

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091620\
 Data File : VL035637.D
 Acq On : 16 Sep 2020 20:25
 Operator : SY/AP
 Sample : L4036-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 DB-IA-Y01

Quant Time: Sep 17 07:08:46 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep 14 15:19:50 2020
 QLast Update : Mon Sep 14 15:19:50 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1051970	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4269404	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	4267429	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	3167999	10.45	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.50%

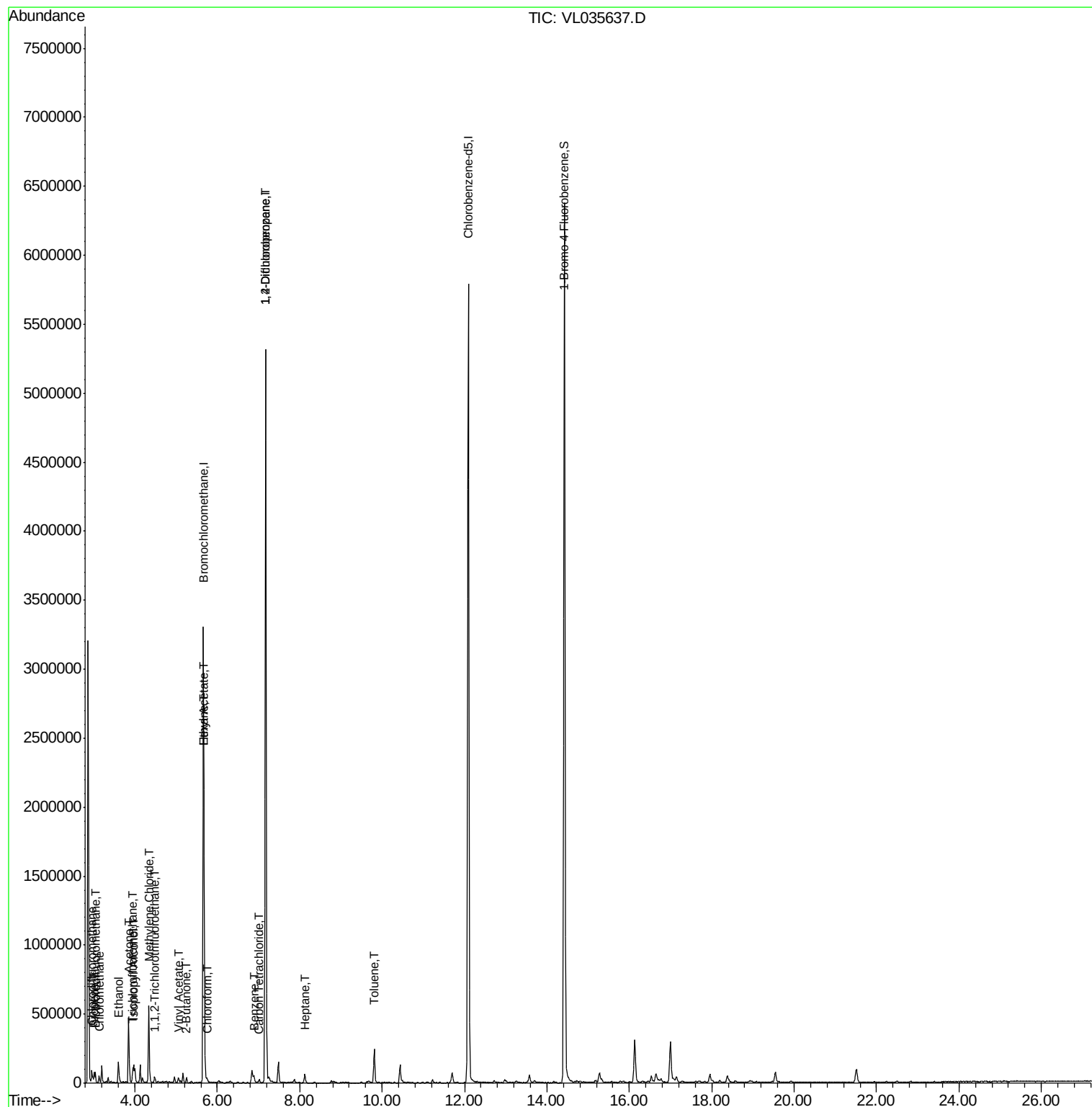
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	49030	0.269	ppbv	98
3) Chlorodifluoromethane	2.95	51	81771	0.703	ppbv #	72
4) Chloromethane	3.13	50	39171	0.628	ppbv	95
9) Propene	3.01	41	13334	0.297	ppbv	84
10) Heptane	8.12	43	17642	0.146	ppbv	98
11) Trichlorofluoromethane	3.94	101	67087	0.252	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.48	101	15100	0.075	ppbv	95
13) Ethanol	3.60	45	156121	14.038	ppbv	98
15) Acetone	3.84	43	427987	3.689	ppbv	99
19) Isopropyl Alcohol	3.97	45	130503	1.885	ppbv #	91
20) Methylene Chloride	4.34	84	244372	2.828	ppbv	96
23) Vinyl Acetate	5.06	43	25063	0.168	ppbv #	78
25) Ethyl Acetate	5.68	43	71385	0.348	ppbv #	82
26) Hexane	5.68	57	99989	0.861	ppbv #	53
29) Chloroform	5.74	83	13212	0.056	ppbv	85
34) 2-Butanone	5.25	43	33601	0.265	ppbv	97
35) Carbon Tetrachloride	7.01	117	14850	0.069	ppbv #	89
36) Benzene	6.89	78	35047	0.127	ppbv	94
39) 1,2-Dichloropropane	7.17	63	819042	8.773	ppbv #	32
53) Toluene	9.81	91	199593	0.574	ppbv	95

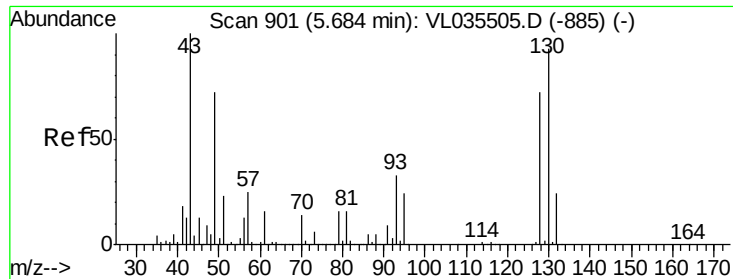
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Sep 14 15:19:50 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

DB-IA-Y01

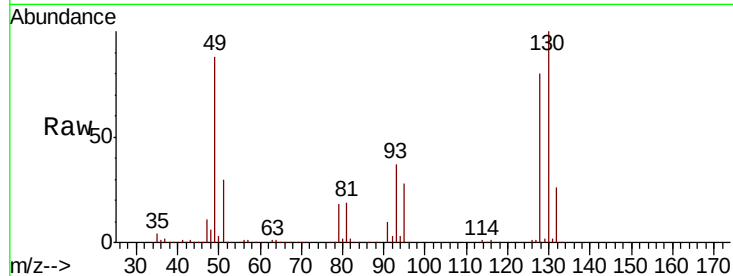
Tot Ion: 49 Resp: 1051970

Ion Ratio Lower Upper

49 100

128 90.2 50.0 150.1

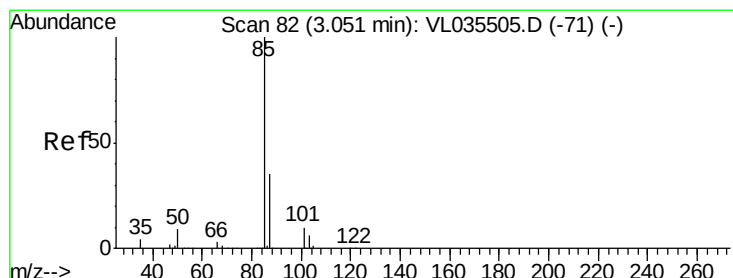
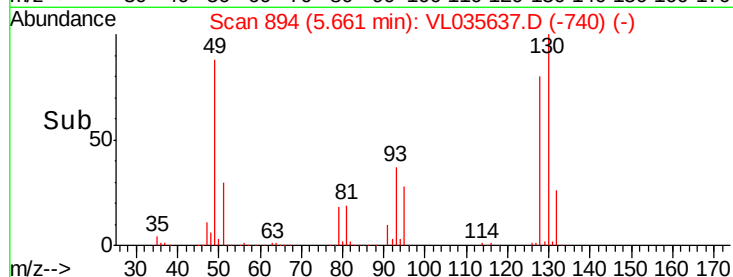
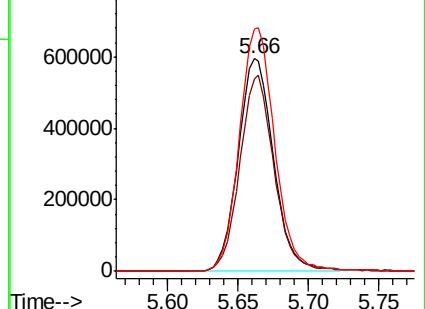
130 115.1 64.4 193.2



