

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092920\
 Data File : VL035728.D
 Acq On : 29 Sep 2020 17:26
 Operator : SY/AP
 Sample : L4174-01DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1ADUP

Manual Integrations
 APPROVED

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 9/30/2020 5:32:16 PM

Quant Time: Sep 30 04:01:28 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 23 07:38:05 2020
 QLast Update : Wed Sep 23 07:38:05 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1091580	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	4047887	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	3904219	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	2975310	10.17	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	55364	0.309	ppbv	97
3) Chlorodifluoromethane	2.99	51	41108m	0.350	ppbv	
4) Chloromethane	3.14	50	36870	0.584	ppbv	98
9) Propene	3.02	41	28388	0.666	ppbv #	81
11) Trichlorofluoromethane	3.96	101	65522	0.256	ppbv	90
13) Ethanol	3.61	45	583079	55.453	ppbv	98
15) Acetone	3.85	43	804859	6.852	ppbv	100
19) Isopropyl Alcohol	3.99	45	138266	2.164	ppbv #	92
20) Methylene Chloride	4.35	84	1189395	13.786	ppbv	96
26) Hexane	5.70	57	797796	6.888	ppbv #	54
34) 2-Butanone	5.26	43	42847	0.320	ppbv	93
35) Carbon Tetrachloride	7.04	117	14752m	0.070	ppbv	
36) Benzene	6.91	78	34622	0.131	ppbv #	93
37) 1,2-Dichloroethane	6.32	62	14826	0.108	ppbv	98
44) 2,2,4-Trimethylpentane	7.89	57	44975	0.119	ppbv #	83
52) Tetrachloroethene	11.26	164	21211	0.167	ppbv	96
53) Toluene	9.83	91	205719	0.661	ppbv	96
59) m/p-Xylene	13.00	91	37362m	0.109	ppbv	

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

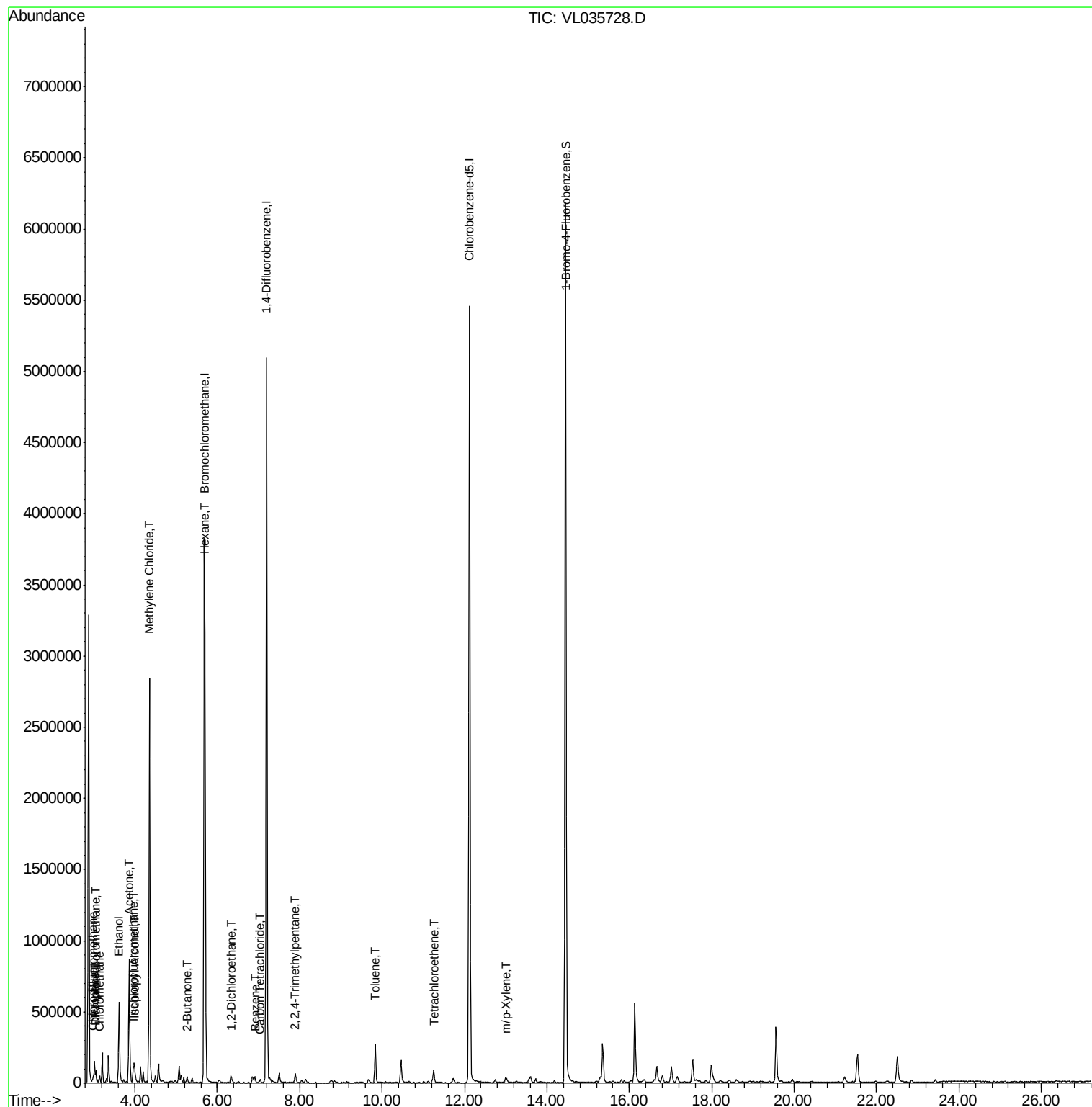
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL092920\
Data File : VL035728.D
Acq On : 29 Sep 2020 17:26
Operator : SY/AP
Sample : L4174-01DUP
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

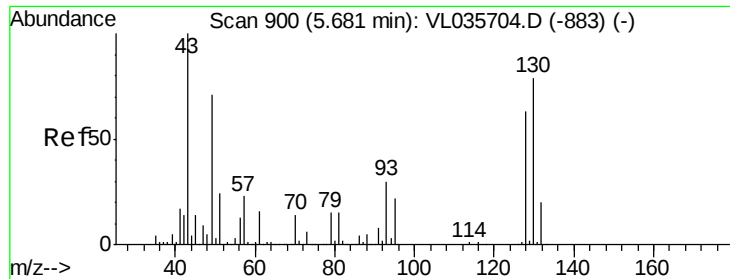
Instrument :
MSVOA_L
ClientSampleId :
IA1ADUP

Manual Integrations
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Quant Time: Sep 30 04:01:28 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 23 07:38:05 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.00 min

Lab File: VL035728.D

Acq: 29 Sep 2020 17:26

Instrument :

MSVOA_L

ClientSampleId :

IA1ADUP

Tot Ion: 49 Resp: 1091580

Ion Ratio Lower Upper

49 100

128 83.9 43.1 129.4

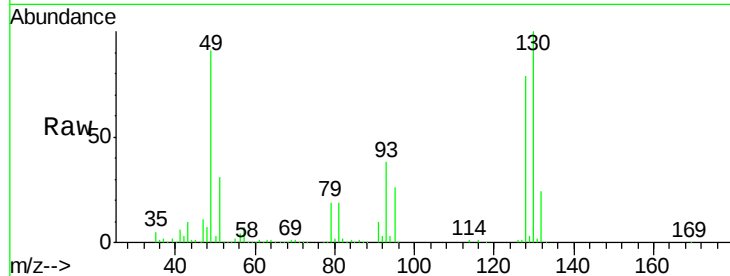
130 107.6 54.9 164.7

Manual Integrations

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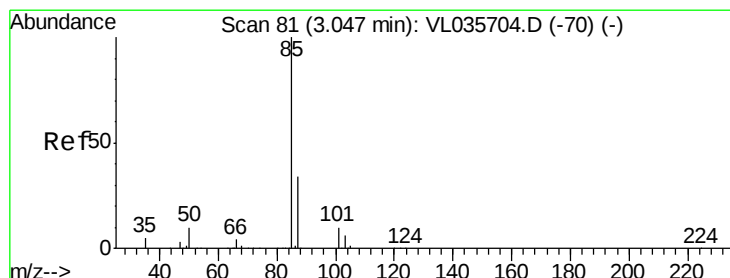
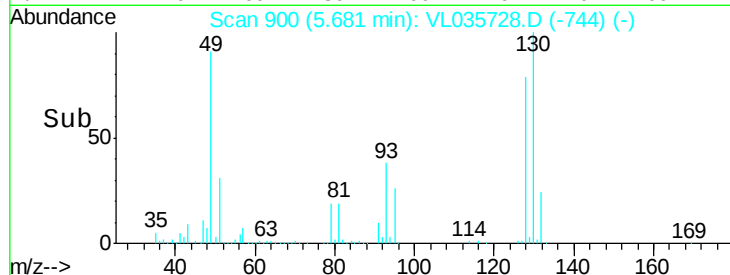
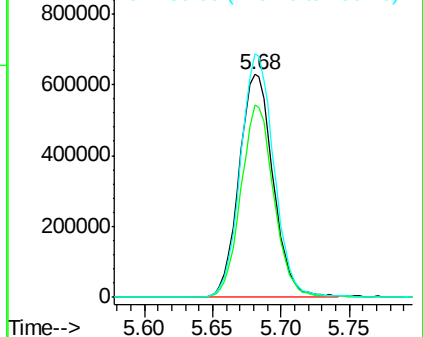
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.309 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.00 min

