

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
 Data File : VL034900.D
 Acq On : 16 Mar 2020 21:24
 Operator : SY/AP
 Sample : L1924-05DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-01DL

Quant Time: Mar 17 04:28:03 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 09 16:42:53 2020
 QLast Update : Mon Mar 09 16:42:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	900231	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1895972	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1835750	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1453039	10.15	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.50%

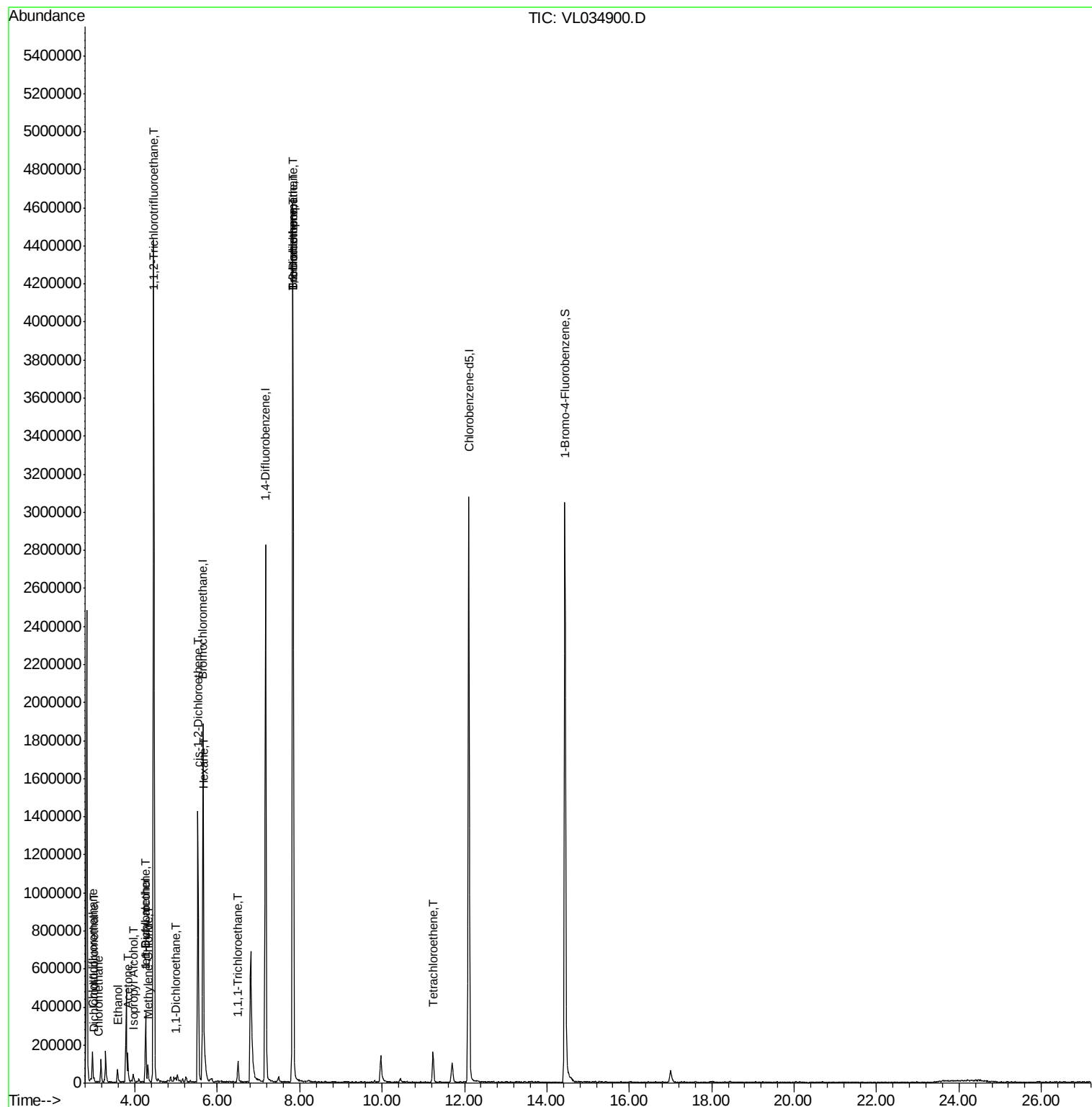
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	11087	0.090	ppbv	94
3) Chlorodifluoromethane	2.96	51	27092	0.269	ppbv #	73
4) Chloromethane	3.11	50	1860	0.033	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.46	101	1554422	16.935	ppbv	97
13) Ethanol	3.58	45	60832	4.167	ppbv	95
15) Acetone	3.82	43	136710	1.172	ppbv	94
17) tert-Butyl alcohol	4.26	59	6542	0.058	ppbv #	72
18) 1,1-Dichloroethene	4.26	96	96654	2.378	ppbv	97
19) Isopropyl Alcohol	3.96	45	20705	0.281	ppbv #	37
20) Methylene Chloride	4.32	84	26900	0.729	ppbv #	92
24) 1,1-Dichloroethane	4.99	63	16396	0.142	ppbv #	94
26) Hexane	5.67	57	10718	0.120	ppbv #	40
31) cis-1,2-Dichloroethene	5.53	61	772546	8.439	ppbv	98
32) 1,1,1-Trichloroethane	6.50	97	62392	0.469	ppbv	92
38) Trichloroethene	7.83	130	1389594	21.650	ppbv	96
39) 1,2-Dichloropropane	7.83	63	7920	0.118	ppbv #	1
42) Bromodichloromethane	7.83	83	11845	0.091	ppbv	91
52) Tetrachloroethene	11.23	164	12995	0.194	ppbv	87

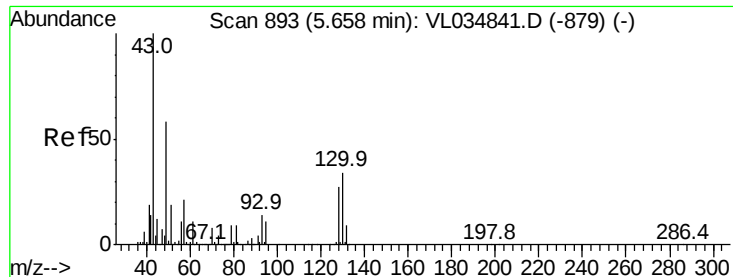
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
Data File : VL034900.D
Acq On : 16 Mar 2020 21:24
Operator : SY/AP
Sample : L1924-05DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampled :
SV-01DL

Quant Time: Mar 17 04:28:03 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 09 16:42:53 2020
QLast Update : Mon Mar 09 16:42:53 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.01 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

SV-01DL

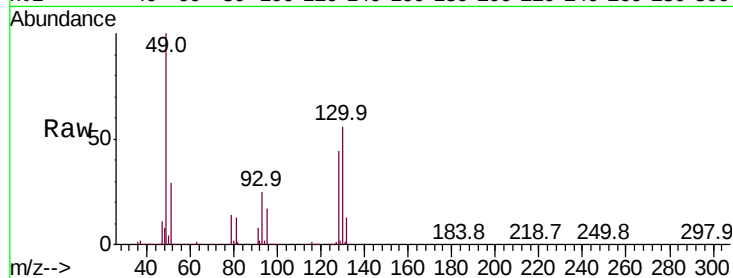
Tot Ion: 49 Resp: 900231

Ion Ratio Lower Upper

49 100

128 44.8 23.4 70.3

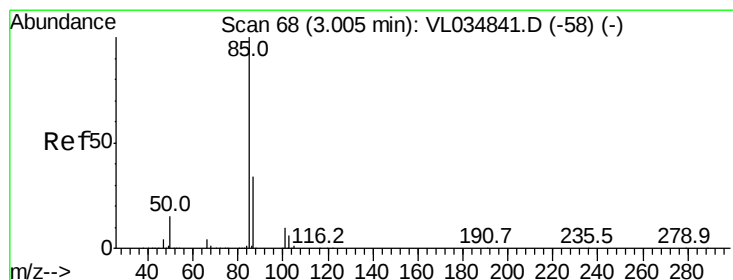
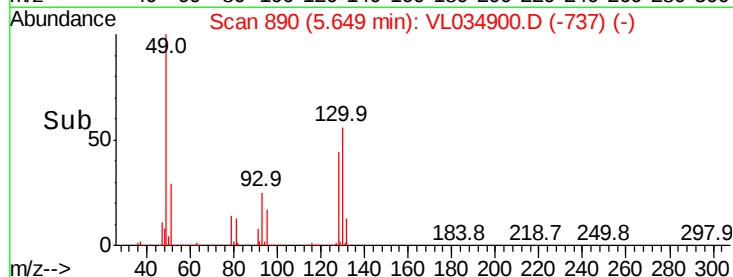
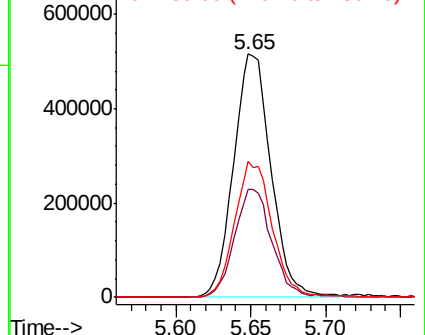
130 56.4 30.0 90.0



