

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
 Data File : VL034904.D
 Acq On : 17 Mar 2020 00:01
 Operator : SY/AP
 Sample : L1924-06DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-02DL

Quant Time: Mar 17 04:28:49 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

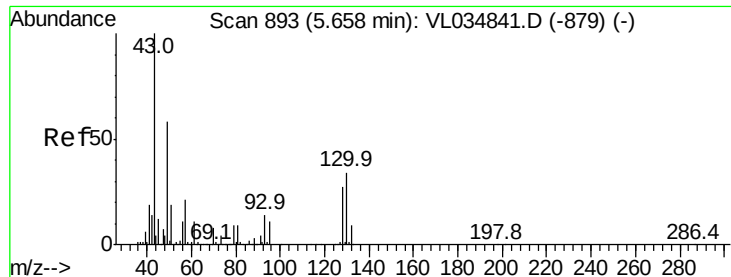
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	863944	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1837273	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1753516	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1402097	10.25	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.50%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	2.97	85	17181	0.145 ppbv	91
3) Chlorodifluoromethane	2.85	51	5598	0.058 ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.46	101	6681753	75.853 ppbv	94
13) Ethanol	3.57	45	55717	3.977 ppbv	97
15) Acetone	3.82	43	421172	3.761 ppbv	100
17) tert-Butyl alcohol	4.26	59	103281	0.957 ppbv #	75
18) 1,1-Dichloroethene	4.26	96	1345906	34.501 ppbv	94
19) Isopropyl Alcohol	3.96	45	29207	0.413 ppbv #	1
20) Methylene Chloride	4.32	84	14565	0.411 ppbv	95
24) 1,1-Dichloroethane	4.99	63	141066	1.272 ppbv	98
27) Carbon Disulfide	4.53	76	3475	0.036 ppbv #	62
29) Chloroform	5.74	83	273538	2.087 ppbv	96
31) cis-1,2-Dichloroethene	5.53	61	477168	5.432 ppbv	100
32) 1,1,1-Trichloroethane	6.50	97	1930780	15.118 ppbv	97
37) 1,2-Dichloroethane	6.50	62	76882	0.833 ppbv #	1
38) Trichloroethene	7.84	130	3064608	49.273 ppbv	98
39) 1,2-Dichloropropane	7.83	63	9949	0.153 ppbv #	1
42) Bromodichloromethane	7.83	83	27906	0.222 ppbv #	85

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.01 min

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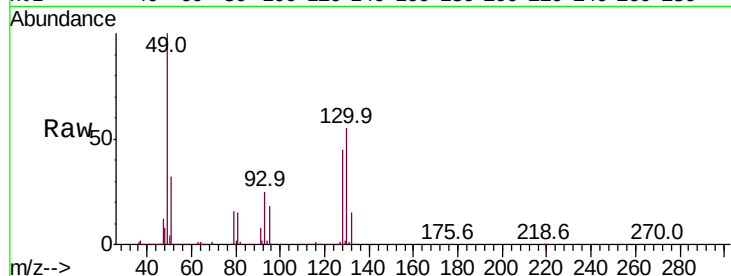
Tot Ion: 49 Resp: 863944

Ion Ratio Lower Upper

49 100

128 45.2 23.4 70.3

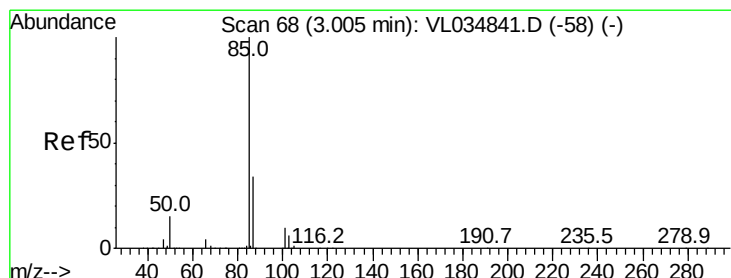
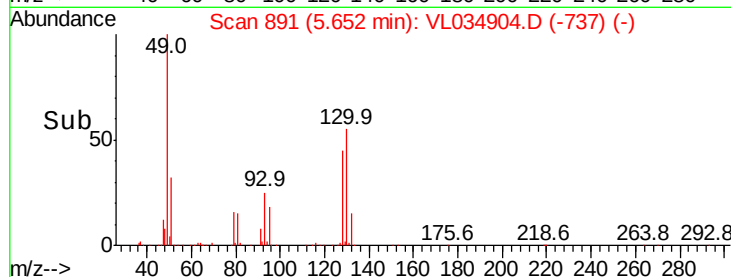
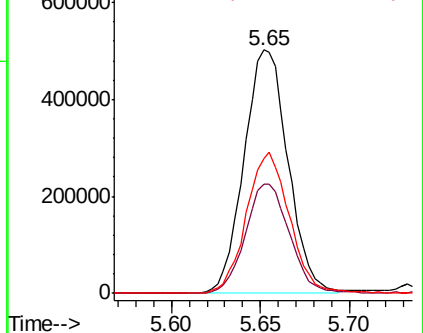
130 57.2 30.0 90.0



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



#2

Dichlorodifluoromethane

Concen: 0.145 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.04 min

Lab File: VL034904.D

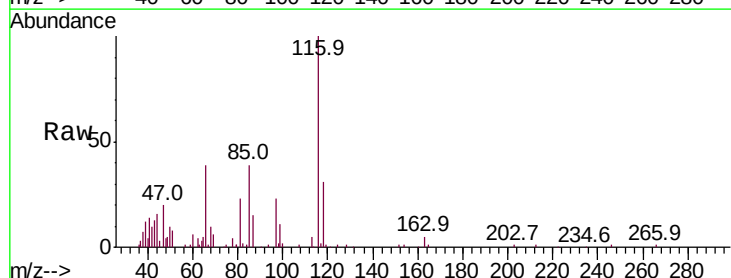
Acq: 17 Mar 2020 00:01

Tgt Ion: 85 Resp: 17181

Ion Ratio Lower Upper

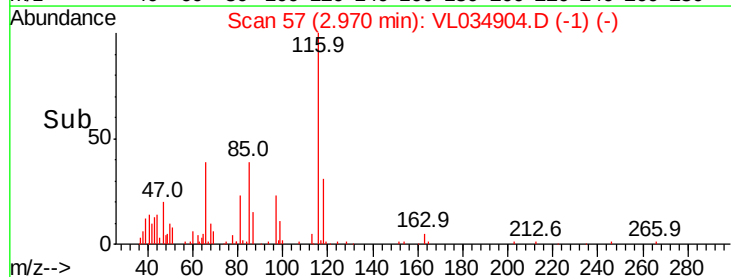
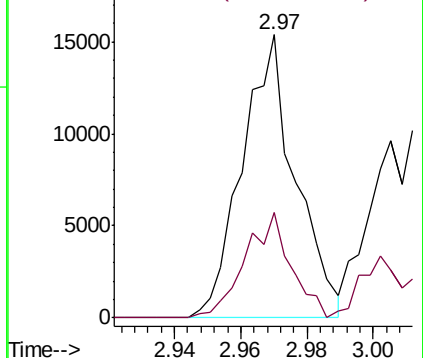
85 100

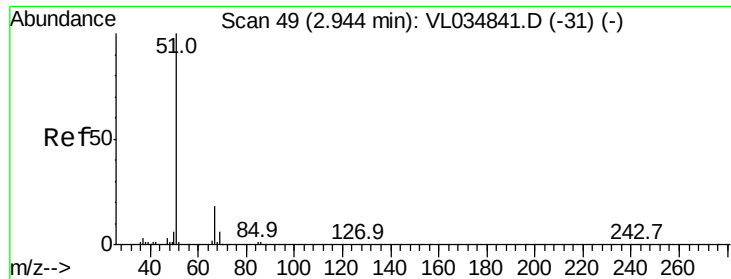
87 38.8 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.058 ppbv

