

Data File : VL033871.D
Acq On : 30 May 2019 15:22
Operator : SY/AP
Sample : K3067-08DL DUP 4X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SG-22-20190523-0

Quant Time: May 31 07:08:25 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL051719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May 17 08:15:41 2019
QLast Update : Fri May 17 08:15:41 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	626837	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1445444	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.23	117	1493718	10.00	ppbv	-0.01

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.56 95 1221853 10.09 ppbv -0.01
Spiked Amount 10.000 Range 65 - 135 Recovery = 100.90%

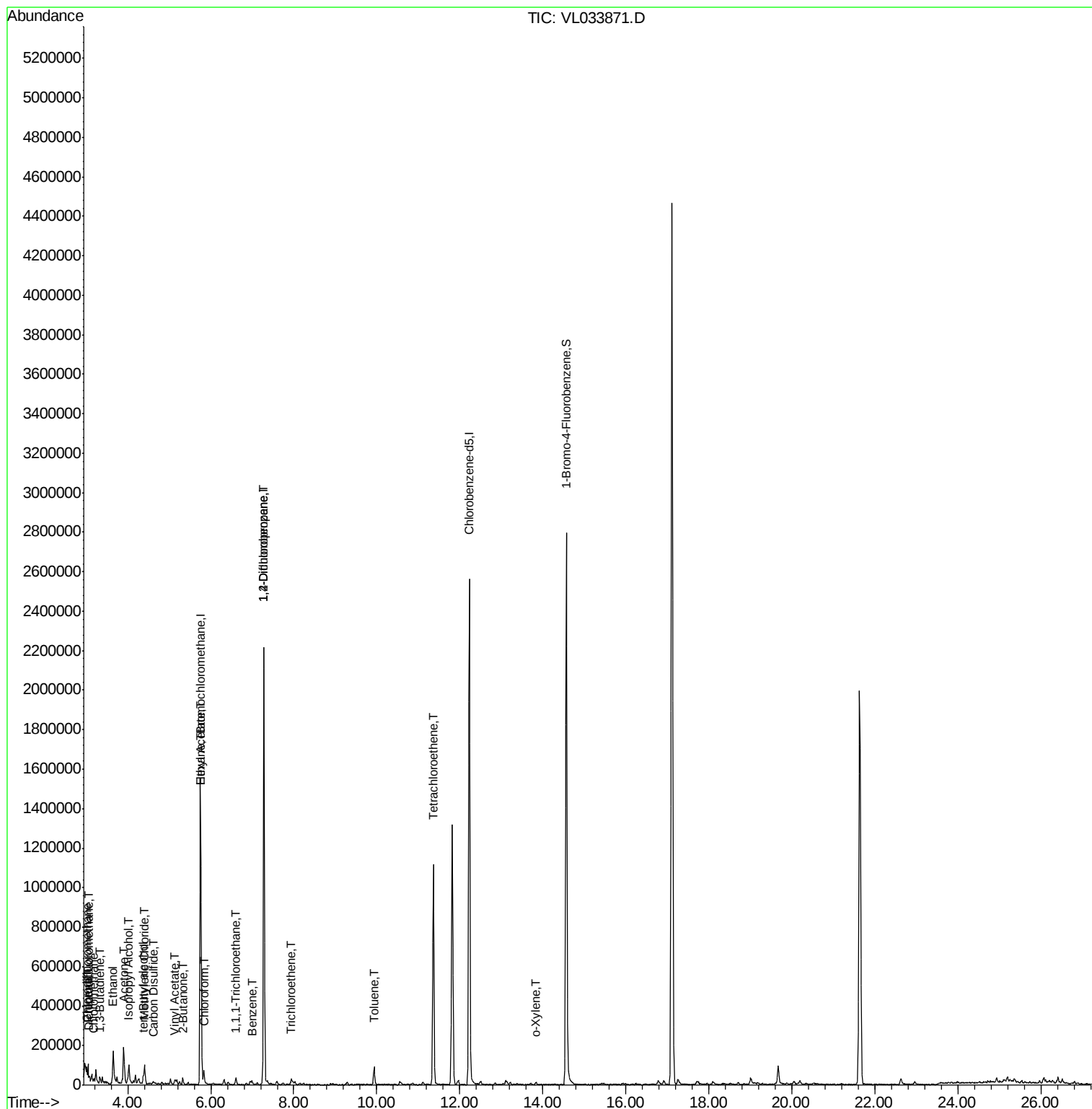
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.07	85	10264	0.078	ppbv	100
3) Chlorodifluoromethane	3.01	51	13573	0.189	ppbv #	91
4) Chloromethane	3.17	50	3544	0.086	ppbv #	43
9) Propene	3.03	41	1075	0.035	ppbv #	15
13) Ethanol	3.65	45	186347	18.878	ppbv	96
15) Acetone	3.90	43	182847	2.102	ppbv	100
16) 1,3-Butadiene	3.35	39	1161	0.034	ppbv #	28
17) tert-Butyl alcohol	4.36	59	3150	0.045	ppbv #	72
19) Isopropyl Alcohol	4.02	45	87162	1.554	ppbv #	91
20) Methylene Chloride	4.40	84	17864	0.533	ppbv	91
23) Vinyl Acetate	5.14	43	11487	0.100	ppbv #	45
25) Ethyl Acetate	5.77	43	105220	0.689	ppbv #	86
26) Hexane	5.77	57	113089	1.722	ppbv #	45
27) Carbon Disulfide	4.62	76	3311	0.037	ppbv #	1
29) Chloroform	5.84	83	38348	0.317	ppbv	97
32) 1,1,1-Trichloroethane	6.61	97	12782	0.106	ppbv #	67
34) 2-Butanone	5.33	43	31555	0.352	ppbv	94
36) Benzene	6.99	78	11174	0.085	ppbv #	82
38) Trichloroethene	7.95	130	3155	0.065	ppbv #	16
39) 1,2-Dichloropropane	7.28	63	386860	7.892	ppbv #	23
52) Tetrachloroethene	11.36	164	251436	5.440	ppbv	98
53) Toluene	9.93	91	30671	0.216	ppbv #	21
60) o-Xylene	13.83	91	5261	0.030	ppbv #	41

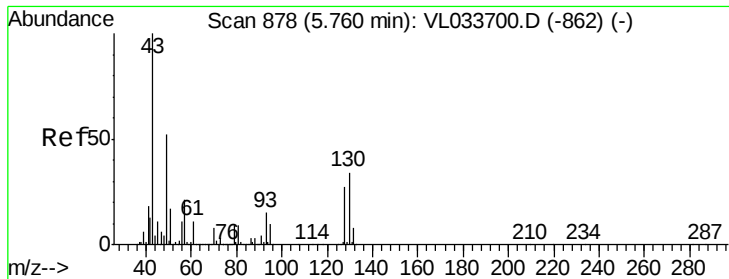
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 875

Delta R.T. -0.01 min

Lab File: VL033871.D

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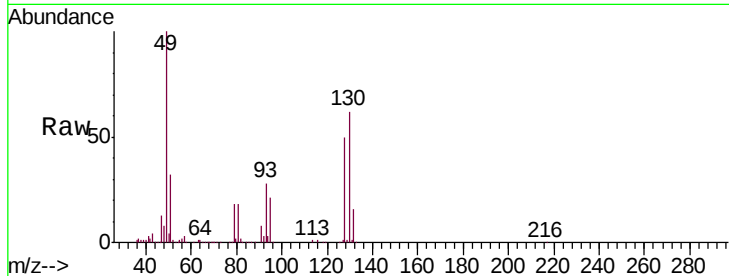
Instrument :

MSVOA_L

ClientSampleId :

SG-22-20190523-0

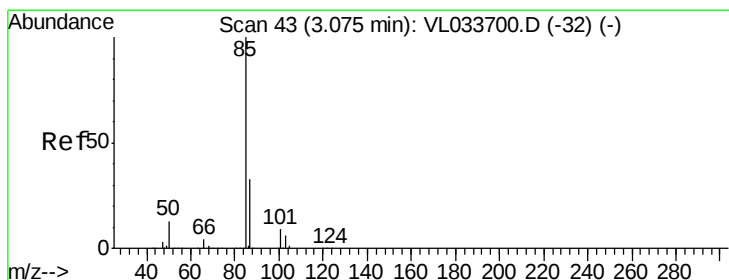
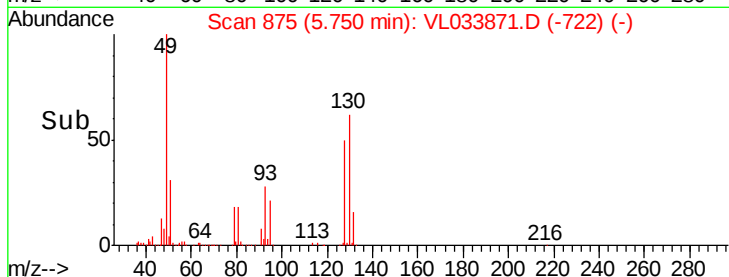
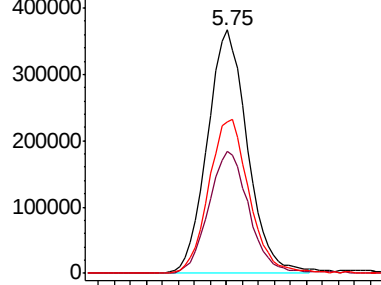
Tgt Ion:	49	Resp:	626837
Ion	Ratio	Lower	Upper
49	100		
128	50.6	25.2	75.6
130	64.9	32.5	97.5



