

Data File : VL035659.D
Acq On : 17 Sep 2020 16:49
Operator : SY/AP
Sample : L4016-02DL2 100X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV-14DL

Quant Time: Sep 18 02:31:46 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	1109094	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4455797	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	4431608	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.44 95 3290670 10.46 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.60%

Target Compounds					Qvalue	
9) Propene	3.01	41	19422	0.411	ppbv	91
10) Heptane	7.88	43	713057	5.614	ppbv #	1
13) Ethanol	3.63	45	6004	0.512	ppbv	98
15) Acetone	3.85	43	1297368	10.606	ppbv	100
16) 1,3-Butadiene	3.31	39	48891	1.074	ppbv #	7
17) tert-Butyl alcohol	4.32	59	6730	0.045	ppbv #	66
20) Methylene Chloride	4.35	84	32308	0.355	ppbv	97
23) Vinyl Acetate	5.06	43	88416	0.563	ppbv #	23
25) Ethyl Acetate	5.70	43	10149	0.047	ppbv #	79
26) Hexane	5.69	57	8316	0.068	ppbv #	1
27) Carbon Disulfide	4.56	76	17623	0.100	ppbv #	89
29) Chloroform	5.76	83	84455	0.339	ppbv	95
30) Cyclohexane	7.14	84	37506	0.286	ppbv #	89
34) 2-Butanone	5.27	43	87533	0.662	ppbv	98
36) Benzene	6.91	78	11115	0.039	ppbv #	93
38) Trichloroethene	7.84	130	78127	0.466	ppbv	95
39) 1,2-Dichloropropane	7.19	63	857184	8.798	ppbv #	32
44) 2,2,4-Trimethylpentane	7.88	57	4313247	11.365	ppbv	96
51) 2-Hexanone	9.94	43	36047	0.229	ppbv #	20
52) Tetrachloroethene	11.24	164	2369328	14.061	ppbv	96
53) Toluene	9.82	91	102099	0.281	ppbv	96
58) Ethyl Benzene	12.73	91	16199	0.035	ppbv	97
60) o-Xylene	13.72	91	19717	0.051	ppbv	99
74) 1,2,4-Trimethylbenzene	16.78	105	20474	0.041	ppbv #	71

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

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Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

SV-14DL

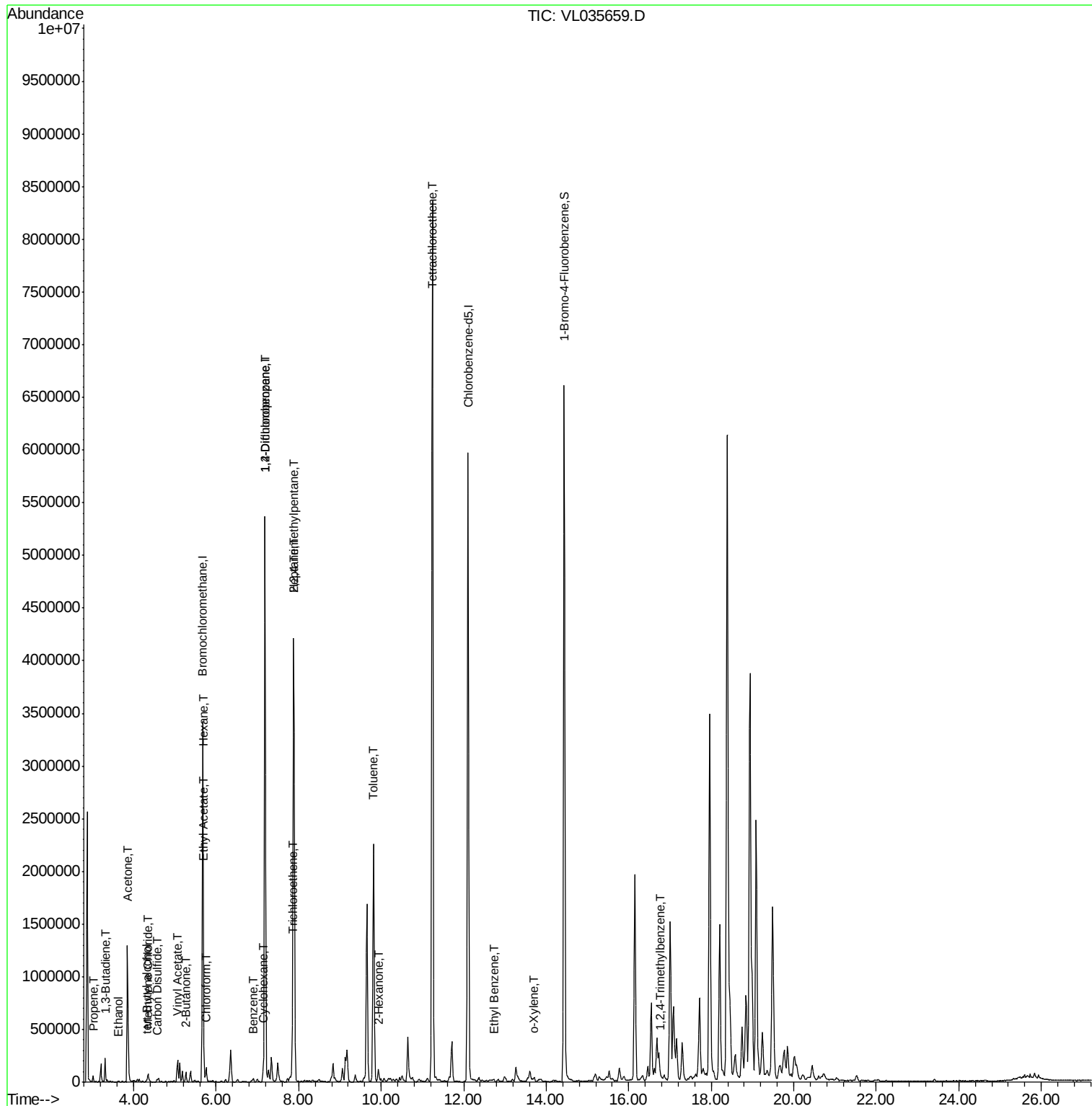
Quant Time: Sep 18 02:31:46 2020

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

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. 0.01 min

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Instrument :

MSVOA_L

ClientSampleId :

SV-14DL

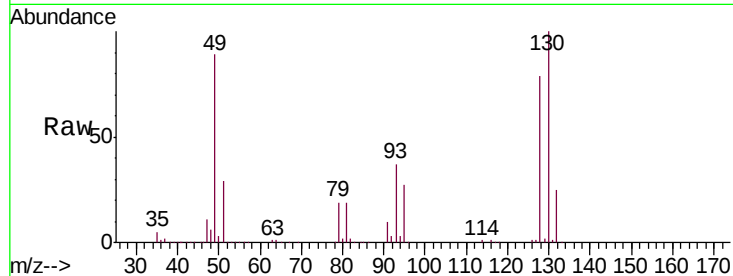
Tgt Ion: 49 Resp: 1109094

Ion Ratio Lower Upper

49 100

128 89.3 50.0 150.1

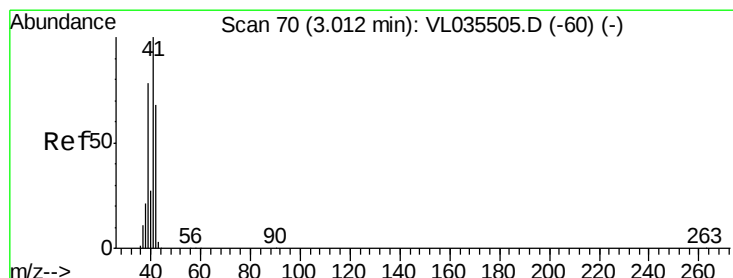
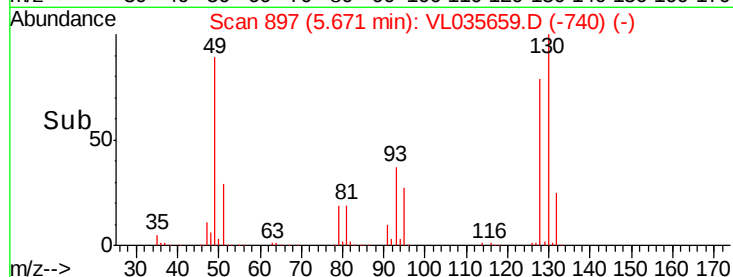
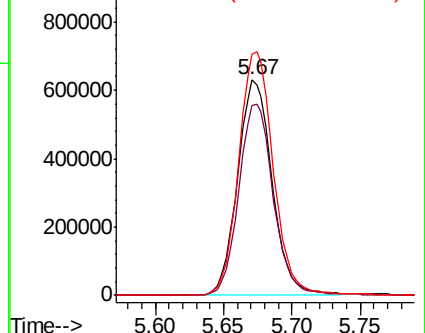
130 114.5 64.4 193.2



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#9

Propene

Concen: 0.411 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.02 min

Lab File: VL035659.D

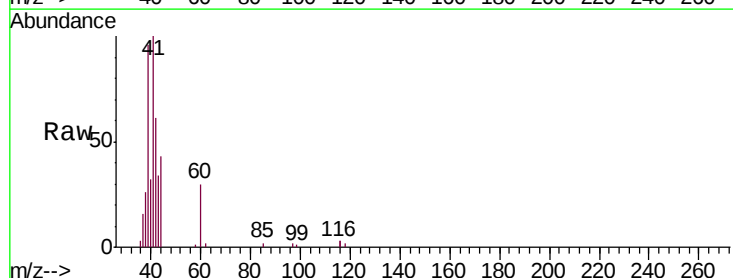
Acq: 17 Sep 2020 16:49

Tgt Ion: 41 Resp: 19422

Ion Ratio Lower Upper

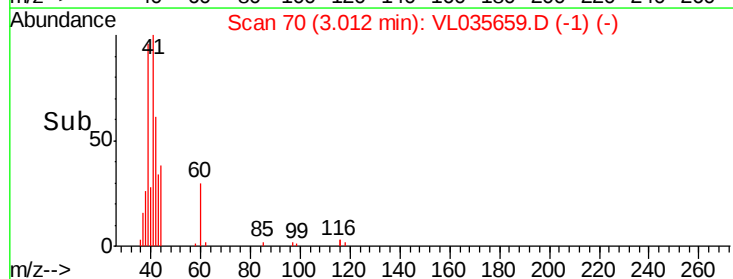
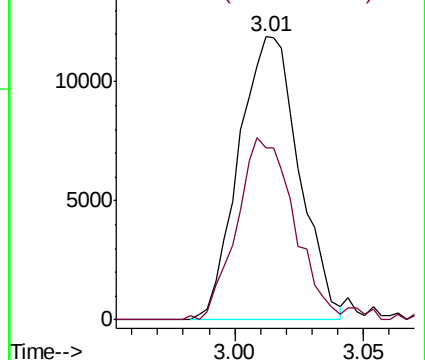
41 100