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: 0.269 ppbv

RT: 3.04 min Scan# 79

Delta R.T. 0.01 min

Lab File: VL035637.D

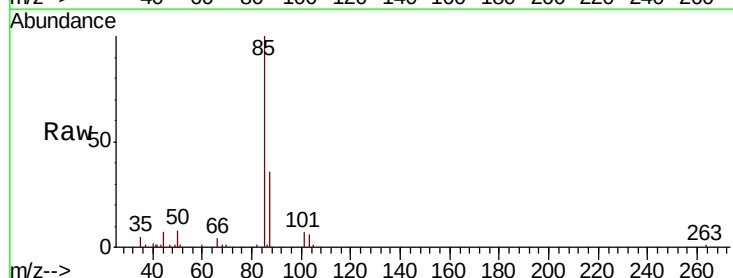
Acq: 16 Sep 2020 20:25

Tgt Ion: 85 Resp: 49030

Ion Ratio Lower Upper

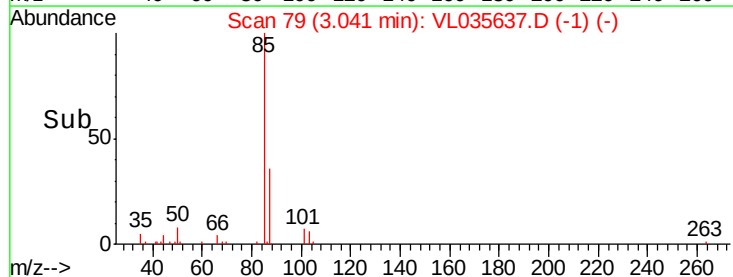
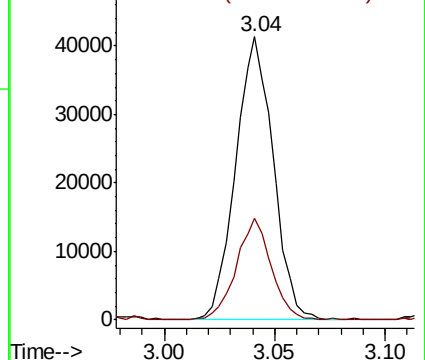
85 100

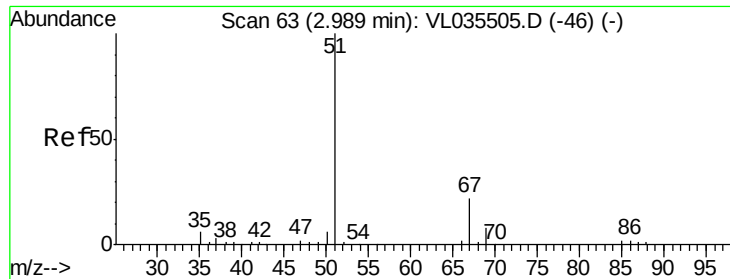
87 36.1 28.0 42.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.703 ppbv

RT: 2.95 min Scan# 52

Delta R.T. -0.02 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

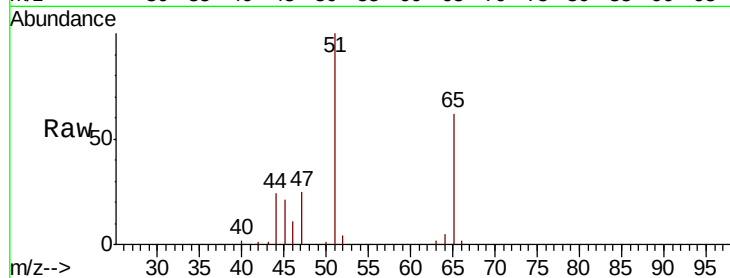
DB-IA-Y01

Tot Ion: 51 Resp: 81771

Ion Ratio Lower Upper

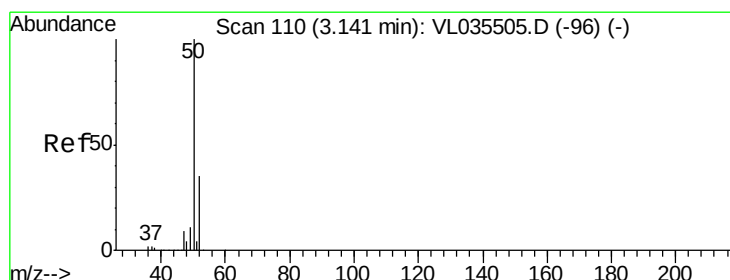
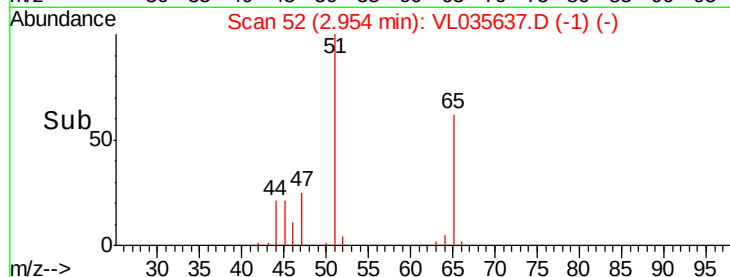
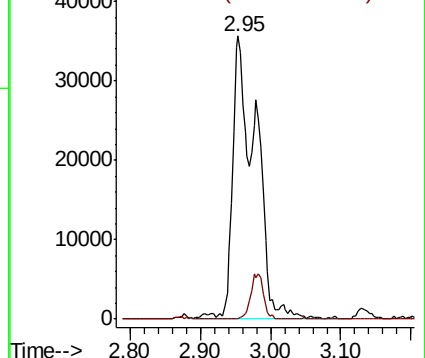
51 100

67 8.7 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.628 ppbv

RT: 3.13 min Scan# 107

Delta R.T. 0.00 min

Lab File: VL035637.D

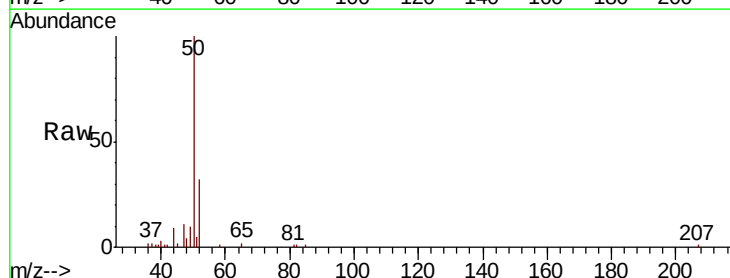
Acq: 16 Sep 2020 20:25

Tgt Ion: 50 Resp: 39171

Ion Ratio Lower Upper

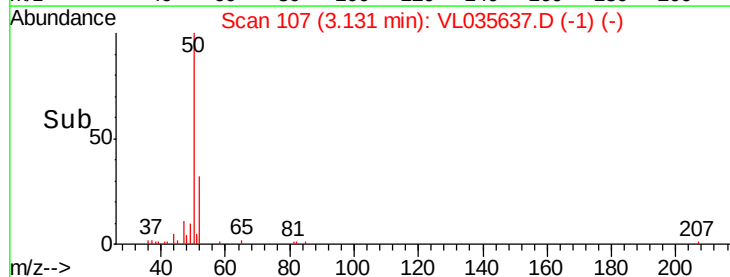
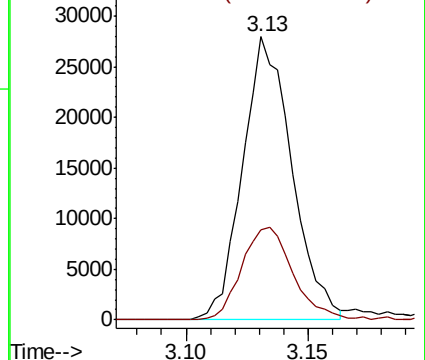
50 100

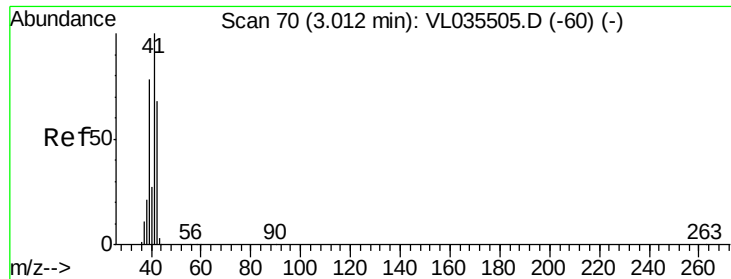
52 31.7 27.7 41.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.297 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.02 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

