

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032521\
 Data File : VL036475.D
 Acq On : 25 Mar 2021 5:10
 Operator :
 Sample : VSTDIC0.03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 25 07:56:02 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 07:52:30 2021
 QLast Update : Thu Mar 25 07:52:30 2021
 Response via : Initial Calibration

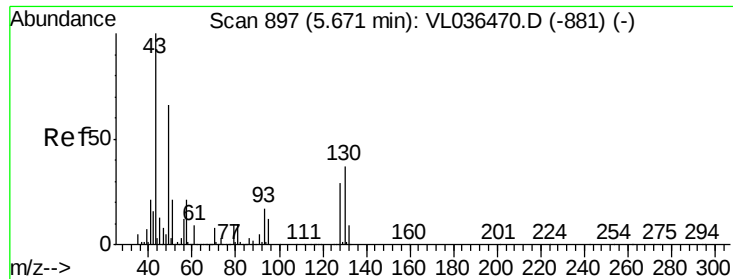
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1499887	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3543467	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3151777	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2516660	9.72	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.20%

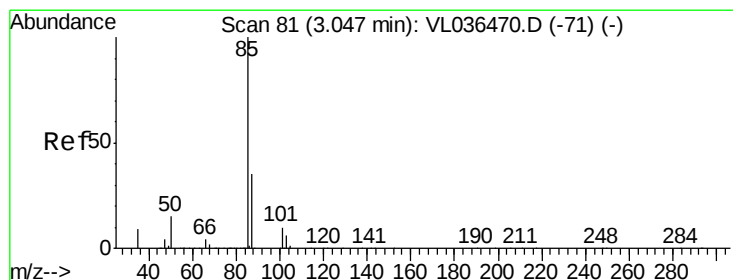
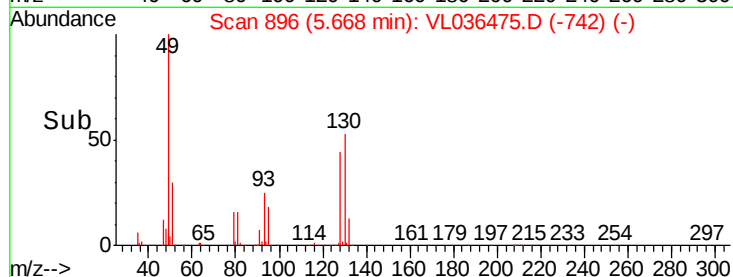
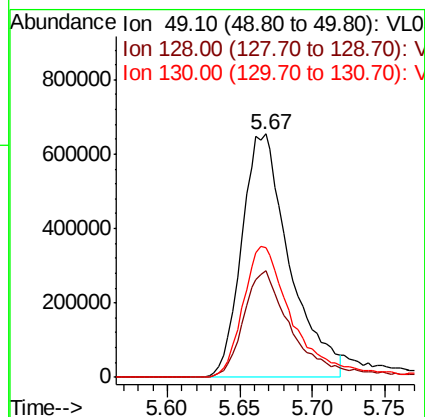
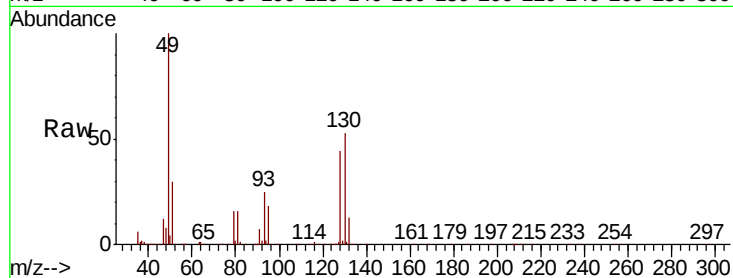
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	12693	0.059	ppbv	95
3) Chlorodifluoromethane	2.98	51	13432	0.069	ppbv	92
4) Chloromethane	3.14	50	2911	0.034	ppbv	97
7) Chloroethane	3.56	64	709	0.023	ppbv #	56
8) Dichlorotetrafluoroethane	3.18	85	4953	0.024	ppbv #	12
12) 1,1,2-Trichlorotrifluoroet	4.48	101	4495	0.032	ppbv #	11
14) Bromoethene	3.74	108	1568	0.027	ppbv #	24
20) Methylene Chloride	4.34	84	2796	0.046	ppbv #	13
21) Allyl Chloride	4.42	41	3002	0.030	ppbv #	1
22) trans-1,2-Dichloroethene	4.88	96	1380	0.024	ppbv #	55
23) Vinyl Acetate	5.08	43	5157	0.025	ppbv #	78
24) 1,1-Dichloroethane	5.01	63	4521	0.028	ppbv #	90
25) Ethyl Acetate	5.69	43	12897	0.038	ppbv #	83
35) Carbon Tetrachloride	7.02	117	6543	0.028	ppbv #	41
37) 1,2-Dichloroethane	6.31	62	3567	0.020	ppbv #	82
39) 1,2-Dichloropropane	7.17	63	1008261	8.368	ppbv #	23
42) Bromodichloromethane	7.80	83	6437	0.027	ppbv #	94

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



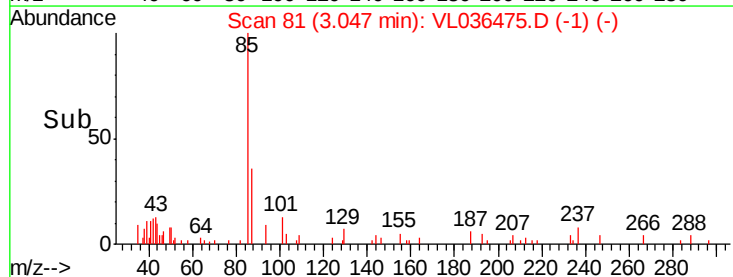
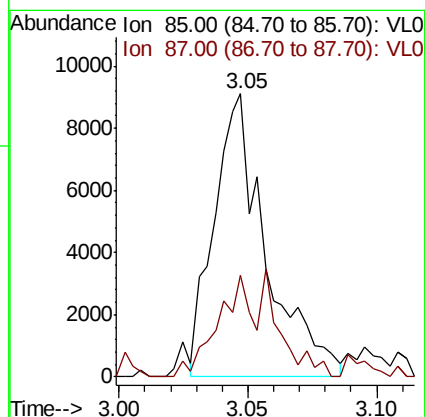
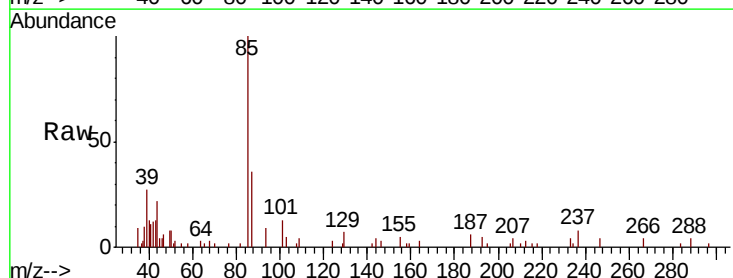
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 25 Mar 2021 5:10

Tot Ion: 49 Resp: 1499887
 Ion Ratio Lower Upper
 49 100
 128 45.8 23.6 70.8
 130 58.2 29.3 87.8



#2
 Dichlorodifluoromethane
 Concen: 0.059 ppbv
 RT: 3.05 min Scan# 81
 Delta R.T. -0.00 min
 Lab File: VL036475.D
 Acq: 25 Mar 2021 5:10

