

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL082720\
 Data File : VL035517.D
 Acq On : 27 Aug 2020 12:34
 Operator : SY/AP
 Sample : OC082520 CAN 10602
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 QC082520 CAN 10602

Quant Time: Aug 28 01:27:07 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Aug 27 06:46:28 2020
 QLast Update : Thu Aug 27 06:46:28 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	981800	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	4105526	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	4179898	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	3000592	10.11	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.10%

Target Compounds					Ovalue
3) Chlorodifluoromethane	3.00	51	3890	0.036 ppbv #	91
4) Chloromethane	3.15	50	2818	0.048 ppbv	93
5) Vinyl Chloride	3.27	62	2270	0.032 ppbv #	67
8) Dichlorotetrafluoroethane	3.20	85	6301	0.031 ppbv	88
11) Trichlorofluoromethane	3.96	101	9026	0.036 ppbv #	82
12) 1,1,2-Trichlorotrifluoroet	4.50	101	6471	0.035 ppbv	96
14) Bromoethene	3.75	108	2444	0.030 ppbv #	77
15) Acetone	3.88	43	33853	0.313 ppbv #	46
18) 1,1-Dichloroethene	4.31	96	3141	0.038 ppbv	91
20) Methylene Chloride	4.36	84	69015	0.856 ppbv	95
23) Vinyl Acetate	5.09	43	6769	0.049 ppbv #	85
24) 1,1-Dichloroethane	5.03	63	4990	0.035 ppbv #	83
25) Ethyl Acetate	5.71	43	18564	0.097 ppbv #	82
26) Hexane	5.71	57	22211	0.205 ppbv #	58
29) Chloroform	5.77	83	8826	0.040 ppbv	92
34) 2-Butanone	5.29	43	9500	0.078 ppbv	96
38) Trichloroethene	7.86	130	5128	0.033 ppbv #	81
39) 1,2-Dichloropropane	7.20	63	741143	8.256 ppbv #	32
76) 1,4-Dichlorobenzene	17.18	146	12748	0.037 ppbv #	52
77) 1,2-Dichlorobenzene	17.87	146	15893	0.047 ppbv	73

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

QC082520 CAN 10602

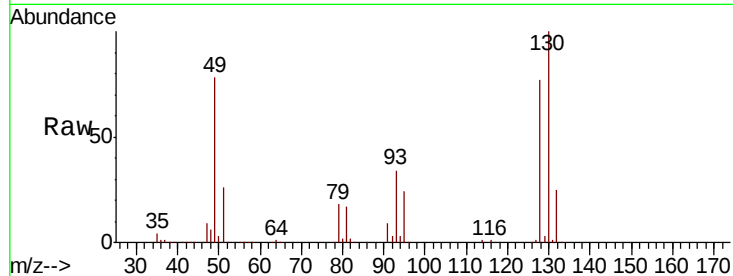
Tot Ion: 49 Resp: 981800

Ion Ratio Lower Upper

49 100

128 97.1 50.0 150.1

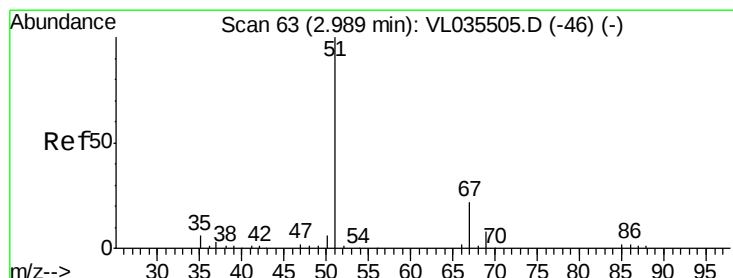
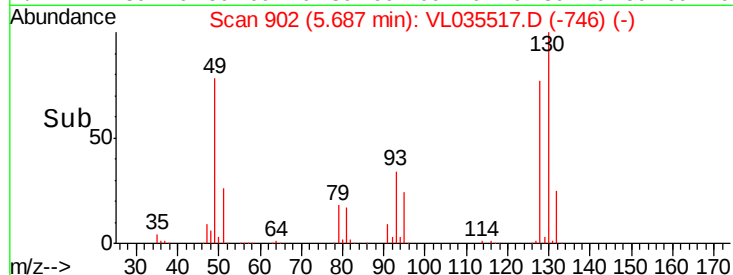
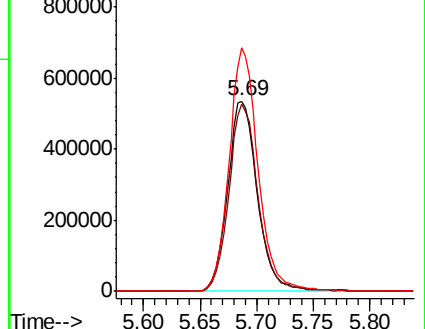
130 125.3 64.4 193.2



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#3

Chlorodifluoromethane

Concen: 0.036 ppbv

RT: 3.00 min Scan# 66

Delta R.T. 0.01 min

Lab File: VL035517.D

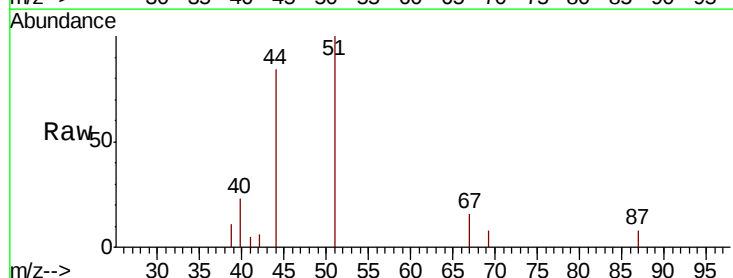
Acq: 27 Aug 2020 12:34

Tgt Ion: 51 Resp: 3890

Ion Ratio Lower Upper

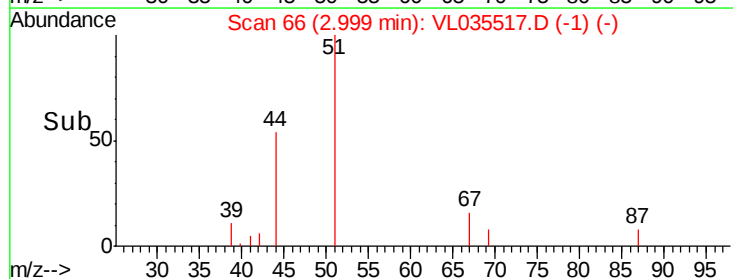
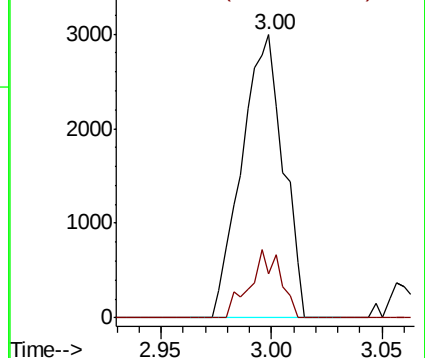
51 100

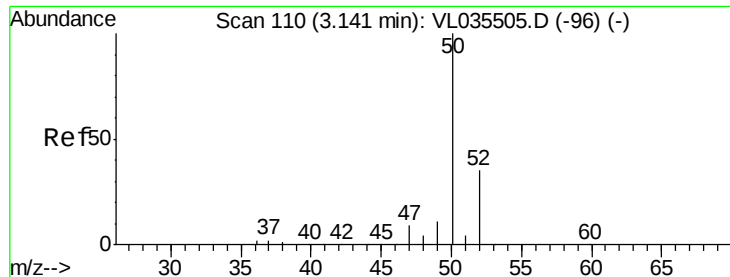
67 17.8 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.048 ppbv

