

Data File : VL035404.D
Acq On : 13 Aug 2020 17:05
Operator : SY/AP
Sample : L3510-01DL 4X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
E053-1100DL

Quant Time: Aug 14 04:29:33 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Aug 12 20:32:44 2020
QLast Update : Wed Aug 12 20:32:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1485171	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3289678	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	3127535	10.00	ppbv	-0.01

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.43 95 2762472 10.94 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 109.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.96	51	6710	0.039	ppbv #	90
4) Chloromethane	3.13	50	3252	0.034	ppbv #	74
6) Bromomethane	3.47	94	498436	9.425	ppbv	98
9) Propene	3.02	41	12065	0.135	ppbv	87
13) Ethanol	3.61	45	84855	2.893	ppbv	91
15) Acetone	3.85	43	87744	0.469	ppbv	93
17) tert-Butyl alcohol	4.29	59	37495	0.172	ppbv #	74
18) 1,1-Dichloroethene	4.29	96	478347	7.073	ppbv	99
19) Isopropyl Alcohol	3.99	45	4475	0.031	ppbv #	1
20) Methylene Chloride	4.34	84	517927	7.332	ppbv	98
25) Ethyl Acetate	5.69	43	158617	0.411	ppbv #	78
26) Hexane	5.68	57	230137	1.362	ppbv #	40
29) Chloroform	5.75	83	1349382	5.597	ppbv	99
38) Trichloroethene	7.84	130	945805	7.651	ppbv	95
39) 1,2-Dichloropropane	7.18	63	939452	7.521	ppbv #	25
42) Bromodichloromethane	7.79	83	2471544	10.020	ppbv	99
47) 1,1,2-Trichloroethane	9.48	97	849107	6.702	ppbv	99
48) Dibromochloromethane	10.31	129	1332698	6.581	ppbv	100
58) Ethyl Benzene	12.72	91	2561242	5.181	ppbv	97
59) m/p-Xylene	12.72	91	2561242	6.213	ppbv #	76
74) 1,2,4-Trimethylbenzene	16.77	105	22898	0.048	ppbv #	69
75) 1,3-Dichlorobenzene	17.15	146	2172575	8.286	ppbv	99
76) 1,4-Dichlorobenzene	17.15	146	2172575	8.067	ppbv	98
77) 1,2-Dichlorobenzene	17.83	146	2108899	7.978	ppbv	99

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

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E053-1100DL

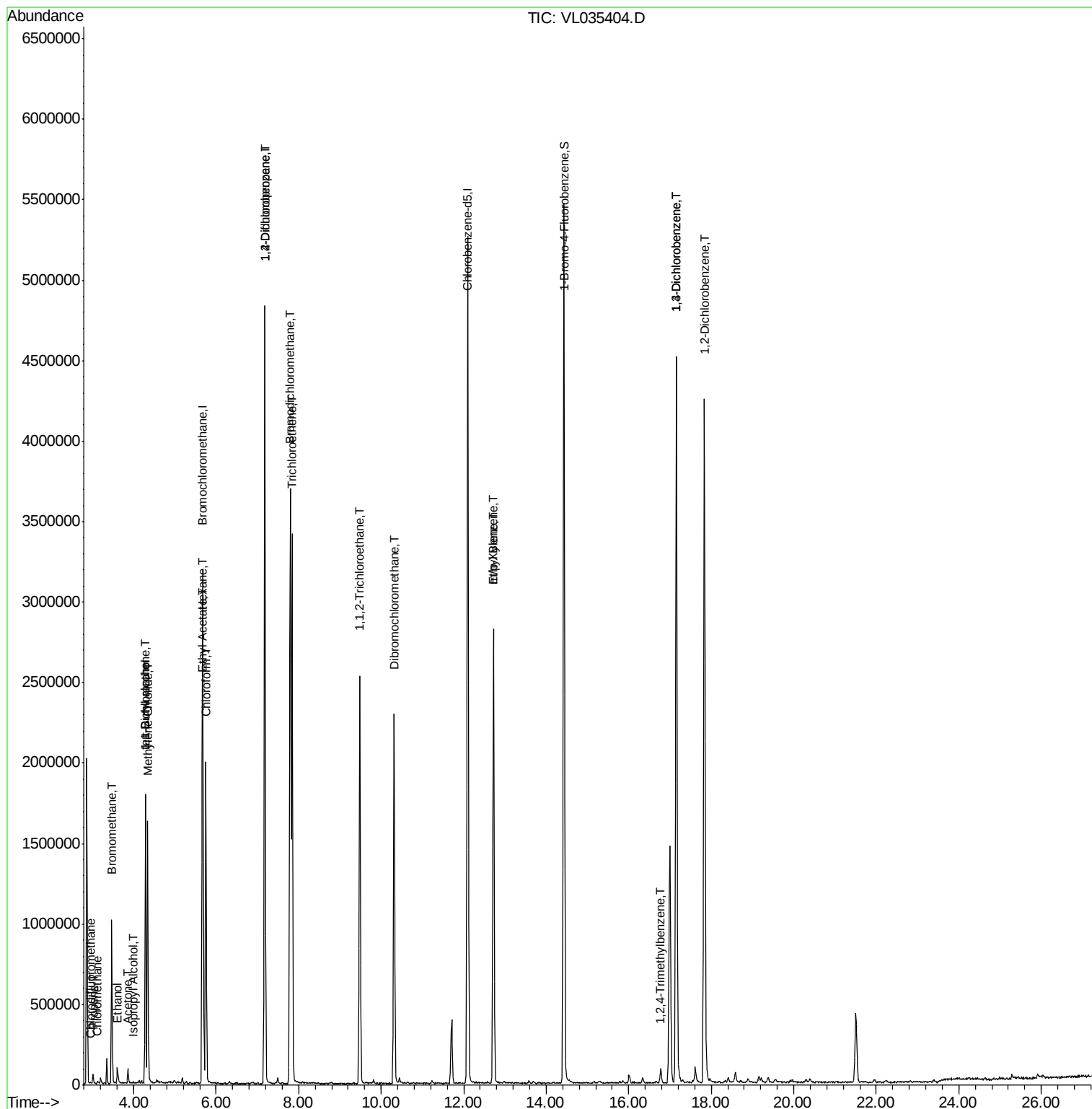
Quant Time: Aug 14 04:29:33 2020

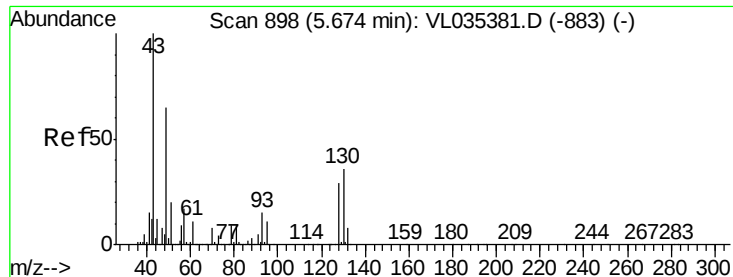
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug 12 20:32:44 2020

QLast Update : Wed Aug 12 20:32:44 2020

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.01 min

Lab File: VL035404.D

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Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

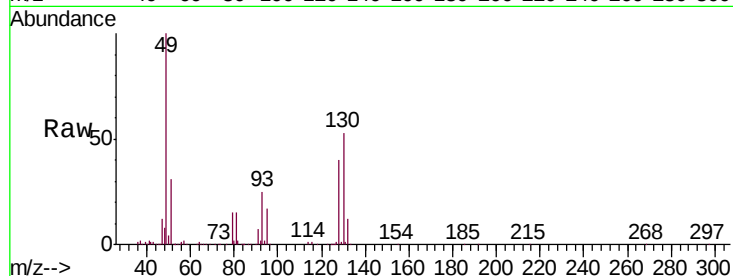
Tgt Ion: 49 Resp: 1485171

Ion Ratio Lower Upper

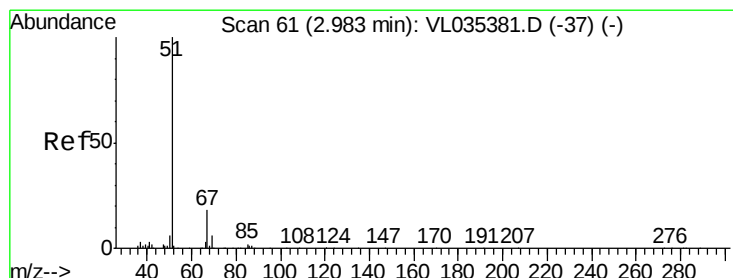
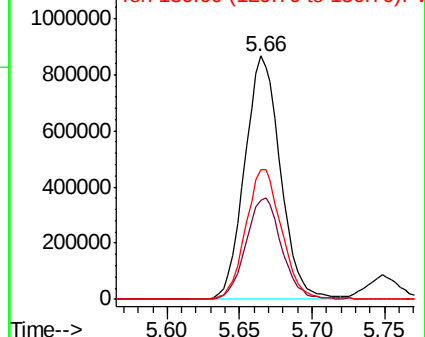
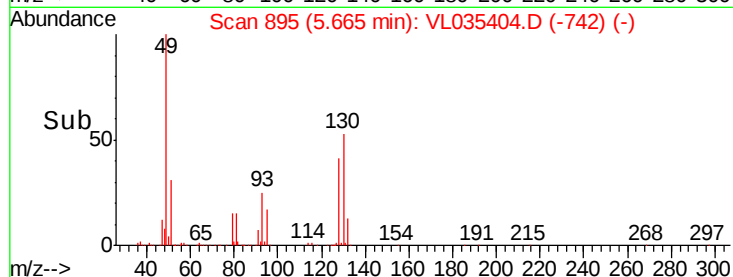
49 100

