

Data File : VL033572.D
Acq On : 10 Apr 2019 20:17
Operator : SY/AP
Sample : K2301-02DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA2DL

Quant Time: Apr 11 03:46:06 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 26 16:00:50 2019
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	919045	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2154301	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2150784	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	1713659	10.16	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	7685	0.057	ppbv	100
3) Chlorodifluoromethane	2.99	51	19760	0.187	ppbv #	72
4) Chloromethane	3.17	50	1888	0.034	ppbv #	82
9) Propene	3.04	41	11868	0.267	ppbv	91
13) Ethanol	3.65	45	161289	14.027	ppbv	68
15) Acetone	3.91	43	81728	0.740	ppbv	95
16) 1,3-Butadiene	3.35	39	2261	0.052	ppbv #	6
19) Isopropyl Alcohol	4.04	45	22440	0.321	ppbv #	94
20) Methylene Chloride	4.41	84	20098	0.428	ppbv #	90
25) Ethyl Acetate	5.78	43	7909	0.039	ppbv #	89
26) Hexane	5.78	57	12354	0.136	ppbv #	49
34) 2-Butanone	5.35	43	6809	0.053	ppbv	99
36) Benzene	7.00	78	7860	0.043	ppbv #	81
39) 1,2-Dichloropropane	7.29	63	557993	7.880	ppbv #	23
52) Tetrachloroethene	11.37	164	5026	0.074	ppbv	90
53) Toluene	9.94	91	13920	0.066	ppbv #	24
74) 1,2,4-Trimethylbenzene	16.92	105	10135	0.035	ppbv #	77

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

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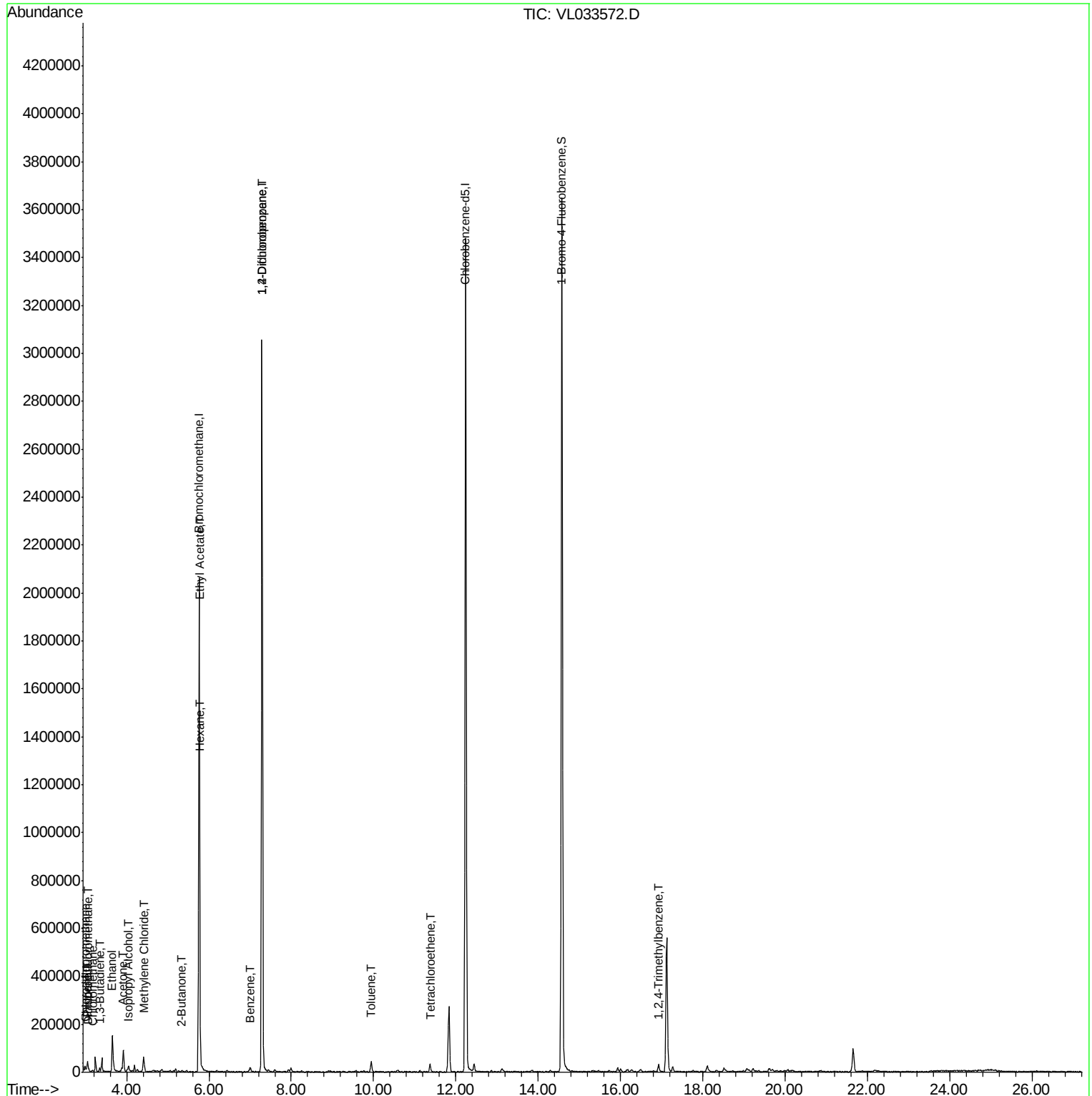
Quant Time: Apr 11 03:46:06 2019

Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL032519AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar 26 16:00:50 2019

QLast Update : Tue Mar 26 16:00:50 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033572.D

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MSVOA_L

ClientSampleId :

IA2DL

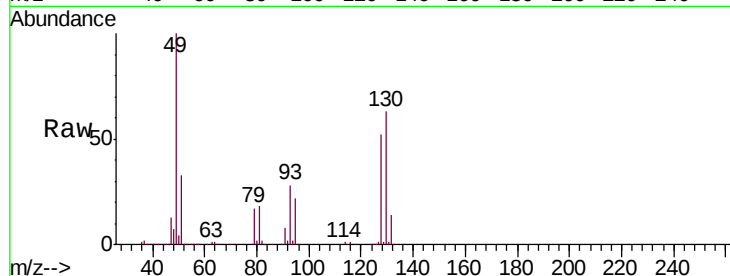
Tgt Ion: 49 Resp: 919045

Ion Ratio Lower Upper

49 100

128 49.0 24.0 72.0

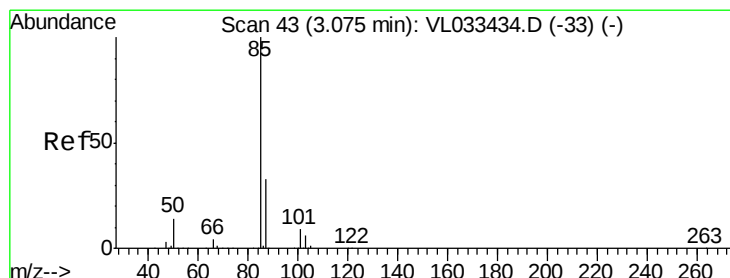
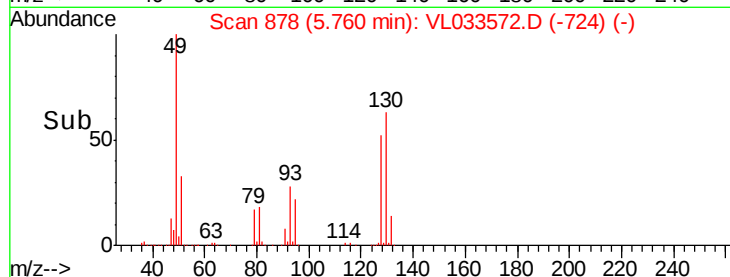
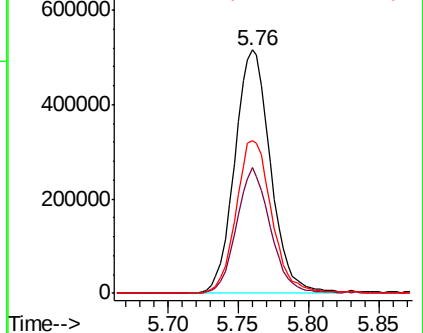
130 63.1 31.2 93.6



