

Data File : VL034718.D
Acq On : 27 Feb 2020 21:14
Operator : SY/AP
Sample : L1662-06
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IAS-6-CR-104

Quant Time: Feb 28 01:10:40 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 26 06:58:15 2020
QLast Update : Wed Feb 26 06:58:15 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1080342	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2152253	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2167885	10.00	ppbv	0.00

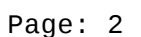
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1855899 10.44 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 104.40%

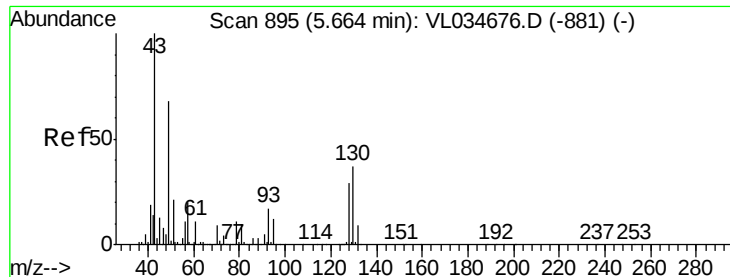
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.02	85	97134	0.570	ppbv	99
3) Chlorodifluoromethane	2.93	51	413235	3.544	ppbv #	61
4) Chloromethane	3.11	50	33809	0.518	ppbv	93
9) Propene	3.17	41	210412	4.317	ppbv	98
10) Heptane	8.14	43	20014	0.160	ppbv #	18
11) Trichlorofluoromethane	3.93	101	38072	0.255	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.47	101	3417	0.032	ppbv #	1
13) Ethanol	3.59	45	5279393	342.909	ppbv	99
15) Acetone	3.83	43	1062874	8.634	ppbv	94
16) 1,3-Butadiene	3.28	39	9272	0.163	ppbv #	37
17) tert-Butyl alcohol	4.29	59	9219	0.098	ppbv #	71
19) Isopropyl Alcohol	3.97	45	2005213	27.346	ppbv	100
20) Methylene Chloride	4.33	84	138537	3.026	ppbv	94
21) Allyl Chloride	4.11	41	409075	5.022	ppbv #	53
23) Vinyl Acetate	5.06	43	19593	0.117	ppbv #	59
25) Ethyl Acetate	5.68	43	109880	0.504	ppbv #	85
26) Hexane	5.68	57	135139	1.345	ppbv #	45
29) Chloroform	5.75	83	8750	0.055	ppbv	87
30) Cyclohexane	7.15	84	1660	0.021	ppbv #	1
34) 2-Butanone	5.24	43	39873	0.294	ppbv	99
35) Carbon Tetrachloride	7.03	117	6287	0.044	ppbv #	88
39) 1,2-Dichloropropane	7.19	63	627778	8.489	ppbv #	24
44) 2,2,4-Trimethylpentane	7.88	57	16456	0.051	ppbv #	17
53) Toluene	9.83	91	941702	4.763	ppbv	97
58) Ethyl Benzene	12.75	91	34010	0.130	ppbv	91
59) m/p-Xylene	13.03	91	36976	0.162	ppbv #	32
60) o-Xylene	13.73	91	45920	0.202	ppbv	98
74) 1,2,4-Trimethylbenzene	16.81	105	7369	0.027	ppbv #	44

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. 0.00 min

Lab File: VL034718.D

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IAS-6-CR-104

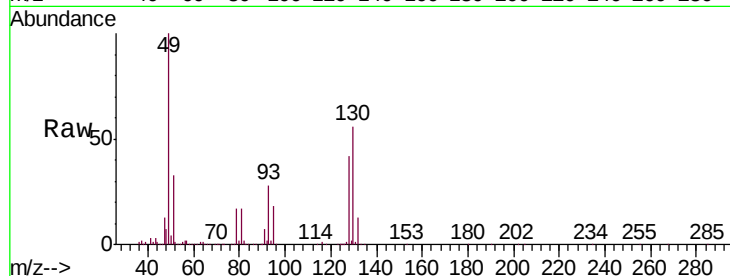
Tgt Ion: 49 Resp: 1080342

Ion Ratio Lower Upper

49 100

128 42.5 21.6 65.0

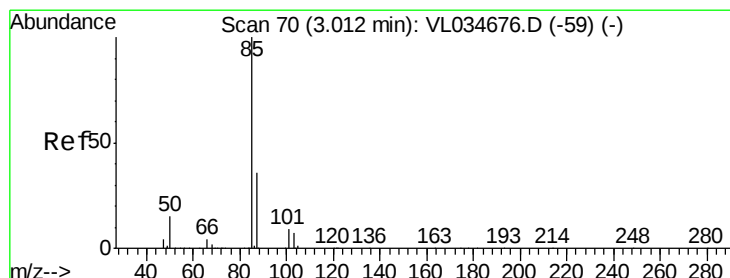
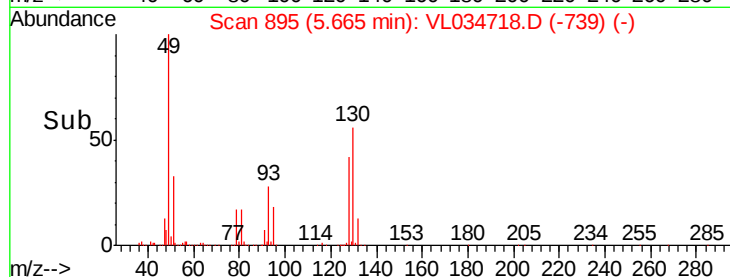
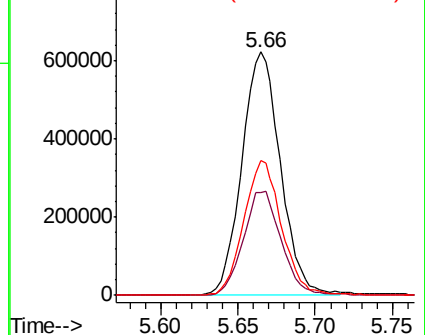
130 54.9 27.7 83.1



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: 0.570 ppbv

RT: 3.02 min Scan# 71

Delta R.T. 0.00 min

Lab File: VL034718.D

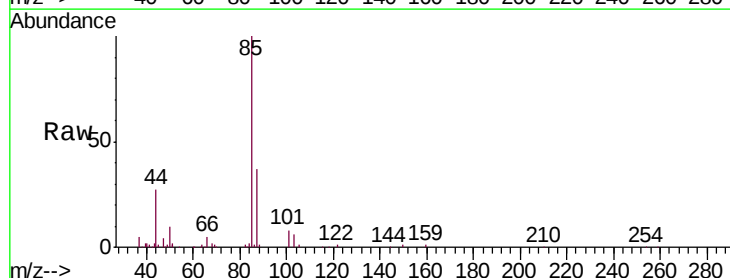
Acq: 27 Feb 2020 21:14

Tgt Ion: 85 Resp: 97134

Ion Ratio Lower Upper

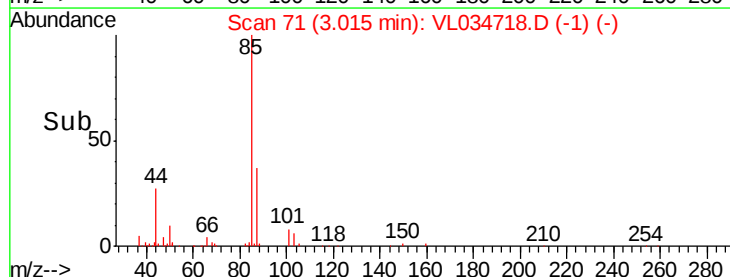
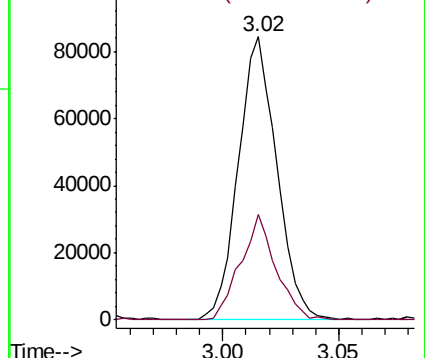
85 100

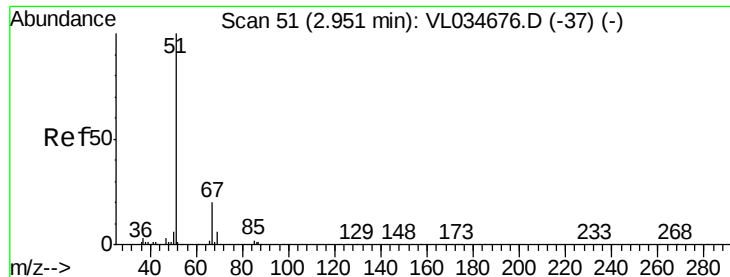
87 37.3 29.2 43.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 3.544 ppbv

RT: 2.93 min Scan# 44

Delta R.T. -0.02 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Instrument :

MSVOA_L

ClientSampleId :

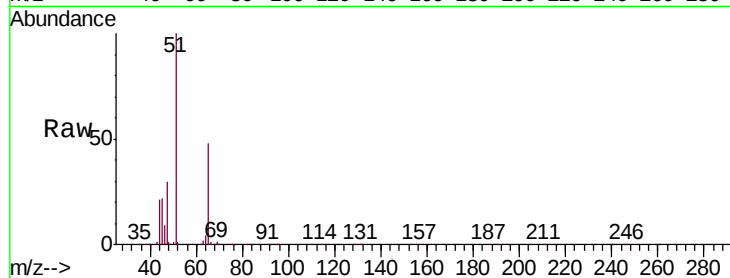
IAS-6-CR-104

Tgt Ion: 51 Resp: 413235

Ion Ratio Lower Upper

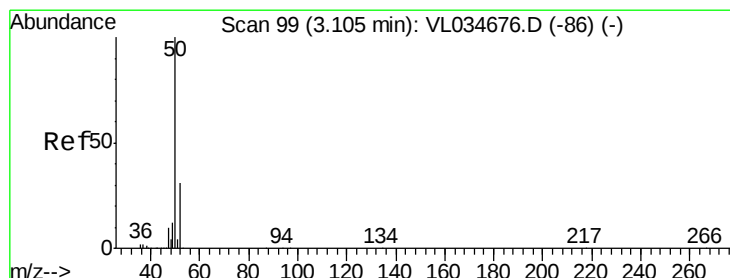
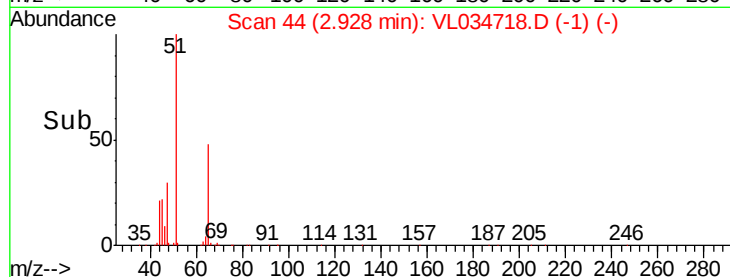
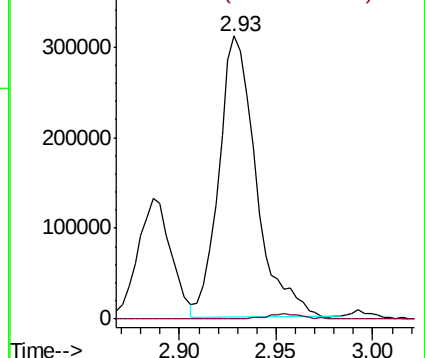
51 100