128 41.9 21.8 65.3

130 53.8 27.9 83.6



Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#3

Chlorodifluoromethane

Concen: 0.039 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.02 min

Lab File: VL035404.D

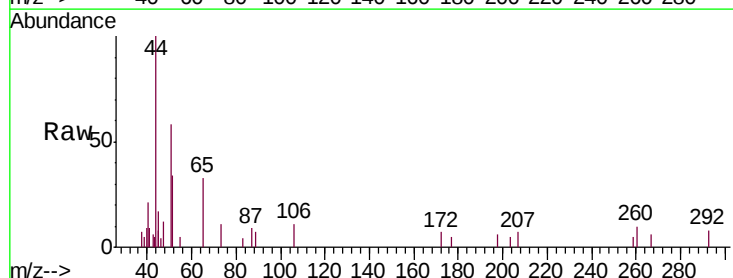
Acq: 13 Aug 2020 17:05

Tgt Ion: 51 Resp: 6710

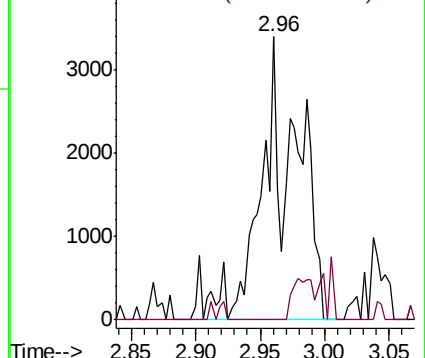
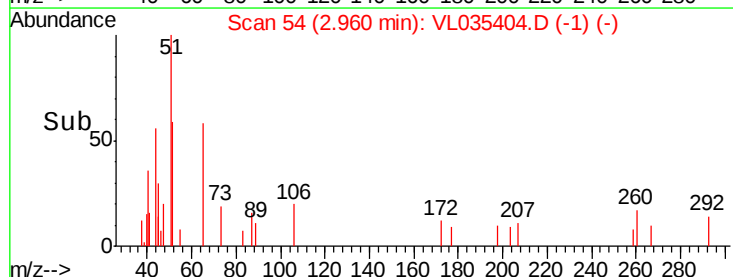
Ion Ratio Lower Upper

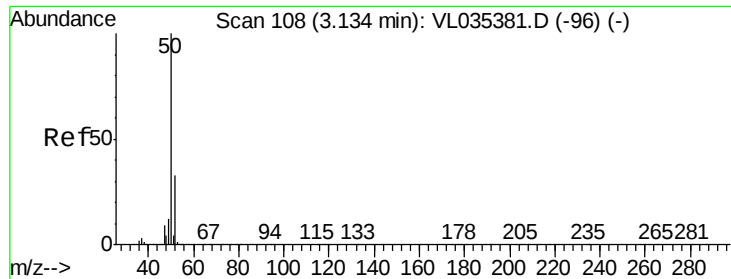
51 100

67 13.1 14.1 21.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0
Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.034 ppbv

RT: 3.13 min Scan# 108

Delta R.T. 0.00 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

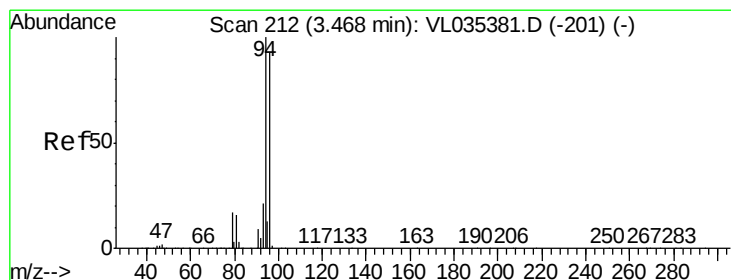
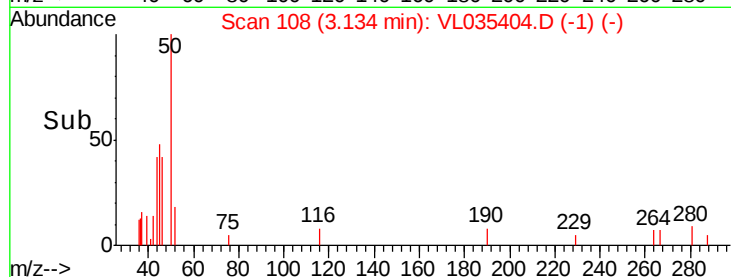
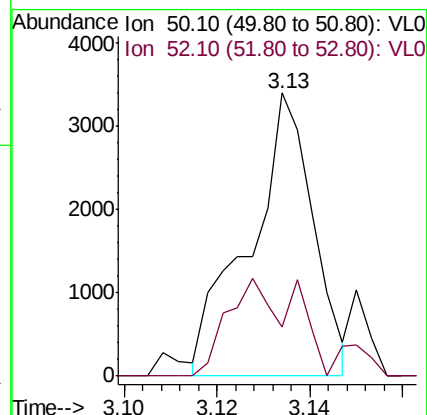
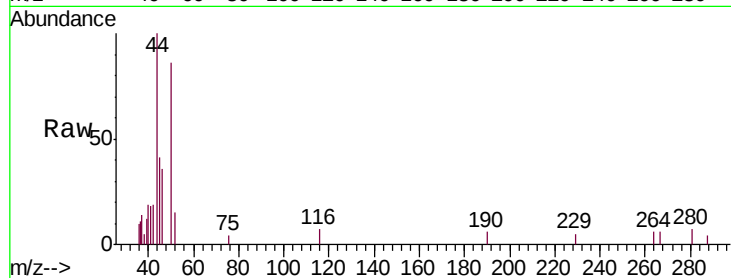
E053-1100DL

Tgt Ion: 50 Resp: 3252

Ion Ratio Lower Upper

50 100

52 18.4 26.6 39.8#



#6

Bromomethane

Concen: 9.425 ppbv

RT: 3.47 min Scan# 212

Delta R.T. 0.00 min

Lab File: VL035404.D

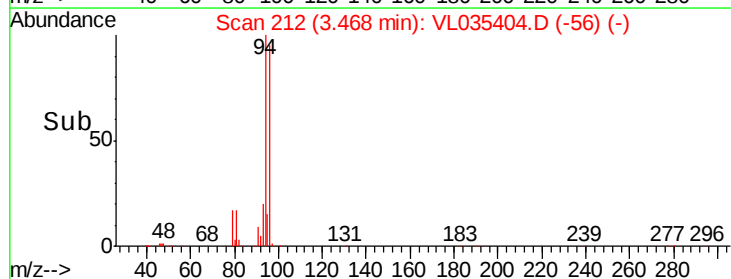
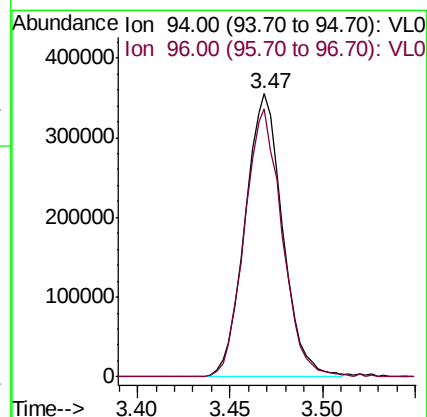
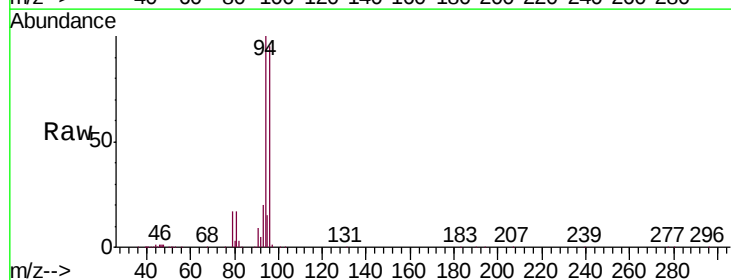
Acq: 13 Aug 2020 17:05

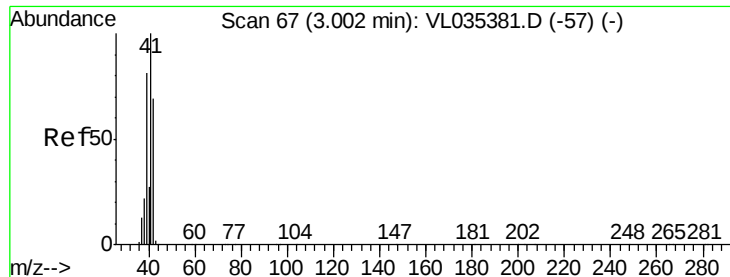
Tgt Ion: 94 Resp: 498436

Ion Ratio Lower Upper

94 100

96 94.6 74.4 111.6





#9

Propene

Concen: 0.135 ppbv

RT: 3.02 min Scan# 71

Delta R.T. 0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

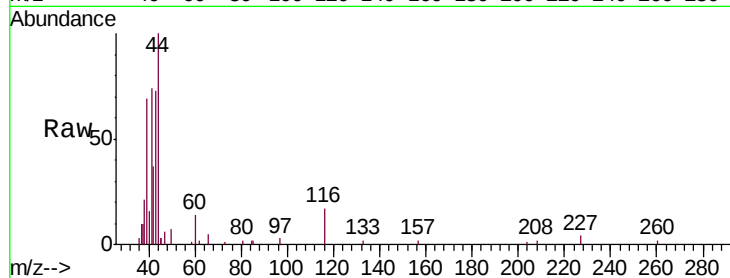
E053-1100DL

Tgt Ion: 41 Resp: 12065

Ion Ratio Lower Upper

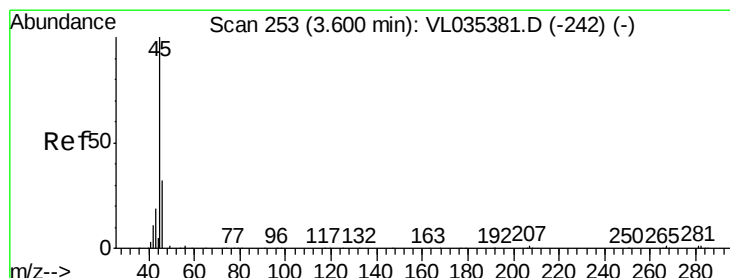
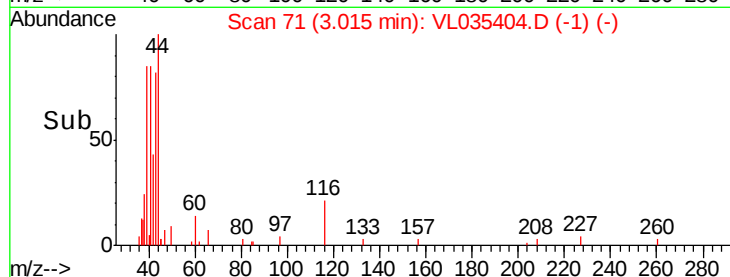
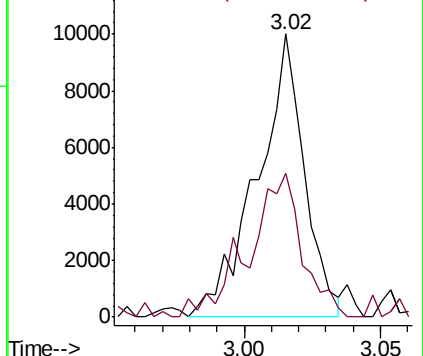
41 100