RT: 2.85 min Scan# 20

Delta R.T. -0.09 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Instrument :

MSVOA_L

ClientSampleId :

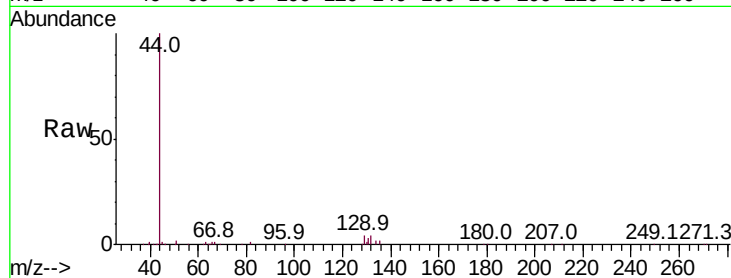
SV-02DL

Tot Ion: 51 Resp: 5598

Ion Ratio Lower Upper

51 100

67 20.6 14.3 21.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.85

4000

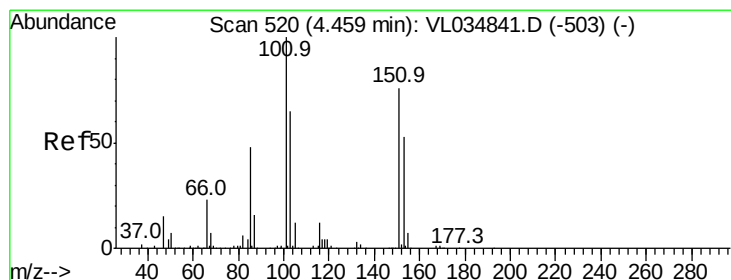
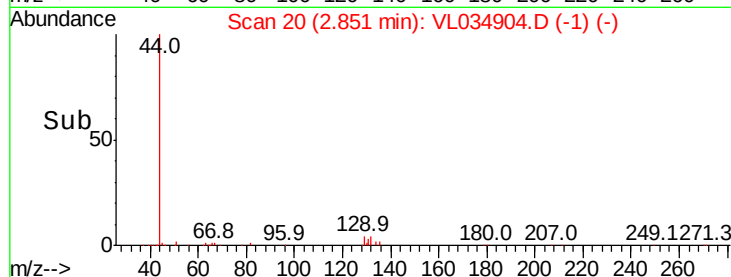
3000

2000

1000

0

Time-->



#12

1,1,2-Trichlorotrifluoroethane

Concen: 75.853 ppbv

RT: 4.46 min Scan# 520

Delta R.T. 0.00 min

Lab File: VL034904.D

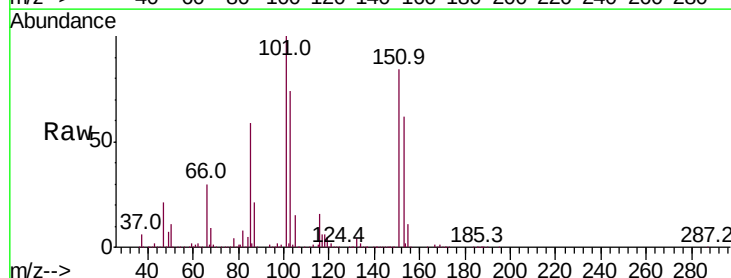
Acq: 17 Mar 2020 00:01

Tgt Ion: 101 Resp: 6681753

Ion Ratio Lower Upper

101 100

151 81.5 60.8 91.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

4.46

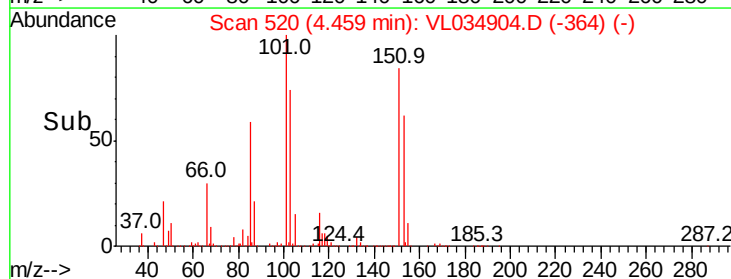
3000000

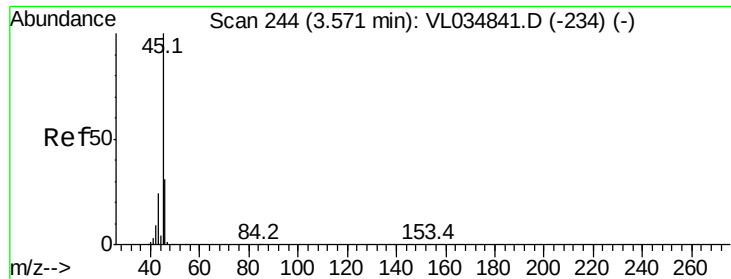
2000000

1000000

0

Time-->

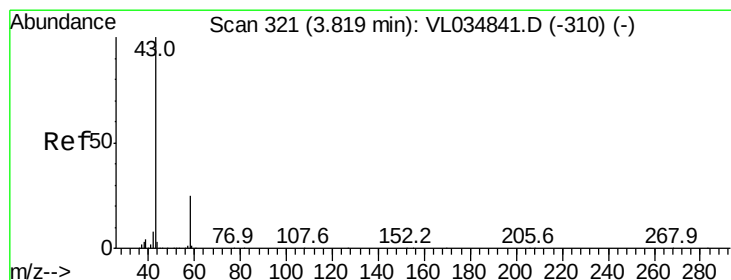
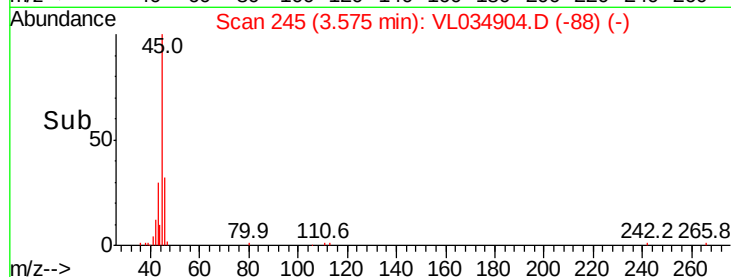
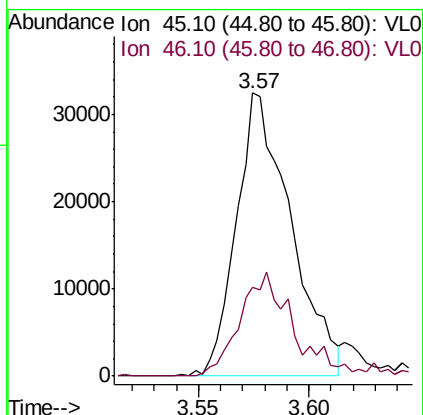
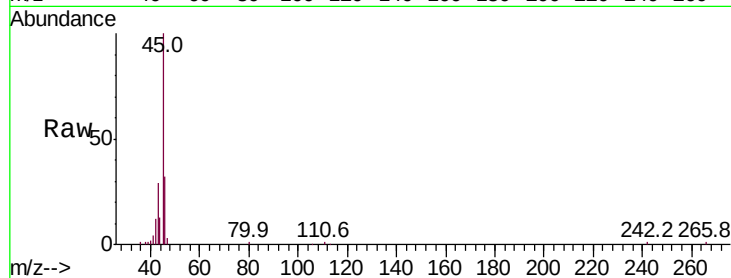




#13
Ethanol
Concen: 3.977 ppbv
RT: 3.57 min Scan# 245
Delta R.T. 0.00 min
Lab File: VL034904.D
Acq: 17 Mar 2020 00:01