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



#2

Dichlorodifluoromethane

Concen: 0.090 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.00 min

Lab File: VL034900.D

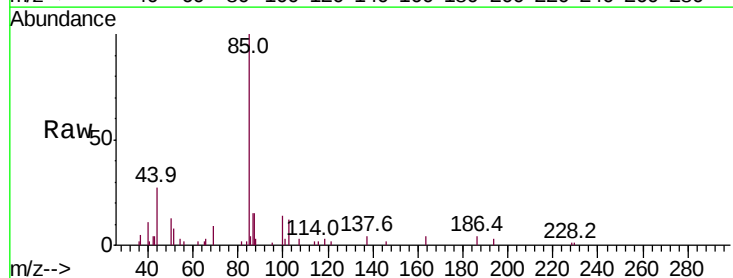
Acq: 16 Mar 2020 21:24

Tgt Ion: 85 Resp: 11087

Ion Ratio Lower Upper

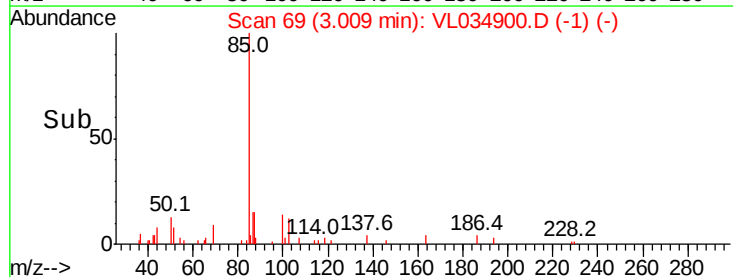
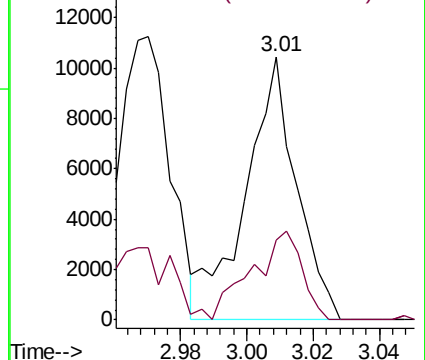
85 100

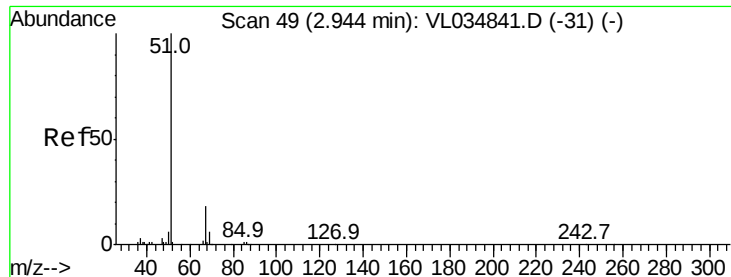
87 30.4 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.269 ppbv

RT: 2.96 min Scan# 55

Delta R.T. 0.02 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

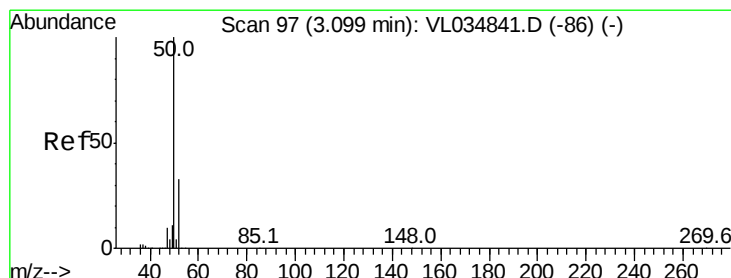
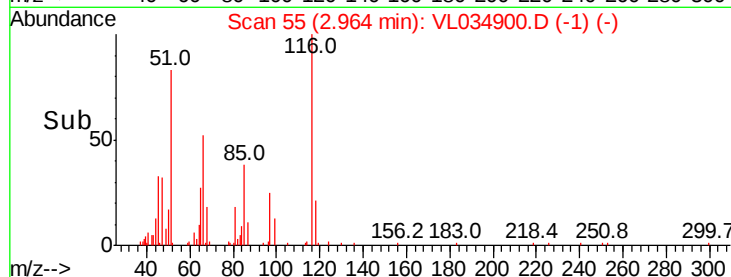
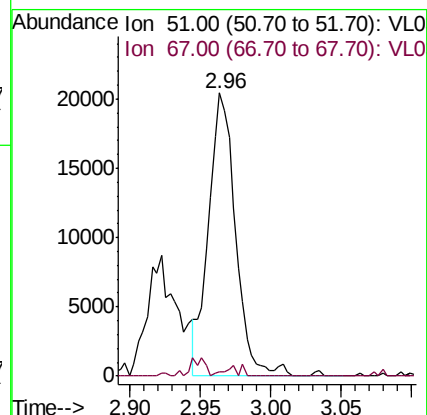
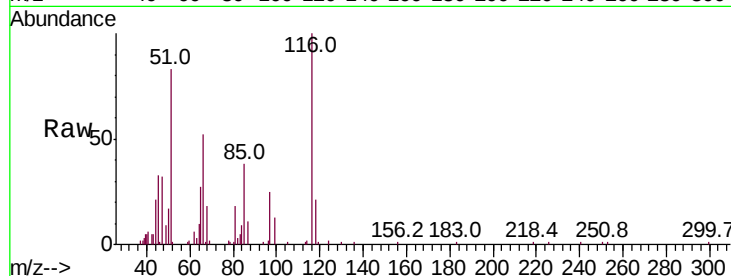
SV-01DL

Tot Ion: 51 Resp: 27092

Ion Ratio Lower Upper

51 100

67 6.0 14.3 21.5#



#4

Chloromethane

Concen: 0.033 ppbv

RT: 3.11 min Scan# 99

Delta R.T. 0.01 min

Lab File: VL034900.D

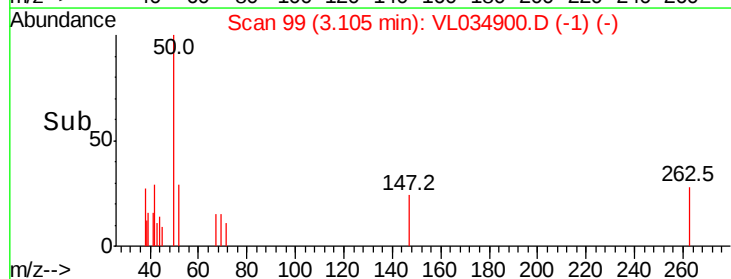
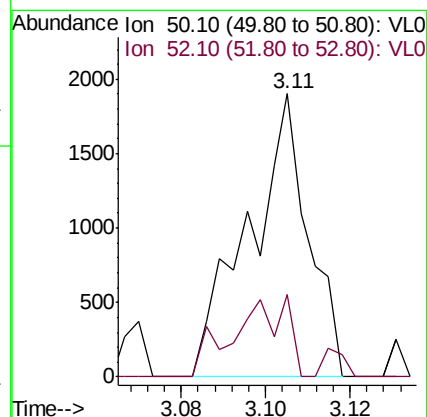
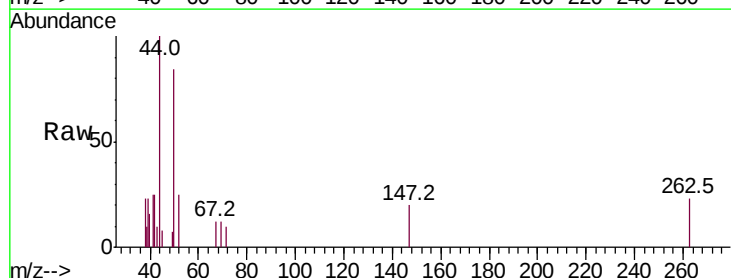
Acq: 16 Mar 2020 21:24