42 58.8 55.4 83.2



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#13

Ethanol

Concen: 2.893 ppbv

RT: 3.61 min Scan# 255

Delta R.T. 0.01 min

Lab File: VL035404.D

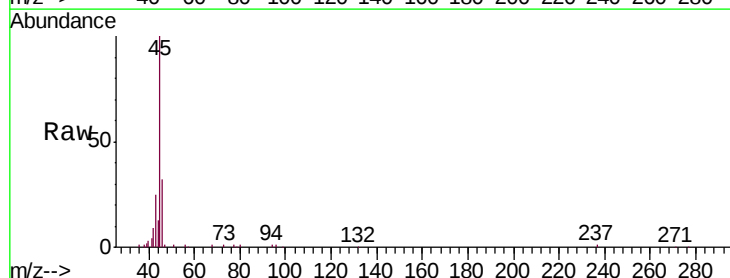
Acq: 13 Aug 2020 17:05

Tgt Ion: 45 Resp: 84855

Ion Ratio Lower Upper

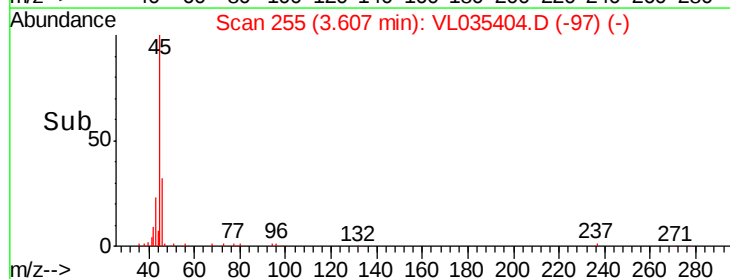
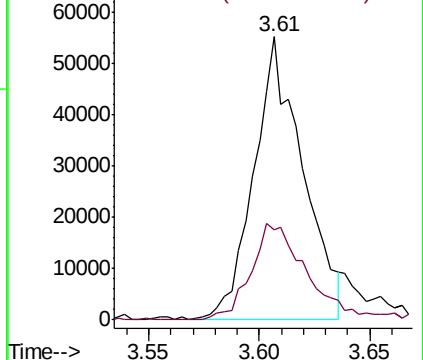
45 100

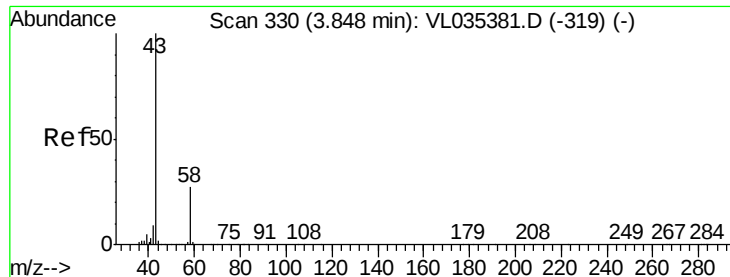
46 40.4 14.1 56.3



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 0.469 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

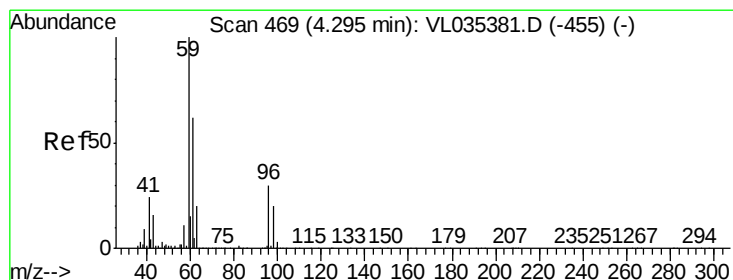
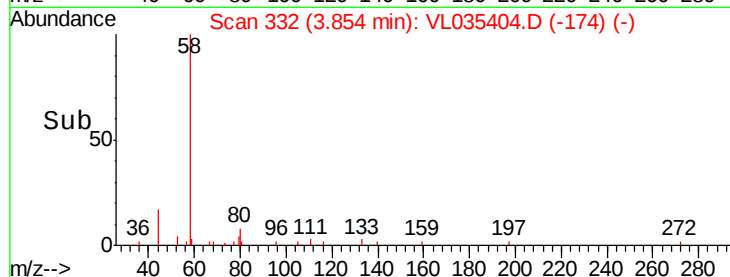
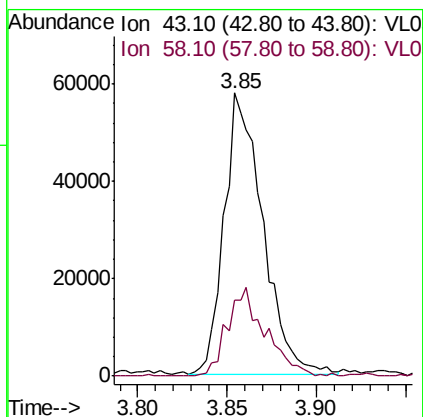
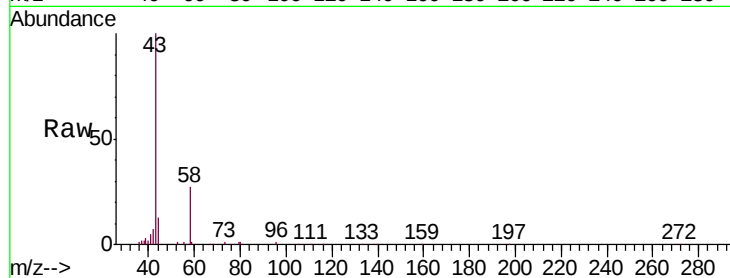
E053-1100DL

Tgt Ion: 43 Resp: 87744

Ion Ratio Lower Upper

43 100

58 30.9 21.7 32.5



#17

tert-Butyl alcohol

Concen: 0.172 ppbv

RT: 4.29 min Scan# 466

Delta R.T. -0.01 min

Lab File: VL035404.D

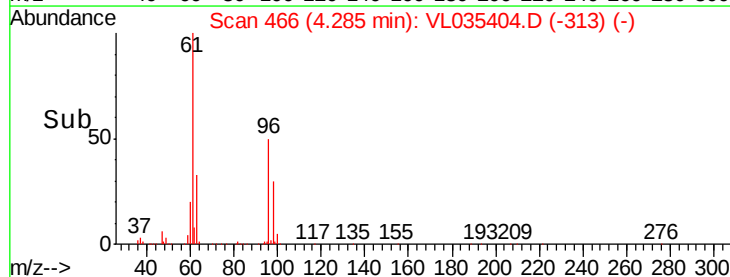
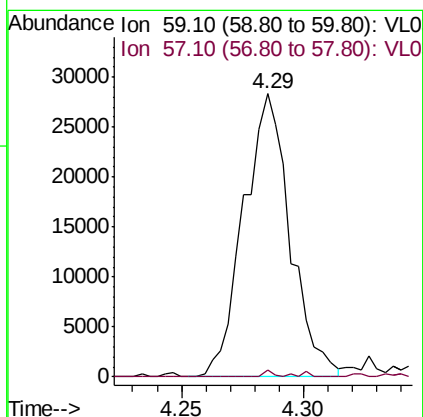
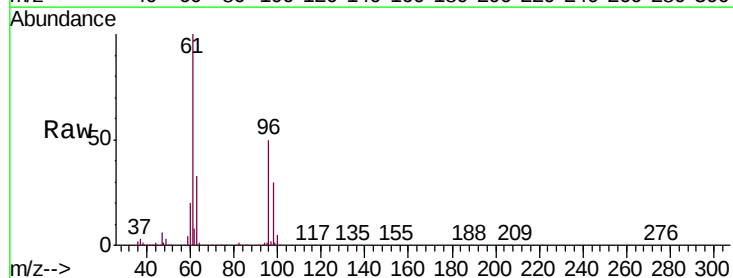
Acq: 13 Aug 2020 17:05

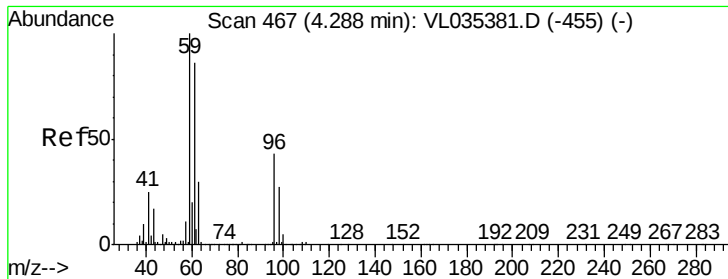
Tgt Ion: 59 Resp: 37495

Ion Ratio Lower Upper

59 100

57 0.9 8.6 13.0#

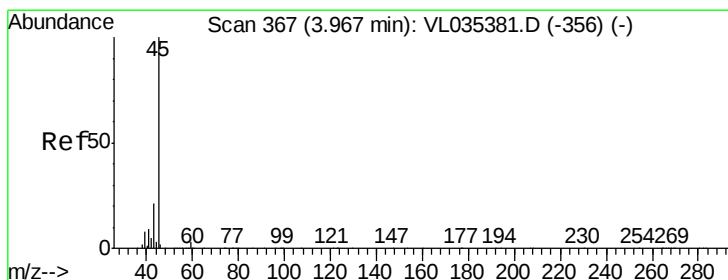
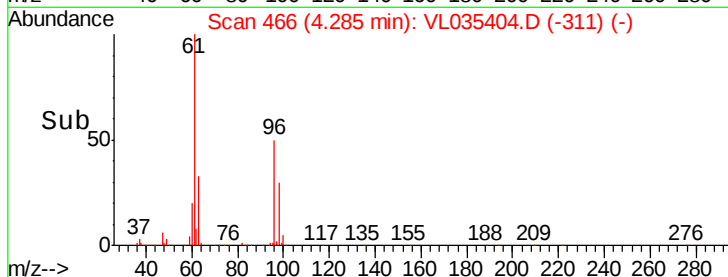
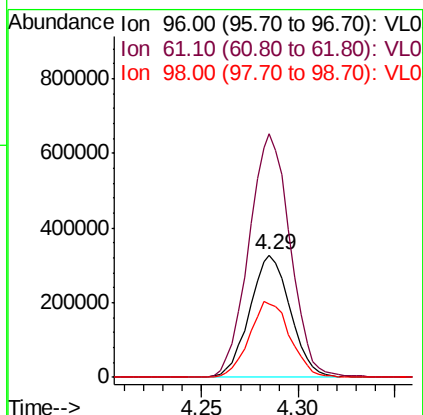
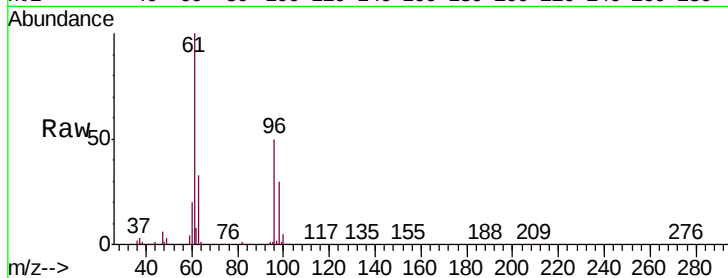