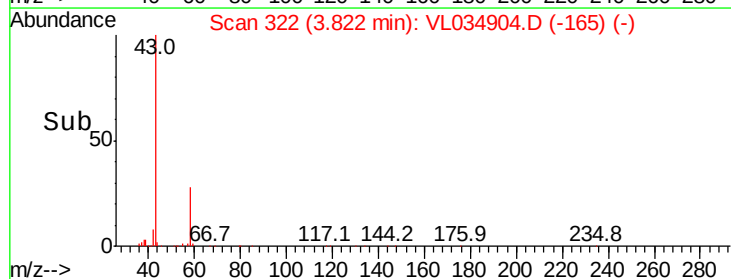
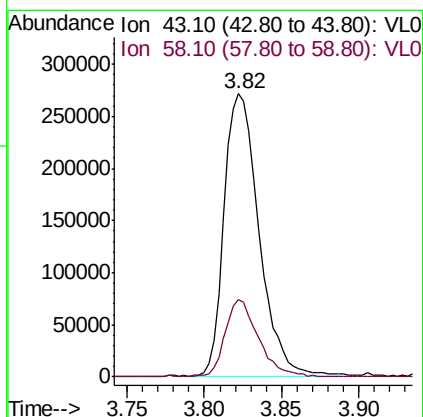
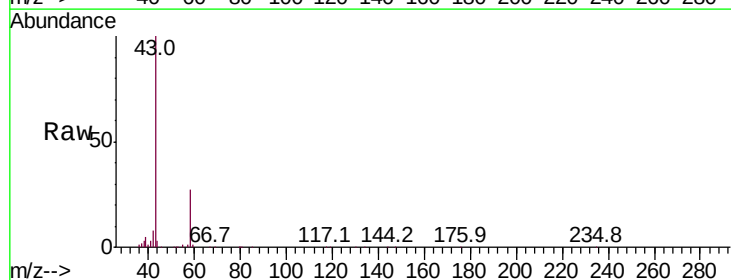
Instrument :
MSVOA_L
ClientSampleId :
SV-02DL

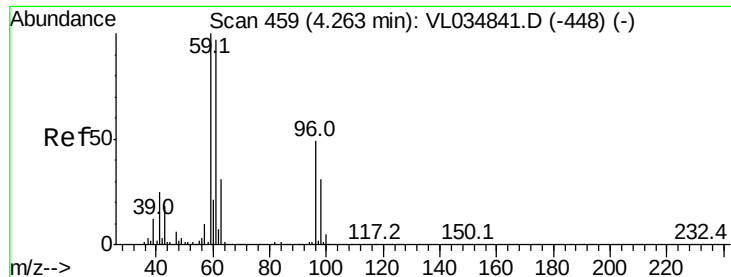
Tot Ion: 45 Resp: 55717
Ion Ratio Lower Upper
45 100
46 38.1 16.0 64.0



#15
Acetone
Concen: 3.761 ppbv
RT: 3.82 min Scan# 322
Delta R.T. 0.00 min
Lab File: VL034904.D
Acq: 17 Mar 2020 00:01

Tgt Ion: 43 Resp: 421172
Ion Ratio Lower Upper
43 100
58 26.5 21.0 31.6





#17

tert-Butyl alcohol

Concen: 0.957 ppbv

RT: 4.26 min Scan# 458

Delta R.T. -0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Instrument :

MSVOA_L

ClientSampleID :

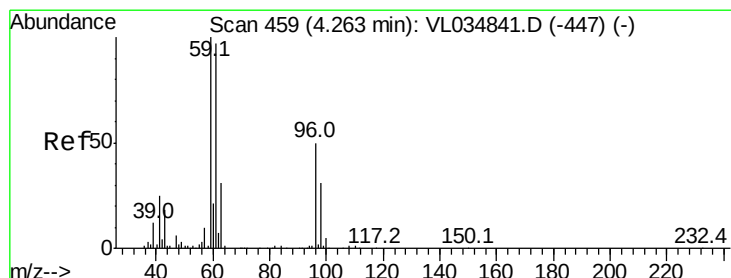
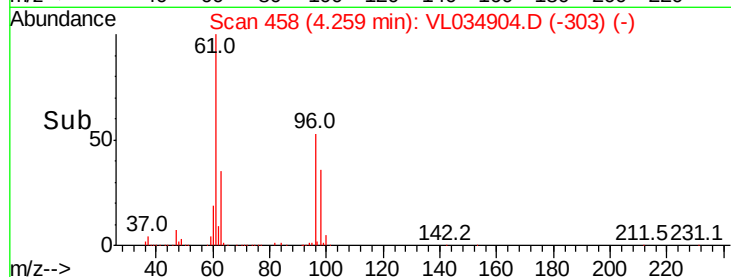
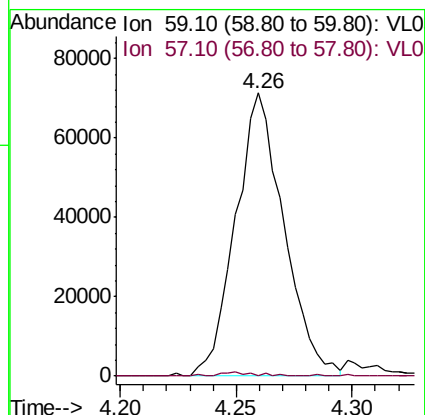
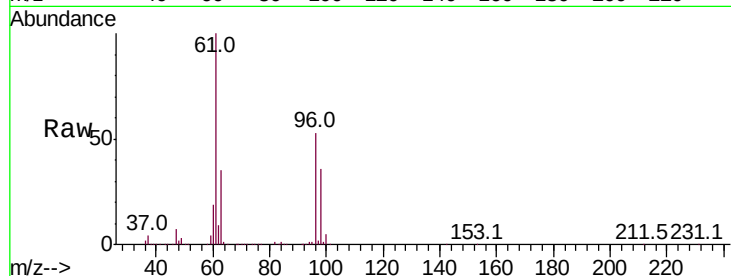
SV-02DL

Tot Ion: 59 Resp: 103281

Ion Ratio Lower Upper

59 100

57 1.1 8.3 12.5#



#18

1,1-Dichloroethene

Concen: 34.501 ppbv

RT: 4.26 min Scan# 458

Delta R.T. -0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

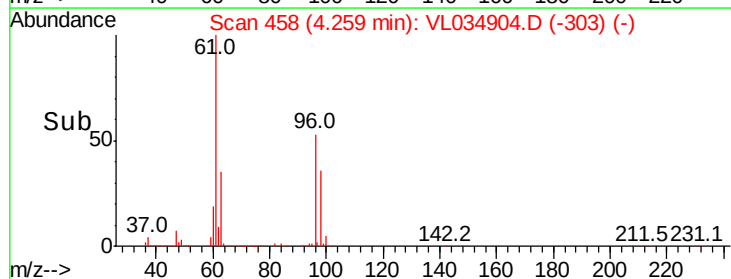
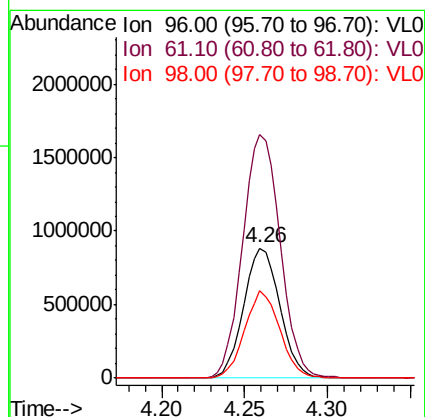
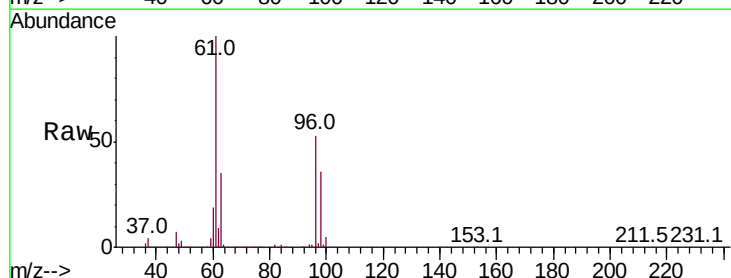
Tgt Ion: 96 Resp: 1345906