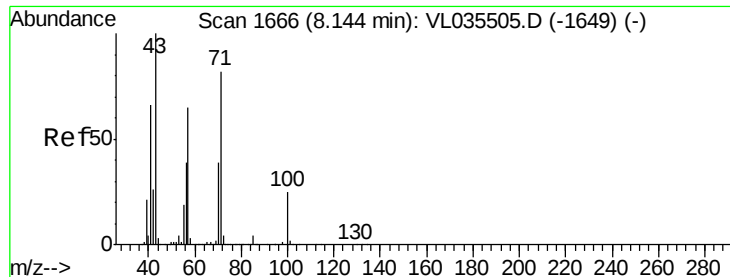
42 63.1 56.3 84.5



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 5.614 ppbv

RT: 7.88 min Scan# 1585

Delta R.T. -0.24 min

Lab File: VL035659.D

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Instrument :

MSVOA_L

ClientSampleId :

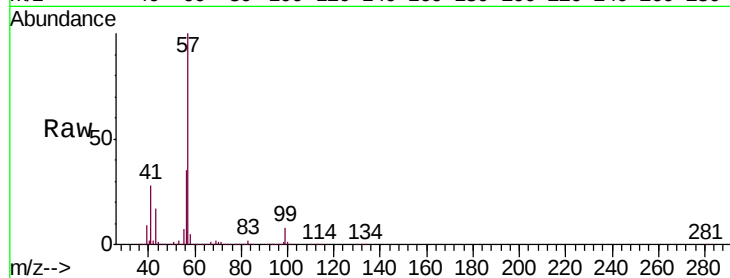
SV-14DL

Tgt Ion: 43 Resp: 713057

Ion Ratio Lower Upper

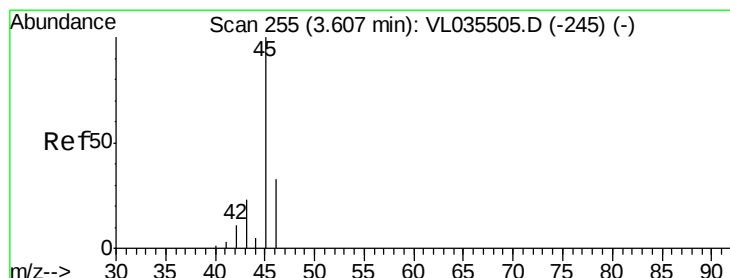
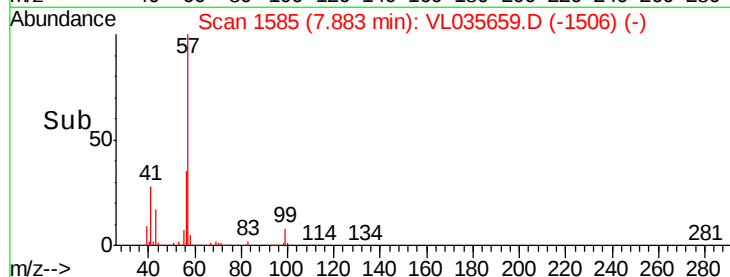
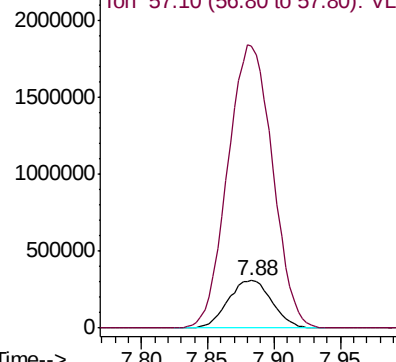
43 100

57 606.2 51.4 77.0#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#13

Ethanol

Concen: 0.512 ppbv

RT: 3.63 min Scan# 261

Delta R.T. 0.03 min

Lab File: VL035659.D

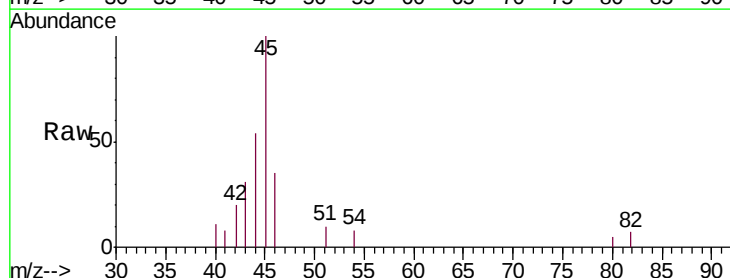
Acq: 17 Sep 2020 16:49

Tgt Ion: 45 Resp: 6004

Ion Ratio Lower Upper

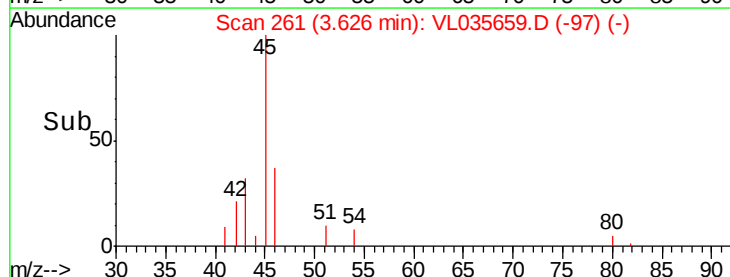
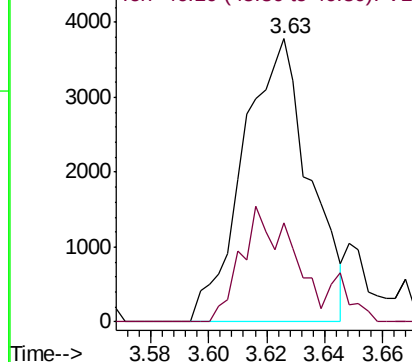
45 100

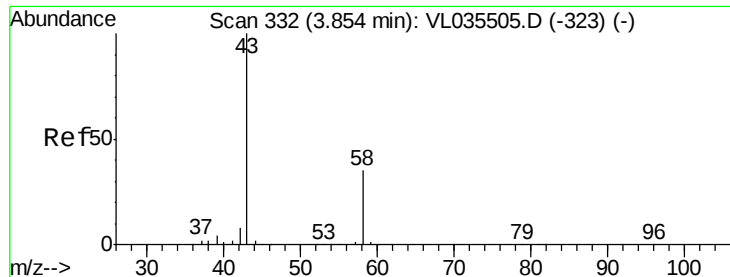
46 36.7 15.2 60.6



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 10.606 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampleId :

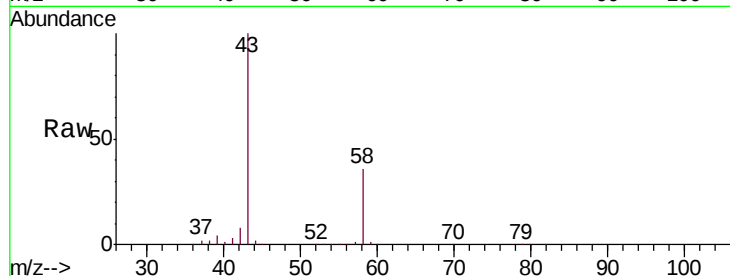
SV-14DL

Tgt Ion: 43 Resp: 1297368

Ion Ratio Lower Upper

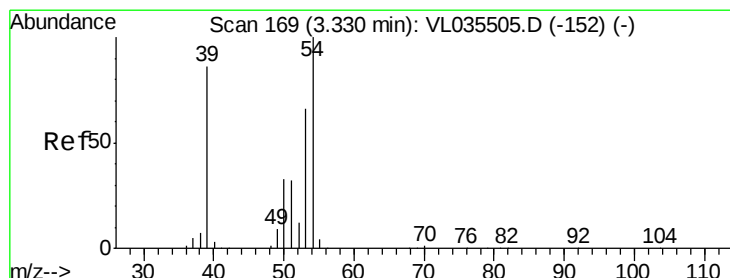
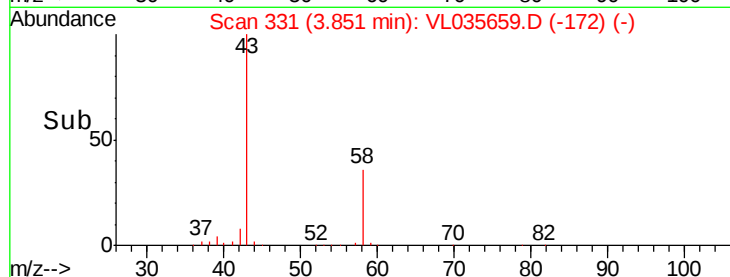
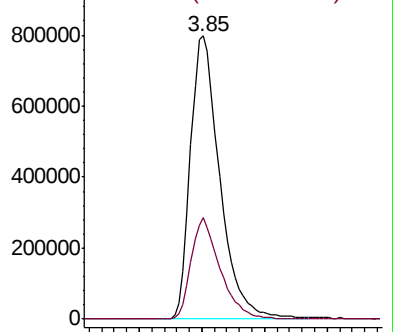
43 100

