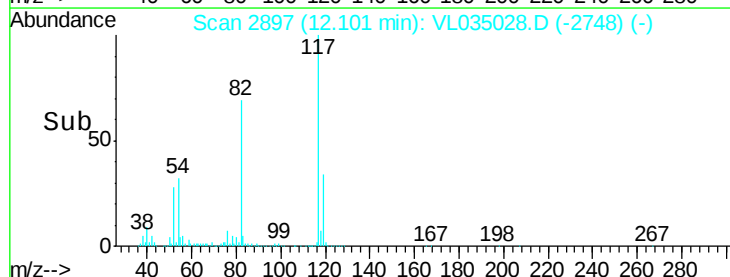
1500000

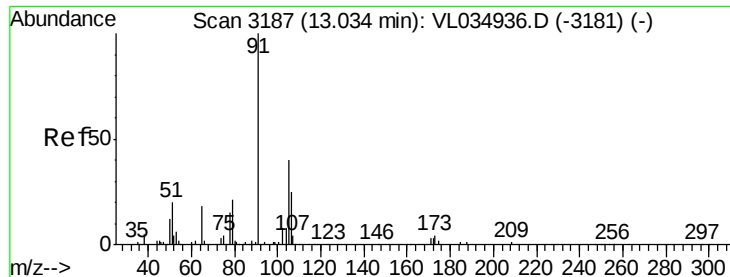
1000000

500000

0

Time-->





#59

m/p-Xylene

Concen: 0.035 ppbv

RT: 13.01 min Scan# 3181

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

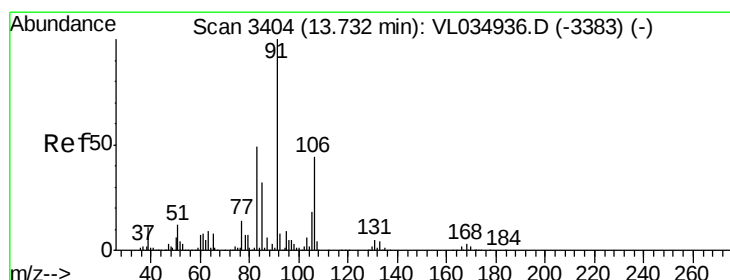
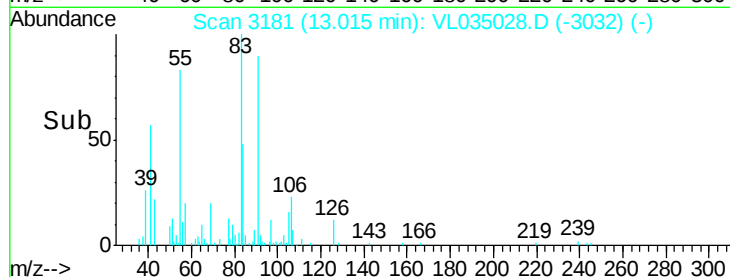
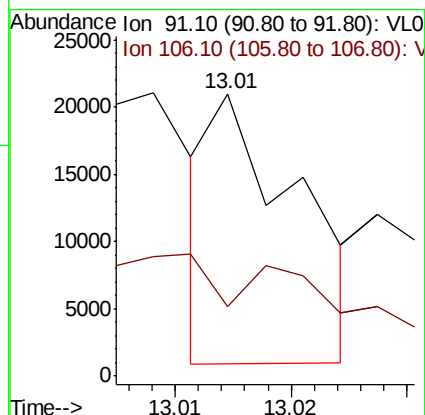
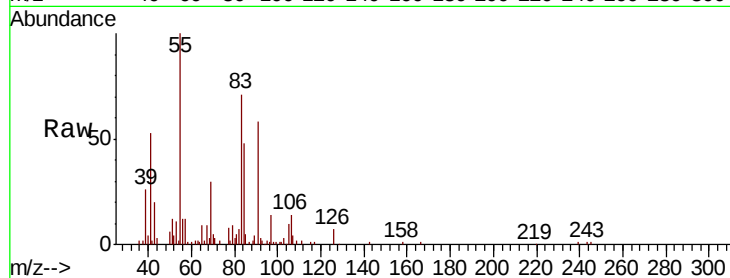
ClientSampleId :

