

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072721\
 Data File : VL037283.D
 Acq On : 27 Jul 2021 5:09
 Operator : SY/AP
 Sample : VSTDIC0.1
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 27 06:44:21 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072721AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 27 06:38:44 2021
 QLast Update : Tue Jul 27 06:38:44 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1271417	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3719239	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3309133	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2456523	9.80	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.00%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	36246	0.162 ppbv	93
3) Chlorodifluoromethane	2.99	51	32693	0.131 ppbv	98
4) Chloromethane	3.14	50	9098	0.110 ppbv #	83
5) Vinyl Chloride	3.26	62	9767	0.108 ppbv	90
6) Bromomethane	3.47	94	3301	0.062 ppbv	90
7) Chloroethane	3.56	64	1594	0.048 ppbv	95
8) Dichlorotetrafluoroethane	3.18	85	28092	0.122 ppbv	100
9) Propene	3.01	41	5875	0.074 ppbv #	17
10) Heptane	8.13	43	6835	0.035 ppbv #	1
11) Trichlorofluoromethane	3.95	101	27088	0.113 ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.49	101	19986	0.118 ppbv	86
15) Acetone	3.87	43	56762	0.385 ppbv #	22
16) 1,3-Butadiene	3.33	39	7860	0.092 ppbv #	65
18) 1,1-Dichloroethene	4.29	96	3110	0.041 ppbv	85
20) Methylene Chloride	4.35	84	21852	0.250 ppbv #	77
21) Allyl Chloride	4.42	41	5461	0.050 ppbv #	1
22) trans-1,2-Dichloroethene	4.89	96	6316	0.085 ppbv #	77
23) Vinyl Acetate	5.09	43	16747	0.081 ppbv #	89
24) 1,1-Dichloroethane	5.01	63	17536	0.105 ppbv	100
25) Ethyl Acetate	5.69	43	15820	0.050 ppbv #	75
26) Hexane	5.69	57	20171	0.128 ppbv #	85
27) Carbon Disulfide	4.56	76	8206	0.053 ppbv #	65
28) Methyl tert-Butyl Ether	5.06	73	17737	0.093 ppbv #	90
29) Chloroform	5.75	83	26542	0.108 ppbv	100
30) Cyclohexane	7.13	84	7621	0.058 ppbv #	2
32) 1,1,1-Trichloroethane	6.52	97	25700	0.098 ppbv	95
34) 2-Butanone	5.27	43	13509	0.092 ppbv #	53
35) Carbon Tetrachloride	7.01	117	10741	0.042 ppbv #	79
36) Benzene	6.89	78	29424	0.097 ppbv #	91
37) 1,2-Dichloroethane	6.31	62	10110	0.057 ppbv #	82
38) Trichloroethene	7.83	130	7252	0.050 ppbv	89
39) 1,2-Dichloropropane	7.18	63	904839	8.045 ppbv #	21
42) Bromodichloromethane	7.79	83	12841	0.053 ppbv #	83
44) 2,2,4-Trimethylpentane	7.87	57	35129	0.069 ppbv #	61
46) cis-1,3-Dichloropropene	8.70	75	5514	0.044 ppbv #	92
47) 1,1,2-Trichloroethane	9.48	97	6256	0.049 ppbv #	50
48) Dibromochloromethane	10.31	129	9730	0.048 ppbv	61
52) Tetrachloroethene	11.22	164	4943	0.035 ppbv #	80
53) Toluene	9.81	91	16619	0.046 ppbv #	29
54) 1,2-Dibromoethane	10.62	107	9010	0.049 ppbv	82
57) Chlorobenzene	12.15	112	11708	0.043 ppbv #	40

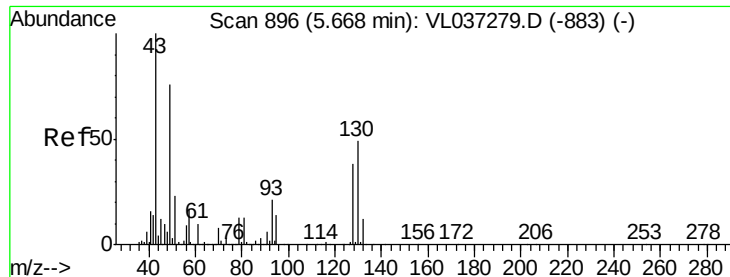
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL072721\
 Data File : VL037283.D
 Acq On : 27 Jul 2021 5:09
 Operator : SY/AP
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Quant Time: Jul 27 06:44:21 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072721AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 27 06:38:44 2021
 QLast Update : Tue Jul 27 06:38:44 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
60) o-Xylene	13.70	91	20624	0.055	ppbv #	54
62) Isopropylbenzene	14.67	105	45861	0.086	ppbv	91
63) 1,1,2,2-Tetrachloroethane	13.68	83	11969	0.048	ppbv #	24
64) n-propylbenzene	15.56	120	4497	0.034	ppbv #	1
65) tert-Butylbenzene	16.75	119	14397	0.030	ppbv #	1
66) Benzyl Chloride	16.99	91	698	0.035	ppbv #	67
69) p-Isopropyltoluene	17.66	119	34488	0.065	ppbv #	73
71) 2-Chlorotoluene	15.45	91	16985	0.046	ppbv #	18
72) 4-Ethyltoluene	15.84	105	15363	0.036	ppbv #	55
73) 1,3,5-Trimethylbenzene	16.00	105	20542	0.050	ppbv #	86
74) 1,2,4-Trimethylbenzene	16.77	105	26277	0.062	ppbv #	81
75) 1,3-Dichlorobenzene	17.00	146	8481	0.033	ppbv #	1
76) 1,4-Dichlorobenzene	17.14	146	8387	0.033	ppbv #	22
78) Hexachloro-1,3-Butadiene	23.38	225	15269	0.074	ppbv #	31

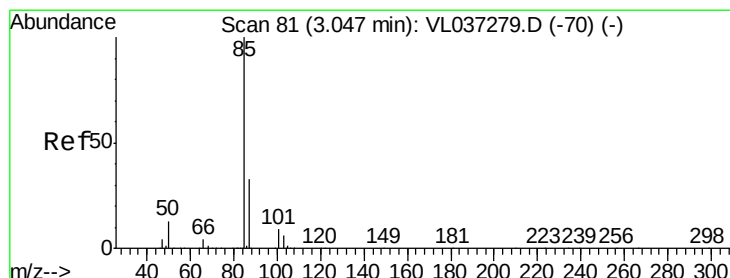
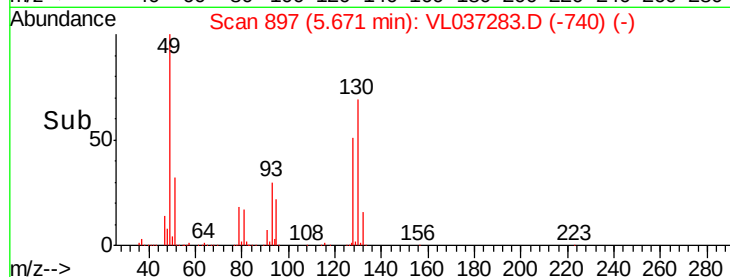
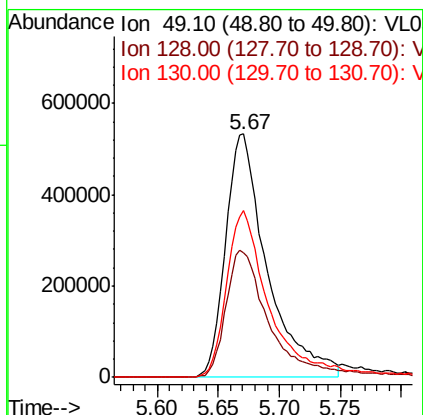
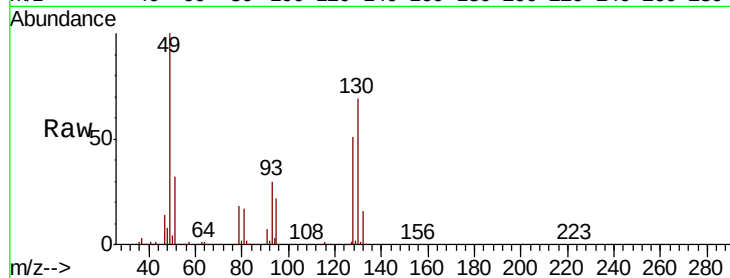
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.67 min Scan# 897
 Delta R.T. 0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

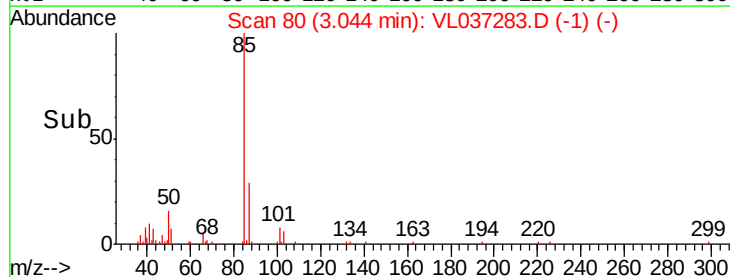
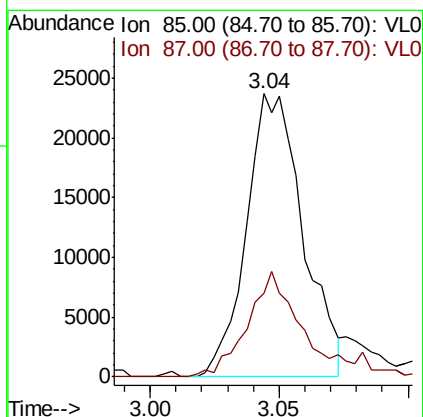
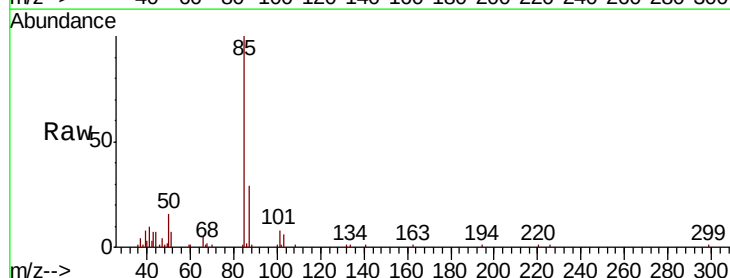
Instrument :
 MSVOA_L
 ClientSampleId :

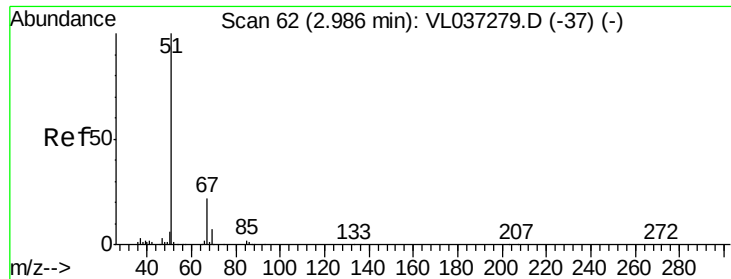
Tot Ion: 49 Resp: 1271417
 Ion Ratio Lower Upper
 49 100
 128 56.7 28.4 85.2
 130 72.9 34.8 104.5



#2
 Dichlorodifluoromethane
 Concen: 0.162 ppbv
 RT: 3.04 min Scan# 80
 Delta R.T. -0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Tgt Ion: 85 Resp: 36246
 Ion Ratio Lower Upper
 85 100
 87 29.4 26.6 39.8





#3

Chlorodifluoromethane

Concen: 0.131 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

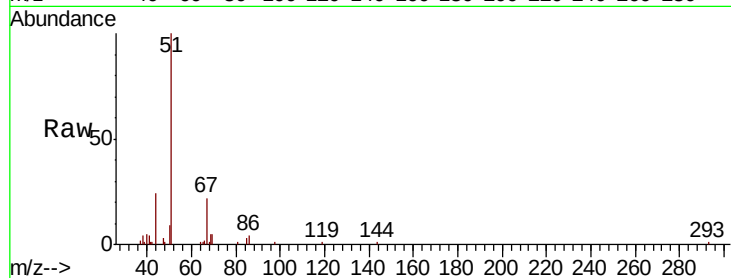
ClientSampleId :

Tot Ion: 51 Resp: 32693

Ion Ratio Lower Upper

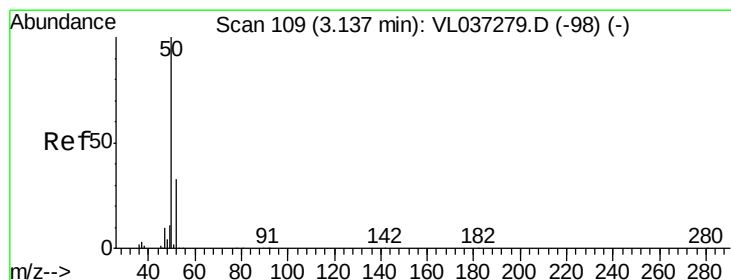
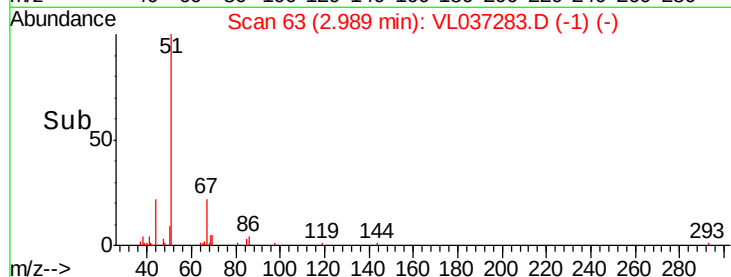
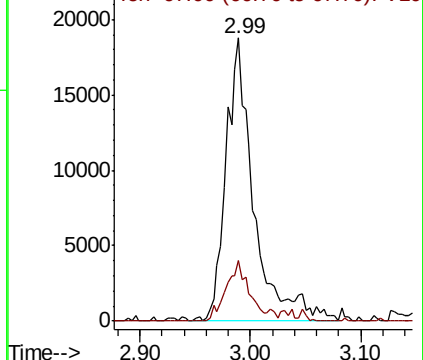
51 100

67 21.0 16.2 24.4



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.110 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.01 min

Lab File: VL037283.D

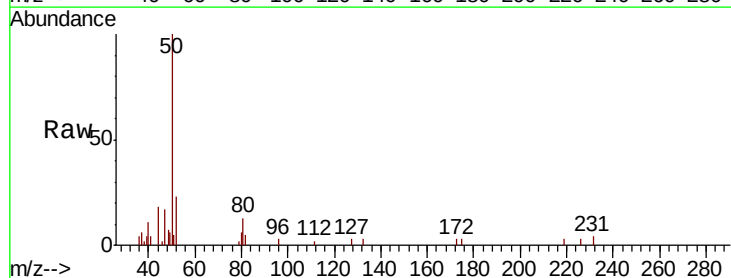
Acq: 27 Jul 2021 5:09

Tgt Ion: 50 Resp: 9098

Ion Ratio Lower Upper

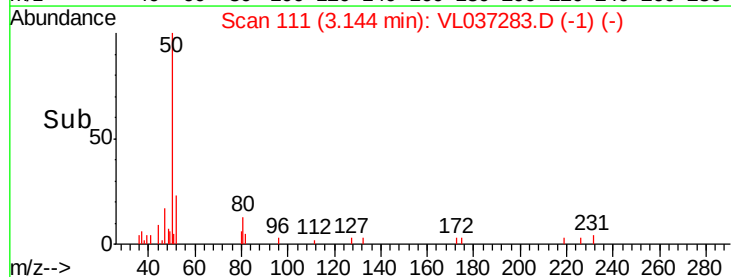
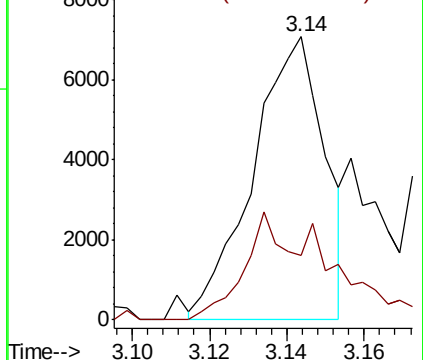
50 100

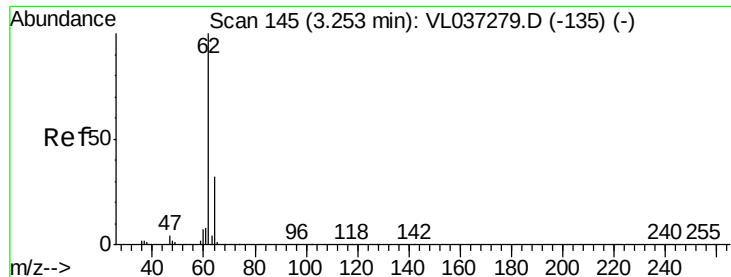
52 23.7 26.4 39.6#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.108 ppbv

RT: 3.26 min Scan# 147

Delta R.T. 0.01 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

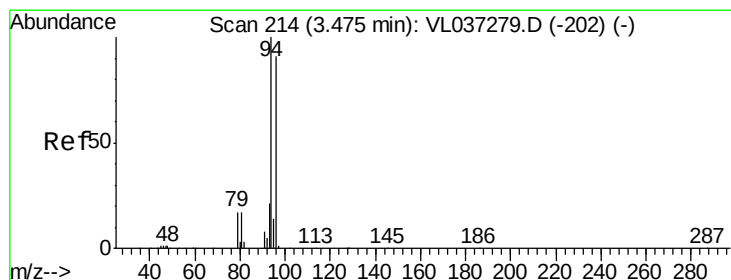
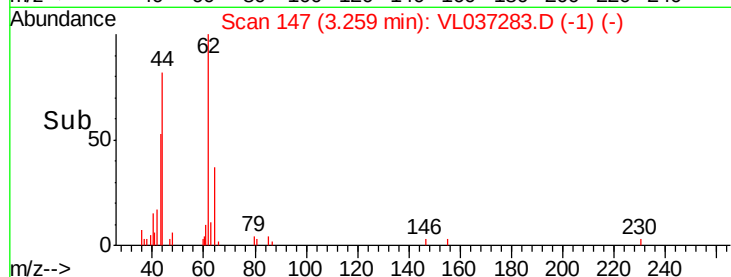
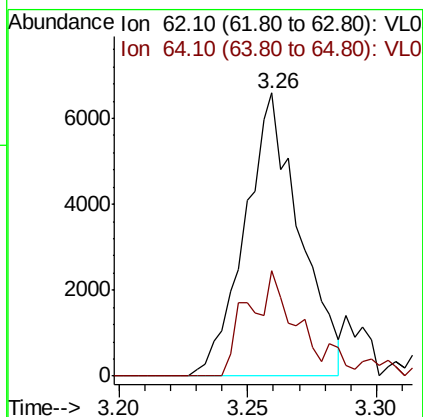
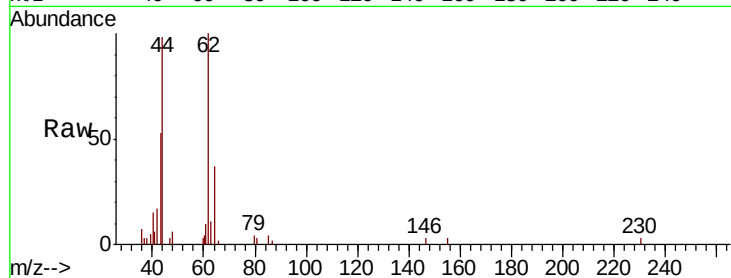
ClientSampleId :

Tot Ion: 62 Resp: 9767

Ion Ratio Lower Upper

62 100

64 37.5 25.5 38.3



#6

Bromomethane

Concen: 0.062 ppbv

RT: 3.47 min Scan# 213

Delta R.T. -0.00 min

Lab File: VL037283.D

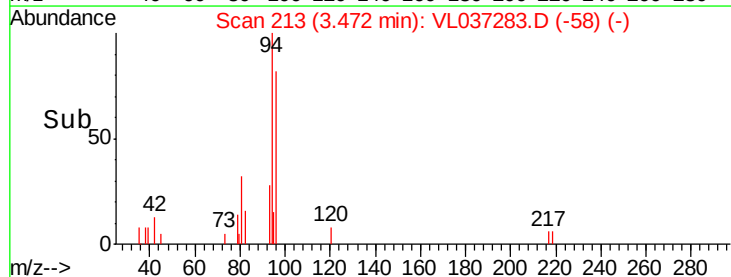
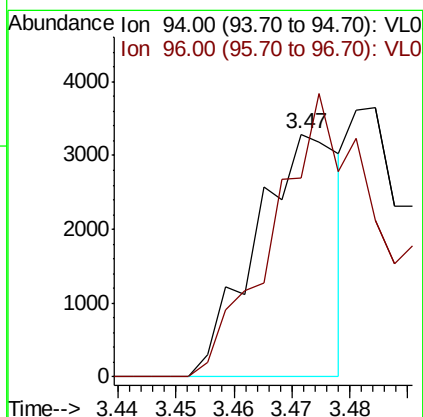
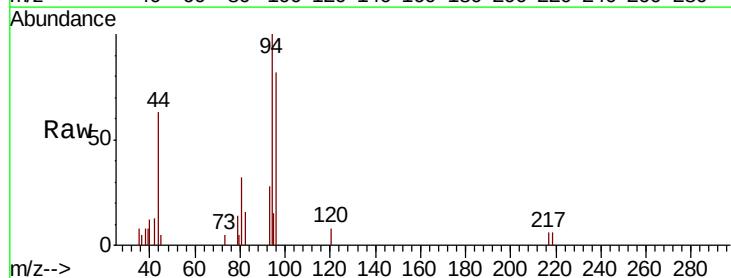
Acq: 27 Jul 2021 5:09

