

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052021\
 Data File : VL037037.D
 Acq On : 20 May 2021 23:35
 Operator : SY/AP
 Sample : M2424-08 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-11

Manual Integrations
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 5/24/2021 3:27:32 PM

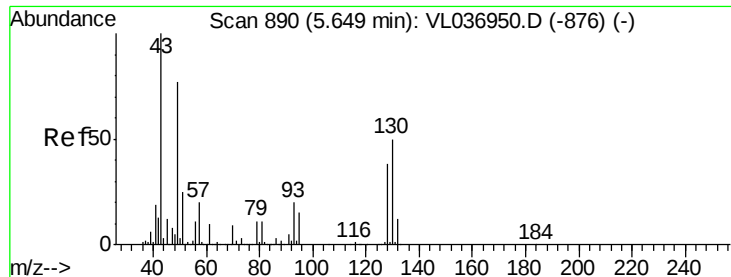
Quant Time: May 22 23:34:45 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1131746	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.14	114	3454600	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.04	117	3108681	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.37	95	2346598	10.05	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.96	51	20268	0.098	ppbv	94
4) Chloromethane	3.11	50	14502m	0.206	ppbv	
9) Propene	3.00	41	2820913m	37.995	ppbv	
10) Heptane	8.09	43	6284619	33.966	ppbv	98
11) Trichlorofluoromethane	3.92	101	21727m	0.122	ppbv	
13) Ethanol	3.58	45	353836m	35.719	ppbv	
15) Acetone	3.82	43	10305869m	88.904	ppbv	
17) tert-Butyl alcohol	4.27	59	201301	1.896	ppbv #	72
19) Isopropyl Alcohol	3.95	45	239382	3.842	ppbv #	30
20) Methylene Chloride	4.32	84	1185660	19.081	ppbv	98
26) Hexane	5.66	57	9635368	67.711	ppbv #	46
27) Carbon Disulfide	4.52	76	244399	1.704	ppbv	97
30) Cyclohexane	7.09	84	85559m	0.708	ppbv	
34) 2-Butanone	5.21	43	1186807	9.435	ppbv	97
36) Benzene	6.85	78	1326128	4.457	ppbv	99
38) Trichloroethene	7.79	130	9680m	0.076	ppbv	
52) Tetrachloroethene	11.19	164	6823m	0.058	ppbv	
53) Toluene	9.76	91	562464	1.589	ppbv	97
58) Ethyl Benzene	12.66	91	61495m	0.140	ppbv	
59) m/p-Xylene	12.92	91	116548m	0.321	ppbv	
60) o-Xylene	13.65	91	44867m	0.130	ppbv	
61) Styrene	13.48	104	23618m	0.121	ppbv	
72) 4-Ethyltoluene	15.79	105	42818m	0.104	ppbv	
73) 1,3,5-Trimethylbenzene	15.96	105	53139m	0.138	ppbv	
74) 1,2,4-Trimethylbenzene	16.72	105	147828	0.371	ppbv #	71

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



#1

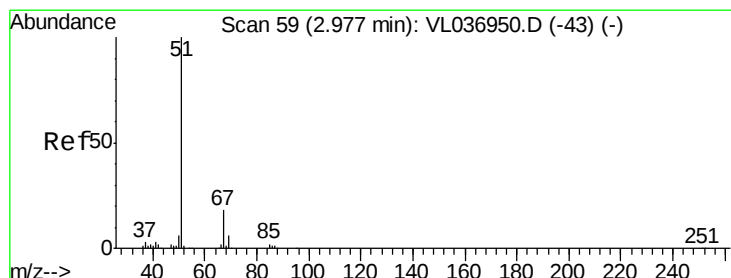
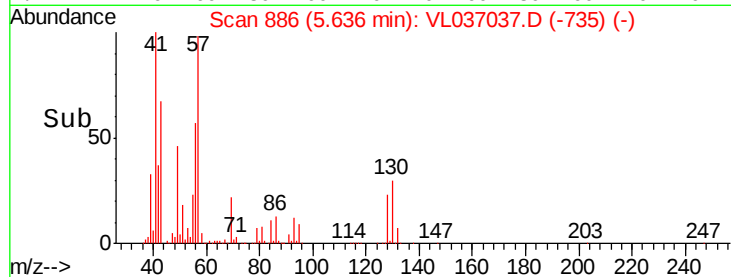
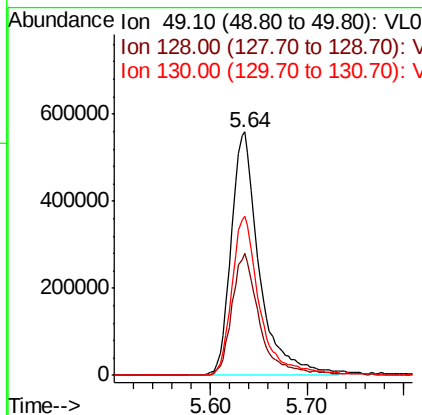
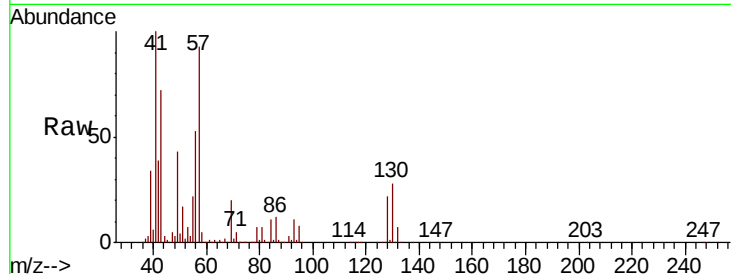
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.64 min Scan# 886
 Delta R.T. -0.01 min
 Lab File: VL037037.D
 Acq: 20 May 2021 23:35

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-11

Tot Ion: 49 Resp: 1131746
 Ion Ratio Lower Upper
 49 100
 128 50.7 26.9 80.7
 130 66.4 33.8 101.4

Manual Integrations
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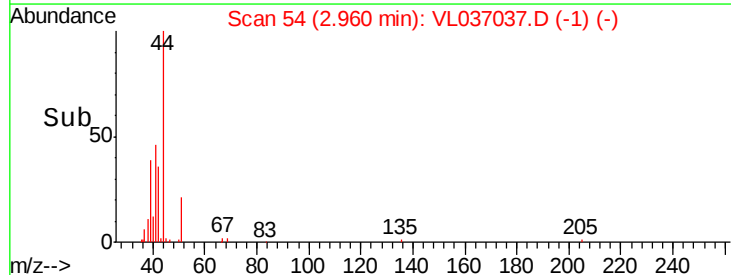
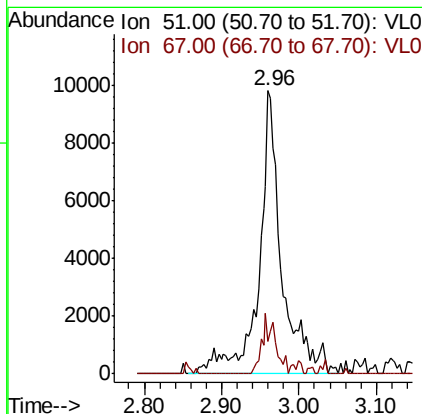
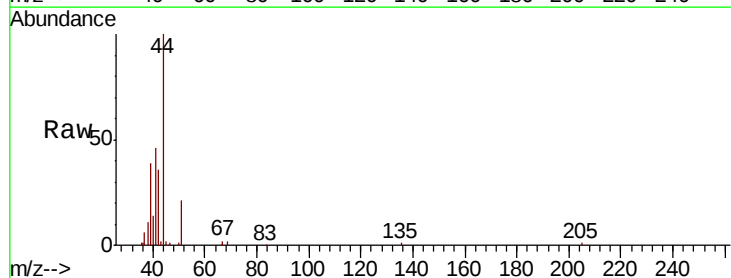
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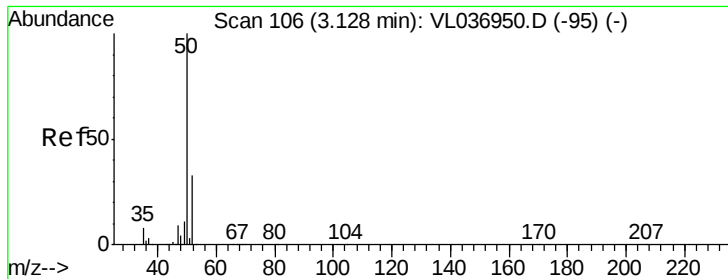


#3

Chlorodifluoromethane
 Concen: 0.098 ppbv
 RT: 2.96 min Scan# 54
 Delta R.T. -0.02 min
 Lab File: VL037037.D
 Acq: 20 May 2021 23:35

Tgt Ion: 51 Resp: 20268
 Ion Ratio Lower Upper
 51 100
 67 15.3 14.6 21.8





#4

Chloromethane

Concen: 0.206 ppbv m

RT: 3.11 min Scan# 100

Delta R.T. -0.02 min

Lab File: VL037037.D

Acq: 20 May 2021 23:35

Instrument :

MSVOA_L

ClientSampleId :

KSV-11

Tot Ion: 50 Resp: 14502

Ion Ratio Lower Upper

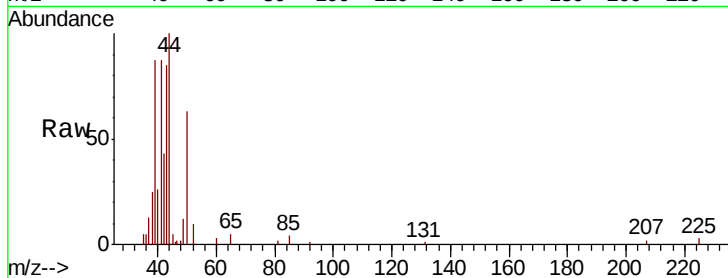
50 100

52 15.7 26.1 39.1#

Manual Integrations
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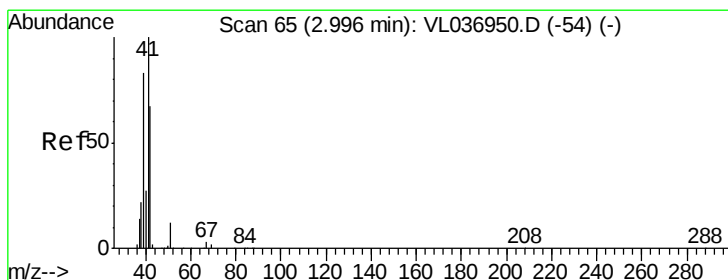
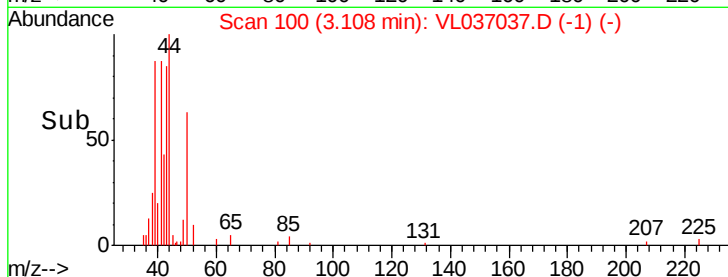
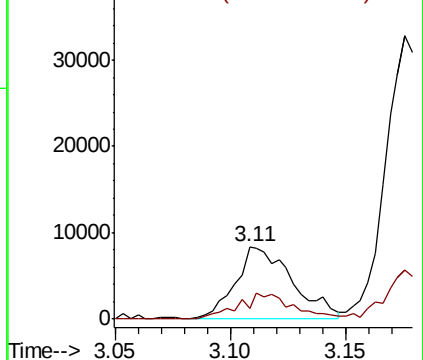
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 37.995 ppbv m