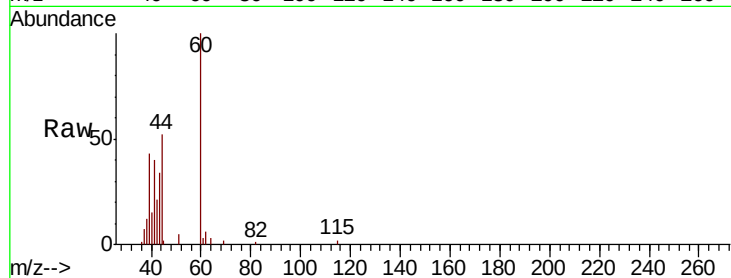
DB-IA-Y01

Tot Ion: 41 Resp: 13334

Ion Ratio Lower Upper

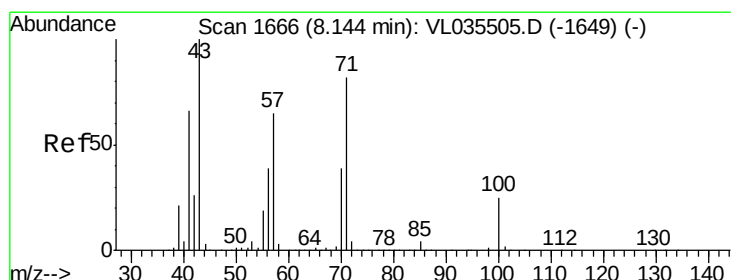
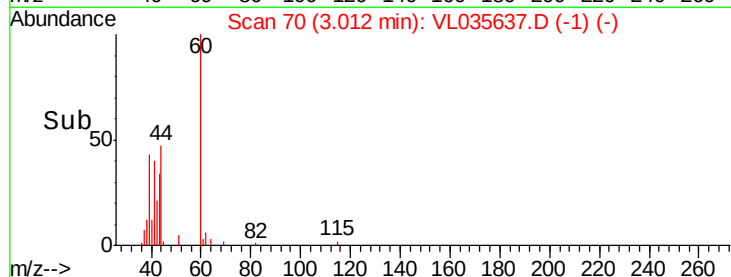
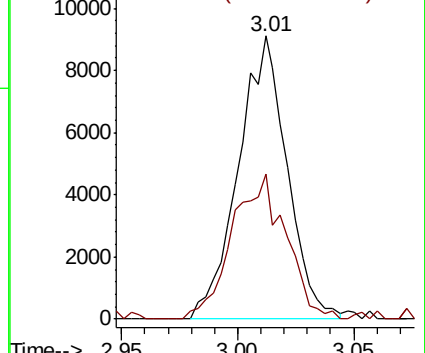
41 100

42 57.6 56.3 84.5



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.146 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. -0.00 min

Lab File: VL035637.D

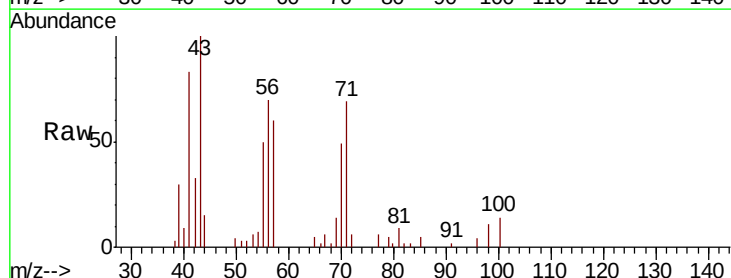
Acq: 16 Sep 2020 20:25

Tgt Ion: 43 Resp: 17642

Ion Ratio Lower Upper

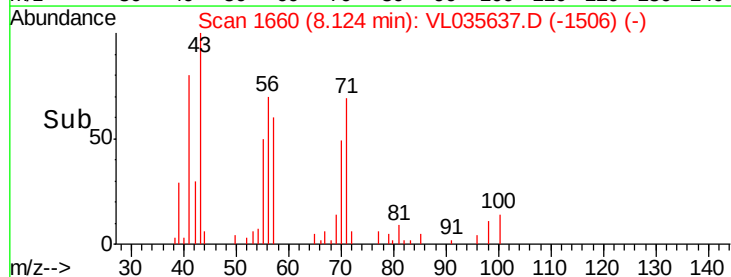
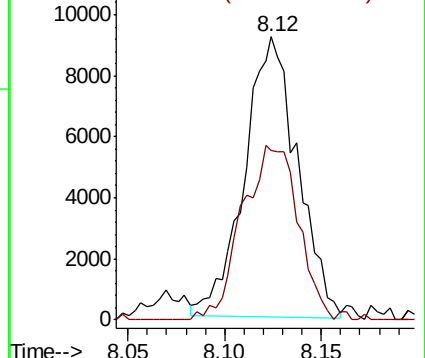
43 100

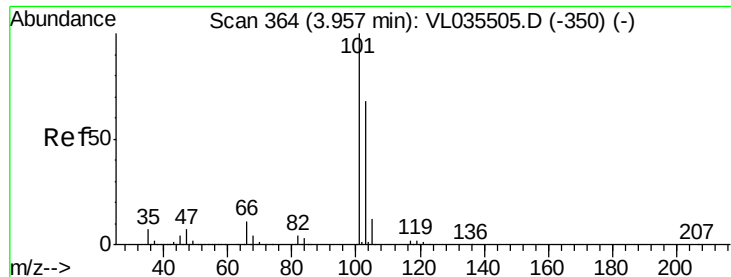
57 66.0 51.4 77.0



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

Trichlorofluoromethane

Concen: 0.252 ppbv

RT: 3.94 min Scan# 360

Delta R.T. 0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

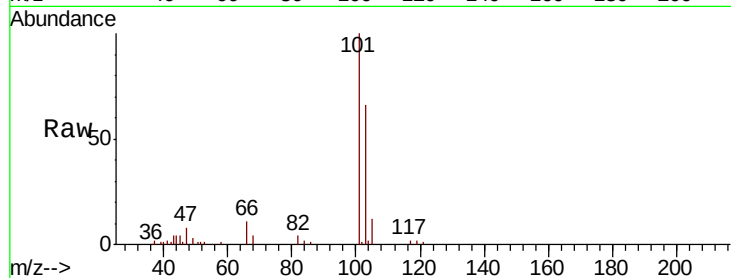
DB-IA-Y01

Tot Ion:101 Resp: 67087

Ion Ratio Lower Upper

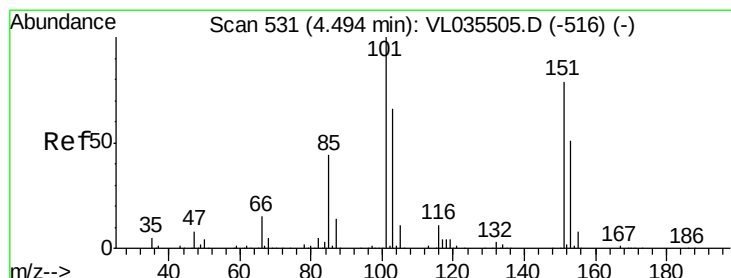
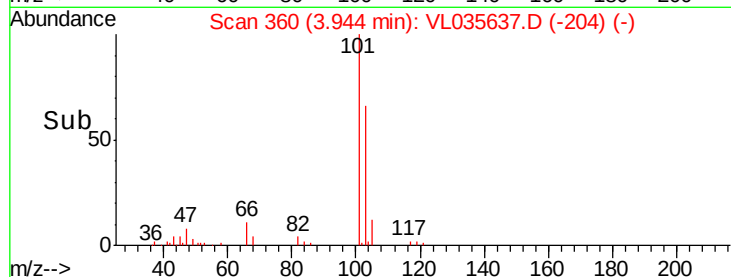
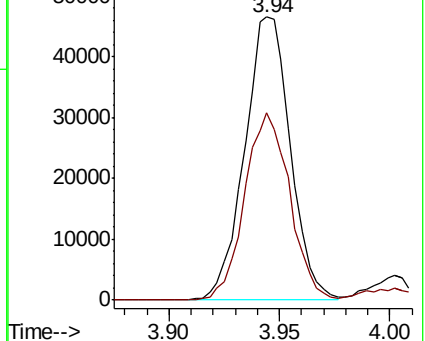
101 100

103 66.4 54.5 81.7



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.075 ppbv

RT: 4.48 min Scan# 527

Delta R.T. 0.00 min

Lab File: VL035637.D

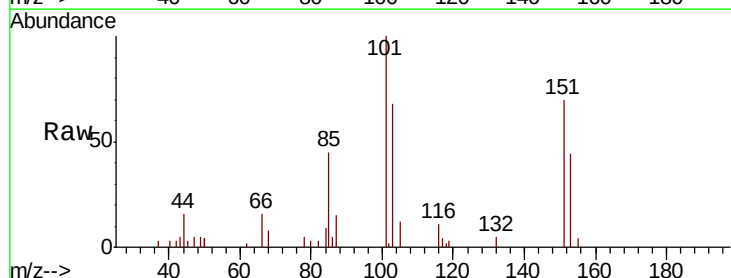
Acq: 16 Sep 2020 20:25

Tgt Ion:101 Resp: 15100

Ion Ratio Lower Upper

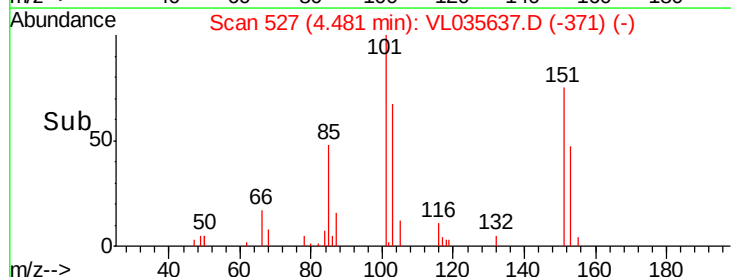
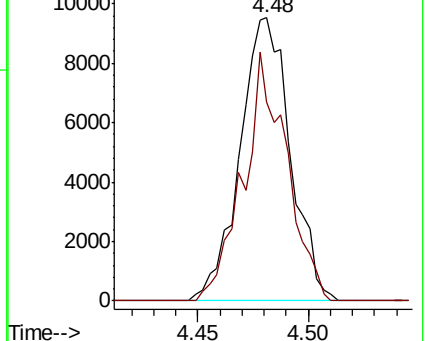
101 100

