

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051921\
 Data File : VL037010.D
 Acq On : 20 May 2021 3:04
 Operator : SY/AP
 Sample : M2424-03 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-02

Quant Time: May 20 06:35:37 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 12:00:15 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1000132	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.15	114	2945794	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.05	117	2685566	10.00	ppbv	-0.01

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.38	95	2054017	10.18	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%	

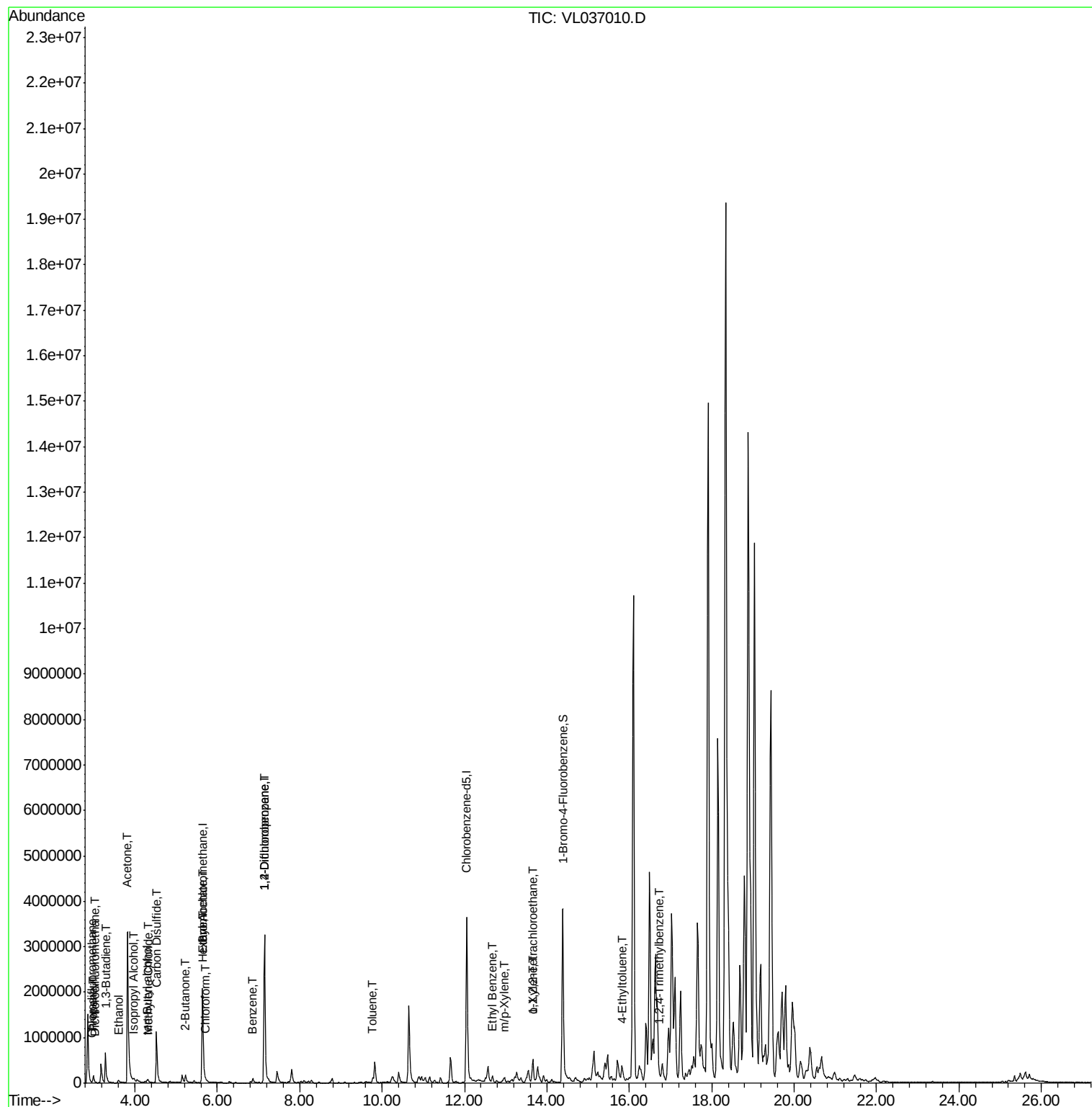
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	6934	0.041	ppbv	94
3) Chlorodifluoromethane	2.96	51	10701	0.058	ppbv #	85
9) Propene	2.99	41	70014	1.067	ppbv	99
13) Ethanol	3.60	45	82814	9.460	ppbv	89
15) Acetone	3.82	43	4849693	47.342	ppbv	98
16) 1,3-Butadiene	3.29	39	191808	3.014	ppbv #	17
17) tert-Butyl alcohol	4.29	59	27127	0.289	ppbv #	51
19) Isopropyl Alcohol	3.96	45	30777	0.559	ppbv #	30
20) Methylene Chloride	4.32	84	16709	0.304	ppbv	97
25) Ethyl Acetate	5.65	43	60956	0.248	ppbv #	88
26) Hexane	5.66	57	35435	0.282	ppbv #	1
27) Carbon Disulfide	4.52	76	1667652	13.158	ppbv	99
29) Chloroform	5.72	83	7914	0.045	ppbv	86
34) 2-Butanone	5.22	43	242642	2.262	ppbv	93
36) Benzene	6.86	78	80108	0.316	ppbv	96
39) 1,2-Dichloropropane	7.14	63	703271	7.195	ppbv #	26
53) Toluene	9.77	91	86667	0.287	ppbv	96
58) Ethyl Benzene	12.68	91	130654	0.345	ppbv	92
59) m/p-Xylene	12.96	91	123943	0.396	ppbv	93
60) o-Xylene	13.66	91	52273	0.175	ppbv	97
63) 1,1,2,2-Tetrachloroethane	13.65	83	8003	0.036	ppbv #	37
72) 4-Ethyltoluene	15.81	105	11520	0.032	ppbv #	57
74) 1,2,4-Trimethylbenzene	16.73	105	24985	0.073	ppbv #	67

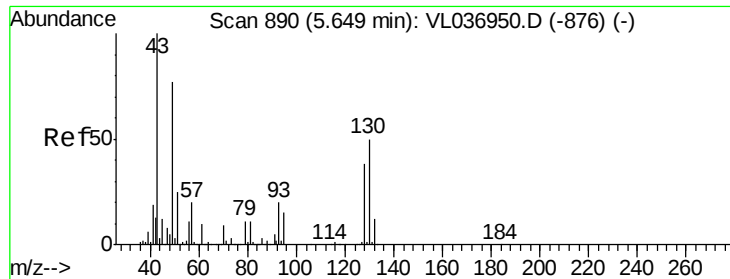
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 887

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

KSV-02

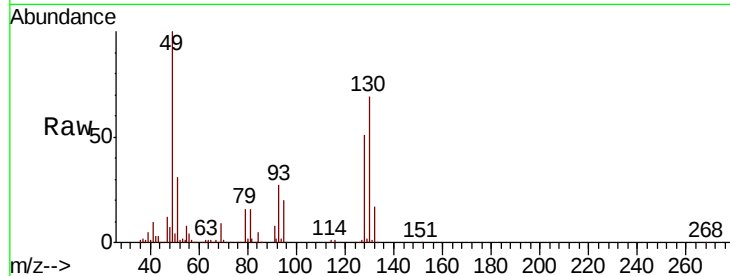
Tot Ion: 49 Resp: 1000132

Ion Ratio Lower Upper

49 100

128 54.9 26.9 80.7

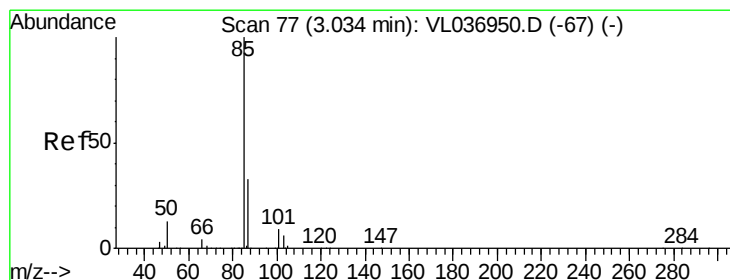
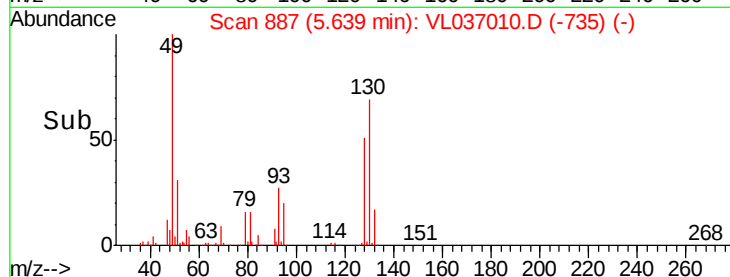
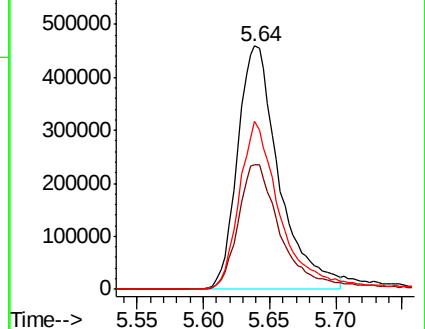
130 70.4 33.8 101.4



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.041 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.01 min

Lab File: VL037010.D

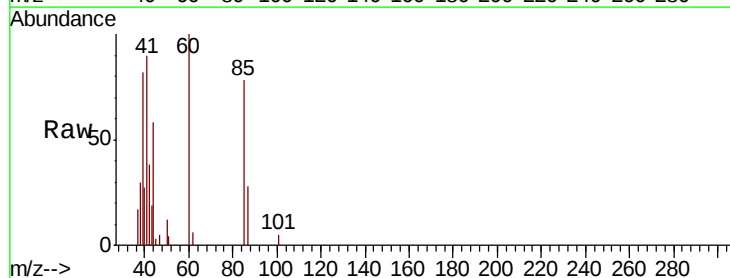
Acq: 20 May 2021 3:04

Tgt Ion: 85 Resp: 6934

Ion Ratio Lower Upper

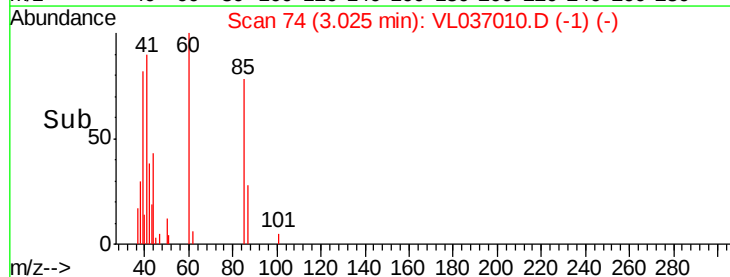
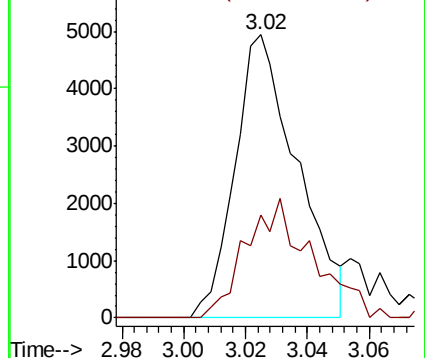
85 100