RT: 3.15 min Scan# 113

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

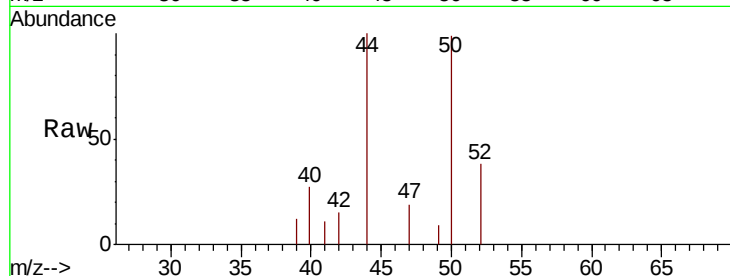
QC082520 CAN 10602

Tot Ion: 50 Resp: 2818

Ion Ratio Lower Upper

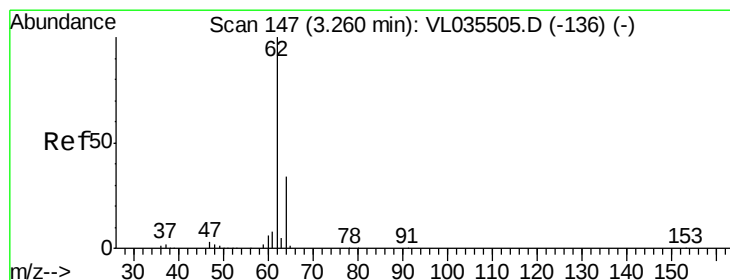
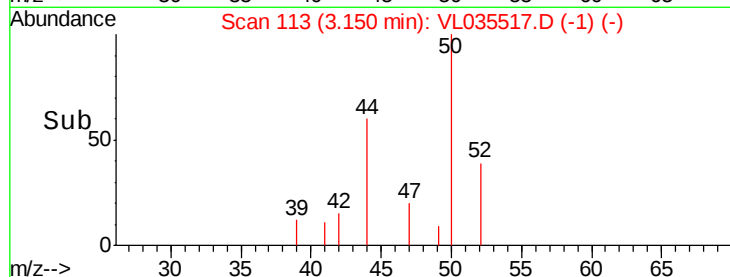
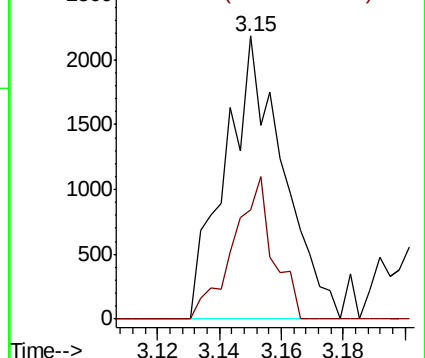
50 100

52 38.6 27.7 41.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#5

Vinyl Chloride

Concen: 0.032 ppbv

RT: 3.27 min Scan# 149

Delta R.T. 0.01 min

Lab File: VL035517.D

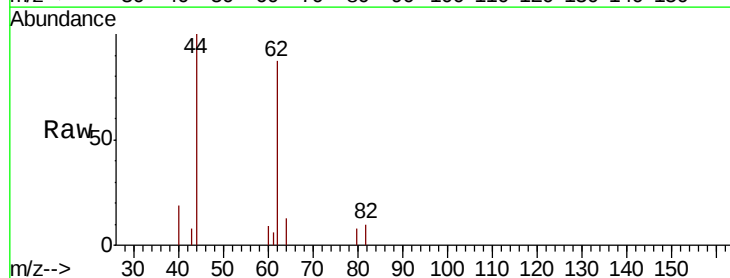
Acq: 27 Aug 2020 12:34

Tgt Ion: 62 Resp: 2270

Ion Ratio Lower Upper

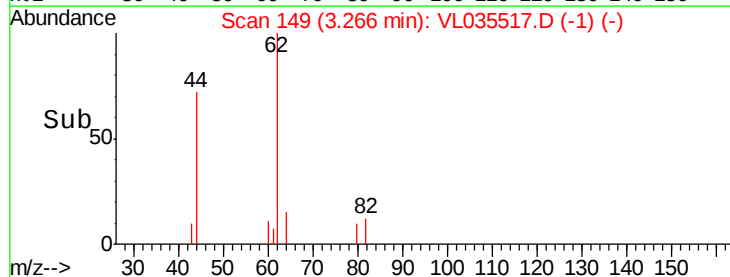
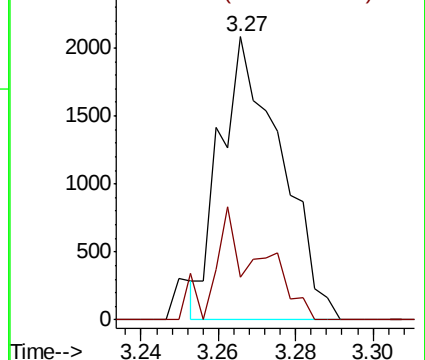
62 100

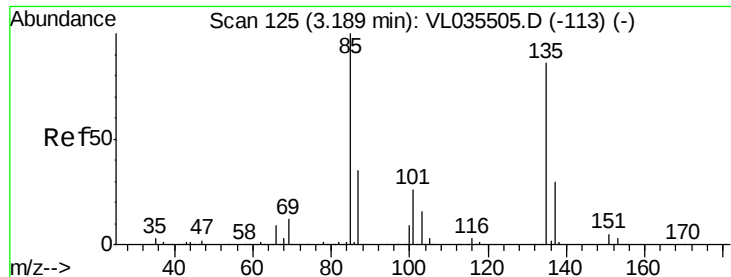
64 15.2 27.4 41.2#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.031 ppbv

RT: 3.20 min Scan# 128

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

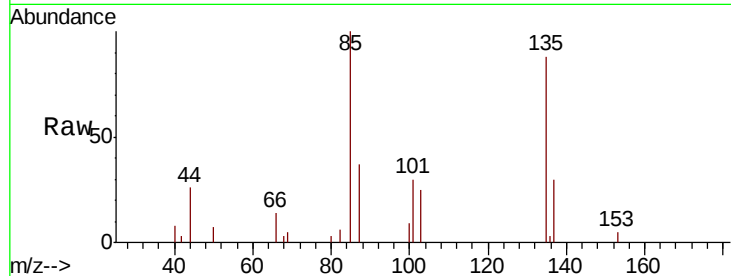
QC082520 CAN 10602

Tot Ion: 85 Resp: 6301

Ion Ratio Lower Upper

85 100

135 99.6 70.4 105.6

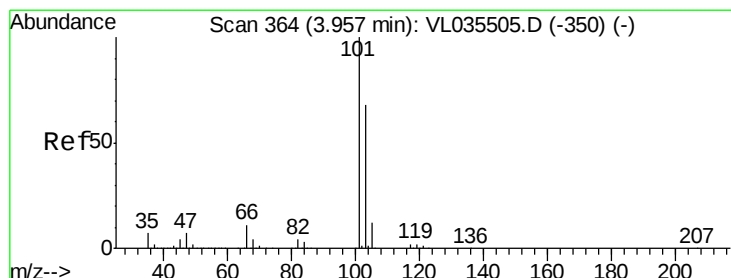
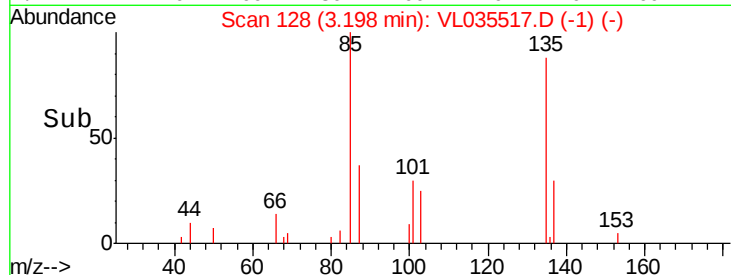


Abundance Ion 85.00 (84.70 to 85.70): VL035505.D (-113) (-)

Ion 135.00 (134.70 to 135.70): VL035505.D (-113) (-)

3.20

Time-->



#11

Trichlorofluoromethane

Concen: 0.036 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.01 min

Lab File: VL035517.D

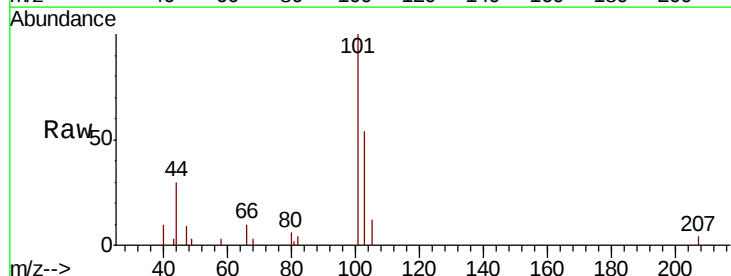
Acq: 27 Aug 2020 12:34

Tgt Ion:101 Resp: 9026

Ion Ratio Lower Upper

101 100

103 53.9 54.5 81.7#

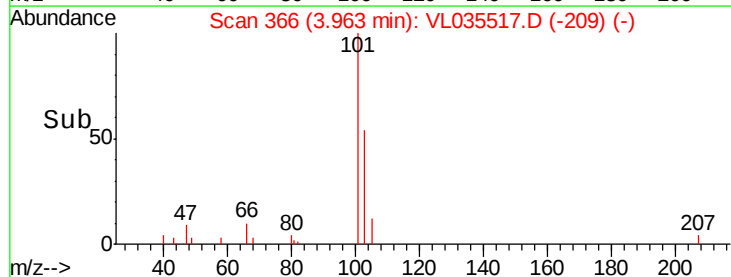


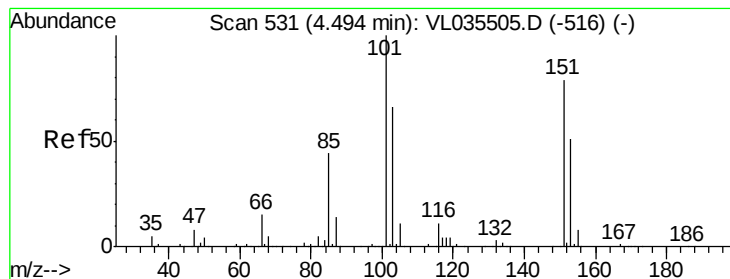
Abundance Ion 101.00 (100.70 to 101.70): VL035505.D (-350) (-)

