

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL070620\
 Data File : VL035151.D
 Acq On : 6 Jul 2020 18:31
 Operator : SY/AP
 Sample : L3190-03 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EXHAUST-02DL

Quant Time: Jul 07 05:04:49 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Sat Jun 20 02:10:36 2020
 QLast Update : Sat Jun 20 02:10:36 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1060752	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2504824	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	2339457	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.44	95	1969785	10.14	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.40%	

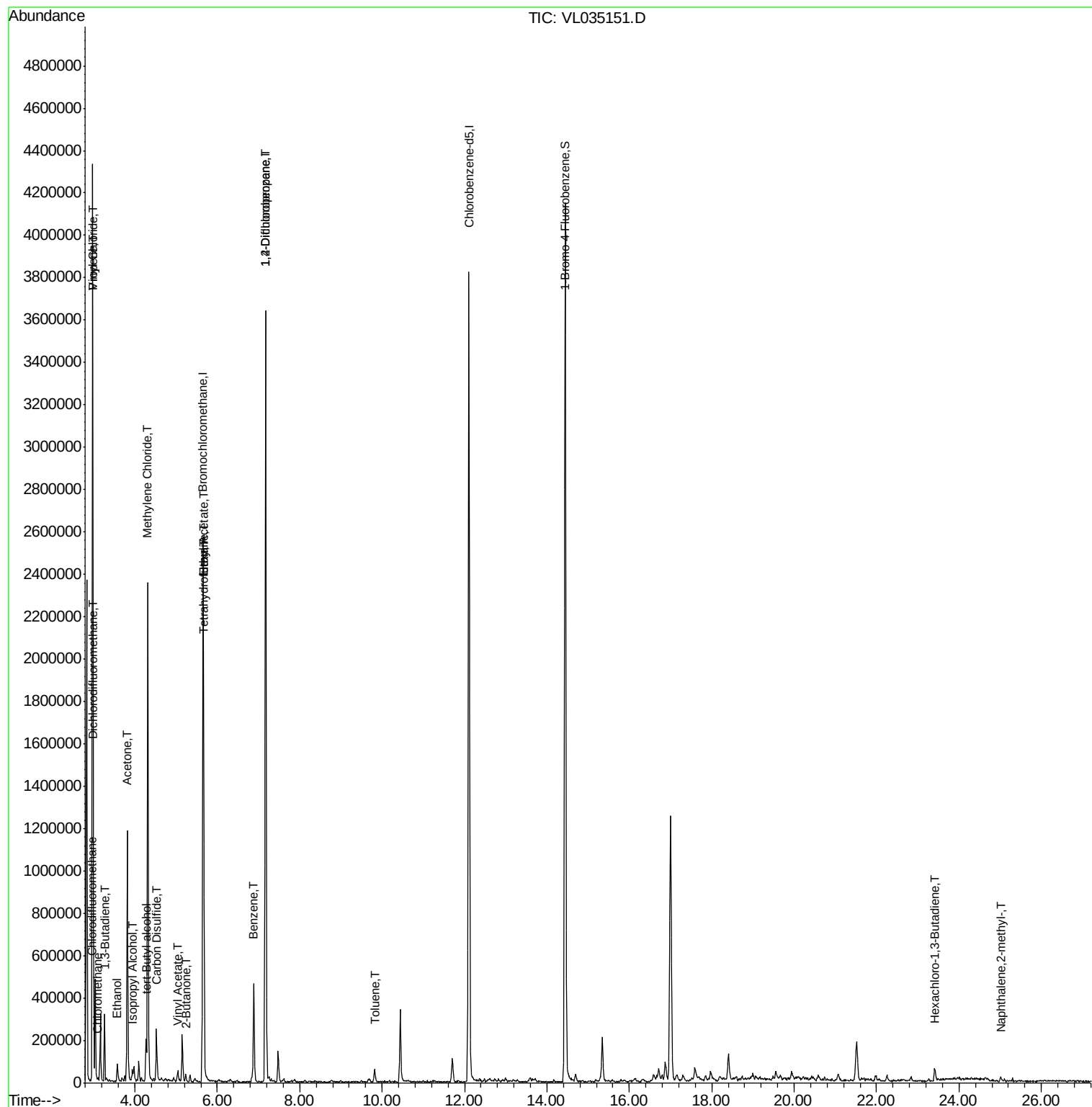
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.00	85	9587	0.067	ppbv #	72
3) Chlorodifluoromethane	2.94	51	8541	0.073	ppbv	99
4) Chloromethane	3.09	50	2751	0.042	ppbv #	79
5) Vinyl Chloride	2.97	62	308131	4.933	ppbv #	43
9) Propene	2.96	41	99352	2.141	ppbv	88
13) Ethanol	3.56	45	44875	2.560	ppbv #	45
15) Acetone	3.81	43	1103776	8.607	ppbv	94
16) 1,3-Butadiene	3.26	39	81354	1.446	ppbv #	12
17) tert-Butyl alcohol	4.27	59	170185	1.497	ppbv	97
19) Isopropyl Alcohol	3.94	45	49370	0.593	ppbv #	93
20) Methylene Chloride	4.31	84	769716	14.829	ppbv	94
23) Vinyl Acetate	5.04	43	38526	0.247	ppbv #	77
25) Ethyl Acetate	5.67	43	247109	1.068	ppbv #	83
26) Hexane	5.67	57	296223	2.839	ppbv #	46
27) Carbon Disulfide	4.52	76	249905	2.314	ppbv	99
34) 2-Butanone	5.23	43	26822	0.186	ppbv #	90
36) Benzene	6.89	78	368147	1.898	ppbv	96
39) 1,2-Dichloropropane	7.17	63	669102	8.820	ppbv #	24
41) Tetrahydrofuran	5.67	42	116478	1.585	ppbv #	49
53) Toluene	9.82	91	38015	0.184	ppbv	96
78) Hexachloro-1,3-Butadiene	23.42	225	8955	0.067	ppbv #	45
80) Naphthalene,2-methyl-	25.01	142	9080	0.100	ppbv	93

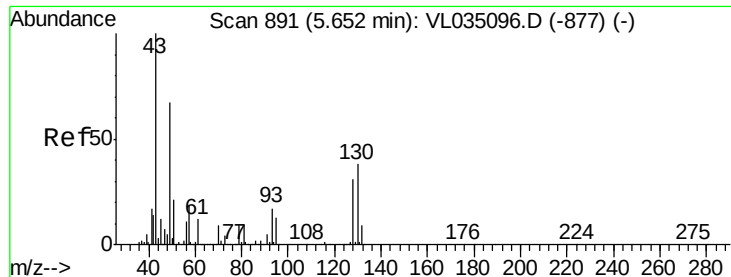
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL070620\
Data File : VL035151.D
Acq On : 6 Jul 2020 18:31
Operator : SY/AP
Sample : L3190-03 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
EXHAUST-02DL

Quant Time: Jul 07 05:04:49 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Sat Jun 20 02:10:36 2020
QLast Update : Sat Jun 20 02:10:36 2020
Response via : Initial Calibration

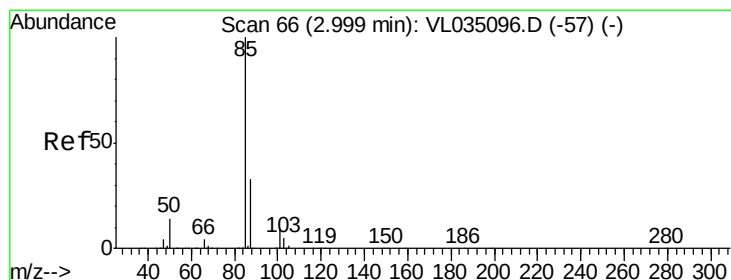
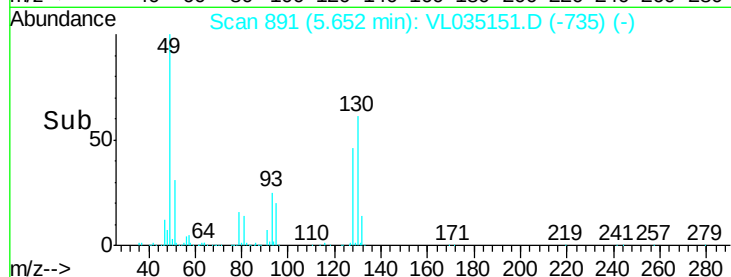
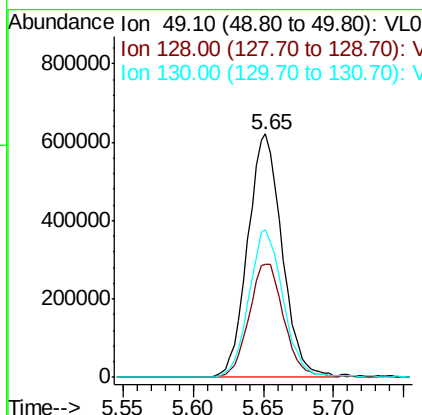
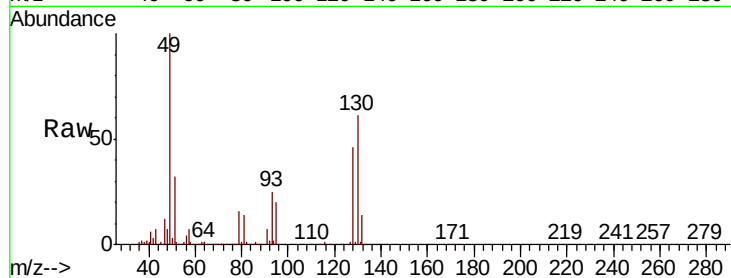




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.65 min Scan# 891
 Delta R.T. 0.00 min
 Lab File: VL035151.D
 Acq: 6 Jul 2020 18:31

