

Data File : VL034096.D
Acq On : 6 Aug 2019 9:07
Operator : SY/AP
Sample : K4098-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
E049-1100

Quant Time: Aug 06 15:02:13 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL080519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 05 17:09:48 2019
QLast Update : Mon Aug 05 17:09:48 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.71	49	1070360	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.24	114	2186862	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.18	117	2439511	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.52 95 2479606 12.53 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 125.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.19	85	2057825	15.621	ppbv	97
4) Chloromethane	3.19	50	289104	3.623	ppbv #	43
8) Dichlorotetrafluoroethane	3.19	85	2057825	13.542	ppbv	98
11) Trichlorofluoromethane	3.97	101	3221658	20.628	ppbv	93
13) Ethanol	3.61	45	625	0.030	ppbv #	38
17) tert-Butyl alcohol	4.31	59	84442	0.592	ppbv #	75
18) 1,1-Dichloroethene	4.31	96	1062929	20.393	ppbv	87
20) Methylene Chloride	4.37	84	31097	0.678	ppbv #	93
24) 1,1-Dichloroethane	5.05	63	3272636	21.688	ppbv	98
25) Ethyl Acetate	5.73	43	11461	0.038	ppbv #	88
26) Hexane	5.73	57	9115	0.071	ppbv #	38
29) Chloroform	5.80	83	4024157	23.214	ppbv	92
32) 1,1,1-Trichloroethane	6.57	97	22487	0.131	ppbv #	43
35) Carbon Tetrachloride	7.08	117	6506	0.039	ppbv #	71
37) 1,2-Dichloroethane	6.36	62	2300925	17.206	ppbv	99
39) 1,2-Dichloropropane	7.24	63	629516	6.277	ppbv #	23
42) Bromodichloromethane	7.86	83	3453433	18.420	ppbv	94
48) Dibromochloromethane	10.39	129	8959	0.058	ppbv	70
58) Ethyl Benzene	12.81	91	7564229	18.440	ppbv #	75
59) m/p-Xylene	13.06	91	3660206	11.116	ppbv	100
60) o-Xylene	13.79	91	4695347	14.269	ppbv	97
80) Naphthalene,2-methyl-	25.38	142	6607	0.052	ppbv	94

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

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E049-1100

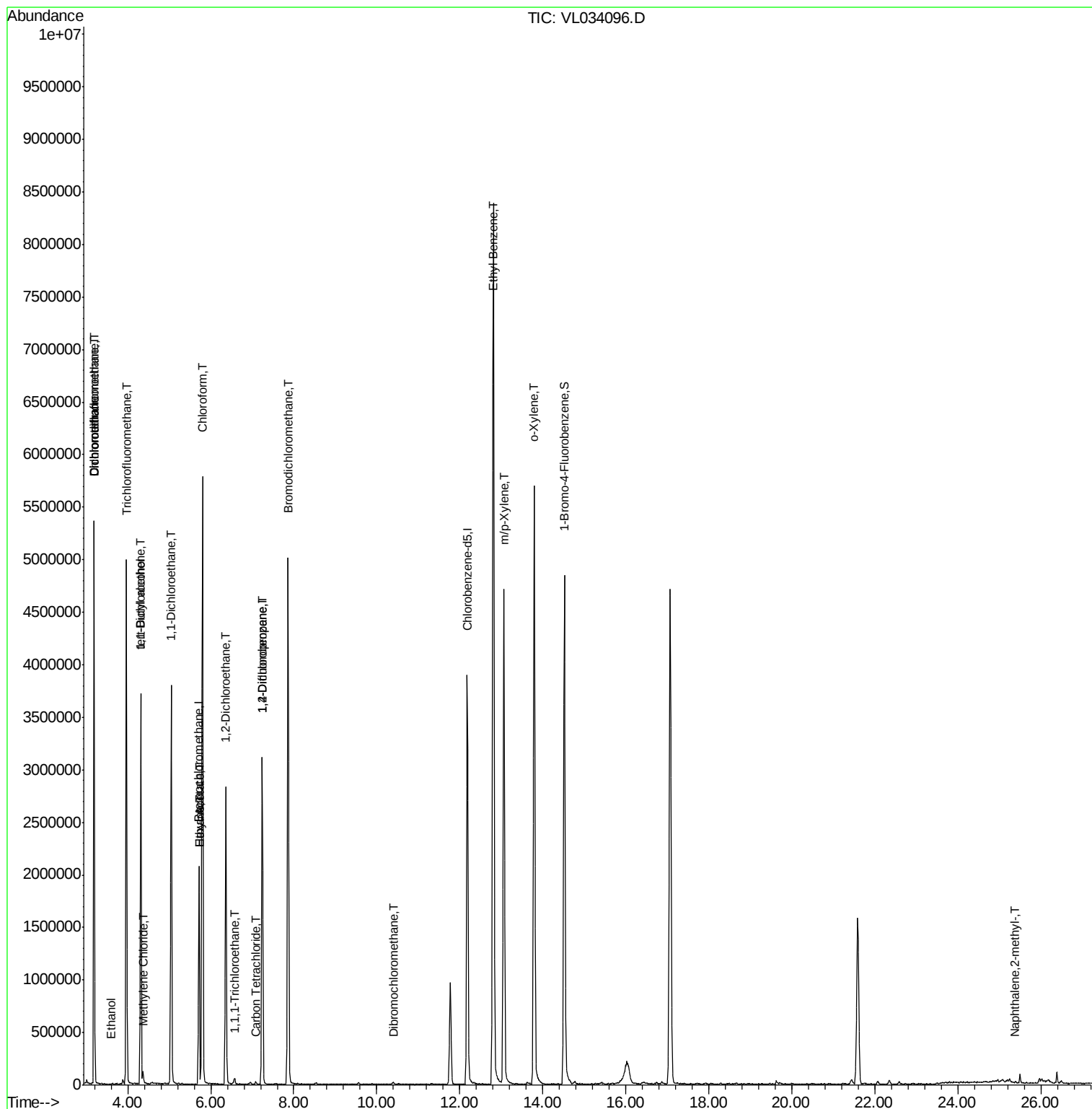
Quant Time: Aug 06 15:02:13 2019

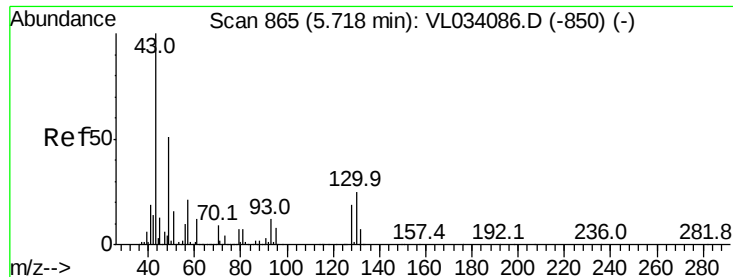
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL080519AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Mon Aug 05 17:09:48 2019

QLast Update : Mon Aug 05 17:09:48 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.71 min Scan# 864

Delta R.T. -0.00 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

E049-1100

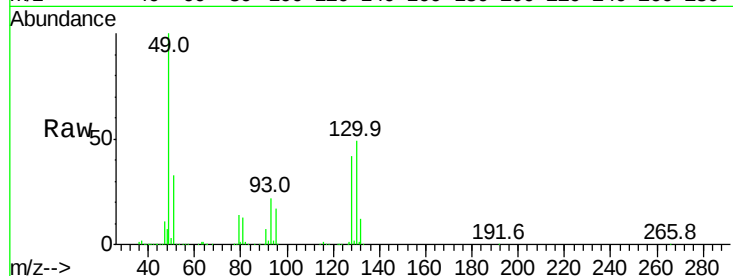
Tgt Ion: 49 Resp: 1070360

Ion Ratio Lower Upper

49 100

128 38.7 19.5 58.5

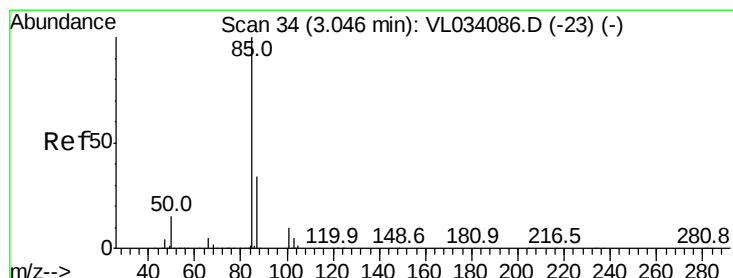
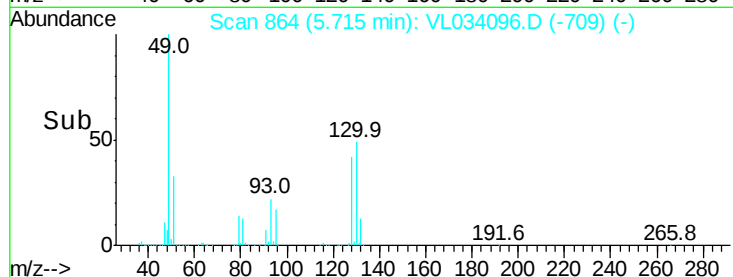
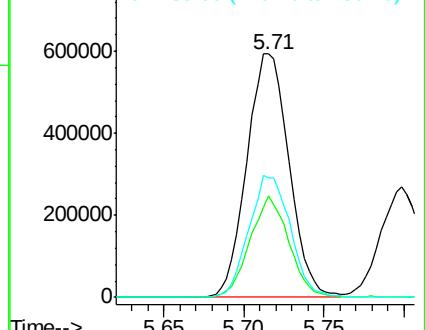
130 49.5 25.4 76.0