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: 0.078 ppbv

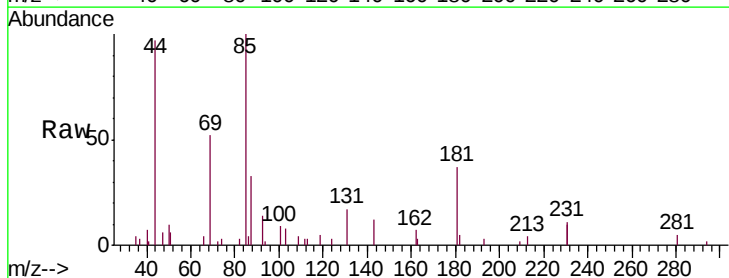
RT: 3.07 min Scan# 42

Delta R.T. -0.00 min

Lab File: VL033871.D

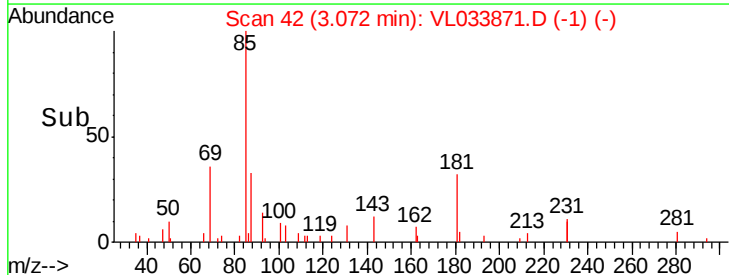
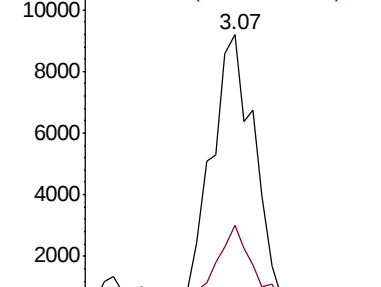
Acq: 30 May 2019 15:22

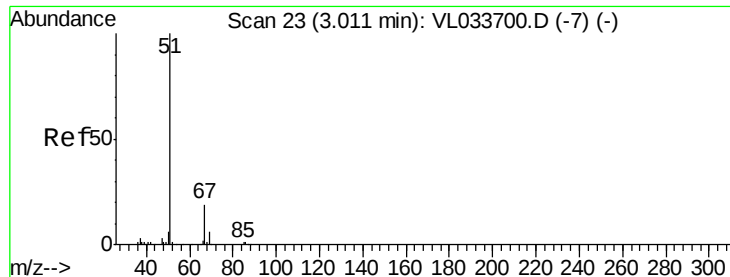
Tgt Ion:	85	Resp:	10264
Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.3	39.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

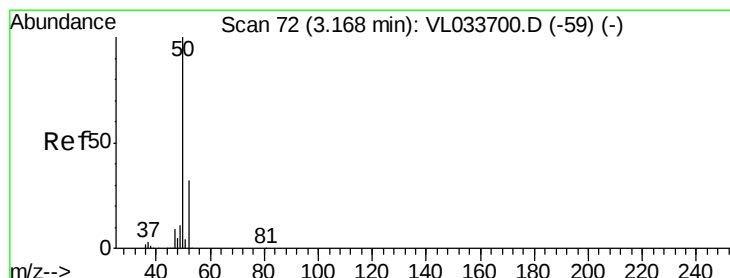
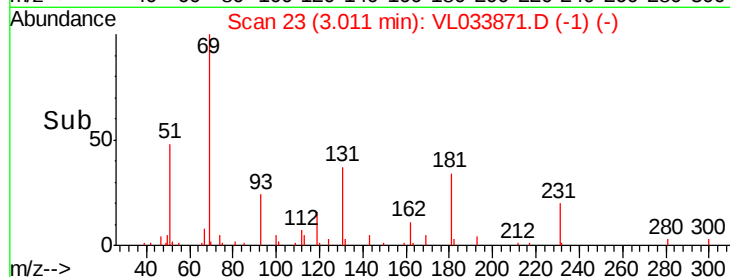
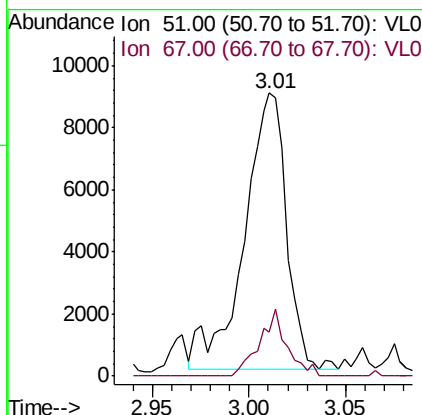
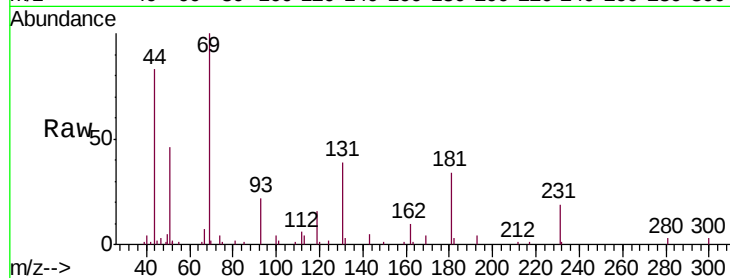




#3
Chlorodifluoromethane
Concen: 0.189 ppbv
RT: 3.01 min Scan# 23
Delta R.T. 0.00 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

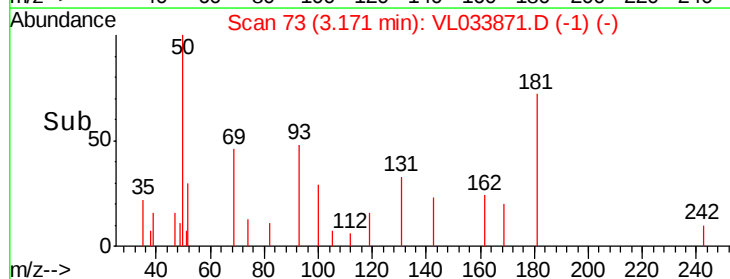
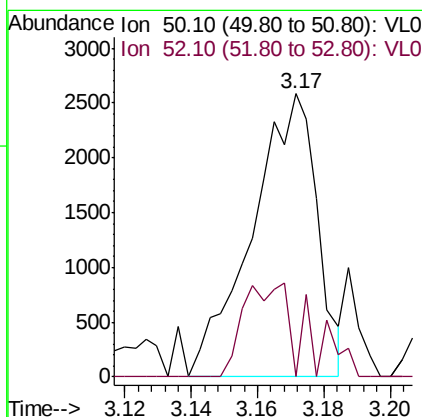
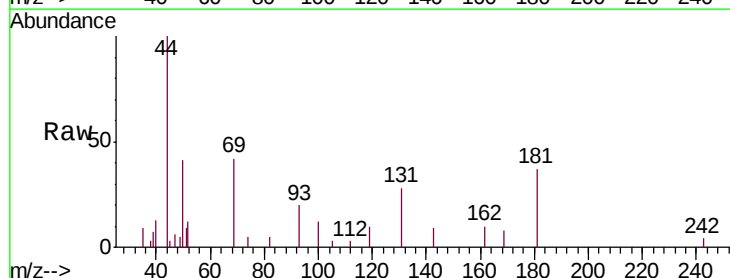
Instrument :
MSVOA_L
ClientSampleId :
SG-22-20190523-0

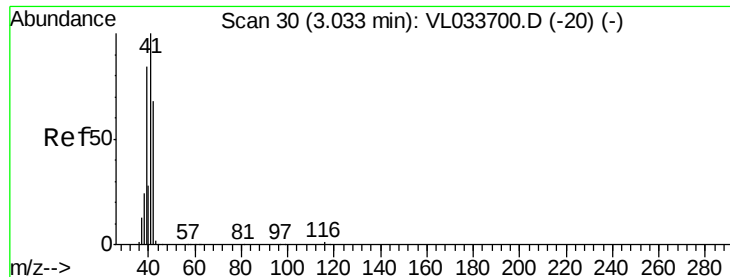
Tgt Ion: 51 Resp: 13573
Ion Ratio Lower Upper
51 100
67 15.5 15.6 23.4#



#4
Chloromethane
Concen: 0.086 ppbv
RT: 3.17 min Scan# 73
Delta R.T. 0.00 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

Tgt Ion: 50 Resp: 3544
Ion Ratio Lower Upper
50 100
52 0.0 25.7 38.5#





#9

Propene

Concen: 0.035 ppbv

RT: 3.03 min Scan# 29

Delta R.T. -0.00 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

Instrument :

MSVOA_L

ClientSampleId :

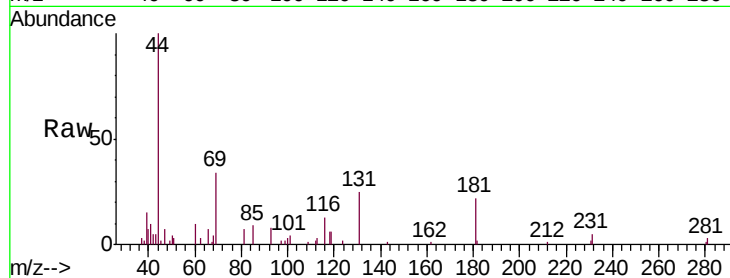
SG-22-20190523-0

Tgt Ion: 41 Resp: 1075

Ion Ratio Lower Upper

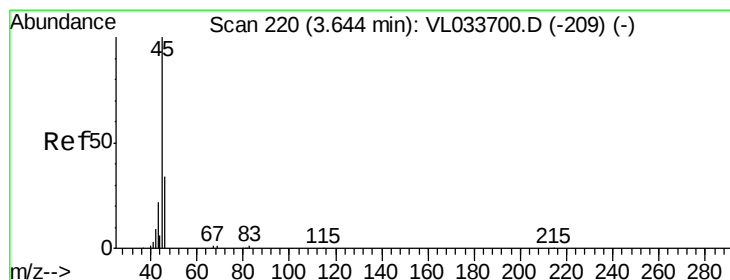
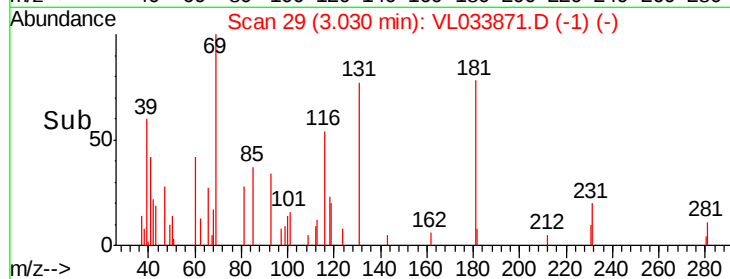
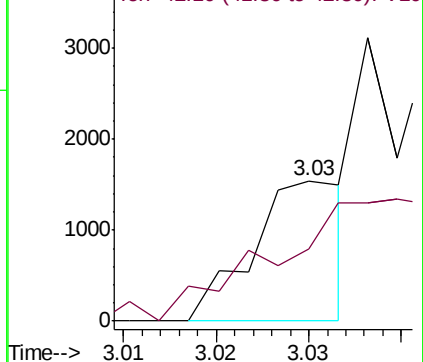
41 100