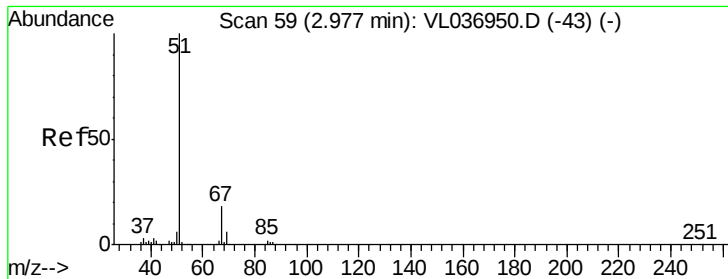
87 36.5 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.058 ppbv

RT: 2.96 min Scan# 53

Delta R.T. -0.02 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

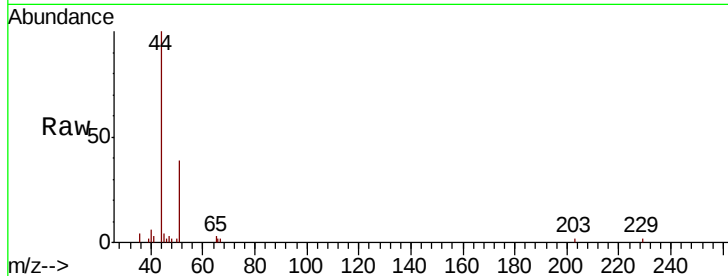
KSV-02

Tot Ion: 51 Resp: 10701

Ion Ratio Lower Upper

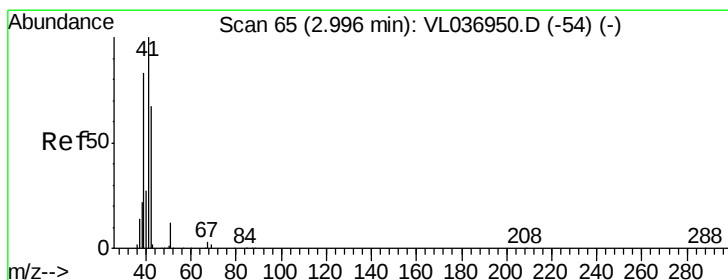
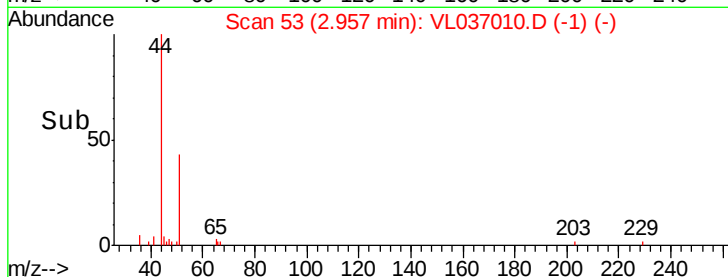
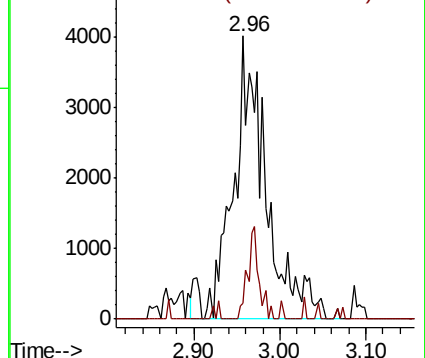
51 100

67 11.5 14.6 21.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 1.067 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.01 min

Lab File: VL037010.D

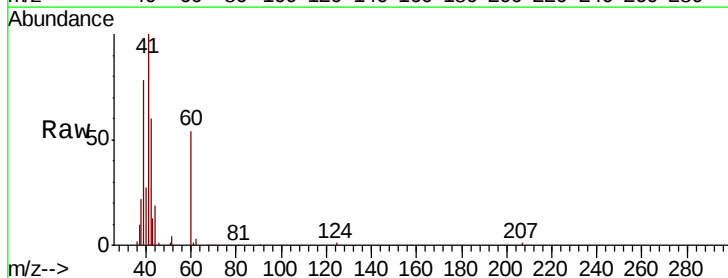
Acq: 20 May 2021 3:04

Tgt Ion: 41 Resp: 70014

Ion Ratio Lower Upper

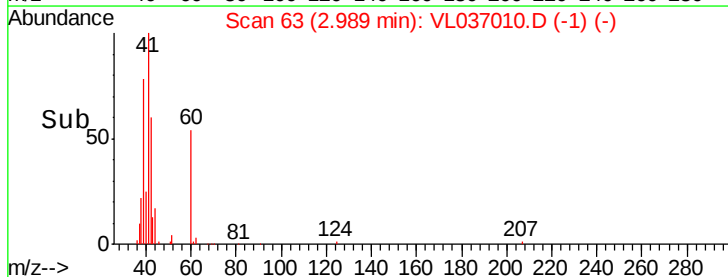
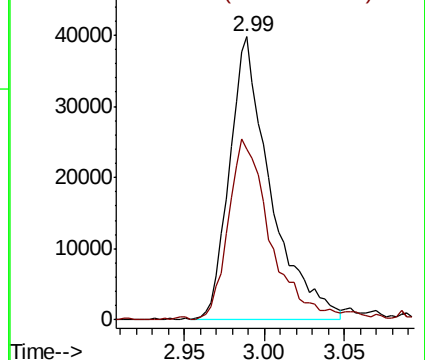
41 100

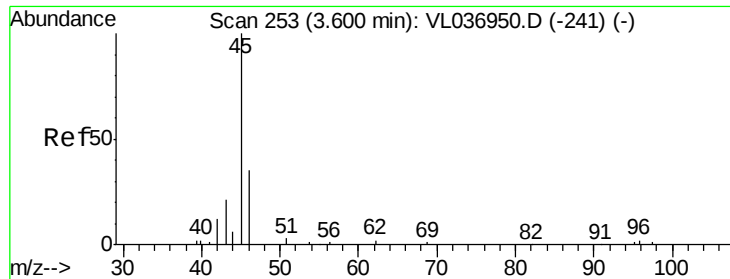
42 68.2 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#13

Ethanol

Concen: 9.460 ppbv

RT: 3.60 min Scan# 252

Delta R.T. -0.00 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

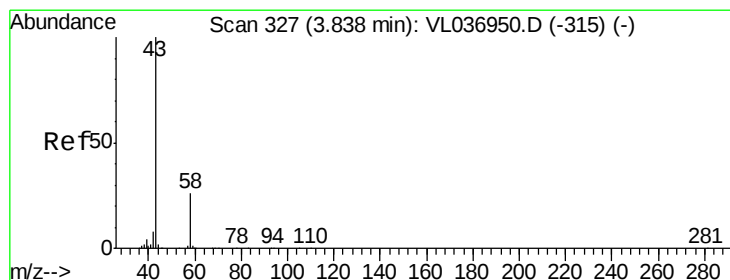
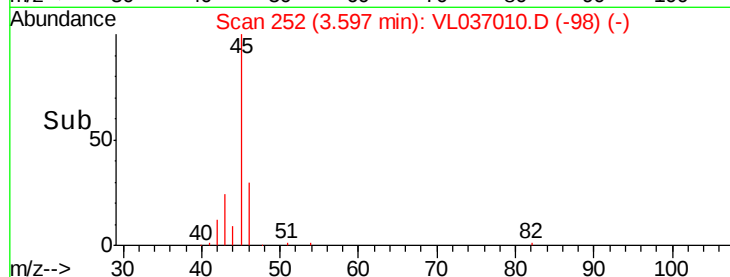
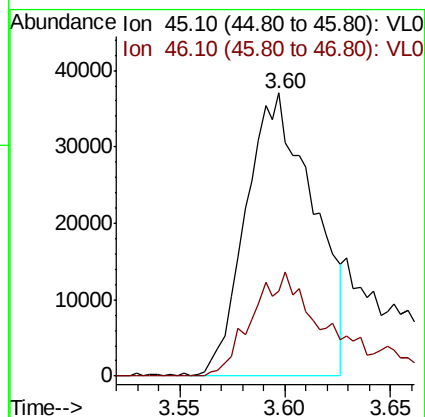
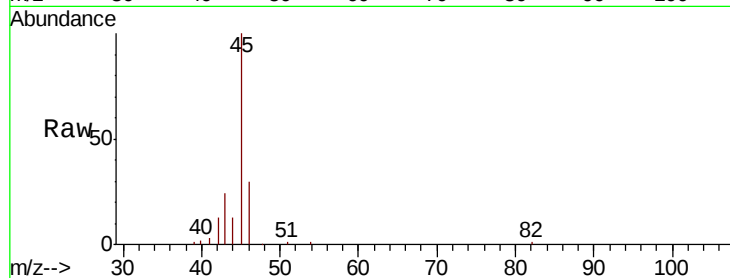
KSV-02