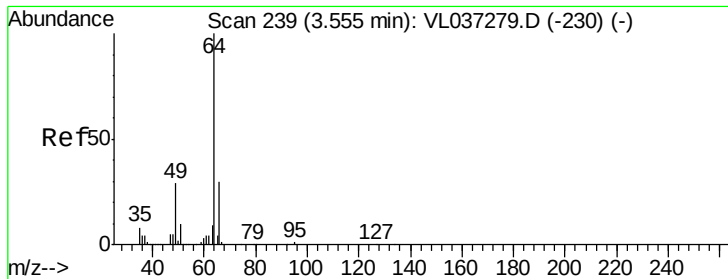
Tgt Ion: 94 Resp: 3301

Ion Ratio Lower Upper

94 100

96 82.1 73.0 109.4





#7

Chloroethane

Concen: 0.048 ppbv

RT: 3.56 min Scan# 239

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

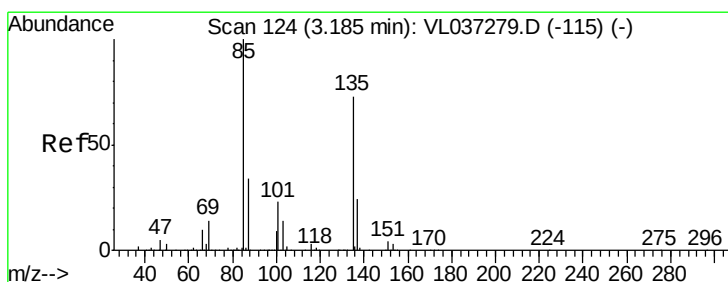
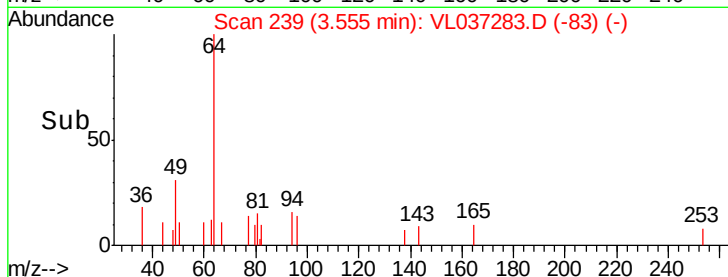
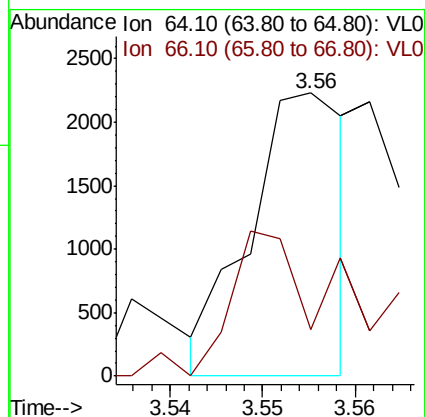
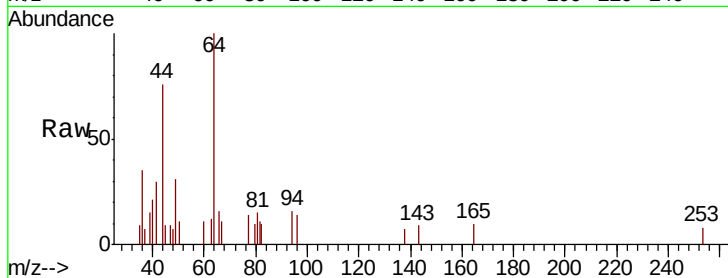
ClientSampleId :

Tot Ion: 64 Resp: 1594

Ion Ratio Lower Upper

64 100

66 27.7 24.3 36.5



#8

Dichlorotetrafluoroethane

Concen: 0.122 ppbv

RT: 3.18 min Scan# 123

Delta R.T. -0.00 min

Lab File: VL037283.D

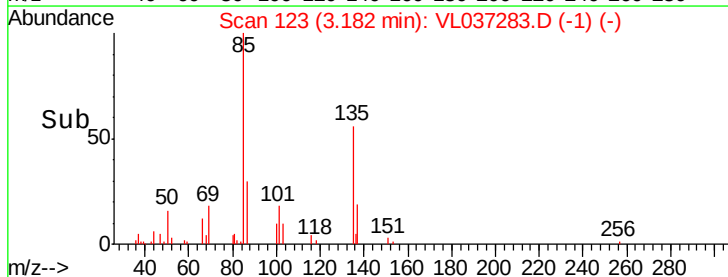
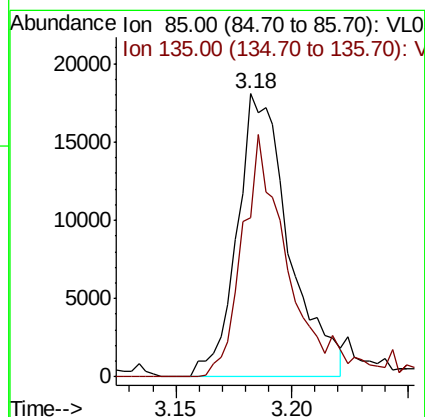
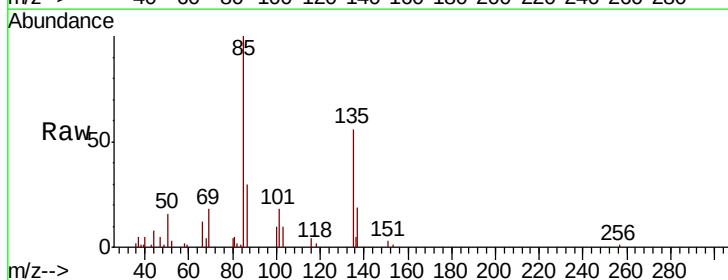
Acq: 27 Jul 2021 5:09

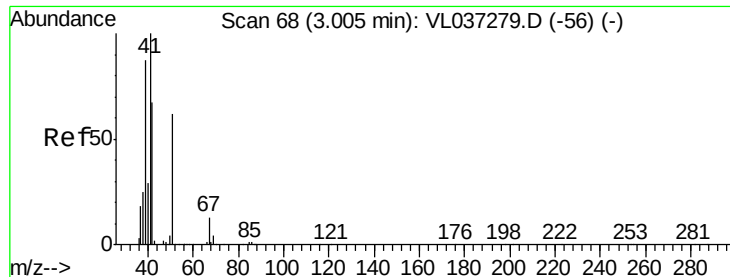
Tgt Ion: 85 Resp: 28092

Ion Ratio Lower Upper

85 100

135 75.3 60.3 90.5





#9

Propene

Concen: 0.074 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

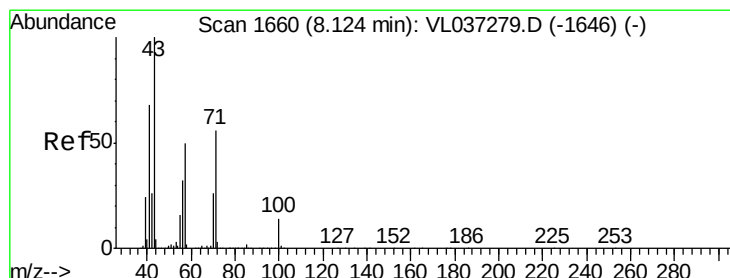
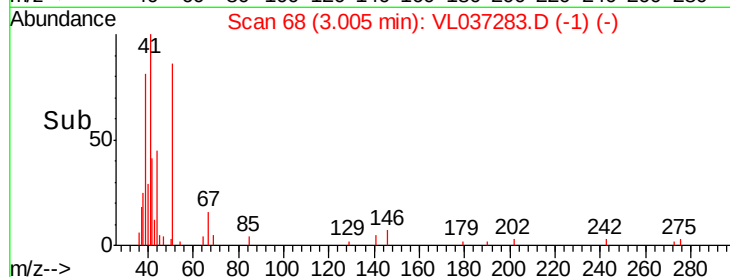
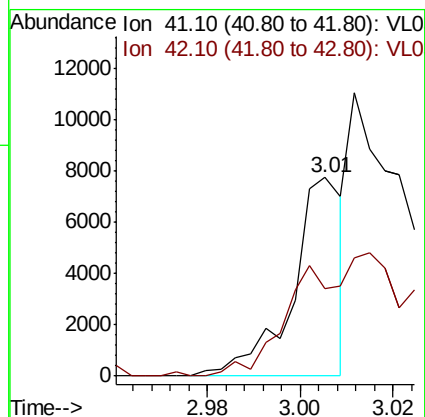
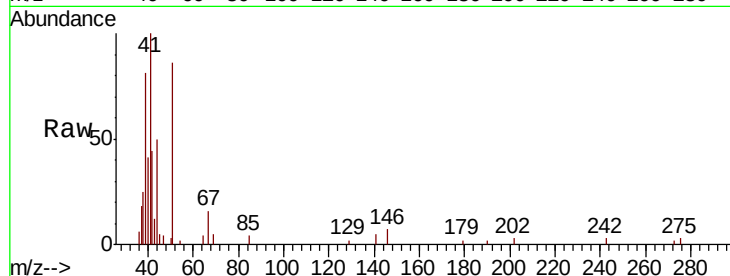
ClientSampleId :

Tot Ion: 41 Resp: 5875

Ion Ratio Lower Upper

41 100

42 0.0 53.4 80.2#



#10

Heptane

Concen: 0.035 ppbv

RT: 8.13 min Scan# 1662

Delta R.T. 0.01 min

Lab File: VL037283.D

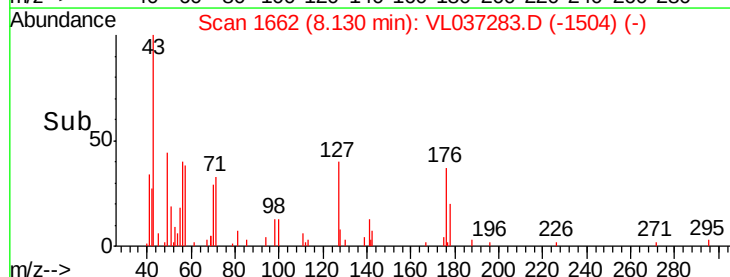
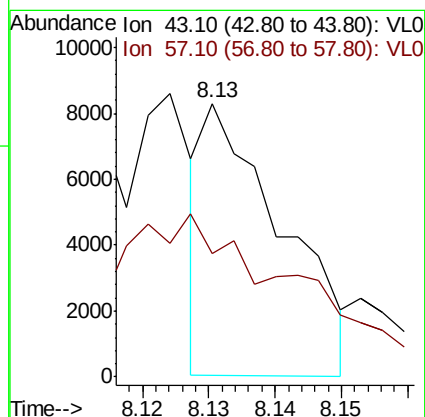
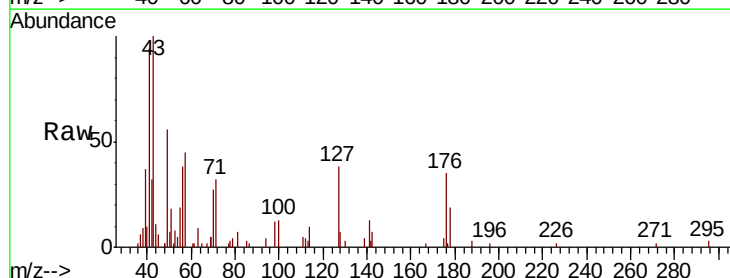
Acq: 27 Jul 2021 5:09

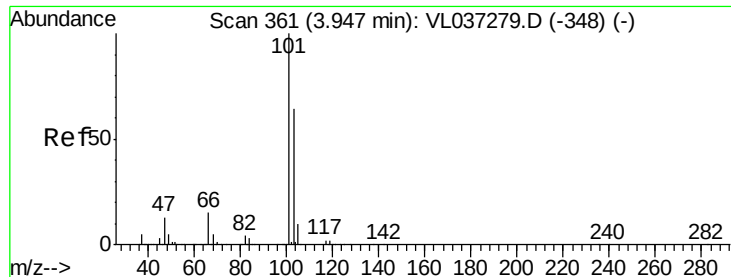
Tgt Ion: 43 Resp: 6835

Ion Ratio Lower Upper

43 100

57 177.4 40.1 60.1#

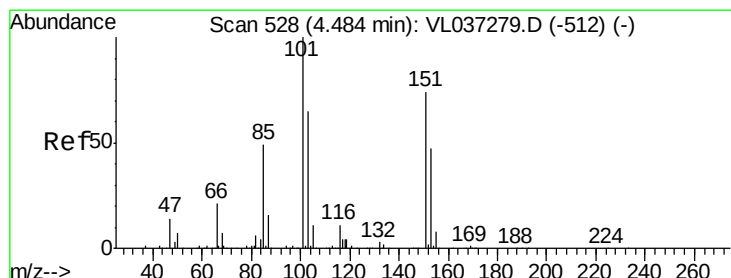
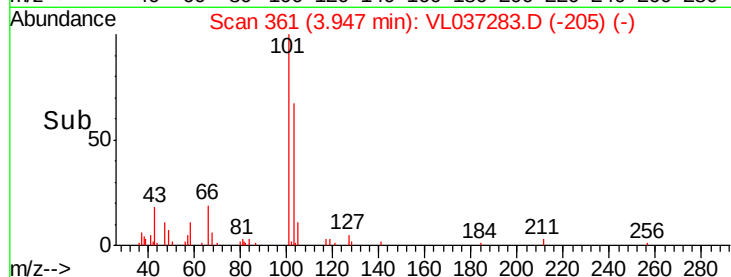
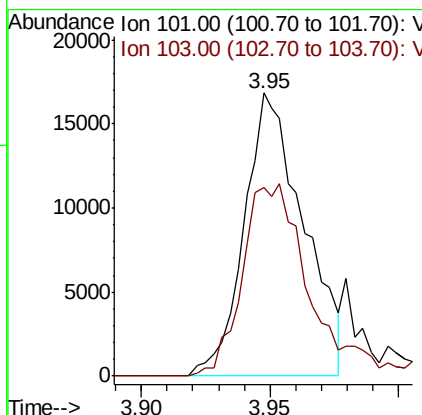
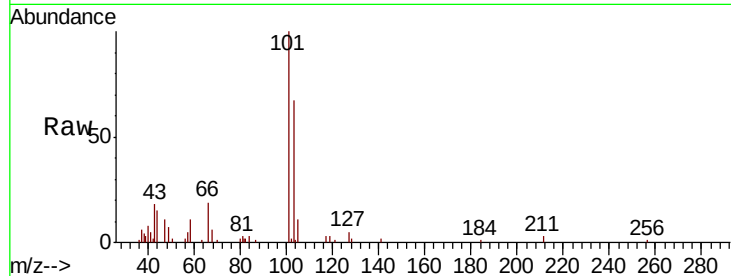




#11
 Trichlorofluoromethane
 Concen: 0.113 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. 0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

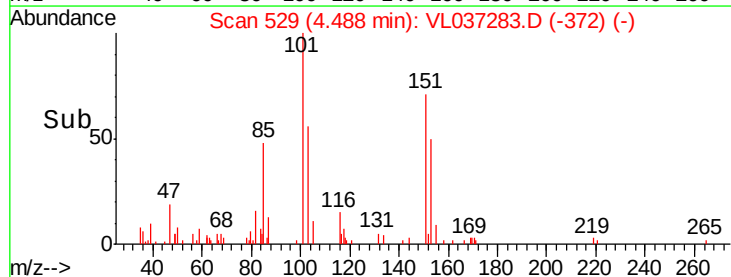
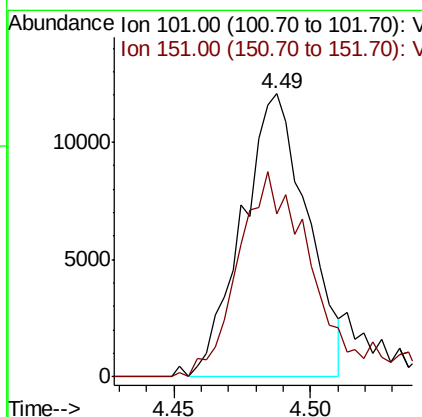
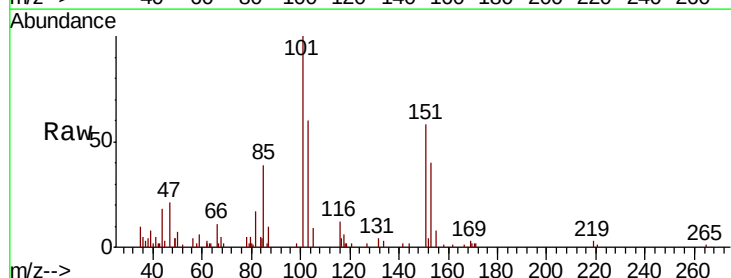
Instrument :
 MSVOA_L
 ClientSampleId :

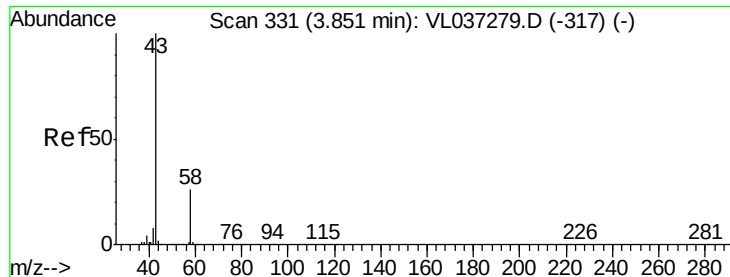
Tot Ion:101 Resp: 27088
 Ion Ratio Lower Upper
 101 100
 103 66.7 51.4 77.0



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.118 ppbv
 RT: 4.49 min Scan# 529
 Delta R.T. 0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Tgt Ion:101 Resp: 19986
 Ion Ratio Lower Upper
 101 100
 151 85.9 59.3 88.9





#15

Acetone

Concen: 0.385 ppbv

RT: 3.87 min Scan# 338

Delta R.T. 0.02 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

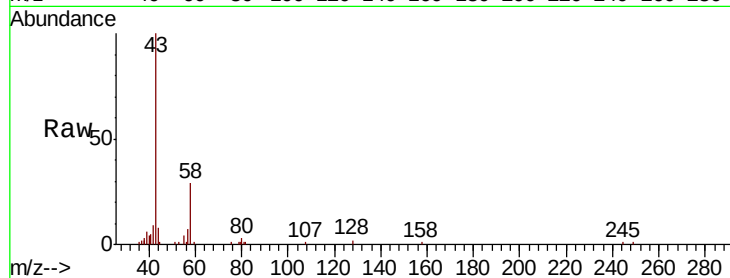
ClientSampleId :

Tot Ion: 43 Resp: 56762

Ion Ratio Lower Upper

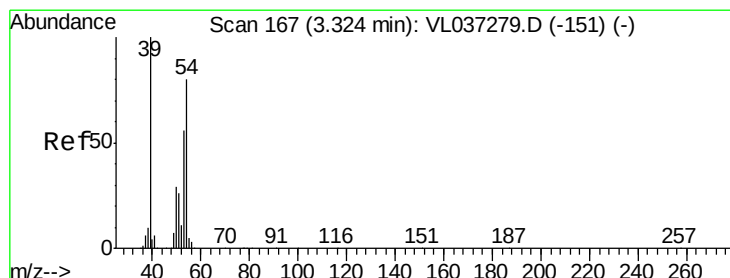
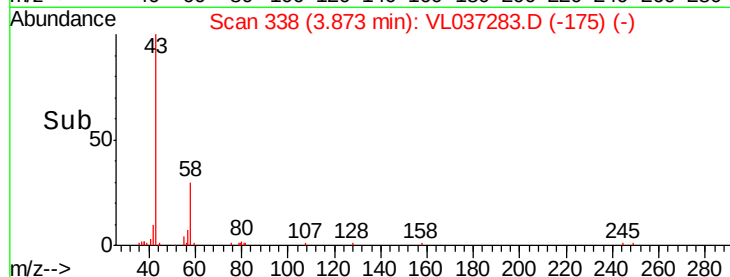
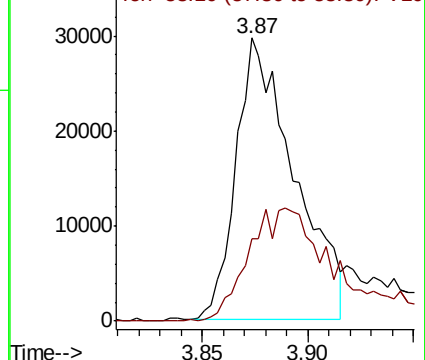
43 100