Lab File: VL035728.D

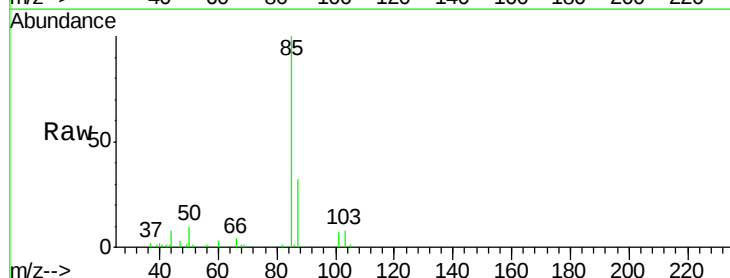
Acq: 29 Sep 2020 17:26

Tgt Ion: 85 Resp: 55364

Ion Ratio Lower Upper

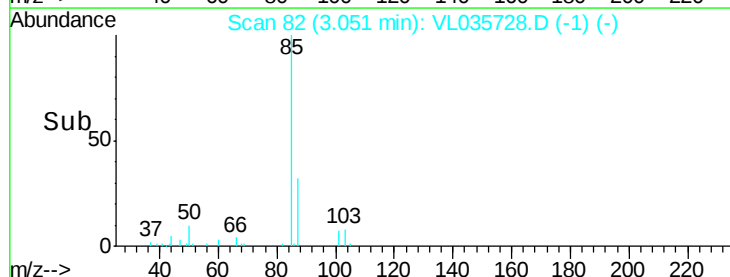
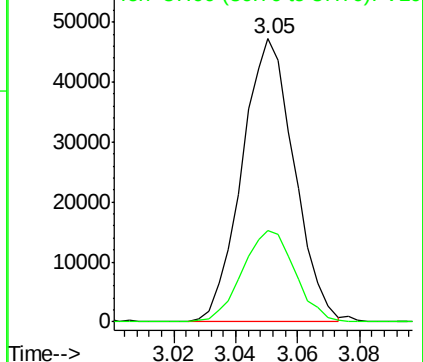
85 100

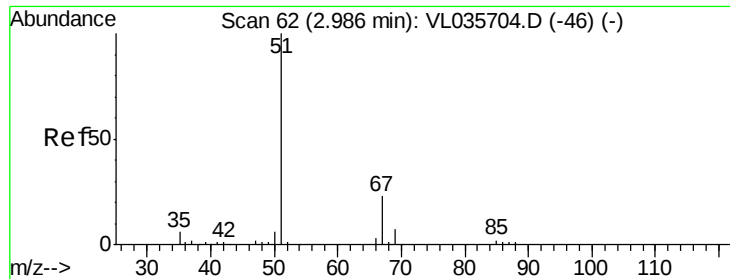
87 32.2 27.3 40.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

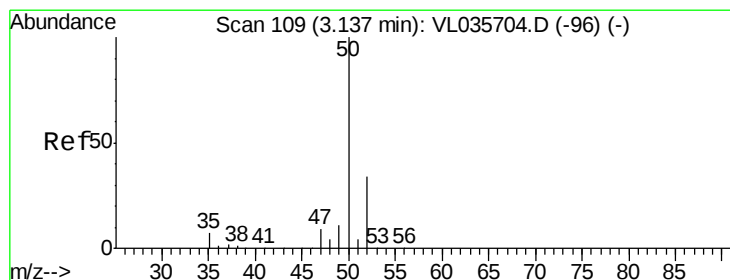
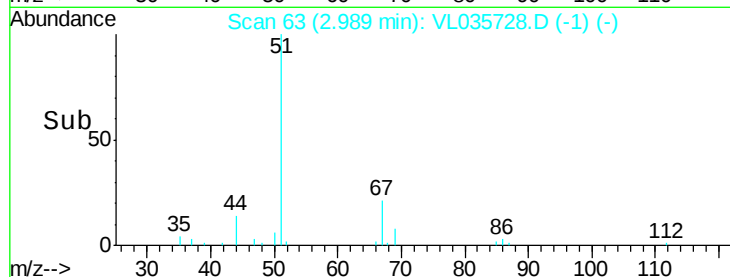
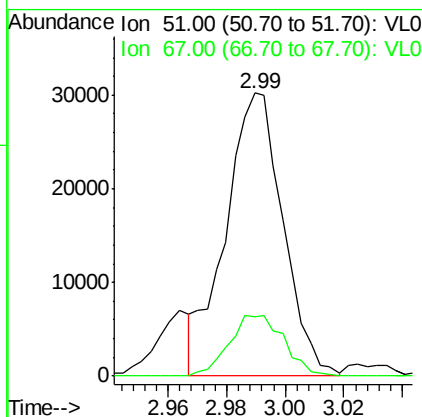
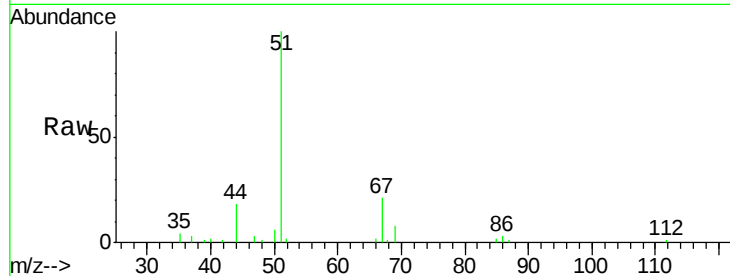
Chlorodifluoromethane
 Concen: 0.350 ppbv
 RT: 2.99 min Scan# 63
 Delta R.T. 0.00 min
 Lab File: VL035728.D
 Acq: 29 Sep 2020 17:26

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1ADUP

Tot Ion	51	Resp	41108
Ion Ratio	100	Lower	Upper
67	20.5	17.8	26.8

Manual Integrations
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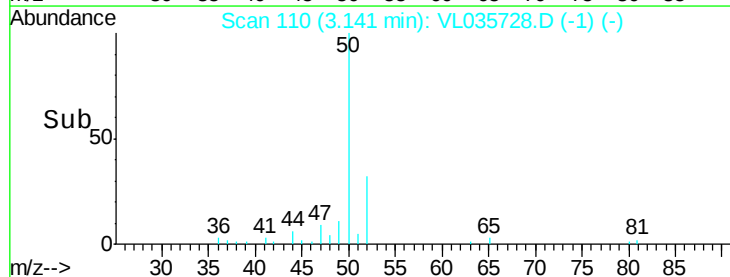
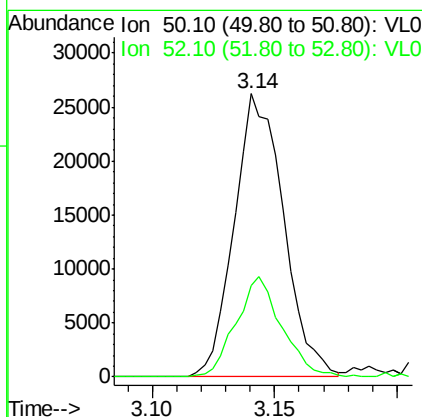
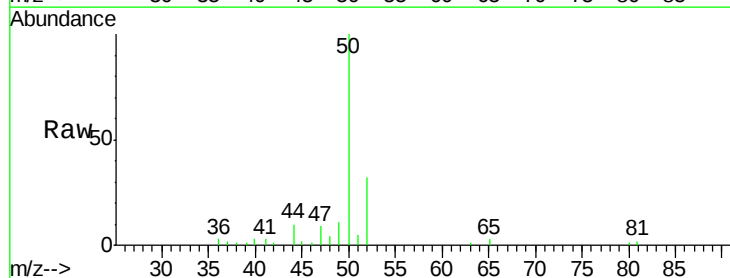
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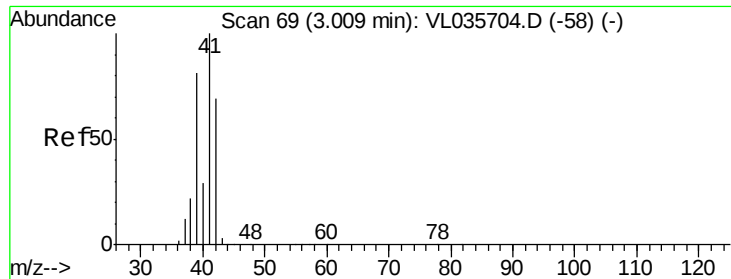