Tgt Ion: 85 Resp: 12693
 Ion Ratio Lower Upper
 85 100
 87 37.7 27.8 41.8





#3

Chlorodifluoromethane

Concen: 0.069 ppbv

RT: 2.98 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

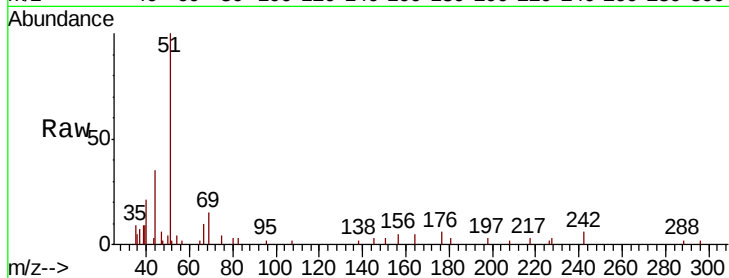
Acq: 25 Mar 2021 5:10

Tot Ion: 51 Resp: 13432

Ion Ratio Lower Upper

51 100

67 21.9 14.7 22.1



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.98

10000

8000

6000

4000

2000

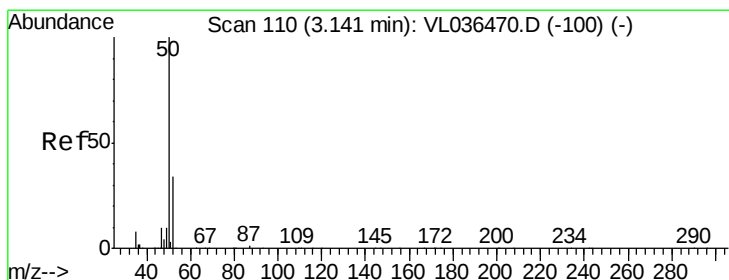
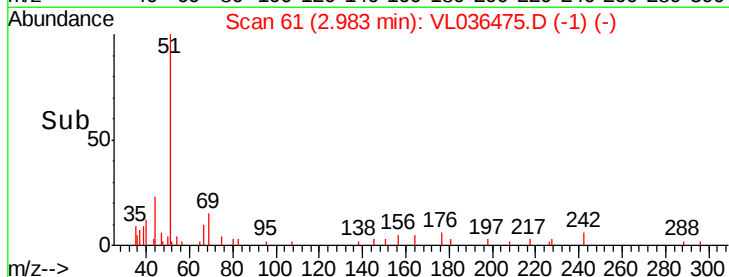
0

Time-->

2.90

3.00

3.10



#4

Chloromethane

Concen: 0.034 ppbv

RT: 3.14 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL036475.D

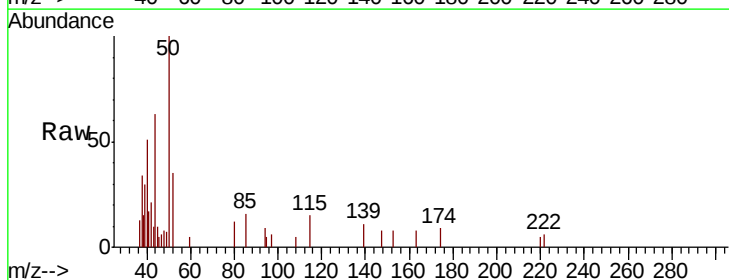
Acq: 25 Mar 2021 5:10

Tgt Ion: 50 Resp: 2911

Ion Ratio Lower Upper

50 100

52 31.9 27.0 40.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.14

3000

2000

1000

0

Time-->

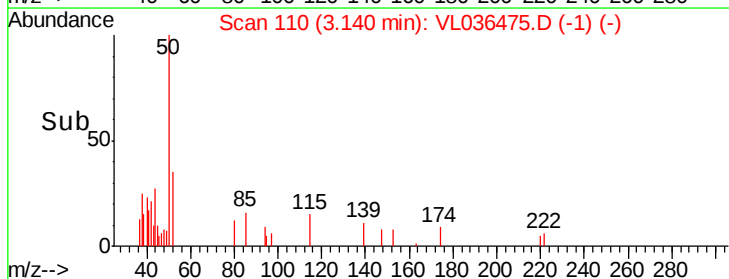
3.12

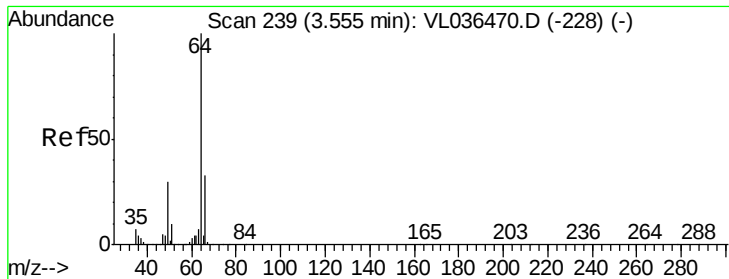
3.13

3.14

3.15

3.16





#7

Chloroethane

Concen: 0.023 ppbv

RT: 3.56 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

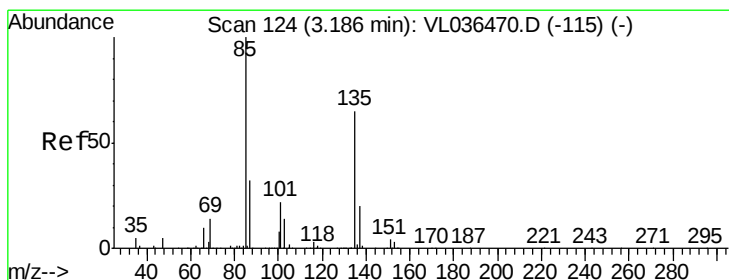
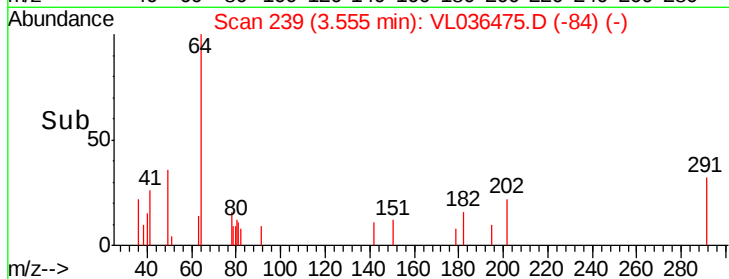
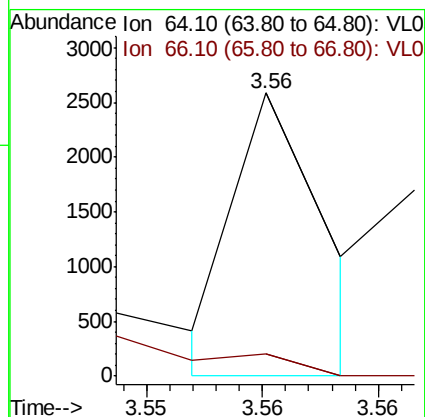
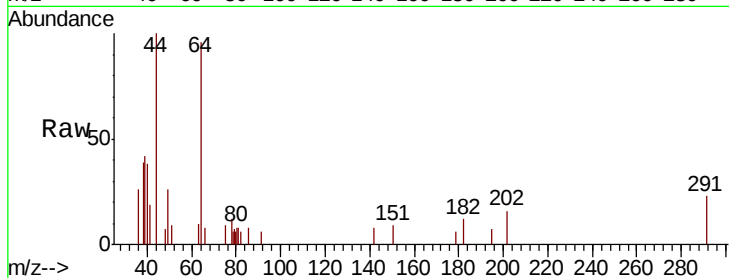
Acq: 25 Mar 2021 5:10

