

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091620\
 Data File : VL035650.D
 Acq On : 17 Sep 2020 5:29
 Operator : SY/AP
 Sample : L4016-01DL 40X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-13DL

Quant Time: Sep 17 07:12:19 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep 14 15:19:50 2020
 QLast Update : Mon Sep 14 15:19:50 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1296950	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	5297332	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	5214036	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	3866561	10.44	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.40%

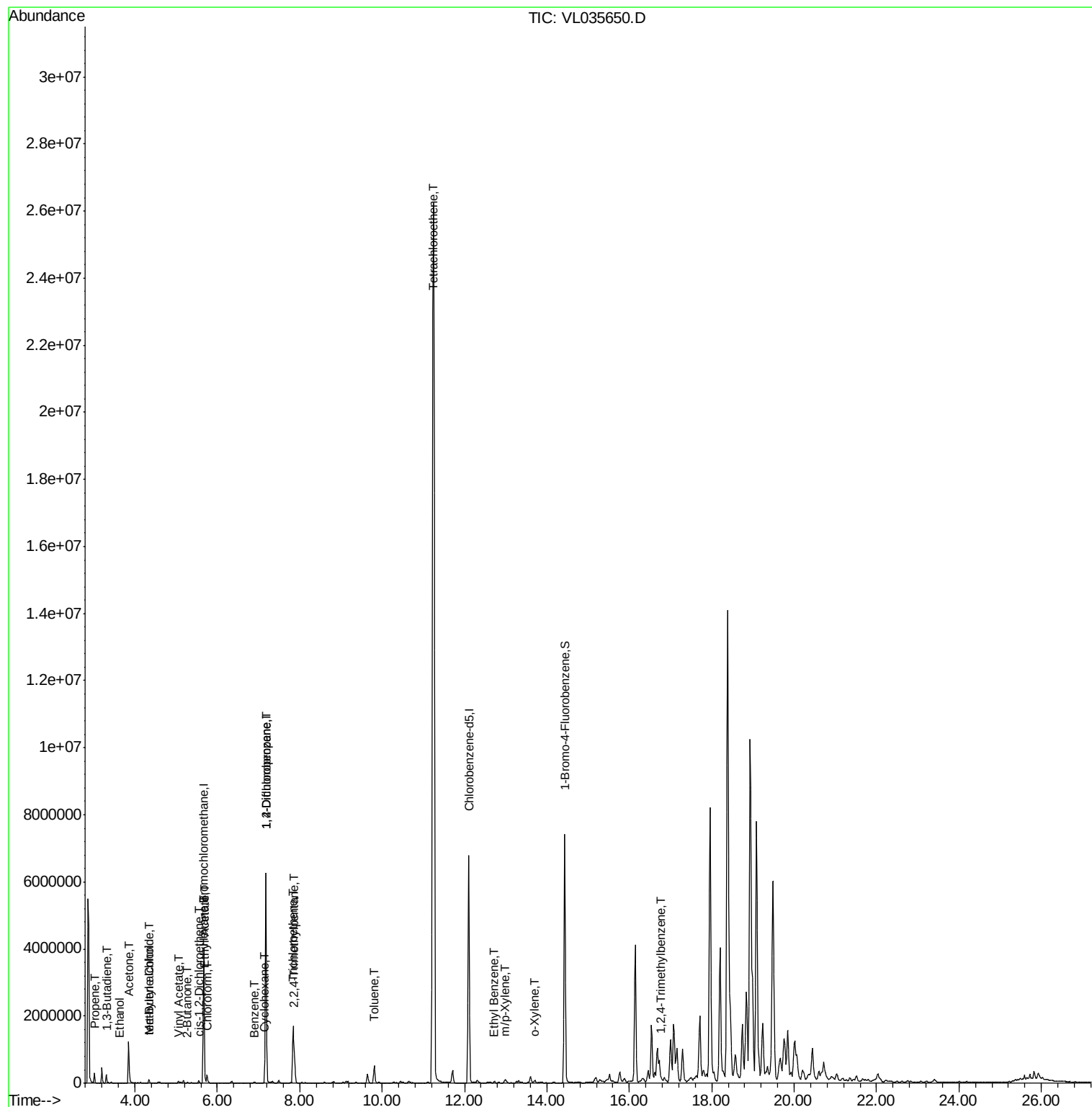
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
9) Propene	3.02	41	56942	1.030	ppbv #	64
13) Ethanol	3.62	45	6336	0.462	ppbv	94
15) Acetone	3.85	43	1194329	8.350	ppbv	98
16) 1,3-Butadiene	3.31	39	50395	0.946	ppbv #	3
17) tert-Butyl alcohol	4.33	59	9284	0.053	ppbv	96
20) Methylene Chloride	4.35	84	42988	0.404	ppbv	98
23) Vinyl Acetate	5.06	43	12995	0.071	ppbv #	31
25) Ethyl Acetate	5.69	43	10975	0.043	ppbv #	76
26) Hexane	5.69	57	16012	0.112	ppbv #	51
29) Chloroform	5.75	83	156535	0.537	ppbv	100
30) Cyclohexane	7.14	84	8502	0.055	ppbv #	25
31) cis-1,2-Dichloroethene	5.55	61	38368	0.261	ppbv	99
34) 2-Butanone	5.27	43	25119	0.160	ppbv	98
36) Benzene	6.89	78	24314	0.071	ppbv #	89
38) Trichloroethene	7.84	130	587120	2.948	ppbv	98
39) 1,2-Dichloropropane	7.18	63	1012990	8.745	ppbv #	31
44) 2,2,4-Trimethylpentane	7.87	57	808216	1.791	ppbv	98
52) Tetrachloroethene	11.24	164	5504713	27.479	ppbv #	78
53) Toluene	9.82	91	121314	0.281	ppbv	97
58) Ethyl Benzene	12.72	91	35889	0.067	ppbv	94
59) m/p-Xylene	13.01	91	32264	0.072	ppbv #	24
60) o-Xylene	13.71	91	25454	0.056	ppbv #	44
74) 1,2,4-Trimethylbenzene	16.78	105	66782	0.114	ppbv #	70

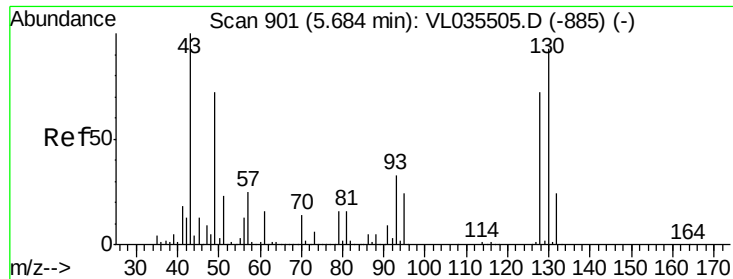
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Instrument :

MSVOA_L

ClientSampleId :

SV-13DL

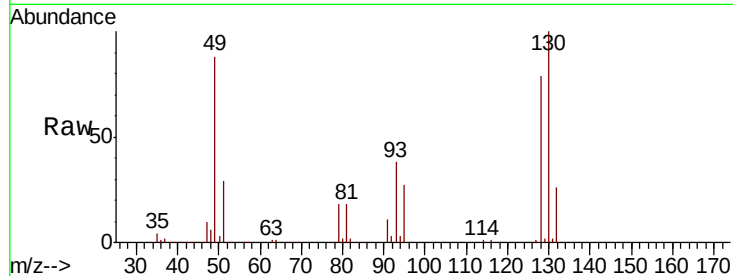
Tot Ion: 49 Resp: 1296950

Ion Ratio Lower Upper

49 100

128 91.0 50.0 150.1

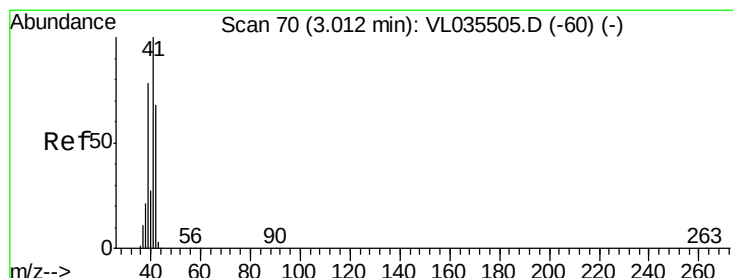
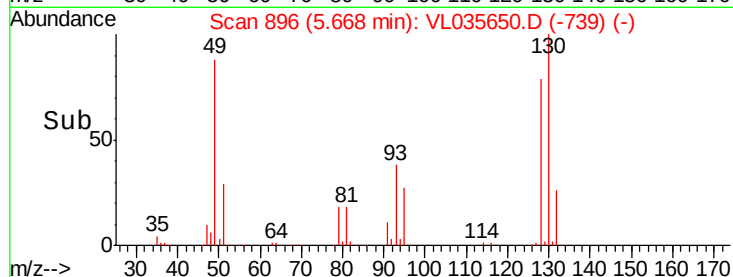
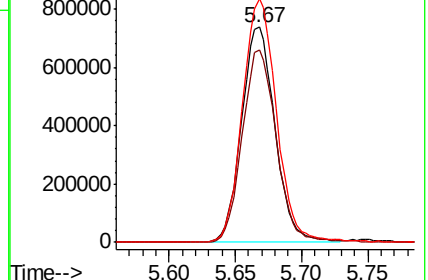
130 115.9 64.4 193.2