58 35.6 28.4 42.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 1.074 ppbv

RT: 3.31 min Scan# 163

Delta R.T. -0.01 min

Lab File: VL035659.D

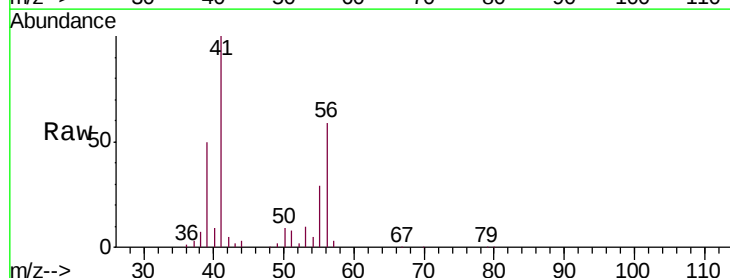
Acq: 17 Sep 2020 16:49

Tgt Ion: 39 Resp: 48891

Ion Ratio Lower Upper

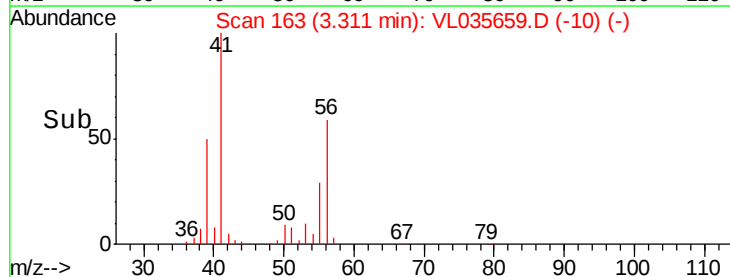
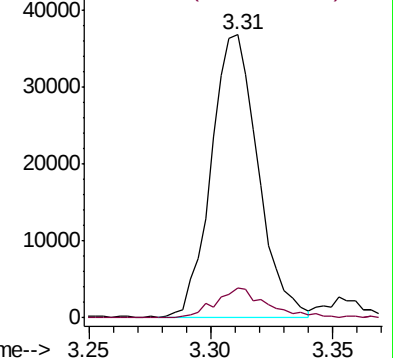
39 100

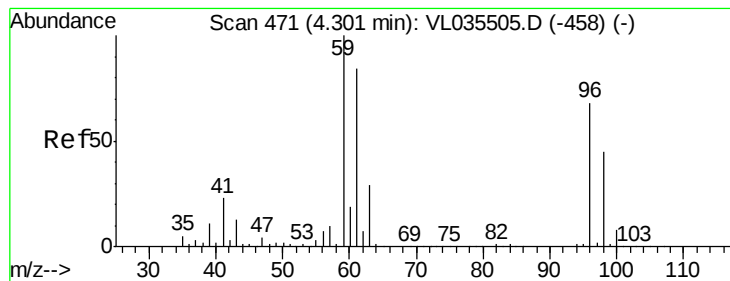
54 11.6 88.4 132.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 0.045 ppbv

RT: 4.32 min Scan# 477

Delta R.T. 0.04 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampleId :

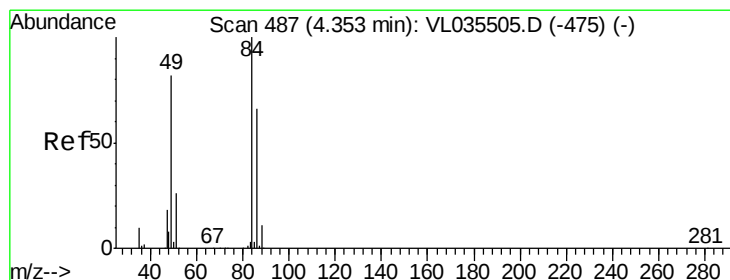
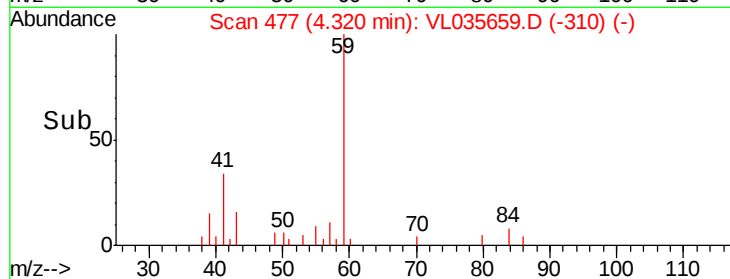
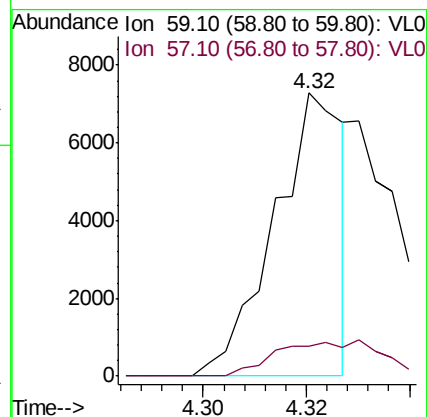
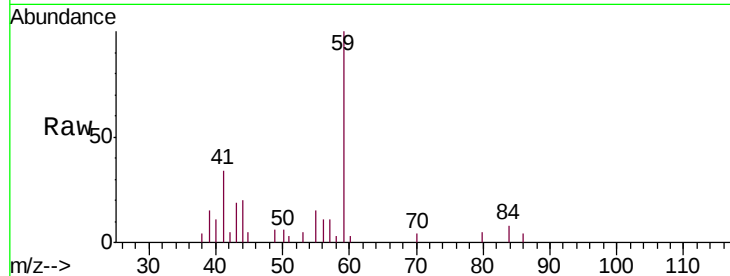
SV-14DL

Tgt Ion: 59 Resp: 6730

Ion Ratio Lower Upper

59 100

57 23.1 8.4 12.6#



#20

Methylene Chloride

Concen: 0.355 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Tgt Ion: 84 Resp: 32308

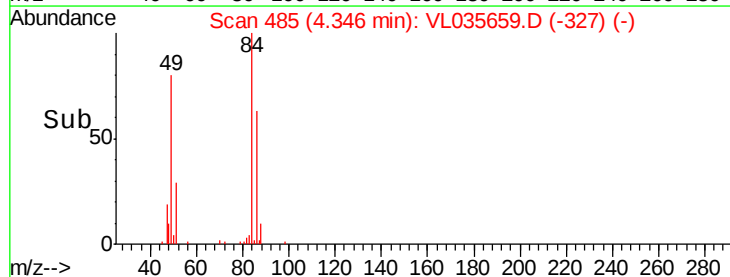
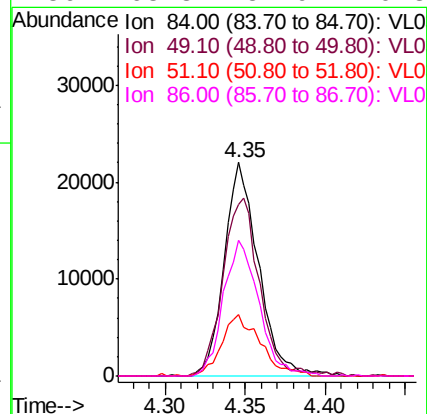
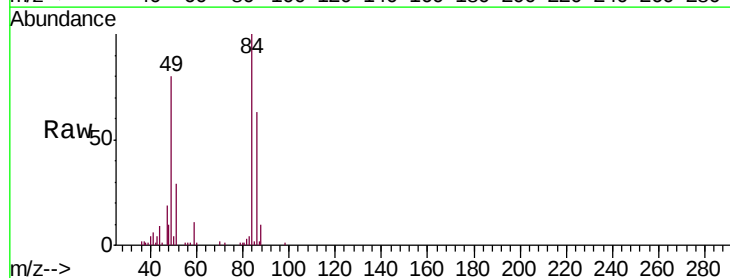
Ion Ratio Lower Upper

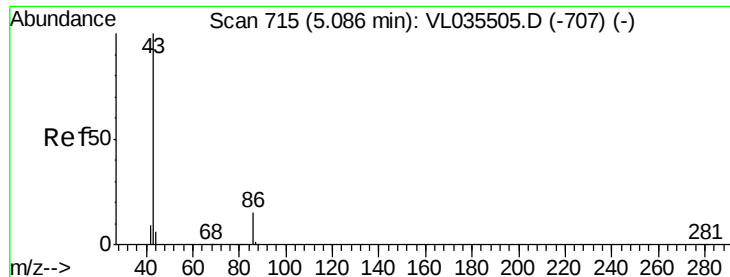
84 100

49 79.4 65.4 98.0

51 28.5 21.5 32.3

86 63.3 52.9 79.3





#23

Vinyl Acetate

Concen: 0.563 ppbv

RT: 5.06 min Scan# 708

Delta R.T. -0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampleId :

SV-14DL

Tgt Ion: 43 Resp: 88416

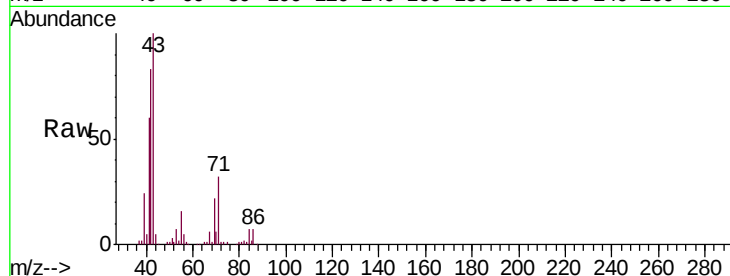
Ion Ratio Lower Upper

43 100

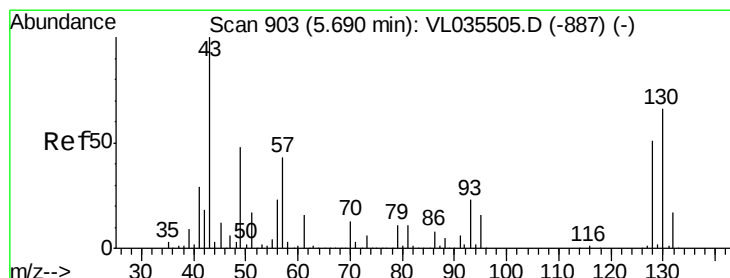
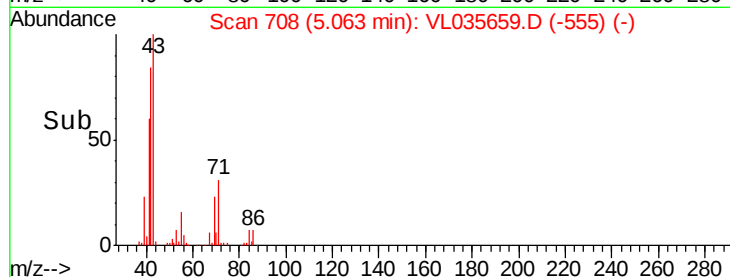
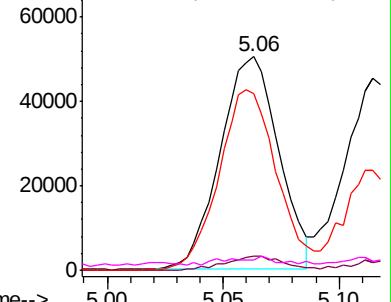
86 6.6 10.6 16.0#