RT: 3.00 min Scan# 65

Delta R.T. -0.00 min

Lab File: VL037037.D

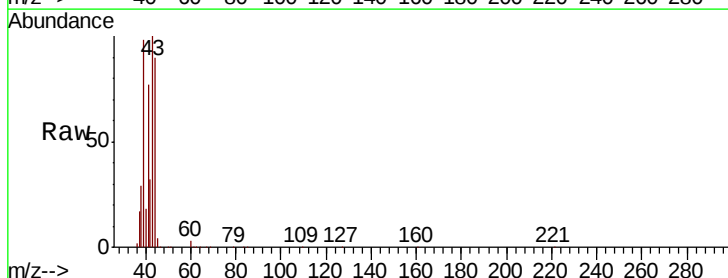
Acq: 20 May 2021 23:35

Tgt Ion: 41 Resp: 2820913

Ion Ratio Lower Upper

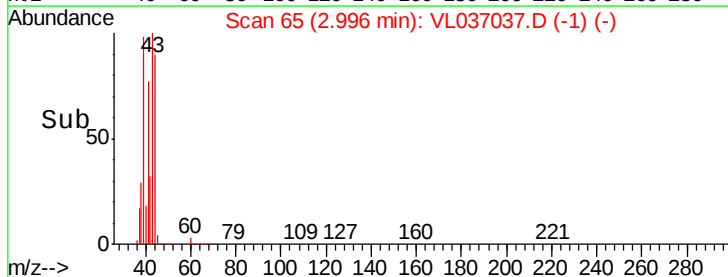
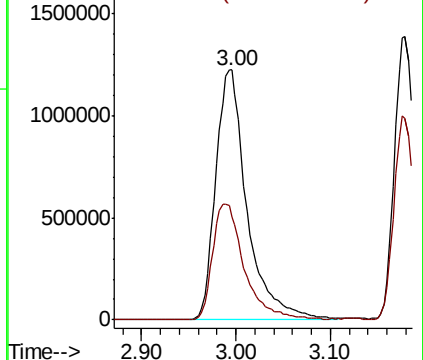
41 100

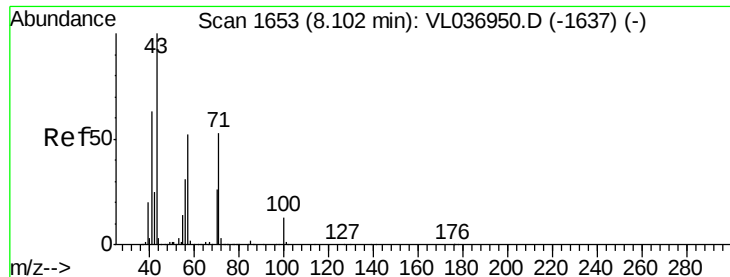
42 63.3 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 33.966 ppbv

RT: 8.09 min Scan# 1649

Delta R.T. -0.01 min

Lab File: VL037037.D

Acq: 20 May 2021 23:35

Instrument :

MSVOA_L

ClientSampleId :

KSV-11

Tot Ion: 43 Resp: 6284619

Ion Ratio Lower Upper

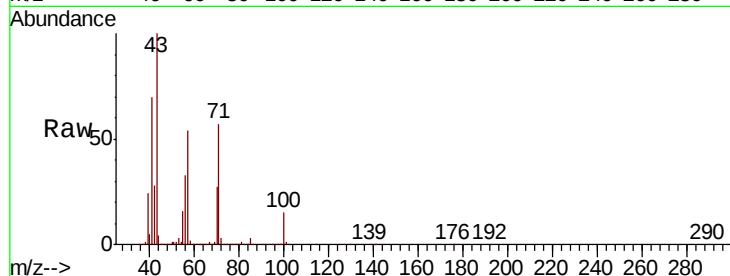
43 100

57 52.6 41.0 61.6

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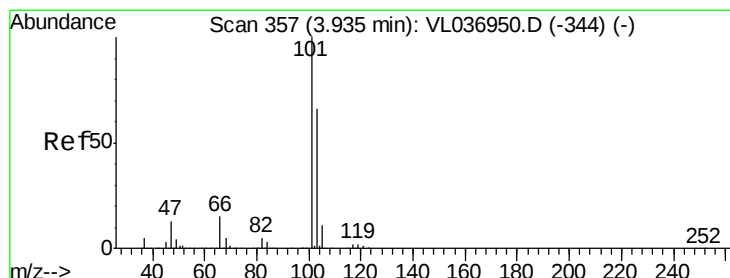
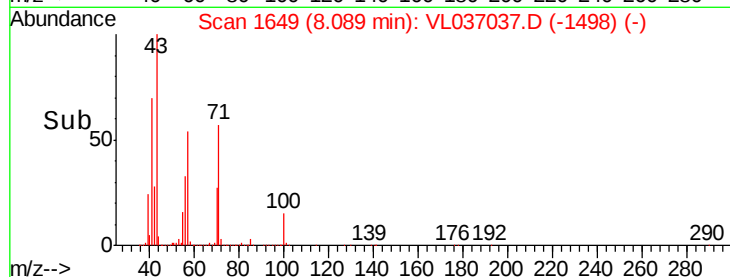
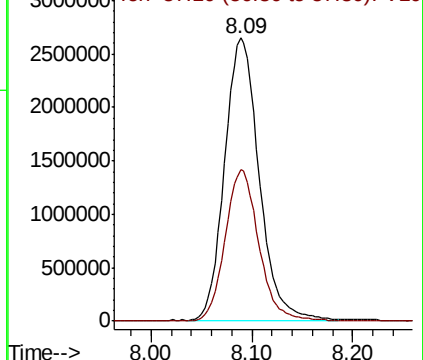
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#11

Trichlorofluoromethane

Concen: 0.122 ppbv m

RT: 3.92 min Scan# 352

Delta R.T. -0.02 min

Lab File: VL037037.D

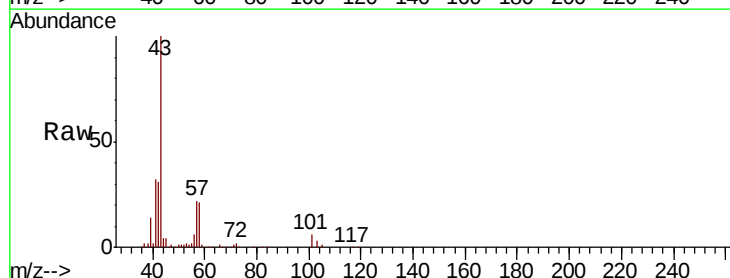
Acq: 20 May 2021 23:35

Tgt Ion:101 Resp: 21727

Ion Ratio Lower Upper

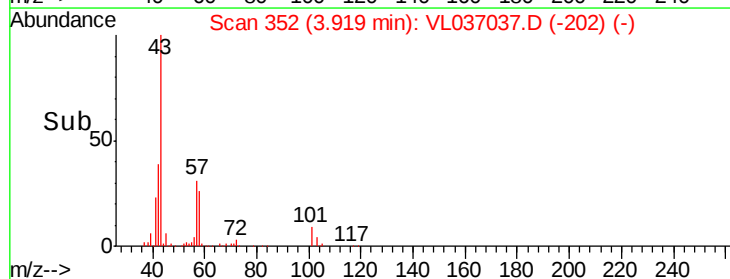
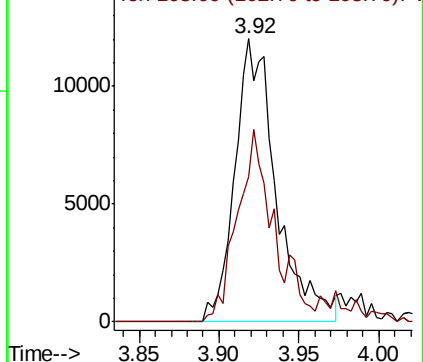
101 100

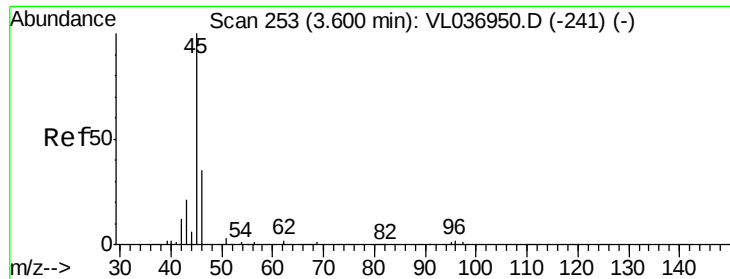
103 51.3 52.6 79.0#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#13

Ethanol

Concen: 35.719 ppbv m

RT: 3.58 min Scan# 246

Delta R.T. -0.02 min

Lab File: VL037037.D

Acq: 20 May 2021 23:35

Instrument :

MSVOA_L

ClientSampleId :

