

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081820\
 Data File : VL035465.D
 Acq On : 19 Aug 2020 11:46
 Operator : SY/AP
 Sample : L3730-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Manual Integrations
 APPROVED

MMDadoda
 8/20/2020 11:07:53 AM

Quant Time: Aug 20 03:25:45 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 17 2020
 QLast Update : Mon Aug 17 19:28:30 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1053850	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4839353	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	4828089	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	3495645	10.34	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	60043	0.307	ppbv	99
3) Chlorodifluoromethane	2.99	51	85165m	0.645	ppbv	
4) Chloromethane	3.14	50	37636	0.547	ppbv	97
9) Propene	3.02	41	48530m	0.914	ppbv	
10) Heptane	8.14	43	29571m	0.212	ppbv	
11) Trichlorofluoromethane	3.95	101	72942	0.238	ppbv	97
13) Ethanol	3.61	45	1213270	62.351	ppbv	99
15) Acetone	3.85	43	1709806	14.096	ppbv #	82
17) tert-Butyl alcohol	4.32	59	21826m	0.139	ppbv	
19) Isopropyl Alcohol	3.98	45	3386811	40.510	ppbv #	99
20) Methylene Chloride	4.35	84	159182	1.626	ppbv #	64
26) Hexane	5.70	57	123489	0.927	ppbv #	43
29) Chloroform	5.76	83	27555	0.103	ppbv	97
30) Cyclohexane	7.14	84	49391	0.334	ppbv #	59
34) 2-Butanone	5.26	43	134290	0.831	ppbv #	74
35) Carbon Tetrachloride	7.03	117	16487m	0.064	ppbv	
36) Benzene	6.90	78	52525	0.148	ppbv #	90
41) Tetrahydrofuran	6.07	42	42617m	0.478	ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	123625	0.267	ppbv	94
50) 4-Methyl-2-Pentanone	8.76	43	181795	0.784	ppbv #	83
52) Tetrachloroethene	11.24	164	16303m	0.075	ppbv	
53) Toluene	9.82	91	521933	1.141	ppbv	99
58) Ethyl Benzene	12.73	91	47170	0.081	ppbv #	86
59) m/p-Xylene	12.99	91	110842m	0.225	ppbv	
60) o-Xylene	13.72	91	44675	0.093	ppbv	89
61) Styrene	13.55	104	172517	0.446	ppbv #	88
74) 1,2,4-Trimethylbenzene	16.79	105	82434	0.130	ppbv #	70

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

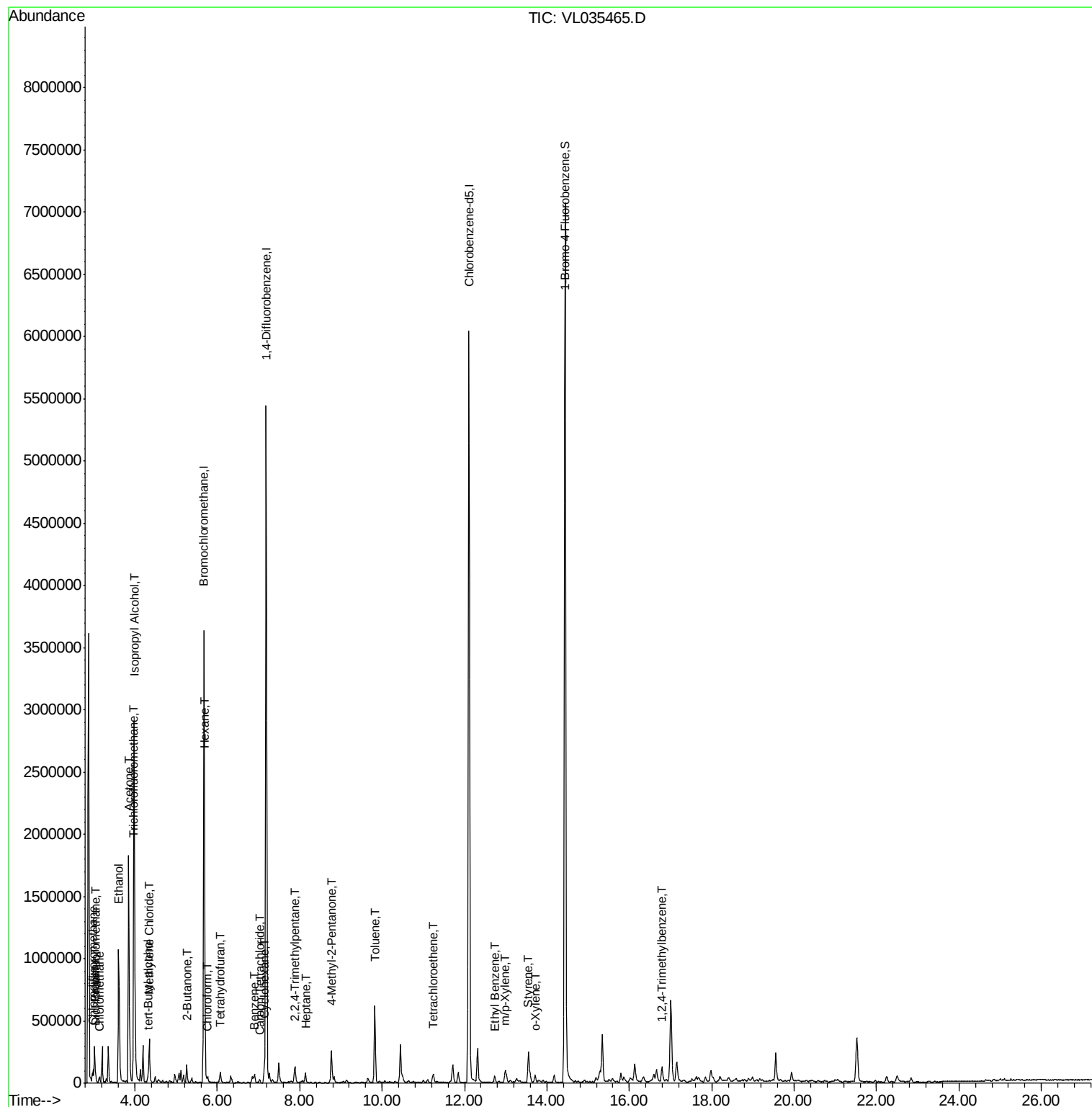
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081820\
Data File : VL035465.D
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Quant Time: Aug 20 03:25:45 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug
QLast Update : Mon Aug 17 19:28:30 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.00 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Instrument :

MSVOA_L

ClientSampled :

IA-2

Tot Ion: 49 Resp: 1053850

Ion Ratio Lower Upper

49 100

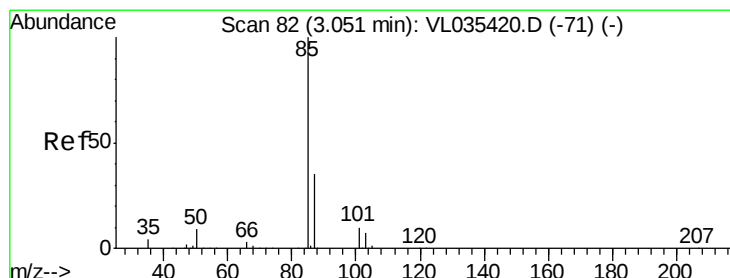
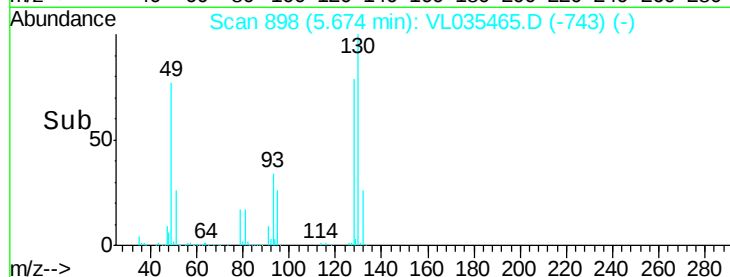
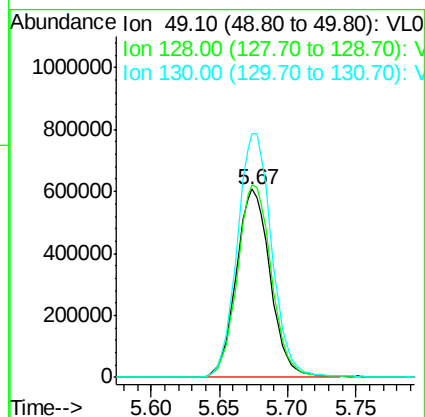
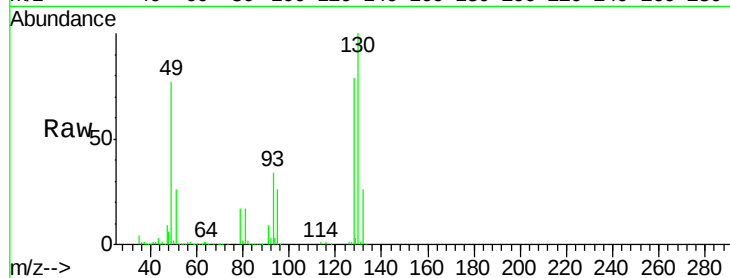
128 103.4 20.9 62.7#

130 132.5 26.7 80.1#

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#2

Dichlorodifluoromethane

Concen: 0.307 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL035465.D

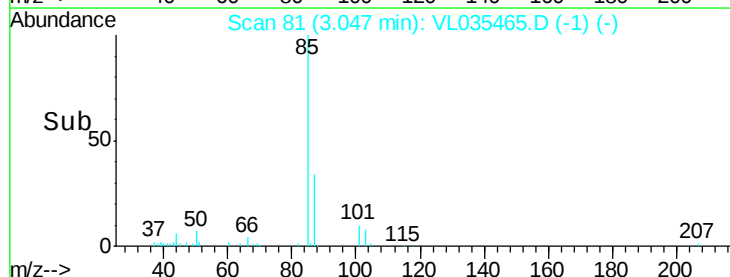
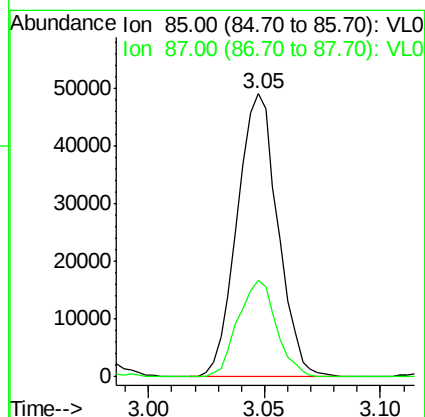
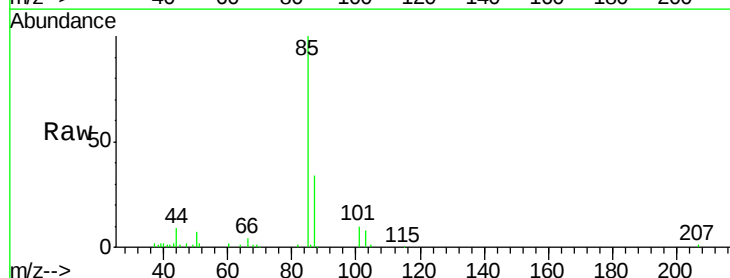
Acq: 19 Aug 2020 11:46