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



#9

Propene

Concen: 1.030 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.02 min

Lab File: VL035650.D

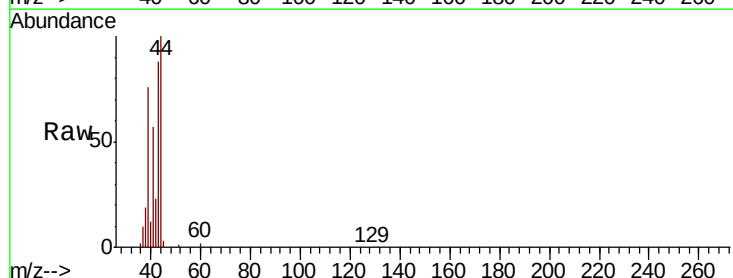
Acq: 17 Sep 2020 5:29

Tgt Ion: 41 Resp: 56942

Ion Ratio Lower Upper

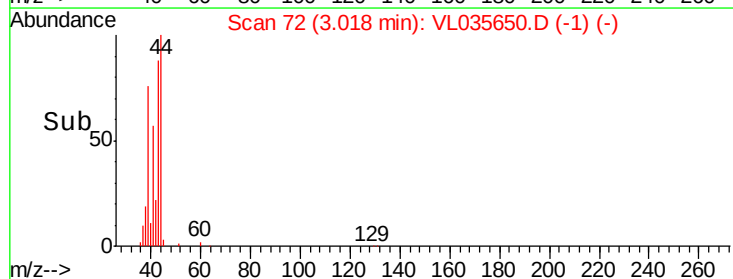
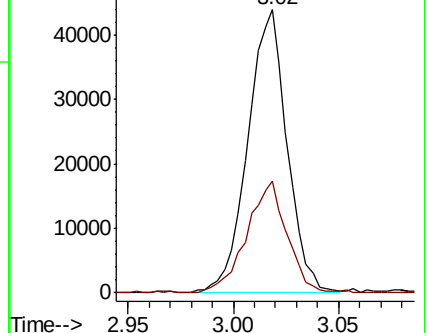
41 100

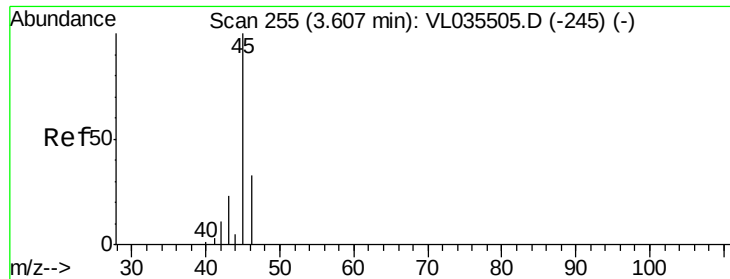
42 40.6 56.3 84.5#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

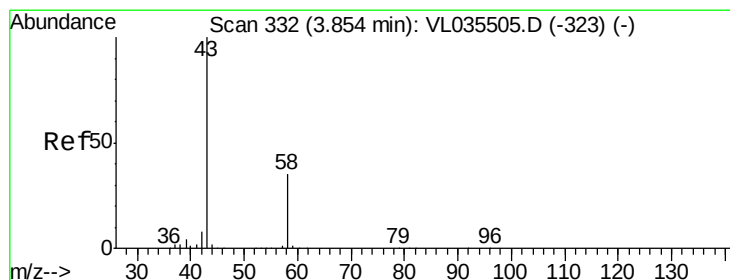
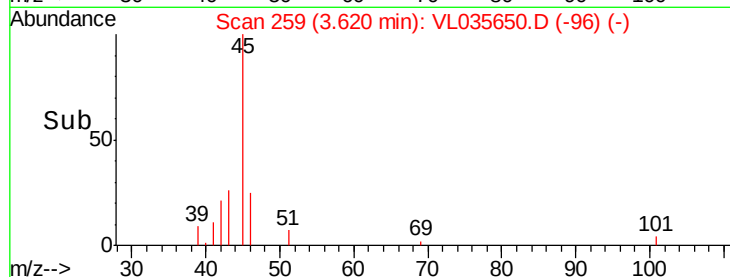
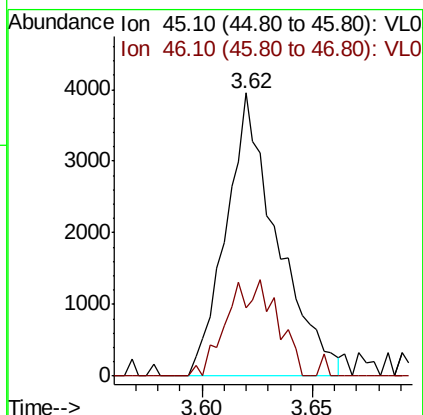
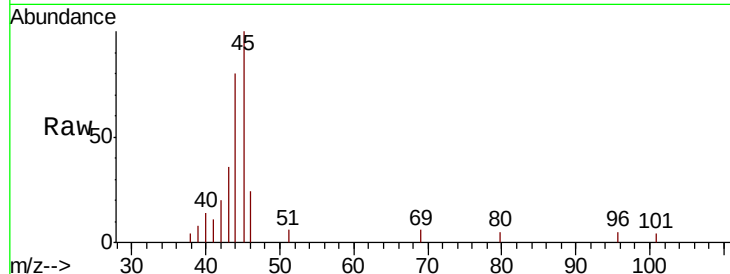




#13
Ethanol
Concen: 0.462 ppbv
RT: 3.62 min Scan# 259
Delta R.T. 0.02 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

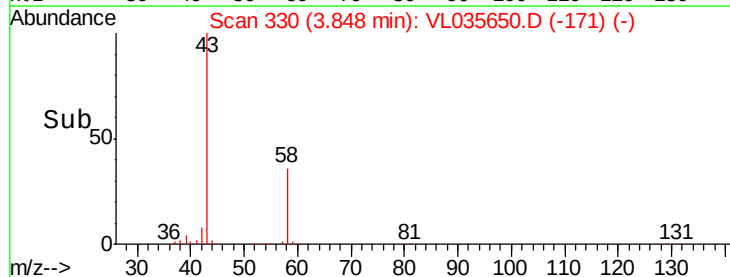
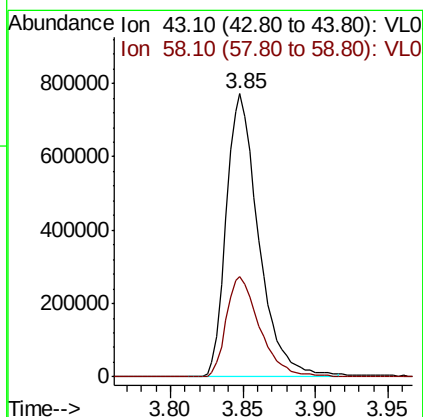
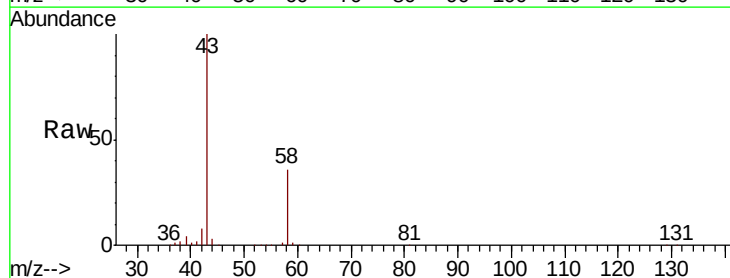
Instrument :
MSVOA_L
ClientSampleId :
SV-13DL

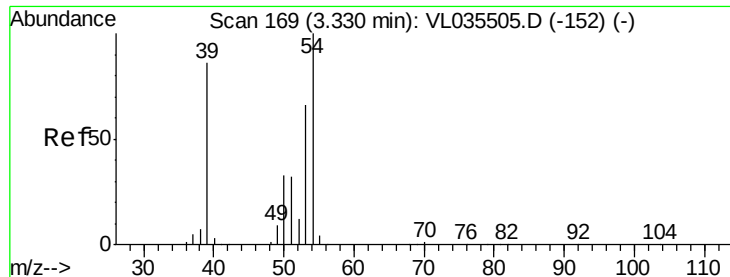
Tot Ion: 45 Resp: 6336
Ion Ratio Lower Upper
45 100
46 34.0 15.2 60.6



#15
Acetone
Concen: 8.350 ppbv
RT: 3.85 min Scan# 330
Delta R.T. 0.01 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

Tgt Ion: 43 Resp: 1194329
Ion Ratio Lower Upper
43 100
58 36.9 28.4 42.6

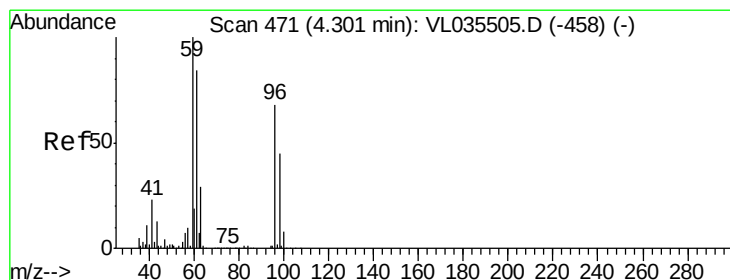
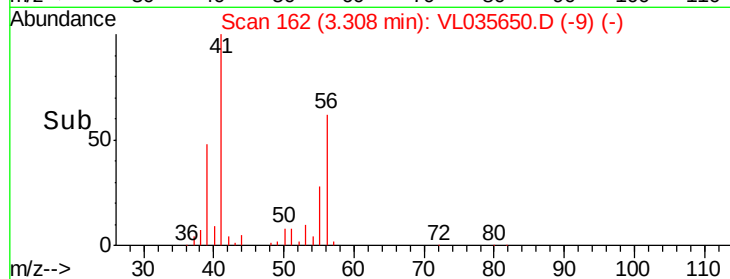
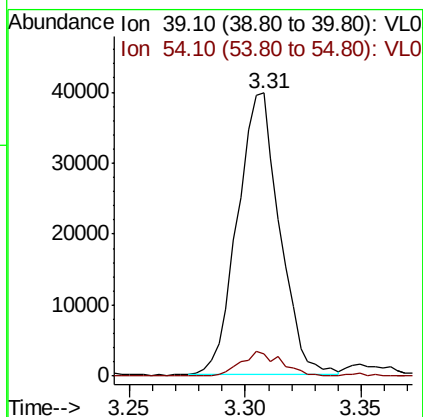
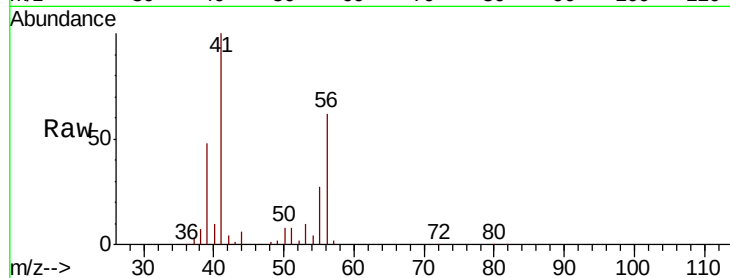