KSV-11

Tot Ion: 45 Resp: 353836

Ion Ratio Lower Upper

45 100

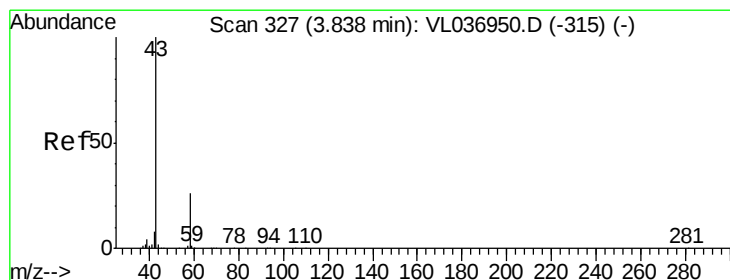
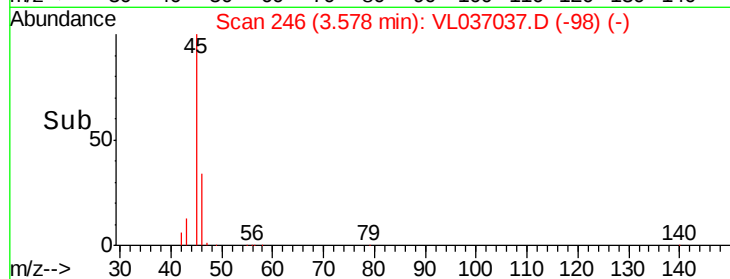
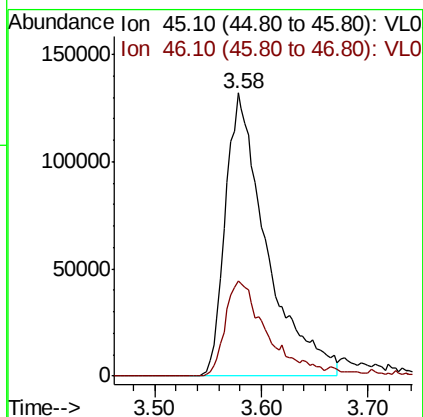
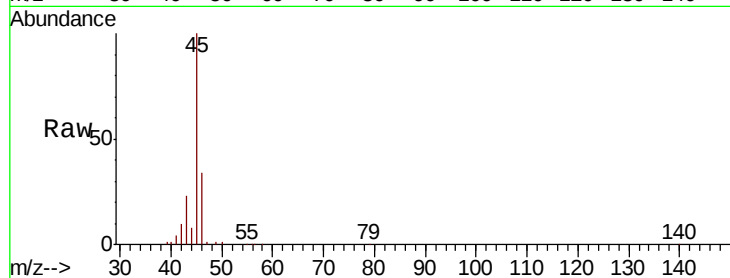
46 36.4 16.3 65.3

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#15

Acetone

Concen: 88.904 ppbv m

RT: 3.82 min Scan# 320

Delta R.T. -0.02 min

Lab File: VL037037.D

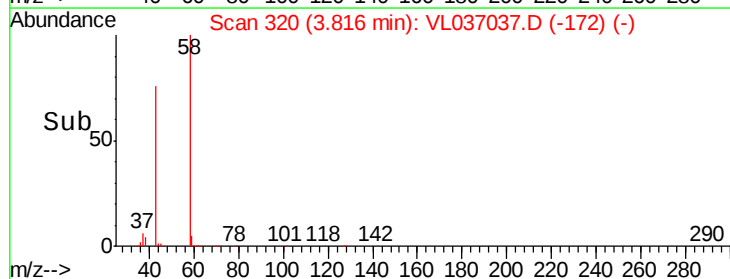
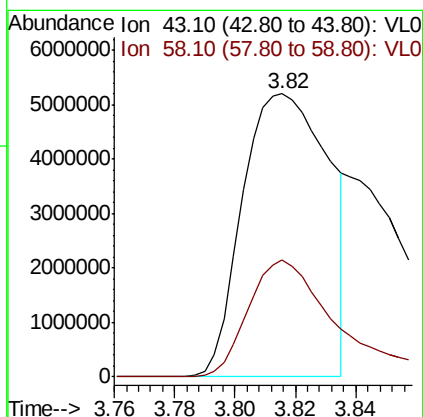
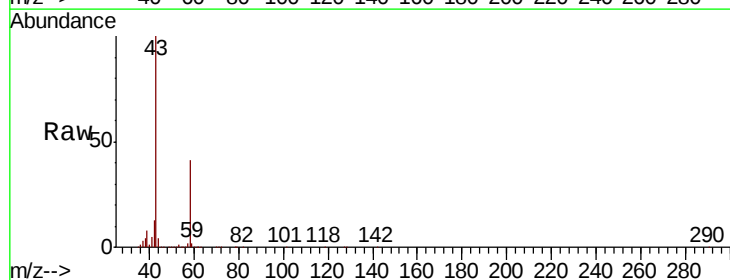
Acq: 20 May 2021 23:35

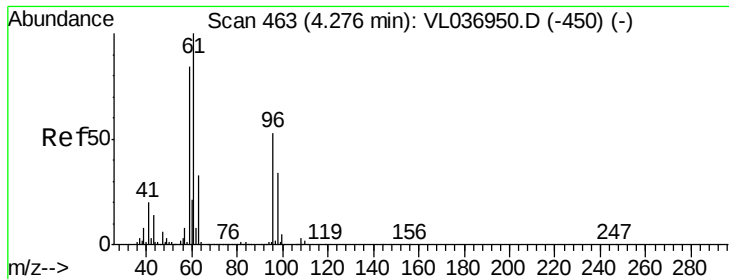
Tgt Ion: 43 Resp:10305869

Ion Ratio Lower Upper

43 100

58 46.3 24.0 36.0#





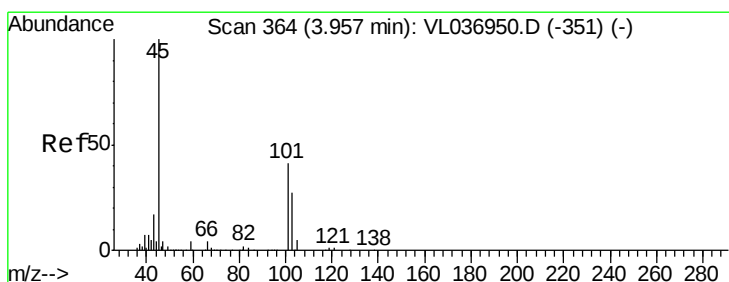
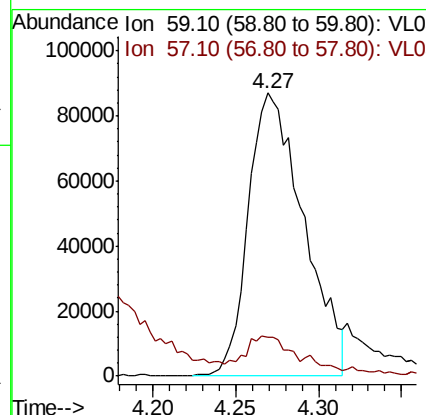
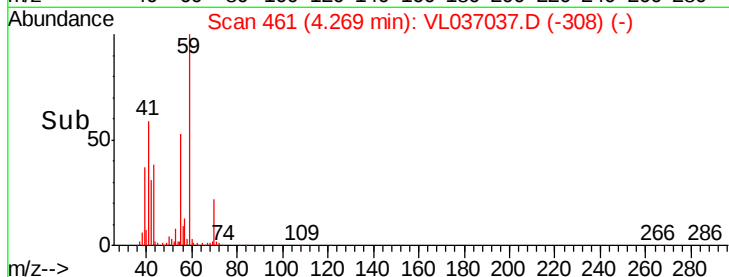
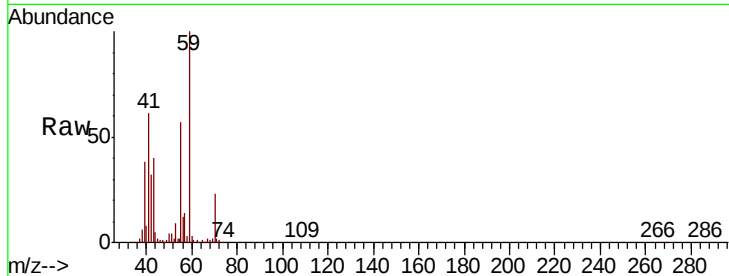
#17
tert-Butyl alcohol
Concen: 1.896 ppbv
RT: 4.27 min Scan# 461
Delta R.T. -0.01 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampled :
KSV-11

Tot Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.3	12.5#

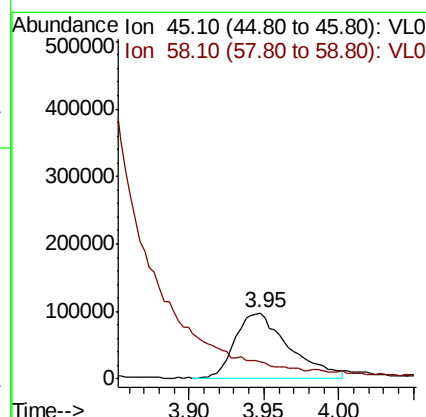
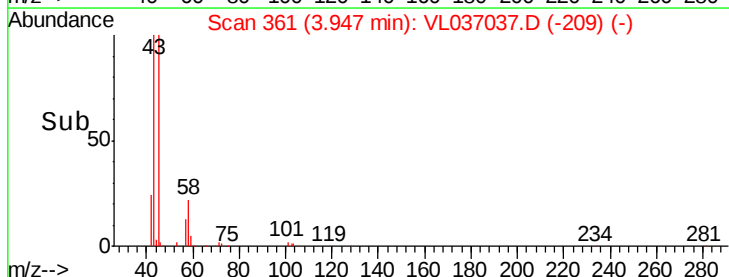
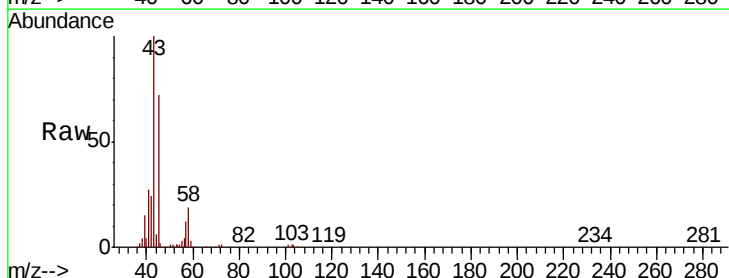
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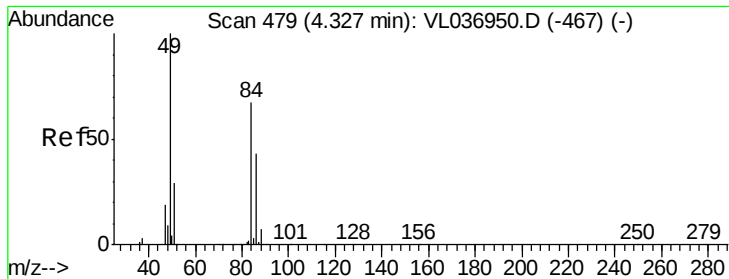
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#19
Isopropyl Alcohol
Concen: 3.842 ppbv
RT: 3.95 min Scan# 361
Delta R.T. -0.01 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion	Ratio	Lower	Upper
45	100		
58	0.0	37.2	55.8#