42 82.6 7.5 11.3#

44 1.5 4.4 6.6#



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



#25

Ethyl Acetate

Concen: 0.047 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.02 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Tgt Ion: 43 Resp: 10149

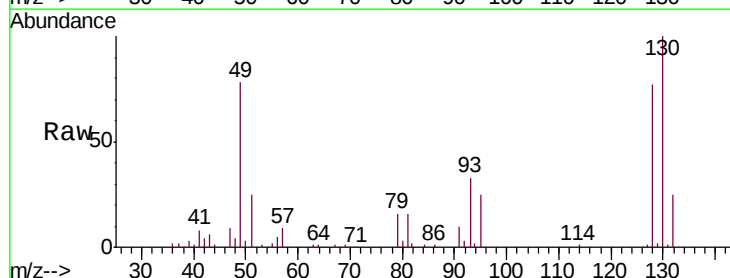
Ion Ratio Lower Upper

43 100

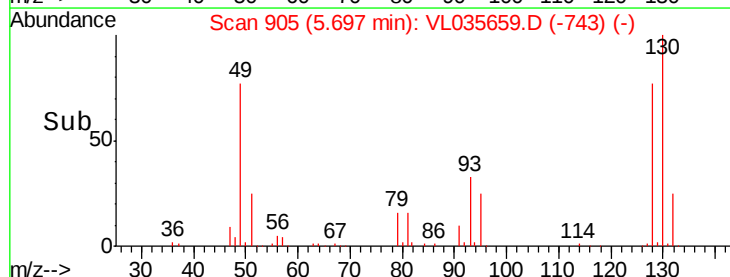
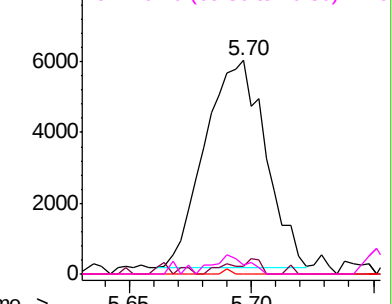
45 6.2 8.4 12.6#

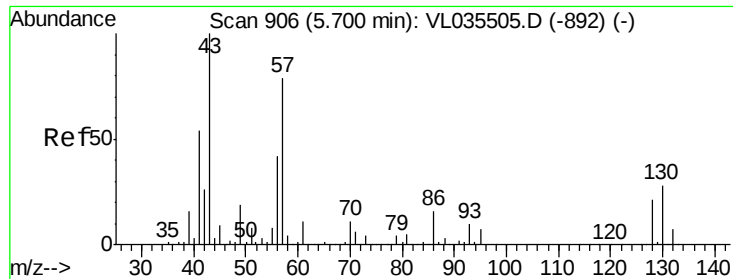
61 0.0 10.6 16.0#

70 6.0 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

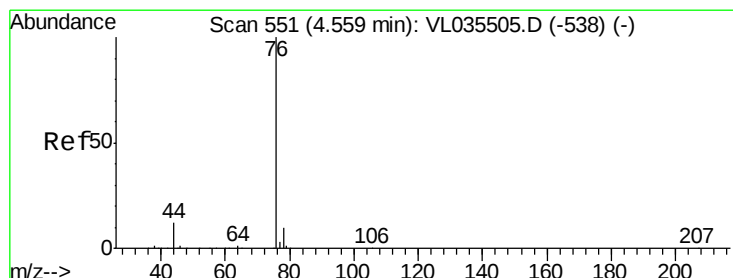
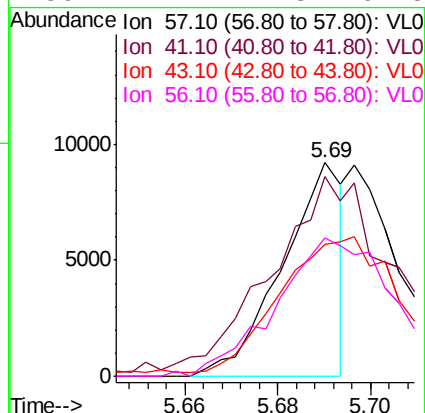
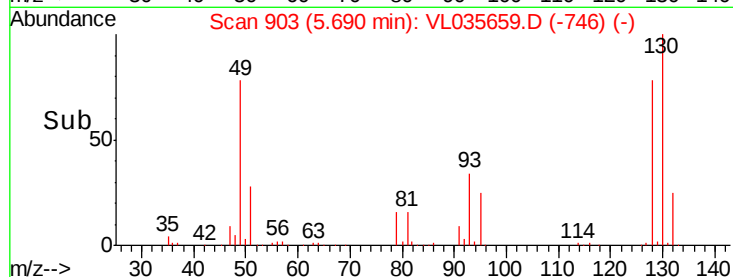
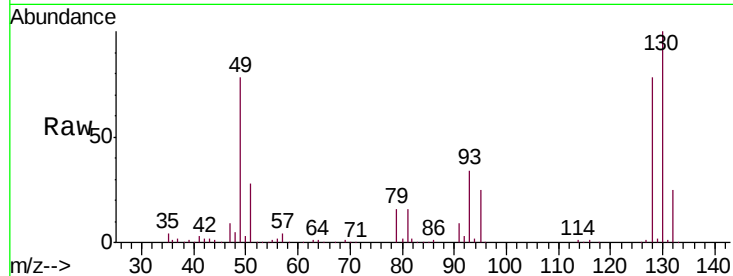




#26
Hexane
Concen: 0.068 ppbv
RT: 5.69 min Scan# 903
Delta R.T. 0.01 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

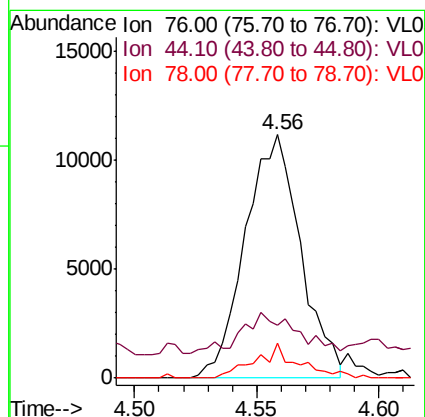
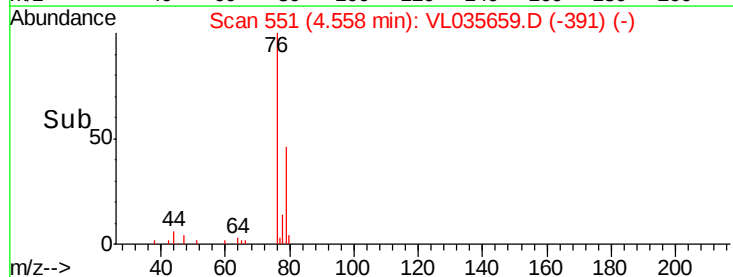
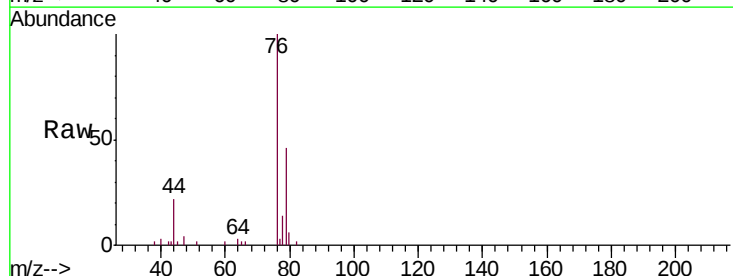
Instrument :
MSVOA_L
ClientSampleId :
SV-14DL

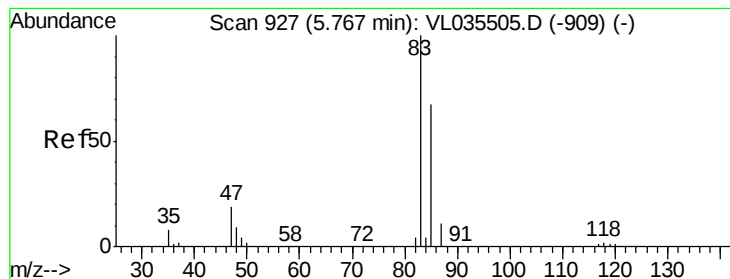
Tgt Ion: 57 Resp: 8316
Ion Ratio Lower Upper
57 100
41 201.7 55.9 83.9#
43 0.0 141.8 212.8#
56 127.2 41.8 62.8#



#27
Carbon Disulfide
Concen: 0.100 ppbv
RT: 4.56 min Scan# 551
Delta R.T. 0.02 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

Tgt Ion: 76 Resp: 17623
Ion Ratio Lower Upper
76 100
44 18.4 9.3 13.9#
78 11.1 7.8 11.6





#29

Chloroform

Concen: 0.339 ppbv

RT: 5.76 min Scan# 924

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampled :

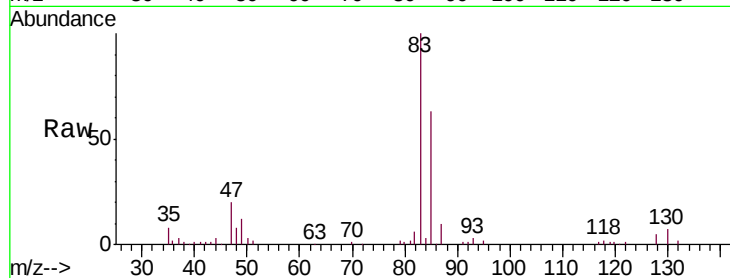
SV-14DL

Tgt Ion: 83 Resp: 84455

Ion Ratio Lower Upper

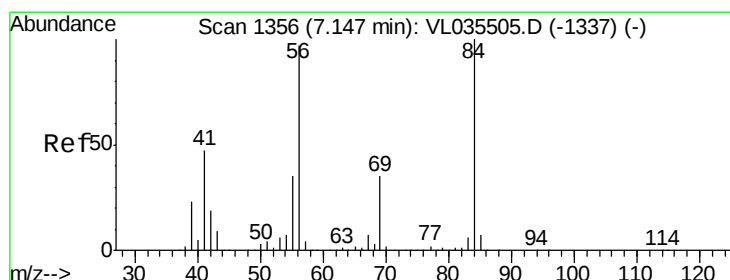
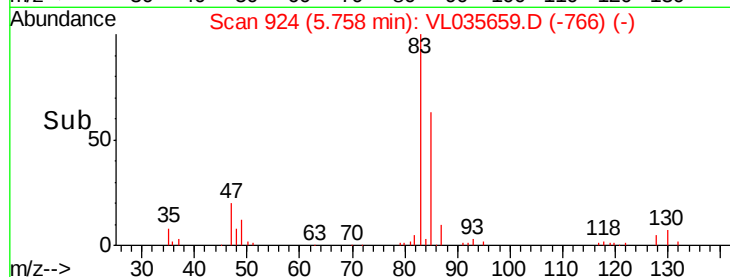
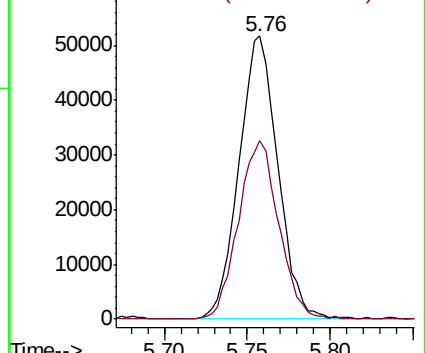
83 100