#4

Chloromethane
 Concen: 0.584 ppbv
 RT: 3.14 min Scan# 110
 Delta R.T. 0.00 min
 Lab File: VL035728.D
 Acq: 29 Sep 2020 17:26

Tgt Ion	50	Resp	36870
Ion Ratio	100	Lower	Upper
52	32.4	26.8	40.2





#9

Propene

Concen: 0.666 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL035728.D

Acq: 29 Sep 2020 17:26

Instrument :

MSVOA_L

ClientSampleId :

IA1ADUP

Tot Ion: 41 Resp: 28388

Ion Ratio Lower Upper

41 100

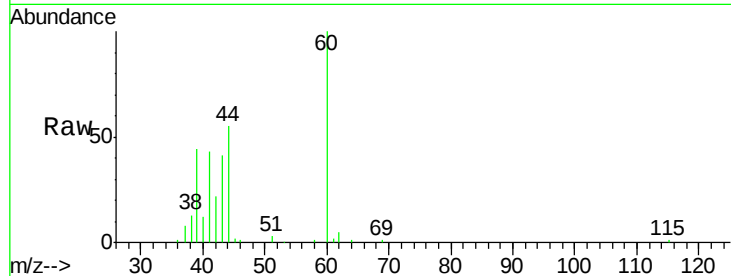
42 54.6 56.2 84.4#

Manual Integrations

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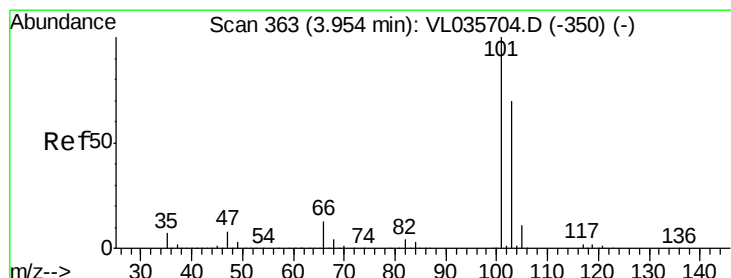
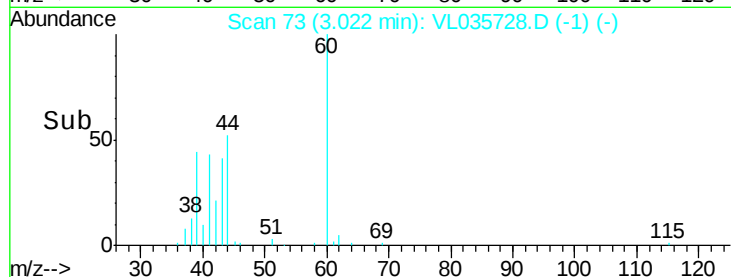
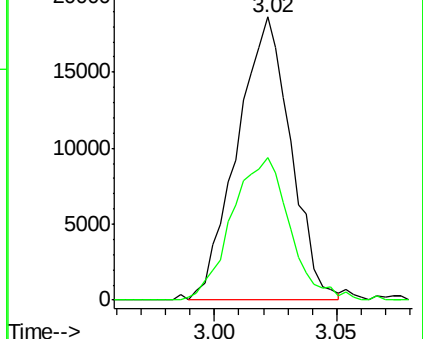
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.256 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.00 min

Lab File: VL035728.D

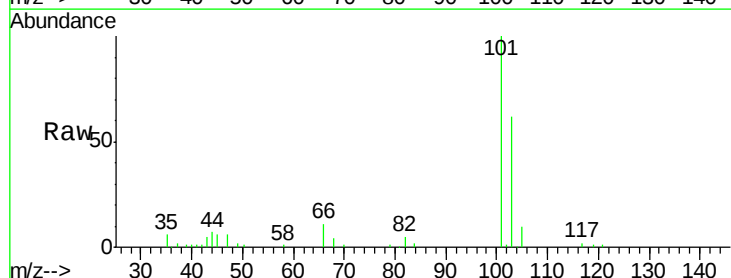
Acq: 29 Sep 2020 17:26

Tgt Ion: 101 Resp: 65522

Ion Ratio Lower Upper

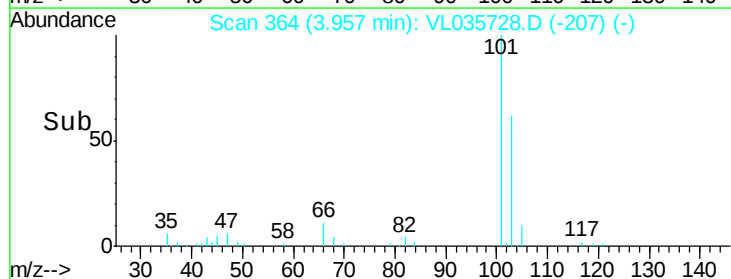
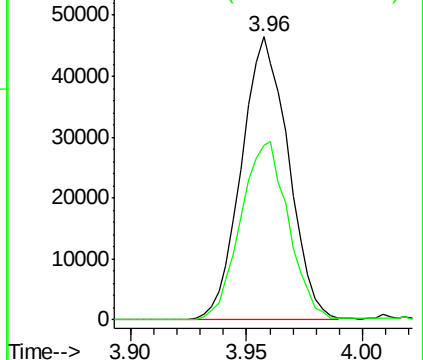
101 100

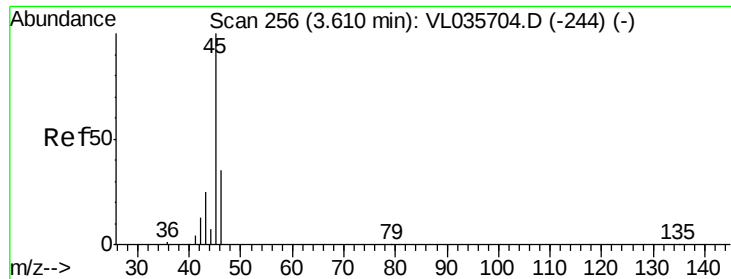
103 61.5 55.6 83.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





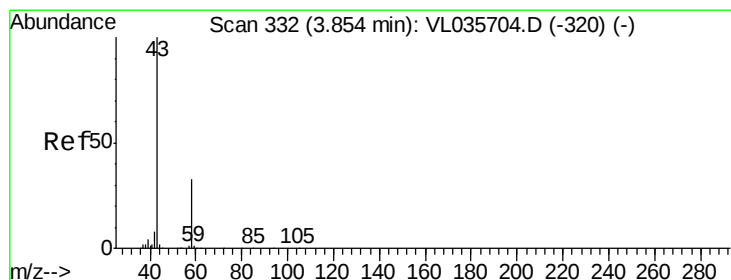
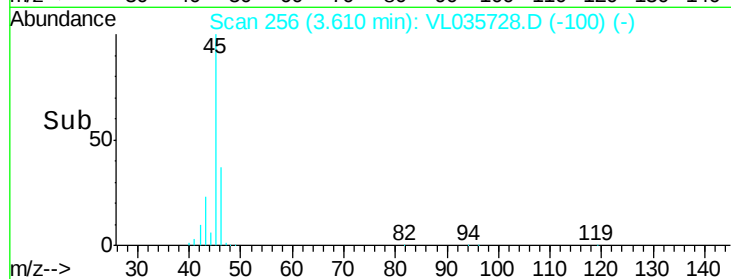
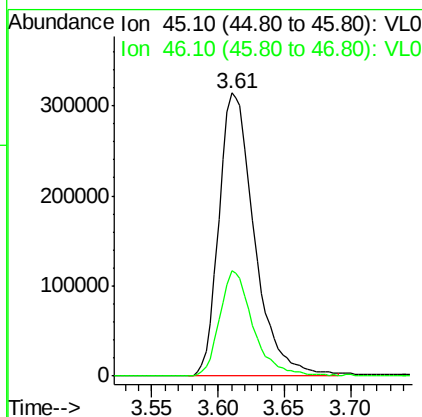
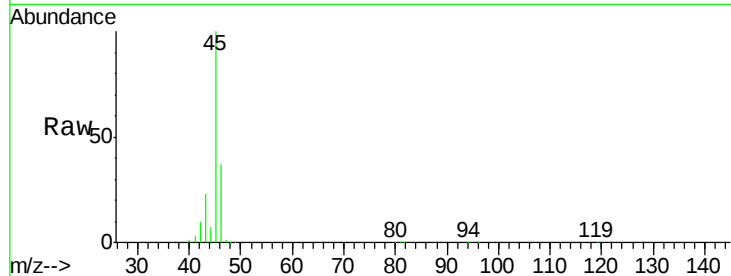
#13
Ethanol
Concen: 55.453 ppbv
RT: 3.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA1ADUP