67 1.7 15.5 23.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.518 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.00 min

Lab File: VL034718.D

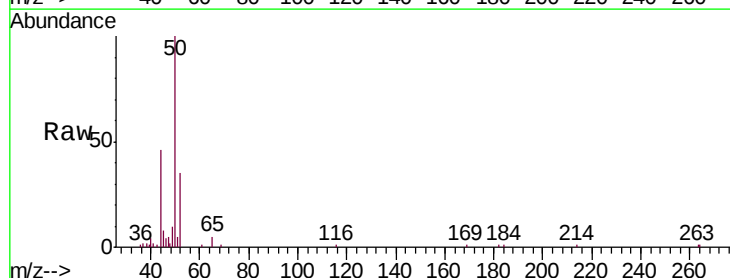
Acq: 27 Feb 2020 21:14

Tgt Ion: 50 Resp: 33809

Ion Ratio Lower Upper

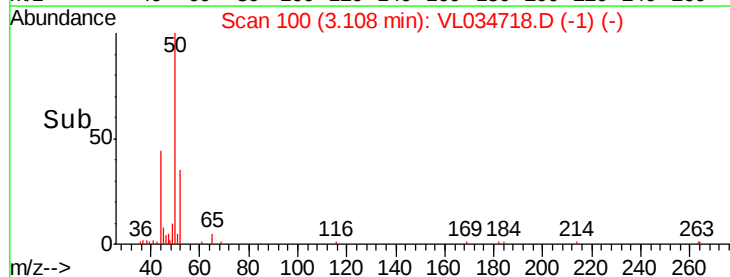
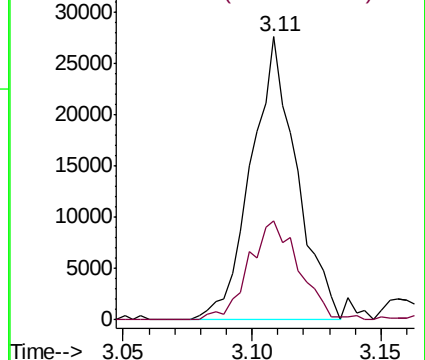
50 100

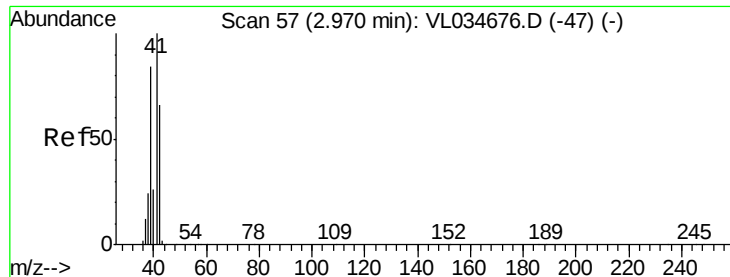
52 35.1 25.0 37.4



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 4.317 ppbv

RT: 3.17 min Scan# 120

Delta R.T. 0.20 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Instrument :

MSVOA_L

ClientSampleId :

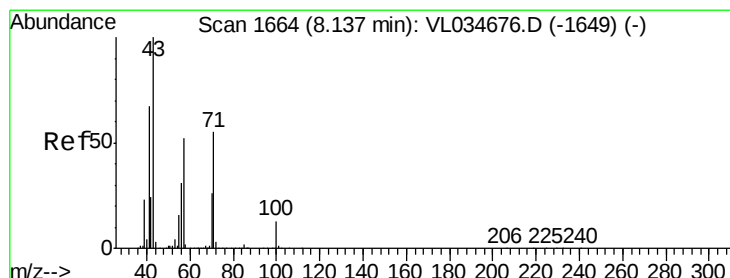
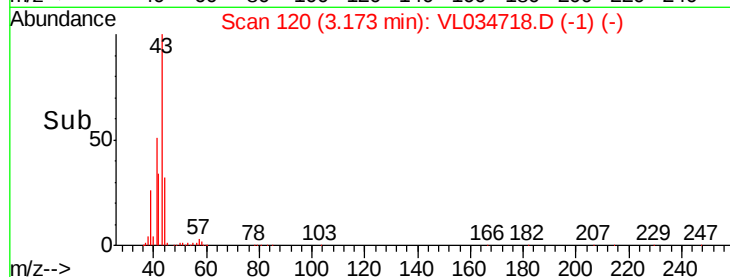
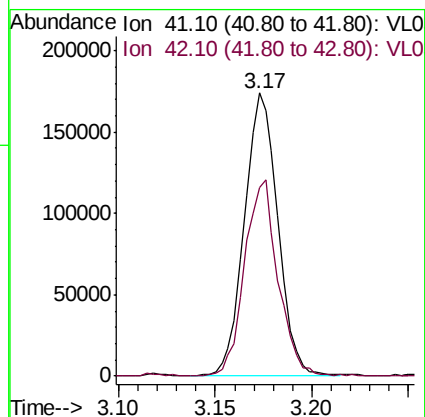
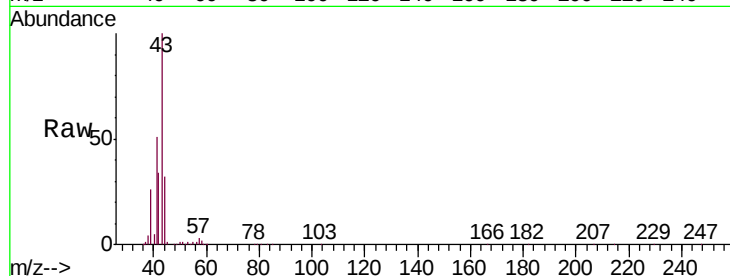
IAS-6-CR-104

Tgt Ion: 41 Resp: 210412

Ion Ratio Lower Upper

41 100

42 70.3 54.9 82.3



#10

Heptane

Concen: 0.160 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.00 min

Lab File: VL034718.D

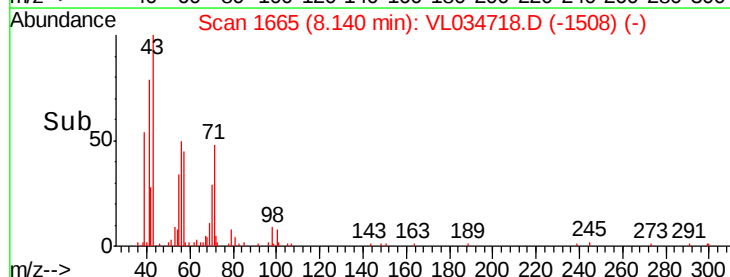
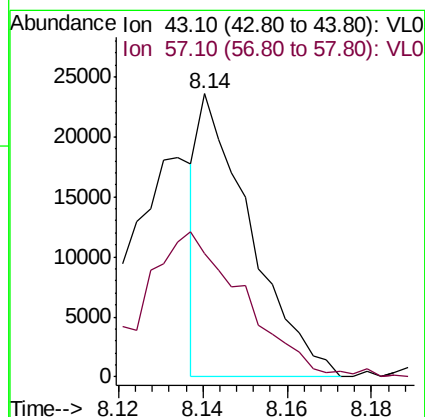
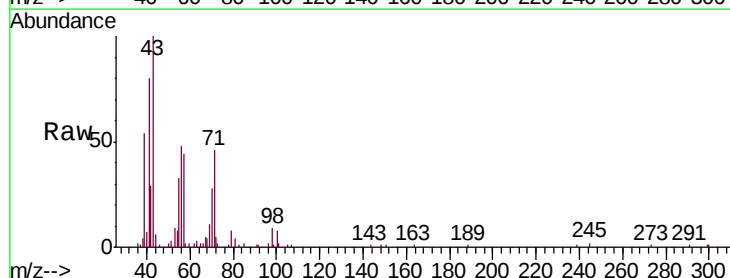
Acq: 27 Feb 2020 21:14

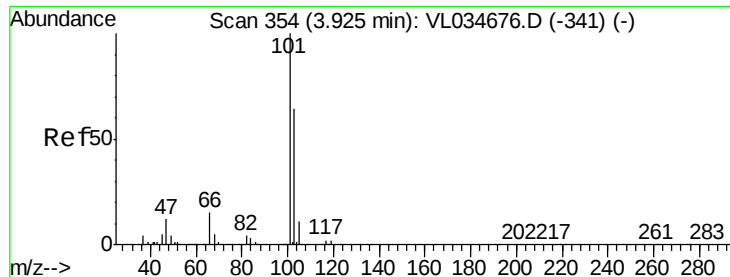
Tgt Ion: 43 Resp: 20014

Ion Ratio Lower Upper

43 100

57 108.6 41.0 61.6#

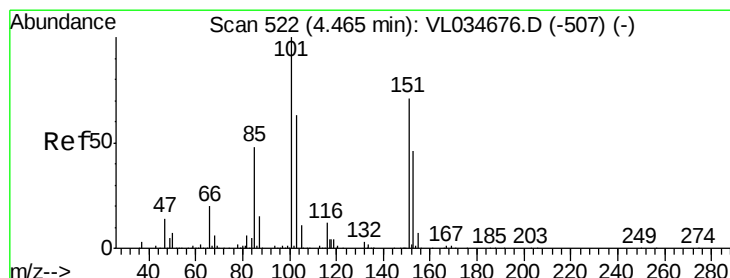
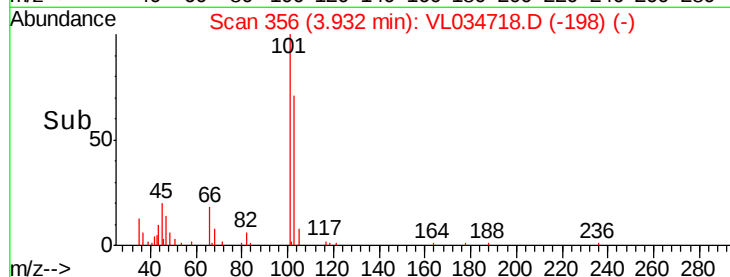
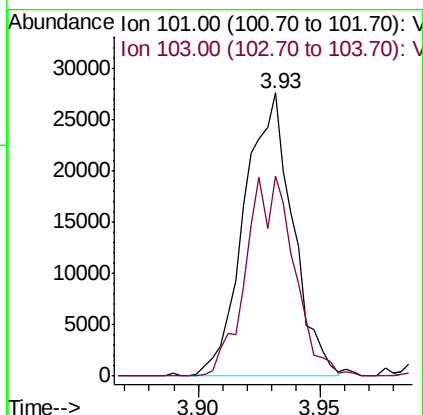
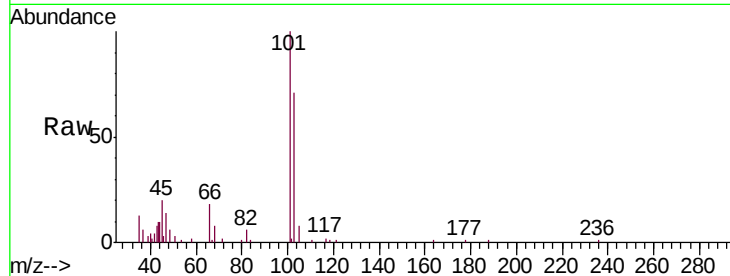




#11
 Trichlorofluoromethane
 Concen: 0.255 ppbv
 RT: 3.93 min Scan# 356
 Delta R.T. 0.01 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