#18
 1,1-Dichloroethene
 Concen: 7.073 ppbv
 RT: 4.29 min Scan# 466
 Delta R.T. -0.00 min
 Lab File: VL035404.D
 Acq: 13 Aug 2020 17:05

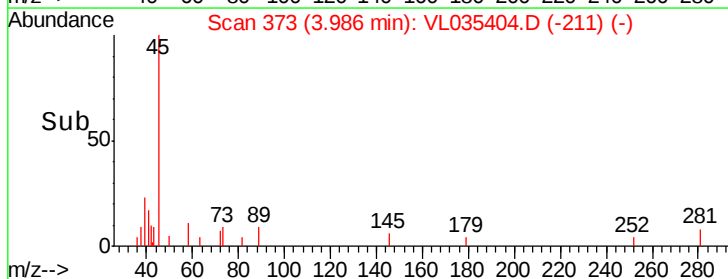
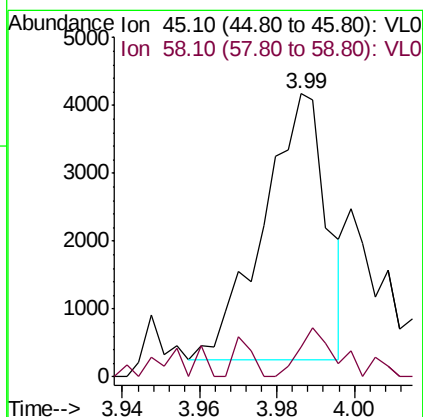
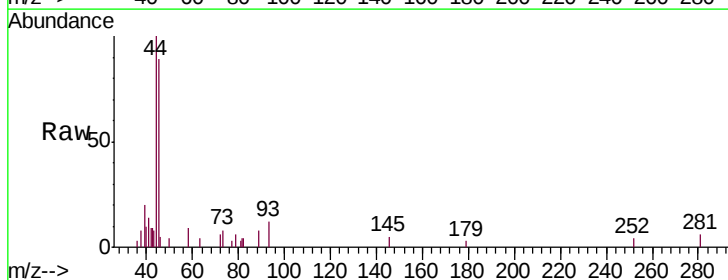
Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100DL

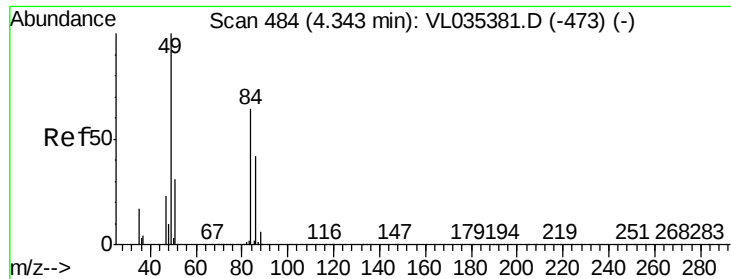
Tgt Ion: 96 Resp: 478347
 Ion Ratio Lower Upper
 96 100
 61 198.7 159.0 238.4
 98 60.3 50.3 75.5



#19
 Isopropyl Alcohol
 Concen: 0.031 ppbv
 RT: 3.99 min Scan# 373
 Delta R.T. 0.02 min
 Lab File: VL035404.D
 Acq: 13 Aug 2020 17:05

Tgt Ion: 45 Resp: 4475
 Ion Ratio Lower Upper
 45 100
 58 606.7 24.9 37.3#

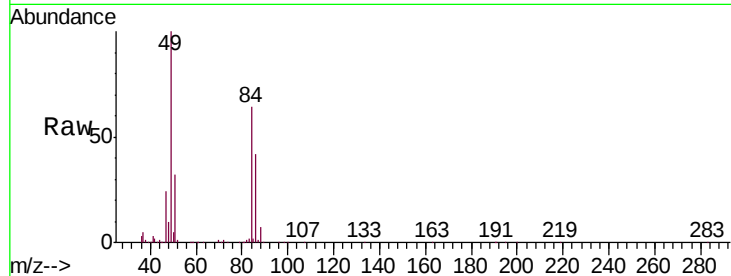




#20
Methylene Chloride
Concen: 7.332 ppbv
RT: 4.34 min Scan# 483
Delta R.T. -0.00 min
Lab File: VL035404.D
Acq: 13 Aug 2020 17:05

Instrument :
MSVOA_L
ClientSampleId :
E053-1100DL

Tgt Ion:	84	Resp:	517927
Ion	Ratio	Lower	Upper
84	100		
49	154.5	125.7	188.5
51	50.1	38.5	57.7
86	64.9	52.4	78.6



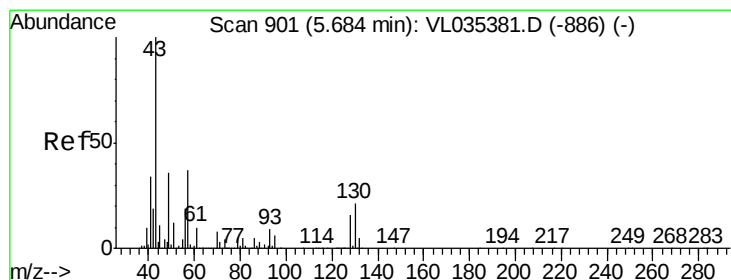
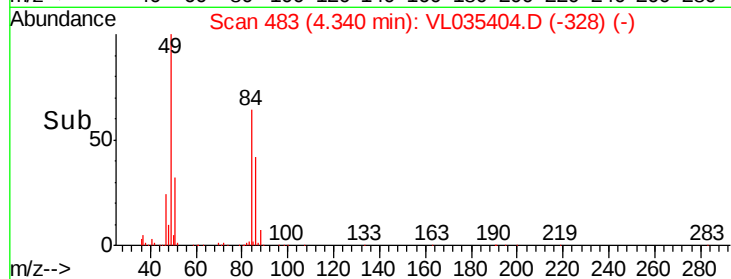
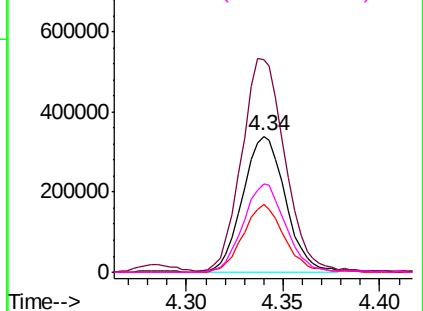
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

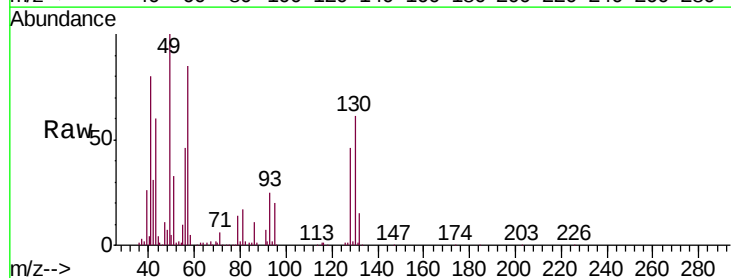
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#25
Ethyl Acetate
Concen: 0.411 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.00 min
Lab File: VL035404.D
Acq: 13 Aug 2020 17:05

Tgt Ion:	43	Resp:	158617
Ion	Ratio	Lower	Upper
43	100		
45	0.7	8.0	12.0#
61	0.6	7.4	11.2#
70	1.8	5.9	8.9#



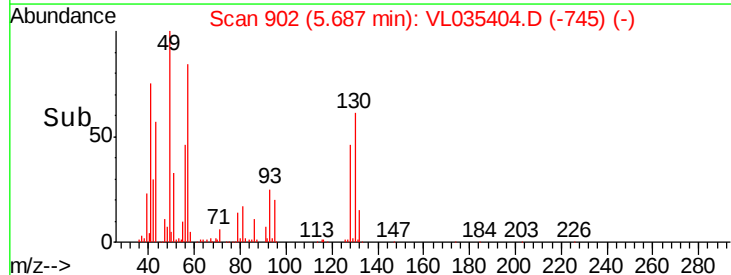
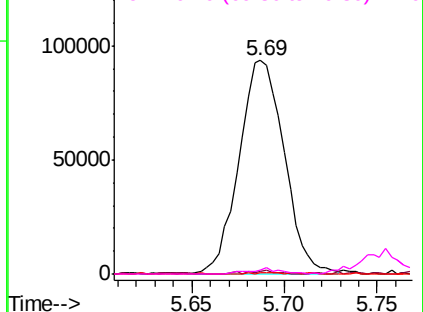
Abundance

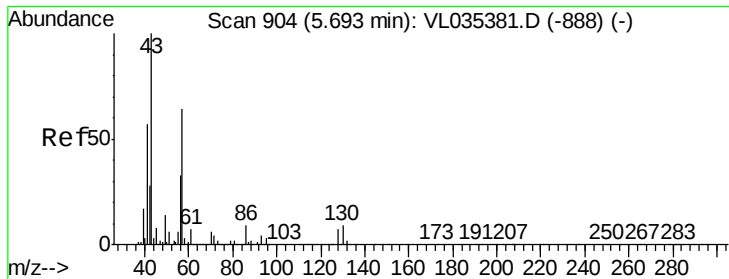
Ion 43.10 (42.80 to 43.80): VL0

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: 1.362 ppbv

RT: 5.68 min Scan# 901

Delta R.T. -0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

Tgt Ion: 57 Resp: 230137

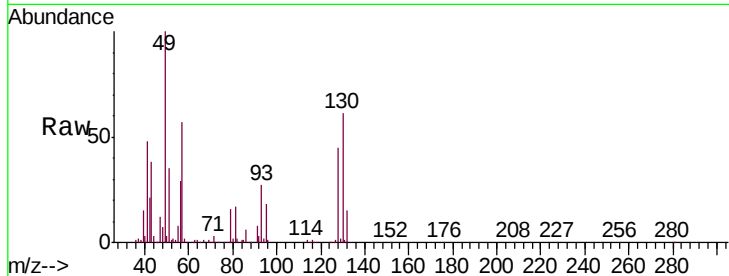
Ion Ratio Lower Upper

57 100

41 90.0 75.4 113.2

43 69.6 184.1 276.1#

56 52.5 42.2 63.4

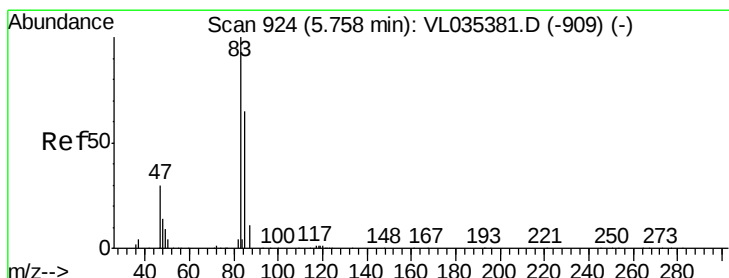
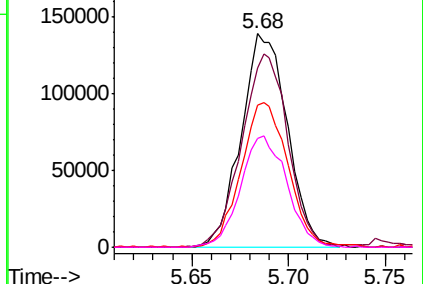
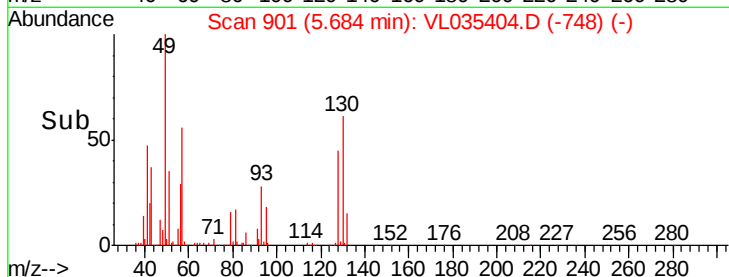