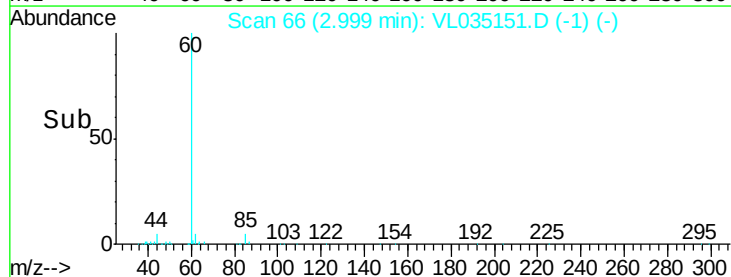
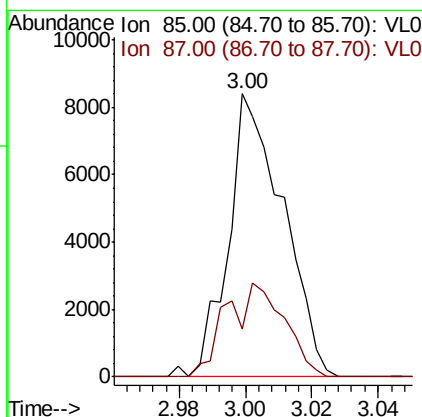
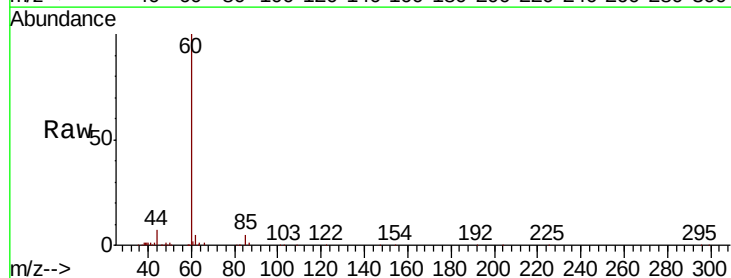
Instrument :
 MSVOA_L
 ClientSampleId :
 EXHAUST-02DL

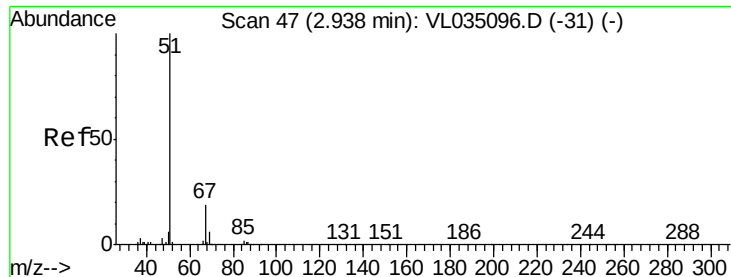
Tot Ion: 49 Resp: 1060752
 Ion Ratio Lower Upper
 49 100
 128 47.4 22.9 68.5
 130 60.6 29.0 87.0



#2
 Dichlorodifluoromethane
 Concen: 0.067 ppbv
 RT: 3.00 min Scan# 66
 Delta R.T. 0.00 min
 Lab File: VL035151.D
 Acq: 6 Jul 2020 18:31

Tgt Ion: 85 Resp: 9587
 Ion Ratio Lower Upper
 85 100
 87 16.8 26.1 39.1#





#3

Chlorodifluoromethane

Concen: 0.073 ppbv

RT: 2.94 min Scan# 49

Delta R.T. 0.01 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

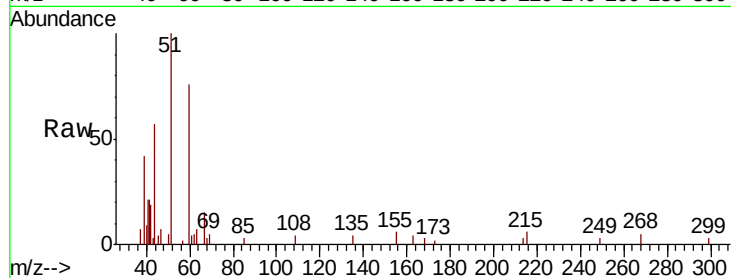
EXHAUST-02DL

Tot Ion: 51 Resp: 8541

Ion Ratio Lower Upper

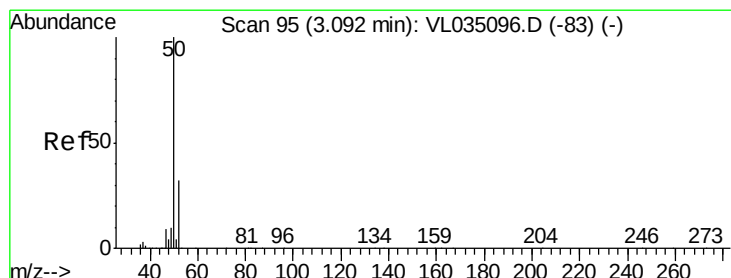
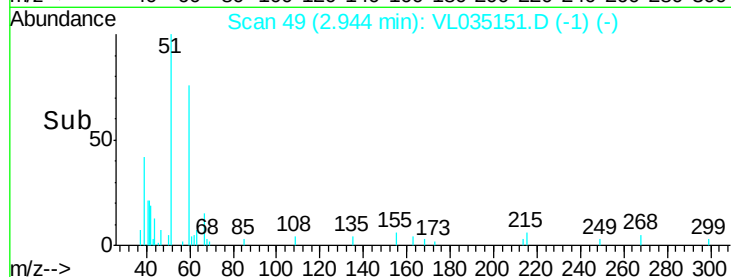
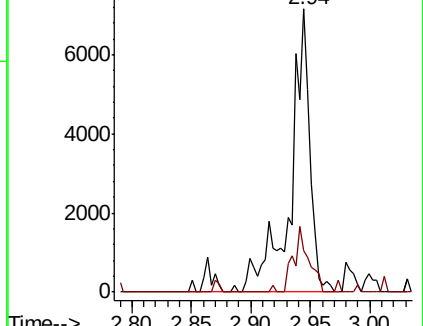
51 100

67 18.5 15.2 22.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.042 ppbv

RT: 3.09 min Scan# 94

Delta R.T. -0.00 min

Lab File: VL035151.D

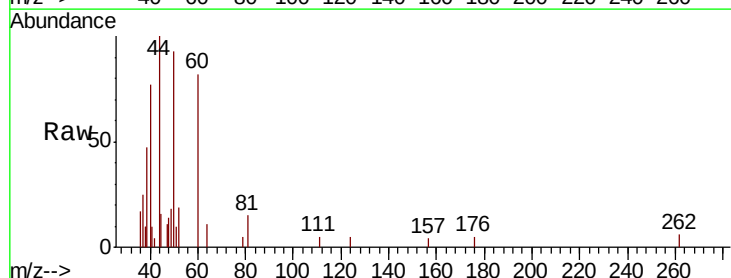
Acq: 6 Jul 2020 18:31

Tgt Ion: 50 Resp: 2751

Ion Ratio Lower Upper

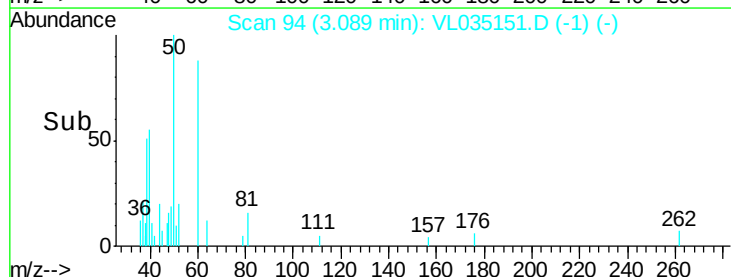
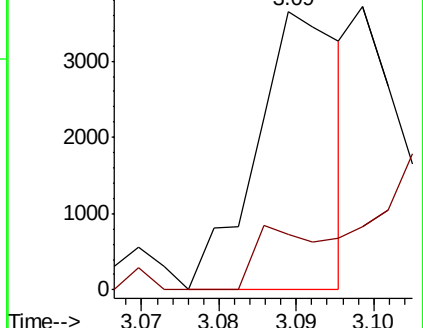
50 100

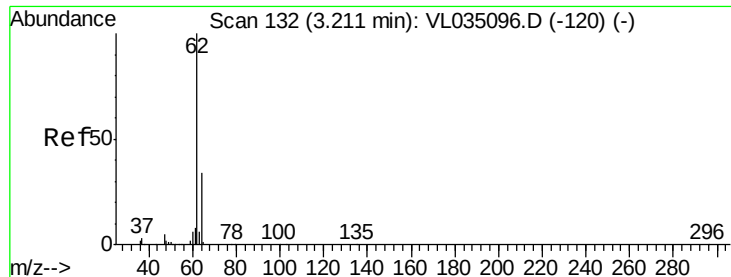
52 20.0 25.4 38.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 4.933 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.24 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

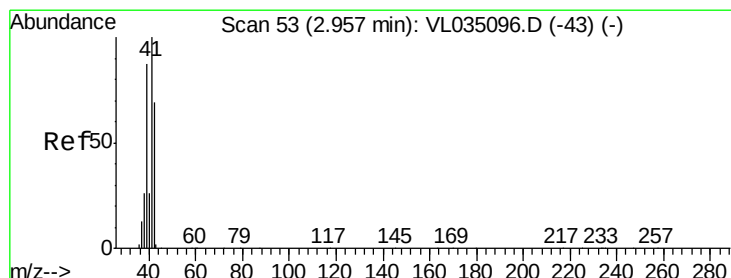
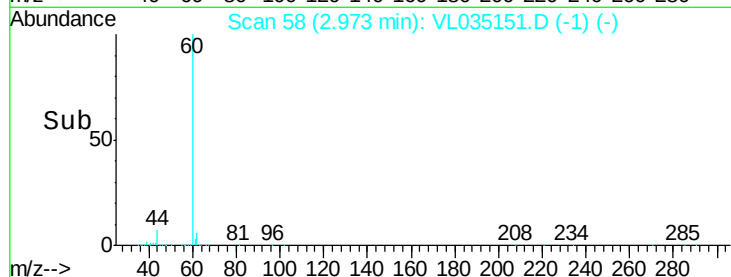
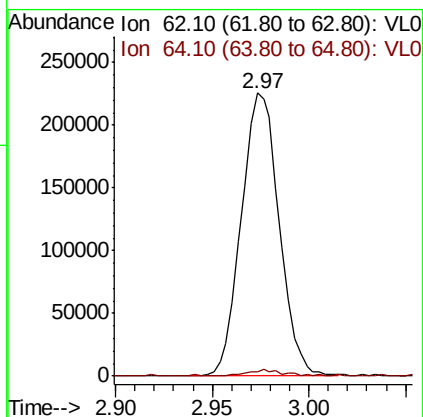
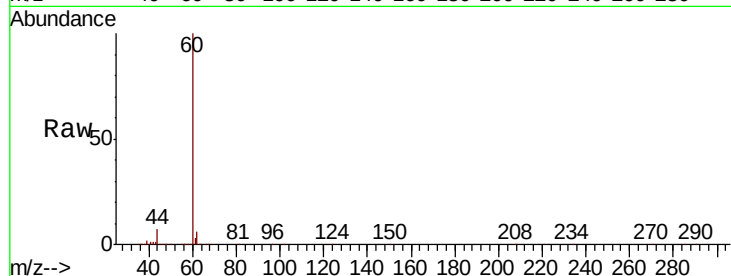
EXHAUST-02DL