42 0.0 56.1 84.1#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#13

Ethanol

Concen: 18.878 ppbv

RT: 3.65 min Scan# 221

Delta R.T. 0.00 min

Lab File: VL033871.D

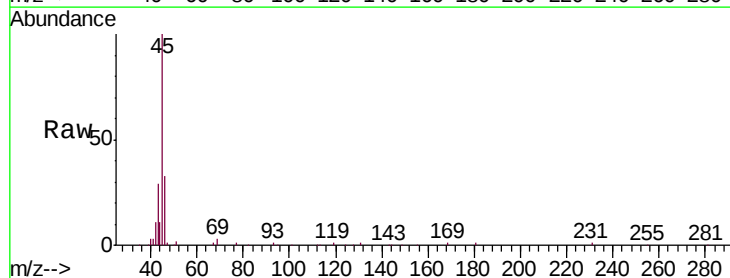
Acq: 30 May 2019 15:22

Tgt Ion: 45 Resp: 186347

Ion Ratio Lower Upper

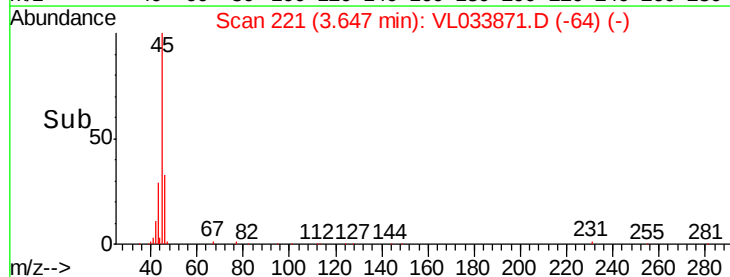
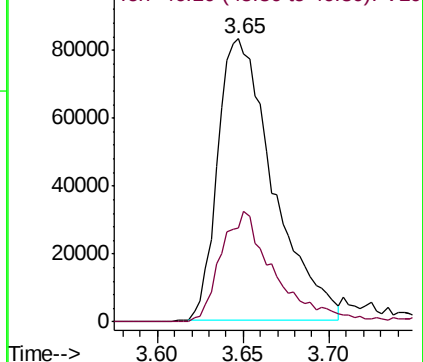
45 100

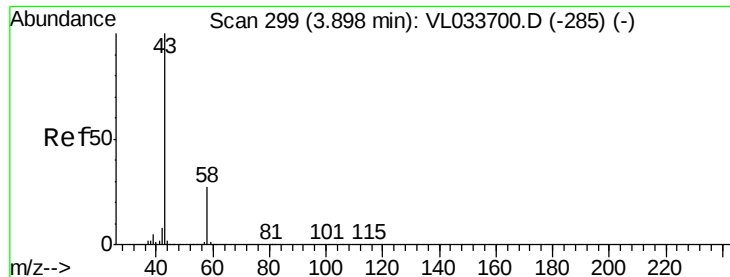
46 39.2 14.8 59.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 2.102 ppbv

RT: 3.90 min Scan# 299

Delta R.T. 0.00 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

Instrument :

MSVOA_L

ClientSampleId :

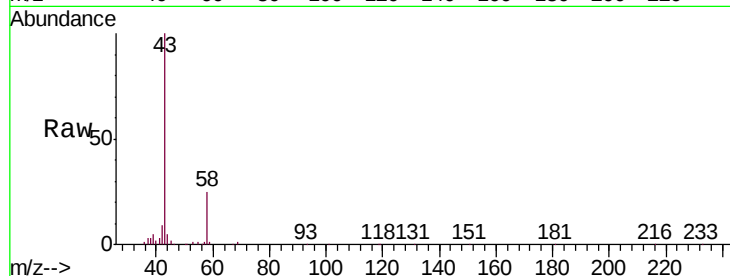
SG-22-20190523-0

Tgt Ion: 43 Resp: 182847

Ion Ratio Lower Upper

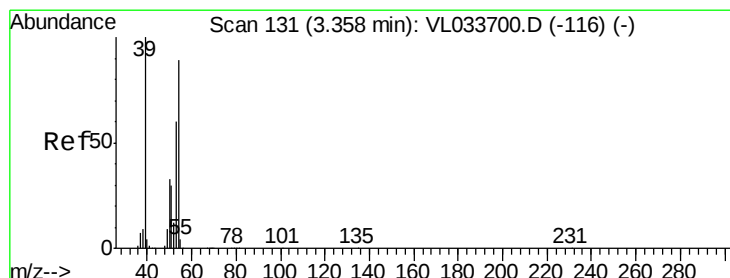
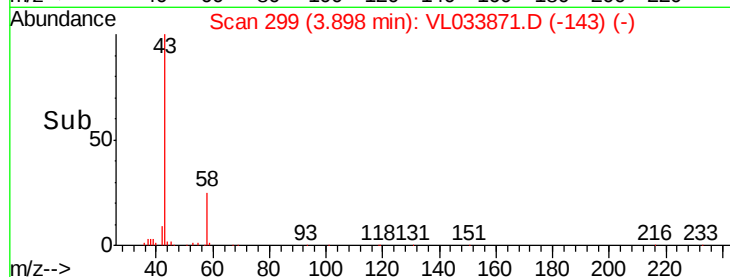
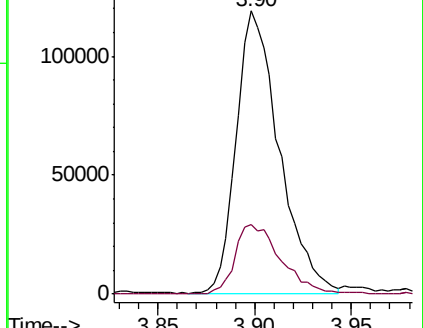
43 100

58 26.7 21.3 31.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.034 ppbv

RT: 3.35 min Scan# 127

Delta R.T. -0.01 min

Lab File: VL033871.D

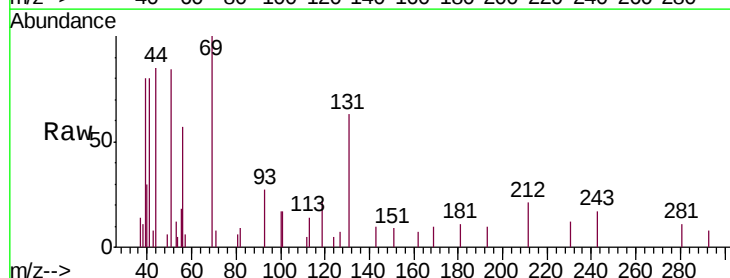
Acq: 30 May 2019 15:22

Tgt Ion: 39 Resp: 1161

Ion Ratio Lower Upper

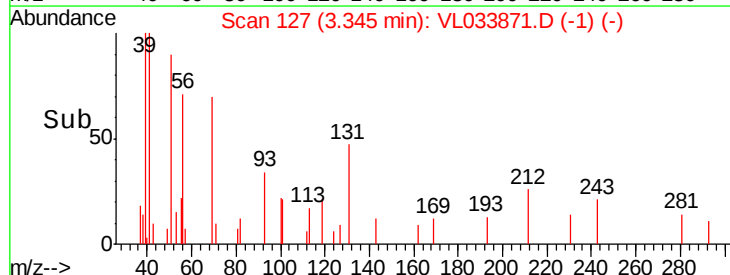
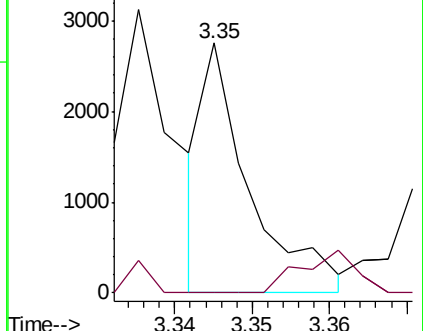
39 100

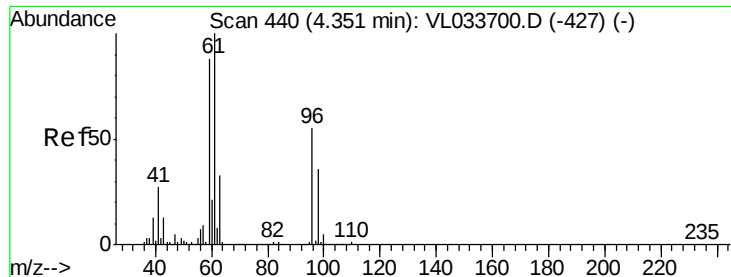
54 20.2 69.0 103.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 0.045 ppbv

RT: 4.36 min Scan# 444

Delta R.T. 0.01 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

Instrument :

MSVOA_L

ClientSampleId :

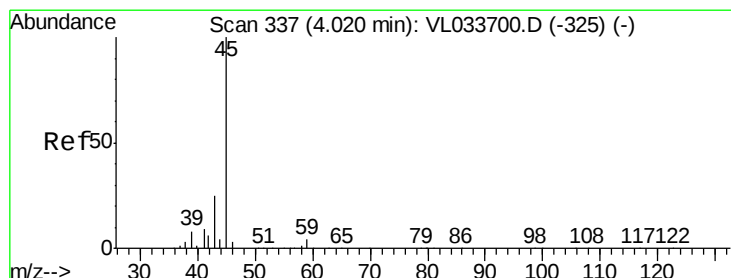
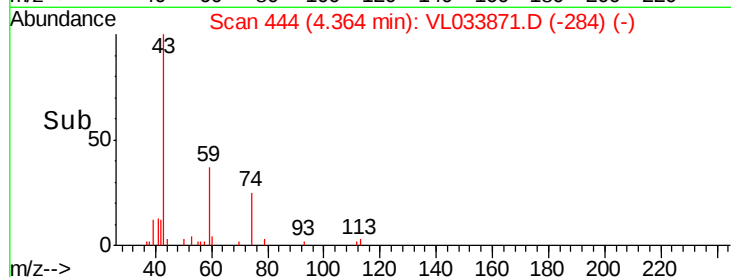
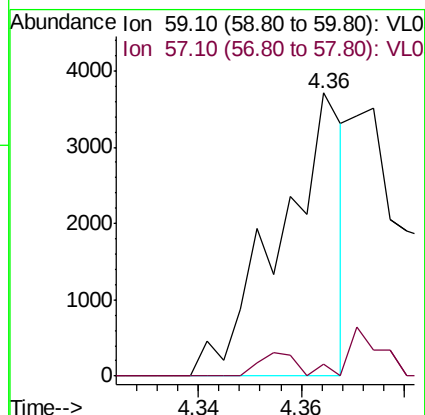
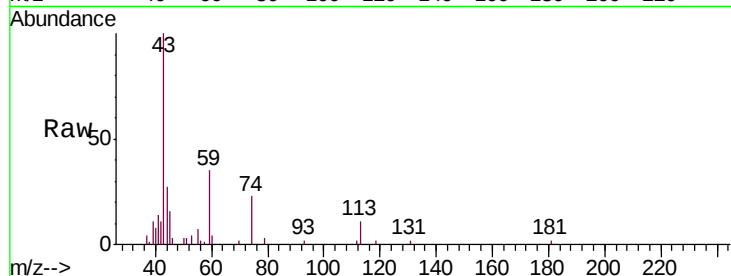
SG-22-20190523-0