#16
 1,3-Butadiene
 Concen: 0.946 ppbv
 RT: 3.31 min Scan# 162
 Delta R.T. -0.01 min
 Lab File: VL035650.D
 Acq: 17 Sep 2020 5:29

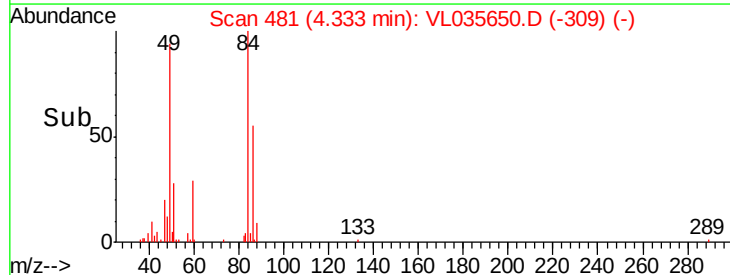
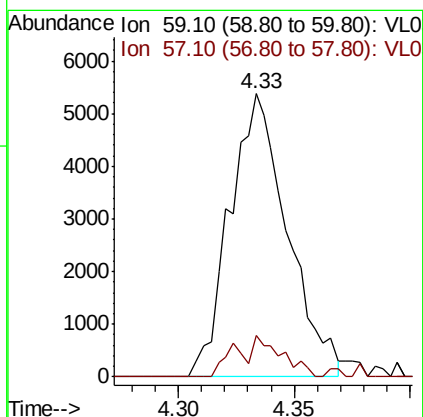
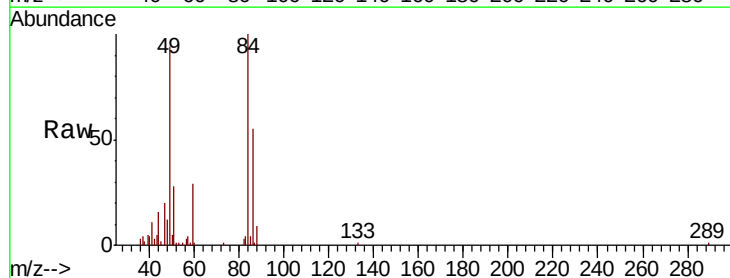
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-13DL

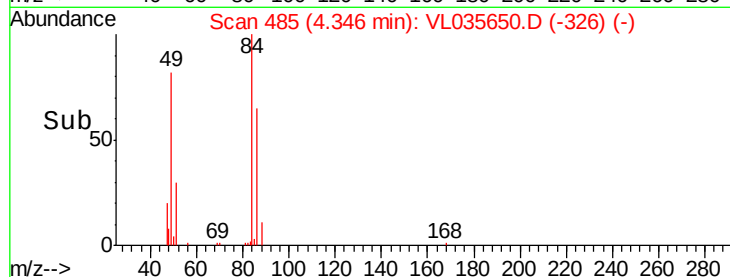
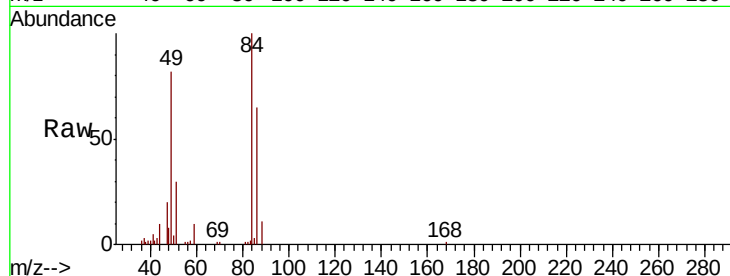
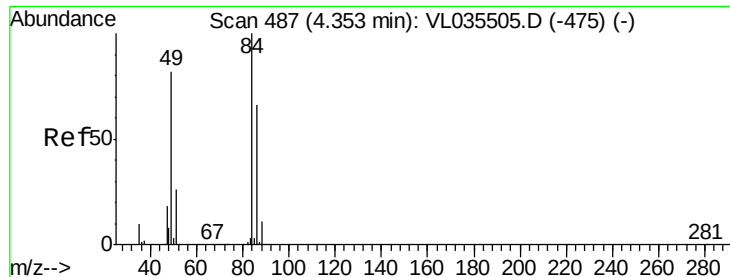
Tot Ion: 39 Resp: 50395
 Ion Ratio Lower Upper
 39 100
 54 8.3 88.4 132.6#



#17
 tert-Butyl alcohol
 Concen: 0.053 ppbv
 RT: 4.33 min Scan# 481
 Delta R.T. 0.05 min
 Lab File: VL035650.D
 Acq: 17 Sep 2020 5:29

Tgt Ion: 59 Resp: 9284
 Ion Ratio Lower Upper
 59 100
 57 12.1 8.4 12.6

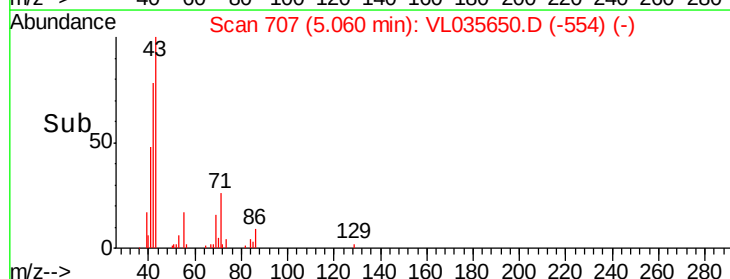
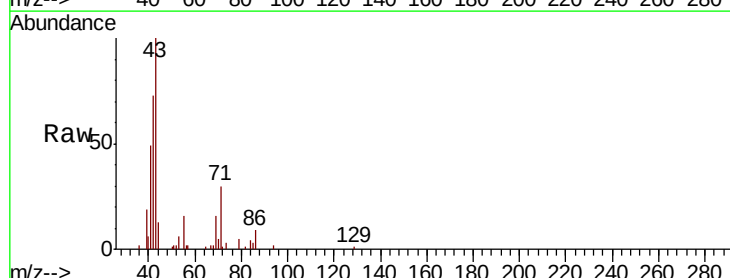
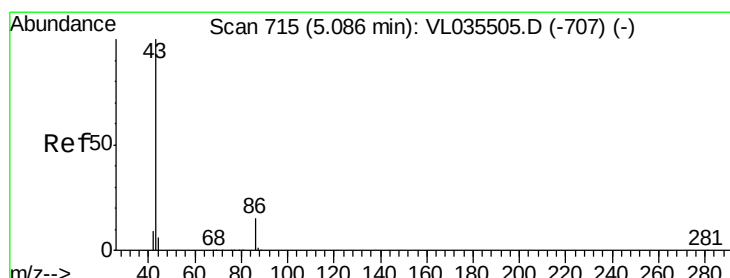
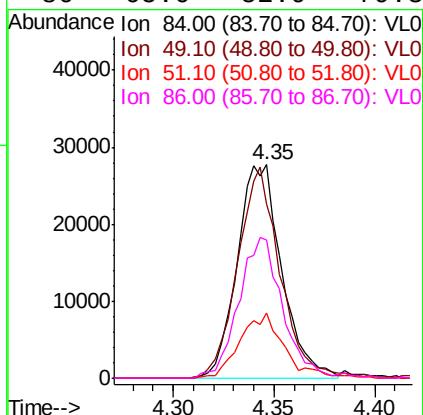




#20
Methvlene Chloride
Concen: 0.404 ppbv
RT: 4.35 min Scan# 485
Delta R.T. 0.01 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

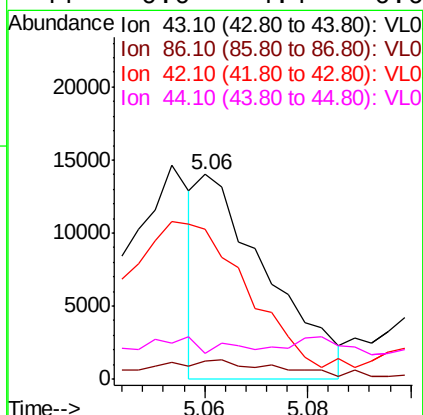
Instrument :
MSVOA_L
ClientSampleId :
SV-13DL

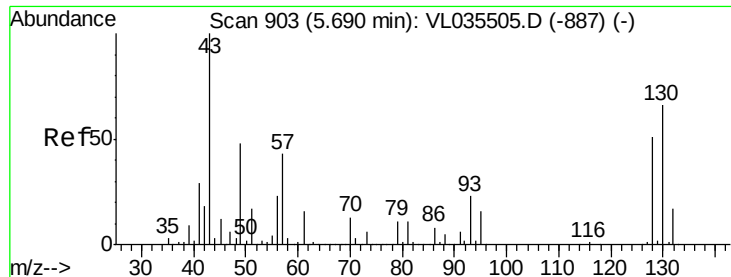
Tot Ion:	84	Resp:	42988
Ion	Ratio	Lower	Upper
84	100		
49	81.7	65.4	98.0
51	30.3	21.5	32.3
86	65.0	52.9	79.3



#23
Vinyl Acetate
Concen: 0.071 ppbv
RT: 5.06 min Scan# 707
Delta R.T. -0.01 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

Tgt Ion:	43	Resp:	12995
Ion	Ratio	Lower	Upper
43	100		
86	9.2	10.6	16.0#
42	75.9	7.5	11.3#
44	0.0	4.4	6.6#





#25

Ethyl Acetate

Concen: 0.043 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.02 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Instrument :

MSVOA_L

ClientSampleId :

SV-13DL

Tot Ion: 43 Resp: 10975

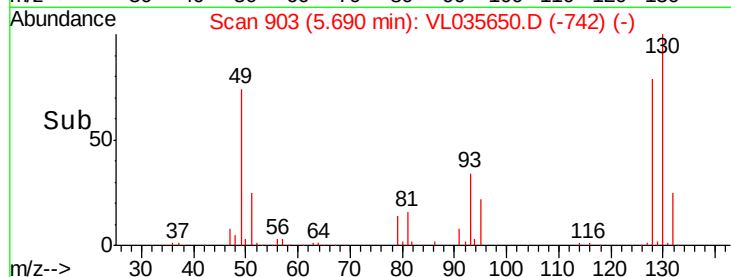
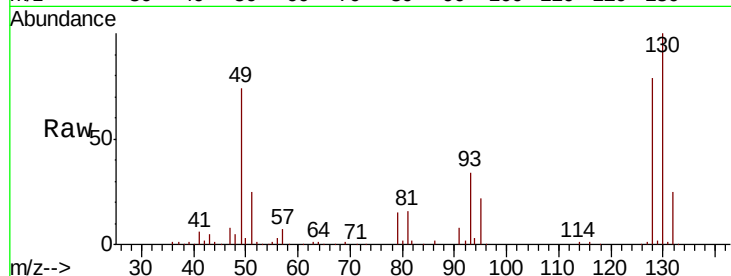
Ion Ratio Lower Upper