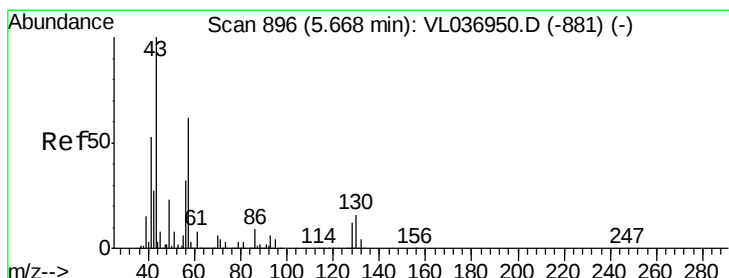
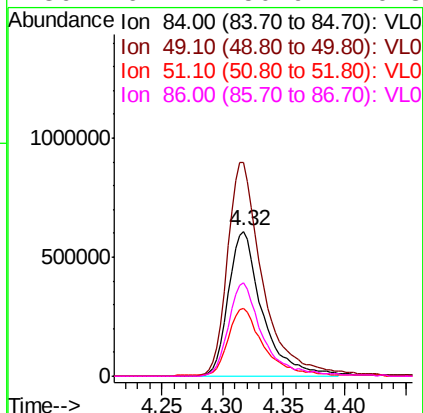
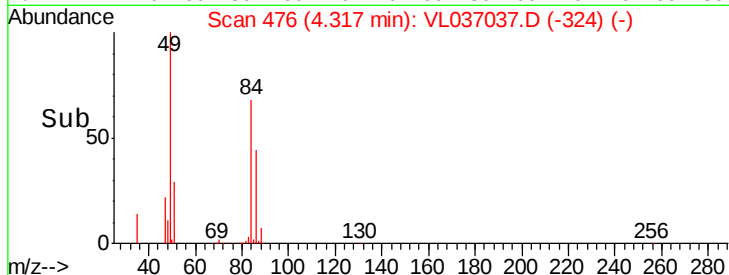
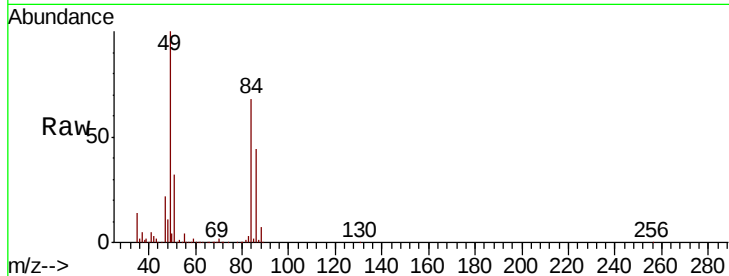
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Methvlene Chloride
Concen: 19.081 ppbv
RT: 4.32 min Scan# 476
Delta R.T. -0.01 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampled :
KSV-11

Tot Ion: 84 Resp: 1185660
Ion Ratio Lower Upper
84 100
49 147.2 119.8 179.6
51 45.9 35.1 52.7
86 64.4 50.9 76.3

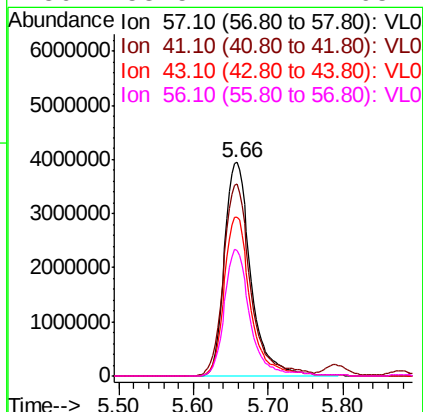
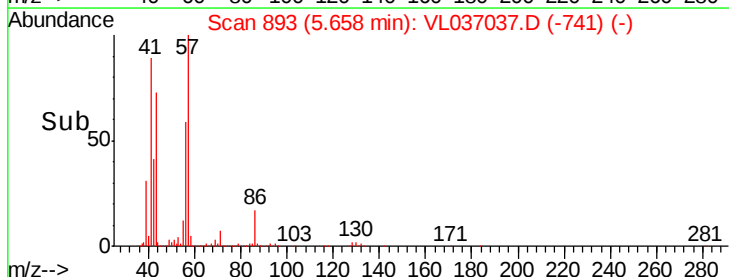
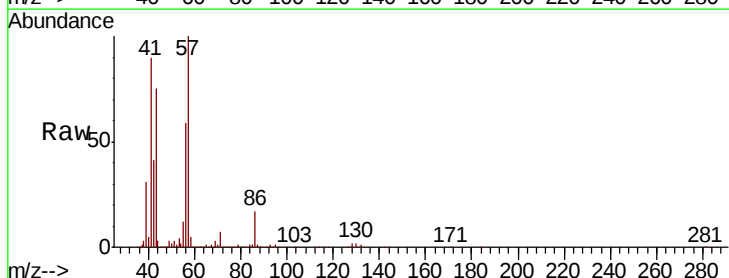
Manual Integrations
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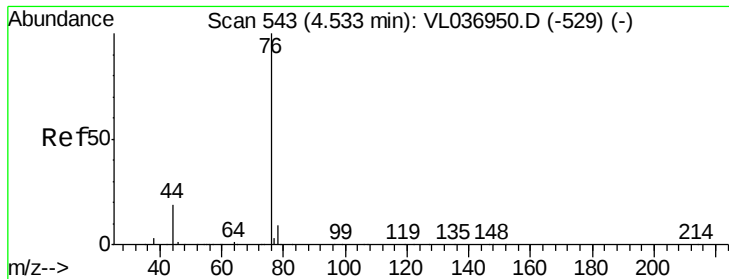
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#26
Hexane
Concen: 67.711 ppbv
RT: 5.66 min Scan# 893
Delta R.T. -0.01 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion: 57 Resp: 9635368
Ion Ratio Lower Upper
57 100
41 93.4 70.5 105.7
43 74.2 165.8 248.8#
56 58.5 42.2 63.4





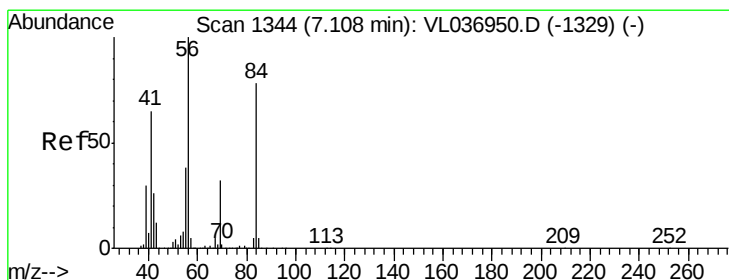
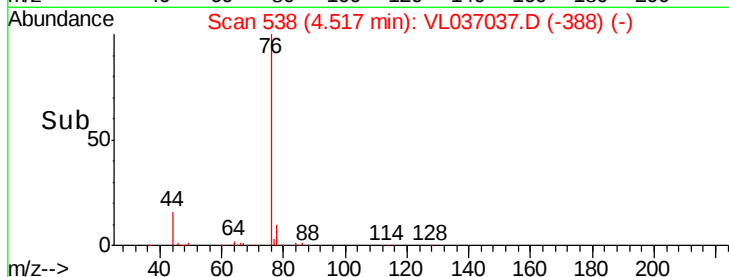
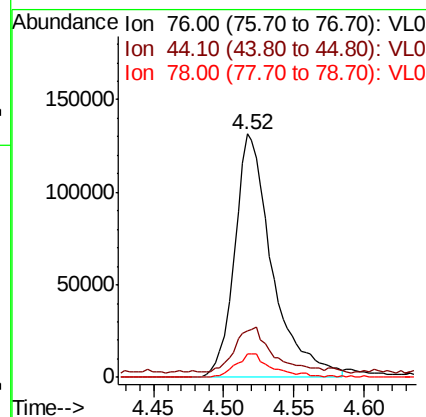
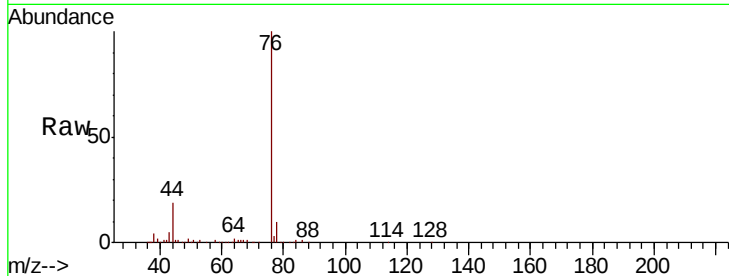
#27
Carbon Disulfide
Concen: 1.704 ppbv
RT: 4.52 min Scan# 538
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampleId :
KSV-11

Tot Ion	Ratio	Lower	Upper
76	100		
44	21.1	15.5	23.3
78	9.8	7.8	11.6

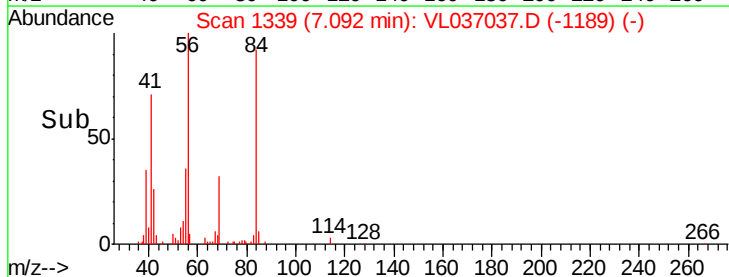
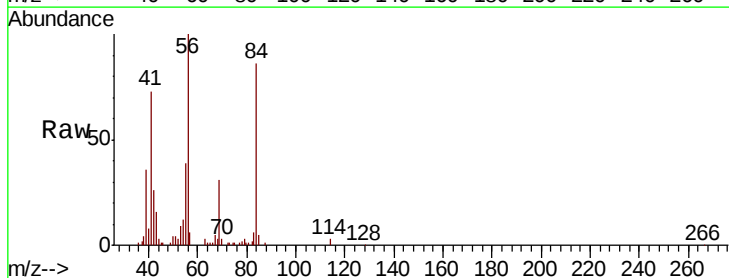
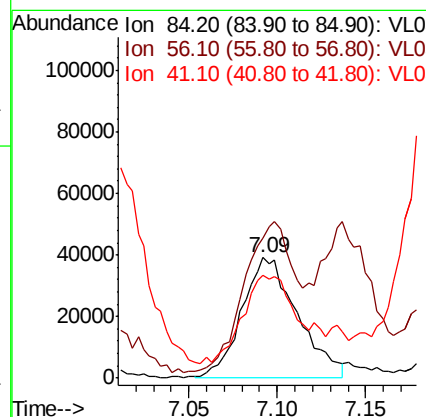
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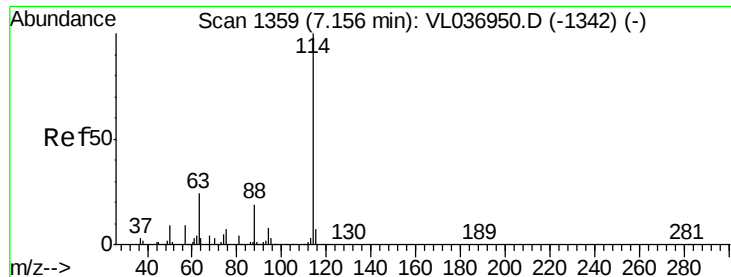
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#30
Cyclohexane
Concen: 0.708 ppbv m
RT: 7.09 min Scan# 1339
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion	Ratio	Lower	Upper
84	100		
56	112.1	107.9	161.9
41	93.0	65.5	98.3