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: 0.057 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033572.D

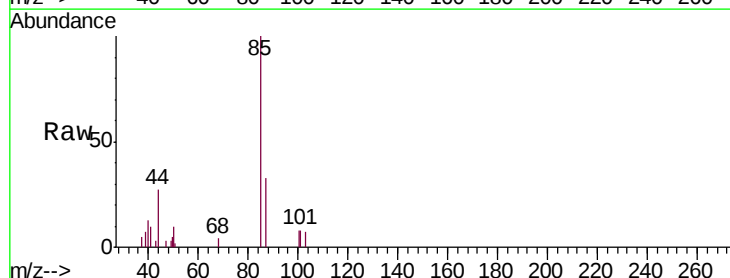
Acq: 10 Apr 2019 20:17

Tgt Ion: 85 Resp: 7685

Ion Ratio Lower Upper

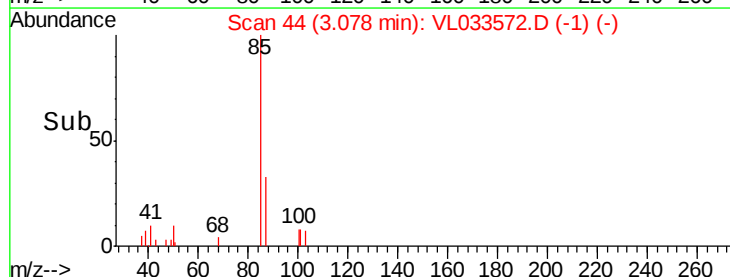
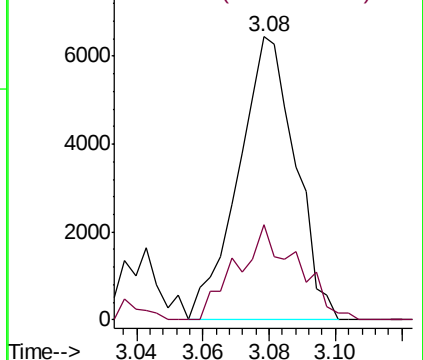
85 100

87 33.5 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

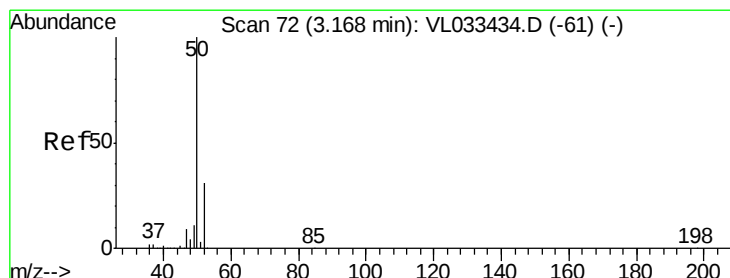
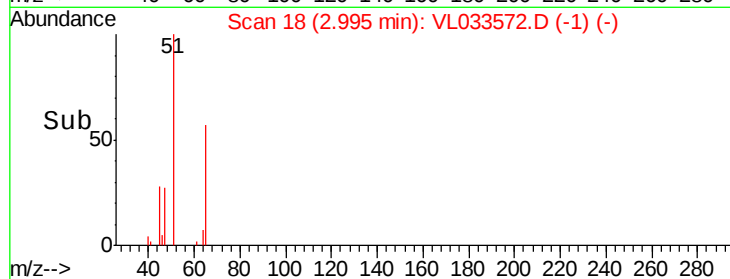
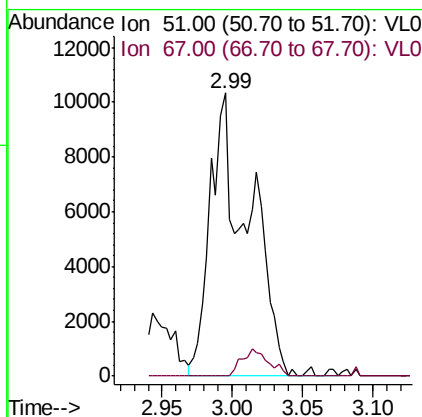
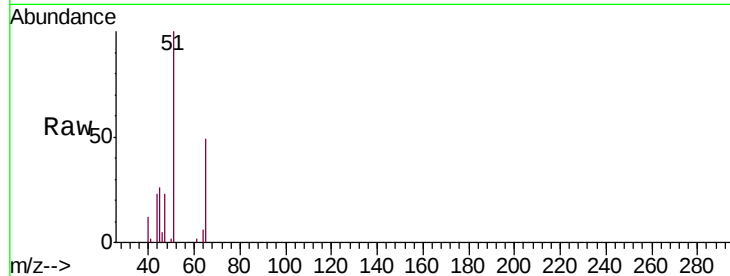




#3
 Chlorodifluoromethane
 Concen: 0.187 ppbv
 RT: 2.99 min Scan# 18
 Delta R.T. -0.02 min
 Lab File: VL033572.D
 Acq: 10 Apr 2019 20:17

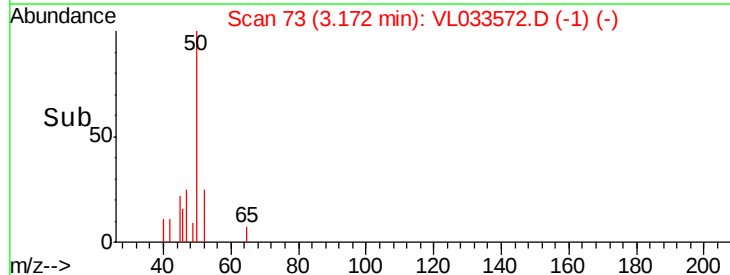
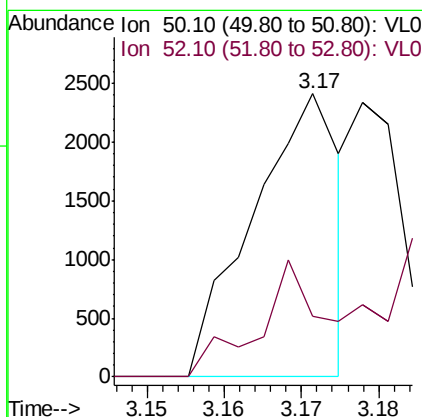
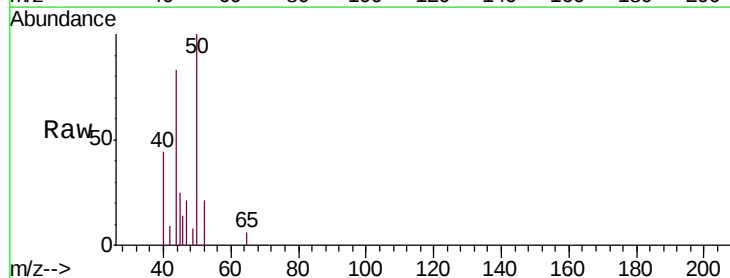
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2DL