43 100

45 4.7 8.4 12.6#

61 0.0 10.6 16.0#

70 3.3 9.4 14.2#

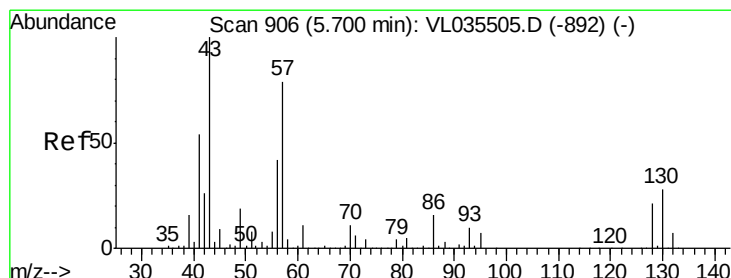
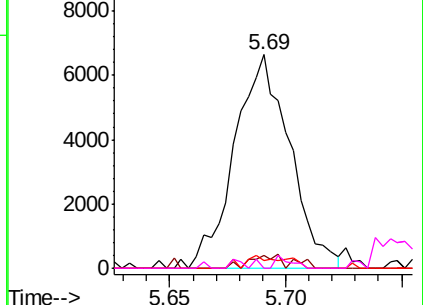


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.112 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Tgt Ion: 57 Resp: 16012

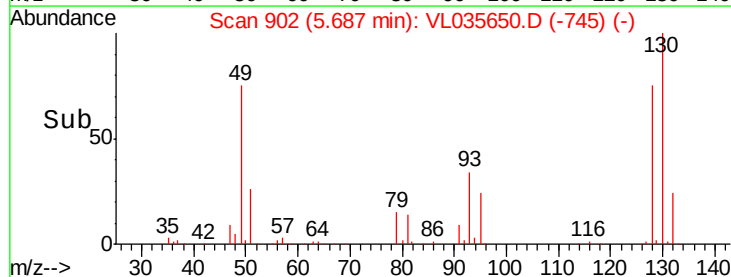
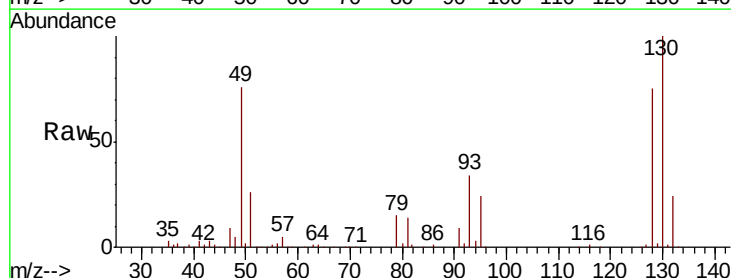
Ion Ratio Lower Upper

57 100

41 78.9 55.9 83.9

43 70.2 141.8 212.8#

56 56.5 41.8 62.8

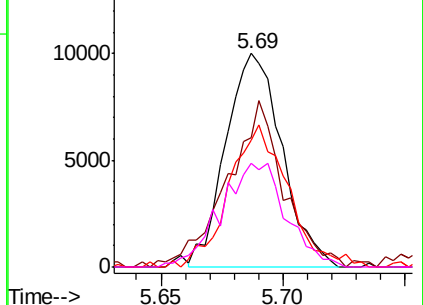


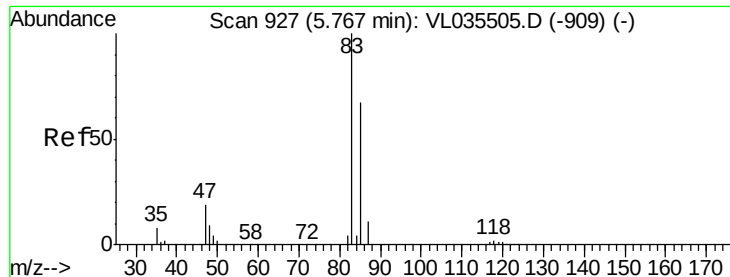
Abundance Ion 57.10 (56.80 to 57.80): VL0

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

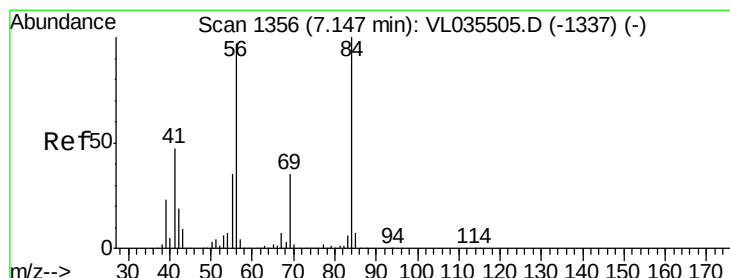
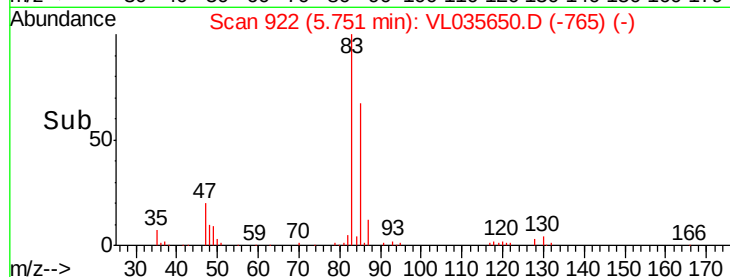
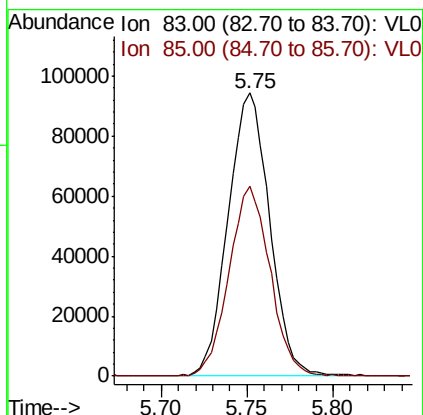
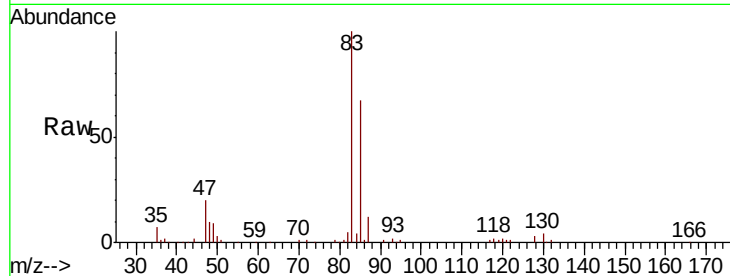




#29
Chloroform
Concen: 0.537 ppbv
RT: 5.75 min Scan# 922
Delta R.T. 0.00 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

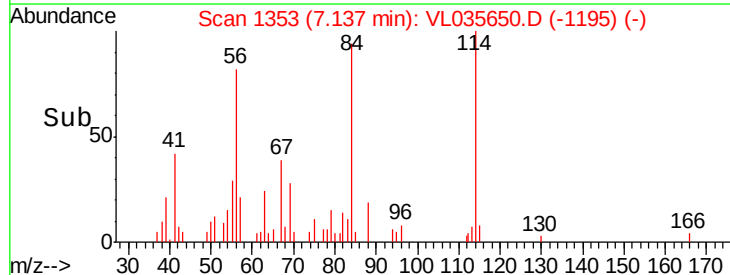
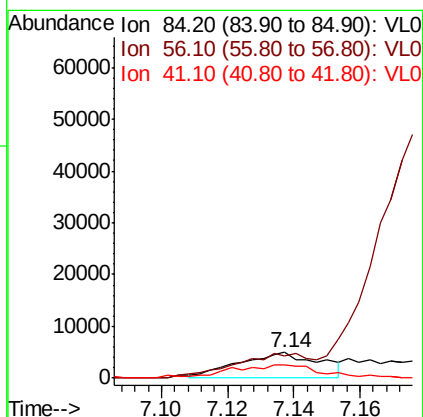
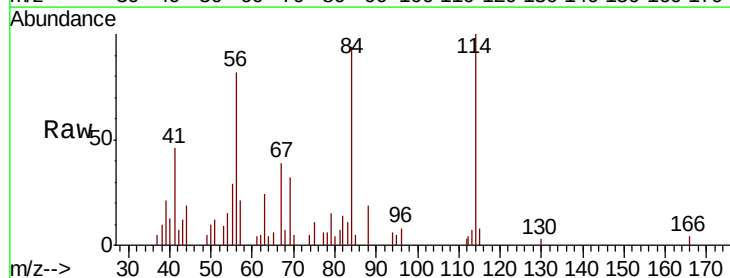
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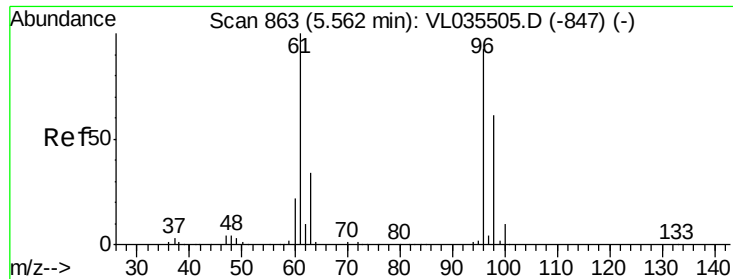
Tot Ion: 83 Resp: 156535
Ion Ratio Lower Upper
83 100
85 67.2 53.9 80.9



#30
Cyclohexane
Concen: 0.055 ppbv
RT: 7.14 min Scan# 1353
Delta R.T. 0.01 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