Tot Ion: 45 Resp: 82814

Ion Ratio Lower Upper

45 100

46 47.5 16.3 65.3



#15

Acetone

Concen: 47.342 ppbv

RT: 3.82 min Scan# 322

Delta R.T. -0.02 min

Lab File: VL037010.D

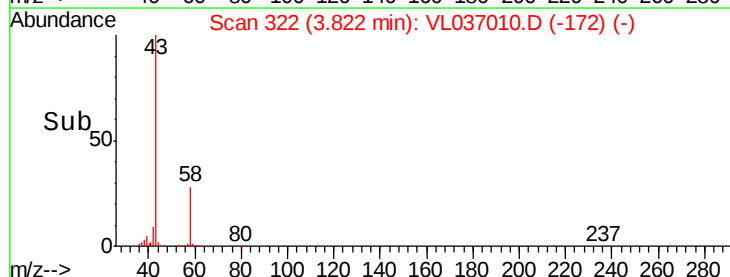
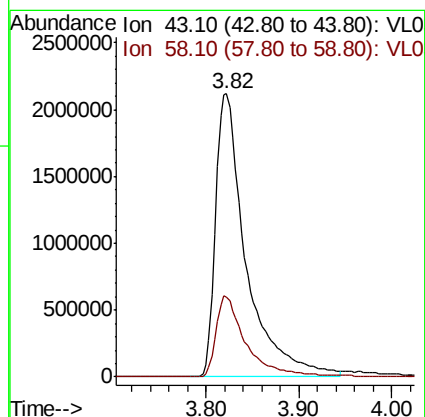
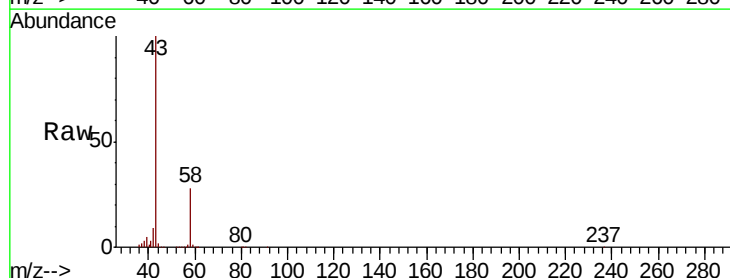
Acq: 20 May 2021 3:04

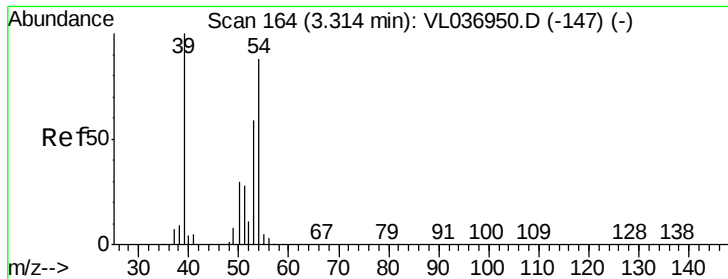
Tgt Ion: 43 Resp: 4849693

Ion Ratio Lower Upper

43 100

58 28.9 24.0 36.0

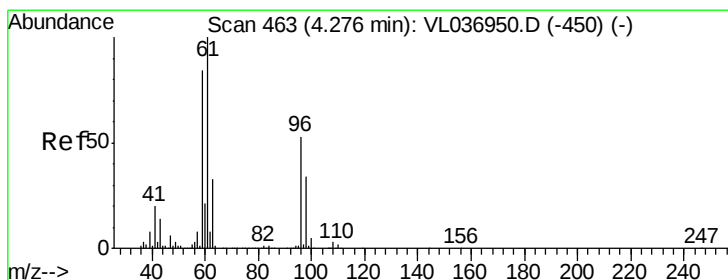
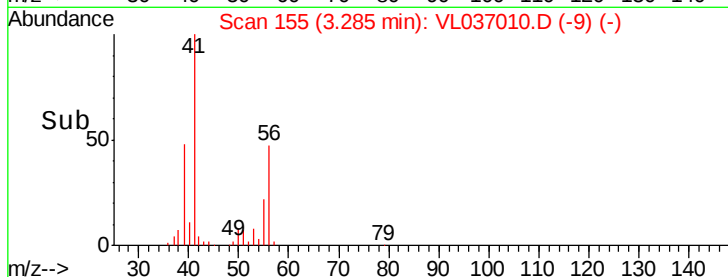
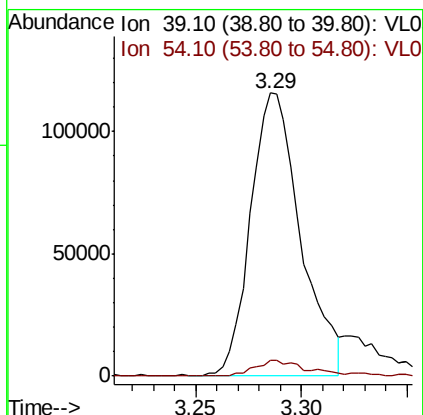
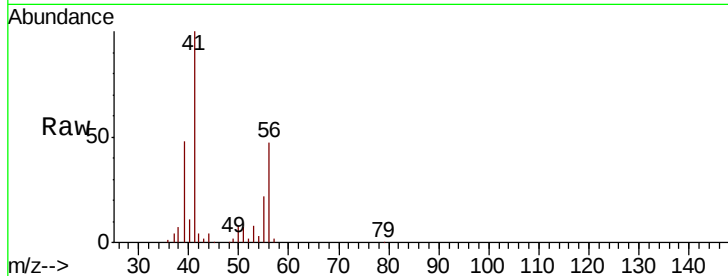




#16
1,3-Butadiene
Concen: 3.014 ppbv
RT: 3.29 min Scan# 155
Delta R.T. -0.03 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

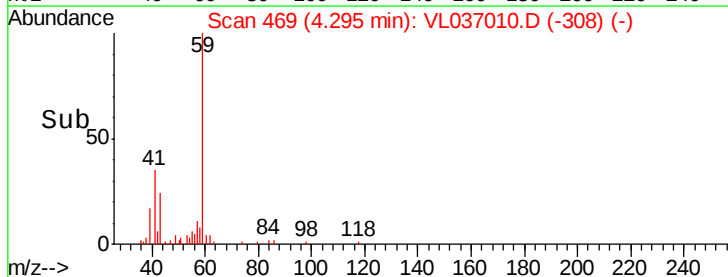
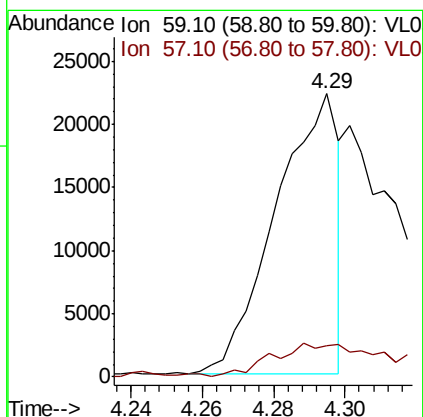
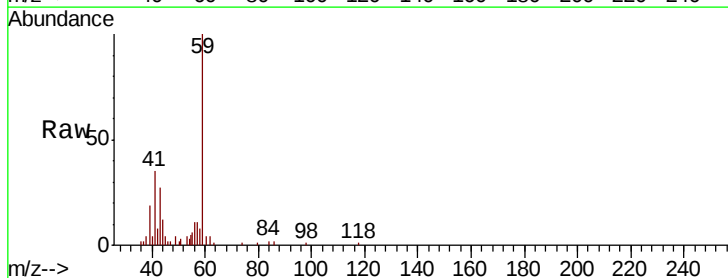
Instrument :
MSVOA_L
ClientSampleId :
KSV-02

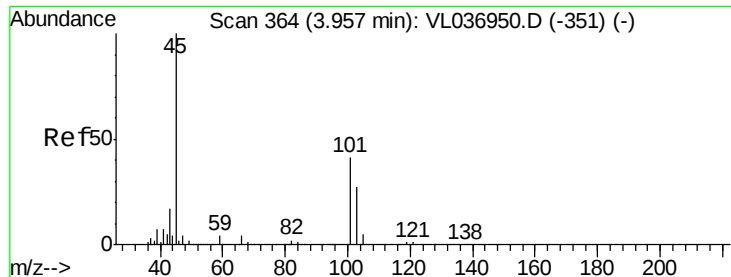
Tot Ion: 39 Resp: 191808
Ion Ratio Lower Upper
39 100
54 6.4 63.2 94.8#



#17
tert-Butyl alcohol
Concen: 0.289 ppbv
RT: 4.29 min Scan# 469
Delta R.T. 0.02 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

Tgt Ion: 59 Resp: 27127
Ion Ratio Lower Upper
59 100
57 28.8 8.3 12.5#





#19

Isopropyl Alcohol

Concen: 0.559 ppbv

RT: 3.96 min Scan# 365

Delta R.T. 0.00 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

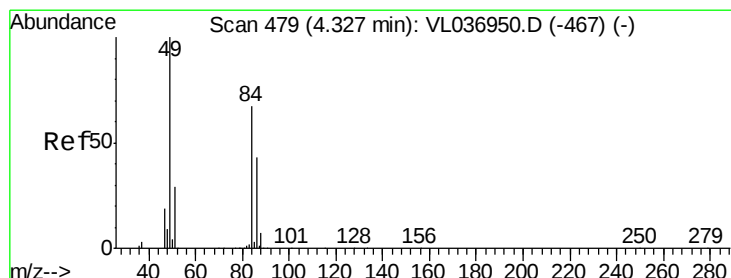
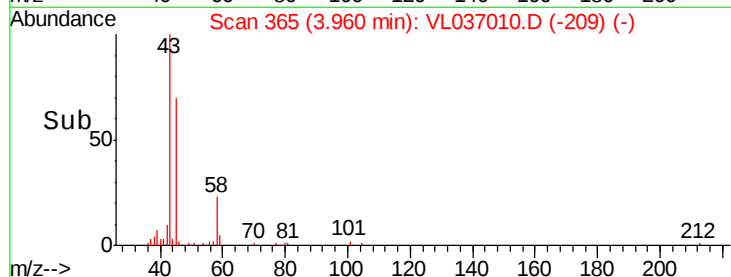
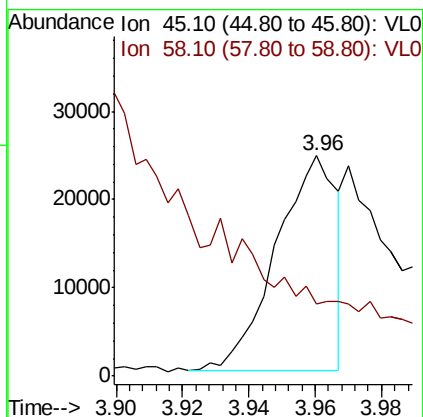
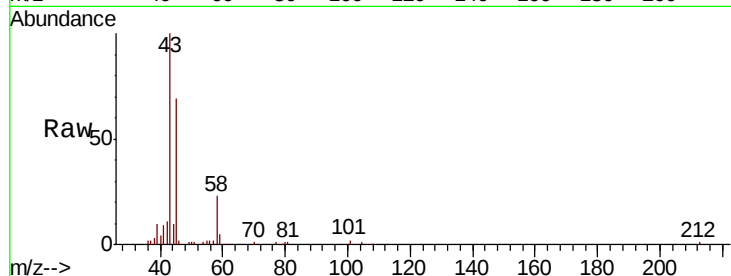
KSV-02