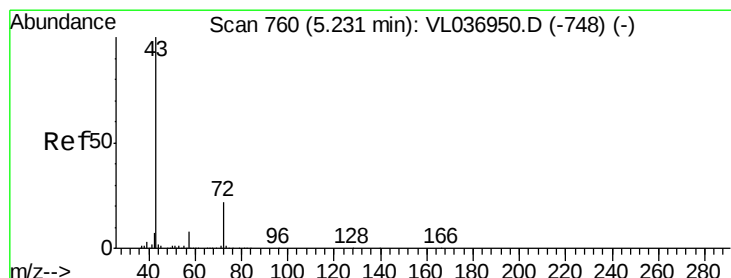
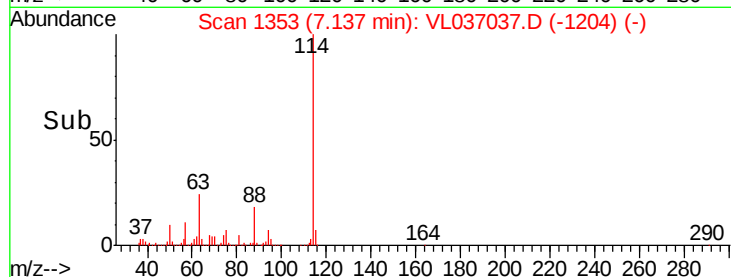
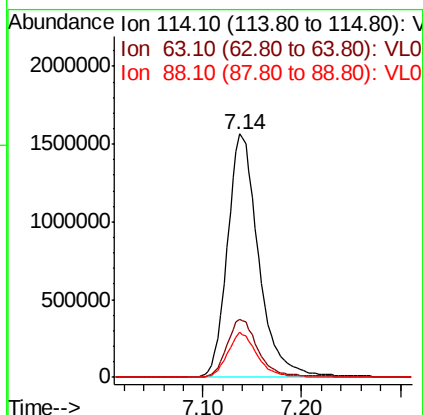
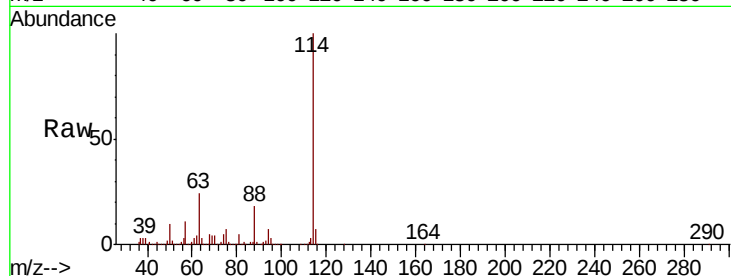
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.14 min Scan# 1353
 Delta R.T. -0.02 min
 Lab File: VL037037.D
 Acq: 20 May 2021 23:35

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-11

Tot Ion: 114 Resp: 3454600
 Ion Ratio Lower Upper
 114 100
 63 24.2 19.6 29.4
 88 17.6 14.6 21.8

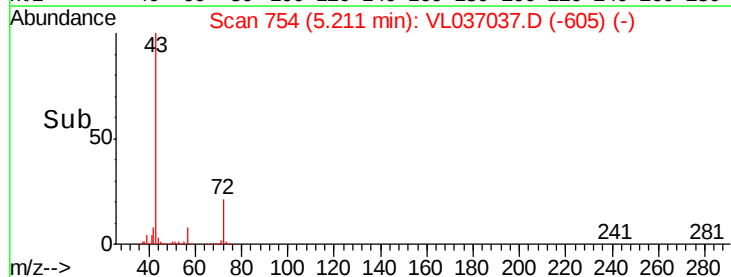
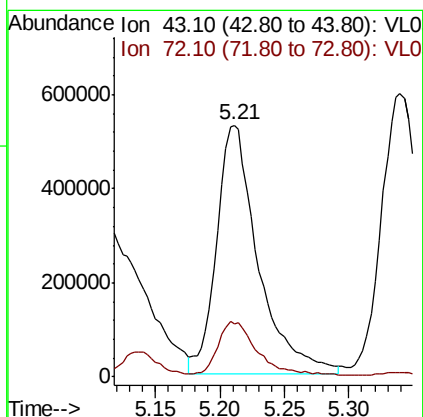
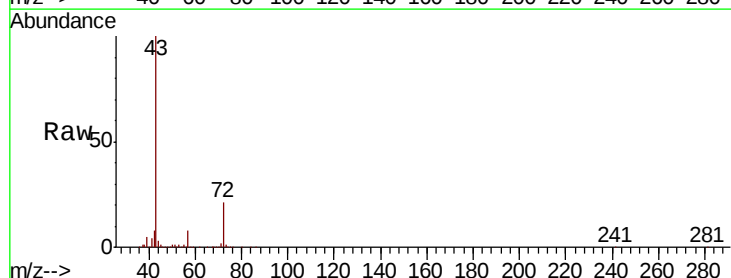
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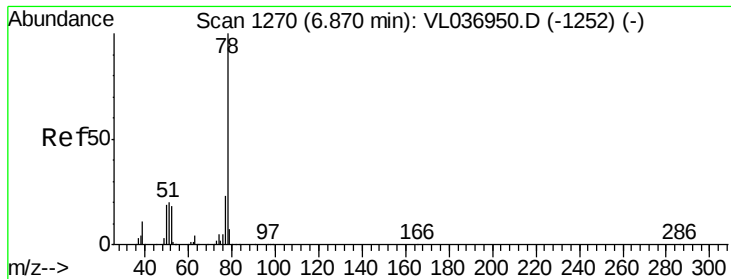
MMDadoda
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#34
 2-Butanone
 Concen: 9.435 ppbv
 RT: 5.21 min Scan# 754
 Delta R.T. -0.02 min
 Lab File: VL037037.D
 Acq: 20 May 2021 23:35

Tgt Ion: 43 Resp: 1186807
 Ion Ratio Lower Upper
 43 100
 72 22.4 19.0 28.4





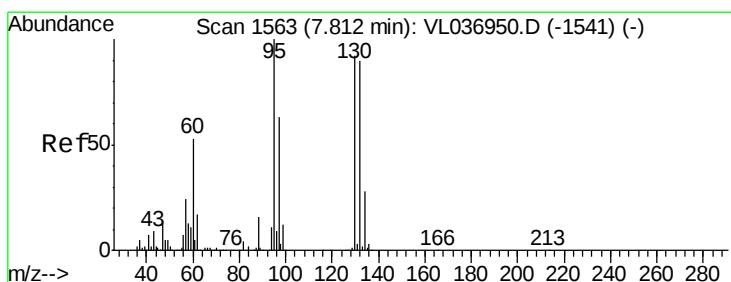
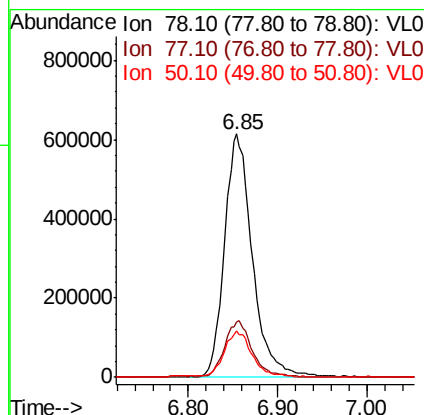
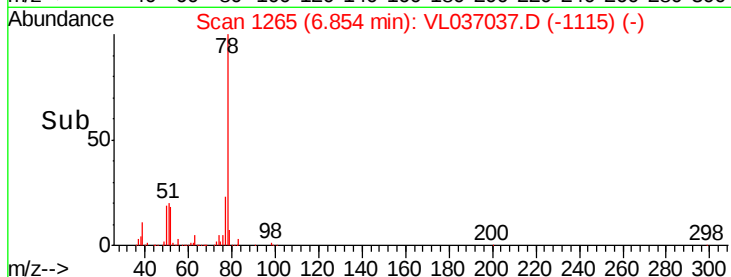
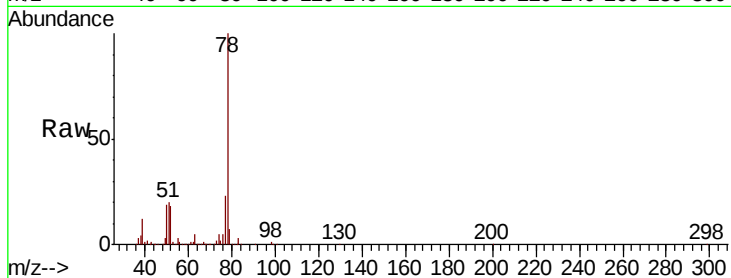
#36
Benzene
Concen: 4.457 ppbv
RT: 6.85 min Scan# 1265
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampleId :
KSV-11

Tot Ion	78	Resp	1326128
Ion	Ratio	Lower	Upper
78	100		
77	22.4	18.6	28.0
50	19.1	15.0	22.4