Tgt Ion: 84 Resp: 8502
Ion Ratio Lower Upper
84 100
56 0.0 80.1 120.1#
41 61.8 38.1 57.1#





#31

cis-1,2-Dichloroethene

Concen: 0.261 ppbv

RT: 5.55 min Scan# 859

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Instrument :

MSVOA_L

ClientSampleId :

SV-13DL

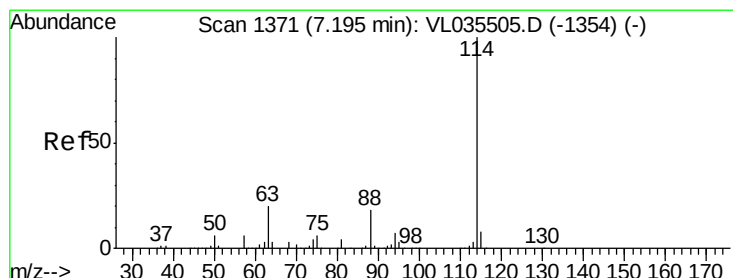
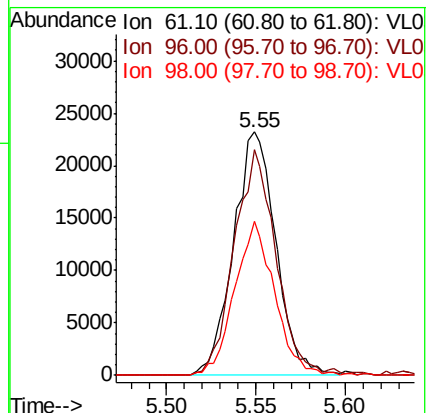
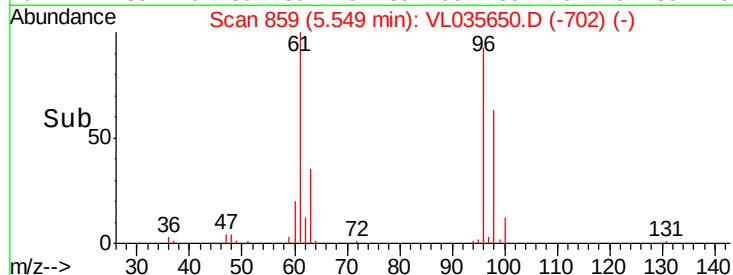
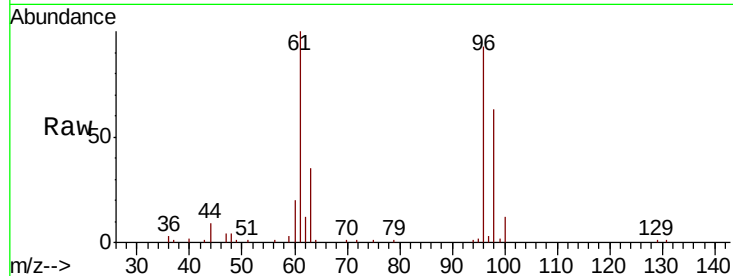
Tot Ion: 61 Resp: 38368

Ion Ratio Lower Upper

61 100

96 92.7 74.4 111.6

98 63.3 49.2 73.8



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

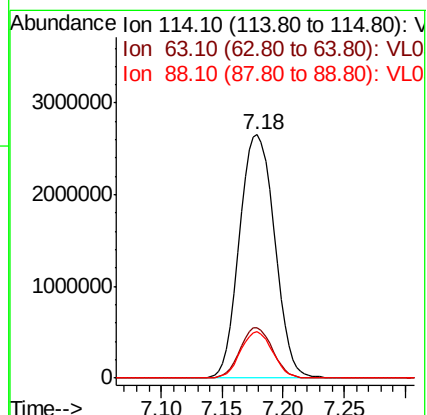
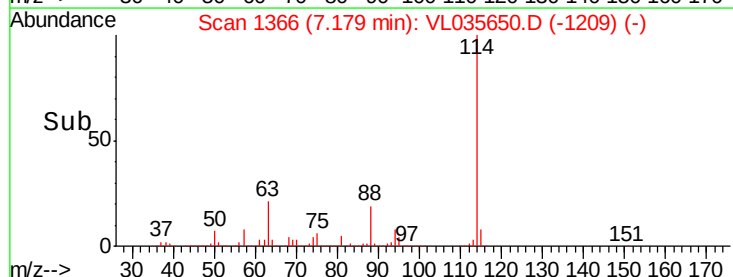
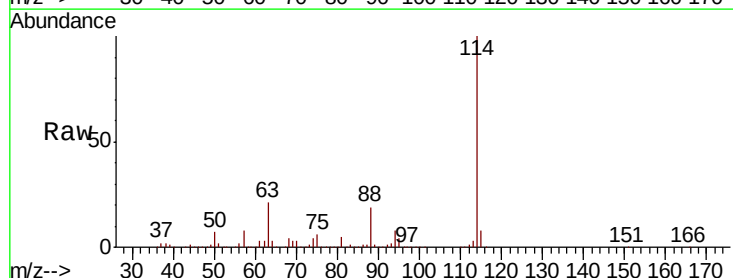
Tgt Ion: 114 Resp: 5297332

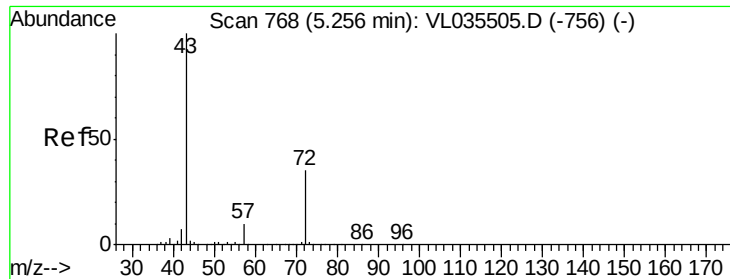
Ion Ratio Lower Upper

114 100

63 19.2 14.7 22.1

88 17.5 13.4 20.2

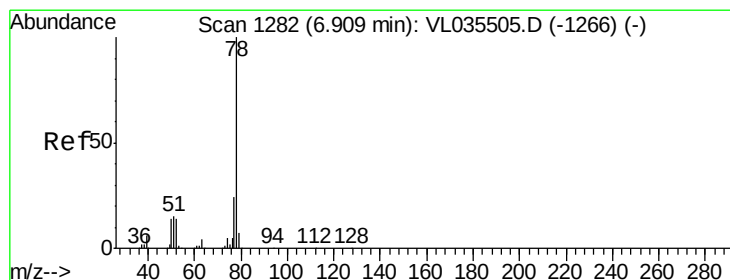
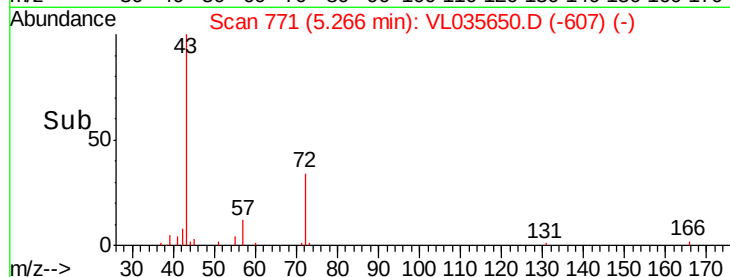
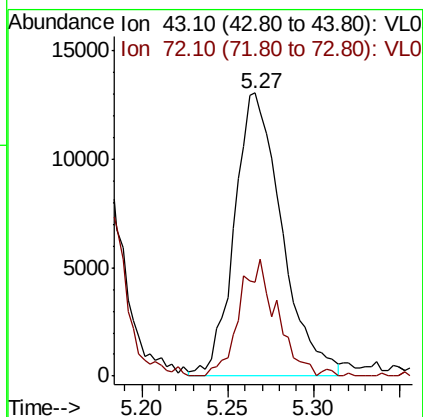
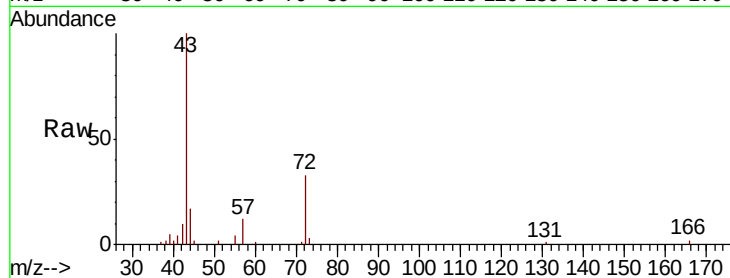




#34
 2-Butanone
 Concen: 0.160 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. 0.03 min
 Lab File: VL035650.D
 Acq: 17 Sep 2020 5:29

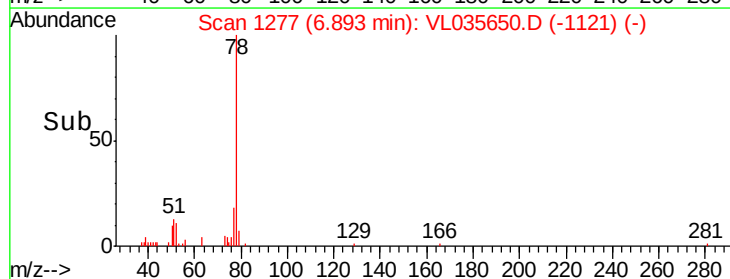
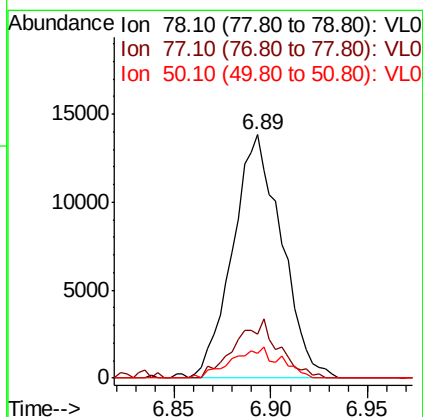
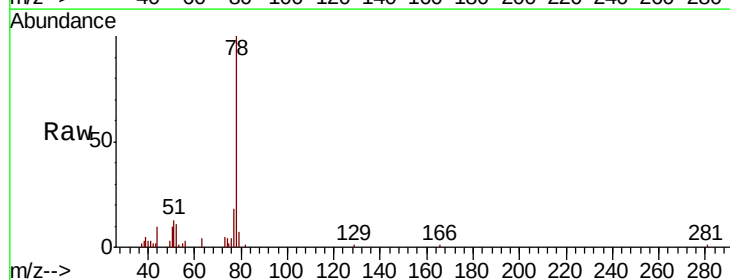
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-13DL