Tot Ion: 45 Resp: 30777

Ion Ratio Lower Upper

45 100

58 0.0 37.2 55.8#



#20

Methylene Chloride

Concen: 0.304 ppbv

RT: 4.32 min Scan# 477

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Tgt Ion: 84 Resp: 16709

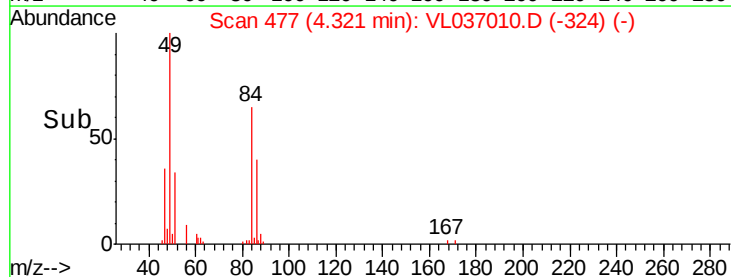
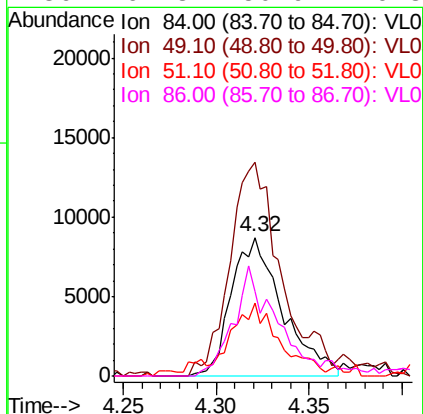
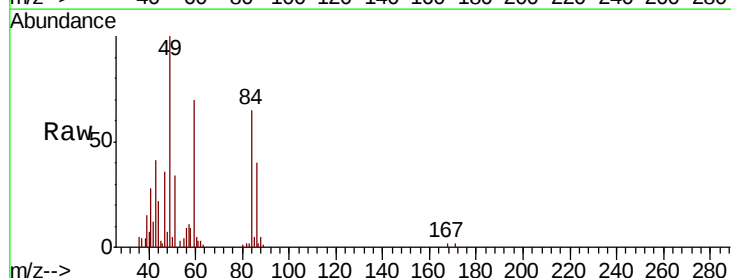
Ion Ratio Lower Upper

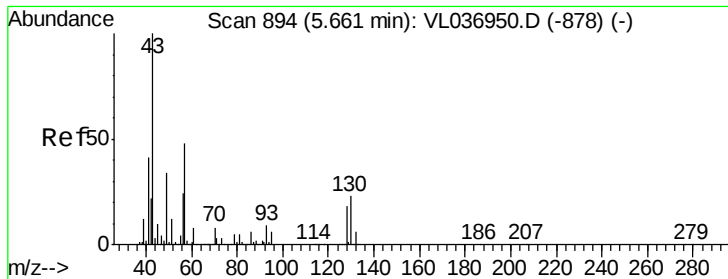
84 100

49 154.4 119.8 179.6

51 45.2 35.1 52.7

86 61.3 50.9 76.3

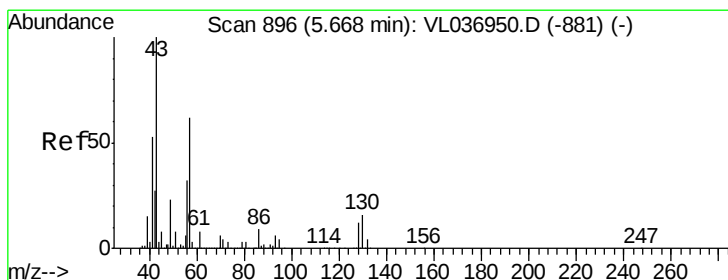
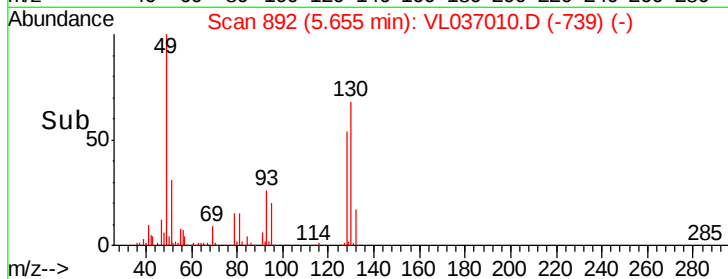
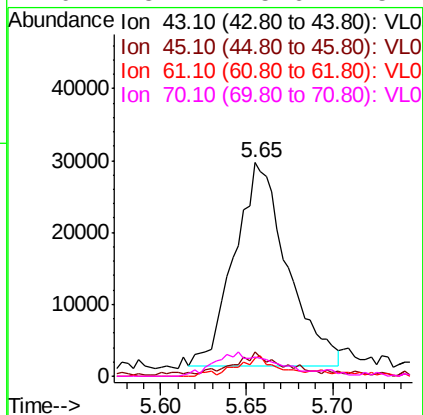
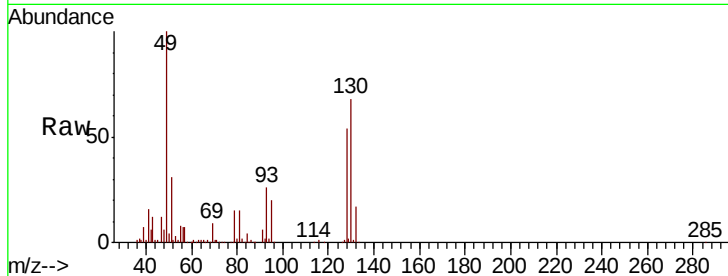




#25
Ethyl Acetate
Concen: 0.248 ppbv
RT: 5.65 min Scan# 892
Delta R.T. -0.01 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

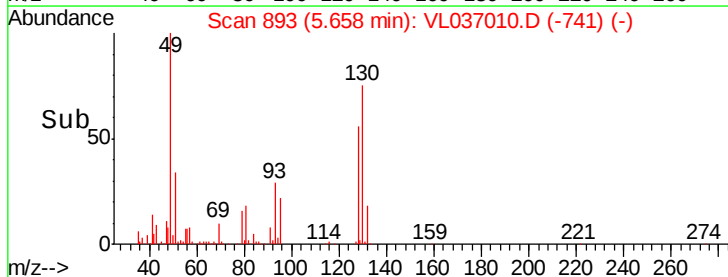
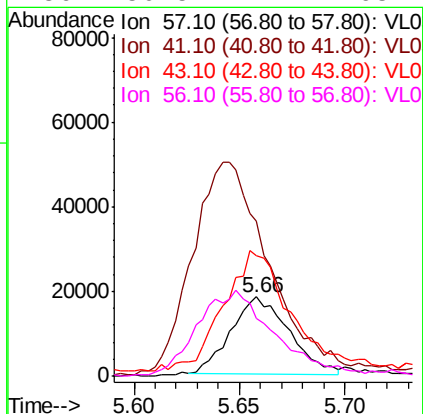
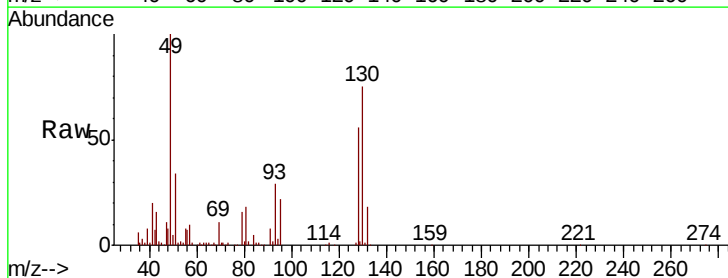
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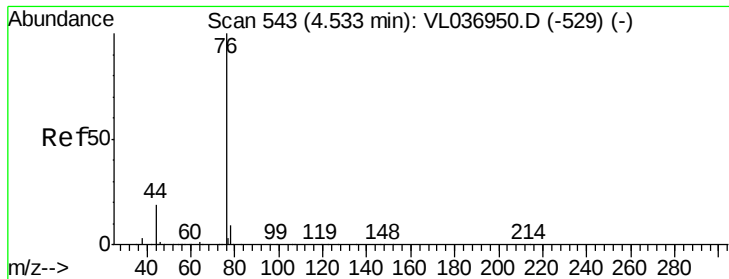
Tot Ion:	43	Resp:	60956
Ion	Ratio	Lower	Upper
43	100		
45	13.1	7.8	11.8#
61	7.5	7.8	11.8#
70	15.1	5.6	8.4#



#26
Hexane
Concen: 0.282 ppbv
RT: 5.66 min Scan# 893
Delta R.T. -0.01 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

Tgt Ion:	57	Resp:	35435
Ion	Ratio	Lower	Upper
57	100		
41	376.8	70.5	105.7#
43	202.8	165.8	248.8
56	150.5	42.2	63.4#