Tot Ion: 45 Resp: 583079
Ion Ratio Lower Upper
45 100
46 35.8 14.7 58.7

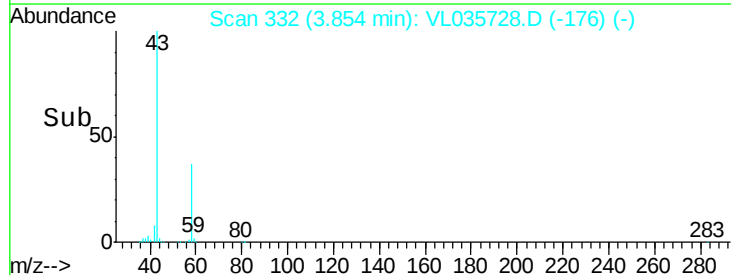
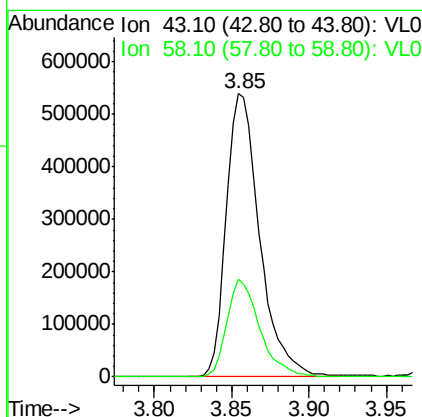
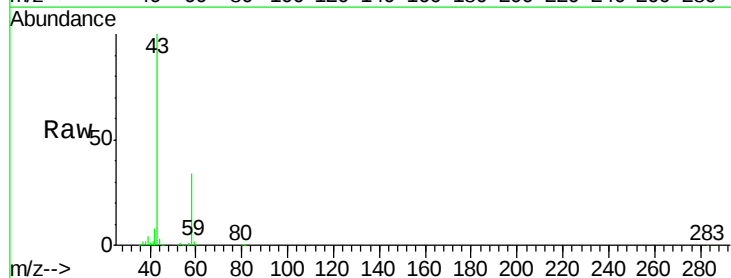
Manual Integrations
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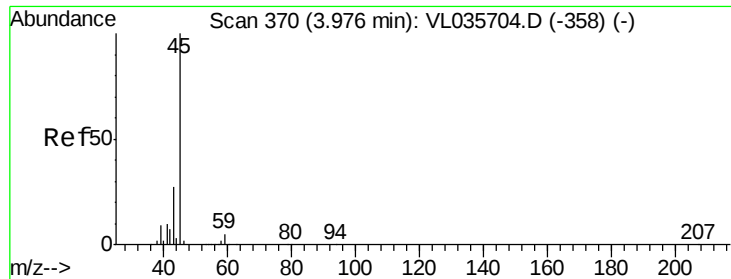
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#15
Acetone
Concen: 6.852 ppbv
RT: 3.85 min Scan# 332
Delta R.T. 0.00 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Tgt Ion: 43 Resp: 804859
Ion Ratio Lower Upper
43 100
58 34.2 27.3 40.9





#19

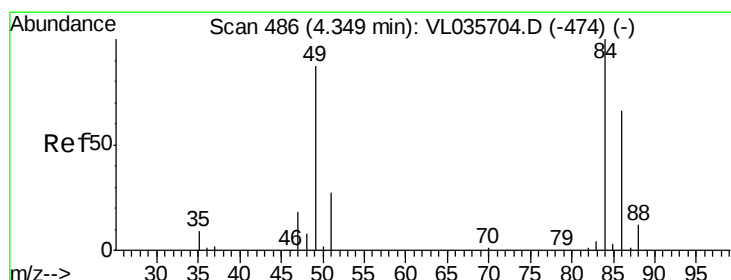
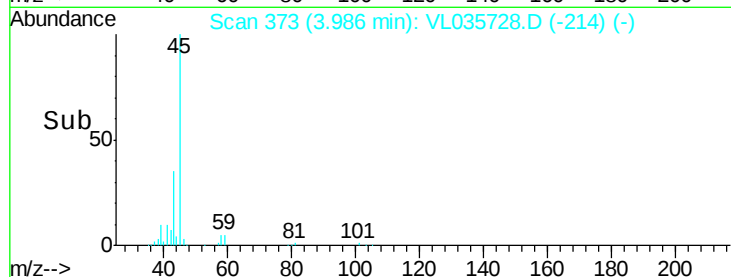
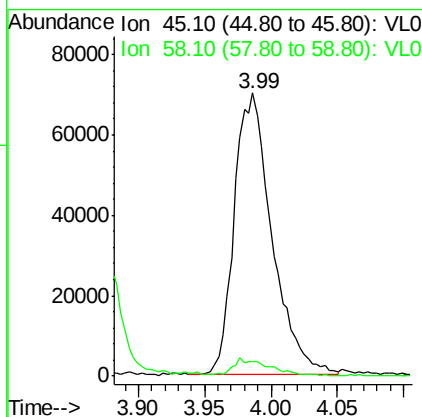
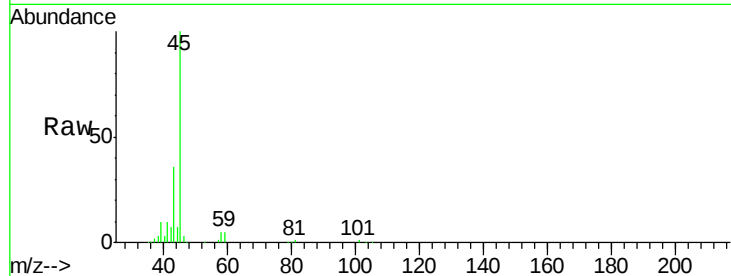
Isopropyl Alcohol
 Concen: 2.164 ppbv
 RT: 3.99 min Scan# 373
 Delta R.T. 0.01 min
 Lab File: VL035728.D
 Acq: 29 Sep 2020 17:26

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1ADUP

Tot Ion	45	58	Ratio	100	6.1	Resp Lower	138266	2.8	Upper	4.2#
45	100									
58		6.1				2.8				4.2#

Manual Integrations
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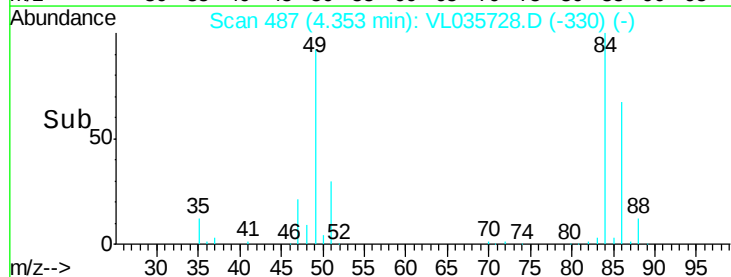
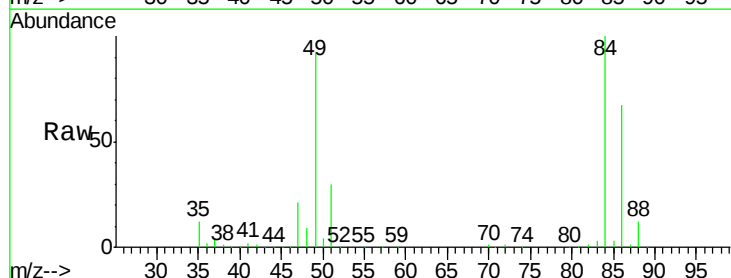
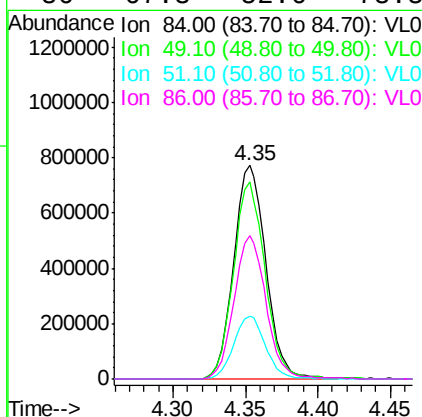
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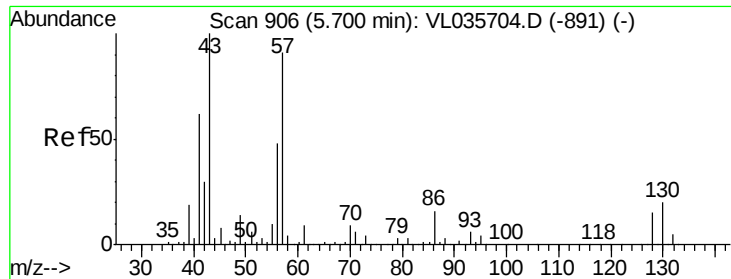