Tgt Ion: 59 Resp: 3150

Ion Ratio Lower Upper

59 100

57 0.0 8.4 12.6#



#19

Isopropyl Alcohol

Concen: 1.554 ppbv

RT: 4.02 min Scan# 338

Delta R.T. 0.00 min

Lab File: VL033871.D

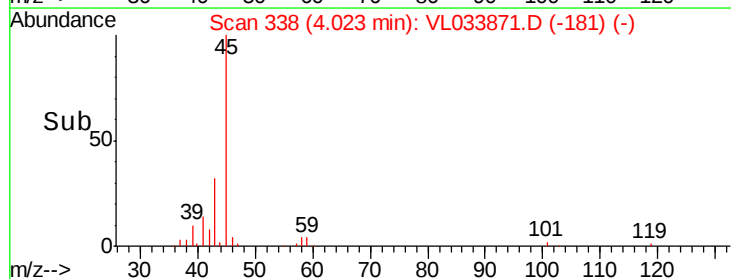
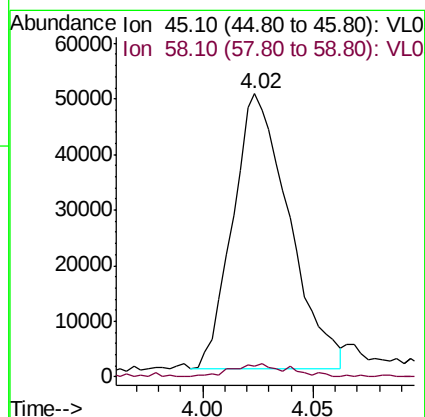
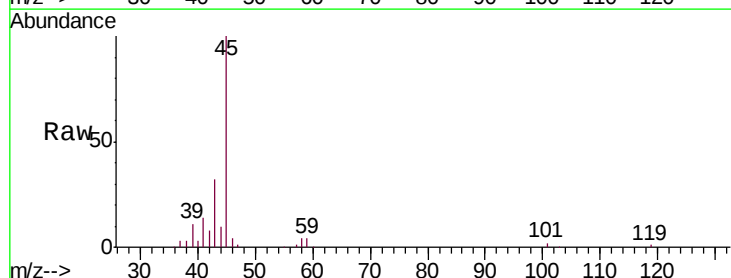
Acq: 30 May 2019 15:22

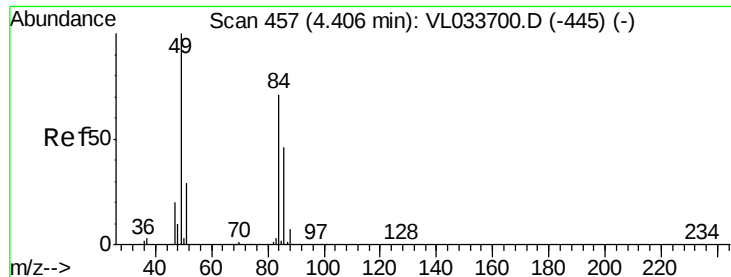
Tgt Ion: 45 Resp: 87162

Ion Ratio Lower Upper

45 100

58 5.1 1.6 2.4#

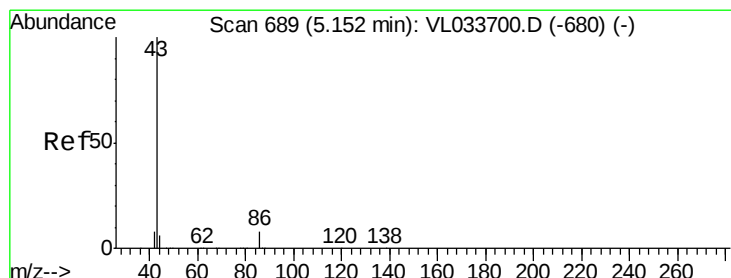
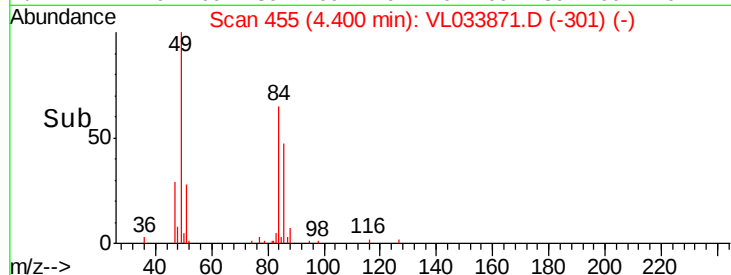
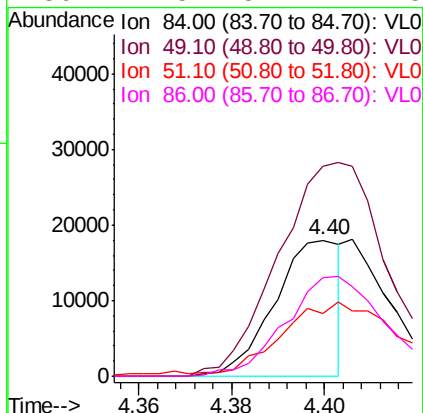
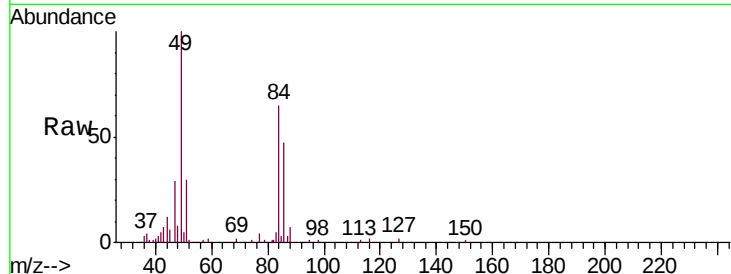




#20
Methylene Chloride
Concen: 0.533 ppbv
RT: 4.40 min Scan# 455
Delta R.T. -0.01 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

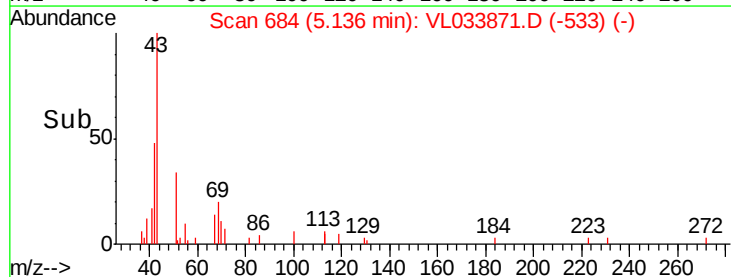
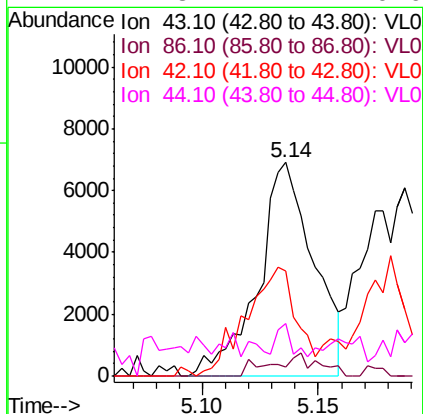
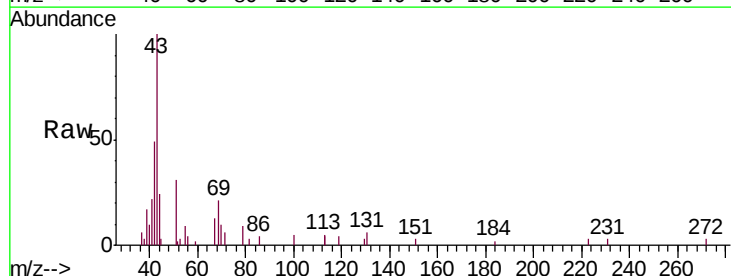
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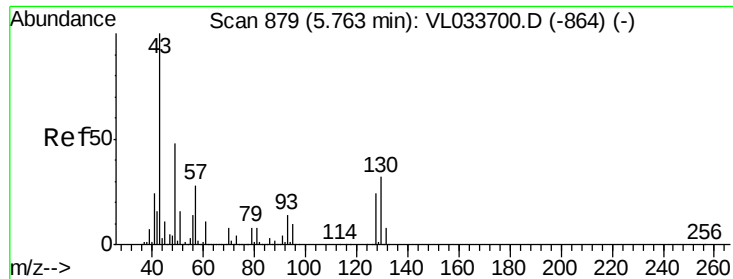
Tgt Ion:	84	Resp:	17864
Ion	Ratio	Lower	Upper
84	100		
49	153.5	112.8	169.2
51	44.4	33.4	50.0
86	72.5	51.7	77.5



#23
Vinyl Acetate
Concen: 0.100 ppbv
RT: 5.14 min Scan# 684
Delta R.T. -0.02 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

Tgt Ion:	43	Resp:	11487
Ion	Ratio	Lower	Upper
43	100		
86	4.3	6.0	9.0#
42	49.4	7.5	11.3#
44	14.3	4.4	6.6#

