

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL122320\
 Data File : VL036196.D
 Acq On : 23 Dec 2020 17:33
 Operator : SY/AP
 Sample : L5196-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG2

Manual Integrations
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 12/26/2020 1:36:12 PM

Quant Time: Dec 25 23:40:38 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 0
 QLast Update : Mon Dec 07 16:56:49 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1160481	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.15	114	2243689	10.00	ppbv	-0.05
55) Chlorobenzene-d5	12.06	117	2069047	10.00	ppbv	-0.05

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1922201	11.70	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	117.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	25771m	0.191	ppbv	
3) Chlorodifluoromethane	2.96	51	107284	0.810	ppbv #	79
4) Chloromethane	3.12	50	34846	0.536	ppbv	92
9) Propene	3.00	41	111604m	1.683	ppbv	
10) Heptane	8.10	43	72977	0.431	ppbv	94
11) Trichlorofluoromethane	3.93	101	49188	0.309	ppbv #	80
13) Ethanol	3.60	45	751174	82.153	ppbv	84
15) Acetone	3.83	43	979949m	7.026	ppbv	
17) tert-Butyl alcohol	4.29	59	155274	1.149	ppbv #	93
19) Isopropyl Alcohol	3.97	45	766557	8.992	ppbv #	100
20) Methylene Chloride	4.32	84	696287	12.183	ppbv	94
26) Hexane	5.66	57	1863198	14.858	ppbv #	38
30) Cyclohexane	7.10	84	45349m	0.492	ppbv	
34) 2-Butanone	5.22	43	128033	0.860	ppbv	98
35) Carbon Tetrachloride	6.99	117	9494m	0.073	ppbv	
36) Benzene	6.87	78	141659	0.745	ppbv #	89
41) Tetrahydrofuran	6.03	42	20753m	0.235	ppbv	
44) 2,2,4-Trimethylpentane	7.84	57	686373m	1.993	ppbv	
52) Tetrachloroethene	11.20	164	2582m	0.038	ppbv	
53) Toluene	9.78	91	888260	4.160	ppbv	98
58) Ethyl Benzene	12.69	91	232349	0.819	ppbv	93
59) m/p-Xylene	12.94	91	743841m	3.115	ppbv	
60) o-Xylene	13.67	91	316146	1.405	ppbv	94
61) Styrene	13.50	104	111271	0.770	ppbv #	87
62) Isopropylbenzene	14.64	105	2364313	7.089	ppbv	97
73) 1,3,5-Trimethylbenzene	15.98	105	70995	0.305	ppbv	91
74) 1,2,4-Trimethylbenzene	16.74	105	282499	1.209	ppbv #	66

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

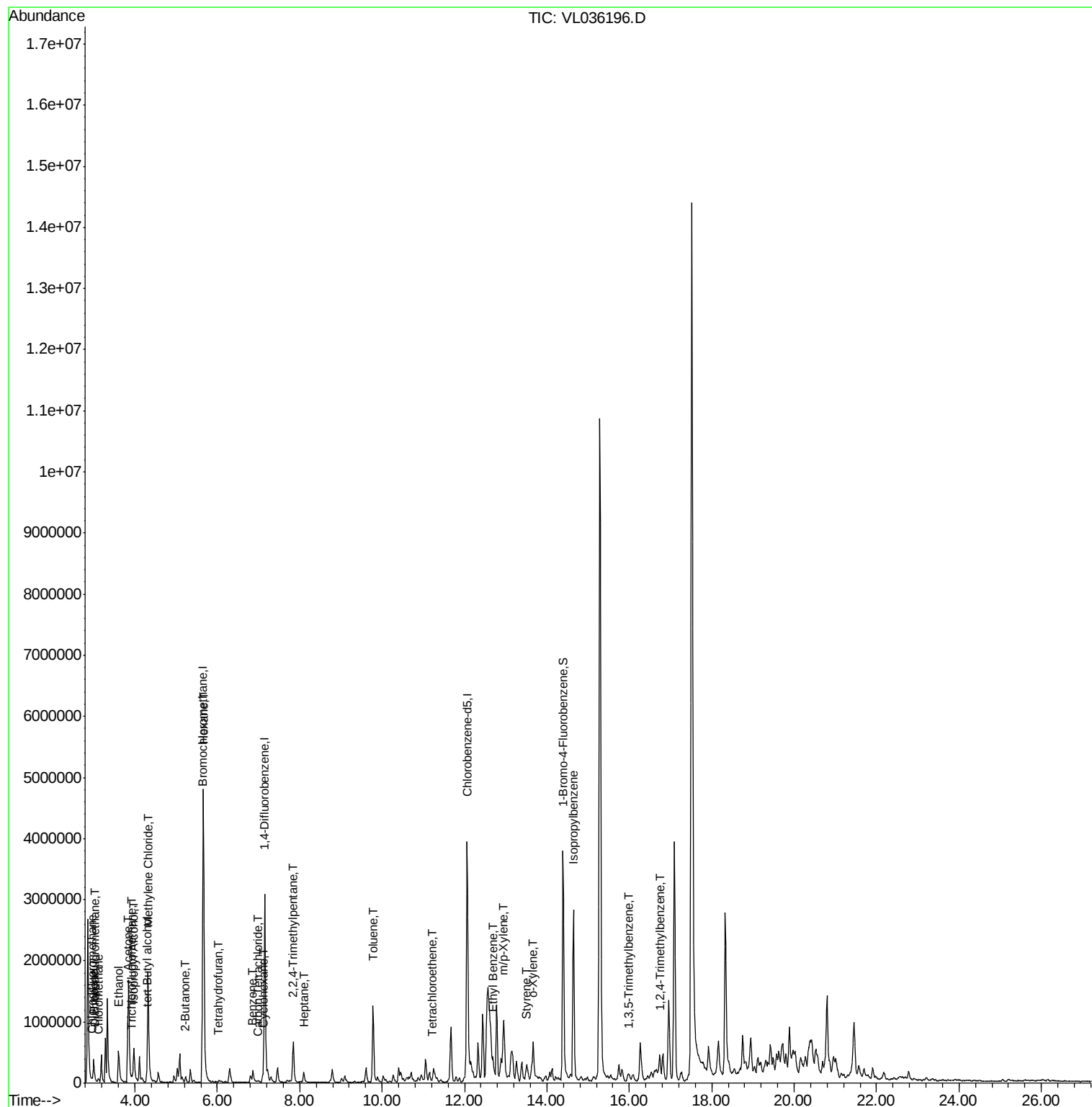
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL122320\
Data File : VL036196.D
Acq On : 23 Dec 2020 17:33
Operator : SY/AP
Sample : L5196-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

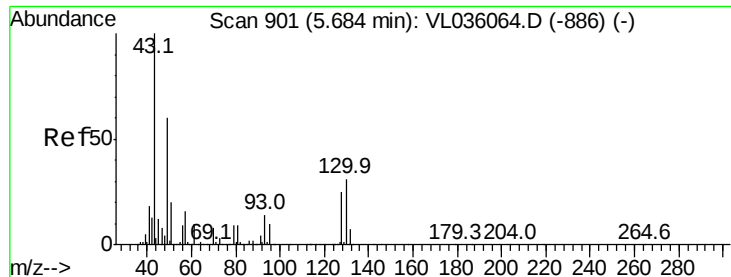
Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Manual Integrations
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12/26/2020 1:36:12 PM

Quant Time: Dec 25 23:40:38 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec
QLast Update : Mon Dec 07 16:56:49 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 888

Delta R.T. -0.04 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Instrument :

MSVOA_L

ClientSampled :

SSSG2

Tot Ion: 49 Resp: 1160481

Ion Ratio Lower Upper

49 100

128 34.4 21.1 63.1

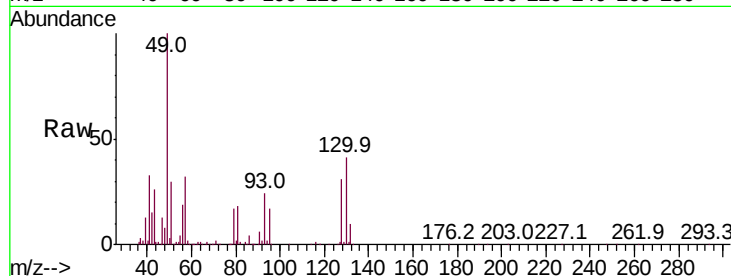
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Manual Integrations

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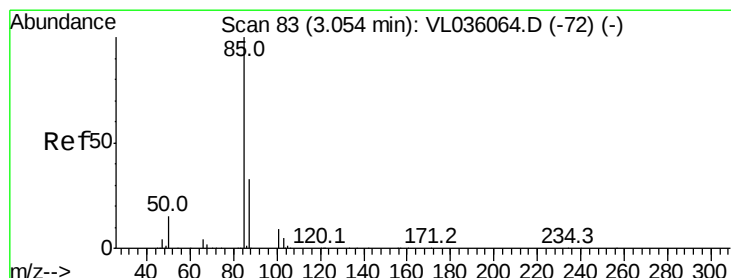
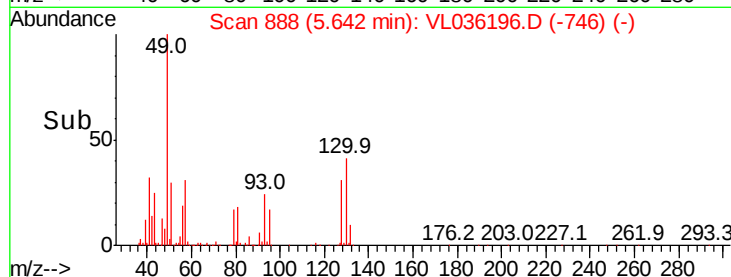
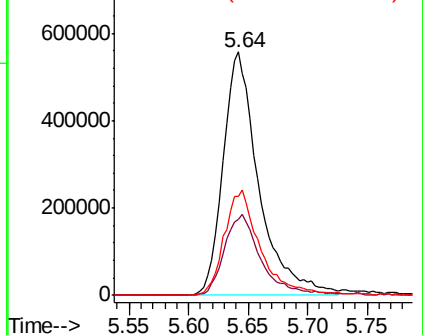
12/26/2020 1:36:12 PM



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: 0.191 ppbv m

RT: 3.02 min Scan# 74

Delta R.T. -0.03 min

Lab File: VL036196.D

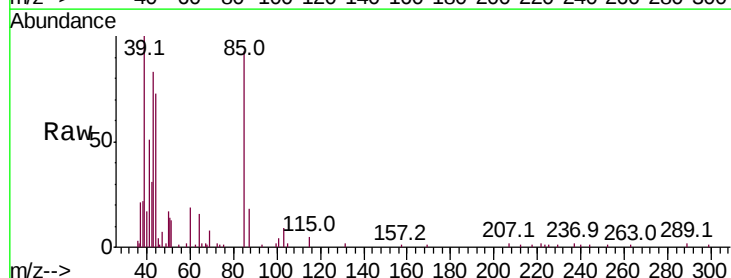
Acq: 23 Dec 2020 17:33

Tgt Ion: 85 Resp: 25771

Ion Ratio Lower Upper

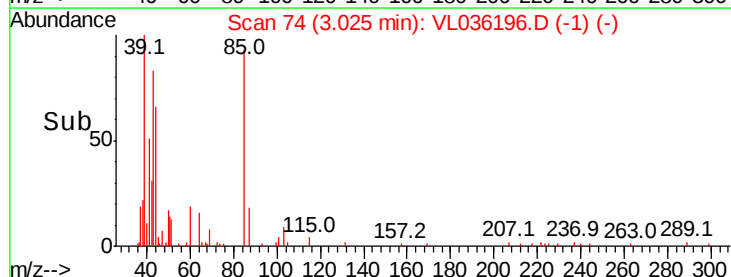
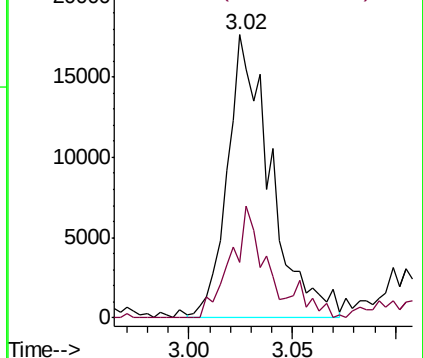
85 100