Tot Ion: 91 Resp: 10507

Ion Ratio Lower Upper

91 100

106 0.0 66.0 99.0#



#60

o-Xylene

Concen: 0.065 ppbv

RT: 13.71 min Scan# 3397

Delta R.T. -0.02 min

Lab File: VL035028.D

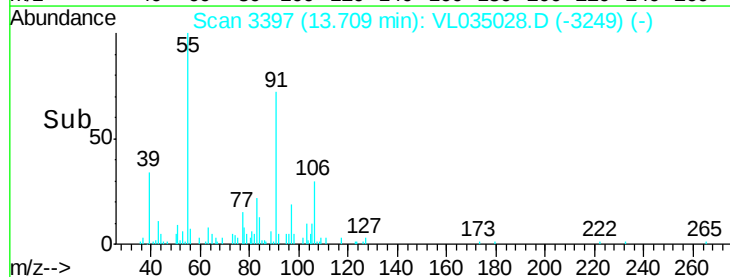
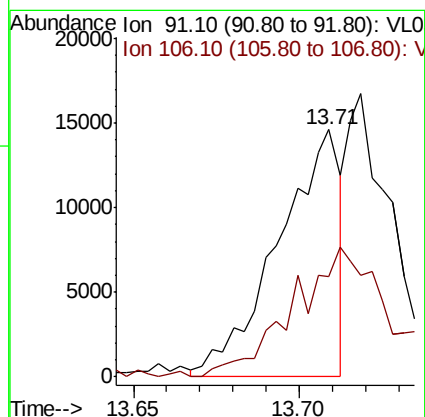
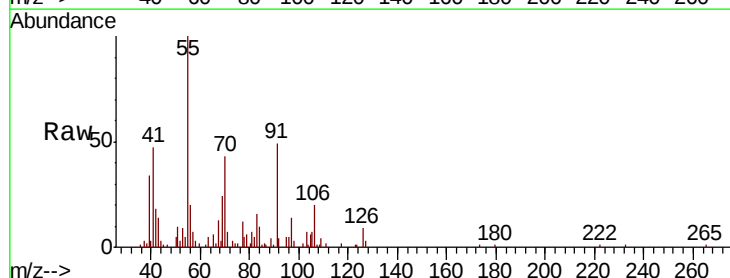
Acq: 14 May 2020 20:18