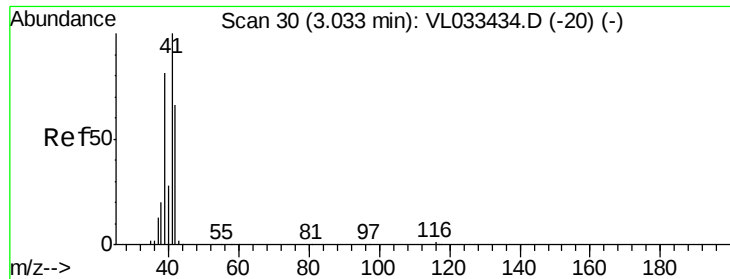
Tgt Ion: 51 Resp: 19760
 Ion Ratio Lower Upper
 51 100
 67 6.7 15.7 23.5#



#4
 Chloromethane
 Concen: 0.034 ppbv
 RT: 3.17 min Scan# 73
 Delta R.T. 0.00 min
 Lab File: VL033572.D
 Acq: 10 Apr 2019 20:17

Tgt Ion: 50 Resp: 1888
 Ion Ratio Lower Upper
 50 100
 52 21.4 25.0 37.6#





#9

Propene

Concen: 0.267 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Instrument :

MSVOA_L

ClientSampleId :

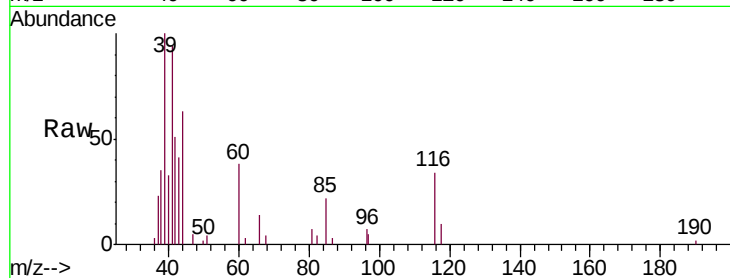
IA2DL

Tgt Ion: 41 Resp: 11868

Ion Ratio Lower Upper

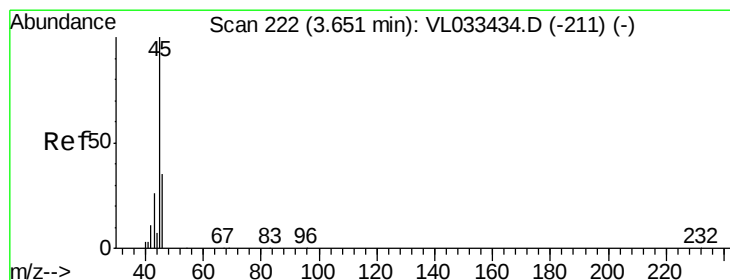
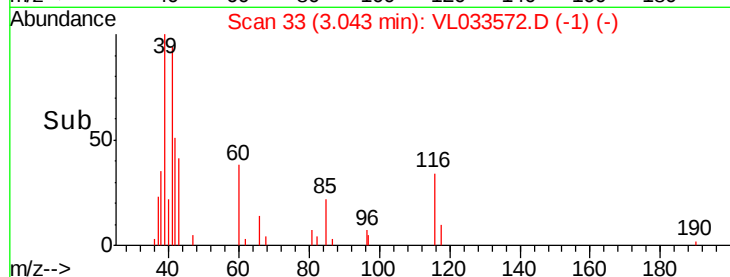
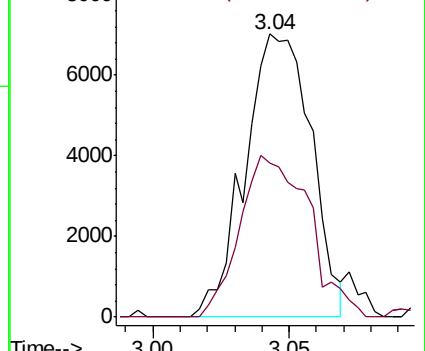
41 100

42 60.5 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#13

Ethanol

Concen: 14.027 ppbv

RT: 3.65 min Scan# 222

Delta R.T. -0.00 min

Lab File: VL033572.D

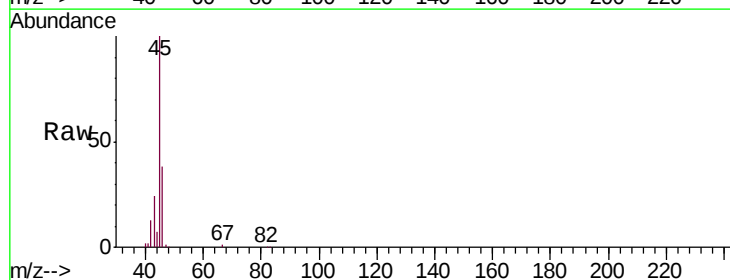
Acq: 10 Apr 2019 20:17

Tgt Ion: 45 Resp: 161289

Ion Ratio Lower Upper

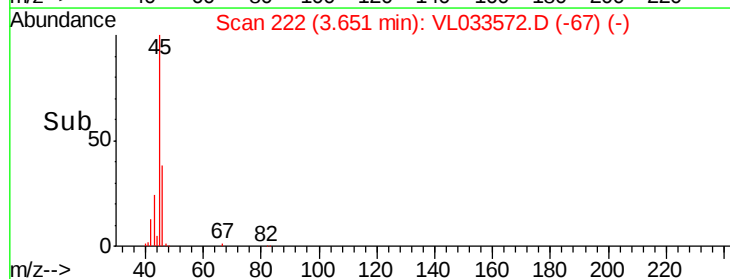
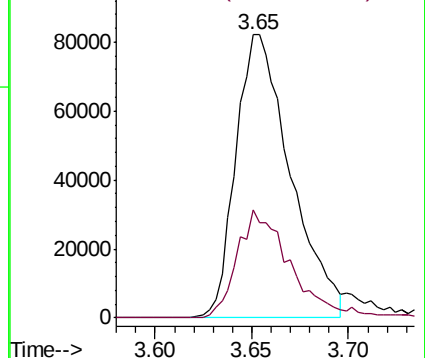
45 100

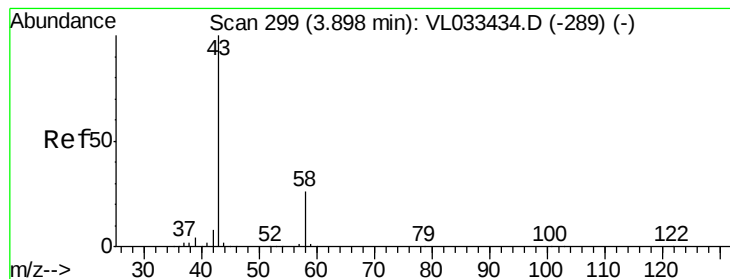
46 38.5 25.4 101.8



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 0.740 ppbv

RT: 3.91 min Scan# 303

Delta R.T. 0.01 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Instrument :

MSVOA_L

ClientSampleId :