85 63.0 53.9 80.9



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#30

Cyclohexane

Concen: 0.286 ppbv

RT: 7.14 min Scan# 1353

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

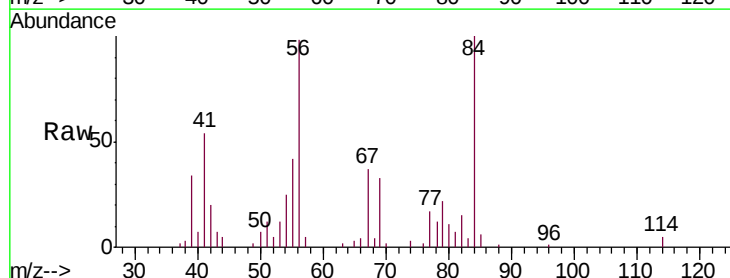
Tgt Ion: 84 Resp: 37506

Ion Ratio Lower Upper

84 100

56 93.7 80.1 120.1

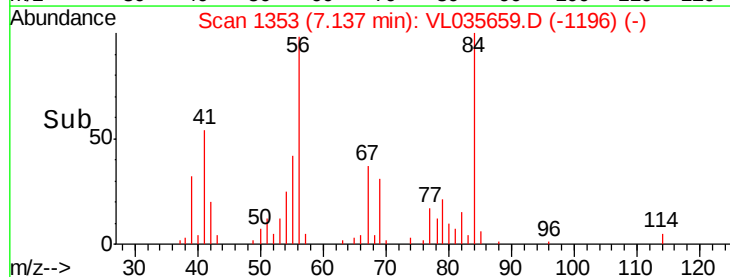
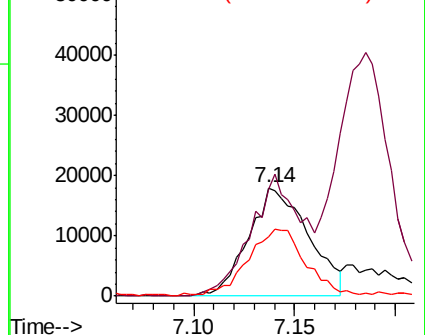
41 61.8 38.1 57.1#

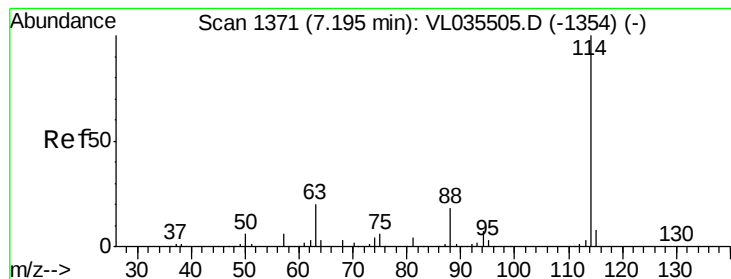


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampleId :

SV-14DL

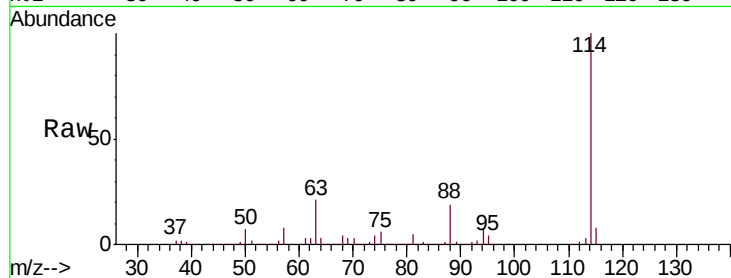
Tgt Ion:114 Resp: 4455797

Ion Ratio Lower Upper

114 100

63 19.4 14.7 22.1

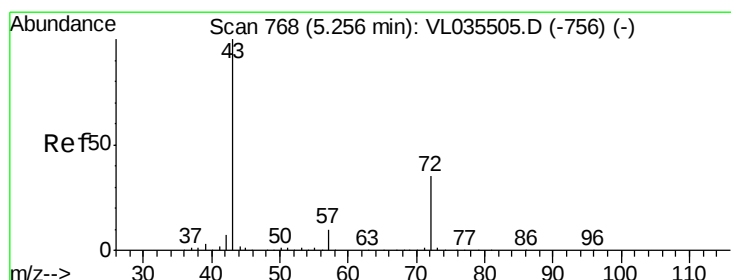
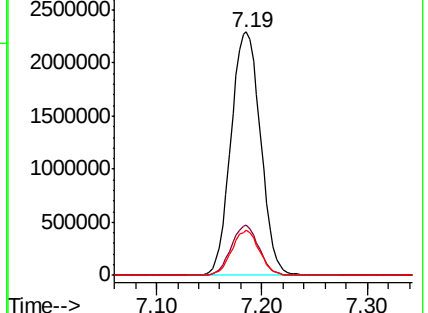
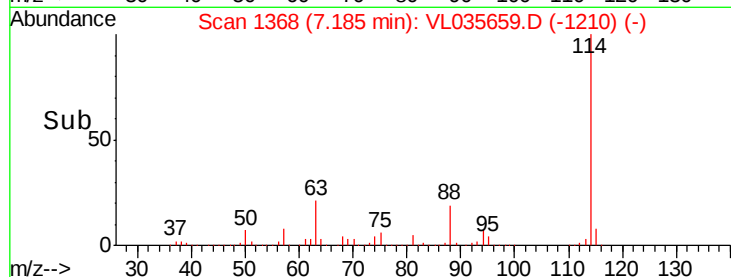
88 17.3 13.4 20.2



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.662 ppbv

RT: 5.27 min Scan# 771

Delta R.T. 0.03 min

Lab File: VL035659.D

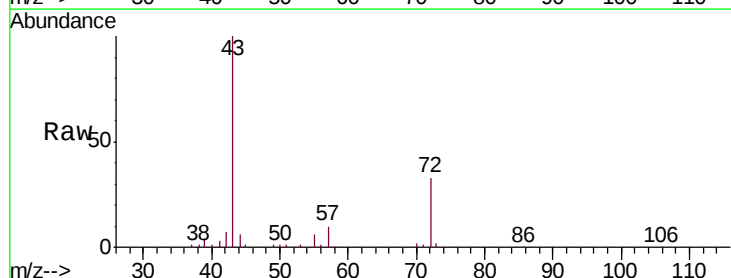
Acq: 17 Sep 2020 16:49

Tgt Ion: 43 Resp: 87533

Ion Ratio Lower Upper

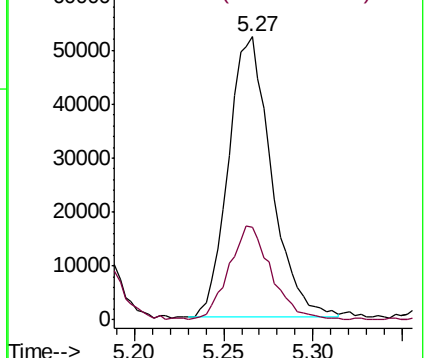
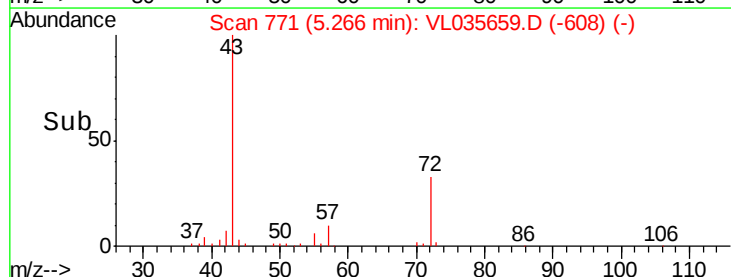
43 100

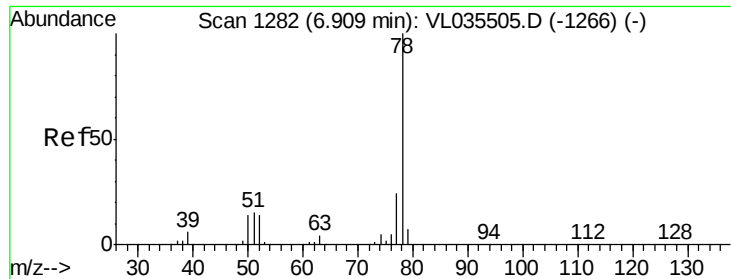
72 33.6 27.7 41.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