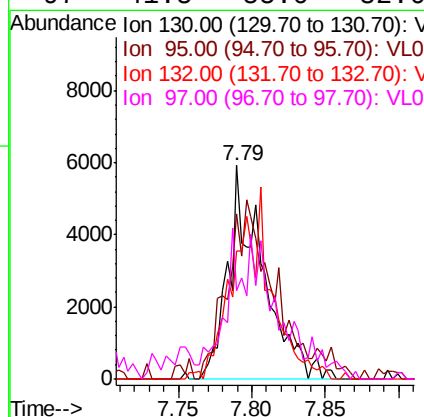
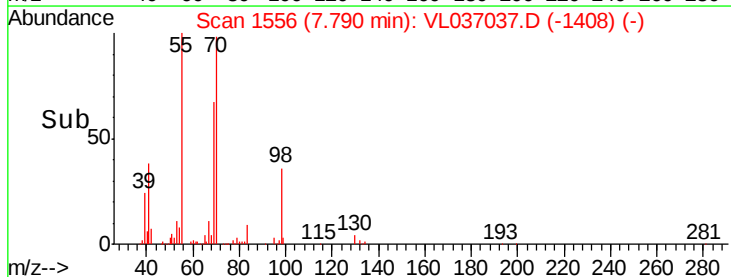
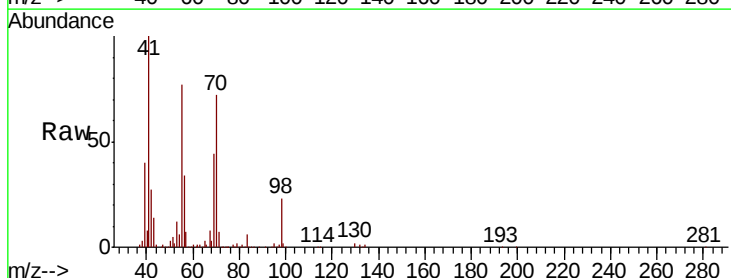
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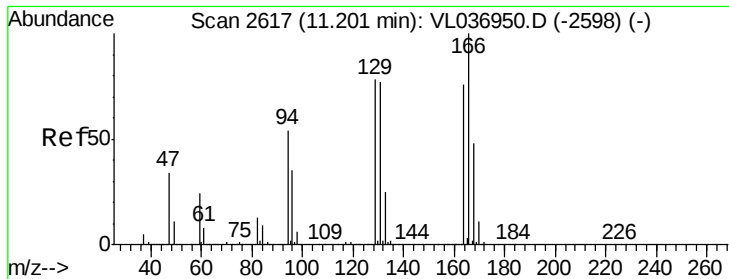
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#38
Trichloroethene
Concen: 0.076 ppbv m
RT: 7.79 min Scan# 1556
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion	130	Resp	9680
Ion	Ratio	Lower	Upper
130	100		
95	77.3	86.9	130.3#
132	60.2	78.4	117.6#
97	41.5	55.0	82.6#





#52

Tetrachloroethene

Concen: 0.058 ppbv m

RT: 11.19 min Scan# 2614

Delta R.T. -0.01 min

Lab File: VL037037.D

Acq: 20 May 2021 23:35

Instrument :

MSVOA_L

ClientSampleId :

KSV-11

Tot Ion:164 Resp: 6823

Ion Ratio Lower Upper

164 100

166 92.5 105.5 158.3#

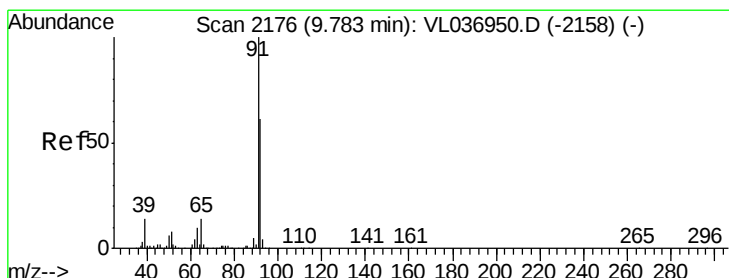
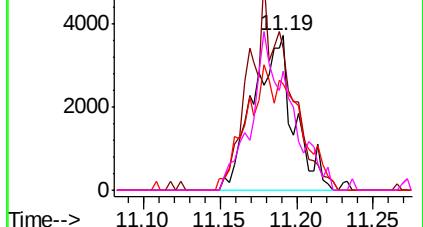
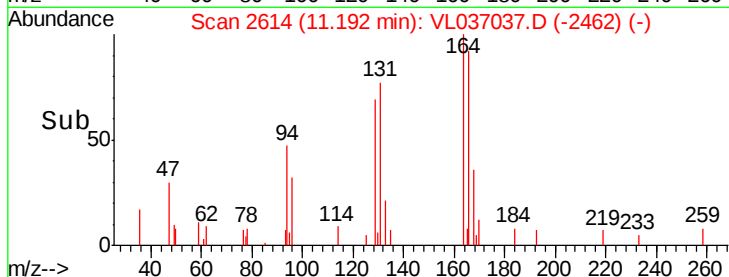
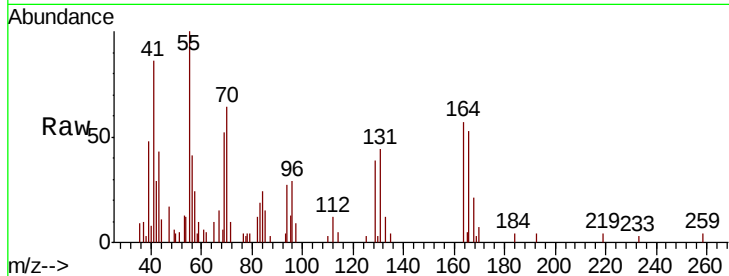
129 69.1 81.8 122.8#

131 77.2 81.2 121.8#

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#53

Toluene

Concen: 1.589 ppbv

RT: 9.76 min Scan# 2169

Delta R.T. -0.02 min

Lab File: VL037037.D

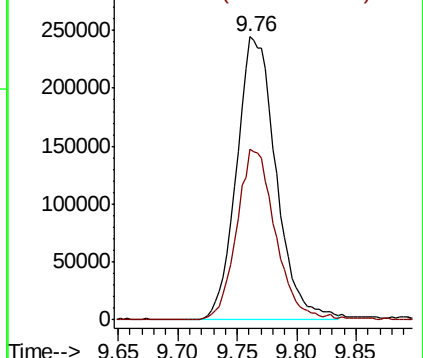
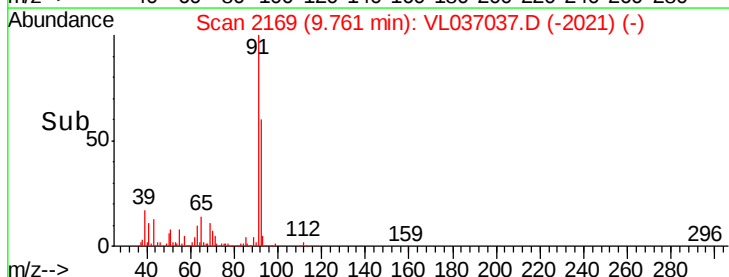
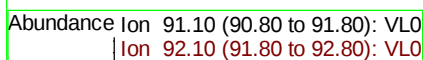
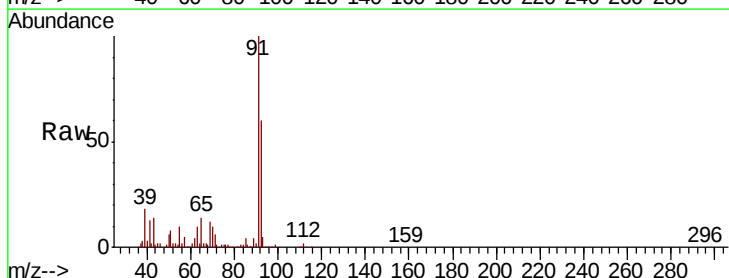
Acq: 20 May 2021 23:35

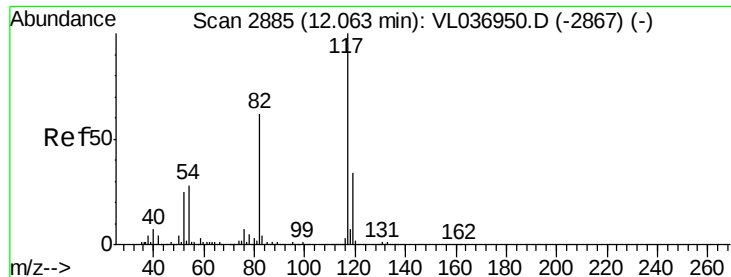
Tgt Ion: 91 Resp: 562464

Ion Ratio Lower Upper

91 100

92 59.8 49.5 74.3





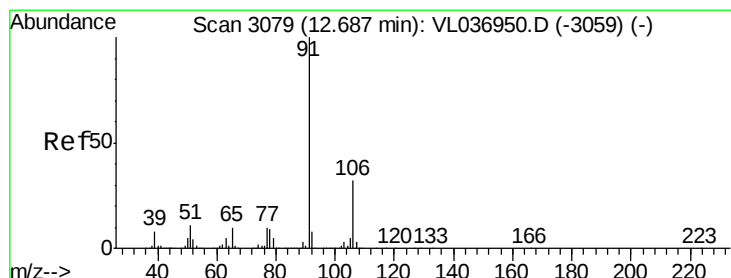
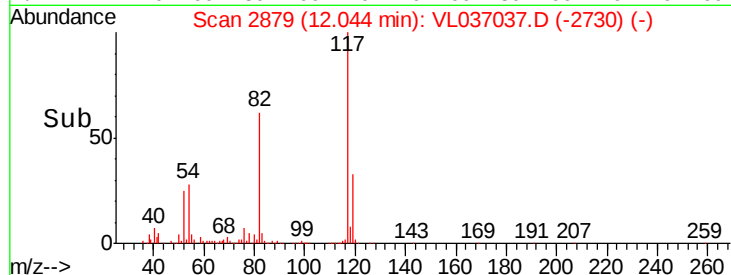
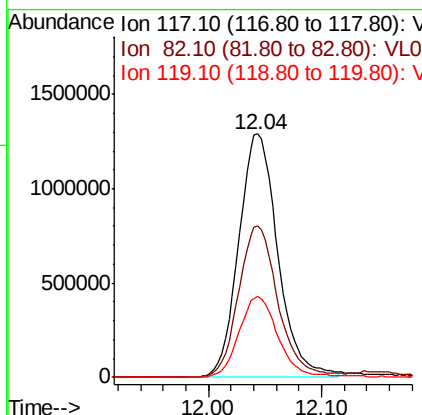
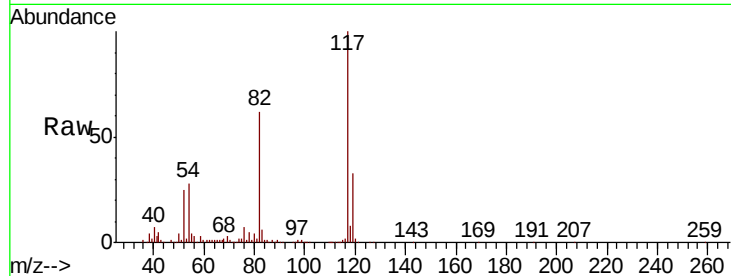
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.04 min Scan# 2879
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampleId :
KSV-11