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: 15.621 ppbv

RT: 3.19 min Scan# 79

Delta R.T. 0.14 min

Lab File: VL034096.D

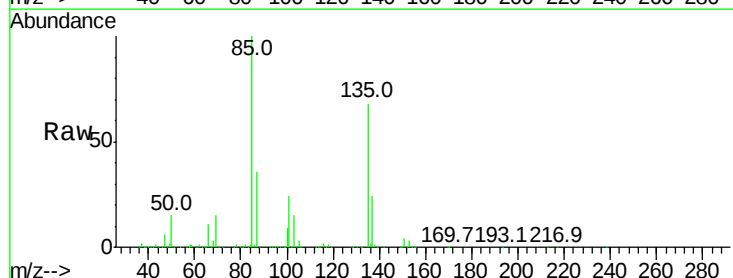
Acq: 6 Aug 2019 9:07

Tgt Ion: 85 Resp: 2057825

Ion Ratio Lower Upper

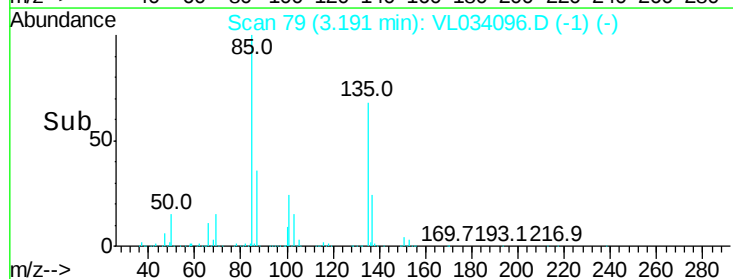
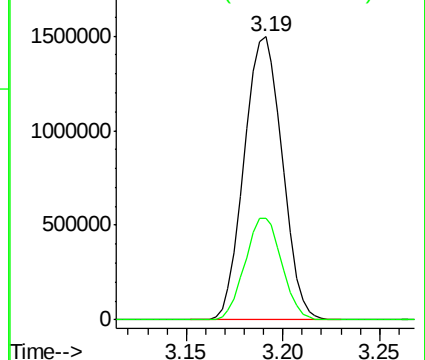
85 100

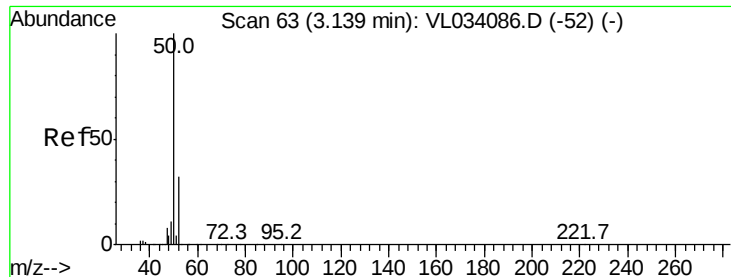
87 35.8 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 3.623 ppbv

RT: 3.19 min Scan# 78

Delta R.T. 0.05 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

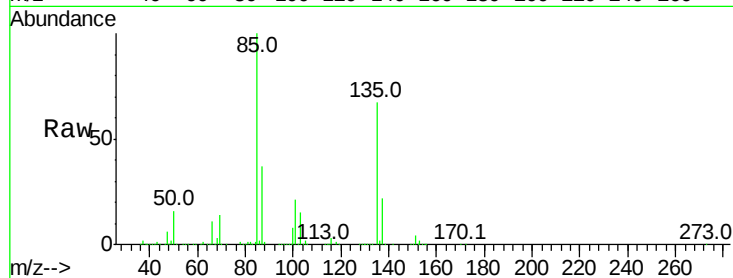
E049-1100

Tgt Ion: 50 Resp: 289104

Ion Ratio Lower Upper

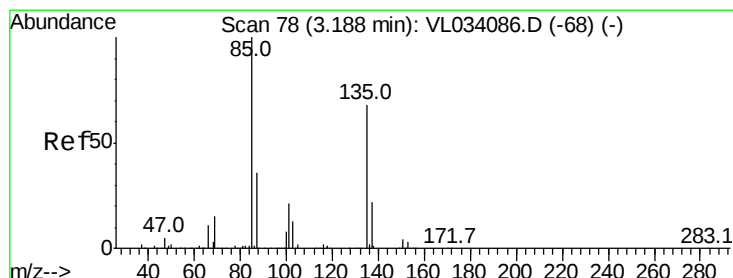
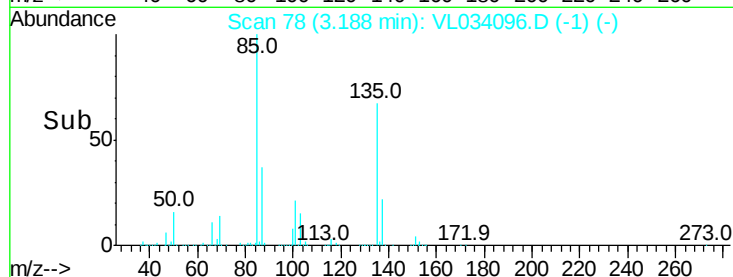
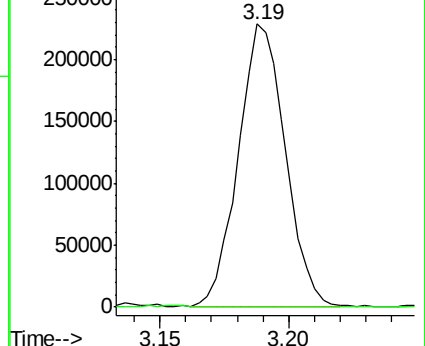
50 100

52 0.0 25.7 38.5#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 13.542 ppbv

RT: 3.19 min Scan# 79

Delta R.T. 0.00 min

Lab File: VL034096.D

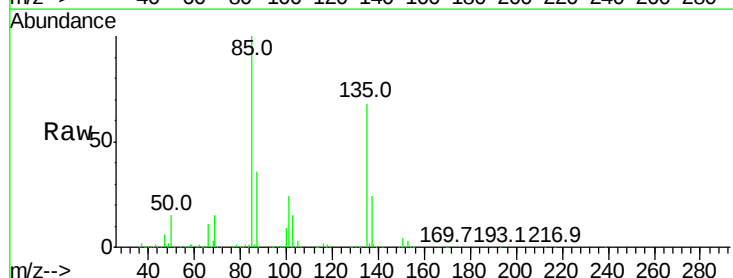
Acq: 6 Aug 2019 9:07

Tgt Ion: 85 Resp: 2057825

Ion Ratio Lower Upper

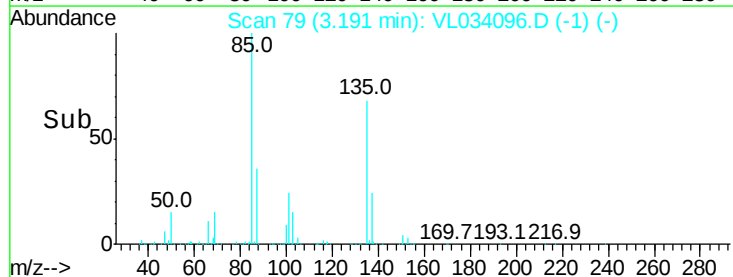
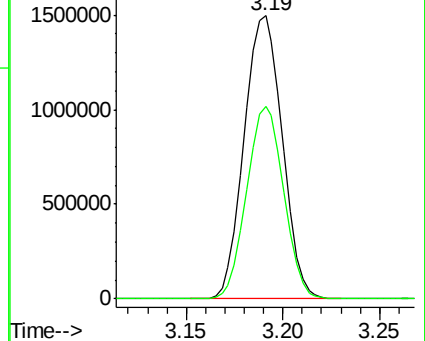
85 100

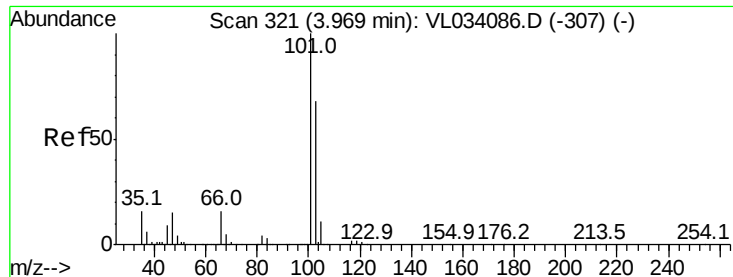
135 66.1 54.0 81.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): VL0





#11

Trichlorofluoromethane

Concen: 20.628 ppbv

RT: 3.97 min Scan# 321

Delta R.T. 0.00 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

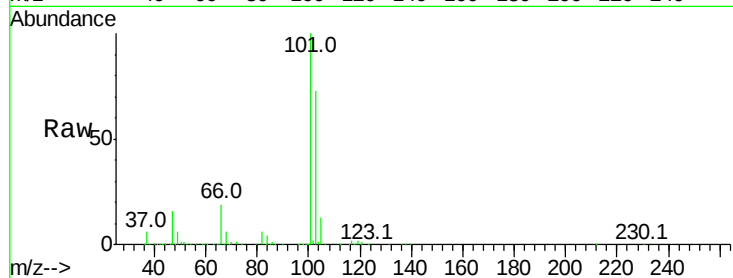
E049-1100

Tgt Ion:101 Resp: 3221658

Ion Ratio Lower Upper

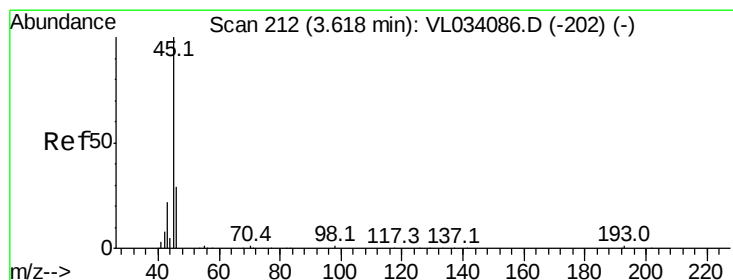
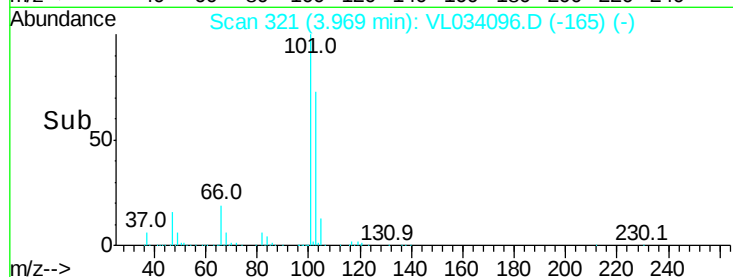
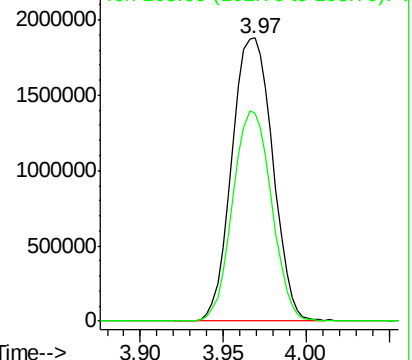
101 100

