

Data File : VL034714.D
Acq On : 27 Feb 2020 18:35
Operator : SY/AP
Sample : L1662-04
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IAS-4-STORGE-RM-NEXT-TO-CAFE

Quant Time: Feb 28 01:09:25 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	1057663	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2143513	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	2115219	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.46 95 1800884 10.38 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 103.80%

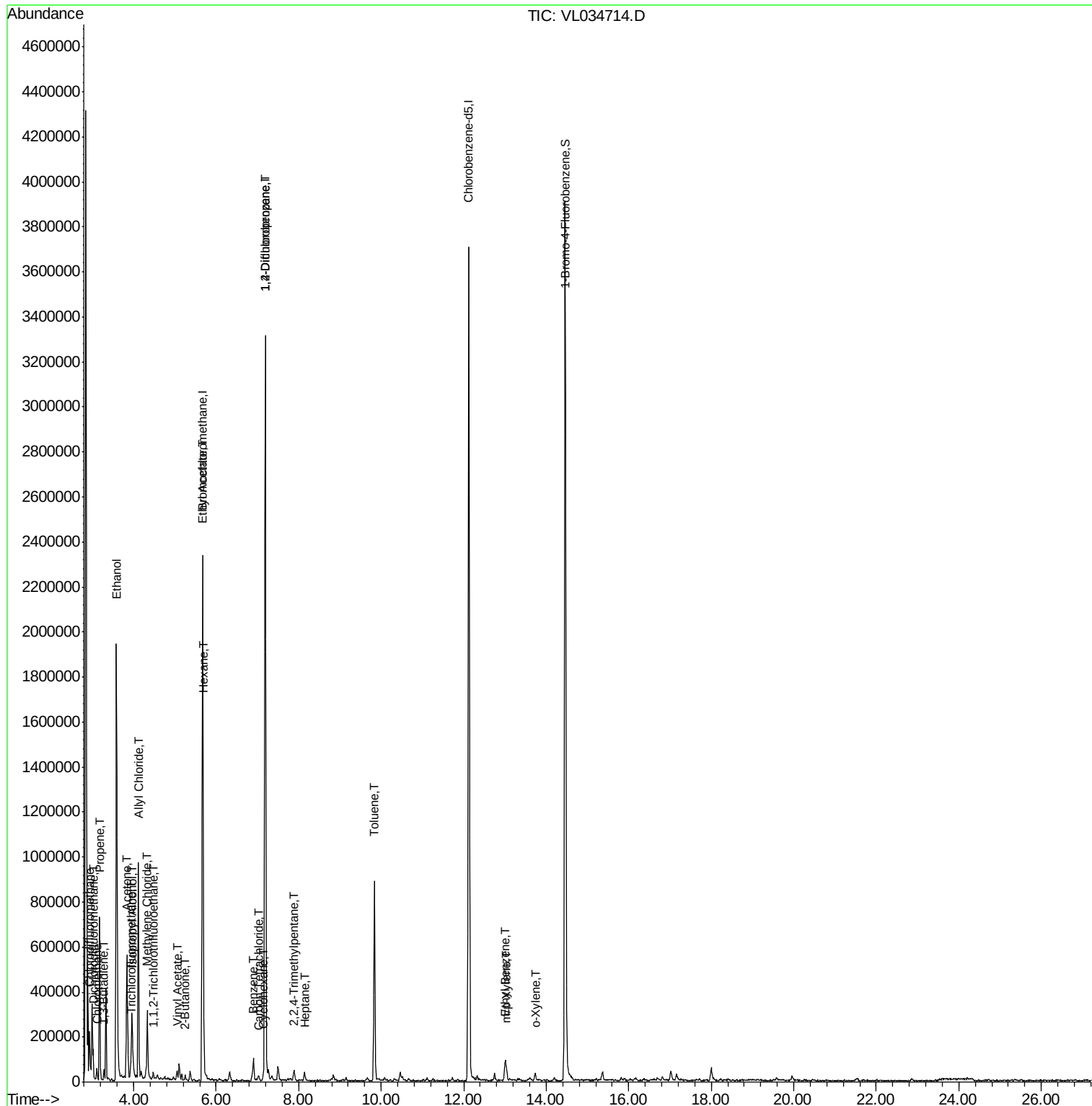
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.02	85	84953	0.509	ppbv	99
3) Chlorodifluoromethane	2.93	51	154888	1.357	ppbv #	69
4) Chloromethane	3.11	50	35240	0.552	ppbv	93
9) Propene	3.18	41	182366	3.822	ppbv	98
10) Heptane	8.14	43	5330	0.043	ppbv #	26
11) Trichlorofluoromethane	3.93	101	40129	0.275	ppbv	92
12) 1,1,2-Trichlorotrifluoroet	4.47	101	3354	0.033	ppbv #	15
13) Ethanol	3.58	45	2007402	133.181	ppbv	97
15) Acetone	3.83	43	582419	4.832	ppbv	94
16) 1,3-Butadiene	3.28	39	4055	0.073	ppbv #	56
19) Isopropyl Alcohol	3.96	45	313155	4.362	ppbv #	94
20) Methylene Chloride	4.33	84	95005	2.120	ppbv #	89
21) Allyl Chloride	4.11	41	275040	3.449	ppbv #	55
23) Vinyl Acetate	5.06	43	11823	0.072	ppbv #	85
25) Ethyl Acetate	5.68	43	44328	0.208	ppbv #	93
26) Hexane	5.69	57	101024	1.027	ppbv #	47
30) Cyclohexane	7.14	84	2315	0.030	ppbv #	1
34) 2-Butanone	5.24	43	8861	0.066	ppbv #	53
35) Carbon Tetrachloride	7.03	117	6083	0.042	ppbv #	74
36) Benzene	6.90	78	59886	0.323	ppbv #	93
39) 1,2-Dichloropropane	7.19	63	633126	8.596	ppbv #	23
44) 2,2,4-Trimethylpentane	7.88	57	15290	0.047	ppbv #	42
53) Toluene	9.83	91	615597	3.126	ppbv	99
58) Ethyl Benzene	13.00	91	18577	0.073	ppbv	96
59) m/p-Xylene	13.04	91	14809	0.066	ppbv #	32
60) o-Xylene	13.73	91	7789	0.035	ppbv #	32

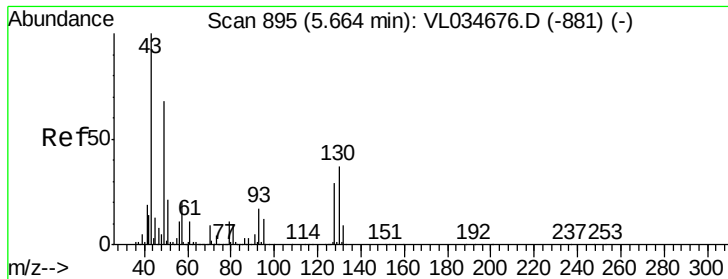
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Feb 26 06:58:15 2020
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.00 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

IAS-4-STORGE-RM-NEXT-TO-CAFE

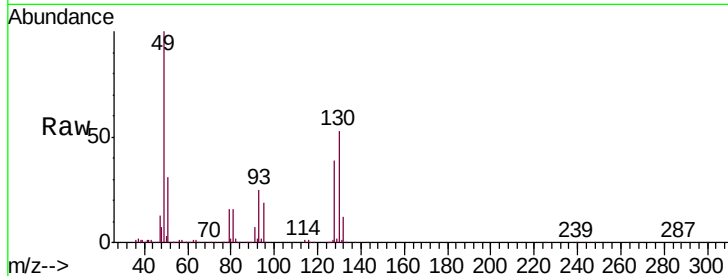
Tgt Ion: 49 Resp: 1057663

Ion Ratio Lower Upper

49 100

128 42.7 21.6 65.0

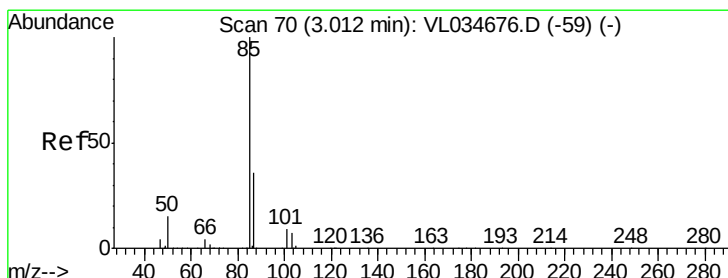
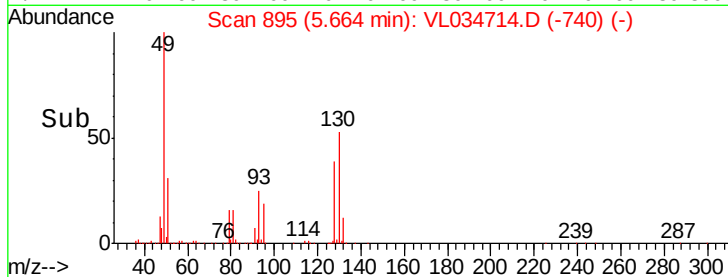
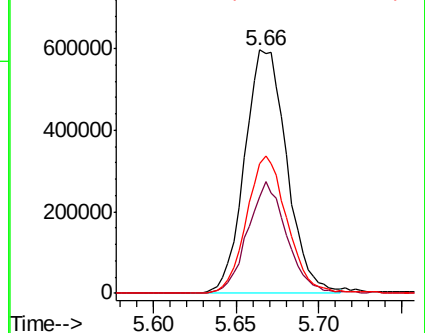
130 54.7 27.7 83.1



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: 0.509 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL034714.D

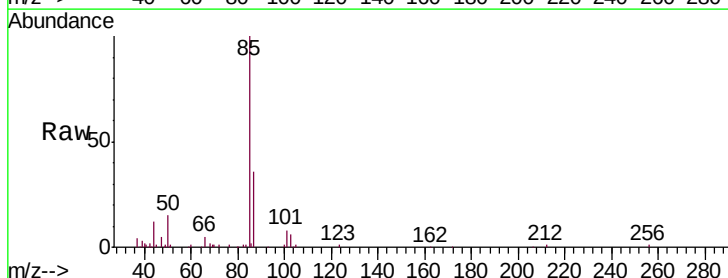
Acq: 27 Feb 2020 18:35

Tgt Ion: 85 Resp: 84953

Ion Ratio Lower Upper

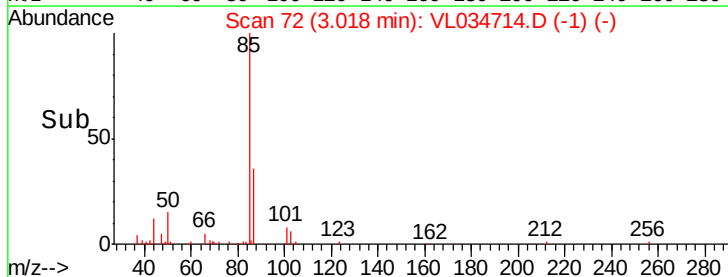
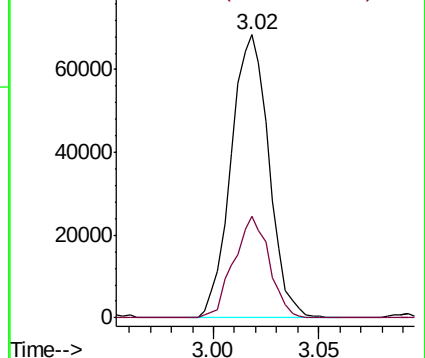
85 100

