

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061721\
 Data File : VL037209.D
 Acq On : 17 Jun 2021 20:01
 Operator : SY/AP
 Sample : M2742-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Manual Integrations
 APPROVED

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 6/21/2021 12:58:30 PM

Quant Time: Jun 19 17:26:39 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jun 1
 QLast Update : Wed Jun 16 14:06:32 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1530440	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	4453661	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	4068400	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	3100406	10.06	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.60%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	85477	0.321 ppbv	98
3) Chlorodifluoromethane	2.99	51	107472m	0.361 ppbv	
4) Chloromethane	3.15	50	27658m	0.279 ppbv	
9) Propene	3.02	41	142752m	1.500 ppbv	
10) Heptane	8.13	43	1861358	8.077 ppbv	97
11) Trichlorofluoromethane	3.95	101	59573	0.210 ppbv	97
13) Ethanol	3.62	45	142861m	9.706 ppbv	
15) Acetone	3.85	43	2568672m	14.884 ppbv	
20) Methylene Chloride	4.35	84	227678	2.204 ppbv	96
26) Hexane	5.69	57	5846926	30.963 ppbv #	45
27) Carbon Disulfide	4.55	76	1048480	5.667 ppbv	99
29) Chloroform	5.76	83	173011	0.593 ppbv	99
30) Cyclohexane	7.14	84	46589	0.296 ppbv #	1
34) 2-Butanone	5.26	43	280557	1.620 ppbv	100
35) Carbon Tetrachloride	7.02	117	16023	0.054 ppbv #	93
36) Benzene	6.89	78	92254m	0.256 ppbv	
38) Trichloroethene	7.84	130	17921	0.105 ppbv #	74
50) 4-Methyl-2-Pentanone	8.76	43	38467m	0.162 ppbv	
52) Tetrachloroethene	11.23	164	854928	5.109 ppbv	96
53) Toluene	9.81	91	533951	1.241 ppbv	98
58) Ethyl Benzene	12.71	91	160282	0.286 ppbv	95
59) m/p-Xylene	12.96	91	485910m	1.024 ppbv	
60) o-Xylene	13.69	91	301874m	0.668 ppbv	
63) 1,1,2,2-Tetrachloroethane	13.67	83	89385m	0.297 ppbv	
65) tert-Butylbenzene	16.77	119	71031	0.125 ppbv #	52
70) n-Butylbenzene	18.58	91	315659	0.531 ppbv #	90
72) 4-Ethyltoluene	15.84	105	148237	0.289 ppbv #	94
73) 1,3,5-Trimethylbenzene	16.00	105	181129m	0.365 ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	612991	1.199 ppbv #	73

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

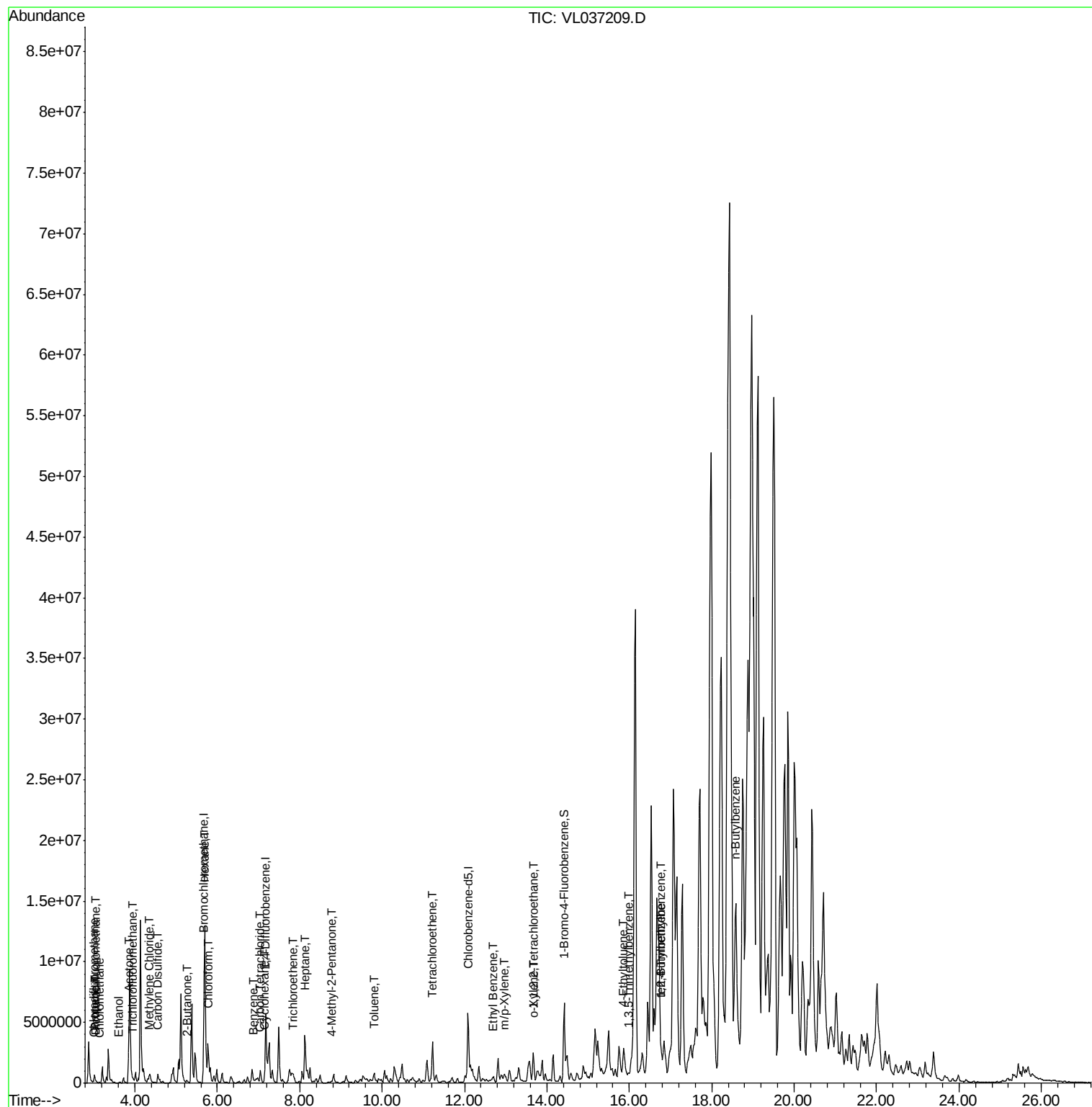
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL061721\
Data File : VL037209.D
Acq On : 17 Jun 2021 20:01
Operator : SY/AP
Sample : M2742-02
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

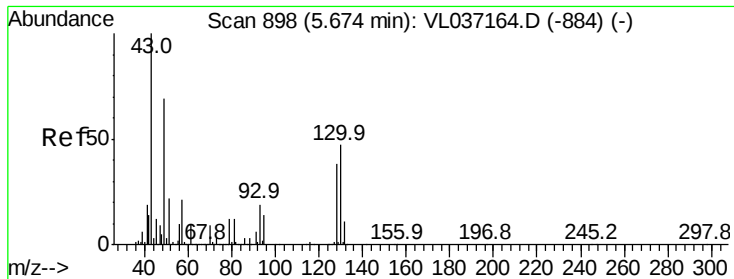
Instrument :
MSVOA_L
ClientSampleId :
SV1

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Quant Time: Jun 19 17:26:39 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL061621AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jun
QLast Update : Wed Jun 16 14:06:32 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL037209.D

Acq: 17 Jun 2021 20:01

Instrument :

MSVOA_L

ClientSampled :

SV1

Tot Ion: 49 Resp: 1530440

Ion Ratio Lower Upper

49 100

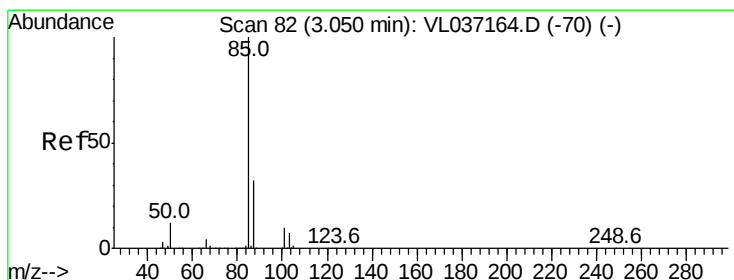
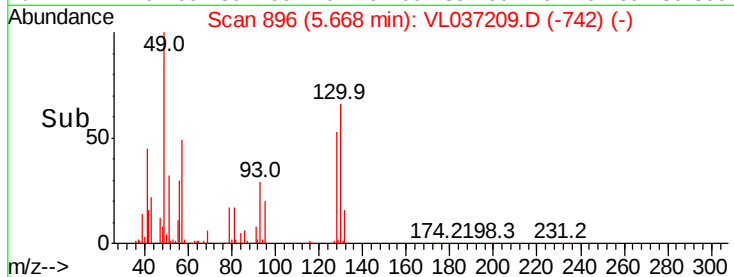
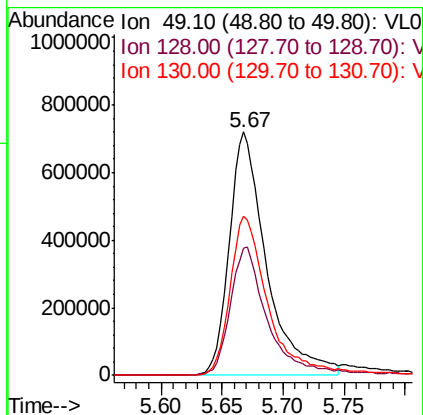
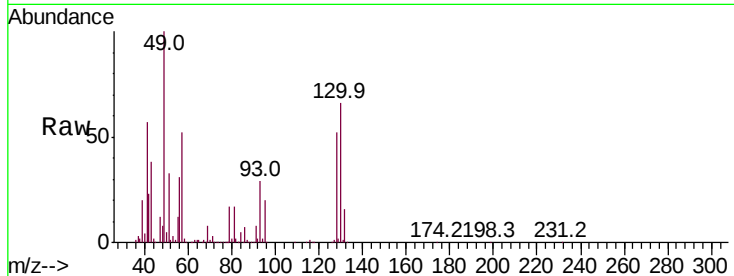
128 54.7 29.3 88.0

130 69.5 35.9 107.8

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#2

Dichlorodifluoromethane

Concen: 0.321 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.00 min

Lab File: VL037209.D

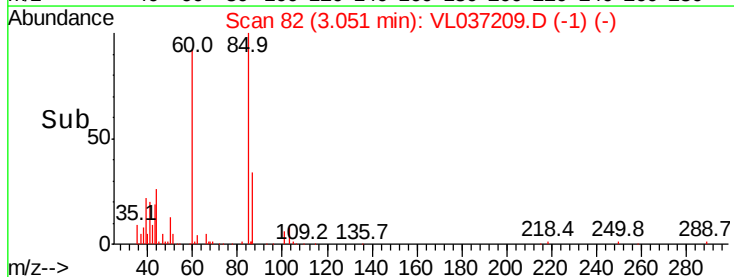
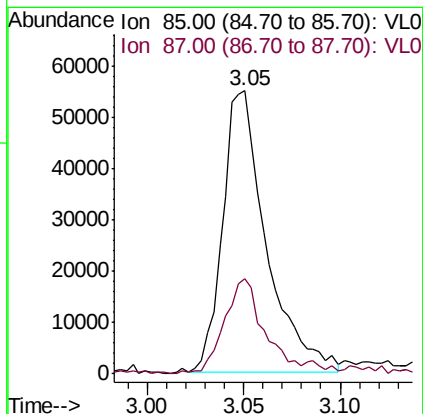
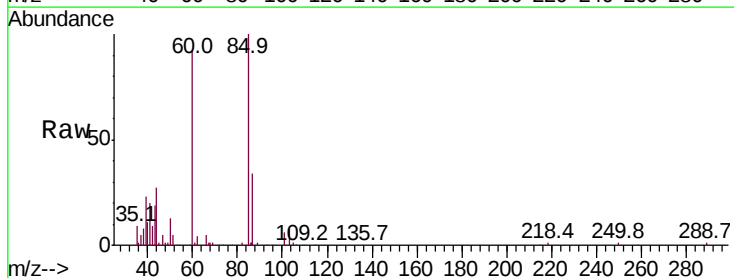
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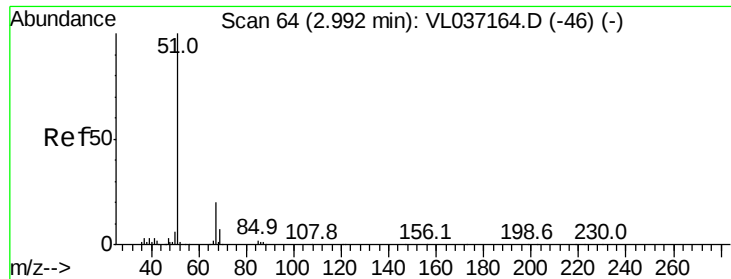
Tgt Ion: 85 Resp: 85477