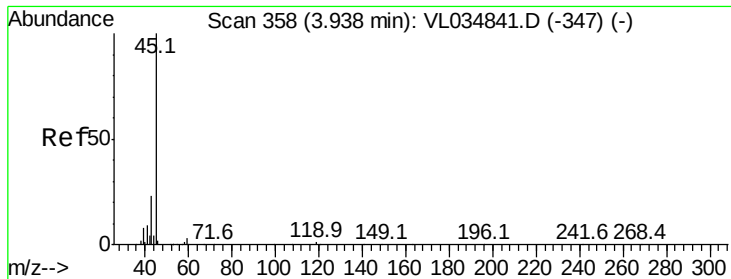
Ion Ratio Lower Upper

96 100

61 187.6 157.3 235.9

98 67.2 50.2 75.4





#19

Isopropyl Alcohol

Concen: 0.413 ppbv

RT: 3.96 min Scan# 365

Delta R.T. 0.02 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Instrument :

MSVOA_L

ClientSampleId :

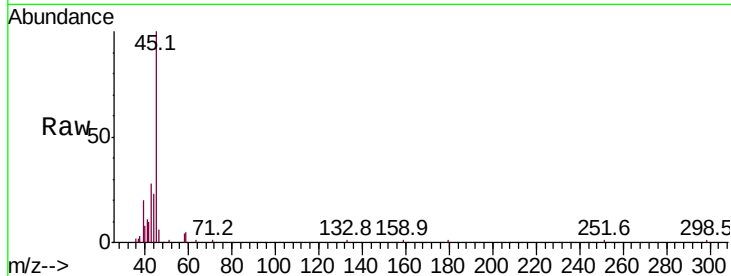
SV-02DL

Tot Ion: 45 Resp: 29207

Ion Ratio Lower Upper

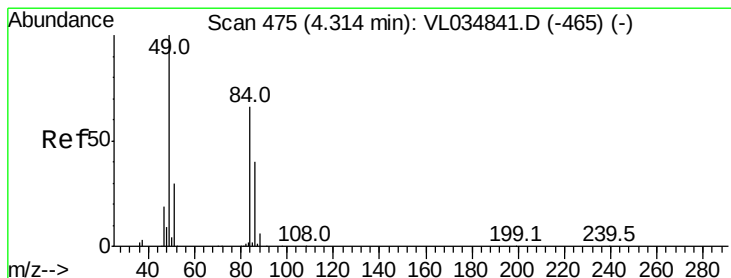
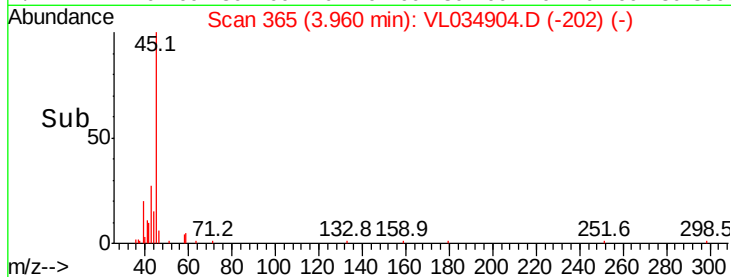
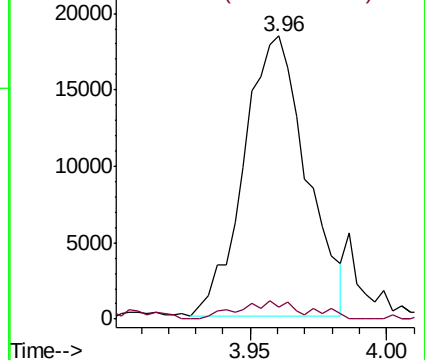
45 100

58 378.9 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: 0.411 ppbv

RT: 4.32 min Scan# 476

Delta R.T. 0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Tgt Ion: 84 Resp: 14565

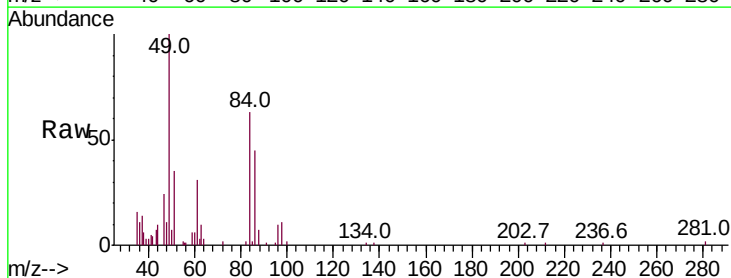
Ion Ratio Lower Upper

84 100

49 153.2 121.5 182.3

51 52.2 36.6 55.0

86 69.9 48.2 72.2

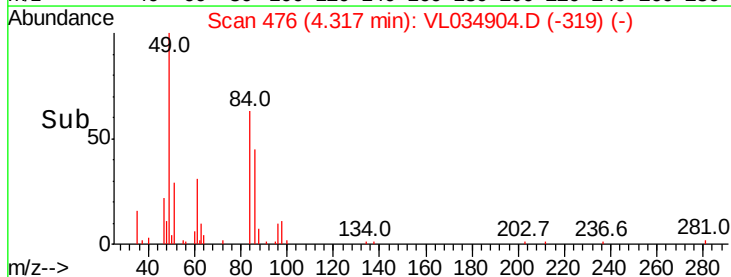
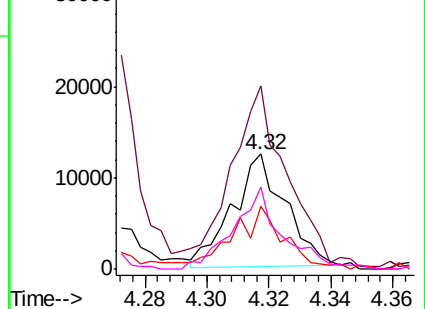


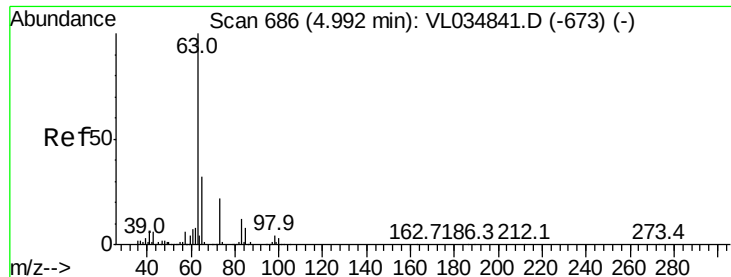
Abundance Ion 84.00 (83.70 to 84.70): VL0

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: 1.272 ppbv

RT: 4.99 min Scan# 686

Delta R.T. 0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

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ClientSampleId :

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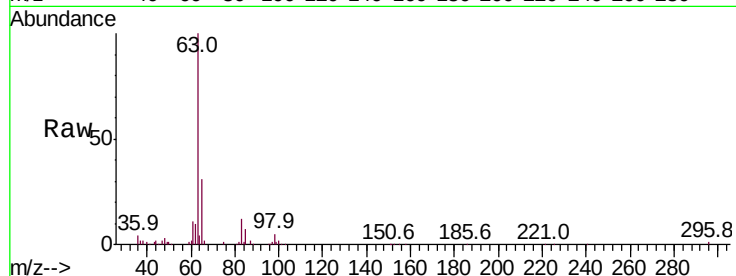
Tot Ion: 63 Resp: 141066