103 73.4 54.3 81.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 0.030 ppbv

RT: 3.61 min Scan# 210

Delta R.T. -0.01 min

Lab File: VL034096.D

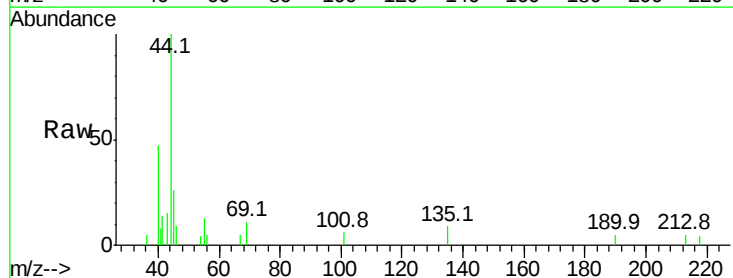
Acq: 6 Aug 2019 9:07

Tgt Ion: 45 Resp: 625

Ion Ratio Lower Upper

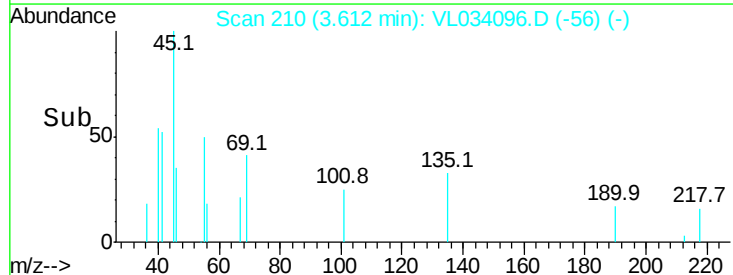
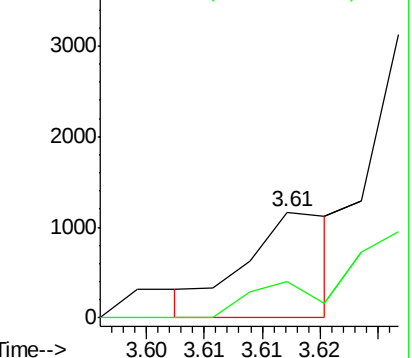
45 100

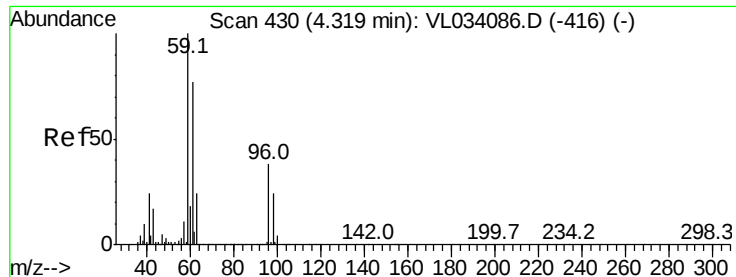
46 0.0 14.9 59.5#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#17

tert-Butyl alcohol

Concen: 0.592 ppbv

RT: 4.31 min Scan# 428

Delta R.T. -0.01 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

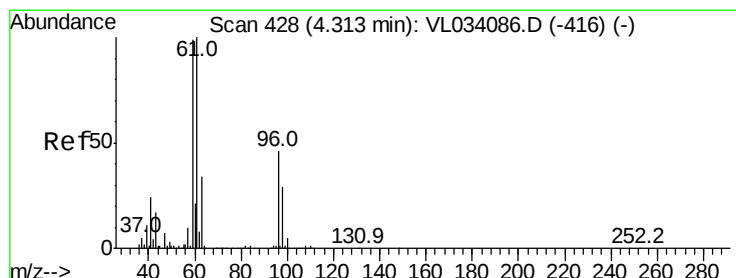
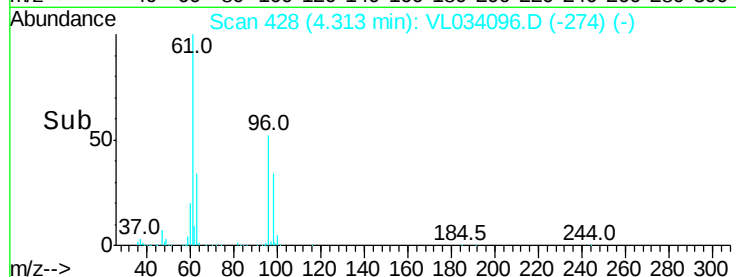
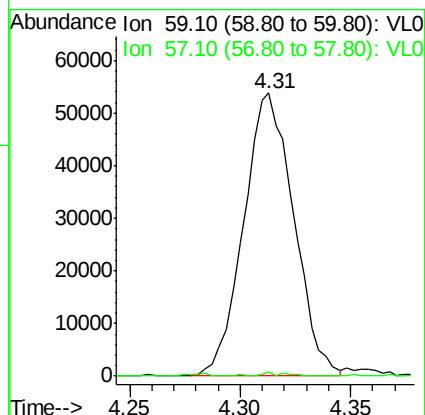
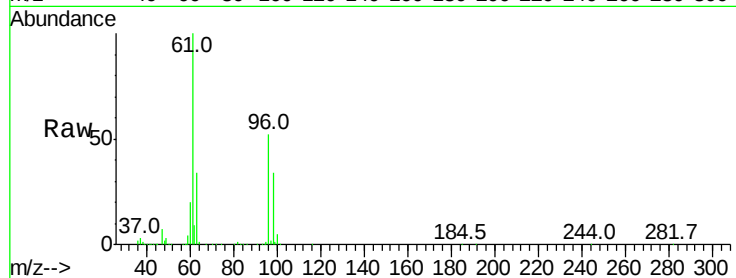
E049-1100

Tgt Ion: 59 Resp: 84442

Ion Ratio Lower Upper

59 100

57 0.9 8.4 12.6#



#18

1,1-Dichloroethene

Concen: 20.393 ppbv

RT: 4.31 min Scan# 428

Delta R.T. 0.00 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

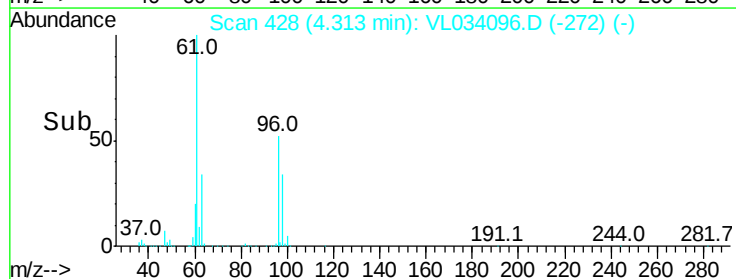
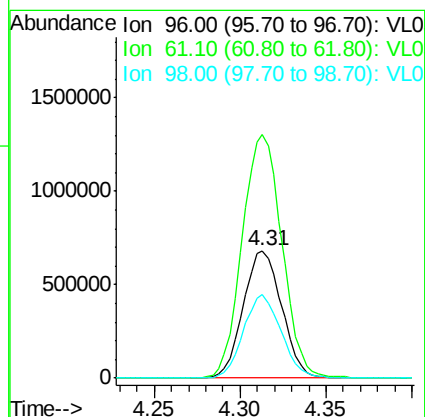
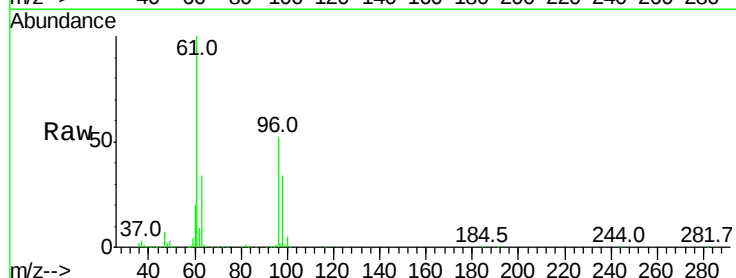
Tgt Ion: 96 Resp: 1062929