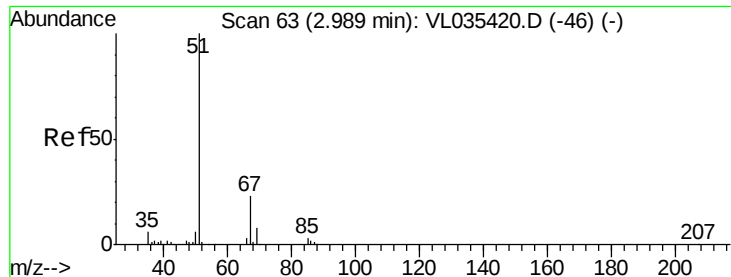
Tgt Ion: 85 Resp: 60043

Ion Ratio Lower Upper

85 100

87 34.2 27.1 40.7





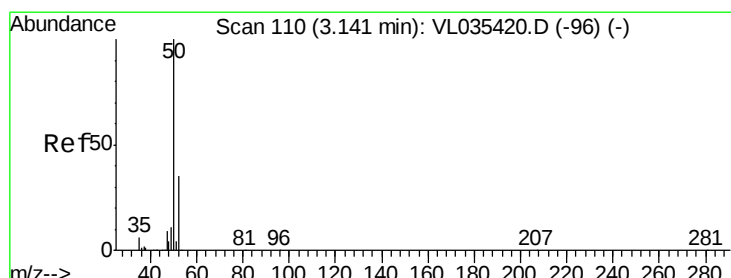
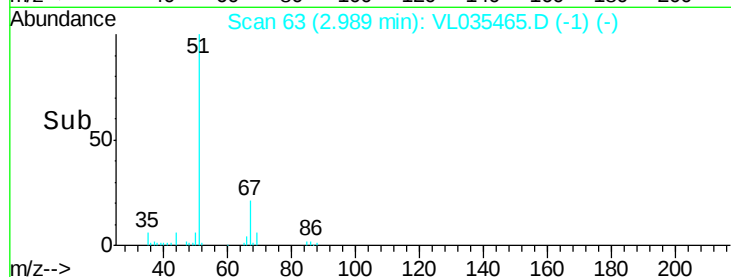
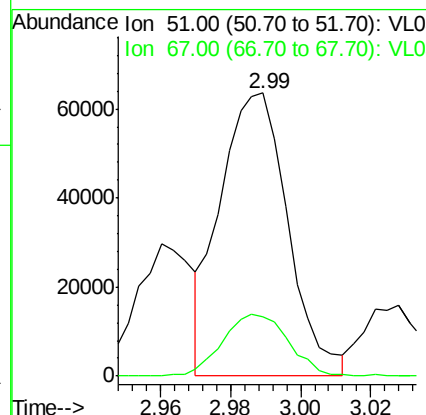
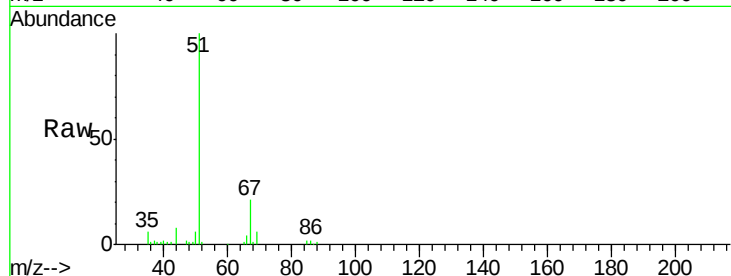
#3
Chlorodifluoromethane
Concen: 0.645 ppbv
RT: 2.99 min Scan# 63
Delta R.T. 0.01 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	51	Resp	85165
Ion Ratio	100	Lower	Upper
51	100		
67	21.7	15.0	22.6

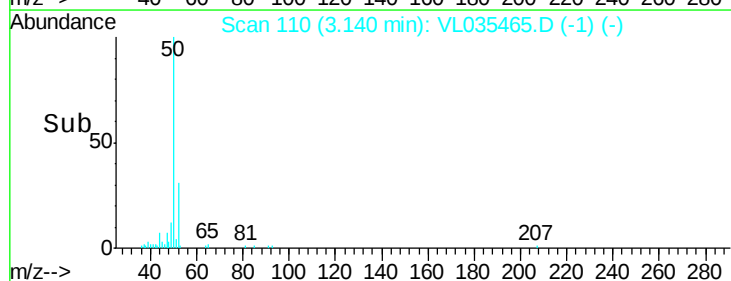
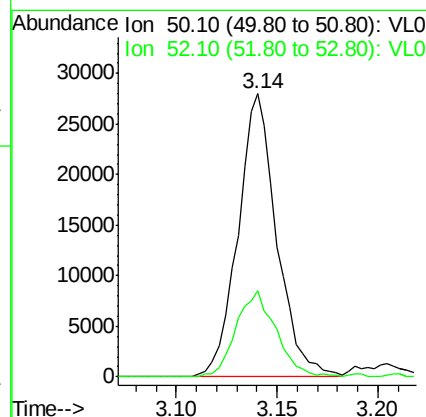
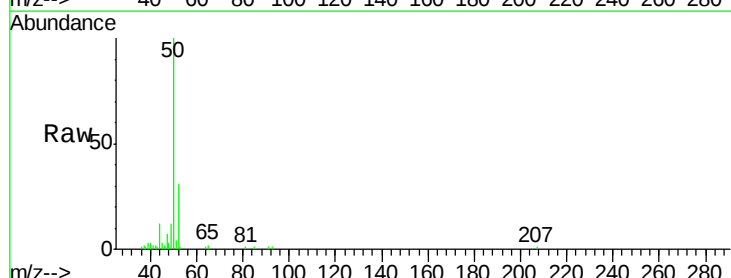
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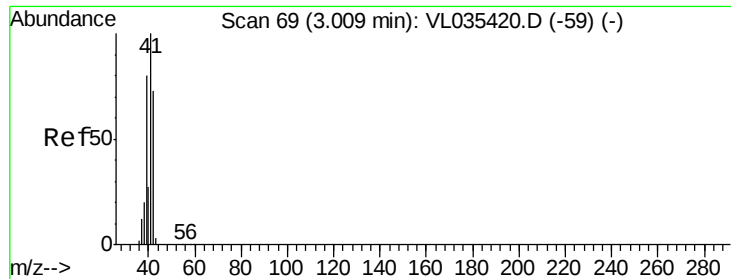
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#4
Chloromethane
Concen: 0.547 ppbv
RT: 3.14 min Scan# 110
Delta R.T. 0.01 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion	50	Resp	37636
Ion Ratio	100	Lower	Upper
50	100		
52	30.7	25.9	38.9





#9

Propene

Concen: 0.914 ppbv m

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Instrument :

MSVOA_L

ClientSampleId :

IA-2

Tot Ion: 41 Resp: 48530

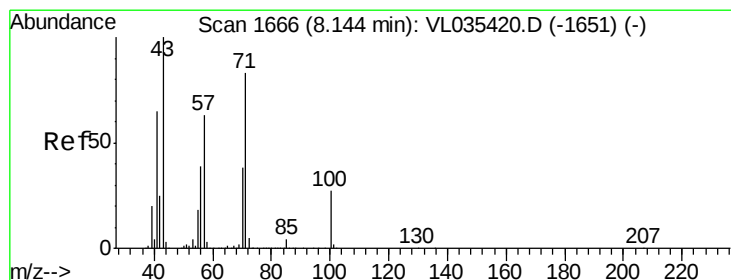
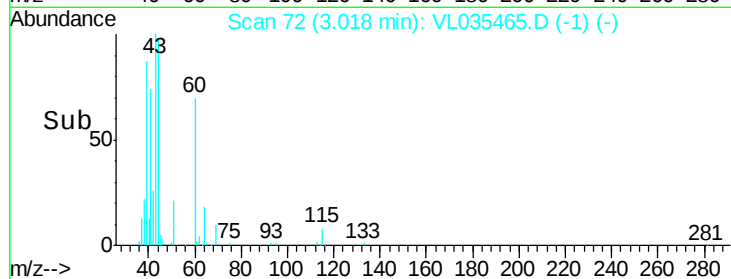
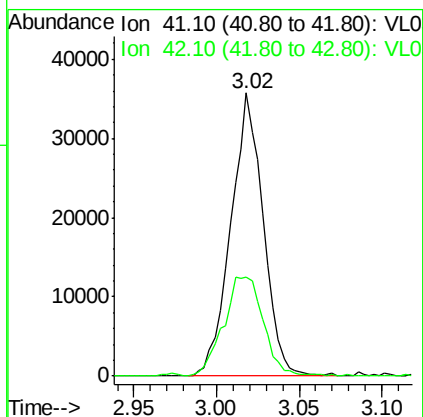
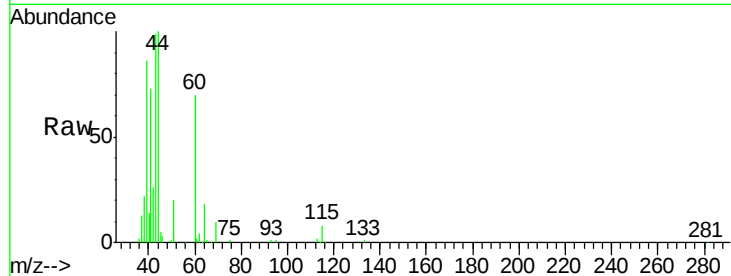
Ion Ratio Lower Upper

41 100

42 89.9 55.5 83.3#

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#10

Heptane

Concen: 0.212 ppbv m

RT: 8.14 min Scan# 1665

Delta R.T. 0.00 min

Lab File: VL035465.D

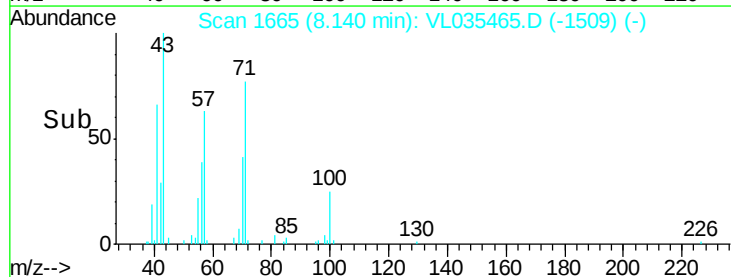
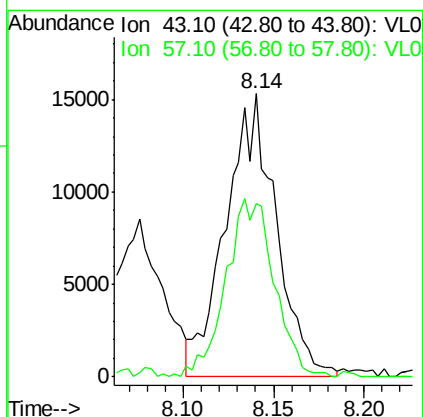
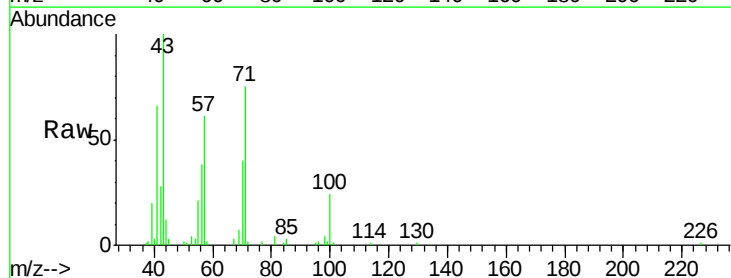
Acq: 19 Aug 2020 11:46