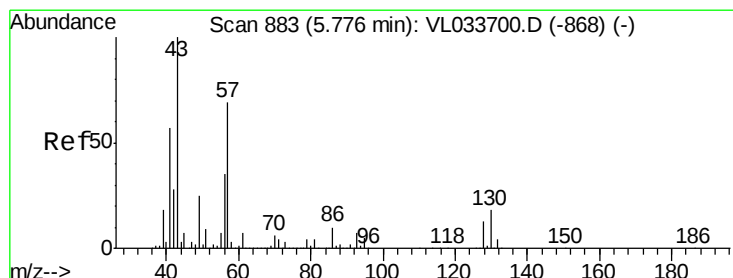
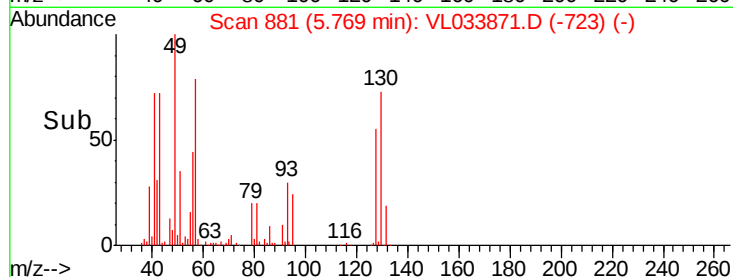
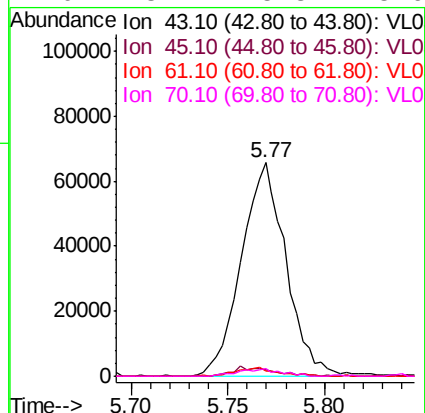
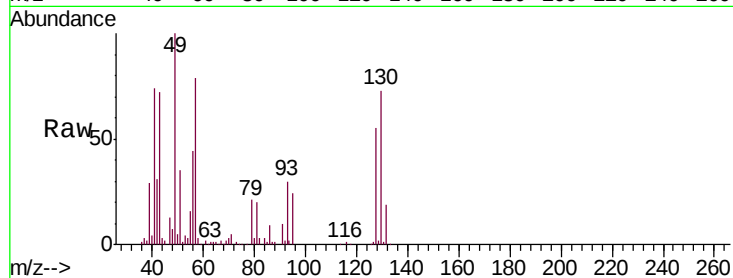




#25
Ethyl Acetate
Concen: 0.689 ppbv
RT: 5.77 min Scan# 881
Delta R.T. 0.01 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

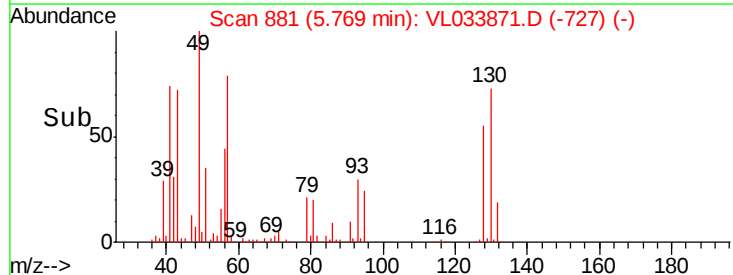
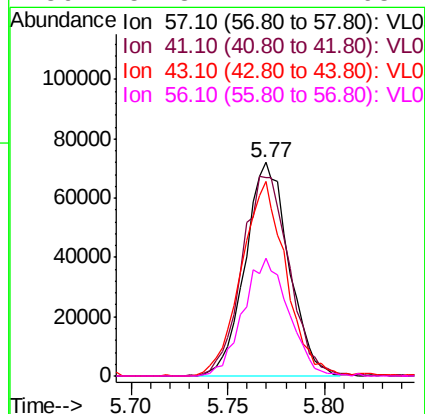
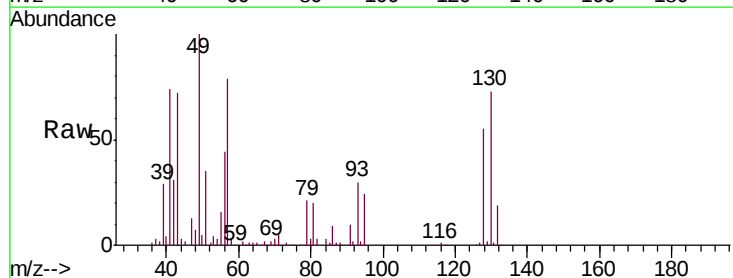
Instrument :
MSVOA_L
ClientSampleId :
SG-22-20190523-0

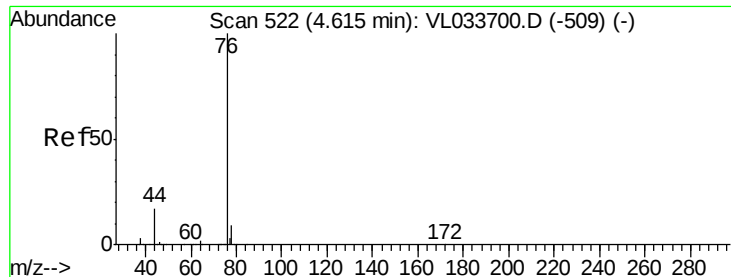
Tgt Ion:	43	Resp:	105220
Ion	Ratio	Lower	Upper
43	100		
45	4.3	7.9	11.9#
61	3.7	7.7	11.5#
70	3.7	5.8	8.6#



#26
Hexane
Concen: 1.722 ppbv
RT: 5.77 min Scan# 881
Delta R.T. -0.01 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

Tgt Ion:	57	Resp:	113089
Ion	Ratio	Lower	Upper
57	100		
41	102.1	69.8	104.6
43	94.0	181.8	272.6#
56	57.3	42.1	63.1





#27

Carbon Disulfide

Concen: 0.037 ppbv

RT: 4.62 min Scan# 522

Delta R.T. 0.00 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

Instrument :

MSVOA_L

ClientSampleId :

SG-22-20190523-0

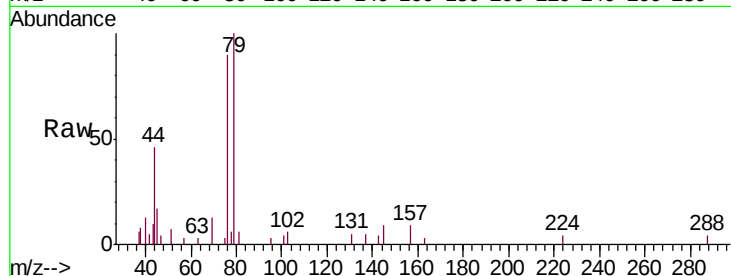
Tgt Ion: 76 Resp: 3311

Ion Ratio Lower Upper

76 100

44 126.4 13.8 20.8#

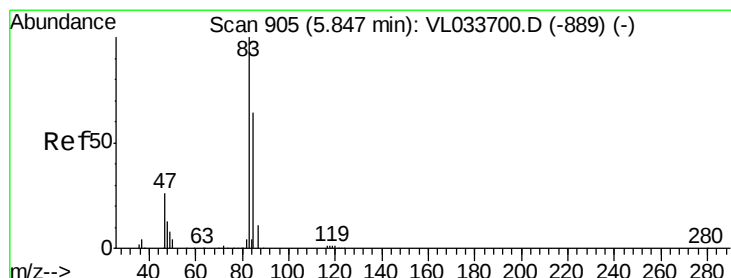
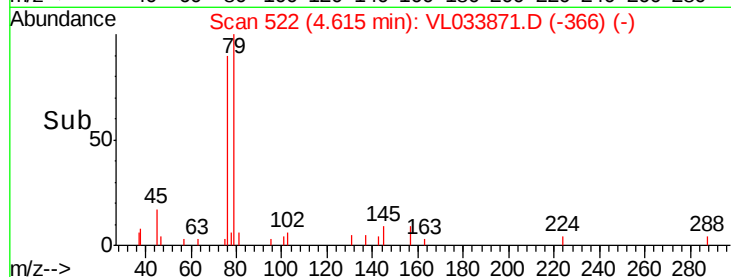
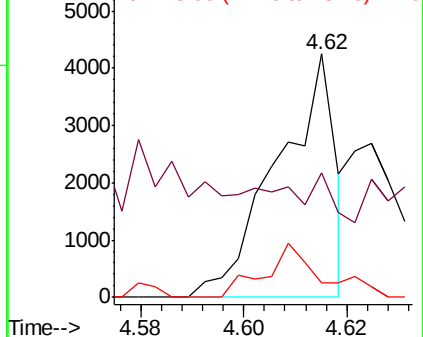
78 25.7 7.4 11.0#



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.317 ppbv

RT: 5.84 min Scan# 902

Delta R.T. -0.01 min

Lab File: VL033871.D

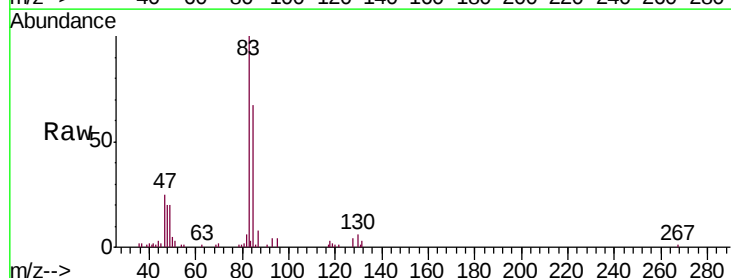
Acq: 30 May 2019 15:22

Tgt Ion: 83 Resp: 38348

Ion Ratio Lower Upper

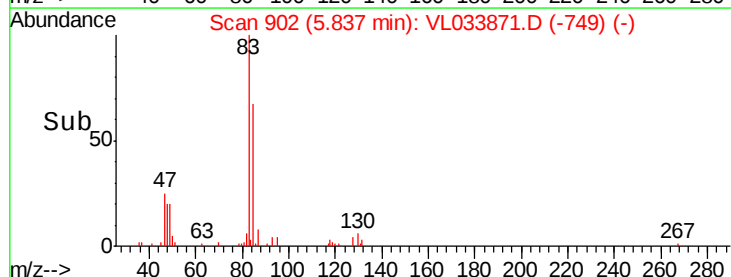
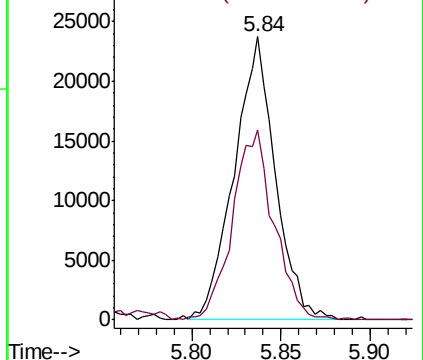
83 100