#20

Methylene Chloride
 Concen: 13.786 ppbv
 RT: 4.35 min Scan# 487
 Delta R.T. 0.00 min
 Lab File: VL035728.D
 Acq: 29 Sep 2020 17:26

Tgt Ion	84	49	51	86	Ratio	100	92.0	29.6	67.3	Resp Lower	1189395	69.8	32.8	78.8	Upper
84	100														
49		92.0					69.8					104.6			
51		29.6					21.8					32.8			
86		67.3					52.6					78.8			





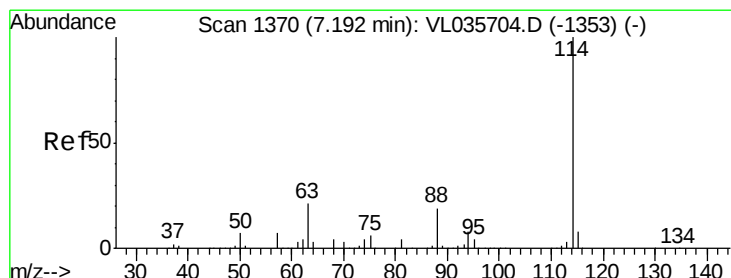
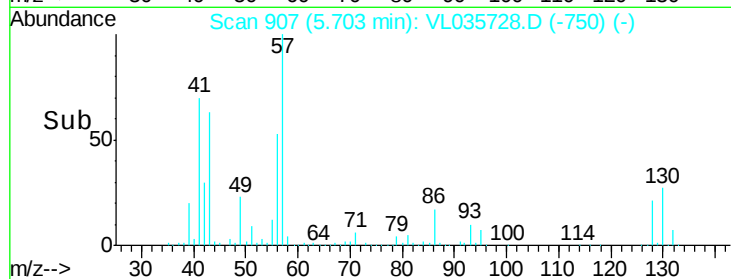
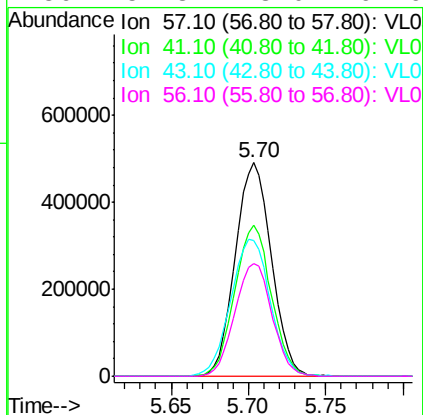
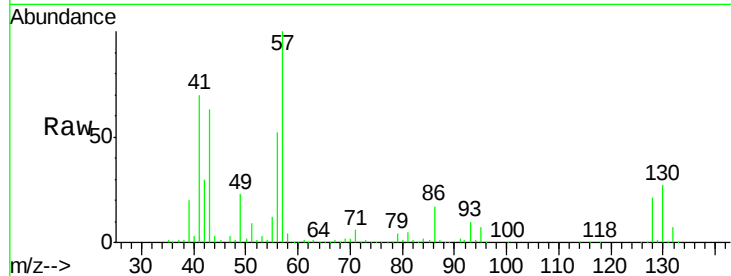
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Hexane
Concen: 6.888 ppbv
RT: 5.70 min Scan# 907
Delta R.T. 0.00 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA1ADUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	71.7	57.9	86.9
43	70.5	143.8	215.6#
56	54.3	43.0	64.6

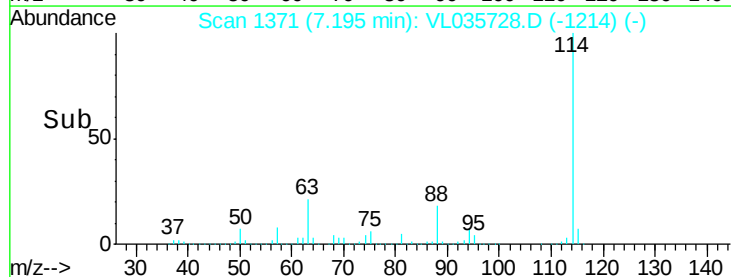
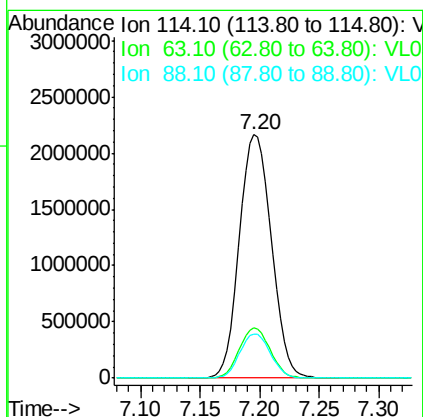
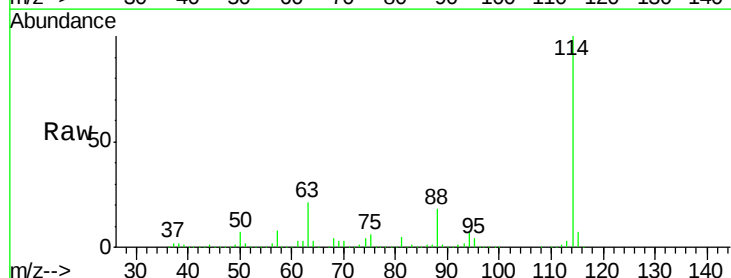
Manual Integrations
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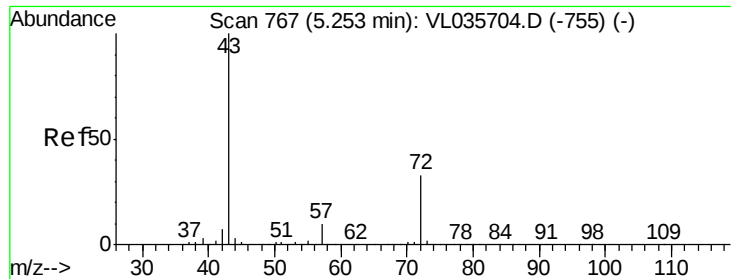
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1371
Delta R.T. 0.00 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Tgt Ion	Ratio	Lower	Upper
114	100		
63	19.9	16.1	24.1
88	17.4	14.1	21.1