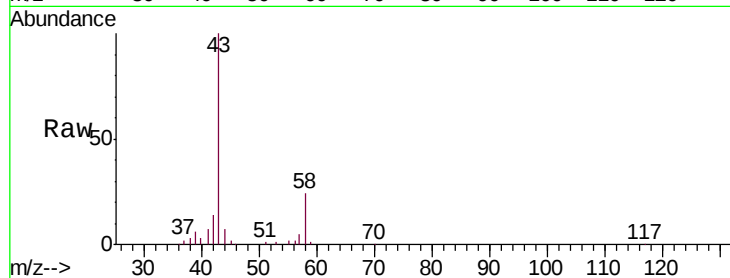
IA2DL

Tgt Ion: 43 Resp: 81728

Ion Ratio Lower Upper

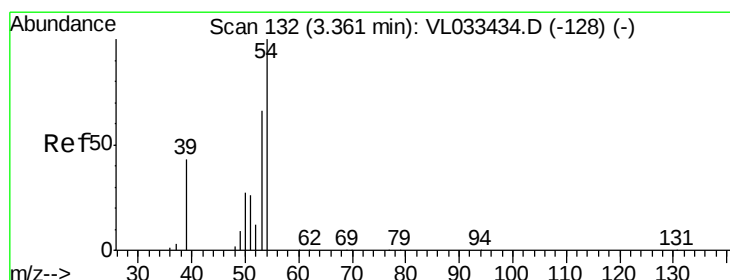
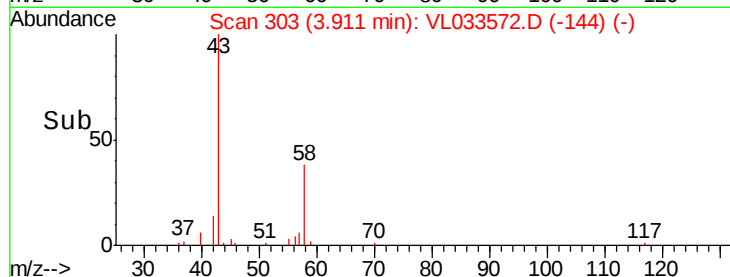
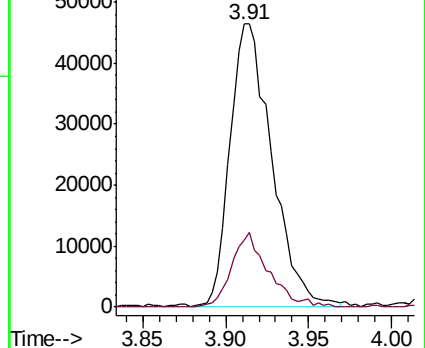
43 100

58 23.3 20.5 30.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.052 ppbv

RT: 3.35 min Scan# 128

Delta R.T. -0.01 min

Lab File: VL033572.D

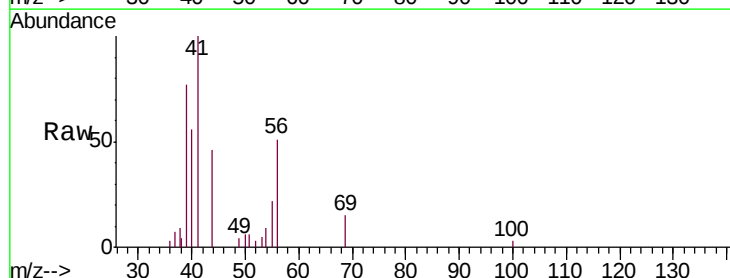
Acq: 10 Apr 2019 20:17

Tgt Ion: 39 Resp: 2261

Ion Ratio Lower Upper

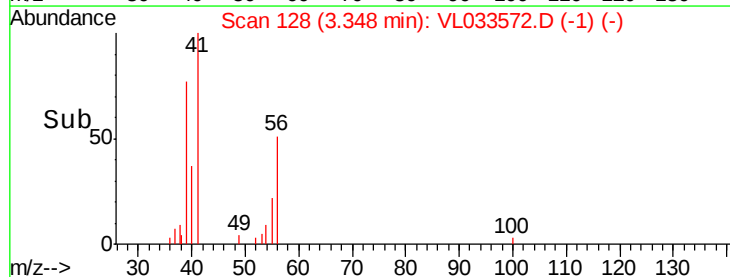
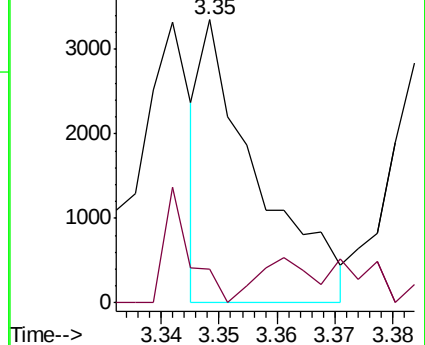
39 100

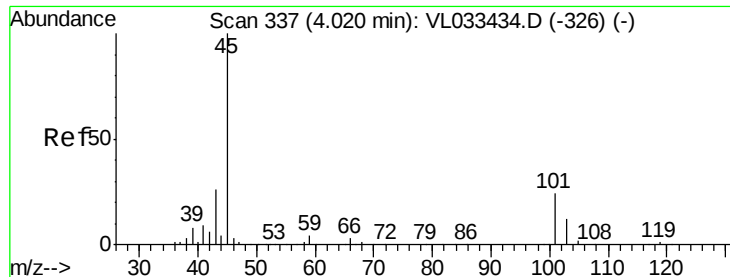
54 0.0 69.4 104.2#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#19

Isopropyl Alcohol

Concen: 0.321 ppbv

RT: 4.04 min Scan# 343

Delta R.T. 0.02 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Instrument :

MSVOA_L

ClientSampleId :

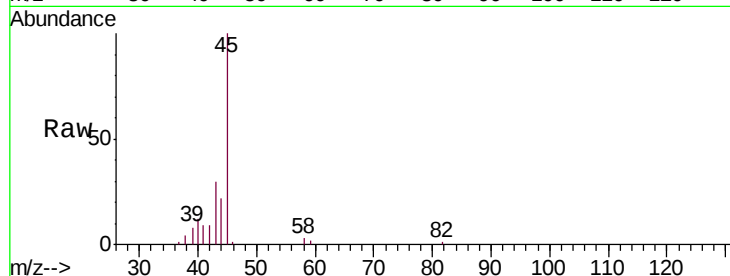
IA2DL

Tgt Ion: 45 Resp: 22440

Ion Ratio Lower Upper

45 100

58 4.0 1.4 2.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.04

15000

10000

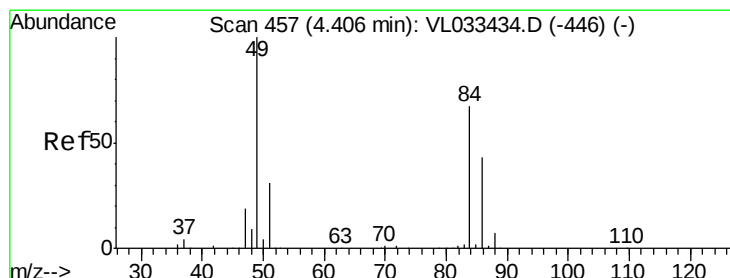
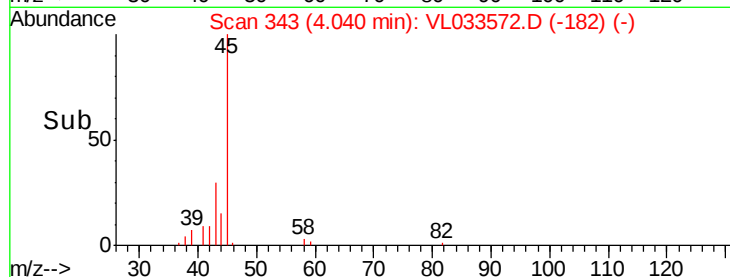
5000

0

Time-->

4.00

4.05



#20

Methylene Chloride

Concen: 0.428 ppbv

RT: 4.41 min Scan# 459

Delta R.T. 0.01 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Tgt Ion: 84 Resp: 20098