Ion Ratio Lower Upper

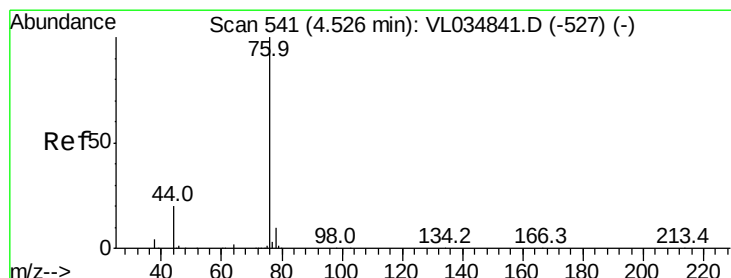
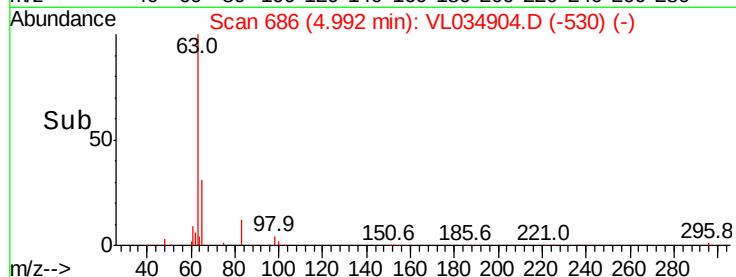
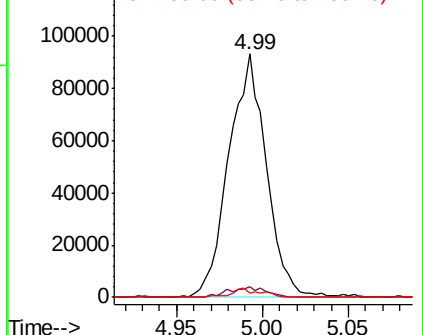
63 100

98 4.5 2.0 5.8

100 1.9 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



#27

Carbon Disulfide

Concen: 0.036 ppbv

RT: 4.53 min Scan# 542

Delta R.T. 0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

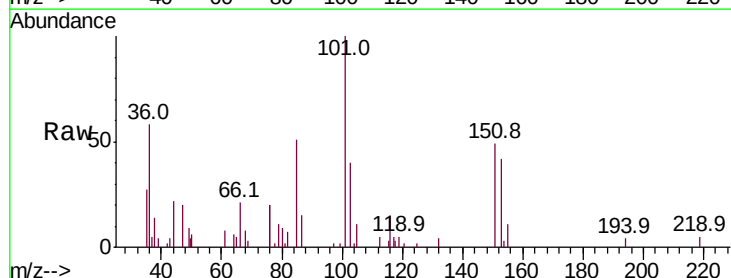
Tgt Ion: 76 Resp: 3475

Ion Ratio Lower Upper

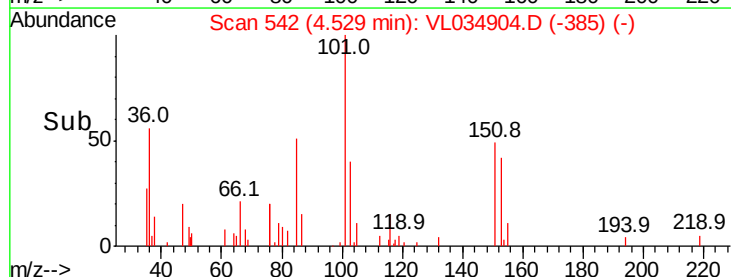
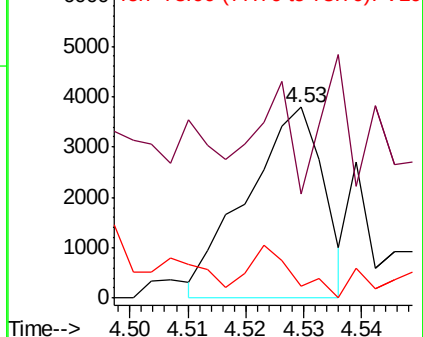
76 100

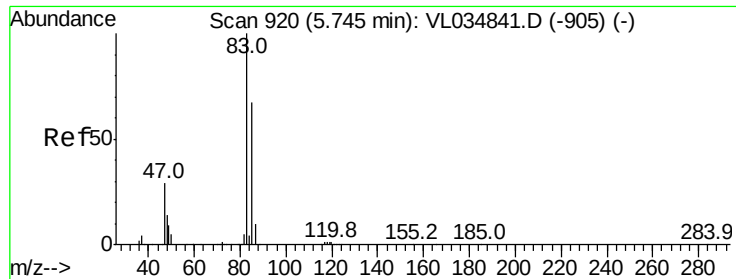
44 0.0 16.2 24.2#

78 0.0 7.8 11.6#



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





#29

Chloroform

Concen: 2.087 ppbv

RT: 5.74 min Scan# 918

Delta R.T. -0.01 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Instrument :

MSVOA_L

ClientSampleId :

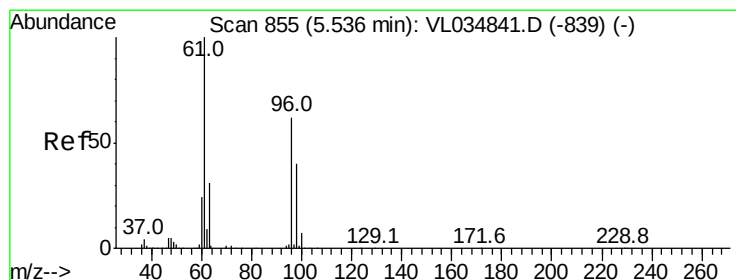
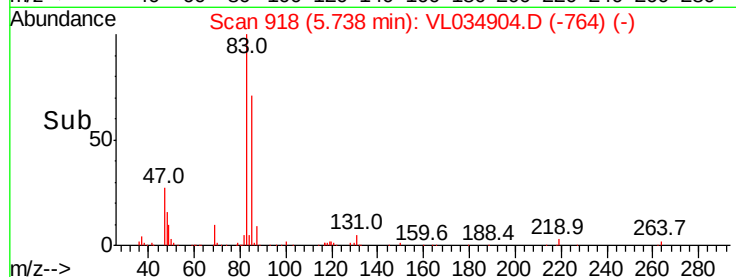
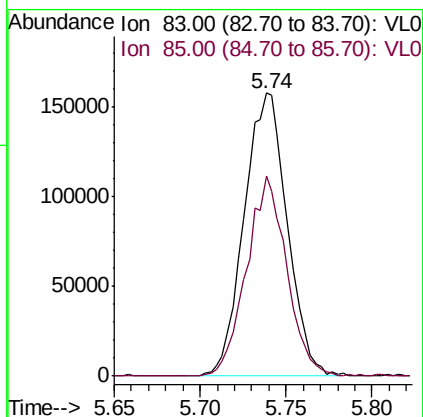
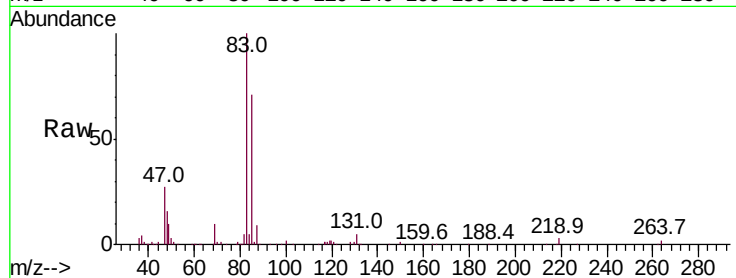
SV-02DL