Tot Ion: 64 Resp: 709

Ion Ratio Lower Upper

64 100

66 8.0 26.2 39.2#



#8

Dichlorotetrafluoroethane

Concen: 0.024 ppbv

RT: 3.18 min Scan# 123

Delta R.T. -0.00 min

Lab File: VL036475.D

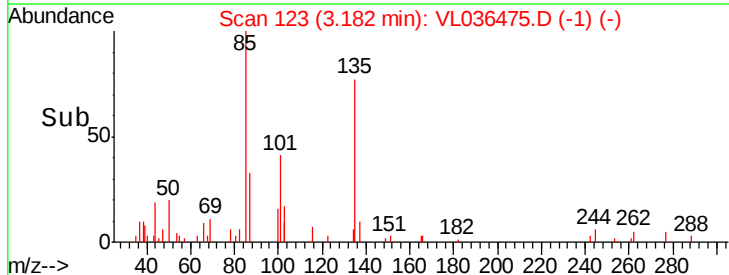
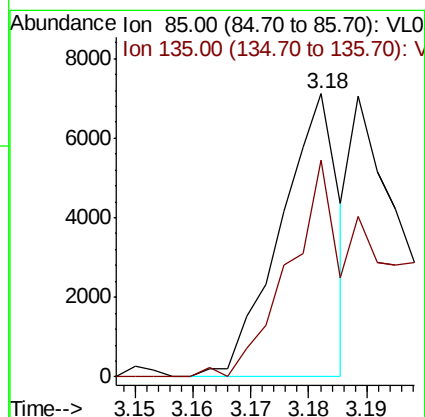
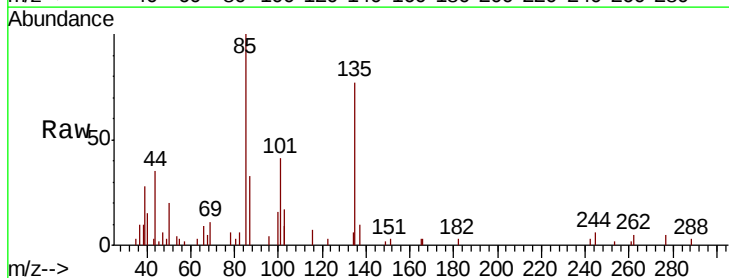
Acq: 25 Mar 2021 5:10

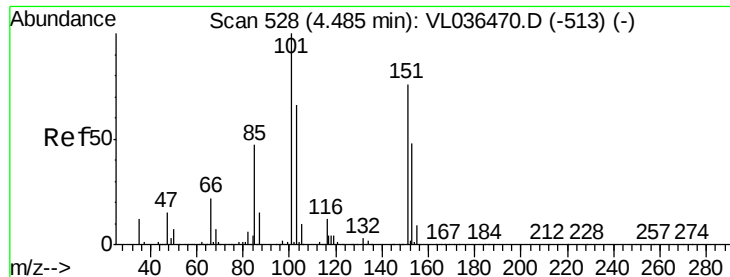
Tgt Ion: 85 Resp: 4953

Ion Ratio Lower Upper

85 100

135 139.1 54.3 81.5#





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.032 ppbv

RT: 4.48 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

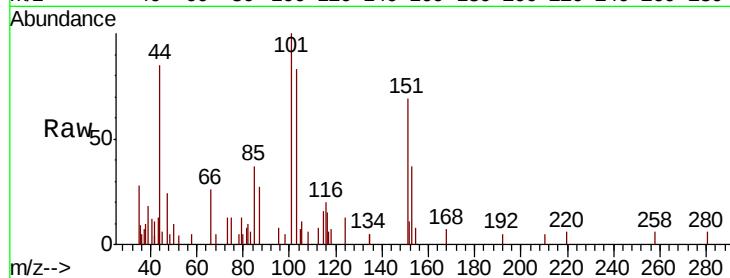
Acq: 25 Mar 2021 5:10

Tot Ion:101 Resp: 4495

Ion Ratio Lower Upper

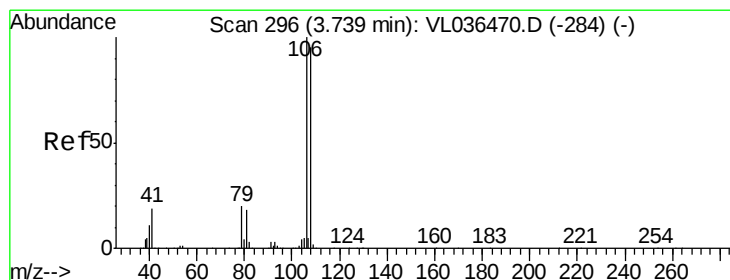
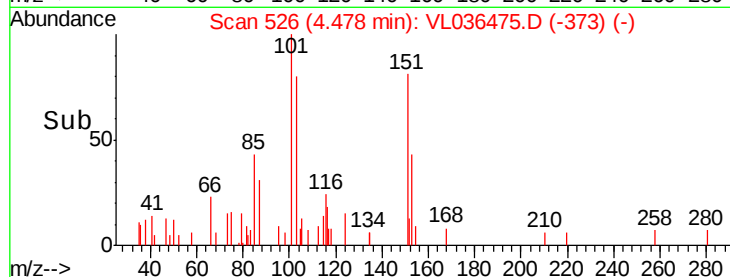
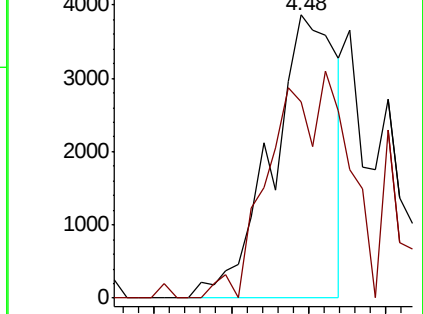
101 100

151 0.0 60.9 91.3#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#14

Bromoethene

Concen: 0.027 ppbv

RT: 3.74 min Scan# 297

Delta R.T. 0.00 min

Lab File: VL036475.D

Acq: 25 Mar 2021 5:10

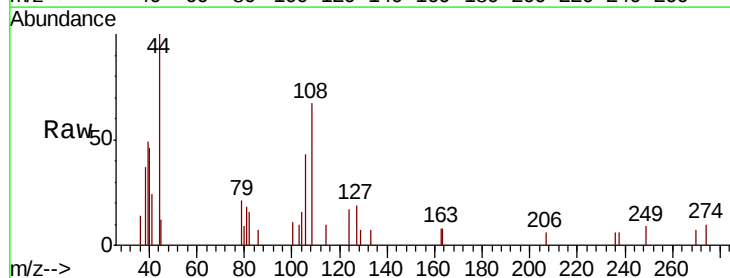
Tgt Ion:108 Resp: 1568

Ion Ratio Lower Upper

108 100

106 184.3 89.0 133.4#

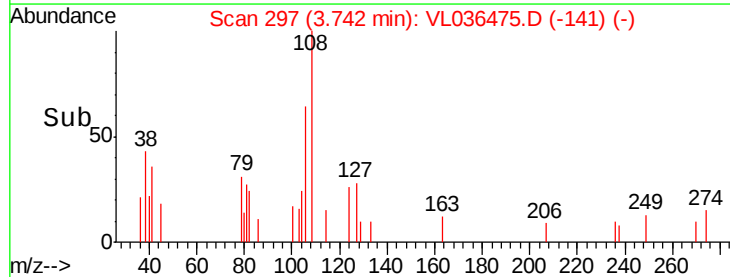
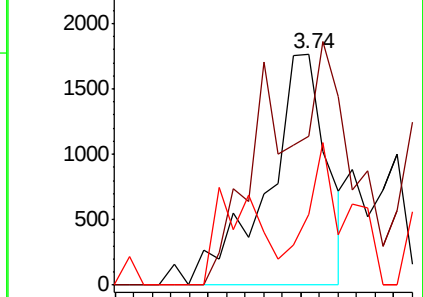
79 73.7 16.8 25.2#

