

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052021\
 Data File : VL037035.D
 Acq On : 20 May 2021 22:20
 Operator : SY/AP
 Sample : M2424-06 2X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-07

Manual Integrations
 APPROVED

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 5/24/2021 3:27:24 PM

Quant Time: May 22 23:26:30 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	5.63	49	1129577	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.14	114	3306035	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.04	117	2904391	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene		14.37	95	2181420	10.00	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	21070	0.110	ppbv	97
3) Chlorodifluoromethane	2.97	51	32003	0.155	ppbv	95
4) Chloromethane	3.12	50	34601m	0.491	ppbv	
9) Propene	2.99	41	61274	0.827	ppbv	98
10) Heptane	8.08	43	134664	0.729	ppbv	96
11) Trichlorofluoromethane	3.92	101	18836	0.106	ppbv	97
13) Ethanol	3.58	45	255719	25.864	ppbv	95
15) Acetone	3.82	43	9241507	79.875	ppbv	99
17) tert-Butyl alcohol	4.28	59	95001	0.896	ppbv	99
19) Isopropyl Alcohol	3.95	45	115371	1.855	ppbv #	30
20) Methylene Chloride	4.31	84	612315	9.873	ppbv	97
26) Hexane	5.65	57	546030	3.844	ppbv #	70
29) Chloroform	5.72	83	201097	1.002	ppbv	100
30) Cyclohexane	7.09	84	12020m	0.100	ppbv	
34) 2-Butanone	5.21	43	638427	5.303	ppbv	98
36) Benzene	6.85	78	57595m	0.202	ppbv	
50) 4-Methyl-2-Pentanone	8.72	43	63297	0.319	ppbv	98
51) 2-Hexanone	10.10	43	51116	0.487	ppbv #	78
53) Toluene	9.76	91	935909	2.762	ppbv	98
58) Ethyl Benzene	12.66	91	63024	0.154	ppbv	92
59) m/p-Xylene	12.92	91	159809m	0.472	ppbv	
60) o-Xylene	13.65	91	67301m	0.208	ppbv	
61) Styrene	13.49	104	42847	0.235	ppbv	91
72) 4-Ethyltoluene	15.80	105	53182m	0.139	ppbv	
73) 1,3,5-Trimethylbenzene	15.96	105	35343	0.098	ppbv	95
74) 1,2,4-Trimethylbenzene	16.72	105	147707m	0.397	ppbv	

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

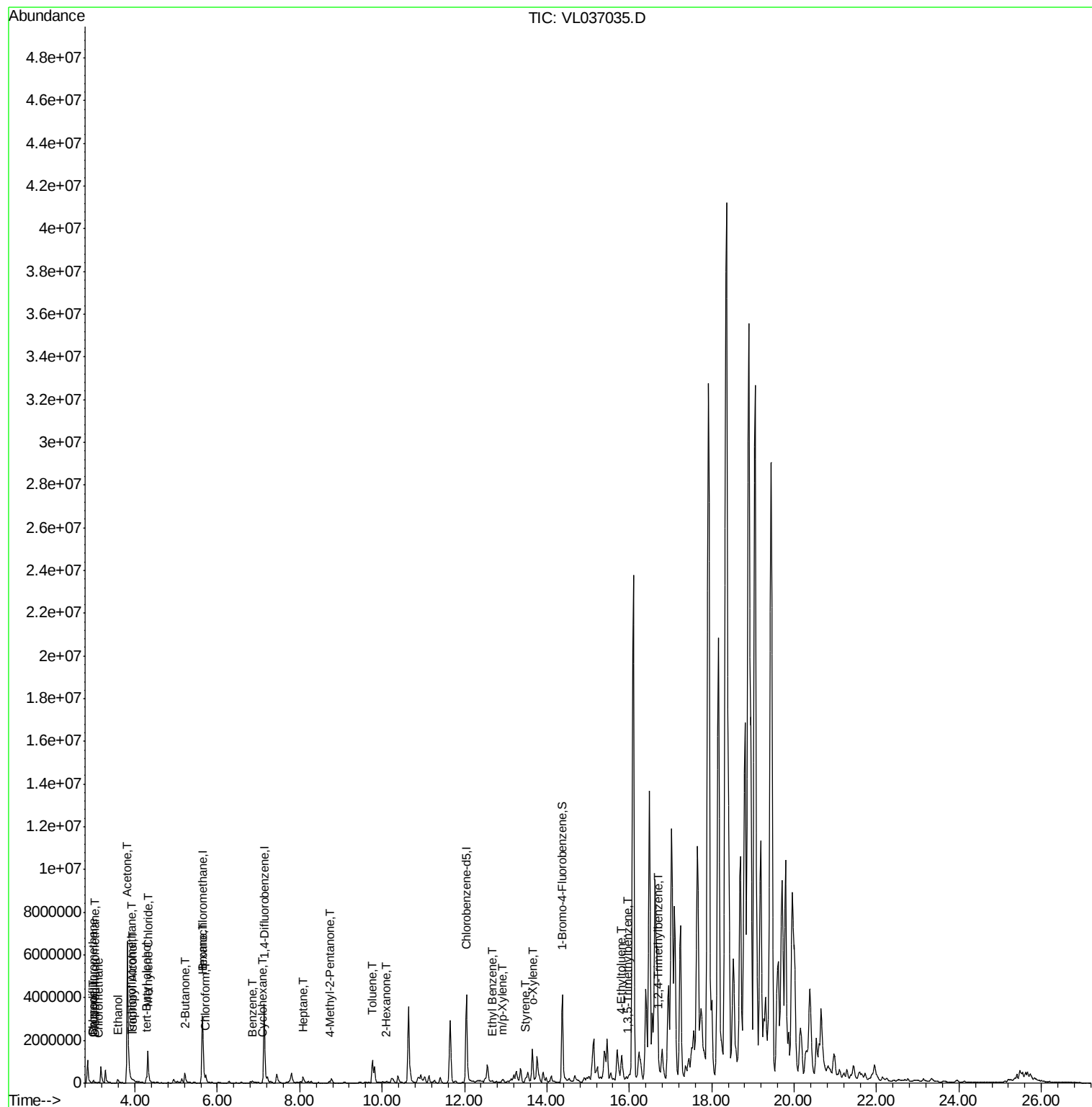
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL052021\
Data File : VL037035.D
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Misc : 400mL/MSVOA L
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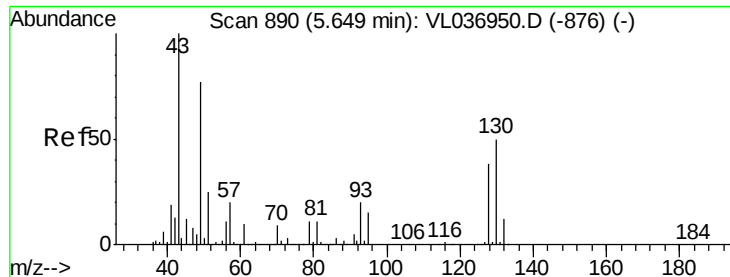
Instrument :
MSVOA_L
ClientSampleId :
KSV-07

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Quant Time: May 22 23:26:30 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.63 min Scan# 885

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

KSV-07

Tot Ion: 49 Resp: 1129577

Ion Ratio Lower Upper

49 100

128 53.9 26.9 80.7

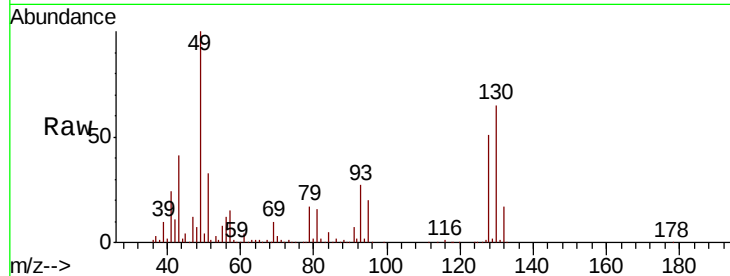
130 69.4 33.8 101.4

Manual Integrations

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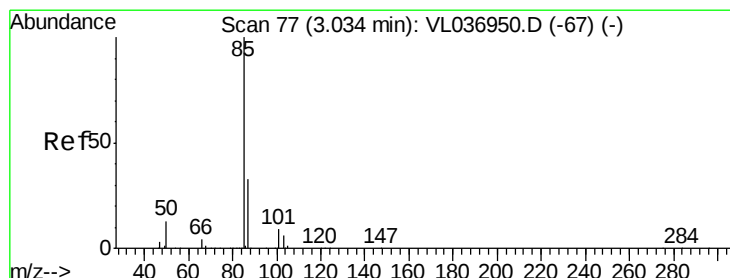
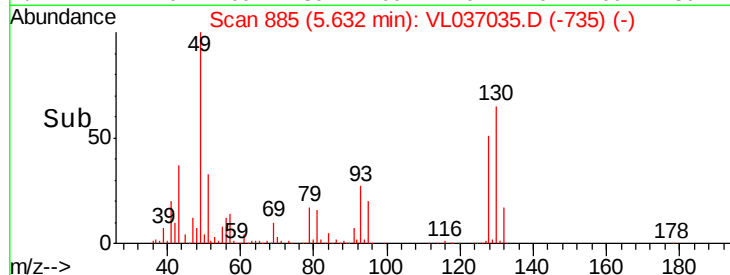
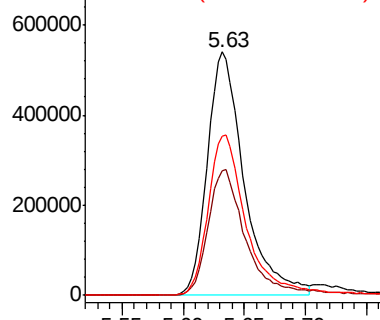
5/24/2021 3:27:24 PM



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: 0.110 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.01 min

Lab File: VL037035.D

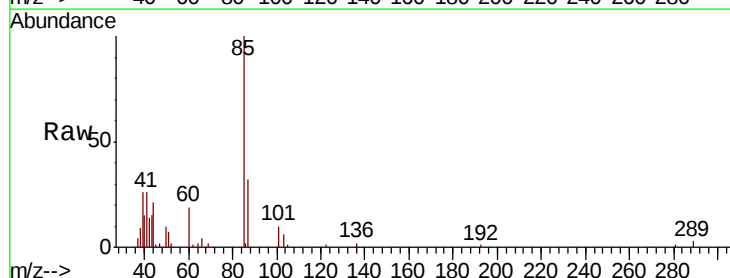
Acq: 20 May 2021 22:20

Tgt Ion: 85 Resp: 21070

Ion Ratio Lower Upper

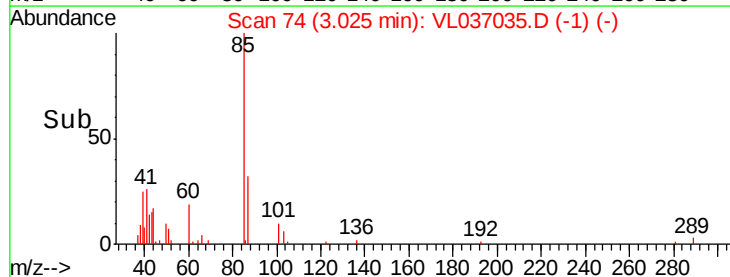
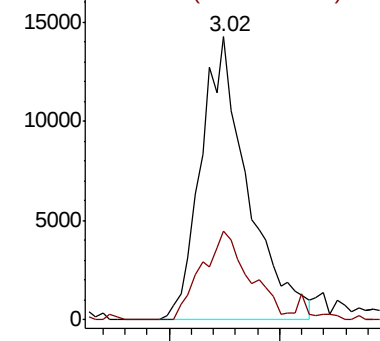
85 100