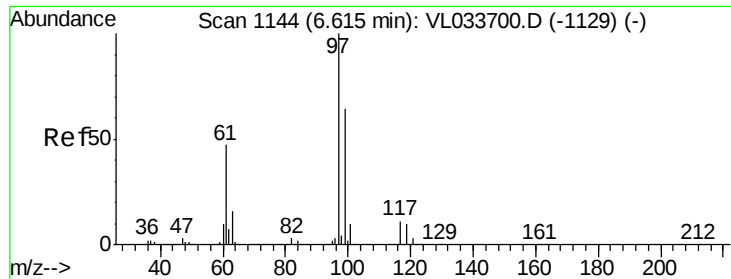
85 67.1 51.5 77.3



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: 0.106 ppbv

RT: 6.61 min Scan# 1141

Delta R.T. -0.01 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

Instrument :

MSVOA_L

ClientSampleId :

SG-22-20190523-0

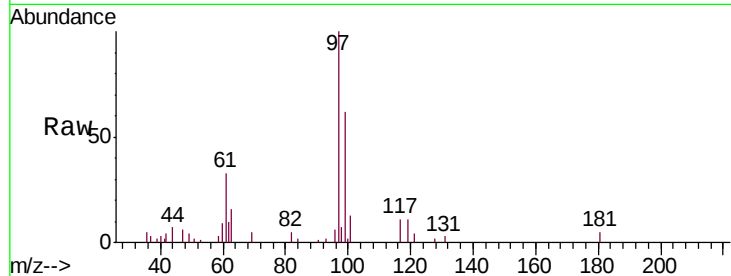
Tgt Ion: 97 Resp: 12782

Ion Ratio Lower Upper

97 100

99 92.0 51.5 77.3#

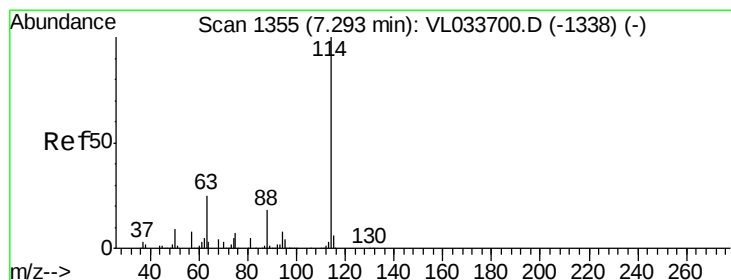
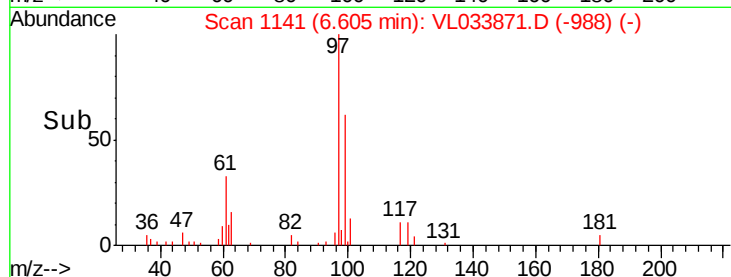
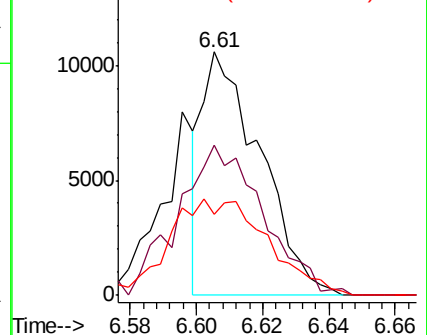
61 67.5 37.8 56.8#



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: 7.28 min Scan# 1351

Delta R.T. -0.01 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

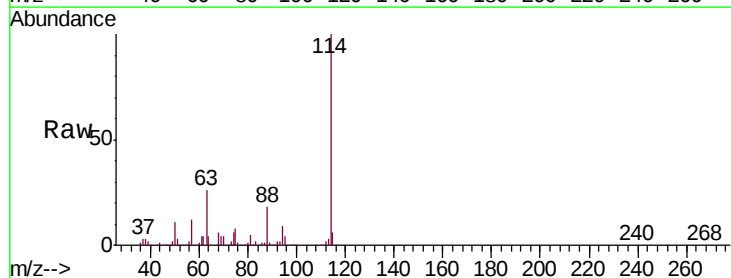
Tgt Ion: 114 Resp: 1445444

Ion Ratio Lower Upper

114 100

63 26.8 20.9 31.3

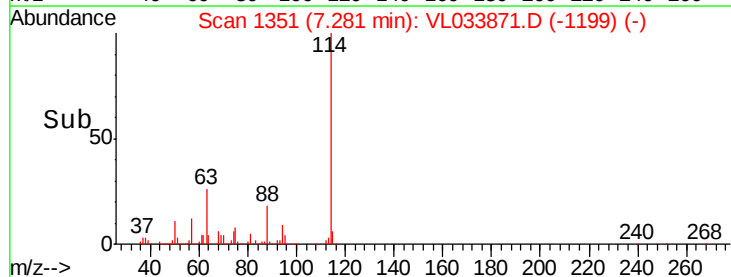
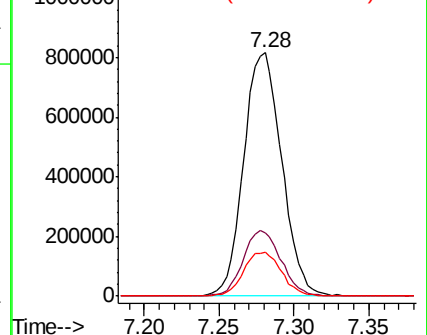
88 18.1 14.3 21.5

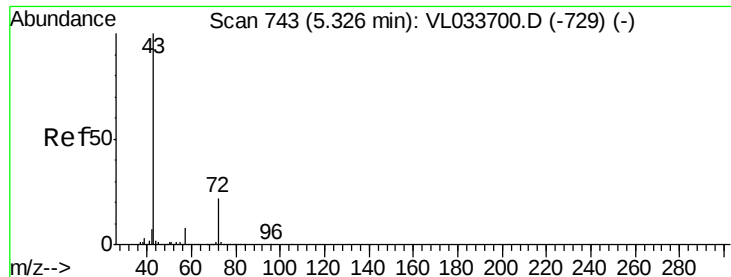


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

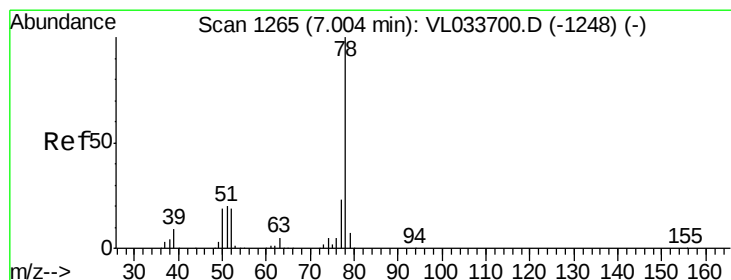
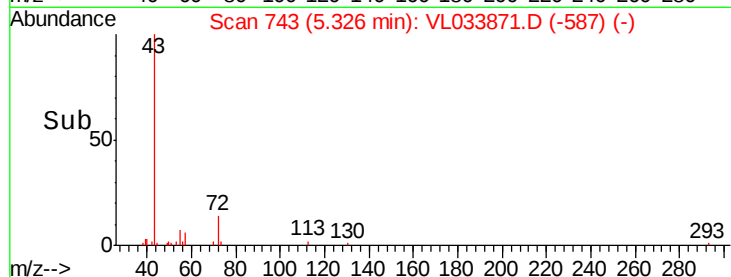
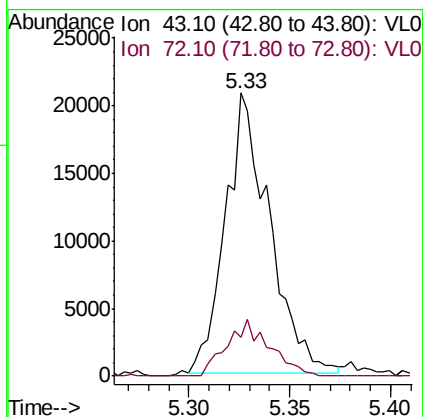
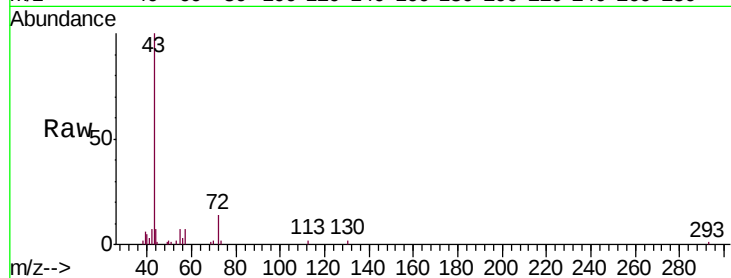




#34
 2-Butanone
 Concen: 0.352 ppbv
 RT: 5.33 min Scan# 743
 Delta R.T. 0.00 min
 Lab File: VL033871.D
 Acq: 30 May 2019 15:22