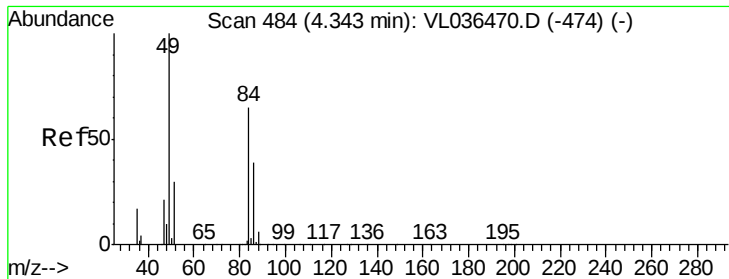


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

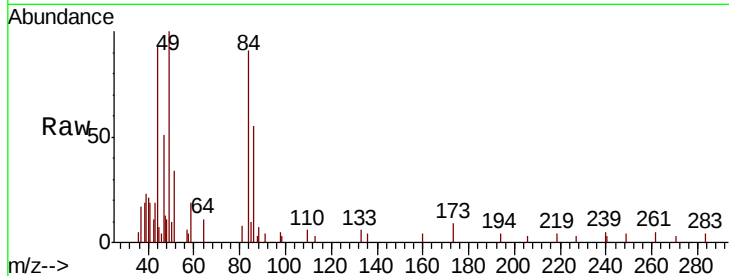
Ion 79.00 (78.70 to 79.70): VLO



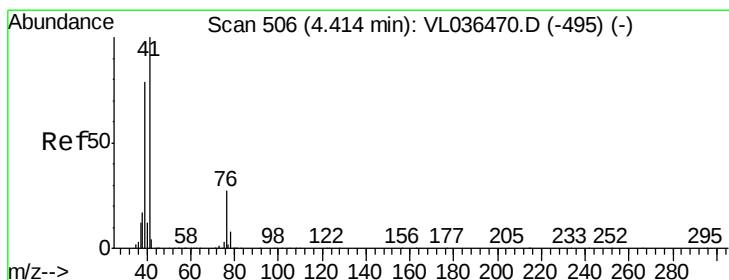
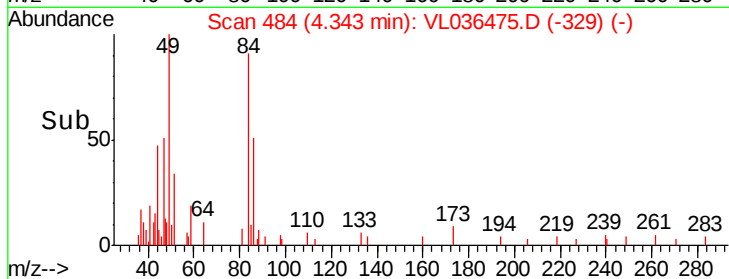
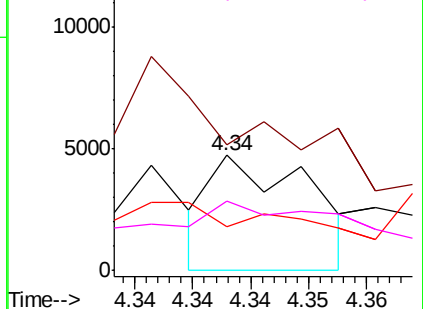


#20
Methylene Chloride
Concen: 0.046 ppbv
RT: 4.34 Instrument: MSVOA_1
Delta R.T. ClientSampleId:
Lab File:
Acq: 25 Mar 2021 5:10

Tot Ion:	84	Resp:	2796
Ion	Ratio	Lower	Upper
84	100		
49	0.0	122.9	184.3#
51	1.6	36.9	55.3#
86	45.0	48.2	72.4#

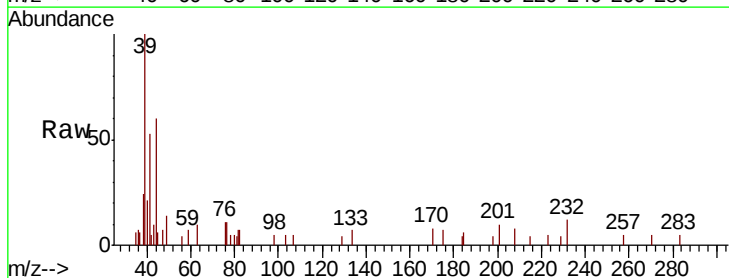


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

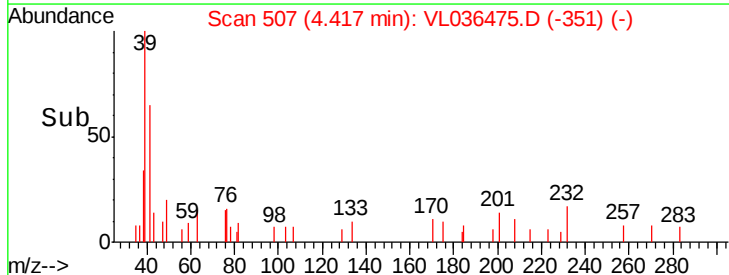
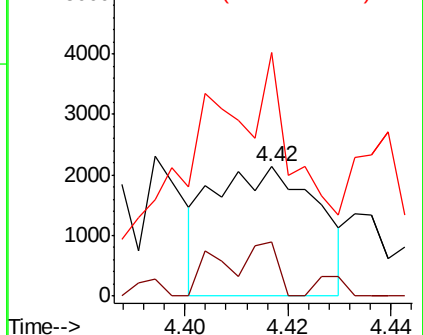


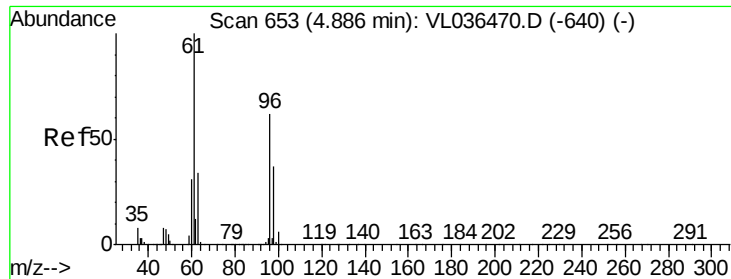
#21
Allyl Chloride
Concen: 0.030 ppbv
RT: 4.42 min Scan# 507
Delta R.T. 0.00 min
Lab File: VL036475.D
Acq: 25 Mar 2021 5:10