58 69.1 22.3 33.5#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.092 ppbv

RT: 3.33 min Scan# 169

Delta R.T. 0.01 min

Lab File: VL037283.D

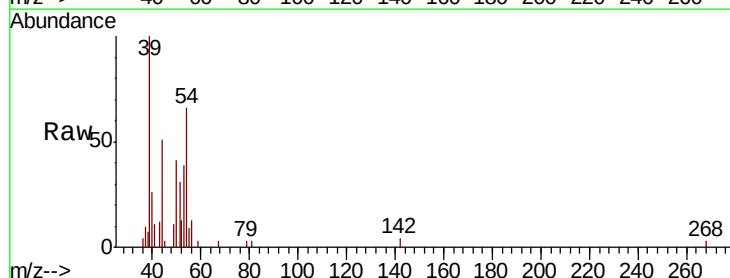
Acq: 27 Jul 2021 5:09

Tgt Ion: 39 Resp: 7860

Ion Ratio Lower Upper

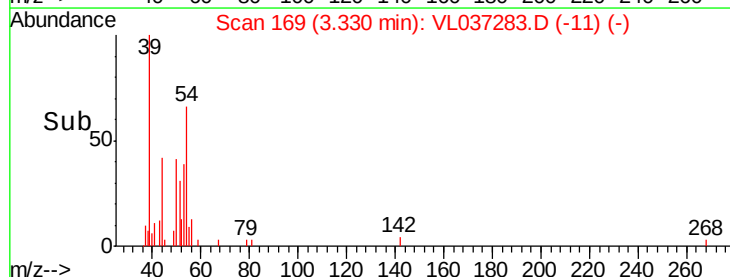
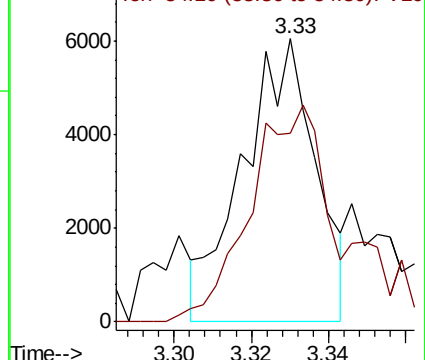
39 100

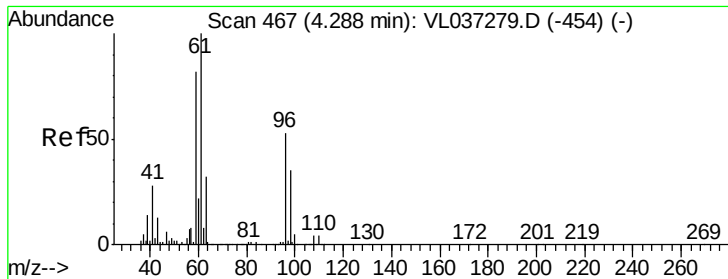
54 105.2 60.4 90.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

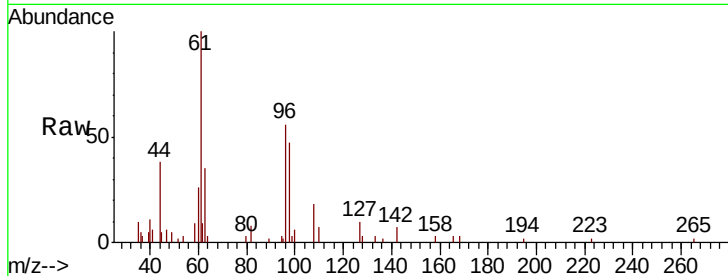




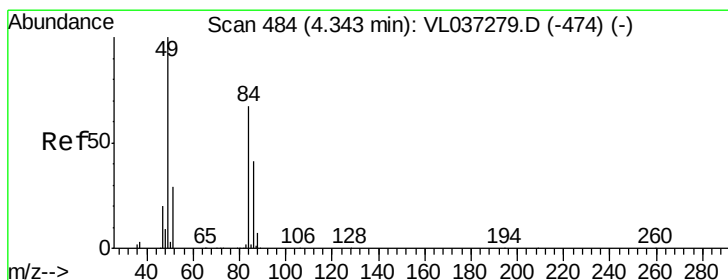
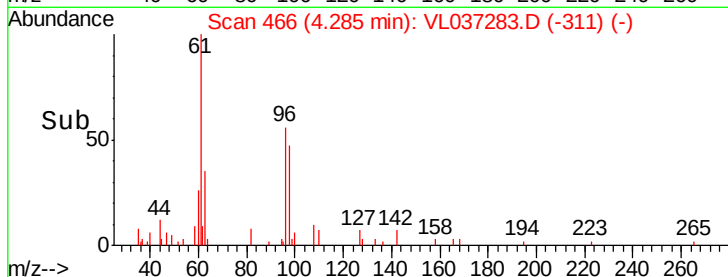
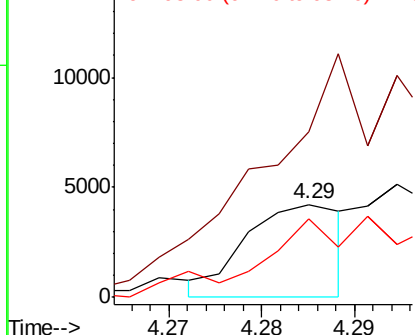
#18
 1,1-Dichloroethene
 Concen: 0.041 ppbv
 RT: 4.29 min Scan# 466
 Delta R.T. -0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Instrument :
 MSVOA_L
 ClientSampled :

Tot Ion: 96 Resp: 3110
 Ion Ratio Lower Upper
 96 100
 61 160.6 151.4 227.2
 98 68.1 52.4 78.6

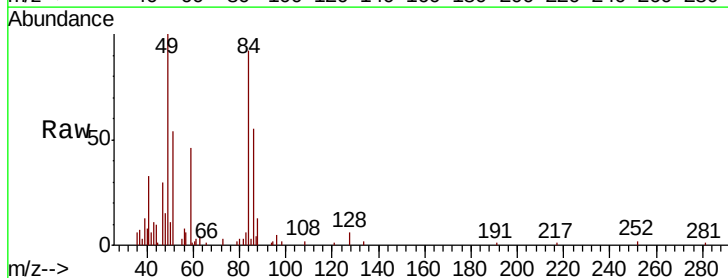


Abundance Ion 96.00 (95.70 to 96.70): VL0
 Ion 61.10 (60.80 to 61.80): VL0
 Ion 98.00 (97.70 to 98.70): VL0

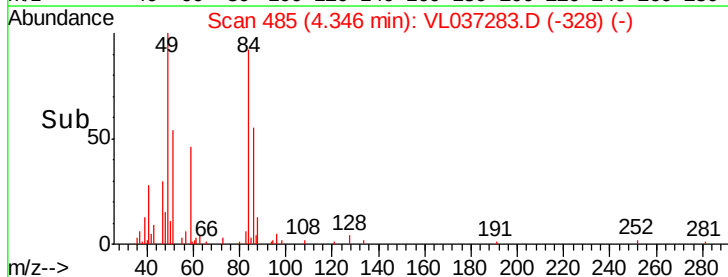
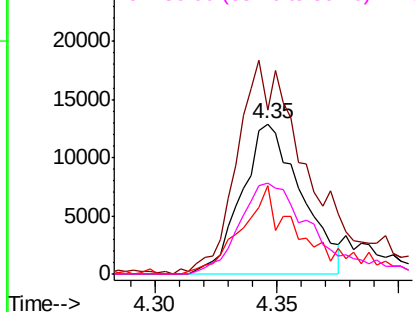


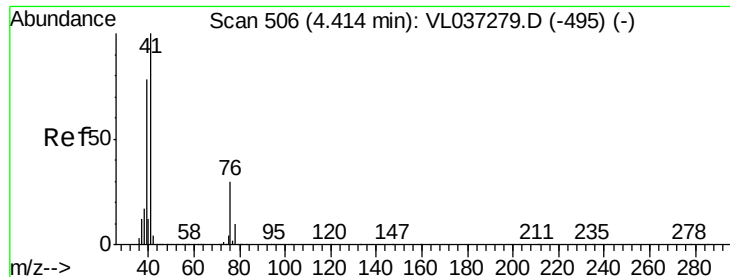
#20
 Methylene Chloride
 Concen: 0.250 ppbv
 RT: 4.35 min Scan# 485
 Delta R.T. 0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Tgt Ion: 84 Resp: 21852
 Ion Ratio Lower Upper
 84 100
 49 107.2 119.0 178.6#
 51 57.0 35.0 52.4#
 86 60.4 49.0 73.6



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

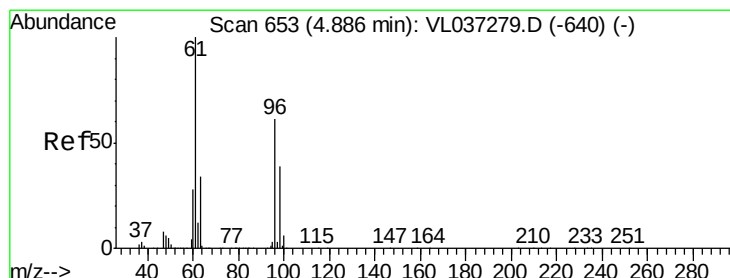
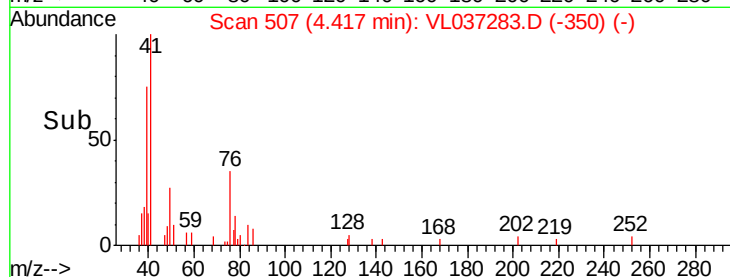
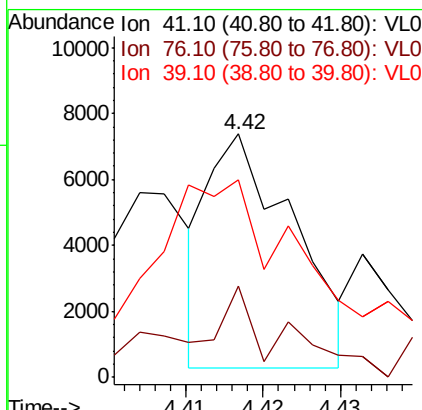
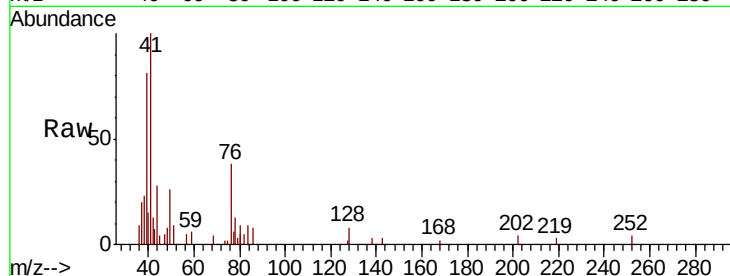




#21
Allvl Chloride
Concen: 0.050 ppbv
RT: 4.42 min Scan# 507
Delta R.T. 0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

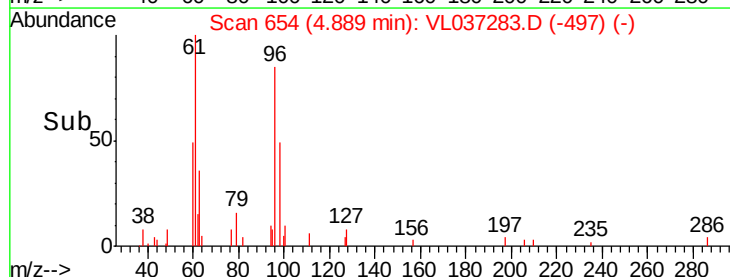
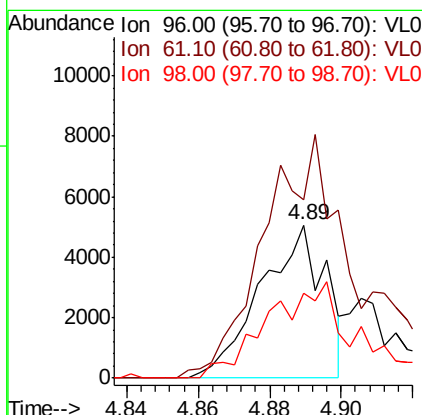
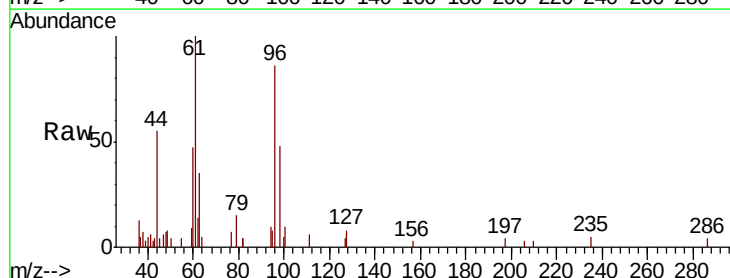
Instrument :
MSVOA_L
ClientSampled :

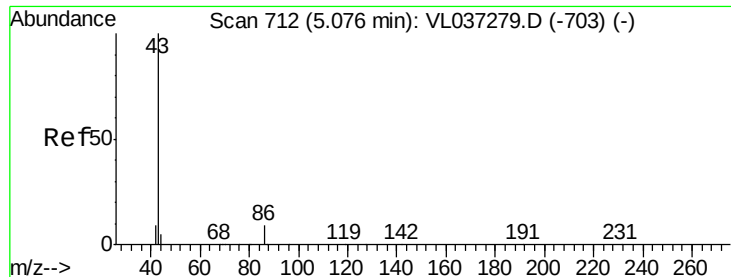
Tot Ion: 41 Resp: 5461
Ion Ratio Lower Upper
41 100
76 54.1 23.6 35.4#
39 218.9 63.8 95.6#



#22
trans-1,2-Dichloroethene
Concen: 0.085 ppbv
RT: 4.89 min Scan# 654
Delta R.T. 0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

Tgt Ion: 96 Resp: 6316
Ion Ratio Lower Upper
96 100
61 127.4 131.8 197.6#
98 55.2 51.4 77.2





#23

Vinyl Acetate

Concen: 0.081 ppbv

RT: 5.09 min Scan# 716

Delta R.T. 0.01 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 43 Resp: 16747

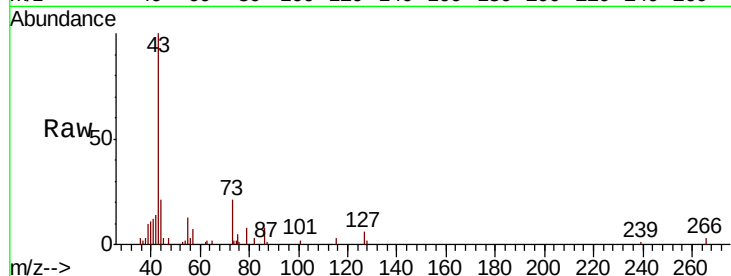
Ion Ratio Lower Upper

43 100

86 8.0 6.2 9.2

42 2.9 8.2 12.4#

44 2.4 3.7 5.5#

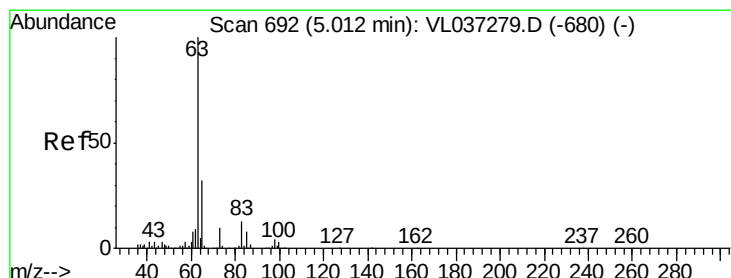
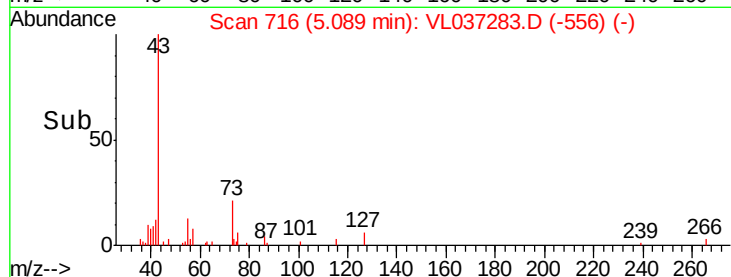
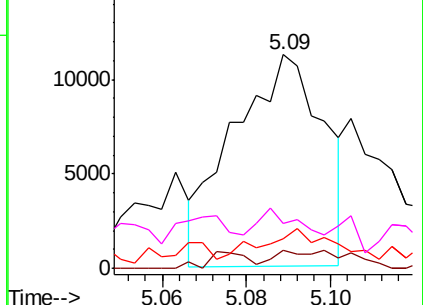


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.105 ppbv

RT: 5.01 min Scan# 693

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

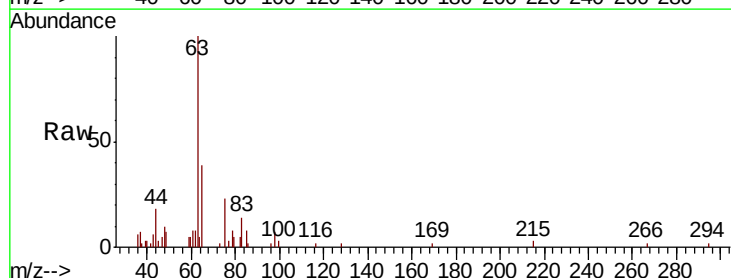
Tgt Ion: 63 Resp: 17536

Ion Ratio Lower Upper

63 100

98 4.6 2.4 7.1

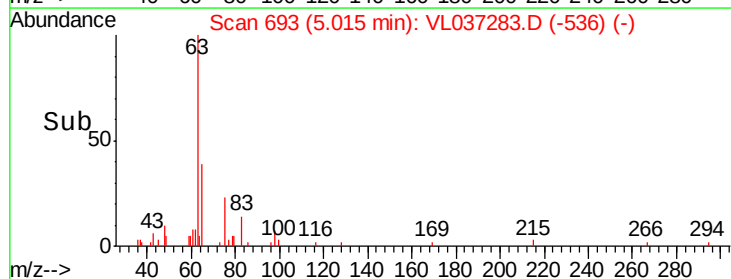
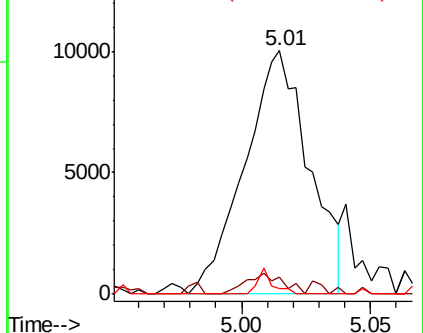
100 2.5 1.4 4.0

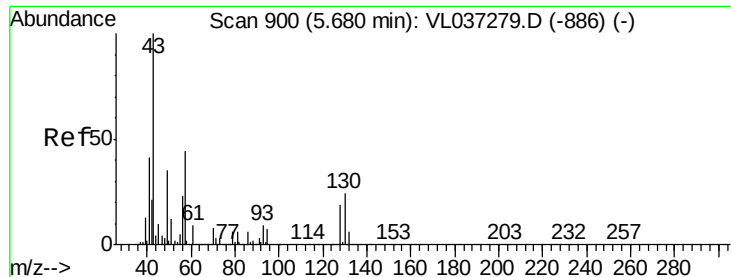


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

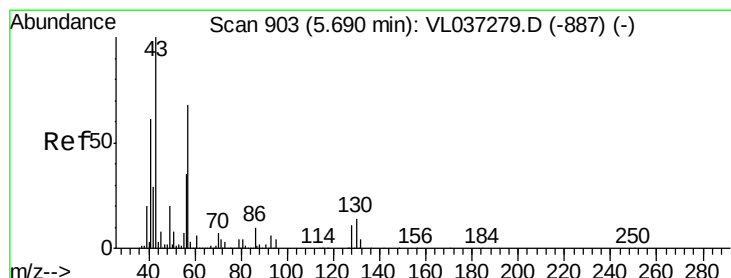
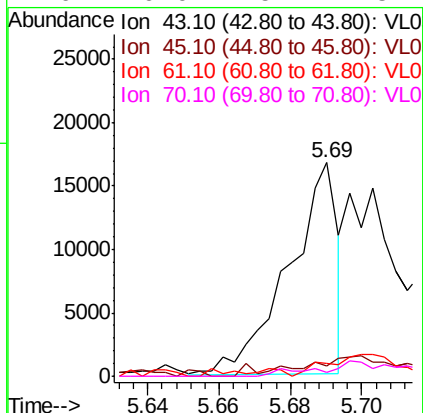
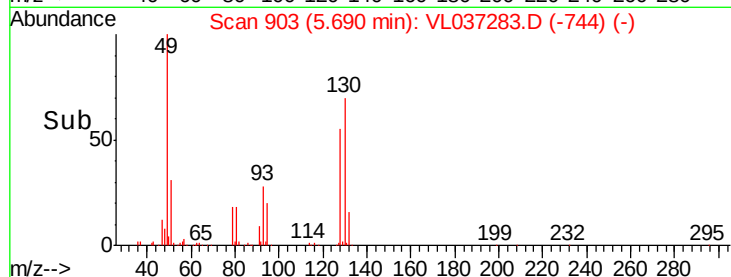
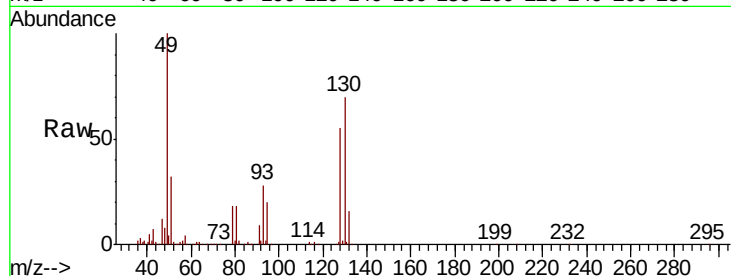