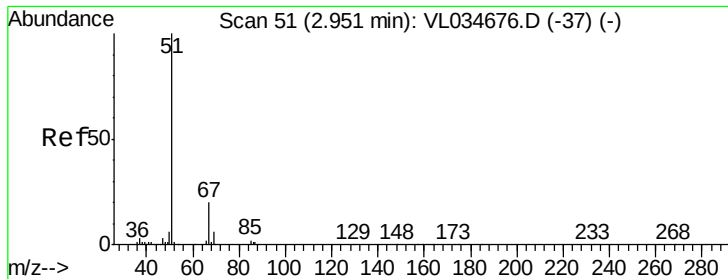
87 36.0 29.2 43.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.357 ppbv

RT: 2.93 min Scan# 45

Delta R.T. -0.02 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

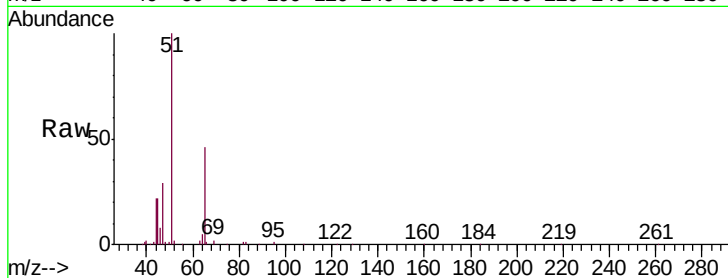
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 51 Resp: 154888

Ion Ratio Lower Upper

51 100

67 5.5 15.5 23.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.93

100000

80000

60000

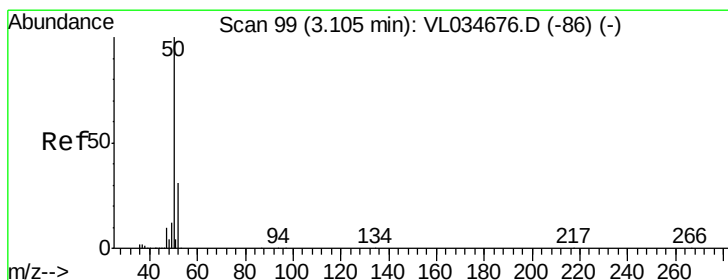
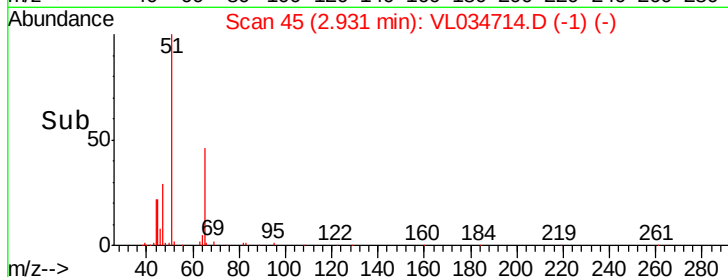
40000

20000

0

Time-->

2.90 3.00 3.10



#4

Chloromethane

Concen: 0.552 ppbv

RT: 3.11 min Scan# 101

Delta R.T. 0.01 min

Lab File: VL034714.D

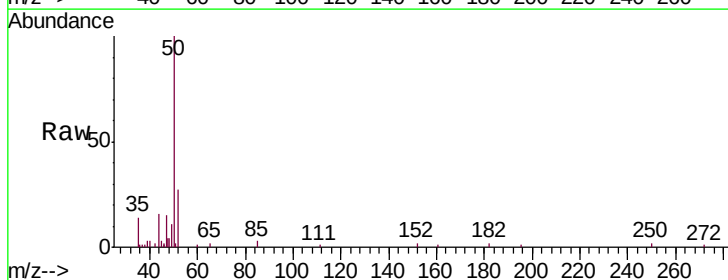
Acq: 27 Feb 2020 18:35

Tgt Ion: 50 Resp: 35240

Ion Ratio Lower Upper

50 100

52 27.2 25.0 37.4



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

30000

25000

20000

15000

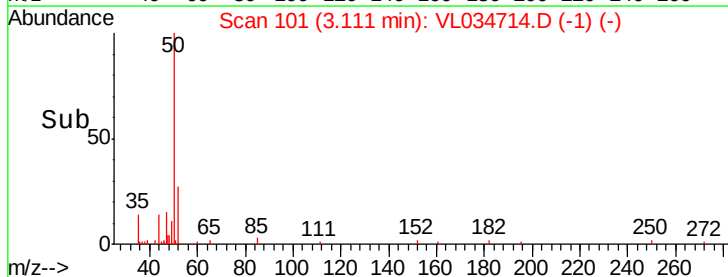
10000

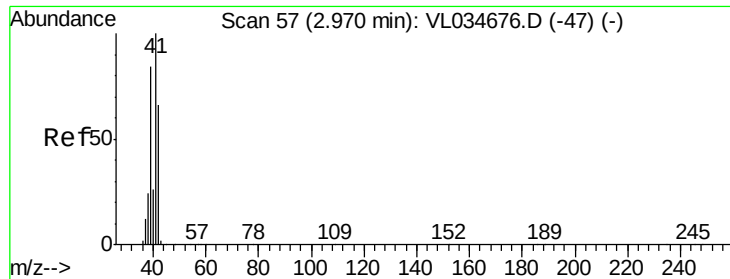
5000

0

Time-->

3.10 3.15





#9

Propene

Concen: 3.822 ppbv

RT: 3.18 min Scan# 122

Delta R.T. 0.21 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

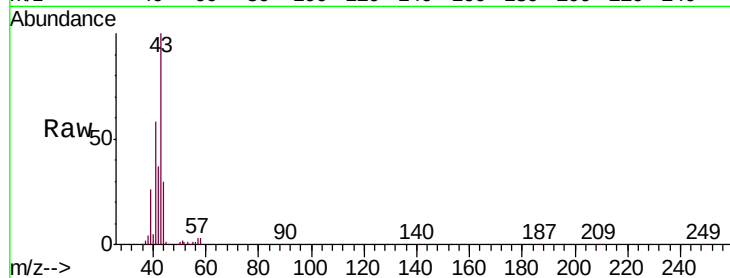
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 41 Resp: 182366

Ion Ratio Lower Upper

41 100

42 66.9 54.9 82.3



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

150000

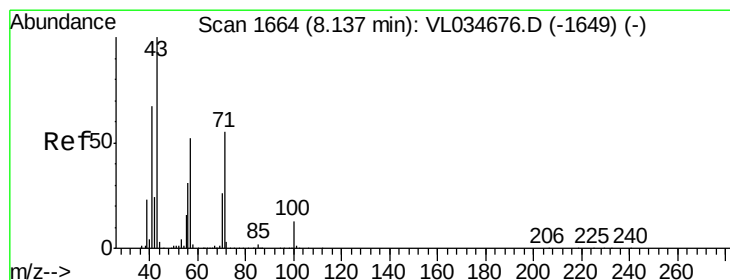
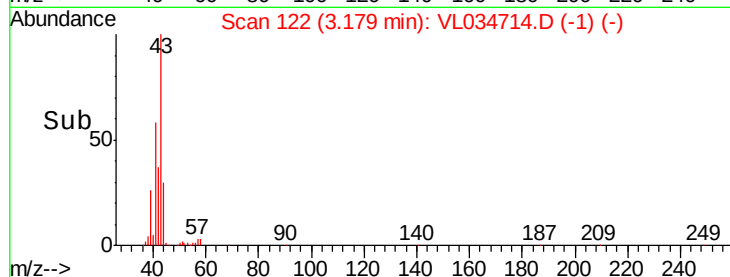
100000

50000

0

3.15 3.20

Time-->



#10

Heptane

Concen: 0.043 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.00 min

Lab File: VL034714.D

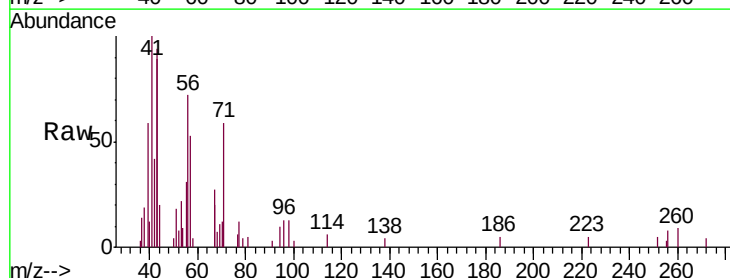
Acq: 27 Feb 2020 18:35

Tgt Ion: 43 Resp: 5330

Ion Ratio Lower Upper

43 100

57 0.0 41.0 61.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

10000

8000

6000

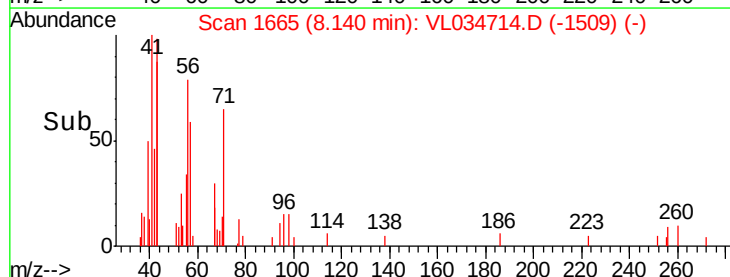
4000

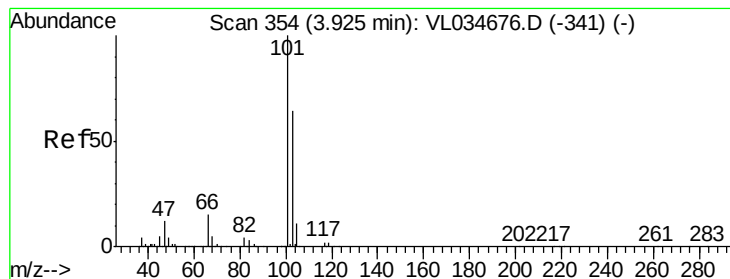
2000

0

8.12 8.13 8.14 8.15

Time-->





#11

Trichlorofluoromethane

Concen: 0.275 ppbv

RT: 3.93 min Scan# 355

Delta R.T. 0.00 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

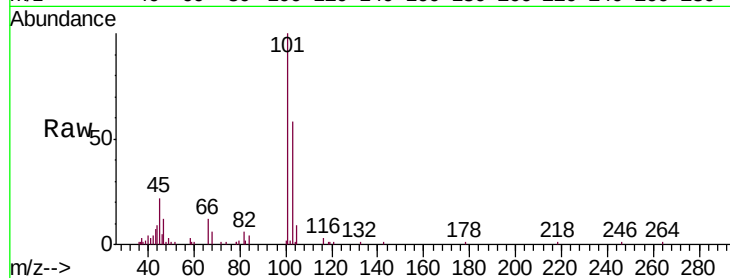
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion:101 Resp: 40129