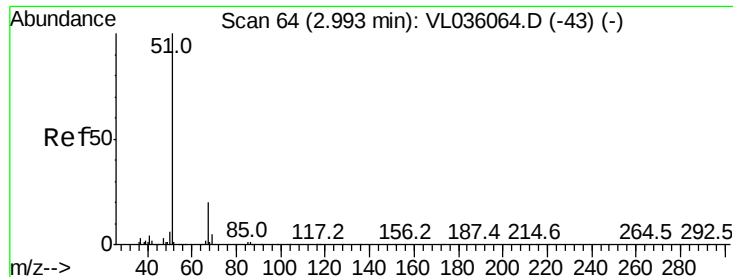
87 19.6 26.5 39.7#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





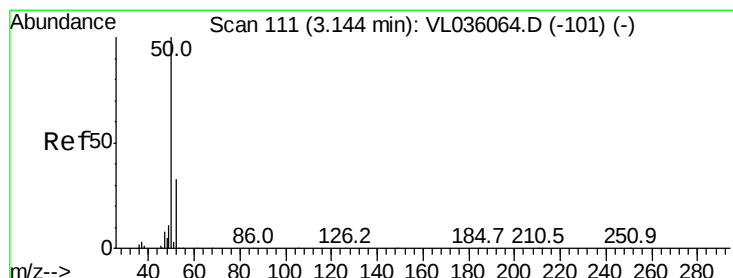
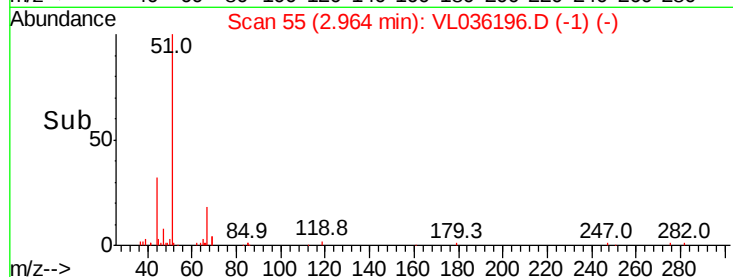
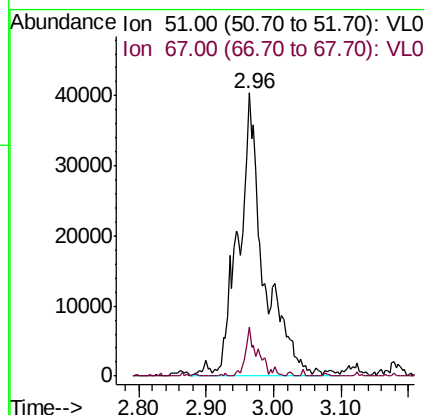
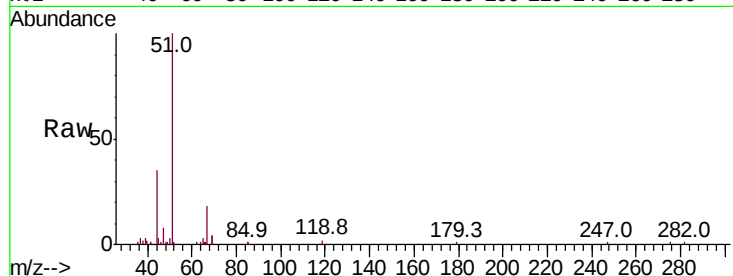
#3
Chlorodifluoromethane
Concen: 0.810 ppbv
RT: 2.96 min Scan# 55
Delta R.T. -0.03 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion: 51 Resp: 107284
Ion Ratio Lower Upper
51 100
67 8.8 14.3 21.5#

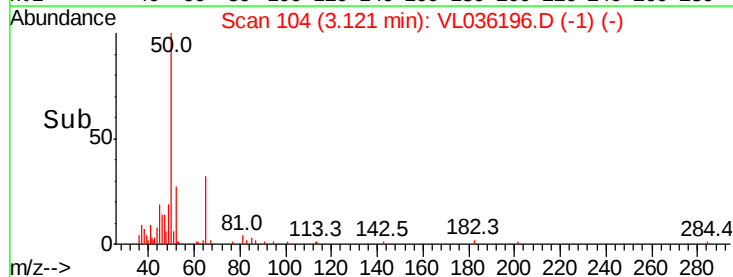
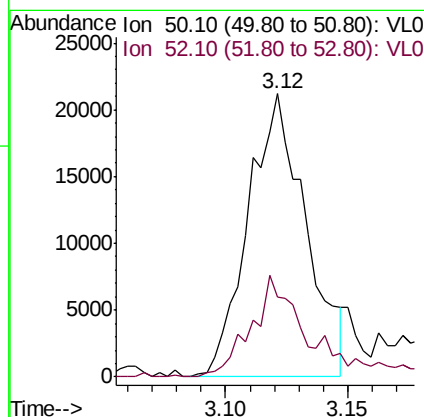
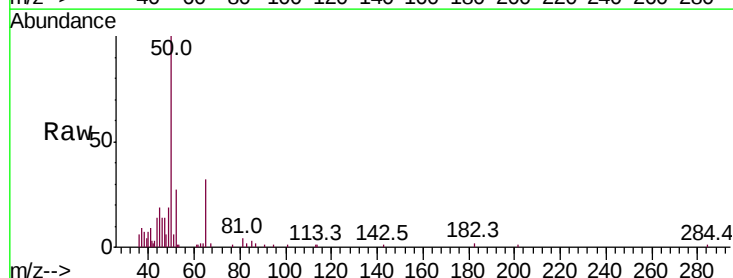
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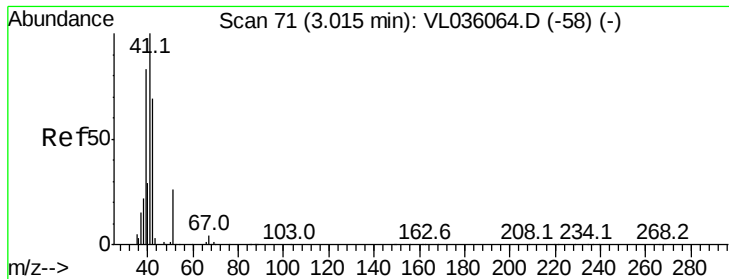
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#4
Chloromethane
Concen: 0.536 ppbv
RT: 3.12 min Scan# 104
Delta R.T. -0.02 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion: 50 Resp: 34846
Ion Ratio Lower Upper
50 100
52 28.1 26.1 39.1





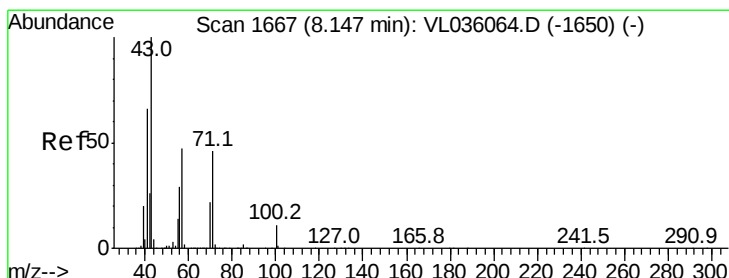
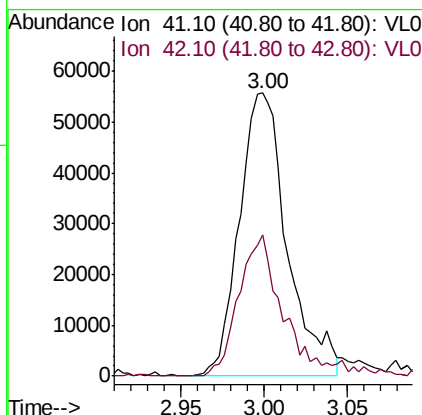
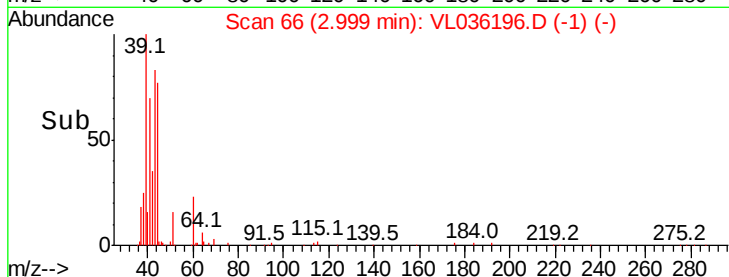
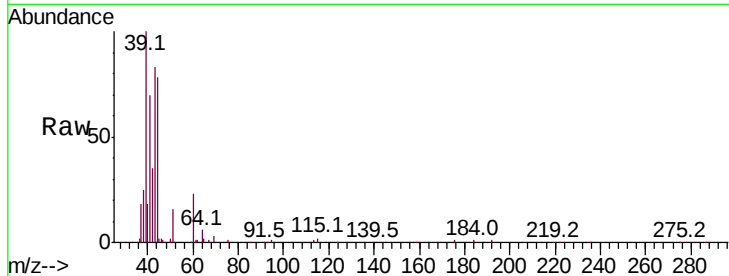
#9
 Propene
 Concen: 1.683 ppbv m
 RT: 3.00 min Scan# 66
 Delta R.T. -0.02 min
 Lab File: VL036196.D
 Acq: 23 Dec 2020 17:33

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG2

Tot Ion: 41 Resp: 111604
 Ion Ratio Lower Upper
 41 100
 42 88.1 57.0 85.6#

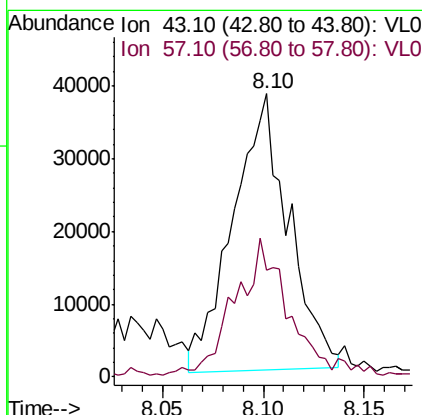
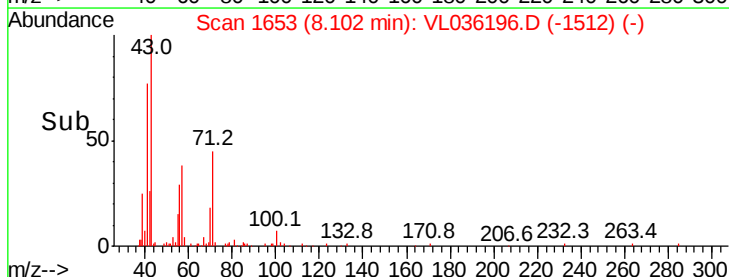
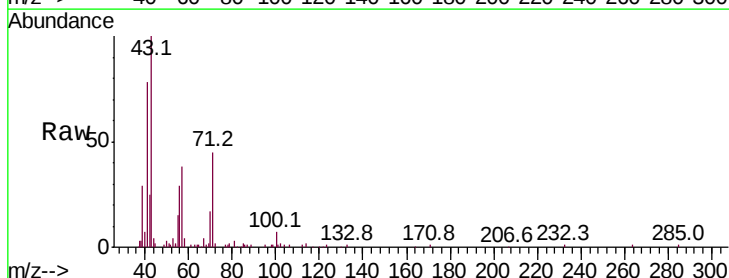
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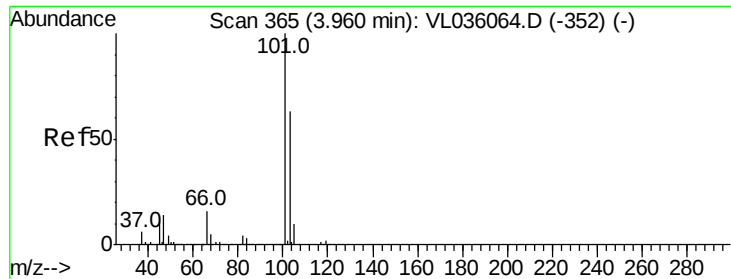
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#10
 Heptane
 Concen: 0.431 ppbv
 RT: 8.10 min Scan# 1653
 Delta R.T. -0.05 min
 Lab File: VL036196.D
 Acq: 23 Dec 2020 17:33