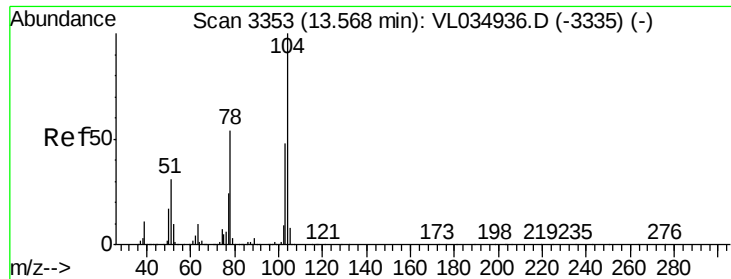
Tgt Ion: 91 Resp: 18999

Ion Ratio Lower Upper

91 100

106 81.8 21.9 65.5#





#61

Stvrene

Concen: 0.332 ppbv

RT: 13.55 min Scan# 3347

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

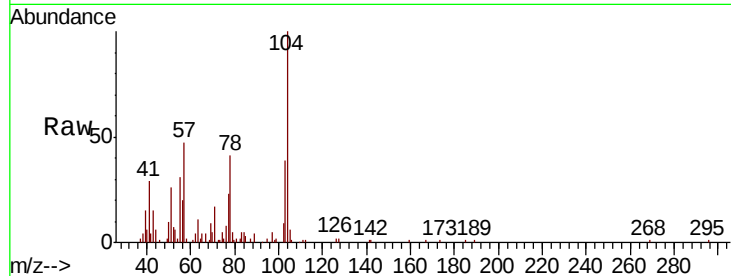
Tot Ion:104 Resp: 61622

Ion Ratio Lower Upper

104 100

78 51.4 43.7 65.5

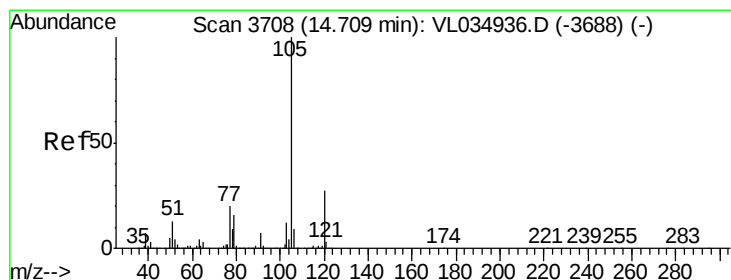
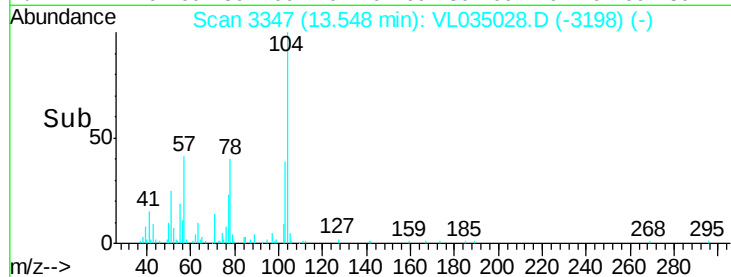
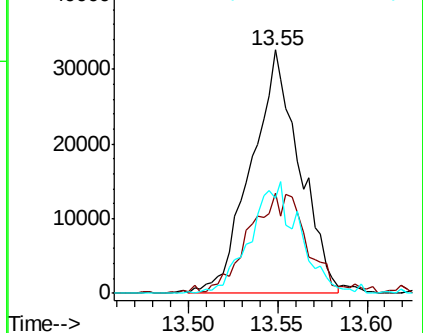
103 46.7 38.8 58.2



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 1.570 ppbv

RT: 14.69 min Scan# 3702

Delta R.T. -0.02 min

Lab File: VL035028.D

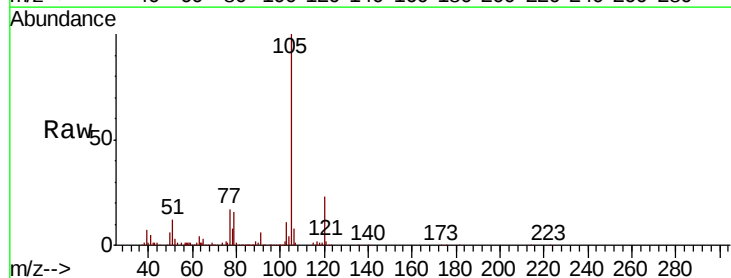
Acq: 14 May 2020 20:18

Tgt Ion:105 Resp: 687510

Ion Ratio Lower Upper

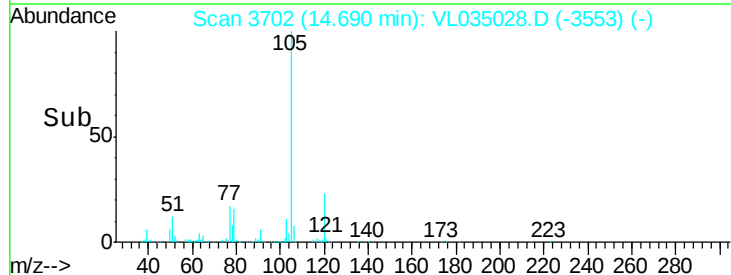
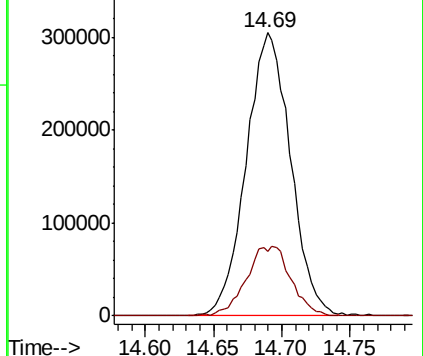
105 100

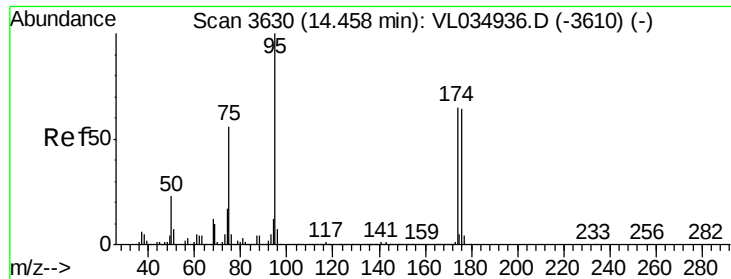
120 24.7 20.6 31.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#68