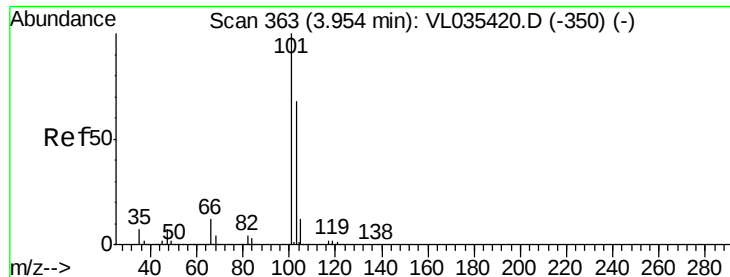
Tgt Ion: 43 Resp: 29571

Ion Ratio Lower Upper

43 100

57 60.9 39.8 59.6#





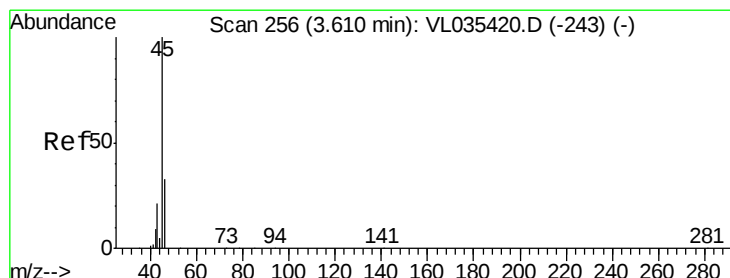
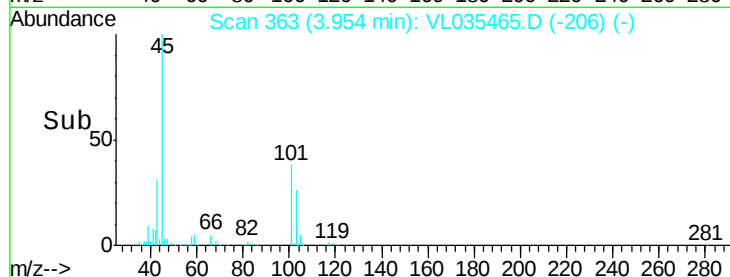
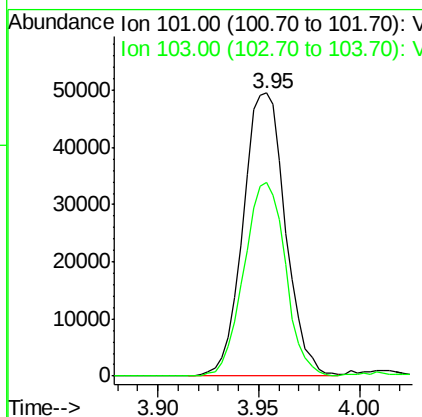
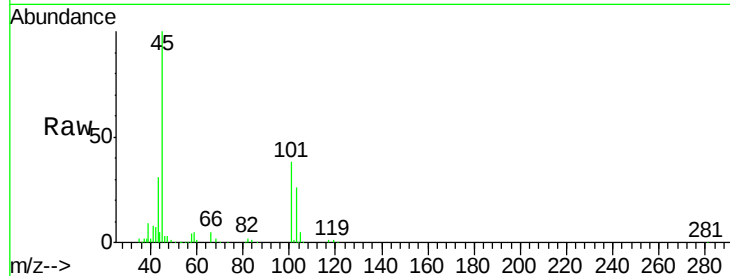
#11
 Trichlorofluoromethane
 Concen: 0.238 ppbv
 RT: 3.95 min Scan# 363
 Delta R.T. 0.01 min
 Lab File: VL035465.D
 Acq: 19 Aug 2020 11:46

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2

Tot Ion:101 Resp: 72942
 Ion Ratio Lower Upper
 101 100
 103 68.4 52.6 78.8

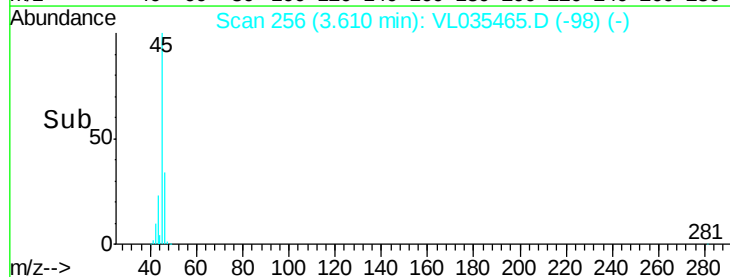
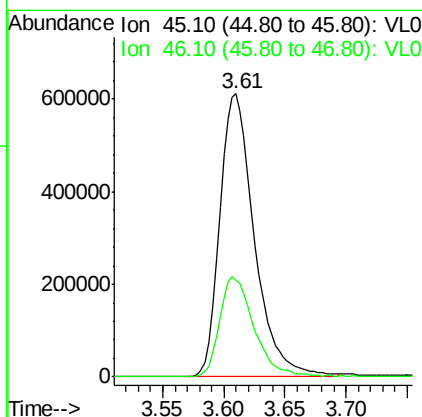
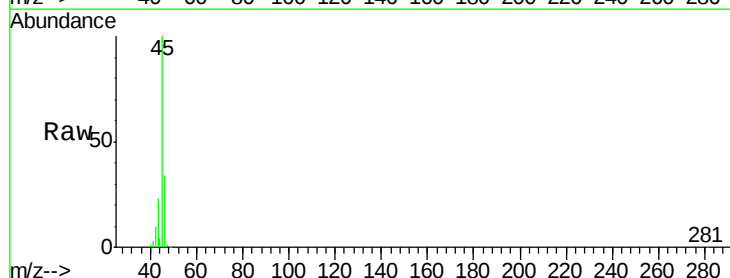
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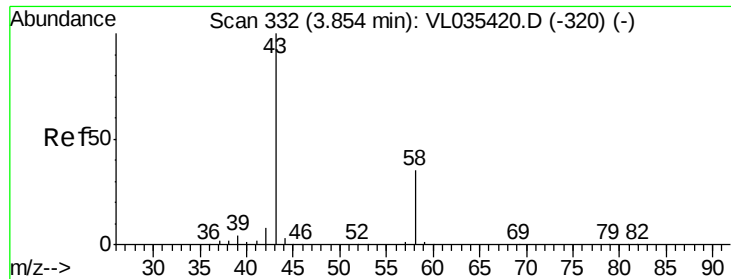
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#13
 Ethanol
 Concen: 62.351 ppbv
 RT: 3.61 min Scan# 256
 Delta R.T. 0.01 min
 Lab File: VL035465.D
 Acq: 19 Aug 2020 11:46

Tgt Ion: 45 Resp: 1213270
 Ion Ratio Lower Upper
 45 100
 46 35.9 14.2 56.6





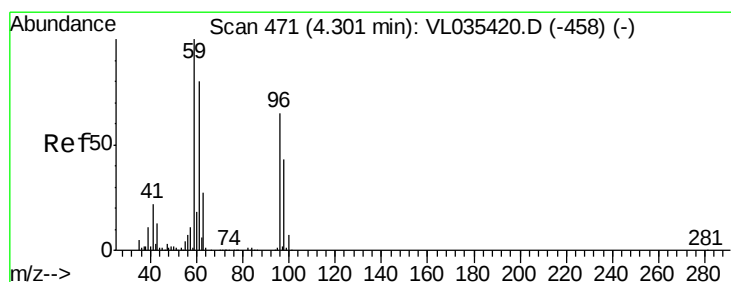
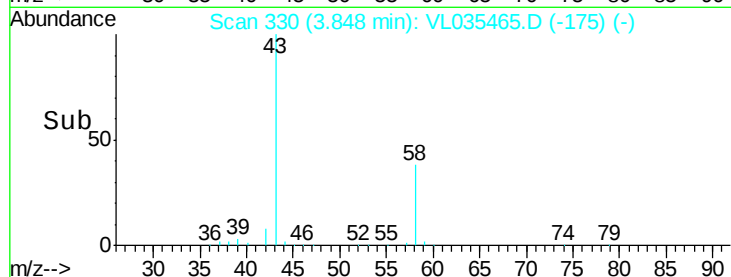
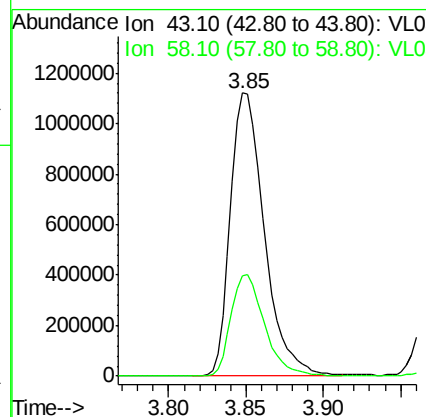
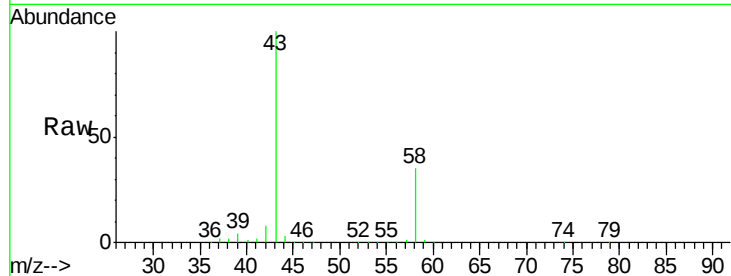
#15
Acetone
Concen: 14.096 ppbv
RT: 3.85 min Scan# 330
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion: 43 Resp: 1709806
Ion Ratio Lower Upper
43 100
58 35.5 21.0 31.6#

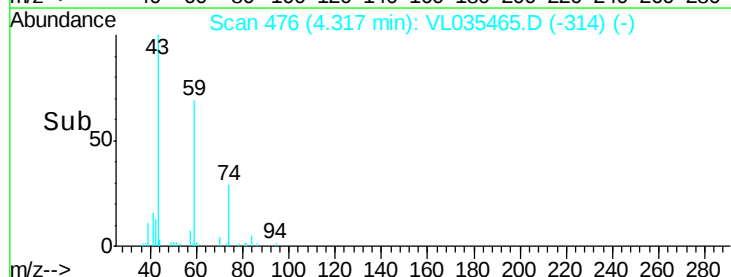
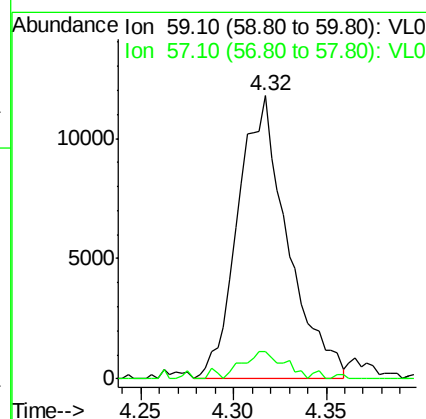
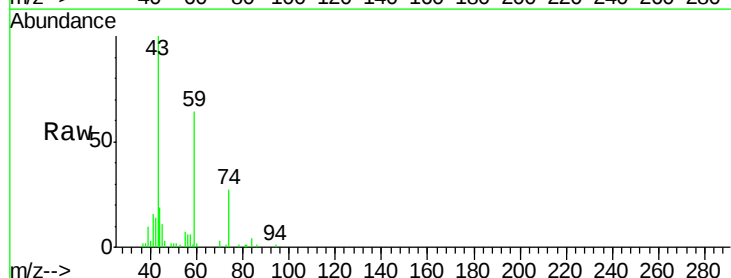
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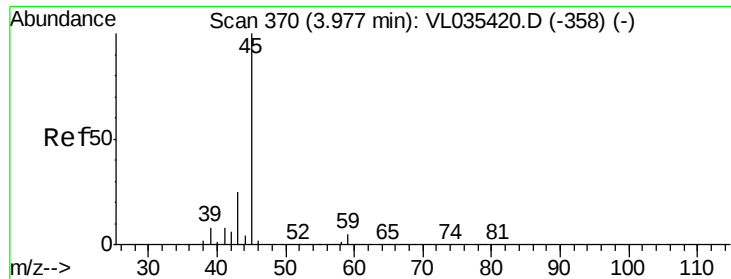
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#17
tert-Butyl alcohol
Concen: 0.139 ppbv m
RT: 4.32 min Scan# 476
Delta R.T. 0.02 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion: 59 Resp: 21826
Ion Ratio Lower Upper
59 100
57 74.1 8.9 13.3#