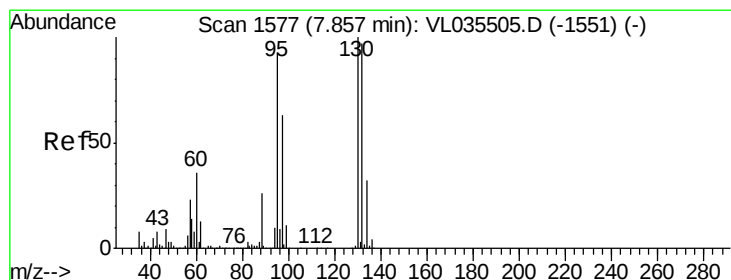
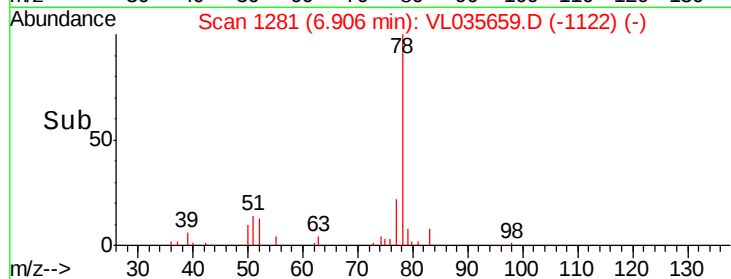
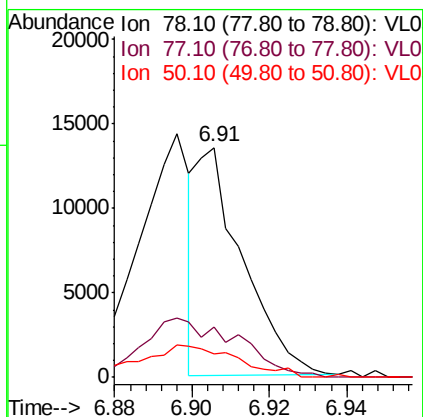
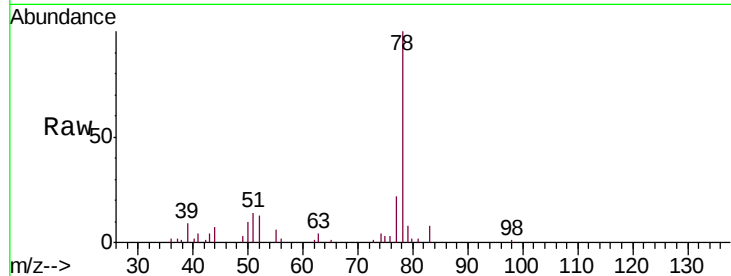




#36
Benzene
Concen: 0.039 ppbv
RT: 6.91 min Scan# 1281
Delta R.T. 0.01 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

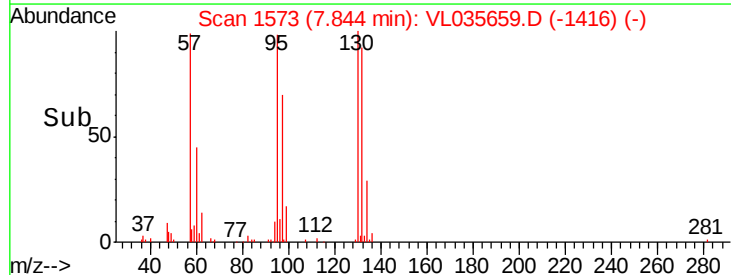
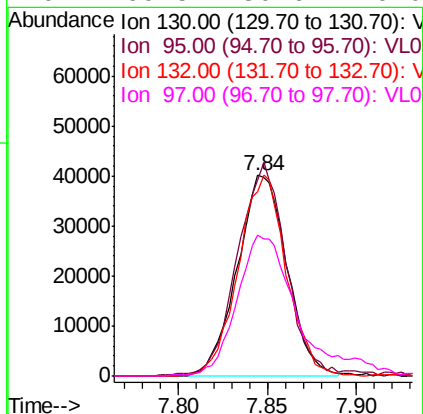
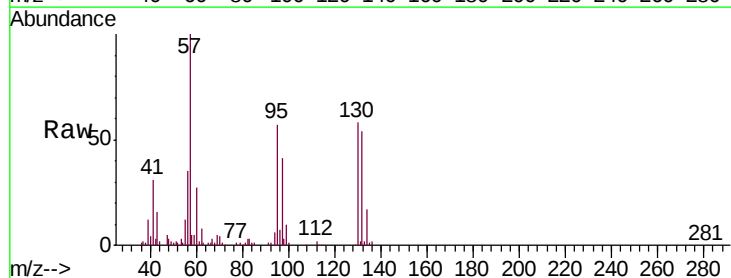
Instrument :
MSVOA_L
ClientSampleId :
SV-14DL

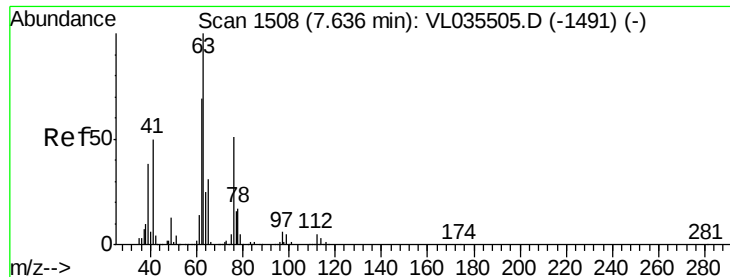
Tgt Ion: 78 Resp: 11115
Ion Ratio Lower Upper
78 100
77 22.1 19.3 28.9
50 9.0 11.0 16.6#



#38
Trichloroethene
Concen: 0.466 ppbv
RT: 7.84 min Scan# 1573
Delta R.T. 0.01 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

Tgt Ion: 130 Resp: 78127
Ion Ratio Lower Upper
130 100
95 96.5 74.6 112.0
132 91.4 77.6 116.4
97 69.5 50.6 76.0





#39

1,2-Dichloropropane

Concen: 8.798 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. -0.43 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampleId :

SV-14DL

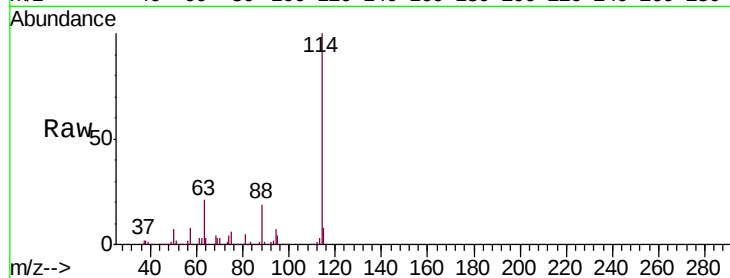
Tgt Ion: 63 Resp: 857184

Ion Ratio Lower Upper

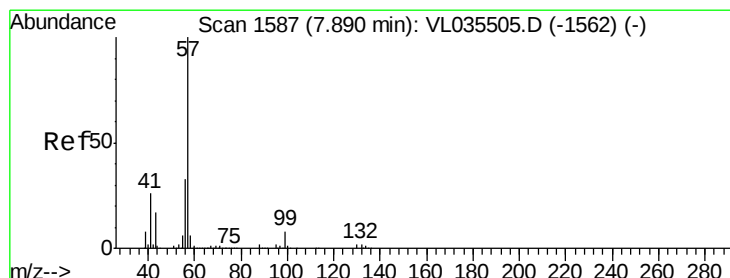
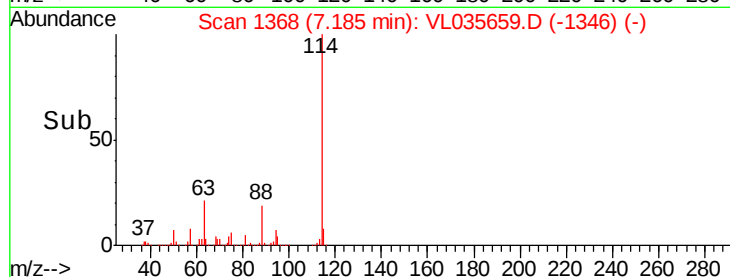
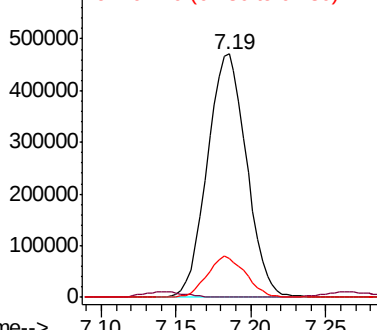
63 100

41 0.0 40.0 60.0#

62 16.0 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: 11.365 ppbv

RT: 7.88 min Scan# 1584

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

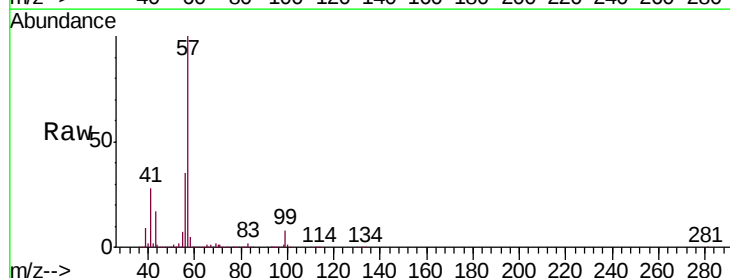
Tgt Ion: 57 Resp: 4313247

Ion Ratio Lower Upper

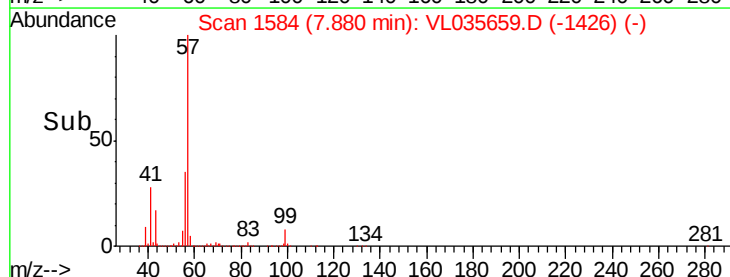
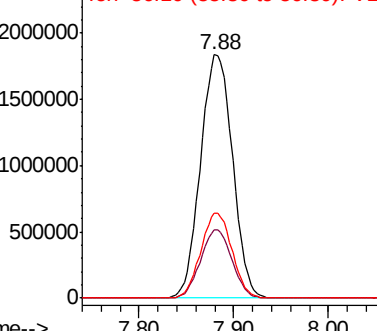
57 100