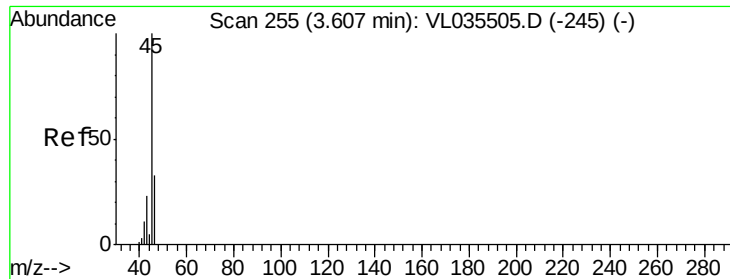
151 75.4 63.5 95.3



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 14.038 ppbv

RT: 3.60 min Scan# 253

Delta R.T. 0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

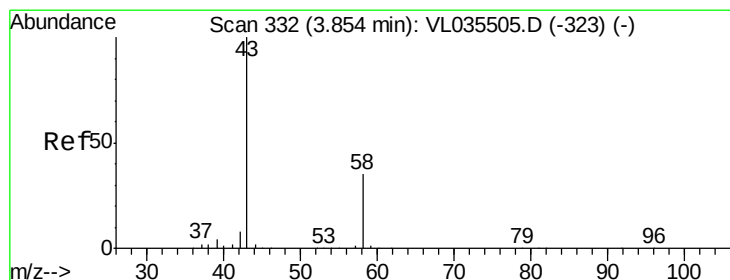
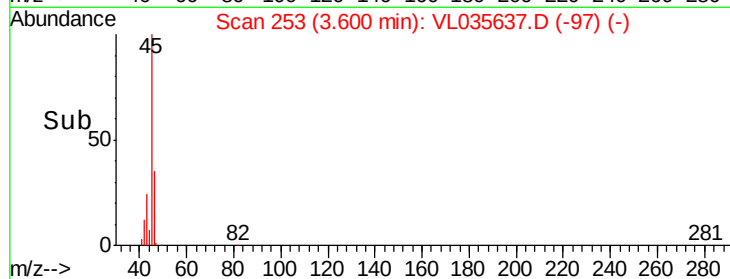
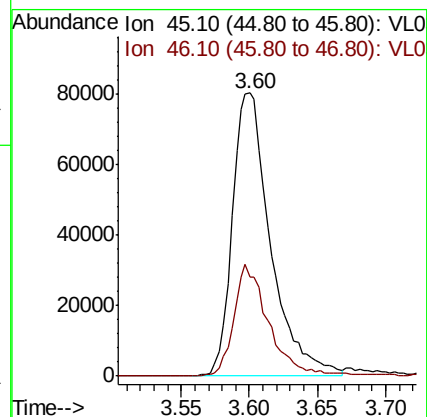
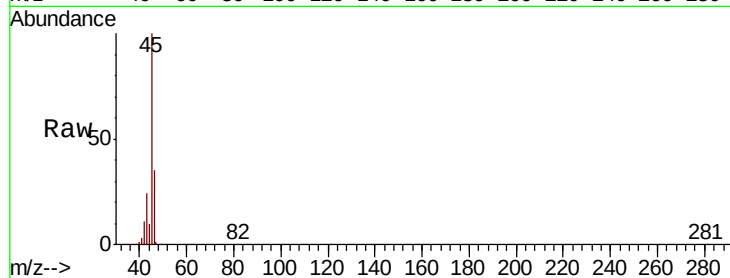
DB-IA-Y01

Tot Ion: 45 Resp: 156121

Ion Ratio Lower Upper

45 100

46 36.7 15.2 60.6



#15

Acetone

Concen: 3.689 ppbv

RT: 3.84 min Scan# 329

Delta R.T. 0.01 min

Lab File: VL035637.D

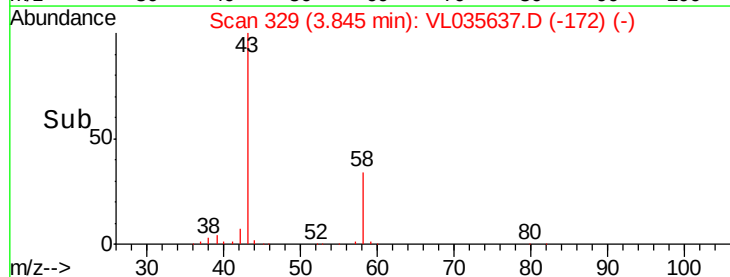
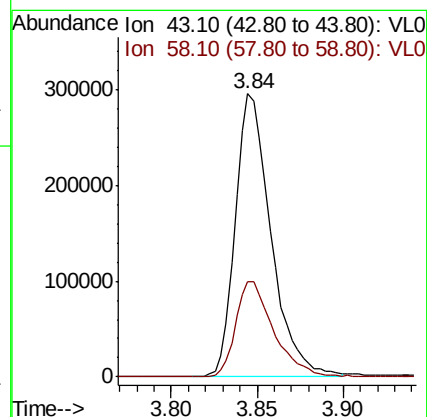
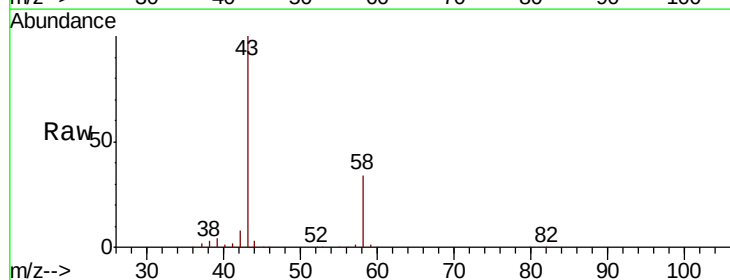
Acq: 16 Sep 2020 20:25

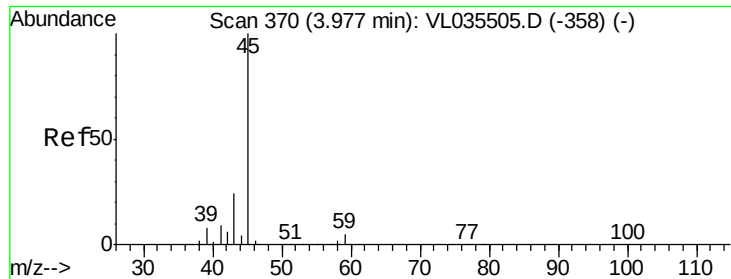
Tgt Ion: 43 Resp: 427987

Ion Ratio Lower Upper

43 100

58 36.2 28.4 42.6





#19

Isopropyl Alcohol

Concen: 1.885 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

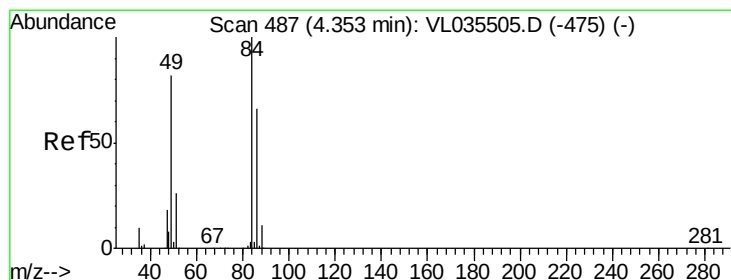
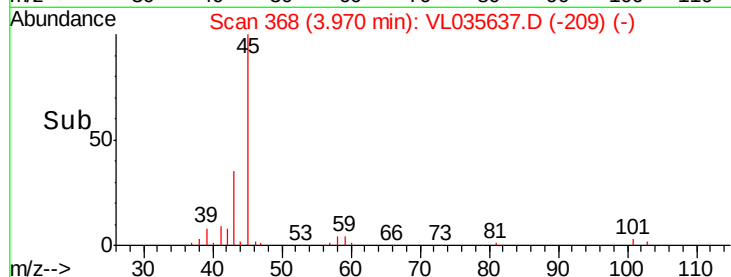
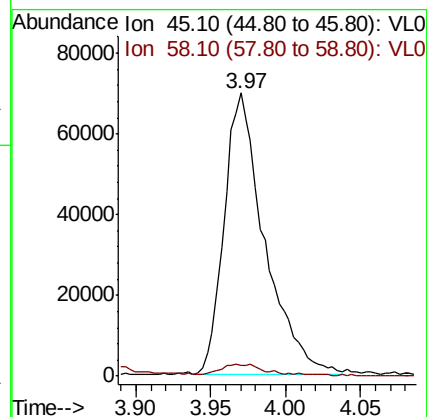
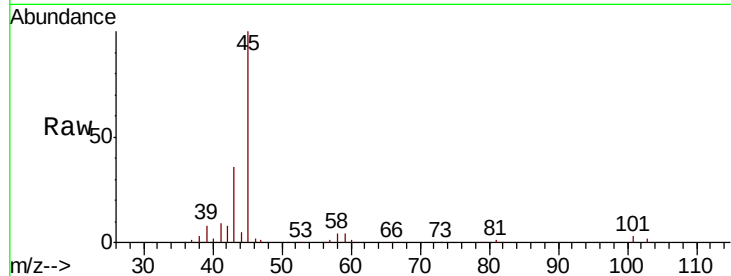
DB-IA-Y01