Ion Ratio Lower Upper

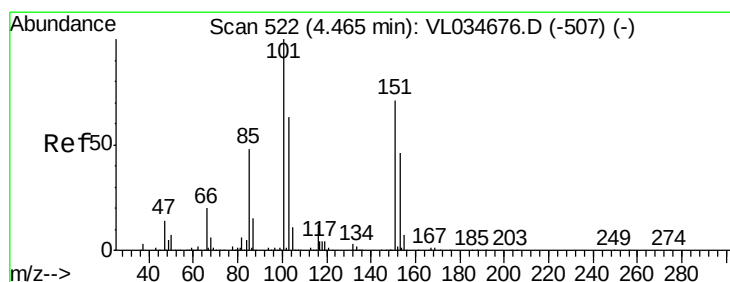
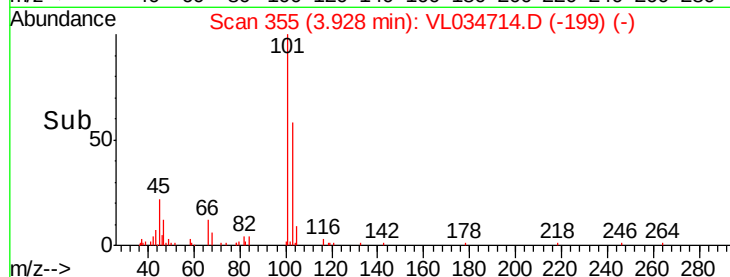
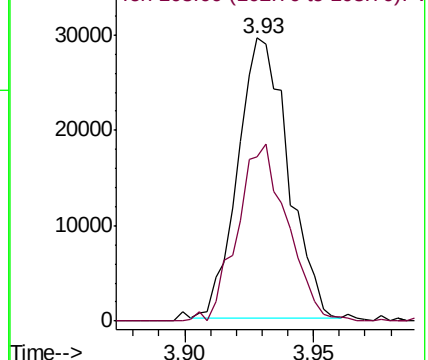
101 100

103 57.9 51.2 76.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.033 ppbv

RT: 4.47 min Scan# 522

Delta R.T. -0.00 min

Lab File: VL034714.D

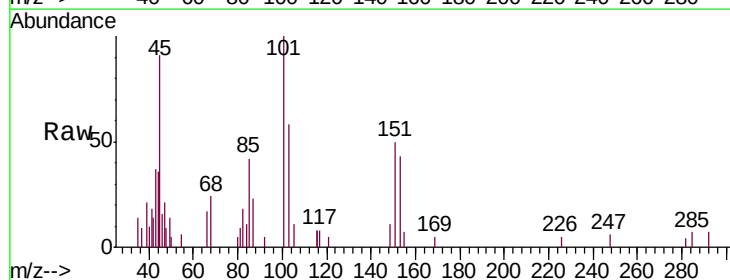
Acq: 27 Feb 2020 18:35

Tgt Ion:101 Resp: 3354

Ion Ratio Lower Upper

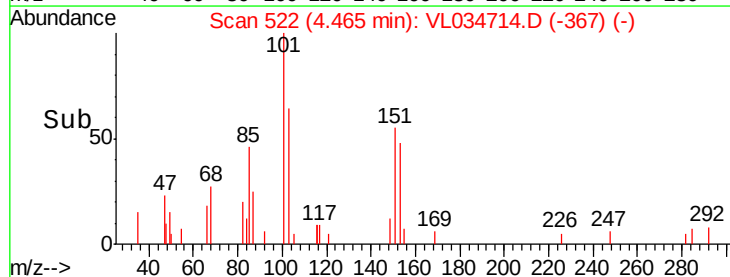
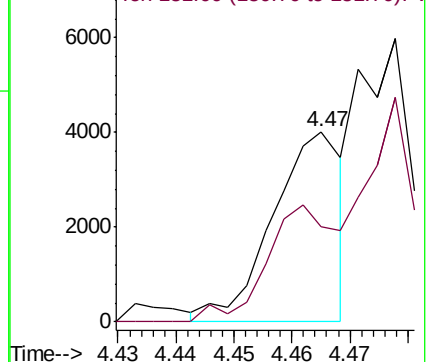
101 100

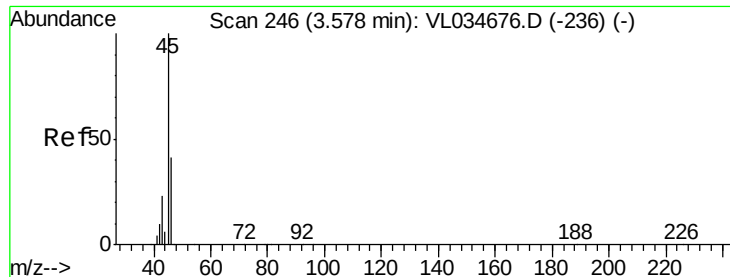
151 0.0 55.8 83.6#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 133.181 ppbv

RT: 3.58 min Scan# 248

Delta R.T. 0.01 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

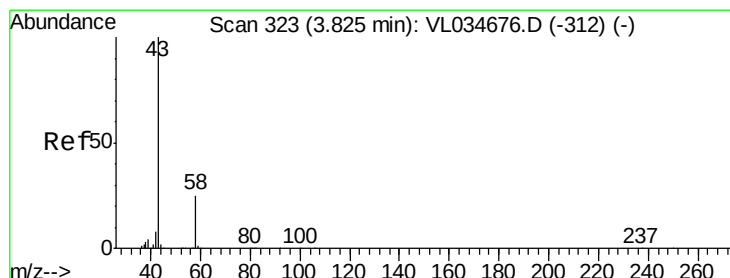
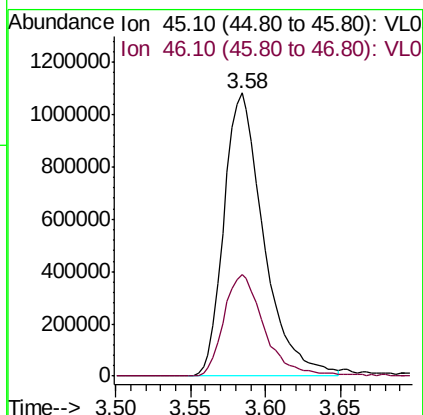
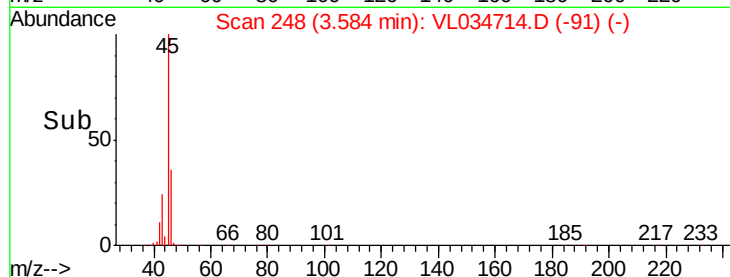
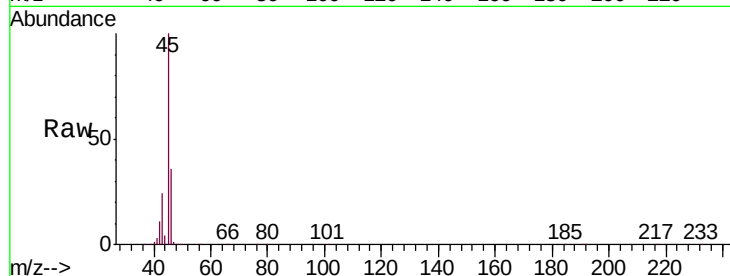
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 45 Resp: 2007402

Ion Ratio Lower Upper

45 100

46 36.8 15.4 61.4



#15

Acetone

Concen: 4.832 ppbv

RT: 3.83 min Scan# 325

Delta R.T. 0.01 min

Lab File: VL034714.D

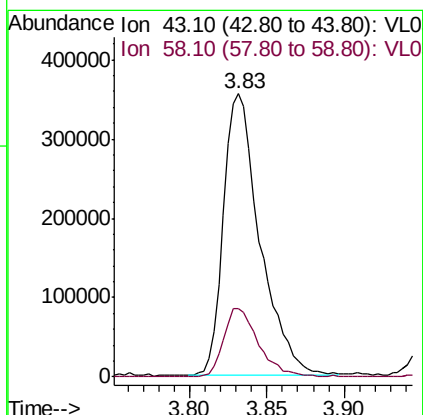
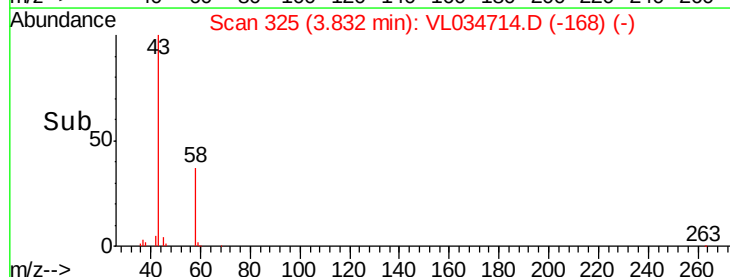
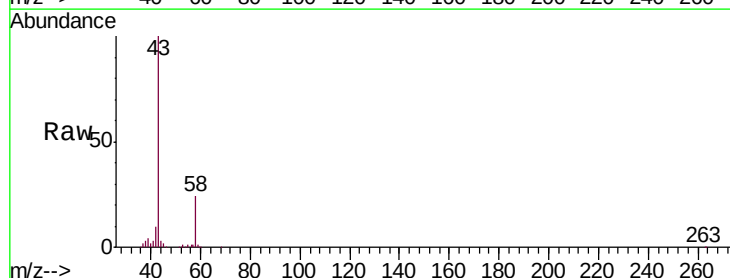
Acq: 27 Feb 2020 18:35