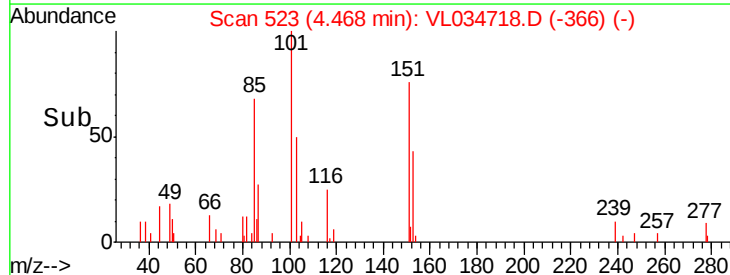
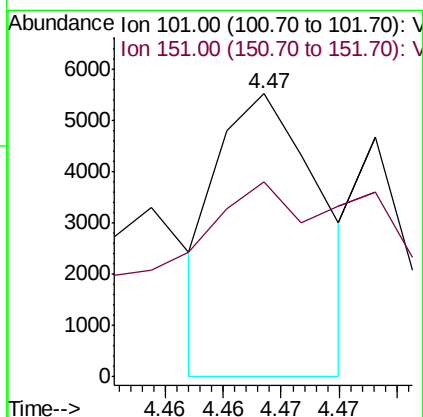
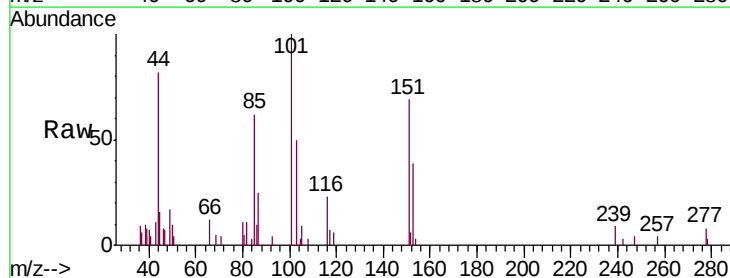
Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-6-CR-104

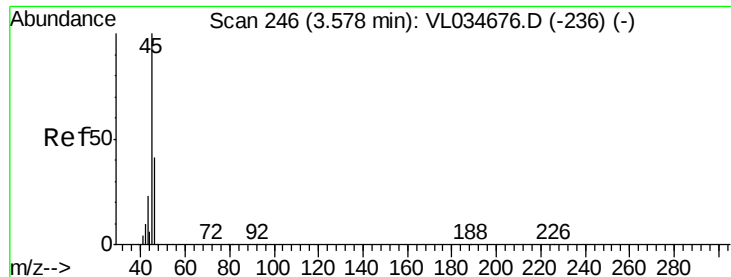
Tgt Ion:101 Resp: 38072
 Ion Ratio Lower Upper
 101 100
 103 69.4 51.2 76.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.032 ppbv
 RT: 4.47 min Scan# 523
 Delta R.T. 0.00 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Tgt Ion:101 Resp: 3417
 Ion Ratio Lower Upper
 101 100
 151 193.5 55.8 83.6#

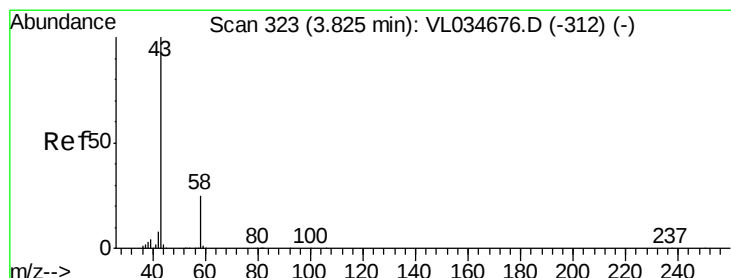
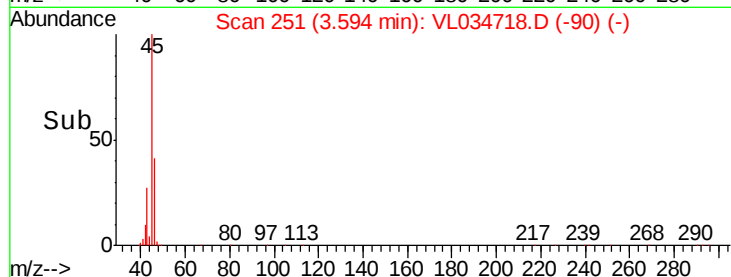
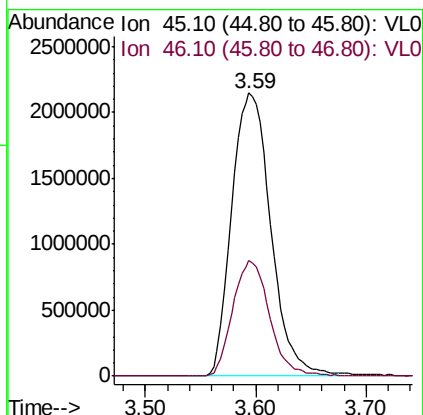
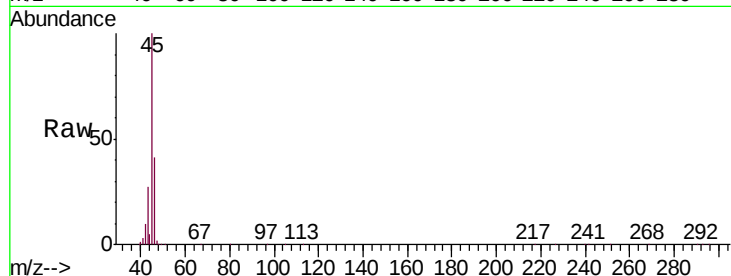




#13
Ethanol
Concen: 342.909 ppbv
RT: 3.59 min Scan# 251
Delta R.T. 0.02 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

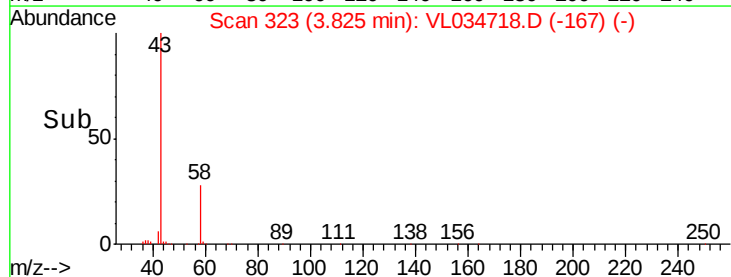
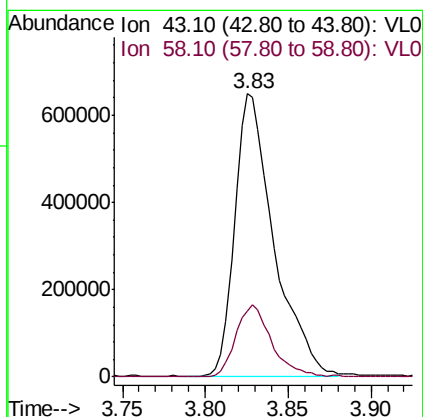
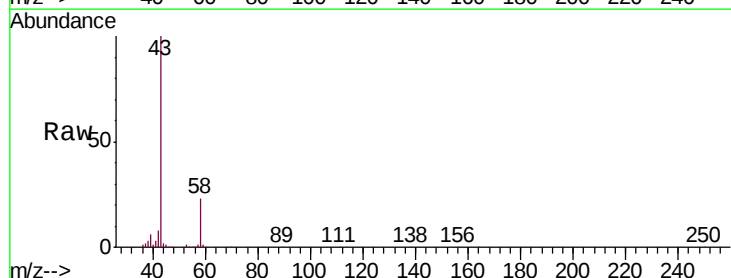
Instrument :
MSVOA_L
ClientSampleId :
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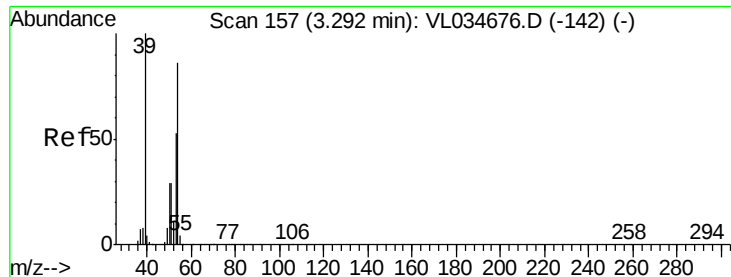
Tgt Ion: 45 Resp: 5279393
Ion Ratio Lower Upper
45 100
46 38.8 15.4 61.4



#15
Acetone
Concen: 8.634 ppbv
RT: 3.83 min Scan# 323
Delta R.T. 0.00 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

Tgt Ion: 43 Resp: 1062874
Ion Ratio Lower Upper
43 100
58 23.8 21.4 32.0





#16

1,3-Butadiene

Concen: 0.163 ppbv

RT: 3.28 min Scan# 154

Delta R.T. -0.01 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Instrument :

MSVOA_L

ClientSampleId :

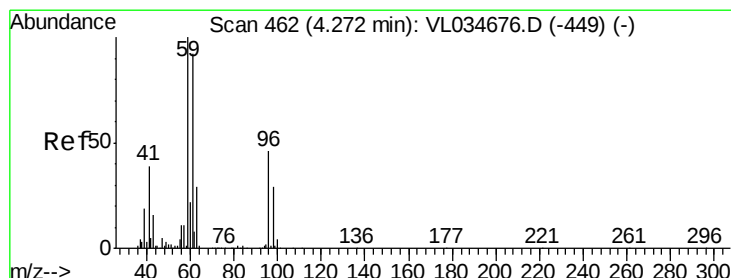
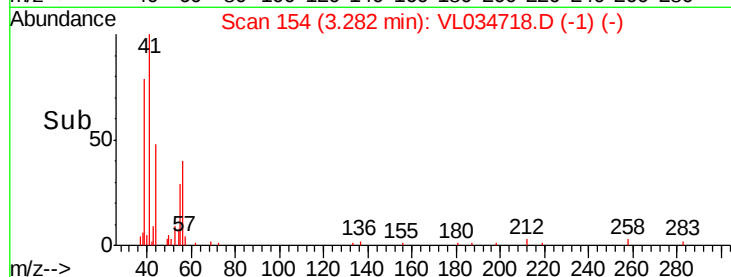
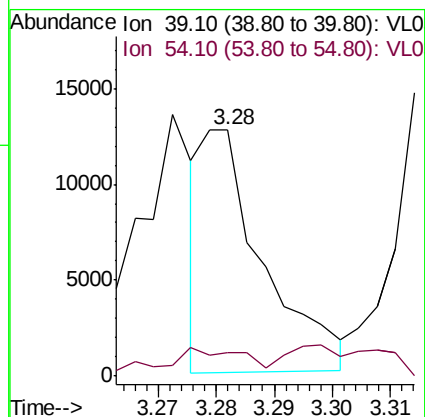
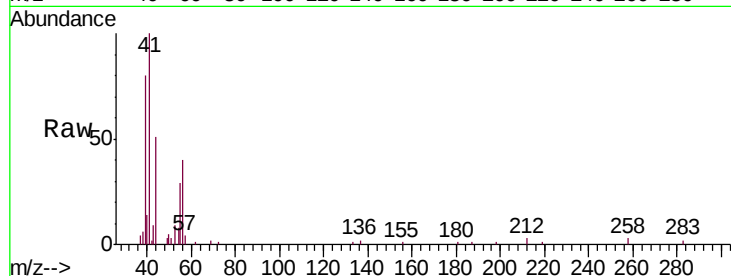
IAS-6-CR-104