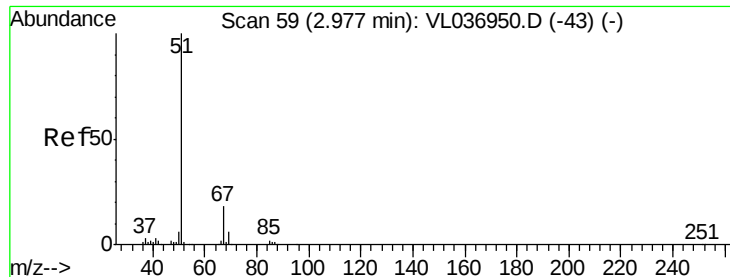
87 31.6 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.155 ppbv

RT: 2.97 min Scan# 56

Delta R.T. -0.01 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

KSV-07

Tot Ion: 51 Resp: 32003

Ion Ratio Lower Upper

51 100

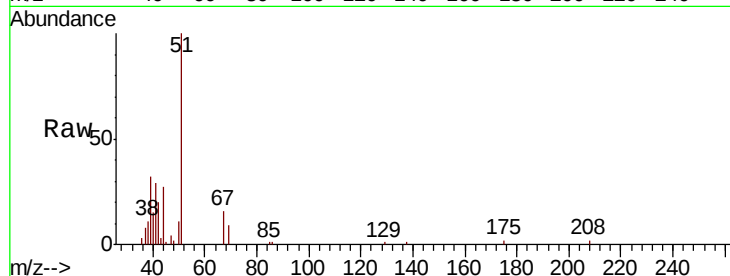
67 16.0 14.6 21.8

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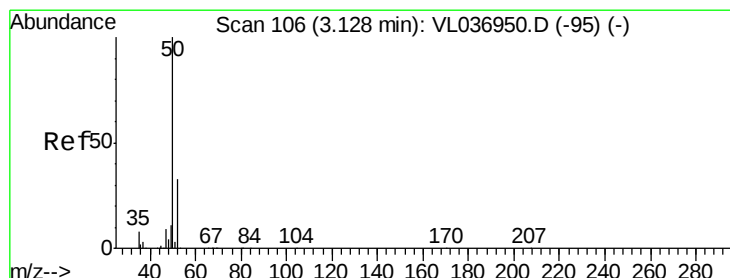
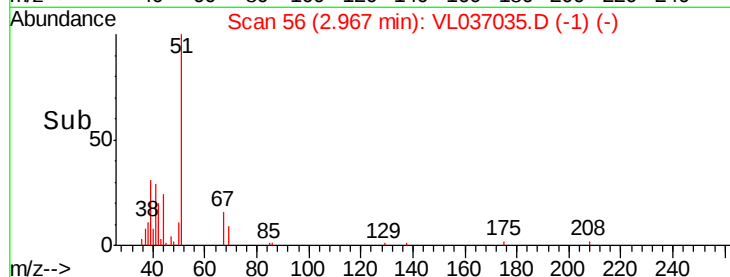
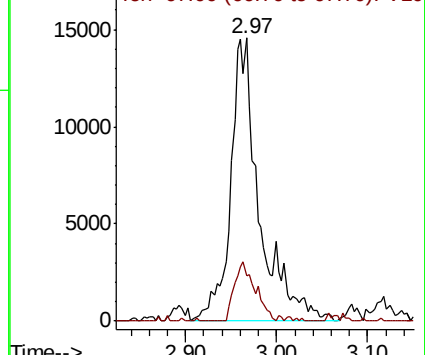
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.491 ppbv m

RT: 3.12 min Scan# 103

Delta R.T. -0.01 min

Lab File: VL037035.D

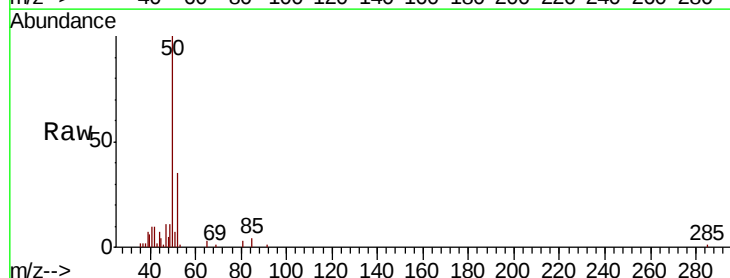
Acq: 20 May 2021 22:20

Tgt Ion: 50 Resp: 34601

Ion Ratio Lower Upper

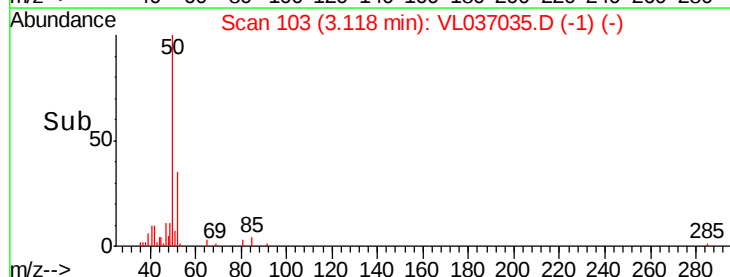
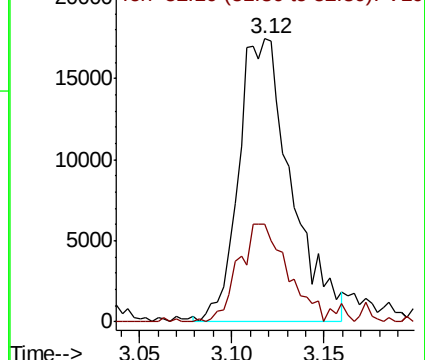
50 100

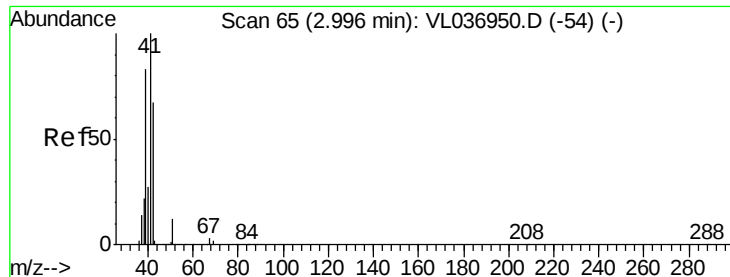
52 34.8 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.827 ppbv

RT: 2.99 min Scan# 62

Delta R.T. -0.01 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

KSV-07

Tot Ion: 41 Resp: 61274

Ion Ratio Lower Upper

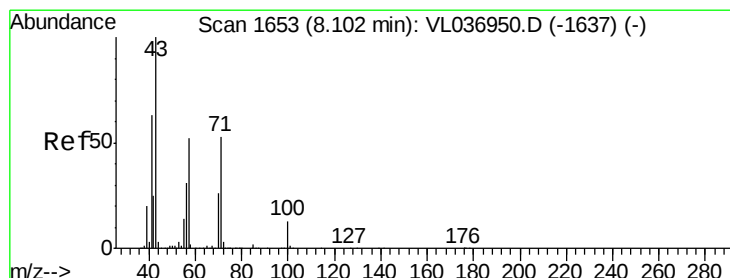
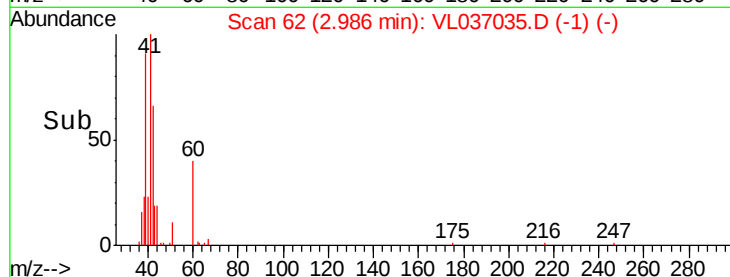
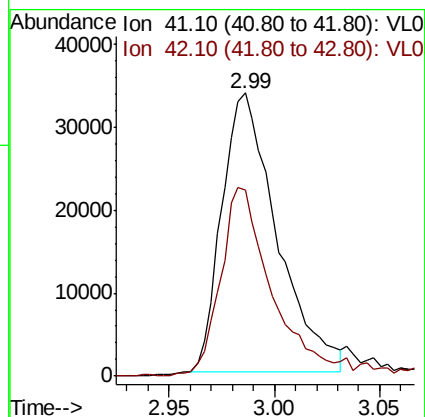
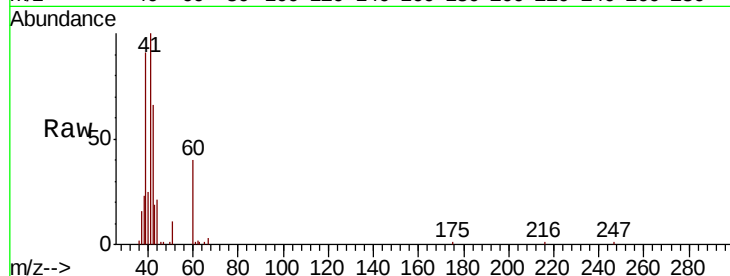
41 100

42 66.1 53.9 80.9

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#10

Heptane

Concen: 0.729 ppbv

RT: 8.08 min Scan# 1646

Delta R.T. -0.02 min

Lab File: VL037035.D

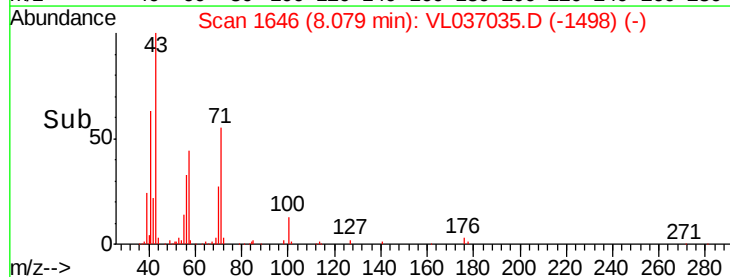
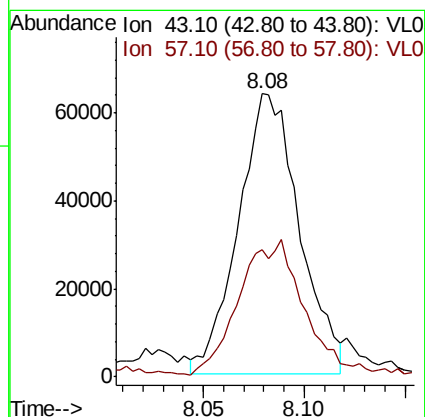
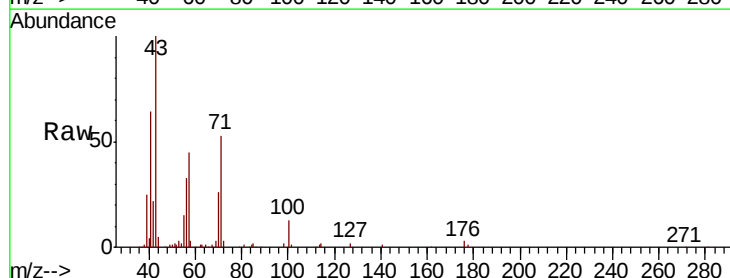
Acq: 20 May 2021 22:20