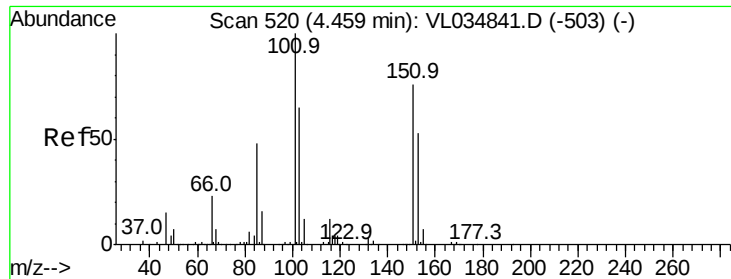
Tgt Ion: 50 Resp: 1860

Ion Ratio Lower Upper

50 100

52 29.3 26.8 40.2





#12

1,1,2-Trichlorotrifluoroethane

Concen: 16.935 ppbv

RT: 4.46 min Scan# 519

Delta R.T. -0.00 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

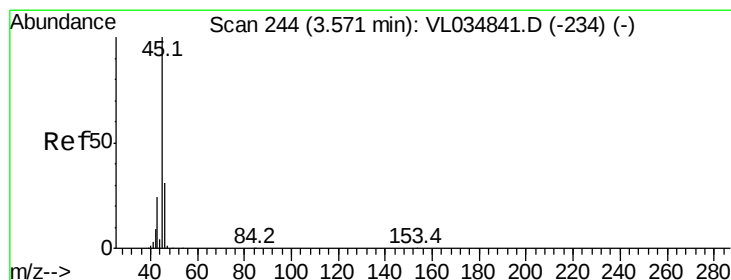
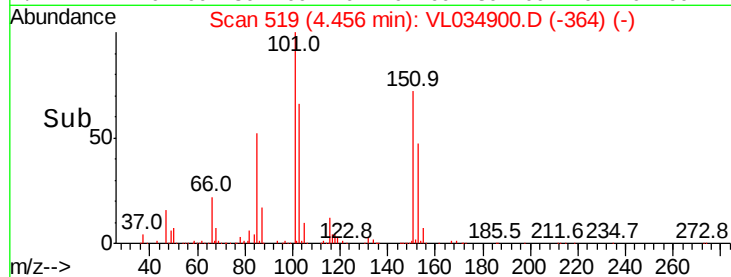
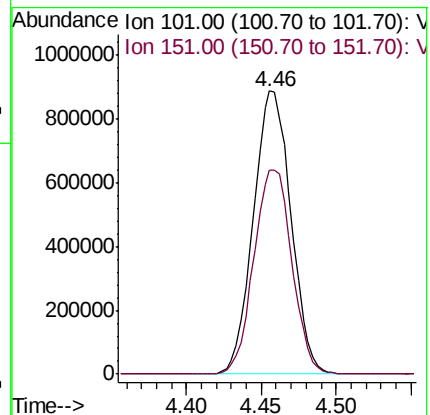
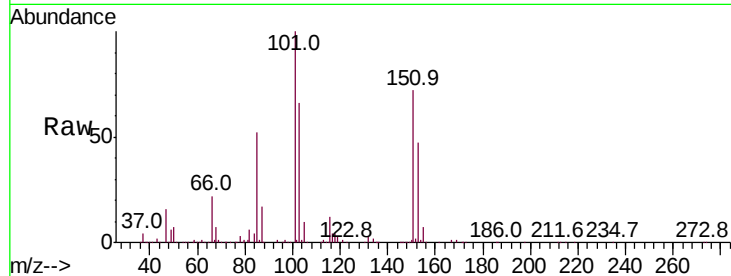
SV-01DL

Tot Ion:101 Resp: 1554422

Ion Ratio Lower Upper

101 100

151 73.3 60.8 91.2



#13

Ethanol

Concen: 4.167 ppbv

RT: 3.58 min Scan# 247

Delta R.T. 0.01 min

Lab File: VL034900.D

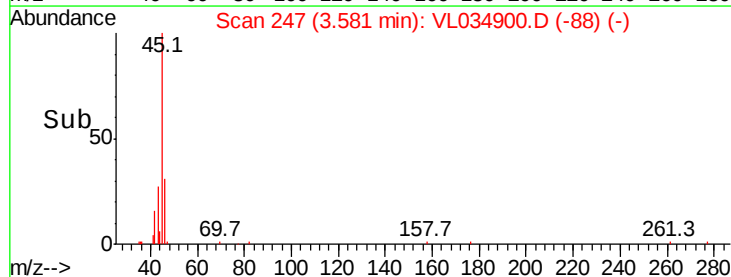
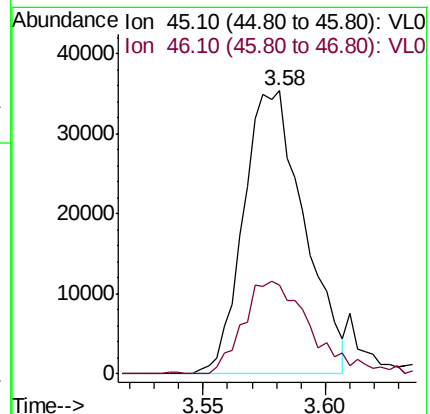
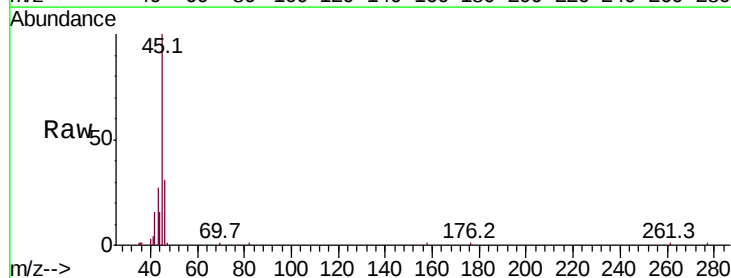
Acq: 16 Mar 2020 21:24

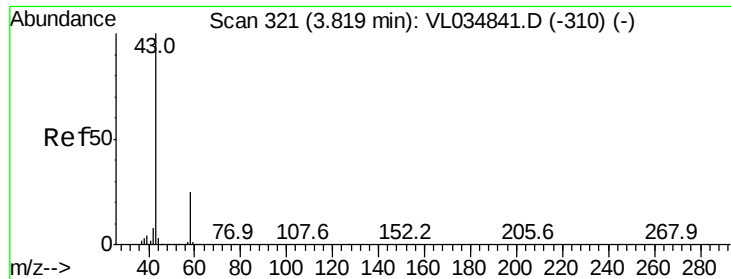
Tgt Ion: 45 Resp: 60832

Ion Ratio Lower Upper

45 100

46 36.8 16.0 64.0





#15

Acetone

Concen: 1.172 ppbv

RT: 3.82 min Scan# 322

Delta R.T. 0.00 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

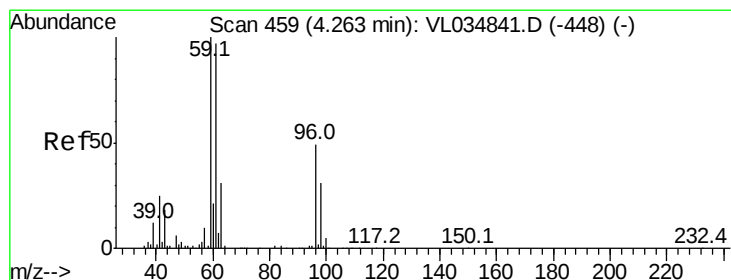
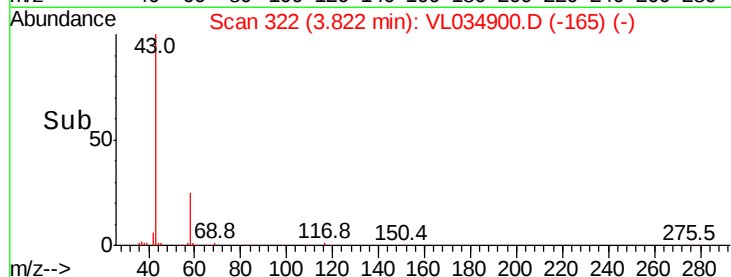
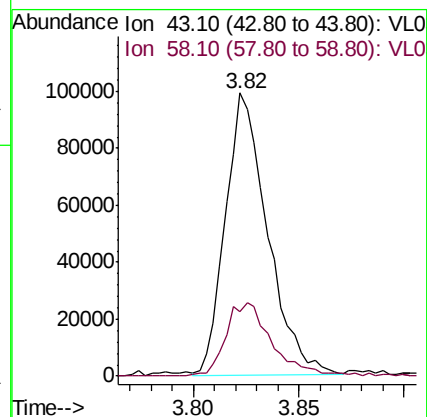
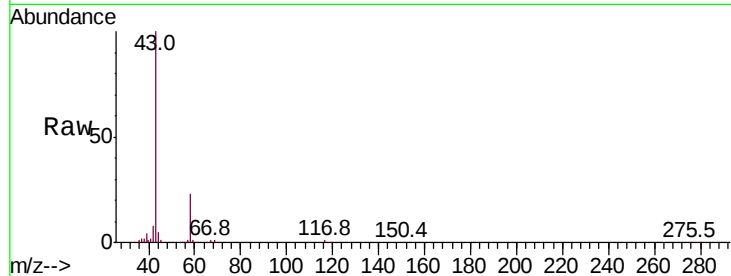
SV-01DL