Ion Ratio Lower Upper

85 100

87 33.4 25.8 38.6





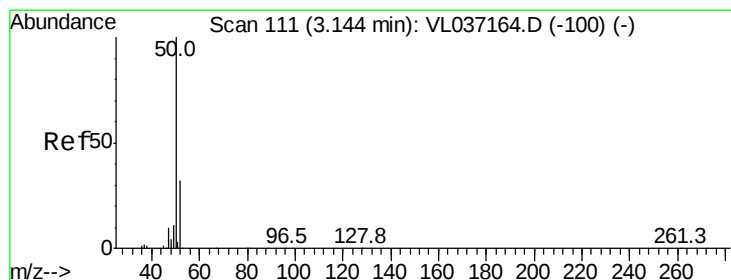
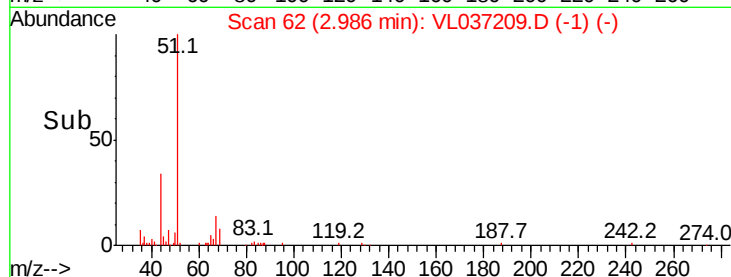
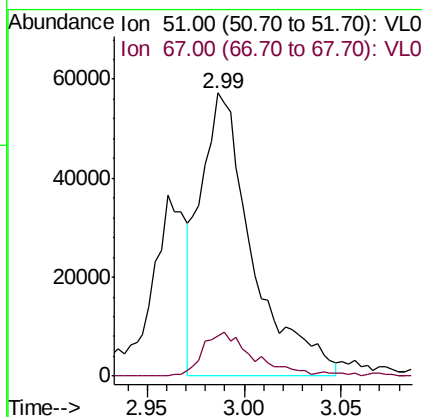
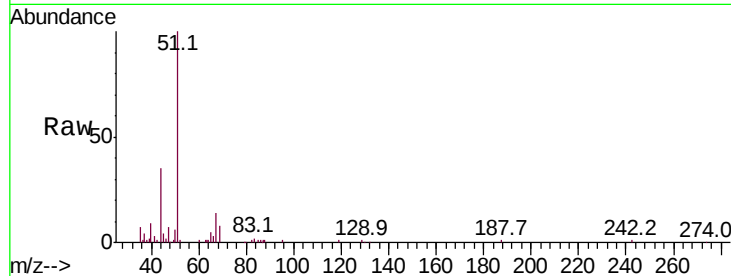
#3
Chlorodifluoromethane
Concen: 0.361 ppbv m
RT: 2.99 min Scan# 62
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ratio	Lower	Upper
51	100		
67	16.3	15.8	23.6

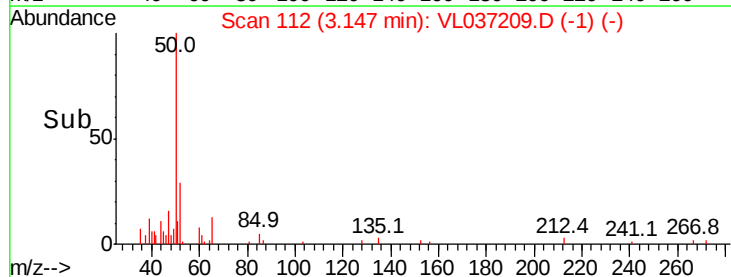
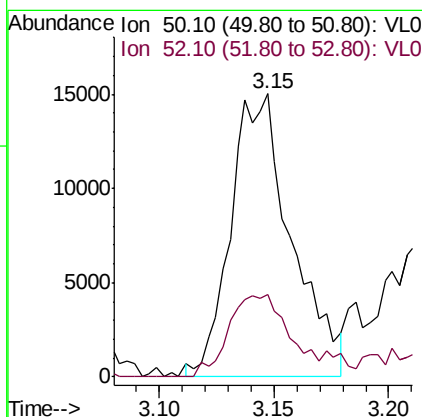
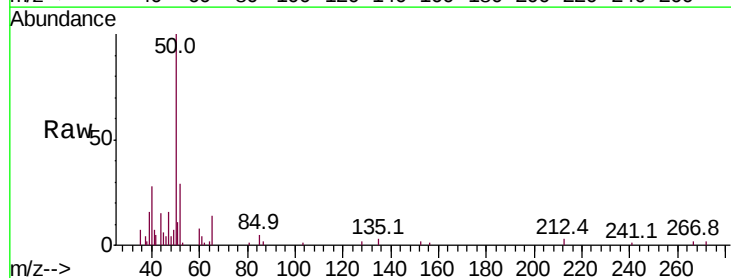
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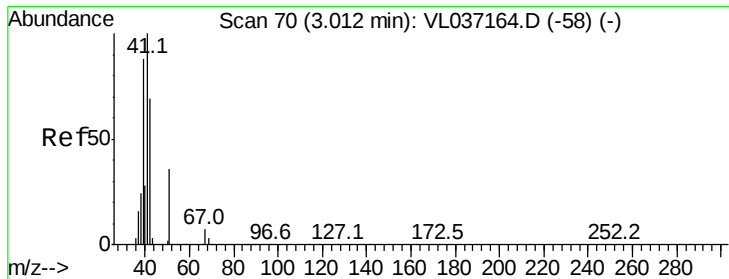
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#4
Chloromethane
Concen: 0.279 ppbv m
RT: 3.15 min Scan# 112
Delta R.T. 0.00 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion	Ratio	Lower	Upper
50	100		
52	29.2	25.8	38.8





#9

Propene

Concen: 1.500 ppbv m

RT: 3.02 min Scan# 71

Delta R.T. 0.00 min

Lab File: VL037209.D

Acq: 17 Jun 2021 20:01

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tot Ion: 41 Resp: 142752

Ion Ratio Lower Upper

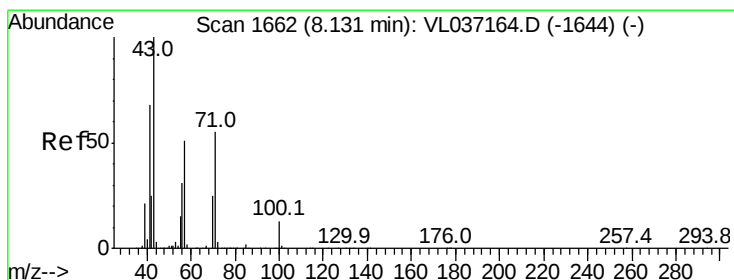
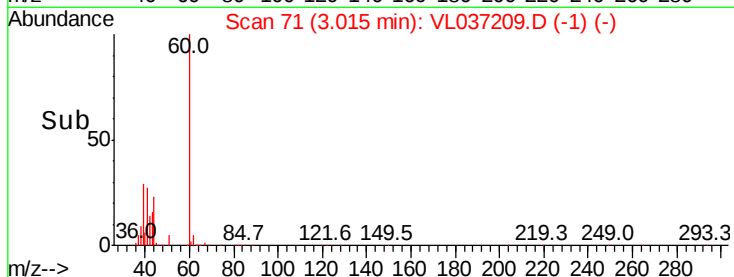
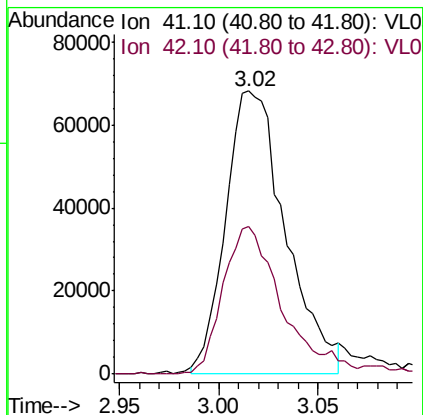
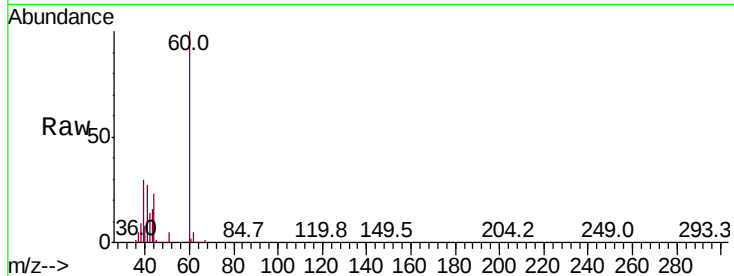
41 100

42 217.3 54.5 81.7#

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#10

Heptane

Concen: 8.077 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. -0.00 min

Lab File: VL037209.D

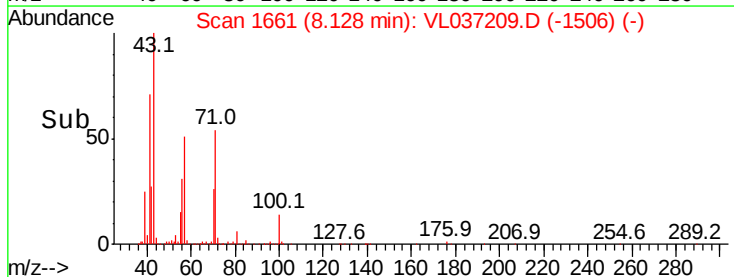
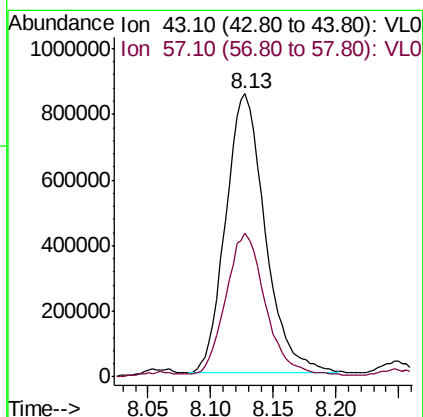
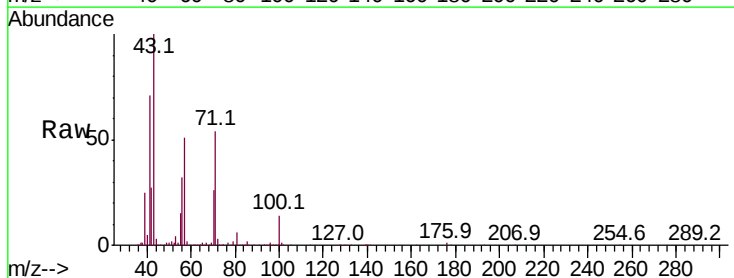
Acq: 17 Jun 2021 20:01