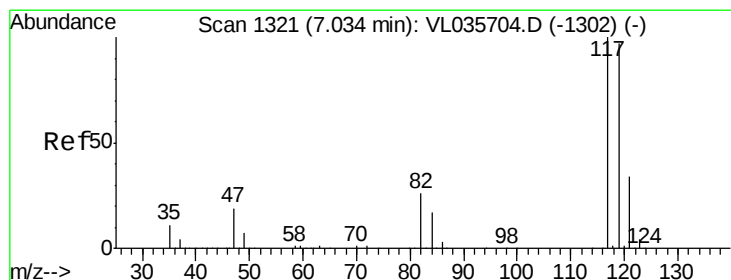
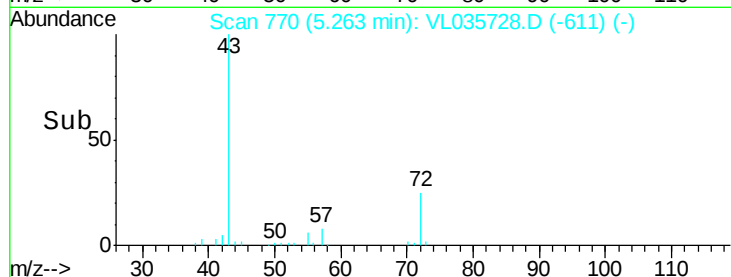
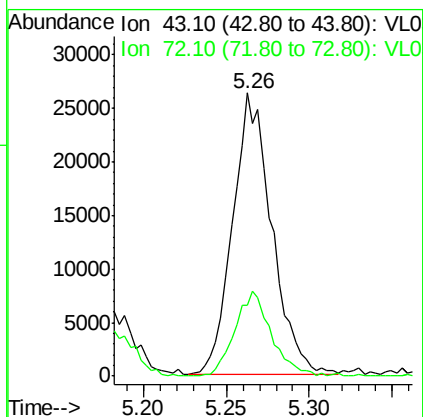
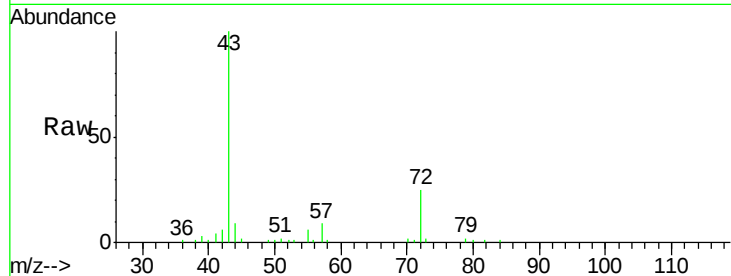
#34
2-Butanone
Concen: 0.320 ppbv
RT: 5.26 min Scan# 770
Delta R.T. 0.01 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA1ADUP

Tot Ion: 43 Resp: 42847
Ion Ratio Lower Upper
43 100
72 28.4 26.1 39.1

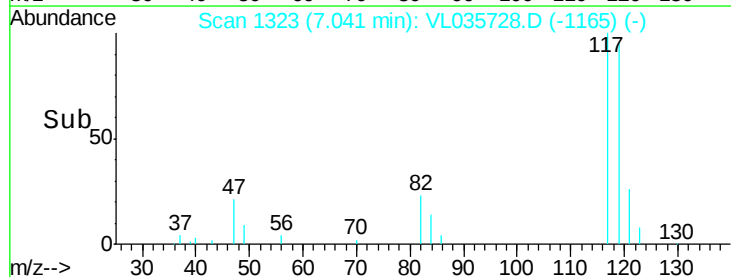
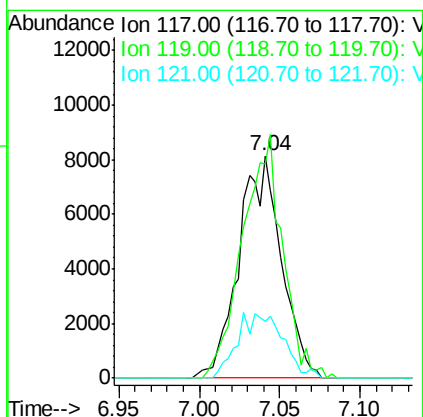
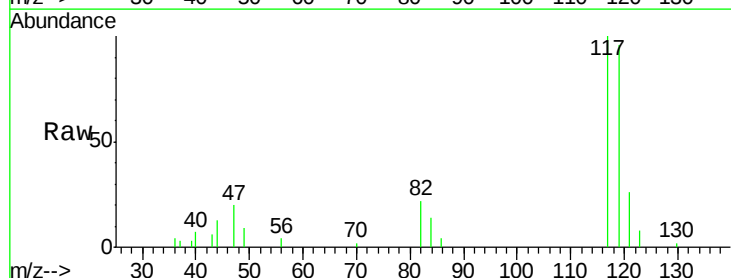
Manual Integrations
APPROVED

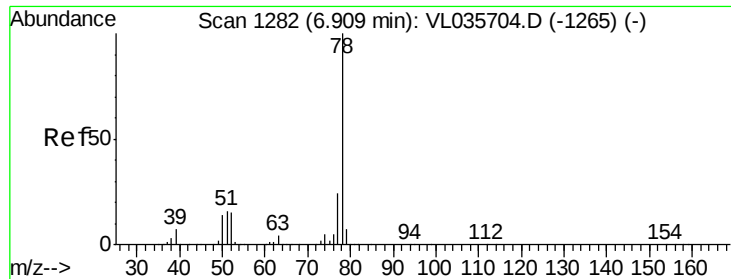
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#35
Carbon Tetrachloride
Concen: 0.070 ppbv m
RT: 7.04 min Scan# 1323
Delta R.T. 0.01 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Tgt Ion: 117 Resp: 14752
Ion Ratio Lower Upper
117 100
119 96.5 77.7 116.5
121 25.7 26.9 40.3#





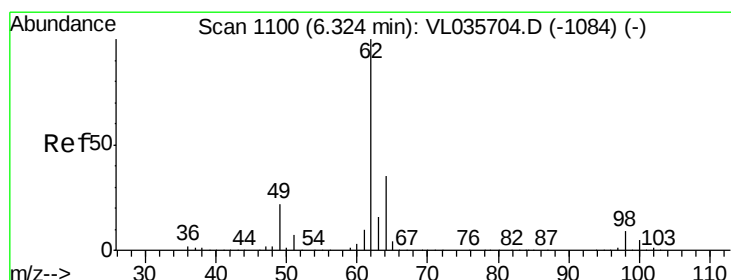
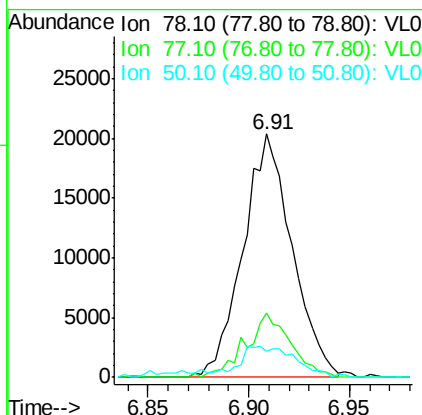
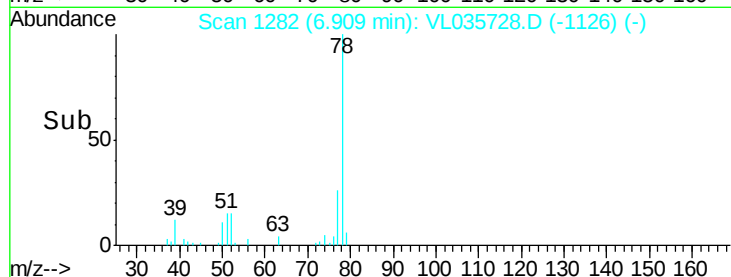
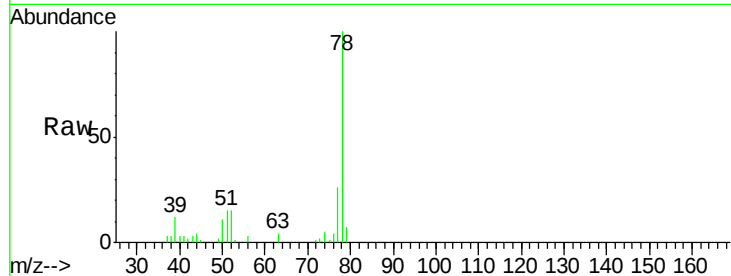
#36
Benzene
Concen: 0.131 ppbv
RT: 6.91 min Scan# 1282
Delta R.T. 0.00 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA1ADUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	26.4	19.3	28.9
50	9.8	11.6	17.4#