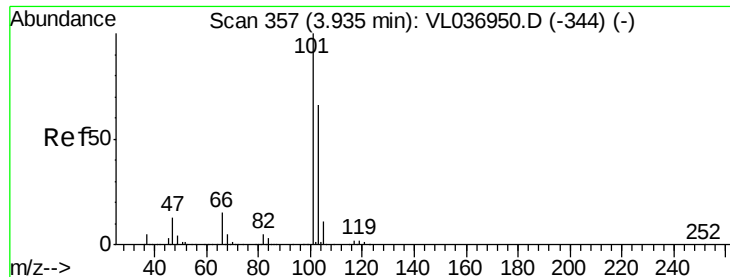
Tgt Ion: 43 Resp: 134664

Ion Ratio Lower Upper

43 100

57 54.0 41.0 61.6





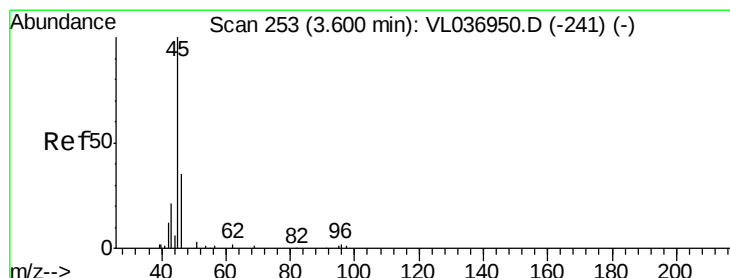
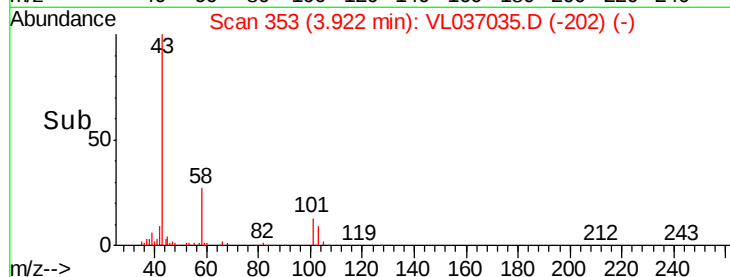
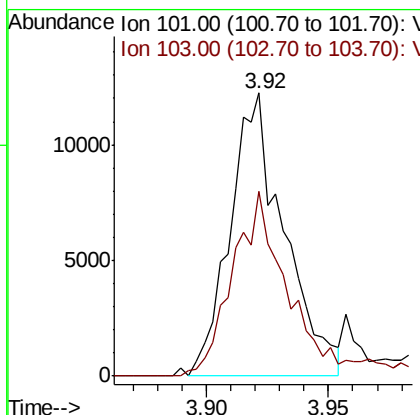
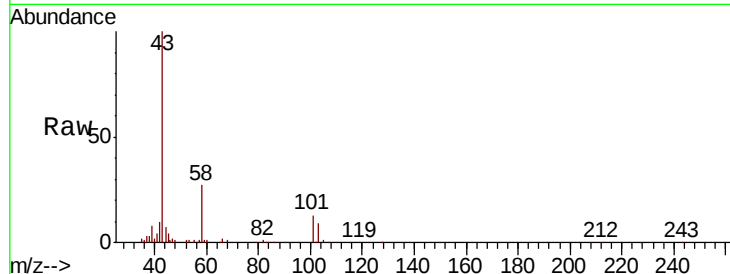
#11
 Trichlorofluoromethane
 Concen: 0.106 ppbv
 RT: 3.92 min Scan# 353
 Delta R.T. -0.01 min
 Lab File: VL037035.D
 Acq: 20 May 2021 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-07

Tot Ion	Ratio	Lower	Upper
101	100		
103	63.2	52.6	79.0

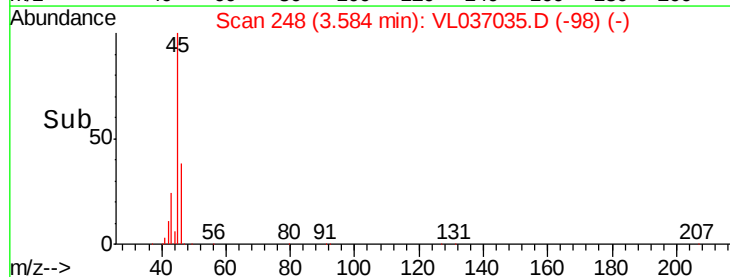
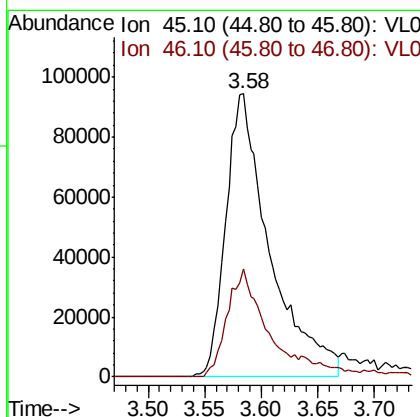
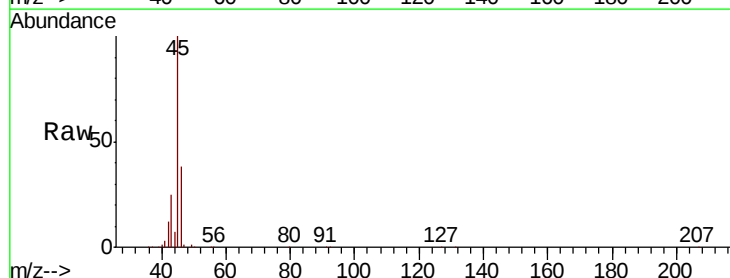
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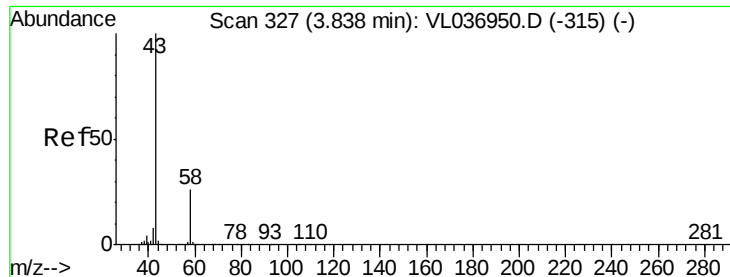
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#13
 Ethanol
 Concen: 25.864 ppbv
 RT: 3.58 min Scan# 248
 Delta R.T. -0.02 min
 Lab File: VL037035.D
 Acq: 20 May 2021 22:20

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.9	16.3	65.3





#15

Acetone

Concen: 79.875 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampled :

KSV-07

Tot Ion: 43 Resp: 9241507

Ion Ratio Lower Upper

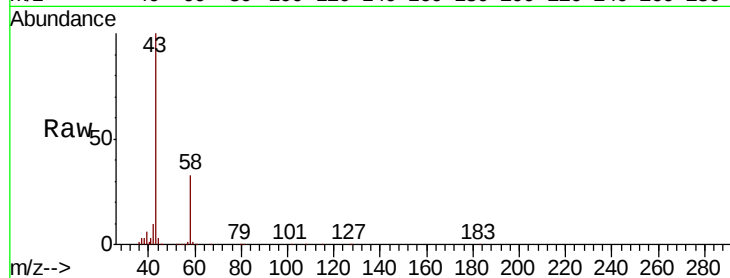
43 100

58 30.7 24.0 36.0

Manual Integrations
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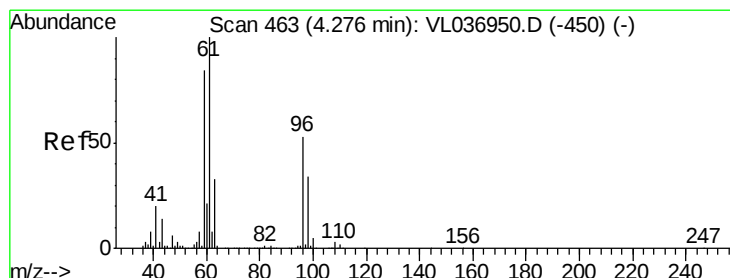
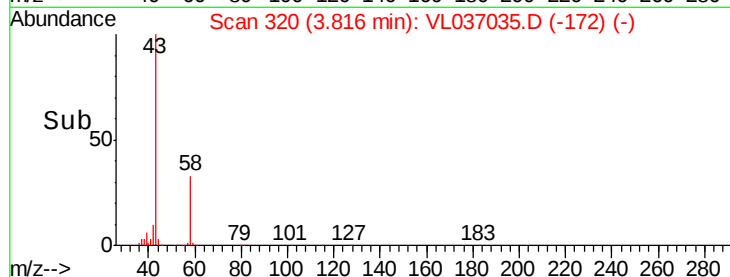
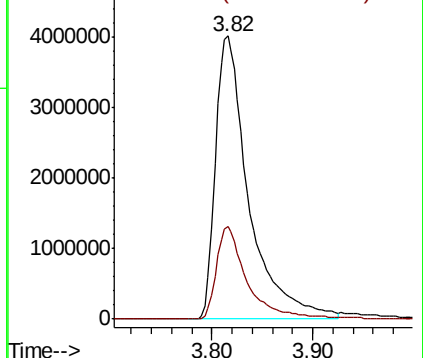
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.896 ppbv

RT: 4.28 min Scan# 463

Delta R.T. -0.00 min

Lab File: VL037035.D

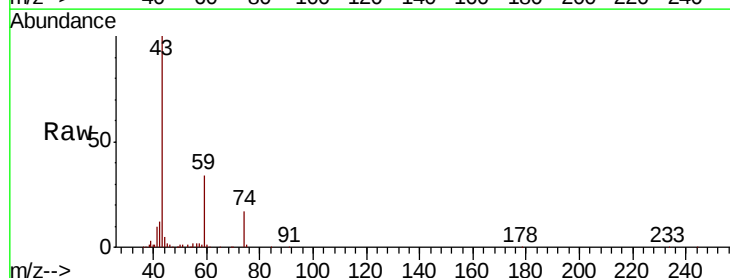
Acq: 20 May 2021 22:20

Tgt Ion: 59 Resp: 95001

Ion Ratio Lower Upper

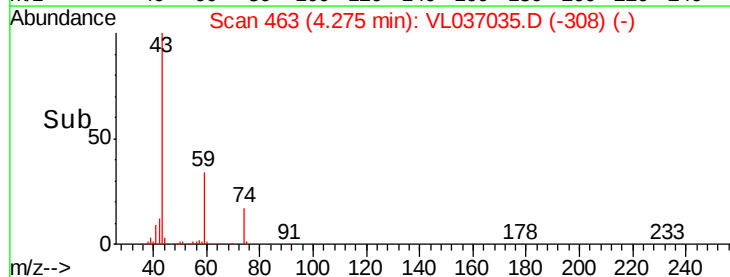
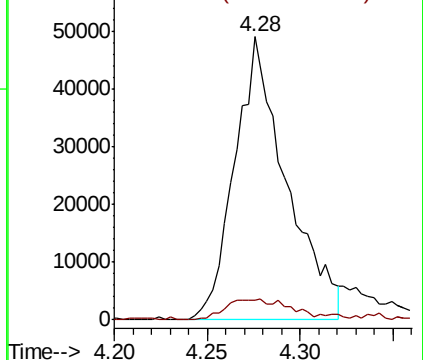
59 100