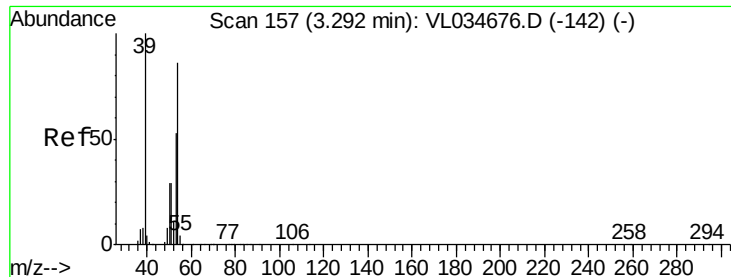
Tgt Ion: 43 Resp: 582419

Ion Ratio Lower Upper

43 100

58 23.5 21.4 32.0





#16

1,3-Butadiene

Concen: 0.073 ppbv

RT: 3.28 min Scan# 154

Delta R.T. -0.01 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

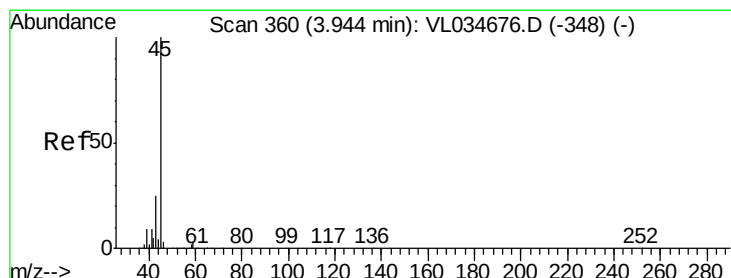
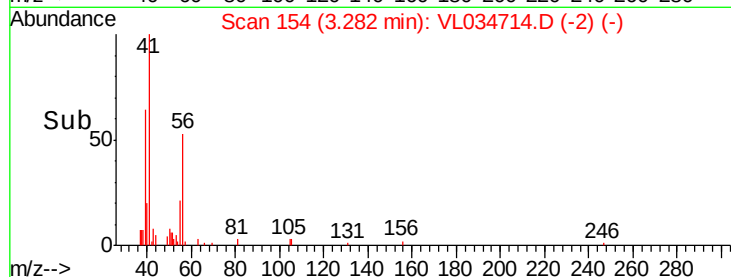
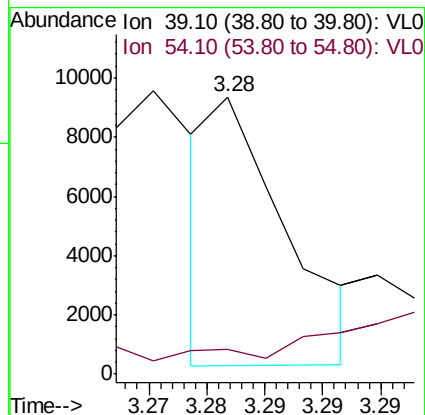
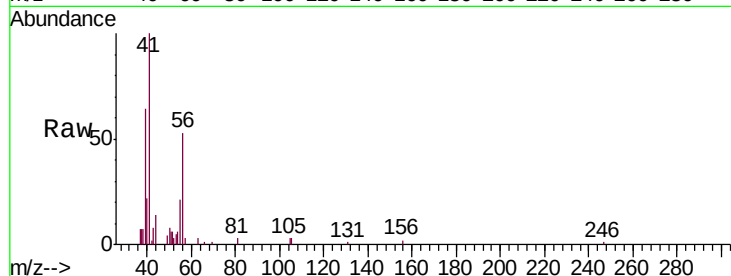
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 39 Resp: 4055

Ion Ratio Lower Upper

39 100

54 123.3 67.0 100.6#



#19

Isopropyl Alcohol

Concen: 4.362 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.01 min

Lab File: VL034714.D

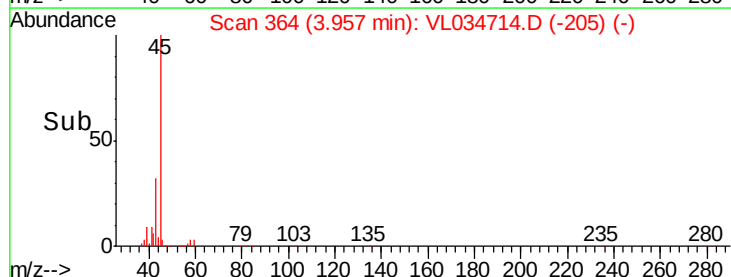
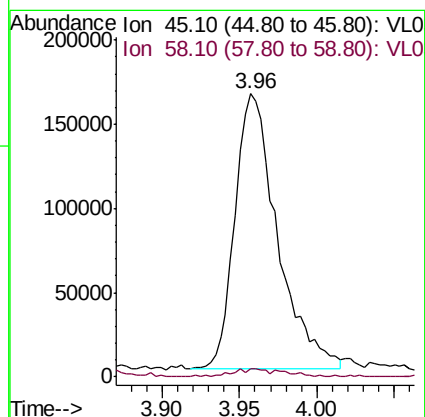
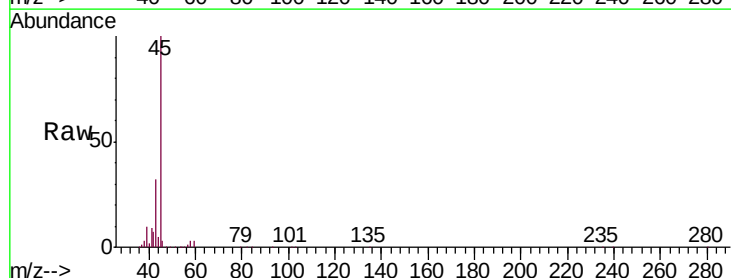
Acq: 27 Feb 2020 18:35

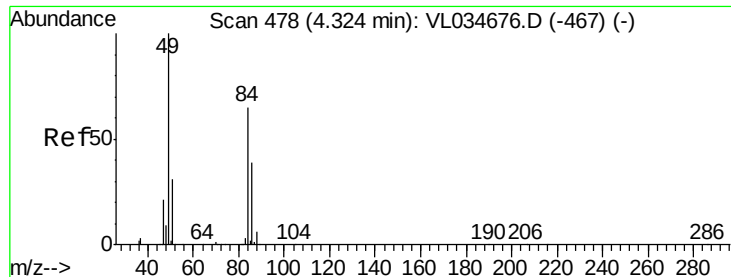
Tgt Ion: 45 Resp: 313155

Ion Ratio Lower Upper

45 100

58 4.2 1.8 2.6#

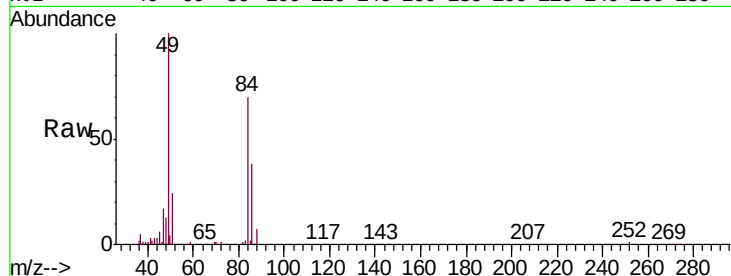




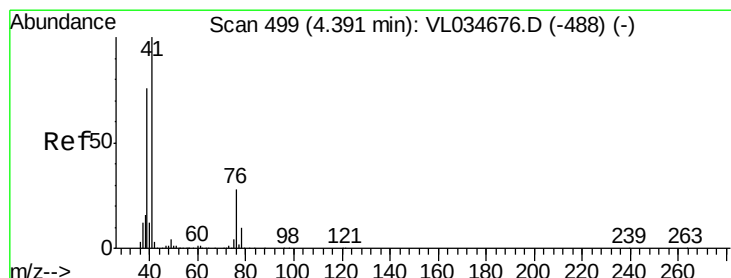
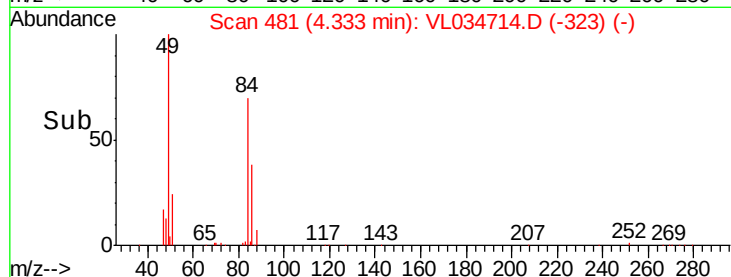
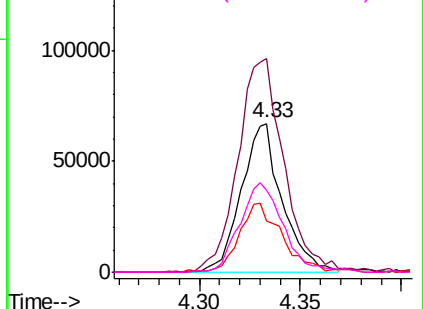
#20
Methylene Chloride
Concen: 2.120 ppbv
RT: 4.33 min Scan# 481
Delta R.T. 0.01 min
Lab File: VL034714.D
Acq: 27 Feb 2020 18:35

Instrument :
MSVOA_L
ClientSampleId :
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion:	84	Resp:	95005
Ion	Ratio	Lower	Upper
84	100		
49	142.6	122.8	184.2
51	32.9	38.6	58.0#
86	55.0	47.7	71.5

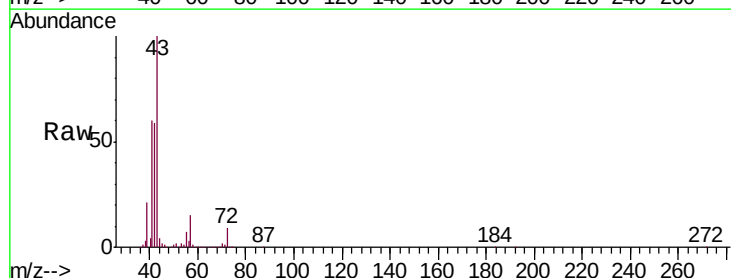


Abundance Ion 84.00 (83.70 to 84.70): VL0
150000
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

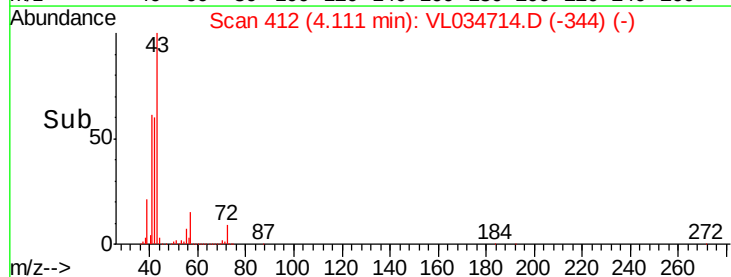
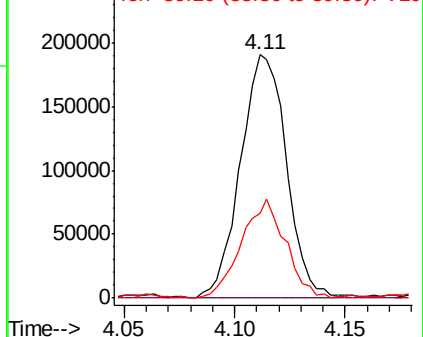