#25
Ethyl Acetate
Concen: 0.050 ppbv
RT: 5.69 min Scan# 903
Delta R.T. 0.01 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

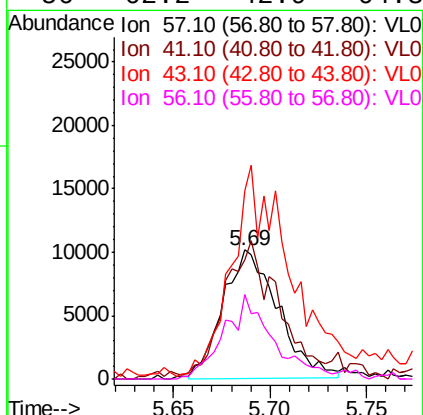
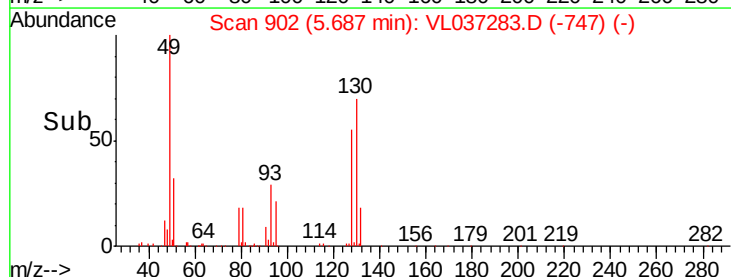
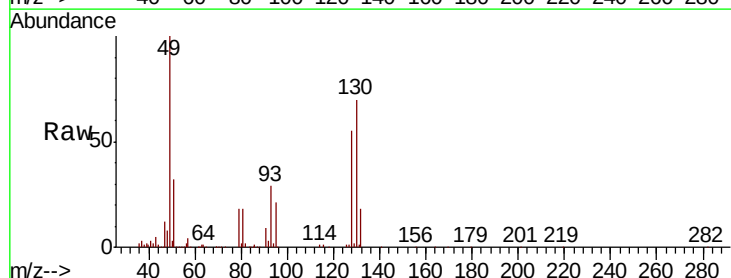
Instrument :
MSVOA_L
ClientSampled :

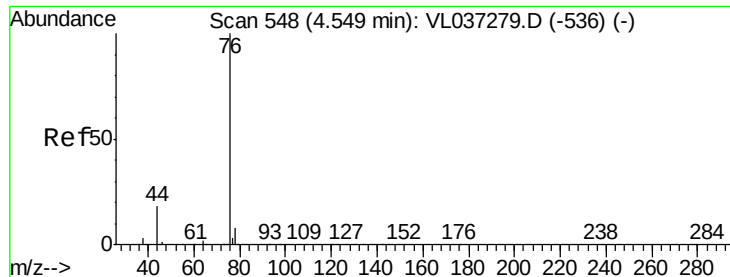
Tot Ion:	43	Resp:	15820
Ion	Ratio	Lower	Upper
43	100		
45	0.0	7.8	11.6#
61	0.0	8.0	12.0#
70	0.0	5.4	8.2#



#26
Hexane
Concen: 0.128 ppbv
RT: 5.69 min Scan# 902
Delta R.T. -0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

Tgt Ion:	57	Resp:	20171
Ion	Ratio	Lower	Upper
57	100		
41	116.5	75.7	113.5#
43	196.4	172.2	258.2
56	62.2	42.9	64.3





#27

Carbon Disulfide

Concen: 0.053 ppbv

RT: 4.56 min Scan# 550

Delta R.T. 0.01 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

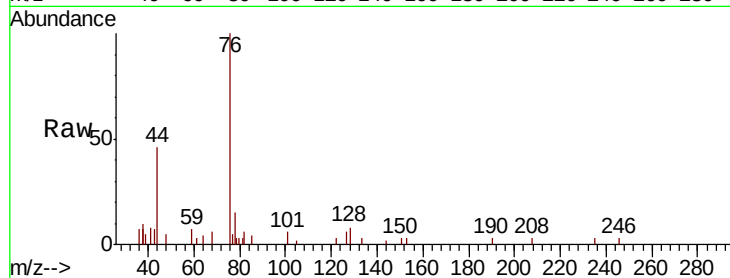
Tot Ion: 76 Resp: 8206

Ion Ratio Lower Upper

76 100

44 35.9 15.8 23.8#

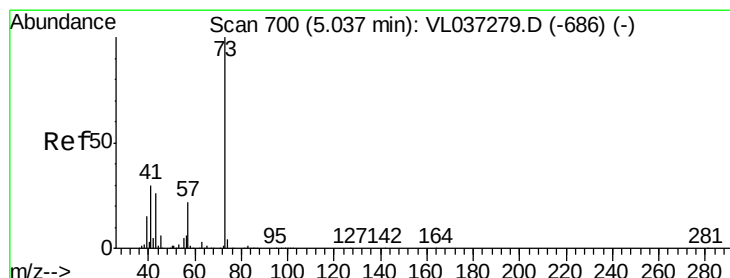
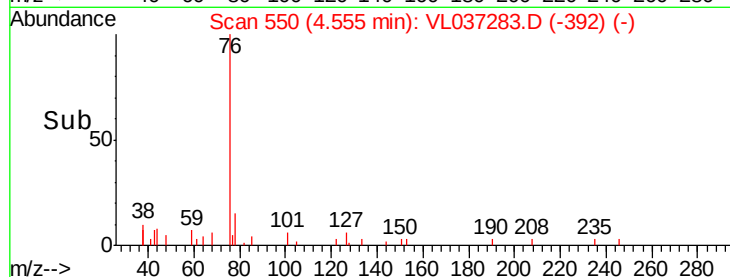
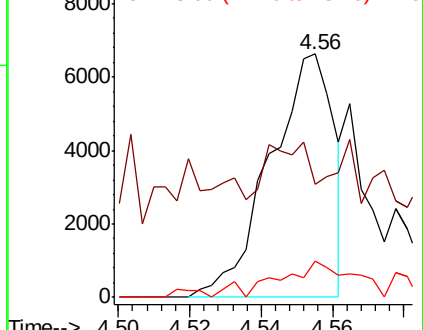
78 23.7 8.4 12.6#



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 0.093 ppbv

RT: 5.06 min Scan# 707

Delta R.T. 0.02 min

Lab File: VL037283.D

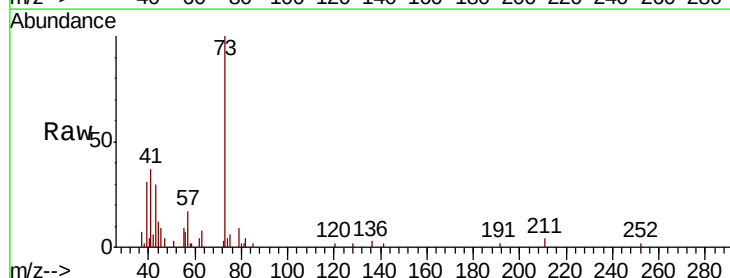
Acq: 27 Jul 2021 5:09

Tgt Ion: 73 Resp: 17737

Ion Ratio Lower Upper

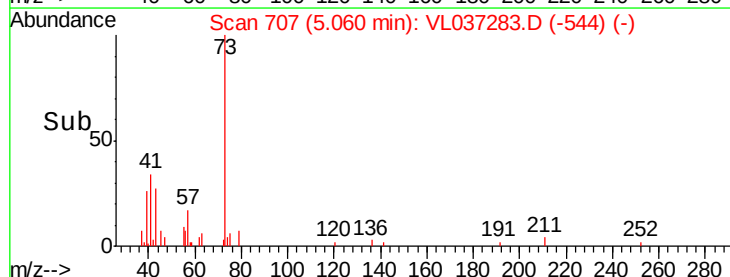
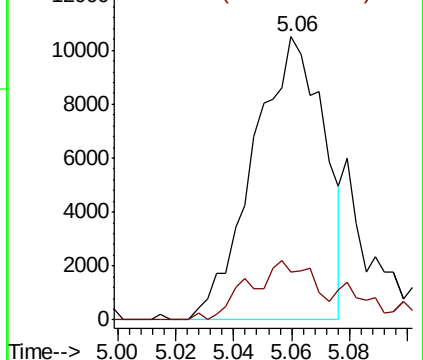
73 100

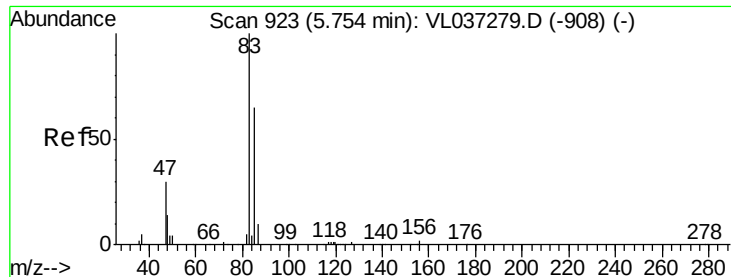
57 27.4 17.9 26.9#



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

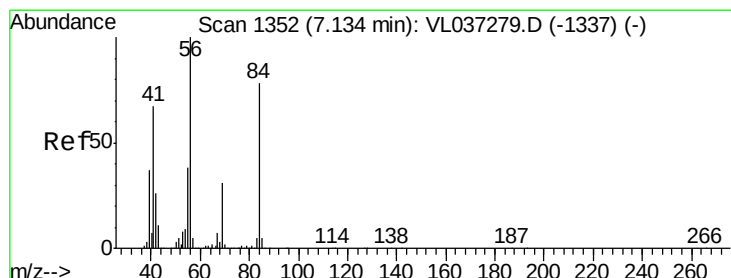
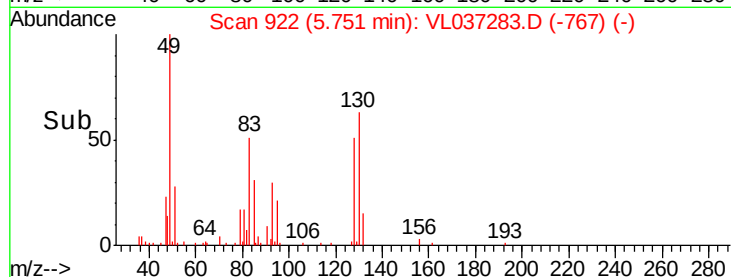
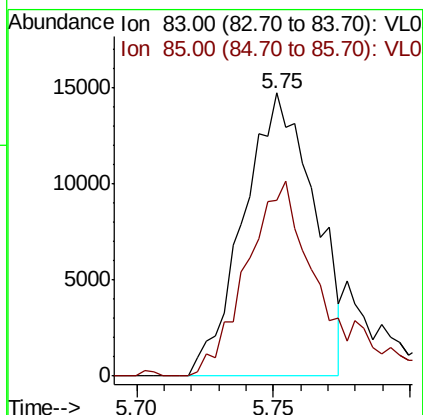
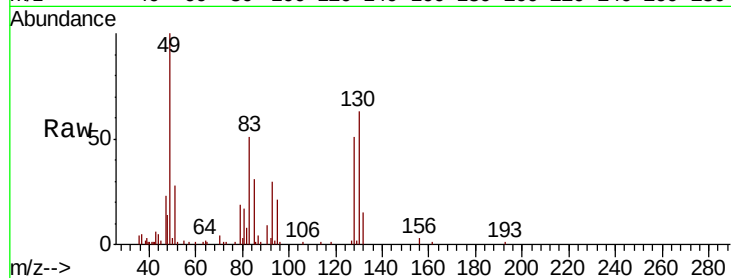




#29
Chloroform
Concen: 0.108 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

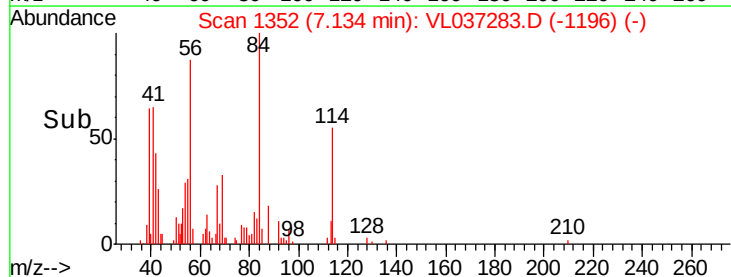
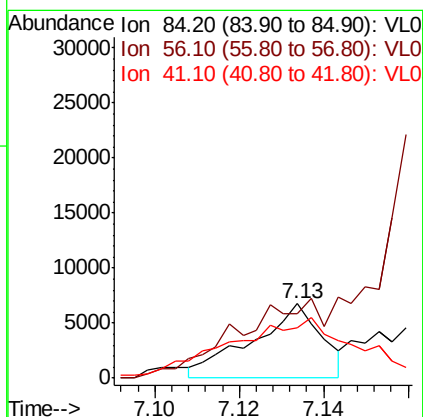
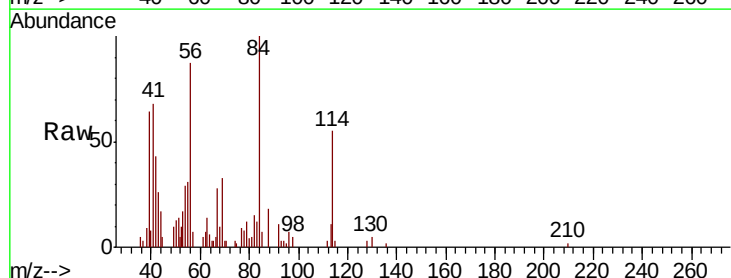
Instrument :
MSVOA_L
ClientSampled :

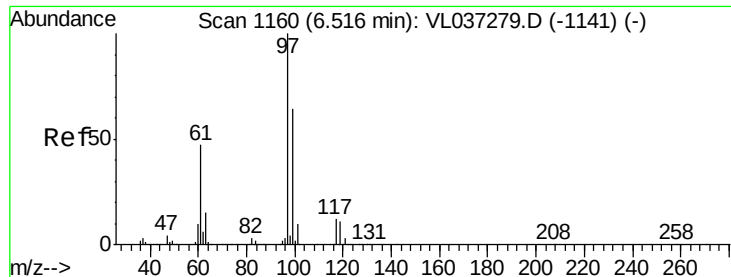
Tot Ion: 83 Resp: 26542
Ion Ratio Lower Upper
83 100
85 65.0 52.2 78.2



#30
Cyclohexane
Concen: 0.058 ppbv
RT: 7.13 min Scan# 1352
Delta R.T. 0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

Tgt Ion: 84 Resp: 7621
Ion Ratio Lower Upper
84 100
56 0.0 106.3 159.5#
41 155.5 68.6 103.0#





#32

1,1,1-Trichloroethane

Concen: 0.098 ppbv

RT: 6.52 min Scan# 1160

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

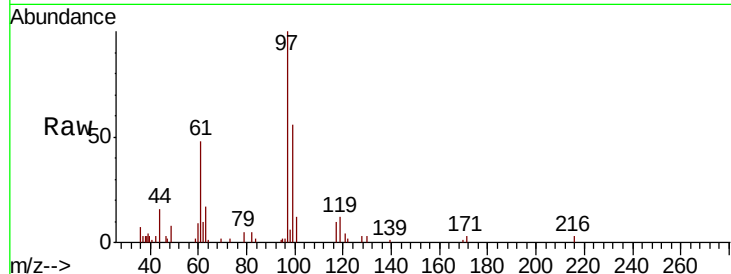
Tot Ion: 97 Resp: 25700

Ion Ratio Lower Upper

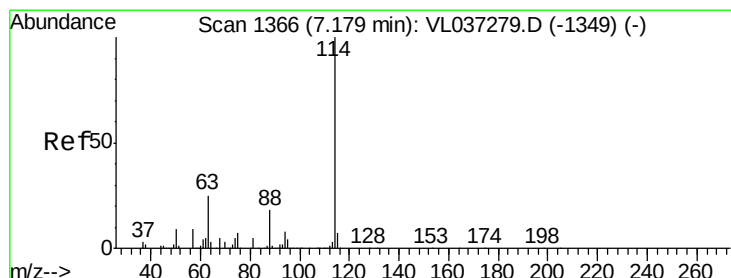
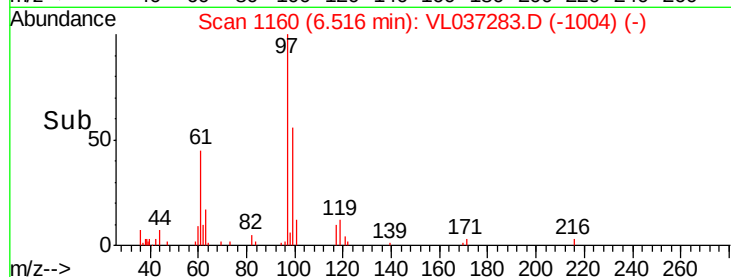
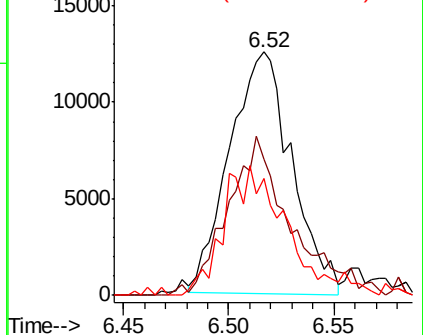
97 100

99 66.6 52.2 78.2

61 55.0 39.1 58.7



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

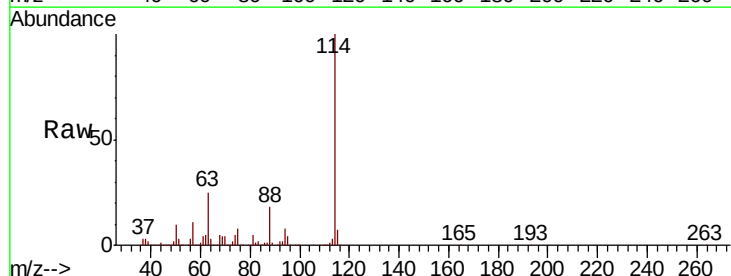
Tgt Ion: 114 Resp: 3719239

Ion Ratio Lower Upper

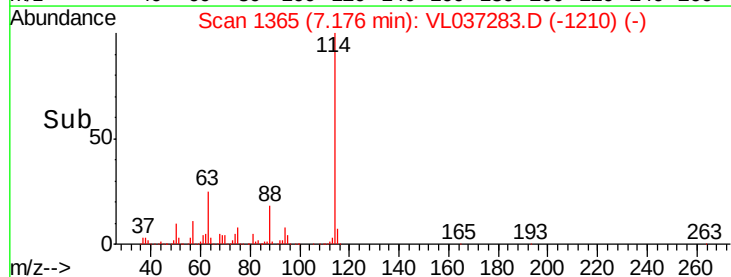
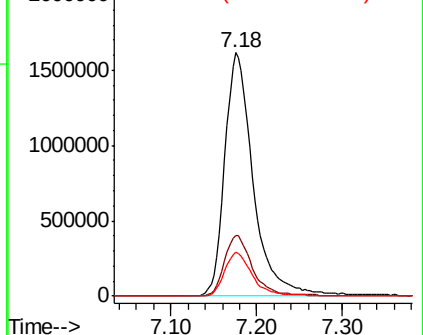
114 100

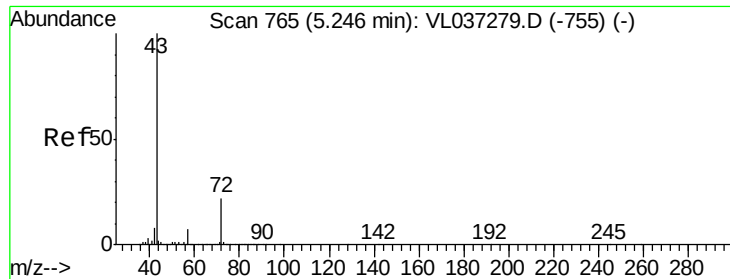
63 24.8 20.2 30.2

88 17.8 14.2 21.4



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: 0.092 ppbv

RT: 5.27 min Scan# 772

Delta R.T. 0.02 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

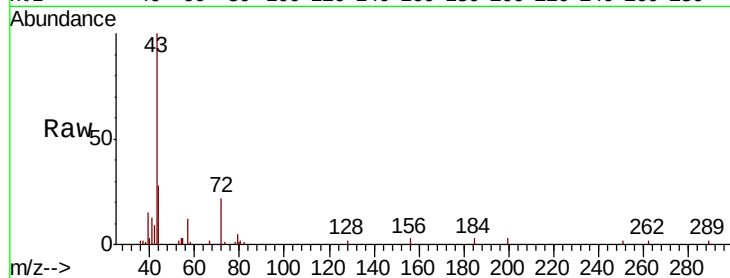
ClientSampled :