Ion 103.00 (102.70 to 103.70): VL035505.D (-350) (-)

3.96

Time-->





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.035 ppbv

RT: 4.50 min Scan# 534

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

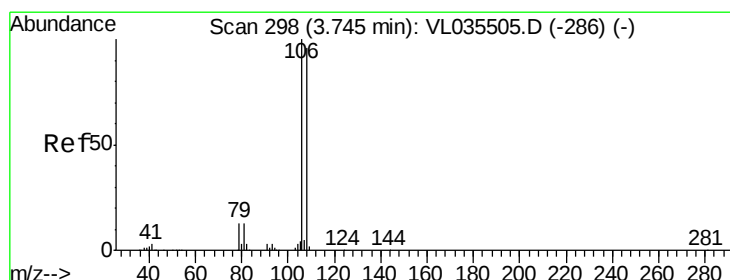
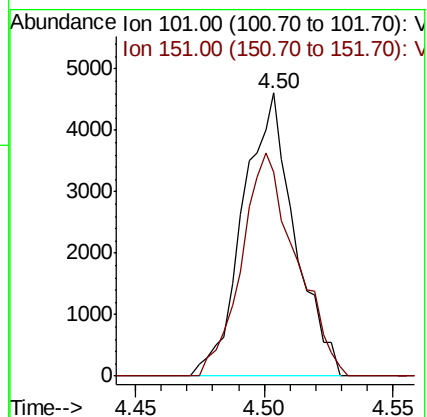
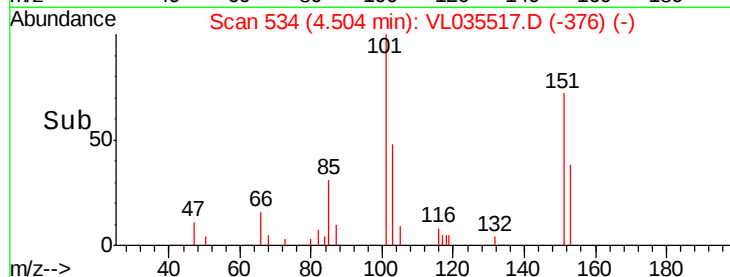
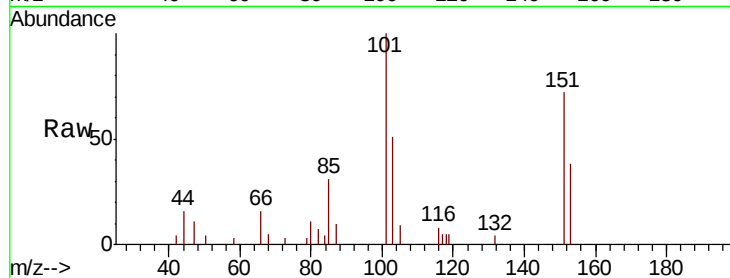
QC082520 CAN 10602

Tot Ion:101 Resp: 6471

Ion Ratio Lower Upper

101 100

151 83.0 63.5 95.3



#14

Bromoethene

Concen: 0.030 ppbv

RT: 3.75 min Scan# 300

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

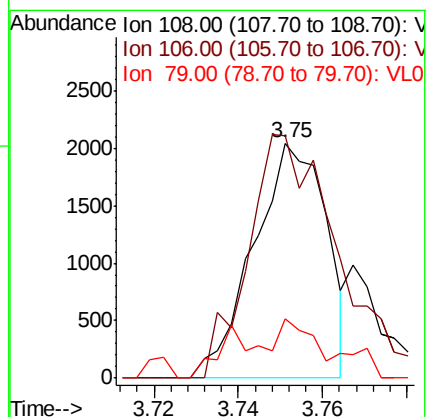
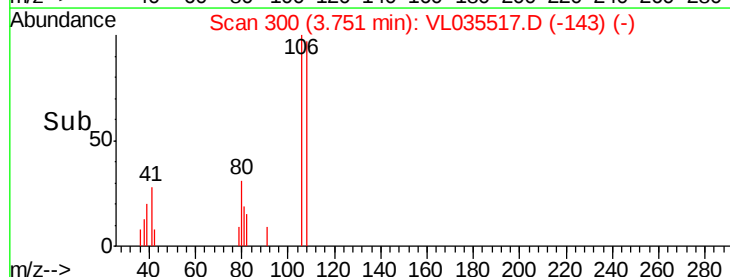
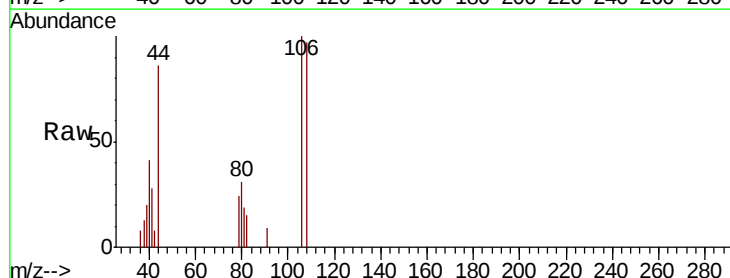
Tgt Ion:108 Resp: 2444

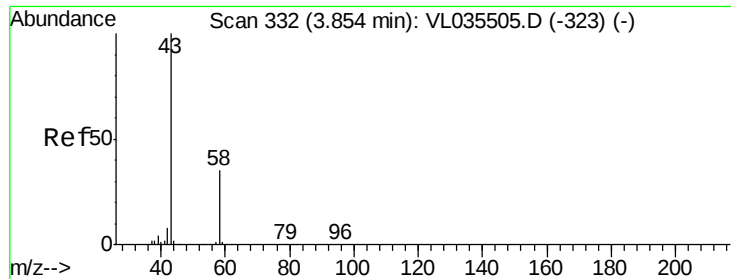
Ion Ratio Lower Upper

108 100

106 125.7 84.9 127.3

79 34.7 10.8 16.2#





#15

Acetone

Concen: 0.313 ppbv

RT: 3.88 min Scan# 341

Delta R.T. 0.03 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

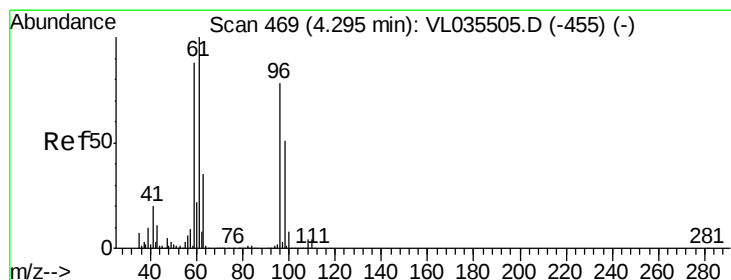
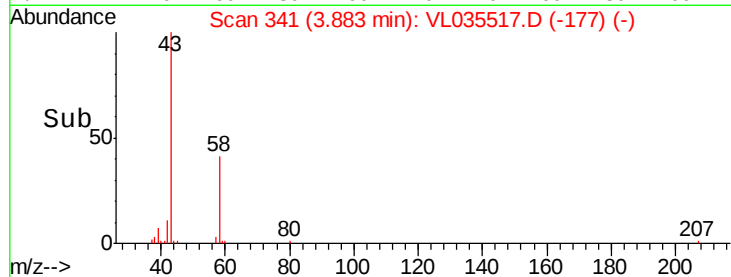
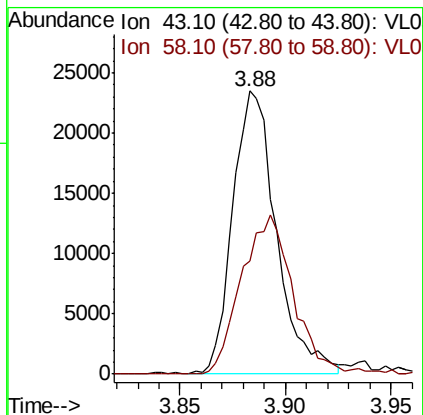
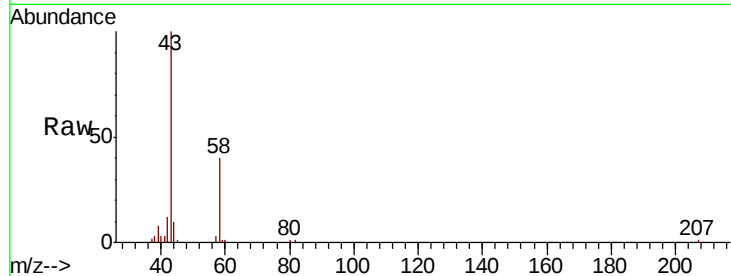
QC082520 CAN 10602