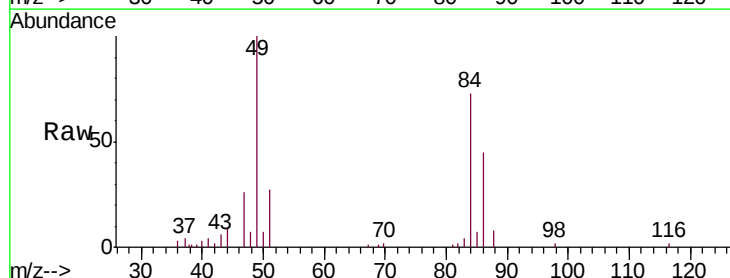
Ion Ratio Lower Upper

84 100

49 136.3 120.0 180.0

51 36.2 36.7 55.1#

86 61.0 51.9 77.9



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

30000

25000

20000

15000

10000

5000

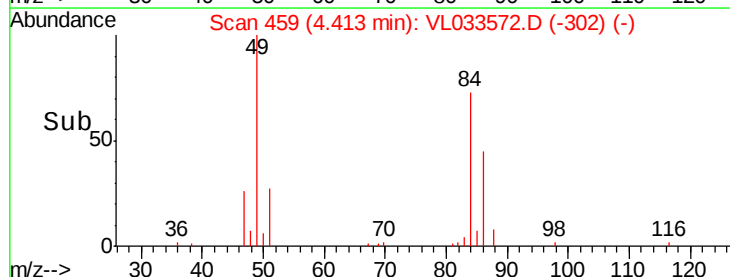
0

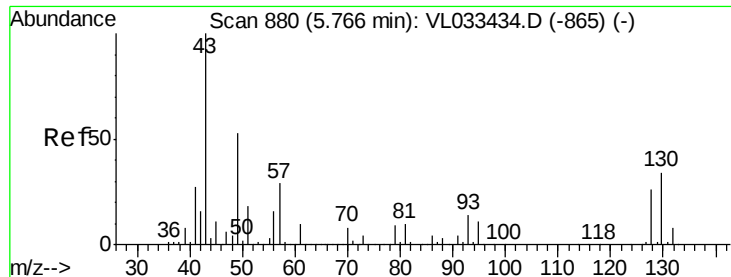
Time-->

4.35

4.40

4.45

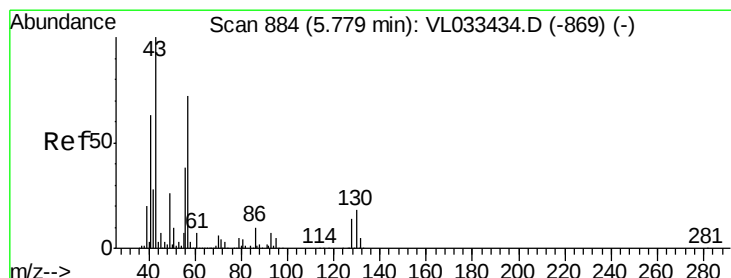
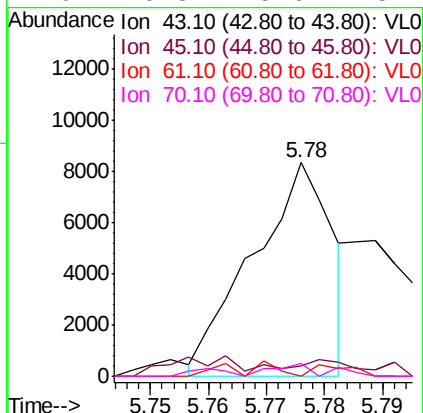
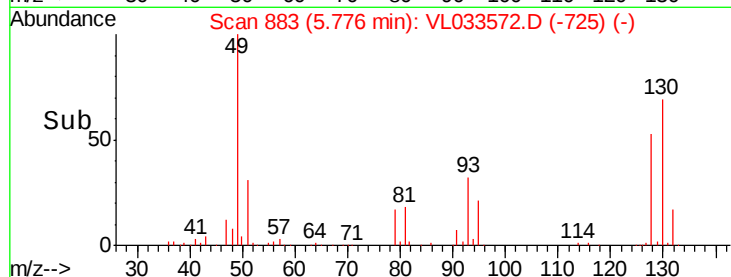
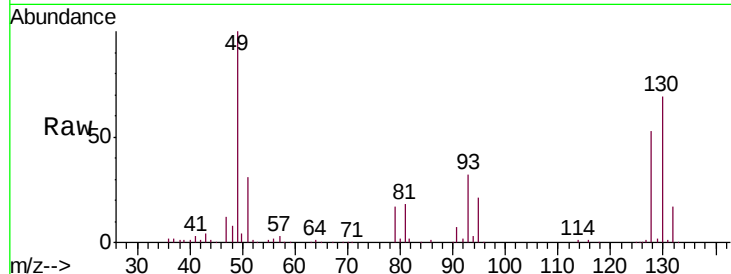




#25
Ethyl Acetate
Concen: 0.039 ppbv
RT: 5.78 min Scan# 883
Delta R.T. 0.01 min
Lab File: VL033572.D
Acq: 10 Apr 2019 20:17

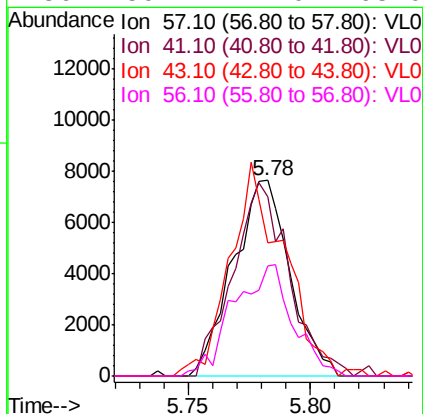
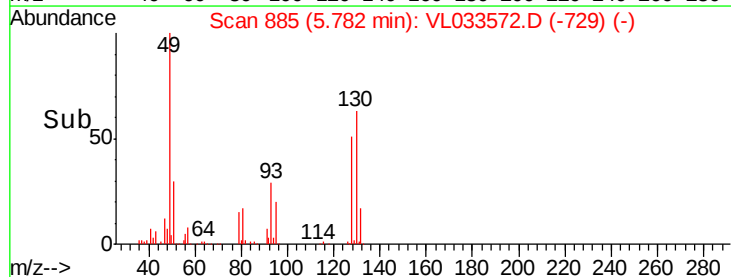
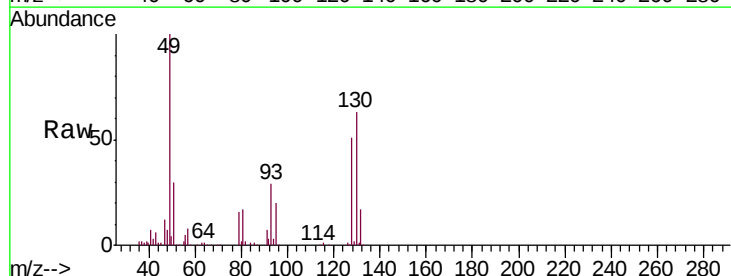
Instrument :
MSVOA_L
ClientSampleId :
IA2DL

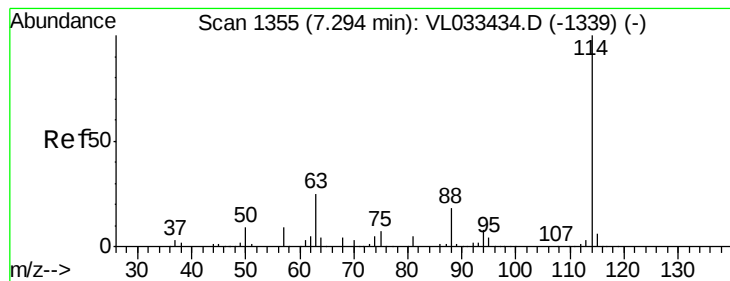
Tgt Ion:	43	Resp:	7909
Ion	Ratio	Lower	Upper
43	100		
45	15.4	7.8	11.6#
61	4.5	7.3	10.9#
70	6.3	5.6	8.4



#26
Hexane
Concen: 0.136 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.00 min
Lab File: VL033572.D
Acq: 10 Apr 2019 20:17

Tgt Ion:	57	Resp:	12354
Ion	Ratio	Lower	Upper
57	100		
41	98.2	70.7	106.1
43	103.8	182.6	274.0#
56	59.2	42.0	63.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.00 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Instrument :