#19

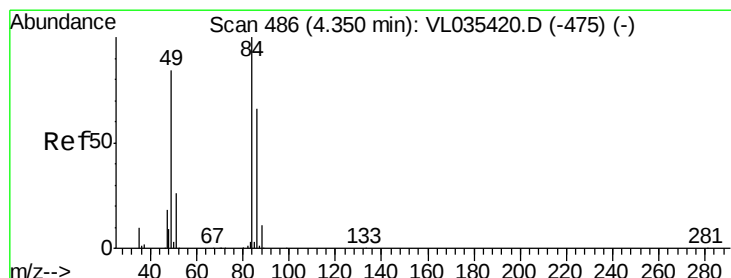
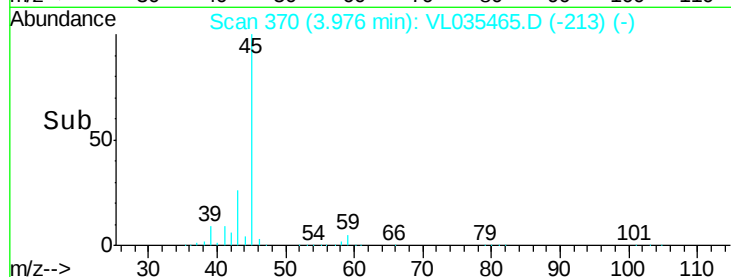
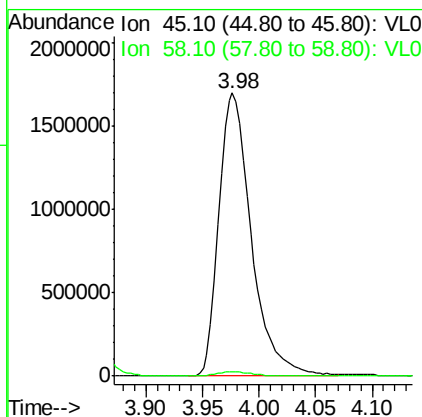
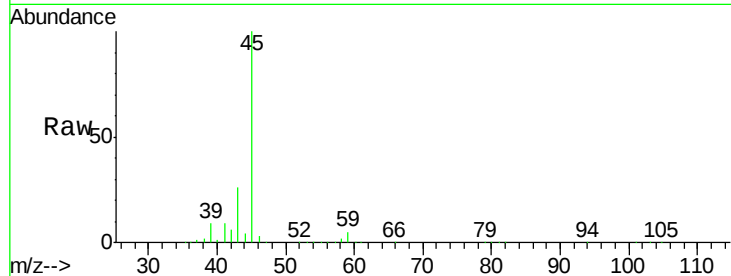
Isopropyl Alcohol
 Concen: 40.510 ppbv
 RT: 3.98 min Scan# 370
 Delta R.T. 0.01 min
 Lab File: VL035465.D
 Acq: 19 Aug 2020 11:46

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Tot Ion: 45 Resp: 3386811
 Ion Ratio Lower Upper
 45 100
 58 1.9 1.0 1.6#

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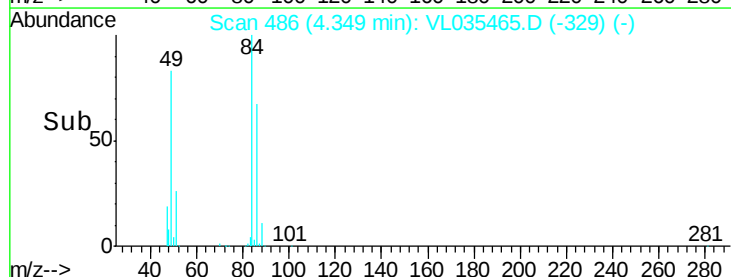
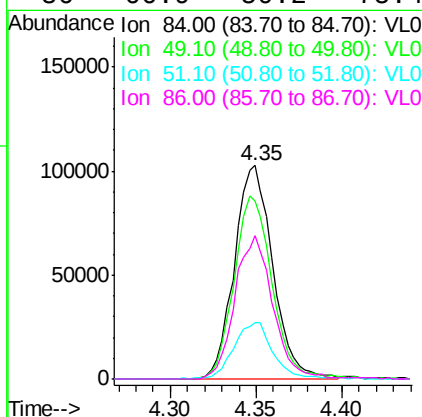
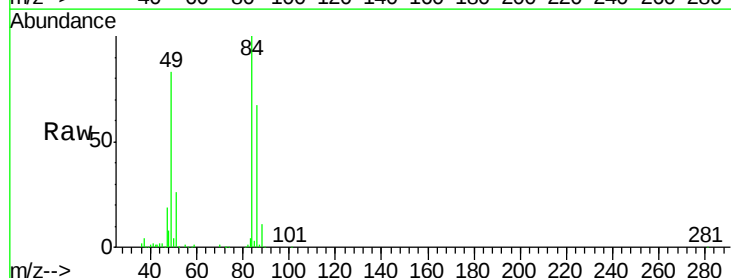
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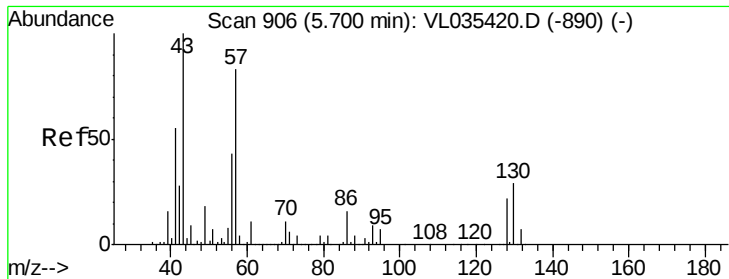


#20

Methylene Chloride
 Concen: 1.626 ppbv
 RT: 4.35 min Scan# 486
 Delta R.T. 0.01 min
 Lab File: VL035465.D
 Acq: 19 Aug 2020 11:46

Tgt Ion: 84 Resp: 159182
 Ion Ratio Lower Upper
 84 100
 49 83.2 118.6 177.8#
 51 26.3 36.4 54.6#
 86 66.9 50.2 75.4





#26

Hexane

Concen: 0.927 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.00 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Instrument :

MSVOA_L

ClientSampleId :

IA-2

Tot Ion: 57 Resp: 123489

Ion Ratio Lower Upper

57 100

41 67.8 75.5 113.3#

43 91.1 181.7 272.5#

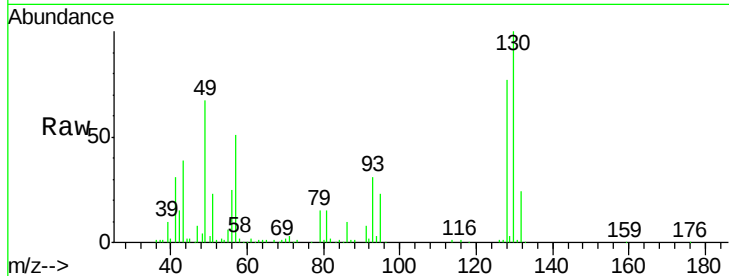
56 52.4 42.4 63.6

Manual Integrations

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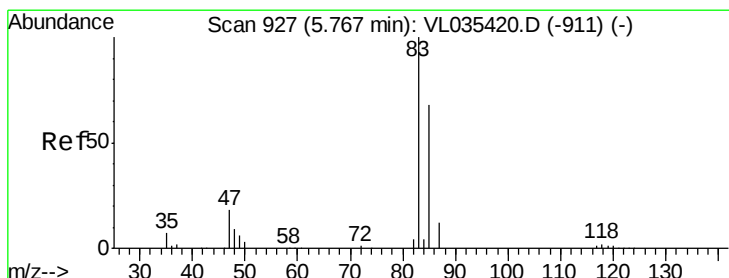
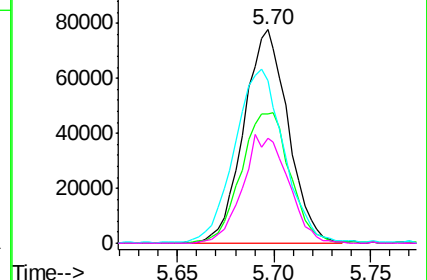
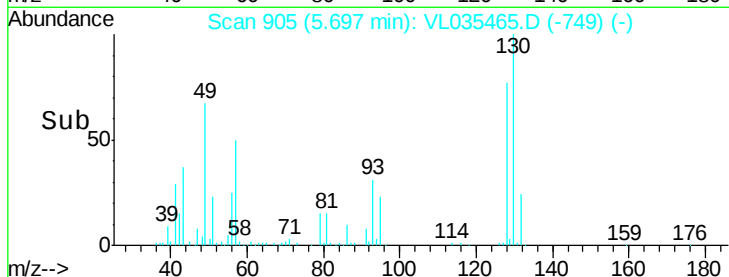


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.103 ppbv

RT: 5.76 min Scan# 924

Delta R.T. -0.00 min

Lab File: VL035465.D

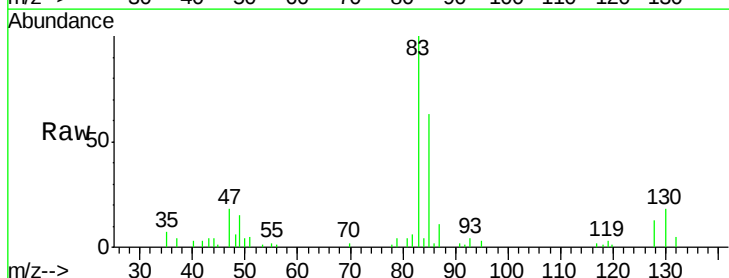
Acq: 19 Aug 2020 11:46

Tgt Ion: 83 Resp: 27555

Ion Ratio Lower Upper

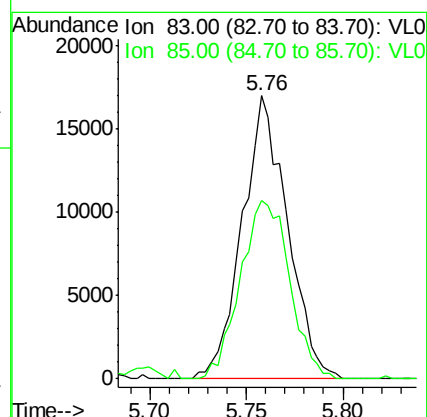
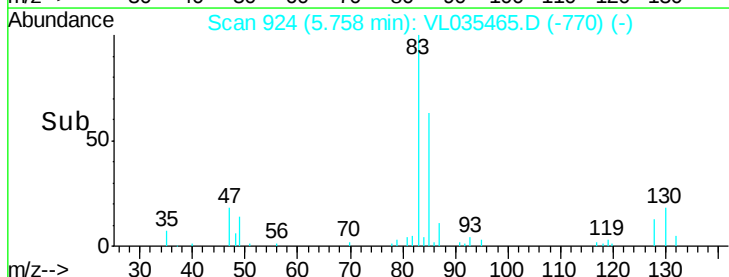
83 100