#27

Carbon Disulfide

Concen: 13.158 ppbv

RT: 4.52 min Scan# 540

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

KSV-02

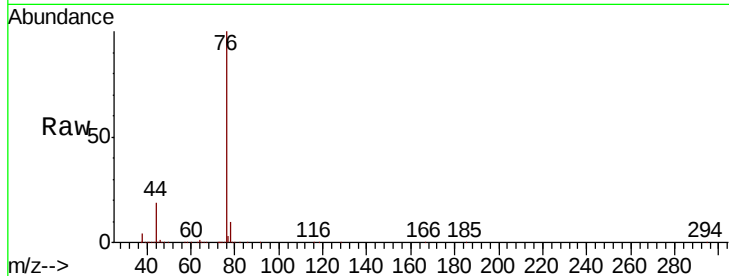
Tot Ion: 76 Resp: 1667652

Ion Ratio Lower Upper

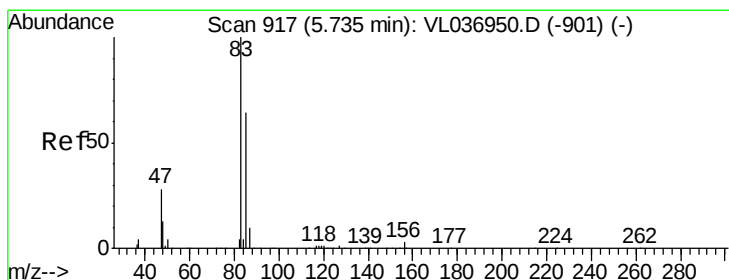
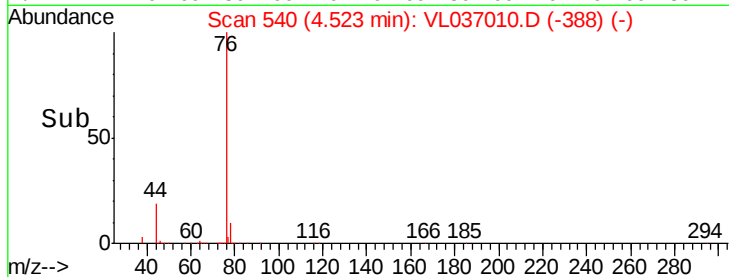
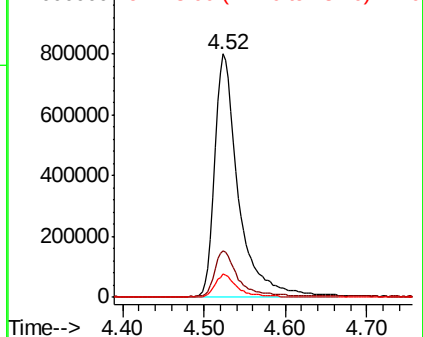
76 100

44 18.9 15.5 23.3

78 9.2 7.8 11.6



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: 0.045 ppbv

RT: 5.72 min Scan# 913

Delta R.T. -0.01 min

Lab File: VL037010.D

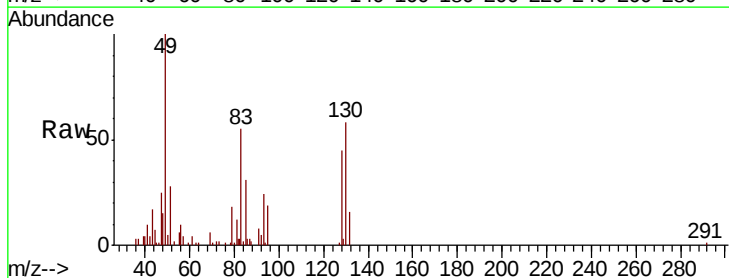
Acq: 20 May 2021 3:04

Tgt Ion: 83 Resp: 7914

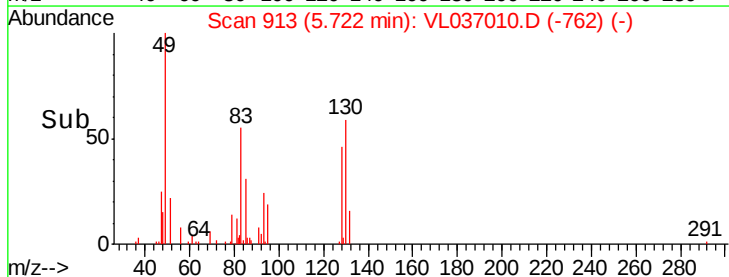
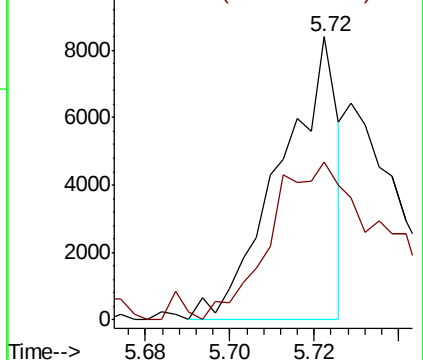
Ion Ratio Lower Upper

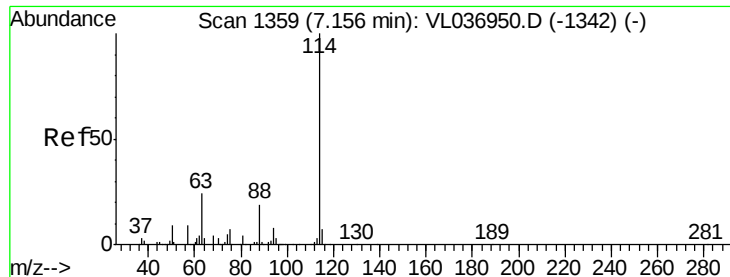
83 100

85 53.2 51.1 76.7



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0



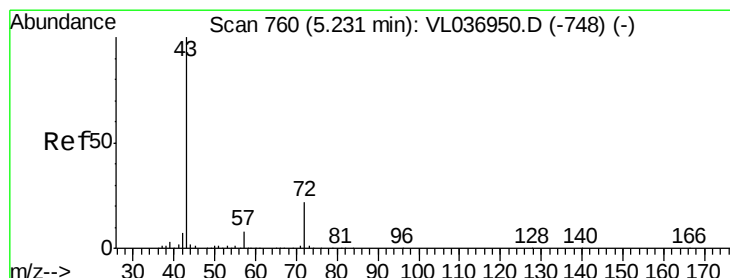
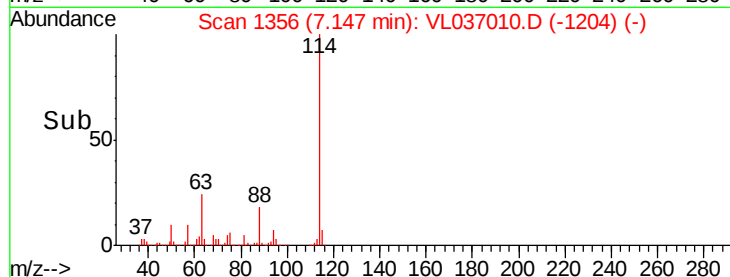
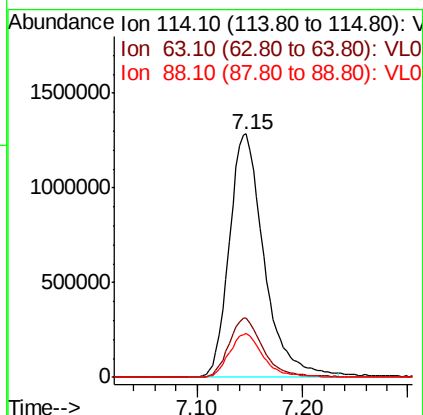
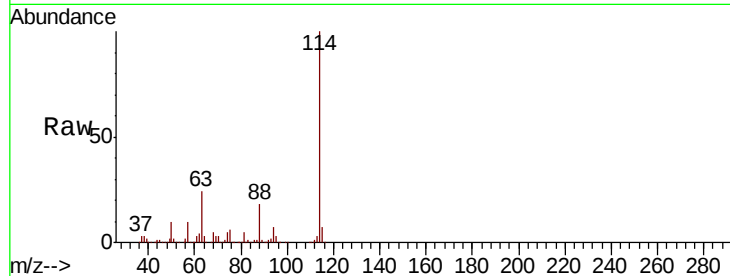


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.15 min Scan# 1356
 Delta R.T. -0.01 min
 Lab File: VL037010.D
 Acq: 20 May 2021 3:04

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-02

Tot Ion:114 Resp: 2945794

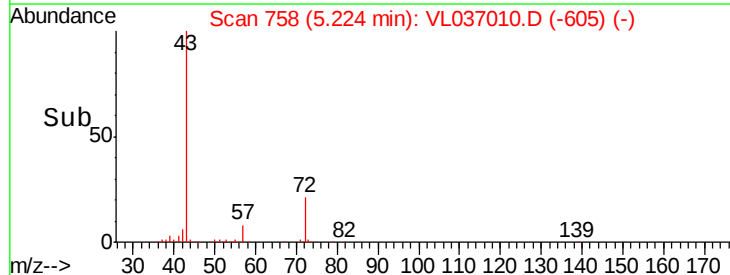
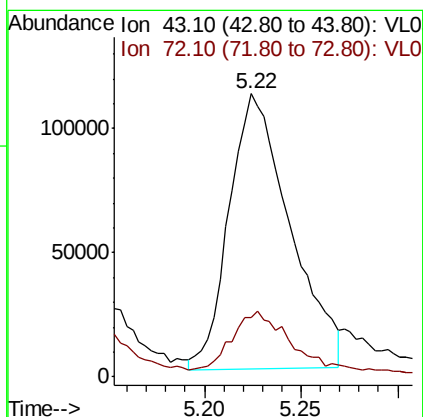
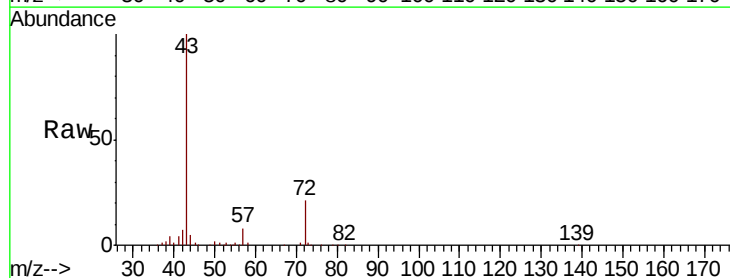
Ion	Ratio	Lower	Upper
114	100		
63	24.3	19.6	29.4
88	17.8	14.6	21.8

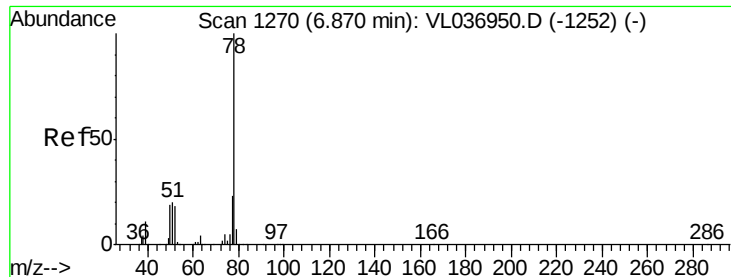


#34
 2-Butanone
 Concen: 2.262 ppbv
 RT: 5.22 min Scan# 758
 Delta R.T. -0.01 min
 Lab File: VL037010.D
 Acq: 20 May 2021 3:04