Tot Ion: 45 Resp: 130503

Ion Ratio Lower Upper

45 100

58 5.5 2.0 3.0#



#20

Methylene Chloride

Concen: 2.828 ppbv

RT: 4.34 min Scan# 483

Delta R.T. 0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Tgt Ion: 84 Resp: 244372

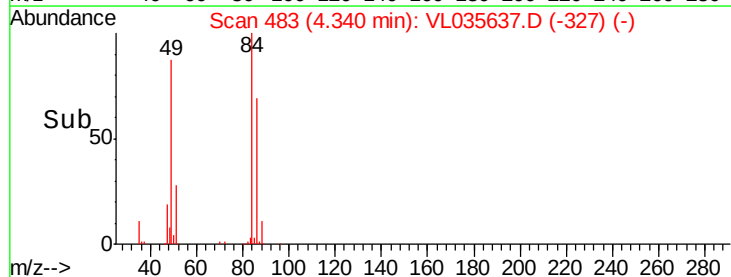
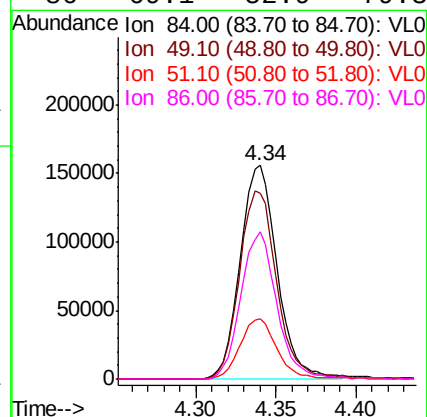
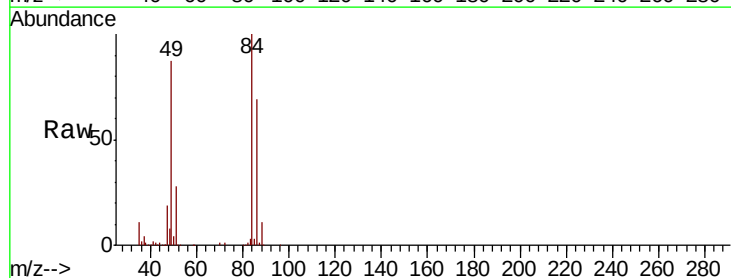
Ion Ratio Lower Upper

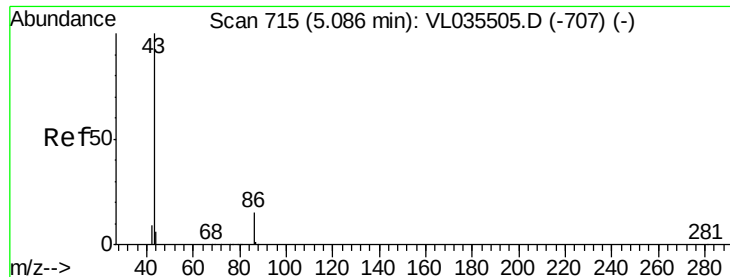
84 100

49 86.7 65.4 98.0

51 28.1 21.5 32.3

86 69.1 52.9 79.3





#23

Vinyl Acetate

Concen: 0.168 ppbv

RT: 5.06 min Scan# 707

Delta R.T. -0.01 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

DB-IA-Y01

Tot Ion: 43 Resp: 25063

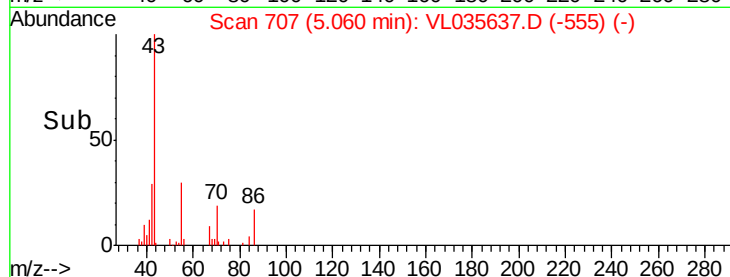
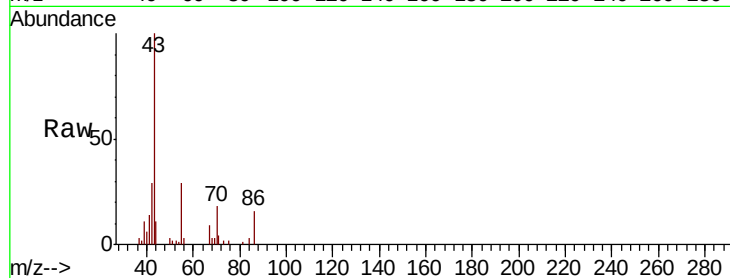
Ion Ratio Lower Upper

43 100

86 16.0 10.6 16.0#

42 27.4 7.5 11.3#

44 2.3 4.4 6.6#

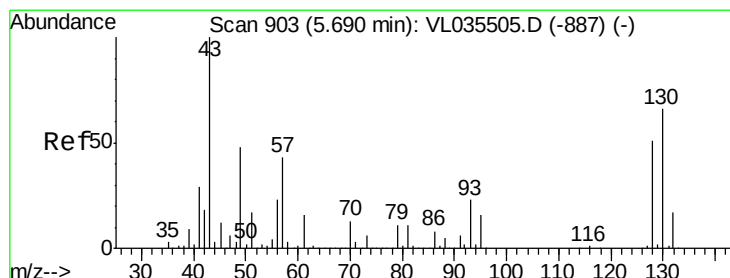
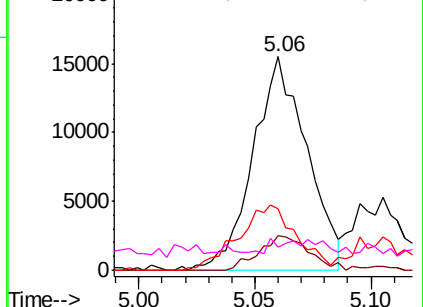


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.348 ppbv

RT: 5.68 min Scan# 901

Delta R.T. 0.01 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Tgt Ion: 43 Resp: 71385

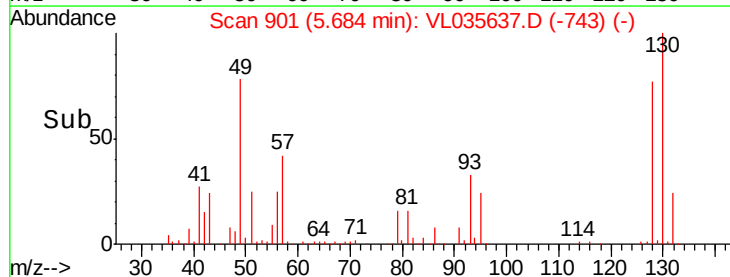
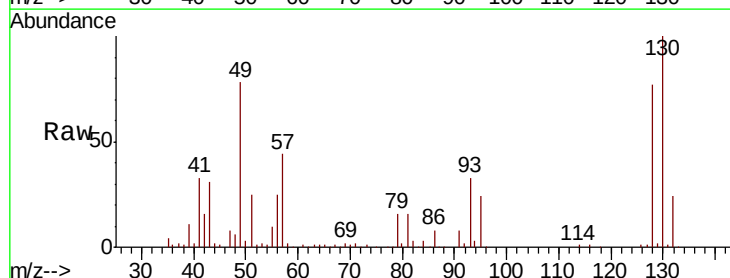
Ion Ratio Lower Upper