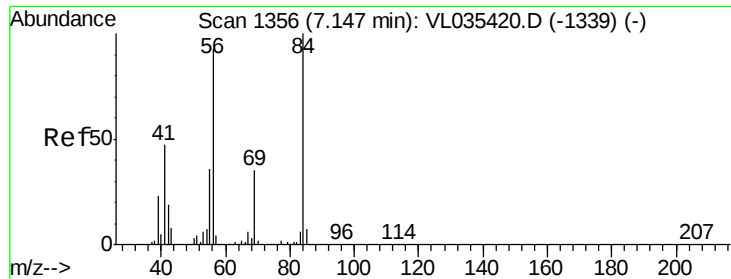
85 63.1 52.7 79.1



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





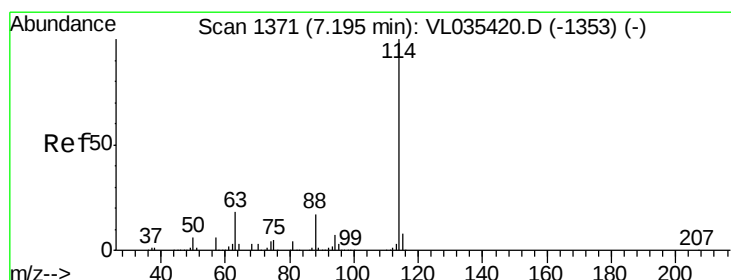
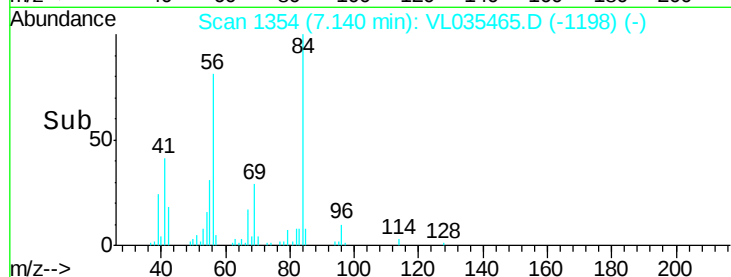
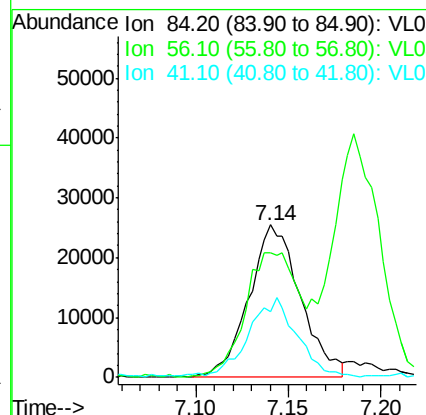
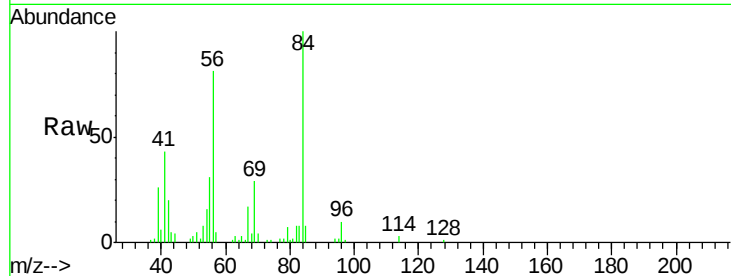
#30
Cvclohexane
Concen: 0.334 ppbv
RT: 7.14 min Scan# 1354
Delta R.T. 0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
84	100		
56	93.7	114.9	172.3#
41	51.1	72.3	108.5#

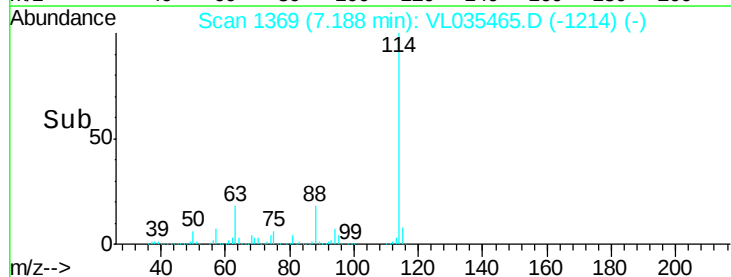
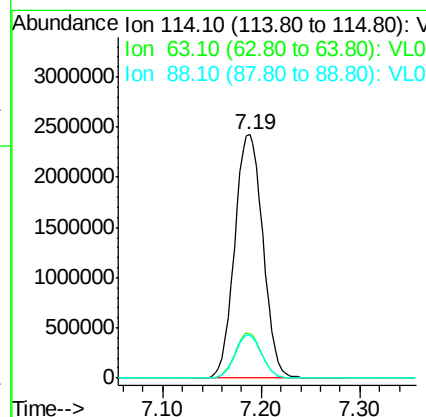
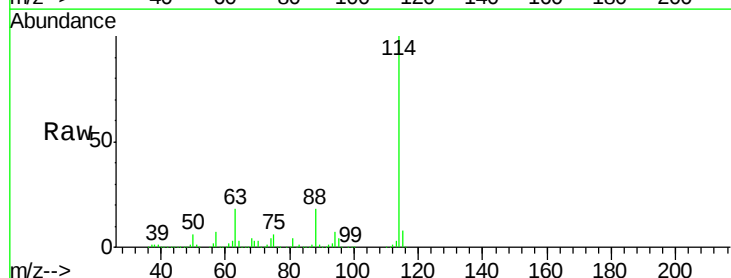
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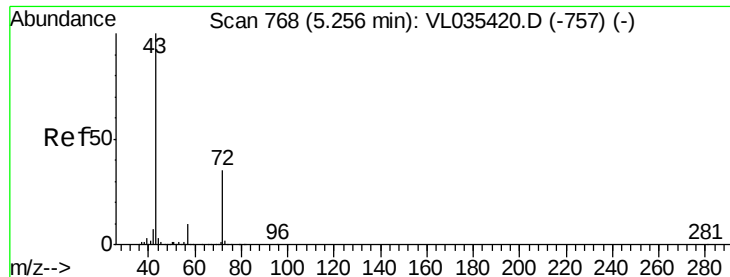
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion	Ratio	Lower	Upper
114	100		
63	17.5	23.1	34.7#
88	16.4	15.9	23.9





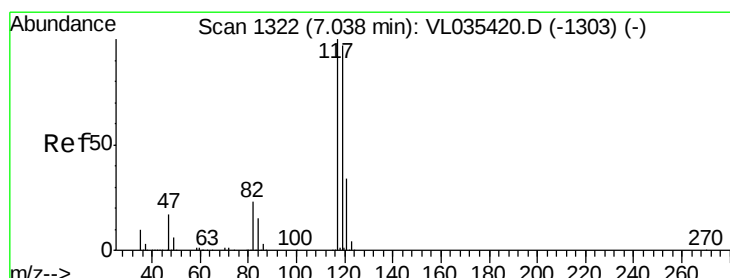
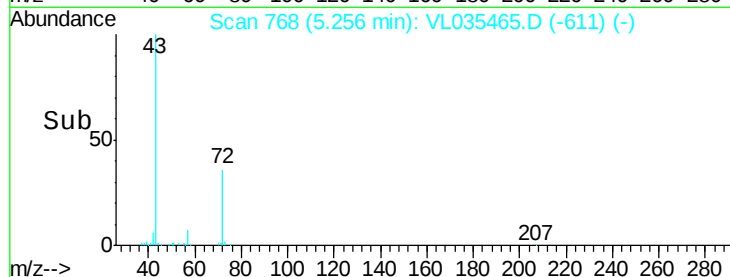
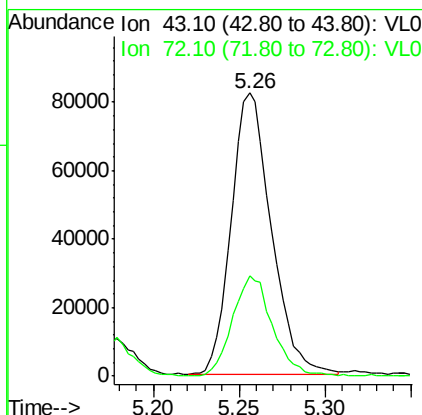
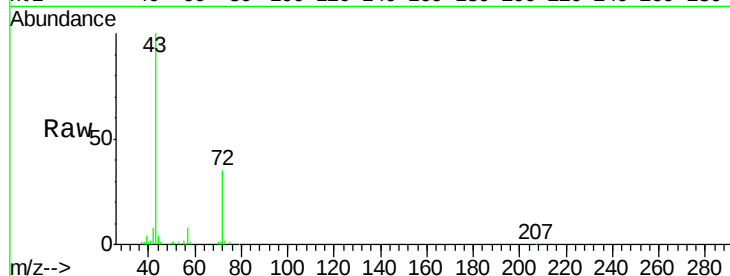
#34
2-Butanone
Concen: 0.831 ppbv
RT: 5.26 min Scan# 768
Delta R.T. 0.01 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion	43	Resp	134290
Ion Ratio	Lower	Upper	
43	100		
72	34.4	17.6	26.4#

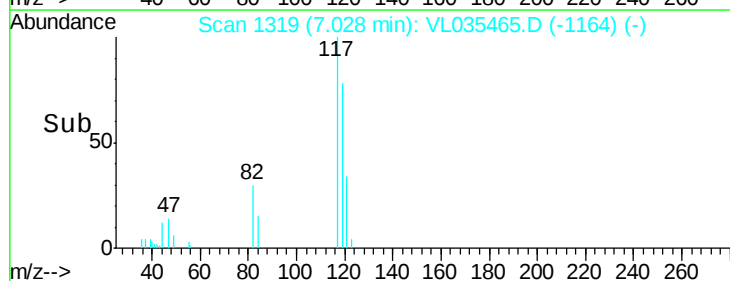
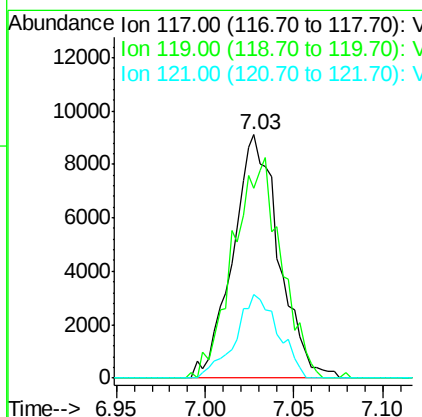
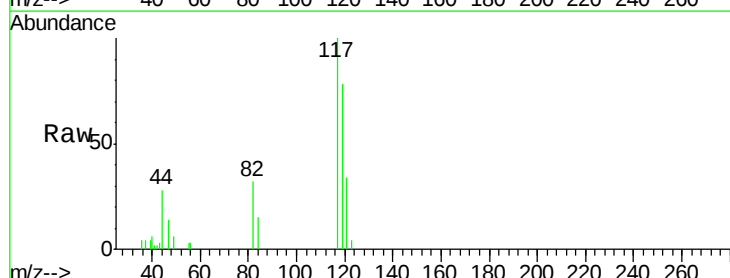
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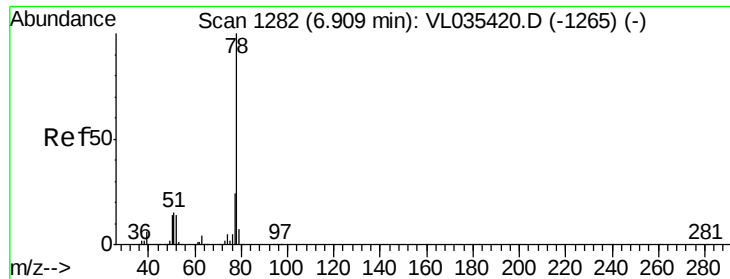
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#35
Carbon Tetrachloride
Concen: 0.064 ppbv m
RT: 7.03 min Scan# 1319
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion	117	Resp	16487
Ion Ratio	Lower	Upper	
117	100		
119	77.8	76.1	114.1
121	34.5	25.5	38.3