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 5.597 ppbv

RT: 5.75 min Scan# 922

Delta R.T. -0.01 min

Lab File: VL035404.D

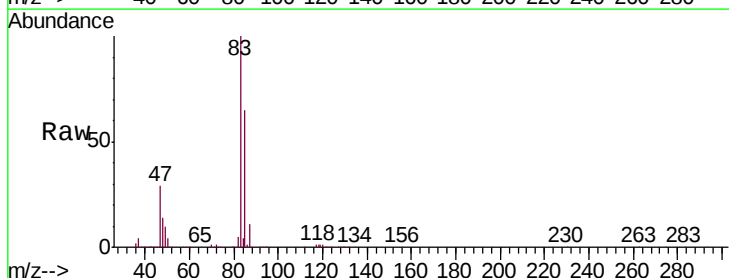
Acq: 13 Aug 2020 17:05

Tgt Ion: 83 Resp: 1349382

Ion Ratio Lower Upper

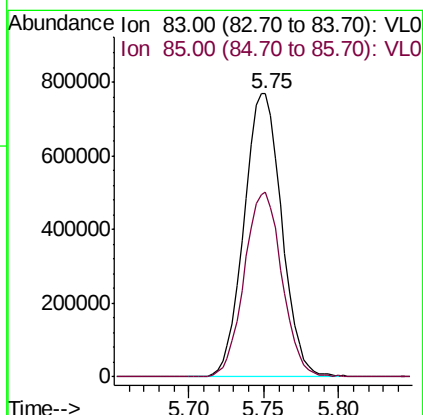
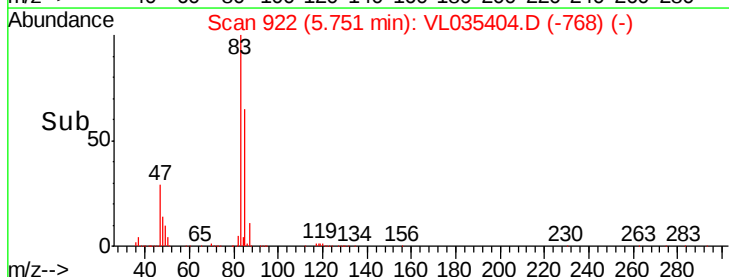
83 100

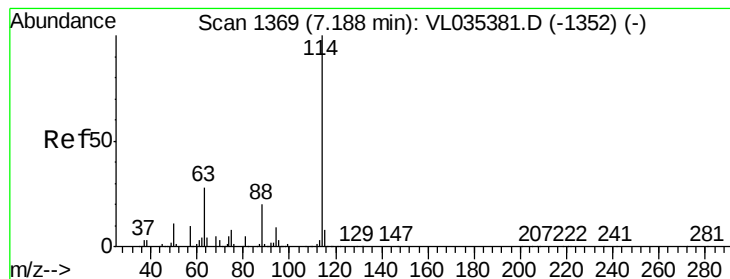
85 65.4 51.7 77.5



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

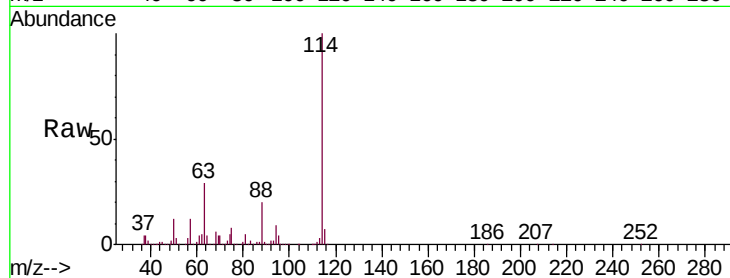
Tgt Ion:114 Resp: 3289678

Ion Ratio Lower Upper

114 100

63 28.7 21.5 32.3

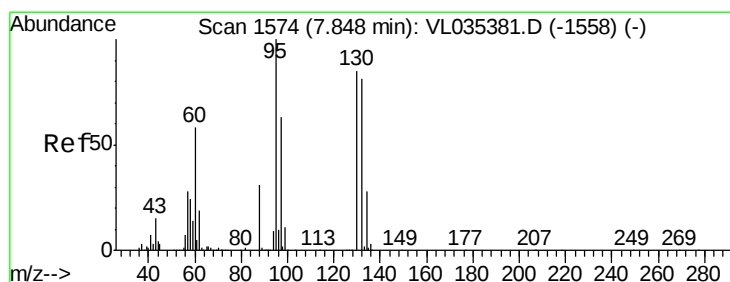
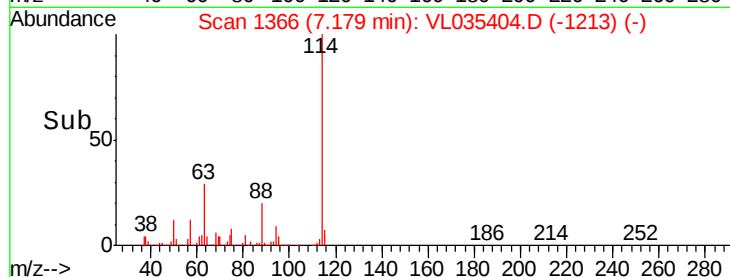
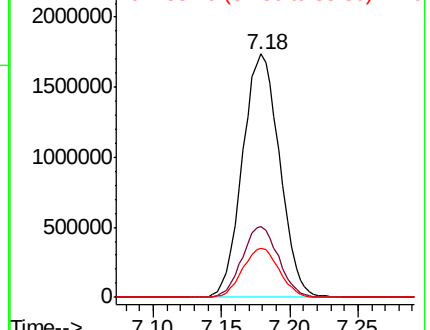
88 19.9 15.6 23.4



Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#38

Trichloroethene

Concen: 7.651 ppbv

RT: 7.84 min Scan# 1571

Delta R.T. -0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Tgt Ion:130 Resp: 945805

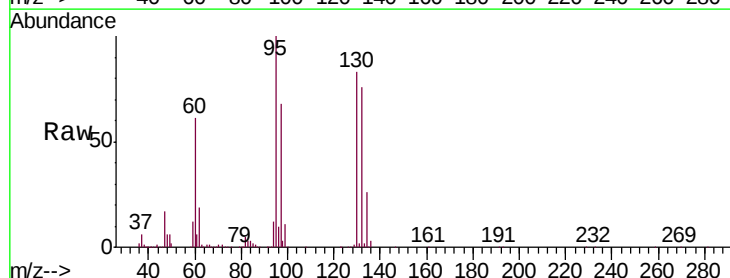
Ion Ratio Lower Upper

130 100

95 120.6 94.2 141.4

132 91.4 76.6 114.8

97 81.5 59.3 88.9

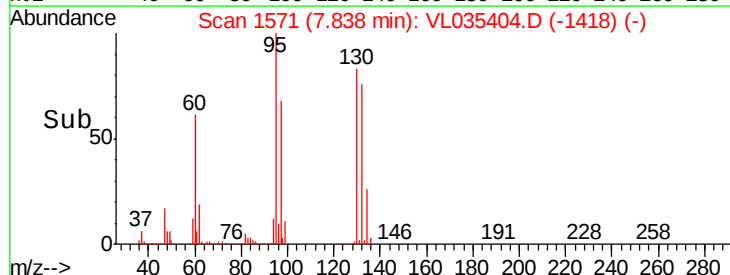
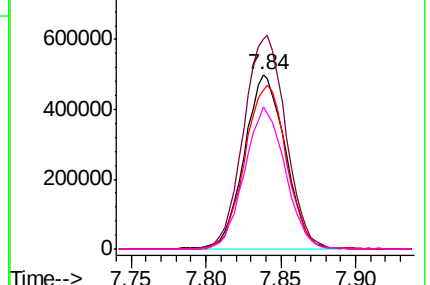


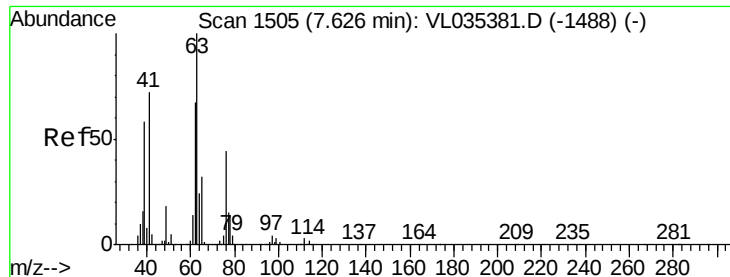
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0