43 100

45 5.8 8.4 12.6#

61 4.4 10.6 16.0#

70 5.2 9.4 14.2#

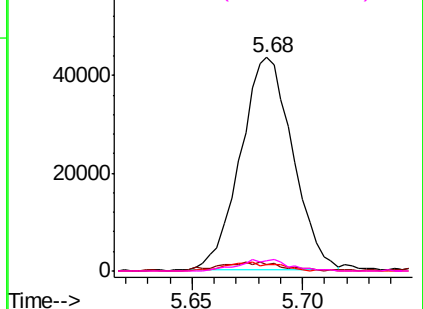


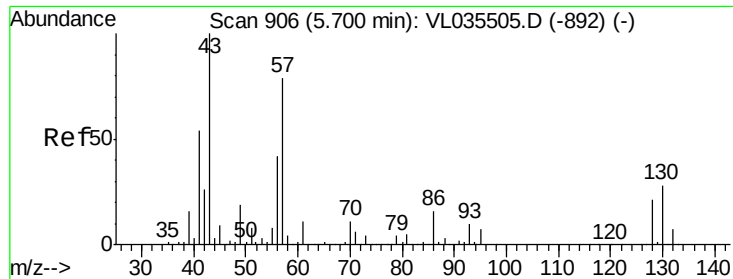
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.861 ppbv

RT: 5.68 min Scan# 901

Delta R.T. -0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

DB-IA-Y01

Tot Ion: 57 Resp: 99989

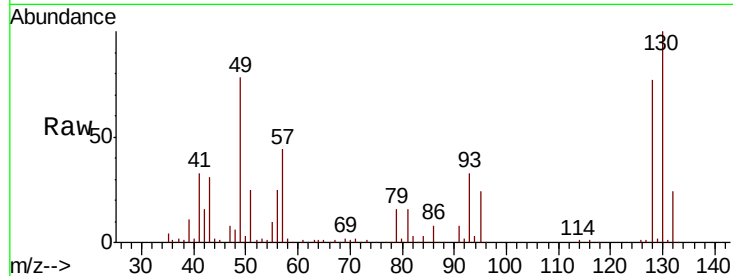
Ion Ratio Lower Upper

57 100

41 75.9 55.9 83.9

43 73.8 141.8 212.8#

56 58.2 41.8 62.8

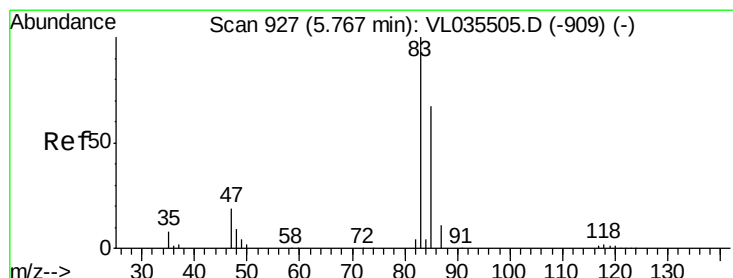
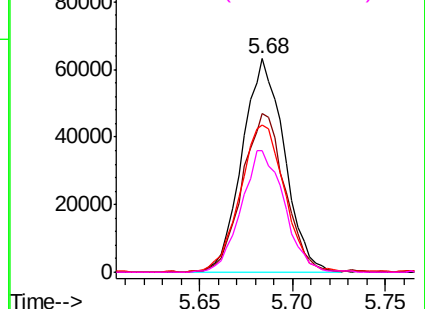
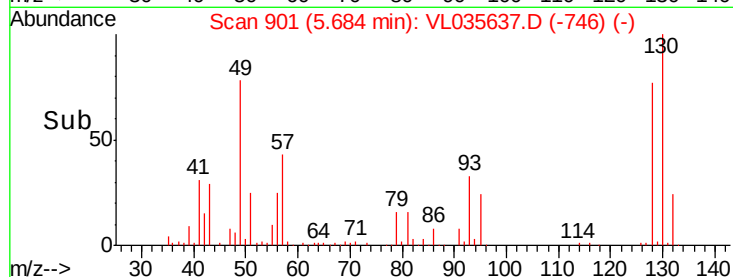


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.056 ppbv

RT: 5.74 min Scan# 919

Delta R.T. -0.01 min

Lab File: VL035637.D

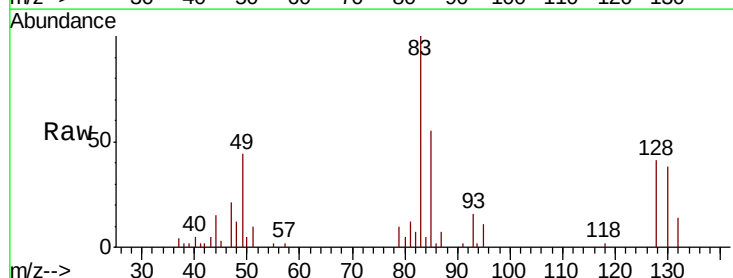
Acq: 16 Sep 2020 20:25

Tgt Ion: 83 Resp: 13212

Ion Ratio Lower Upper

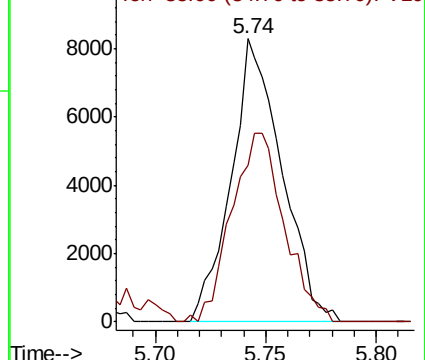
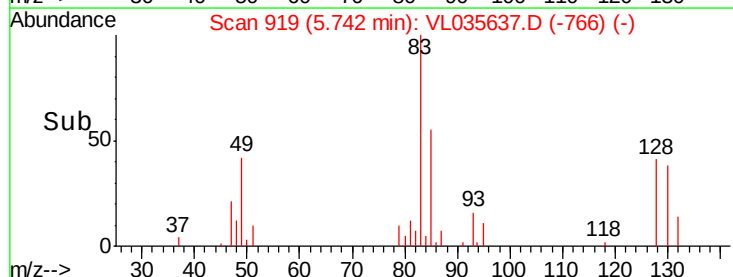
83 100

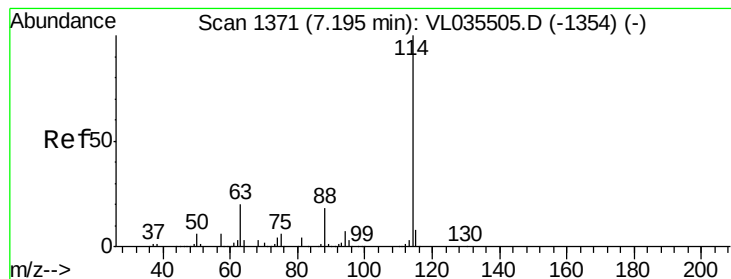
85 55.3 53.9 80.9



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: 7.17 min Scan# 1364

Delta R.T. -0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

DB-IA-Y01

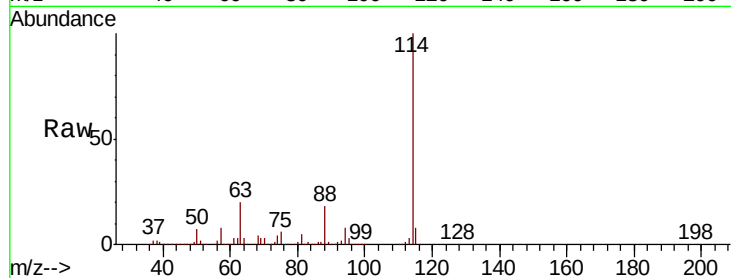
Tot Ion:114 Resp: 4269404

Ion Ratio Lower Upper

114 100

63 19.3 14.7 22.1

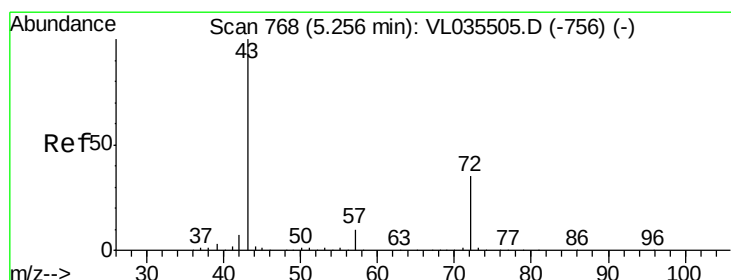
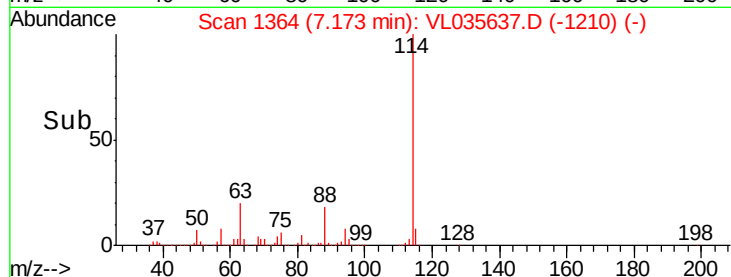
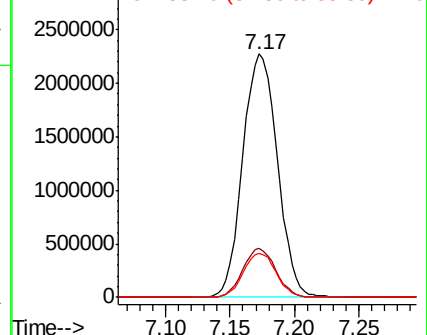
88 17.3 13.4 20.2