Tot Ion: 43 Resp: 13509

Ion Ratio Lower Upper

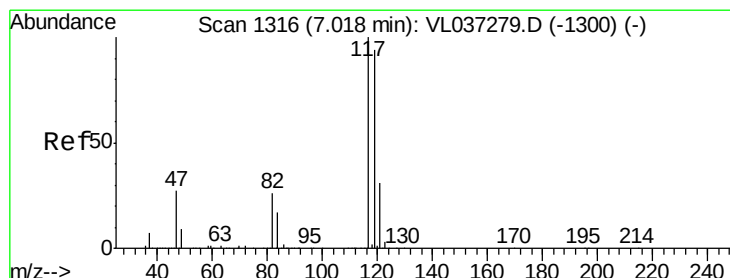
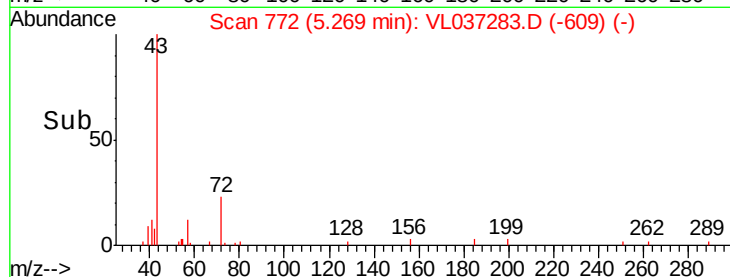
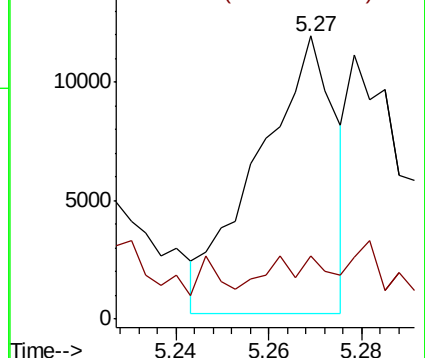
43 100

72 0.0 17.9 26.9#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.042 ppbv

RT: 7.01 min Scan# 1315

Delta R.T. -0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

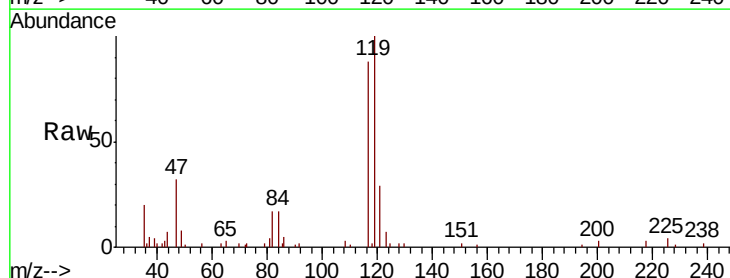
Tgt Ion: 117 Resp: 10741

Ion Ratio Lower Upper

117 100

119 119.8 75.4 113.0#

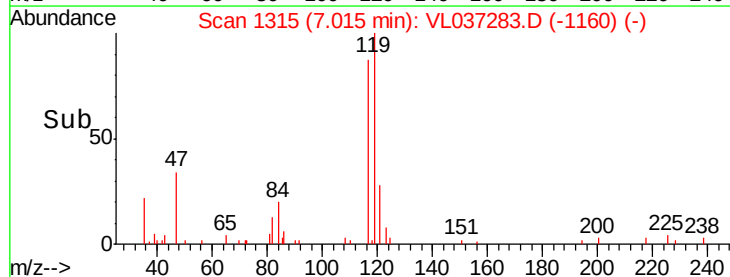
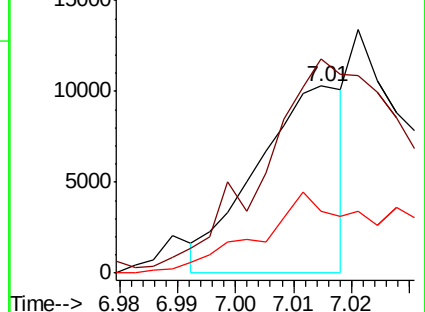
121 32.7 24.8 37.2

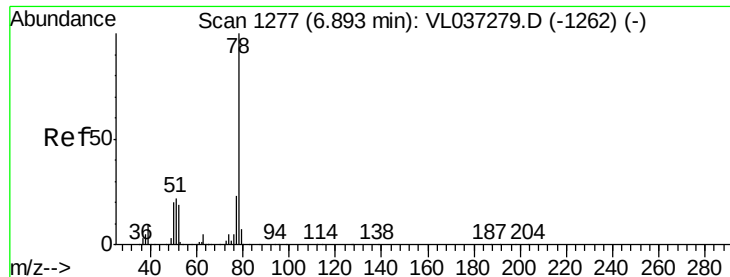


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V





#36

Benzene

Concen: 0.097 ppbv

RT: 6.89 min Scan# 1277

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

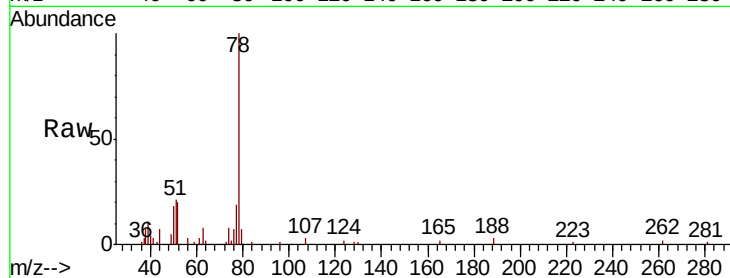
Tot Ion: 78 Resp: 29424

Ion Ratio Lower Upper

78 100

77 17.3 18.5 27.7#

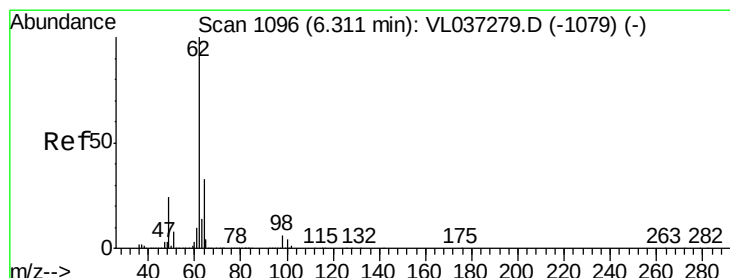
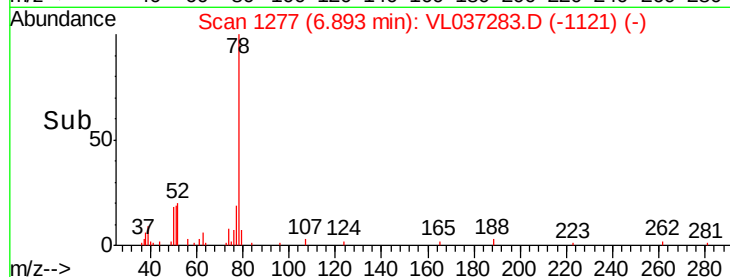
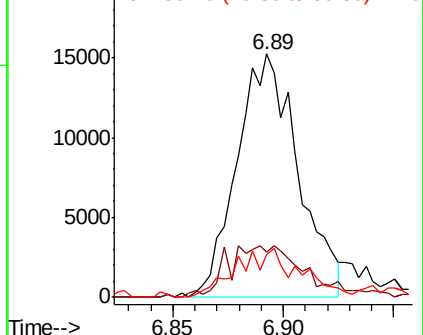
50 17.7 16.2 24.4



Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0



#37

1,2-Dichloroethane

Concen: 0.057 ppbv

RT: 6.31 min Scan# 1095

Delta R.T. -0.00 min

Lab File: VL037283.D

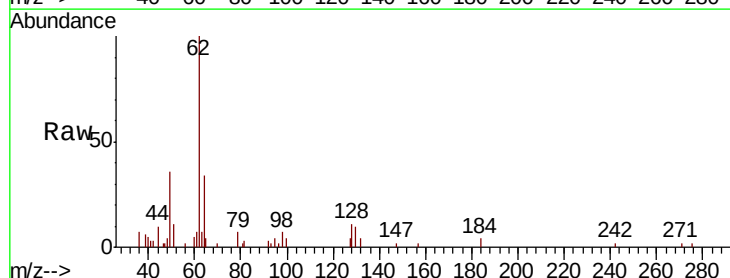
Acq: 27 Jul 2021 5:09

Tgt Ion: 62 Resp: 10110

Ion Ratio Lower Upper

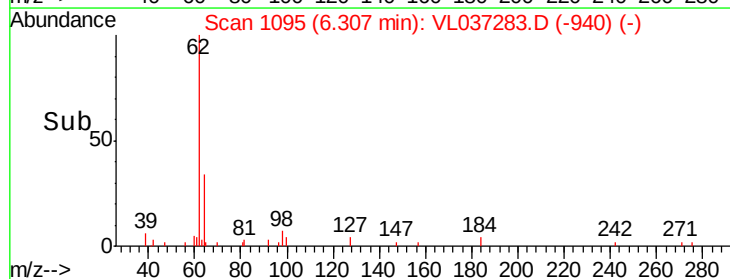
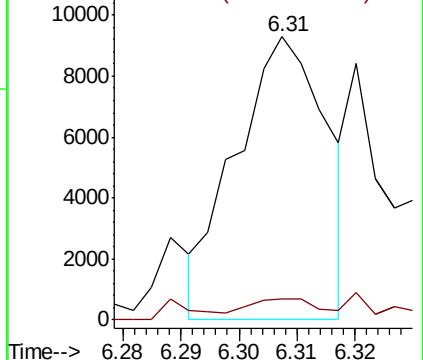
62 100

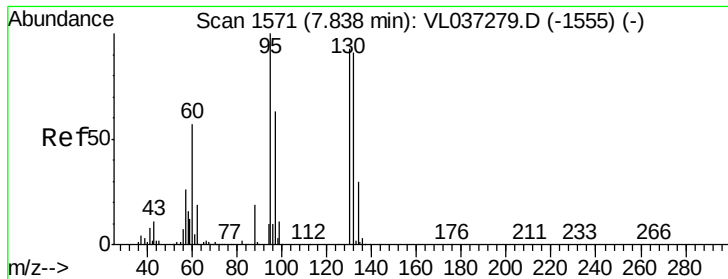
98 0.0 4.9 7.3#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

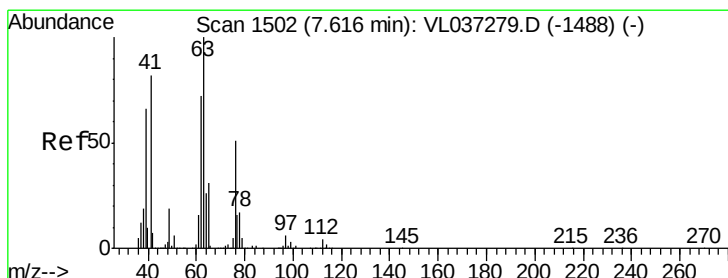
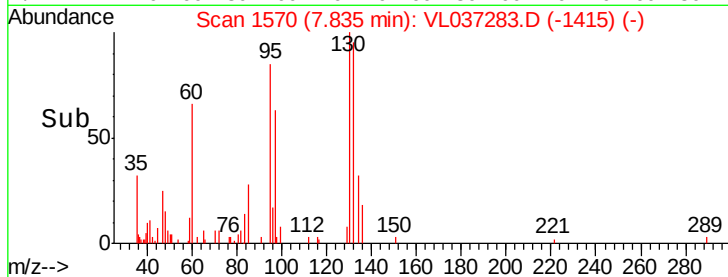
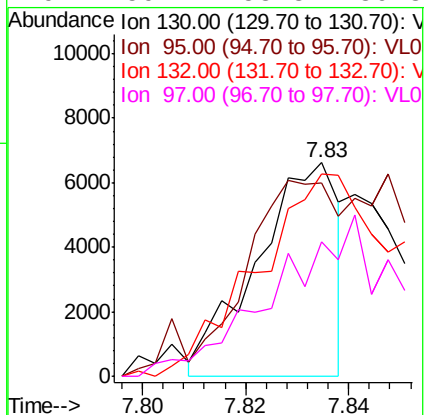
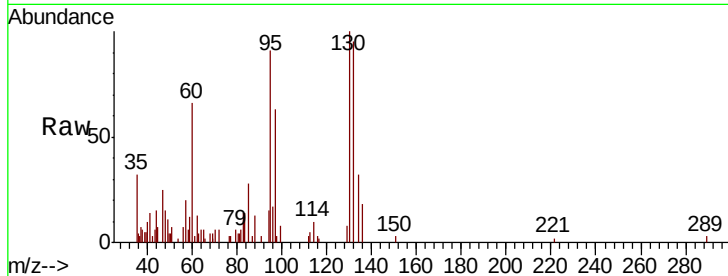




#38
 Trichloroethene
 Concen: 0.050 ppbv
 RT: 7.83 min Scan# 1570
 Delta R.T. -0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

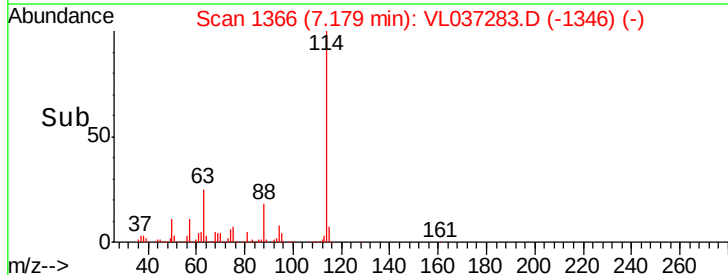
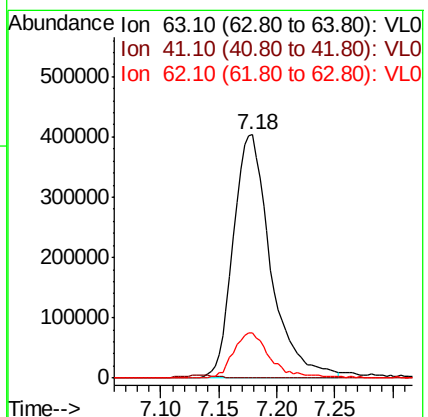
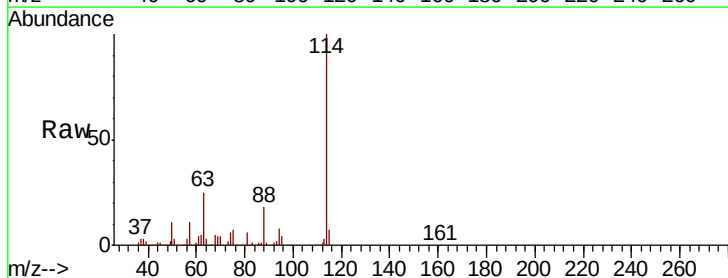
Instrument :
 MSVOA_L
 ClientSampleId :

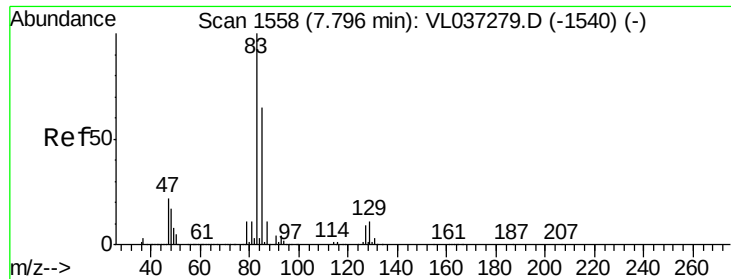
Tot Ion:	130	Resp:	7252
Ion	Ratio	Lower	Upper
130	100		
95	90.4	86.2	129.2
132	90.4	78.0	117.0
97	59.7	53.8	80.8



#39
 1,2-Dichloropropane
 Concen: 8.045 ppbv
 RT: 7.18 min Scan# 1366
 Delta R.T. -0.44 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Tgt Ion:	63	Resp:	904839
Ion	Ratio	Lower	Upper
63	100		
41	0.0	65.6	98.4#
62	18.6	57.9	86.9#





#42

Bromodichloromethane

Concen: 0.053 ppbv

RT: 7.79 min Scan# 1557

Delta R.T. -0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

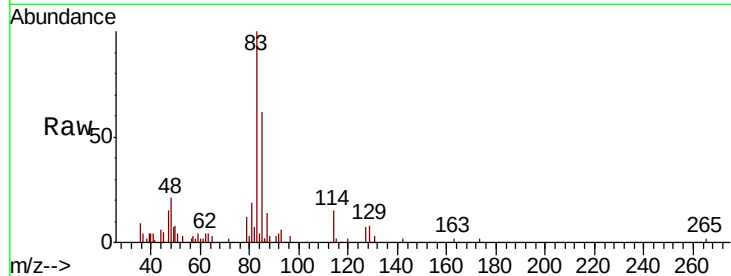
Tot Ion: 83 Resp: 12841

Ion Ratio Lower Upper

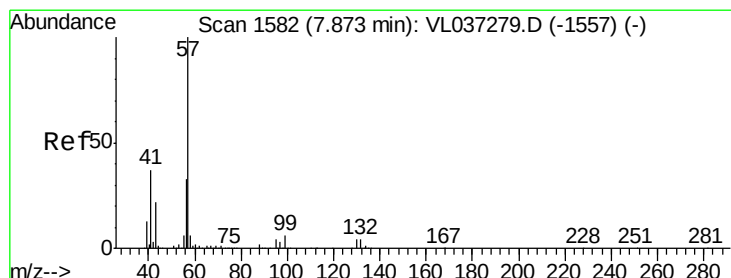
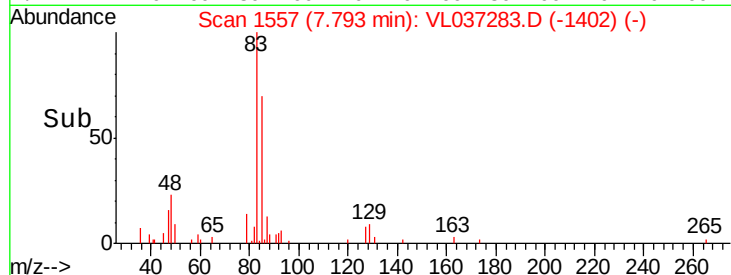
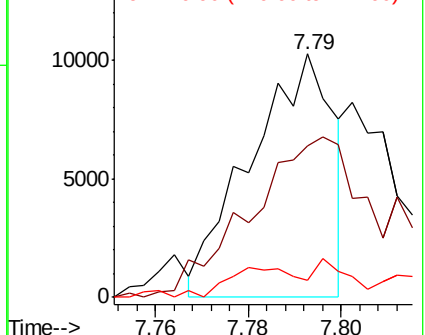
83 100

85 51.1 51.7 77.5#

127 4.9 7.4 11.0#



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



#44

2,2,4-Trimethylpentane

Concen: 0.069 ppbv

RT: 7.87 min Scan# 1582

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

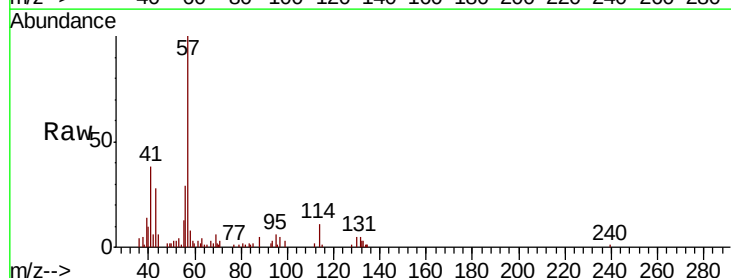
Tgt Ion: 57 Resp: 35129

Ion Ratio Lower Upper

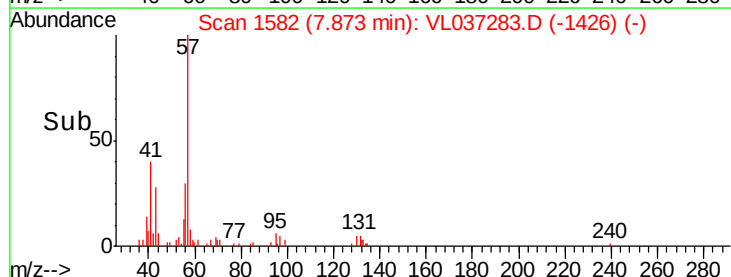
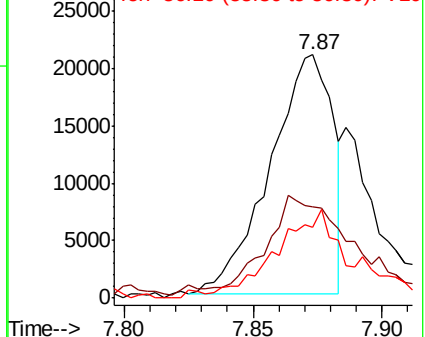
57 100