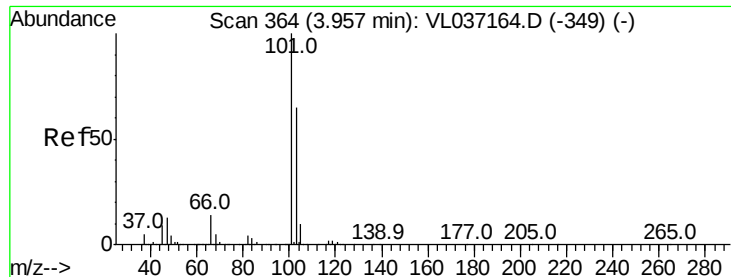
Tgt Ion: 43 Resp: 1861358

Ion Ratio Lower Upper

43 100

57 52.6 40.6 61.0





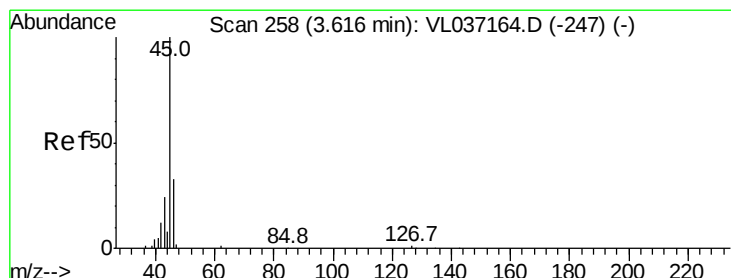
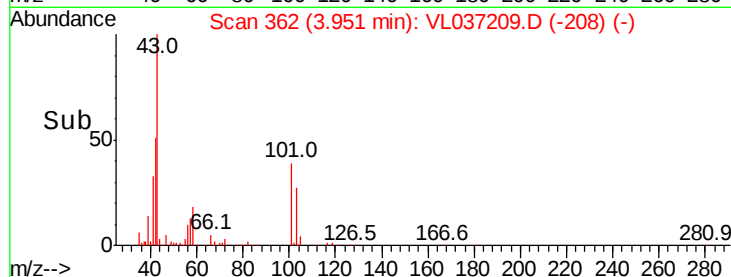
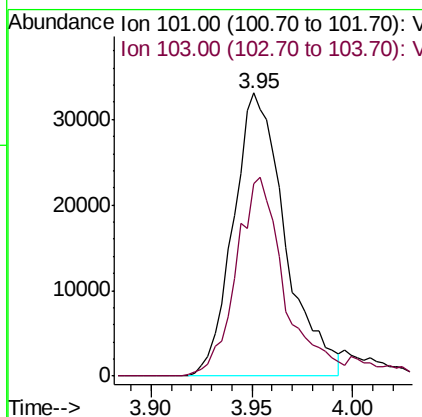
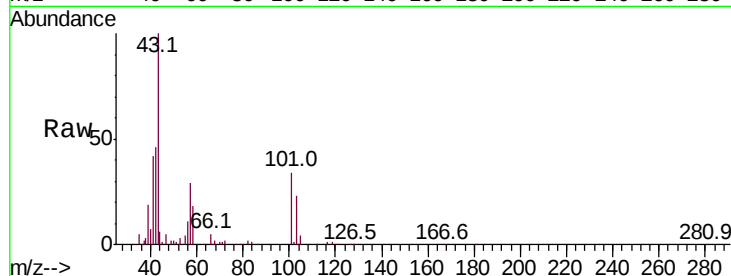
#11
 Trichlorofluoromethane
 Concen: 0.210 ppbv
 RT: 3.95 min Scan# 362
 Delta R.T. -0.01 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Tot Ion:101 Resp: 59573
 Ion Ratio Lower Upper
 101 100
 103 67.4 52.2 78.4

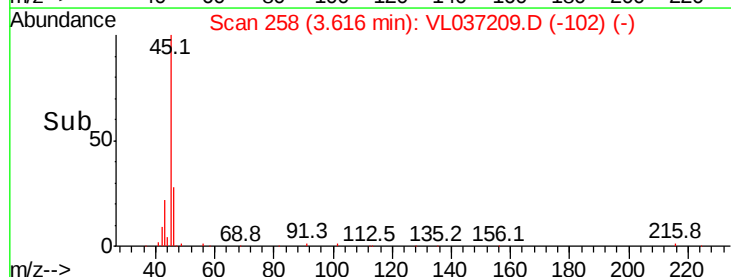
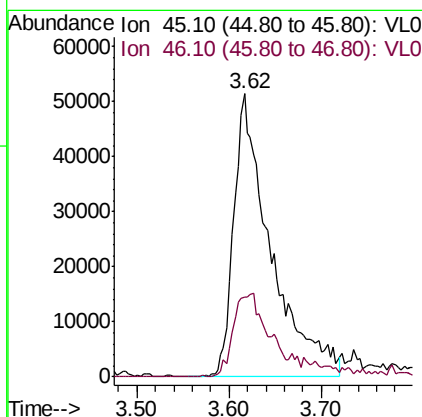
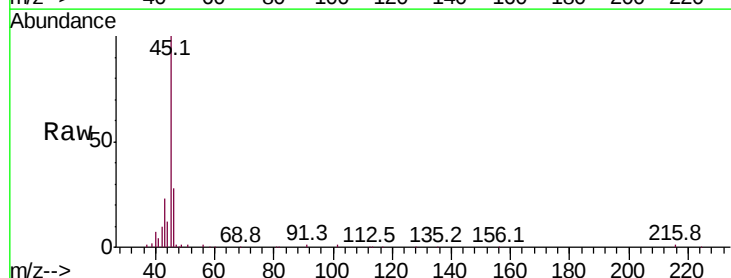
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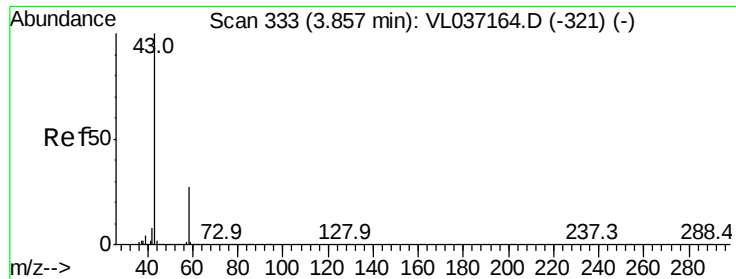
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#13
 Ethanol
 Concen: 9.706 ppbv m
 RT: 3.62 min Scan# 258
 Delta R.T. 0.00 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Tgt Ion: 45 Resp: 142861
 Ion Ratio Lower Upper
 45 100
 46 34.6 34.2 137.0





#15

Acetone

Concen: 14.884 ppbv m

RT: 3.85 min Scan# 330

Delta R.T. -0.01 min

Lab File: VL037209.D

Acq: 17 Jun 2021 20:01

Instrument :

MSVOA_L

ClientSampled :

SV1

Tot Ion: 43 Resp: 2568672

Ion Ratio Lower Upper

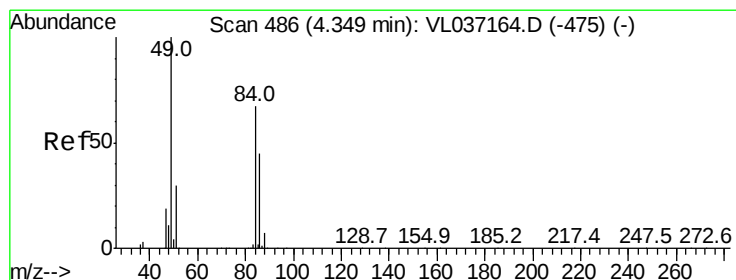
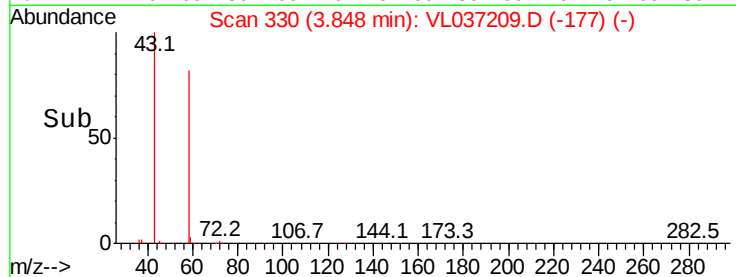
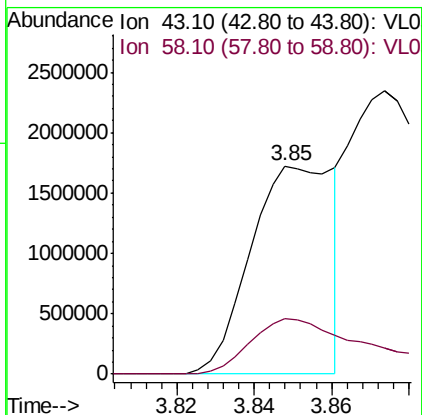
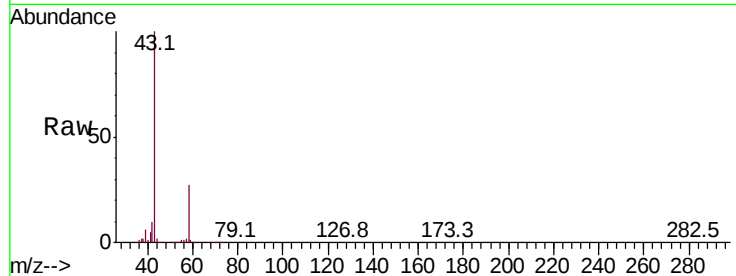
43 100

58 45.3 23.7 35.5#

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#20

Methylene Chloride

Concen: 2.204 ppbv

RT: 4.35 min Scan# 485

Delta R.T. -0.00 min

Lab File: VL037209.D

Acq: 17 Jun 2021 20:01

Tgt Ion: 84 Resp: 227678

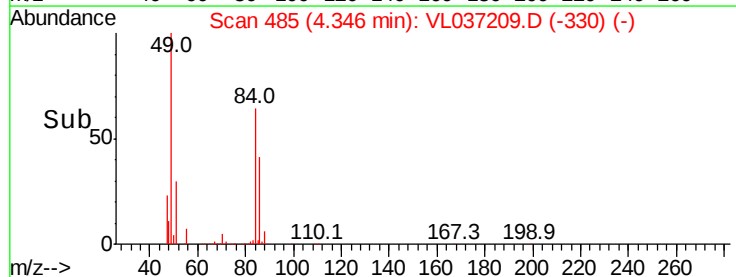
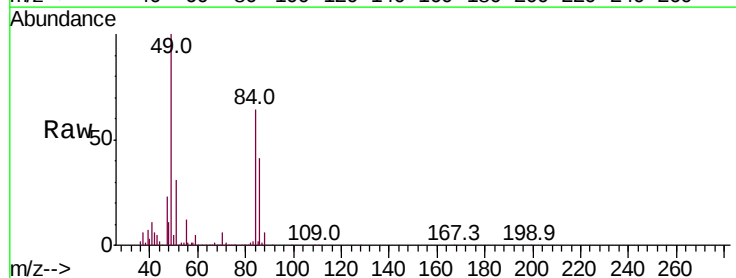
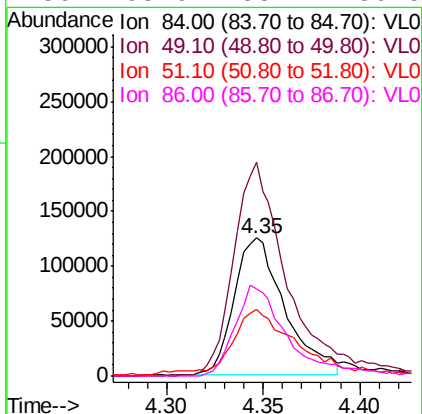
Ion Ratio Lower Upper

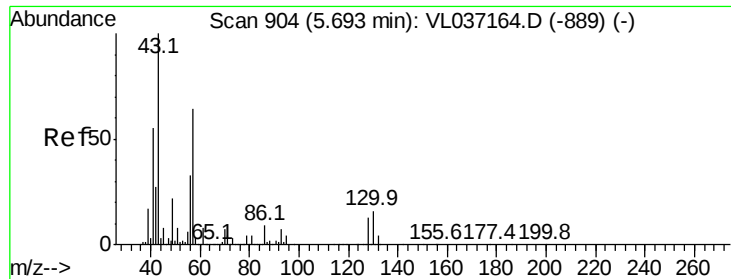
84 100

49 155.6 119.7 179.5

51 45.4 36.1 54.1

86 63.6 53.7 80.5





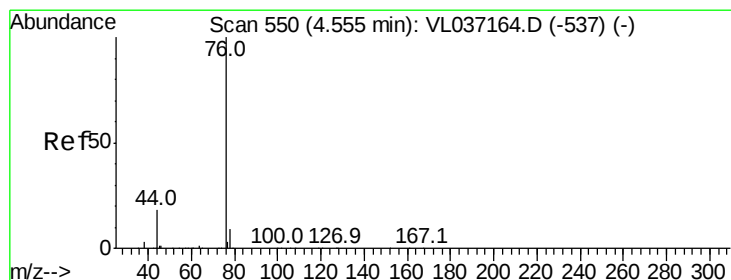
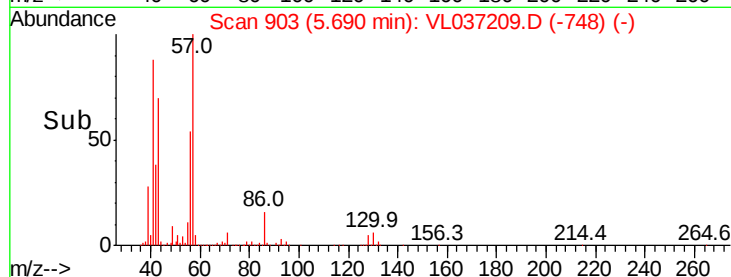
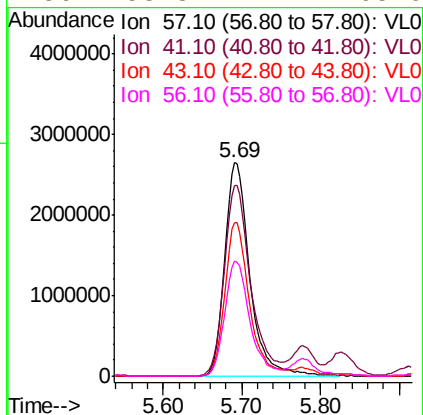
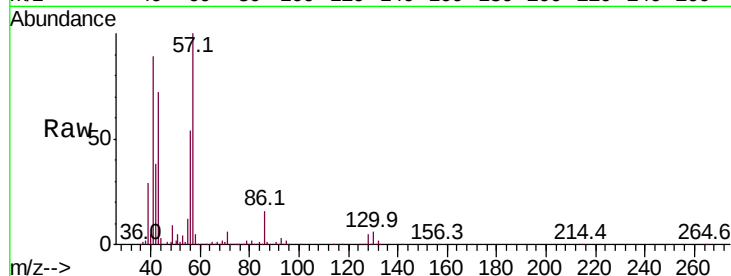
#26
Hexane
Concen: 30.963 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.00 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tot Ion: 57 Resp: 5846926
Ion Ratio Lower Upper
57 100
41 93.5 73.5 110.3
43 70.1 170.7 256.1#
56 53.8 42.4 63.6