Tgt Ion: 39 Resp: 9272

Ion Ratio Lower Upper

39 100

54 27.1 67.0 100.6#



#17

tert-Butyl alcohol

Concen: 0.098 ppbv

RT: 4.29 min Scan# 469

Delta R.T. 0.02 min

Lab File: VL034718.D

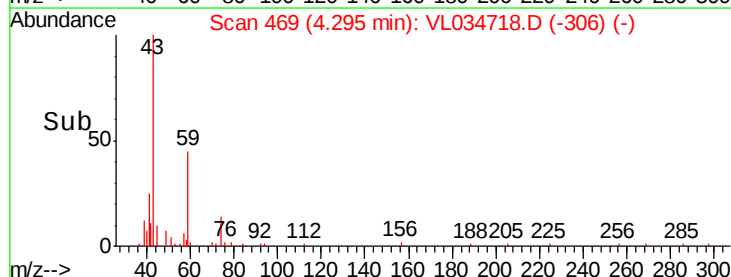
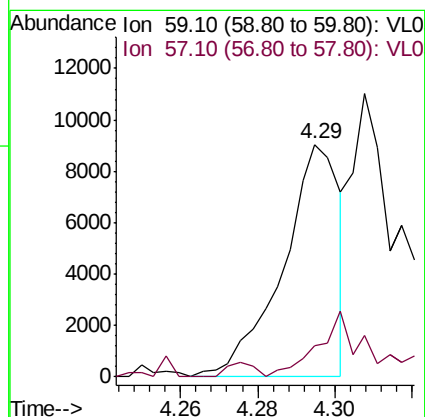
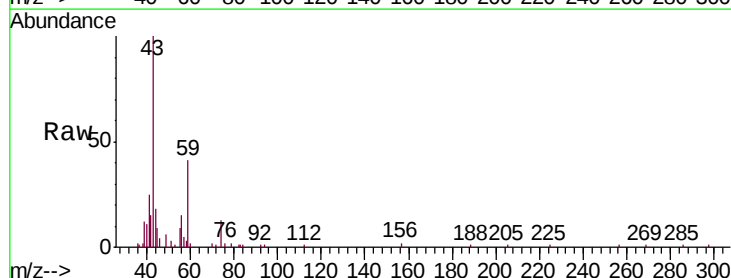
Acq: 27 Feb 2020 21:14

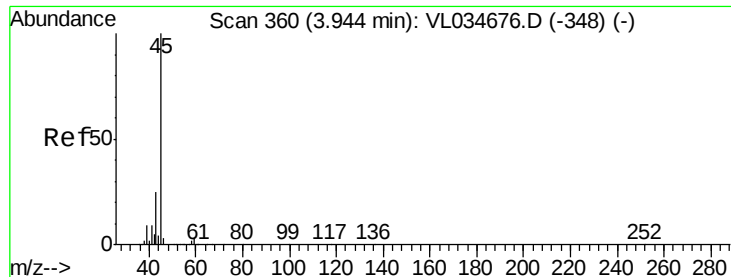
Tgt Ion: 59 Resp: 9219

Ion Ratio Lower Upper

59 100

57 0.0 8.8 13.2#



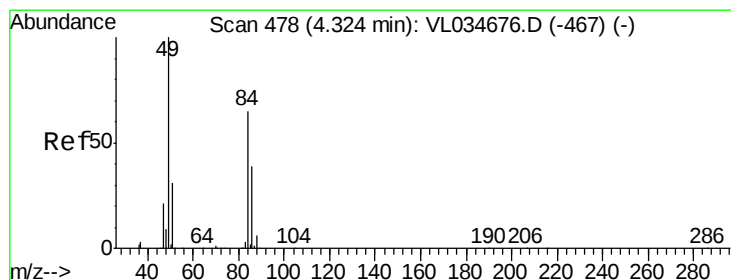
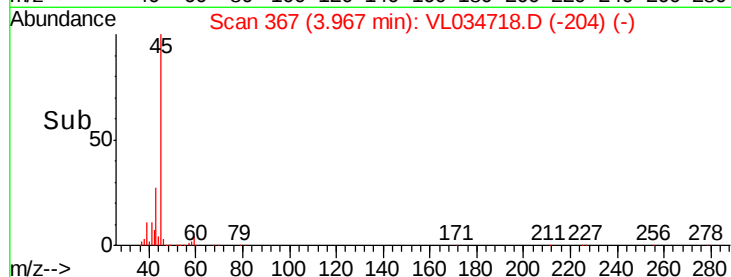
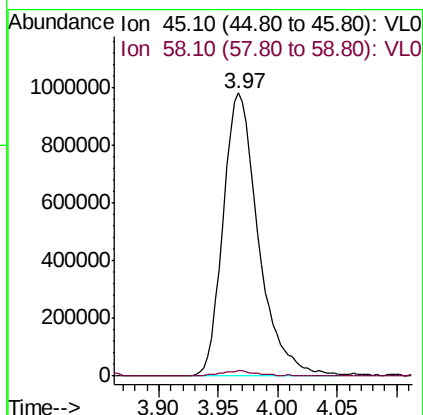
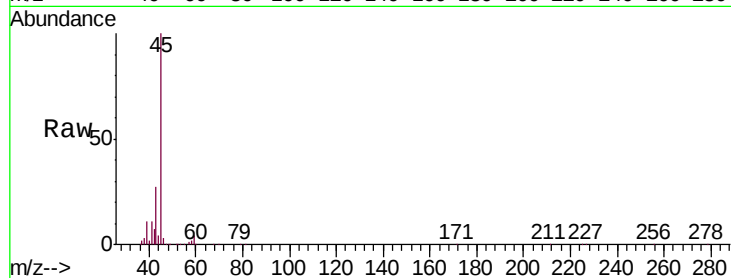


#19

Isopropyl Alcohol
 Concen: 27.346 ppbv
 RT: 3.97 min Scan# 367
 Delta R.T. 0.02 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-6-CR-104

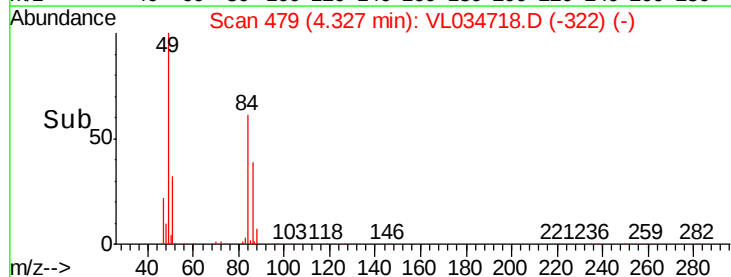
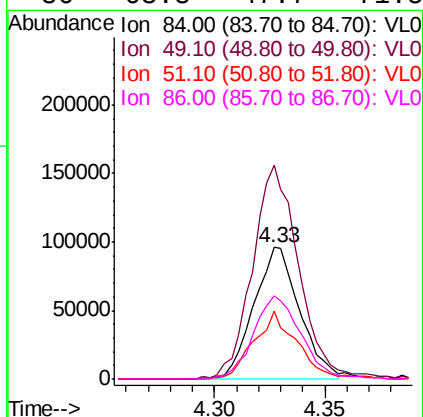
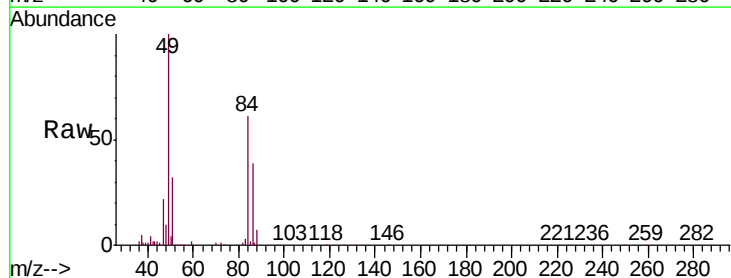
Tgt Ion: 45 Resp: 2005213
 Ion Ratio Lower Upper
 45 100
 58 2.2 1.8 2.6

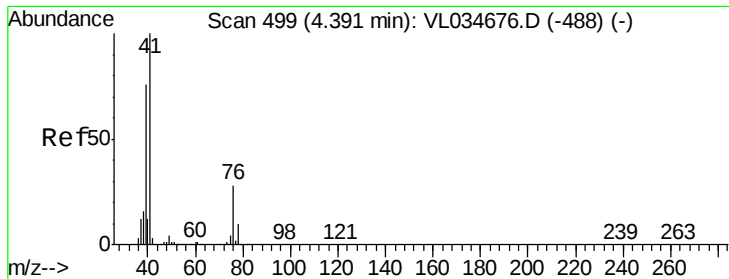


#20

Methylene Chloride
 Concen: 3.026 ppbv
 RT: 4.33 min Scan# 479
 Delta R.T. 0.00 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Tgt Ion: 84 Resp: 138537
 Ion Ratio Lower Upper
 84 100
 49 162.7 122.8 184.2
 51 51.7 38.6 58.0
 86 63.8 47.7 71.5





#21

Allyl Chloride

Concen: 5.022 ppbv

RT: 4.11 min Scan# 412

Delta R.T. -0.28 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Instrument :

MSVOA_L

ClientSampleId :

IAS-6-CR-104

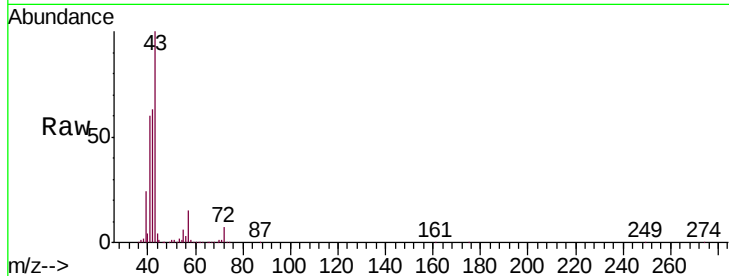
Tgt Ion: 41 Resp: 409075

Ion Ratio Lower Upper

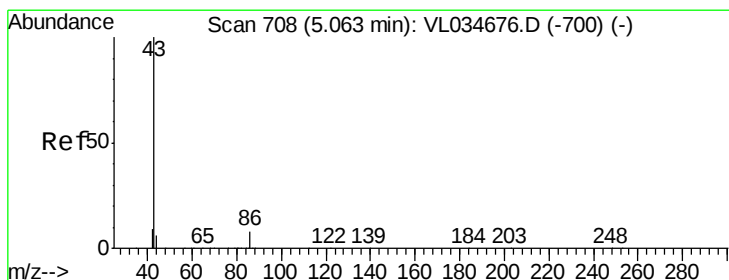
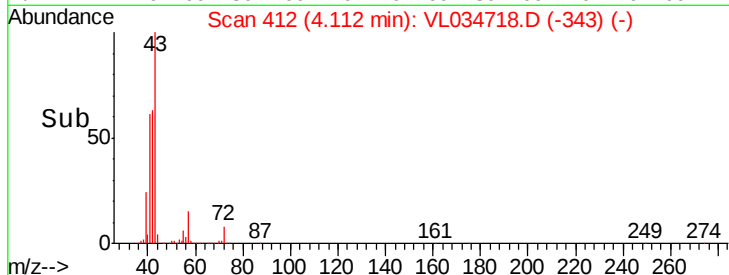
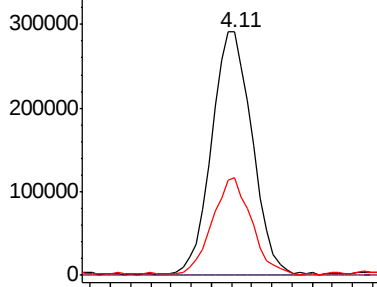
41 100

76 0.0 22.8 34.2#

39 39.1 61.7 92.5#



Abundance Ion 41.10 (40.80 to 41.80): VL0
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0