Tgt Ion:	41	Resp:	3002
Ion	Ratio	Lower	Upper
41	100		
76	30.8	22.9	34.3
39	220.0	69.4	104.0#



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: 0.024 ppbv

RT: 4.88 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 5:10

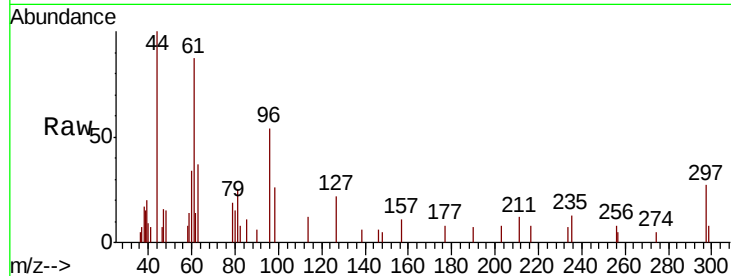
Tot Ion: 96 Resp: 1380

Ion Ratio Lower Upper

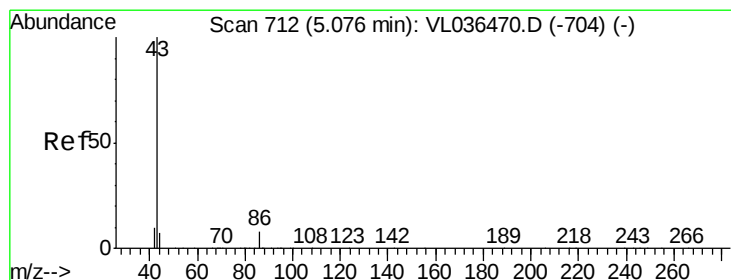
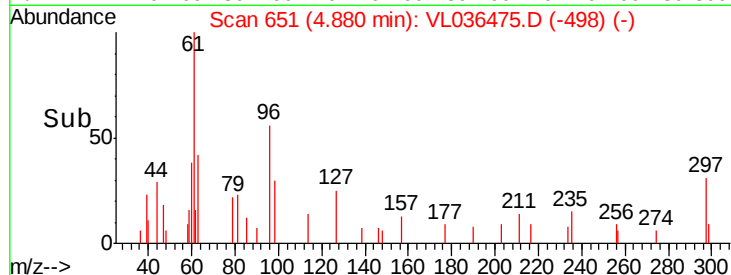
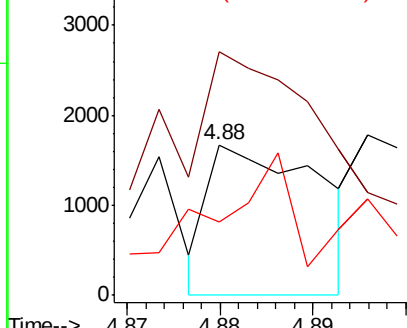
96 100

61 113.7 129.4 194.0#

98 7.2 48.2 72.4#



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0



#23

Vinyl Acetate

Concen: 0.025 ppbv

RT: 5.08 min Scan# 712

Delta R.T. -0.00 min

Lab File: VL036475.D

Acq: 25 Mar 2021 5:10

Tgt Ion: 43 Resp: 5157

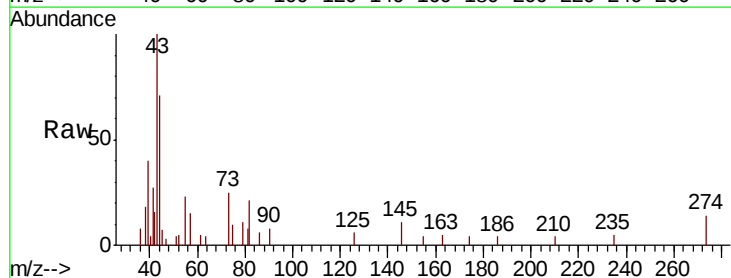
Ion Ratio Lower Upper

43 100

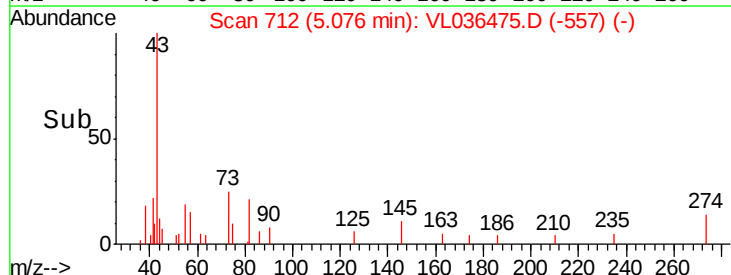
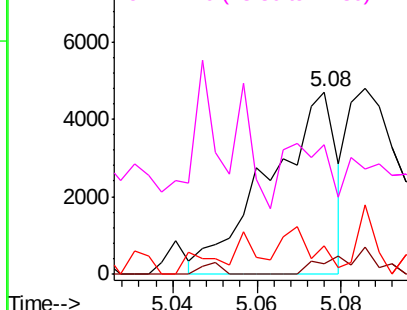
86 6.4 5.4 8.0

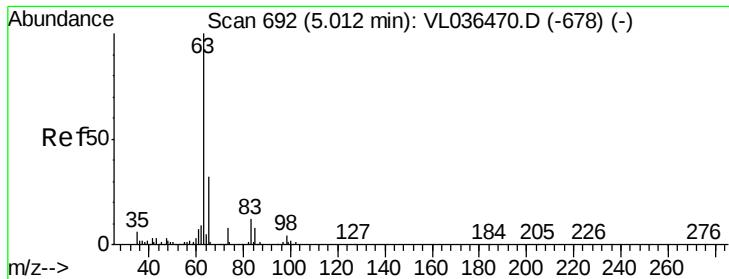
42 12.8 8.5 12.7#

44 30.8 4.6 7.0#



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 86.10 (85.80 to 86.80): VL0
Ion 42.10 (41.80 to 42.80): VL0
Ion 44.10 (43.80 to 44.80): VL0