Tgt Ion: 43 Resp: 72977
 Ion Ratio Lower Upper
 43 100
 57 51.6 37.9 56.9





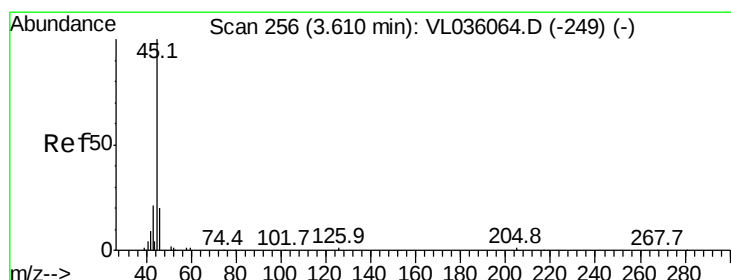
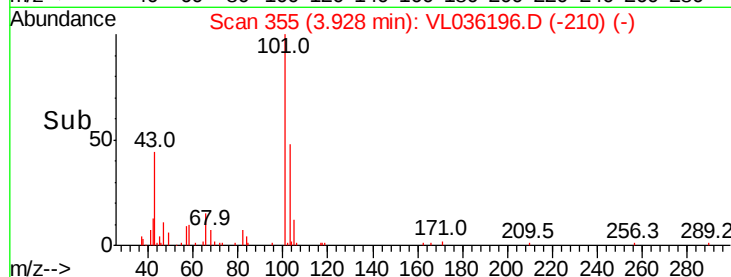
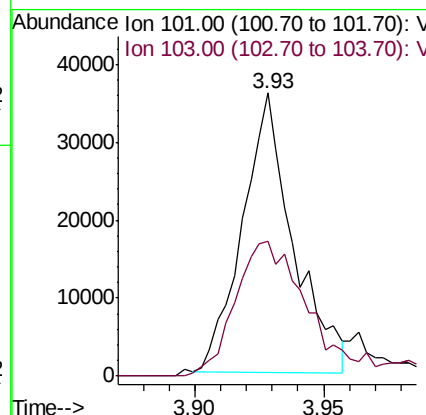
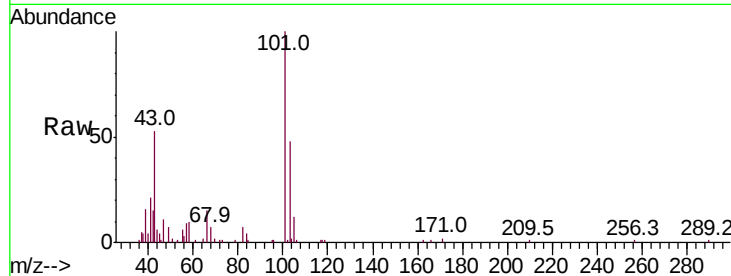
#11
Trichlorofluoromethane
Concen: 0.309 ppbv
RT: 3.93 min Scan# 355
Delta R.T. -0.03 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion:101 Resp: 49188
Ion Ratio Lower Upper
101 100
103 47.2 50.3 75.5#

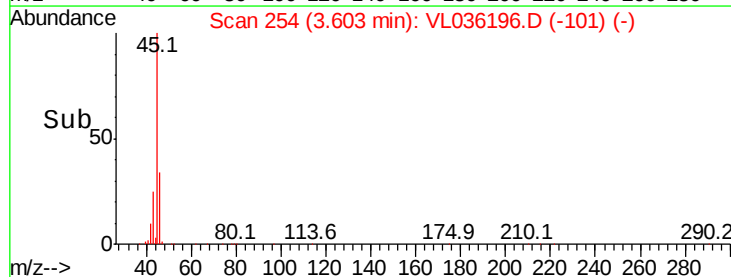
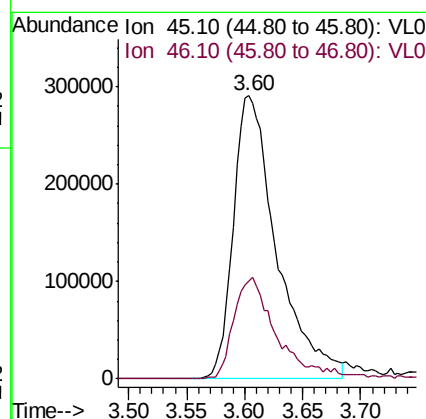
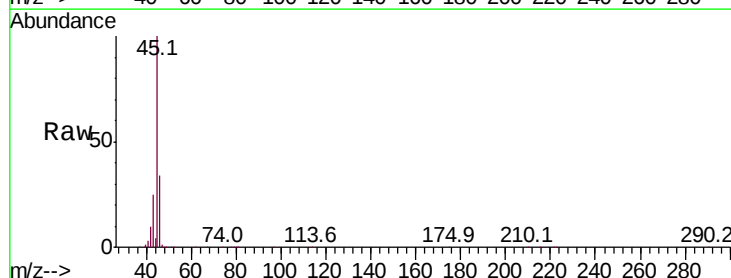
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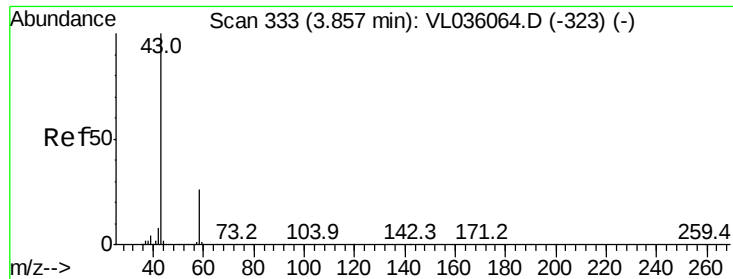
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#13
Ethanol
Concen: 82.153 ppbv
RT: 3.60 min Scan# 254
Delta R.T. -0.01 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion: 45 Resp: 751174
Ion Ratio Lower Upper
45 100
46 36.9 19.0 75.8





#15

Acetone

Concen: 7.026 ppbv m

RT: 3.83 min Scan# 323

Delta R.T. -0.03 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Instrument :

MSVOA_L

ClientSampleId :

SSSG2

Tot Ion: 43 Resp: 979949

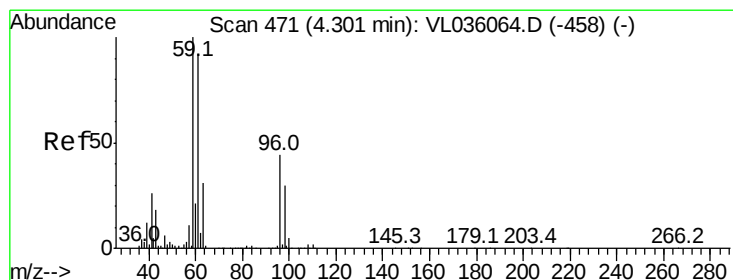
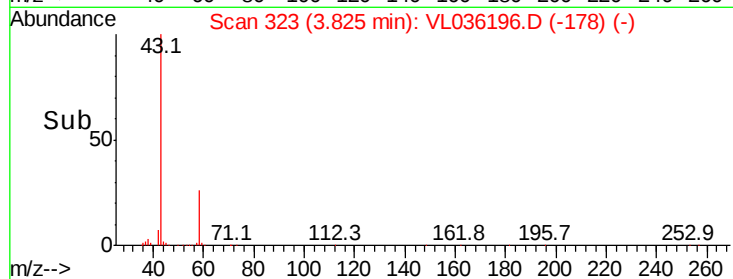
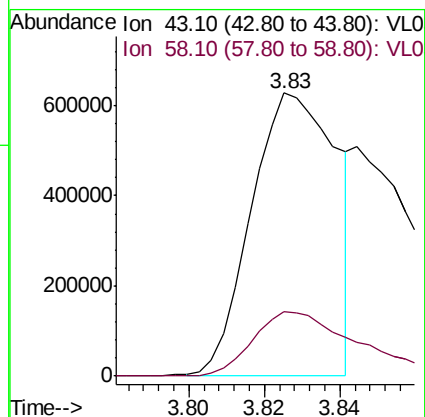
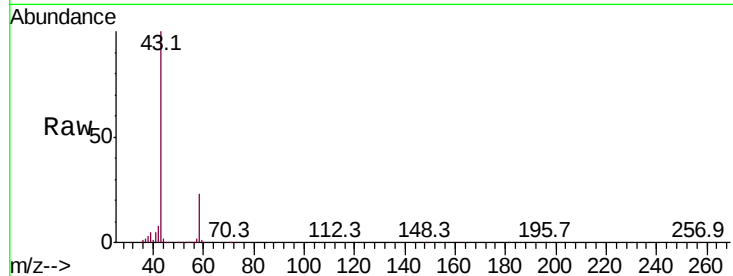
Ion Ratio Lower Upper

43 100

58 31.3 20.9 31.3

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 1.149 ppbv

RT: 4.29 min Scan# 468

Delta R.T. -0.01 min

Lab File: VL036196.D

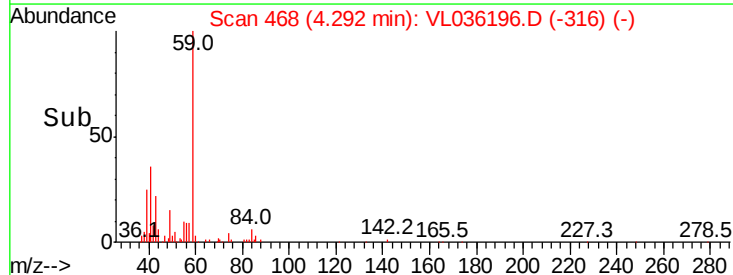
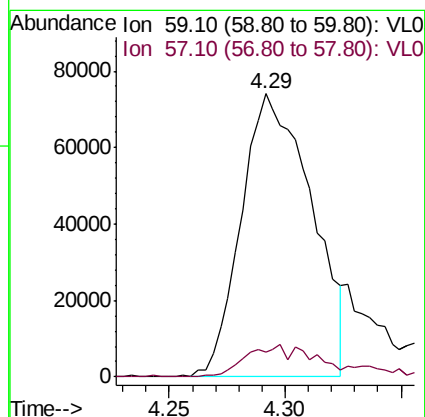
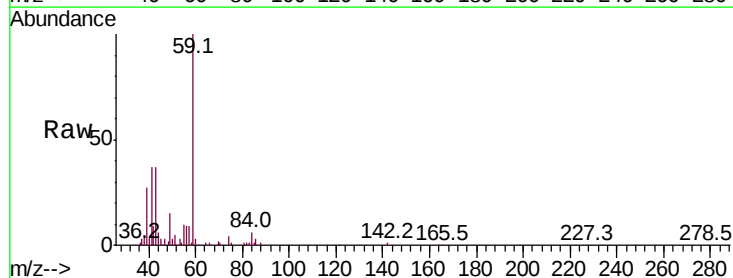
Acq: 23 Dec 2020 17:33