MSVOA_L

ClientSampleId :

IA2DL

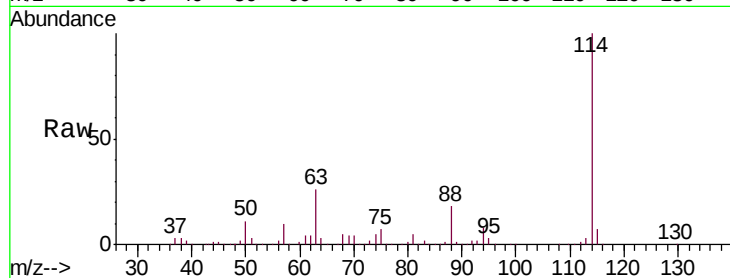
Tgt Ion:114 Resp: 2154301

Ion Ratio Lower Upper

114 100

63 26.1 21.5 32.3

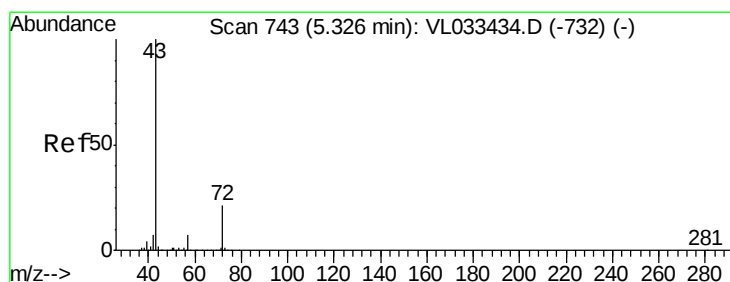
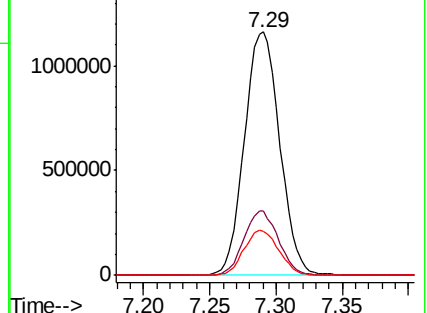
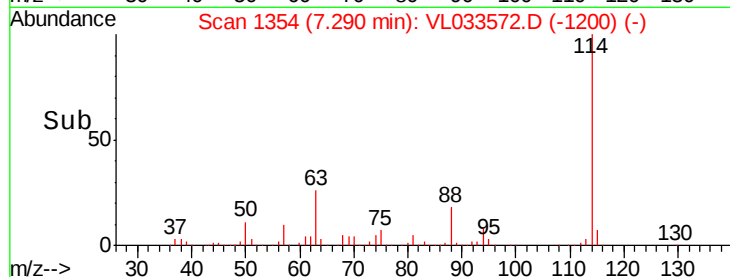
88 18.3 14.5 21.7



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.053 ppbv

RT: 5.35 min Scan# 750

Delta R.T. 0.02 min

Lab File: VL033572.D

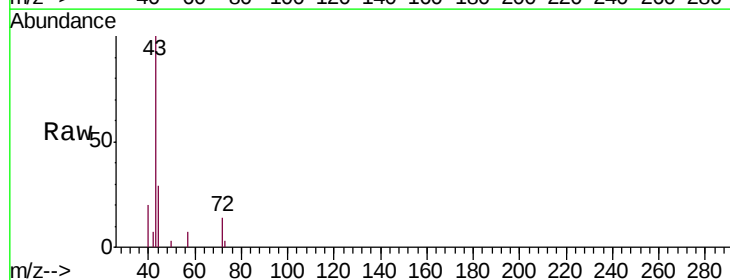
Acq: 10 Apr 2019 20:17

Tgt Ion: 43 Resp: 6809

Ion Ratio Lower Upper

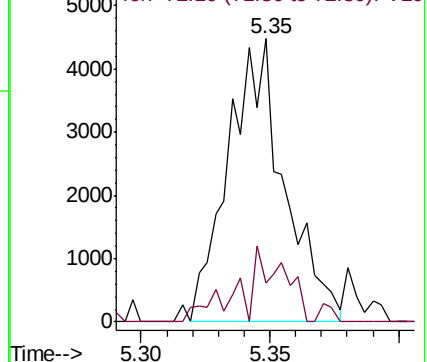
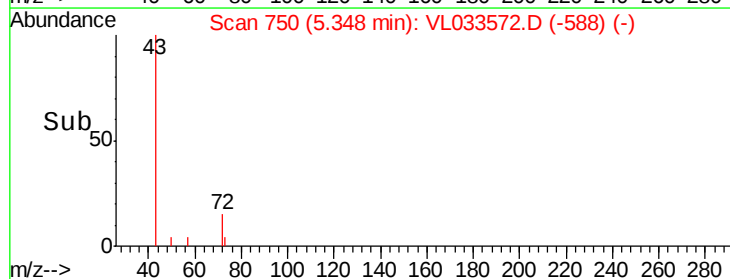
43 100

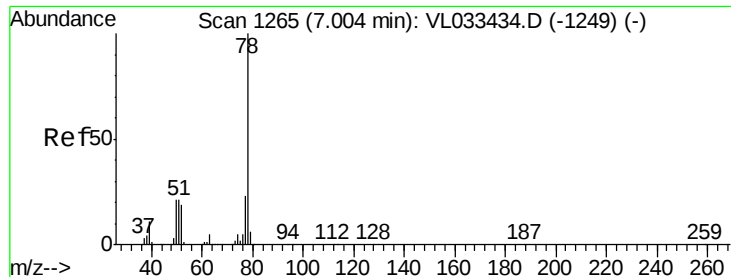
72 22.2 17.4 26.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.043 ppbv

RT: 7.00 min Scan# 1263

Delta R.T. -0.01 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Instrument :

MSVOA_L

ClientSampleId :

IA2DL

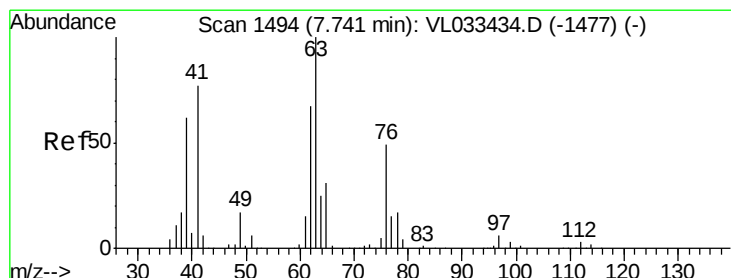
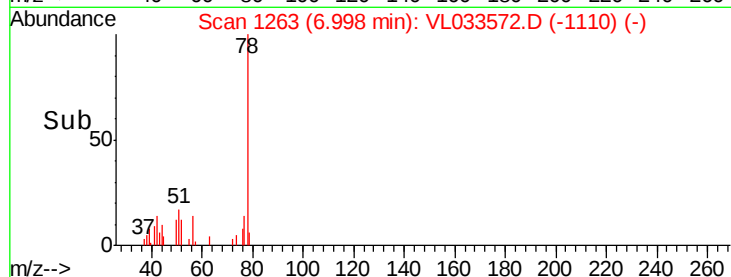
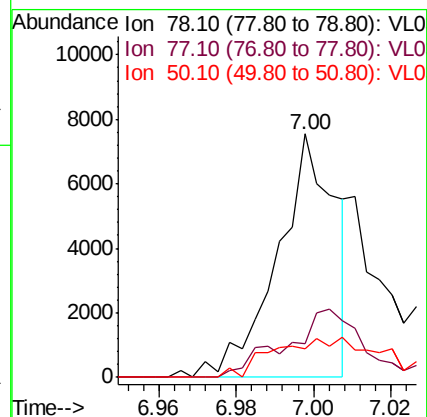
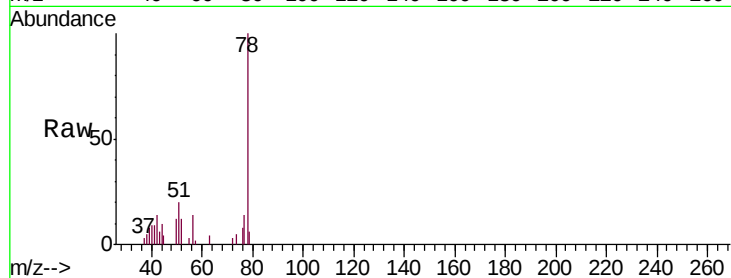
Tgt Ion: 78 Resp: 7860