Tot Ion: 83 Resp: 273538

Ion Ratio Lower Upper

83 100

85 70.5 53.8 80.6



#31

cis-1,2-Dichloroethene

Concen: 5.432 ppbv

RT: 5.53 min Scan# 854

Delta R.T. -0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

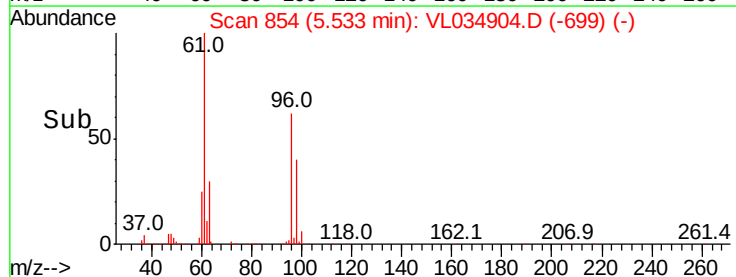
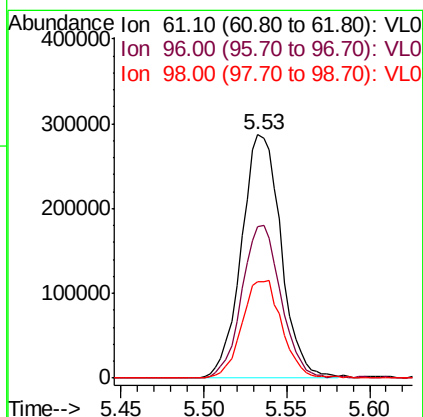
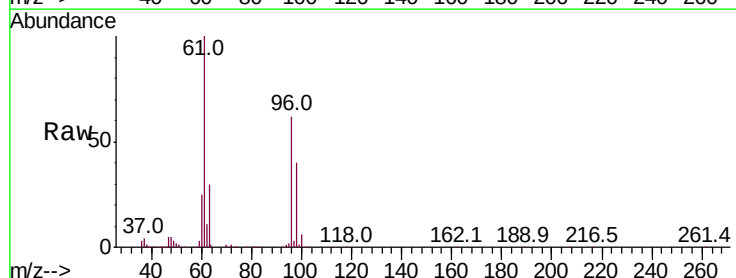
Tgt Ion: 61 Resp: 477168

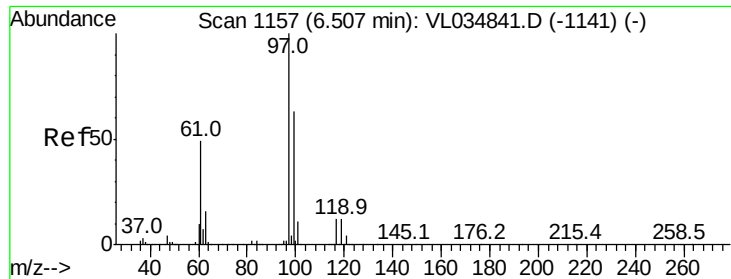
Ion Ratio Lower Upper

61 100

96 62.3 49.8 74.8

98 39.8 32.2 48.4





#32

1,1,1-Trichloroethane

Concen: 15.118 ppbv

RT: 6.50 min Scan# 1156

Delta R.T. -0.00 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Instrument :

MSVOA_L

ClientSampleId :

SV-02DL

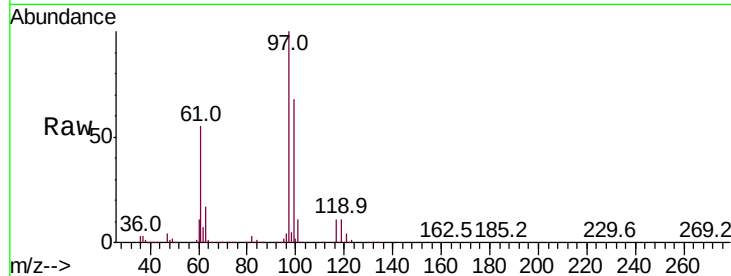
Tot Ion: 97 Resp: 1930780

Ion Ratio Lower Upper

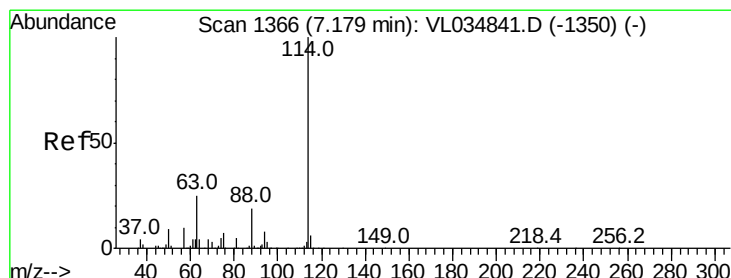
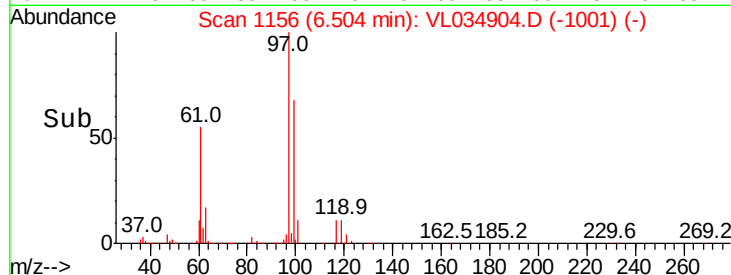
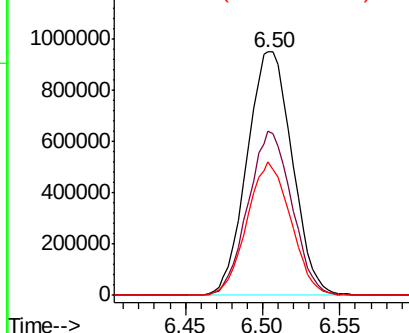
97 100

99 65.2 51.1 76.7

61 53.1 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# 1364

Delta R.T. -0.01 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

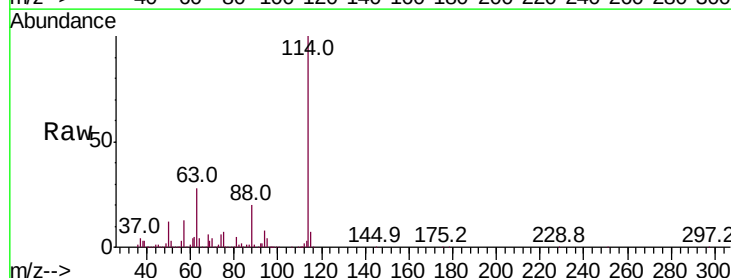
Tgt Ion: 114 Resp: 1837273

Ion Ratio Lower Upper

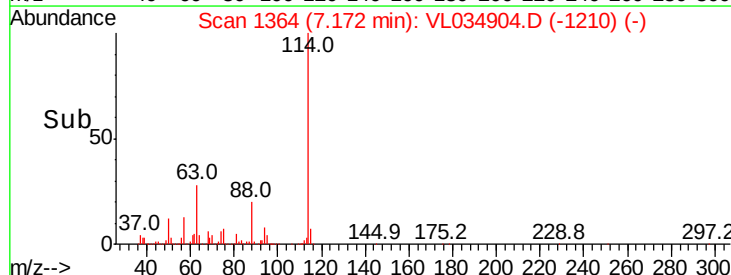
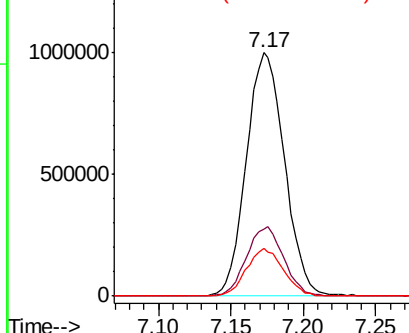
114 100