#23

Vinyl Acetate

Concen: 0.117 ppbv

RT: 5.06 min Scan# 706

Delta R.T. -0.01 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Tgt Ion: 43 Resp: 19593

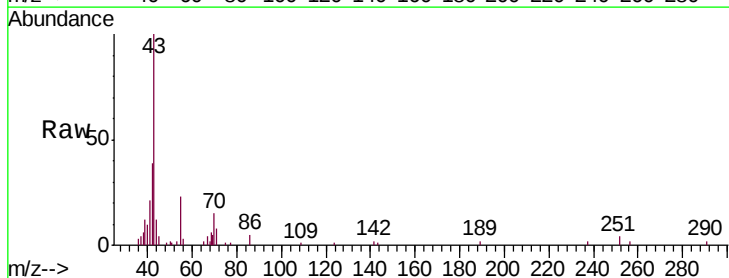
Ion Ratio Lower Upper

43 100

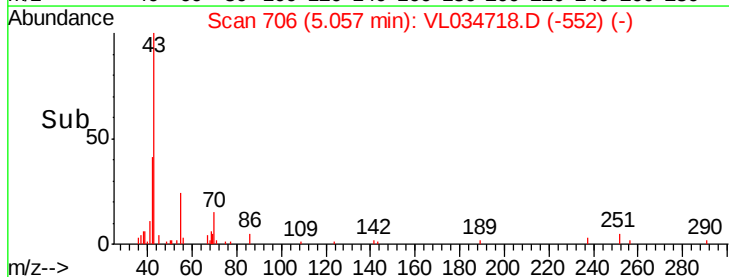
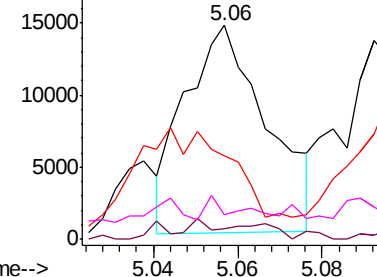
86 2.0 6.0 9.0#

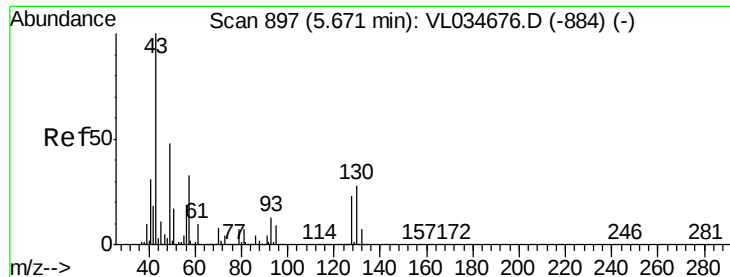
42 38.9 8.0 12.0#

44 2.4 4.5 6.7#



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: 0.504 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.01 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Instrument :

MSVOA_L

ClientSampleId :

IAS-6-CR-104

Tgt Ion: 43 Resp: 109880

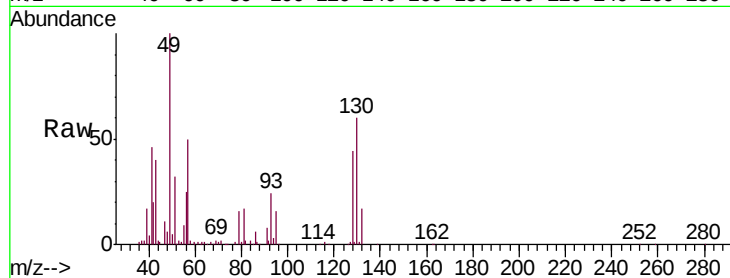
Ion Ratio Lower Upper

43 100

45 5.8 8.2 12.4#

61 2.0 7.8 11.6#

70 3.0 6.1 9.1#

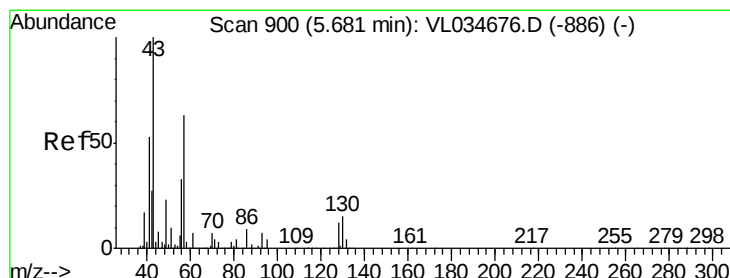
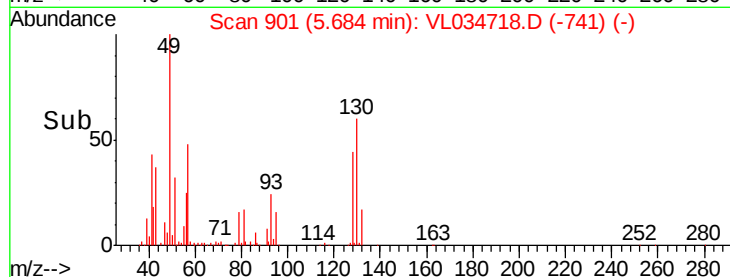
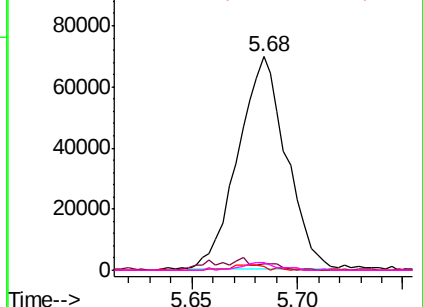


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 1.345 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.00 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Tgt Ion: 57 Resp: 135139

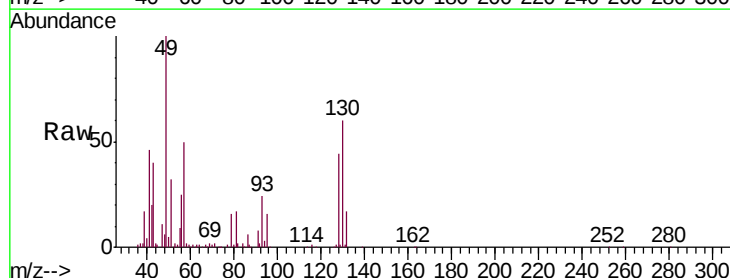
Ion Ratio Lower Upper

57 100

41 99.9 70.3 105.5

43 84.6 177.0 265.4#

56 56.4 42.6 64.0

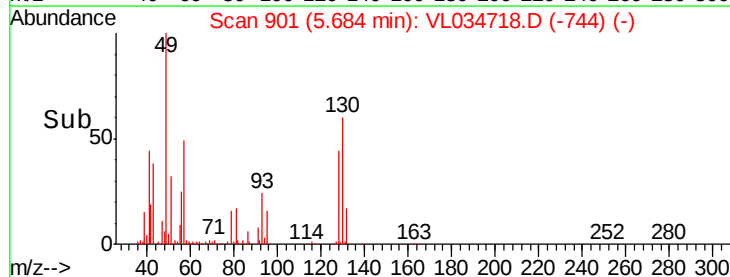
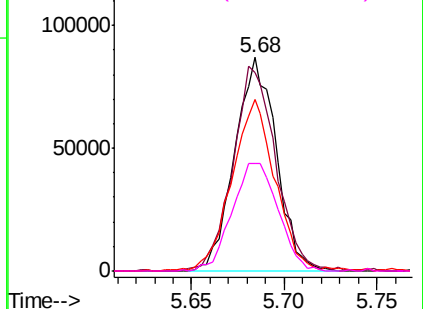


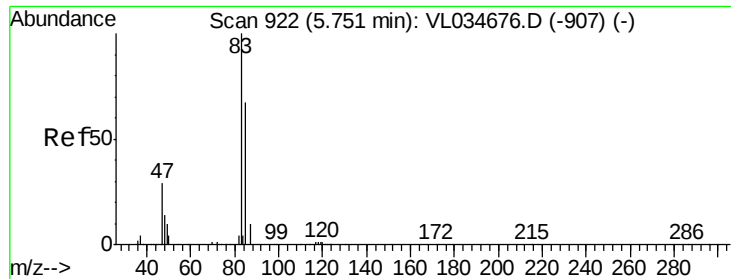
Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#29

Chloroform

Concen: 0.055 ppbv

RT: 5.75 min Scan# 921

Delta R.T. -0.00 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

Instrument :

MSVOA_L

ClientSampleId :

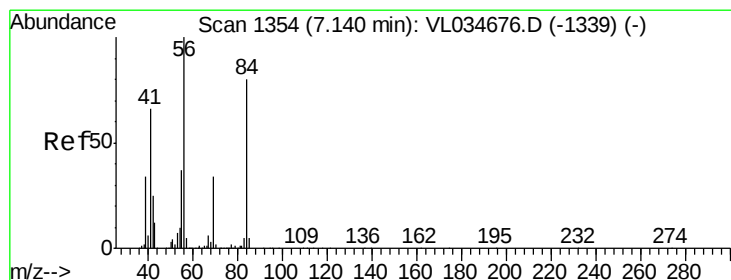
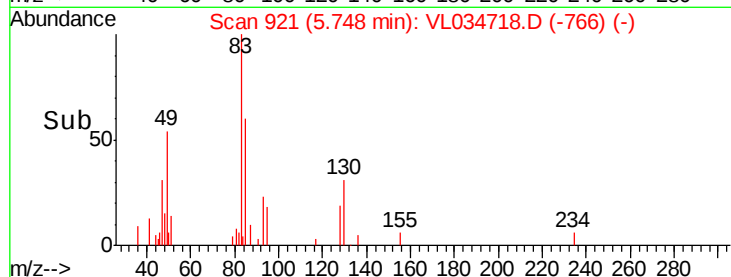
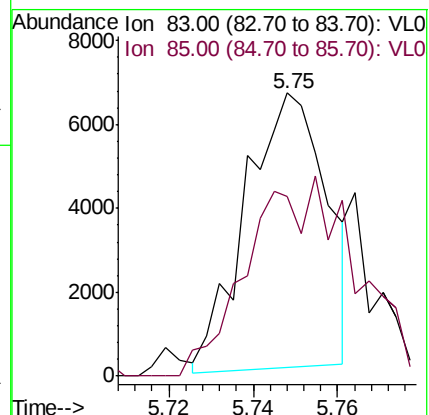
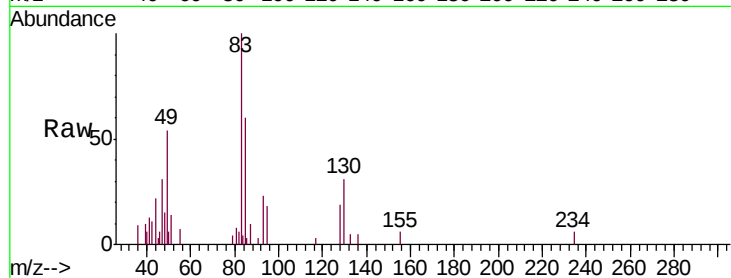
IAS-6-CR-104