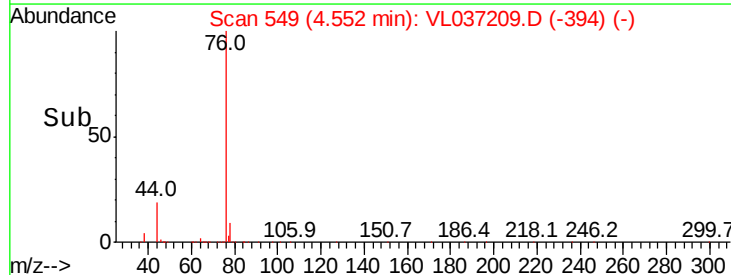
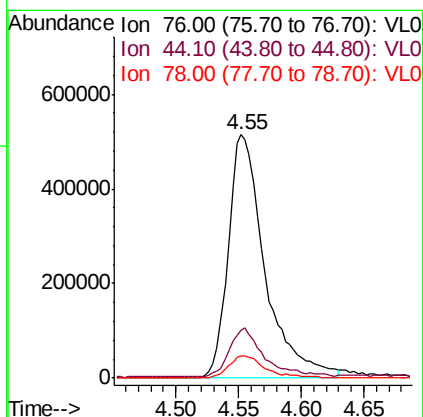
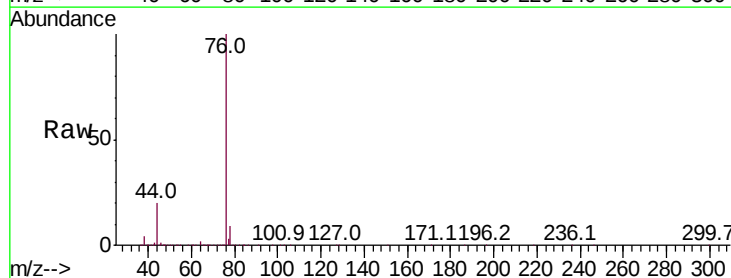
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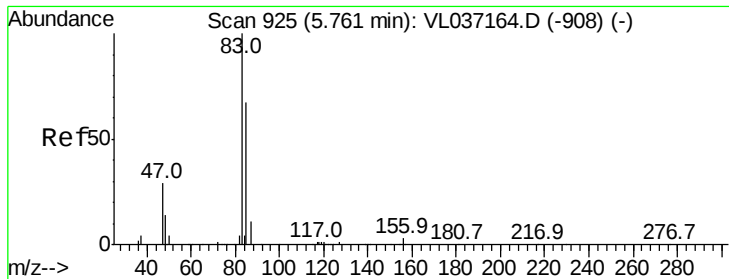
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#27
Carbon Disulfide
Concen: 5.667 ppbv
RT: 4.55 min Scan# 549
Delta R.T. -0.00 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion: 76 Resp: 1048480
Ion Ratio Lower Upper
76 100
44 19.3 15.4 23.2
78 9.4 8.0 12.0





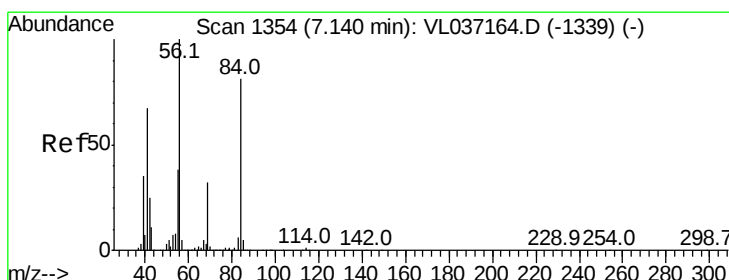
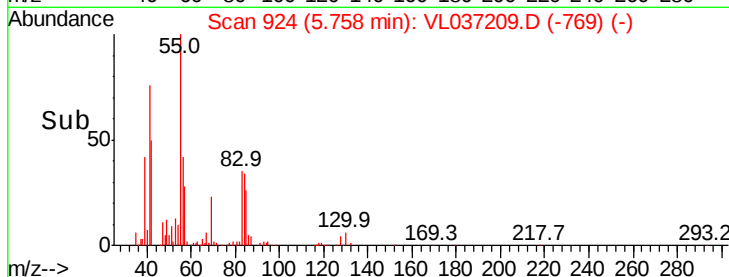
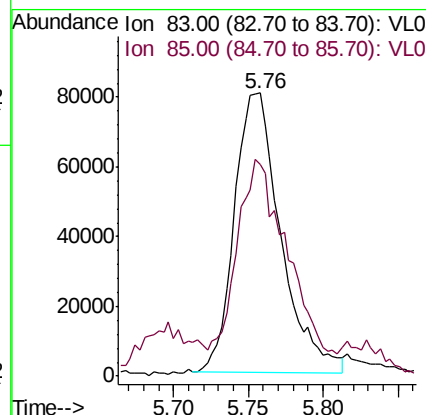
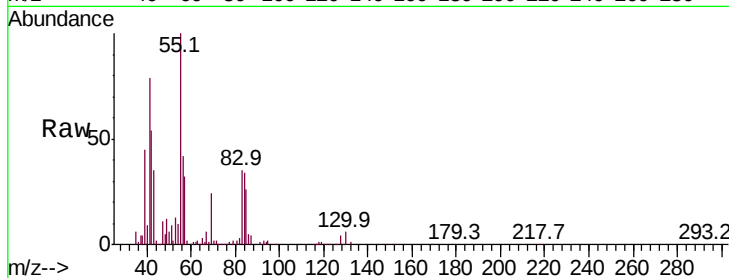
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Chloroform
Concen: 0.593 ppbv
RT: 5.76 min Scan# 924
Delta R.T. -0.00 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	83	85	Ratio	100	65.8	Resp	173011	Lower	Upper
83	100								
85		65.8						53.6	80.4

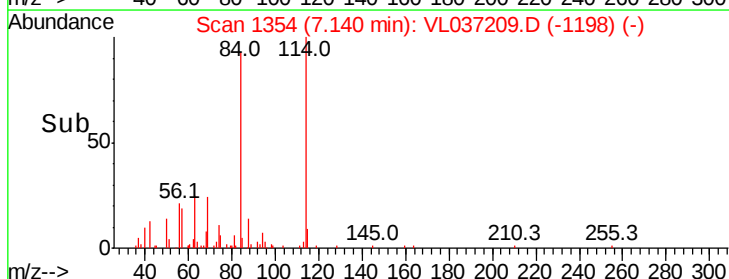
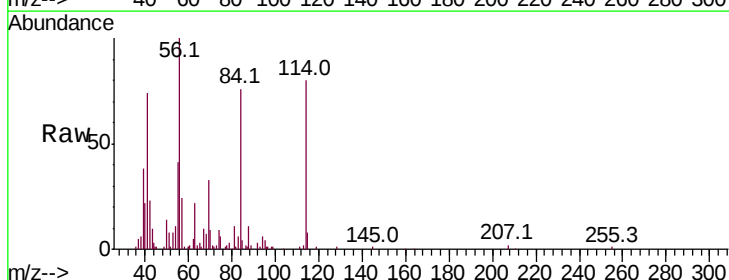
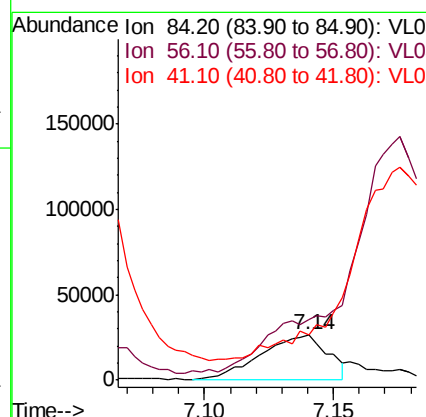
Manual Integrations
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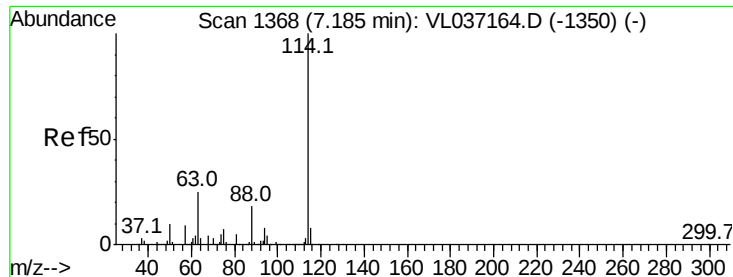
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#30
Cyclohexane
Concen: 0.296 ppbv
RT: 7.14 min Scan# 1354
Delta R.T. 0.00 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion	84	56	41	Ratio	100	0.0	0.0	Resp	46589	Lower	Upper
84	100										
56		0.0								107.7	161.5#
41			0.0							69.0	103.6#





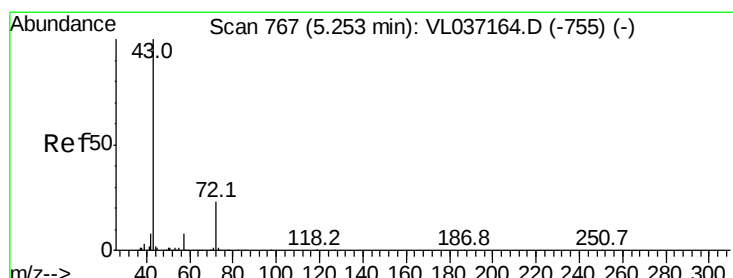
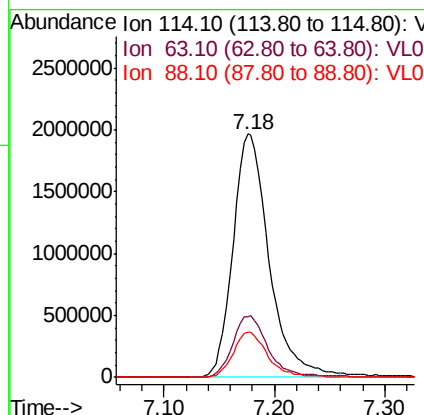
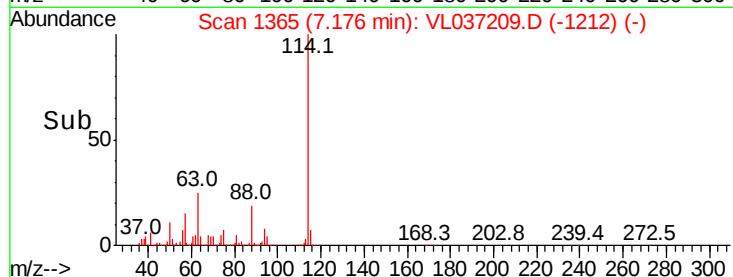
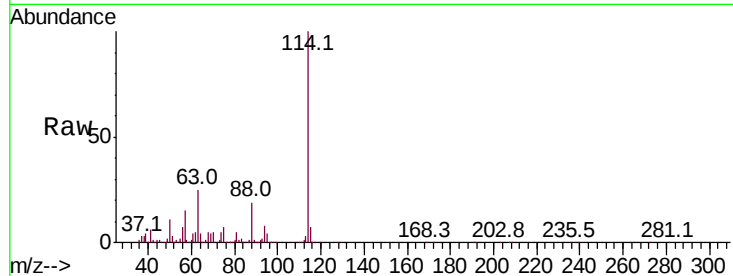
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1365
 Delta R.T. -0.01 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.7	19.6	29.4
88	18.2	14.2	21.2