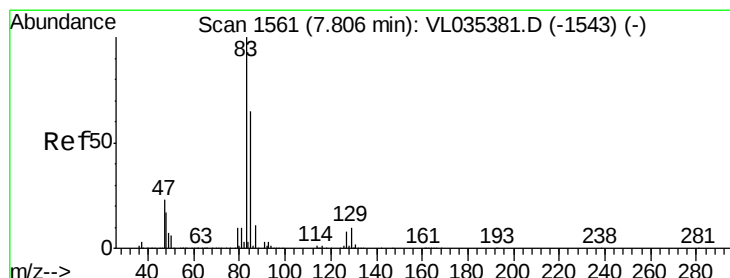
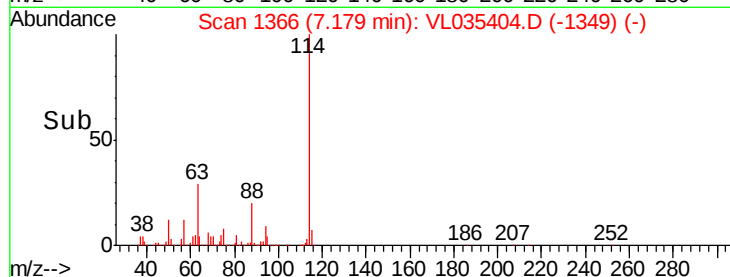
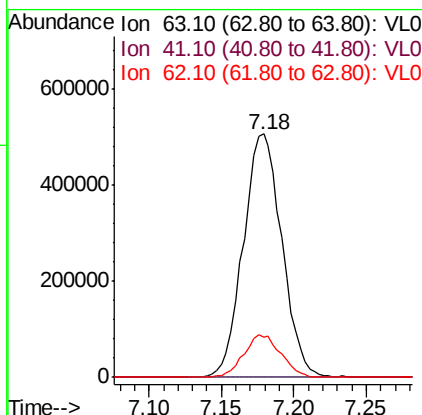
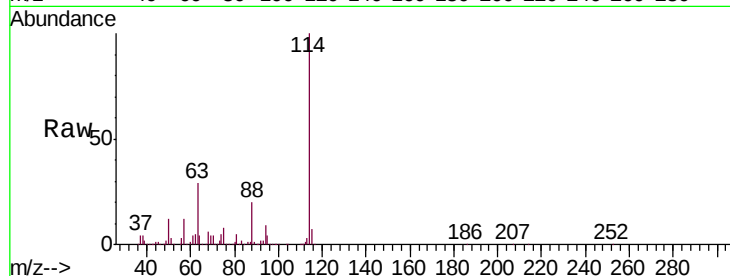




#39
 1,2-Dichloropropane
 Concen: 7.521 ppbv
 RT: 7.18 min Scan# 1366
 Delta R.T. -0.45 min
 Lab File: VL035404.D
 Acq: 13 Aug 2020 17:05

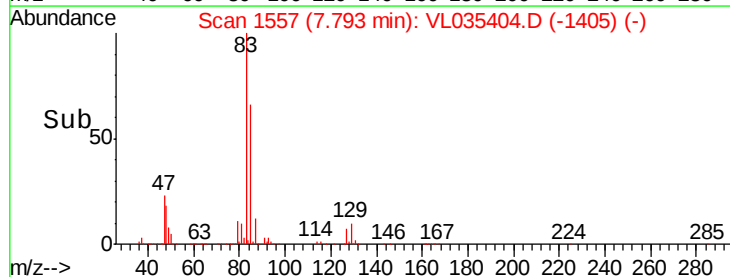
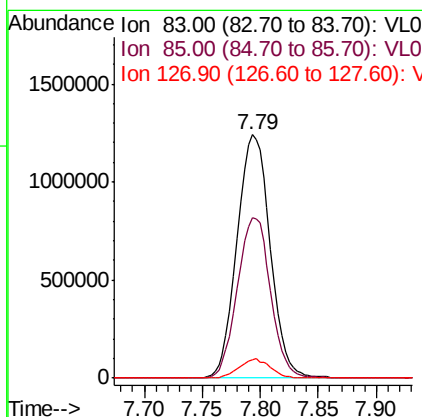
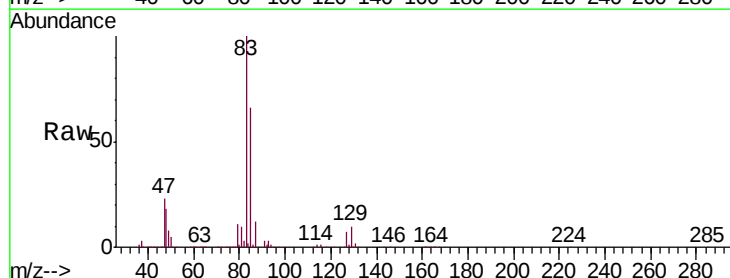
Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100DL

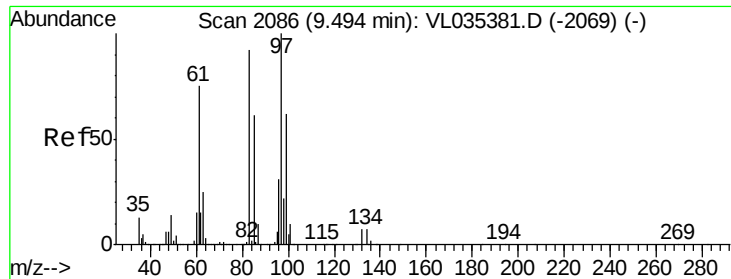
Tgt Ion: 63 Resp: 939452
 Ion Ratio Lower Upper
 63 100
 41 0.0 57.4 86.2#
 62 16.7 53.6 80.4#



#42
 Bromodichloromethane
 Concen: 10.020 ppbv
 RT: 7.79 min Scan# 1557
 Delta R.T. -0.01 min
 Lab File: VL035404.D
 Acq: 13 Aug 2020 17:05

Tgt Ion: 83 Resp: 2471544
 Ion Ratio Lower Upper
 83 100
 85 65.6 52.2 78.4
 127 7.3 6.3 9.5

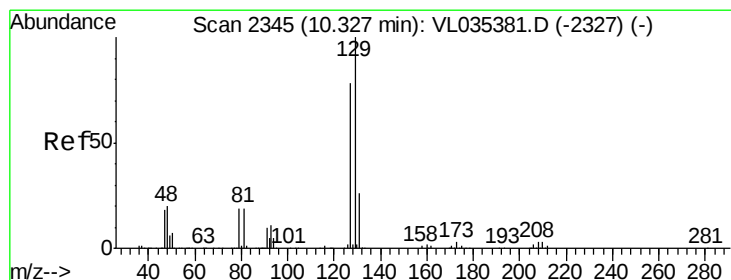
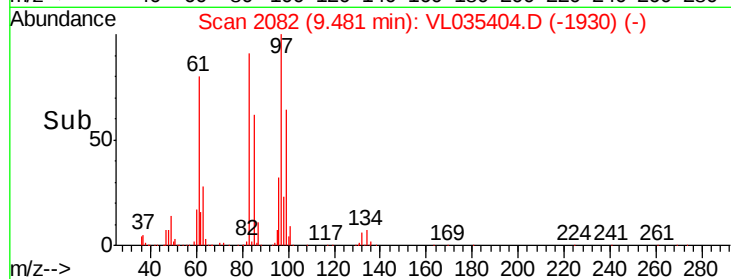
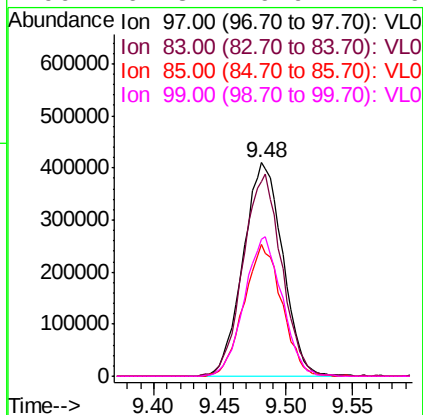
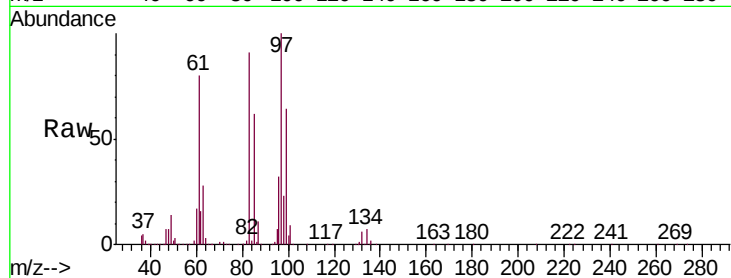




#47
 1,1,2-Trichloroethane
 Concen: 6.702 ppbv
 RT: 9.48 min Scan# 2082
 Delta R.T. -0.01 min
 Lab File: VL035404.D
 Acq: 13 Aug 2020 17:05

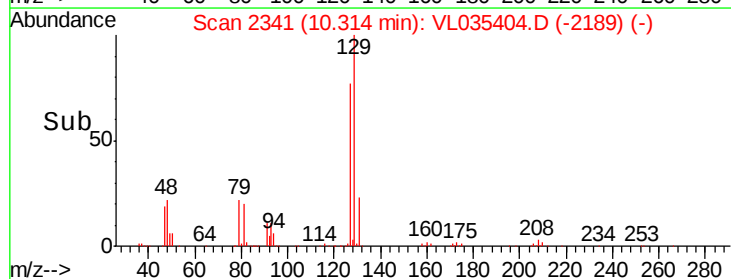
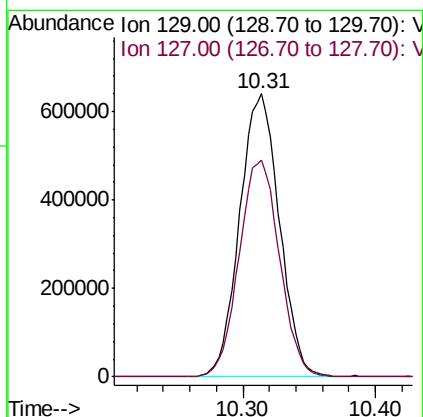
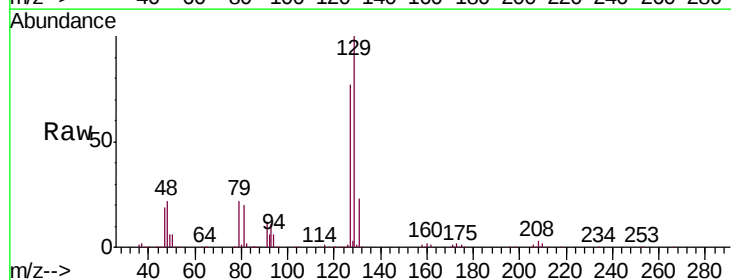
Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100DL

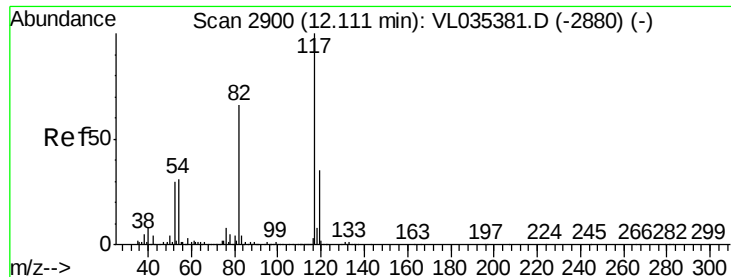
Tgt Ion:	97	Resp:	849107
Ion	Ratio	Lower	Upper
97	100		
83	91.4	73.9	110.9
85	61.8	49.0	73.6
99	64.3	49.9	74.9