#24

1,1-Dichloroethane

Concen: 0.028 ppbv

RT: 5.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 5:10

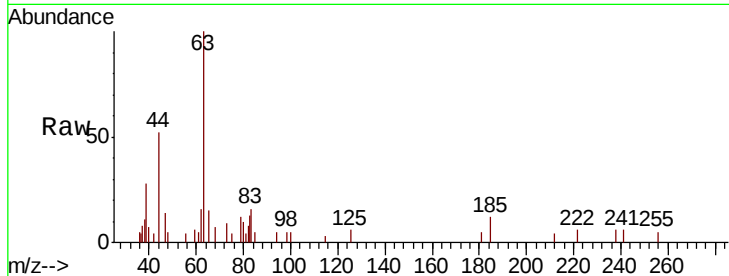
Tot Ion: 63 Resp: 4521

Ion Ratio Lower Upper

63 100

98 1.5 2.1 6.2#

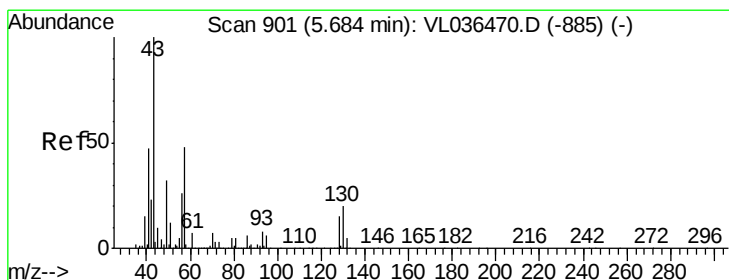
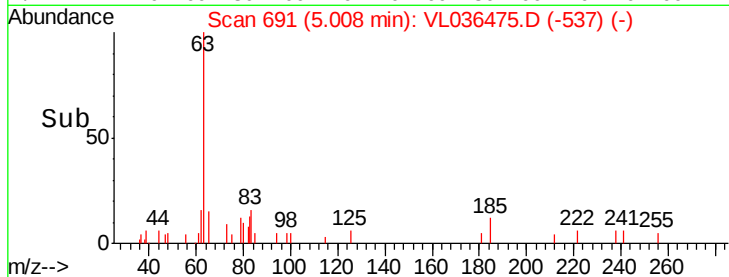
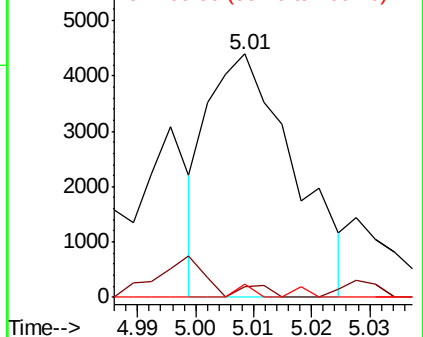
100 7.2 0.9 2.8#



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: 0.038 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL036475.D

Acq: 25 Mar 2021 5:10

Tgt Ion: 43 Resp: 12897

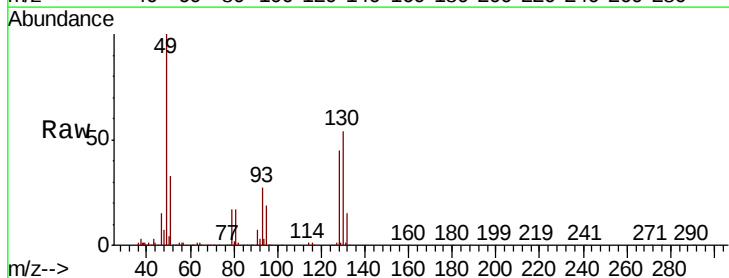
Ion Ratio Lower Upper

43 100

45 0.0 7.9 11.9#

61 13.9 7.4 11.2#

70 3.6 5.1 7.7#

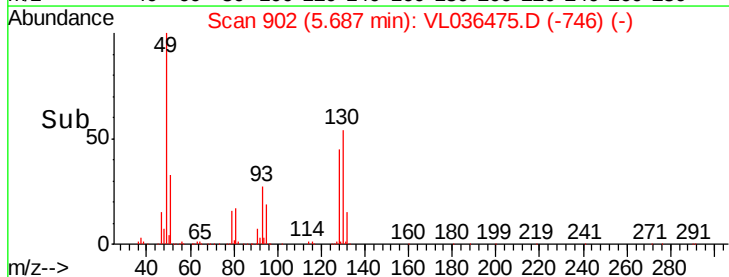
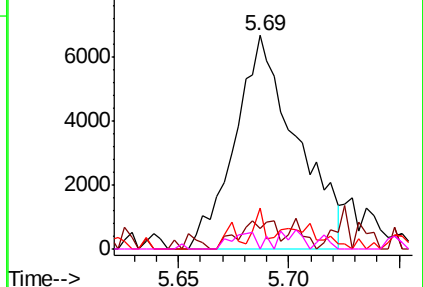


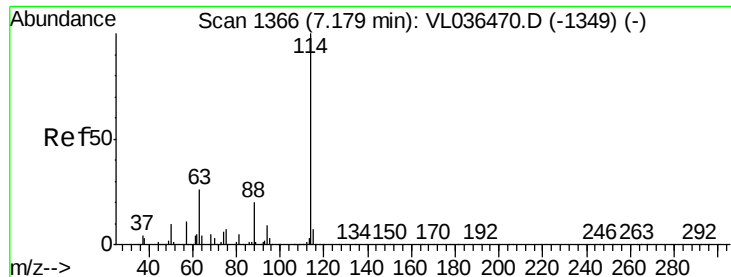
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

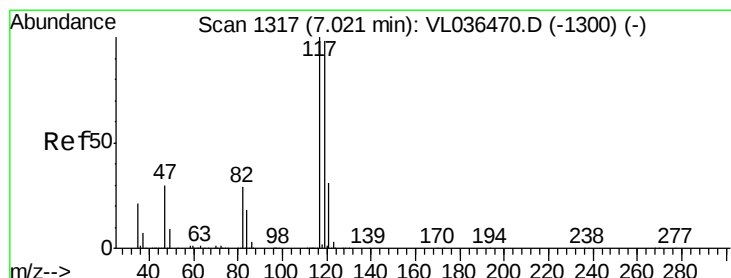
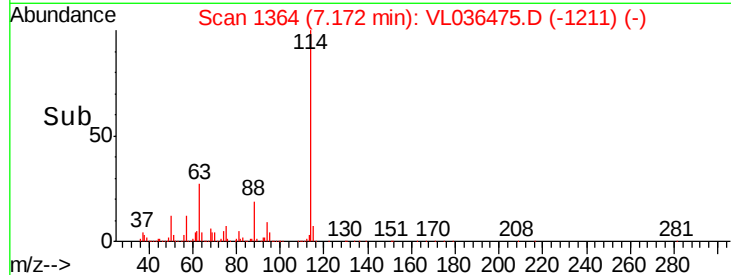
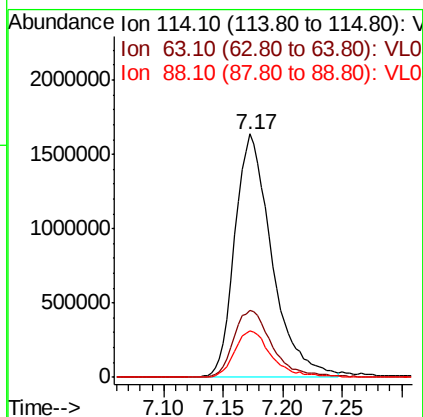
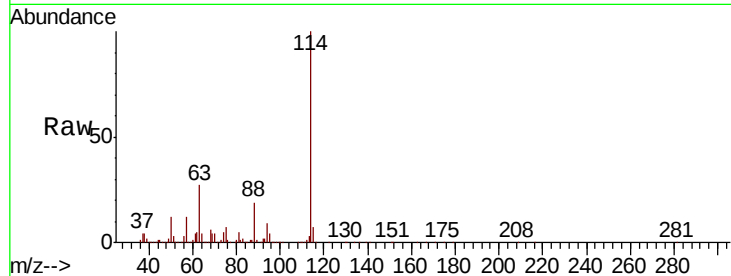
Ion 70.10 (69.80 to 70.80): VL0