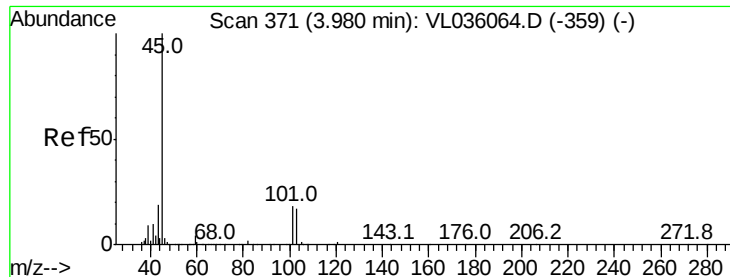
Tgt Ion: 59 Resp: 155274

Ion Ratio Lower Upper

59 100

57 13.4 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 8.992 ppbv

RT: 3.97 min Scan# 367

Delta R.T. -0.01 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Instrument :

MSVOA_L

ClientSampleId :

SSSG2

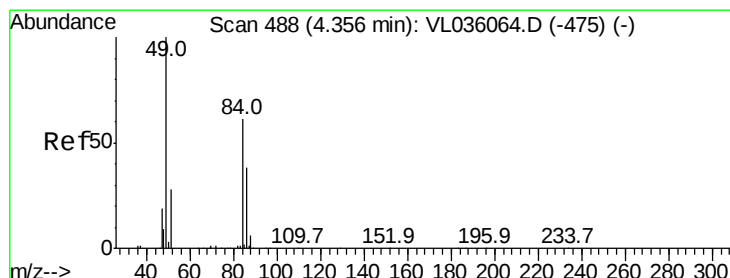
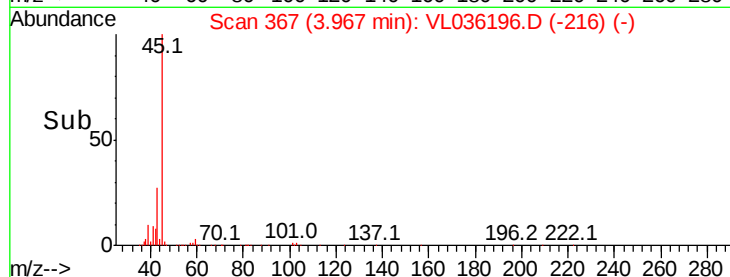
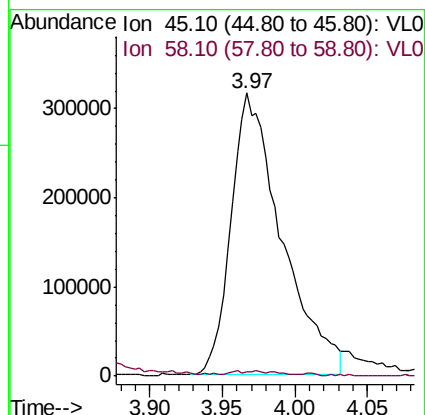
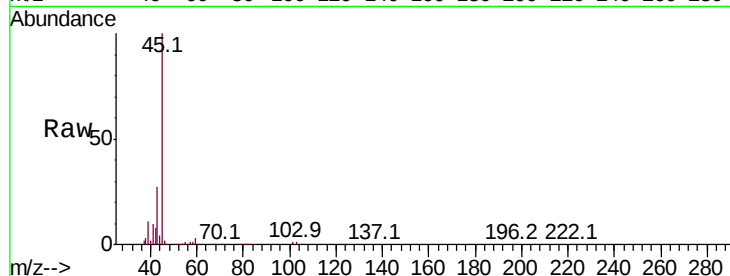
Tot Ion: 45 Resp: 766557
Ion Ratio Lower Upper

45 100

58 2.4 0.0 0.0#

Manual Integrations
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#20

Methylene Chloride

Concen: 12.183 ppbv

RT: 4.32 min Scan# 477

Delta R.T. -0.04 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

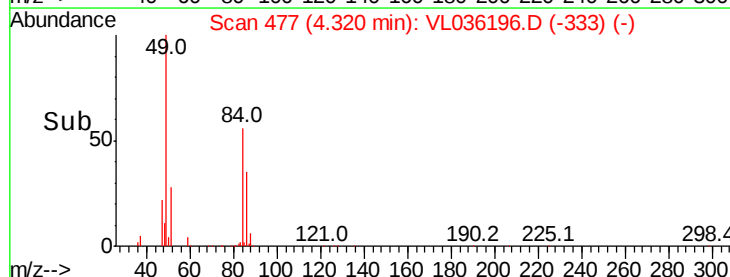
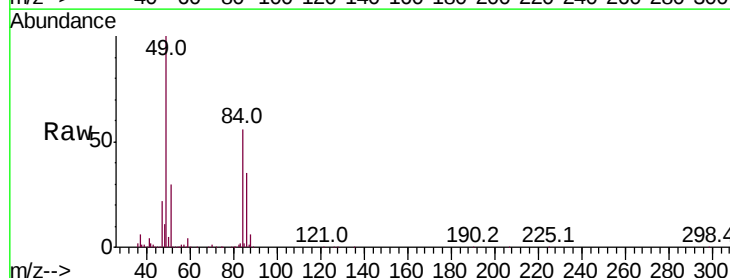
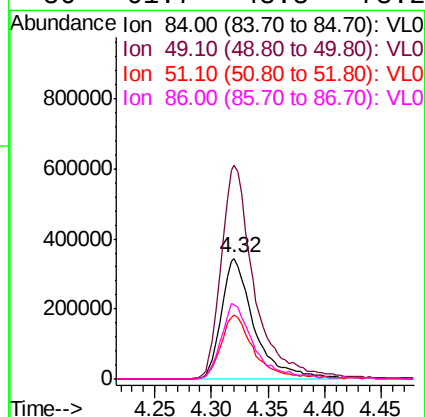
Tgt Ion: 84 Resp: 696287
Ion Ratio Lower Upper

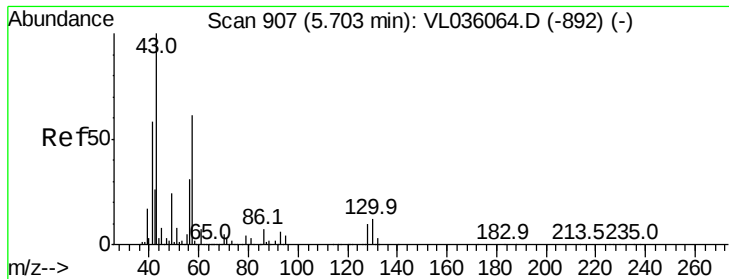
84 100

49 177.0 133.0 199.4

51 52.3 38.9 58.3

86 61.7 48.8 73.2





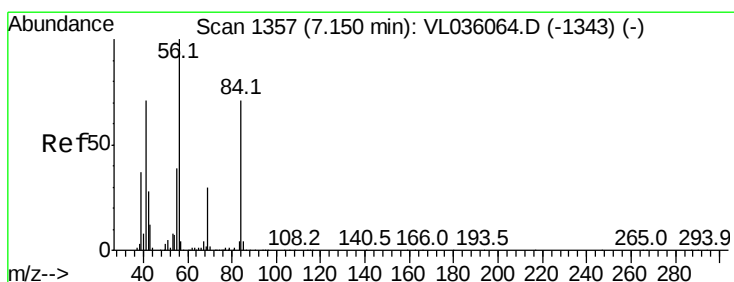
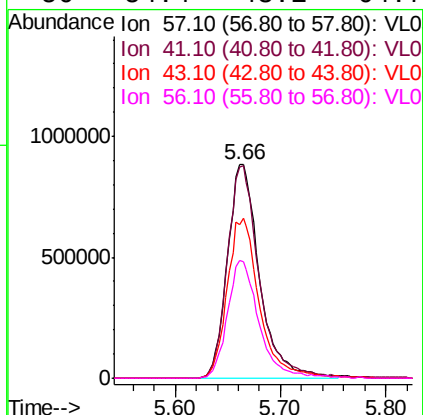
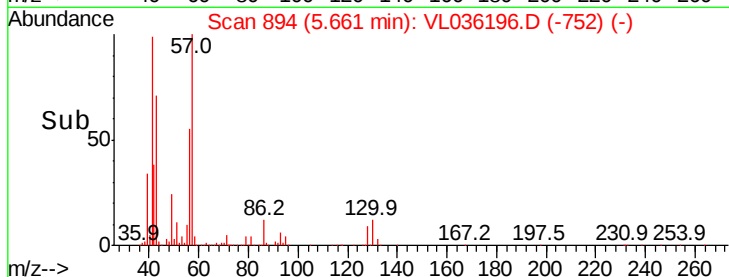
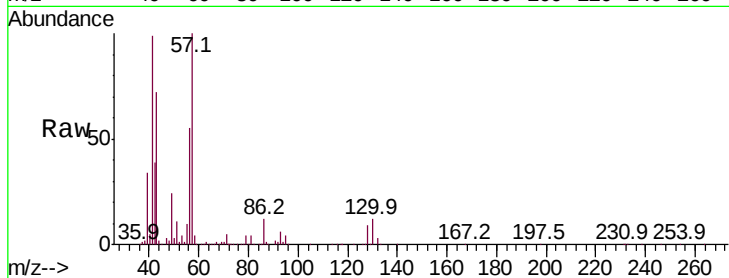
#26
Hexane
Concen: 14.858 ppbv
RT: 5.66 min Scan# 894
Delta R.T. -0.04 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion	Ratio	Lower	Upper
57	100		
41	99.6	82.9	124.3
43	75.7	199.9	299.9#
56	54.4	43.1	64.7

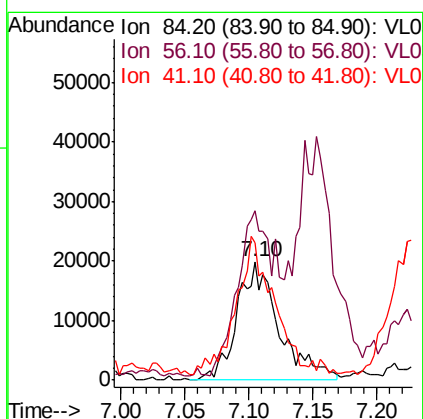
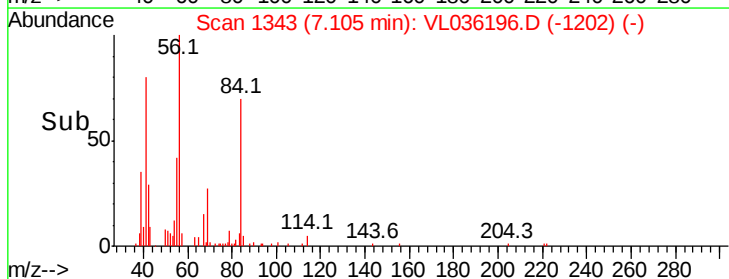
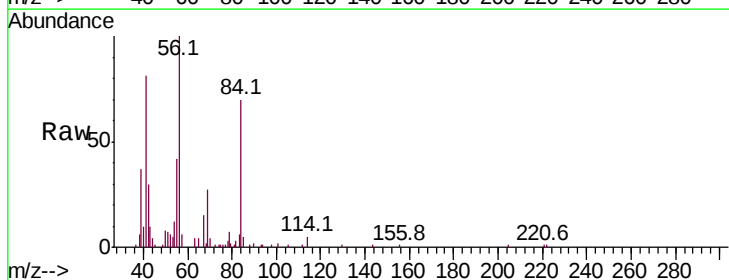
Manual Integrations
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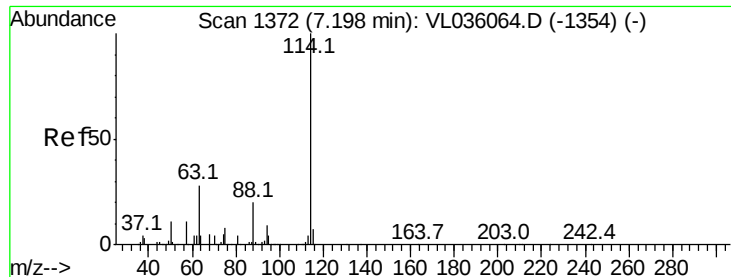
MMDadoda
12/26/2020 1:36:12 PM