#48
 Dibromochloromethane
 Concen: 6.581 ppbv
 RT: 10.31 min Scan# 2341
 Delta R.T. -0.01 min
 Lab File: VL035404.D
 Acq: 13 Aug 2020 17:05

Tgt Ion:	129	Resp:	1332698
Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.3	117.8





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2896

Delta R.T. -0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

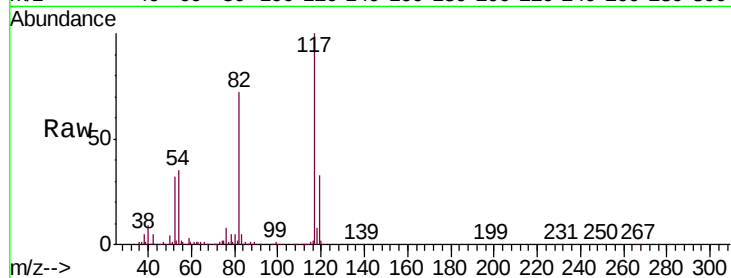
Tgt Ion:117 Resp: 3127535

Ion Ratio Lower Upper

117 100

82 72.2 53.0 79.6

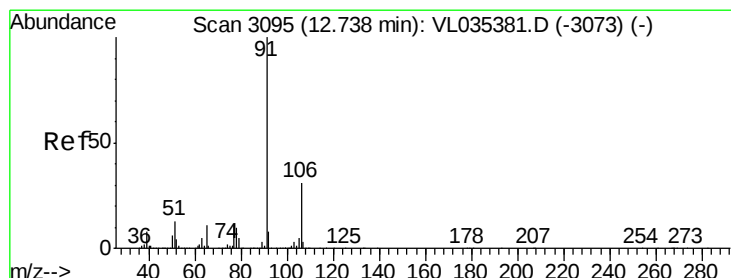
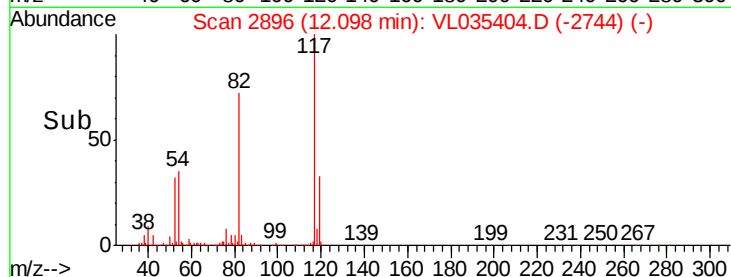
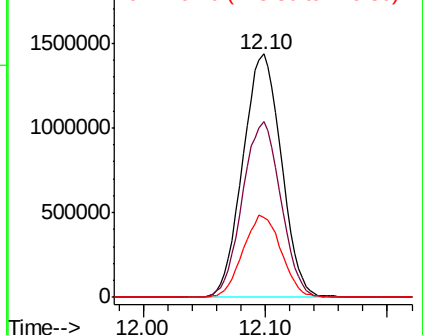
119 33.6 25.7 38.5



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: 5.181 ppbv

RT: 12.72 min Scan# 3090

Delta R.T. -0.02 min

Lab File: VL035404.D

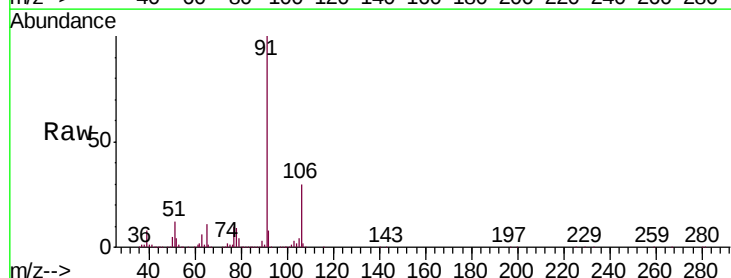
Acq: 13 Aug 2020 17:05

Tgt Ion: 91 Resp: 2561242

Ion Ratio Lower Upper

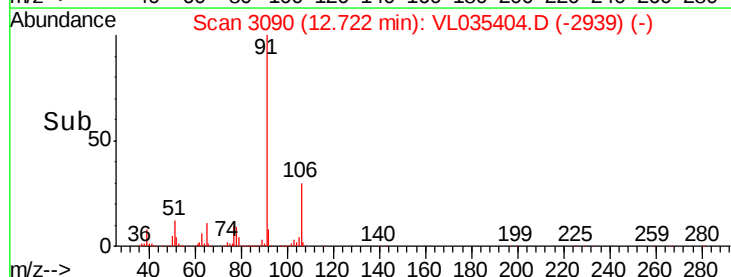
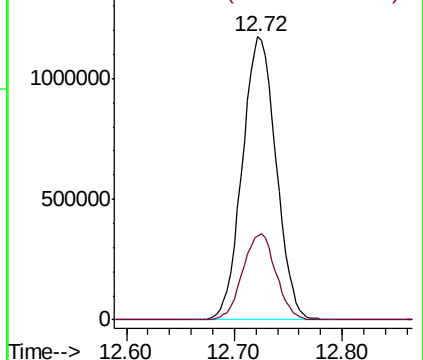
91 100

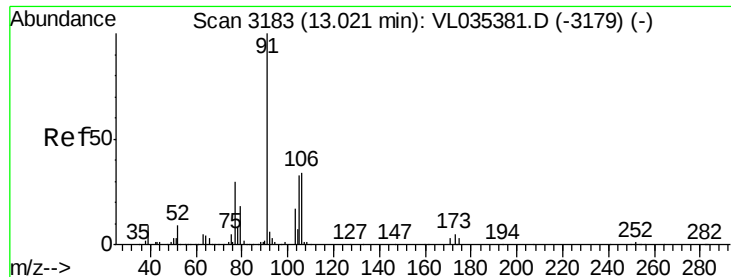
106 29.6 25.1 37.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

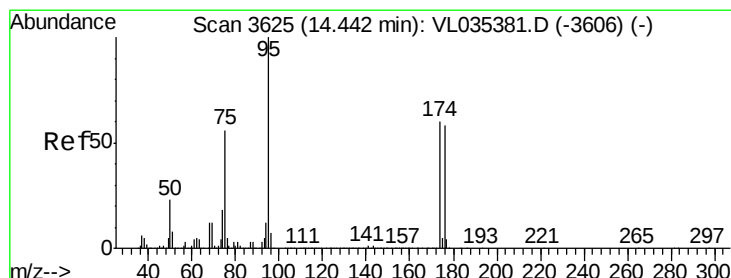
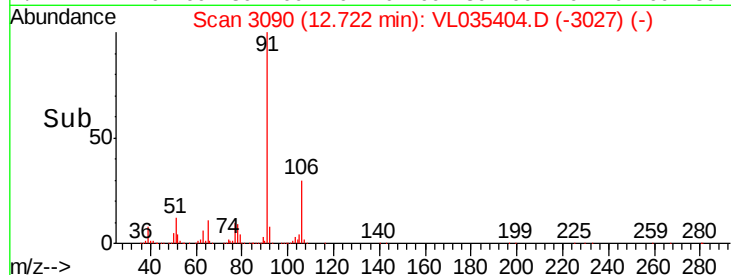
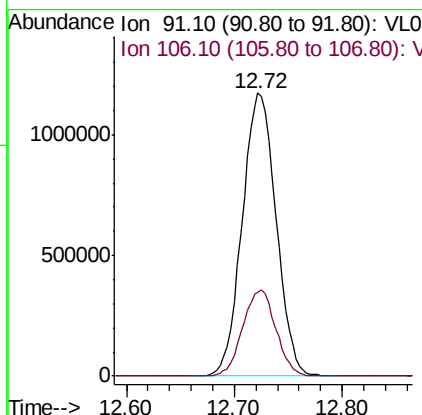
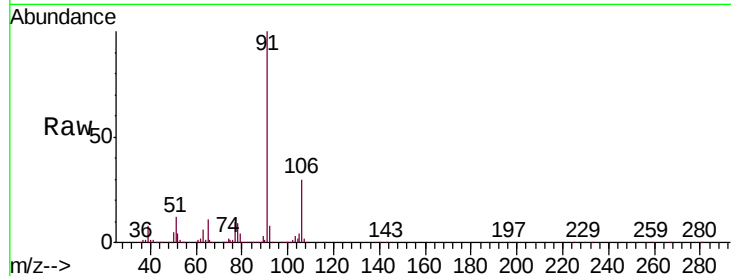




#59
m/p-Xylene
Concen: 6.213 ppbv
RT: 12.72 min Scan# 3090
Delta R.T. -0.30 min
Lab File: VL035404.D
Acq: 13 Aug 2020 17:05

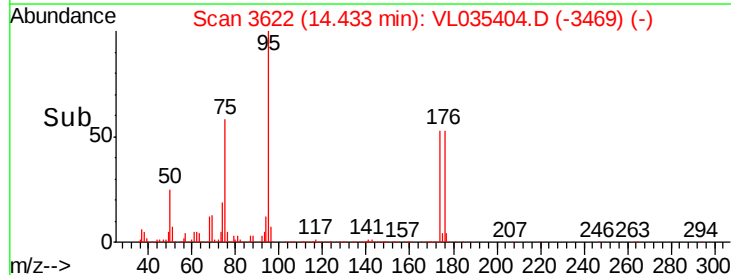
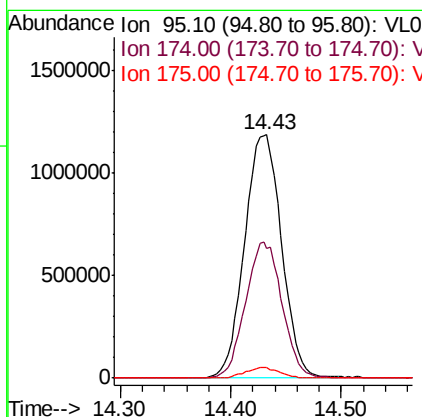
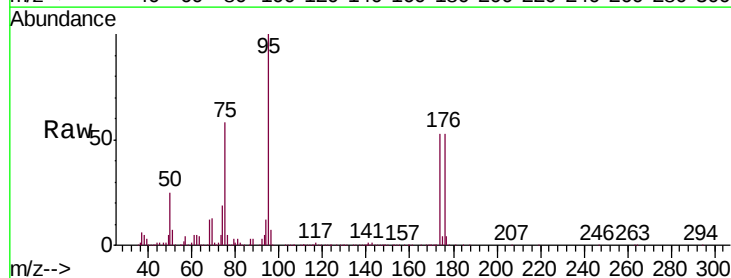
Instrument :
MSVOA_L
ClientSampleId :
E053-1100DL