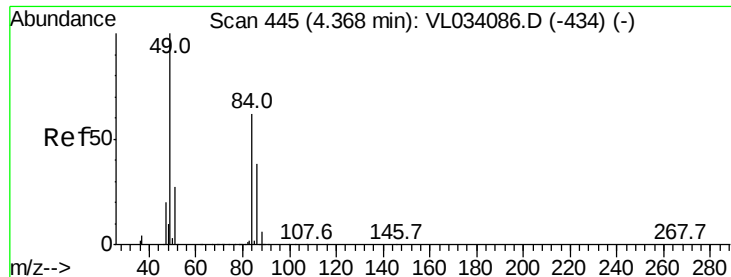
Ion Ratio Lower Upper

96 100

61 191.1 173.1 259.7

98 65.6 50.3 75.5

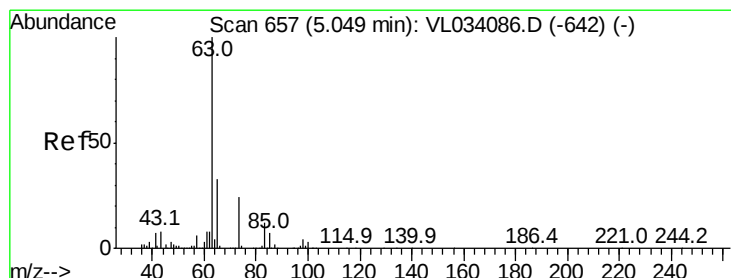
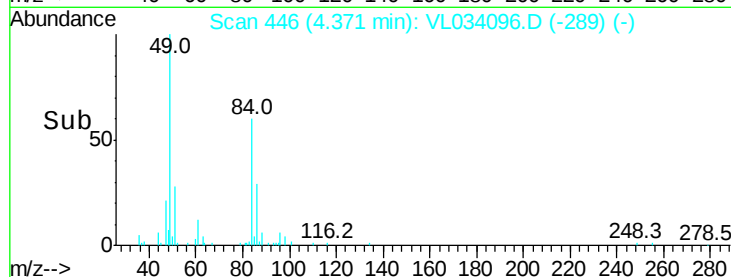
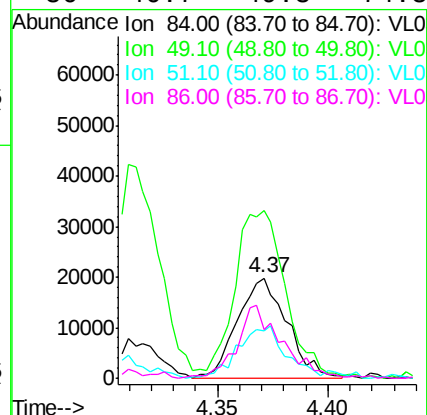
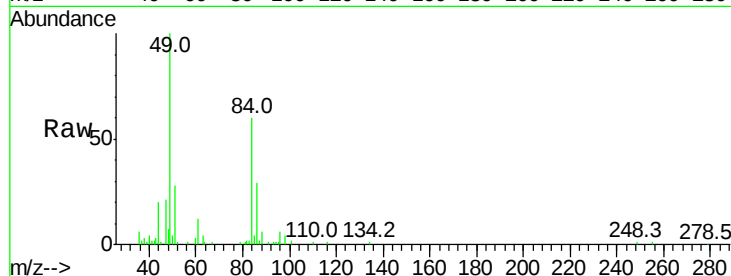




#20
Methylene Chloride
Concen: 0.678 ppbv
RT: 4.37 min Scan# 446
Delta R.T. 0.00 min
Lab File: VL034096.D
Acq: 6 Aug 2019 9:07

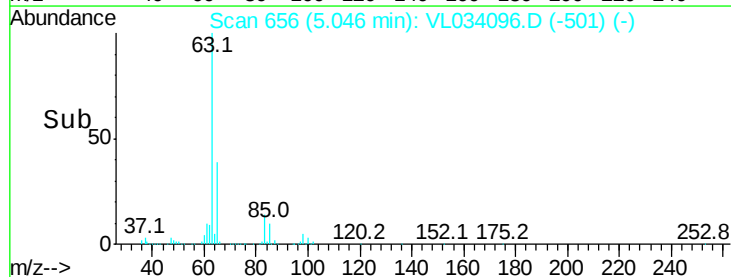
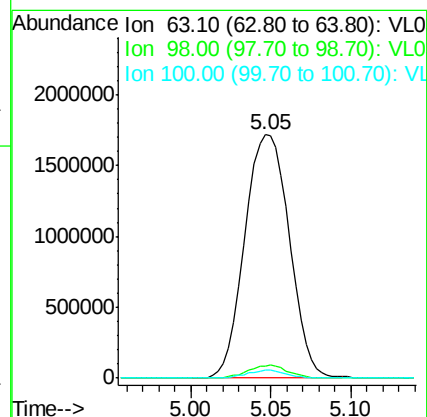
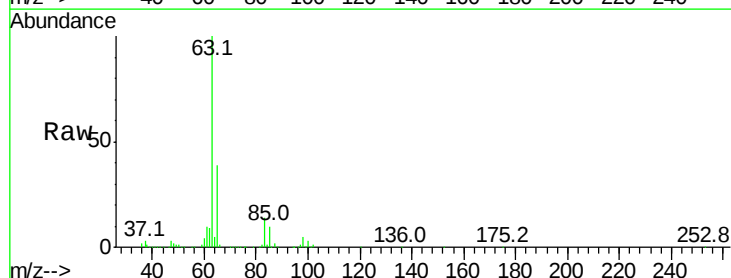
Instrument :
MSVOA_L
ClientSampleId :
E049-1100

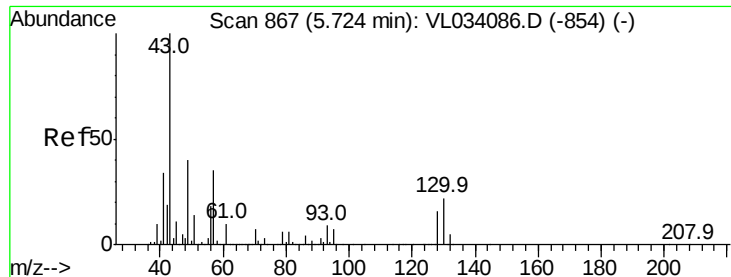
Tgt Ion: 84 Resp: 31097
Ion Ratio Lower Upper
84 100
49 165.9 129.7 194.5
51 45.8 35.8 53.8
86 46.7 49.8 74.8#



#24
1,1-Dichloroethane
Concen: 21.688 ppbv
RT: 5.05 min Scan# 656
Delta R.T. -0.00 min
Lab File: VL034096.D
Acq: 6 Aug 2019 9:07

Tgt Ion: 63 Resp: 3272636
Ion Ratio Lower Upper
63 100
98 4.9 2.0 6.0
100 3.2 1.3 3.8





#25

Ethyl Acetate

Concen: 0.038 ppbv

RT: 5.73 min Scan# 869

Delta R.T. 0.01 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

E049-1100

Tgt Ion: 43 Resp: 11461

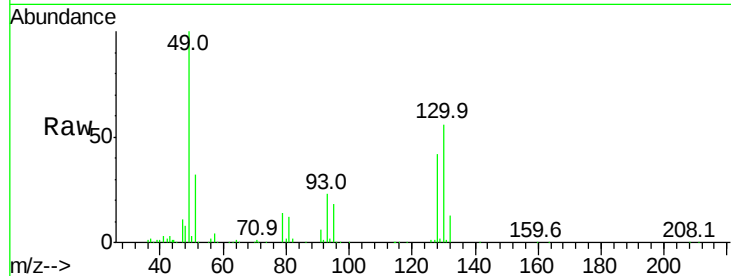
Ion Ratio Lower Upper

43 100

45 5.5 8.4 12.6#

61 8.2 7.3 10.9

70 0.0 5.8 8.6#

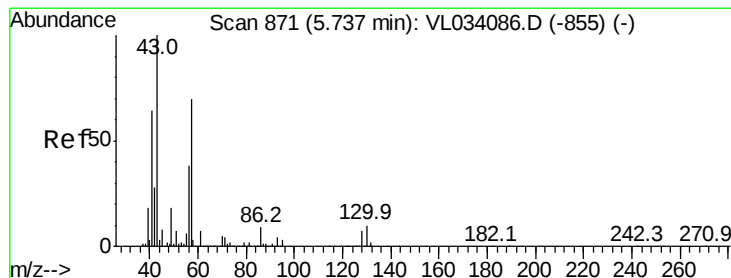
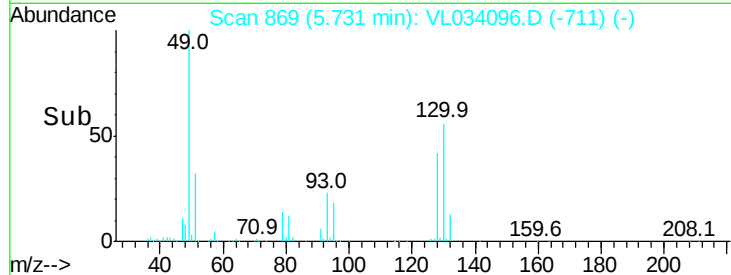
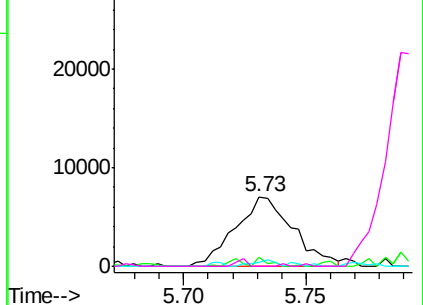


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.071 ppbv

RT: 5.73 min Scan# 869

Delta R.T. -0.01 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Tgt Ion: 57 Resp: 9115

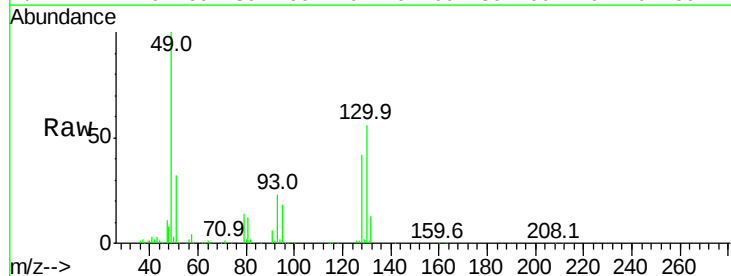
Ion Ratio Lower Upper

57 100

41 154.0 75.7 113.5#

43 128.3 189.8 284.8#

56 90.5 42.7 64.1#

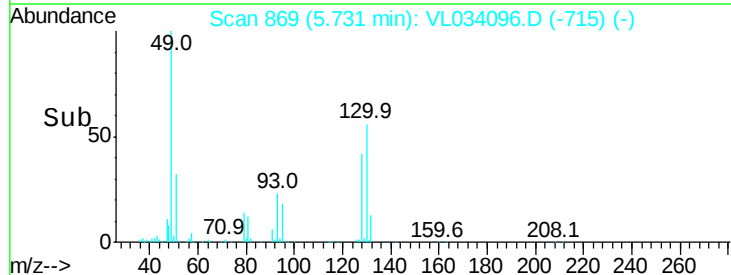
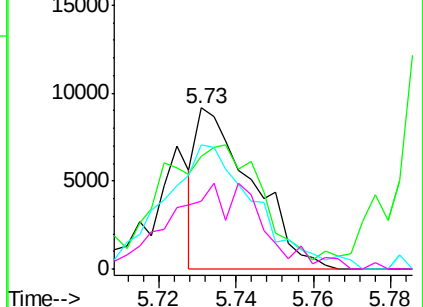