Tgt Ion: 83 Resp: 8750

Ion Ratio Lower Upper

83 100

85 56.9 53.9 80.9



#30

Cyclohexane

Concen: 0.021 ppbv

RT: 7.15 min Scan# 1356

Delta R.T. 0.01 min

Lab File: VL034718.D

Acq: 27 Feb 2020 21:14

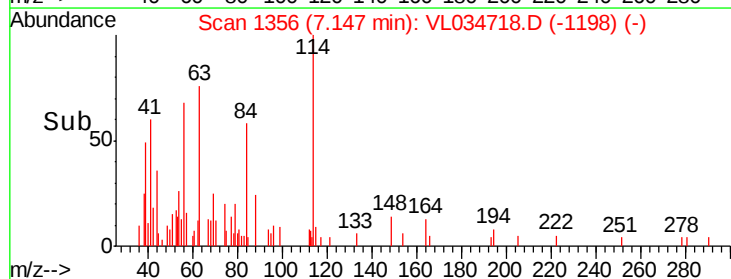
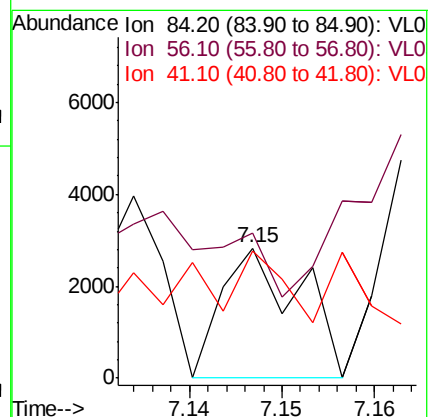
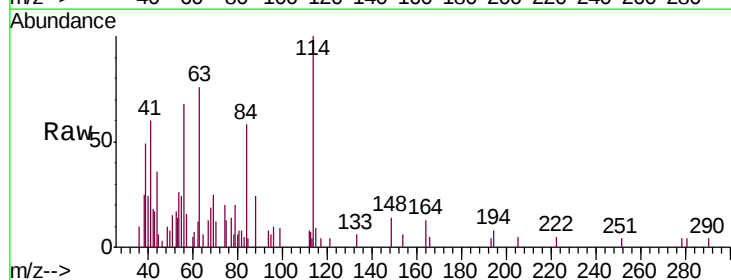
Tgt Ion: 84 Resp: 1660

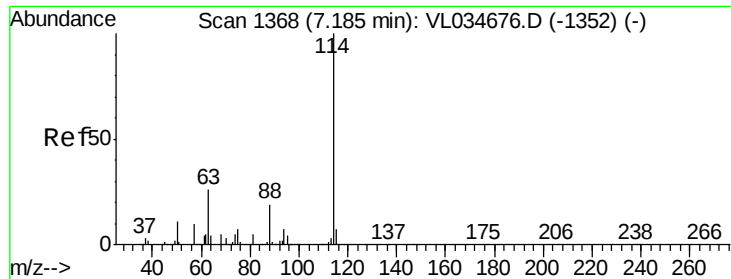
Ion Ratio Lower Upper

84 100

56 0.0 113.4 170.2#

41 0.0 68.2 102.4#

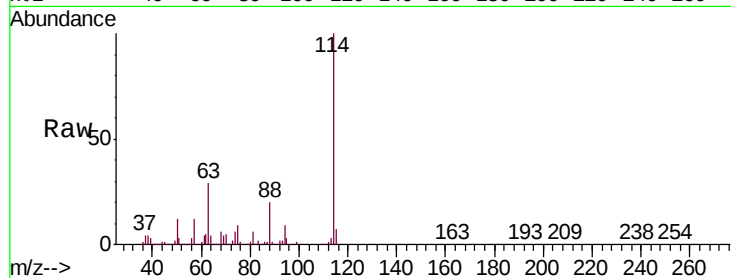




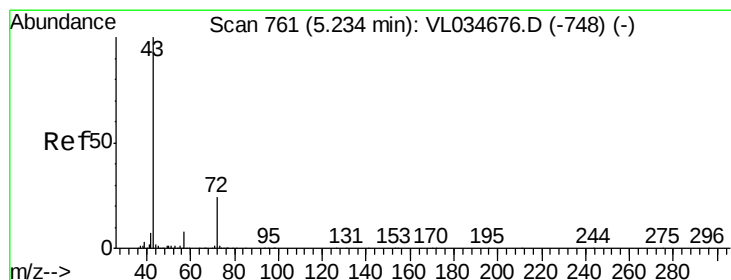
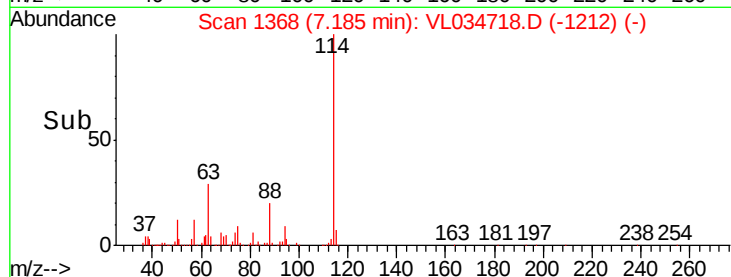
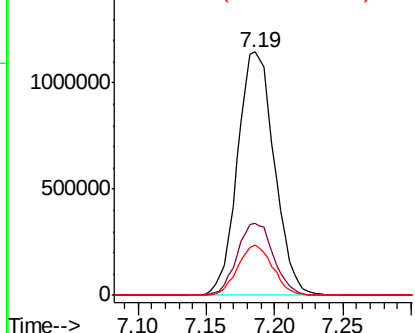
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1368
 Delta R.T. 0.00 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-6-CR-104

Tgt Ion:114 Resp: 2152253
 Ion Ratio Lower Upper
 114 100
 63 29.4 22.9 34.3
 88 19.7 15.8 23.6

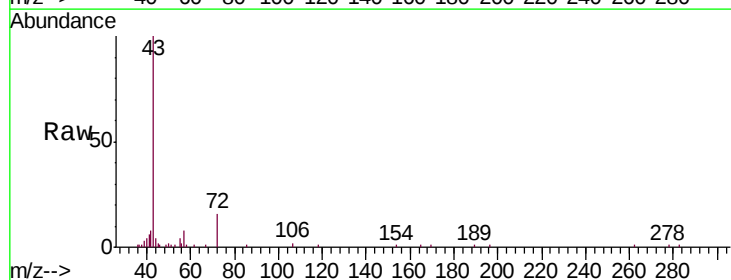


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

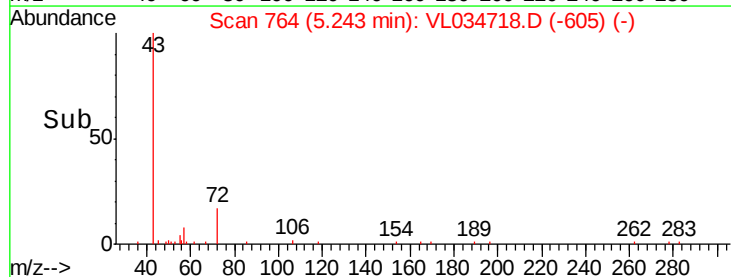
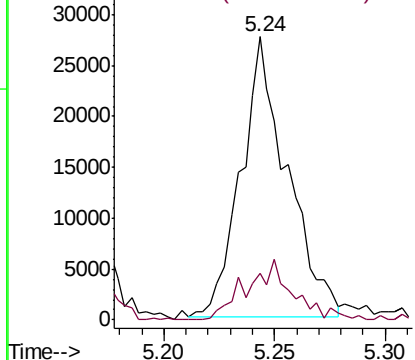


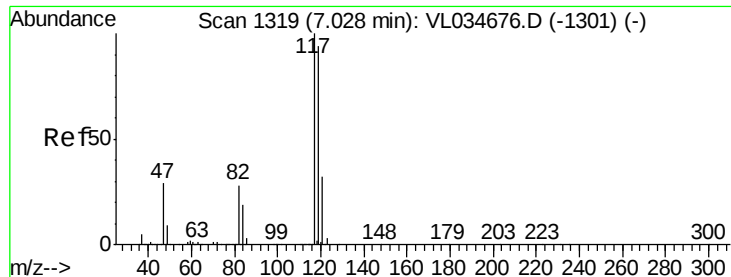
#34
 2-Butanone
 Concen: 0.294 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. 0.01 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Tgt Ion: 43 Resp: 39873
 Ion Ratio Lower Upper
 43 100
 72 22.0 18.2 27.2



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0

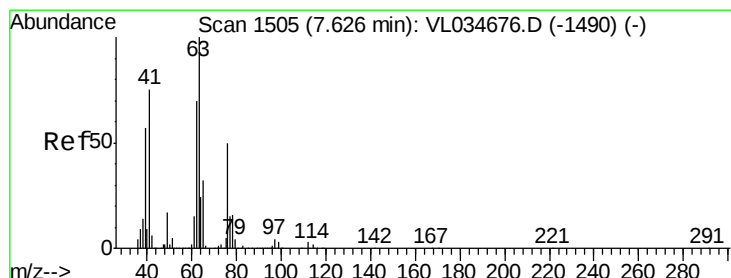
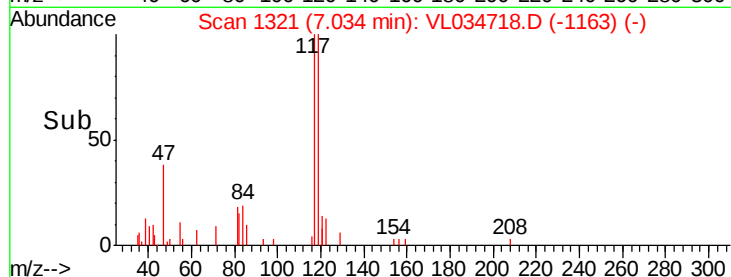
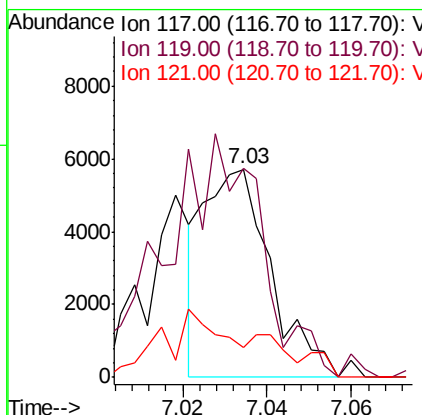
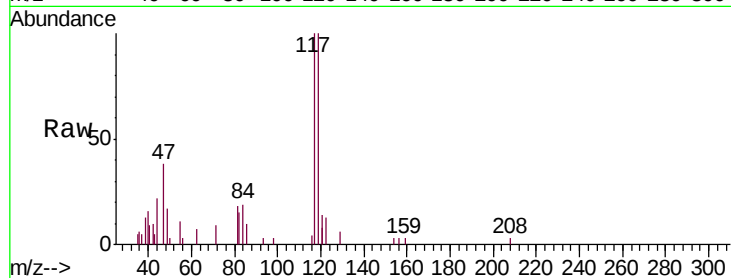




#35
Carbon Tetrachloride
Concen: 0.044 ppbv
RT: 7.03 min Scan# 1321
Delta R.T. 0.01 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