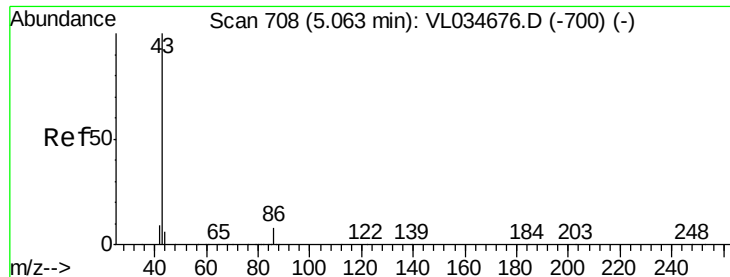
#21
Allyl Chloride
Concen: 3.449 ppbv
RT: 4.11 min Scan# 412
Delta R.T. -0.28 min
Lab File: VL034714.D
Acq: 27 Feb 2020 18:35

Tgt Ion:	41	Resp:	275040
Ion	Ratio	Lower	Upper
41	100		
76	0.0	22.8	34.2#
39	40.6	61.7	92.5#



Abundance Ion 41.10 (40.80 to 41.80): VL0
250000
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0





#23

Vinyl Acetate

Concen: 0.072 ppbv

RT: 5.06 min Scan# 707

Delta R.T. -0.00 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 43 Resp: 11823

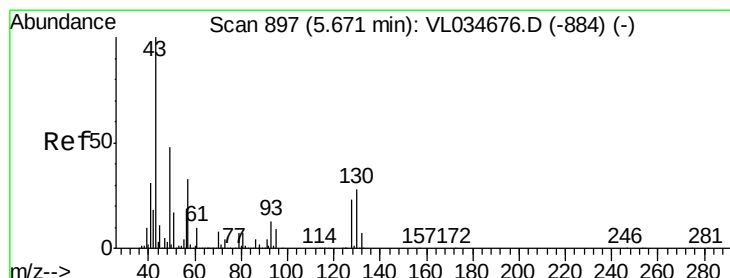
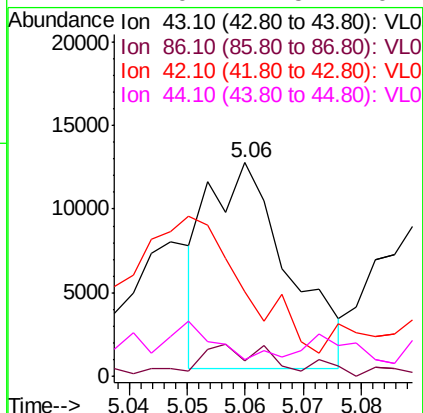
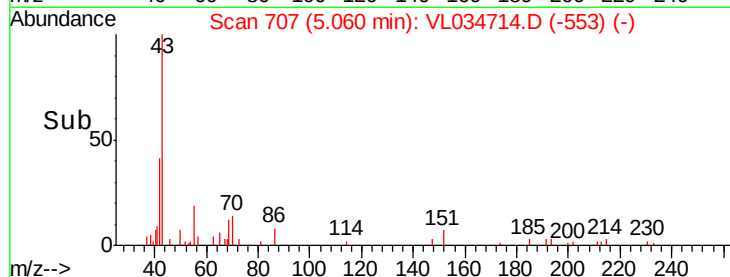
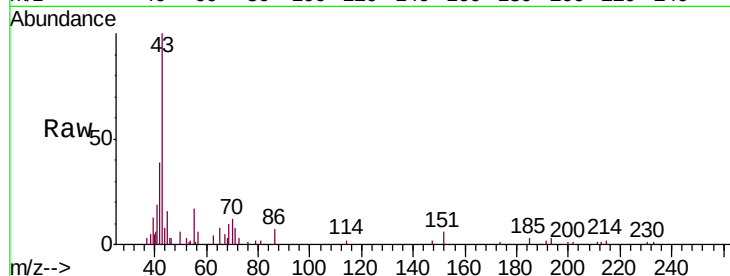
Ion Ratio Lower Upper

43 100

86 5.7 6.0 9.0#

42 18.5 8.0 12.0#

44 11.0 4.5 6.7#



#25

Ethyl Acetate

Concen: 0.208 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.01 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Tgt Ion: 43 Resp: 44328

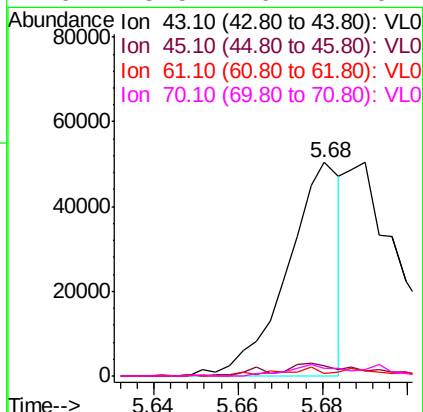
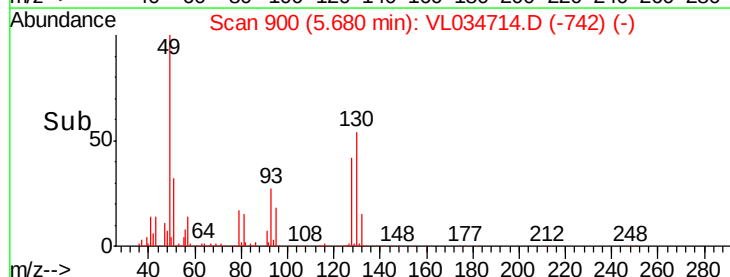
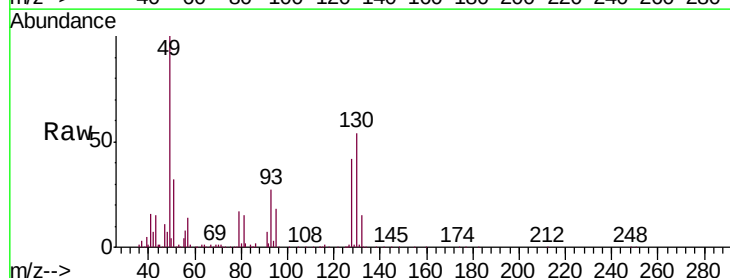
Ion Ratio Lower Upper

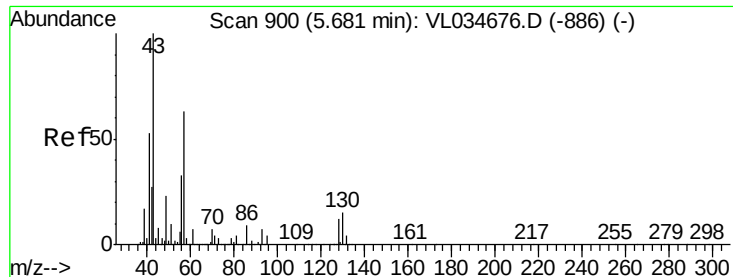
43 100

45 10.2 8.2 12.4

61 3.4 7.8 11.6#

70 8.5 6.1 9.1





#26

Hexane

Concen: 1.027 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.01 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

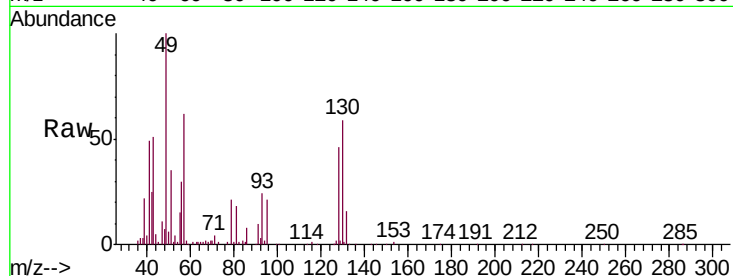
ClientSampleId :

IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 57 Resp: 101024

Ion Ratio Lower Upper

57	100		
41	99.3	70.3	105.5
43	89.8	177.0	265.4#
56	55.8	42.6	64.0



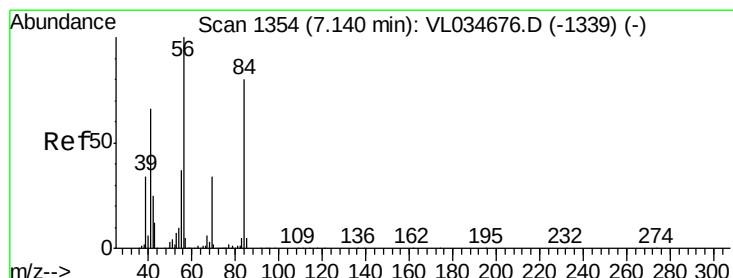
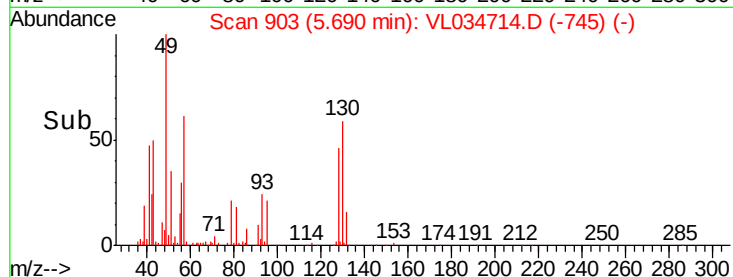
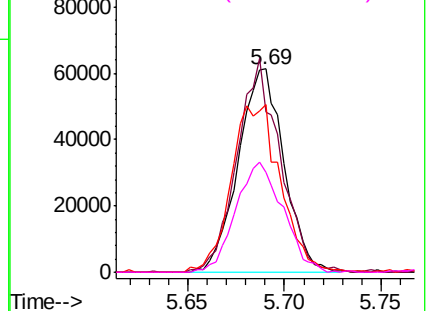
Abundance

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



#30

Cyclohexane

Concen: 0.030 ppbv

RT: 7.14 min Scan# 1354

Delta R.T. -0.00 min

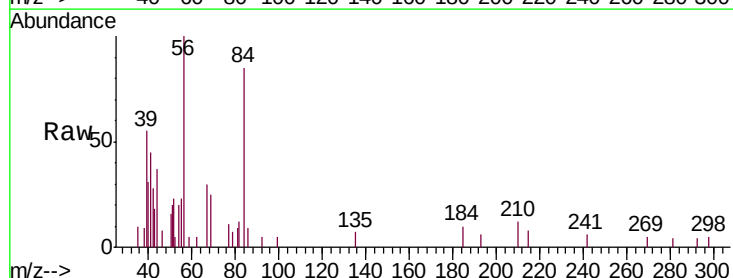
Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Tgt Ion: 84 Resp: 2315

Ion Ratio Lower Upper

84	100		
56	0.0	113.4	170.2#
41	0.0	68.2	102.4#

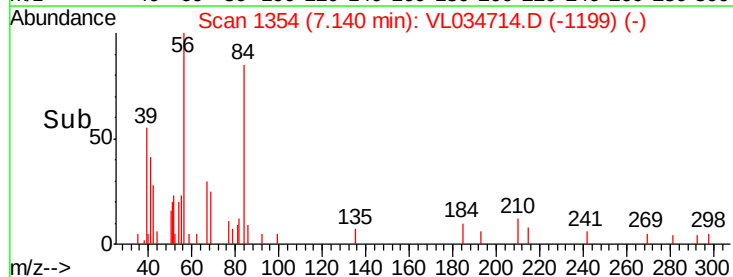
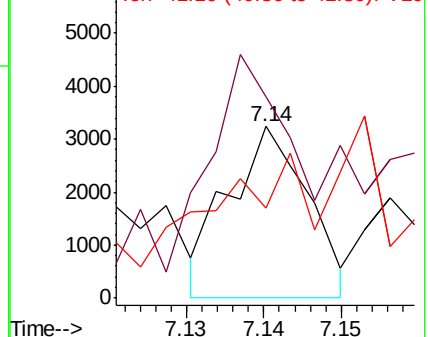