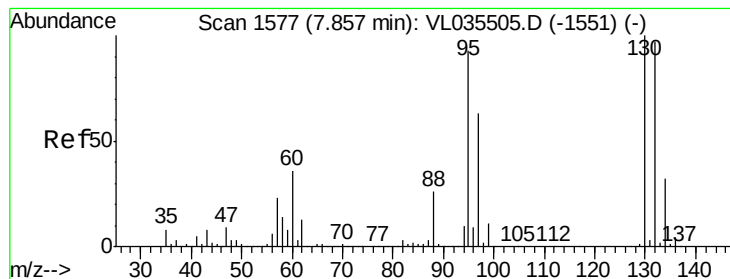
Tot Ion: 43 Resp: 25119
 Ion Ratio Lower Upper
 43 100
 72 33.2 27.7 41.5



#36
 Benzene
 Concen: 0.071 ppbv
 RT: 6.89 min Scan# 1277
 Delta R.T. 0.00 min
 Lab File: VL035650.D
 Acq: 17 Sep 2020 5:29

Tgt Ion: 78 Resp: 24314
 Ion Ratio Lower Upper
 78 100
 77 18.3 19.3 28.9#
 50 10.1 11.0 16.6#





#38

Trichloroethene

Concen: 2.948 ppbv

RT: 7.84 min Scan# 1571

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Instrument :

MSVOA_L

ClientSampleId :

SV-13DL

Tot Ion:130 Resp: 587120

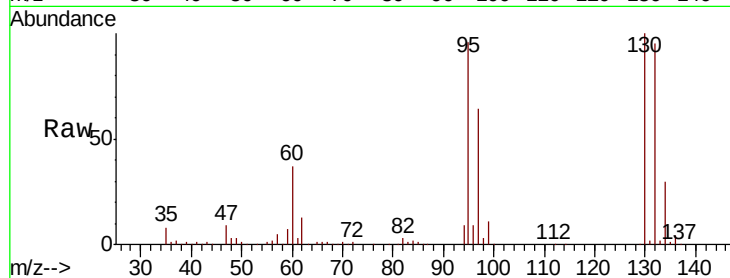
Ion Ratio Lower Upper

130 100

95 95.7 74.6 112.0

132 94.6 77.6 116.4

97 63.7 50.6 76.0

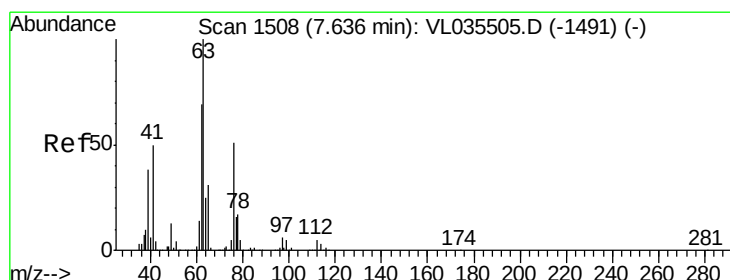
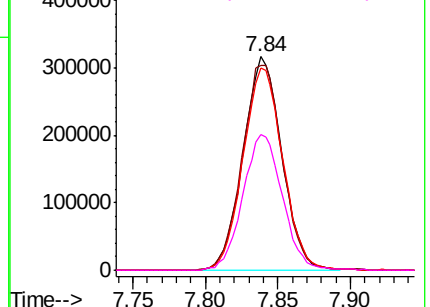
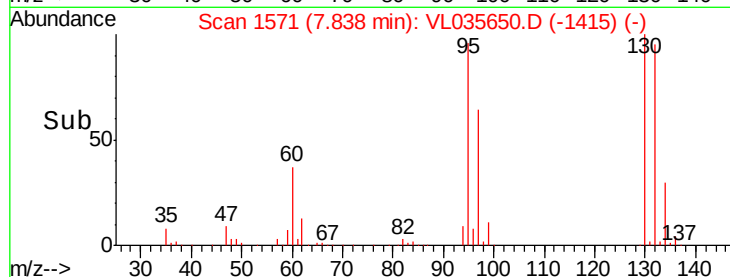


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 8.745 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.43 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

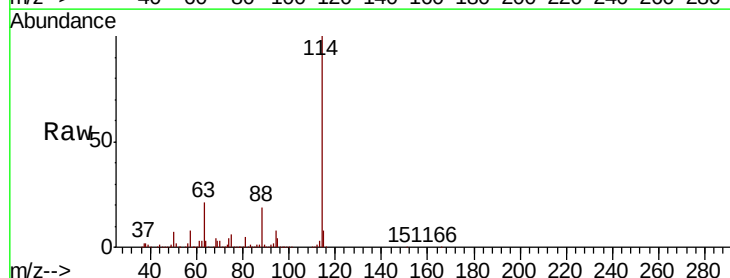
Tgt Ion: 63 Resp: 1012990

Ion Ratio Lower Upper

63 100

41 0.0 40.0 60.0#

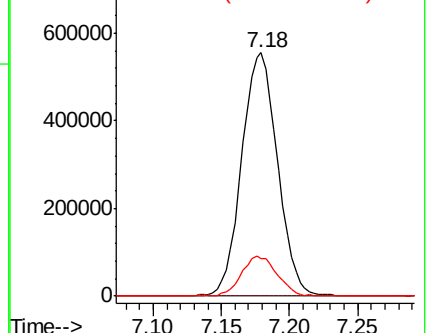
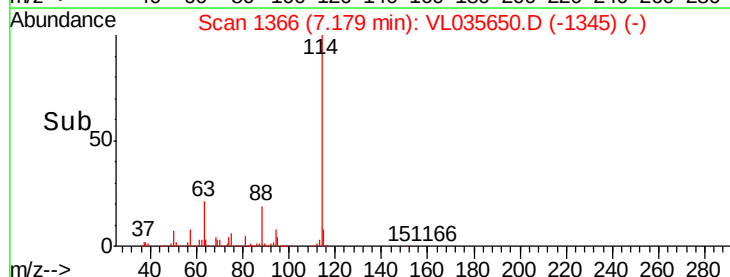
62 15.5 55.4 83.0#

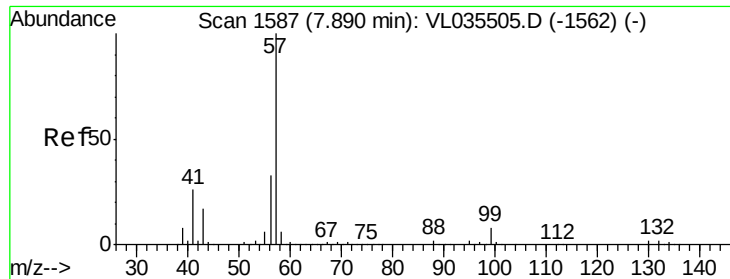


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 1.791 ppbv

RT: 7.87 min Scan# 1582

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Instrument :

MSVOA_L

ClientSampleId :

SV-13DL

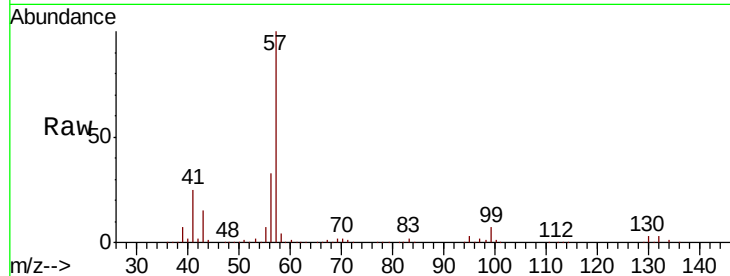
Tot Ion: 57 Resp: 808216

Ion Ratio Lower Upper

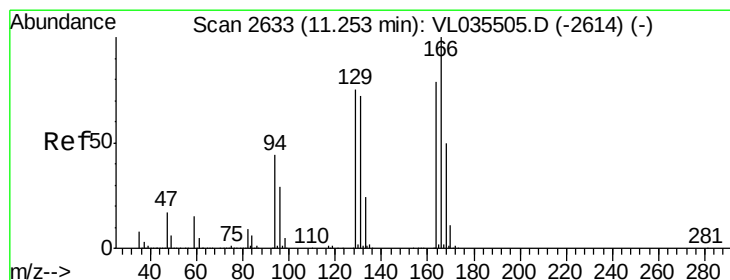
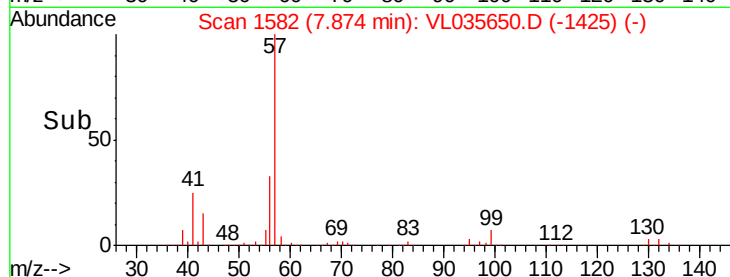
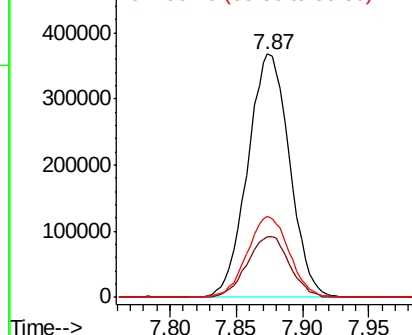
57 100

41 25.3 20.5 30.7

56 33.7 25.3 37.9



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



#52

Tetrachloroethene

Concen: 27.479 ppbv

RT: 11.24 min Scan# 2628

Delta R.T. 0.01 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Tgt Ion:164 Resp: 5504713