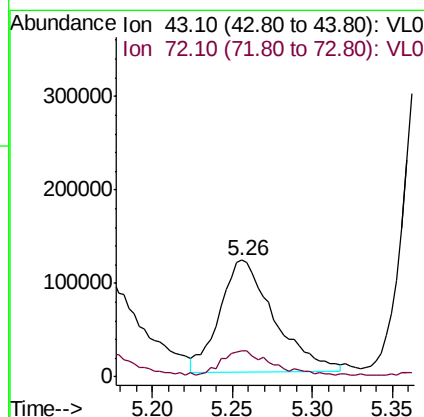
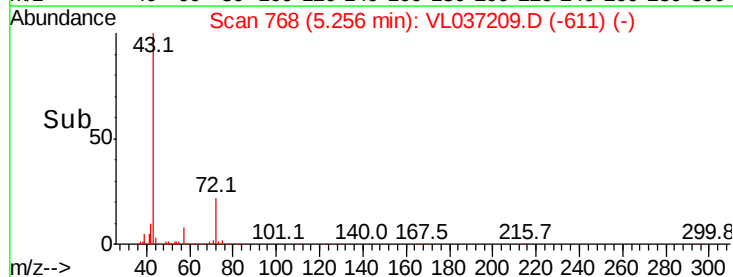
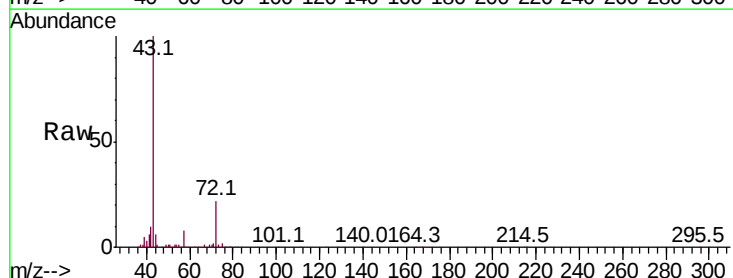
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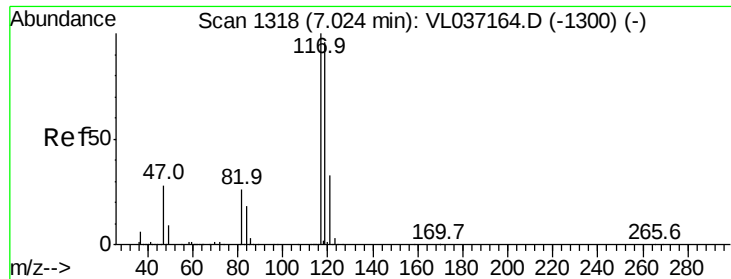
MMDadoda
 6/21/2021 12:58:30 PM



#34
 2-Butanone
 Concen: 1.620 ppbv
 RT: 5.26 min Scan# 768
 Delta R.T. 0.00 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.8	18.9	28.3





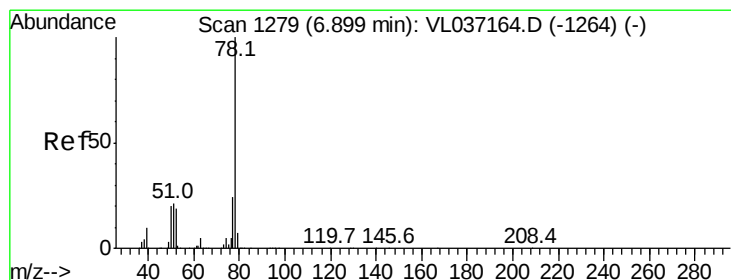
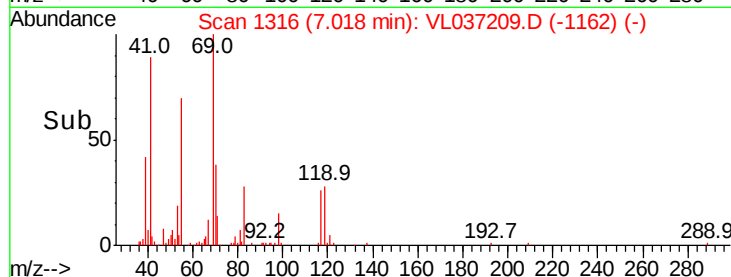
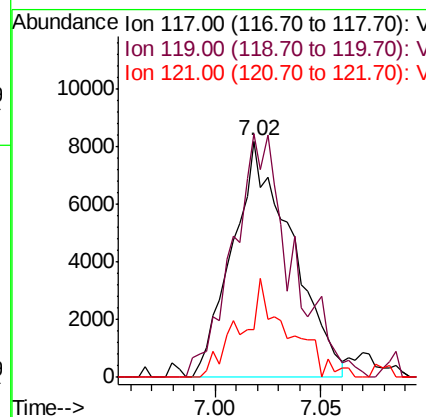
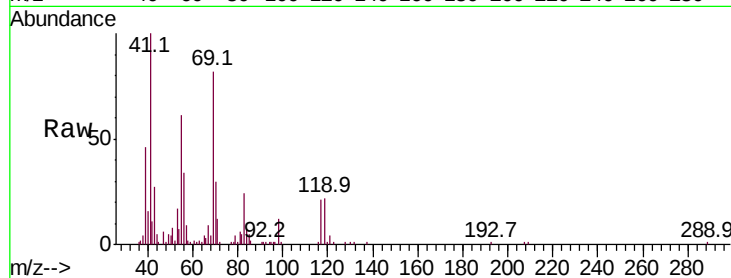
#35
Carbon Tetrachloride
Concen: 0.054 ppbv
RT: 7.02 min Scan# 1316
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ratio	Lower	Upper
117	100		
119	97.2	76.6	114.8
121	20.1	26.4	39.6#

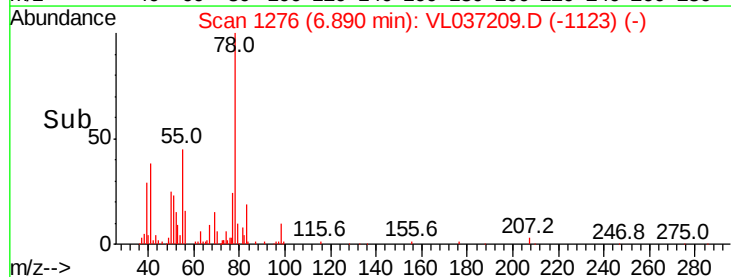
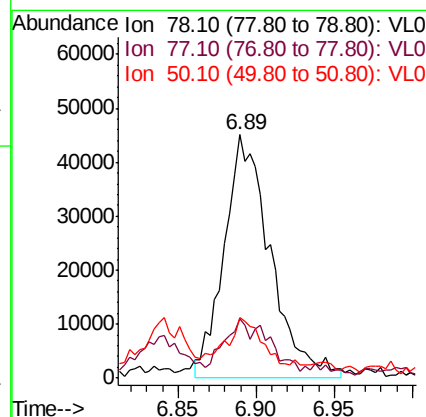
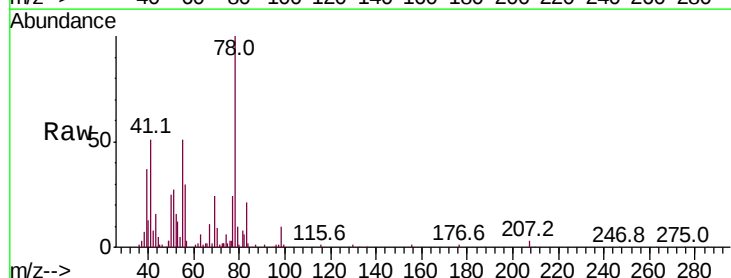
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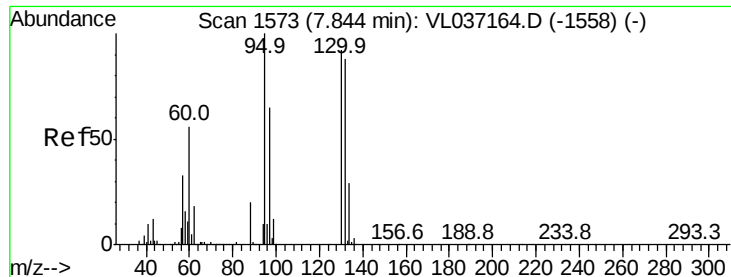
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#36
Benzene
Concen: 0.256 ppbv m
RT: 6.89 min Scan# 1276
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.0	28.6
50	24.8	15.7	23.5#





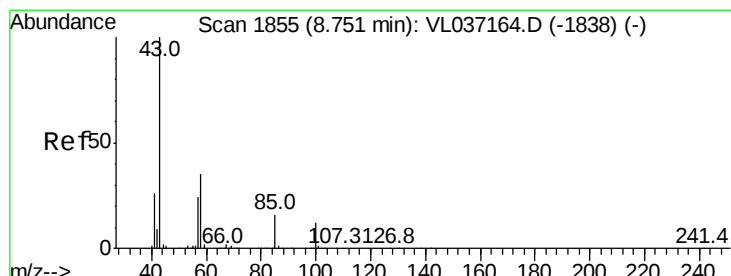
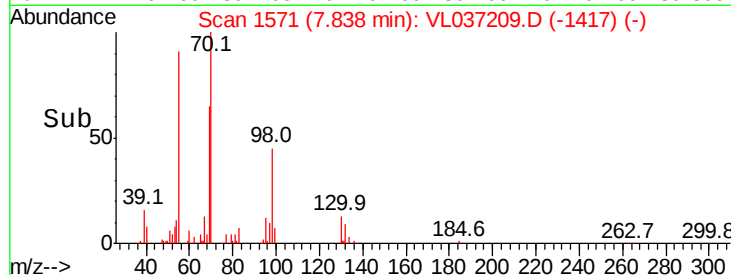
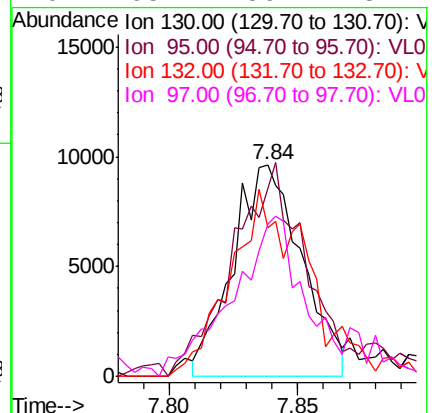
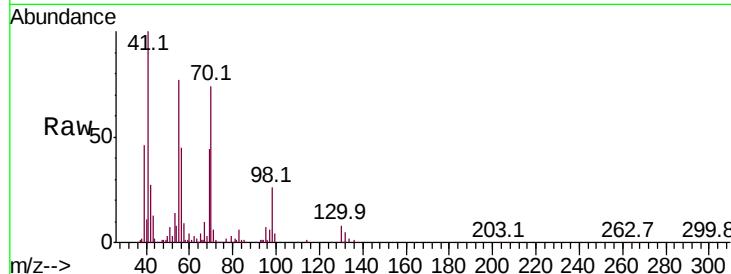
#38
 Trichloroethene
 Concen: 0.105 ppbv
 RT: 7.84 min Scan# 1571
 Delta R.T. -0.01 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tot Ion	Ratio	Lower	Upper
130	100		
95	79.4	86.6	129.8#
132	59.9	76.6	114.8#
97	63.1	56.1	84.1