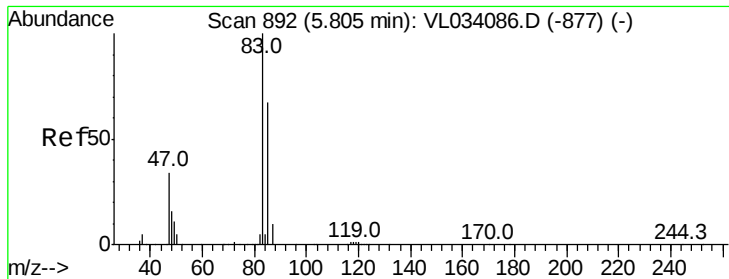
Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 23.214 ppbv

RT: 5.80 min Scan# 890

Delta R.T. -0.01 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

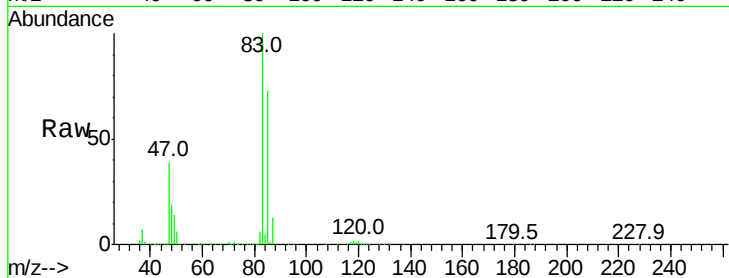
E049-1100

Tgt Ion: 83 Resp: 4024157

Ion Ratio Lower Upper

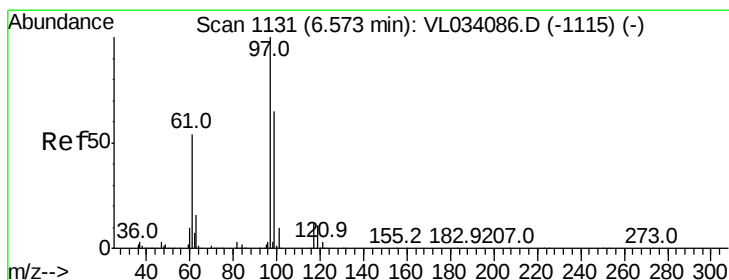
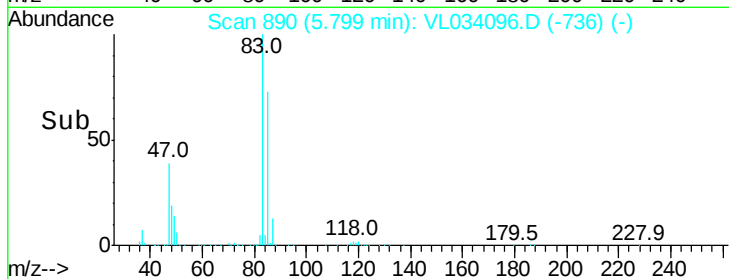
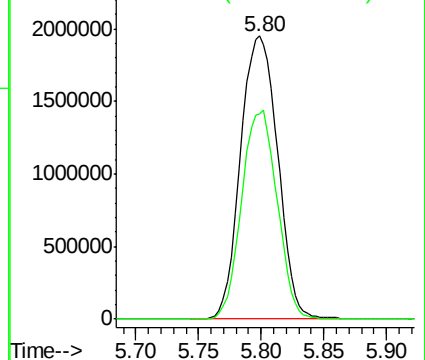
83 100

85 72.7 53.2 79.8



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#32

1,1,1-Trichloroethane

Concen: 0.131 ppbv

RT: 6.57 min Scan# 1131

Delta R.T. 0.00 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

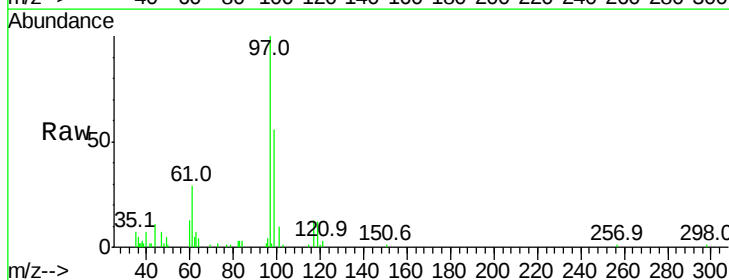
Tgt Ion: 97 Resp: 22487

Ion Ratio Lower Upper

97 100

99 99.3 52.2 78.4#

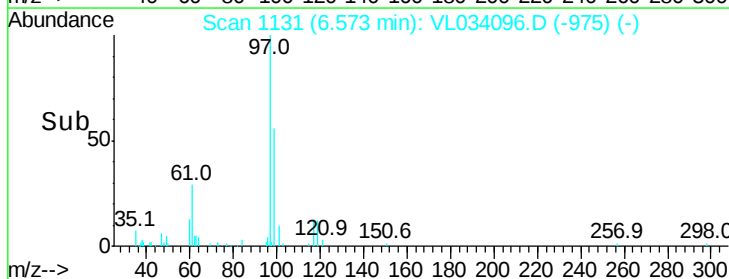
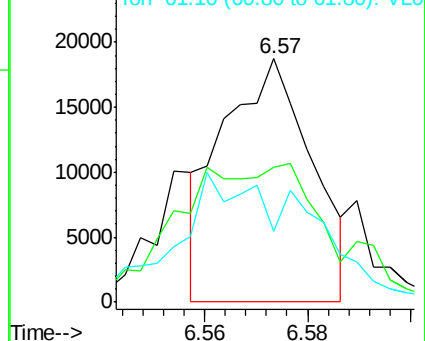
61 0.0 42.0 63.0#

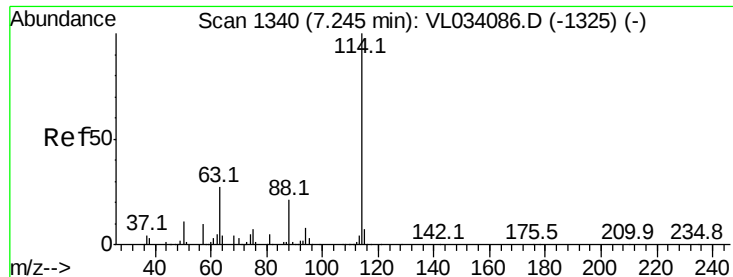


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

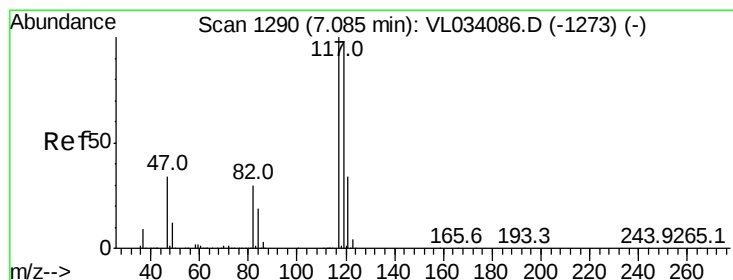
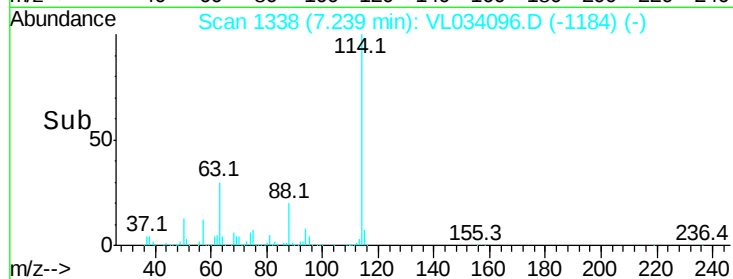
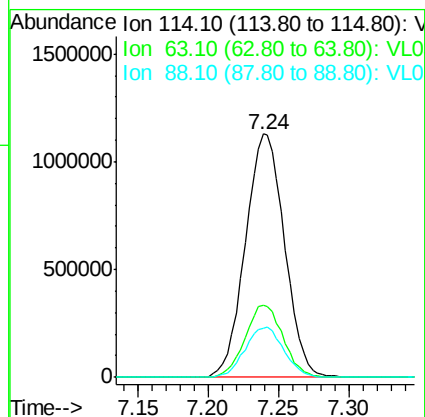
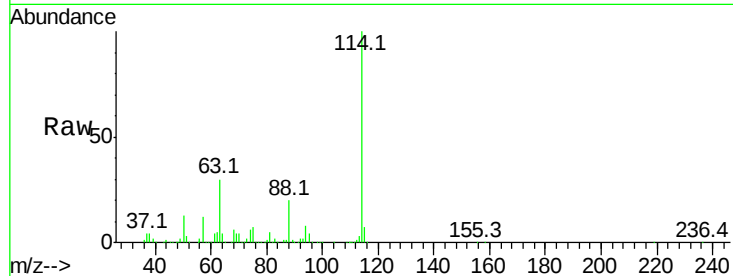




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.24 min Scan# 1338
 Delta R.T. -0.01 min
 Lab File: VL034096.D
 Acq: 6 Aug 2019 9:07