Tot Ion: 62 Resp: 308131

Ion Ratio Lower Upper

62 100

64 1.2 27.0 40.4#



#9

Propene

Concen: 2.141 ppbv

RT: 2.96 min Scan# 55

Delta R.T. 0.01 min

Lab File: VL035151.D

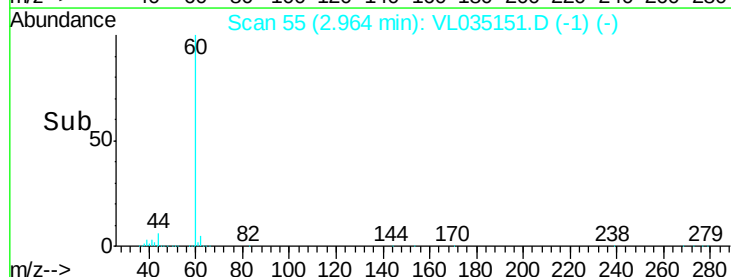
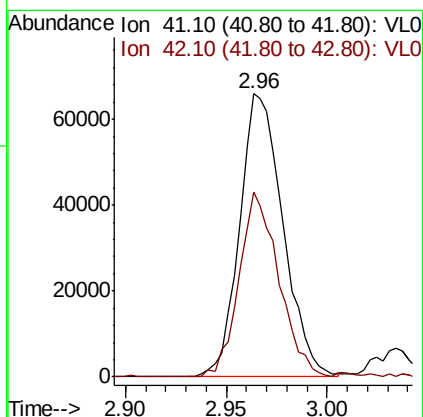
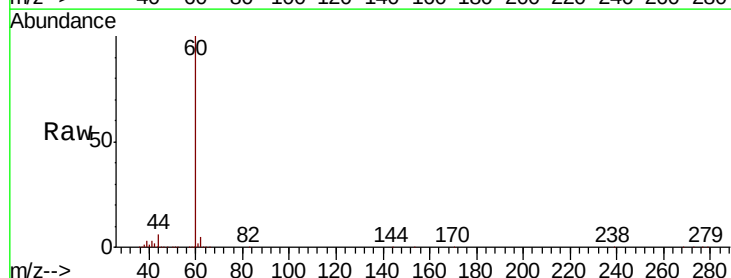
Acq: 6 Jul 2020 18:31

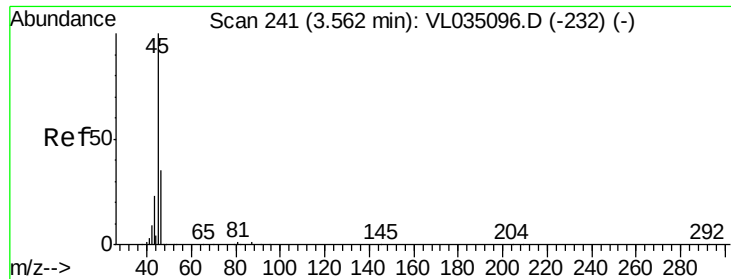
Tgt Ion: 41 Resp: 99352

Ion Ratio Lower Upper

41 100

42 60.2 55.8 83.6

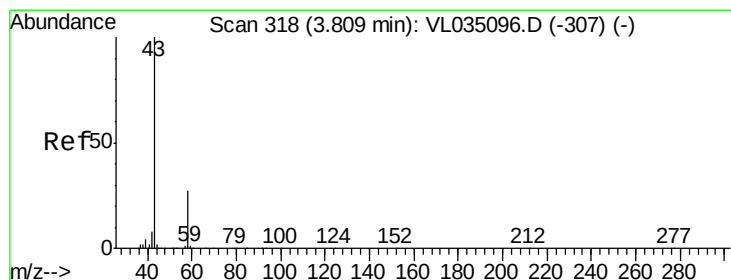
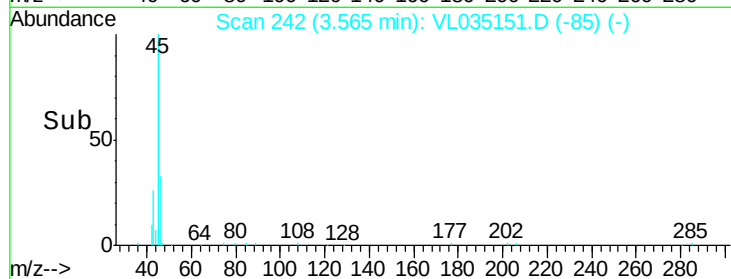
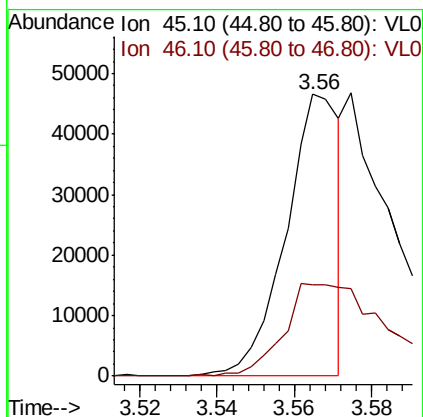
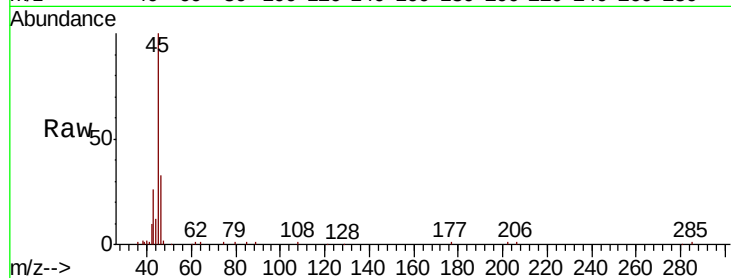




#13
Ethanol
Concen: 2.560 ppbv
RT: 3.56 min Scan# 242
Delta R.T. 0.00 min
Lab File: VL035151.D
Acq: 6 Jul 2020 18:31

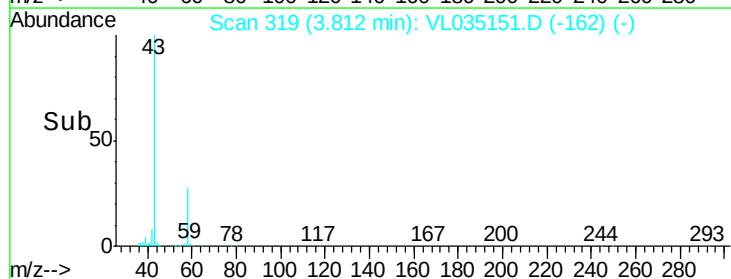
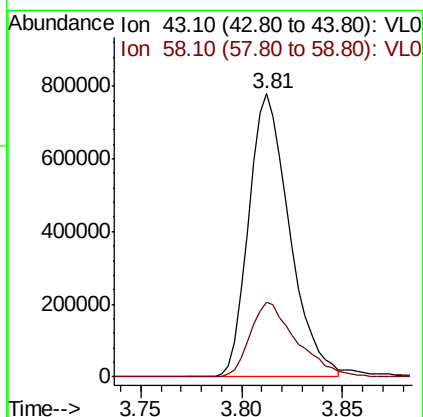
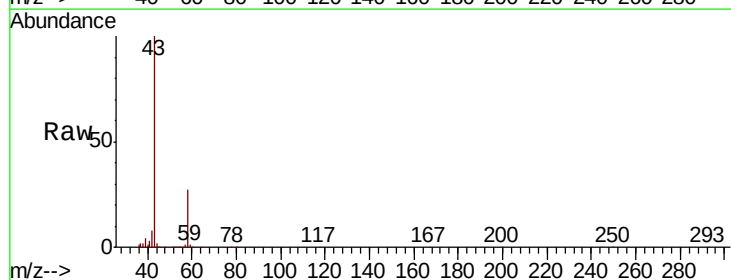
Instrument :
MSVOA_L
ClientSampleId :
EXHAUST-02DL

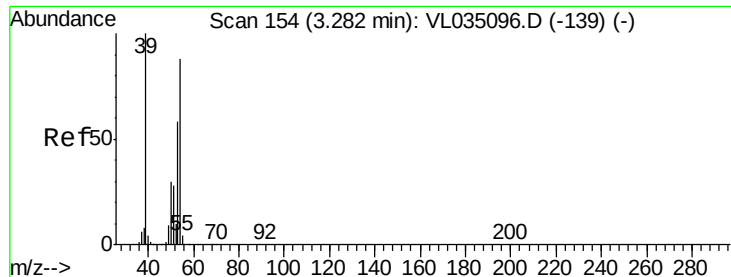
Tot Ion: 45 Resp: 44875
Ion Ratio Lower Upper
45 100
46 68.0 14.2 57.0#



#15
Acetone
Concen: 8.607 ppbv
RT: 3.81 min Scan# 319
Delta R.T. 0.00 min
Lab File: VL035151.D
Acq: 6 Jul 2020 18:31