1-Bromo-4-Fluorobenzene

Concen: 10.384 ppbv

RT: 14.44 min Scan# 3625

Delta R.T. -0.02 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Instrument :

MSVOA_L

ClientSampleId :

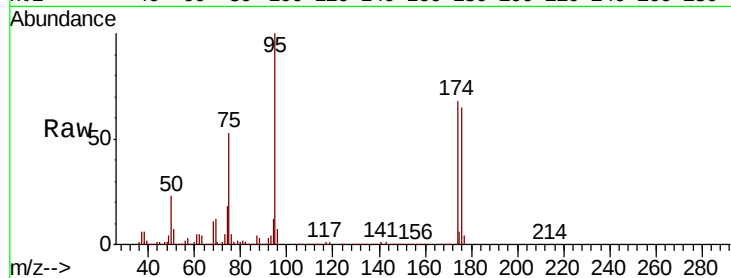
Tot Ion: 95 Resp: 2296745

Ion Ratio Lower Upper

95 100

174 68.4 51.5 77.3

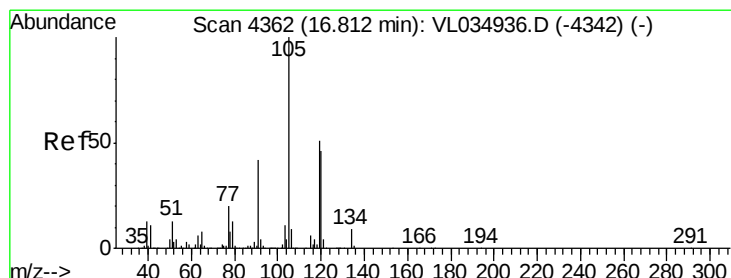
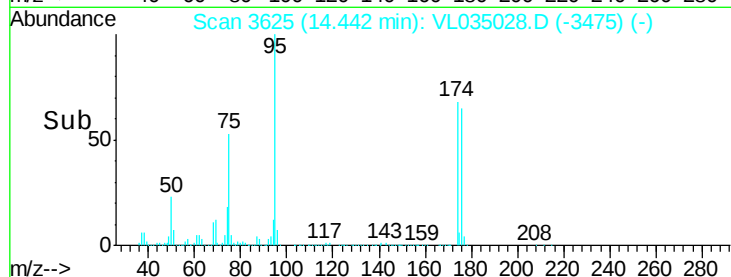
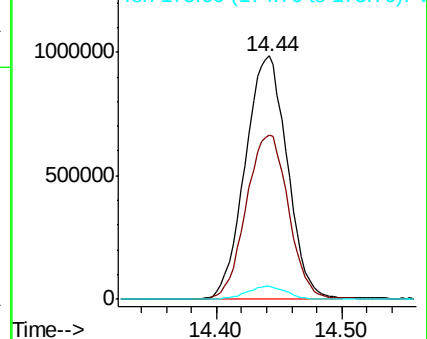
175 5.2 3.8 5.8



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V



#74

1,2,4-Trimethylbenzene

Concen: 0.049 ppbv

RT: 16.79 min Scan# 4354

Delta R.T. -0.03 min

Lab File: VL035028.D

Acq: 14 May 2020 20:18

Tgt Ion:105 Resp: 17185

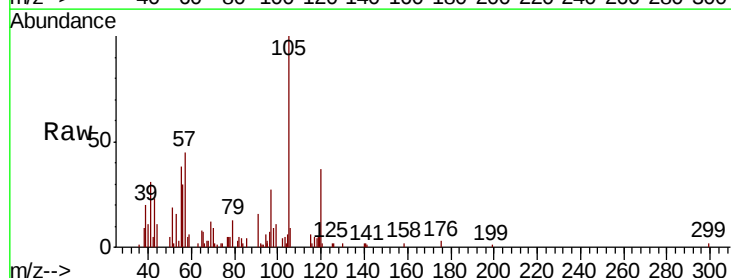
Ion Ratio Lower Upper

105 100

120 39.6 36.8 55.2

91 7.8 35.4 53.0#

77 6.9 16.2 24.2#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