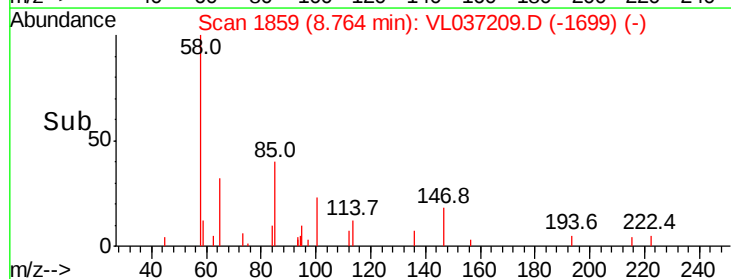
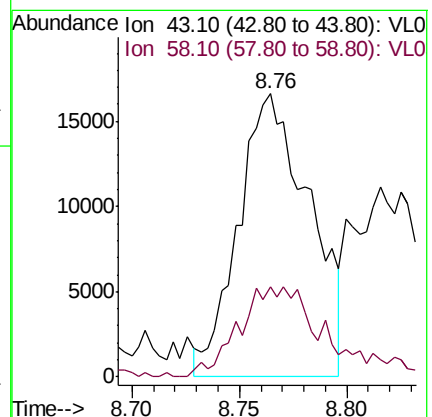
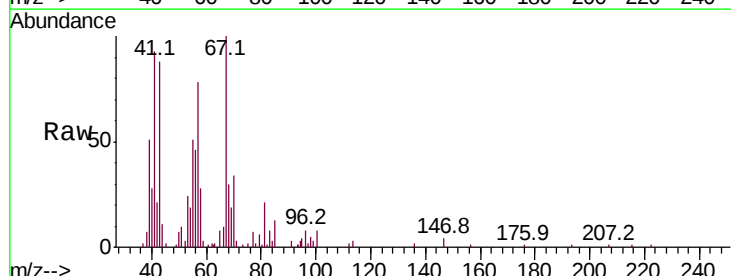
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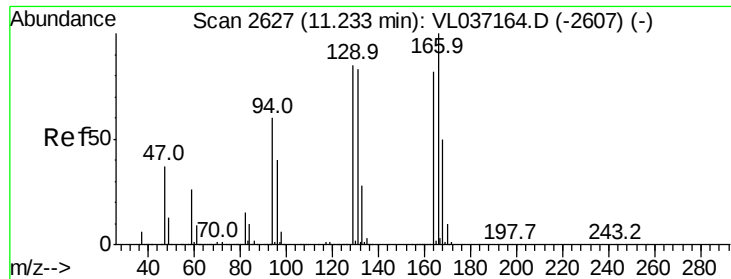
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#50
 4-Methyl-2-Pentanone
 Concen: 0.162 ppbv m
 RT: 8.76 min Scan# 1859
 Delta R.T. 0.01 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Tgt Ion	Ratio	Lower	Upper
43	100		
58	38.5	28.4	42.6





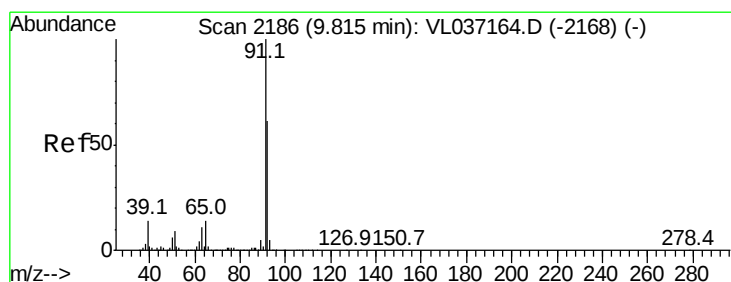
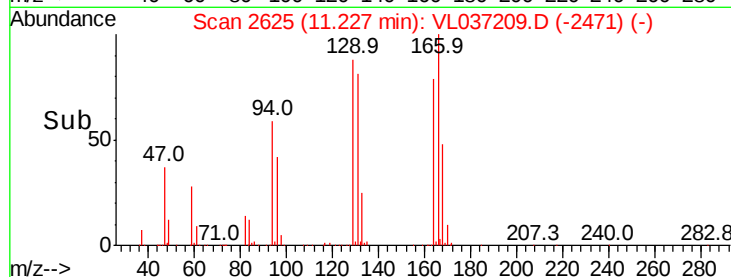
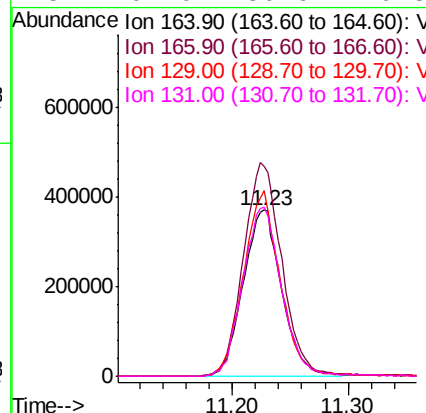
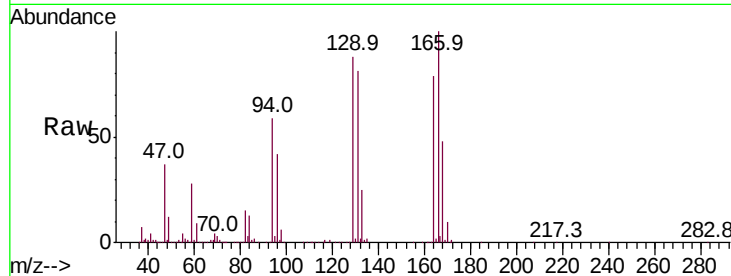
#52
Tetrachloroethene
Concen: 5.109 ppbv
RT: 11.23 min Scan# 2625
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ratio	Lower	Upper
164	100		
166	126.4	97.6	146.4
129	111.3	82.9	124.3
131	102.0	80.6	120.8

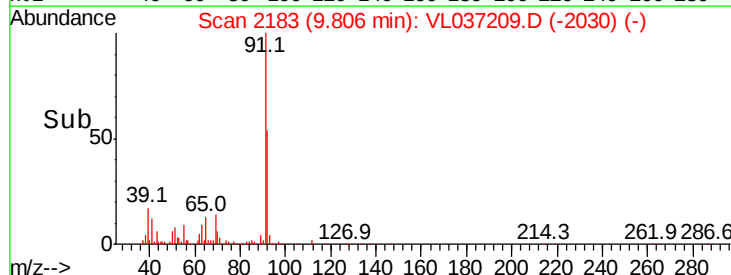
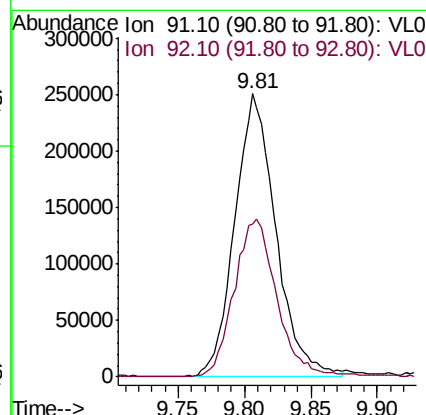
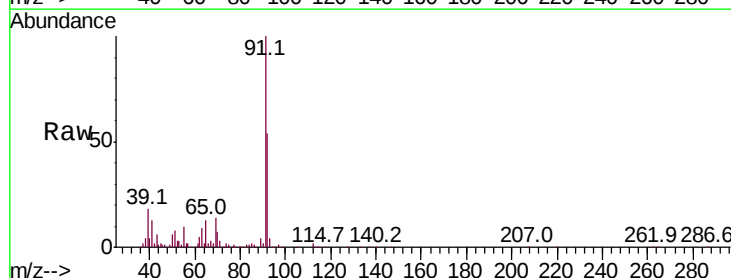
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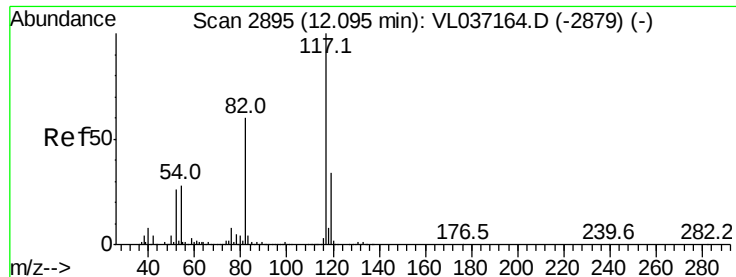
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#53
Toluene
Concen: 1.241 ppbv
RT: 9.81 min Scan# 2183
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.2	48.3	72.5





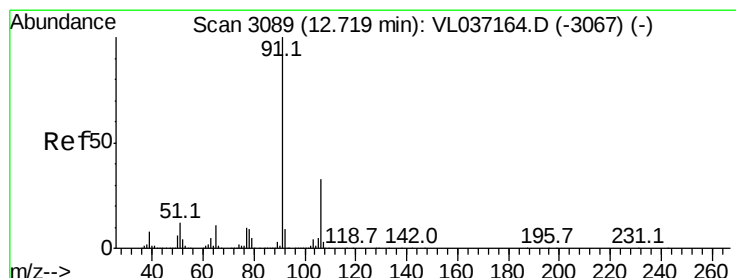
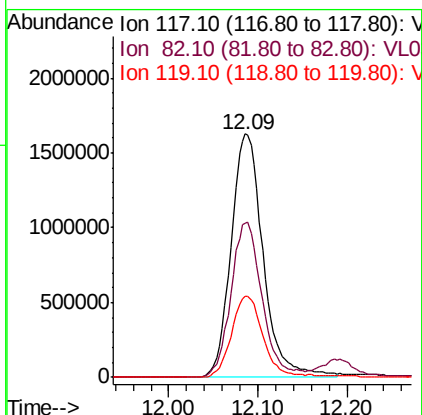
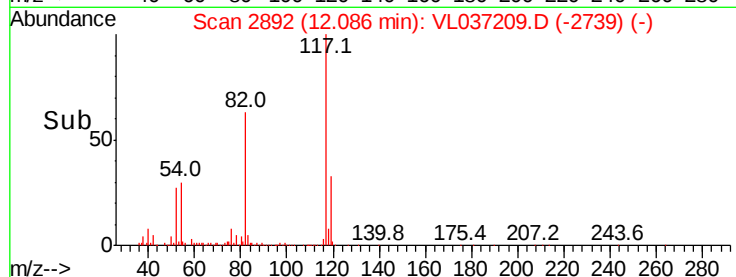
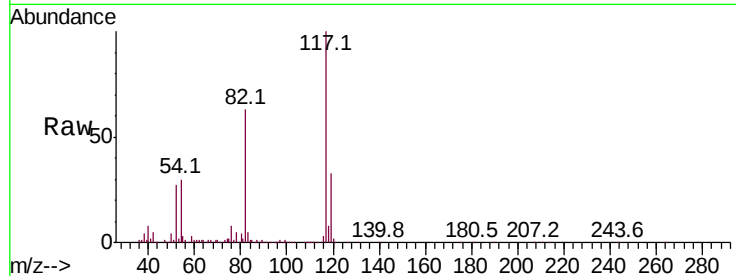
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tot Ion:117 Resp: 4068400
Ion Ratio Lower Upper
117 100
82 61.7 51.7 77.5
119 33.5 47.6 71.4#

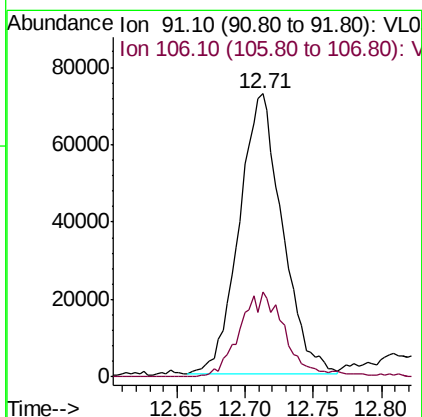
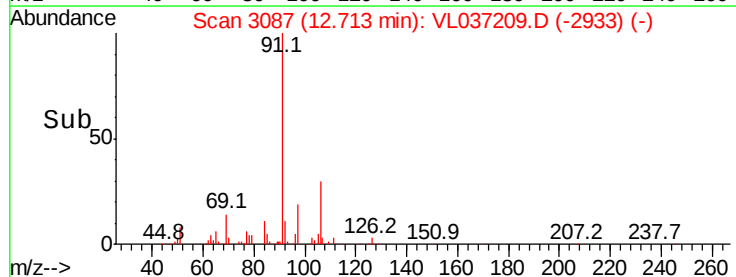
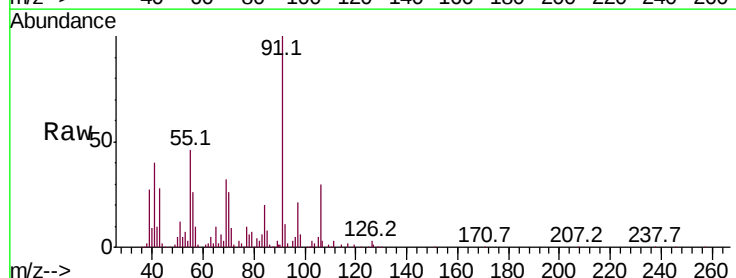
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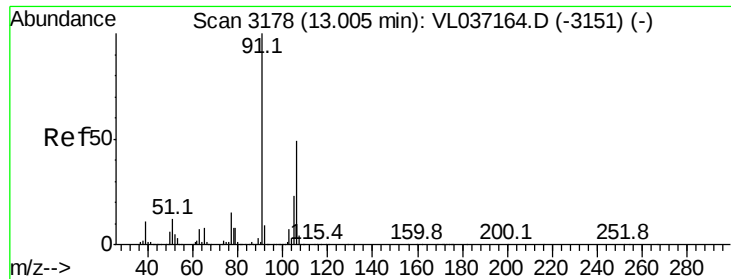
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#58
Ethyl Benzene
Concen: 0.286 ppbv
RT: 12.71 min Scan# 3087
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion: 91 Resp: 160282
Ion Ratio Lower Upper
91 100
106 30.2 26.3 39.5