Tgt Ion: 43 Resp: 1103776
Ion Ratio Lower Upper
43 100
58 30.3 21.8 32.6





#16

1,3-Butadiene

Concen: 1.446 ppbv

RT: 3.26 min Scan# 148

Delta R.T. -0.02 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

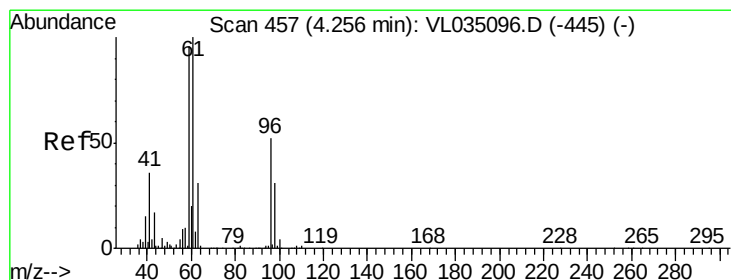
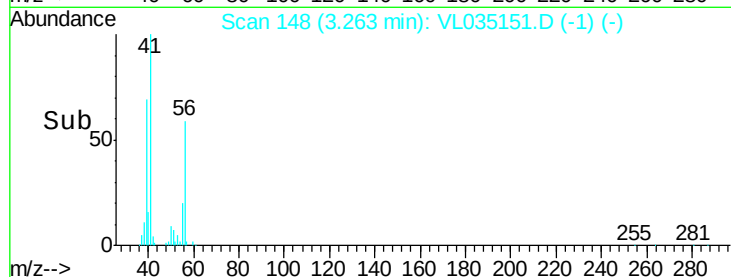
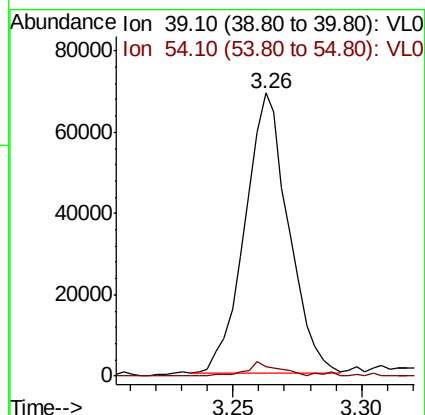
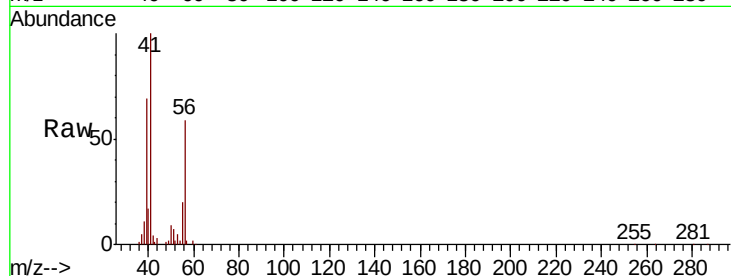
EXHAUST-02DL

Tot Ion: 39 Resp: 81354

Ion Ratio Lower Upper

39 100

54 4.5 67.0 100.4#



#17

tert-Butyl alcohol

Concen: 1.497 ppbv

RT: 4.27 min Scan# 461

Delta R.T. 0.01 min

Lab File: VL035151.D

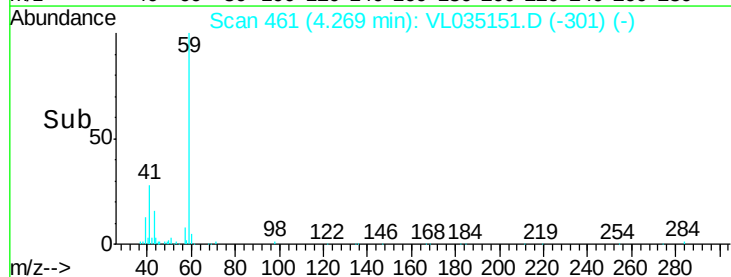
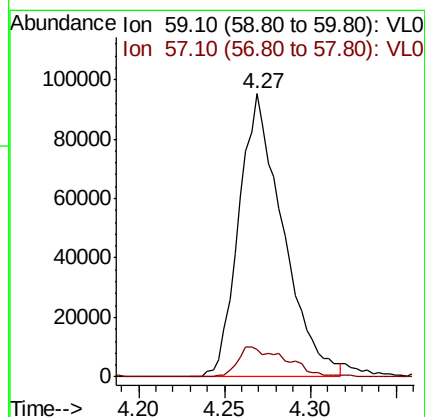
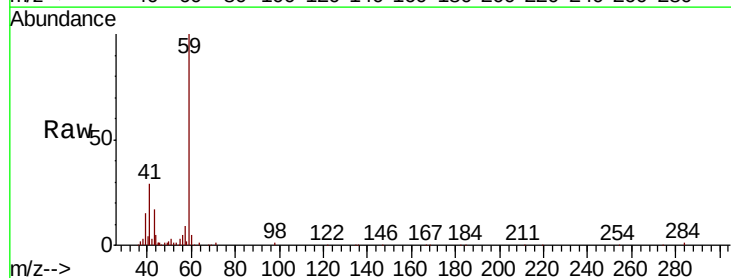
Acq: 6 Jul 2020 18:31

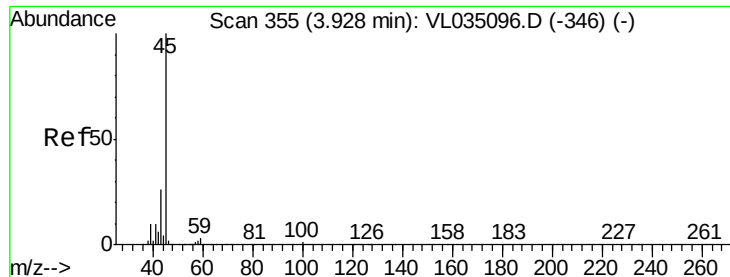
Tgt Ion: 59 Resp: 170185

Ion Ratio Lower Upper

59 100

57 11.7 8.6 12.8





#19

Isopropyl Alcohol

Concen: 0.593 ppbv

RT: 3.94 min Scan# 359

Delta R.T. 0.01 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

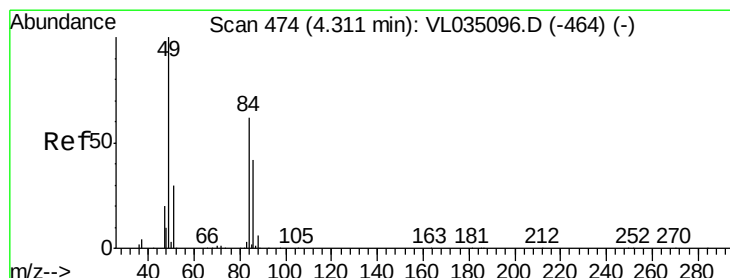
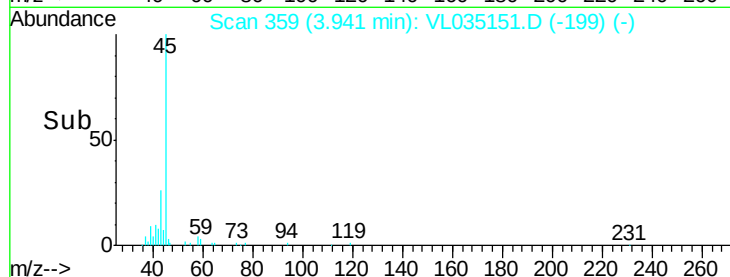
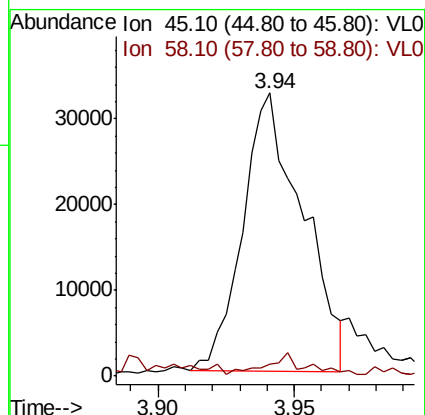
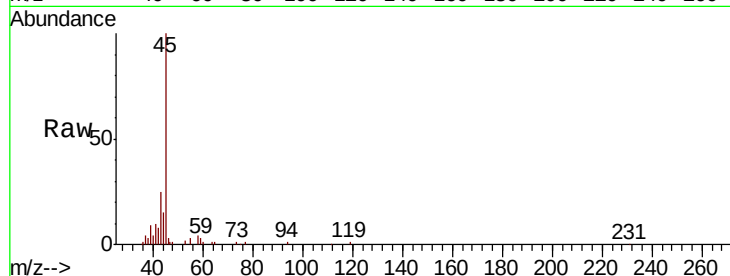
EXHAUST-02DL

Tot Ion: 45 Resp: 49370

Ion Ratio Lower Upper

45 100

58 0.0 1.8 2.8#



#20

Methylene Chloride

Concen: 14.829 ppbv

RT: 4.31 min Scan# 475

Delta R.T. 0.00 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Tgt Ion: 84 Resp: 769716

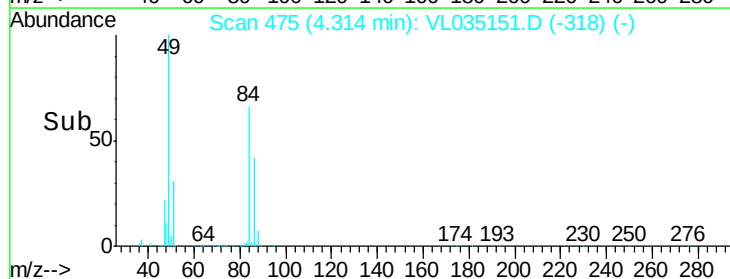
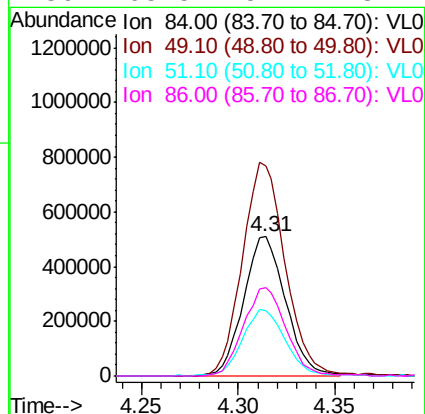
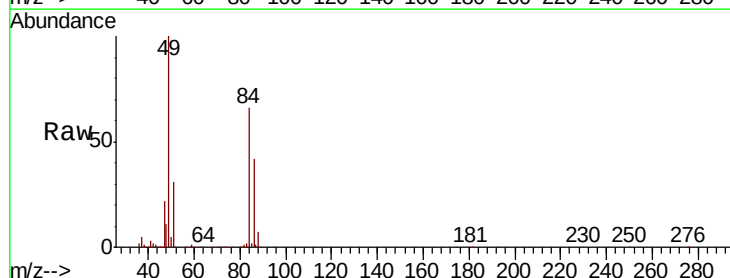
Ion Ratio Lower Upper