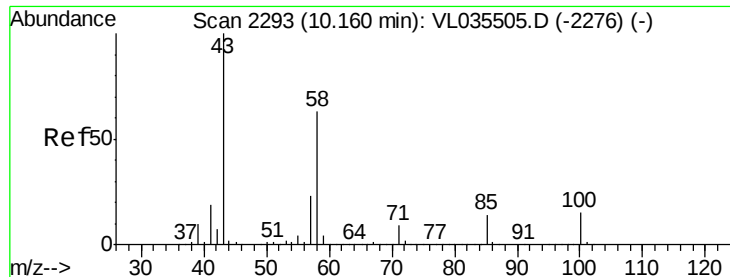
41 27.4 20.5 30.7

56 34.0 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

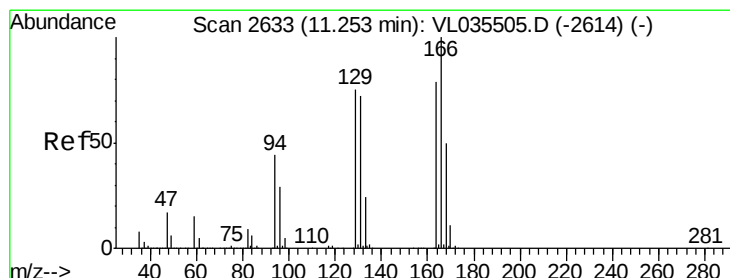
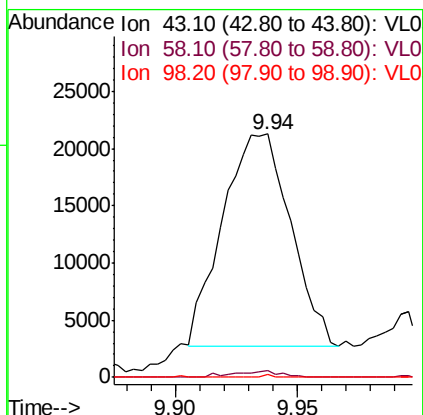
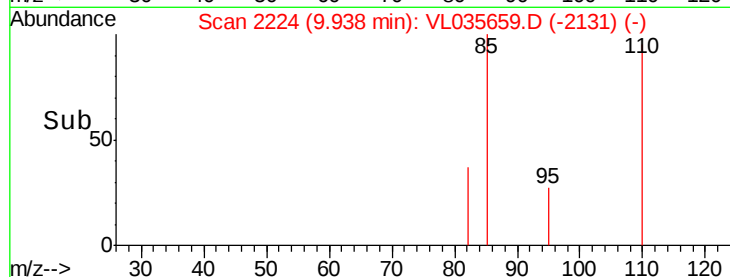
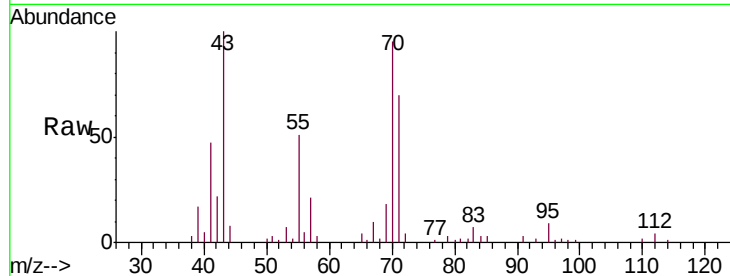




#51
2-Hexanone
Concen: 0.229 ppbv
RT: 9.94 min Scan# 2224
Delta R.T. -0.20 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

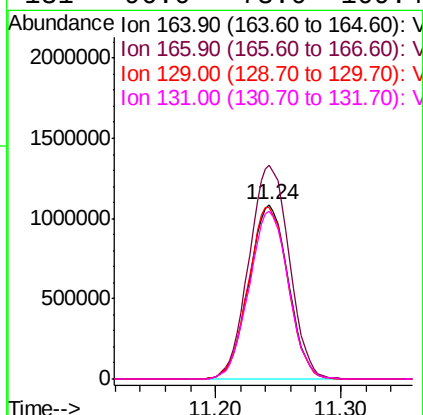
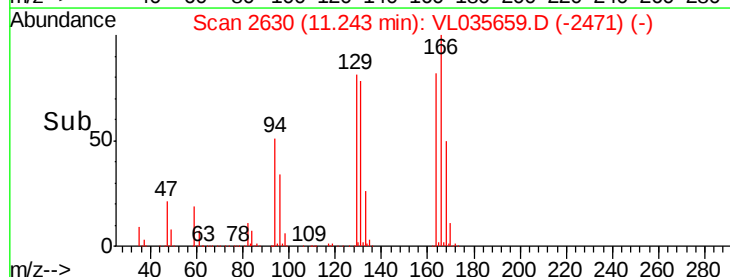
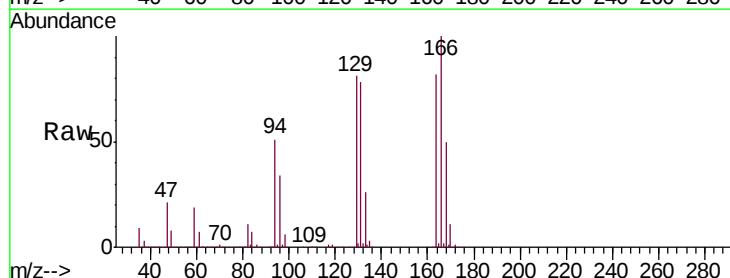
Instrument :
MSVOA_L
ClientSampled :
SV-14DL

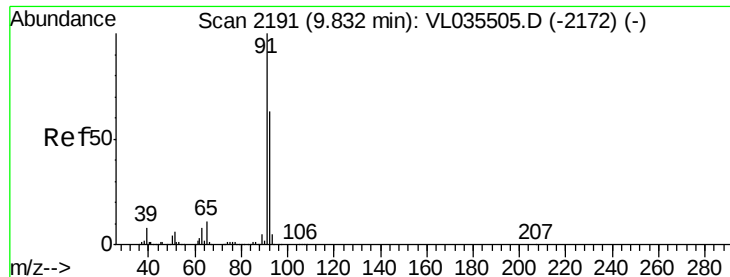
Tgt Ion: 43 Resp: 36047
Ion Ratio Lower Upper
43 100
58 0.0 50.2 75.4#
98 1.7 0.4 0.6#



#52
Tetrachloroethene
Concen: 14.061 ppbv
RT: 11.24 min Scan# 2630
Delta R.T. 0.01 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

Tgt Ion: 164 Resp: 2369328
Ion Ratio Lower Upper
164 100
166 122.5 100.9 151.3
129 98.7 75.3 112.9
131 96.0 73.0 109.4





#53

Toluene

Concen: 0.281 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

Instrument :

MSVOA_L

ClientSampleId :

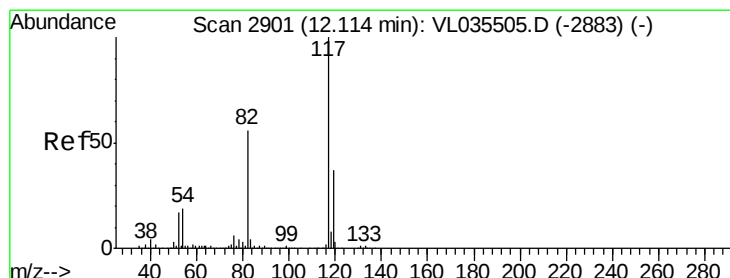
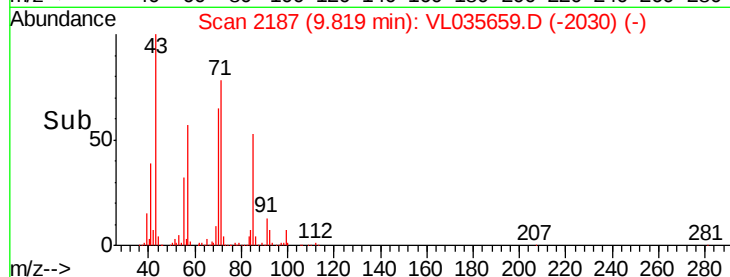
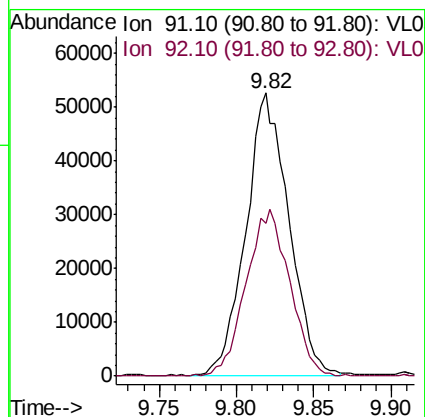
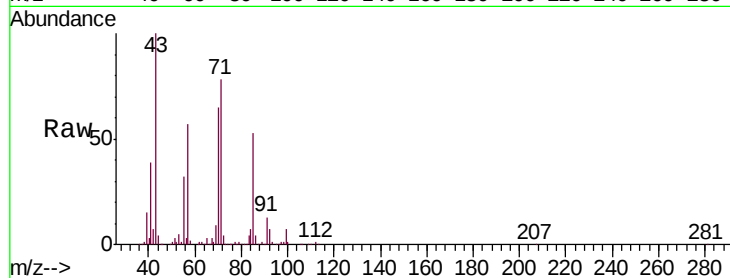
SV-14DL

Tgt Ion: 91 Resp: 102099

Ion Ratio Lower Upper

91 100

92 59.4 49.8 74.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. 0.01 min

Lab File: VL035659.D

Acq: 17 Sep 2020 16:49

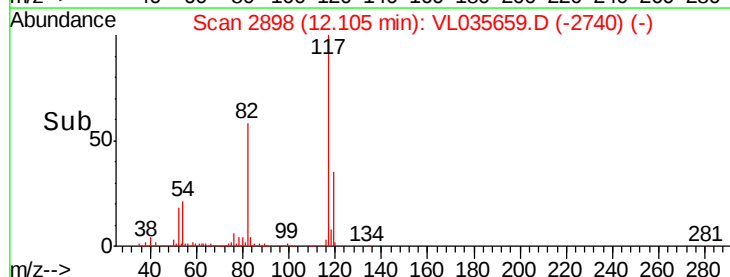
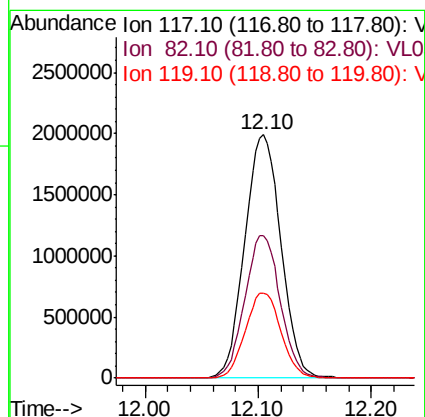
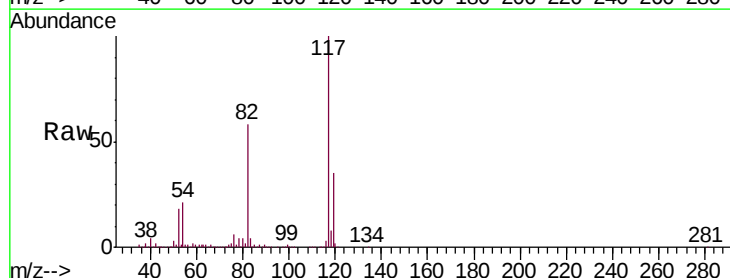
Tgt Ion: 117 Resp: 4431608