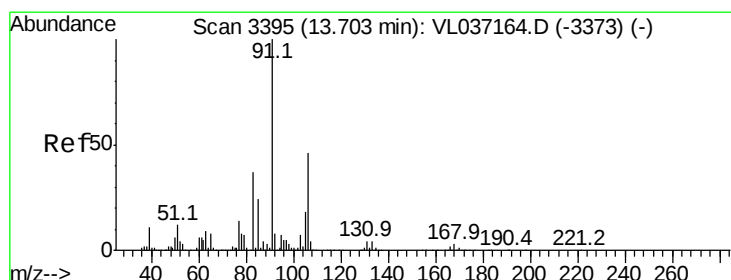
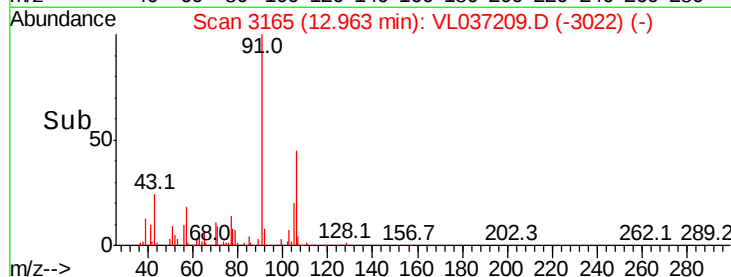
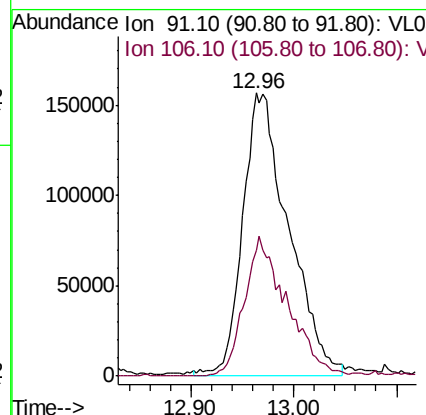
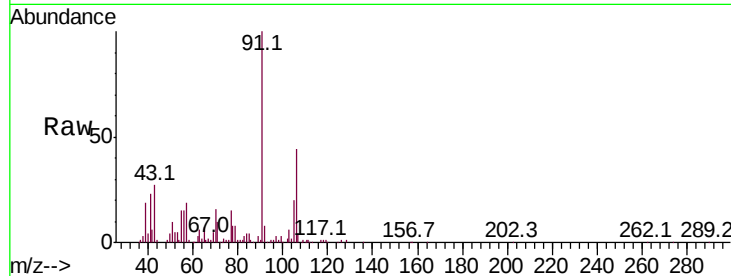
#59
m/p-Xylene
Concen: 1.024 ppbv m
RT: 12.96 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tot Ion: 91 Resp: 485910
Ion Ratio Lower Upper
91 100
106 46.3 37.0 55.4

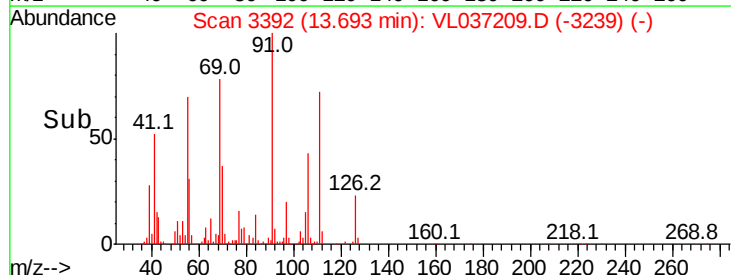
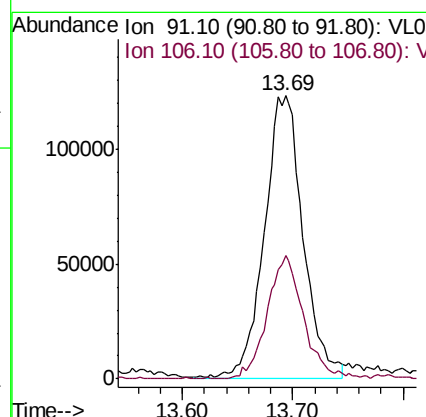
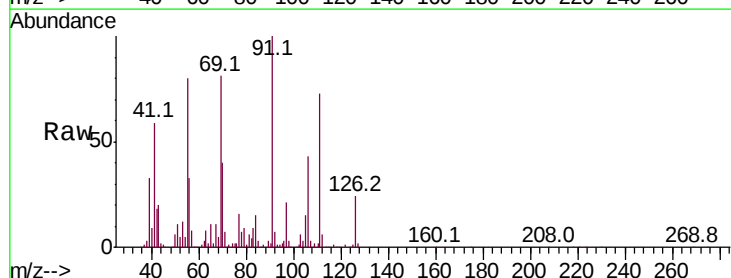
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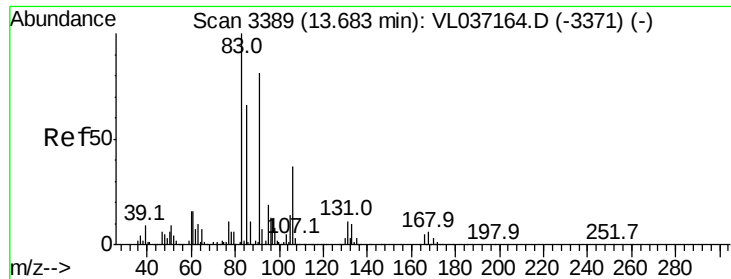
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#60
o-Xylene
Concen: 0.668 ppbv m
RT: 13.69 min Scan# 3392
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion: 91 Resp: 301874
Ion Ratio Lower Upper
91 100
106 41.0 23.0 69.0





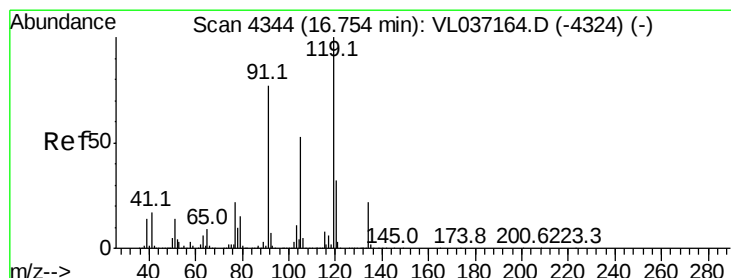
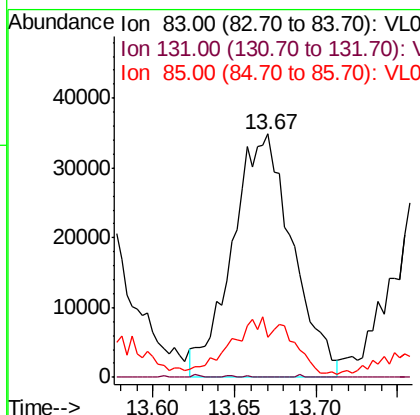
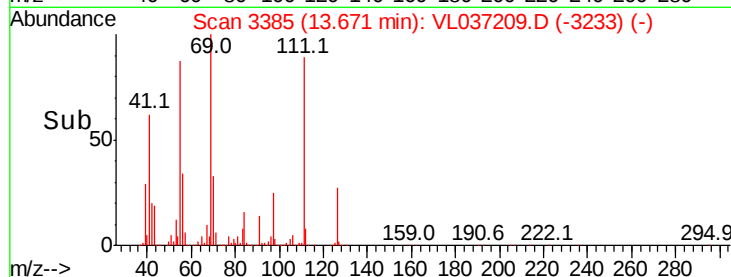
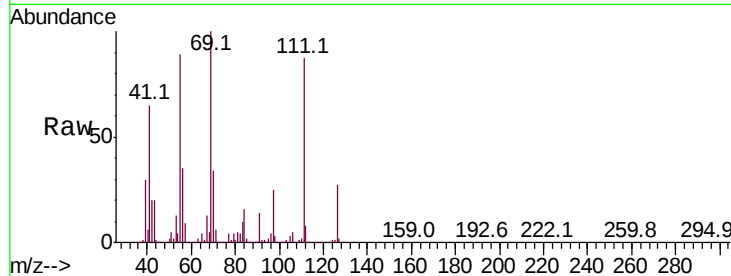
#63
1,1,2,2-Tetrachloroethane
Concen: 0.297 ppbv m
RT: 13.67 min Scan# 3385
Delta R.T. -0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Instrument :
MSVOA_L
ClientSampled :
SV1

Tot Ion	Ratio	Lower	Upper
83	100		
131	0.0	5.4	16.2#
85	22.3	33.1	99.2#

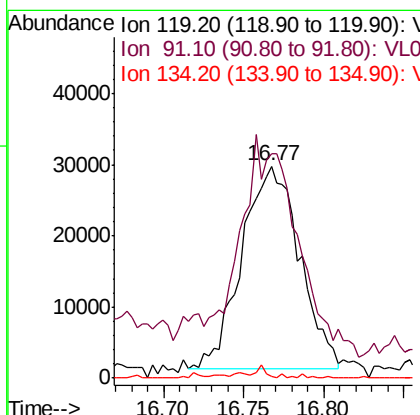
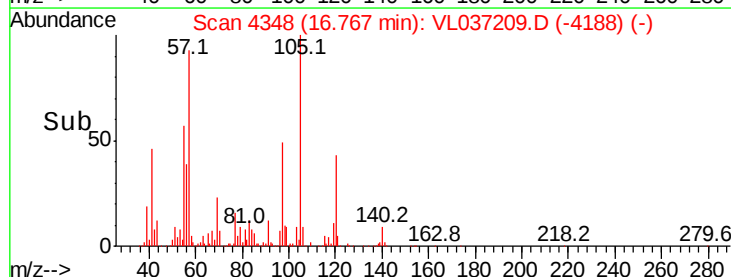
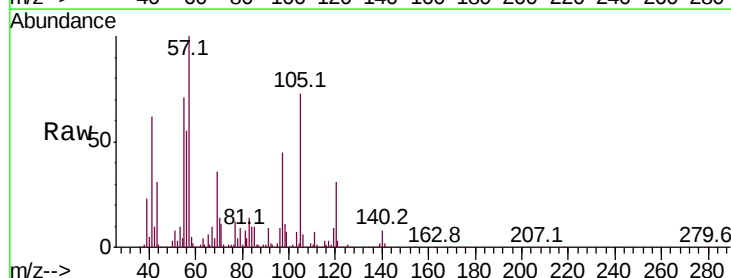
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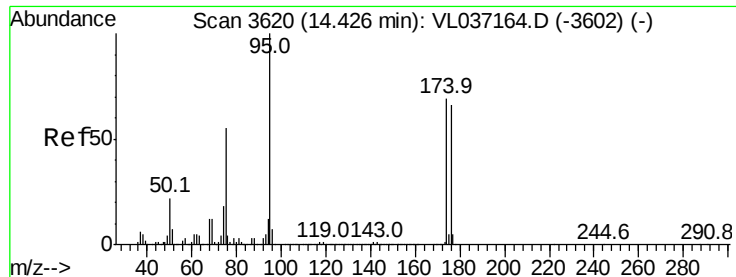
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#65
tert-Butylbenzene
Concen: 0.125 ppbv
RT: 16.77 min Scan# 4348
Delta R.T. 0.01 min
Lab File: VL037209.D
Acq: 17 Jun 2021 20:01