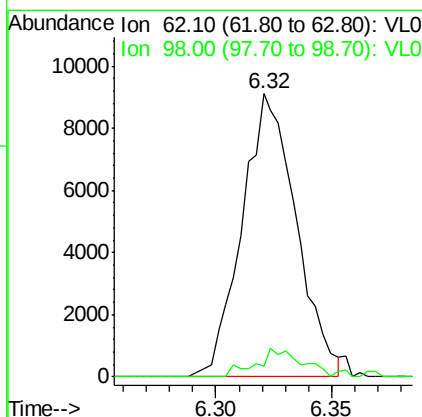
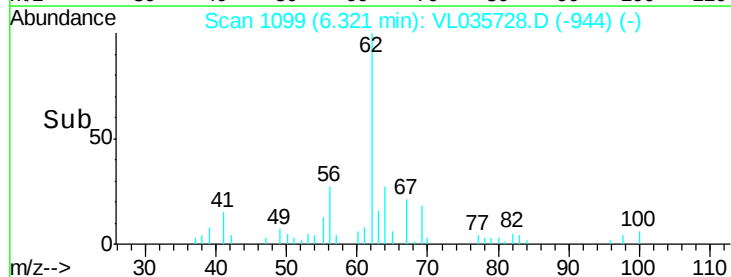
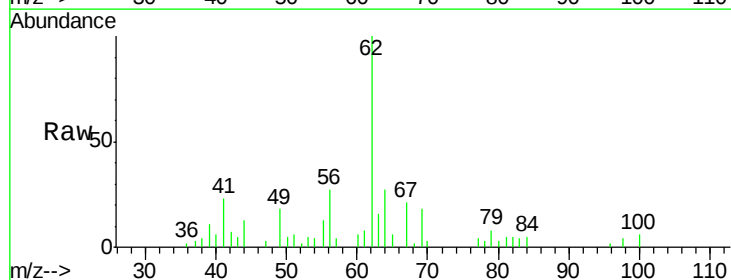
Manual Integrations
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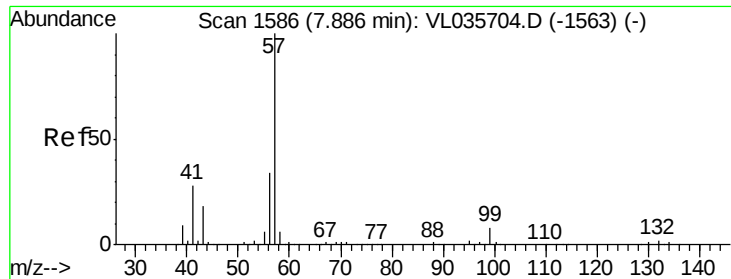
MMDadoda
9/30/2020 5:32:16 PM



#37
1,2-Dichloroethane
Concen: 0.108 ppbv
RT: 6.32 min Scan# 1099
Delta R.T. -0.00 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Tgt Ion	Ratio	Lower	Upper
62	100		
98	9.2	6.9	10.3





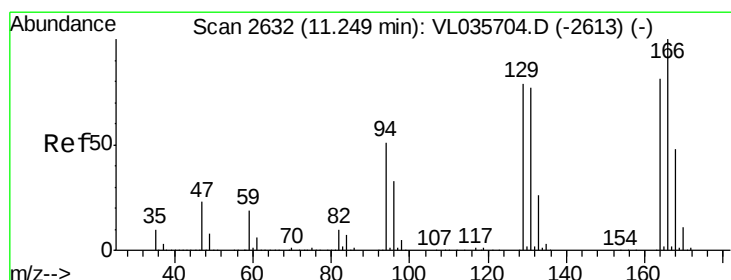
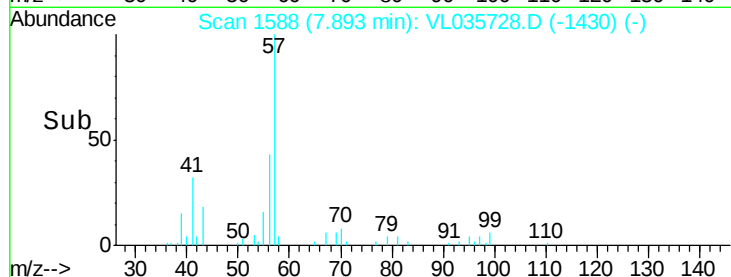
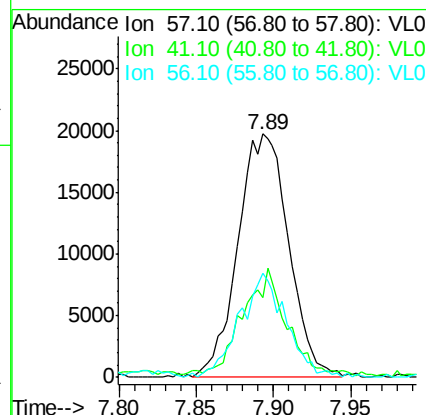
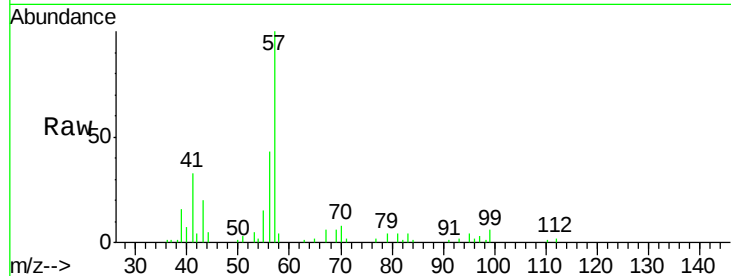
#44
 2,2,4-Trimethylpentane
 Concen: 0.119 ppbv
 RT: 7.89 min Scan# 1588
 Delta R.T. 0.01 min
 Lab File: VL035728.D
 Acq: 29 Sep 2020 17:26

Instrument :
 MSVOA_L
 ClientSampled :
 IA1ADUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	37.6	21.2	31.8#
56	39.5	25.8	38.8#

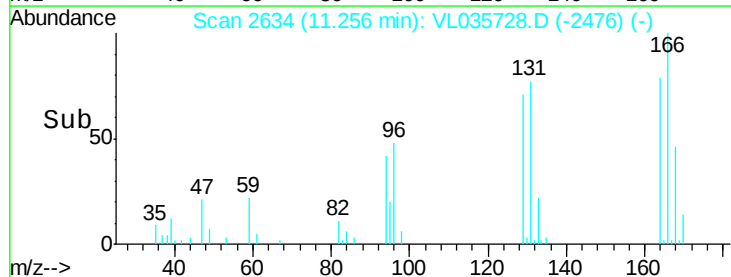
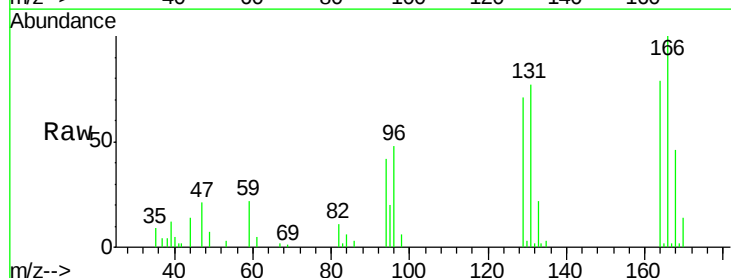
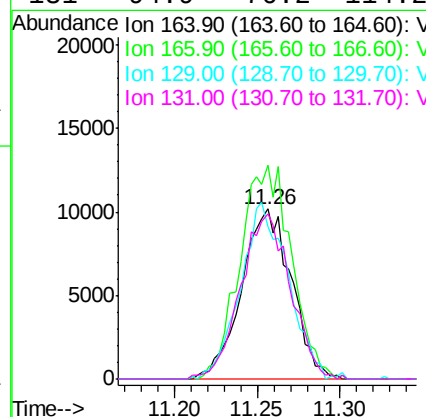
Manual Integrations
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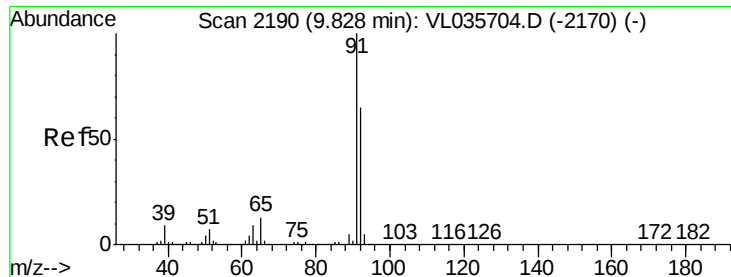
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 9/30/2020 5:32:16 PM



#52
 Tetrachloroethene
 Concen: 0.167 ppbv
 RT: 11.26 min Scan# 2634
 Delta R.T. 0.01 min
 Lab File: VL035728.D
 Acq: 29 Sep 2020 17:26

Tgt Ion	Ratio	Lower	Upper
164	100		
166	124.3	98.7	148.1
129	87.8	78.4	117.6
131	94.9	76.2	114.2





#53

Toluene

Concen: 0.661 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL035728.D

Acq: 29 Sep 2020 17:26

Instrument :

MSVOA_L

ClientSampleId :