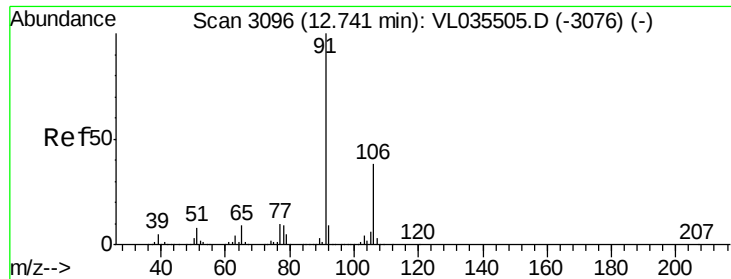
Ion Ratio Lower Upper

117 100

82 57.7 41.6 62.4

119 34.7 29.3 43.9

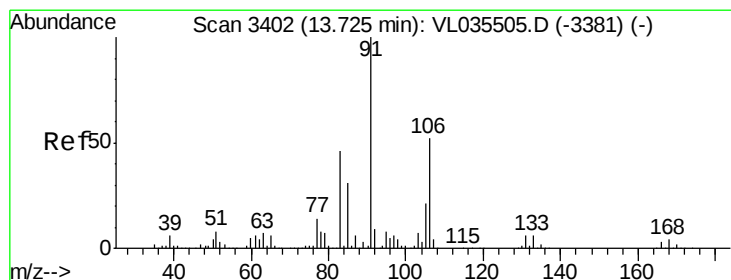
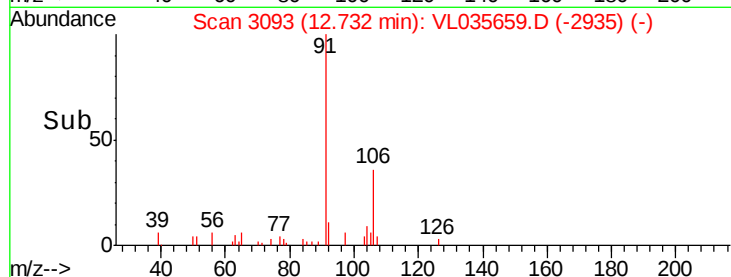
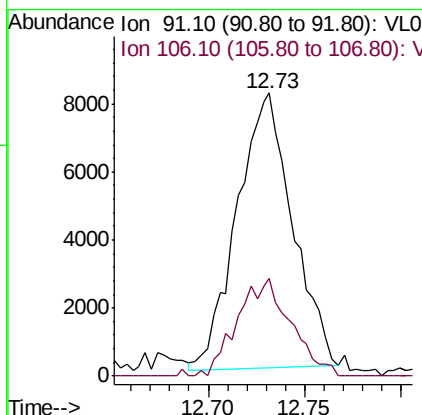
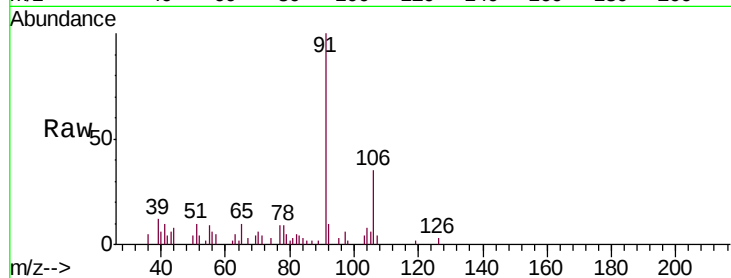




#58
Ethyl Benzene
Concen: 0.035 ppbv
RT: 12.73 min Scan# 3093
Delta R.T. 0.01 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

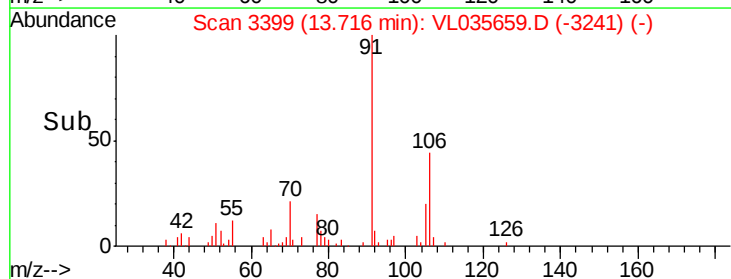
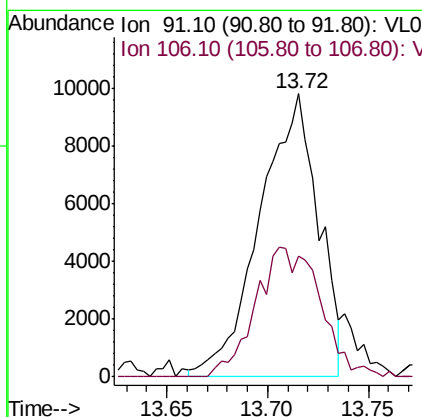
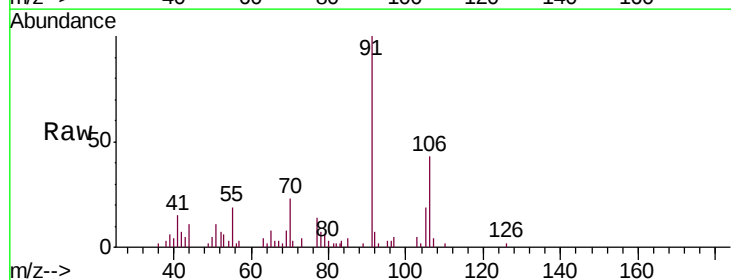
Instrument :
MSVOA_L
ClientSampleId :
SV-14DL

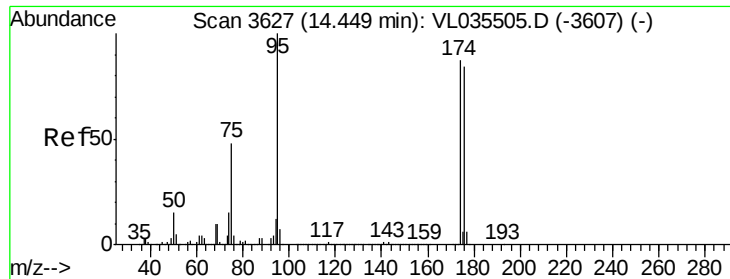
Tgt Ion: 91 Resp: 16199
Ion Ratio Lower Upper
91 100
106 35.9 30.3 45.5



#60
o-Xylene
Concen: 0.051 ppbv
RT: 13.72 min Scan# 3399
Delta R.T. 0.01 min
Lab File: VL035659.D
Acq: 17 Sep 2020 16:49

Tgt Ion: 91 Resp: 19717
Ion Ratio Lower Upper
91 100
106 50.8 25.8 77.4

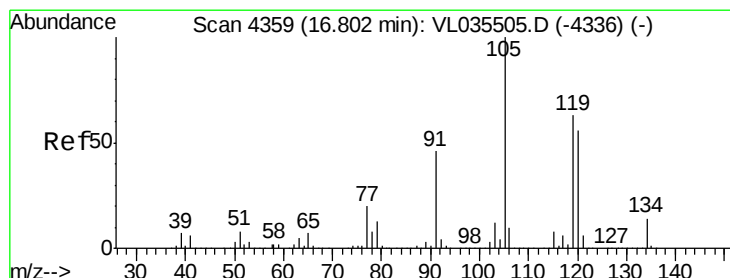
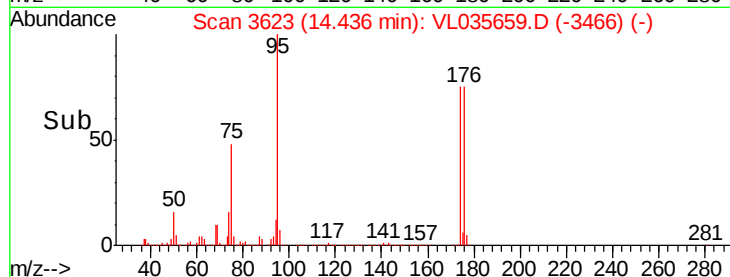
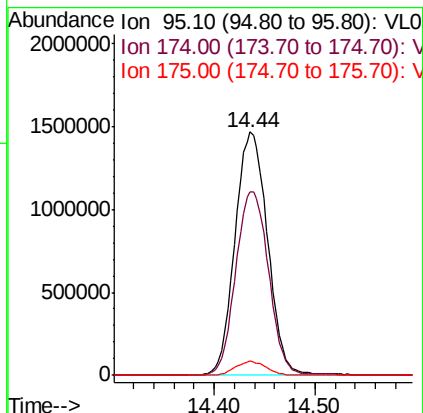
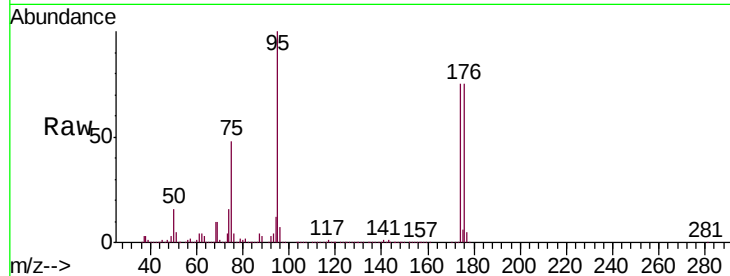




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.456 ppbv
 RT: 14.44 min Scan# 3623
 Delta R.T. 0.01 min
 Lab File: VL035659.D
 Acq: 17 Sep 2020 16:49

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-14DL

Tgt Ion: 95 Resp: 3290670
 Ion Ratio Lower Upper
 95 100
 174 77.0 69.6 104.4
 175 5.6 5.1 7.7



#74
 1,2,4-Trimethylbenzene
 Concen: 0.041 ppbv
 RT: 16.78 min Scan# 4353
 Delta R.T. 0.00 min
 Lab File: VL035659.D
 Acq: 17 Sep 2020 16:49

Tgt Ion: 105 Resp: 20474
 Ion Ratio Lower Upper
 105 100
 120 45.3 44.4 66.6
 91 11.0 37.1 55.7#
 77 14.6 16.0 24.0#