Tot Ion: 43 Resp: 33853

Ion Ratio Lower Upper

43 100

58 66.8 28.4 42.6#



#18

1,1-Dichloroethene

Concen: 0.038 ppbv

RT: 4.31 min Scan# 473

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

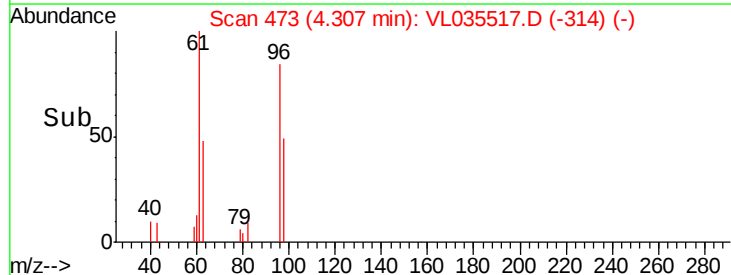
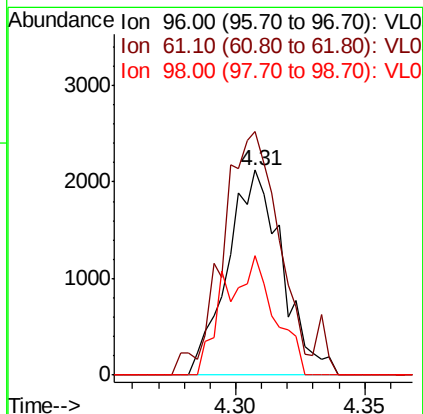
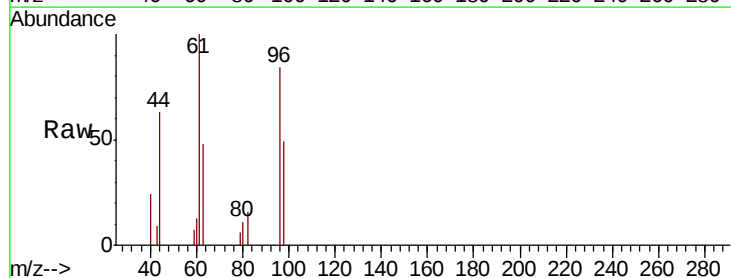
Tgt Ion: 96 Resp: 3141

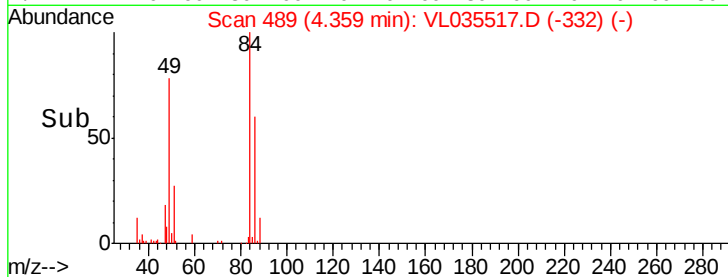
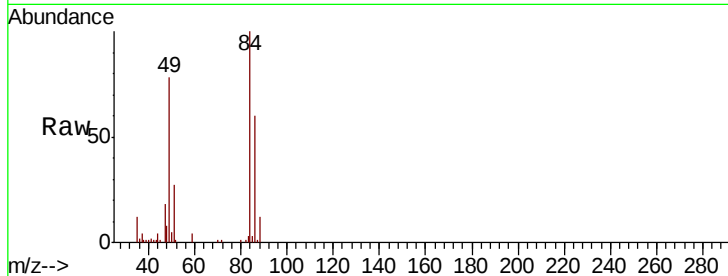
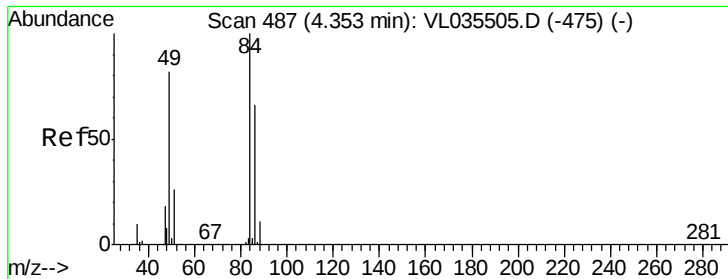
Ion Ratio Lower Upper

96 100

61 118.7 103.0 154.6

98 58.4 52.8 79.2

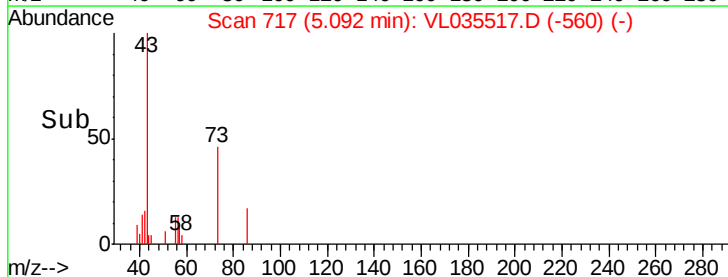
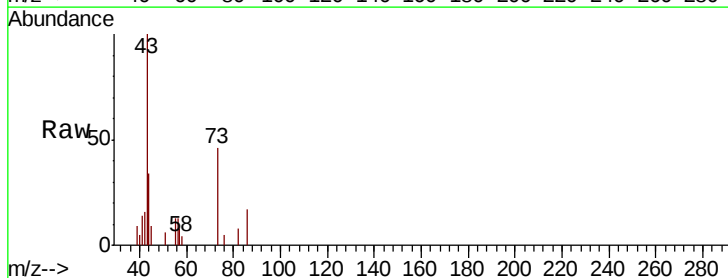
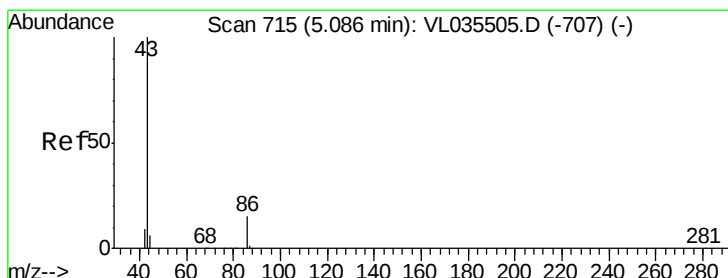
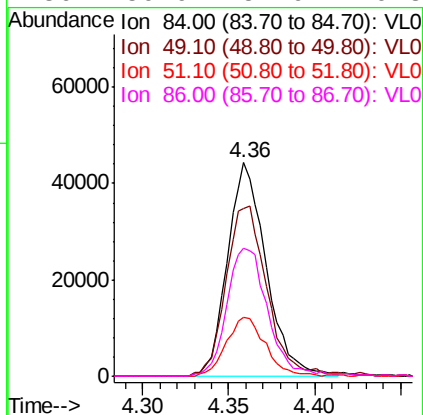




#20
Methvlene Chloride
Concen: 0.856 ppbv
RT: 4.36 min Scan# 489
Delta R.T. 0.01 min
Lab File: VL035517.D
Acq: 27 Aug 2020 12:34

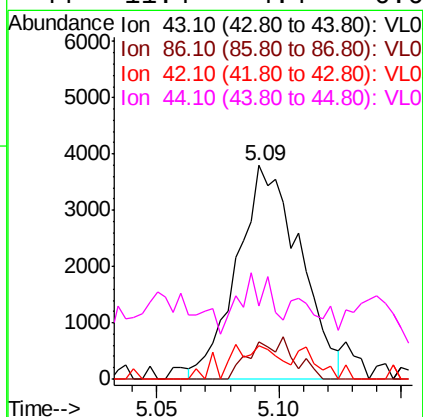
Instrument :
MSVOA_L
ClientSampleId :
QC082520 CAN 10602