IA1ADUP

Tot Ion: 91 Resp: 205719

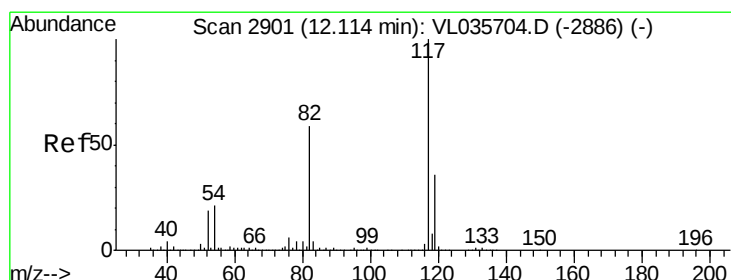
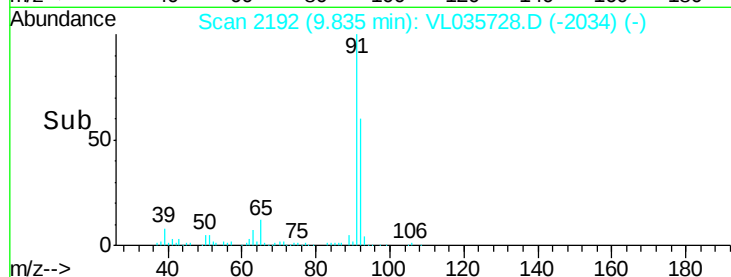
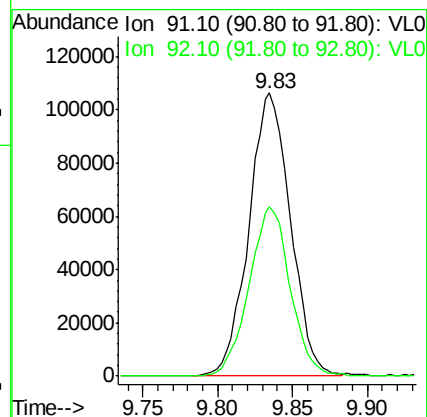
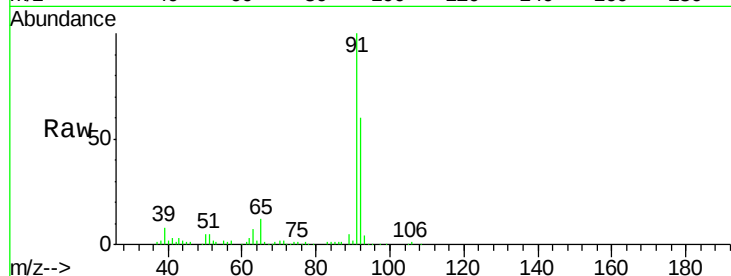
Ion Ratio Lower Upper

91 100

92 59.3 50.0 75.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2902

Delta R.T. 0.00 min

Lab File: VL035728.D

Acq: 29 Sep 2020 17:26

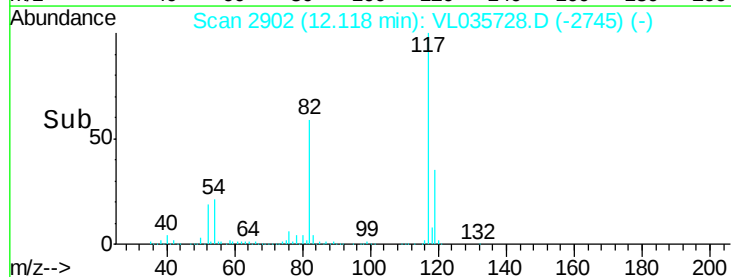
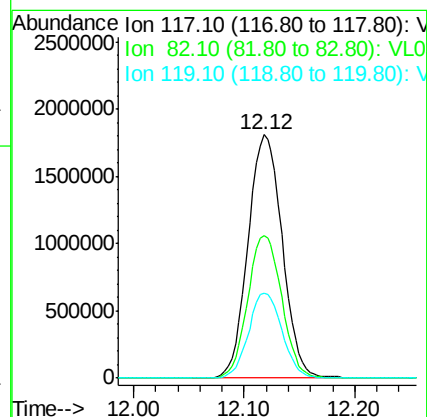
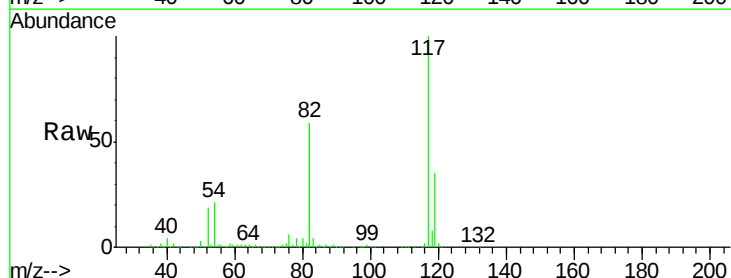
Tgt Ion: 117 Resp: 3904219

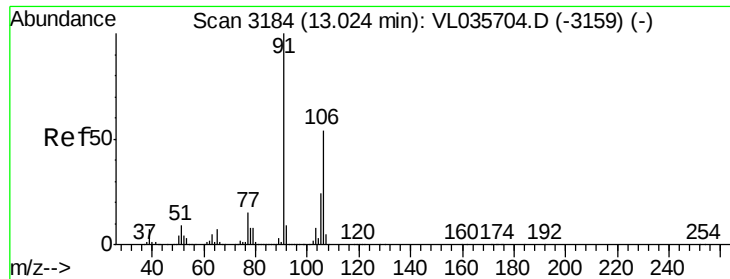
Ion Ratio Lower Upper

117 100

82 58.4 46.1 69.1

119 34.3 28.0 42.0





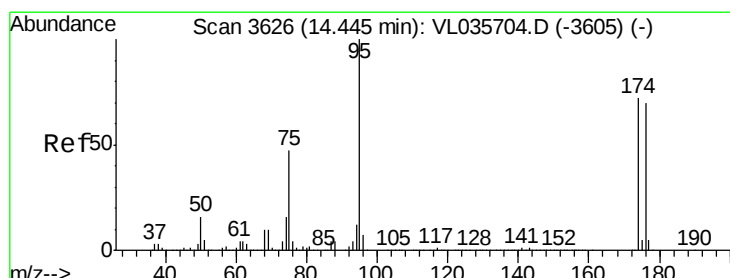
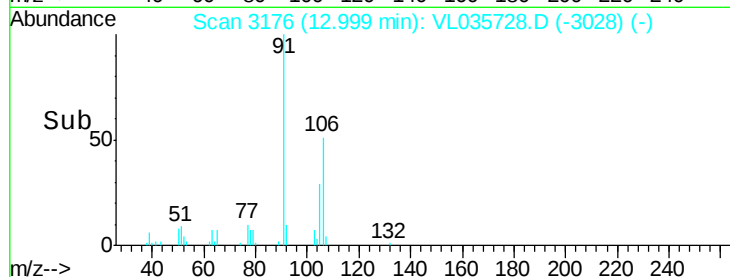
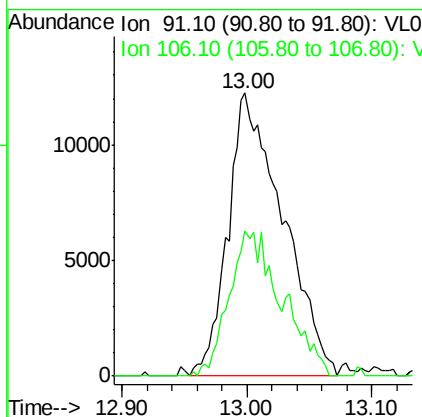
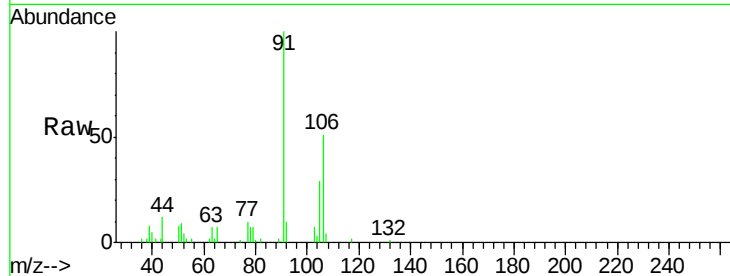
#59
m/p-Xylene
Concen: 0.109 ppbv m
RT: 13.00 min Scan# 3176
Delta R.T. -0.03 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Instrument :
MSVOA_L
ClientSampled :
IA1ADUP

Tot Ion: 91 Resp: 37362
Ion Ratio Lower Upper
91 100
106 0.0 41.4 62.0#

Manual Integrations
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.170 ppbv
RT: 14.45 min Scan# 3628
Delta R.T. 0.01 min
Lab File: VL035728.D
Acq: 29 Sep 2020 17:26

Tgt Ion: 95 Resp: 2975310
Ion Ratio Lower Upper
95 100
174 77.2 59.6 89.4
175 5.4 4.2 6.4