#30
Cyclohexane
Concen: 0.492 ppbv m
RT: 7.10 min Scan# 1343
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	128.0	192.0#
41	0.0	81.3	121.9#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.15 min Scan# 1358

Delta R.T. -0.05 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

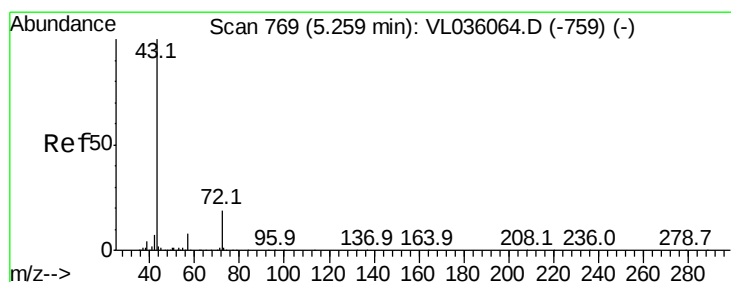
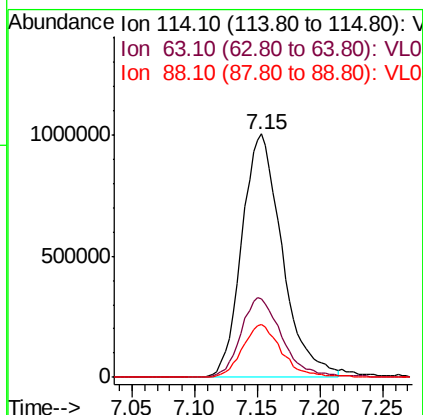
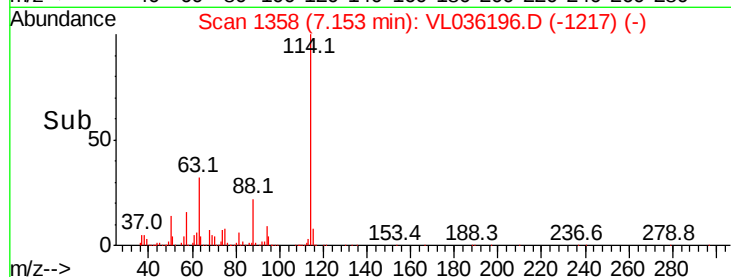
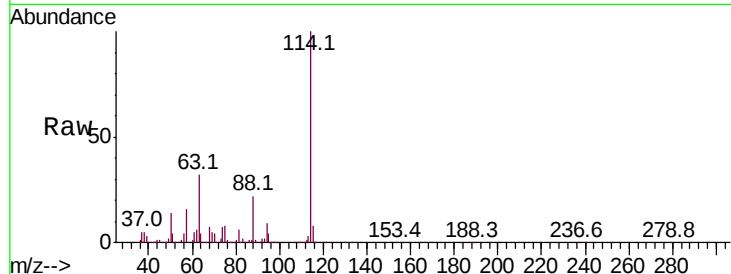
Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion:114 Resp: 2243689

Ion	Ratio	Lower	Upper
114	100		
63	33.8	23.6	35.4
88	21.3	15.8	23.6

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#34

2-Butanone

Concen: 0.860 ppbv

RT: 5.22 min Scan# 758

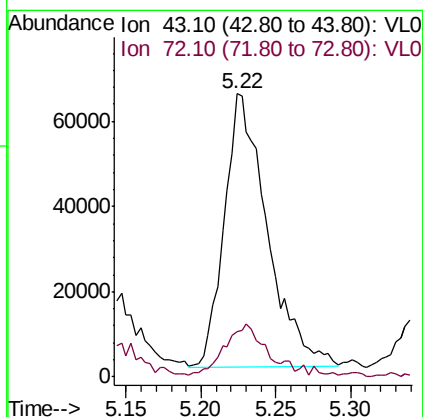
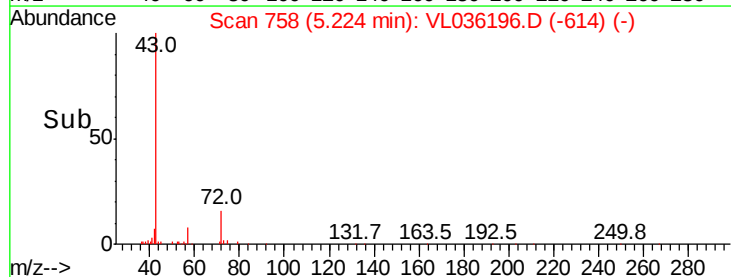
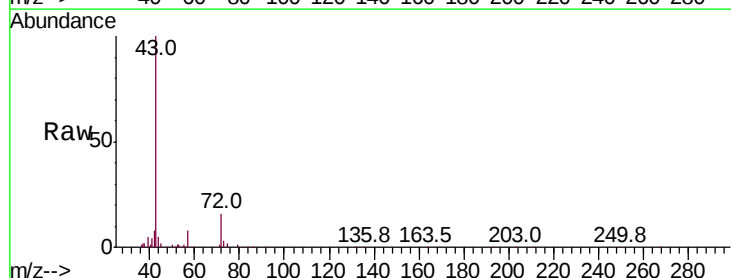
Delta R.T. -0.04 min

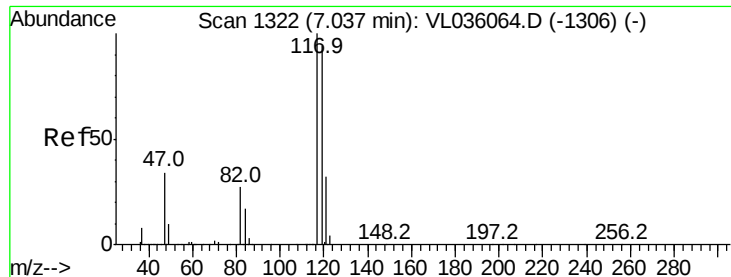
Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Tgt Ion: 43 Resp: 128033

Ion	Ratio	Lower	Upper
43	100		
72	21.5	16.5	24.7





#35

Carbon Tetrachloride

Concen: 0.073 ppbv m

RT: 6.99 min Scan# 1308

Delta R.T. -0.05 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Instrument :

MSVOA_L

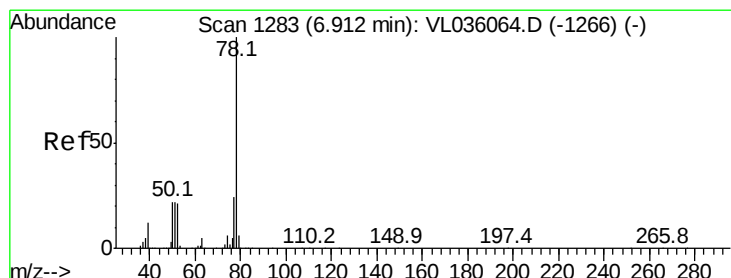
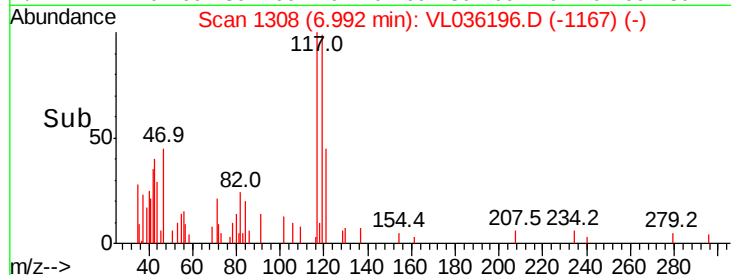
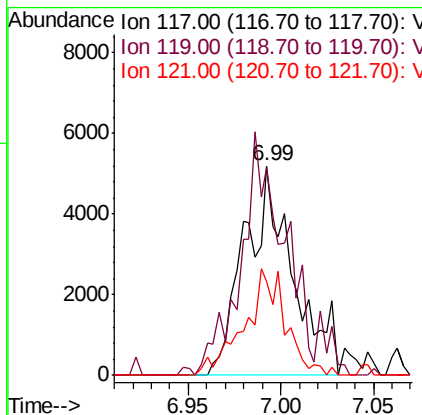
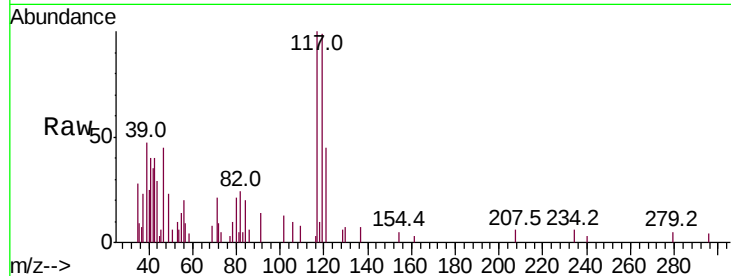
ClientSampleId :

SSSG2

Tot Ion	Ratio	Lower	Upper
117	100		
119	99.0	75.1	112.7
121	44.7	25.6	38.4#

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#36

Benzene

Concen: 0.745 ppbv

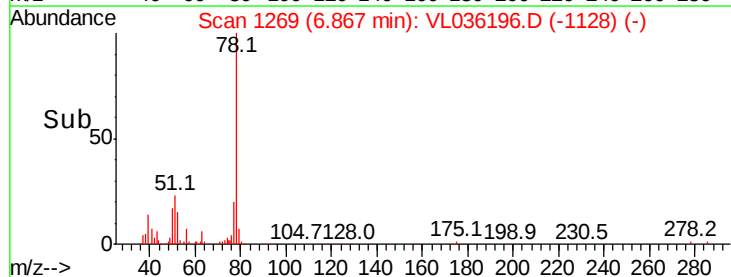
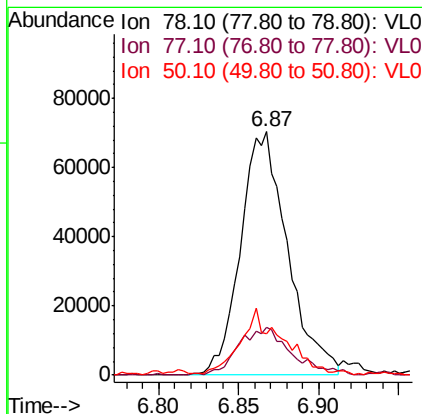
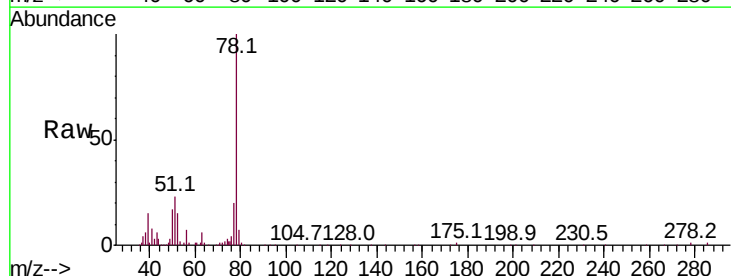
RT: 6.87 min Scan# 1269