Tot Ion: 43 Resp: 136710

Ion Ratio Lower Upper

43 100

58 29.3 21.0 31.6



#17

tert-Butyl alcohol

Concen: 0.058 ppbv

RT: 4.26 min Scan# 458

Delta R.T. -0.00 min

Lab File: VL034900.D

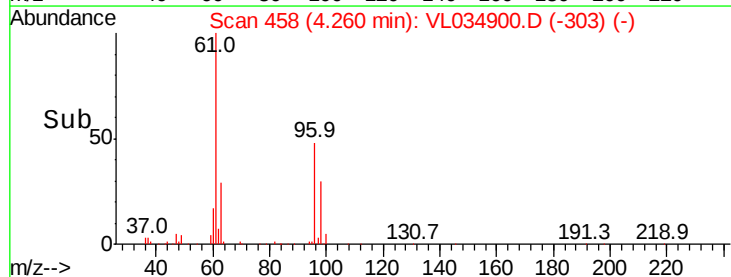
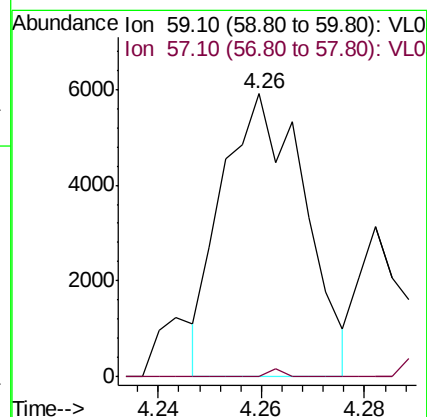
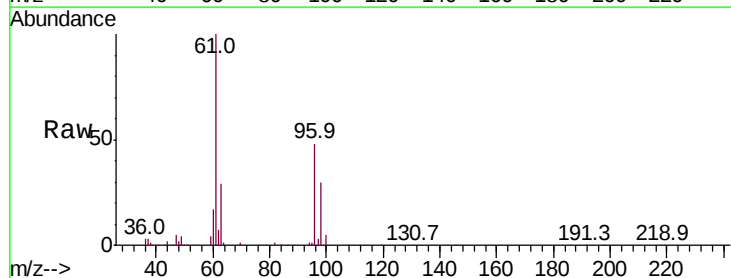
Acq: 16 Mar 2020 21:24

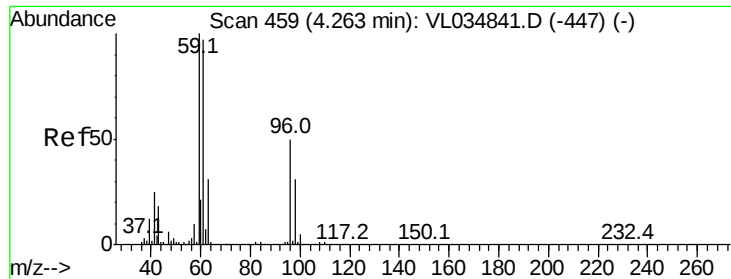
Tgt Ion: 59 Resp: 6542

Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#





#18

1,1-Dichloroethene

Concen: 2.378 ppbv

RT: 4.26 min Scan# 459

Delta R.T. 0.00 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleID :

SV-01DL

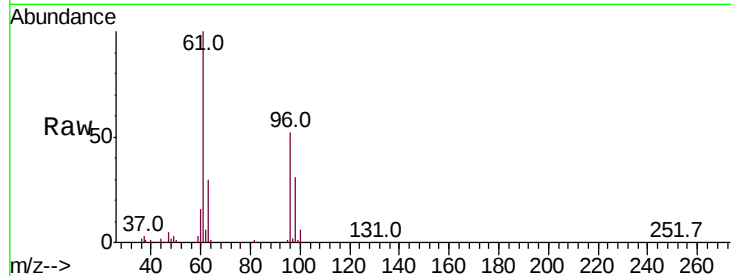
Tot Ion: 96 Resp: 96654

Ion Ratio Lower Upper

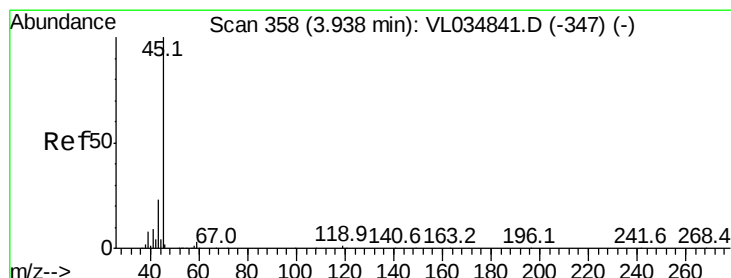
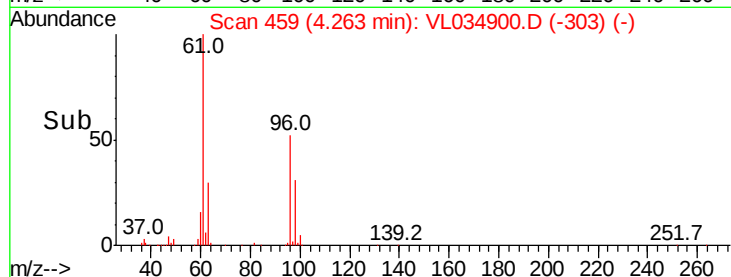
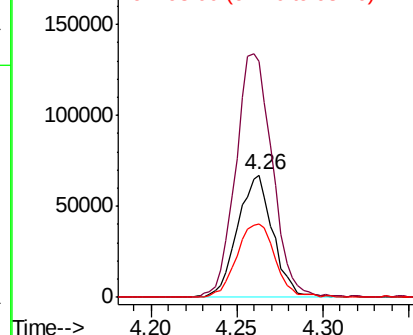
96 100

61 192.9 157.3 235.9

98 60.4 50.2 75.4



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



#19

Isopropyl Alcohol

Concen: 0.281 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.02 min

Lab File: VL034900.D

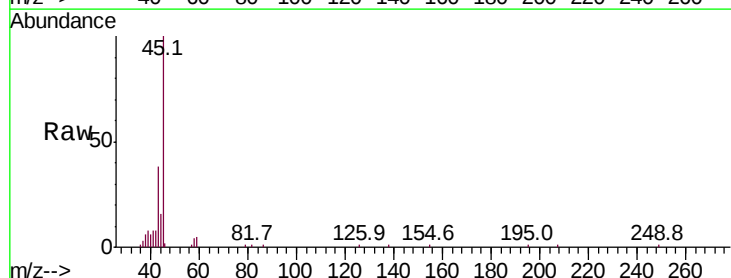
Acq: 16 Mar 2020 21:24

Tgt Ion: 45 Resp: 20705

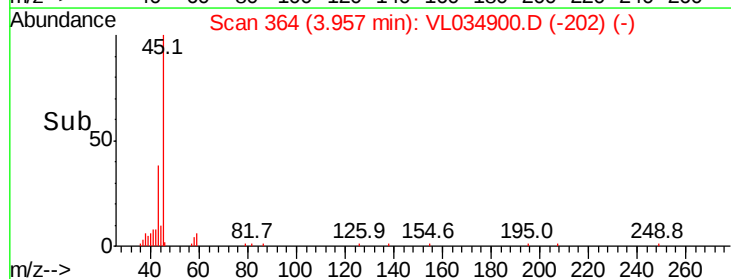
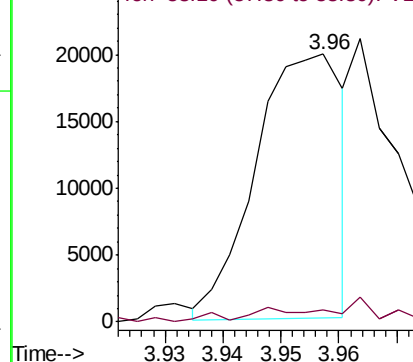
Ion Ratio Lower Upper