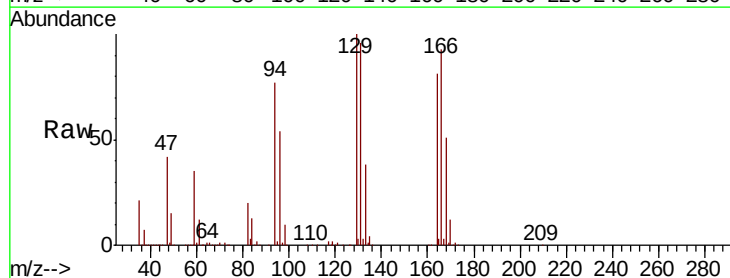
Ion Ratio Lower Upper

164 100

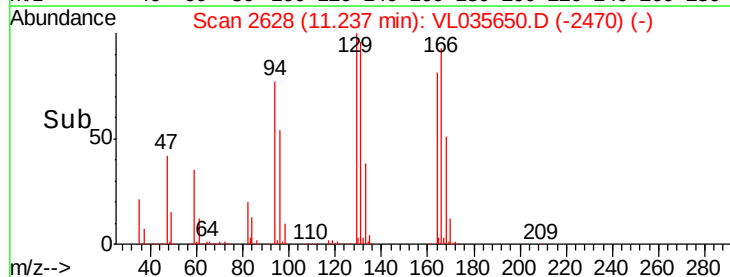
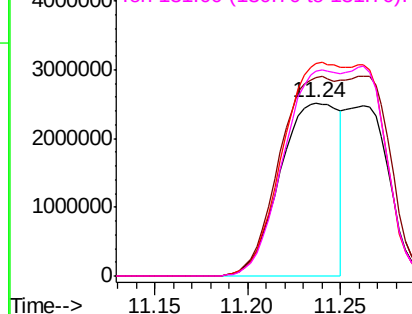
166 114.5 100.9 151.3

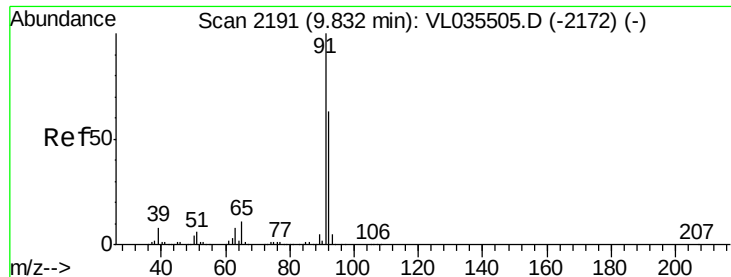
129 123.0 75.3 112.9#

131 118.5 73.0 109.4#



Abundance Ion 163.90 (163.60 to 164.60): V
Ion 165.90 (165.60 to 166.60): V
Ion 129.00 (128.70 to 129.70): V
Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 0.281 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. 0.00 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

Instrument :

MSVOA_L

ClientSampleId :

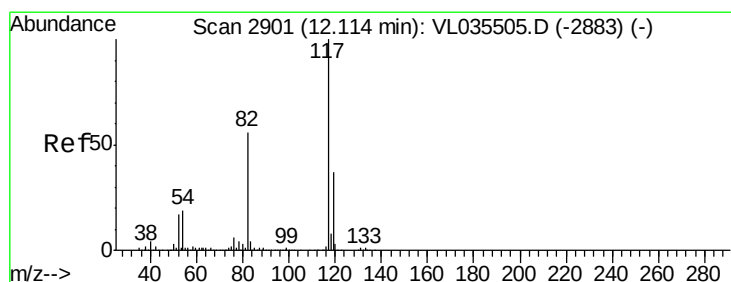
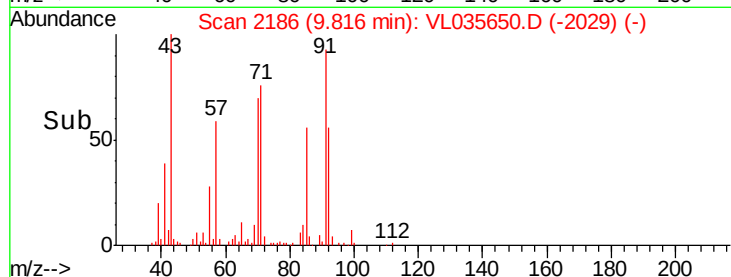
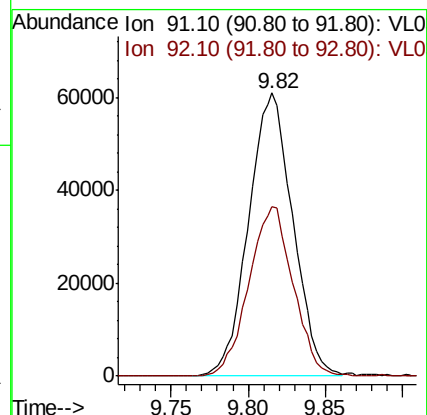
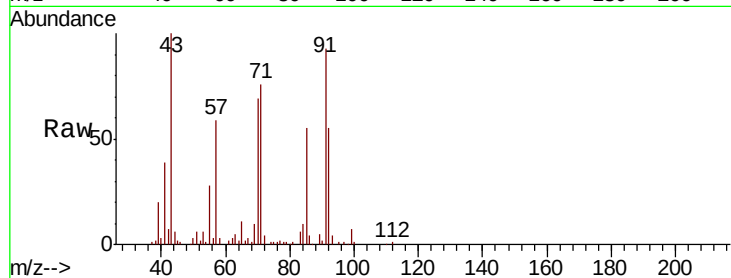
SV-13DL

Tot Ion: 91 Resp: 121314

Ion Ratio Lower Upper

91 100

92 59.8 49.8 74.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2897

Delta R.T. 0.01 min

Lab File: VL035650.D

Acq: 17 Sep 2020 5:29

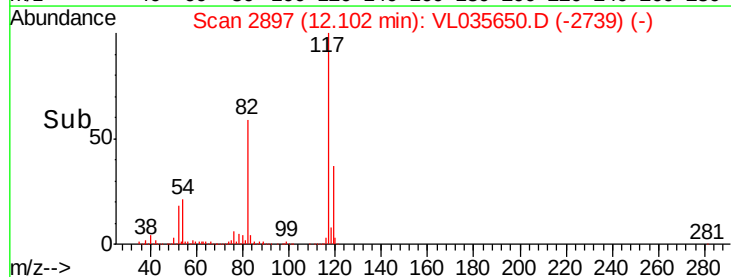
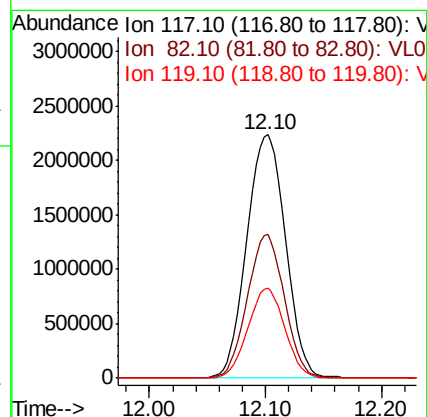
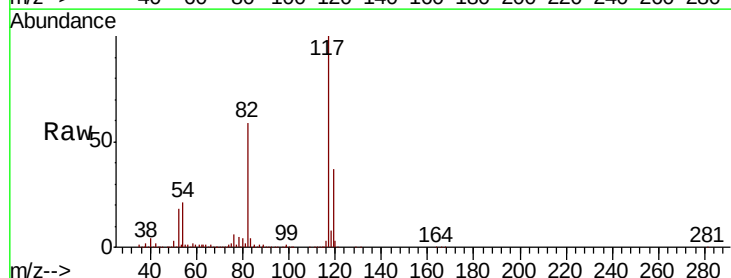
Tgt Ion: 117 Resp: 5214036

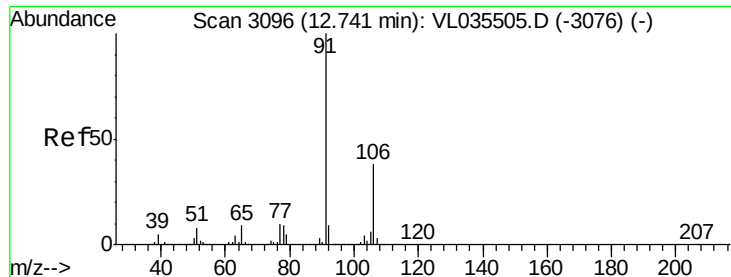
Ion Ratio Lower Upper

117 100

82 56.4 41.6 62.4

119 35.2 29.3 43.9

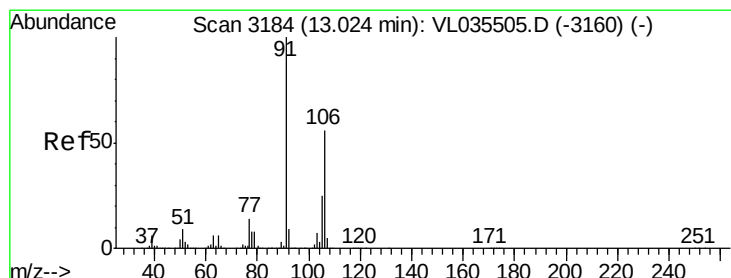
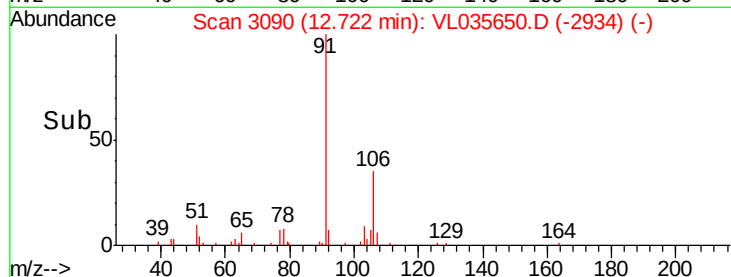
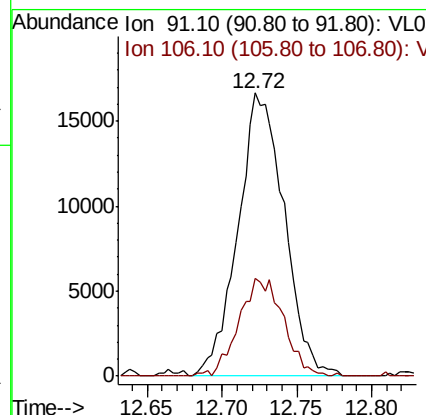
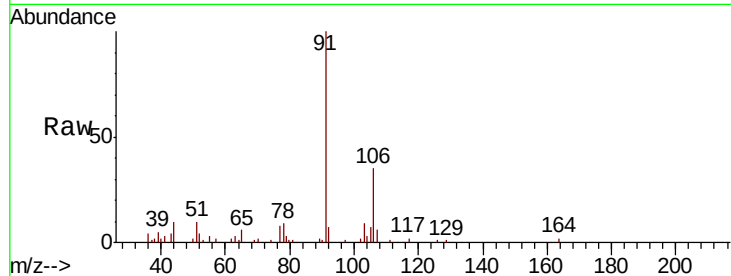