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.265 ppbv

RT: 5.25 min Scan# 766

Delta R.T. 0.01 min

Lab File: VL035637.D

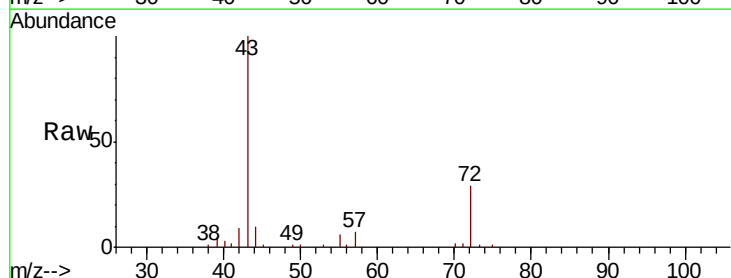
Acq: 16 Sep 2020 20:25

Tgt Ion: 43 Resp: 33601

Ion Ratio Lower Upper

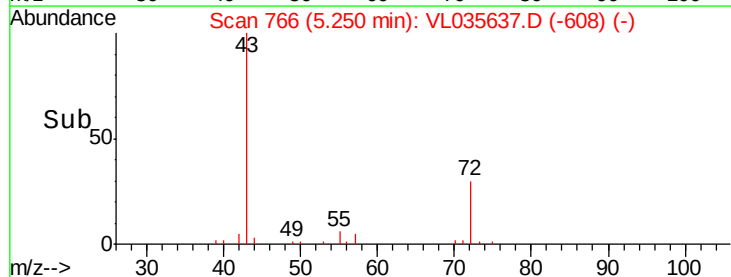
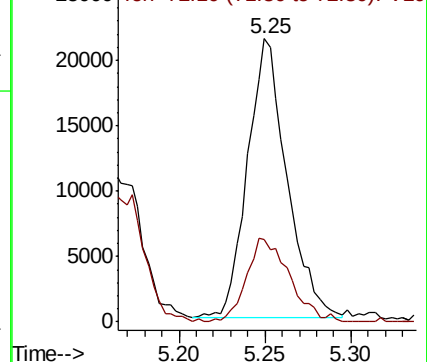
43 100

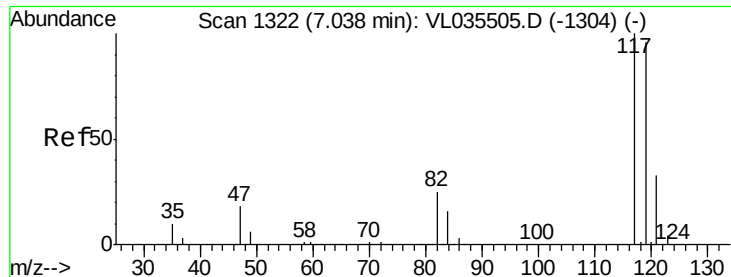
72 33.0 27.7 41.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.069 ppbv

RT: 7.01 min Scan# 1315

Delta R.T. -0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

DB-IA-Y01

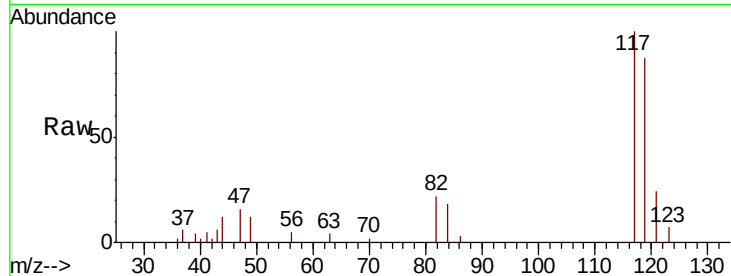
Tot Ion:117 Resp: 14850

Ion Ratio Lower Upper

117 100

119 86.9 77.2 115.8

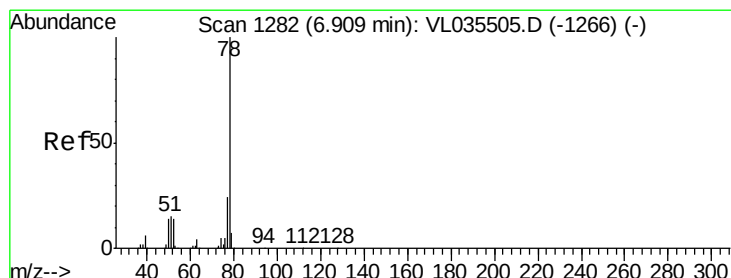
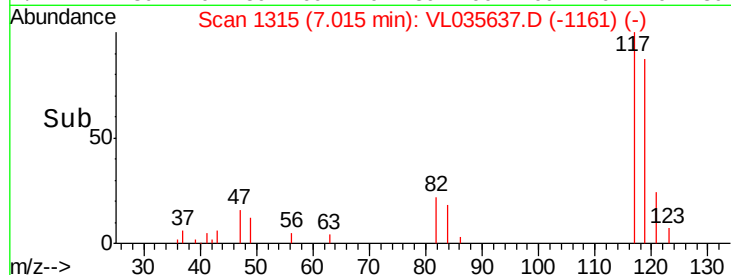
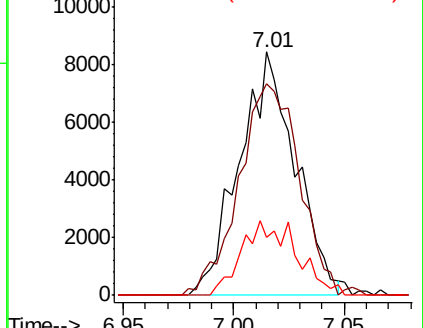
121 23.6 26.1 39.1#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.127 ppbv

RT: 6.89 min Scan# 1276

Delta R.T. -0.00 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

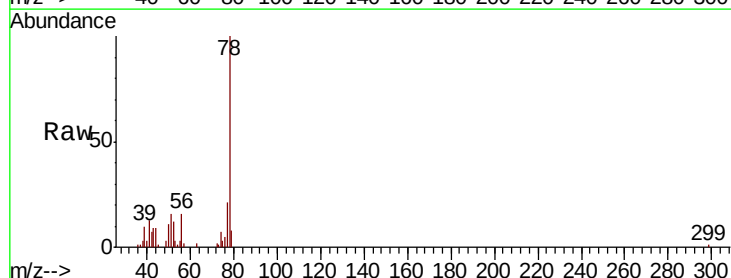
Tgt Ion: 78 Resp: 35047

Ion Ratio Lower Upper

78 100

77 21.5 19.3 28.9

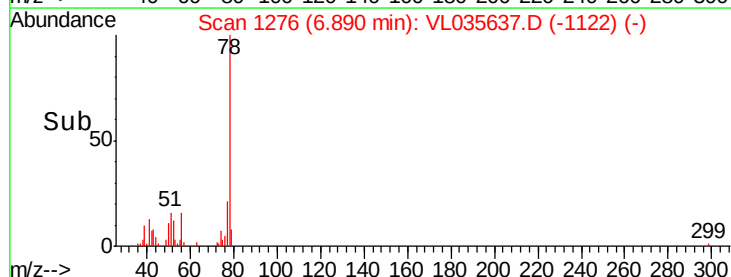
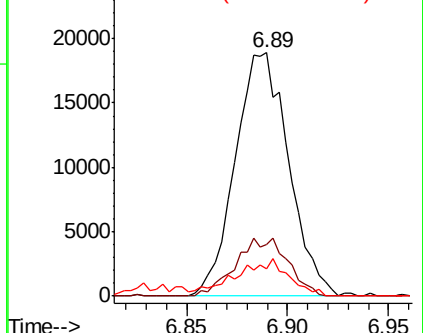
50 11.4 11.0 16.6

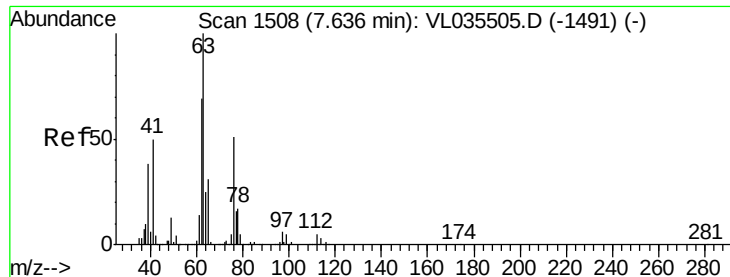


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 8.773 ppbv

RT: 7.17 min Scan# 1364

Delta R.T. -0.44 min

Lab File: VL035637.D

Acq: 16 Sep 2020 20:25

Instrument :

MSVOA_L

ClientSampleId :