Ion Ratio Lower Upper

78 100

77 14.0 18.1 27.1#

50 11.7 16.7 25.1#



#39

1,2-Dichloropropane

Concen: 7.880 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.45 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

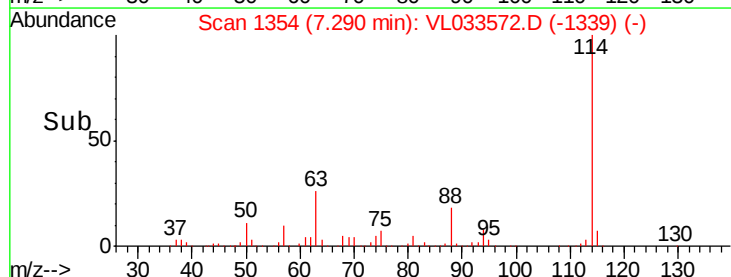
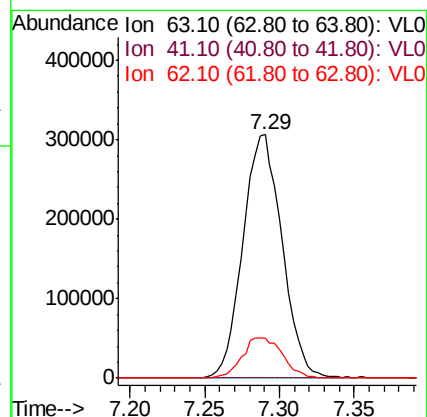
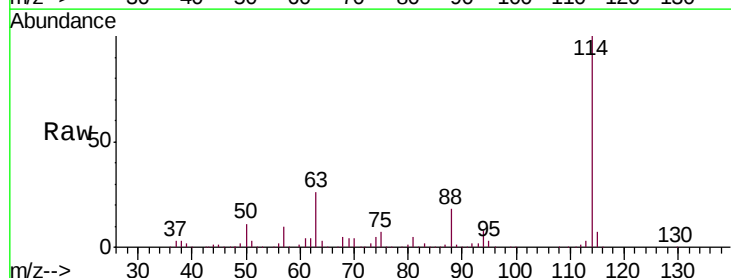
Tgt Ion: 63 Resp: 557993

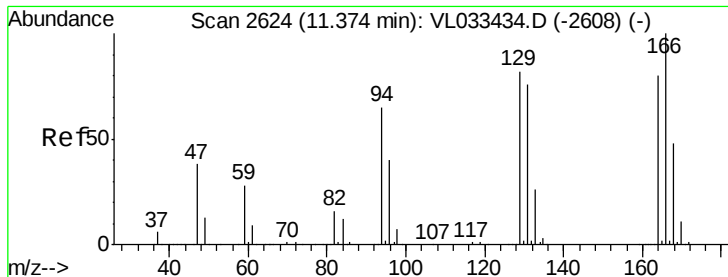
Ion Ratio Lower Upper

63 100

41 0.0 61.2 91.8#

62 16.6 54.0 81.0#

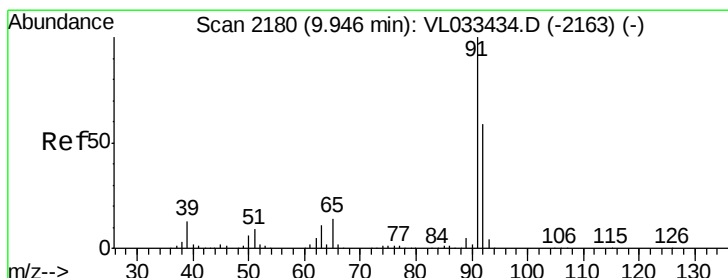
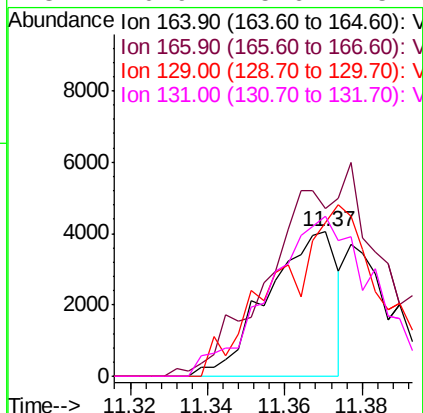
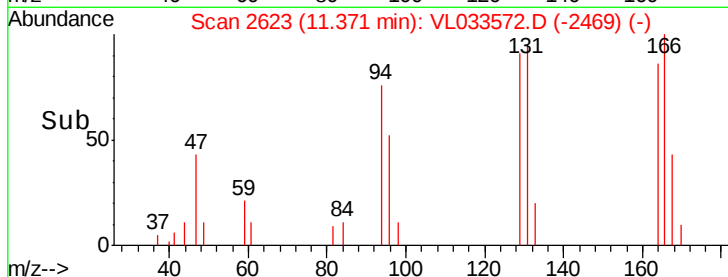
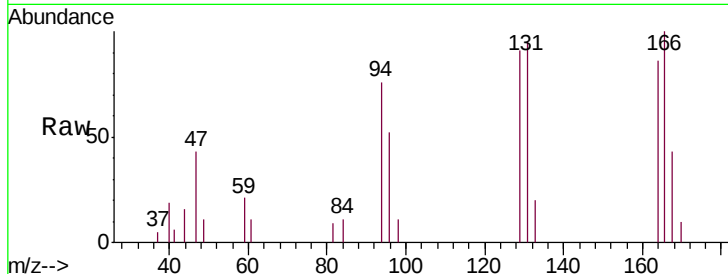




#52
Tetrachloroethene
Concen: 0.074 ppbv
RT: 11.37 min Scan# 2623
Delta R.T. -0.00 min
Lab File: VL033572.D
Acq: 10 Apr 2019 20:17

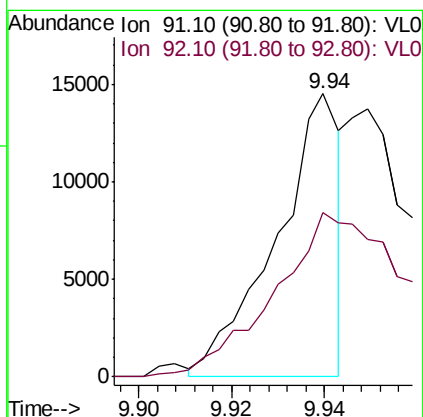
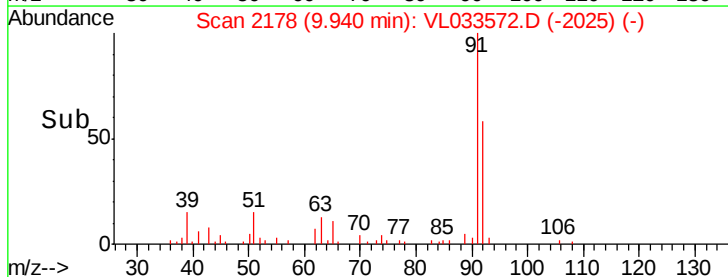
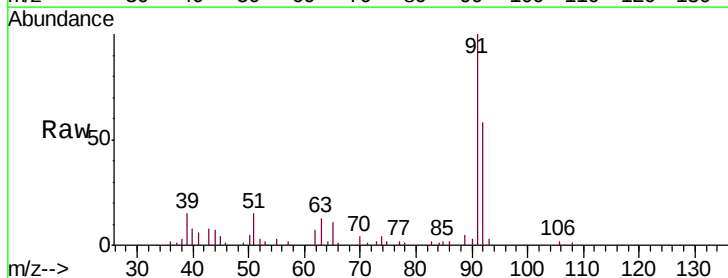
Instrument :
MSVOA_L
ClientSampleId :
IA2DL