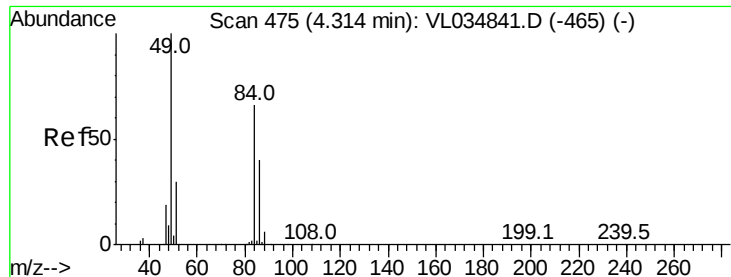
45 100

58 0.0 30.5 45.7#



Abundance Ion 45.10 (44.80 to 45.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





#20

Methylene Chloride

Concen: 0.729 ppbv

RT: 4.32 min Scan# 476

Delta R.T. 0.00 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

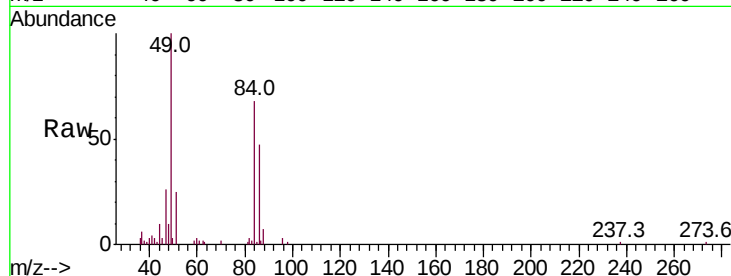
ClientSampleID :

SV-01DL

Tot Ion: 84 Resp: 26900

Ion Ratio Lower Upper

84	100		
49	147.8	121.5	182.3
51	34.8	36.6	55.0#
86	71.6	48.2	72.2

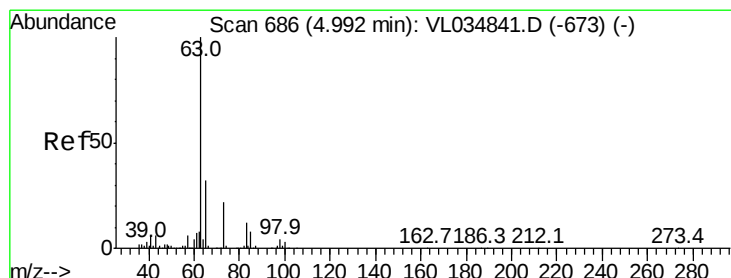
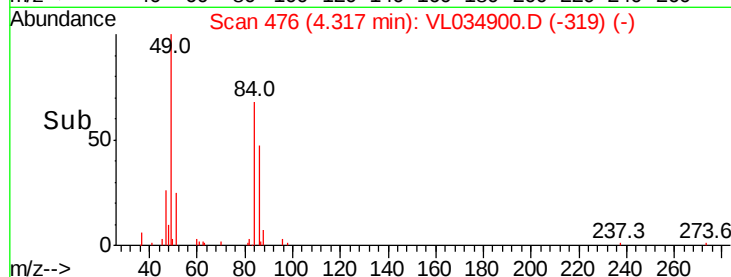
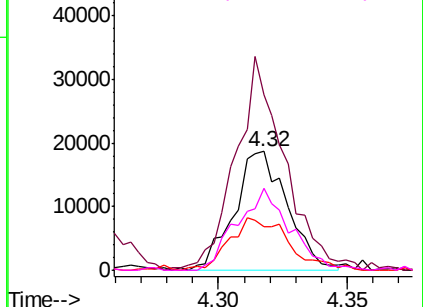


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#24

1,1-Dichloroethane

Concen: 0.142 ppbv

RT: 4.99 min Scan# 684

Delta R.T. -0.01 min

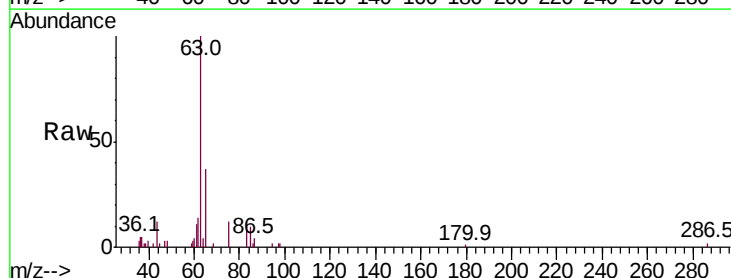
Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Tgt Ion: 63 Resp: 16396

Ion Ratio Lower Upper

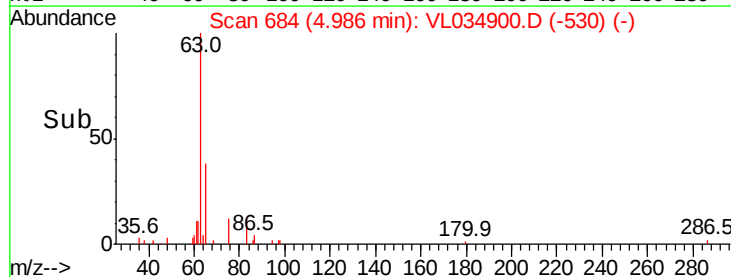
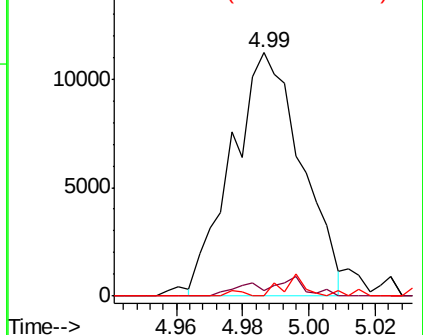
63	100		
98	2.2	2.0	5.8
100	0.0	1.4	4.0#

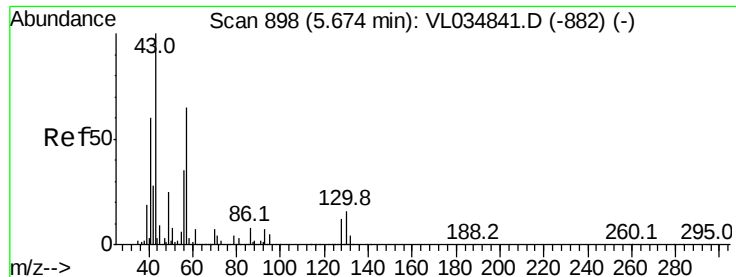


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

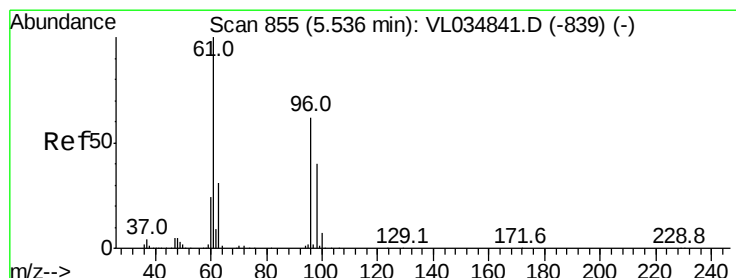
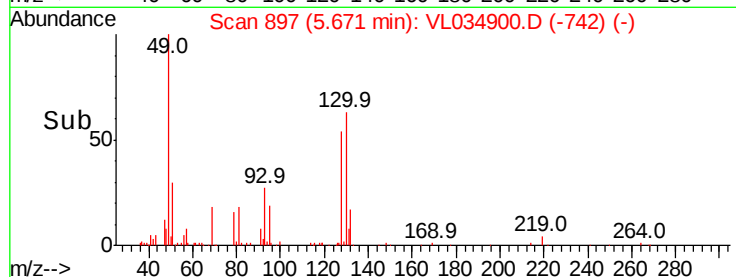
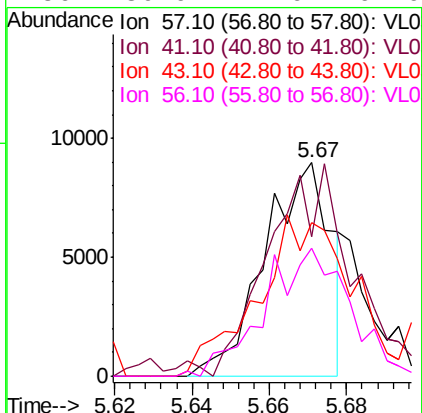
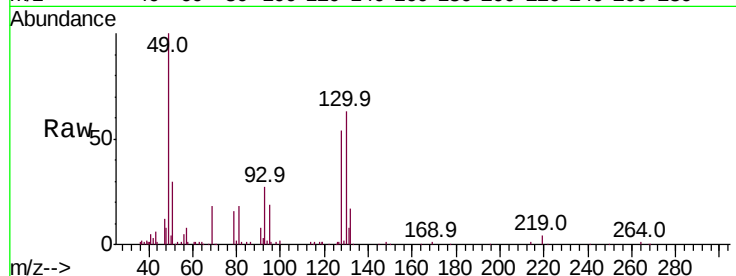