Tgt Ion: 43 Resp: 242642

Ion	Ratio	Lower	Upper
43	100		
72	26.9	19.0	28.4

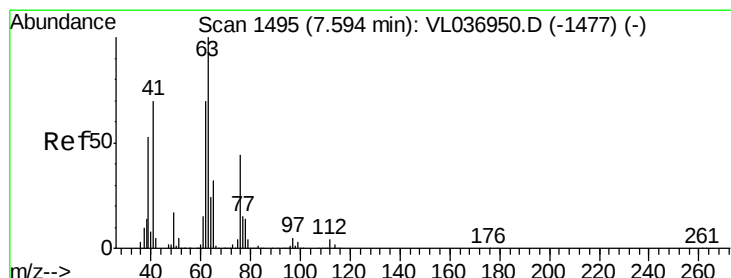
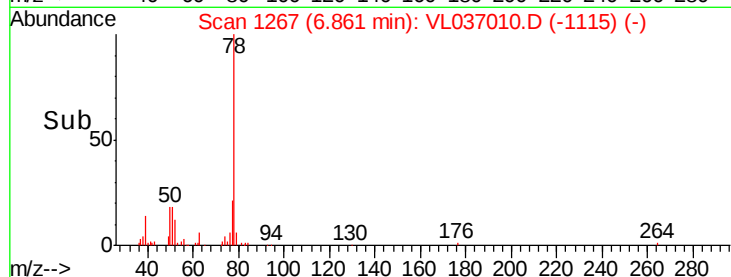
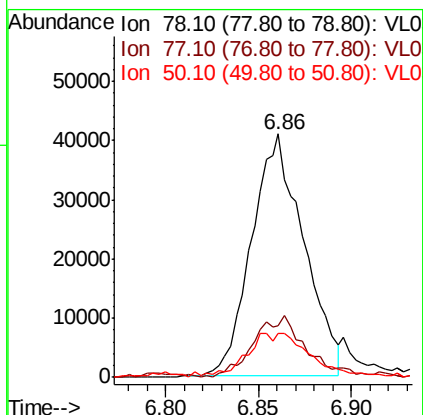
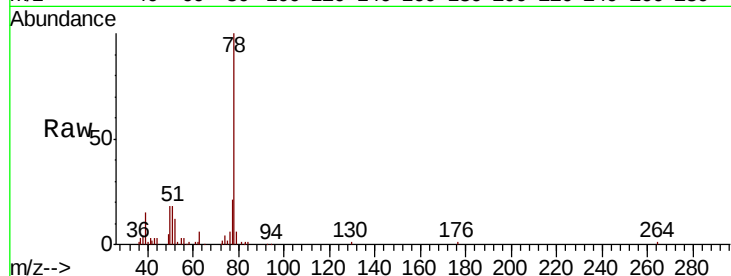




#36
Benzene
Concen: 0.316 ppbv
RT: 6.86 min Scan# 1267
Delta R.T. -0.01 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

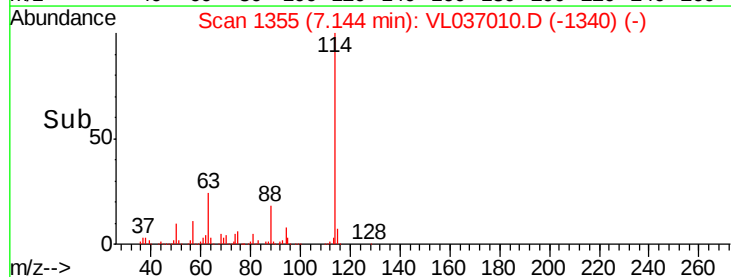
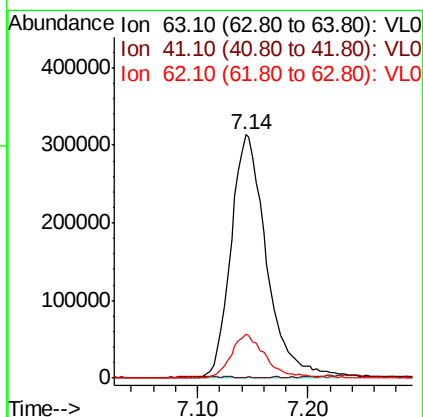
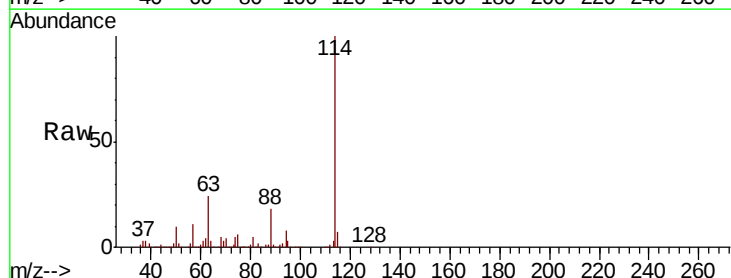
Instrument :
MSVOA_L
ClientSampled :
KSV-02

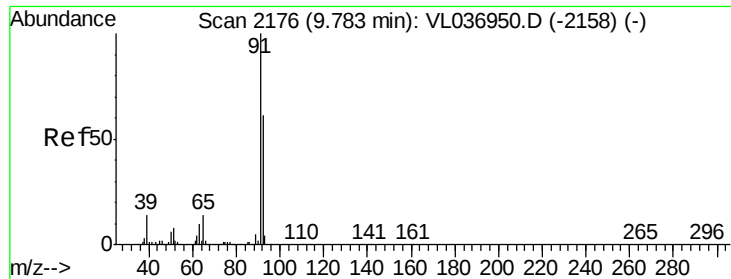
Tot Ion	78	Resp	80108
Ion Ratio	Lower	Upper	
78	100		
77	20.0	18.6	28.0
50	18.2	15.0	22.4



#39
1,2-Dichloropropane
Concen: 7.195 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. -0.45 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

Tgt Ion	63	Resp	703271
Ion Ratio	Lower	Upper	
63	100		
41	0.0	55.7	83.5#
62	17.9	56.2	84.4#





#53

Toluene

Concen: 0.287 ppbv

RT: 9.77 min Scan# 2173

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

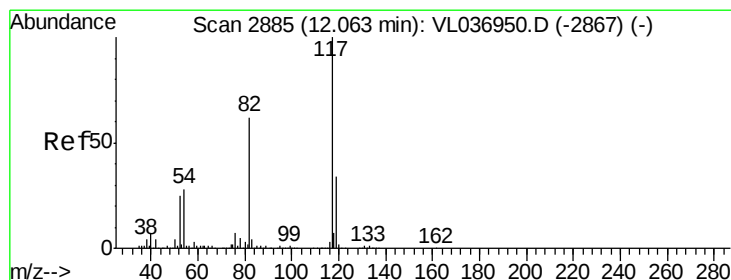
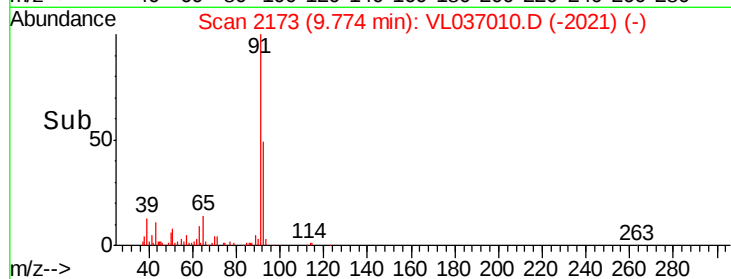
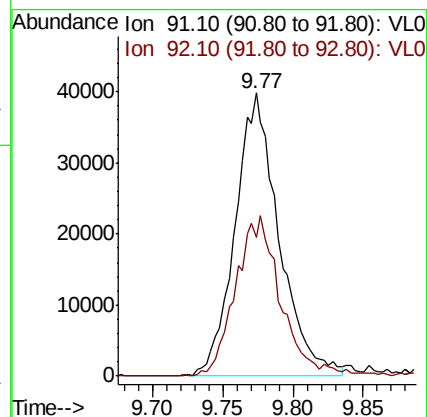
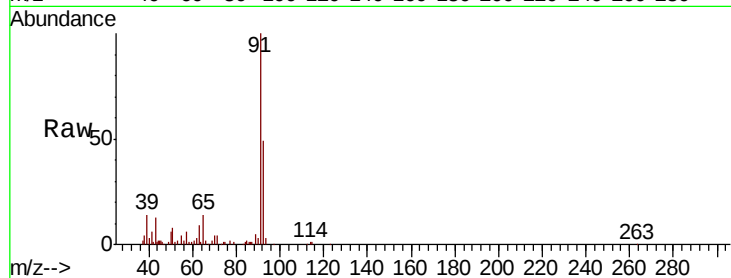
KSV-02

Tot Ion: 91 Resp: 86667

Ion Ratio Lower Upper

91 100

92 59.0 49.5 74.3



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.05 min Scan# 2881

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

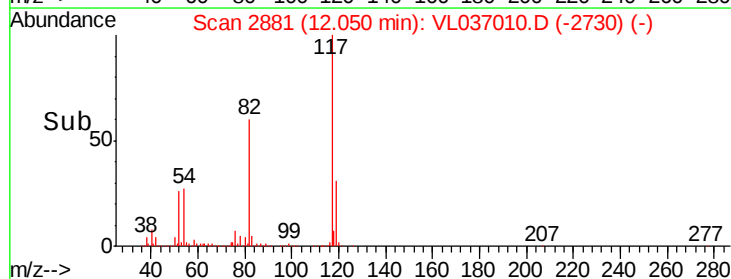
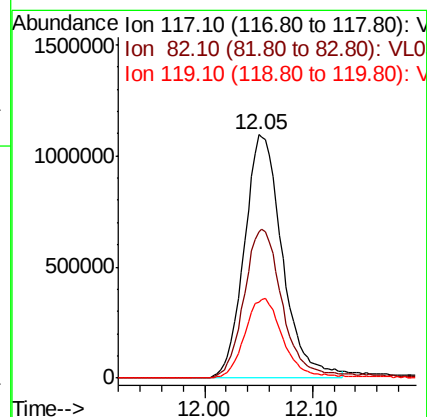
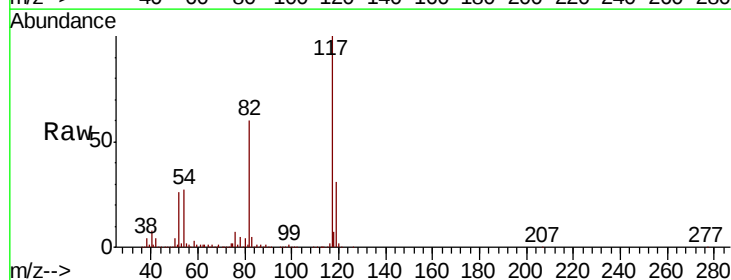
Tgt Ion: 117 Resp: 2685566