#58
Ethyl Benzene
Concen: 0.067 ppbv
RT: 12.72 min Scan# 3090
Delta R.T. 0.00 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

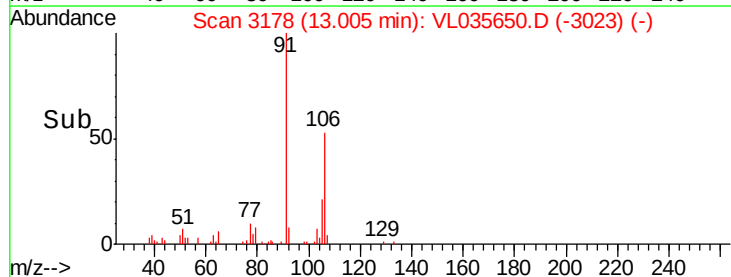
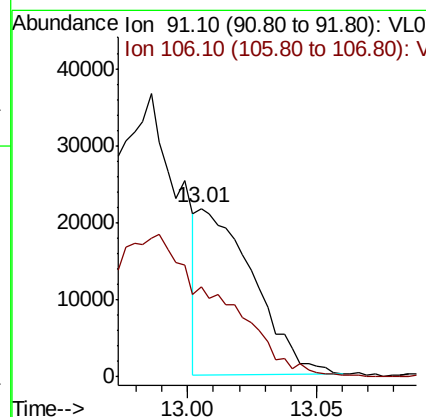
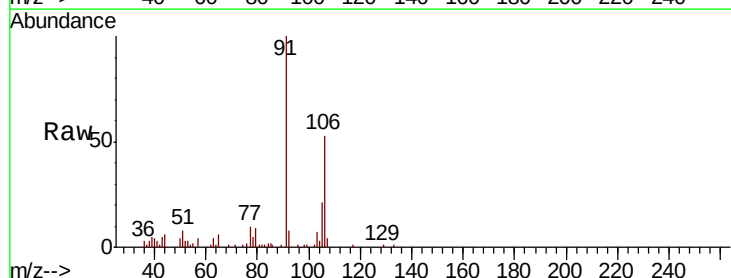
Instrument :
MSVOA_L
ClientSampleId :
SV-13DL

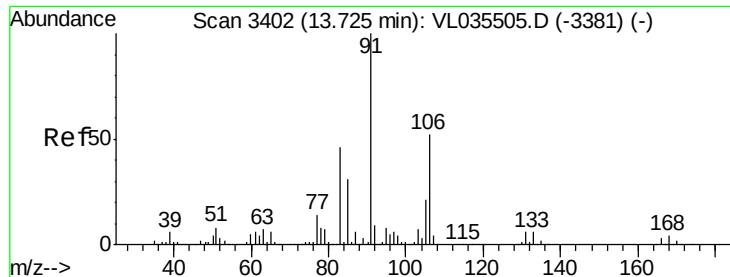
Tot Ion: 91 Resp: 35889
Ion Ratio Lower Upper
91 100
106 34.5 30.3 45.5



#59
m/p-Xylene
Concen: 0.072 ppbv
RT: 13.01 min Scan# 3178
Delta R.T. -0.00 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

Tgt Ion: 91 Resp: 32264
Ion Ratio Lower Upper
91 100
106 0.0 43.4 65.2#

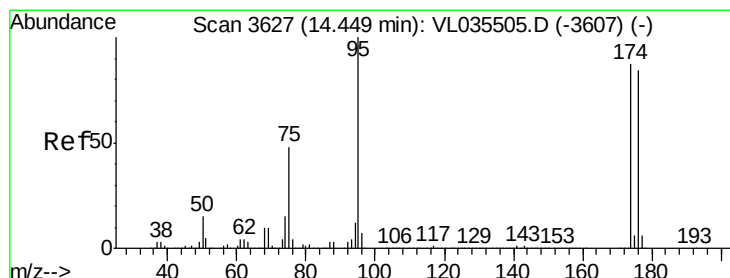
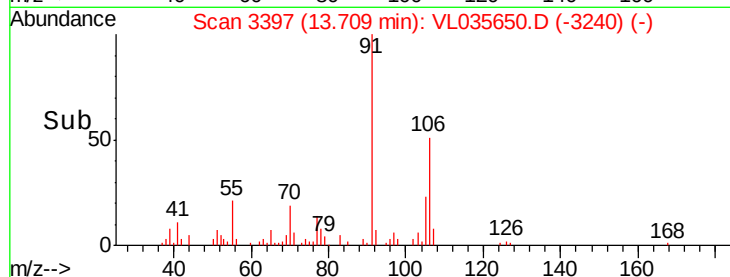
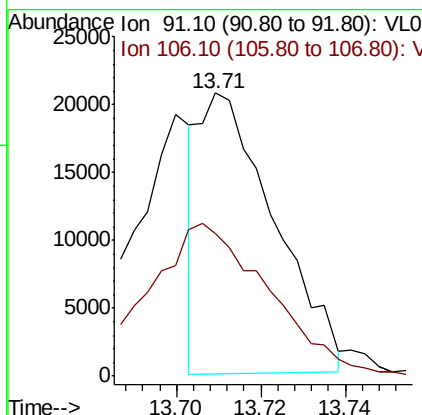
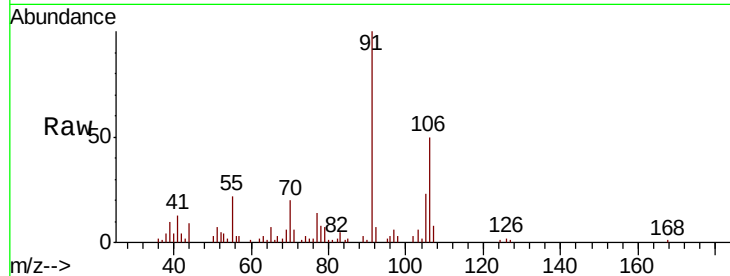




#60
o-Xylene
Concen: 0.056 ppbv
RT: 13.71 min Scan# 3397
Delta R.T. 0.00 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

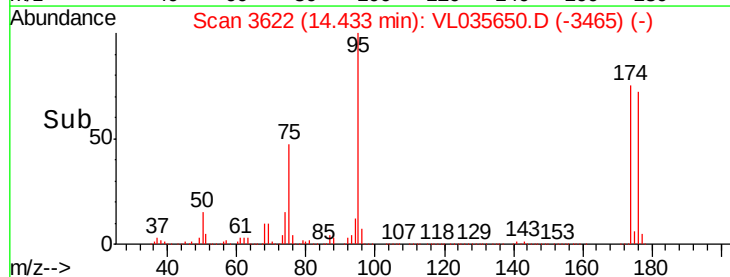
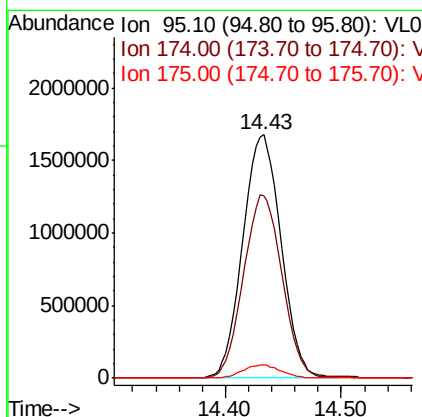
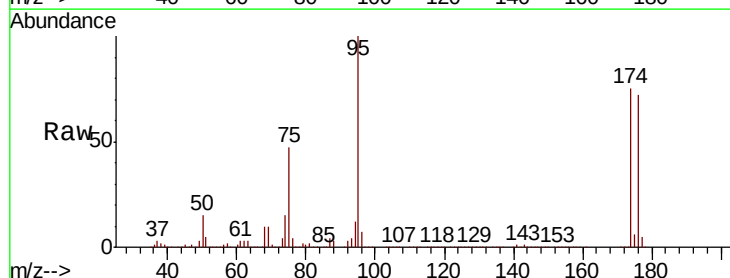
Instrument :
MSVOA_L
ClientSampleID :
SV-13DL

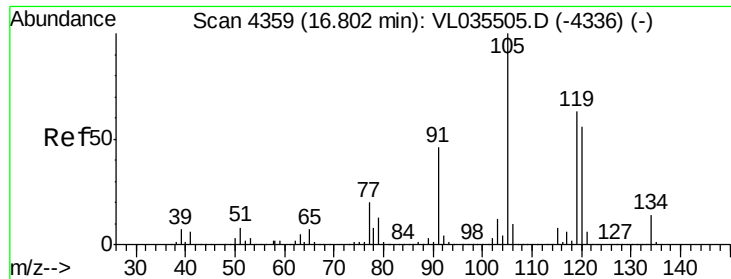
Tot Ion: 91 Resp: 25454
Ion Ratio Lower Upper
91 100
106 90.9 25.8 77.4#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.442 ppbv
RT: 14.43 min Scan# 3622
Delta R.T. 0.00 min
Lab File: VL035650.D
Acq: 17 Sep 2020 5:29

Tgt Ion: 95 Resp: 3866561
Ion Ratio Lower Upper
95 100
174 76.2 69.6 104.4
175 5.5 5.1 7.7





#74
 1,2,4-Trimethylbenzene
 Concen: 0.114 ppbv
 RT: 16.78 min Scan# 4351
 Delta R.T. -0.00 min
 Lab File: VL035650.D
 Acq: 17 Sep 2020 5:29

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-13DL

Tot Ion:	105	Resp:	66782
Ion	Ratio	Lower	Upper
105	100		
120	44.7	44.4	66.6
91	11.5	37.1	55.7#
77	10.0	16.0	24.0#