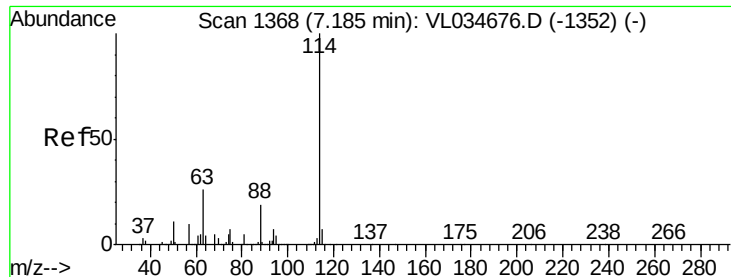
Abundance

Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

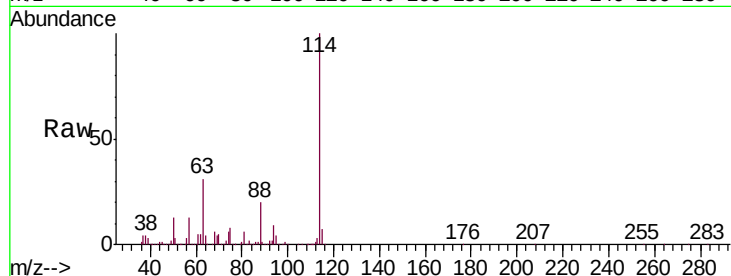




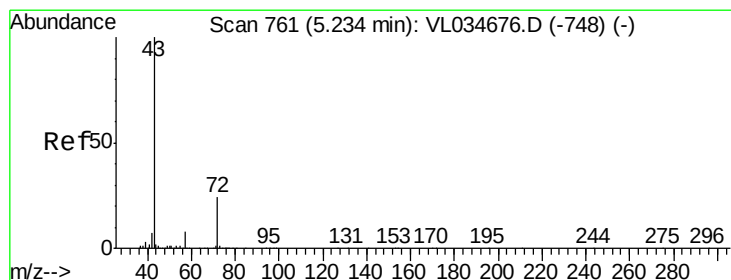
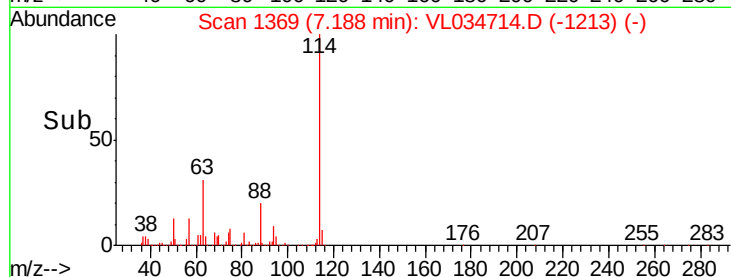
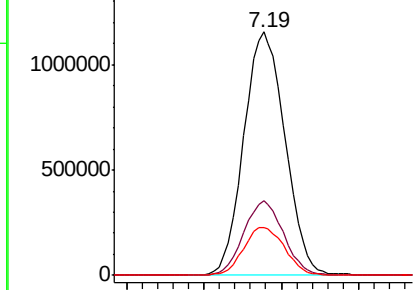
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T. 0.00 min
 Lab File: VL034714.D
 Acq: 27 Feb 2020 18:35

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 114 Resp: 2143513
 Ion Ratio Lower Upper
 114 100
 63 29.6 22.9 34.3
 88 19.6 15.8 23.6

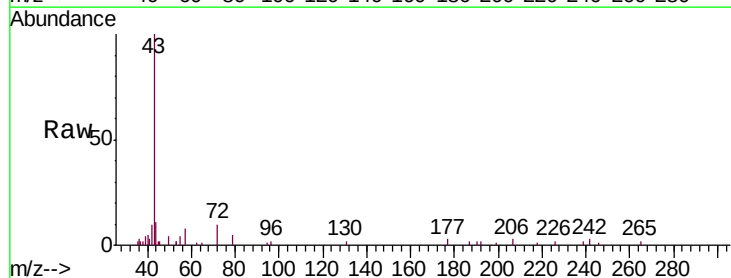


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

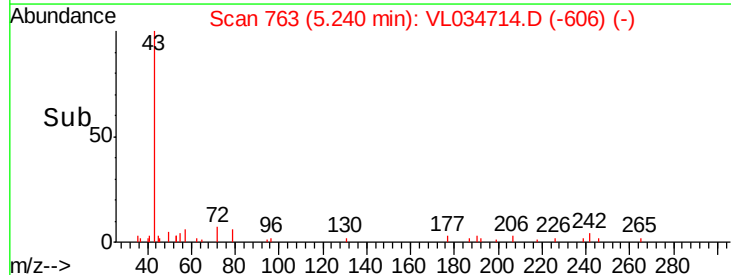
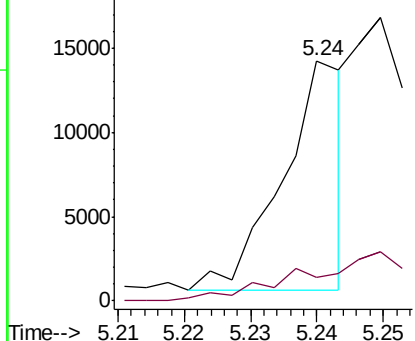


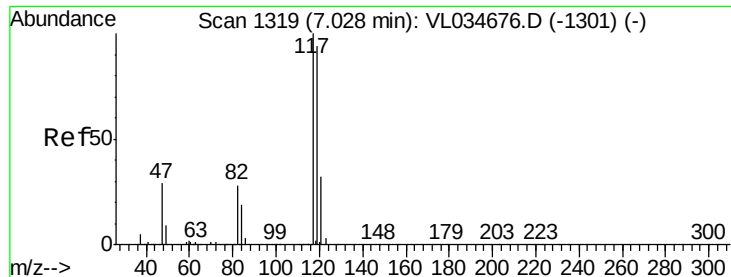
#34
 2-Butanone
 Concen: 0.066 ppbv
 RT: 5.24 min Scan# 763
 Delta R.T. 0.01 min
 Lab File: VL034714.D
 Acq: 27 Feb 2020 18:35

Tgt Ion: 43 Resp: 8861
 Ion Ratio Lower Upper
 43 100
 72 0.0 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: 0.042 ppbv

RT: 7.03 min Scan# 1320

Delta R.T. 0.00 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

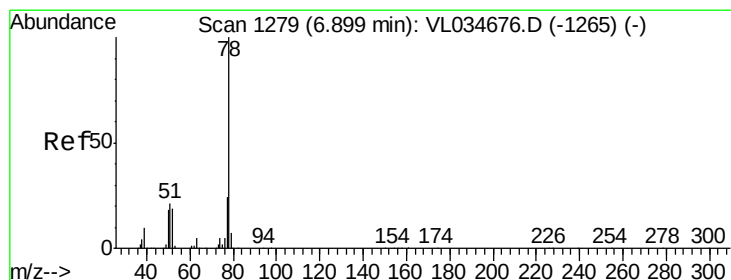
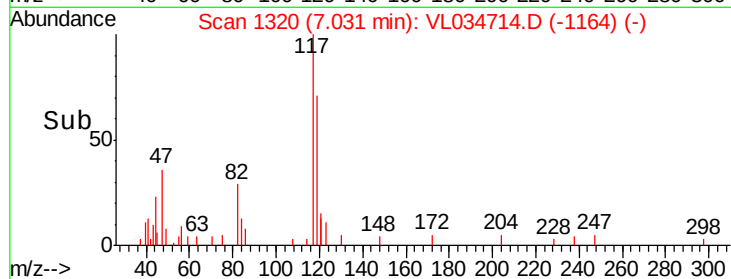
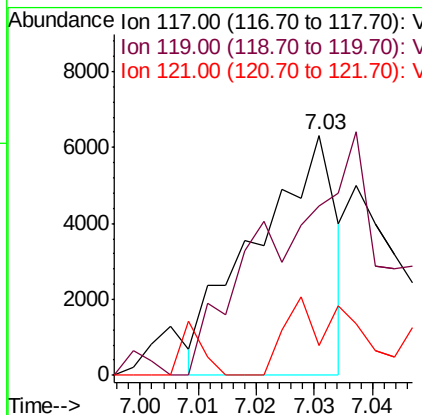
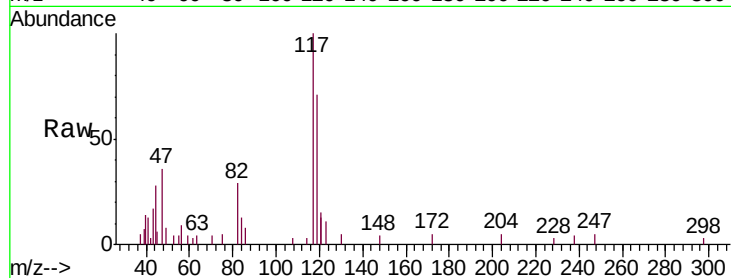
Instrument :

MSVOA_L

ClientSampleId :

IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion:	117	Resp:	6083
Ion	Ratio	Lower	Upper
117	100		
119	79.4	75.5	113.3
121	0.0	25.4	38.0#



#36

Benzene

Concen: 0.323 ppbv

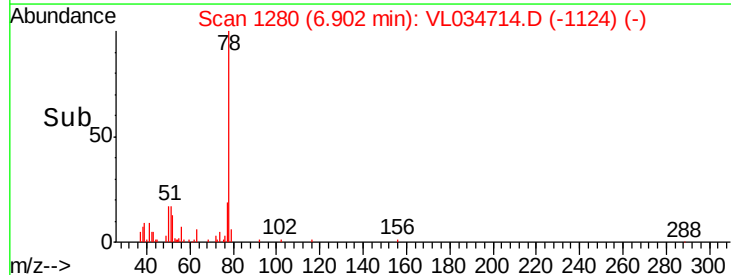
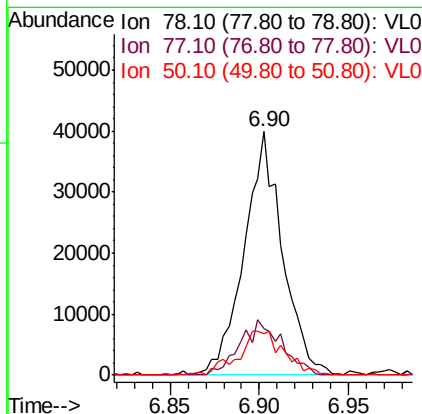
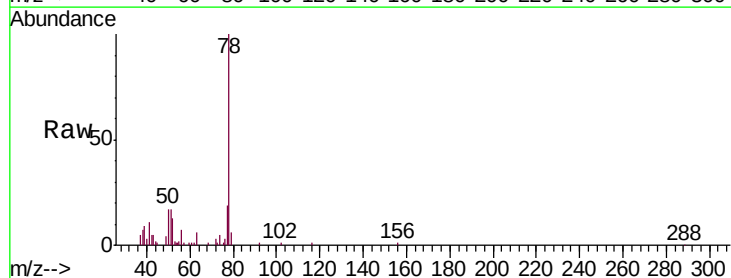
RT: 6.90 min Scan# 1280