Tot Ion	Ratio	Lower	Upper
117	100		
82	63.1	52.6	79.0
119	34.0	46.6	70.0

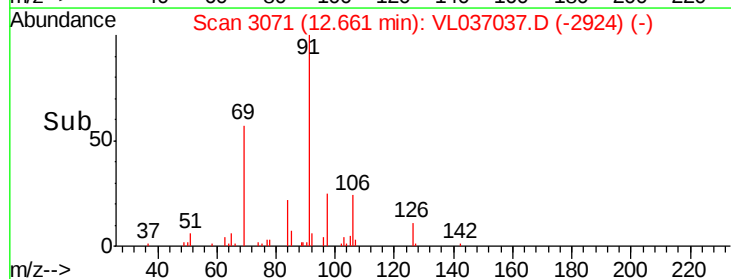
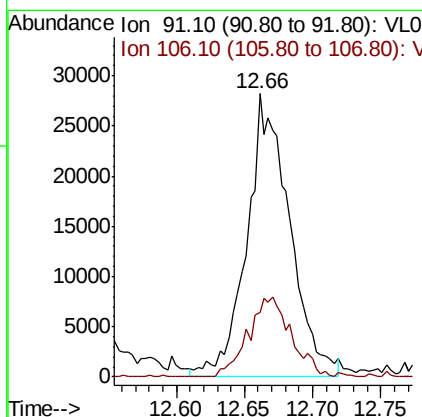
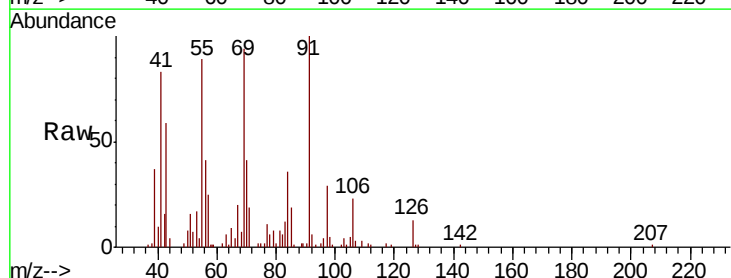
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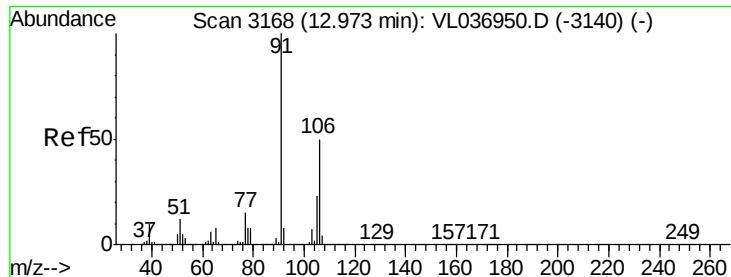
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#58
Ethyl Benzene
Concen: 0.140 ppbv m
RT: 12.66 min Scan# 3071
Delta R.T. -0.03 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion	Ratio	Lower	Upper
91	100		
106	22.8	25.6	38.4





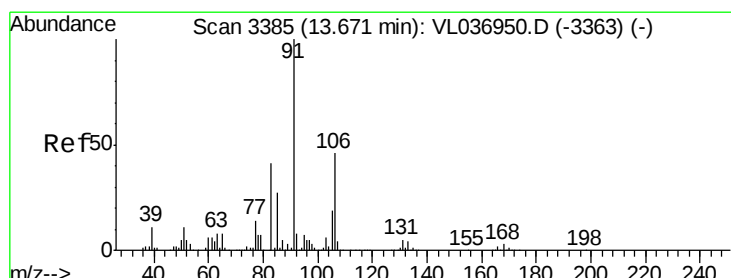
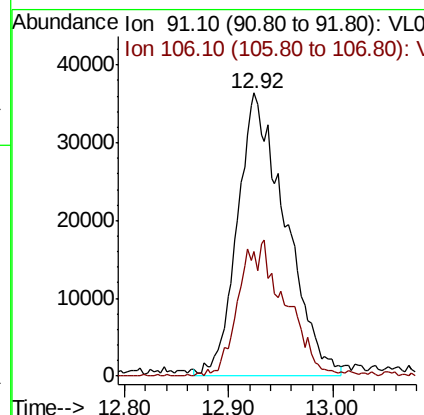
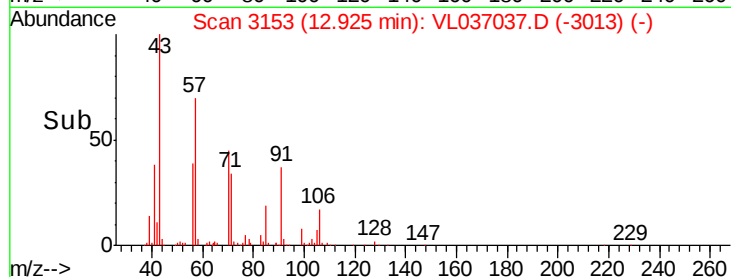
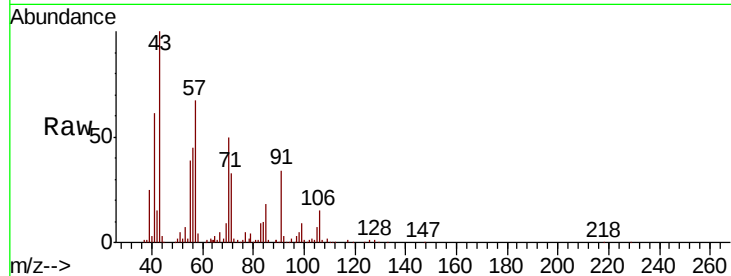
#59
m/p-Xylene
Concen: 0.321 ppbv m
RT: 12.92 min Scan# 3153
Delta R.T. -0.05 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampled :
KSV-11

Tot Ion: 91 Resp: 116548
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#

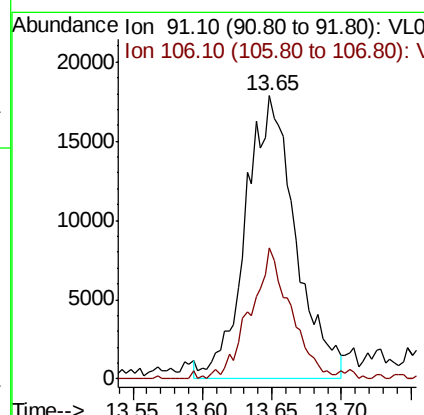
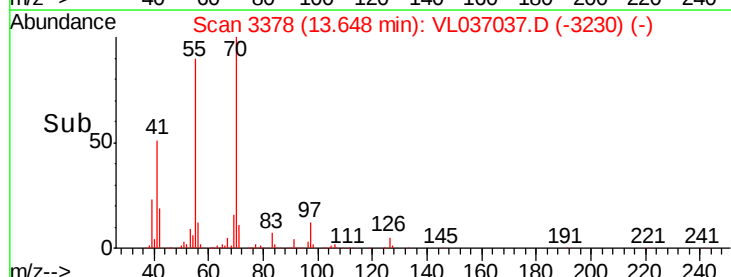
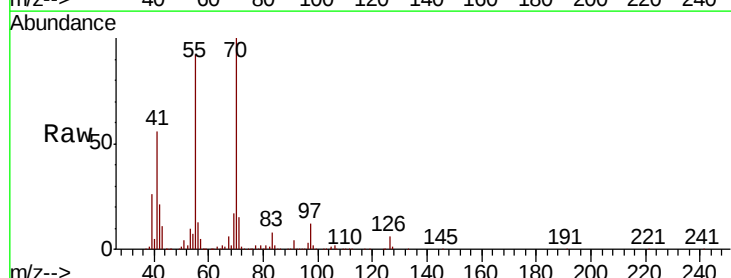
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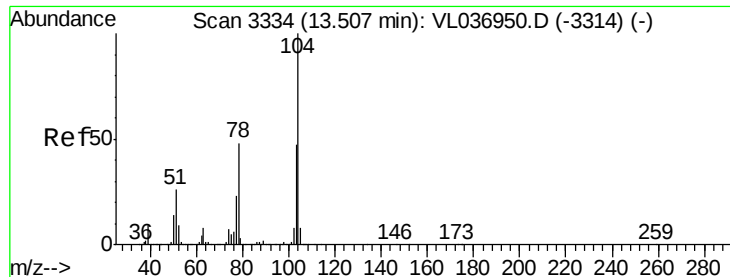
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#60
o-Xylene
Concen: 0.130 ppbv m
RT: 13.65 min Scan# 3378
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion: 91 Resp: 44867
Ion Ratio Lower Upper
91 100
106 38.9 23.4 70.3





#61

Stvrene

Concen: 0.121 ppbv m

RT: 13.48 min Scan# 3326

Delta R.T. -0.03 min

Lab File: VL037037.D

Acq: 20 May 2021 23:35

Instrument :

MSVOA_L

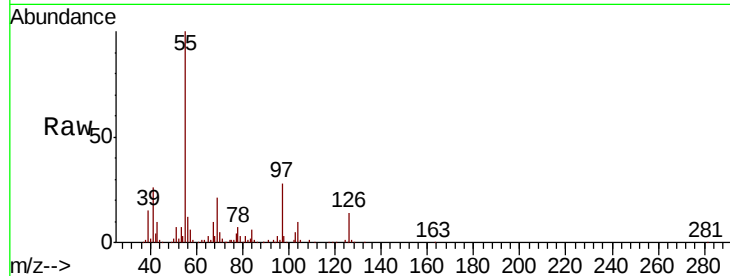
ClientSampled :