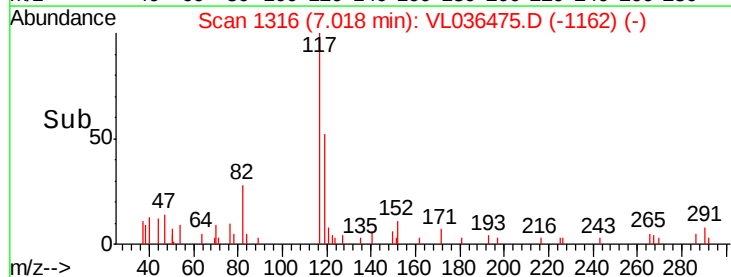
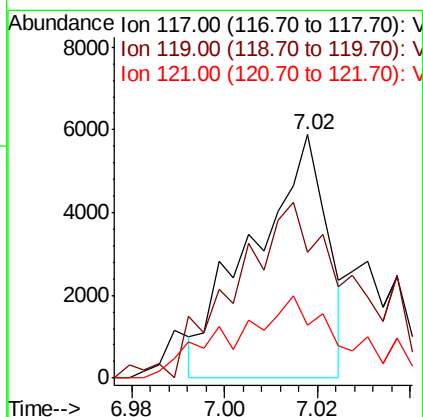
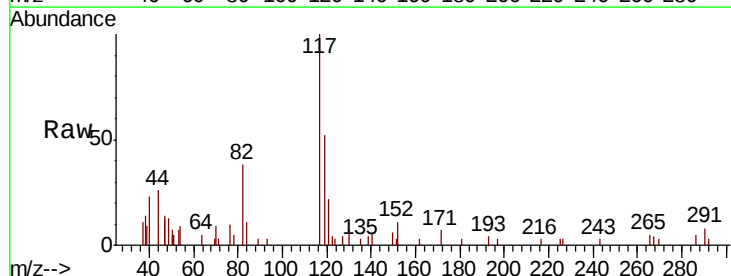
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 5:10

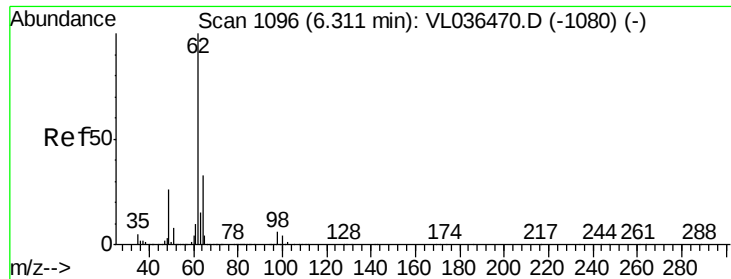
Tot Ion:114 Resp: 3543467
 Ion Ratio Lower Upper
 114 100
 63 28.9 22.4 33.6
 88 19.5 15.4 23.0



#35
 Carbon Tetrachloride
 Concen: 0.028 ppbv
 RT: 7.02 min Scan# 1316
 Delta R.T. -0.00 min
 Lab File: VL036475.D
 Acq: 25 Mar 2021 5:10

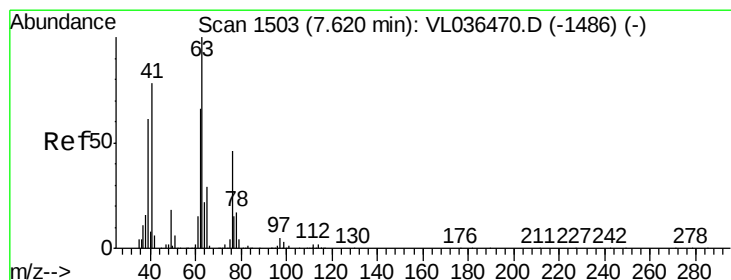
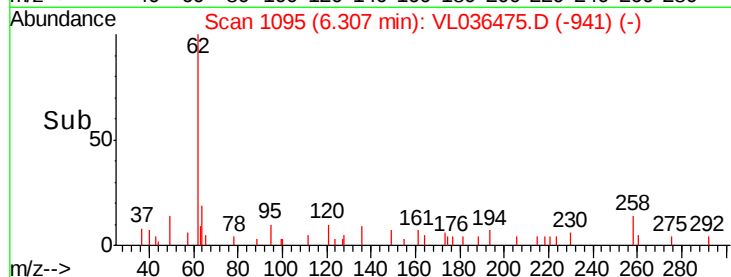
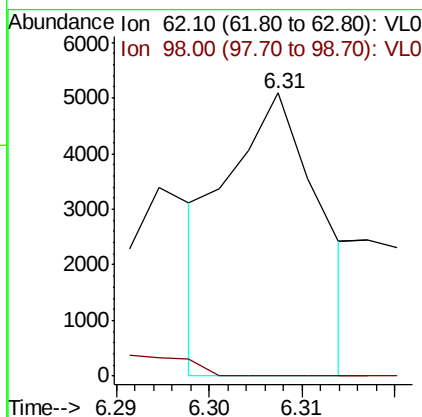
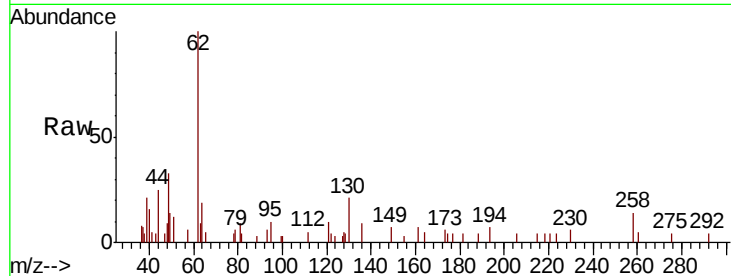
Tgt Ion:117 Resp: 6543
 Ion Ratio Lower Upper
 117 100
 119 32.1 78.2 117.2#
 121 10.7 24.5 36.7#





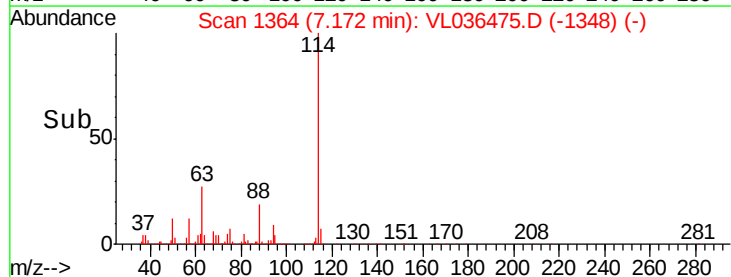
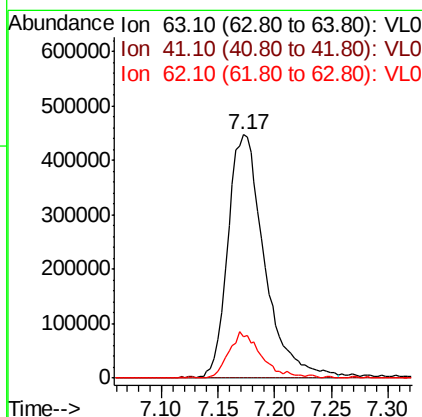
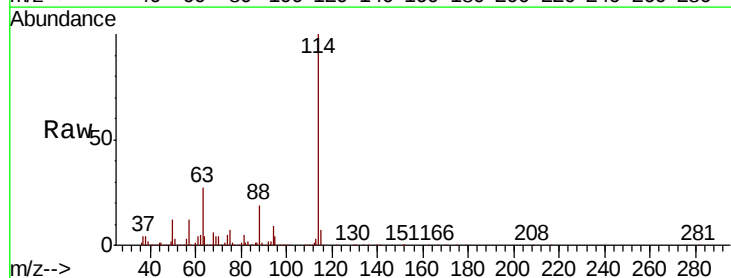
#37
 1,2-Dichloroethane
 Concen: 0.020 ppbv
 RT: 6.31
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 Acq: 25 Mar 2021 5:10