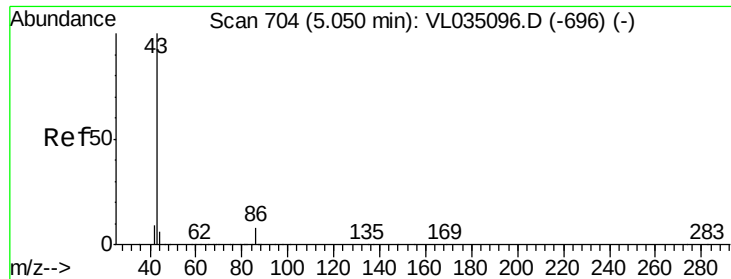
84 100

49 150.7 128.8 193.2

51 46.3 38.7 58.1

86 63.5 54.1 81.1





#23

Vinyl Acetate

Concen: 0.247 ppbv

RT: 5.04 min Scan# 701

Delta R.T. -0.01 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

EXHAUST-02DL

Tot Ion: 43 Resp: 38526

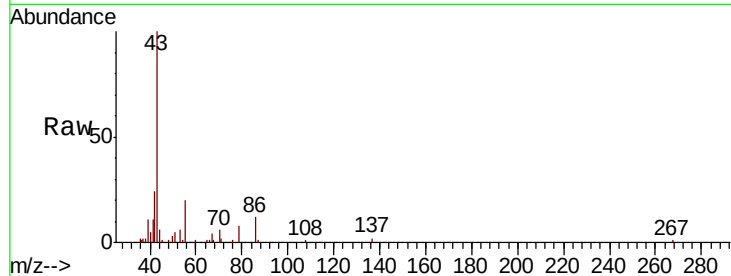
Ion Ratio Lower Upper

43 100

86 12.5 6.2 9.2#

42 22.5 8.1 12.1#

44 0.0 4.6 7.0#

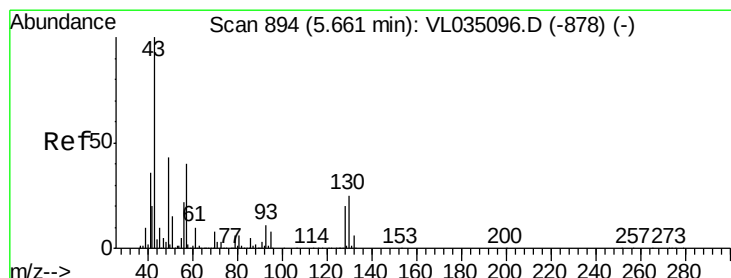
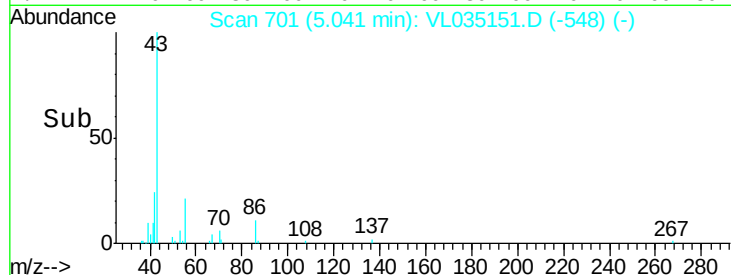
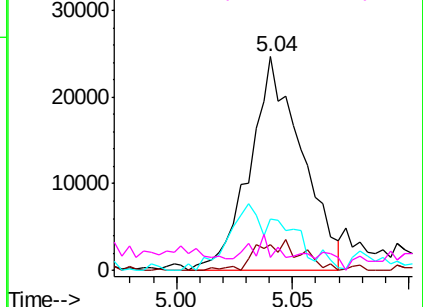


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 1.068 ppbv

RT: 5.67 min Scan# 897

Delta R.T. 0.01 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Tgt Ion: 43 Resp: 247109

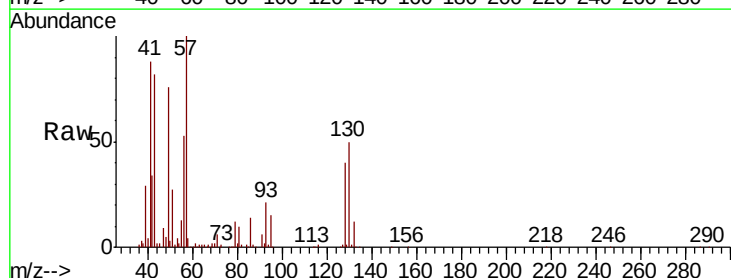
Ion Ratio Lower Upper

43 100

45 3.7 8.4 12.6#

61 2.7 8.0 12.0#

70 3.2 6.3 9.5#

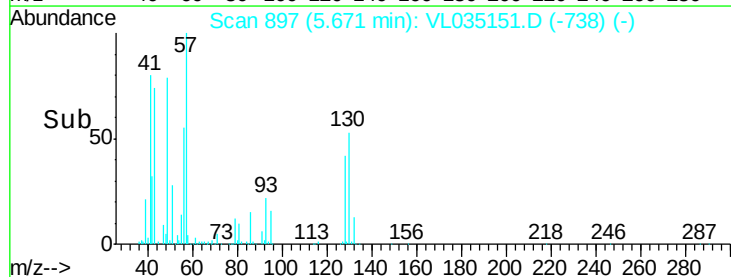
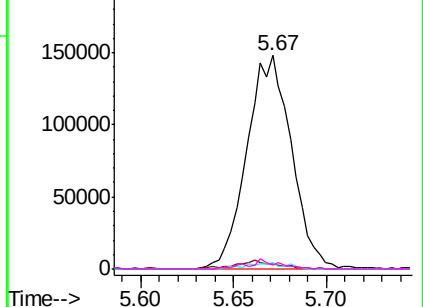


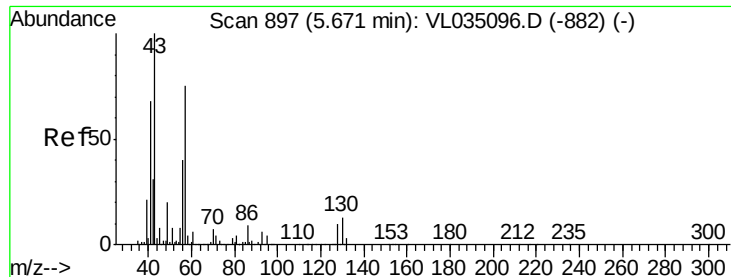
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

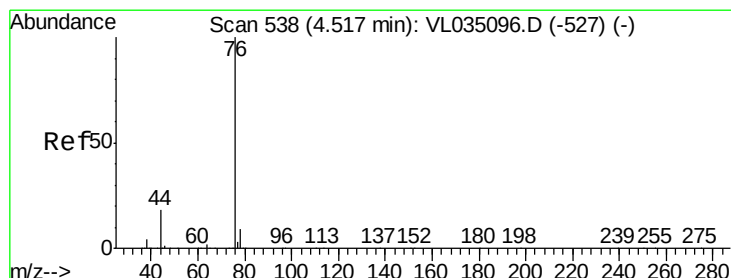
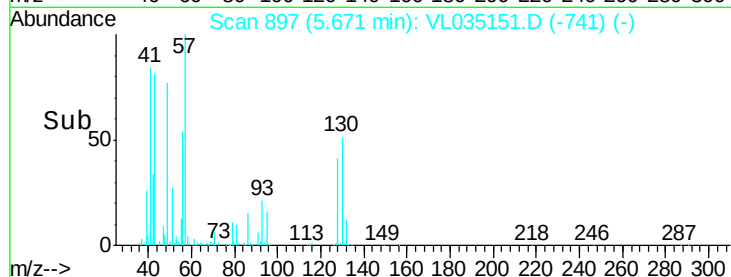
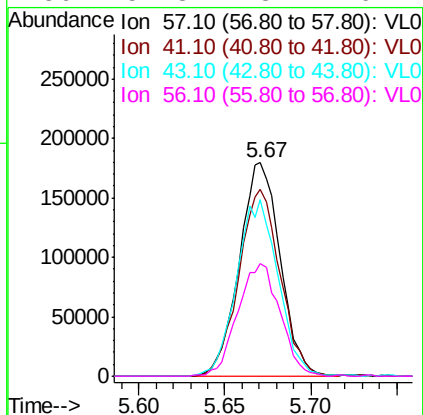
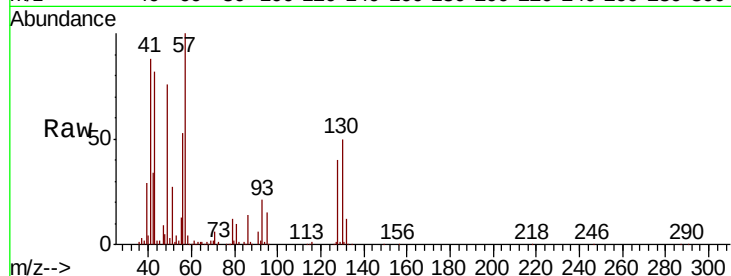




#26
Hexane
Concen: 2.839 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL035151.D
Acq: 6 Jul 2020 18:31