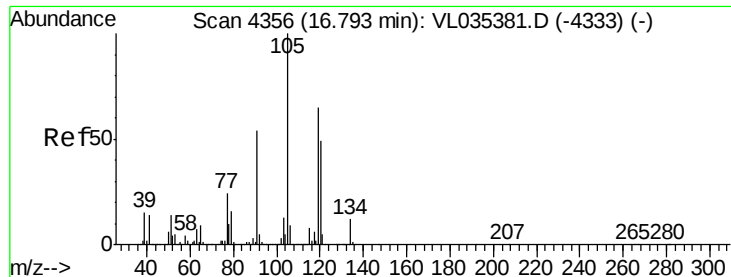
Tgt Ion: 91 Resp: 2561242
Ion Ratio Lower Upper
91 100
106 30.0 36.7 55.1#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.940 ppbv
RT: 14.43 min Scan# 3622
Delta R.T. -0.01 min
Lab File: VL035404.D
Acq: 13 Aug 2020 17:05

Tgt Ion: 95 Resp: 2762472
Ion Ratio Lower Upper
95 100
174 55.5 48.2 72.2
175 4.1 3.7 5.5





#74

1,2,4-Trimethylbenzene

Concen: 0.048 ppbv

RT: 16.77 min Scan# 4349

Delta R.T. -0.02 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

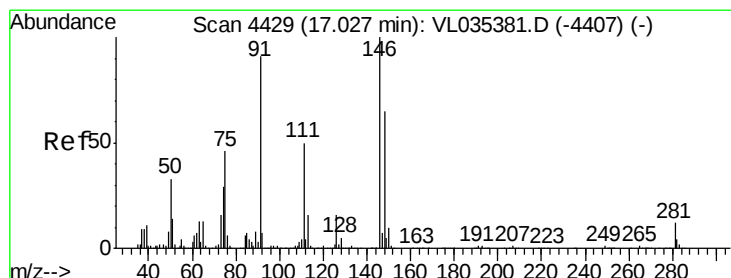
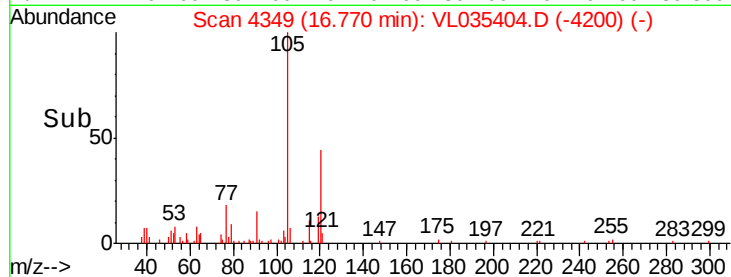
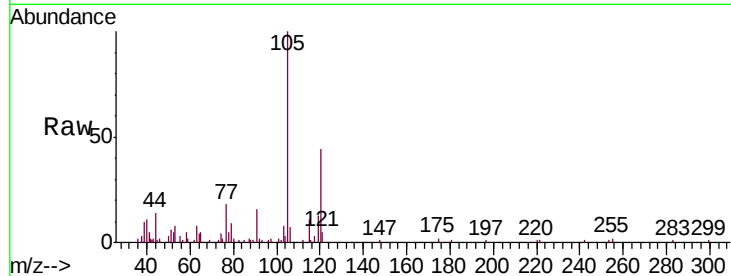
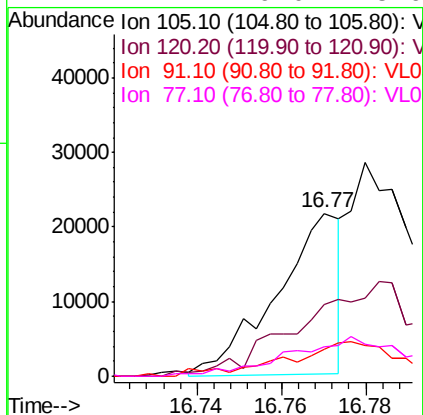
Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

Tgt Ion:	105	Resp:	22898
Ion	Ratio	Lower	Upper
105	100		
120	43.1	39.1	58.7
91	12.0	43.7	65.5#
77	17.2	19.0	28.6#



#75

1,3-Dichlorobenzene

Concen: 8.286 ppbv

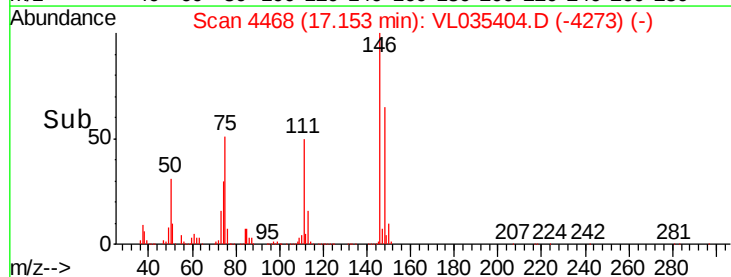
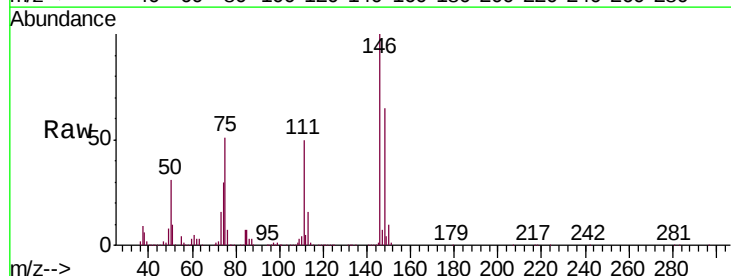
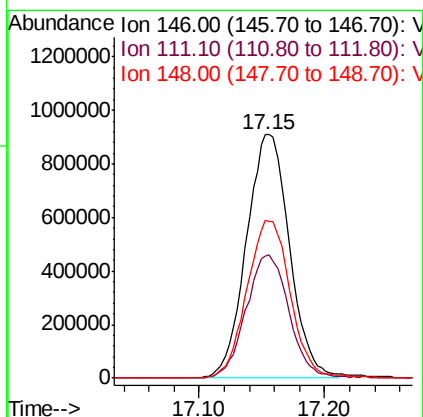
RT: 17.15 min Scan# 4468

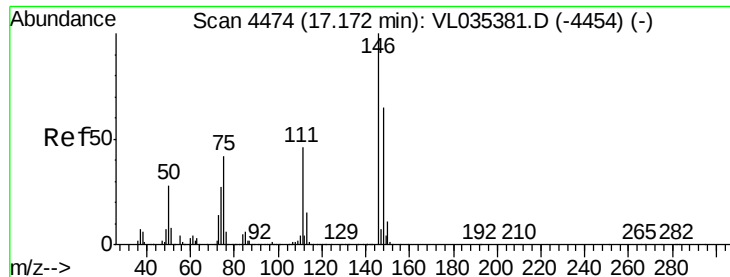
Delta R.T. 0.13 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Tgt Ion:	146	Resp:	2172575
Ion	Ratio	Lower	Upper
146	100		
111	50.8	25.0	75.0
148	65.5	32.6	97.7





#76

1,4-Dichlorobenzene

Concen: 8.067 ppbv

RT: 17.15 min Scan# 4468

Delta R.T. -0.02 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

Instrument :

MSVOA_L

ClientSampleId :

E053-1100DL

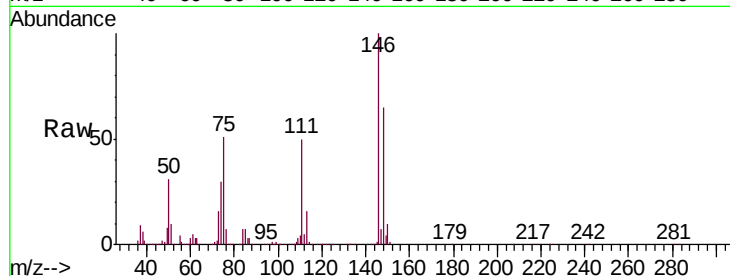
Tgt Ion:146 Resp: 2172575

Ion Ratio Lower Upper

146 100

111 50.8 24.0 72.0

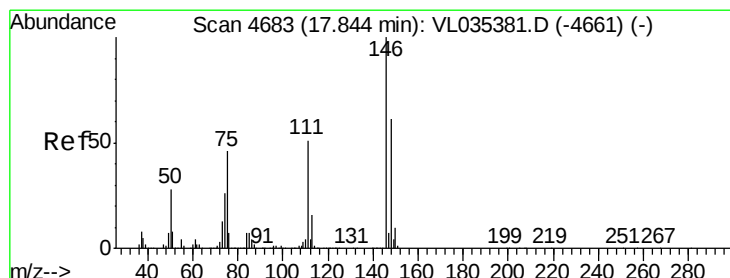
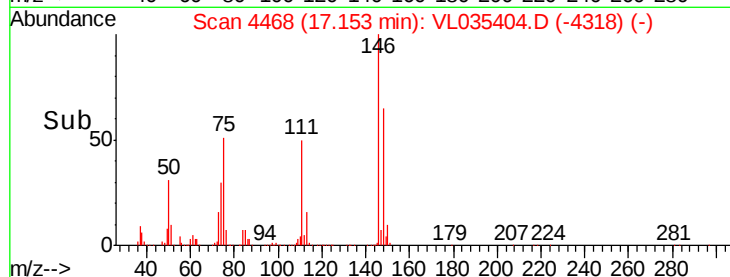
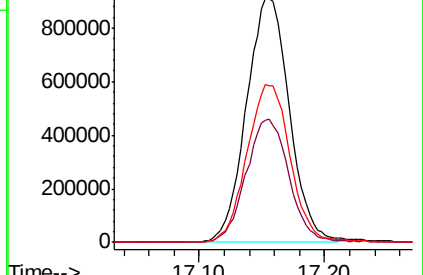
148 65.5 32.5 97.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#77

1,2-Dichlorobenzene

Concen: 7.978 ppbv

RT: 17.83 min Scan# 4680

Delta R.T. -0.01 min

Lab File: VL035404.D

Acq: 13 Aug 2020 17:05

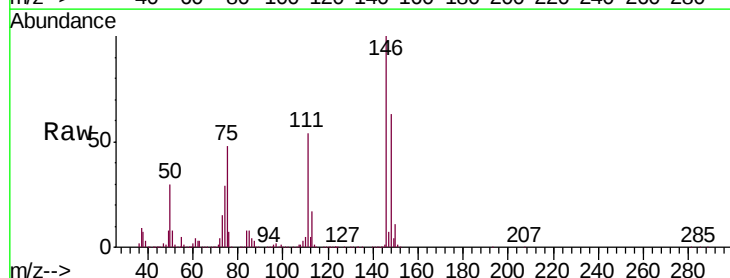
Tgt Ion:146 Resp: 2108899

Ion Ratio Lower Upper

146 100

111 53.3 25.9 77.8

148 64.3 32.1 96.3



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