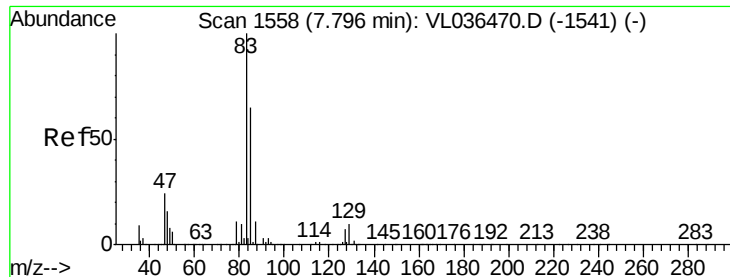
Tot Ion: 62 Resp: 3567
 Ion Ratio Lower Upper
 62 100
 98 0.0 4.7 7.1#



#39
 1,2-Dichloropropane
 Concen: 8.368 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.45 min
 Lab File: VL036475.D
 Acq: 25 Mar 2021 5:10

Tgt Ion: 63 Resp: 1008261
 Ion Ratio Lower Upper
 63 100
 41 0.1 62.4 93.6#
 62 17.2 52.8 79.2#





#42

Bromodichloromethane

Concen: 0.027 ppbv

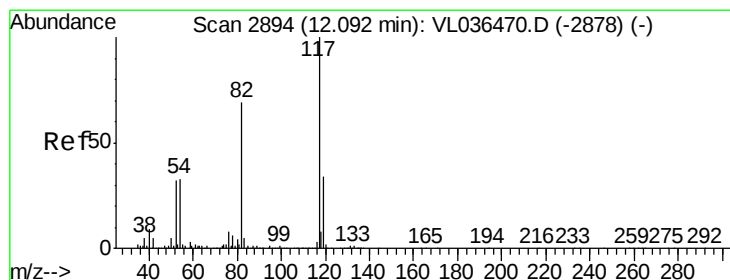
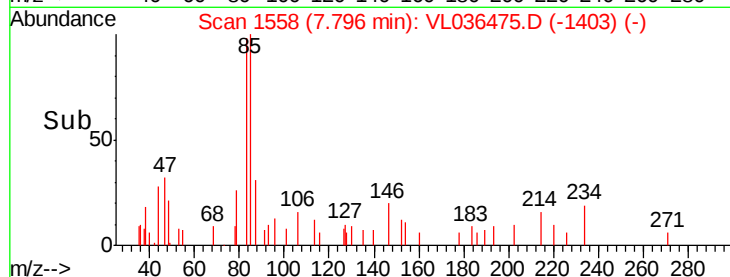
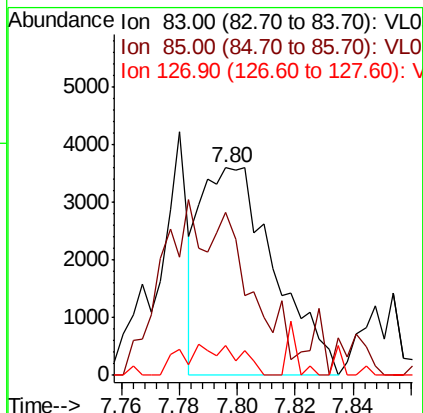
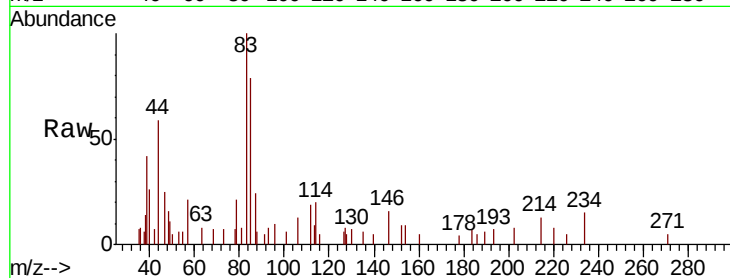
RT: 7.80 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 5:10

Tot Ion:	83	Resp:	6437
Ion Ratio	Lower	Upper	
83	100		
85	60.3	51.8	77.6
127	9.4	5.8	8.8#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

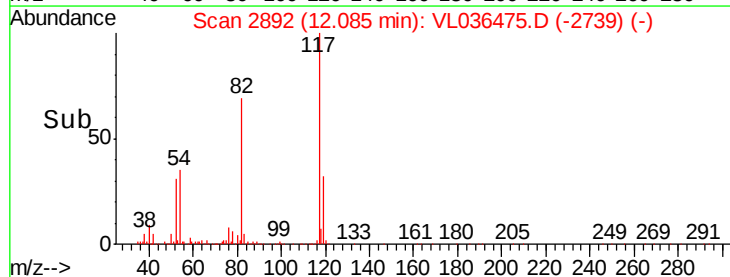
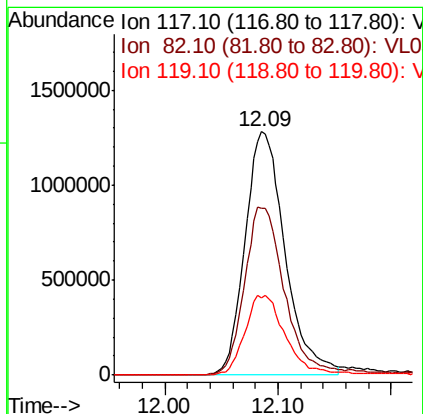
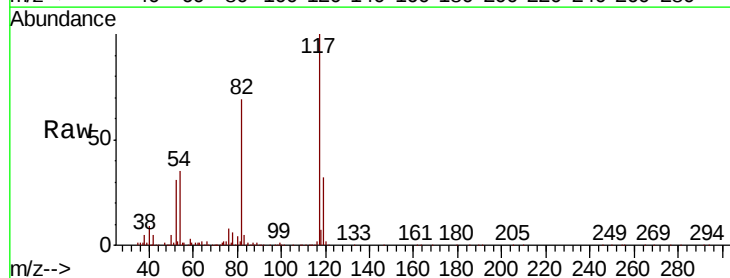
RT: 12.09 min Scan# 2892

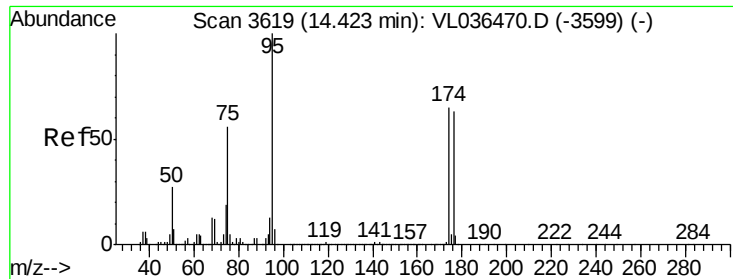
Delta R.T. -0.01 min

Lab File: VL036475.D

Acq: 25 Mar 2021 5:10

Tgt Ion:	117	Resp:	3151777
Ion Ratio	Lower	Upper	
117	100		
82	72.1	57.4	86.0
119	34.0	47.4	71.2#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.716 ppbv

RT: 14.42

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Mar 2021 3.10

Tot Ion: 95 Resp: 2516660

Ion Ratio Lower Upper

95 100

174 65.4 51.0 76.6

175 4.8 3.9 5.9