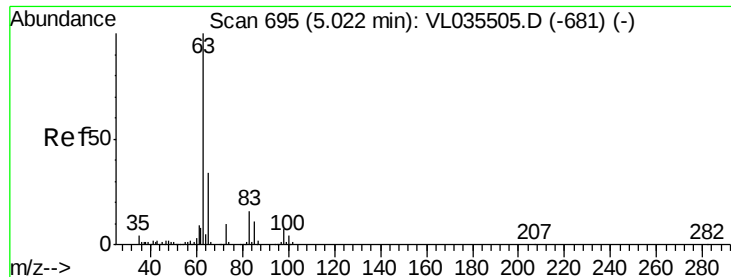
Tot Ion:	84	Resp:	69015
Ion	Ratio	Lower	Upper
84	100		
49	78.4	65.4	98.0
51	27.3	21.5	32.3
86	59.9	52.9	79.3



#23
Vinyl Acetate
Concen: 0.049 ppbv
RT: 5.09 min Scan# 717
Delta R.T. 0.01 min
Lab File: VL035517.D
Acq: 27 Aug 2020 12:34

Tgt Ion:	43	Resp:	6769
Ion	Ratio	Lower	Upper
43	100		
86	18.1	10.6	16.0#
42	16.2	7.5	11.3#
44	11.4	4.4	6.6#





#24

1,1-Dichloroethane

Concen: 0.035 ppbv

RT: 5.03 min Scan# 697

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

QC082520 CAN 10602

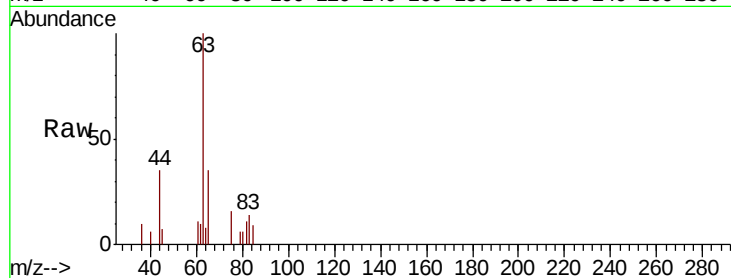
Tot Ion: 63 Resp: 4990

Ion Ratio Lower Upper

63 100

98 0.0 3.4 10.1#

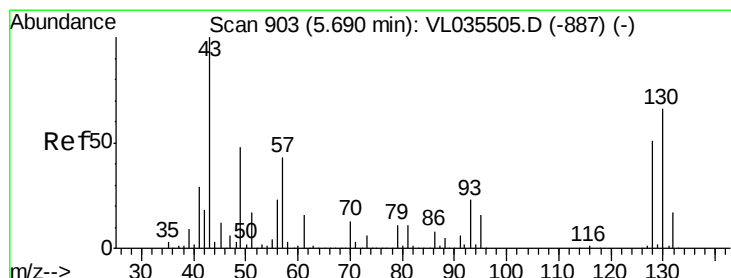
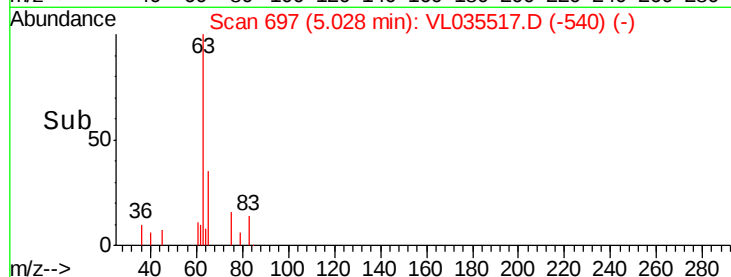
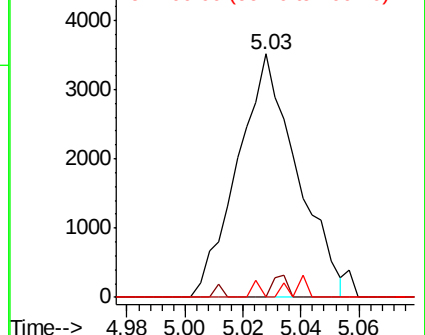
100 0.0 2.1 6.5#



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: 0.097 ppbv

RT: 5.71 min Scan# 910

Delta R.T. 0.02 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Tgt Ion: 43 Resp: 18564

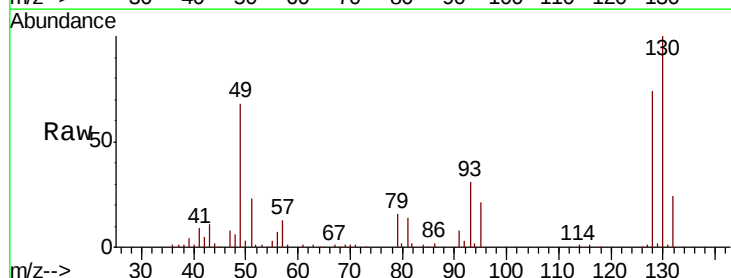
Ion Ratio Lower Upper

43 100

45 4.8 8.4 12.6#

61 4.6 10.6 16.0#

70 5.5 9.4 14.2#

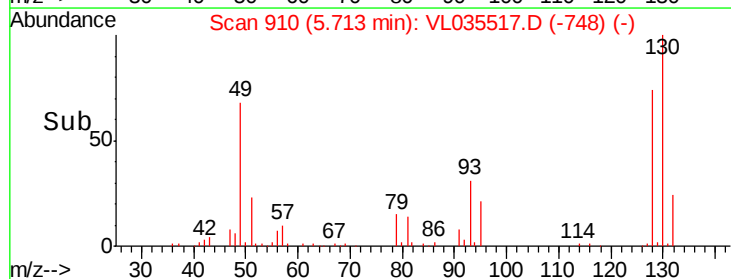
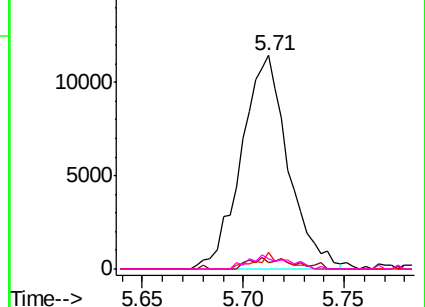


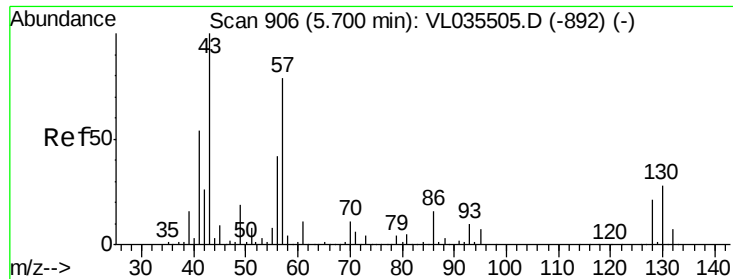
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.205 ppbv

RT: 5.71 min Scan# 909

Delta R.T. 0.01 min

Lab File: VL035517.D

Acq: 27 Aug 2020 12:34

Instrument :

MSVOA_L

ClientSampleId :