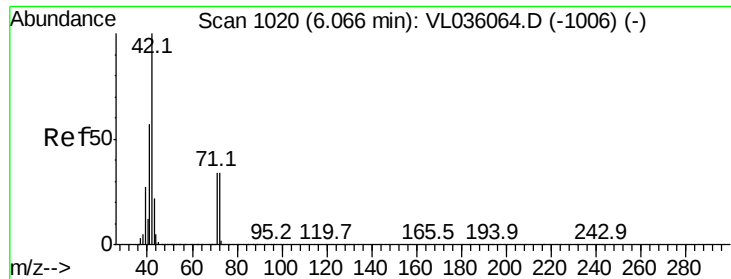
Delta R.T. -0.05 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.8	19.4	29.2
50	16.6	17.8	26.8#





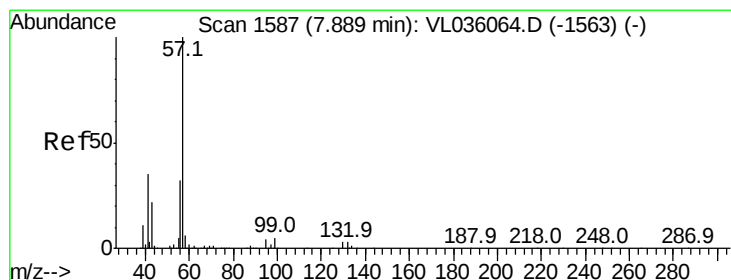
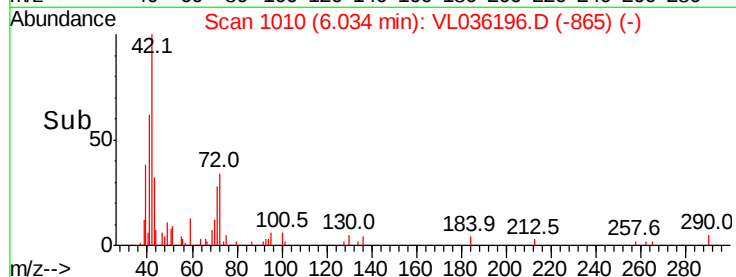
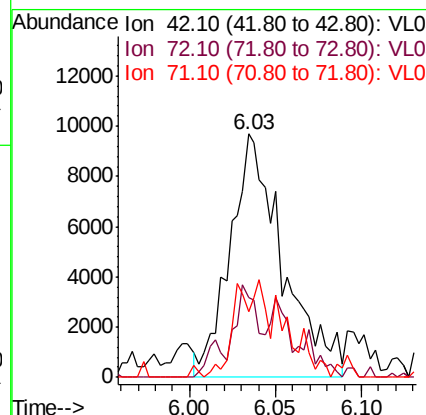
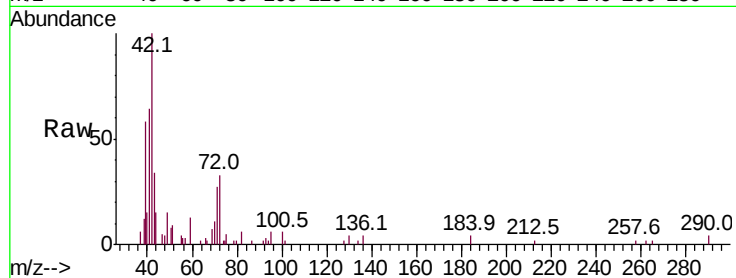
#41
Tetrahydrofuran
Concen: 0.235 ppbv m
RT: 6.03 min Scan# 1010
Delta R.T. -0.03 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion	Ratio	Lower	Upper
42	100		
72	38.7	28.3	42.5
71	36.8	27.3	40.9

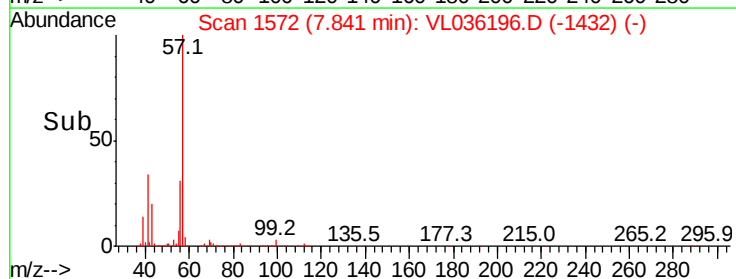
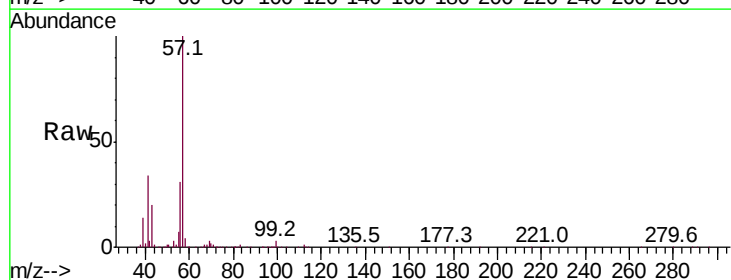
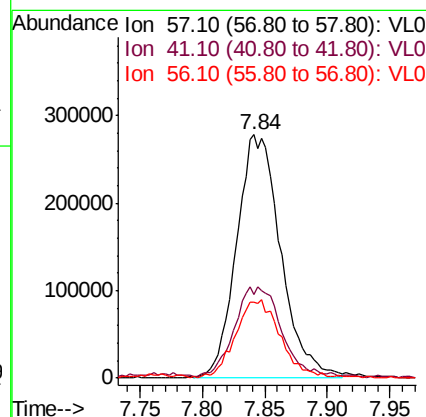
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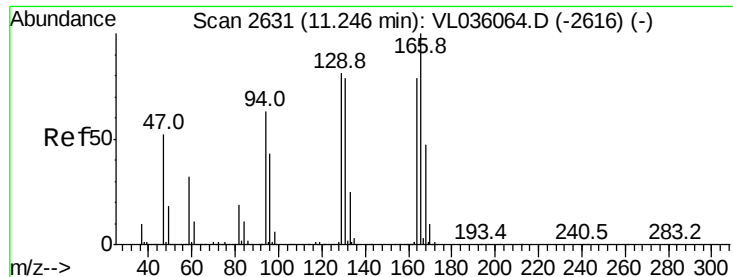
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#44
2,2,4-Trimethylpentane
Concen: 1.993 ppbv m
RT: 7.84 min Scan# 1572
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion	Ratio	Lower	Upper
57	100		
41	40.4	28.9	43.3
56	32.6	25.3	37.9





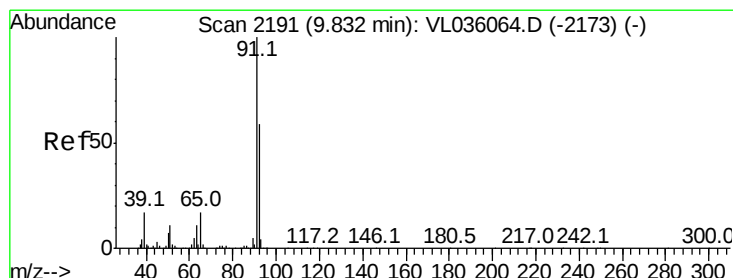
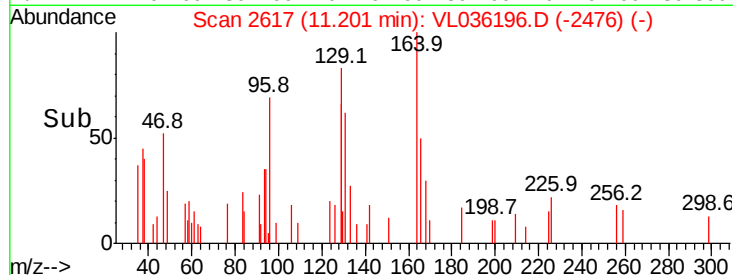
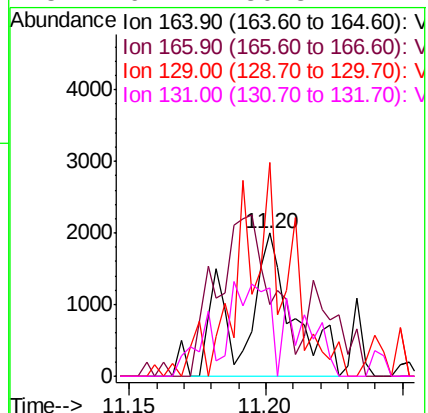
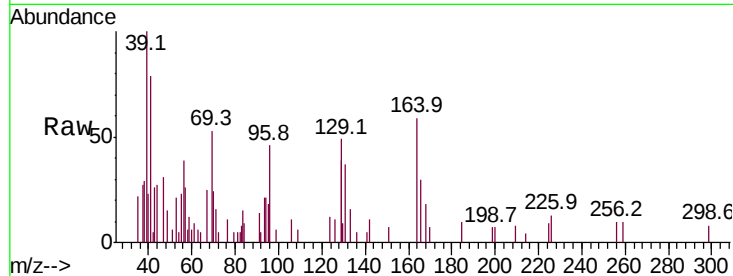
#52
Tetrachloroethene
Concen: 0.038 ppbv m
RT: 11.20 min Scan# 2617
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion	Ratio	Lower	Upper
164	100		
166	50.2	101.9	152.9#
129	83.1	82.1	123.1
131	62.1	80.8	121.2#

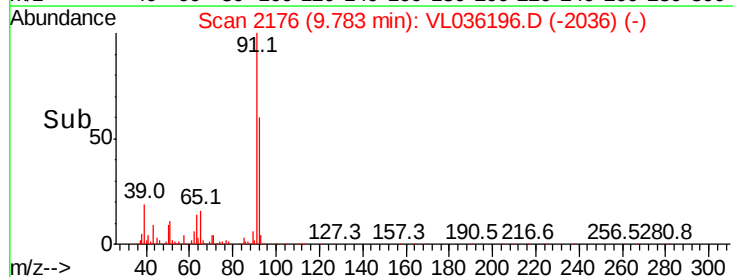
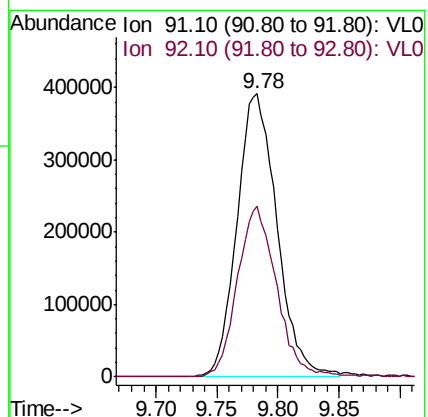
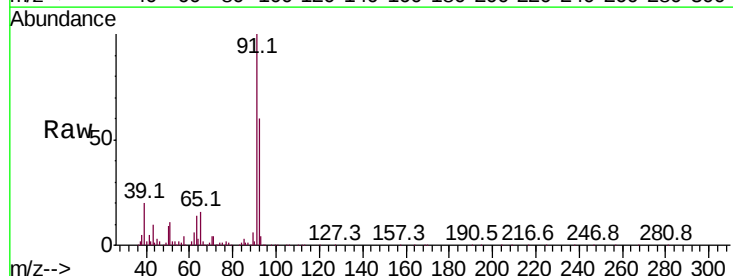
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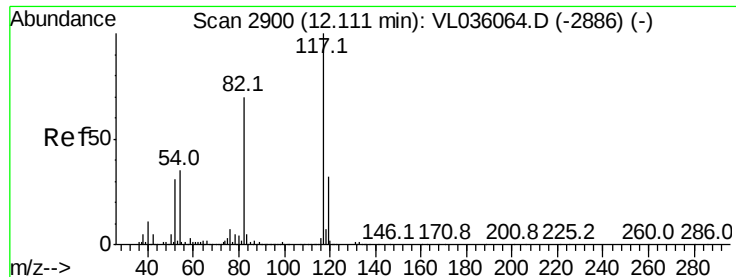
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#53
Toluene
Concen: 4.160 ppbv
RT: 9.78 min Scan# 2176
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion	Ratio	Lower	Upper
91	100		
92	58.8	48.2	72.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. -0.05 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Instrument :