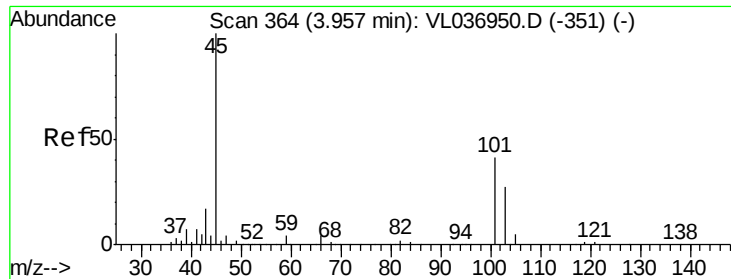
57 10.1 8.3 12.5



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

Isopropyl Alcohol

Concen: 1.855 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.01 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampled :

KSV-07

Tot Ion: 45 Resp: 115371

Ion Ratio Lower Upper

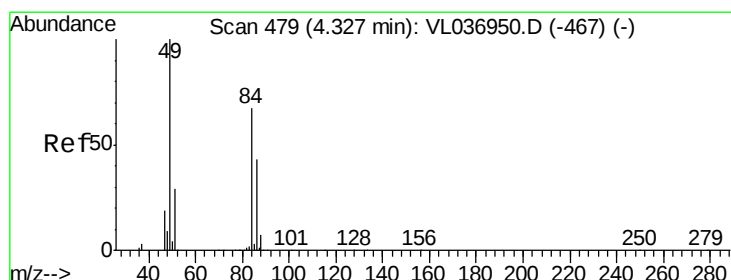
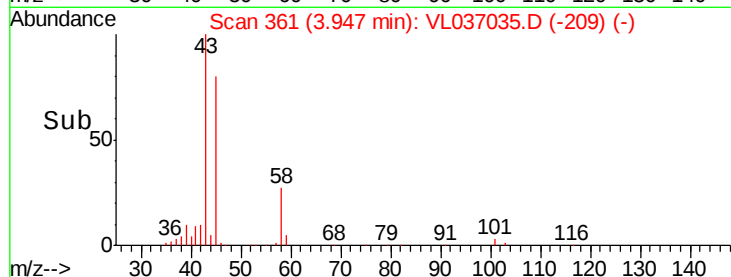
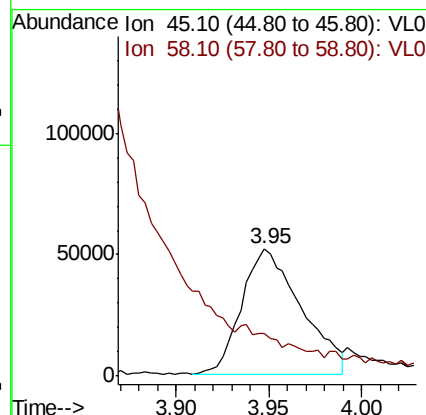
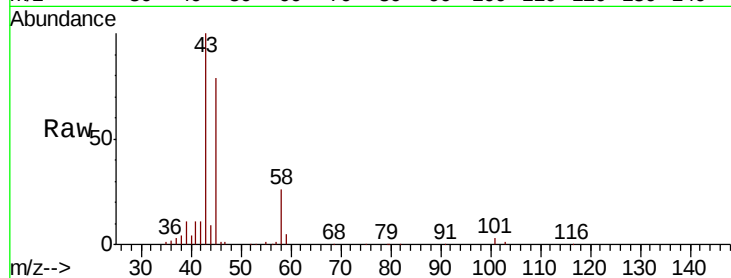
45 100

58 0.0 37.2 55.8#

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#20

Methylene Chloride

Concen: 9.873 ppbv

RT: 4.31 min Scan# 475

Delta R.T. -0.01 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Tgt Ion: 84 Resp: 612315

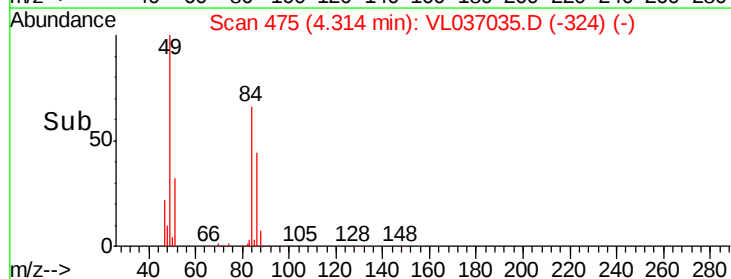
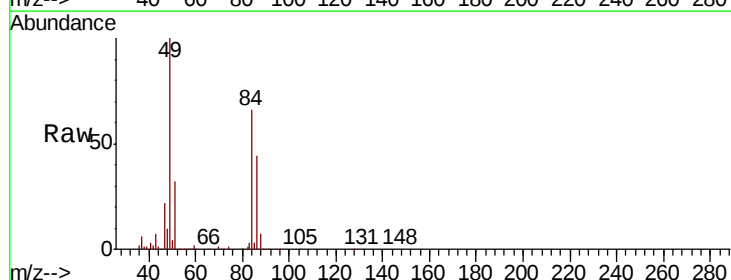
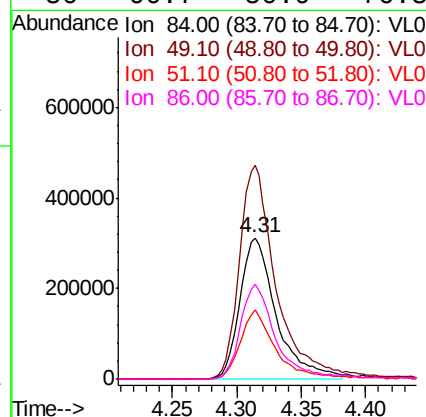
Ion Ratio Lower Upper

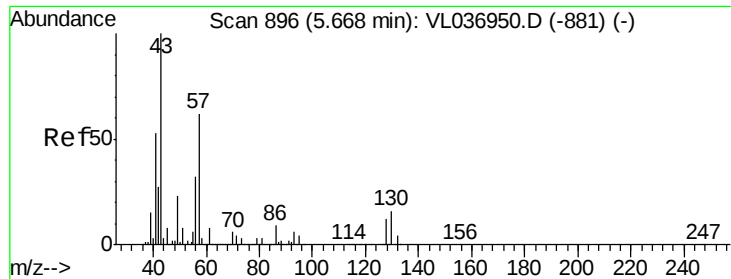
84 100

49 151.0 119.8 179.6

51 48.4 35.1 52.7

86 66.7 50.9 76.3





#26

Hexane

Concen: 3.844 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

KSV-07

Tot Ion: 57 Resp: 546030

Ion Ratio Lower Upper

57 100

41 112.9 70.5 105.7#

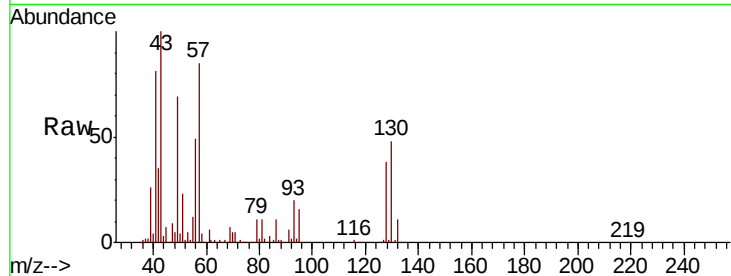
43 152.4 165.8 248.8#

56 61.1 42.2 63.4

Manual Integrations
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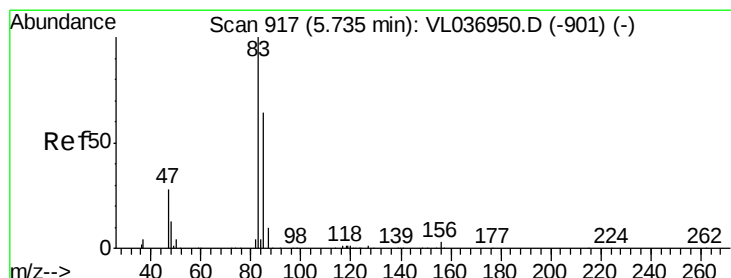
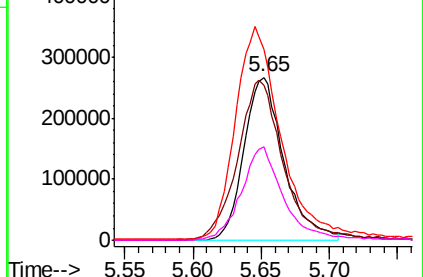
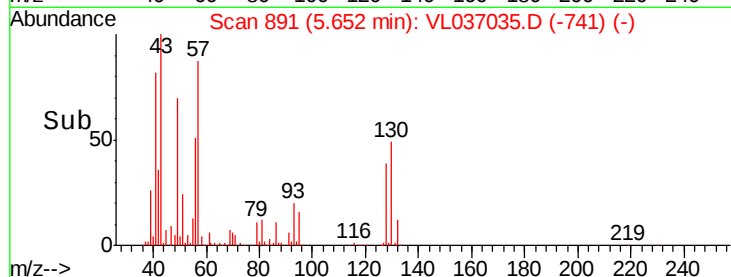


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 1.002 ppbv

RT: 5.72 min Scan# 912

Delta R.T. -0.02 min

Lab File: VL037035.D

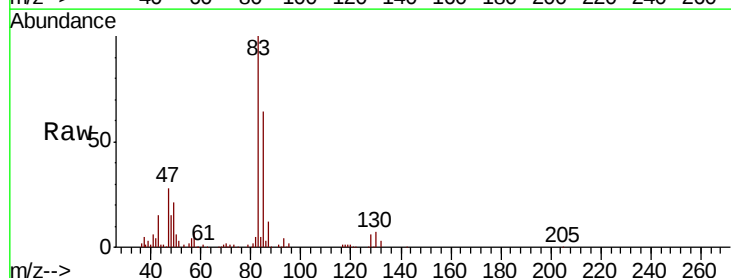
Acq: 20 May 2021 22:20

Tgt Ion: 83 Resp: 201097

Ion Ratio Lower Upper

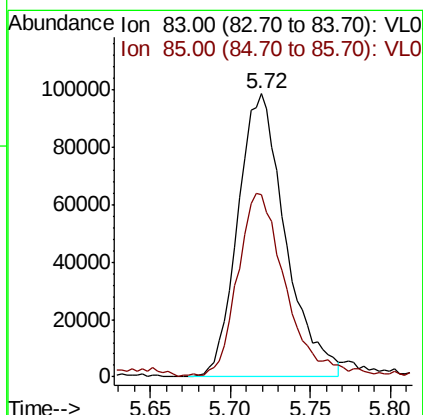
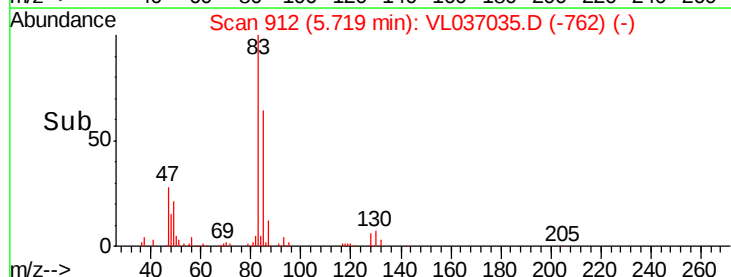
83 100