#26
Hexane
Concen: 0.120 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.00 min
Lab File: VL034900.D
Acq: 16 Mar 2020 21:24

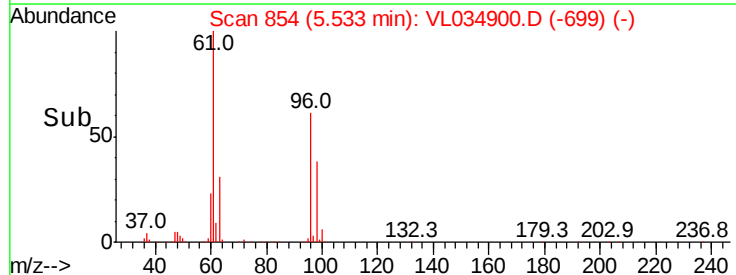
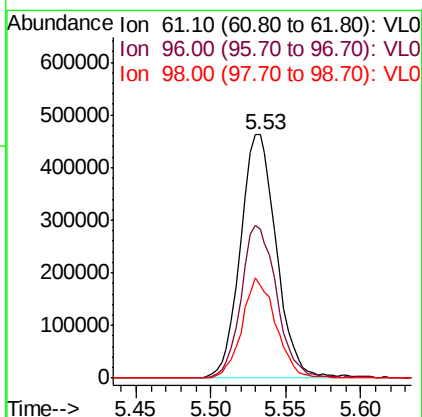
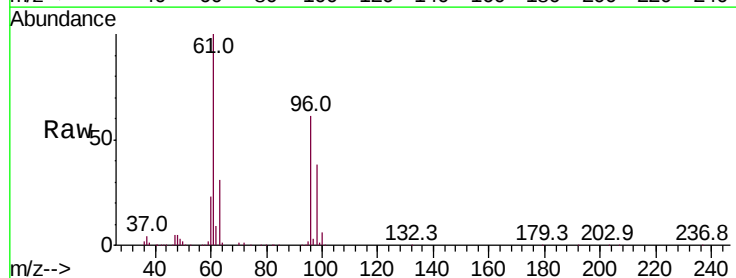
Instrument :
MSVOA_L
ClientSampleId :
SV-01DL

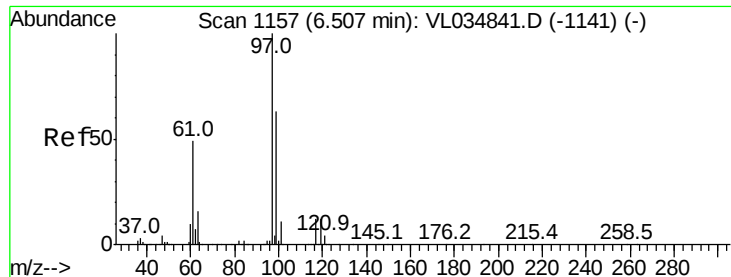
Tot Ion: 57 Resp: 10718
Ion Ratio Lower Upper
57 100
41 134.1 72.6 109.0#
43 114.1 183.8 275.6#
56 80.9 41.9 62.9#



#31
cis-1,2-Dichloroethene
Concen: 8.439 ppbv
RT: 5.53 min Scan# 854
Delta R.T. -0.00 min
Lab File: VL034900.D
Acq: 16 Mar 2020 21:24

Tgt Ion: 61 Resp: 772546
Ion Ratio Lower Upper
61 100
96 61.1 49.8 74.8
98 38.2 32.2 48.4





#32

1,1,1-Trichloroethane

Concen: 0.469 ppbv

RT: 6.50 min Scan# 1155

Delta R.T. -0.01 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

SV-01DL

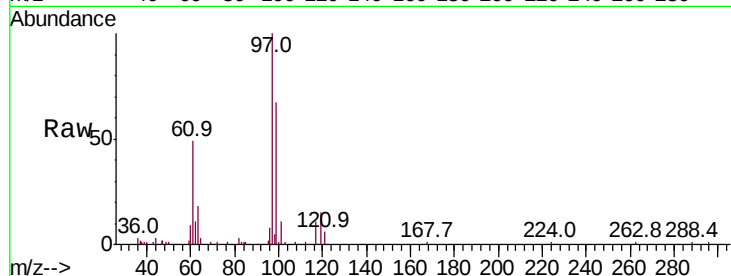
Tot Ion: 97 Resp: 62392

Ion Ratio Lower Upper

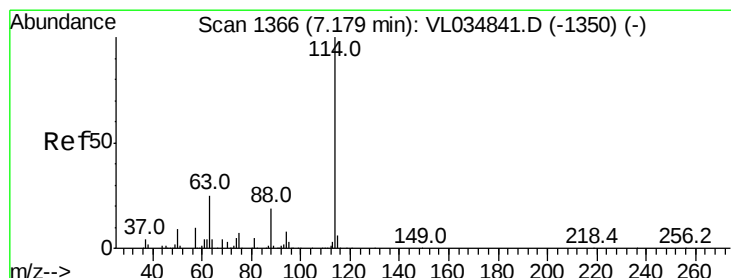
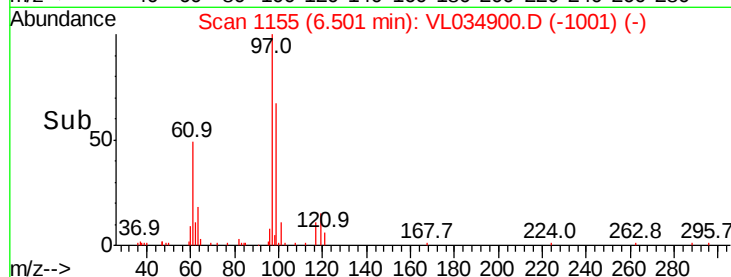
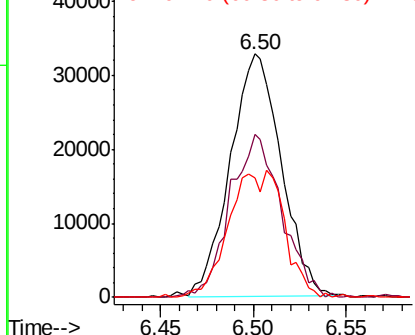
97 100

99 68.2 51.1 76.7

61 57.0 39.7 59.5



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: 7.17 min Scan# 1363

Delta R.T. -0.01 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

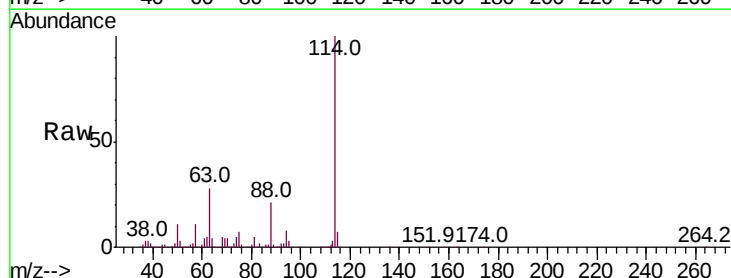
Tgt Ion: 114 Resp: 1895972

Ion Ratio Lower Upper

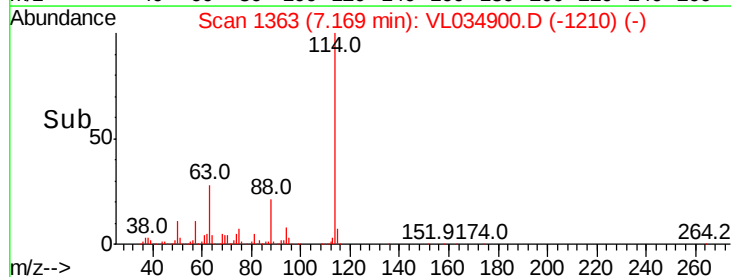
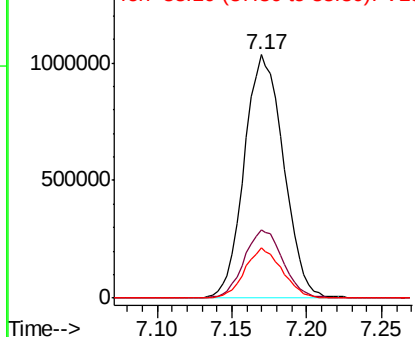
114 100