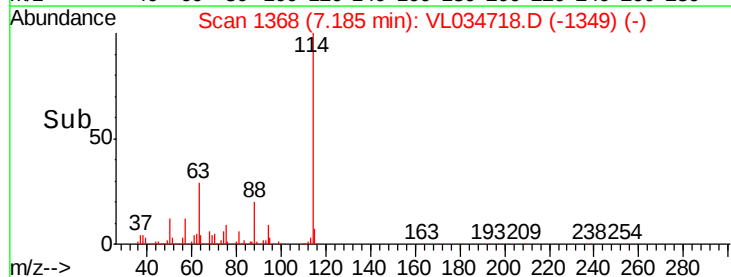
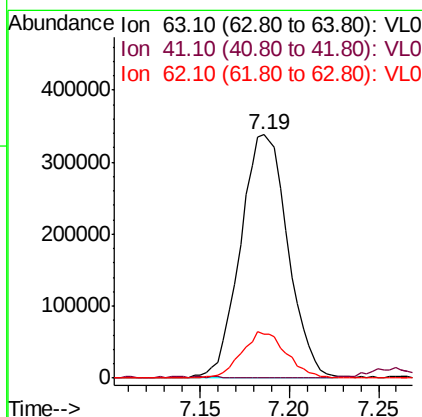
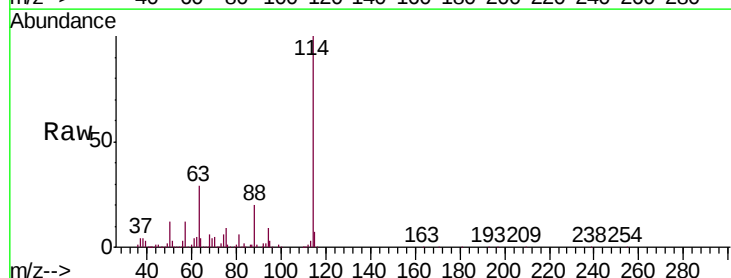
Instrument :
MSVOA_L
ClientSampleId :
IAS-6-CR-104

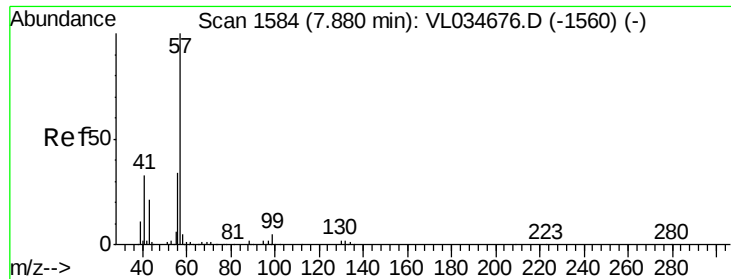
Tgt Ion: 117 Resp: 6287
Ion Ratio Lower Upper
117 100
119 100.3 75.5 113.3
121 14.5 25.4 38.0#



#39
1,2-Dichloropropane
Concen: 8.489 ppbv
RT: 7.19 min Scan# 1368
Delta R.T. -0.44 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

Tgt Ion: 63 Resp: 627778
Ion Ratio Lower Upper
63 100
41 0.0 60.2 90.4#
62 17.8 56.3 84.5#

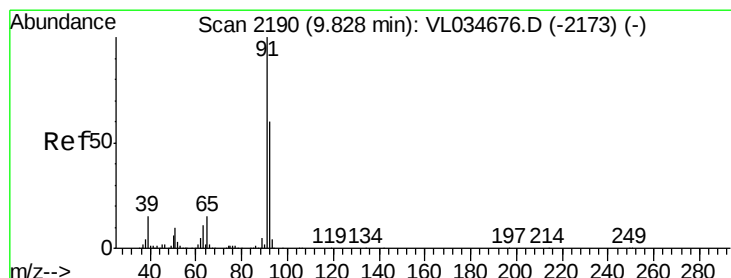
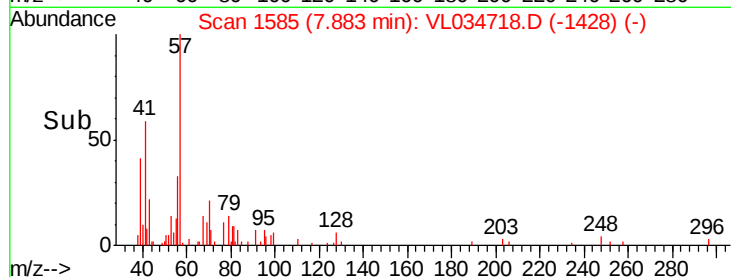
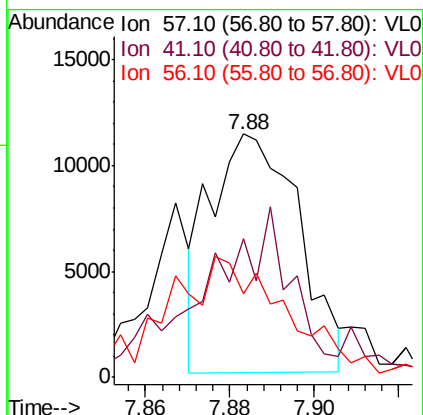
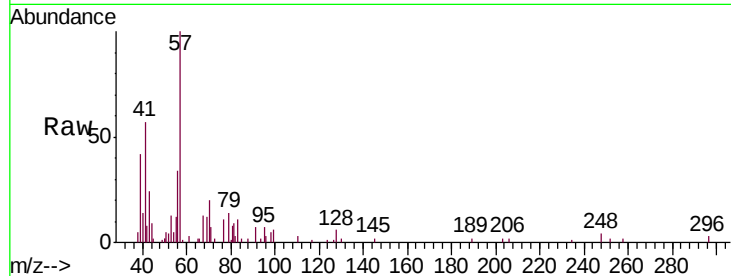




#44
 2,2,4-Trimethylpentane
 Concen: 0.051 ppbv
 RT: 7.88 min Scan# 1585
 Delta R.T. 0.00 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

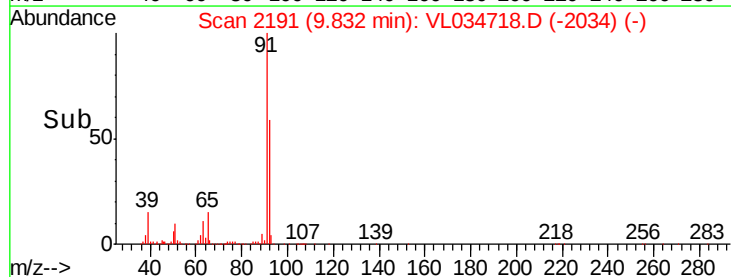
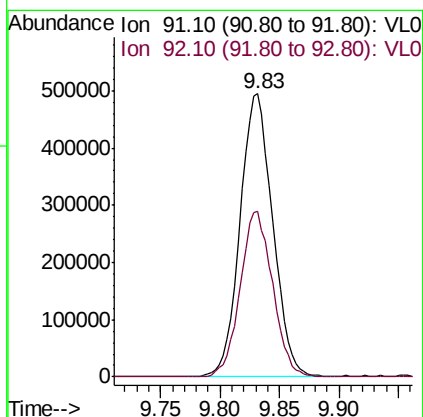
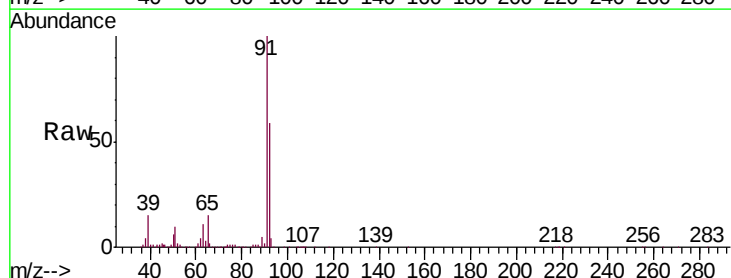
Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-6-CR-104

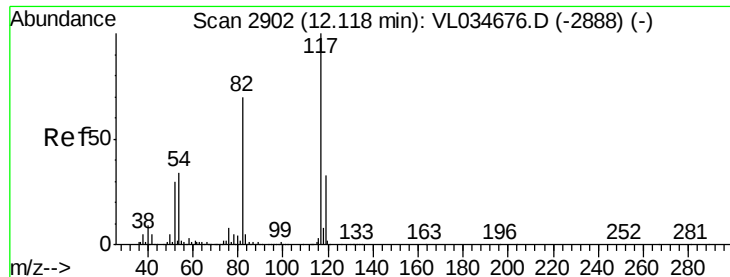
Tgt Ion: 57 Resp: 16456
 Ion Ratio Lower Upper
 57 100
 41 85.5 26.0 39.0#
 56 71.3 25.6 38.4#



#53
 Toluene
 Concen: 4.763 ppbv
 RT: 9.83 min Scan# 2191
 Delta R.T. 0.00 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Tgt Ion: 91 Resp: 941702
 Ion Ratio Lower Upper
 91 100
 92 58.3 48.5 72.7

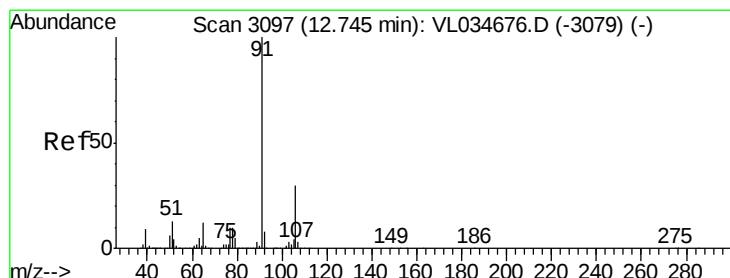
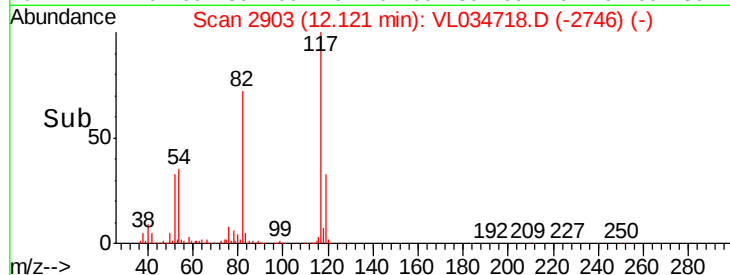
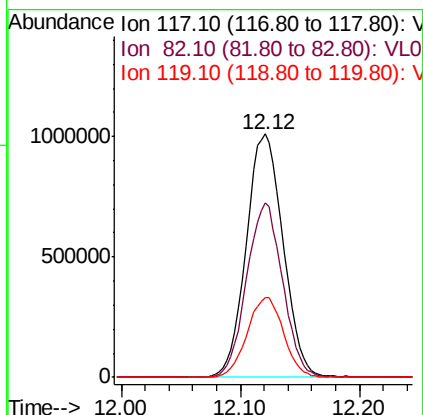
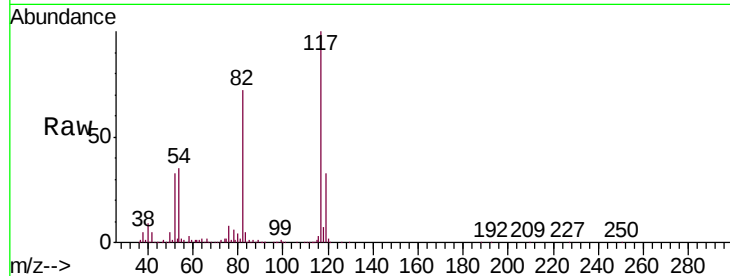




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min Scan# 2903
Delta R.T. 0.00 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