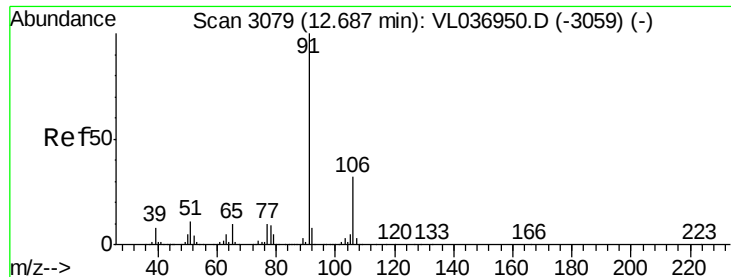
Ion Ratio Lower Upper

117 100

82 64.5 52.6 79.0

119 33.5 46.6 70.0#





#58

Ethyl Benzene

Concen: 0.345 ppbv

RT: 12.68 min Scan# 3076

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

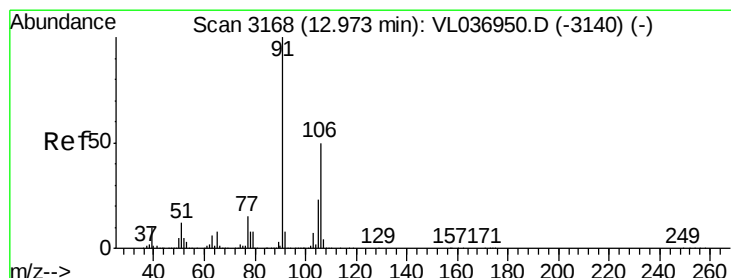
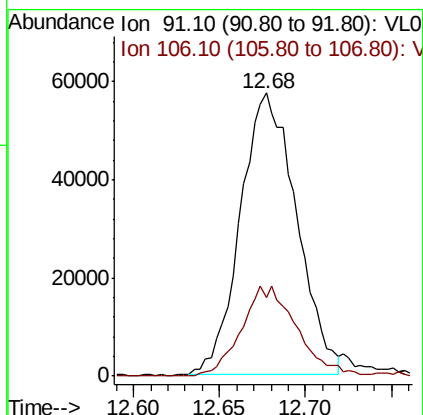
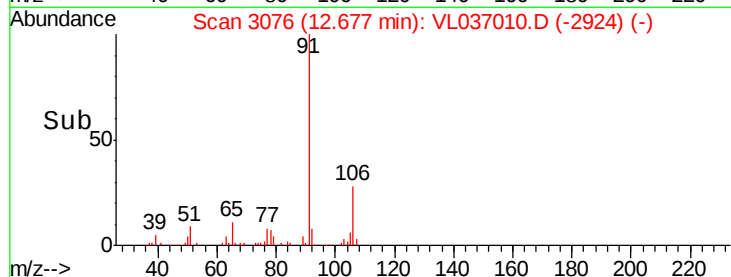
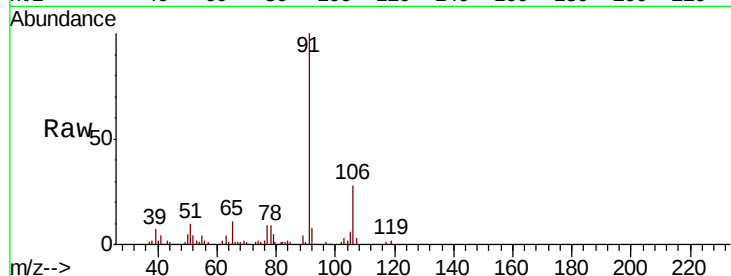
KSV-02

Tot Ion: 91 Resp: 130654

Ion Ratio Lower Upper

91 100

106 27.8 25.6 38.4



#59

m/p-Xylene

Concen: 0.396 ppbv

RT: 12.96 min Scan# 3165

Delta R.T. -0.01 min

Lab File: VL037010.D

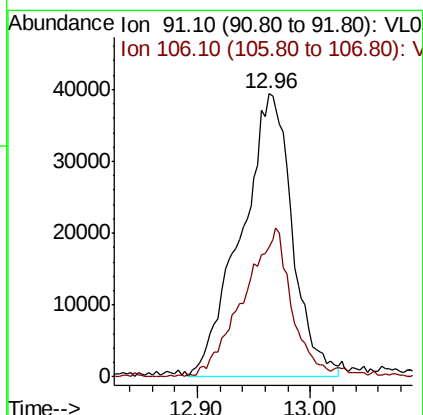
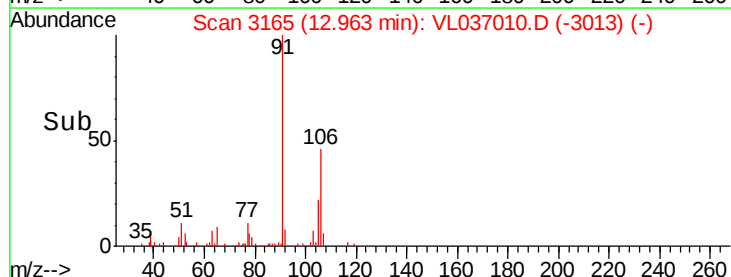
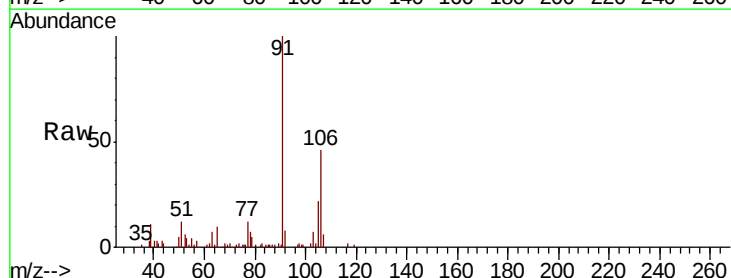
Acq: 20 May 2021 3:04

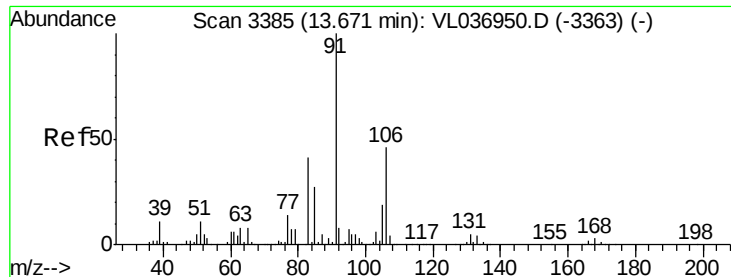
Tgt Ion: 91 Resp: 123943

Ion Ratio Lower Upper

91 100

106 51.1 37.4 56.2

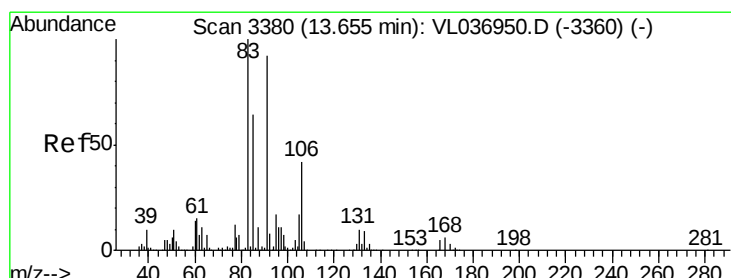
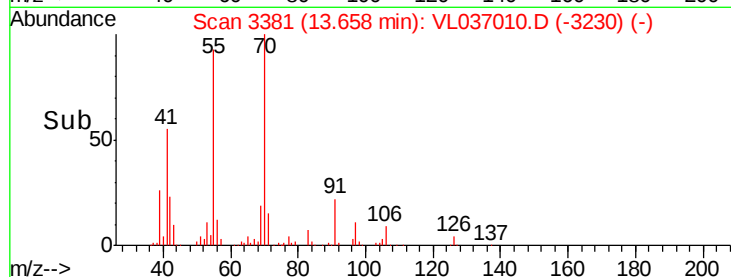
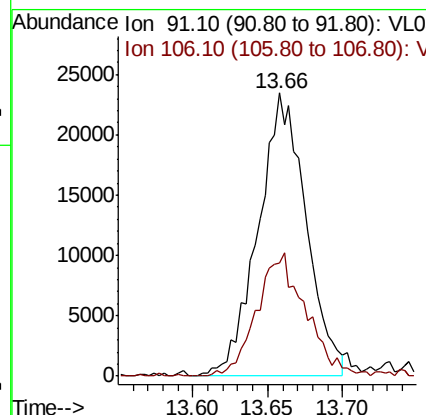
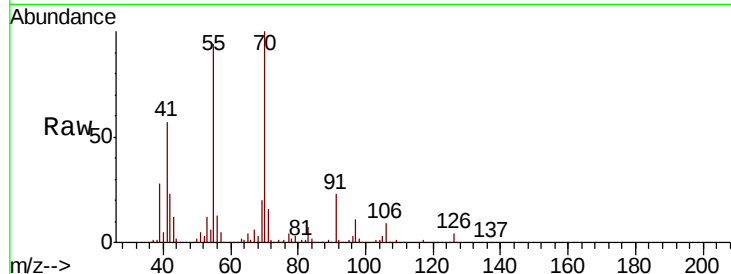




#60
o-Xylene
Concen: 0.175 ppbv
RT: 13.66 min Scan# 3381
Delta R.T. -0.01 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