QC082520 CAN 10602

Tot Ion: 57 Resp: 22211

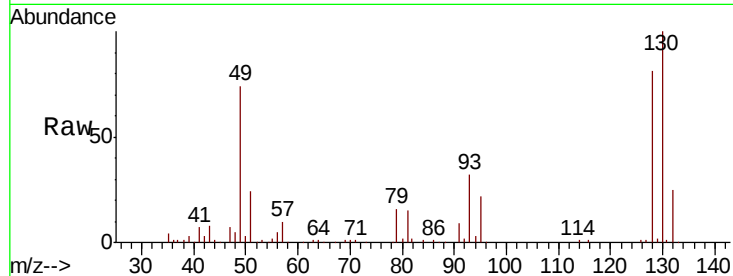
Ion Ratio Lower Upper

57 100

41 80.7 55.9 83.9

43 85.4 141.8 212.8#

56 54.7 41.8 62.8

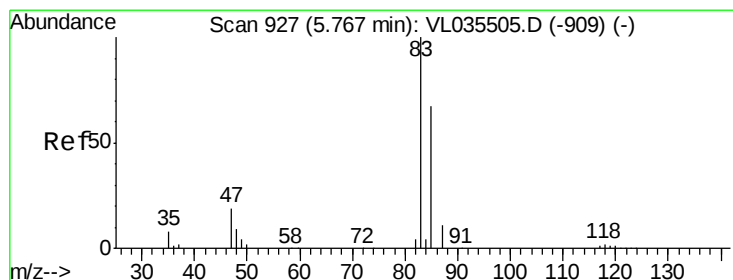
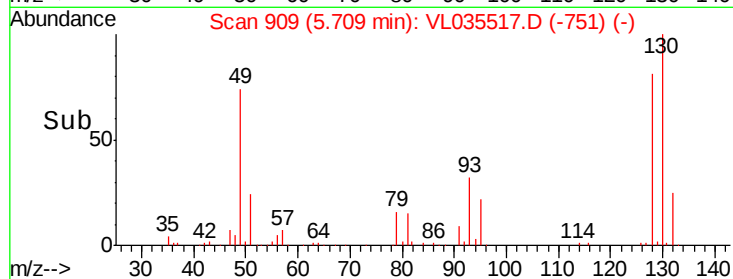
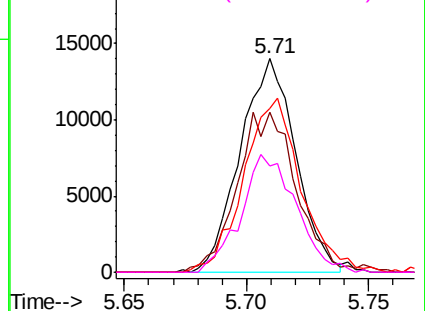


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 0.040 ppbv

RT: 5.77 min Scan# 928

Delta R.T. 0.00 min

Lab File: VL035517.D

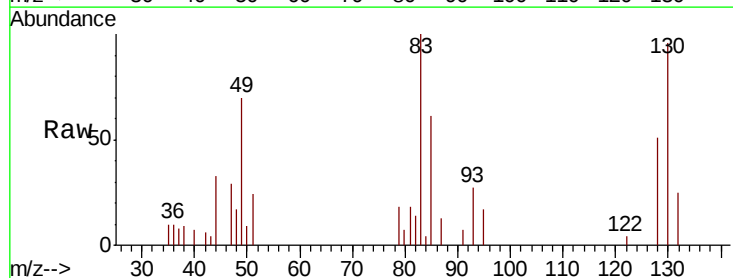
Acq: 27 Aug 2020 12:34

Tgt Ion: 83 Resp: 8826

Ion Ratio Lower Upper

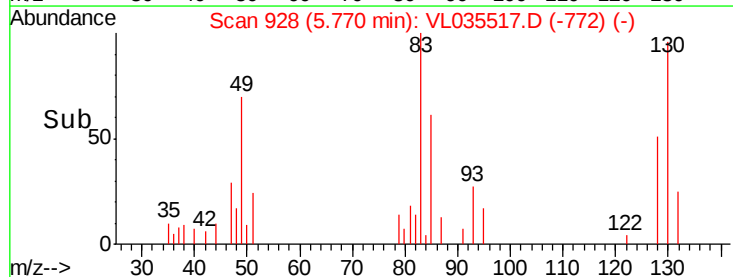
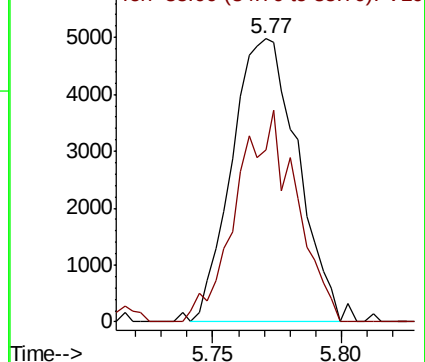
83 100

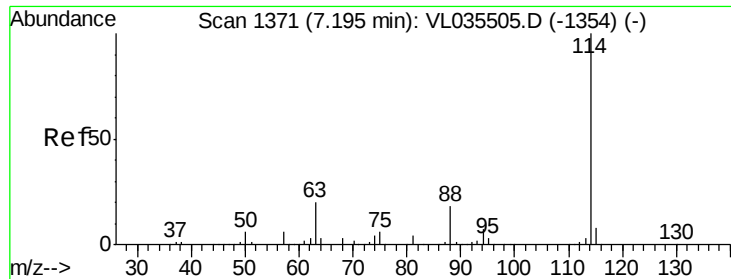
85 60.8 53.9 80.9



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

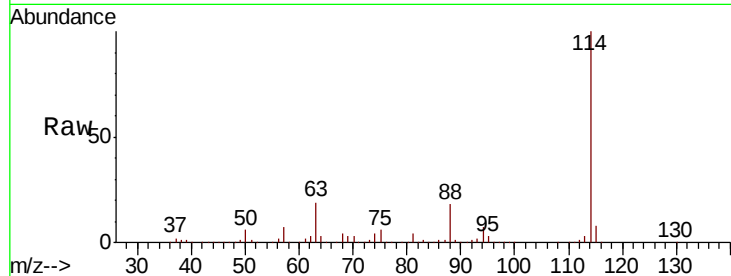




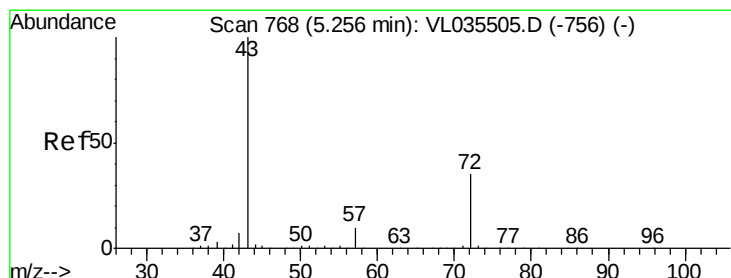
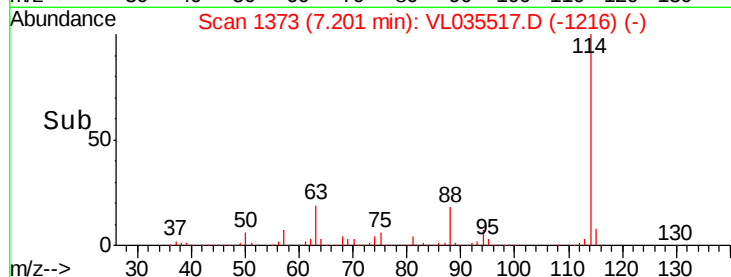
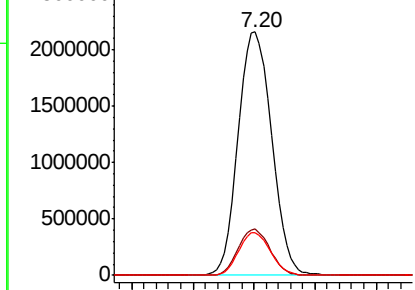
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.20 min Scan# 1373
 Delta R.T. 0.01 min
 Lab File: VL035517.D
 Acq: 27 Aug 2020 12:34

Instrument :
 MSVOA_L
 ClientSampleId :
 QC082520 CAN 10602

Tot Ion:114 Resp: 4105526
 Ion Ratio Lower Upper
 114 100
 63 18.1 14.7 22.1
 88 16.6 13.4 20.2

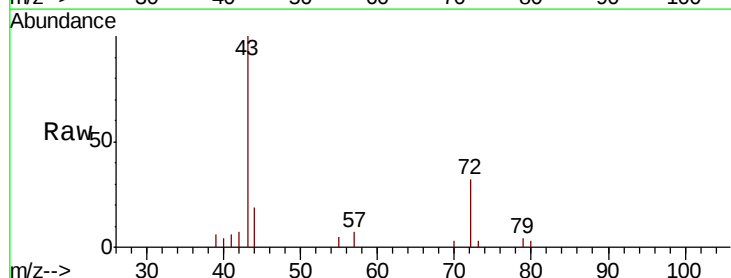


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

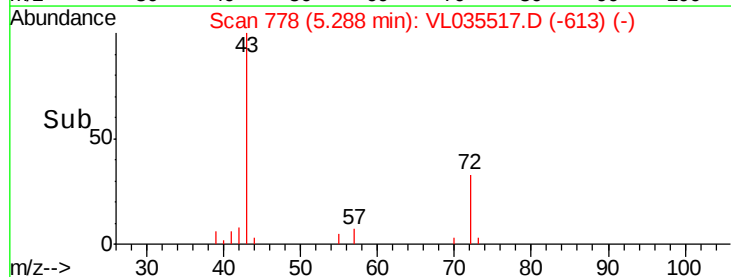
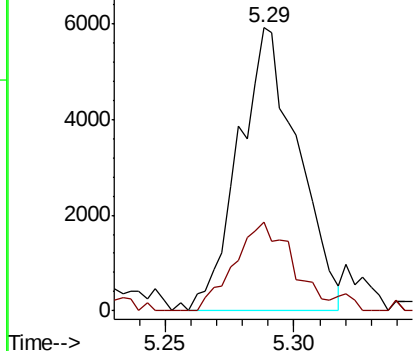