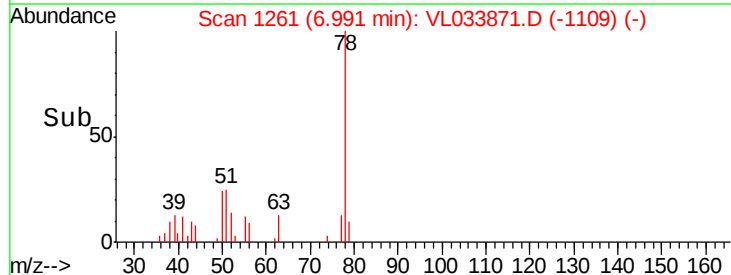
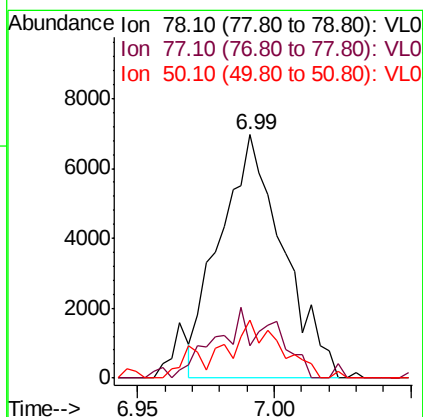
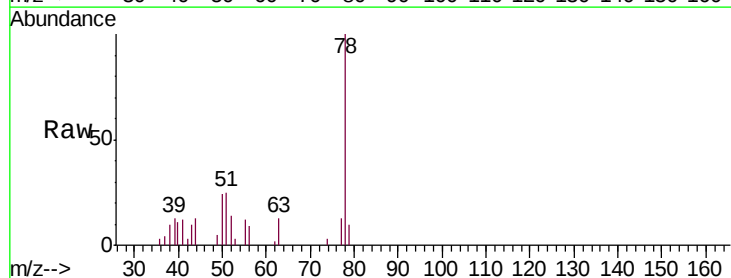
Instrument :
 MSVOA_L
 ClientSampleId :
 SG-22-20190523-0

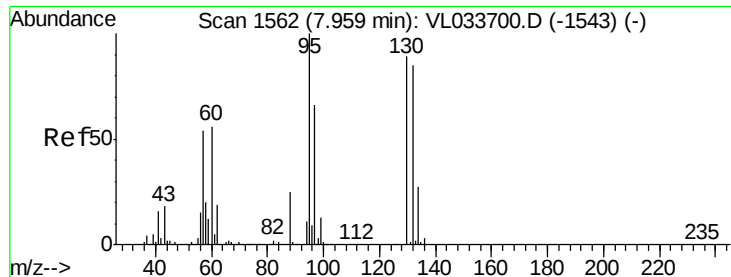
Tgt Ion: 43 Resp: 31555
 Ion Ratio Lower Upper
 43 100
 72 19.5 17.8 26.6



#36
 Benzene
 Concen: 0.085 ppbv
 RT: 6.99 min Scan# 1261
 Delta R.T. -0.01 min
 Lab File: VL033871.D
 Acq: 30 May 2019 15:22

Tgt Ion: 78 Resp: 11174
 Ion Ratio Lower Upper
 78 100
 77 8.0 18.4 27.6#
 50 20.8 15.5 23.3

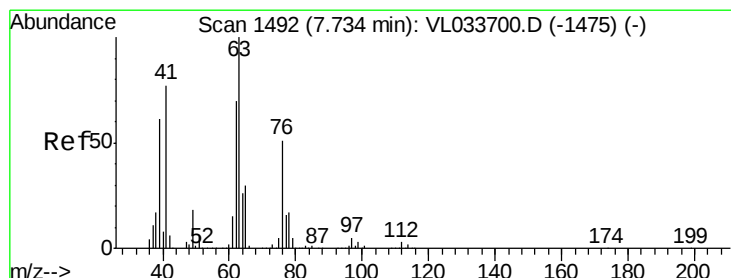
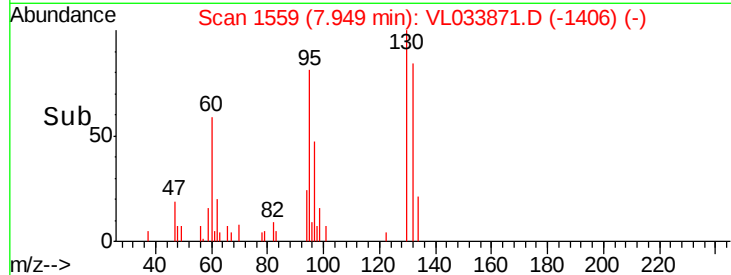
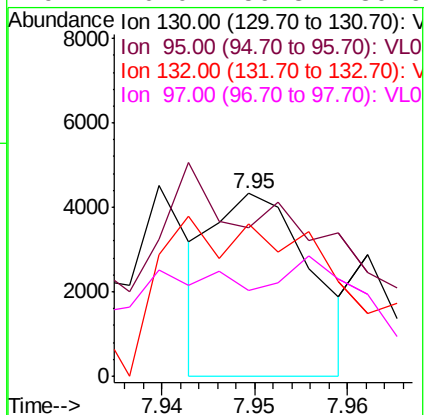
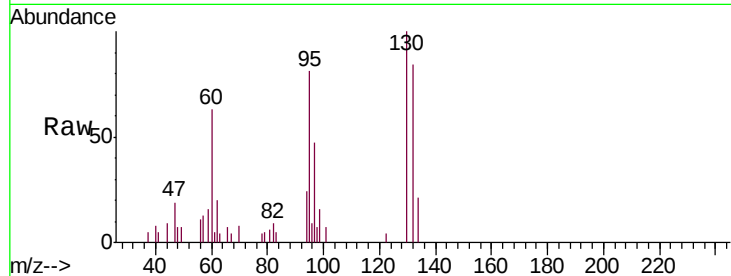




#38
 Trichloroethene
 Concen: 0.065 ppbv
 RT: 7.95 min Scan# 1559
 Delta R.T. -0.01 min
 Lab File: VL033871.D
 Acq: 30 May 2019 15:22

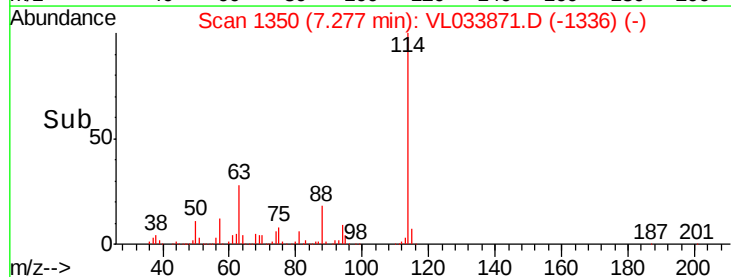
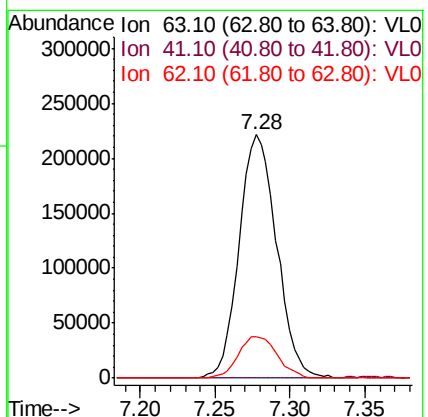
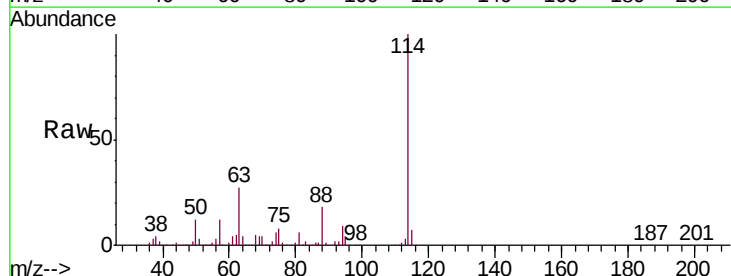
Instrument :
 MSVOA_L
 ClientSampleId :
 SG-22-20190523-0

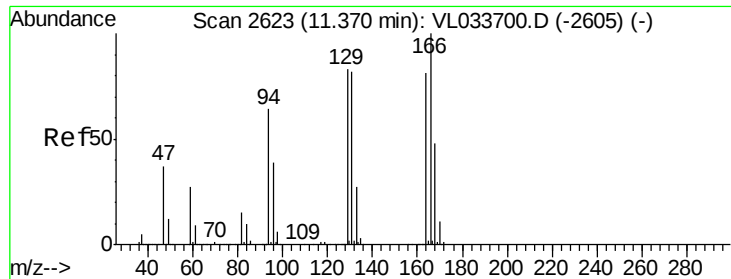
Tgt Ion:	130	Resp:	3155
Ion	Ratio	Lower	Upper
130	100		
95	0.0	90.2	135.4#
132	40.7	76.4	114.6#
97	0.0	59.8	89.6#



#39
 1,2-Dichloropropane
 Concen: 7.892 ppbv
 RT: 7.28 min Scan# 1350
 Delta R.T. -0.46 min
 Lab File: VL033871.D
 Acq: 30 May 2019 15:22

Tgt Ion:	63	Resp:	386860
Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.5	92.3#
62	17.2	56.2	84.4#





#52

Tetrachloroethene

Concen: 5.440 ppbv

RT: 11.36 min Scan# 2620

Delta R.T. -0.01 min

Lab File: VL033871.D

Acq: 30 May 2019 15:22

Instrument :

MSVOA_L

ClientSampleId :

SG-22-20190523-0

Tgt Ion:164 Resp: 251436

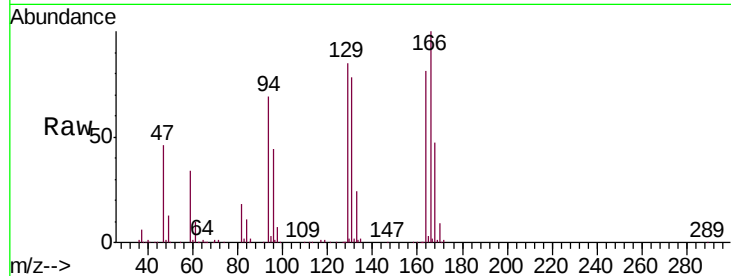
Ion Ratio Lower Upper

164 100

166 124.2 98.9 148.3

129 105.9 81.8 122.6

131 99.2 81.1 121.7



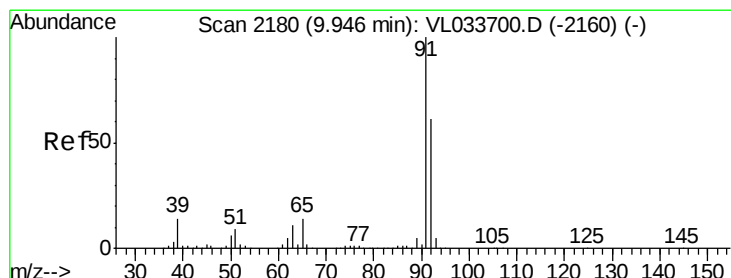
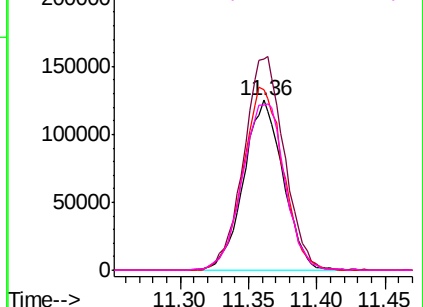
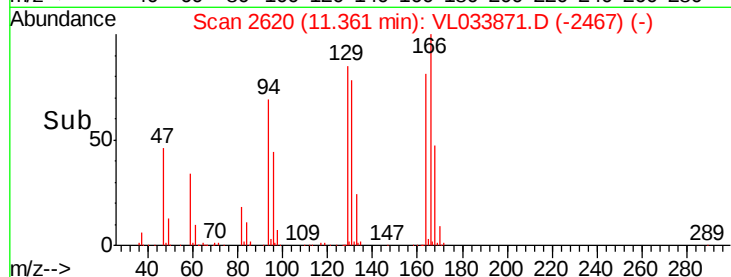
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.216 ppbv