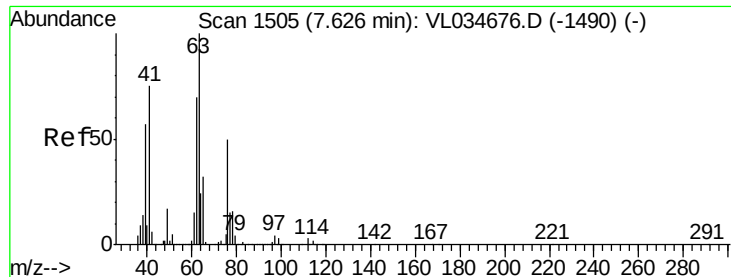
Delta R.T. 0.00 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Tgt Ion:	78	Resp:	59886
Ion	Ratio	Lower	Upper
78	100		
77	19.0	19.5	29.3#
50	17.0	14.6	21.8





#39

1,2-Dichloropropane

Concen: 8.596 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. -0.44 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

IAS-4-STORGE-RM-NEXT-TO-CAFE

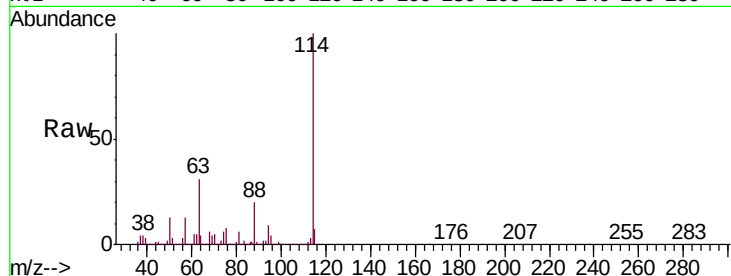
Tgt Ion: 63 Resp: 633126

Ion Ratio Lower Upper

63 100

41 0.0 60.2 90.4#

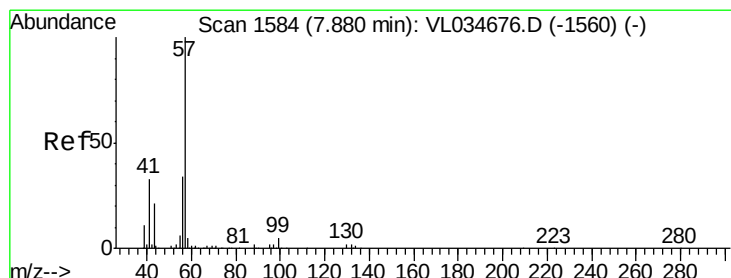
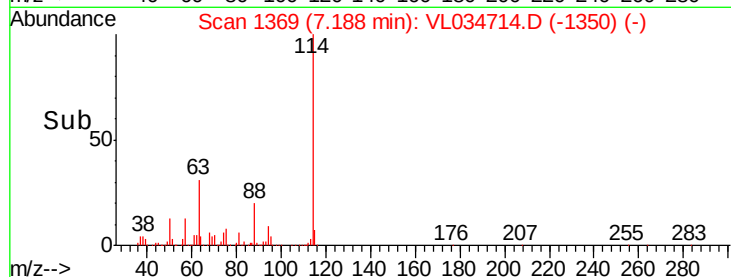
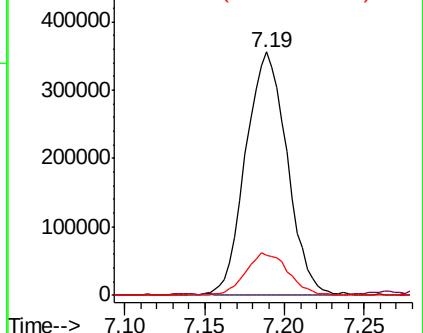
62 16.7 56.3 84.5#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.047 ppbv

RT: 7.88 min Scan# 1585

Delta R.T. 0.00 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

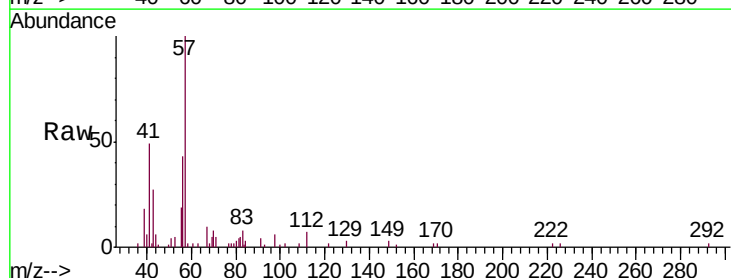
Tgt Ion: 57 Resp: 15290

Ion Ratio Lower Upper

57 100

41 0.0 26.0 39.0#

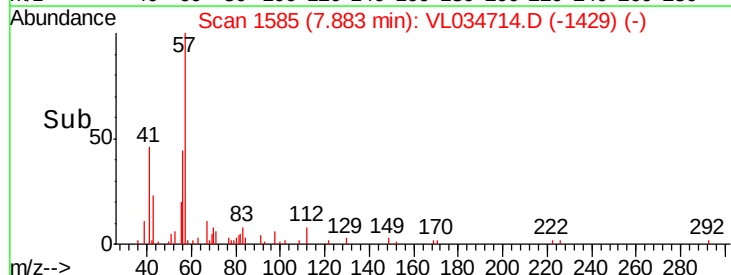
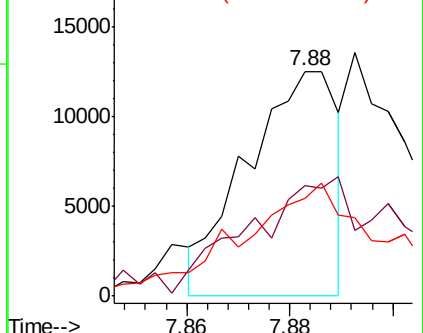
56 0.0 25.6 38.4#

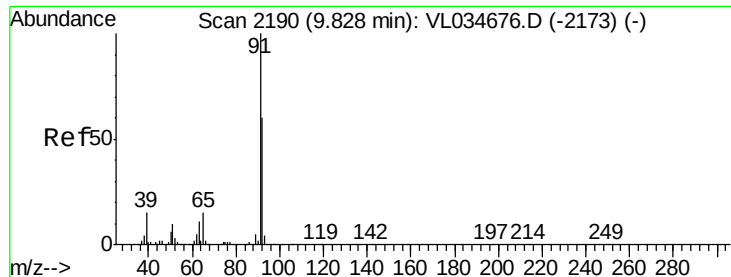


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 3.126 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

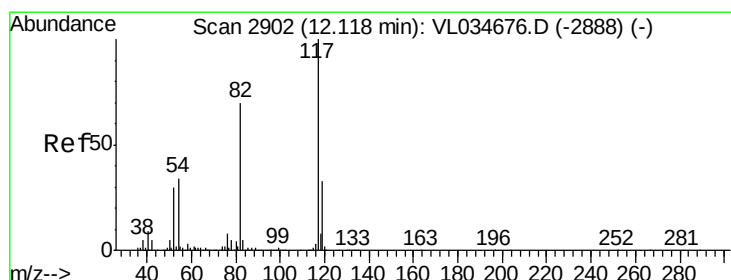
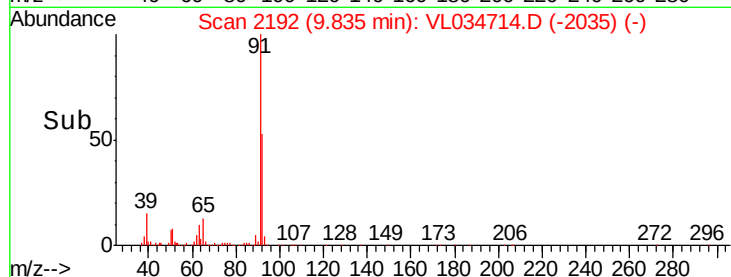
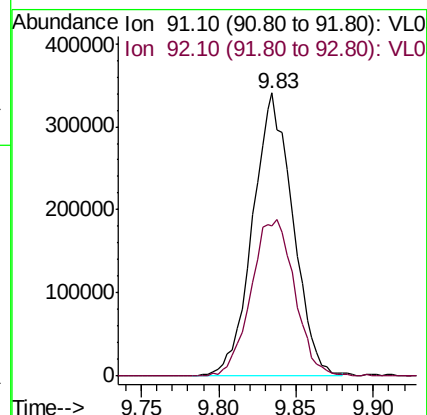
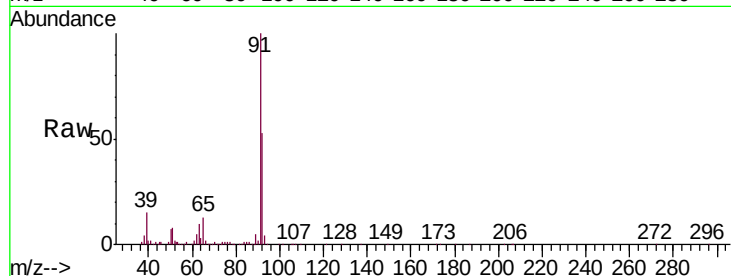
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 91 Resp: 615597