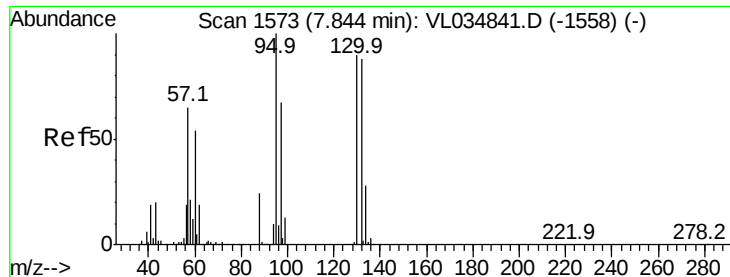
63 27.7 20.6 31.0

88 19.5 15.0 22.6



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





#38

Trichloroethene

Concen: 21.650 ppbv

RT: 7.83 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

SV-01DL

Tot Ion:130 Resp: 1389594

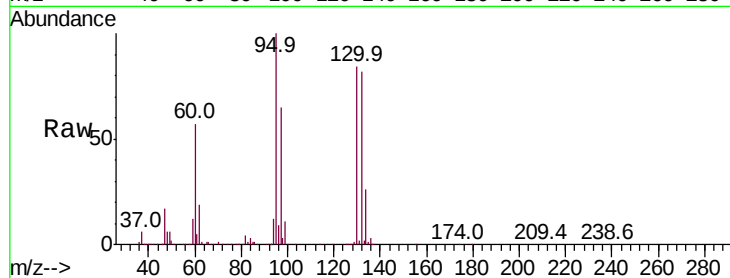
Ion Ratio Lower Upper

130 100

95 118.8 88.5 132.7

132 97.6 78.0 117.0

97 77.0 59.3 88.9

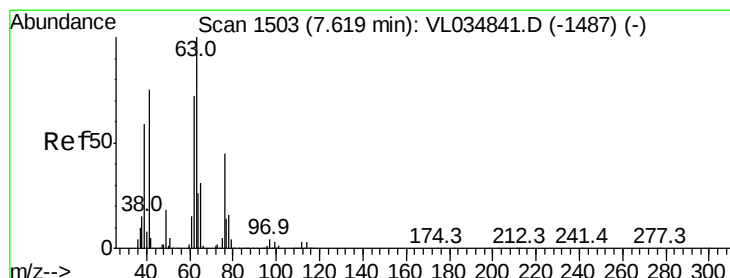
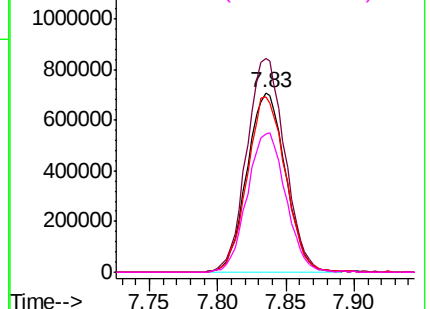
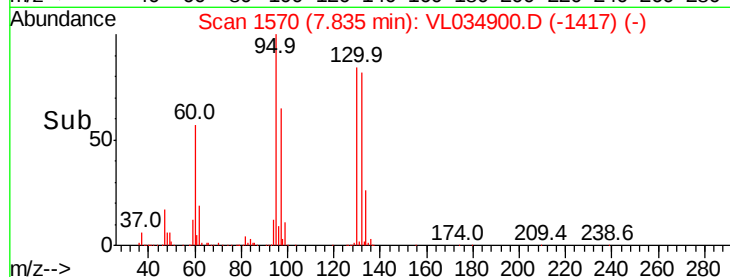


Abundance Ion 130.00 (129.70 to 130.70): V

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: 0.118 ppbv

RT: 7.83 min Scan# 1570

Delta R.T. 0.22 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

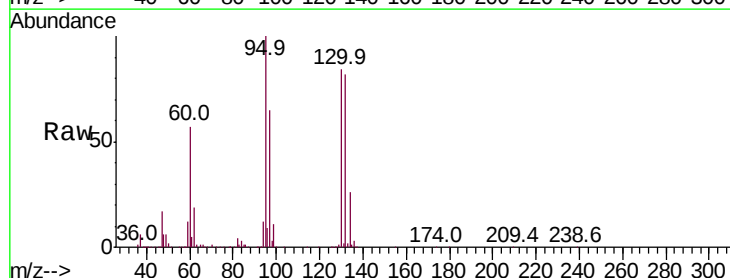
Tgt Ion: 63 Resp: 7920

Ion Ratio Lower Upper

63 100

41 0.0 59.8 89.8#

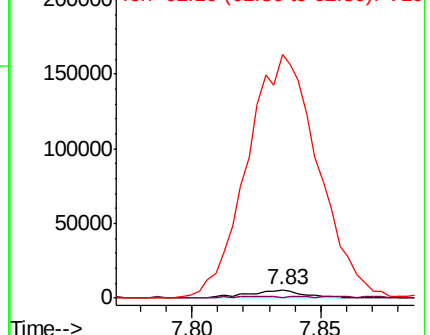
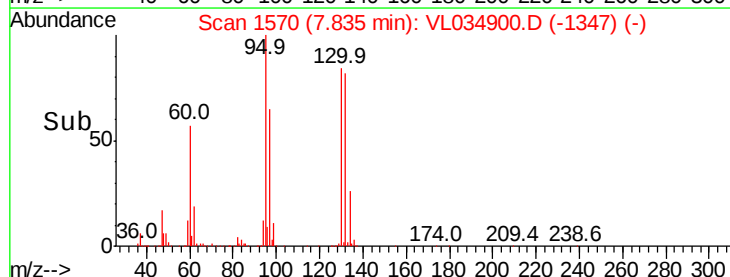
62 2793.5 57.6 86.4#

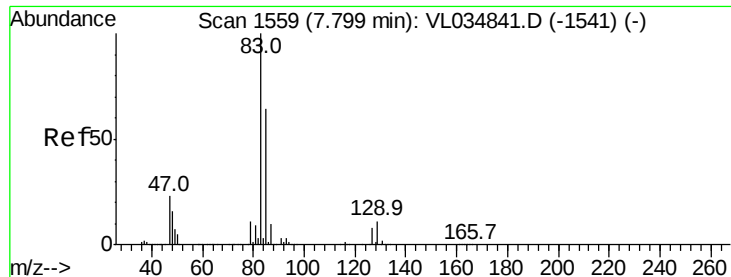


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#42

Bromodichloromethane

Concen: 0.091 ppbv

RT: 7.83 min Scan# 1568

Delta R.T. 0.03 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampled :