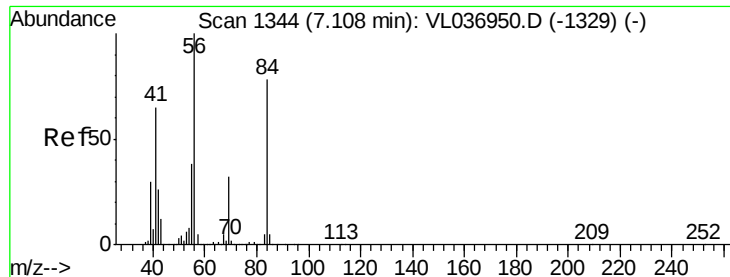
85 63.6 51.1 76.7



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





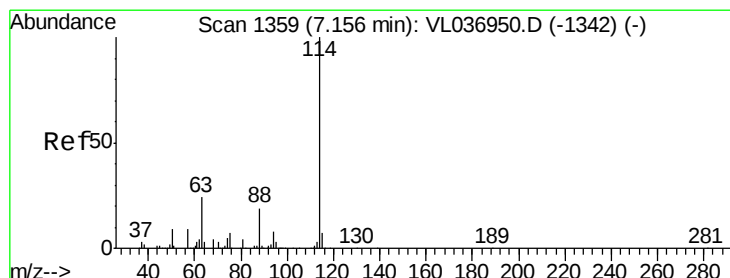
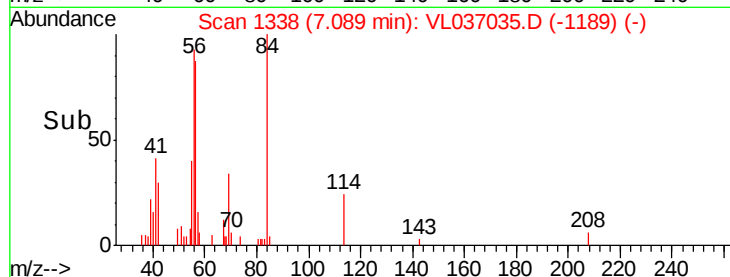
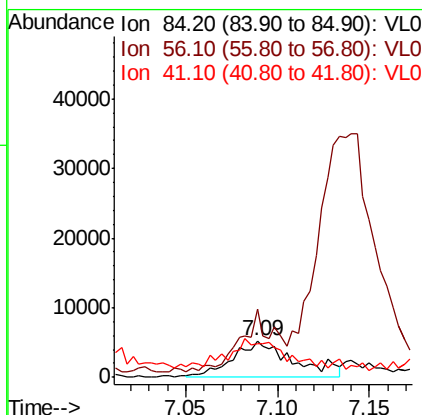
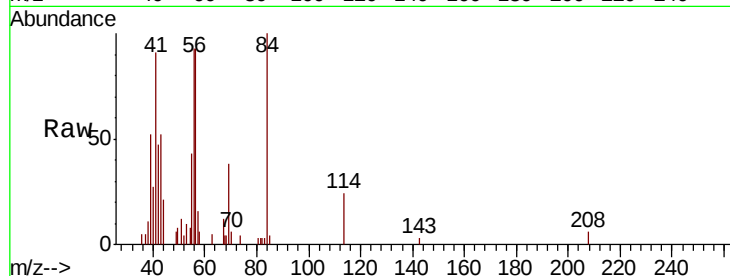
#30
Cyclohexane
Concen: 0.100 ppbv m
RT: 7.09 min Scan# 1338
Delta R.T. -0.02 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
KSV-07

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	107.9	161.9#
41	0.0	65.5	98.3#

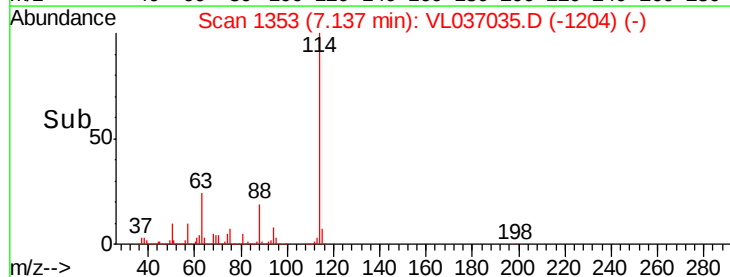
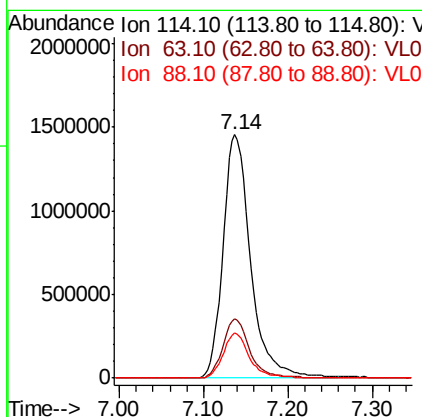
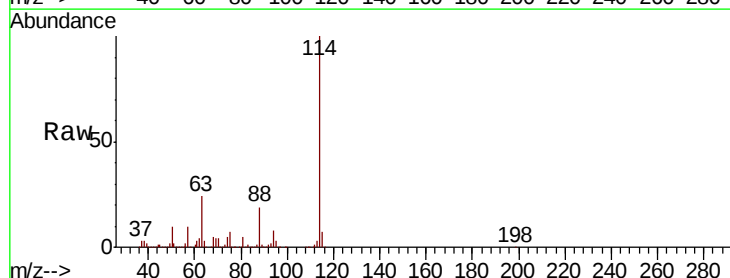
Manual Integrations
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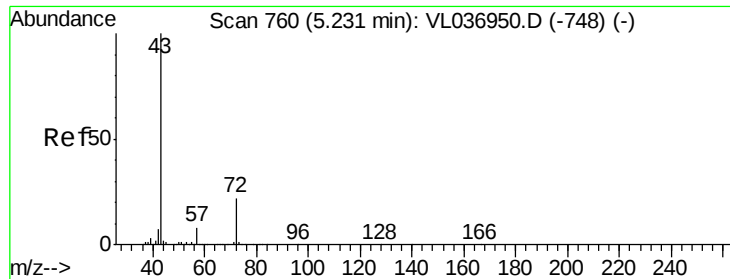
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.14 min Scan# 1353
Delta R.T. -0.02 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.0	19.6	29.4
88	17.9	14.6	21.8





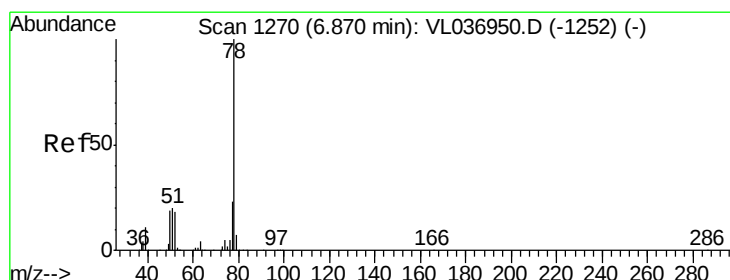
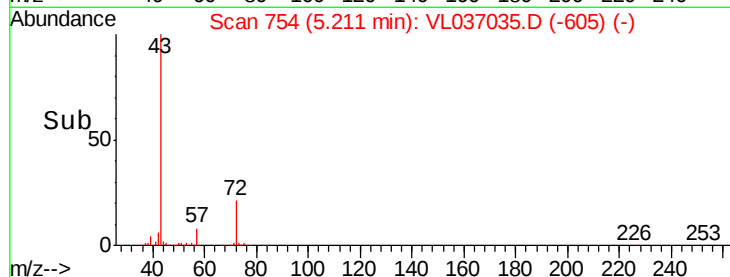
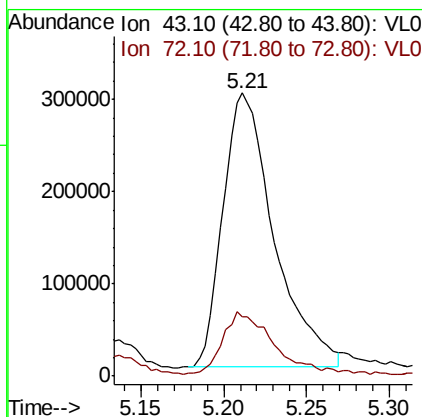
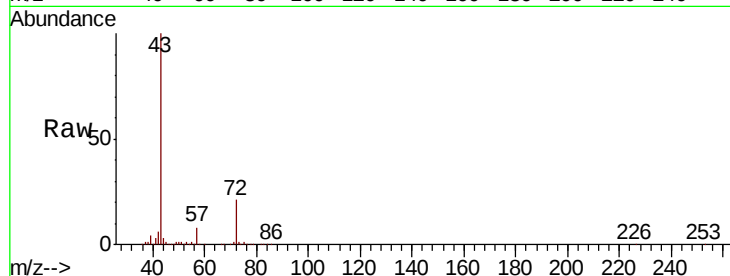
#34
 2-Butanone
 Concen: 5.303 ppbv
 RT: 5.21 min Scan# 754
 Delta R.T. -0.02 min
 Lab File: VL037035.D
 Acq: 20 May 2021 22:20

Instrument :
 MSVOA_L
 ClientSampleId :
 KSV-07

Tot Ion	Ratio	Lower	Upper
43	100		
72	24.5	19.0	28.4

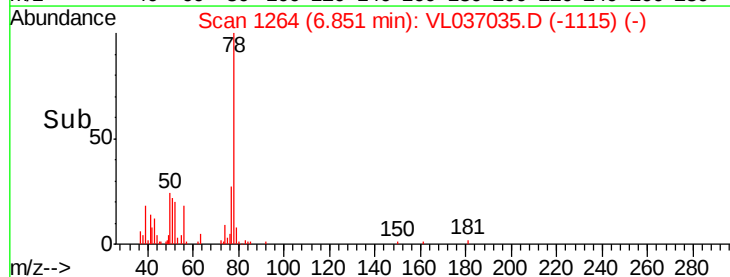
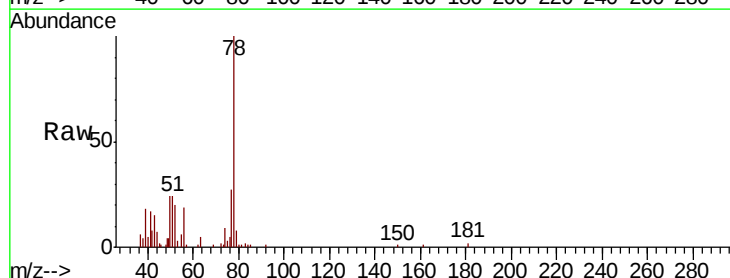
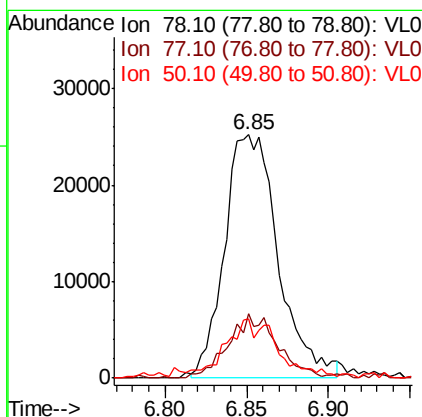
Manual Integrations
 APPROVED