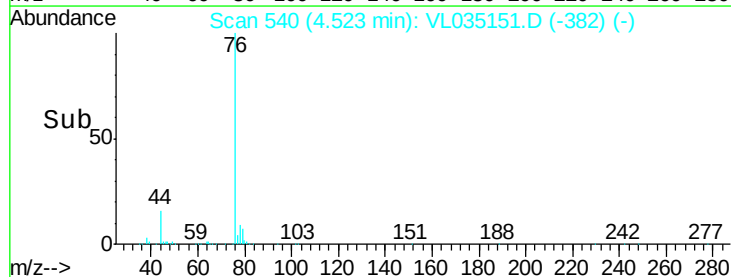
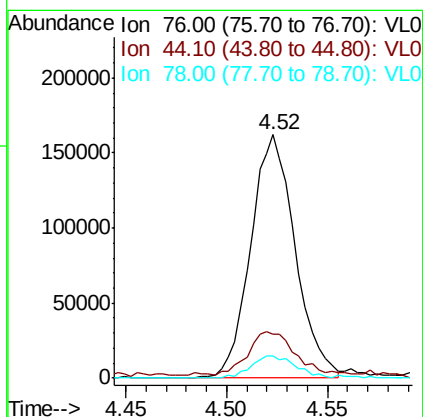
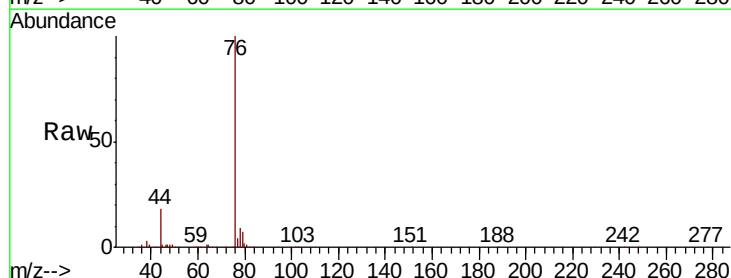
Instrument :
MSVOA_L
ClientSampleId :
EXHAUST-02DL

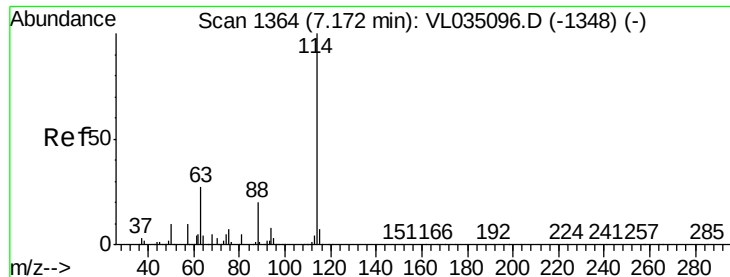
Tot Ion	Ratio	Lower	Upper
57	100		
41	88.8	72.9	109.3
43	84.0	181.3	271.9#
56	54.8	43.1	64.7



#27
Carbon Disulfide
Concen: 2.314 ppbv
RT: 4.52 min Scan# 540
Delta R.T. 0.01 min
Lab File: VL035151.D
Acq: 6 Jul 2020 18:31

Tgt Ion	Ratio	Lower	Upper
76	100		
44	19.5	15.8	23.8
78	9.9	7.6	11.4

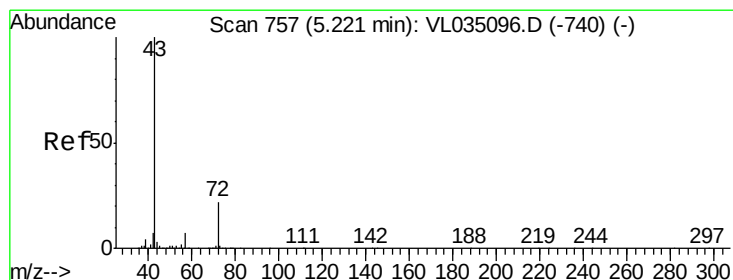
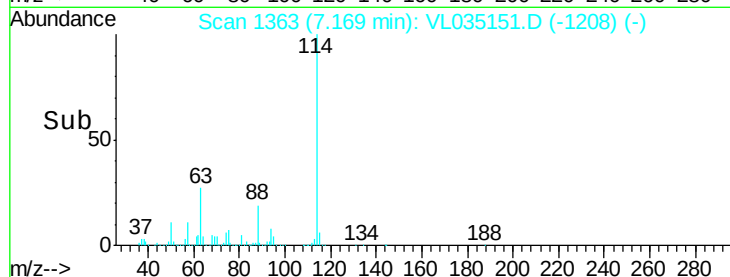
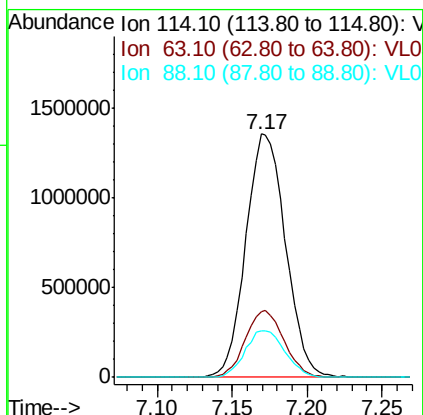
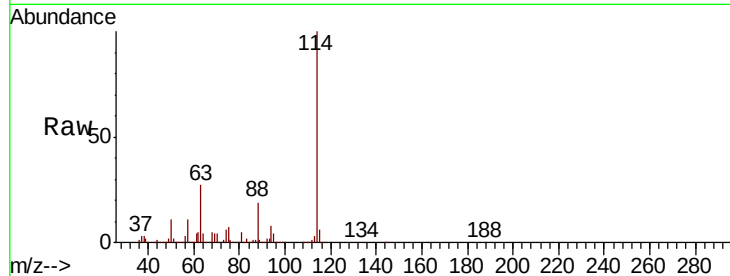




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1363
 Delta R.T. -0.00 min
 Lab File: VL035151.D
 Acq: 6 Jul 2020 18:31

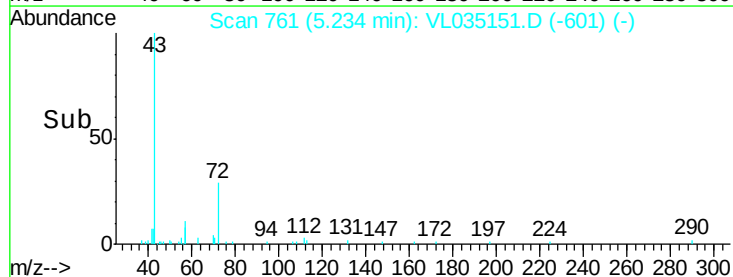
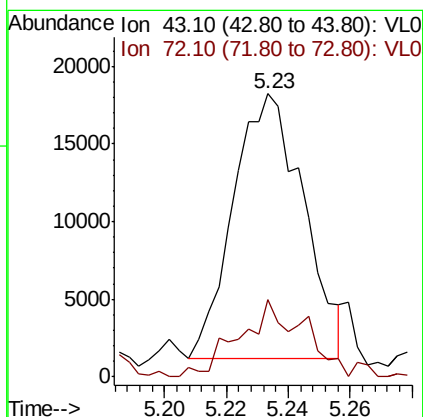
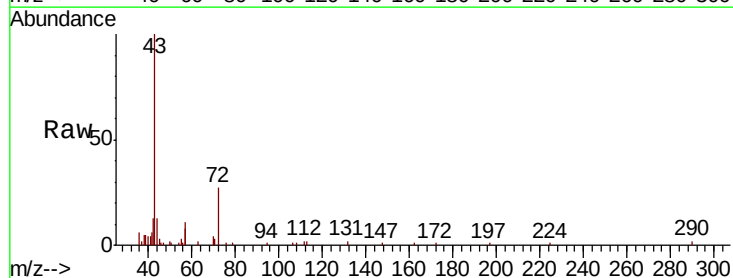
Instrument :
 MSVOA_L
 ClientSampleId :
 EXHAUST-02DL

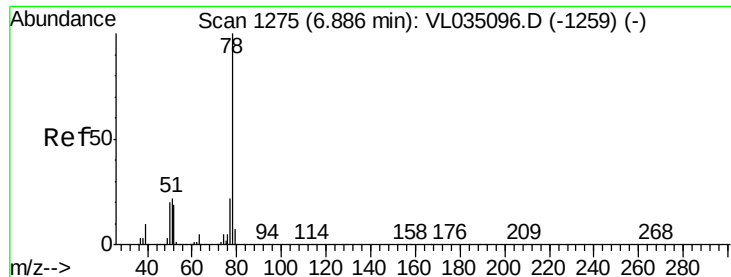
Tot Ion:114 Resp: 2504824
 Ion Ratio Lower Upper
 114 100
 63 26.9 21.9 32.9
 88 19.4 15.6 23.4



#34
 2-Butanone
 Concen: 0.186 ppbv
 RT: 5.23 min Scan# 761
 Delta R.T. 0.01 min
 Lab File: VL035151.D
 Acq: 6 Jul 2020 18:31

Tgt Ion: 43 Resp: 26822
 Ion Ratio Lower Upper
 43 100
 72 27.8 18.3 27.5#





#36

Benzene

Concen: 1.898 ppbv

RT: 6.89 min Scan# 1276

Delta R.T. 0.00 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

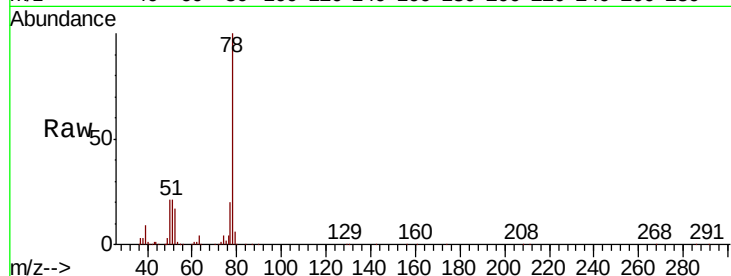
MSVOA_L

ClientSampleId :