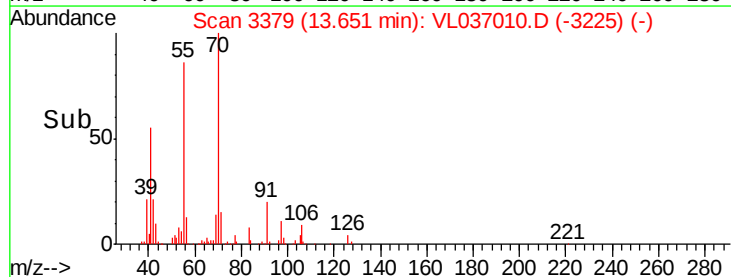
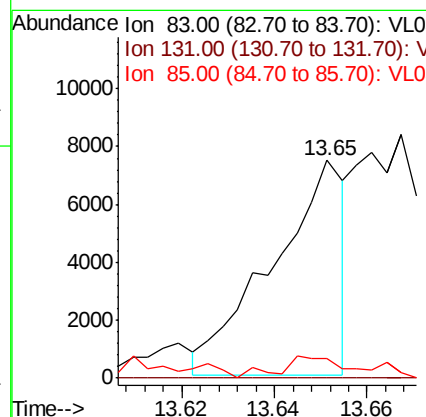
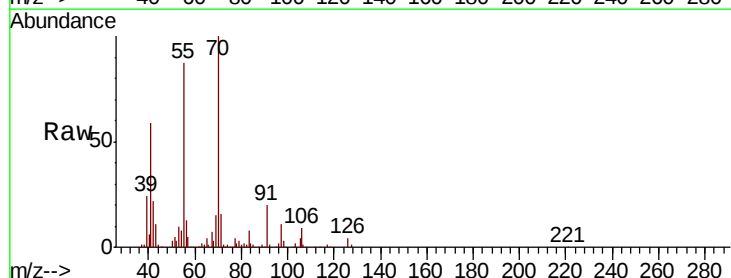
Instrument :
MSVOA_L
ClientSampleId :
KSV-02

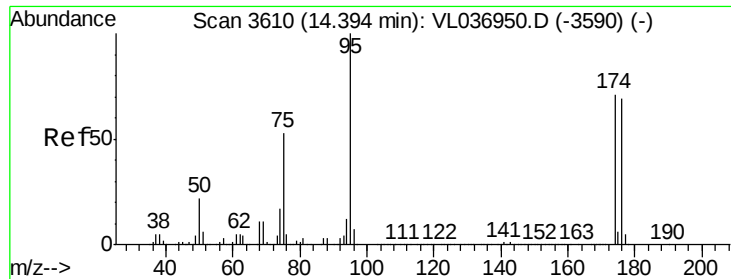
Tot Ion: 91 Resp: 52273
Ion Ratio Lower Upper
91 100
106 45.0 23.4 70.3



#63
1,1,2,2-Tetrachloroethane
Concen: 0.036 ppbv
RT: 13.65 min Scan# 3379
Delta R.T. -0.00 min
Lab File: VL037010.D
Acq: 20 May 2021 3:04

Tgt Ion: 83 Resp: 8003
Ion Ratio Lower Upper
83 100
131 0.0 5.0 15.0#
85 11.5 32.9 98.6#

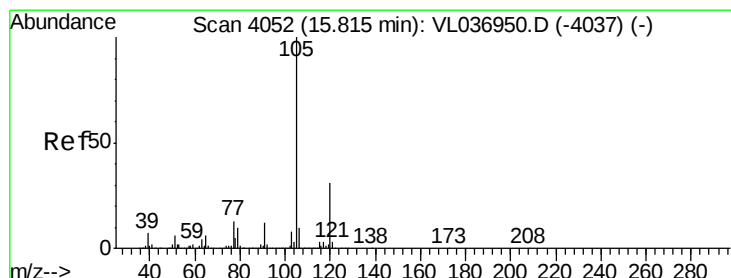
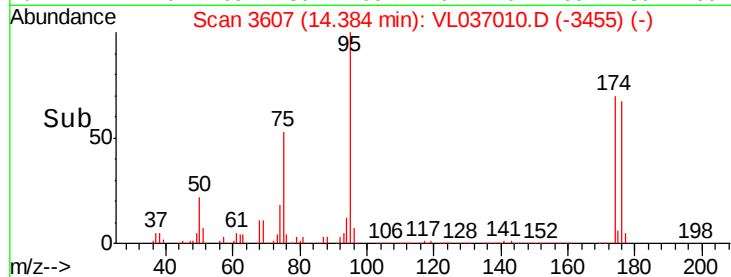
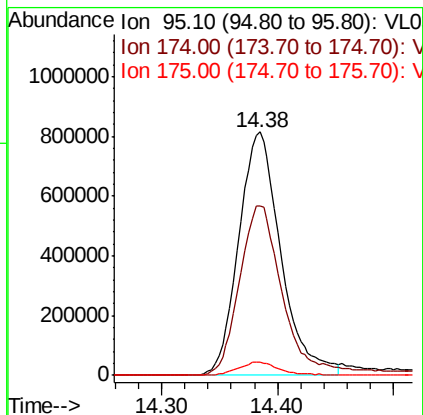
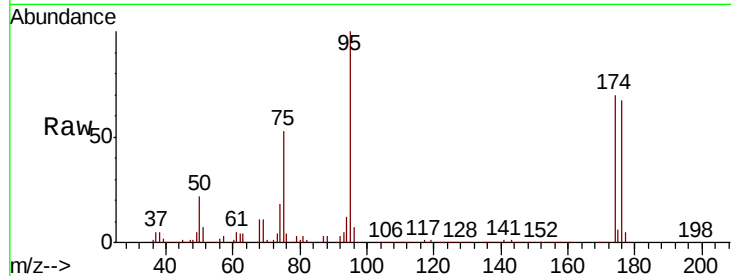




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.181 ppbv
 RT: 14.38 min Scan# 3607
 Delta R.T. -0.01 min
 Lab File: VL037010.D
 Acq: 20 May 2021 3:04

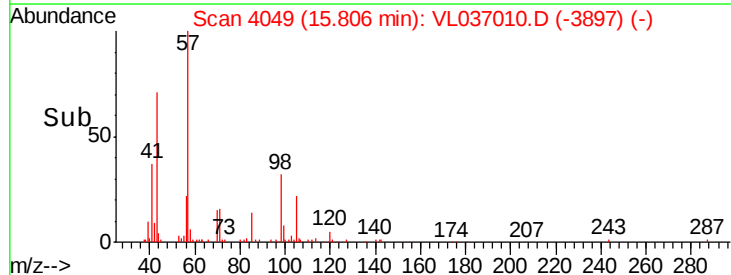
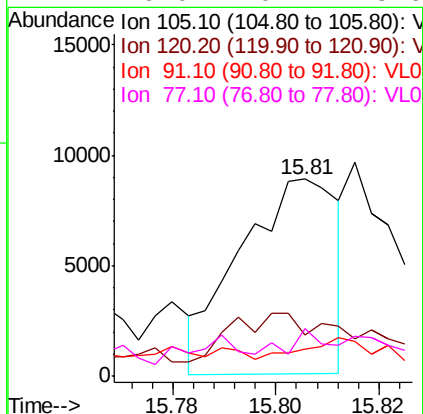
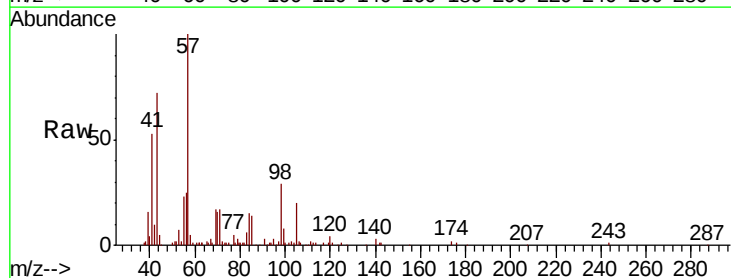
Instrument :
 MSVOA_L
 ClientSampled :
 KSV-02

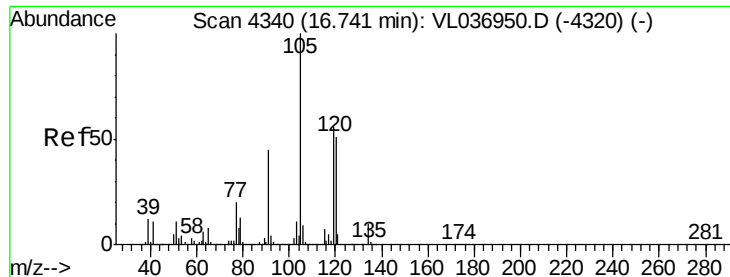
Tot Ion: 95 Resp: 2054017
 Ion Ratio Lower Upper
 95 100
 174 75.5 58.4 87.6
 175 5.4 4.4 6.6



#72
 4-Ethyltoluene
 Concen: 0.032 ppbv
 RT: 15.81 min Scan# 4049
 Delta R.T. -0.01 min
 Lab File: VL037010.D
 Acq: 20 May 2021 3:04

Tgt Ion: 105 Resp: 11520
 Ion Ratio Lower Upper
 105 100
 120 59.2 24.6 37.0#
 91 0.0 9.8 14.6#
 77 0.0 10.4 15.6#





#74

1,2,4-Trimethylbenzene

Concen: 0.073 ppbv

RT: 16.73 min Scan# 4336

Delta R.T. -0.01 min

Lab File: VL037010.D

Acq: 20 May 2021 3:04

Instrument :

MSVOA_L

ClientSampleId :

KSV-02

Tot Ion:105 Resp: 24985

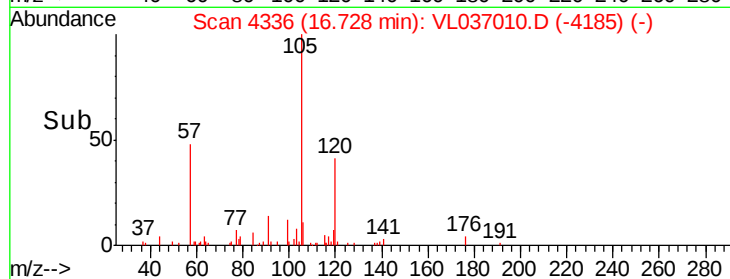
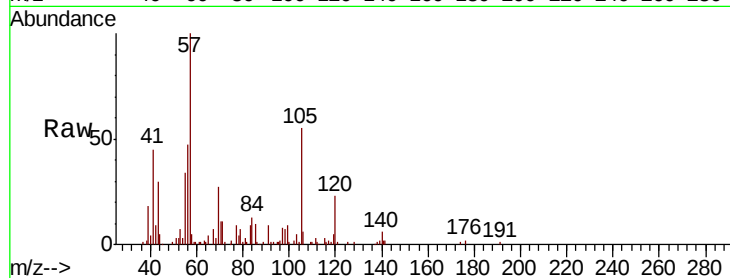
Ion Ratio Lower Upper

105 100

120 39.0 40.6 61.0#

91 9.2 37.4 56.0#

77 10.4 16.2 24.4#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