KSV-11

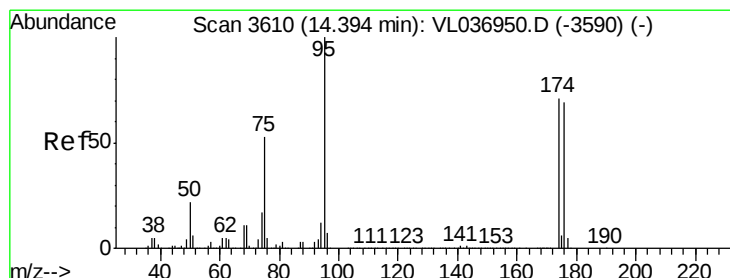
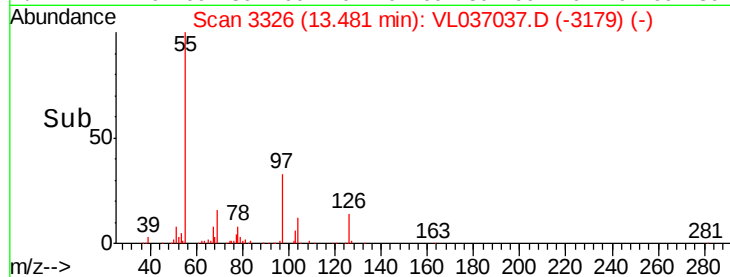
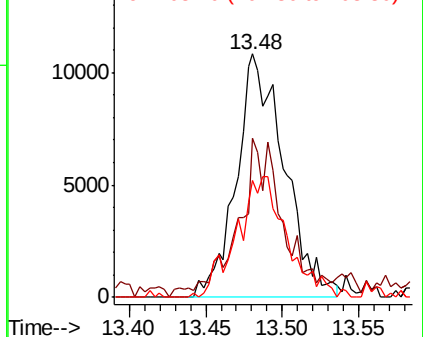
Tot Ion:	104	Resp:	23618
Ion Ratio	Lower	Upper	
104	100		
78	68.6	39.0	58.6#
103	0.0	38.0	57.0#

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Abundance Ion 104.10 (103.80 to 104.80): V
Ion 78.10 (77.80 to 78.80): VL0
Ion 103.10 (102.80 to 103.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.048 ppbv

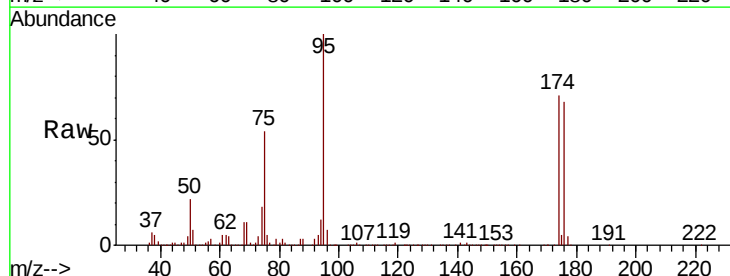
RT: 14.37 min Scan# 3603

Delta R.T. -0.02 min

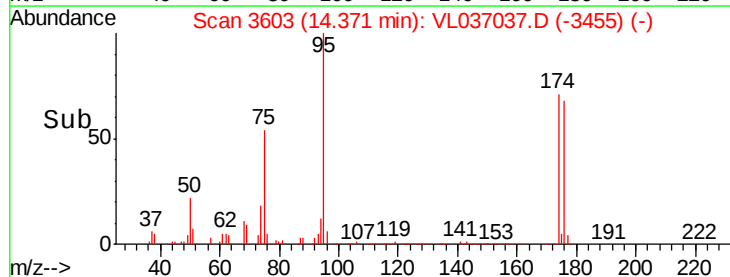
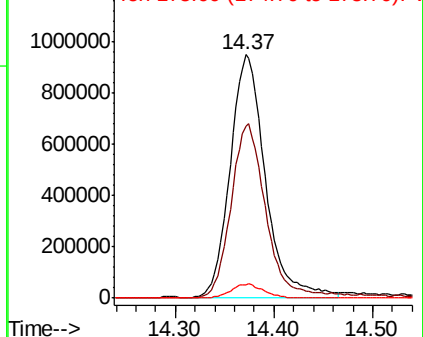
Lab File: VL037037.D

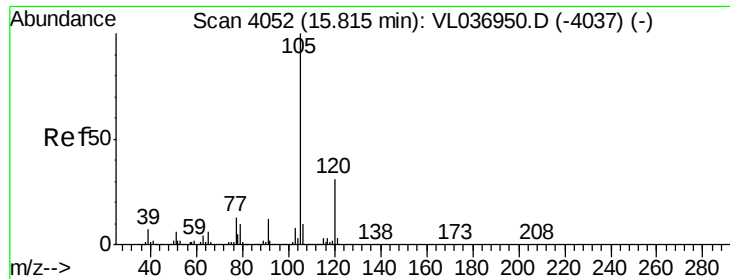
Acq: 20 May 2021 23:35

Tgt Ion:	95	Resp:	2346598
Ion Ratio	Lower	Upper	
95	100		
174	74.0	58.4	87.6
175	5.4	4.4	6.6



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





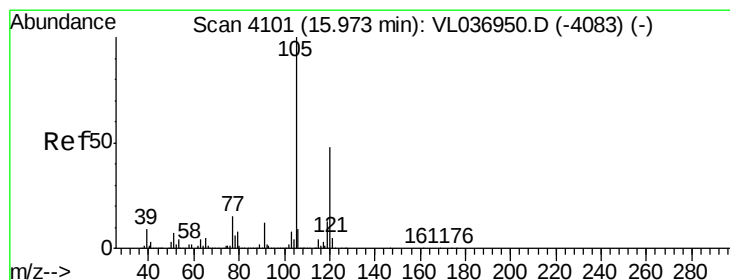
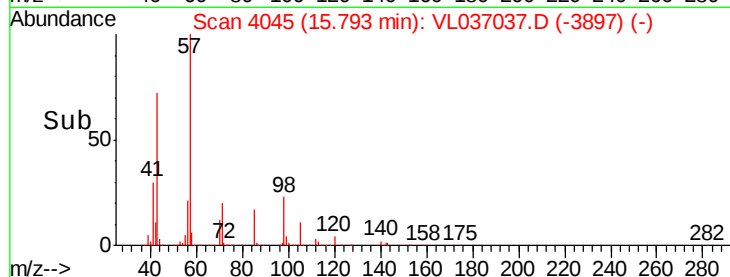
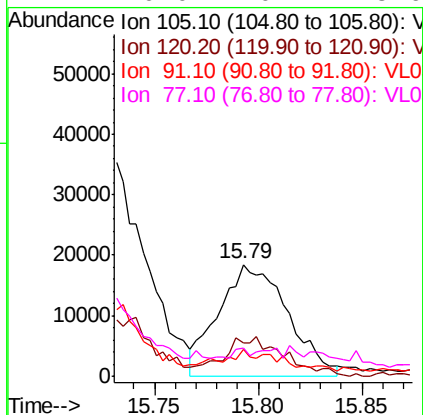
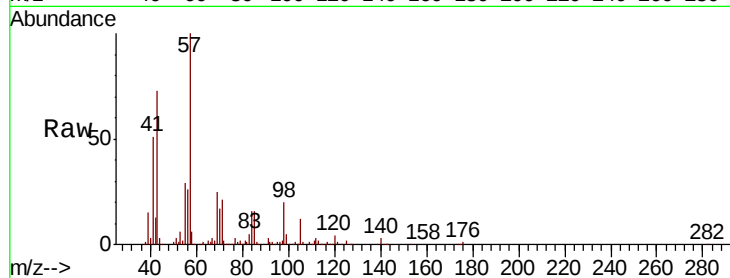
#72
4-Ethyltoluene
Concen: 0.104 ppbv m
RT: 15.79 min Scan# 4045
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Instrument :
MSVOA_L
ClientSampled :
KSV-11

Tot Ion:	105	Resp:	42818
Ion Ratio	Lower	Upper	
105	100		
120	0.0	24.6	37.0#
91	17.3	9.8	14.6#
77	0.0	10.4	15.6#

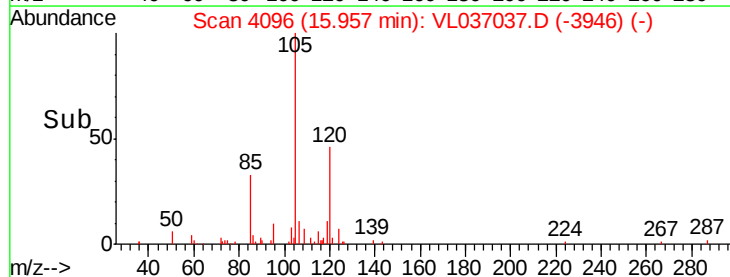
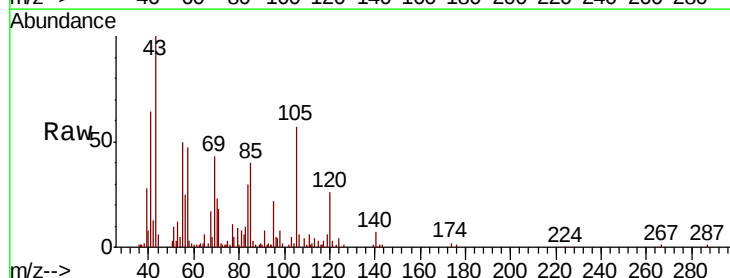
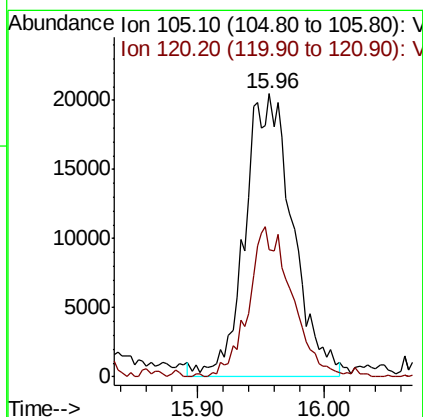
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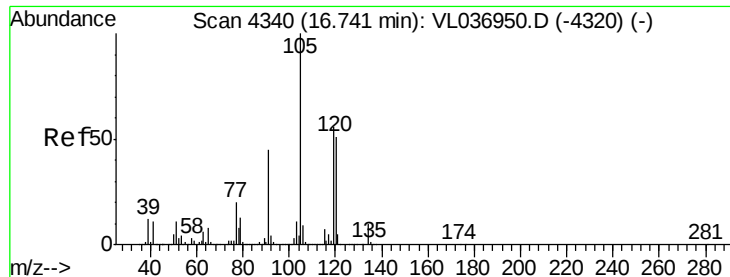
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#73
1,3,5-Trimethylbenzene
Concen: 0.138 ppbv m
RT: 15.96 min Scan# 4096
Delta R.T. -0.02 min
Lab File: VL037037.D
Acq: 20 May 2021 23:35

Tgt Ion:	105	Resp:	53139
Ion Ratio	Lower	Upper	
105	100		
120	45.0	38.6	58.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.371 ppbv
 RT: 16.72 min Scan# 4334
 Delta R.T. -0.02 min
 Lab File: VL037037.D
 Acq: 20 May 2021 23:35

Instrument :
 MSVOA_L
 ClientSampled :
 KSV-11

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	43.5	40.6	61.0
91	9.8	37.4	56.0#
77	14.2	16.2	24.4#

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