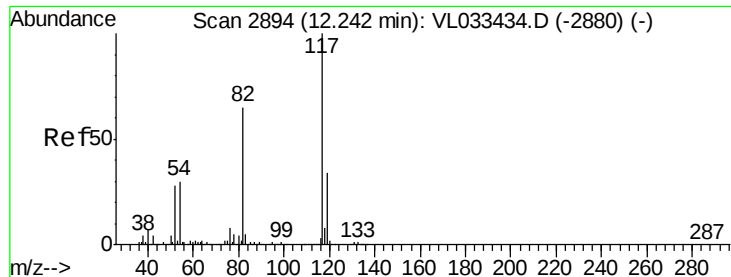
Tgt Ion:164 Resp: 5026
Ion Ratio Lower Upper
164 100
166 112.5 99.5 149.3
129 106.0 81.4 122.2
131 110.9 75.6 113.4



#53
Toluene
Concen: 0.066 ppbv
RT: 9.94 min Scan# 2178
Delta R.T. -0.01 min
Lab File: VL033572.D
Acq: 10 Apr 2019 20:17

Tgt Ion: 91 Resp: 13920
Ion Ratio Lower Upper
91 100
92 116.3 47.4 71.0#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

Instrument :

MSVOA_L

ClientSampleId :

IA2DL

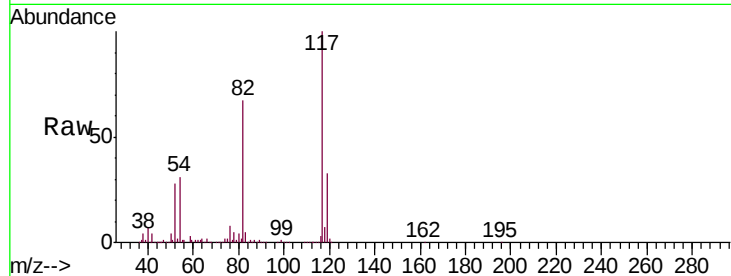
Tgt Ion:117 Resp: 2150784

Ion Ratio Lower Upper

117 100

82 66.6 51.5 77.3

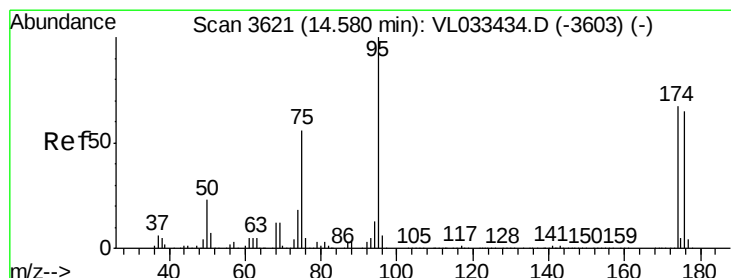
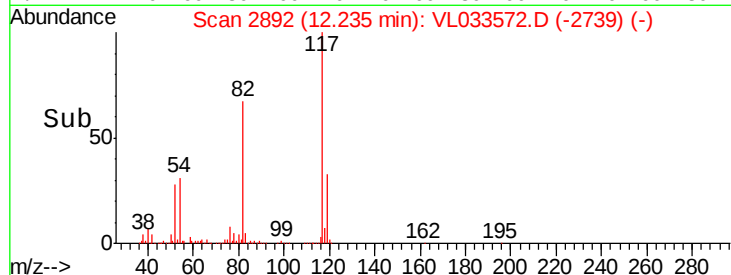
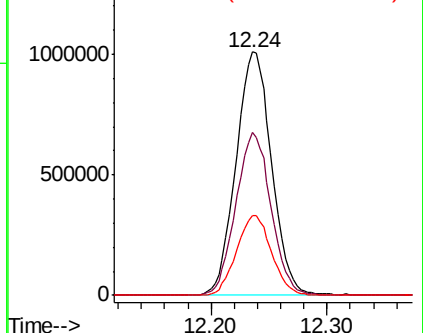
119 32.4 25.5 38.3



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: 10.163 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.01 min

Lab File: VL033572.D

Acq: 10 Apr 2019 20:17

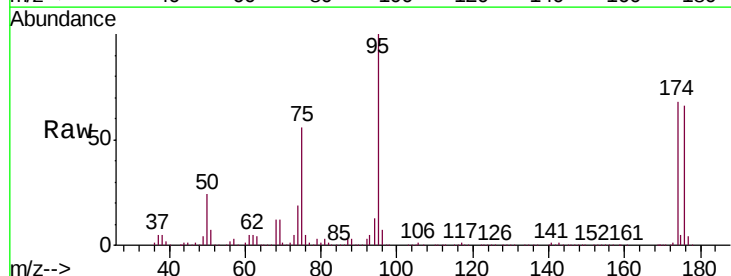
Tgt Ion: 95 Resp: 1713659

Ion Ratio Lower Upper

95 100

174 66.7 52.9 79.3

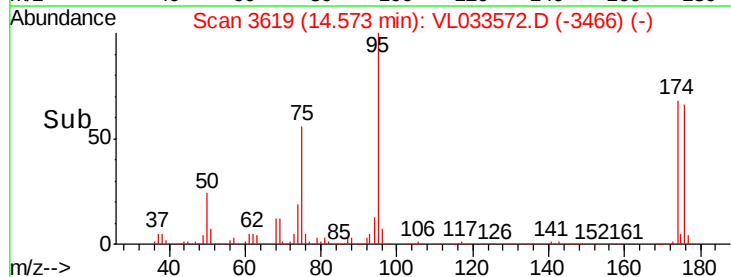
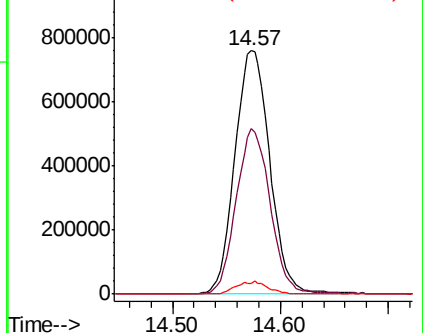
175 4.9 3.8 5.6

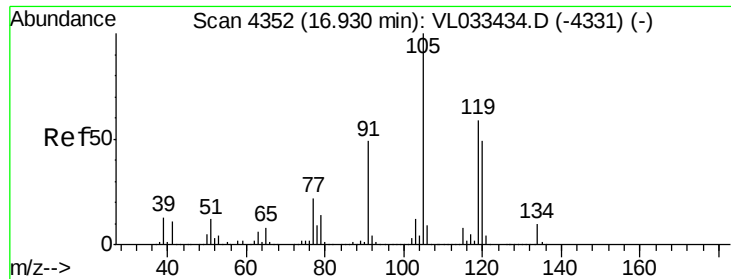


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.035 ppbv
 RT: 16.92 min Scan# 4349
 Delta R.T. -0.01 min
 Lab File: VL033572.D
 Acq: 10 Apr 2019 20:17

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2DL

Tgt Ion:	105	Resp:	10135
Ion	Ratio	Lower	Upper
105	100		
120	48.9	39.0	58.6
91	15.3	40.0	60.0#
77	17.5	17.5	26.3