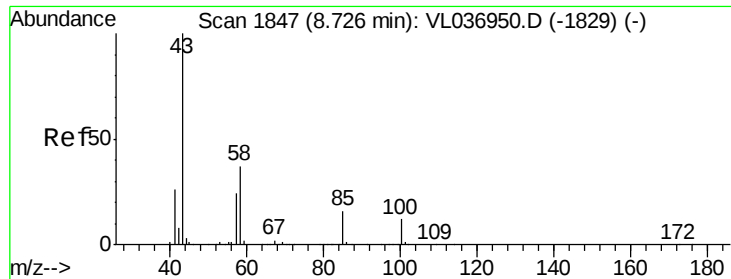
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#36
 Benzene
 Concen: 0.202 ppbv m
 RT: 6.85 min Scan# 1264
 Delta R.T. -0.02 min
 Lab File: VL037035.D
 Acq: 20 May 2021 22:20

Tgt Ion	Ratio	Lower	Upper
78	100		
77	26.7	18.6	28.0
50	24.5	15.0	22.4#





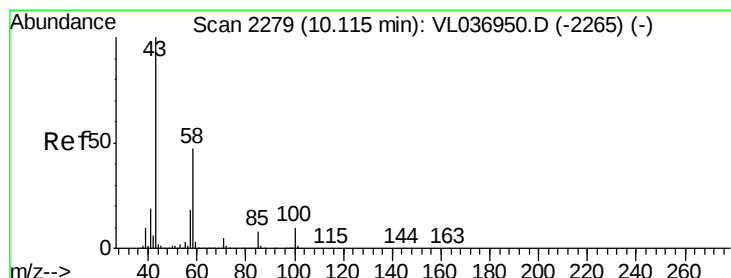
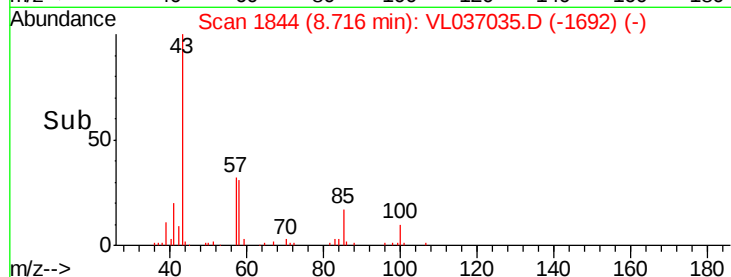
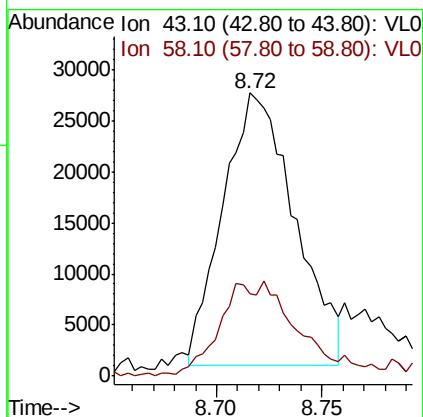
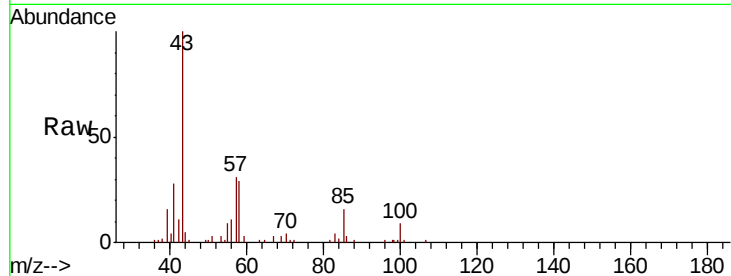
#50
4-Methyl-2-Pentanone
Concen: 0.319 ppbv
RT: 8.72 min Scan# 1844
Delta R.T. -0.01 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
KSV-07

Tot Ion: 43 Resp: 63297
Ion Ratio Lower Upper
43 100
58 38.0 29.4 44.2

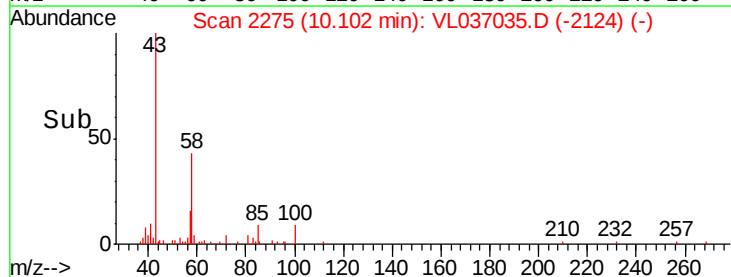
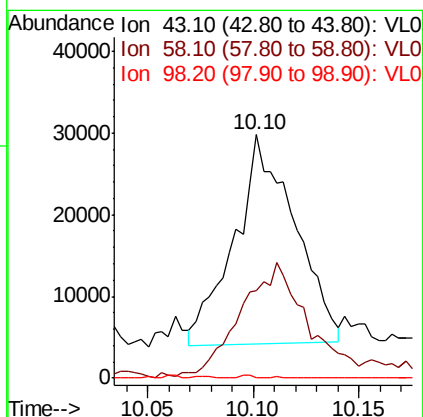
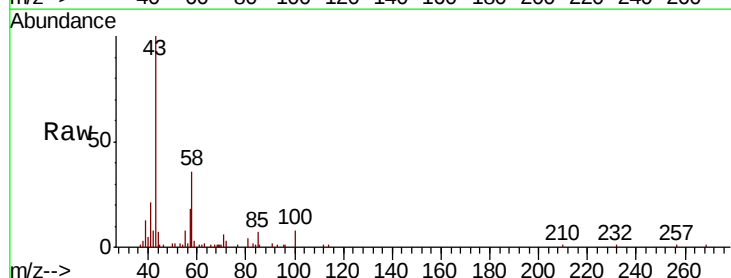
Manual Integrations
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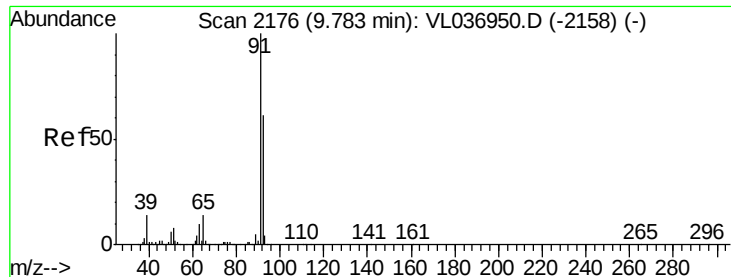
MMDadoda
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#51
2-Hexanone
Concen: 0.487 ppbv
RT: 10.10 min Scan# 2275
Delta R.T. -0.01 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Tgt Ion: 43 Resp: 51116
Ion Ratio Lower Upper
43 100
58 67.0 41.1 61.7#
98 0.3 0.1 0.1#





#53

Toluene

Concen: 2.762 ppbv

RT: 9.76 min Scan# 2170

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

KSV-07

Tot Ion: 91 Resp: 935909

Ion Ratio Lower Upper

91 100

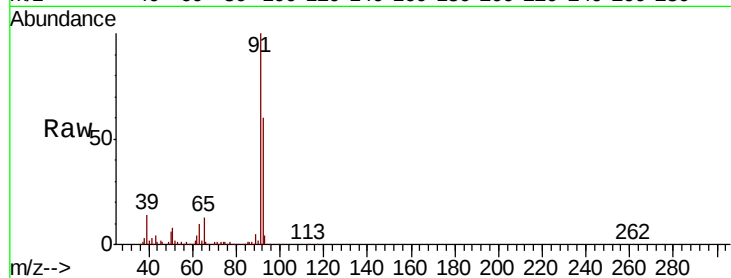
92 60.5 49.5 74.3

Manual Integrations

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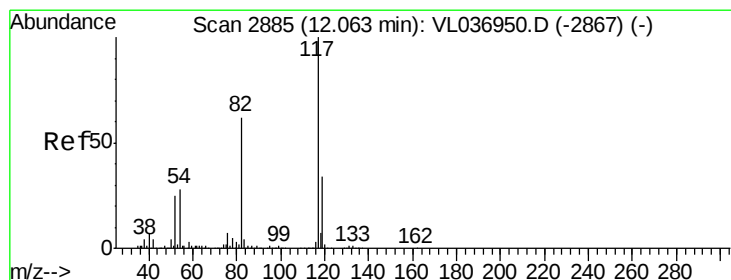
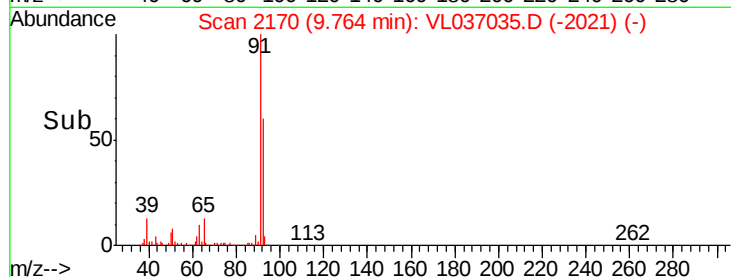
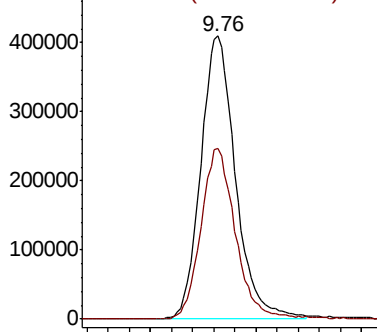
MMDadoda

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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: 12.04 min Scan# 2878

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

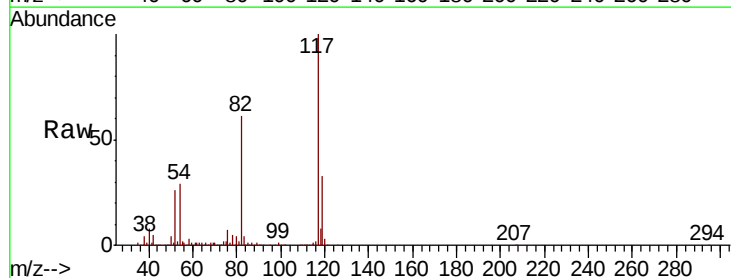
Tgt Ion: 117 Resp: 2904391

Ion Ratio Lower Upper

117 100

82 65.0 52.6 79.0

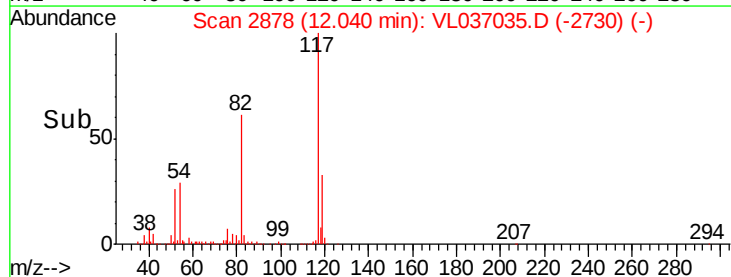
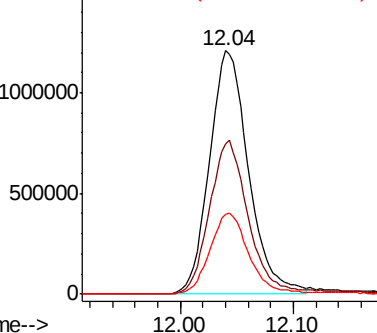
119 33.8 46.6 70.0#