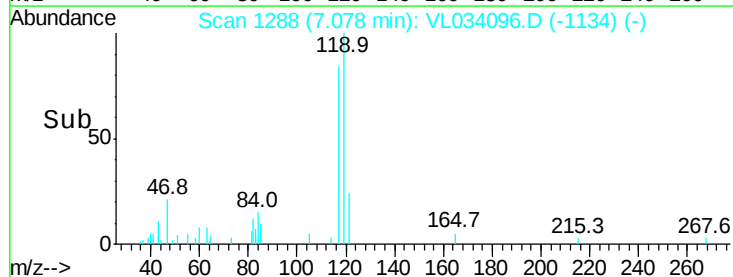
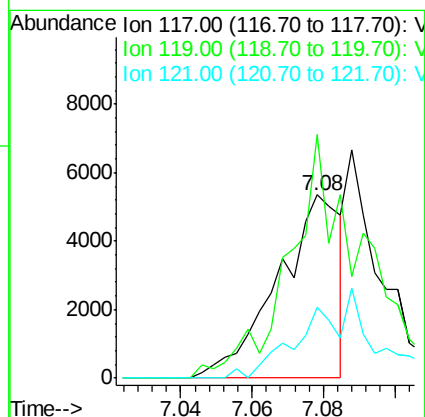
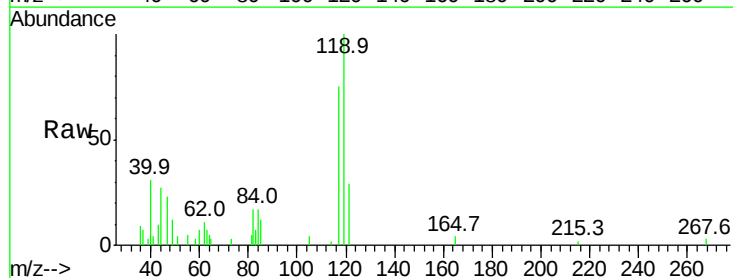
Instrument :
 MSVOA_L
 ClientSampleId :
 E049-1100

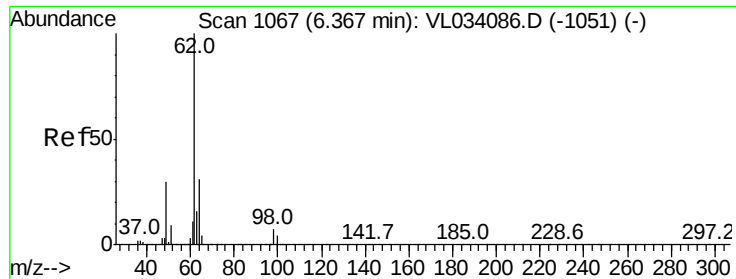
Tgt Ion:114 Resp: 2186862
 Ion Ratio Lower Upper
 114 100
 63 28.8 22.5 33.7
 88 20.5 15.7 23.5



#35
 Carbon Tetrachloride
 Concen: 0.039 ppbv
 RT: 7.08 min Scan# 1288
 Delta R.T. -0.01 min
 Lab File: VL034096.D
 Acq: 6 Aug 2019 9:07

Tgt Ion:117 Resp: 6506
 Ion Ratio Lower Upper
 117 100
 119 132.8 77.8 116.6#
 121 38.5 27.4 41.2

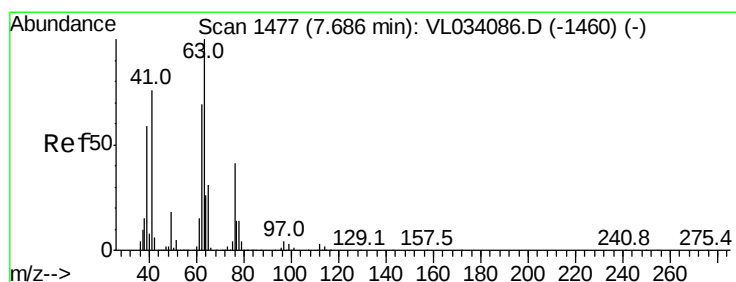
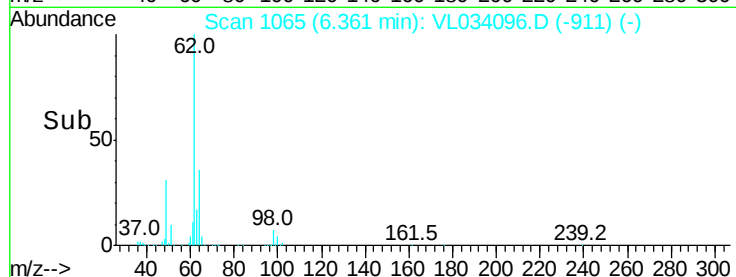
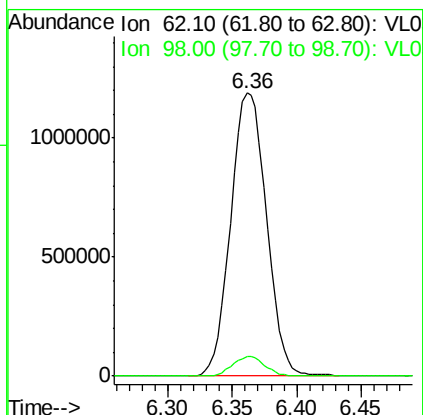
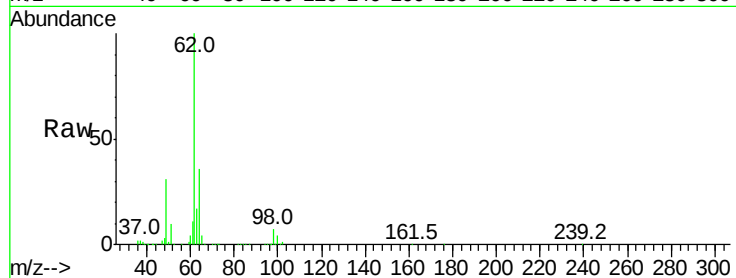




#37
 1,2-Dichloroethane
 Concen: 17.206 ppbv
 RT: 6.36 min Scan# 1065
 Delta R.T. -0.01 min
 Lab File: VL034096.D
 Acq: 6 Aug 2019 9:07

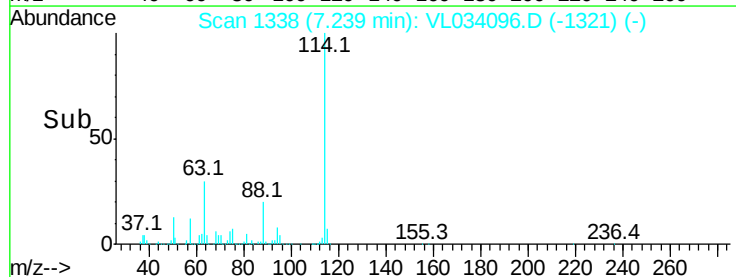
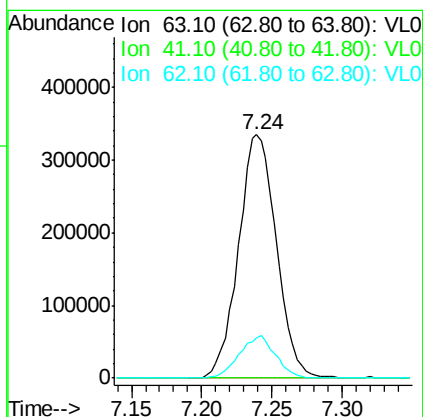
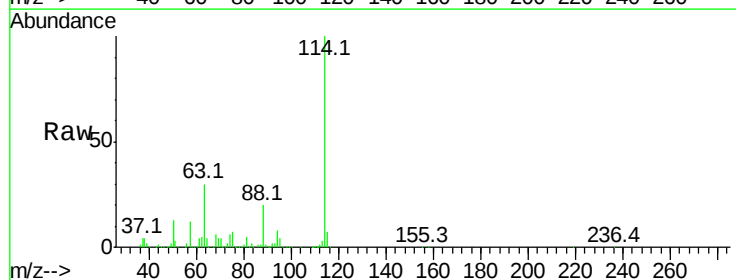
Instrument :
 MSVOA_L
 ClientSampleId :
 E049-1100

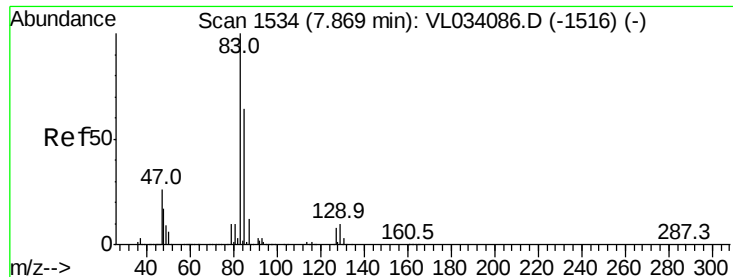
Tgt Ion: 62 Resp: 2300925
 Ion Ratio Lower Upper
 62 100
 98 6.4 4.9 7.3



#39
 1,2-Dichloropropane
 Concen: 6.277 ppbv
 RT: 7.24 min Scan# 1338
 Delta R.T. -0.45 min
 Lab File: VL034096.D
 Acq: 6 Aug 2019 9:07

Tgt Ion: 63 Resp: 629516
 Ion Ratio Lower Upper
 63 100
 41 0.0 60.6 91.0#
 62 16.2 55.0 82.6#