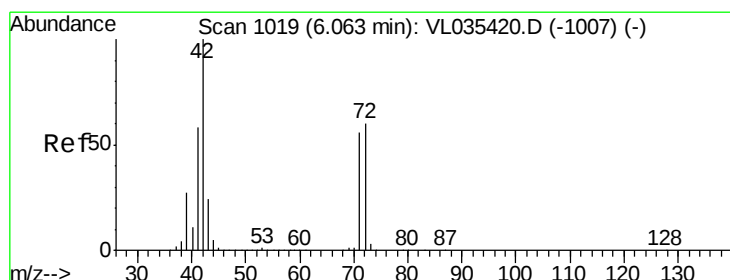
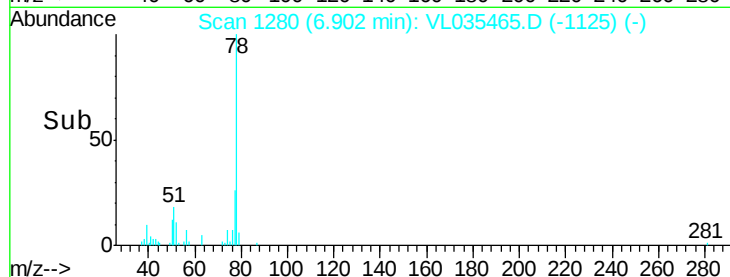
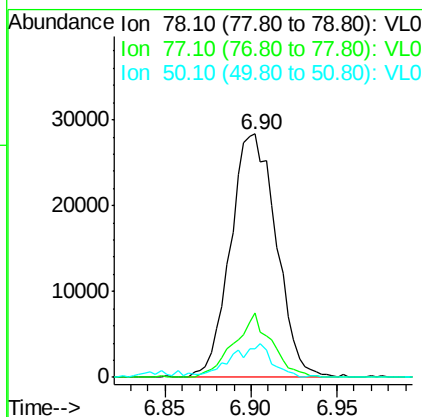
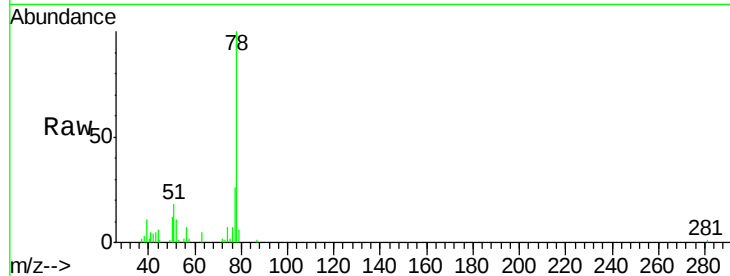
#36
Benzene
Concen: 0.148 ppbv
RT: 6.90 min Scan# 1280
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	26.3	19.6	29.4
50	11.9	16.3	24.5#

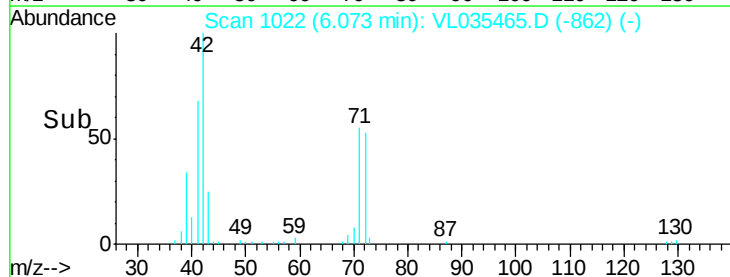
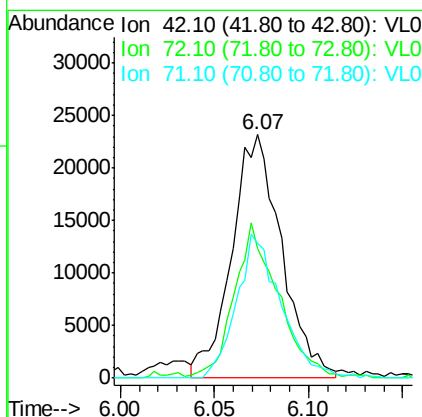
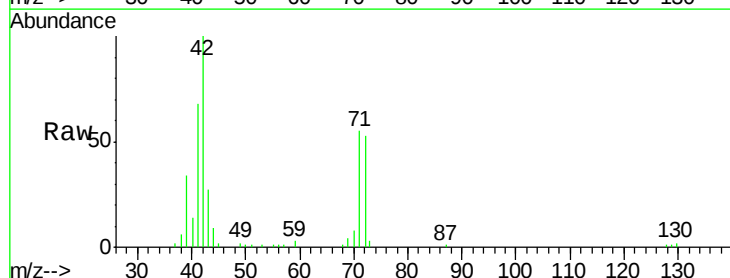
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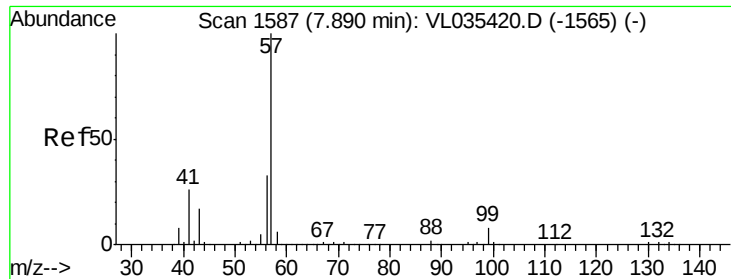
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#41
Tetrahydrofuran
Concen: 0.478 ppbv m
RT: 6.07 min Scan# 1022
Delta R.T. 0.02 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.0	29.4	44.2#
71	0.0	28.9	43.3#





#44

2,2,4-Trimethylpentane

Concen: 0.267 ppbv

RT: 7.89 min Scan# 1586

Delta R.T. 0.00 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Instrument :

MSVOA_L

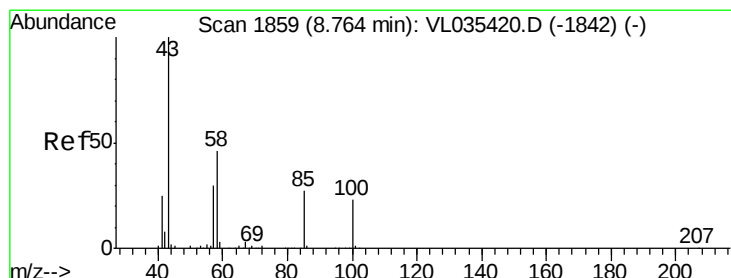
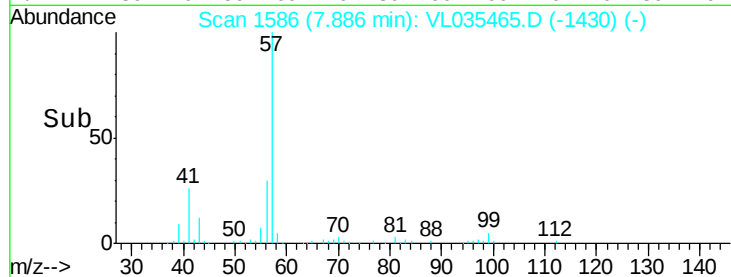
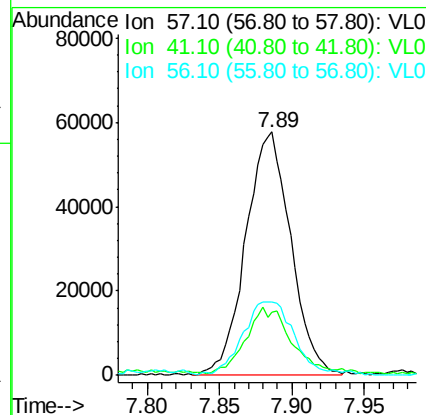
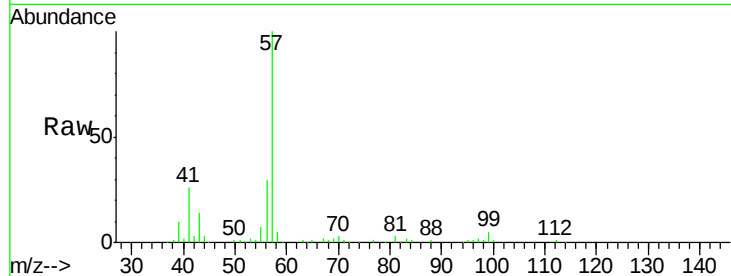
ClientSampleId :

IA-2

Tot Ion:	57	Resp:	123625
Ion Ratio	Lower	Upper	
57	100		
41	31.5	27.2	40.8
56	35.5	25.4	38.0

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#50

4-Methyl-2-Pentanone

Concen: 0.784 ppbv

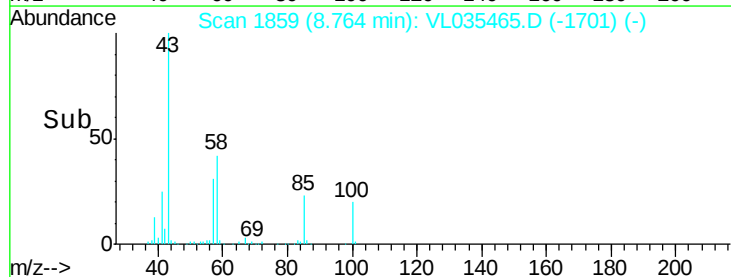
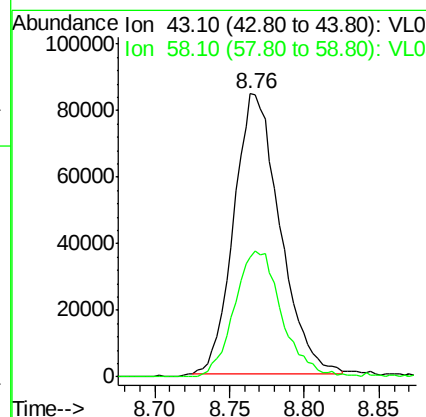
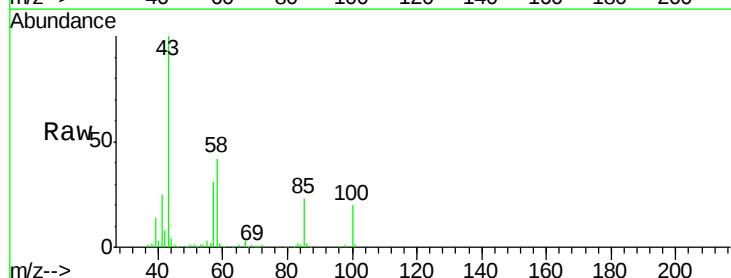
RT: 8.76 min Scan# 1859

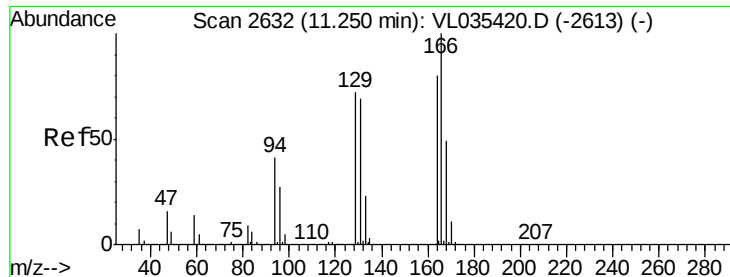
Delta R.T. 0.01 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Tgt Ion:	43	Resp:	181795
Ion Ratio	Lower	Upper	
43	100		
58	45.9	28.7	43.1#





#52

Tetrachloroethene

Concen: 0.075 ppbv m

RT: 11.24 min Scan# 2630

Delta R.T. -0.00 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Instrument :