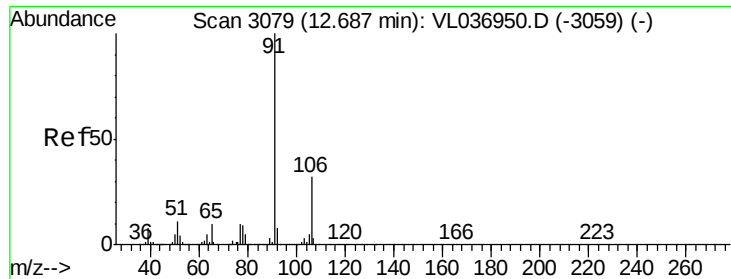


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





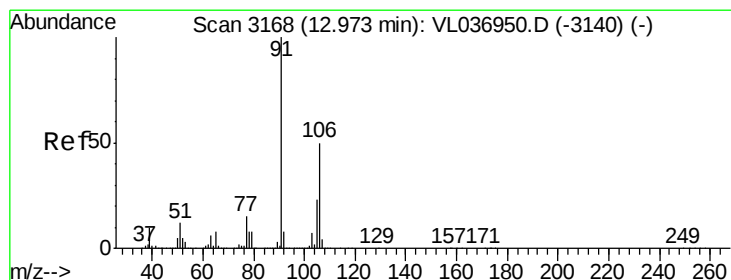
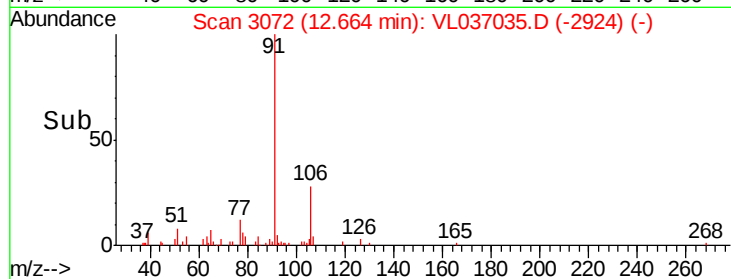
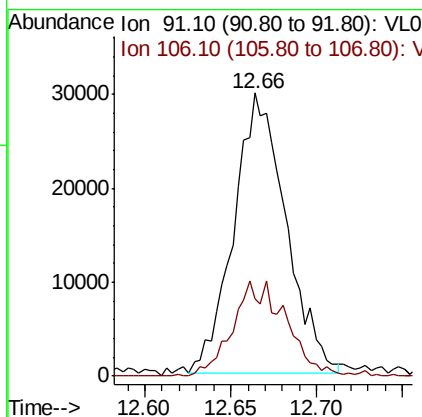
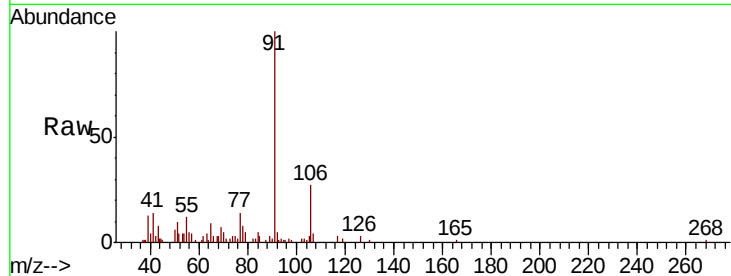
#58
Ethyl Benzene
Concen: 0.154 ppbv
RT: 12.66 min Scan# 3072
Delta R.T. -0.02 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
KSV-07

Tot Ion: 91 Resp: 63024
Ion Ratio Lower Upper
91 100
106 27.7 25.6 38.4

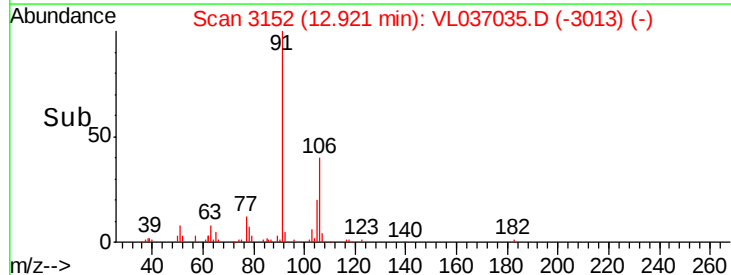
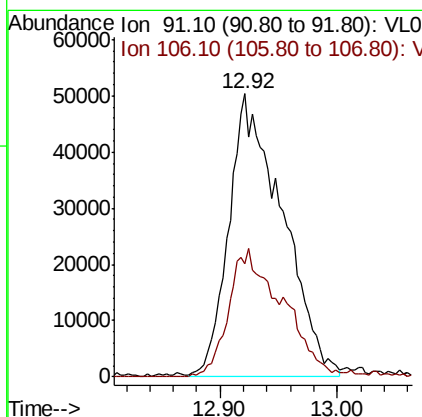
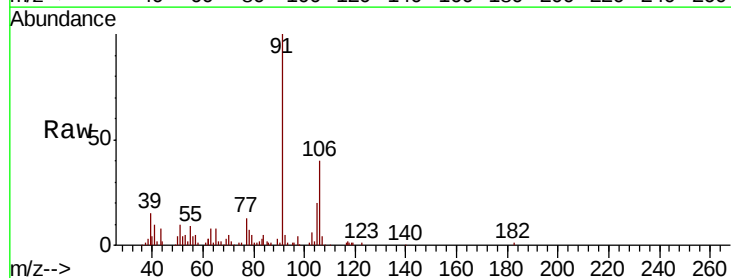
Manual Integrations
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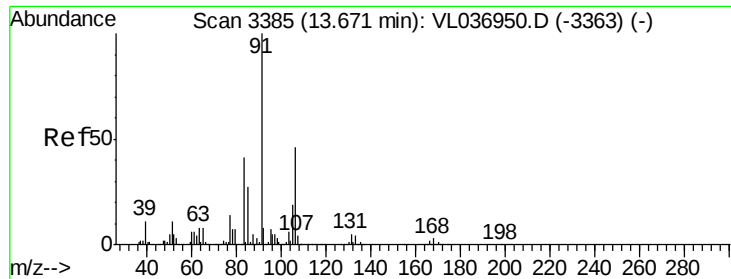
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#59
m/p-Xylene
Concen: 0.472 ppbv m
RT: 12.92 min Scan# 3152
Delta R.T. -0.05 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Tgt Ion: 91 Resp: 159809
Ion Ratio Lower Upper
91 100
106 46.3 37.4 56.2





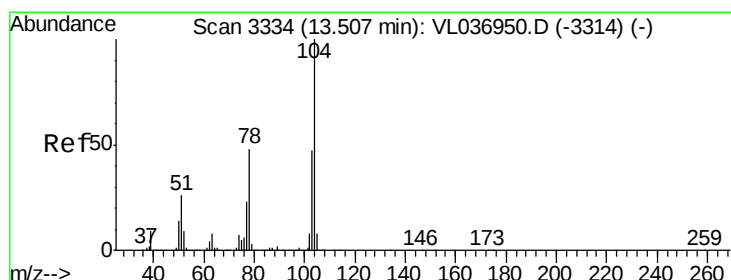
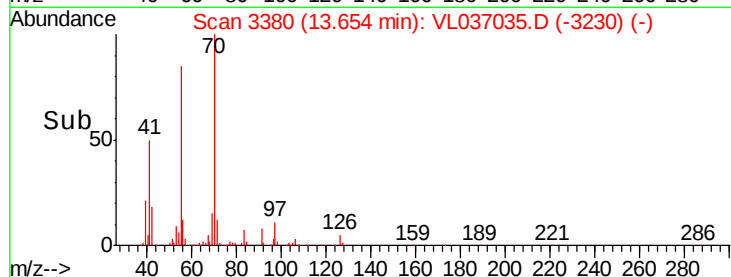
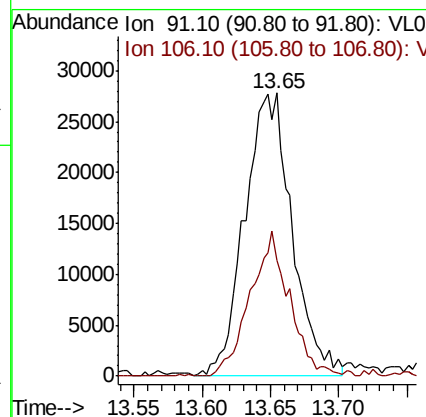
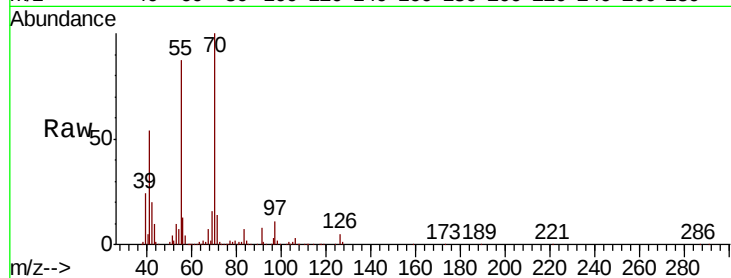
#60
o-Xylene
Concen: 0.208 ppbv m
RT: 13.65 min Scan# 3380
Delta R.T. -0.02 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Instrument :
MSVOA_L
ClientSampleId :
KSV-07

Tot Ion: 91 Resp: 67301
Ion Ratio Lower Upper
91 100
106 0.0 23.4 70.3#

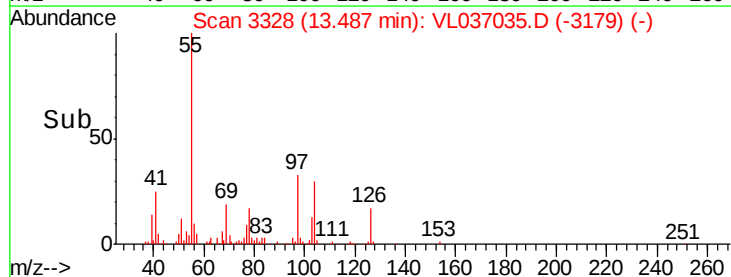
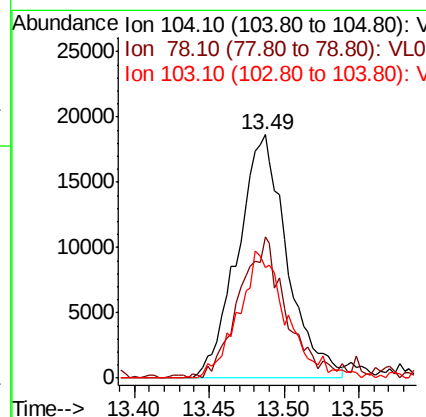
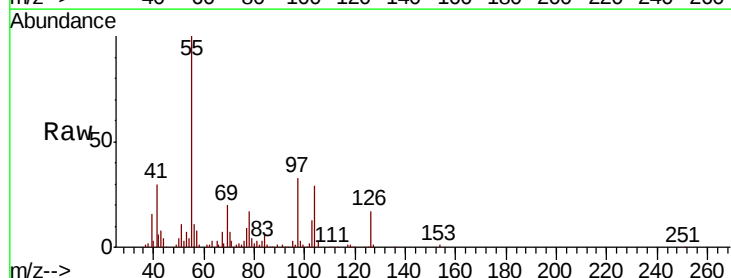
Manual Integrations
APPROVED