SV-01DL

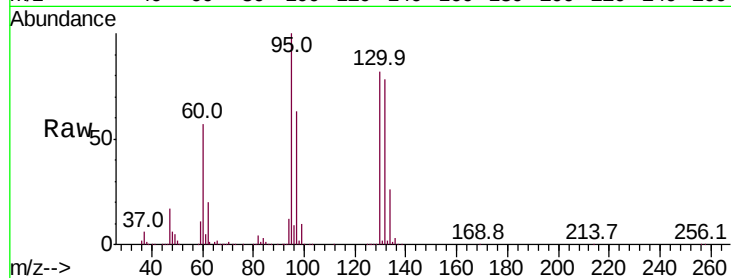
Tot Ion: 83 Resp: 11845

Ion Ratio Lower Upper

83 100

85 71.5 51.4 77.2

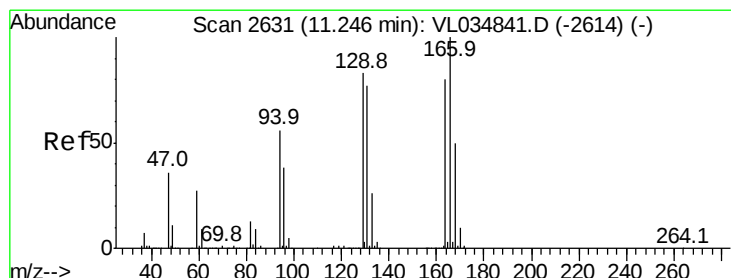
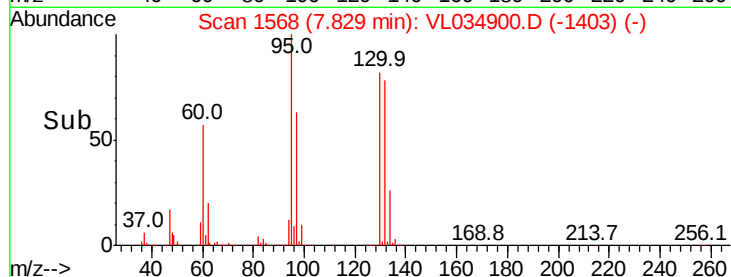
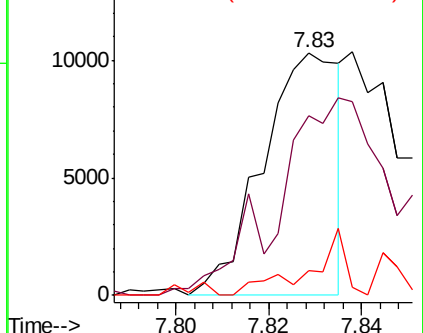
127 8.9 6.2 9.4



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



#52

Tetrachloroethene

Concen: 0.194 ppbv

RT: 11.23 min Scan# 2625

Delta R.T. -0.02 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Tgt Ion:164 Resp: 12995

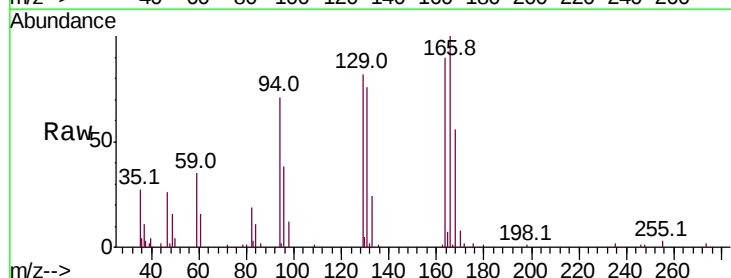
Ion Ratio Lower Upper

164 100

166 109.0 100.0 150.0

129 95.5 83.1 124.7

131 81.7 77.2 115.8

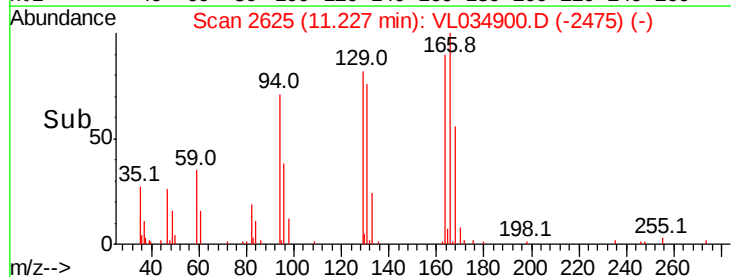
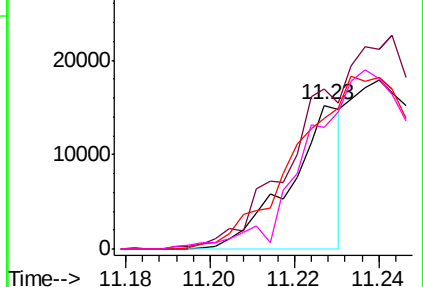


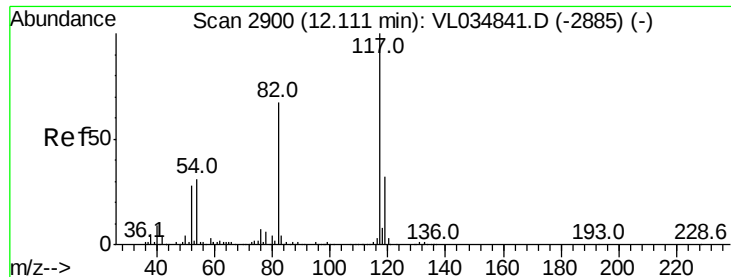
Abundance Ion 163.90 (163.60 to 164.60): V

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





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2897

Delta R.T. -0.01 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

Instrument :

MSVOA_L

ClientSampleId :

SV-01DL

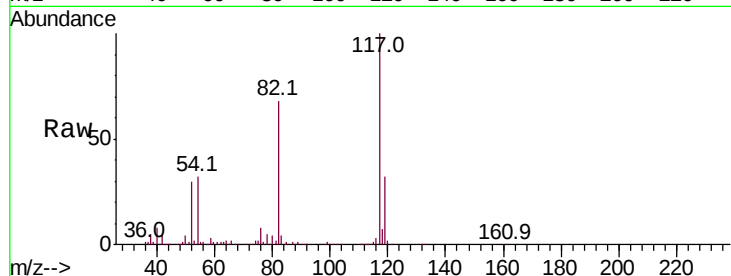
Tot Ion:117 Resp: 1835750

Ion Ratio Lower Upper

117 100

82 69.8 51.1 76.7

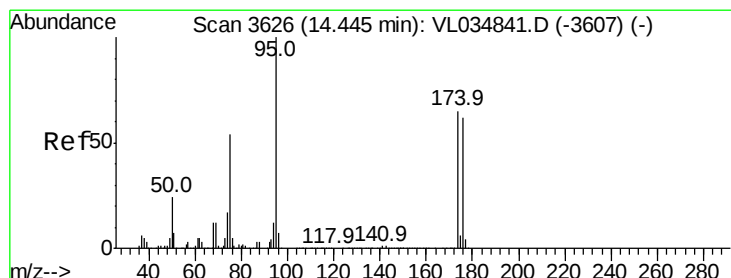
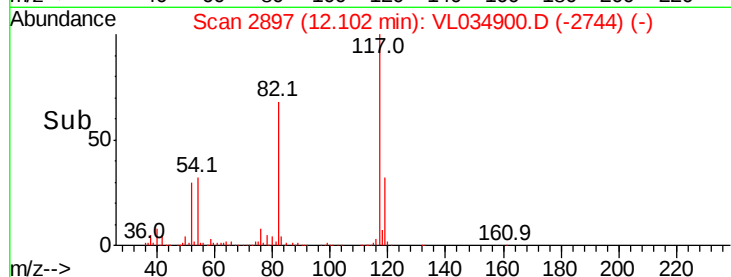
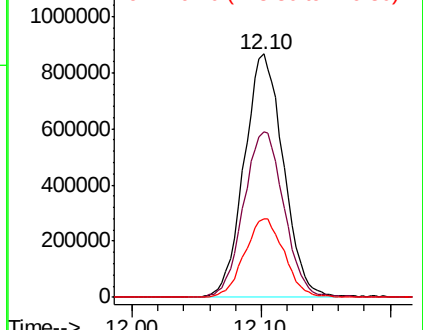
119 32.9 27.3 40.9



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.149 ppbv

RT: 14.44 min Scan# 3624

Delta R.T. -0.01 min

Lab File: VL034900.D

Acq: 16 Mar 2020 21:24

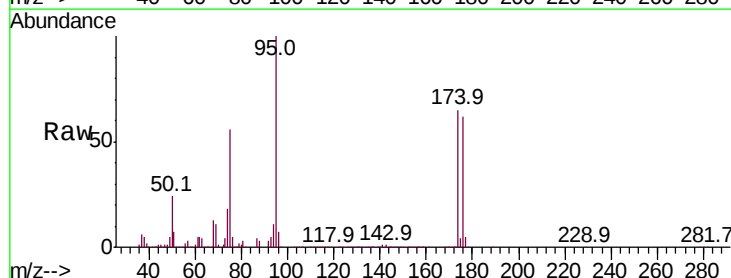
Tgt Ion: 95 Resp: 1453039

Ion Ratio Lower Upper

95 100

174 66.8 55.2 82.8

175 4.8 4.3 6.5



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