EXHAUST-02DL

Tot Ion: 78 Resp: 368147

Ion	Ratio	Lower	Upper
78	100		
77	19.6	17.8	26.6
50	21.1	16.2	24.2

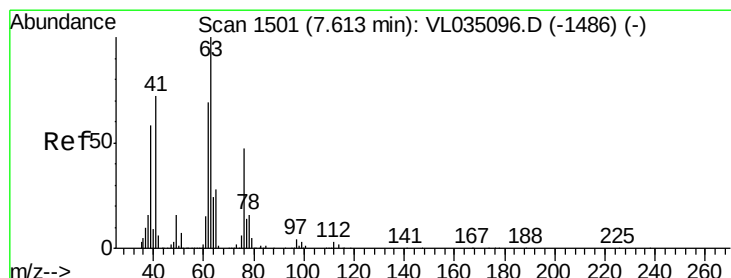
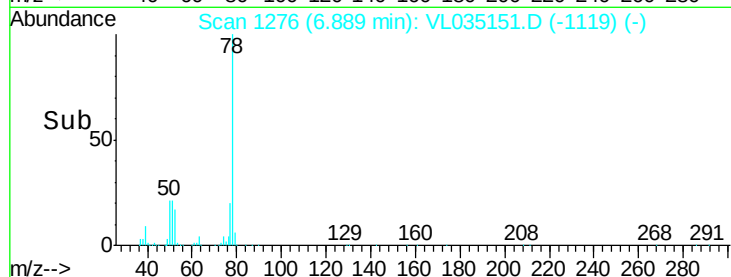
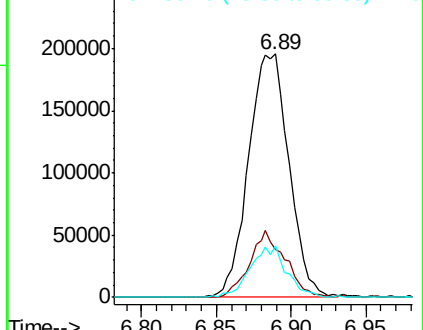


Abundance

Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 8.820 ppbv

RT: 7.17 min Scan# 1364

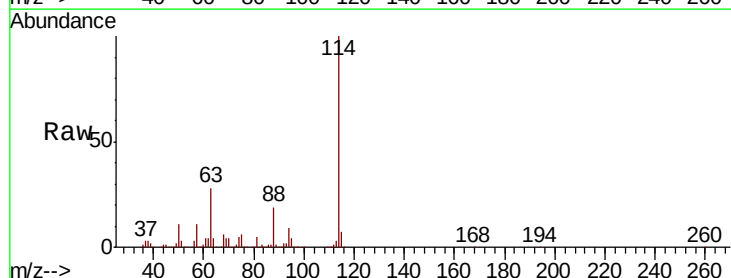
Delta R.T. -0.44 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Tgt Ion: 63 Resp: 669102

Ion	Ratio	Lower	Upper
63	100		
41	0.0	58.0	87.0#
62	16.0	55.4	83.0#

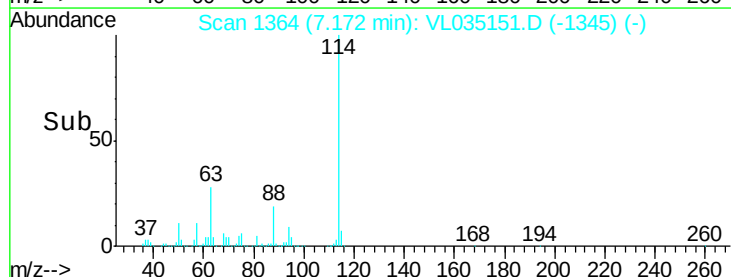
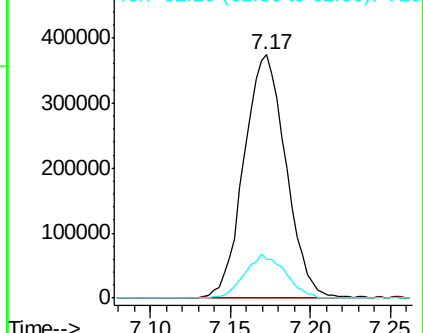


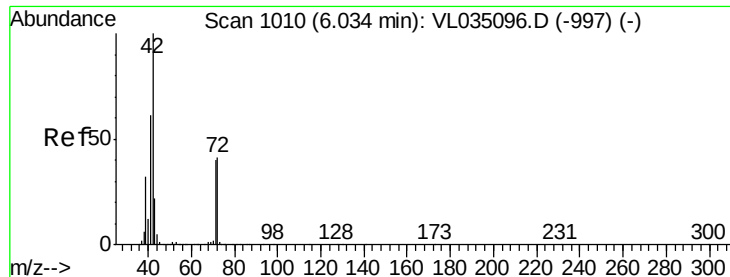
Abundance

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





#41

Tetrahydrofuran

Concen: 1.585 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.36 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

EXHAUST-02DL

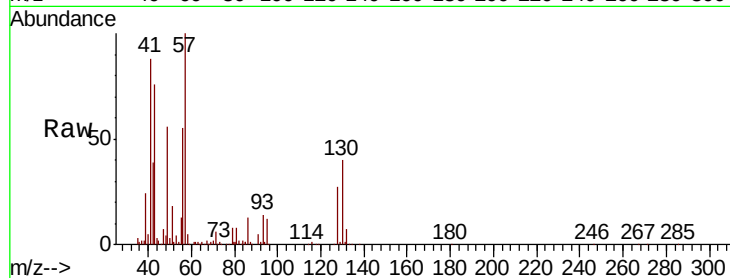
Tot Ion: 42 Resp: 116478

Ion Ratio Lower Upper

42 100

72 1.6 33.4 50.2#

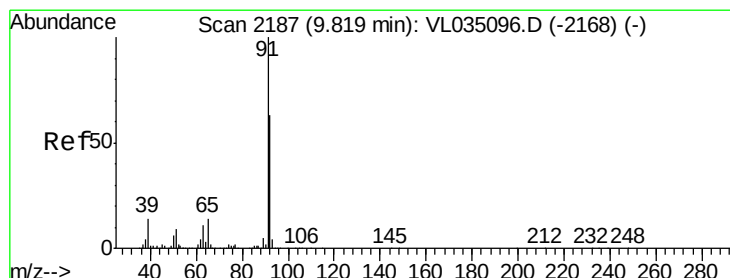
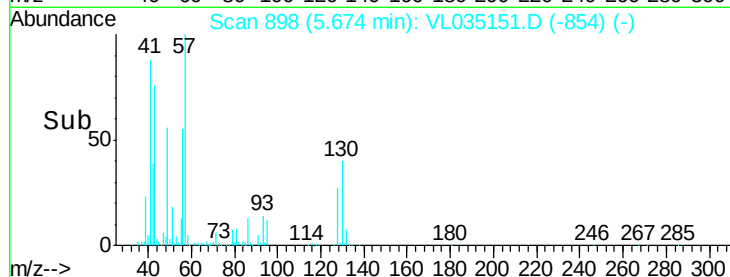
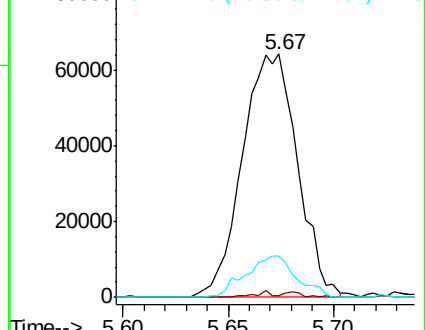
71 16.1 31.8 47.6#



Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



#53

Toluene

Concen: 0.184 ppbv

RT: 9.82 min Scan# 2188

Delta R.T. 0.00 min

Lab File: VL035151.D

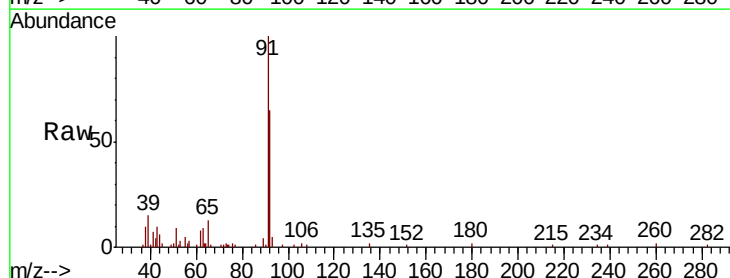
Acq: 6 Jul 2020 18:31

Tgt Ion: 91 Resp: 38015

Ion Ratio Lower Upper

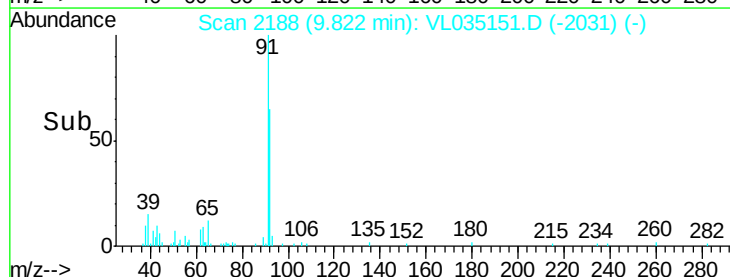
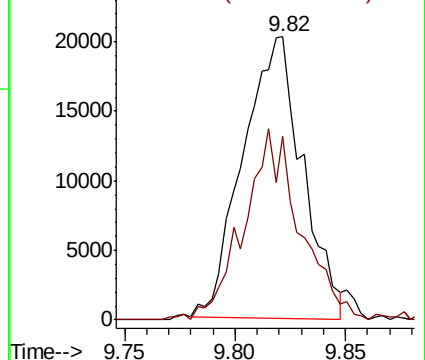
91 100

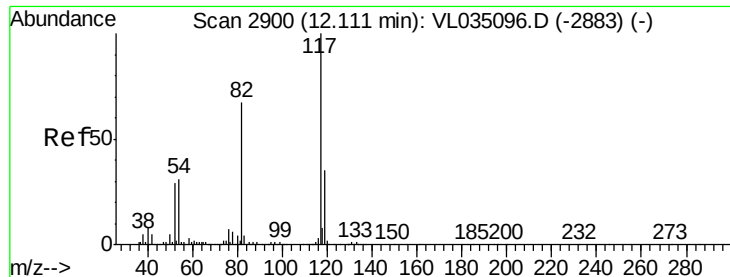
92 64.7 49.0 73.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