MSVOA_L

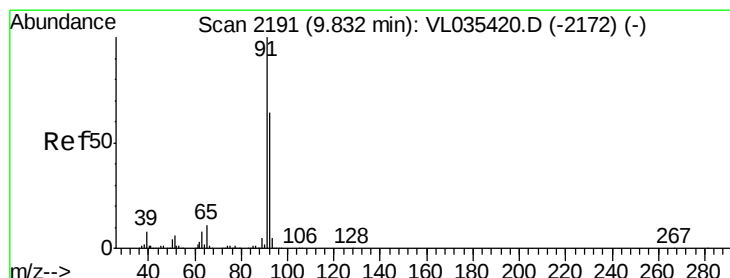
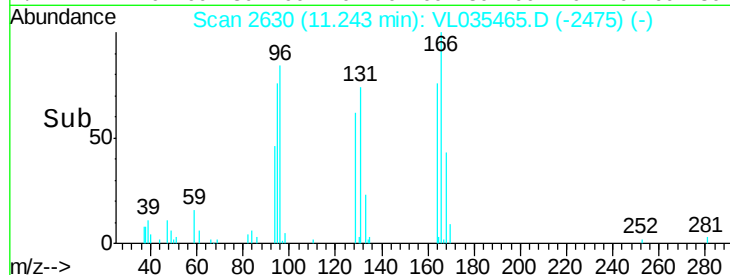
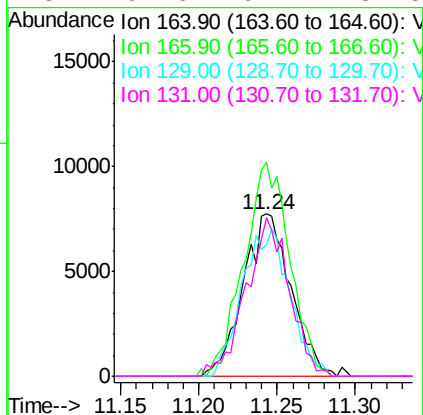
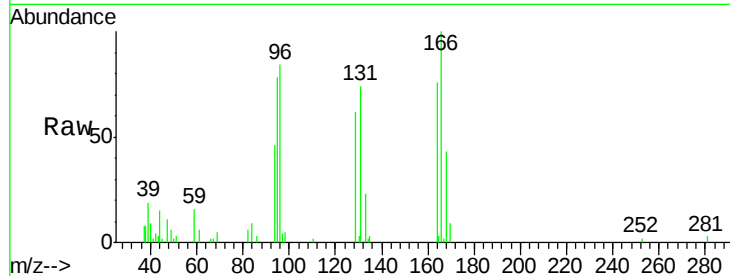
ClientSampleId :

IA-2

Tot Ion:	164	Resp:	16303
Ion	Ratio	Lower	Upper
164	100		
166	131.9	103.4	155.0
129	81.1	90.2	135.4#
131	97.6	91.7	137.5

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#53

Toluene

Concen: 1.141 ppbv

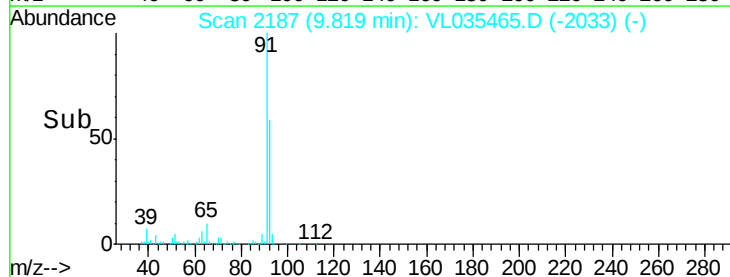
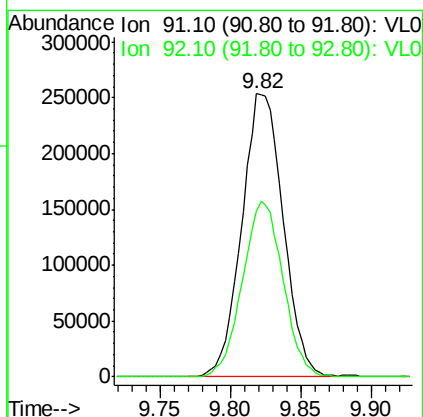
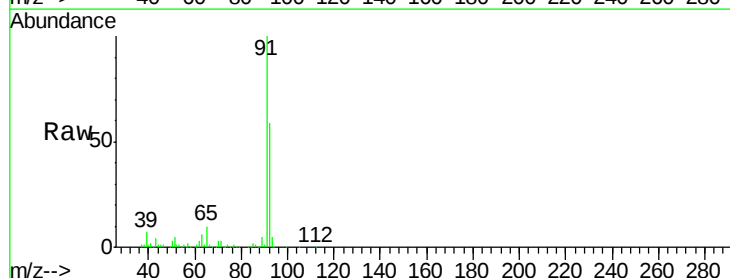
RT: 9.82 min Scan# 2187

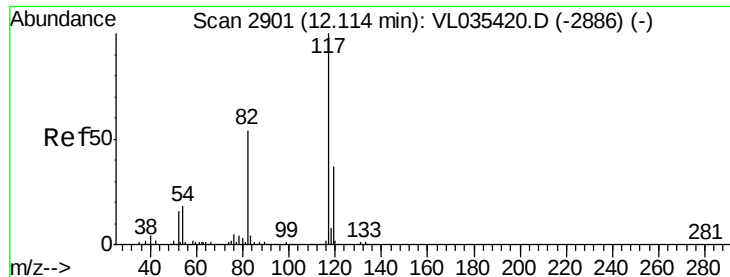
Delta R.T. -0.00 min

Lab File: VL035465.D

Acq: 19 Aug 2020 11:46

Tgt Ion:	91	Resp:	521933
Ion	Ratio	Lower	Upper
91	100		
92	60.6	49.1	73.7





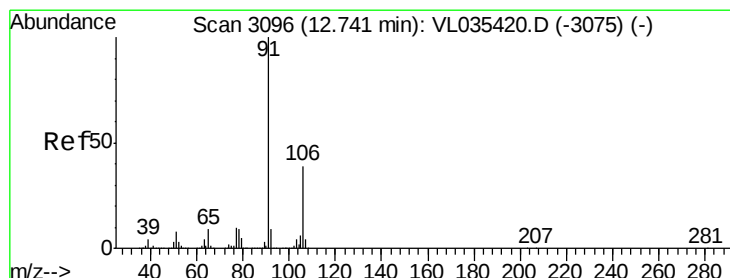
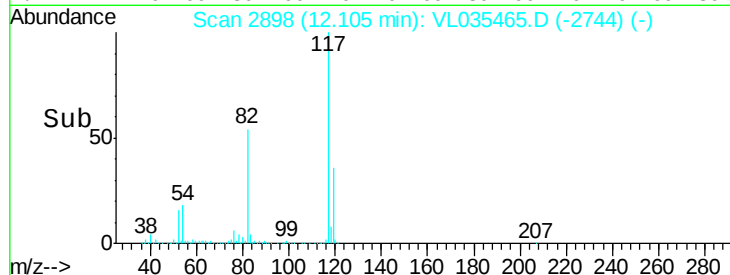
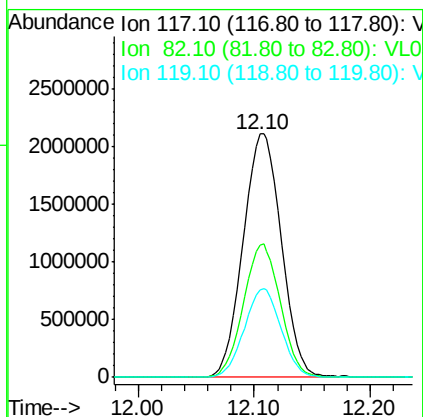
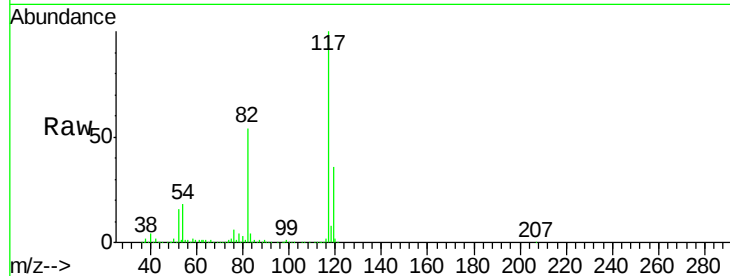
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2898
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion:117 Resp: 4828089
Ion Ratio Lower Upper
117 100
82 53.0 57.4 86.0#
119 35.1 28.4 42.6

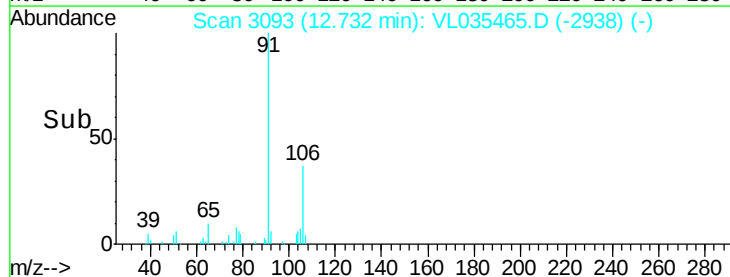
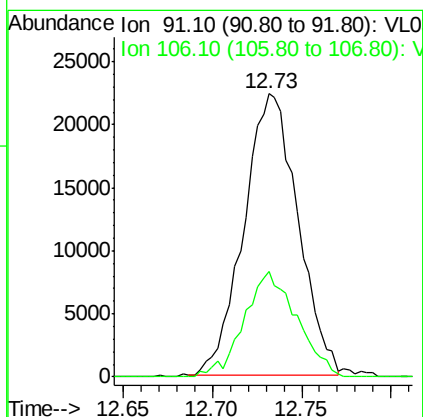
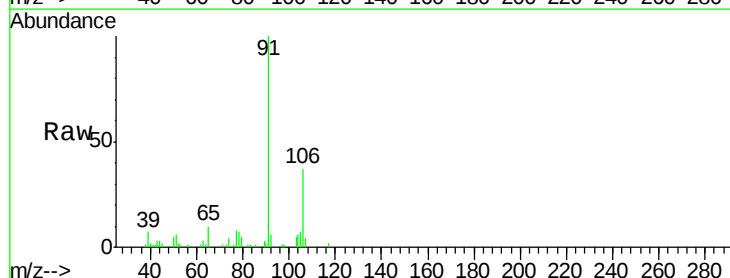
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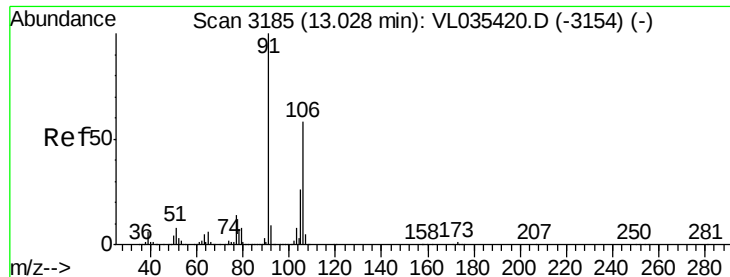
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#58
Ethyl Benzene
Concen: 0.081 ppbv
RT: 12.73 min Scan# 3093
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion: 91 Resp: 47170
Ion Ratio Lower Upper
91 100
106 37.8 24.1 36.1#