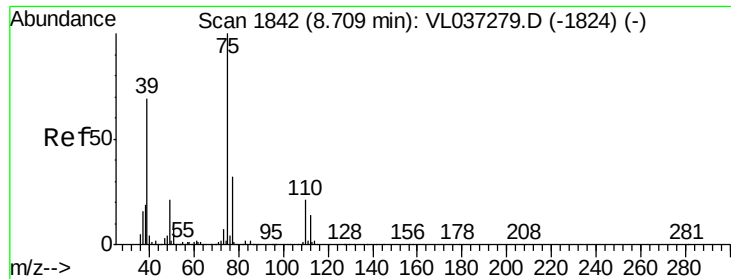
41 61.3 28.9 43.3#

56 50.0 25.1 37.7#



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





#46

cis-1,3-Dichloropropene

Concen: 0.044 ppbv

RT: 8.70 min Scan# 1840

Delta R.T. -0.01 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

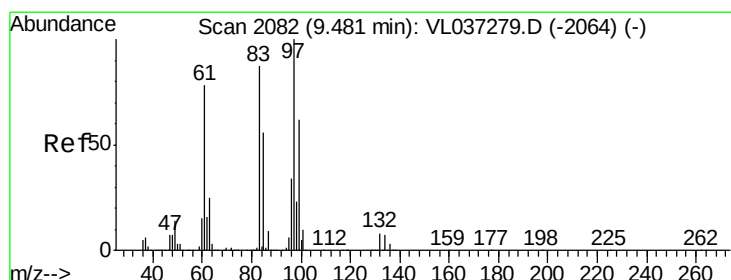
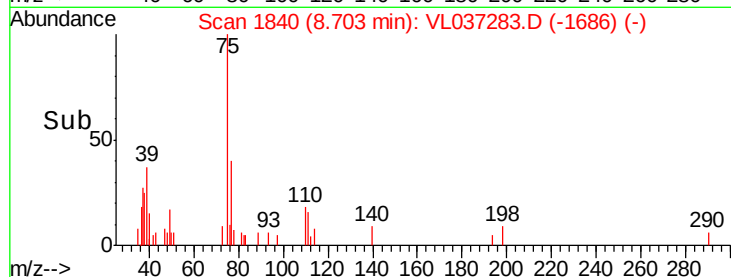
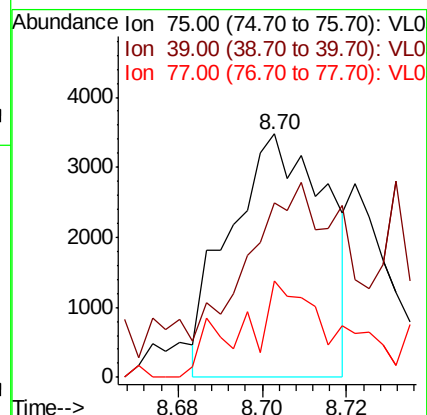
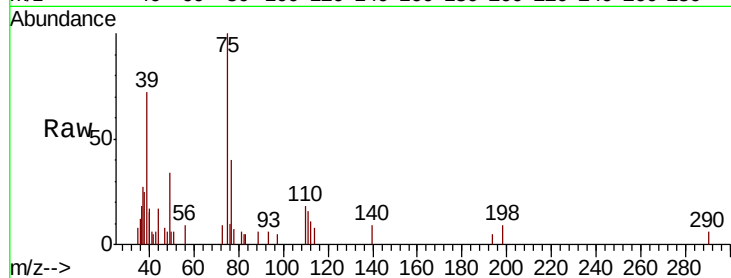
Tot Ion: 75 Resp: 5514

Ion Ratio Lower Upper

75 100

39 65.5 55.3 82.9

77 40.7 25.7 38.5#



#47

1,1,2-Trichloroethane

Concen: 0.049 ppbv

RT: 9.48 min Scan# 2081

Delta R.T. -0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Tgt Ion: 97 Resp: 6256

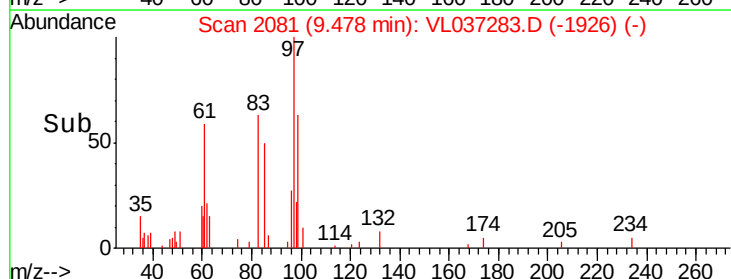
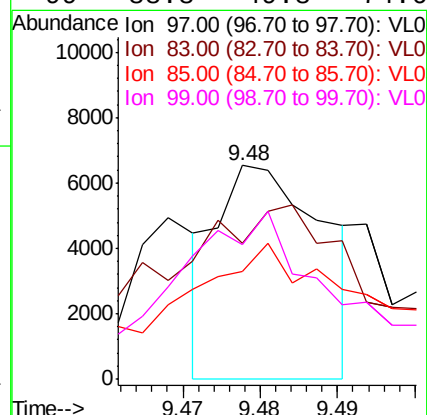
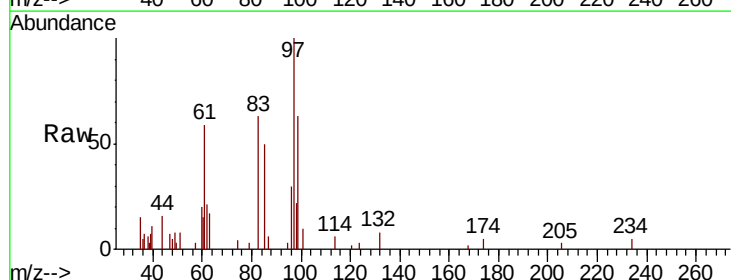
Ion Ratio Lower Upper

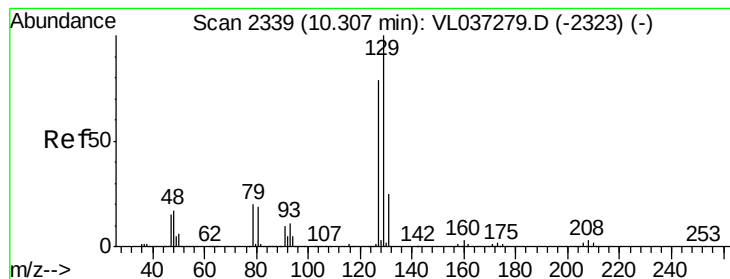
97 100

83 25.4 69.8 104.8#

85 26.3 44.9 67.3#

99 88.8 49.8 74.6#





#48

Dibromochloromethane

Concen: 0.048 ppbv

RT: 10.31 min Scan# 2339

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

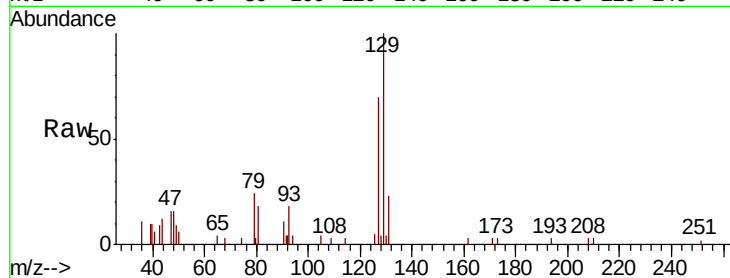
ClientSampleId :

Tot Ion:129 Resp: 9730

Ion Ratio Lower Upper

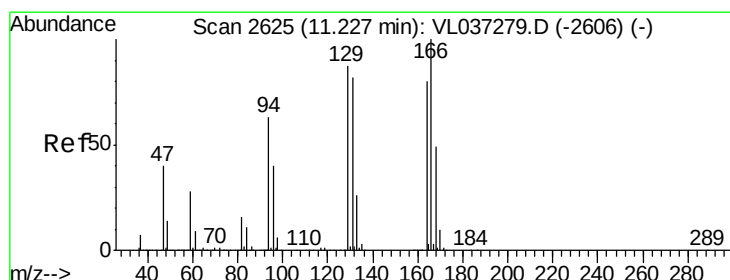
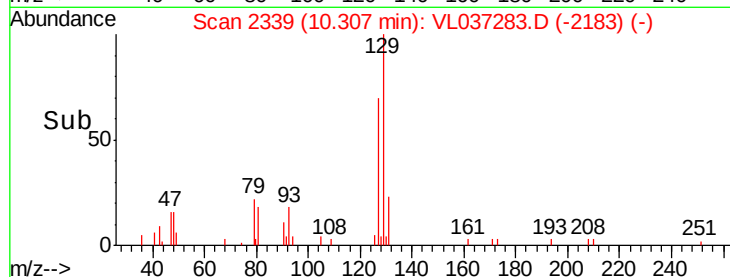
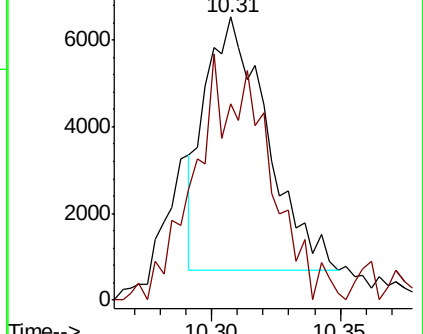
129 100

127 112.5 39.3 117.8



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#52

Tetrachloroethene

Concen: 0.035 ppbv

RT: 11.22 min Scan# 2622

Delta R.T. -0.01 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Tgt Ion:164 Resp: 4943

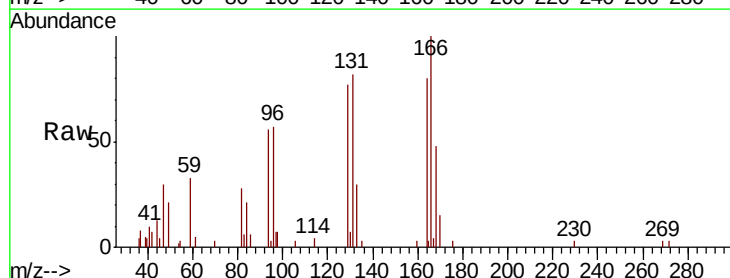
Ion Ratio Lower Upper

164 100

166 98.9 100.6 151.0#

129 85.5 87.8 131.6#

131 89.0 82.6 123.8

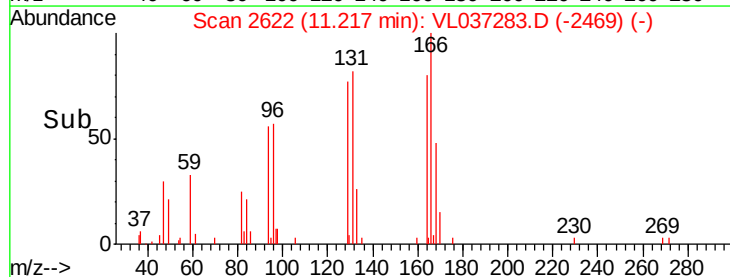
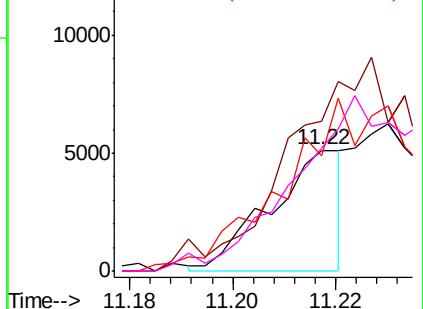


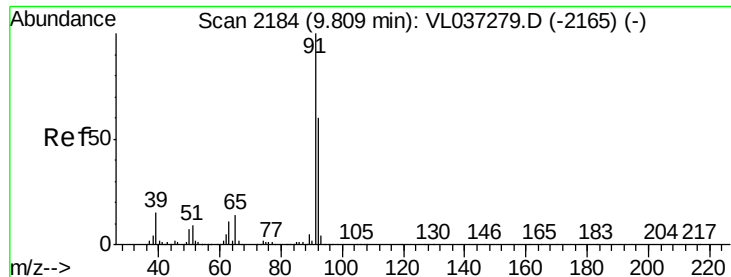
Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.046 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

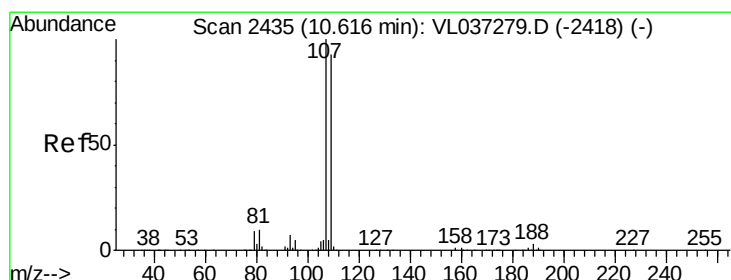
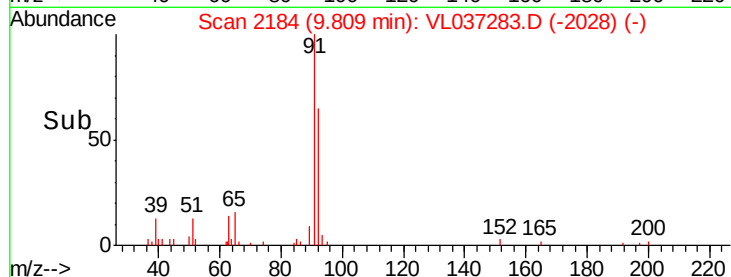
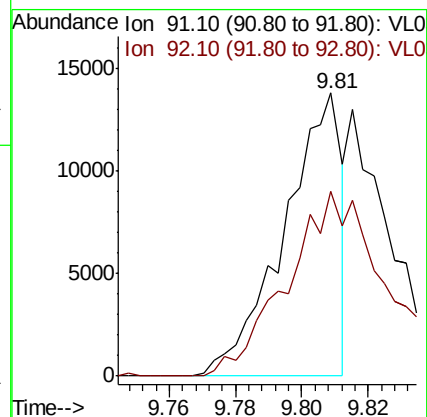
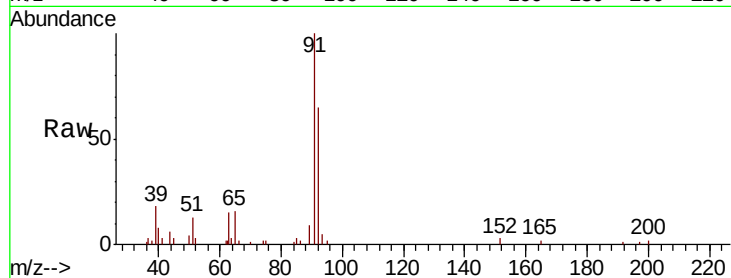
ClientSampleId :

Tot Ion: 91 Resp: 16619

Ion Ratio Lower Upper

91 100

92 113.9 48.1 72.1#



#54

1,2-Dibromoethane

Concen: 0.049 ppbv

RT: 10.62 min Scan# 2436

Delta R.T. 0.00 min

Lab File: VL037283.D

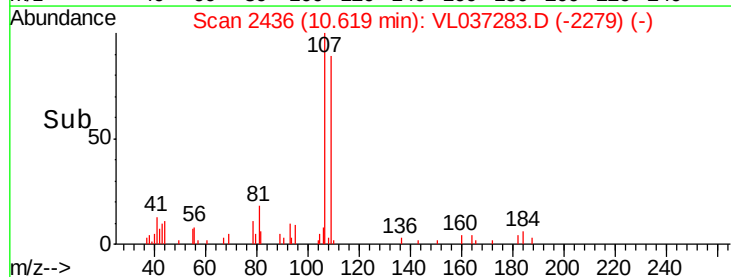
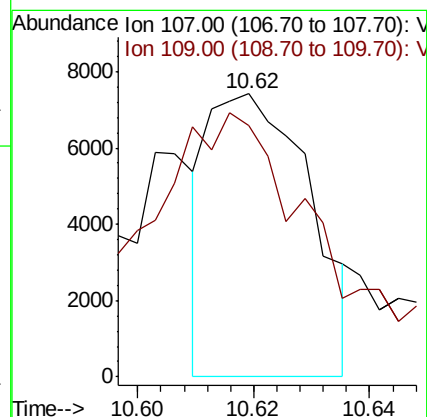
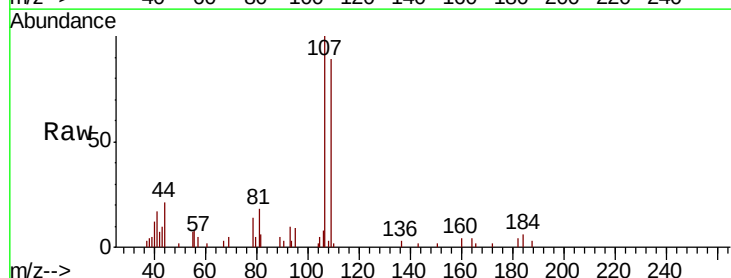
Acq: 27 Jul 2021 5:09

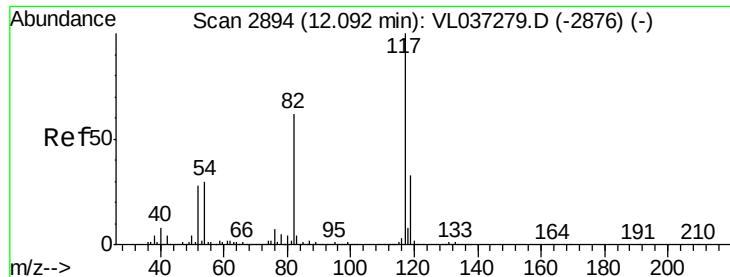
Tgt Ion: 107 Resp: 9010

Ion Ratio Lower Upper

107 100

109 110.2 74.2 111.4

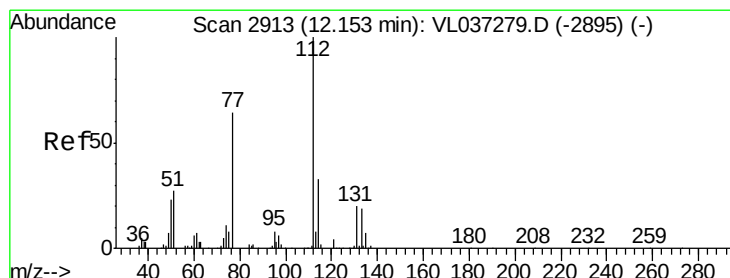
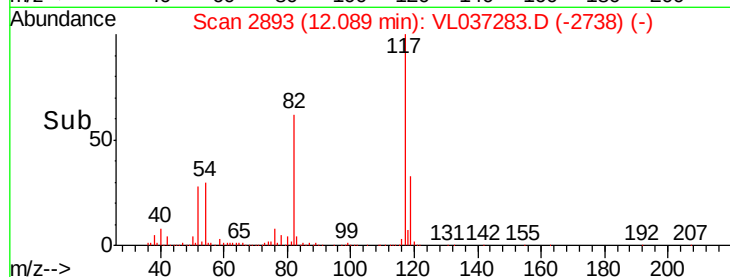
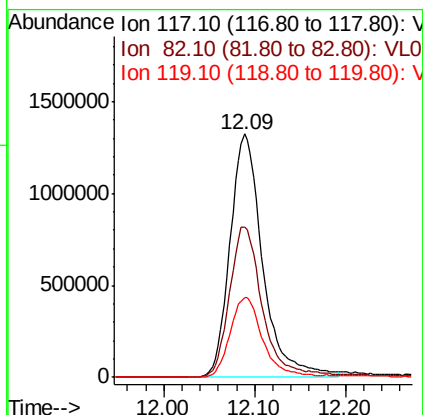
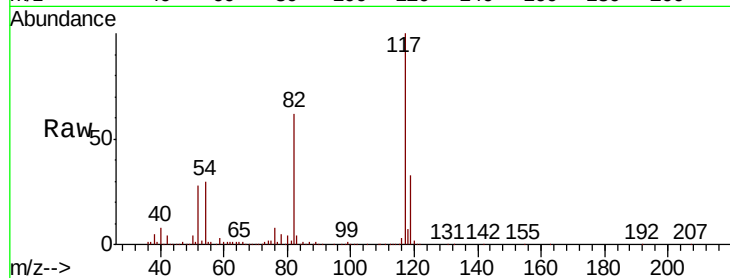




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2893
Delta R.T. -0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

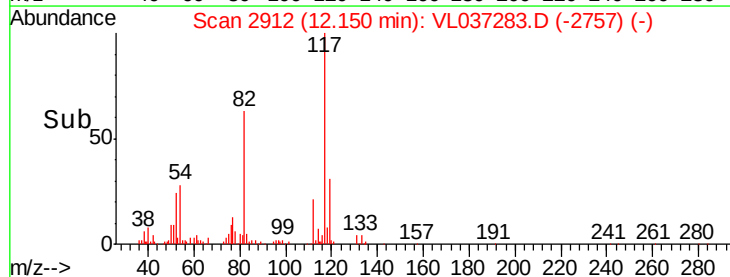
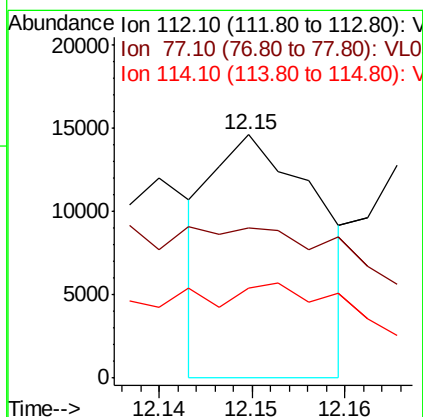
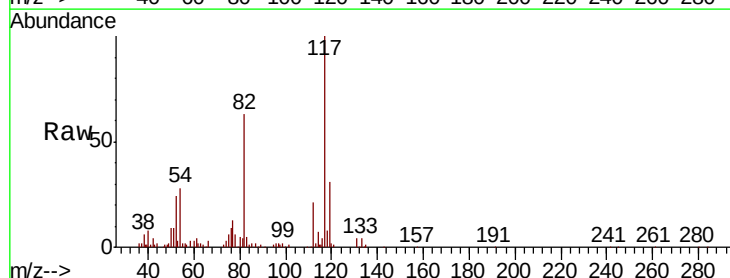
Instrument :
MSVOA_L
ClientSampleId :