Tgt Ion	Ratio	Lower	Upper
119	100		
91	121.9	62.6	93.8#
134	2.0	16.2	24.4#





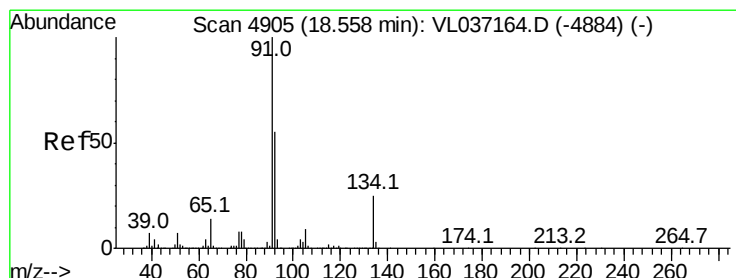
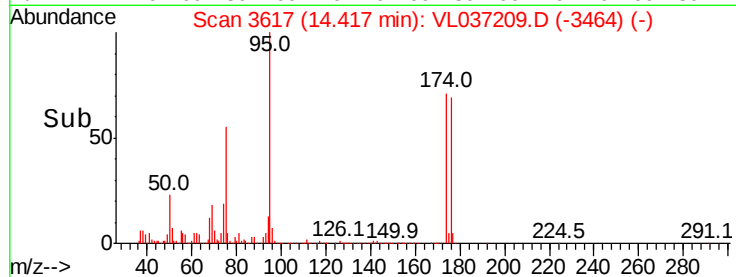
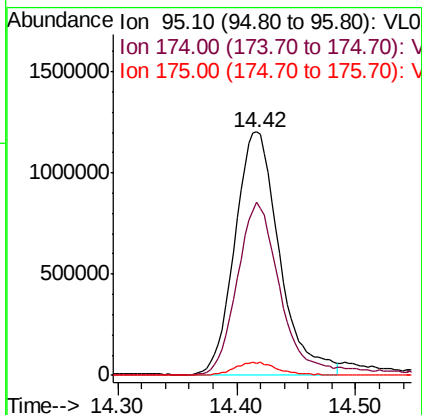
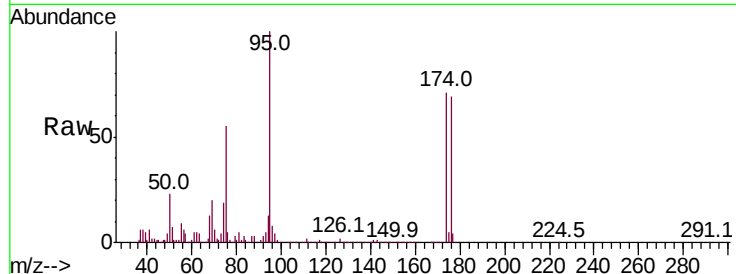
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.057 ppbv
 RT: 14.42 min Scan# 3617
 Delta R.T. -0.01 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tot Ion	95	174	175
3100406	100	72.9	5.4
Resp		57.0	4.4
Lower		85.4	6.6
Upper			

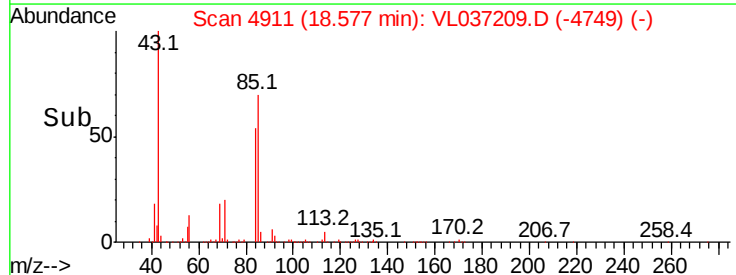
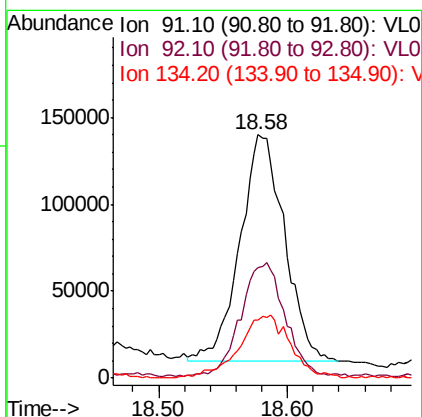
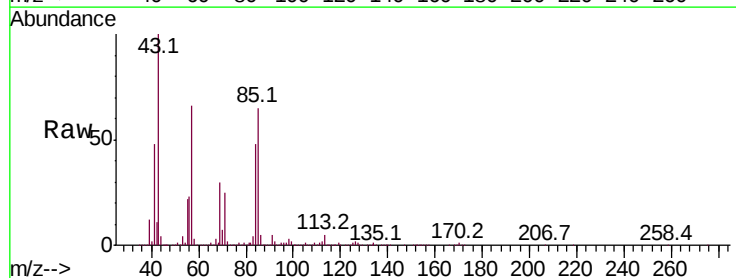
Manual Integrations
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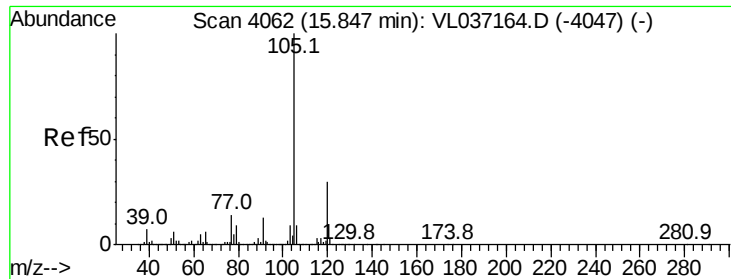
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#70
 n-Butylbenzene
 Concen: 0.531 ppbv
 RT: 18.58 min Scan# 4911
 Delta R.T. 0.02 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Tgt Ion	91	92	134
315659	100	48.9	32.2
Resp		44.0	20.2
Lower		66.0	30.4
Upper			





#72

4-Ethyltoluene

Concen: 0.289 ppbv

RT: 15.84 min Scan# 4061

Delta R.T. -0.00 min

Lab File: VL037209.D

Acq: 17 Jun 2021 20:01

Instrument :

MSVOA_L

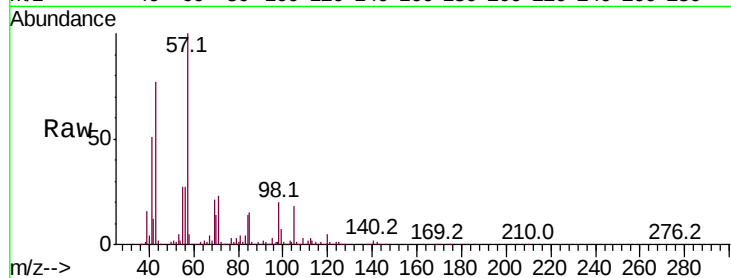
ClientSampled :

SV1

Tot Ion	Ratio	Resp	Lower	Upper
105	100			
120	33.0	24.7	37.1	
91	18.7	10.2	15.4	
77	14.7	11.0	16.6	

Manual Integrations
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6/21/2021 12:58:30 PM

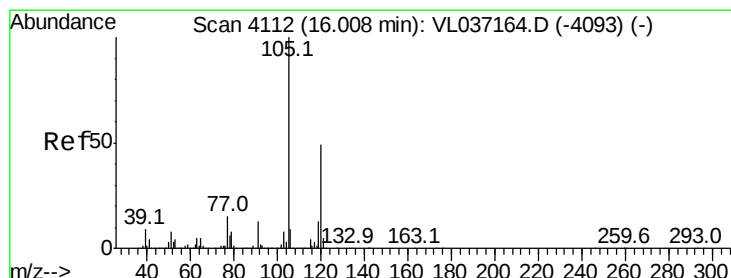
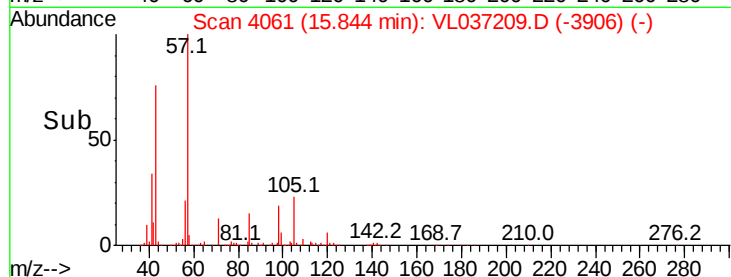
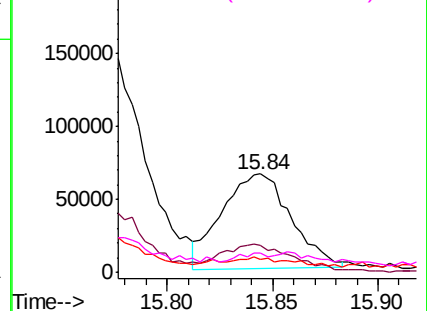


Abundance Ion 105.10 (104.80 to 105.80): V

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



#73

1,3,5-Trimethylbenzene

Concen: 0.365 ppbv m

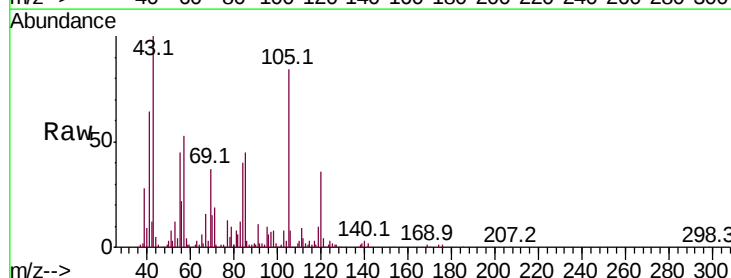
RT: 16.00 min Scan# 4109

Delta R.T. -0.01 min

Lab File: VL037209.D

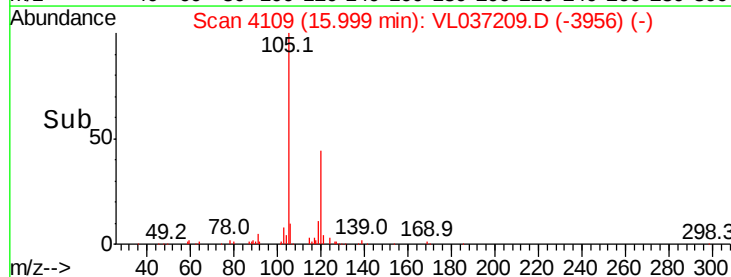
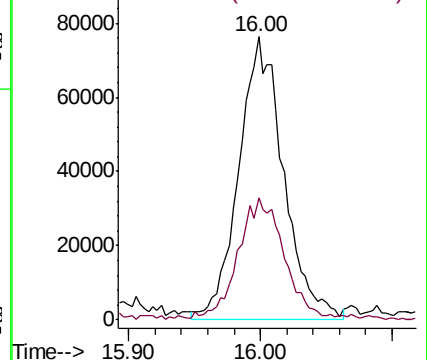
Acq: 17 Jun 2021 20:01

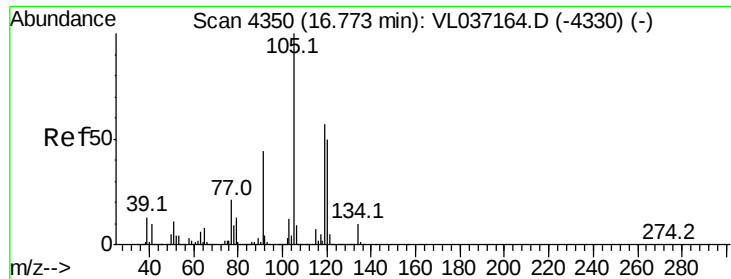
Tgt Ion	Ratio	Resp	Lower	Upper
105	100			
120	43.4	39.4	59.2	



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74
 1,2,4-Trimethylbenzene
 Concen: 1.199 ppbv
 RT: 16.77 min Scan# 4348
 Delta R.T. -0.01 min
 Lab File: VL037209.D
 Acq: 17 Jun 2021 20:01

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Tot Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	43.5	39.8	59.8
91	11.3	37.0	55.4#
77	14.0	17.0	25.4#

Manual Integrations
 APPROVED

MMDadoda
 6/21/2021 12:58:30 PM