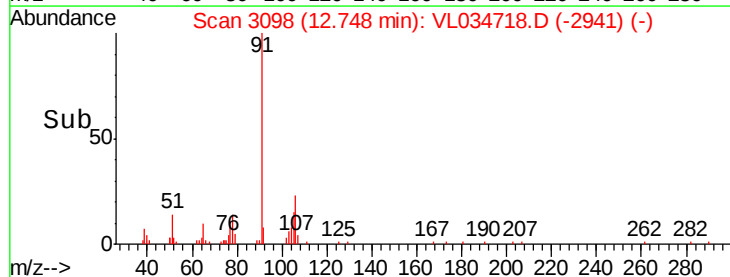
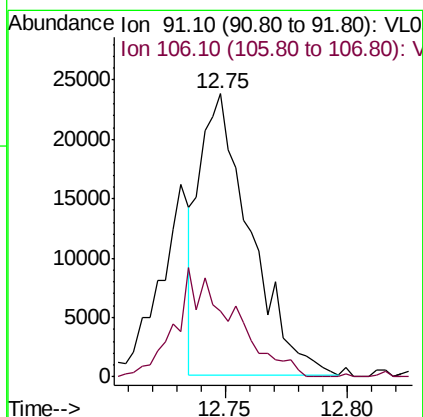
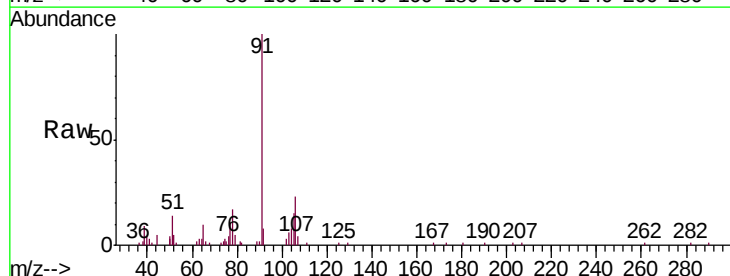
Instrument :
MSVOA_L
ClientSampleId :
IAS-6-CR-104

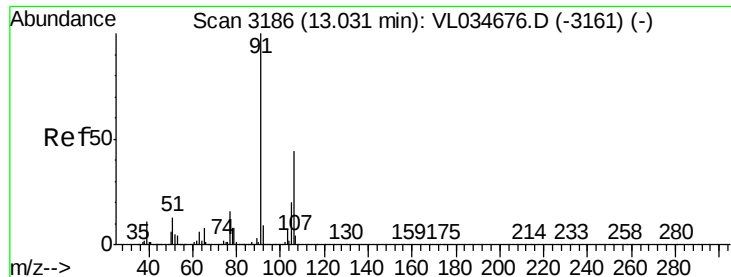
Tgt Ion:117 Resp: 2167885
Ion Ratio Lower Upper
117 100
82 70.1 54.1 81.1
119 32.6 27.6 41.4



#58
Ethyl Benzene
Concen: 0.130 ppbv
RT: 12.75 min Scan# 3098
Delta R.T. 0.00 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

Tgt Ion: 91 Resp: 34010
Ion Ratio Lower Upper
91 100
106 25.4 24.0 36.0

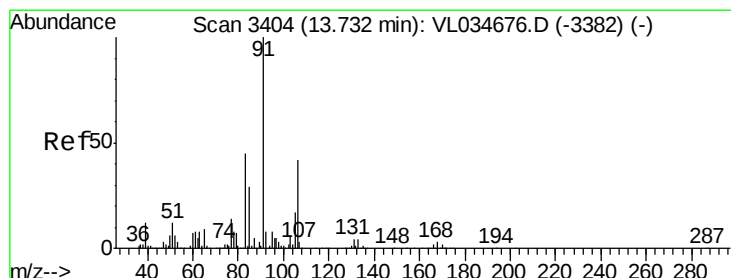
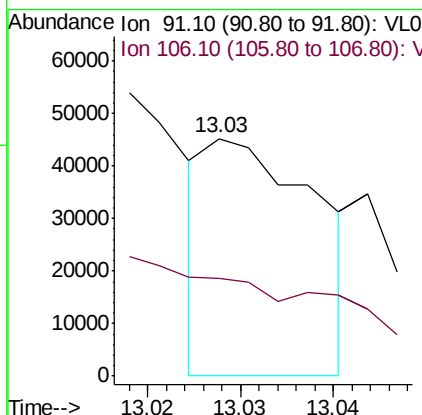
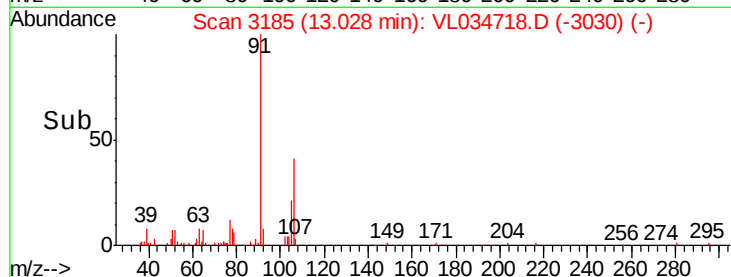
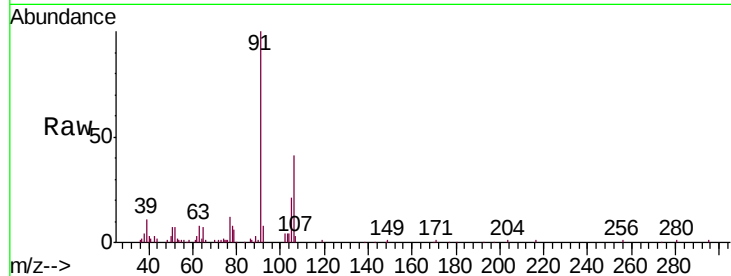




#59
m/p-Xylene
Concen: 0.162 ppbv
RT: 13.03 min Scan# 3185
Delta R.T. -0.00 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

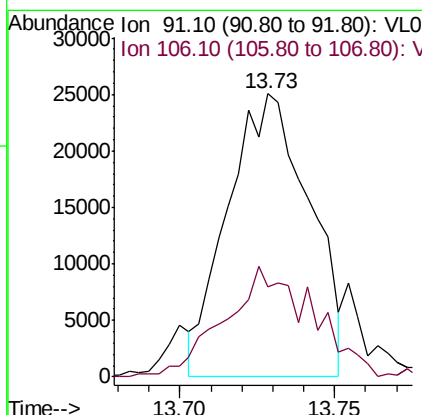
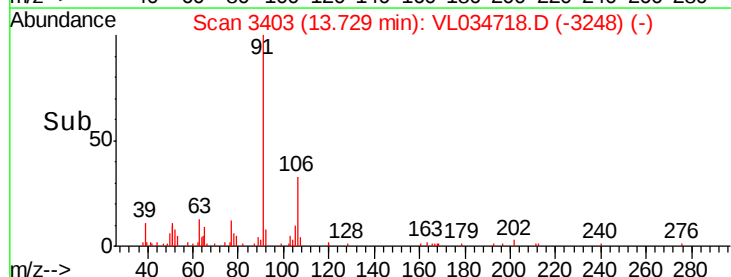
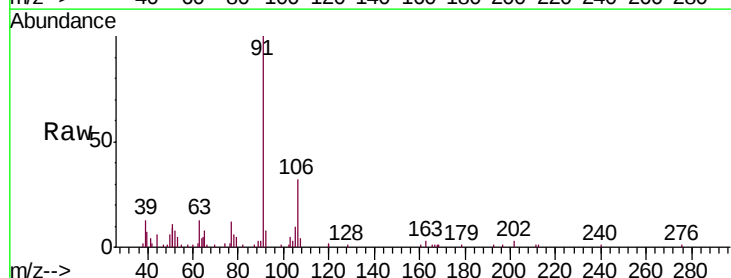
Instrument :
MSVOA_L
ClientSampleId :
IAS-6-CR-104

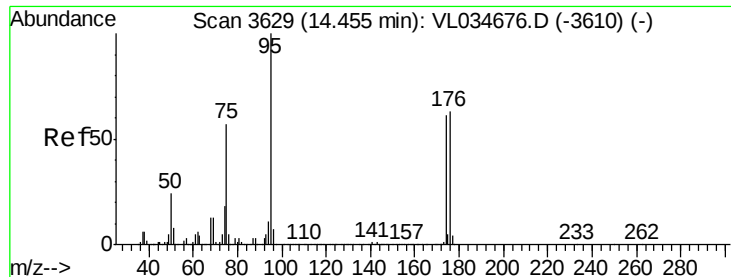
Tgt Ion: 91 Resp: 36976
Ion Ratio Lower Upper
91 100
106 0.0 35.6 53.4#



#60
o-Xylene
Concen: 0.202 ppbv
RT: 13.73 min Scan# 3403
Delta R.T. -0.00 min
Lab File: VL034718.D
Acq: 27 Feb 2020 21:14

Tgt Ion: 91 Resp: 45920
Ion Ratio Lower Upper
91 100
106 42.3 21.9 65.5

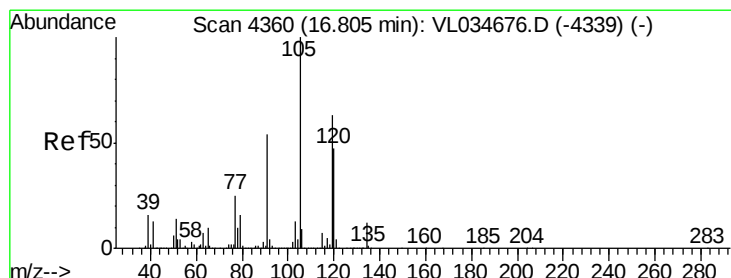
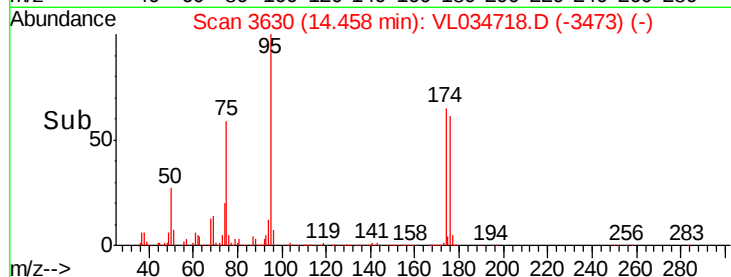
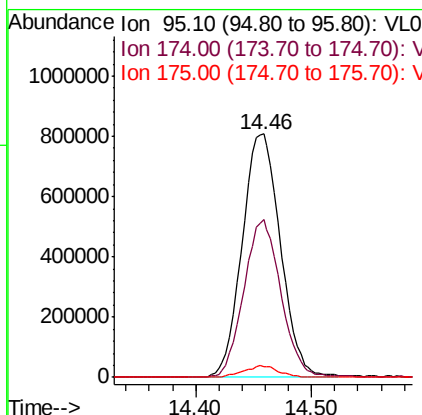
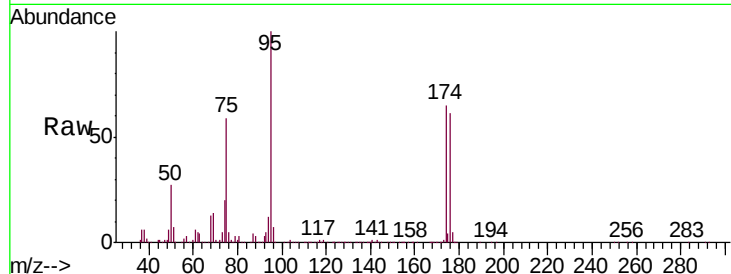




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.441 ppbv
 RT: 14.46 min Scan# 3630
 Delta R.T. 0.00 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-6-CR-104

Tgt Ion: 95 Resp: 1855899
 Ion Ratio Lower Upper
 95 100
 174 63.1 50.7 76.1
 175 4.4 3.9 5.9



#74
 1,2,4-Trimethylbenzene
 Concen: 0.027 ppbv
 RT: 16.81 min Scan# 4362
 Delta R.T. 0.01 min
 Lab File: VL034718.D
 Acq: 27 Feb 2020 21:14

Tgt Ion: 105 Resp: 7369
 Ion Ratio Lower Upper
 105 100
 120 8.7 37.9 56.9#
 91 14.0 43.9 65.9#
 77 0.0 20.3 30.5#