#42

Bromodichloromethane

Concen: 18.420 ppbv

RT: 7.86 min Scan# 1531

Delta R.T. -0.01 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

E049-1100

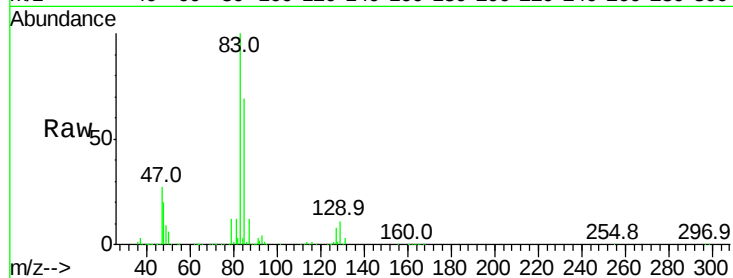
Tgt Ion: 83 Resp: 3453433

Ion Ratio Lower Upper

83 100

85 69.0 50.9 76.3

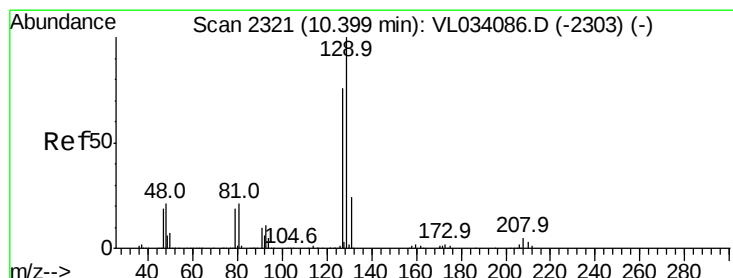
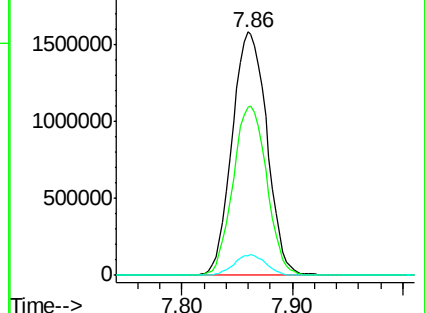
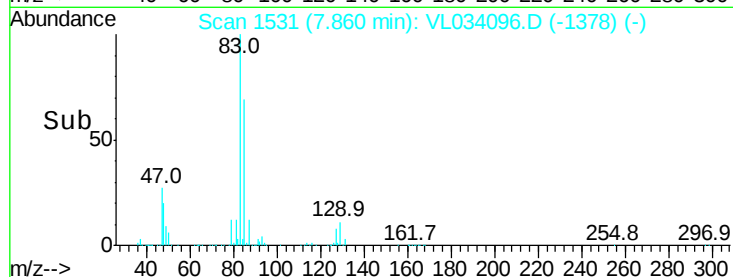
127 8.0 6.1 9.1



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V



#48

Dibromochloromethane

Concen: 0.058 ppbv

RT: 10.39 min Scan# 2318

Delta R.T. -0.01 min

Lab File: VL034096.D

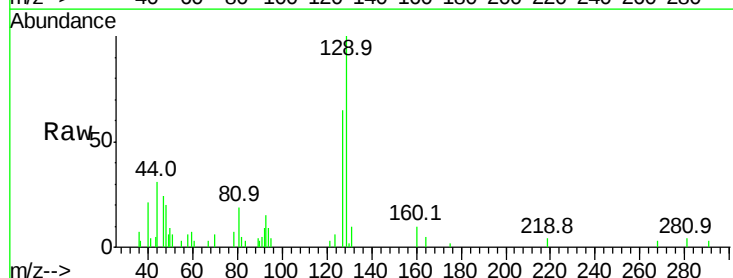
Acq: 6 Aug 2019 9:07

Tgt Ion: 129 Resp: 8959

Ion Ratio Lower Upper

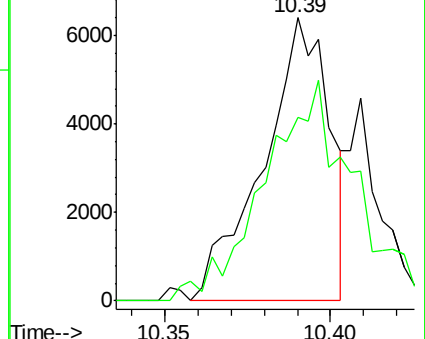
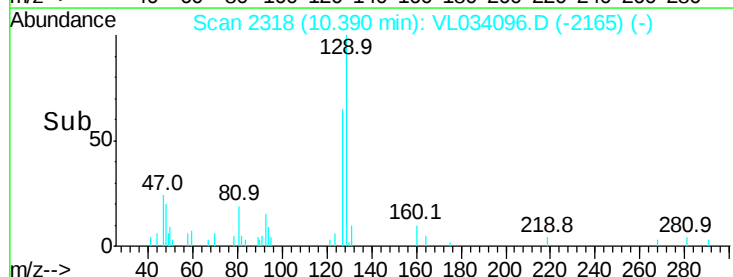
129 100

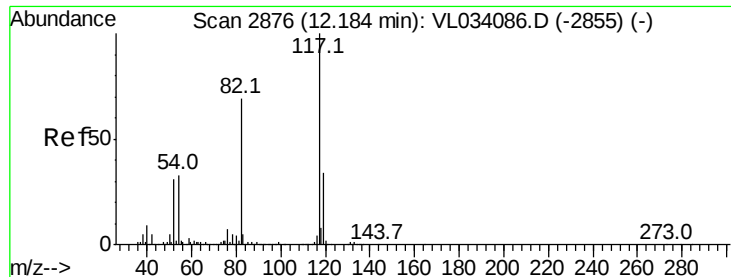
127 105.1 39.4 118.2



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.18 min Scan# 2875

Delta R.T. -0.00 min

Lab File: VL034096.D

Acq: 6 Aug 2019 9:07

Instrument :

MSVOA_L

ClientSampleId :

E049-1100

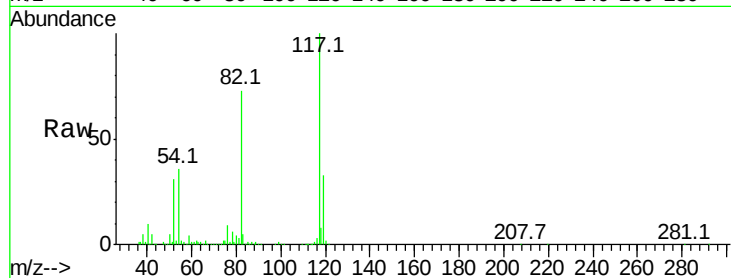
Tgt Ion:117 Resp: 2439511

Ion Ratio Lower Upper

117 100

82 72.6 52.2 78.4

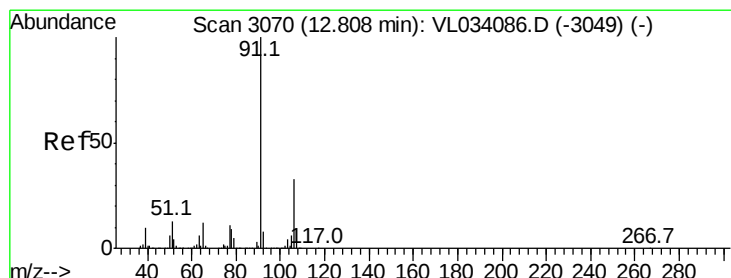
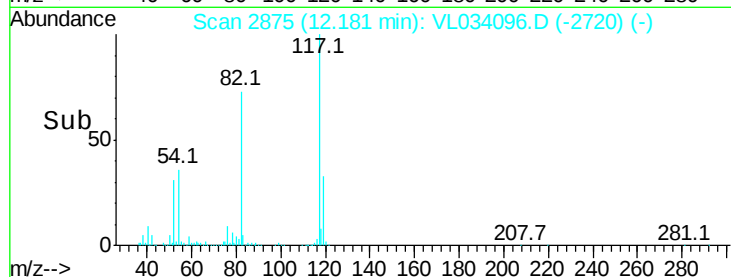
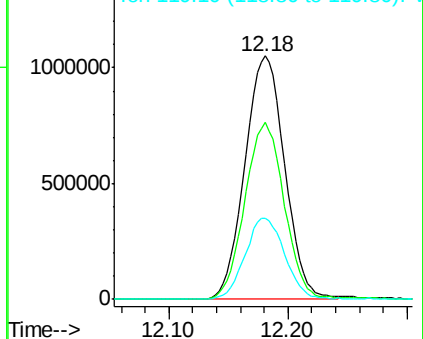
119 33.4 44.8 67.2#



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



#58

Ethyl Benzene

Concen: 18.440 ppbv

RT: 12.81 min Scan# 3071

Delta R.T. 0.00 min

Lab File: VL034096.D

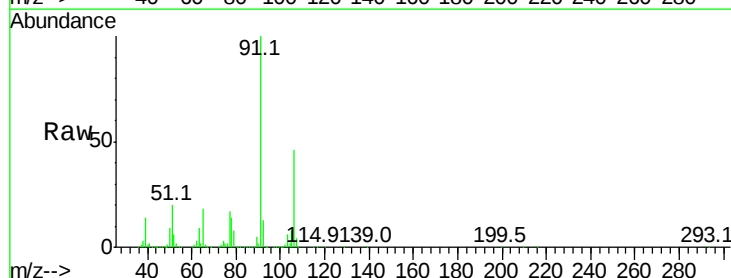
Acq: 6 Aug 2019 9:07

Tgt Ion: 91 Resp: 7564229

Ion Ratio Lower Upper

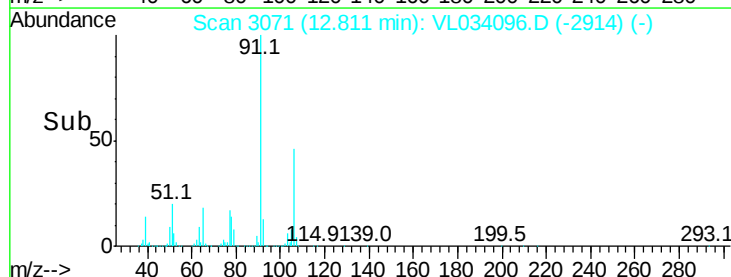
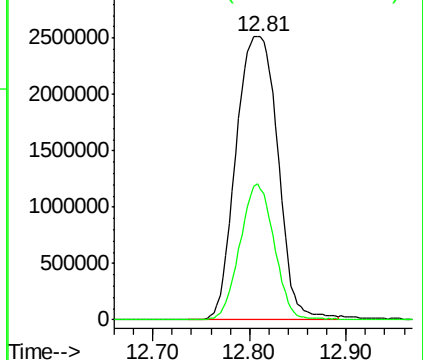
91 100