Ion Ratio Lower Upper

91 100

92 60.0 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: VL034714.D

Acq: 27 Feb 2020 18:35

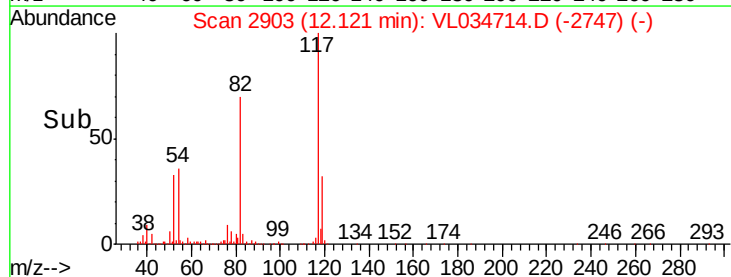
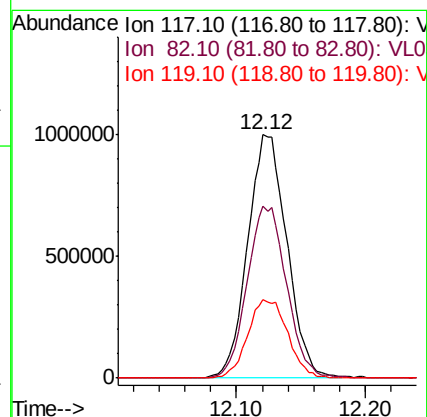
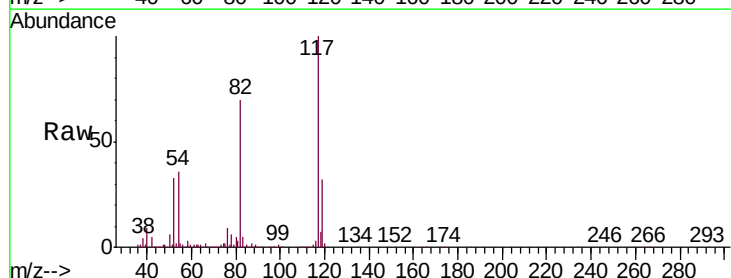
Tgt Ion: 117 Resp: 2115219

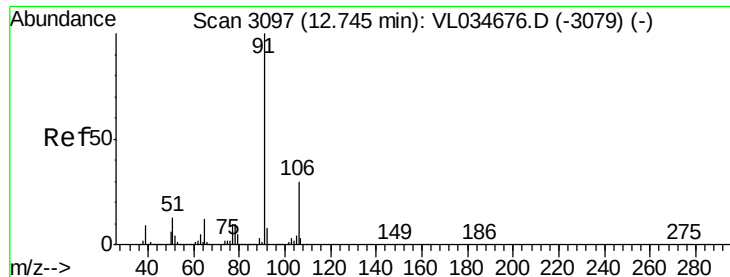
Ion Ratio Lower Upper

117 100

82 71.2 54.1 81.1

119 32.9 27.6 41.4





#58

Ethyl Benzene

Concen: 0.073 ppbv

RT: 13.00 min Scan# 3175

Delta R.T. 0.25 min

Lab File: VL034714.D

Acq: 27 Feb 2020 18:35

Instrument :

MSVOA_L

ClientSampleId :

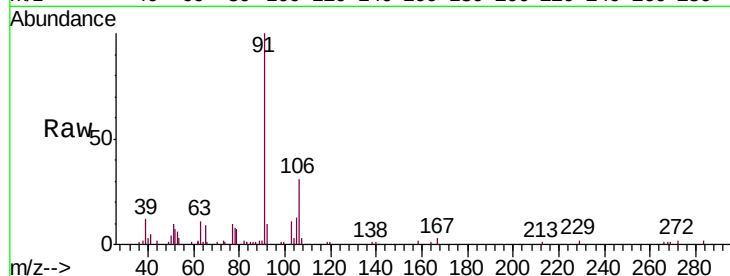
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 91 Resp: 18577

Ion Ratio Lower Upper

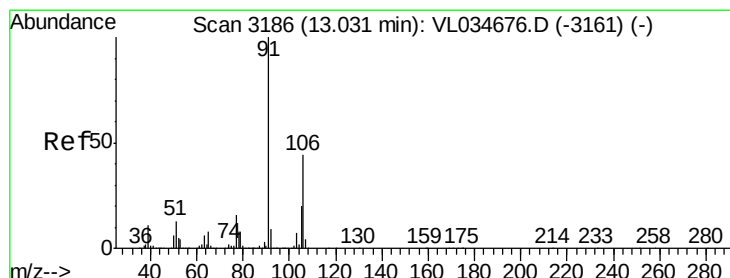
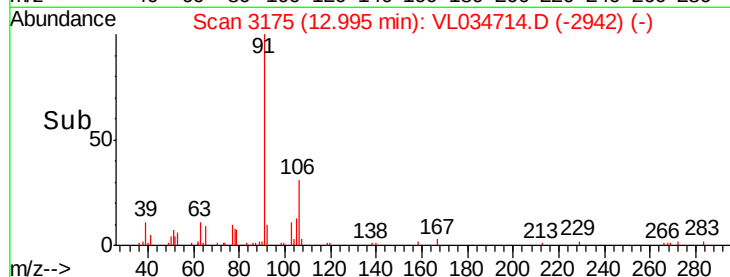
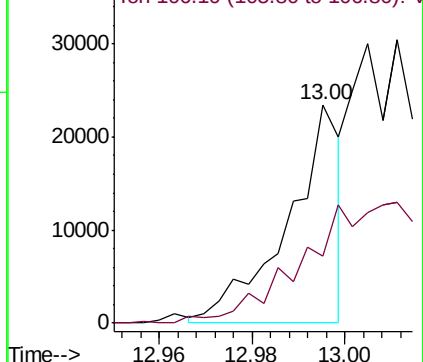
91 100

106 28.0 24.0 36.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.066 ppbv

RT: 13.04 min Scan# 3189

Delta R.T. 0.01 min

Lab File: VL034714.D

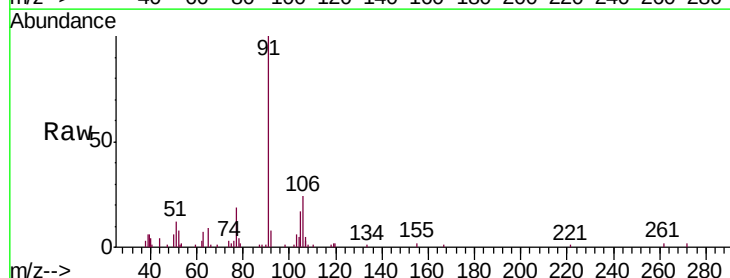
Acq: 27 Feb 2020 18:35

Tgt Ion: 91 Resp: 14809

Ion Ratio Lower Upper

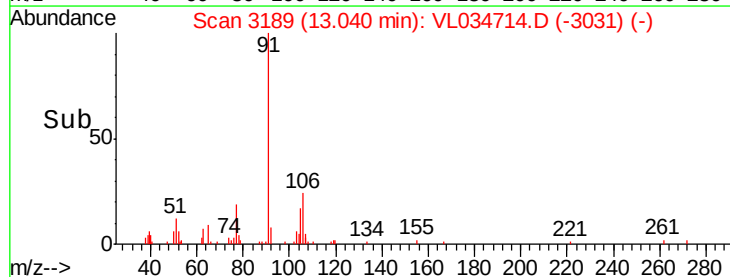
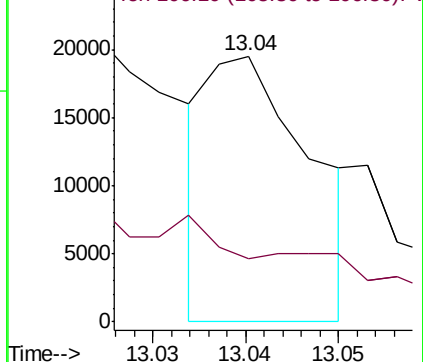
91 100

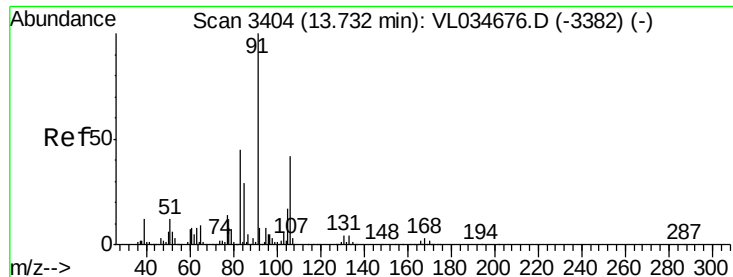
106 0.0 35.6 53.4#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

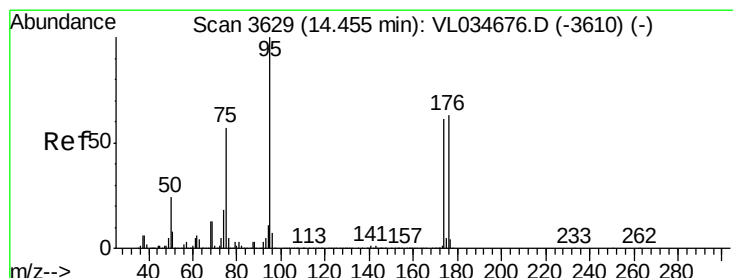
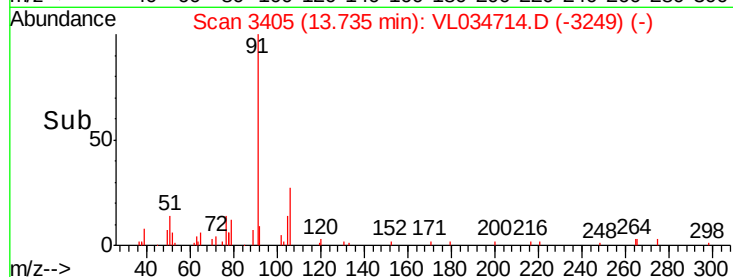
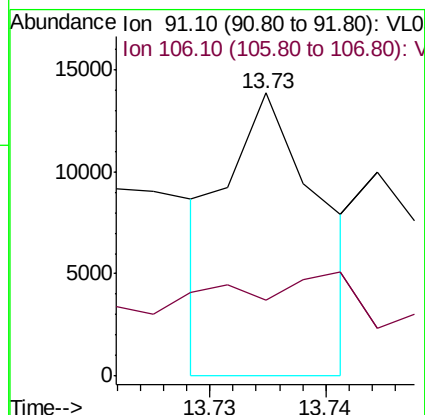
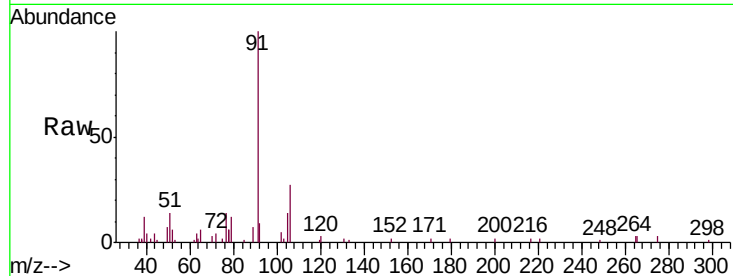




#60
o-Xylene
Concen: 0.035 ppbv
RT: 13.73 min Scan# 3405
Delta R.T. 0.00 min
Lab File: VL034714.D
Acq: 27 Feb 2020 18:35

Instrument :
MSVOA_L
ClientSampleId :
IAS-4-STORGE-RM-NEXT-TO-CAFE

Tgt Ion: 91 Resp: 7789
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.383 ppbv
RT: 14.46 min Scan# 3630
Delta R.T. 0.00 min
Lab File: VL034714.D
Acq: 27 Feb 2020 18:35

Tgt Ion: 95 Resp: 1800884
Ion Ratio Lower Upper
95 100
174 63.1 50.7 76.1
175 4.6 3.9 5.9