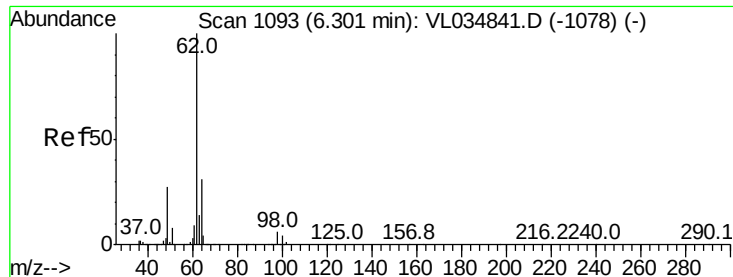
63 27.8 20.6 31.0

88 19.1 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

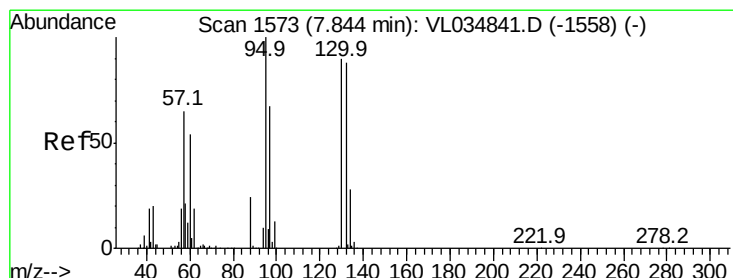
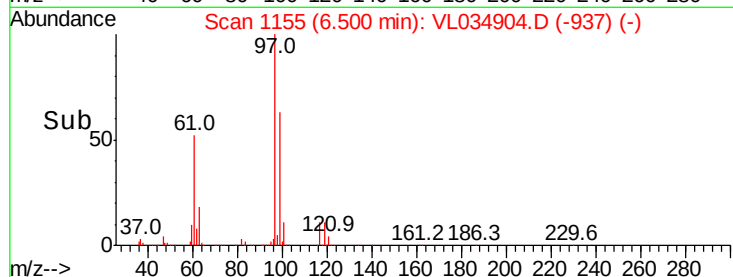
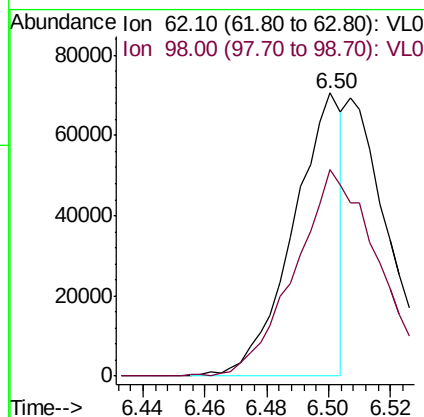
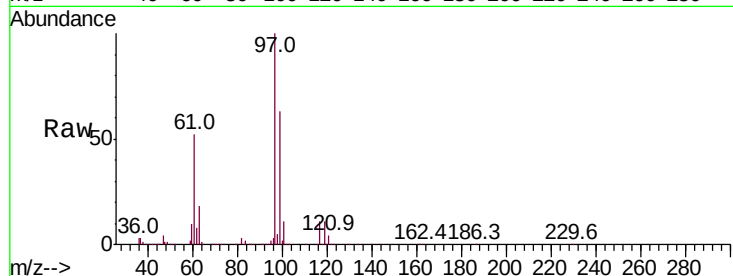




#37
 1,2-Dichloroethane
 Concen: 0.833 ppbv
 RT: 6.50 min Scan# 1155
 Delta R.T. 0.20 min
 Lab File: VL034904.D
 Acq: 17 Mar 2020 00:01

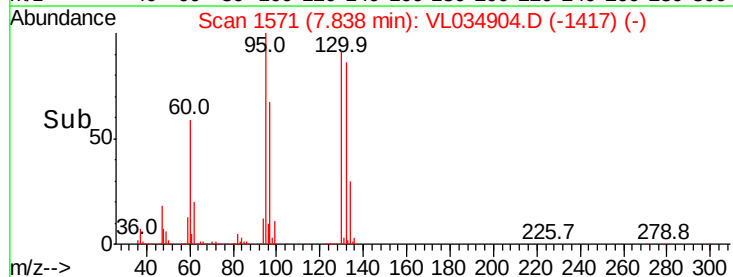
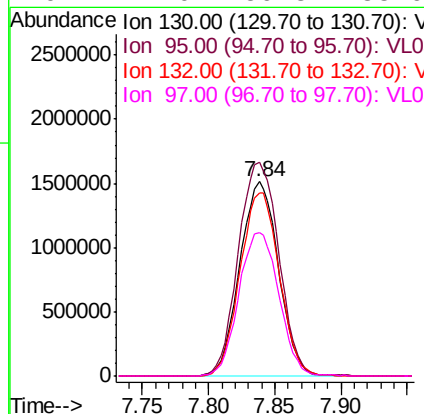
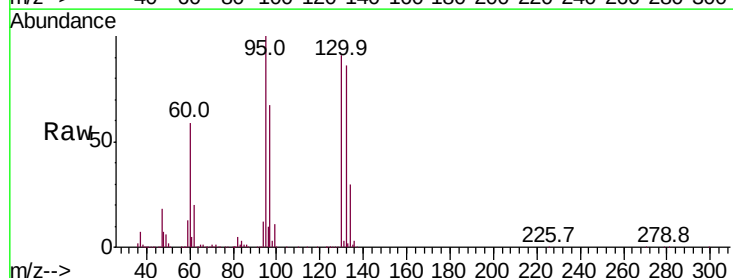
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-02DL

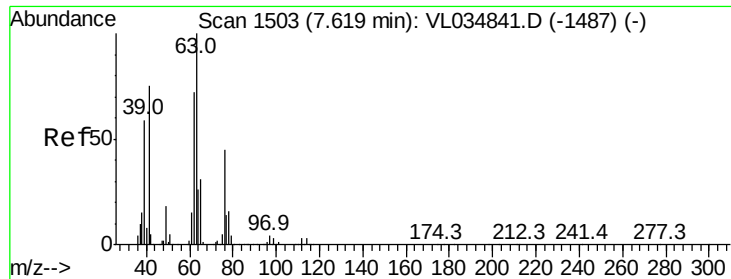
Tot Ion: 62 Resp: 76882
 Ion Ratio Lower Upper
 62 100
 98 124.7 5.2 7.8#



#38
 Trichloroethene
 Concen: 49.273 ppbv
 RT: 7.84 min Scan# 1571
 Delta R.T. -0.01 min
 Lab File: VL034904.D
 Acq: 17 Mar 2020 00:01

Tgt Ion:130 Resp: 3064608
 Ion Ratio Lower Upper
 130 100
 95 109.8 88.5 132.7
 132 94.1 78.0 117.0
 97 74.0 59.3 88.9





#39

1,2-Dichloropropane

Concen: 0.153 ppbv

RT: 7.83 min Scan# 1569

Delta R.T. 0.21 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

Instrument :

MSVOA_L

ClientSampleId :