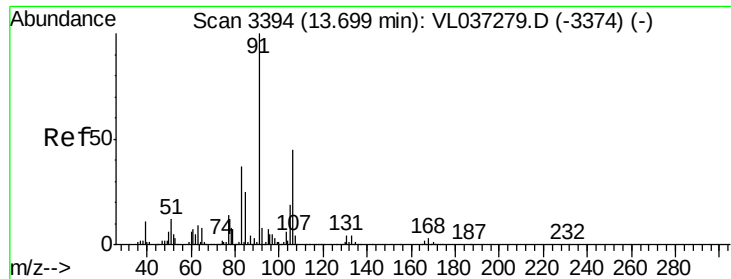
Tot Ion:117 Resp: 3309133
Ion Ratio Lower Upper
117 100
82 64.6 52.3 78.5
119 33.7 26.5 39.7



#57
Chlorobenzene
Concen: 0.043 ppbv
RT: 12.15 min Scan# 2912
Delta R.T. -0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

Tgt Ion:112 Resp: 11708
Ion Ratio Lower Upper
112 100
77 12.0 51.7 77.5#
114 6.2 29.3 35.9#





#60

o-Xylene

Concen: 0.055 ppbv

RT: 13.70 min Scan# 3393

Delta R.T. -0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

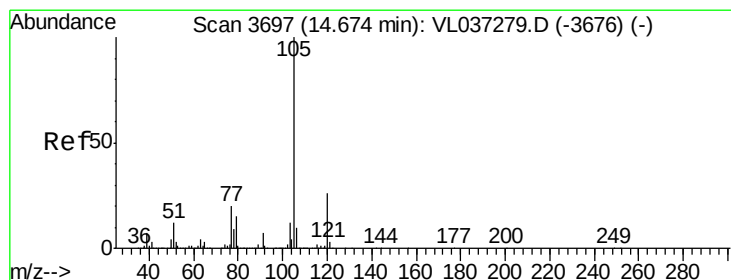
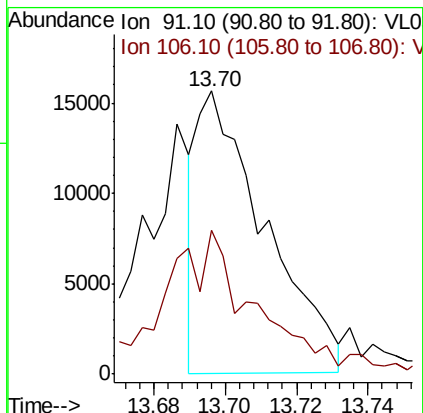
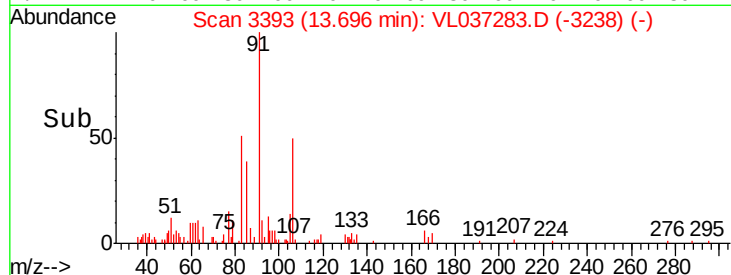
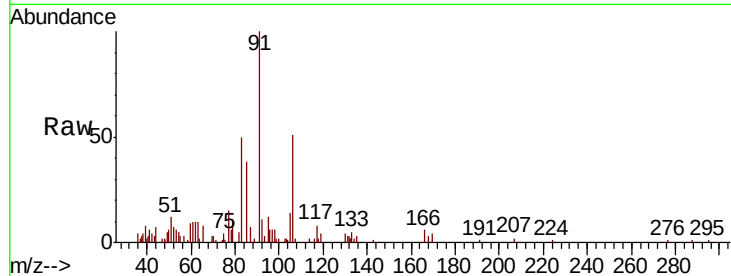
ClientSampleId :

Tot Ion: 91 Resp: 20624

Ion Ratio Lower Upper

91 100

106 75.3 22.6 67.8#



#62

Isopropylbenzene

Concen: 0.086 ppbv

RT: 14.67 min Scan# 3697

Delta R.T. 0.00 min

Lab File: VL037283.D

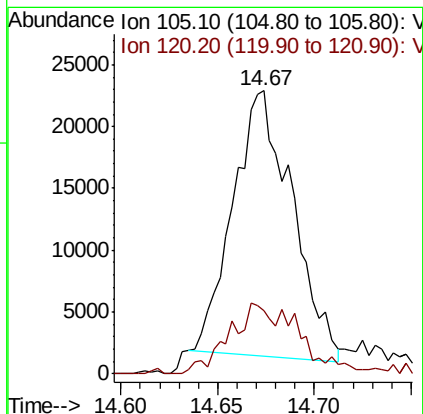
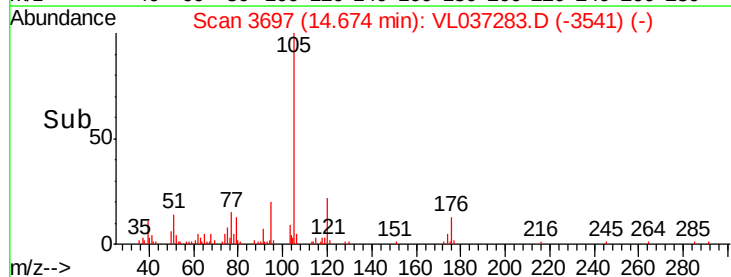
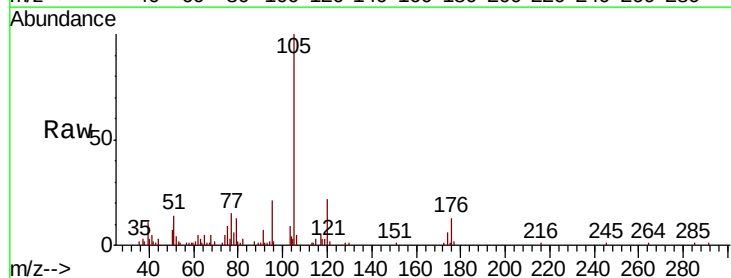
Acq: 27 Jul 2021 5:09

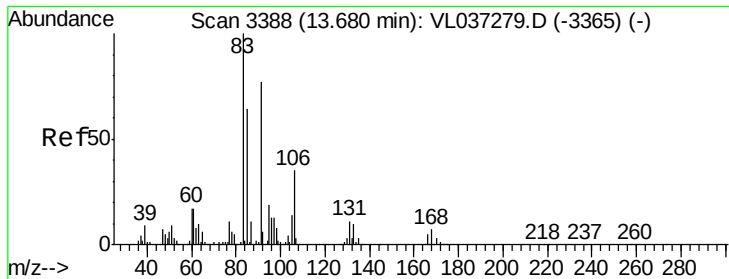
Tgt Ion: 105 Resp: 45861

Ion Ratio Lower Upper

105 100

120 31.4 21.3 31.9





#63

1,1,2,2-Tetrachloroethane

Concen: 0.048 ppbv

RT: 13.68 min Scan# 3388

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

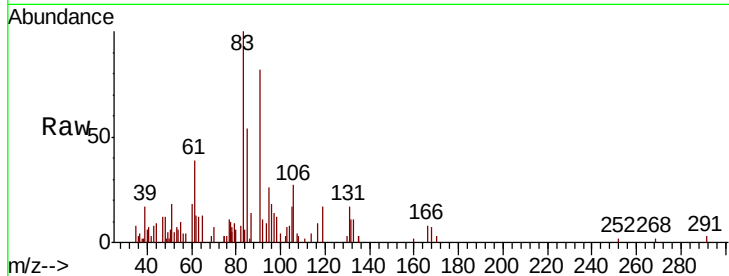
Tot Ion: 83 Resp: 11969

Ion Ratio Lower Upper

83 100

131 0.0 5.4 16.2#

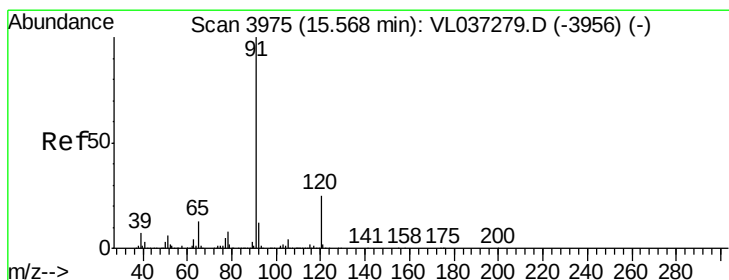
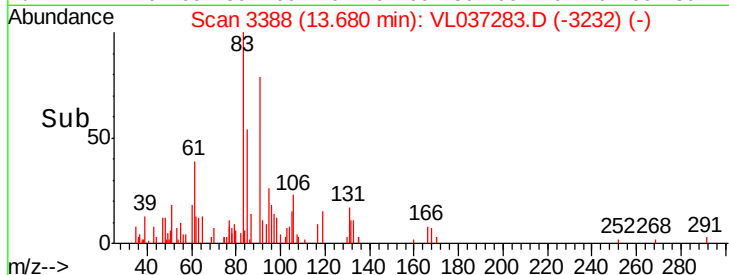
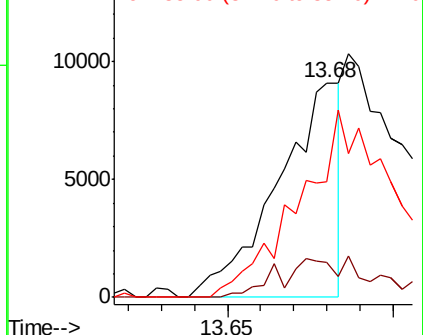
85 0.0 33.4 100.2#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 0.034 ppbv

RT: 15.56 min Scan# 3974

Delta R.T. -0.00 min

Lab File: VL037283.D

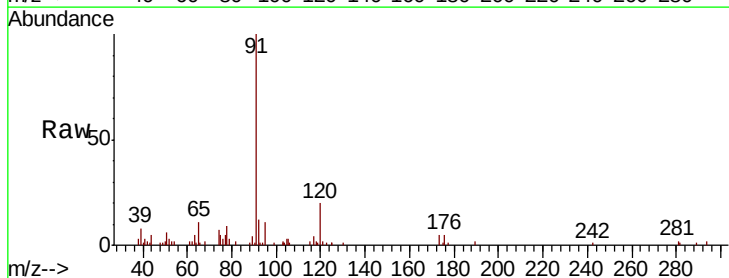
Acq: 27 Jul 2021 5:09

Tgt Ion:120 Resp: 4497

Ion Ratio Lower Upper

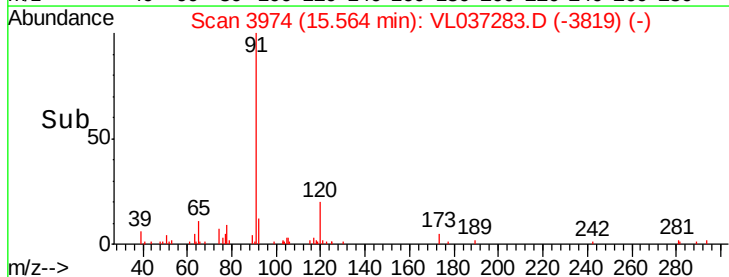
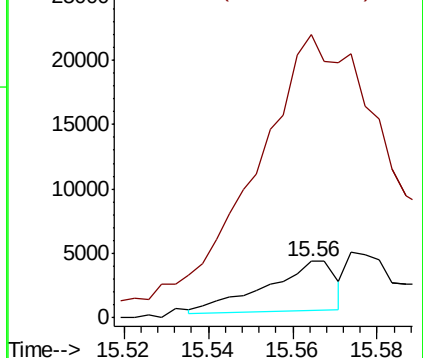
120 100

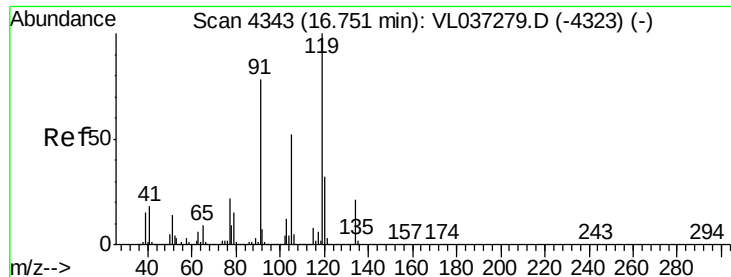
91 1316.2 353.8 530.8#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





#65

tert-Butylbenzene

Concen: 0.030 ppbv

RT: 16.75 min Scan# 4344

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

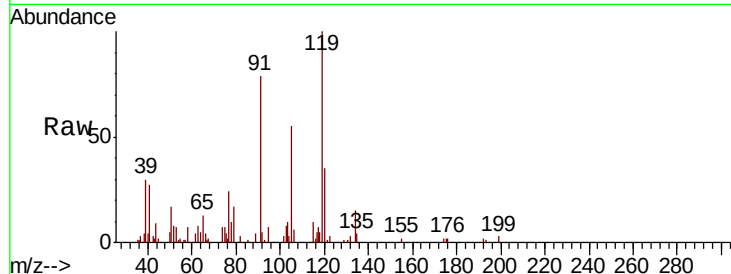
Tot Ion:119 Resp: 14397

Ion Ratio Lower Upper

119 100

91 282.6 63.4 95.0#

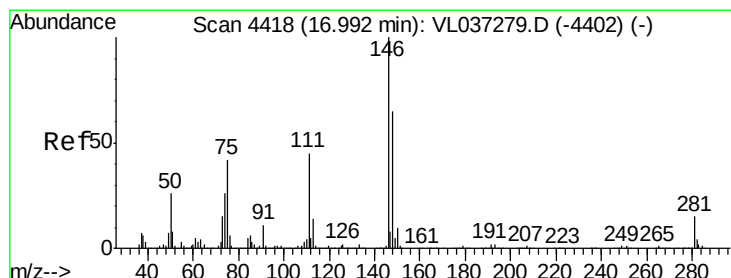
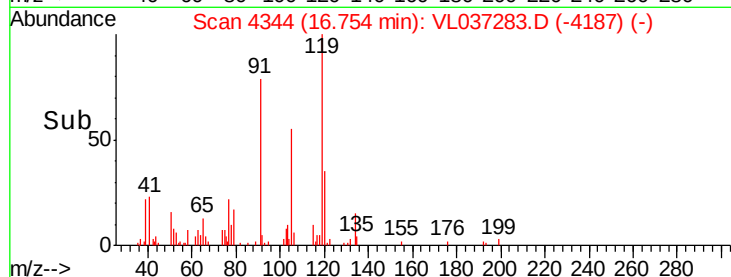
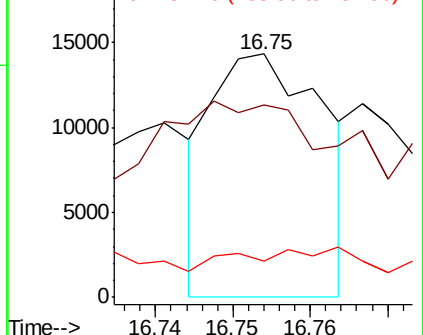
134 0.0 16.1 24.1#



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 0.035 ppbv

RT: 16.99 min Scan# 4416

Delta R.T. -0.01 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

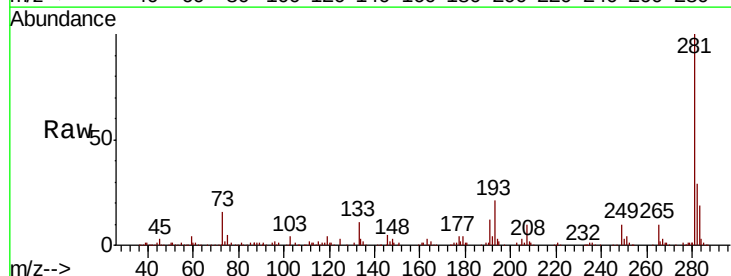
Tgt Ion: 91 Resp: 698

Ion Ratio Lower Upper

91 100

126 0.0 13.4 20.2#

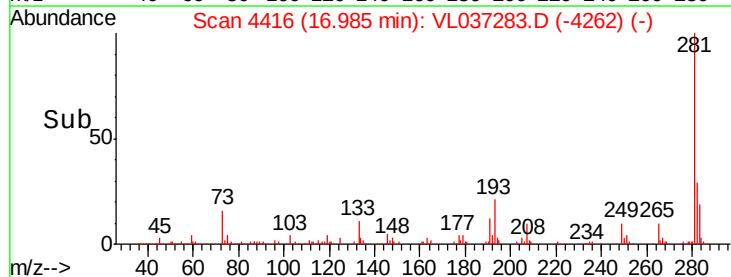
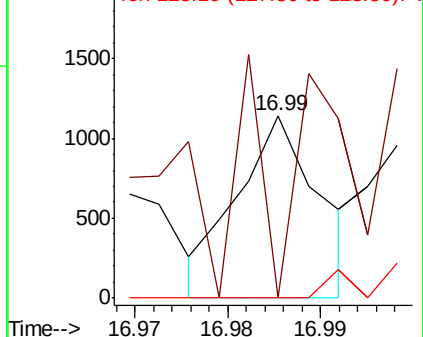
128 0.0 4.5 6.7#

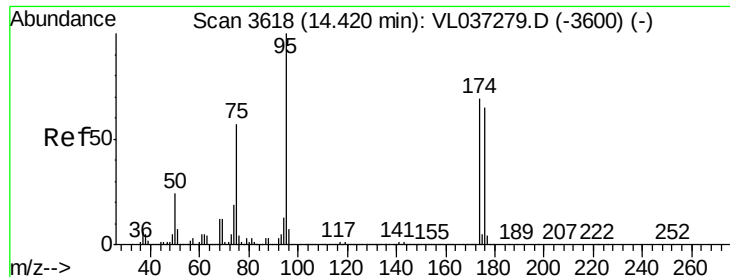


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V

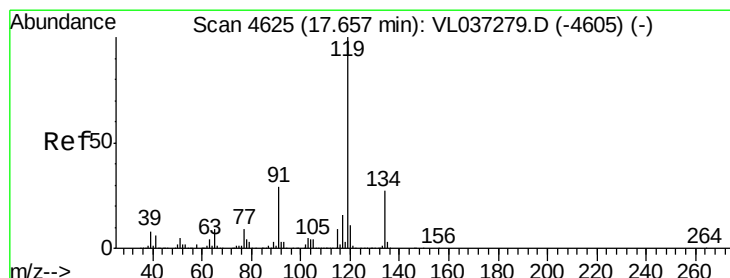
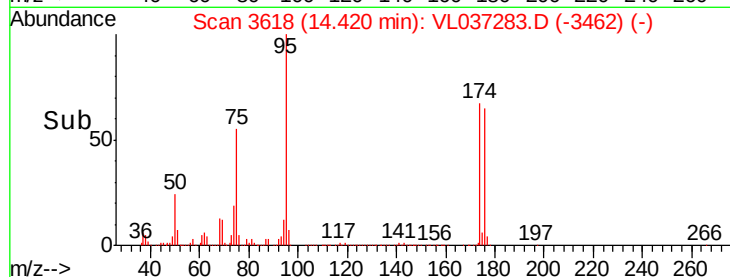
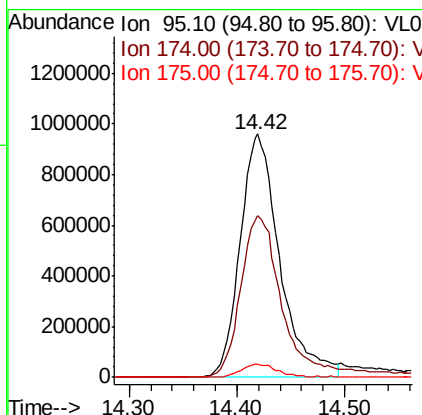
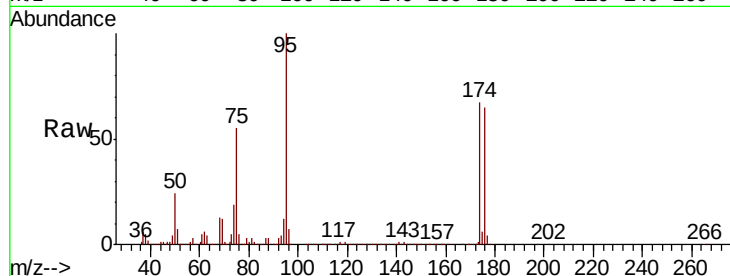