RT: 9.93 min Scan# 2175

Delta R.T. -0.02 min

Lab File: VL033871.D

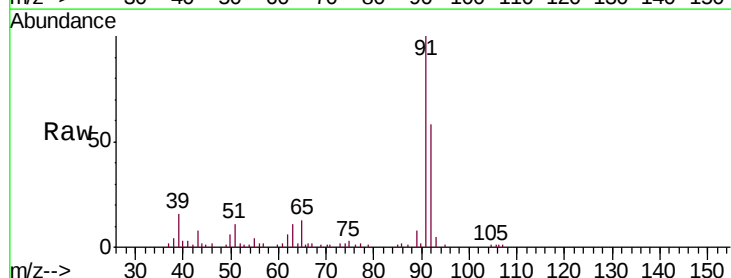
Acq: 30 May 2019 15:22

Tgt Ion: 91 Resp: 30671

Ion Ratio Lower Upper

91 100

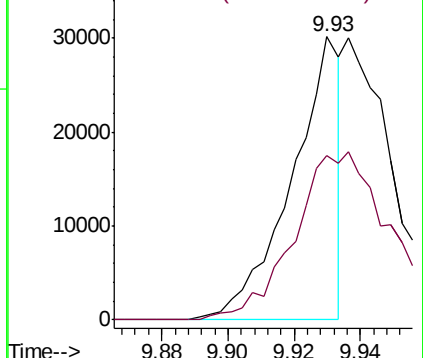
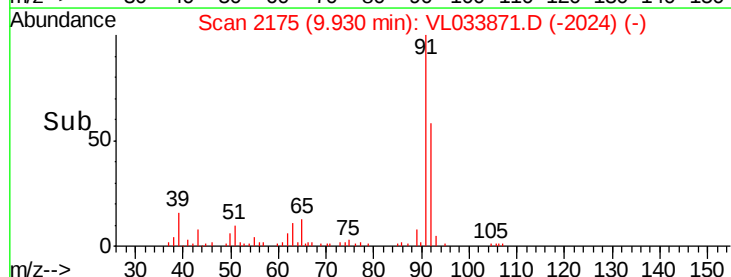
92 0.0 47.6 71.4#

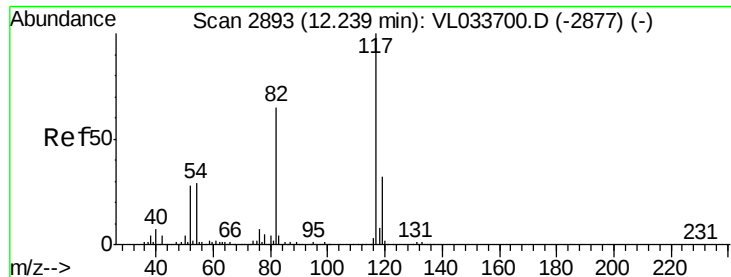


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

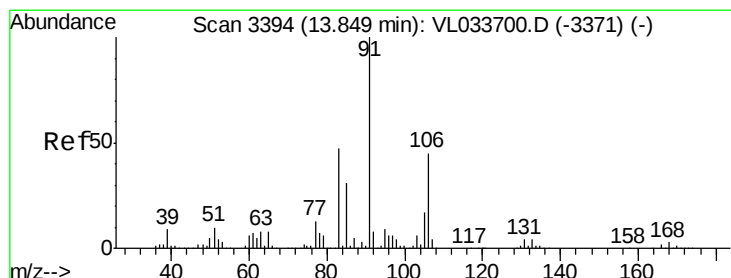
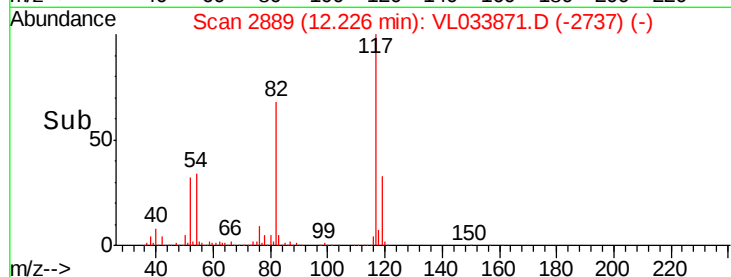
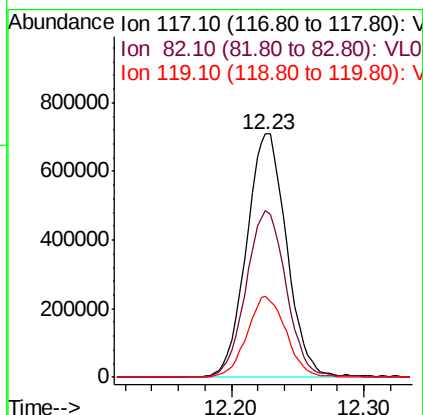
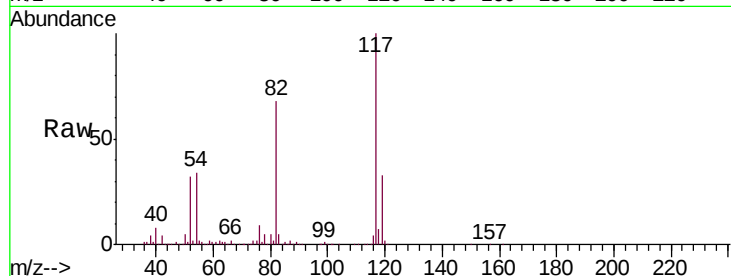




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2889
Delta R.T. -0.01 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

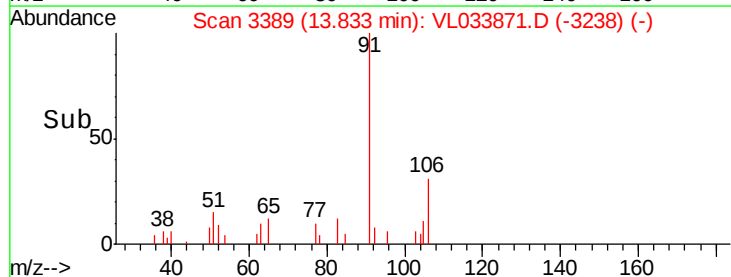
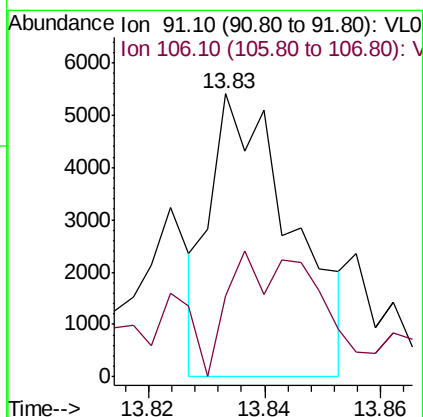
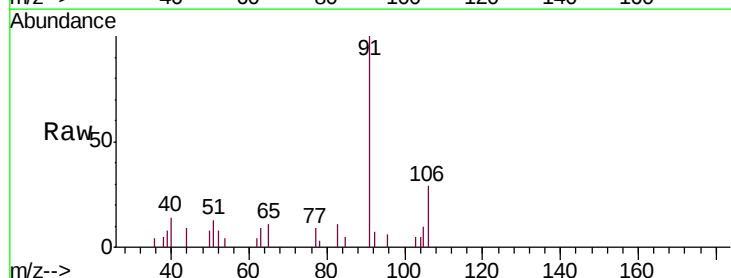
Instrument :
MSVOA_L
ClientSampleId :
SG-22-20190523-0

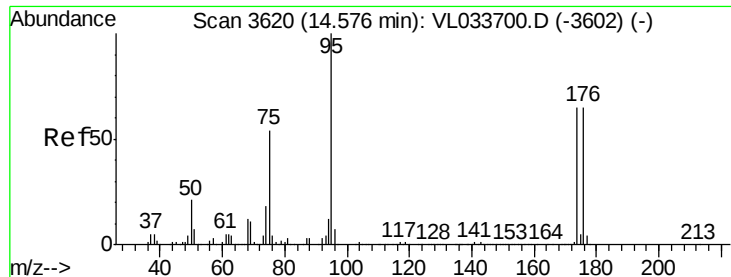
Tgt Ion: 117 Resp: 1493718
Ion Ratio Lower Upper
117 100
82 69.0 49.4 74.0
119 32.6 24.9 37.3



#60
o-Xylene
Concen: 0.030 ppbv
RT: 13.83 min Scan# 3389
Delta R.T. -0.02 min
Lab File: VL033871.D
Acq: 30 May 2019 15:22

Tgt Ion: 91 Resp: 5261
Ion Ratio Lower Upper
91 100
106 81.0 21.6 64.8#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.090 ppbv
 RT: 14.56 min Scan# 3616
 Delta R.T. -0.01 min
 Lab File: VL033871.D
 Acq: 30 May 2019 15:22

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-22-20190523-0

Tgt Ion: 95 Resp: 1221853
 Ion Ratio Lower Upper
 95 100
 174 66.5 53.9 80.9
 175 4.7 3.8 5.8