MSVOA_L

ClientSampleId :

SSSG2

Tot Ion:117 Resp: 2069047

Ion Ratio Lower Upper

117 100

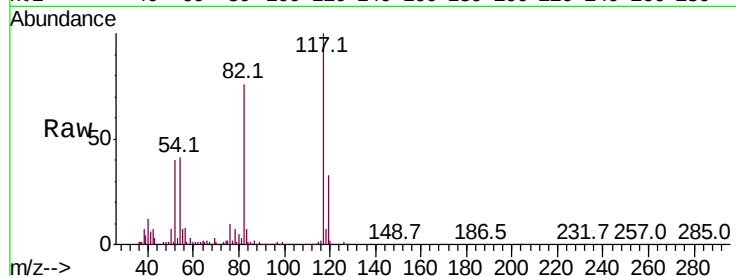
82 79.8 0.0 0.0#

119 33.0 0.0 0.0#

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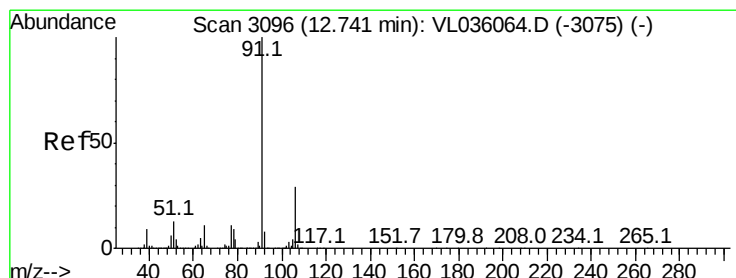
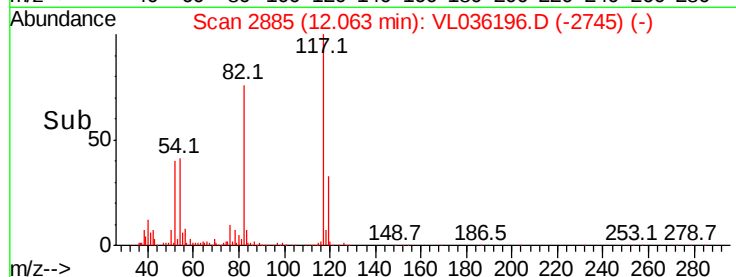
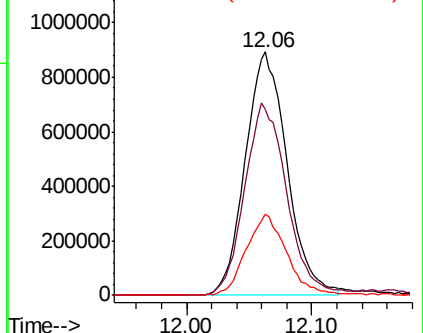
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.819 ppbv

RT: 12.69 min Scan# 3079

Delta R.T. -0.05 min

Lab File: VL036196.D

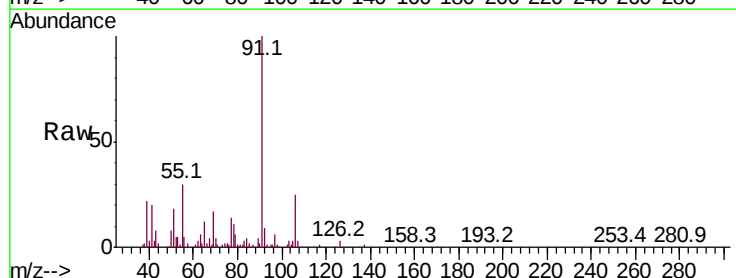
Acq: 23 Dec 2020 17:33

Tgt Ion: 91 Resp: 232349

Ion Ratio Lower Upper

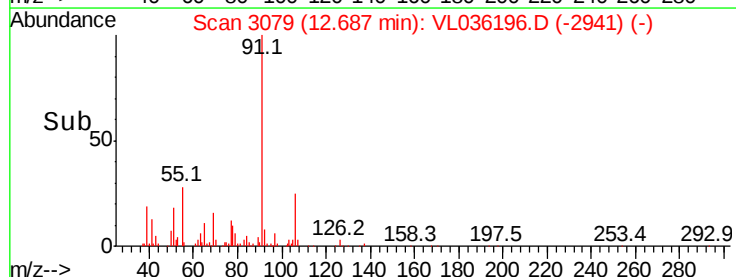
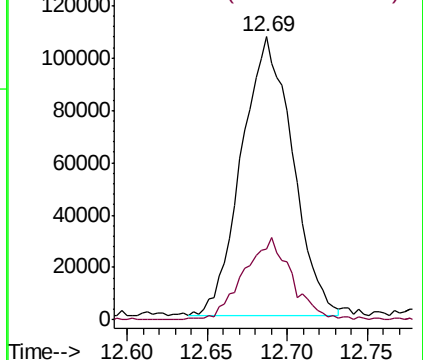
91 100

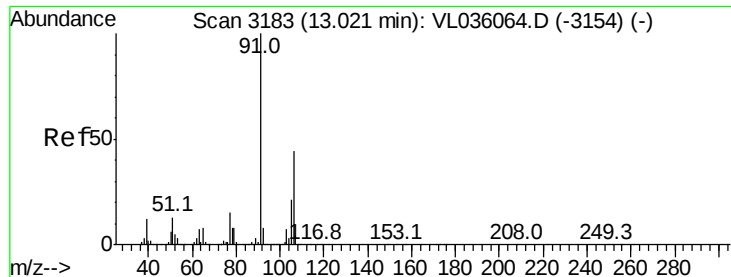
106 24.9 23.0 34.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





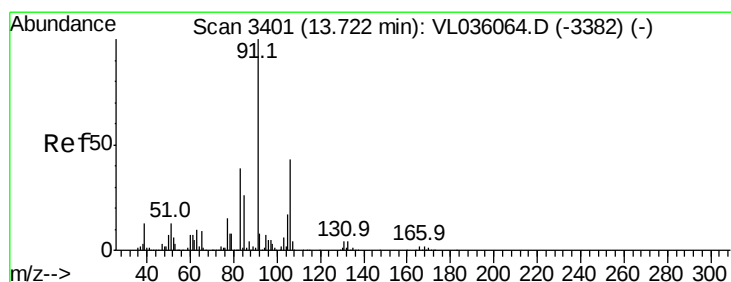
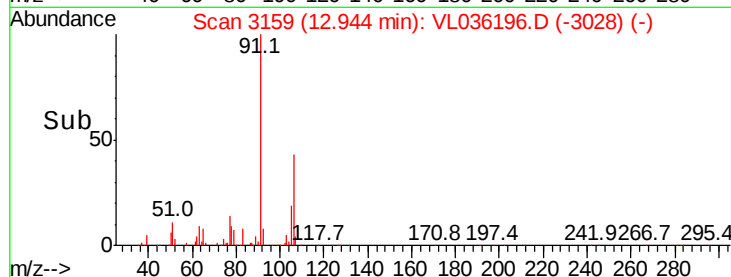
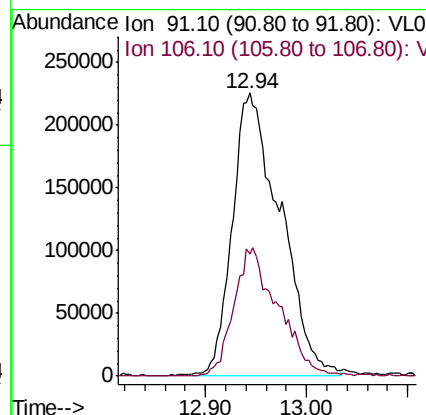
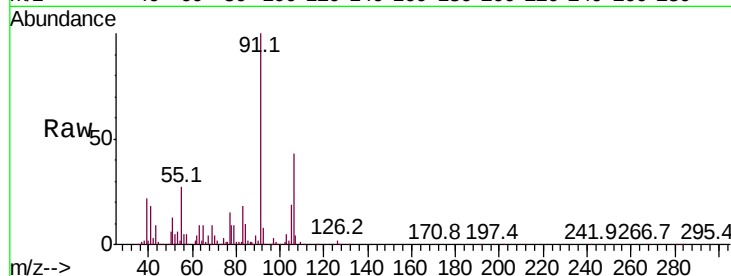
#59
m/p-Xylene
Concen: 3.115 ppbv m
RT: 12.94 min Scan# 3159
Delta R.T. -0.08 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion	91	106	Ratio	Lower	Upper
743841	100	0.0		33.6	50.4

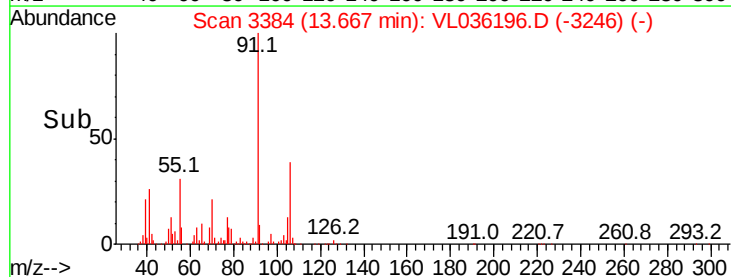
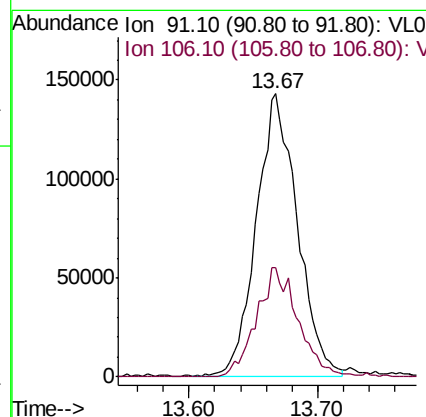
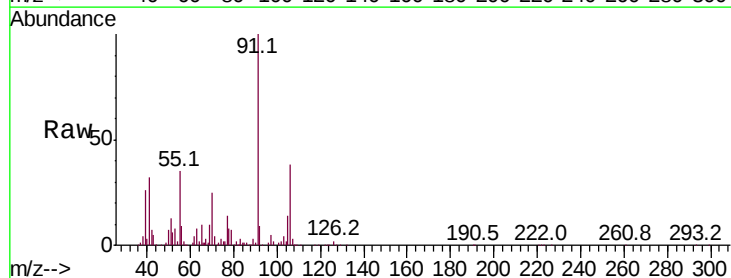
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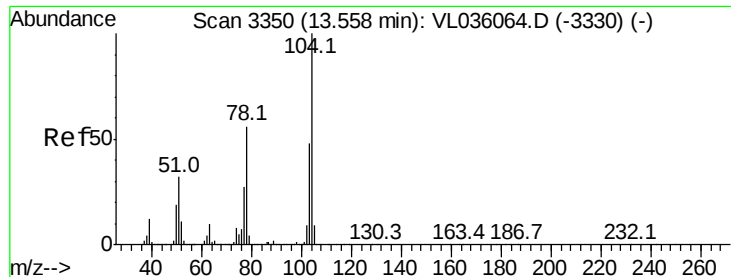
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#60
o-Xylene
Concen: 1.405 ppbv
RT: 13.67 min Scan# 3384
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion	91	106	Ratio	Lower	Upper
316146	100	39.6		21.6	64.6