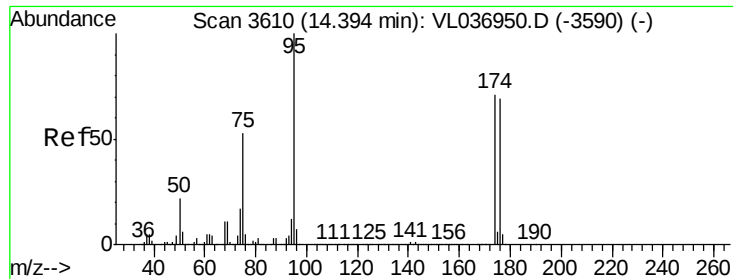
MMDadoda
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#61
Styrene
Concen: 0.235 ppbv
RT: 13.49 min Scan# 3328
Delta R.T. -0.02 min
Lab File: VL037035.D
Acq: 20 May 2021 22:20

Tgt Ion:104 Resp: 42847
Ion Ratio Lower Upper
104 100
78 57.5 39.0 58.6
103 51.1 38.0 57.0





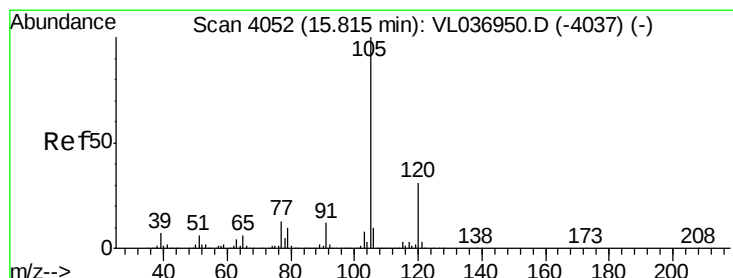
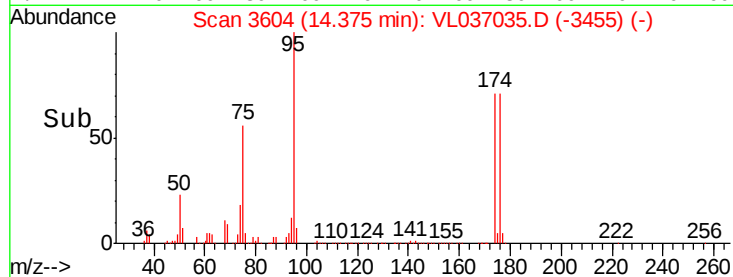
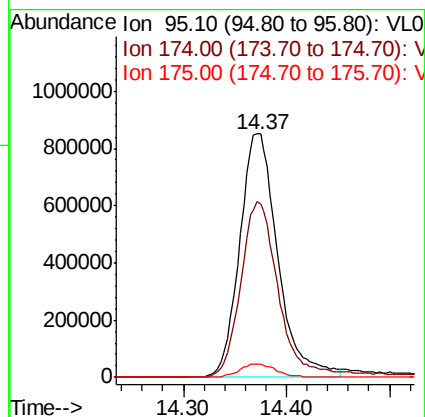
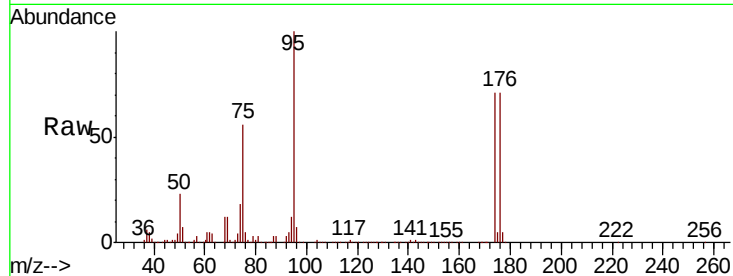
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.998 ppbv
 RT: 14.37 min Scan# 3604
 Delta R.T. -0.02 min
 Lab File: VL037035.D
 Acq: 20 May 2021 22:20

Instrument :
 MSVOA_L
 ClientSampled :
 KSV-07

Tot Ion: 95 Resp: 2181420
 Ion Ratio Lower Upper
 95 100
 174 74.9 58.4 87.6
 175 5.5 4.4 6.6

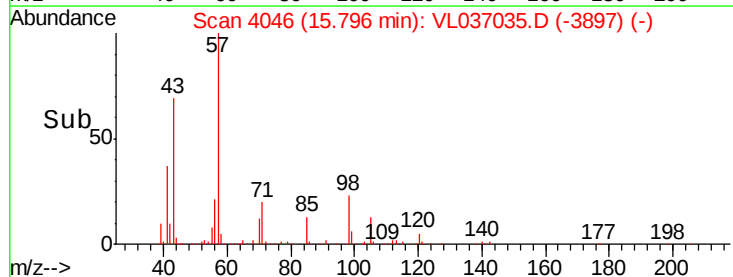
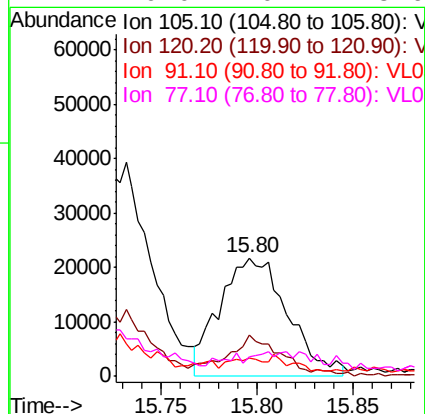
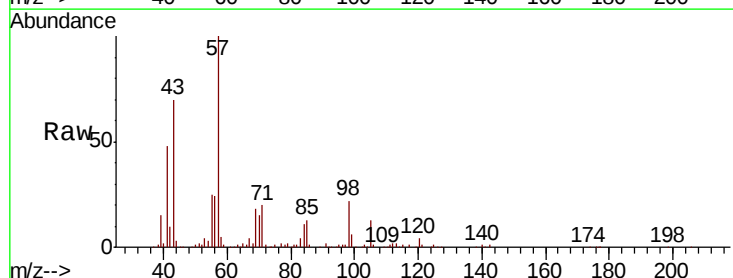
Manual Integrations
 APPROVED

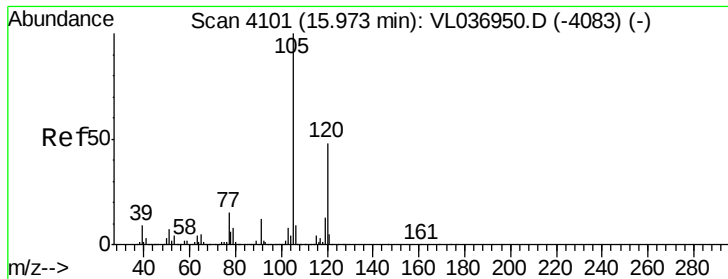
MMDadoda
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#72
 4-Ethyltoluene
 Concen: 0.139 ppbv m
 RT: 15.80 min Scan# 4046
 Delta R.T. -0.02 min
 Lab File: VL037035.D
 Acq: 20 May 2021 22:20

Tgt Ion: 105 Resp: 53182
 Ion Ratio Lower Upper
 105 100
 120 27.9 24.6 37.0
 91 0.0 9.8 14.6#
 77 0.0 10.4 15.6#





#73

1,3,5-Trimethylbenzene

Concen: 0.098 ppbv

RT: 15.96 min Scan# 4096

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Instrument :

MSVOA_L

ClientSampleId :

KSV-07

Tot Ion:105 Resp: 35343

Ion Ratio Lower Upper

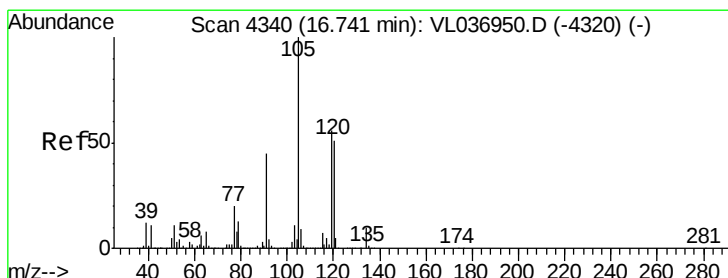
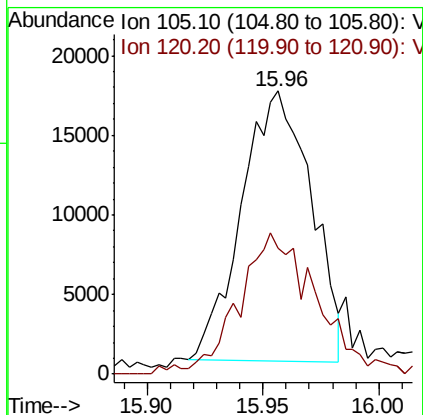
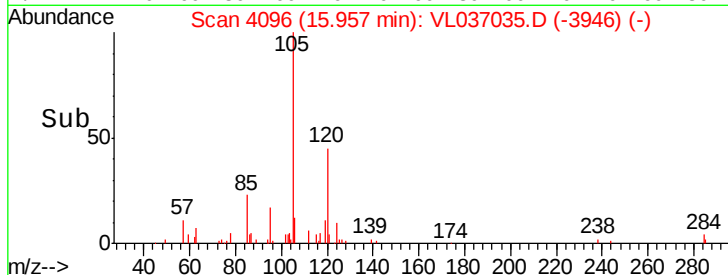
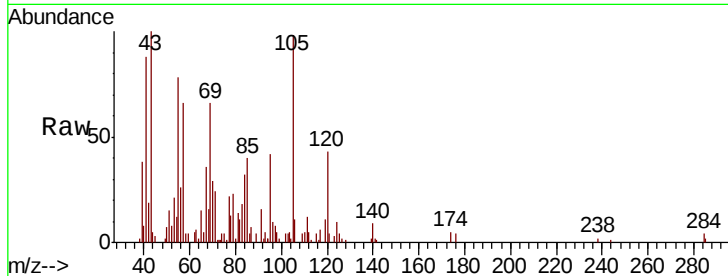
105 100

120 44.9 38.6 58.0

Manual Integrations
APPROVED

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5/24/2021 3:27:24 PM



#74

1,2,4-Trimethylbenzene

Concen: 0.397 ppbv m

RT: 16.72 min Scan# 4333

Delta R.T. -0.02 min

Lab File: VL037035.D

Acq: 20 May 2021 22:20

Tgt Ion:105 Resp: 147707

Ion Ratio Lower Upper

105 100

120 42.2 40.6 61.0

91 12.6 37.4 56.0#

77 15.2 16.2 24.4#