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.802 ppbv
 RT: 14.42 min Scan# 3618
 Delta R.T. 0.00 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

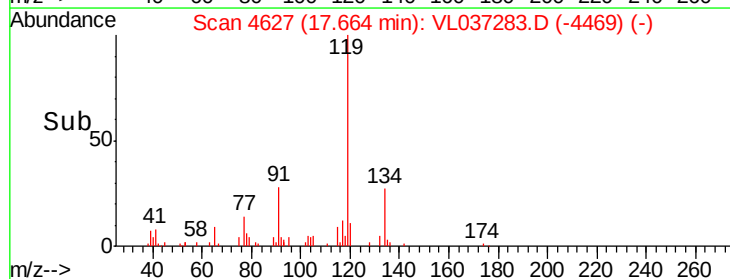
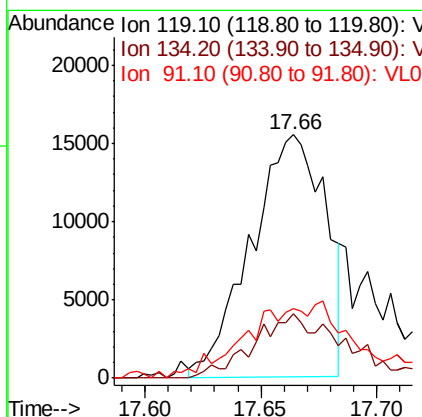
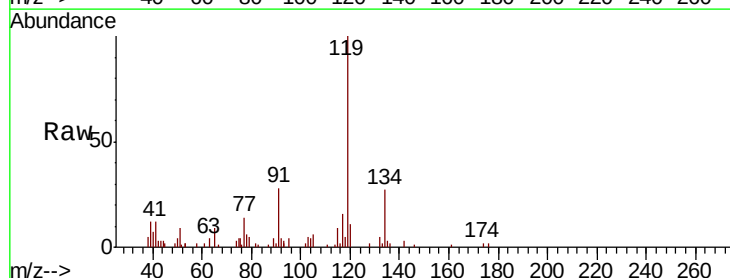
Instrument :
 MSVOA_L
 ClientSampleId :

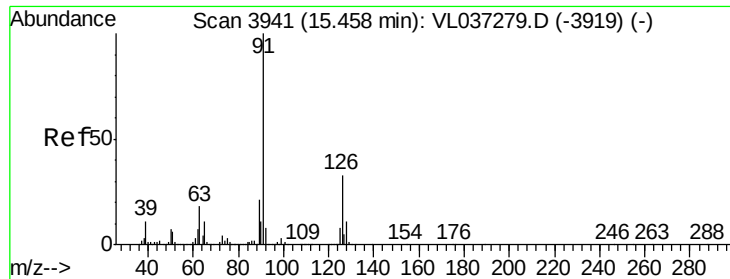
Tot Ion: 95 Resp: 2456523
 Ion Ratio Lower Upper
 95 100
 174 73.8 56.3 84.5
 175 5.4 4.3 6.5



#69
 p-Isopropyltoluene
 Concen: 0.065 ppbv
 RT: 17.66 min Scan# 4627
 Delta R.T. 0.01 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Tgt Ion: 119 Resp: 34488
 Ion Ratio Lower Upper
 119 100
 134 35.1 20.6 31.0#
 91 47.2 23.0 34.4#

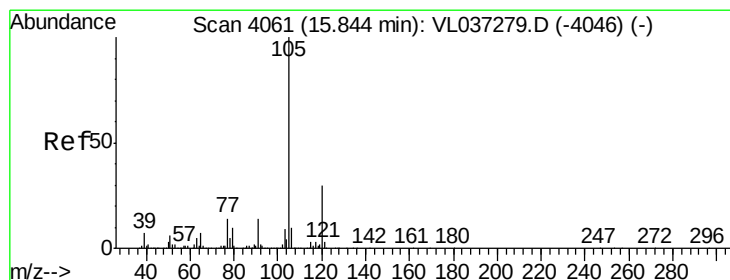
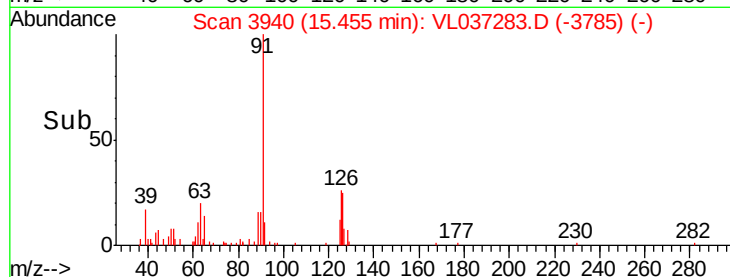
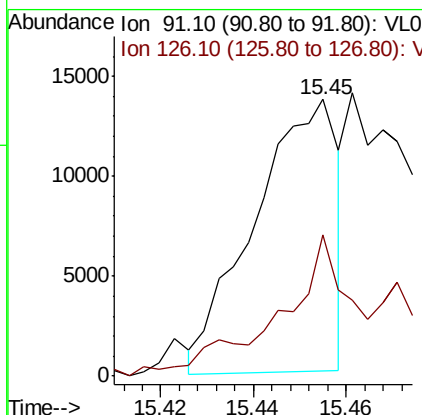
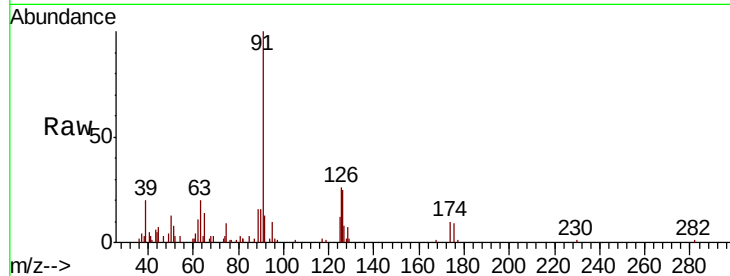




#71
2-Chlorotoluene
Concen: 0.046 ppbv
RT: 15.45 min Scan# 3940
Delta R.T. -0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

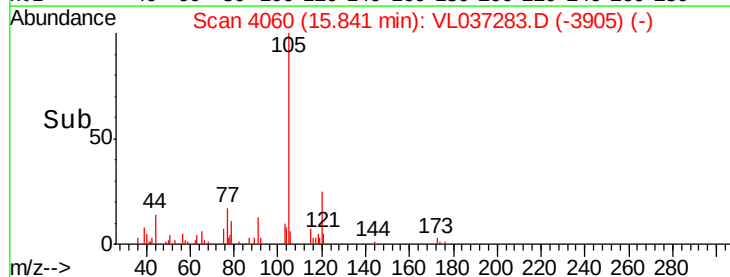
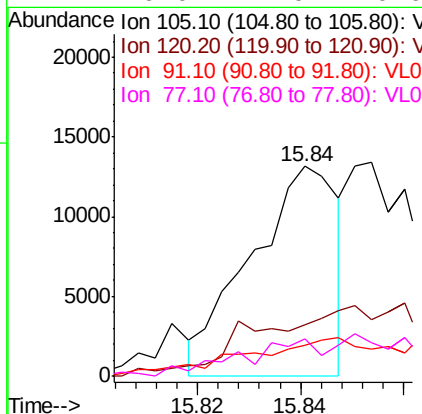
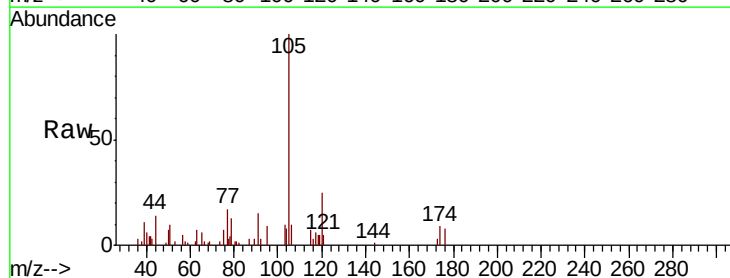
Instrument :
MSVOA_L
ClientSampleId :

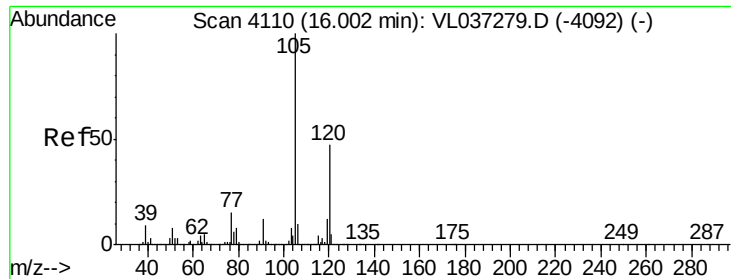
Tot Ion: 91 Resp: 16985
Ion Ratio Lower Upper
91 100
126 78.7 13.1 52.3#



#72
4-Ethyltoluene
Concen: 0.036 ppbv
RT: 15.84 min Scan# 4060
Delta R.T. -0.00 min
Lab File: VL037283.D
Acq: 27 Jul 2021 5:09

Tgt Ion: 105 Resp: 15363
Ion Ratio Lower Upper
105 100
120 0.0 24.3 36.5#
91 0.0 10.5 15.7#
77 0.0 11.0 16.6#





#73

1,3,5-Trimethylbenzene

Concen: 0.050 ppbv

RT: 16.00 min Scan# 4111

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

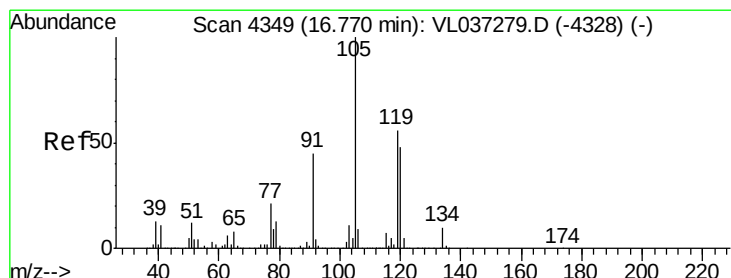
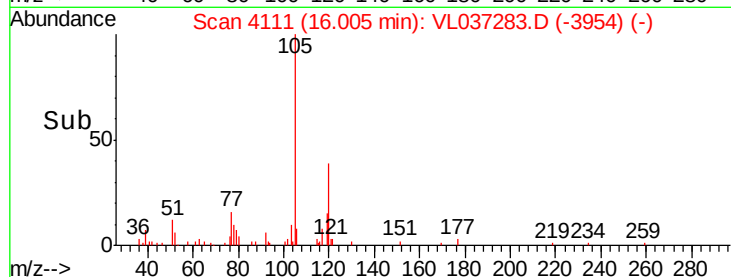
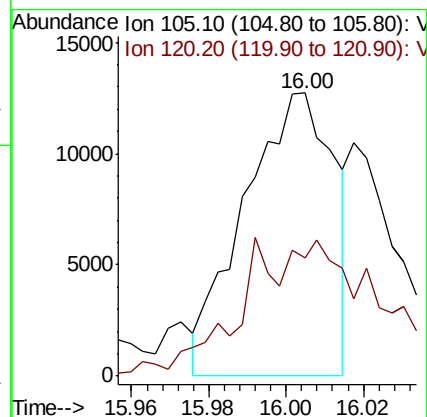
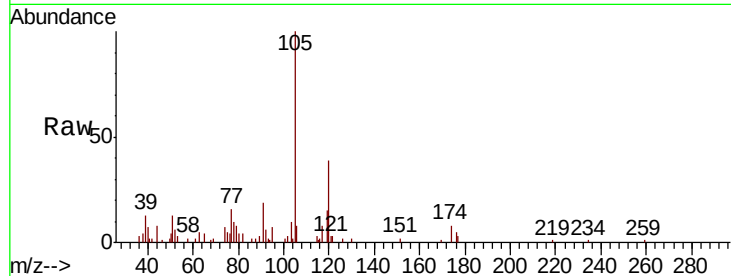
ClientSampleId :

Tot Ion:105 Resp: 20542

Ion Ratio Lower Upper

105 100

120 37.6 37.7 56.5#



#74

1,2,4-Trimethylbenzene

Concen: 0.062 ppbv

RT: 16.77 min Scan# 4349

Delta R.T. 0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Tgt Ion:105 Resp: 26277

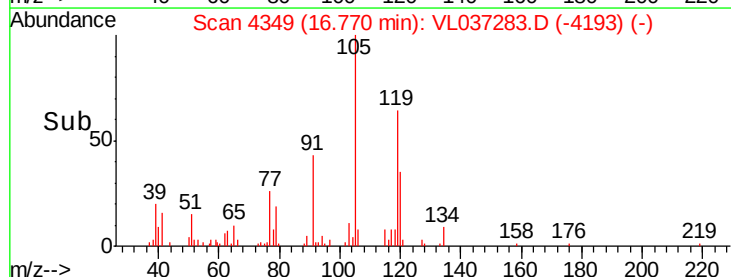
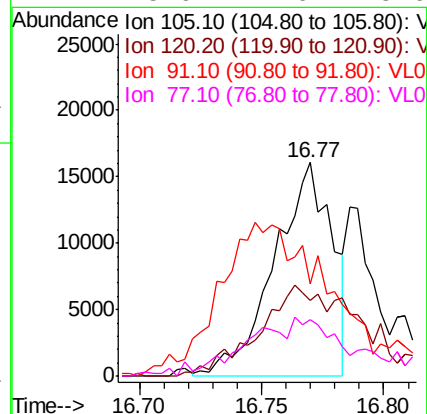
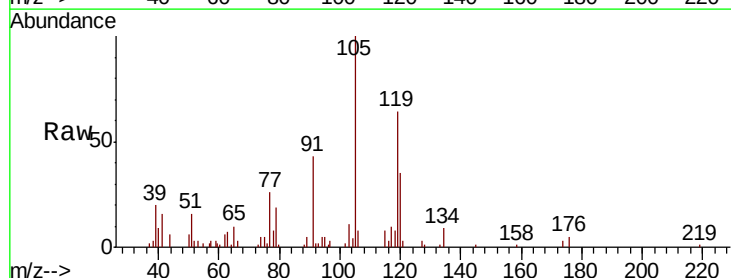
Ion Ratio Lower Upper

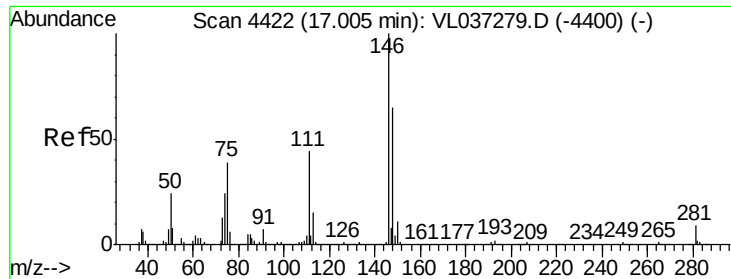
105 100

120 37.3 38.2 57.4#

91 26.2 36.2 54.2#

77 23.9 17.0 25.6

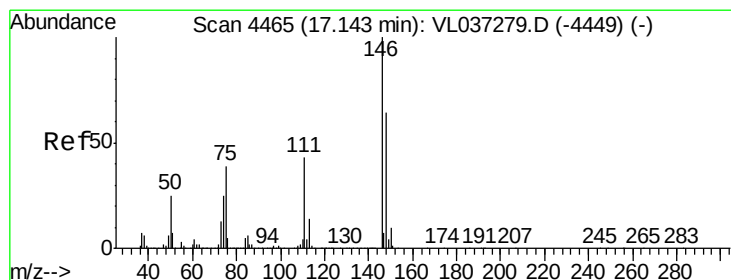
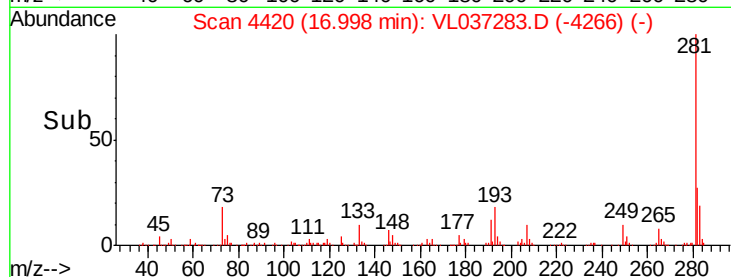
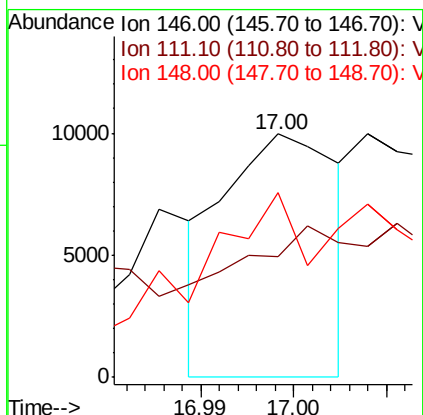
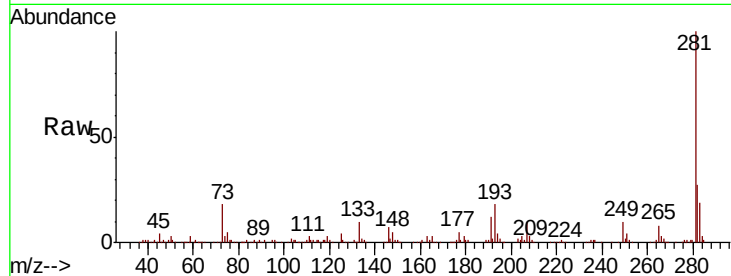




#75
 1,3-Dichlorobenzene
 Concen: 0.033 ppbv
 RT: 17.00 min Scan# 4420
 Delta R.T. -0.01 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

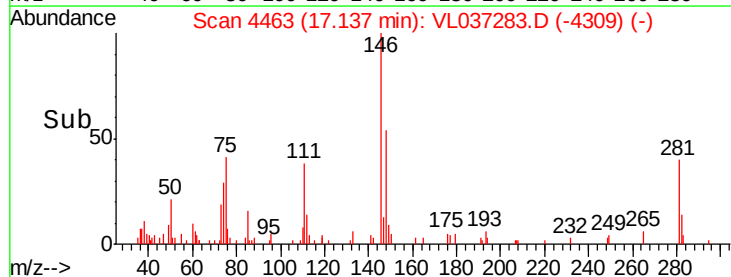
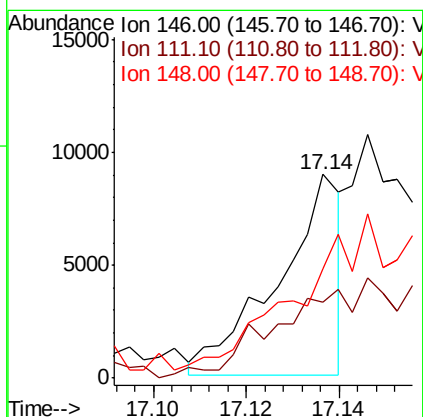
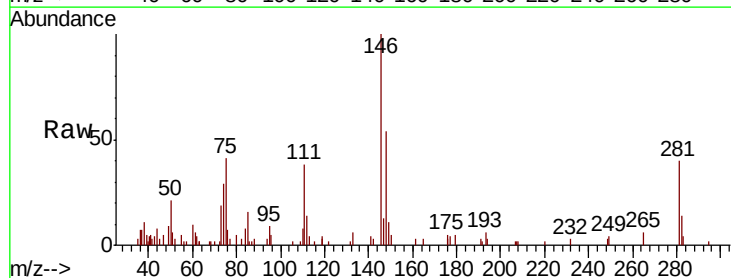
Instrument :
 MSVOA_L
 ClientSampleId :

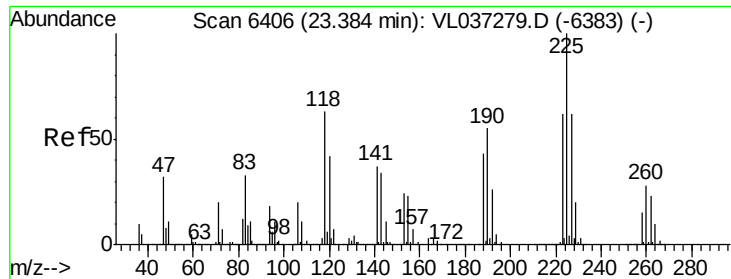
Tot Ion:146 Resp: 8481
 Ion Ratio Lower Upper
 146 100
 111 0.0 22.6 67.8#
 148 265.7 32.4 97.2#



#76
 1,4-Dichlorobenzene
 Concen: 0.033 ppbv
 RT: 17.14 min Scan# 4463
 Delta R.T. -0.01 min
 Lab File: VL037283.D
 Acq: 27 Jul 2021 5:09

Tgt Ion:146 Resp: 8387
 Ion Ratio Lower Upper
 146 100
 111 0.0 22.8 68.4#
 148 0.0 33.7 101.0#





#78

Hexachloro-1,3-Butadiene

Concen: 0.074 ppbv

RT: 23.38 min Scan# 6405

Delta R.T. -0.00 min

Lab File: VL037283.D

Acq: 27 Jul 2021 5:09

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:225 Resp: 15269

Ion Ratio Lower Upper

225 100

223 125.0 51.4 77.2#

227 110.5 50.8 76.2#