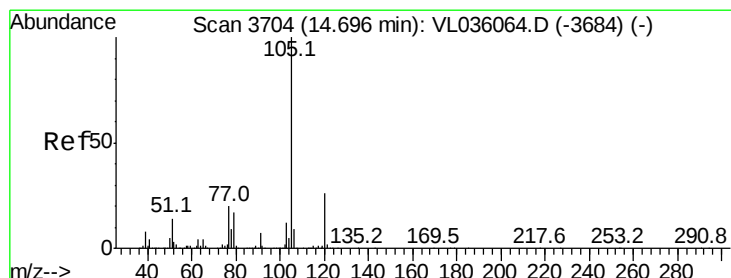
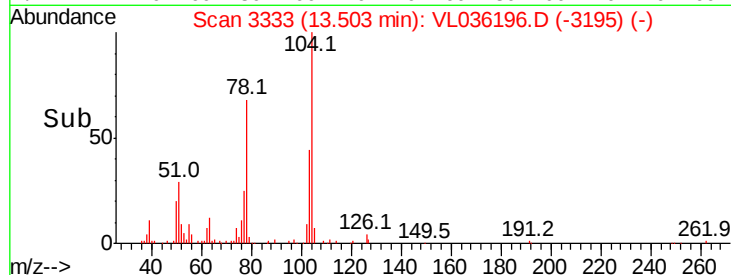
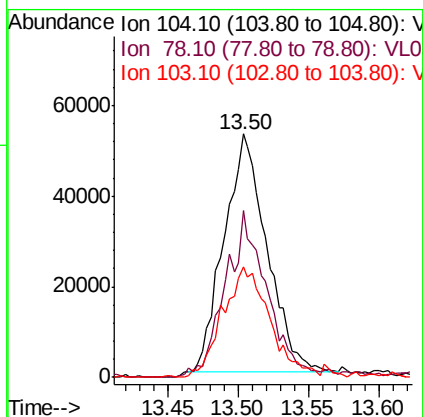
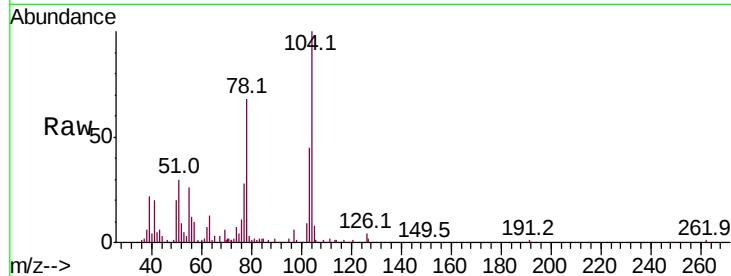
#61
Stvrene
Concen: 0.770 ppbv
RT: 13.50 min Scan# 3333
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG2

Tot Ion	Ratio	Lower	Upper
104	100		
78	70.1	45.8	68.8#
103	53.3	38.6	57.8

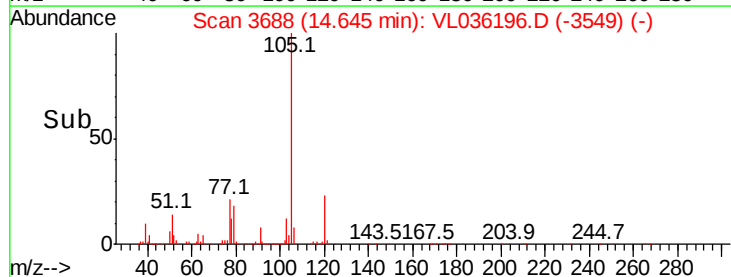
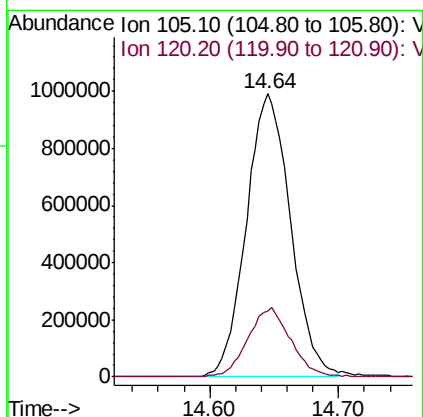
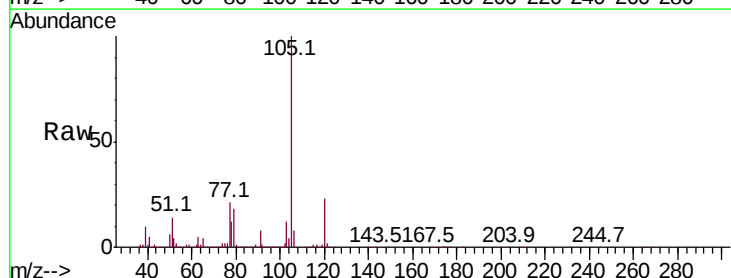
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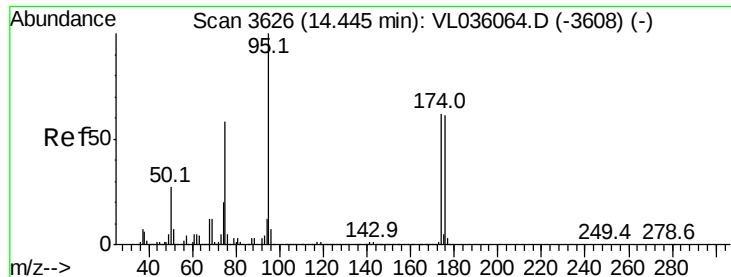
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#62
Isopropylbenzene
Concen: 7.089 ppbv
RT: 14.64 min Scan# 3688
Delta R.T. -0.05 min
Lab File: VL036196.D
Acq: 23 Dec 2020 17:33

Tgt Ion	Ratio	Lower	Upper
105	100		
120	23.8	20.1	30.1





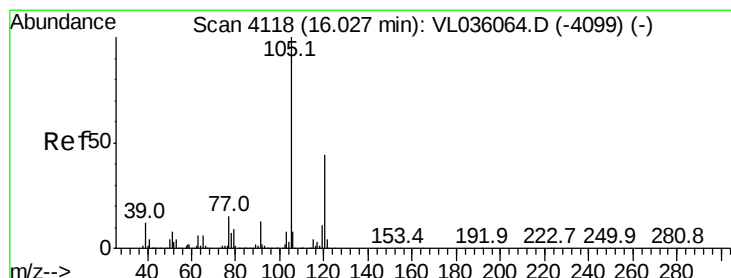
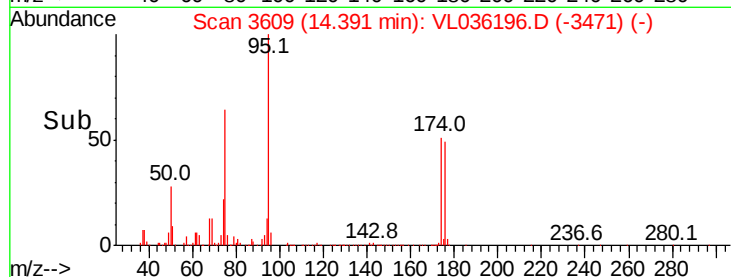
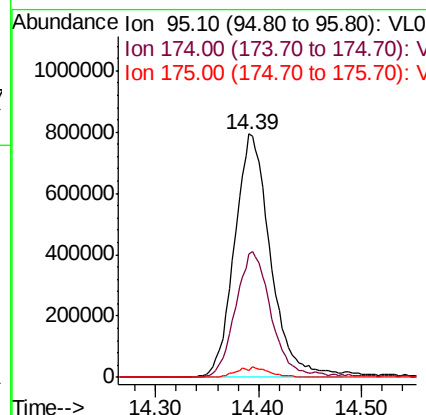
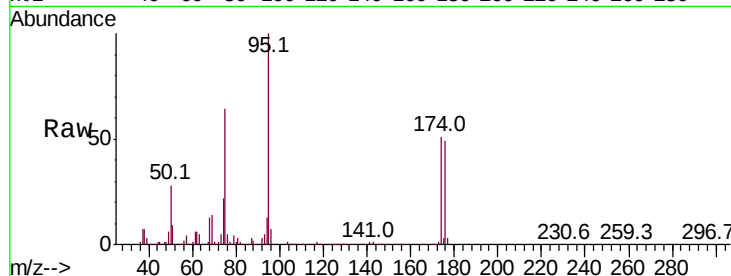
#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.700 ppbv
 RT: 14.39 min Scan# 3609
 Delta R.T. -0.05 min
 Lab File: VL036196.D
 Acq: 23 Dec 2020 17:33

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG2

Tot Ion	Ratio	Lower	Upper
95	100		
174	53.0	50.7	76.1
175	3.9	4.0	6.0

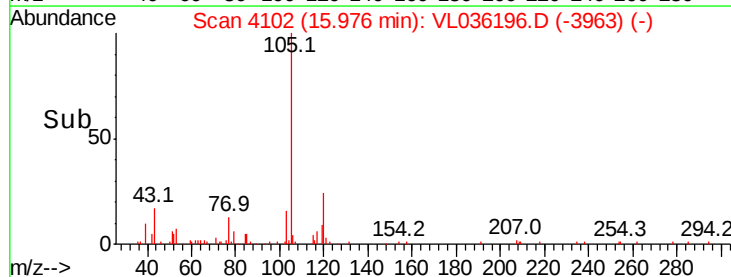
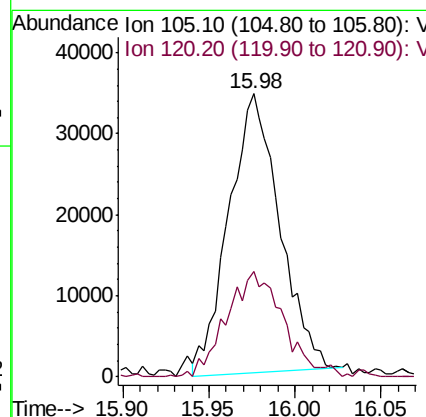
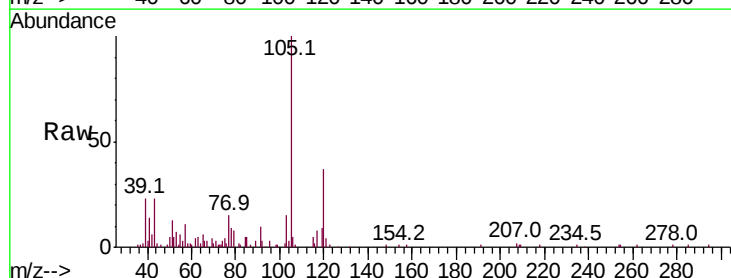
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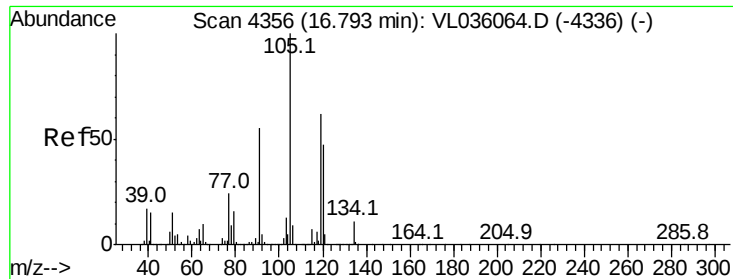
MMDadoda
 12/26/2020 1:36:12 PM



#73
 1,3,5-Trimethylbenzene
 Concen: 0.305 ppbv
 RT: 15.98 min Scan# 4102
 Delta R.T. -0.05 min
 Lab File: VL036196.D
 Acq: 23 Dec 2020 17:33

Tgt Ion	Ratio	Lower	Upper
105	100		
120	38.4	35.4	53.2





#74

1,2,4-Trimethylbenzene

Concen: 1.209 ppbv

RT: 16.74 min Scan# 4339

Delta R.T. -0.05 min

Lab File: VL036196.D

Acq: 23 Dec 2020 17:33

Instrument :

MSVOA_L

ClientSampleId :

SSSG2

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	39.7	37.4	56.0
91	12.1	45.6	68.4#
77	15.3	19.4	29.2#

Manual Integrations
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