SV-02DL

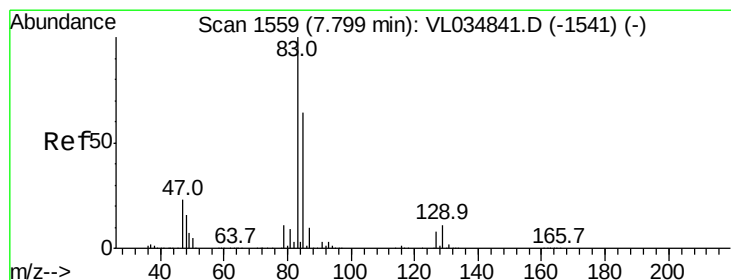
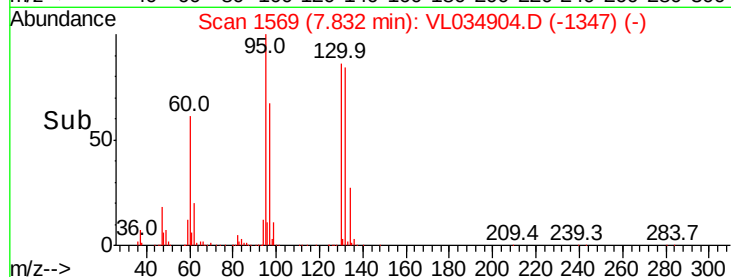
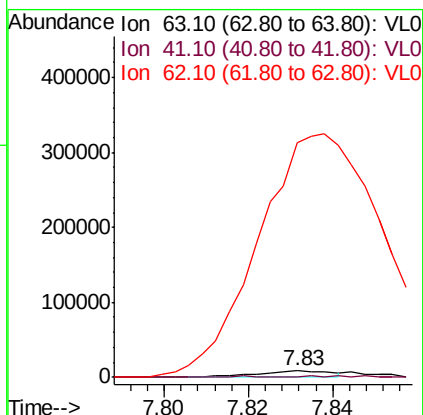
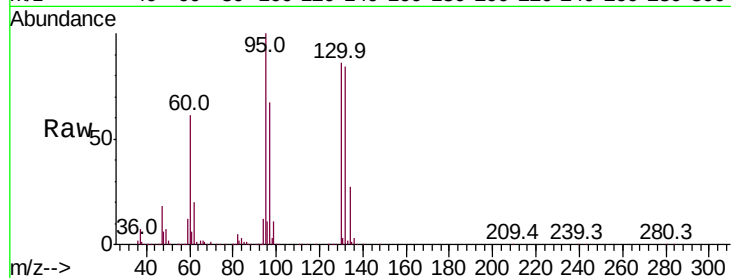
Tot Ion: 63 Resp: 9949

Ion Ratio Lower Upper

63 100

41 16.4 59.8 89.8#

62 3764.7 57.6 86.4#



#42

Bromodichloromethane

Concen: 0.222 ppbv

RT: 7.83 min Scan# 1570

Delta R.T. 0.04 min

Lab File: VL034904.D

Acq: 17 Mar 2020 00:01

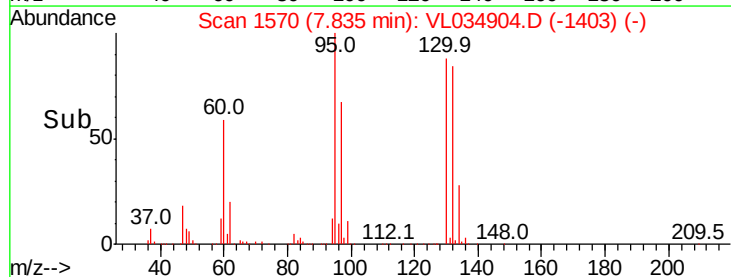
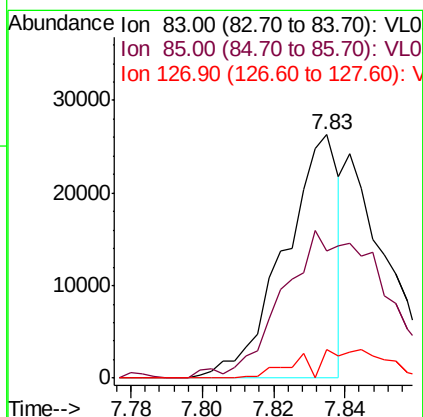
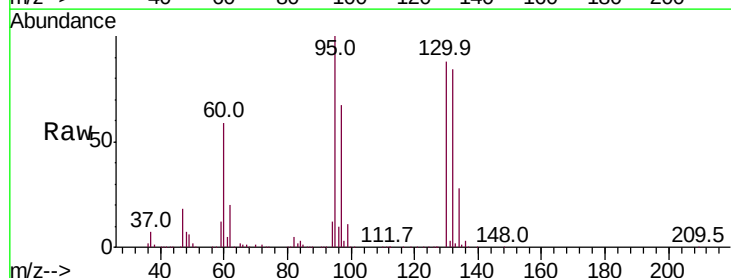
Tgt Ion: 83 Resp: 27906

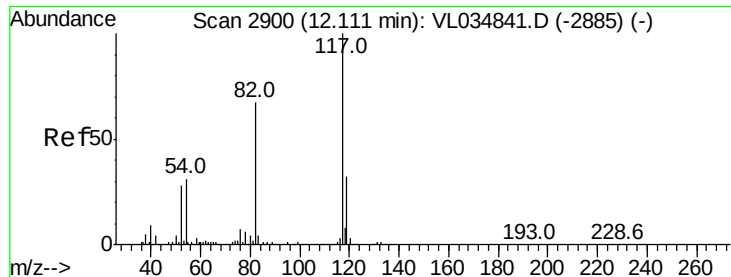
Ion Ratio Lower Upper

83 100

85 52.2 51.4 77.2

127 11.6 6.2 9.4#

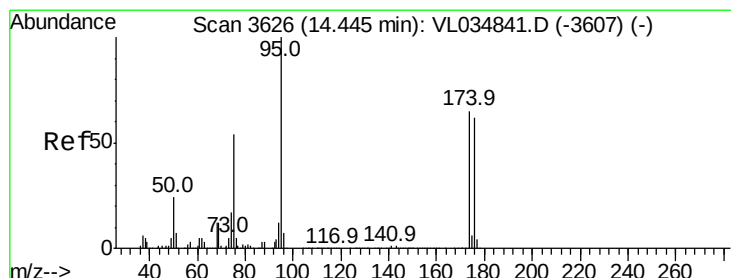
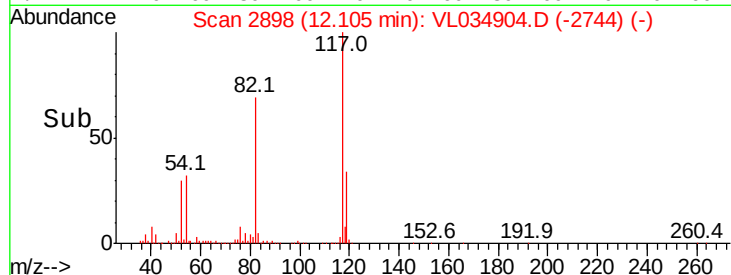
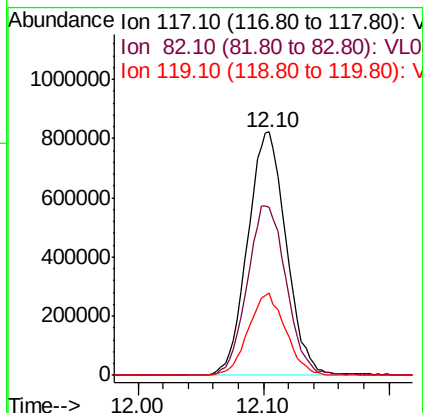
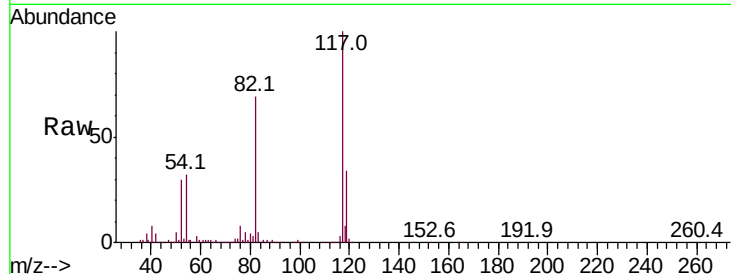




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2898
Delta R.T. -0.01 min
Lab File: VL034904.D
Acq: 17 Mar 2020 00:01

Instrument :
MSVOA_L
ClientSampleId :
SV-02DL

Tot Ion:117 Resp: 1753516
Ion Ratio Lower Upper
117 100
82 70.9 51.1 76.7
119 33.0 27.3 40.9



#68
1-Bromo-4-Fluorobenzene
Concen: 10.253 ppbv
RT: 14.44 min Scan# 3623
Delta R.T. -0.01 min
Lab File: VL034904.D
Acq: 17 Mar 2020 00:01

Tgt Ion: 95 Resp: 1402097
Ion Ratio Lower Upper
95 100
174 63.8 55.2 82.8
175 4.9 4.3 6.5