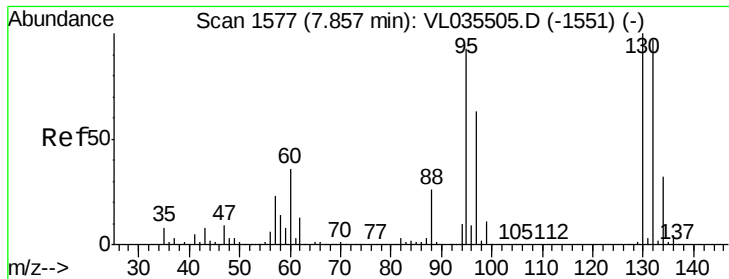
#34
 2-Butanone
 Concen: 0.078 ppbv
 RT: 5.29 min Scan# 778
 Delta R.T. 0.03 min
 Lab File: VL035517.D
 Acq: 27 Aug 2020 12:34

Tgt Ion: 43 Resp: 9500
 Ion Ratio Lower Upper
 43 100
 72 32.4 27.7 41.5



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0

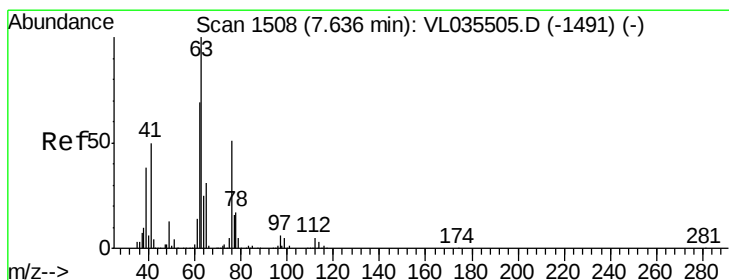
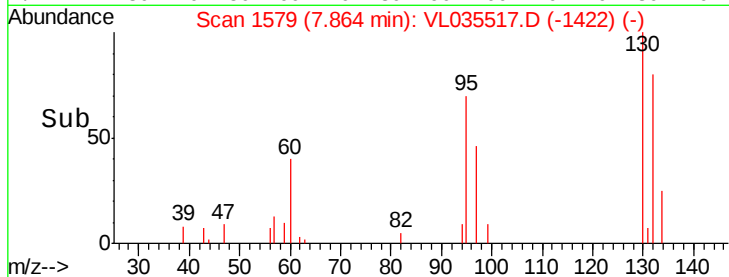
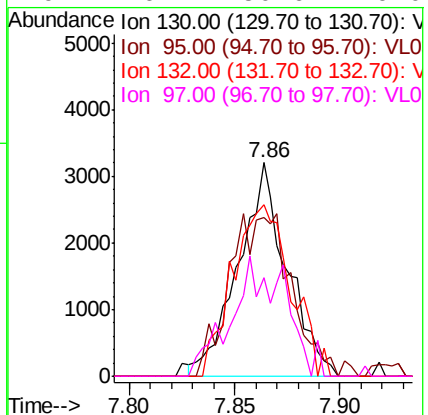
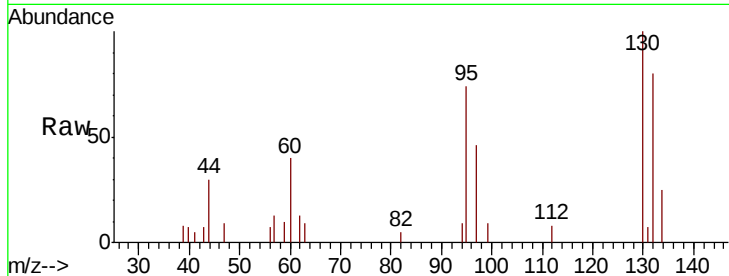




#38
 Trichloroethene
 Concen: 0.033 ppbv
 RT: 7.86 min Scan# 1579
 Delta R.T. 0.01 min
 Lab File: VL035517.D
 Acq: 27 Aug 2020 12:34

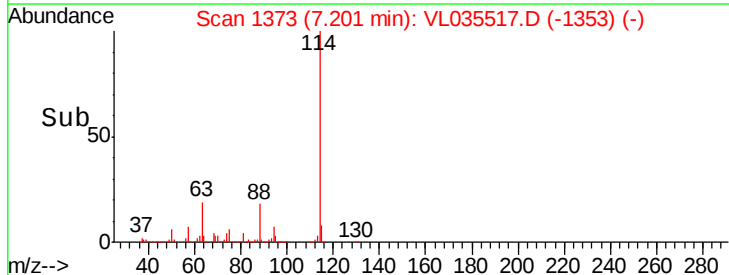
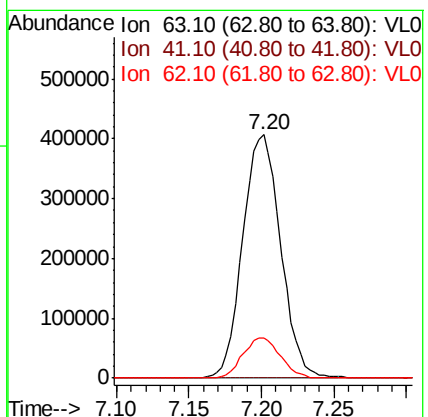
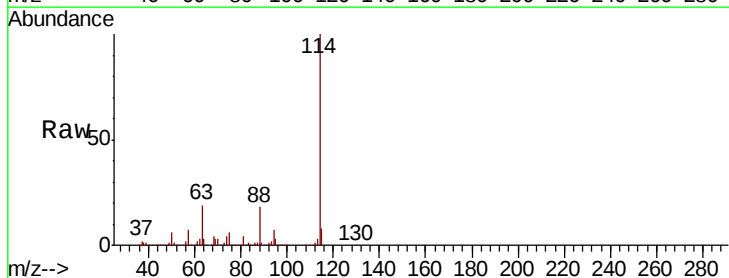
Instrument :
 MSVOA_L
 ClientSampleId :
 QC082520 CAN 10602

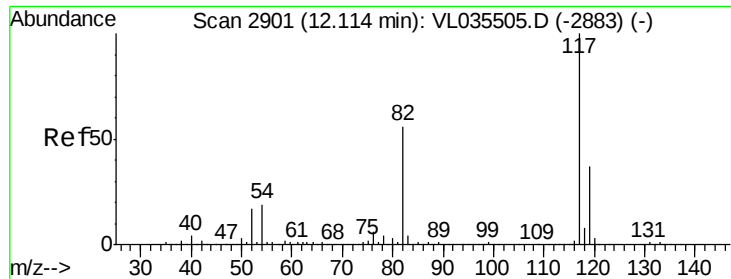
Tot Ion:	130	Resp:	5128
Ion	Ratio	Lower	Upper
130	100		
95	74.5	74.6	112.0#
132	80.1	77.6	116.4
97	46.4	50.6	76.0#



#39
 1,2-Dichloropropane
 Concen: 8.256 ppbv
 RT: 7.20 min Scan# 1373
 Delta R.T. -0.43 min
 Lab File: VL035517.D
 Acq: 27 Aug 2020 12:34

Tgt Ion:	63	Resp:	741143
Ion	Ratio	Lower	Upper
63	100		
41	0.0	40.0	60.0#
62	16.4	55.4	83.0#