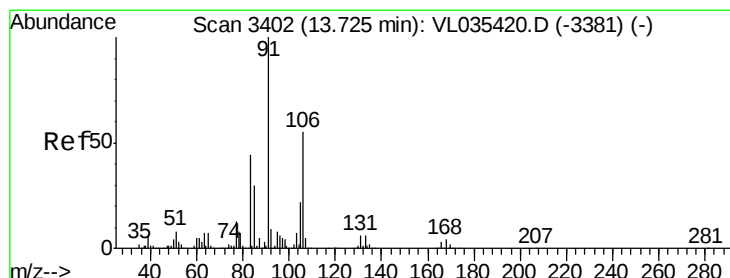
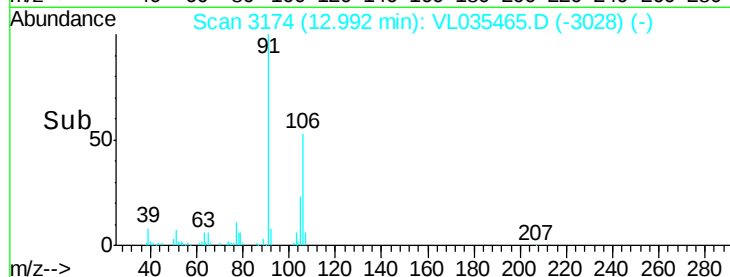
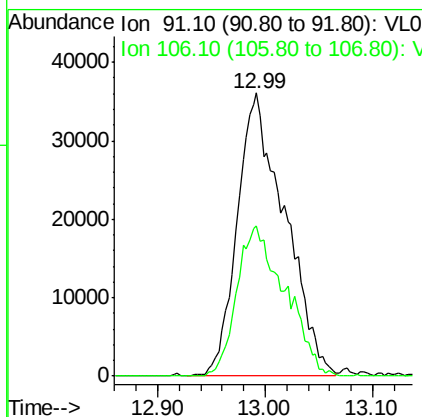
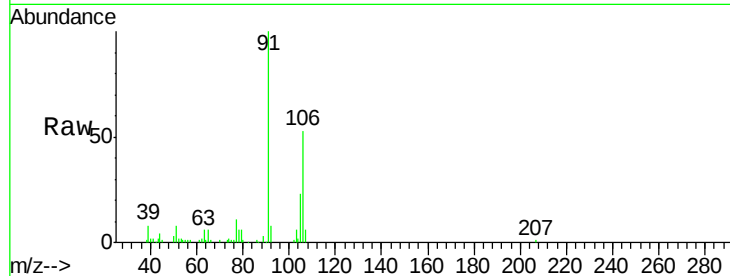
#59
m/p-Xylene
Concen: 0.225 ppbv m
RT: 12.99 min Scan# 3174
Delta R.T. -0.03 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion: 91 Resp: 110842
Ion Ratio Lower Upper
91 100
106 53.8 34.0 51.0#

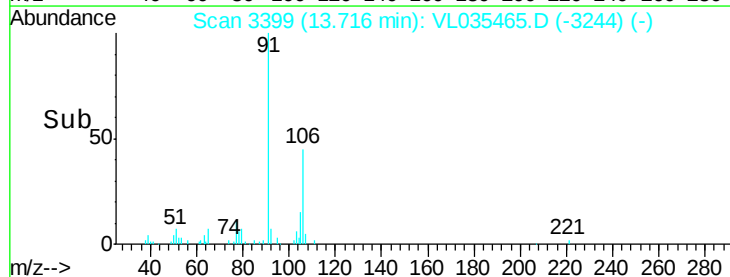
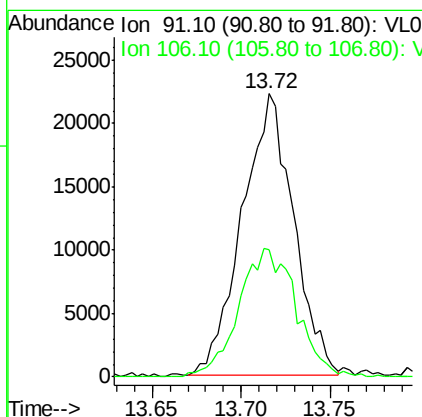
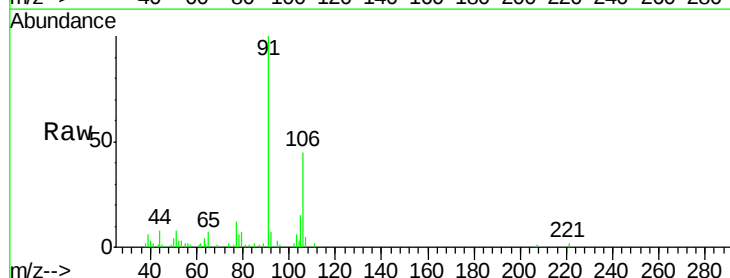
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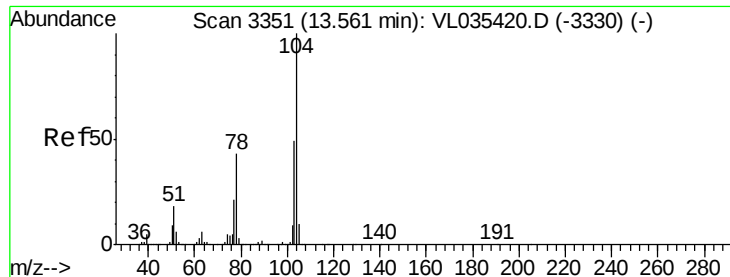
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#60
o-Xylene
Concen: 0.093 ppbv
RT: 13.72 min Scan# 3399
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion: 91 Resp: 44675
Ion Ratio Lower Upper
91 100
106 50.8 21.8 65.3





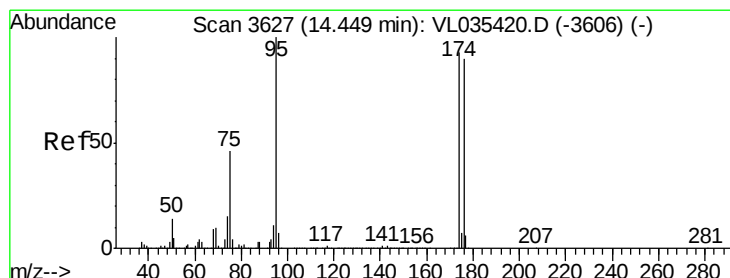
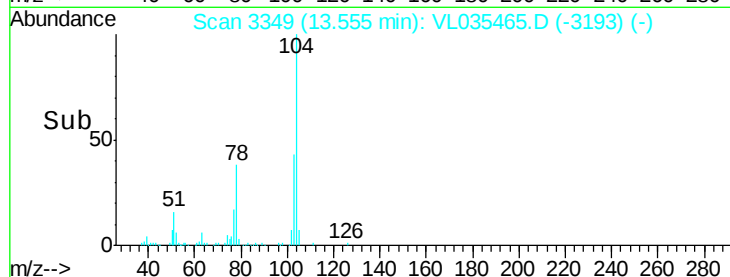
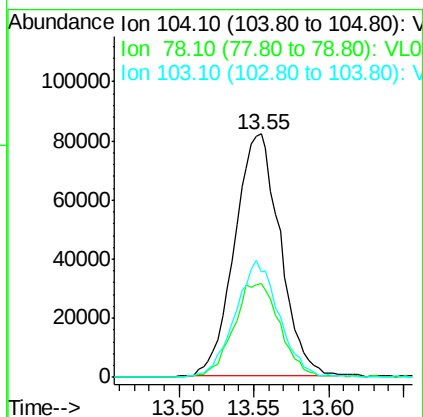
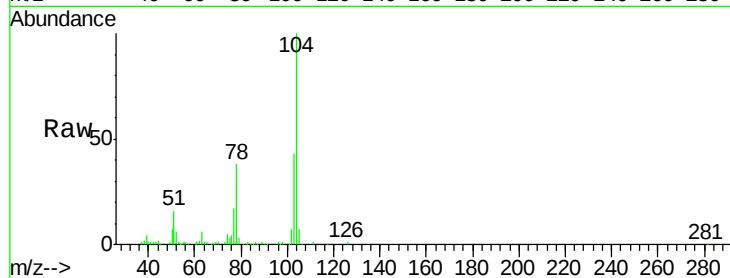
#61
Stvrene
Concen: 0.446 ppbv
RT: 13.55 min Scan# 3349
Delta R.T. 0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
104	100		
78	40.8	45.4	68.2#
103	47.3	37.8	56.8

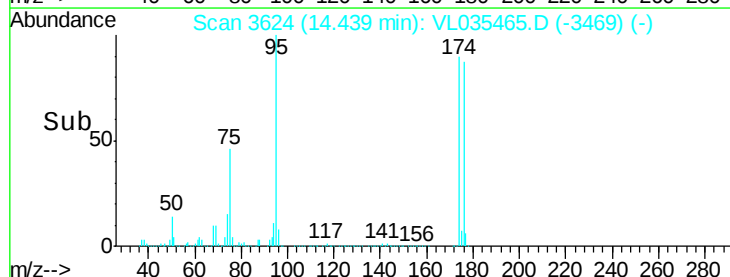
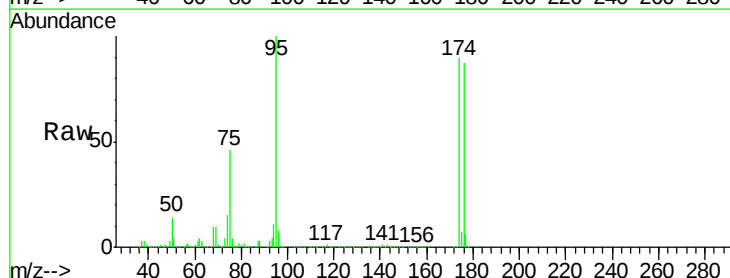
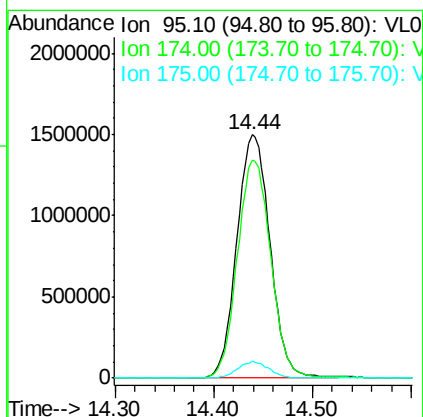
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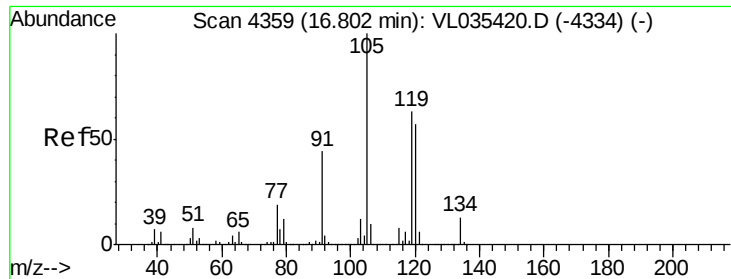
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.342 ppbv
RT: 14.44 min Scan# 3624
Delta R.T. -0.00 min
Lab File: VL035465.D
Acq: 19 Aug 2020 11:46

Tgt Ion	Ratio	Lower	Upper
95	100		
174	90.8	44.0	66.0#
175	6.6	3.2	4.8#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.130 ppbv
 RT: 16.79 min Scan# 4355
 Delta R.T. -0.00 min
 Lab File: VL035465.D
 Acq: 19 Aug 2020 11:46

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Tot Ion:	105	Resp:	82434
Ion Ratio	Lower	Upper	
105	100		
120	48.7	37.8	56.8
91	11.3	40.0	60.0#
77	9.7	18.8	28.2#

Manual Integrations
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MMDadoda
 8/20/2020 11:07:53 AM