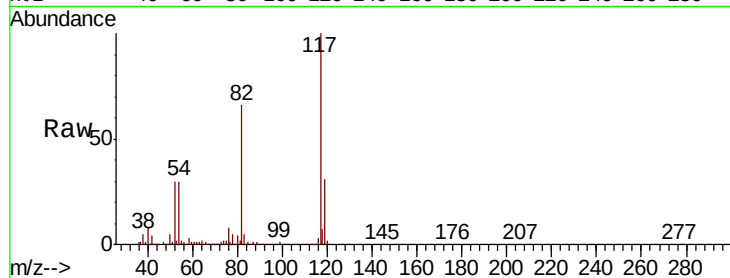




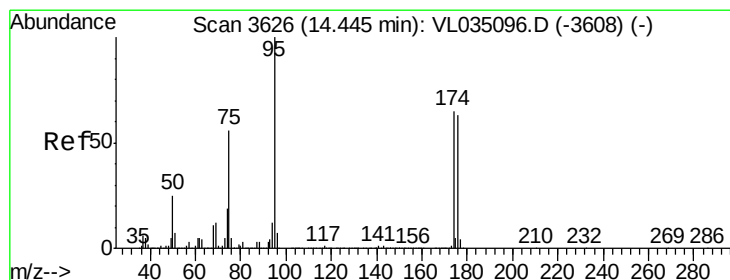
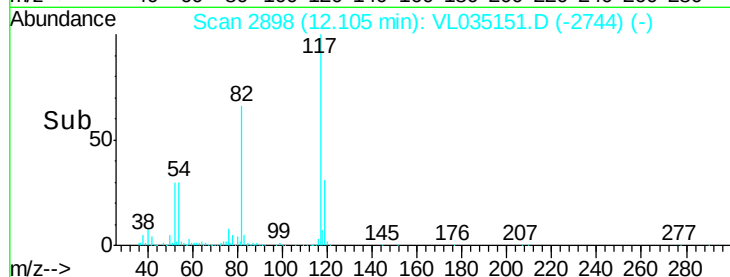
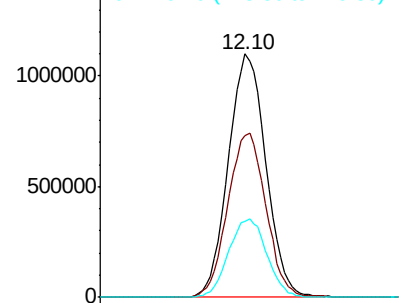
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2898
Delta R.T. -0.01 min
Lab File: VL035151.D
Acq: 6 Jul 2020 18:31

Instrument :
MSVOA_L
ClientSampleId :
EXHAUST-02DL

Tot Ion:117 Resp: 2339457
Ion Ratio Lower Upper
117 100
82 68.7 50.4 75.6
119 33.1 25.4 38.0

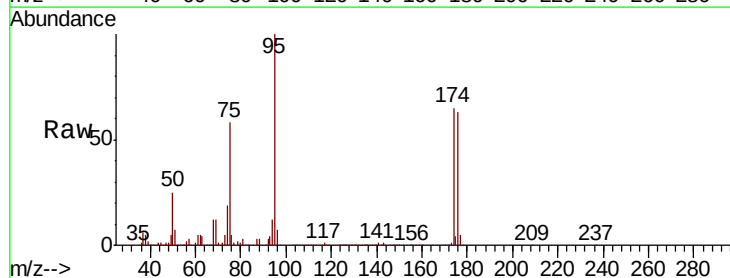


Abundance Ion 117.10 (116.80 to 117.80): V
1500000 Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

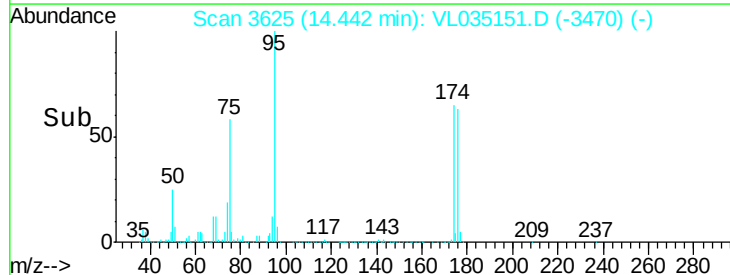
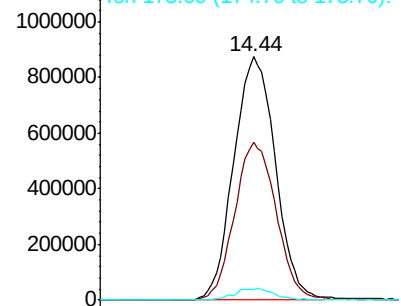


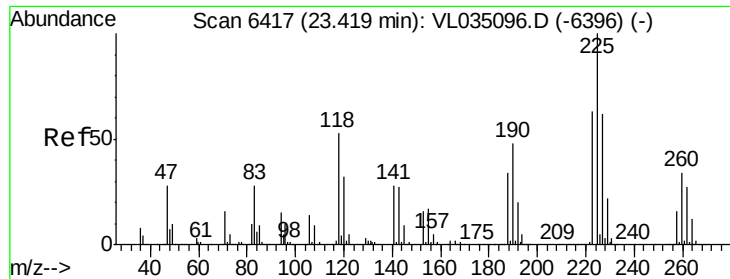
#68
1-Bromo-4-Fluorobenzene
Concen: 10.136 ppbv
RT: 14.44 min Scan# 3625
Delta R.T. -0.00 min
Lab File: VL035151.D
Acq: 6 Jul 2020 18:31

Tgt Ion: 95 Resp: 1969785
Ion Ratio Lower Upper
95 100
174 65.1 52.2 78.2
175 4.7 4.0 6.0



Abundance Ion 95.10 (94.80 to 95.80): VL0
1200000 Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V





#78

Hexachloro-1,3-Butadiene

Concen: 0.067 ppbv

RT: 23.42 min Scan# 6416

Delta R.T. -0.00 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

Instrument :

MSVOA_L

ClientSampleId :

EXHAUST-02DL

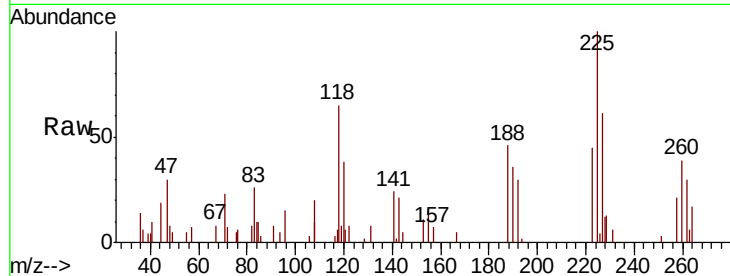
Tot Ion:225 Resp: 8955

Ion Ratio Lower Upper

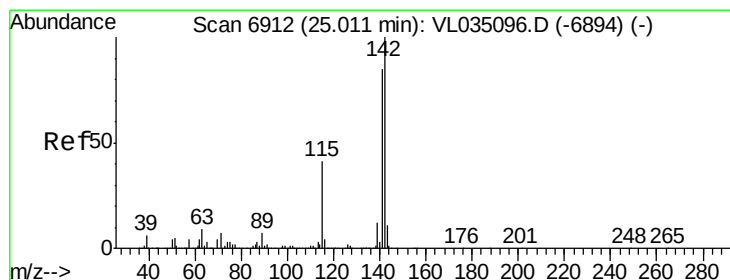
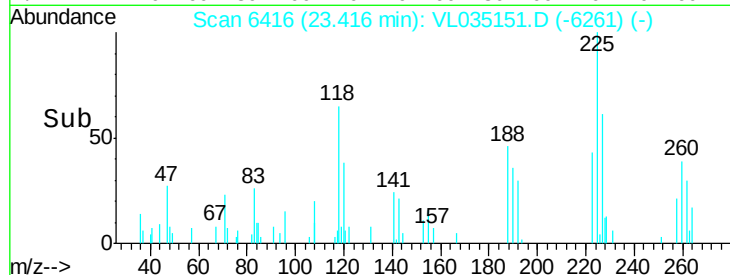
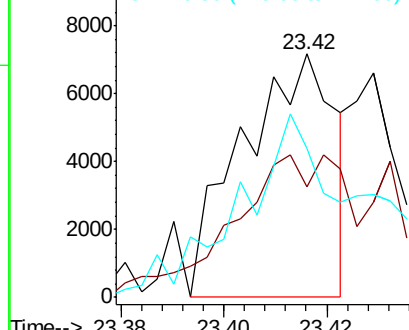
225 100

223 108.6 51.4 77.0#

227 107.4 51.8 77.8#



Abundance Ion 224.90 (224.60 to 225.60): V
Ion 222.90 (222.60 to 223.60): V
Ion 226.90 (226.60 to 227.60): V



#80

Naphthalene, 2-methyl-

Concen: 0.100 ppbv

RT: 25.01 min Scan# 6913

Delta R.T. 0.00 min

Lab File: VL035151.D

Acq: 6 Jul 2020 18:31

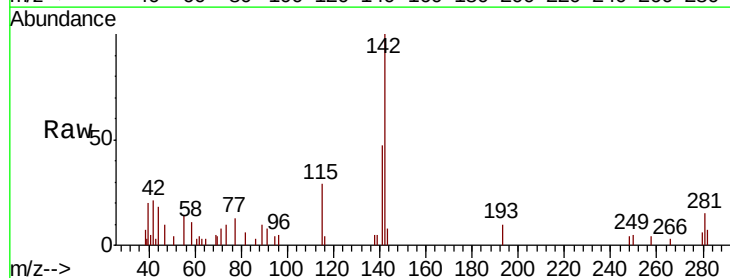
Tgt Ion:142 Resp: 9080

Ion Ratio Lower Upper

142 100

141 89.4 67.5 101.3

115 48.5 33.8 50.8



Abundance Ion 142.00 (141.70 to 142.70): V
Ion 141.00 (140.70 to 141.70): V
Ion 115.00 (114.70 to 115.70): V