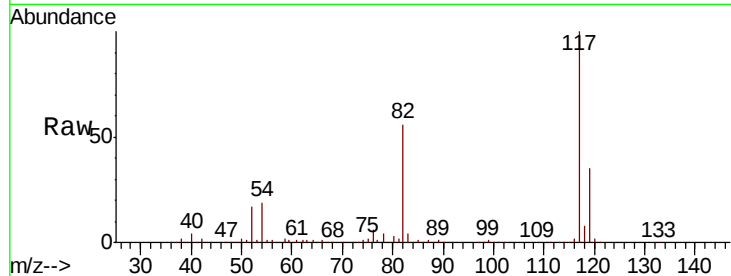




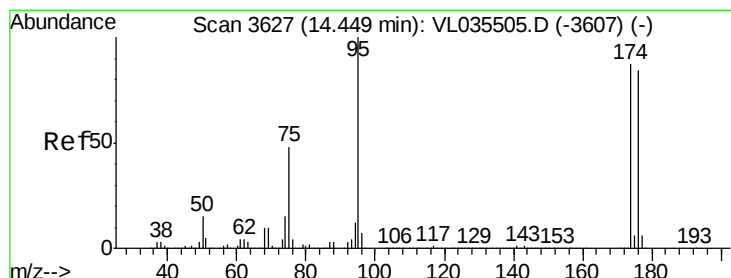
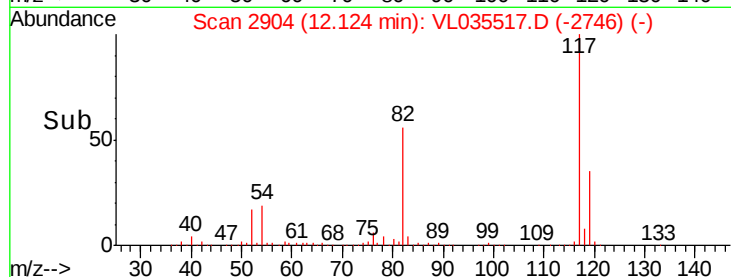
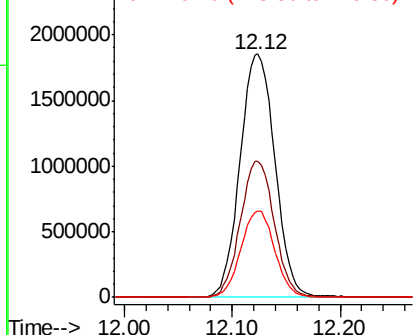
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min Scan# 2904
Delta R.T. 0.01 min
Lab File: VL035517.D
Acq: 27 Aug 2020 12:34

Instrument :
MSVOA_L
ClientSampleId :
QC082520 CAN 10602

Tot Ion:117 Resp: 4179898
Ion Ratio Lower Upper
117 100
82 54.9 41.6 62.4
119 34.7 29.3 43.9

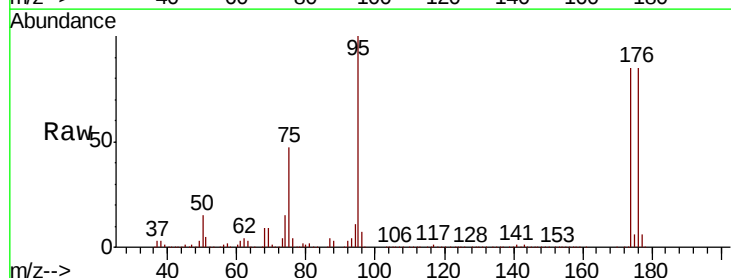


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

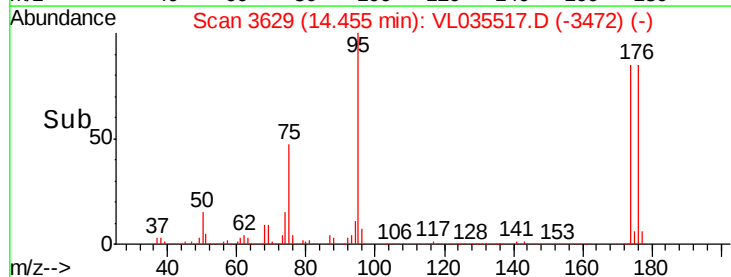
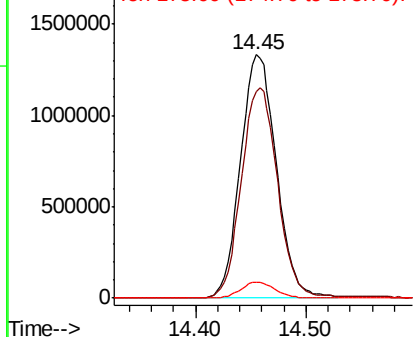


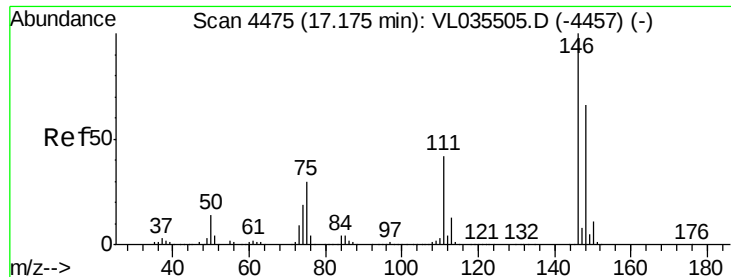
#68
1-Bromo-4-Fluorobenzene
Concen: 10.109 ppbv
RT: 14.45 min Scan# 3629
Delta R.T. 0.01 min
Lab File: VL035517.D
Acq: 27 Aug 2020 12:34

Tgt Ion: 95 Resp: 3000592
Ion Ratio Lower Upper
95 100
174 88.5 69.6 104.4
175 6.4 5.1 7.7



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

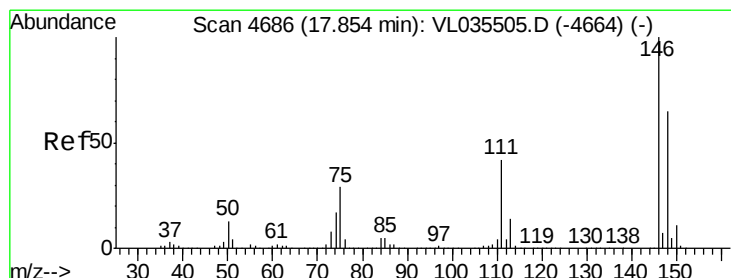
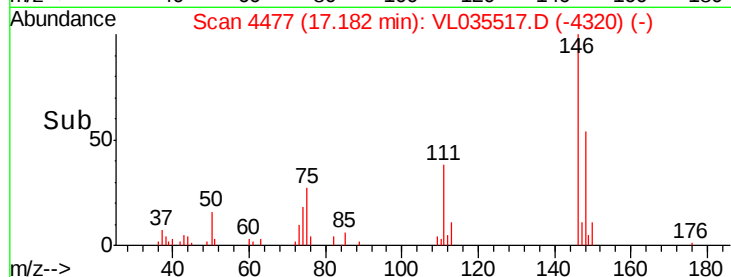
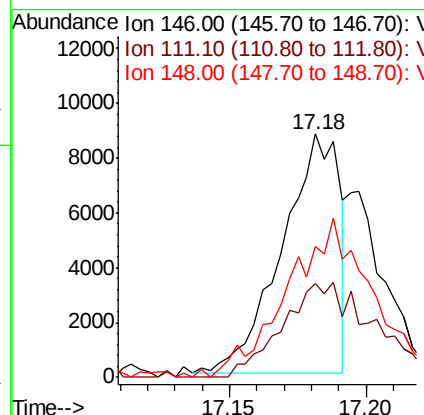
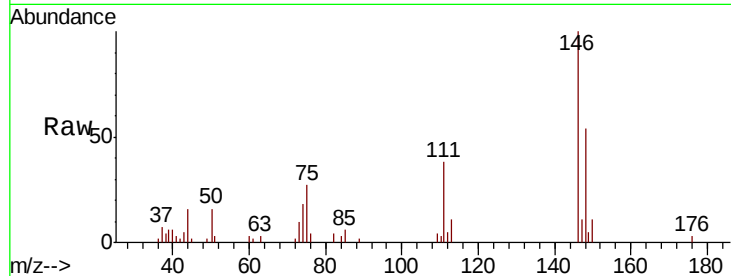




#76
 1,4-Dichlorobenzene
 Concen: 0.037 ppbv
 RT: 17.18 min Scan# 4477
 Delta R.T. 0.01 min
 Lab File: VL035517.D
 Acq: 27 Aug 2020 12:34

Instrument :
 MSVOA_L
 ClientSampleId :
 QC082520 CAN 10602

Tot Ion:146 Resp: 12748
 Ion Ratio Lower Upper
 146 100
 111 65.7 20.0 60.0#
 148 107.3 33.2 99.6#



#77
 1,2-Dichlorobenzene
 Concen: 0.047 ppbv
 RT: 17.87 min Scan# 4691
 Delta R.T. 0.02 min
 Lab File: VL035517.D
 Acq: 27 Aug 2020 12:34

Tgt Ion:146 Resp: 15893
 Ion Ratio Lower Upper
 146 100
 111 57.8 21.1 63.3
 148 88.4 32.9 98.7