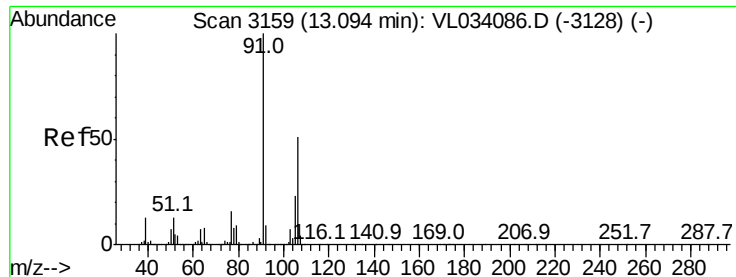
106 46.5 26.0 39.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

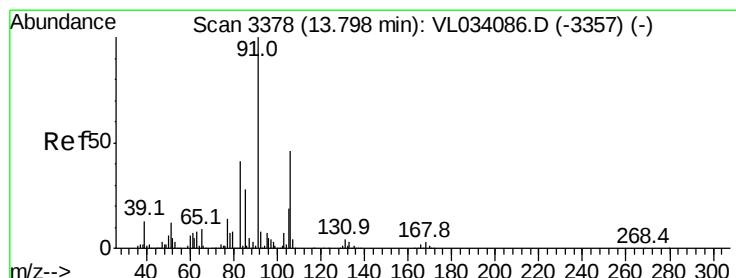
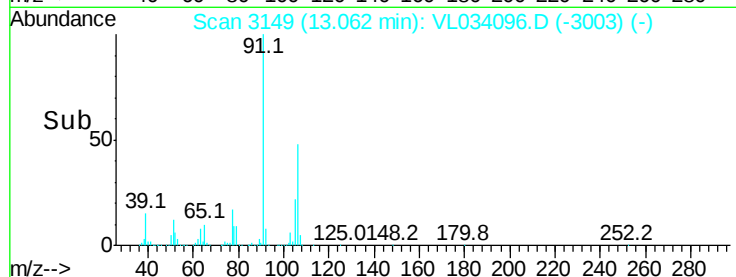
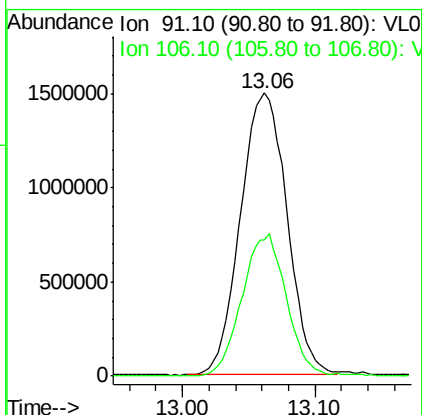
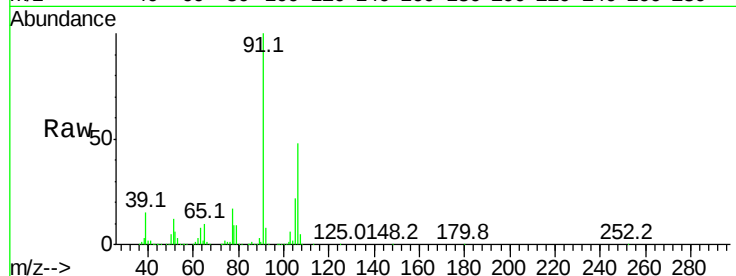




#59
m/p-Xylene
Concen: 11.116 ppbv
RT: 13.06 min Scan# 3149
Delta R.T. -0.03 min
Lab File: VL034096.D
Acq: 6 Aug 2019 9:07

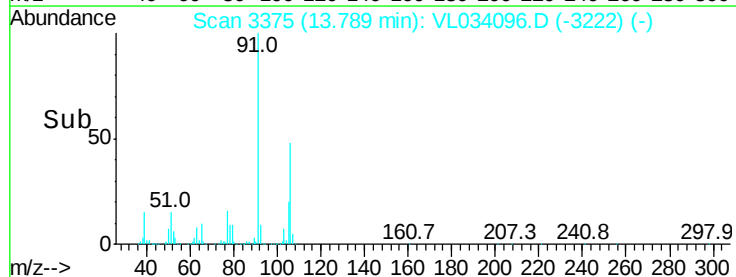
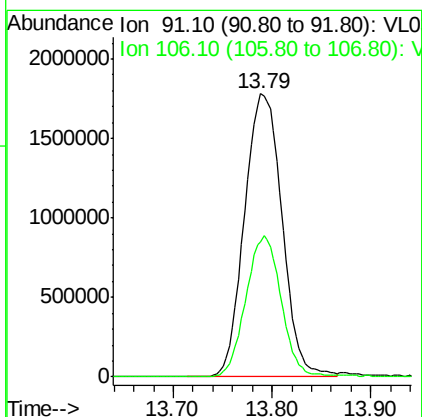
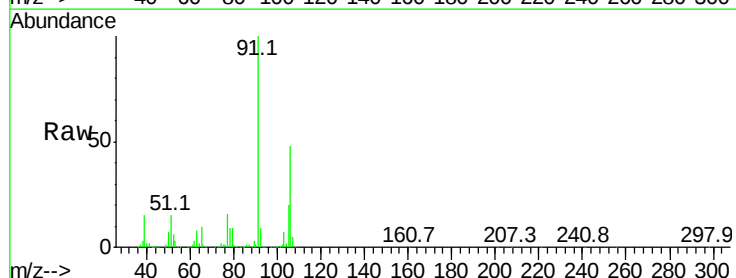
Instrument :
MSVOA_L
ClientSampleId :
E049-1100

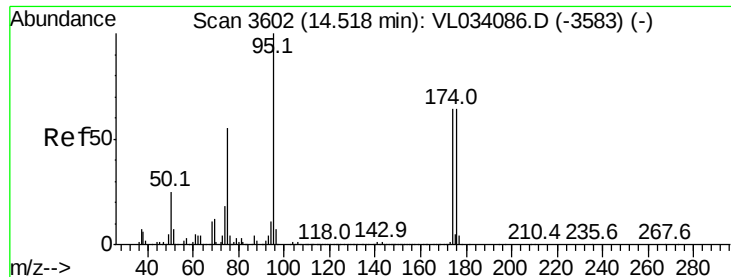
Tgt Ion: 91 Resp: 3660206
Ion Ratio Lower Upper
91 100
106 48.2 38.7 58.1



#60
o-Xylene
Concen: 14.269 ppbv
RT: 13.79 min Scan# 3375
Delta R.T. -0.01 min
Lab File: VL034096.D
Acq: 6 Aug 2019 9:07

Tgt Ion: 91 Resp: 4695347
Ion Ratio Lower Upper
91 100
106 47.0 22.6 67.7

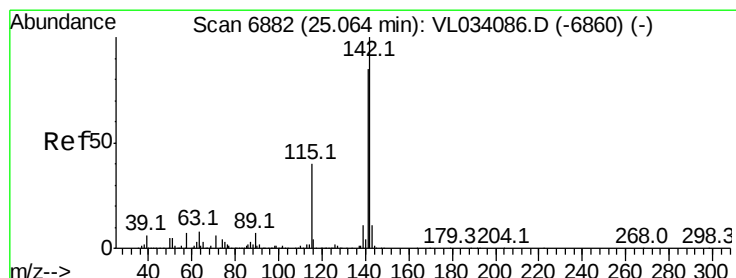
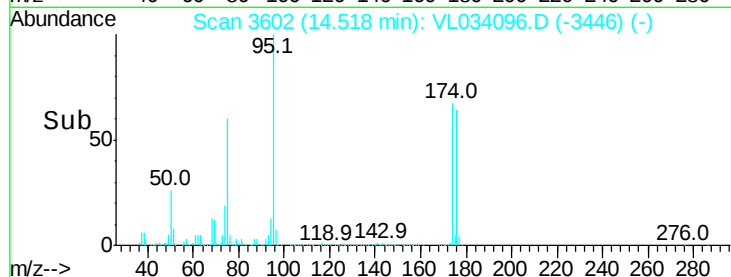
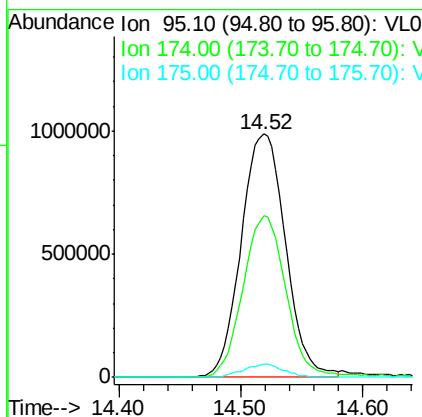
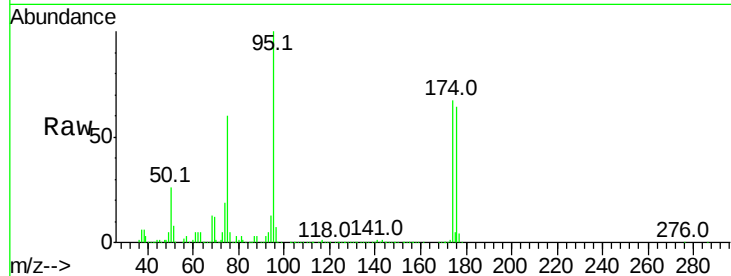




#68
 1-Bromo-4-Fluorobenzene
 Concen: 12.527 ppbv
 RT: 14.52 min Scan# 3602
 Delta R.T. 0.00 min
 Lab File: VL034096.D
 Acq: 6 Aug 2019 9:07

Instrument :
 MSVOA_L
 ClientSampleId :
 E049-1100

Tgt Ion: 95 Resp: 2479606
 Ion Ratio Lower Upper
 95 100
 174 65.5 53.0 79.6
 175 5.0 4.2 6.2



#80
 Naphthalene, 2-methyl-
 Concen: 0.052 ppbv
 RT: 25.38 min Scan# 6981
 Delta R.T. 0.32 min
 Lab File: VL034096.D
 Acq: 6 Aug 2019 9:07

Tgt Ion: 142 Resp: 6607
 Ion Ratio Lower Upper
 142 100
 141 79.9 66.1 99.1
 115 45.1 30.8 46.2