DB-IA-Y01

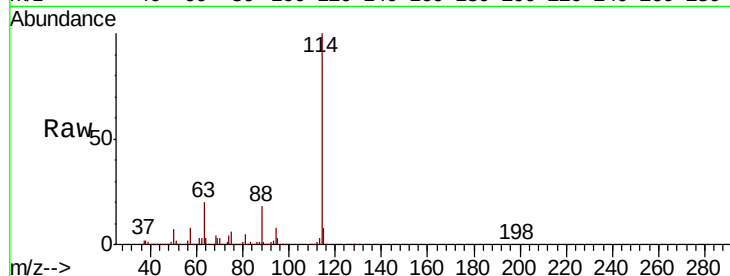
Tot Ion: 63 Resp: 819042

Ion Ratio Lower Upper

63 100

41 0.0 40.0 60.0#

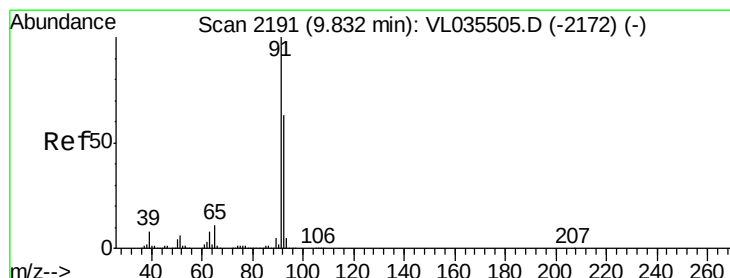
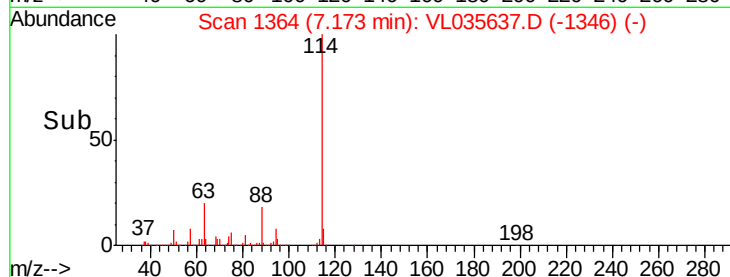
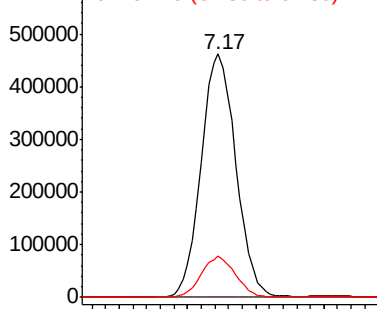
62 16.8 55.4 83.0#



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



#53

Toluene

Concen: 0.574 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL035637.D

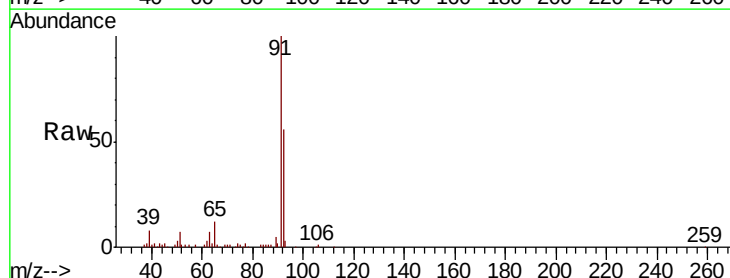
Acq: 16 Sep 2020 20:25

Tgt Ion: 91 Resp: 199593

Ion Ratio Lower Upper

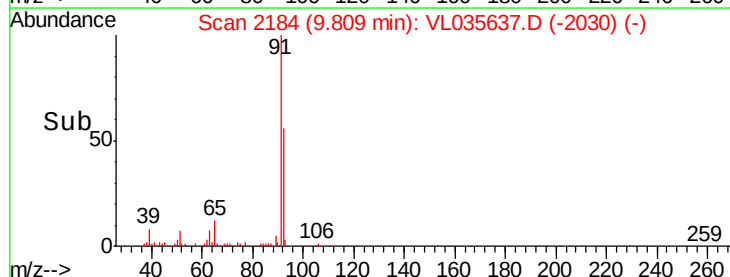
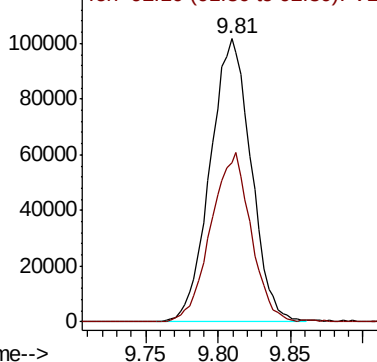
91 100

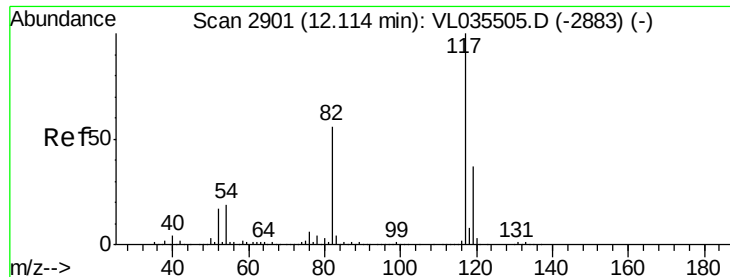
92 58.8 49.8 74.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

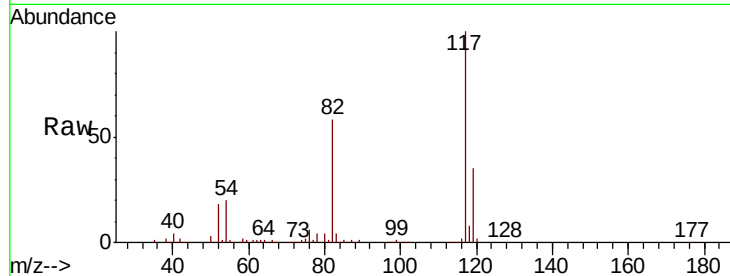




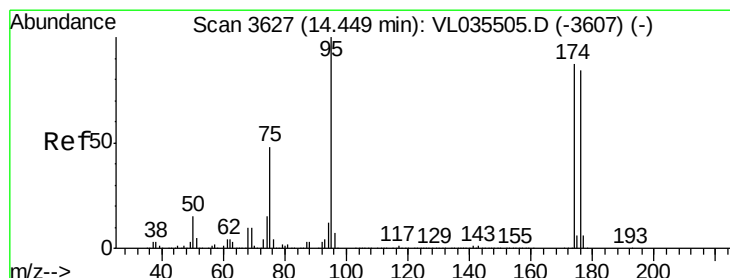
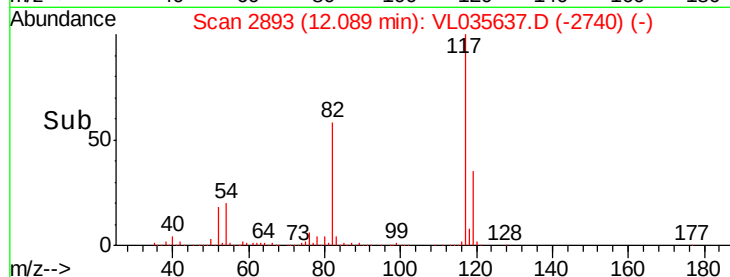
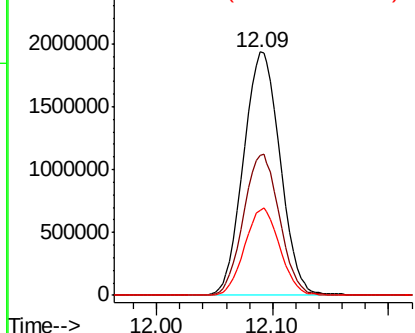
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2893
Delta R.T. -0.01 min
Lab File: VL035637.D
Acq: 16 Sep 2020 20:25

Instrument :
MSVOA_L
ClientSampleId :
DB-IA-Y01

Tot Ion:117 Resp: 4267429
Ion Ratio Lower Upper
117 100
82 57.5 41.6 62.4
119 34.7 29.3 43.9

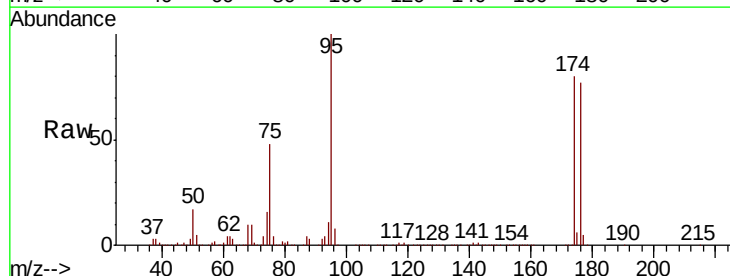


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 10.454 ppbv
RT: 14.42 min Scan# 3619
Delta R.T. -0.01 min
Lab File: VL035637.D
Acq: 16 Sep 2020 20:25

Tgt Ion: 95 Resp: 3167999
Ion Ratio Lower Upper
95 100
174 79.3 69.6 104.4
175 5.7 5.1 7.7



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

