

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032019\
 Data File : VL033396.D
 Acq On : 20 Mar 2019 19:10
 Operator : SY/AP
 Sample : K1975-01DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1DUP

Manual Integrations
 APPROVED

MMDadoda
 3/25/2019 8:26:28 AM

Quant Time: Mar 21 13:12:23 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 1
 QLast Update : Fri Mar 15 14:52:14 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	807919	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1803028	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.24	117	1774876	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	1379510	10.49	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.90%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.07	85	71669	0.504 ppbv	92
3) Chlorodifluoromethane	3.01	51	35195	0.380 ppbv	96
4) Chloromethane	3.17	50	30121	0.600 ppbv #	89
9) Propene	3.05	41	21359	0.516 ppbv #	74
11) Trichlorofluoromethane	4.00	101	37948	0.268 ppbv	88
13) Ethanol	3.65	45	180662	9.155 ppbv	99
15) Acetone	3.90	43	494921	3.941 ppbv	99
19) Isopropyl Alcohol	4.03	45	50374	0.843 ppbv #	1
20) Methylene Chloride	4.41	84	137570	3.359 ppbv	99
26) Hexane	5.78	57	150075	1.839 ppbv #	66
34) 2-Butanone	5.33	43	109500	0.925 ppbv	99
35) Carbon Tetrachloride	7.13	117	10466m	0.082 ppbv	
36) Benzene	7.00	78	21194m	0.131 ppbv	
52) Tetrachloroethene	11.36	164	6825m	0.102 ppbv	
53) Toluene	9.94	91	265781	1.450 ppbv	98
59) m/p-Xylene	13.12	91	47757m	0.221 ppbv	

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

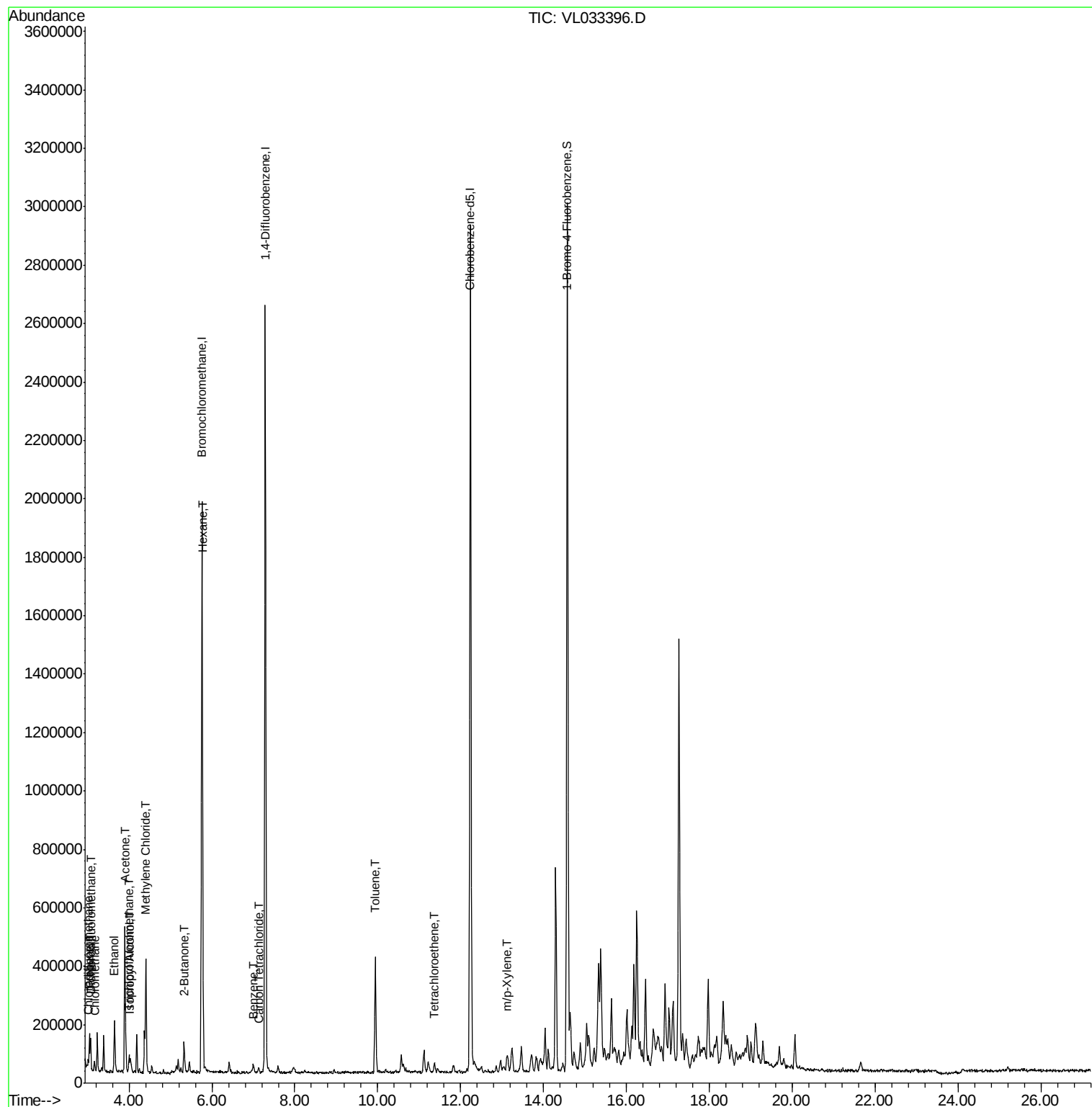
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032019\
Data File : VL033396.D
Acq On : 20 Mar 2019 19:10
Operator : SY/AP
Sample : K1975-01DUP
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

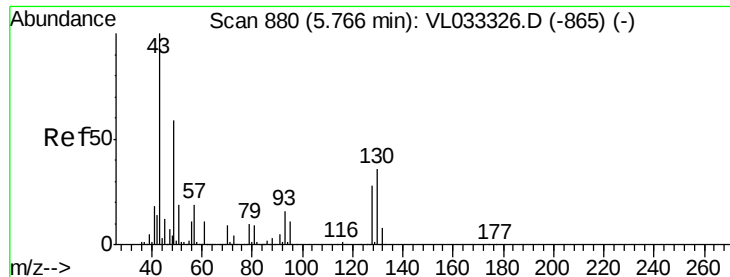
Instrument :
MSVOA_L
ClientSampleId :
QA1DUP

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3/25/2019 8:26:28 AM

Quant Time: Mar 21 13:12:23 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar
QLast Update : Fri Mar 15 14:52:14 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

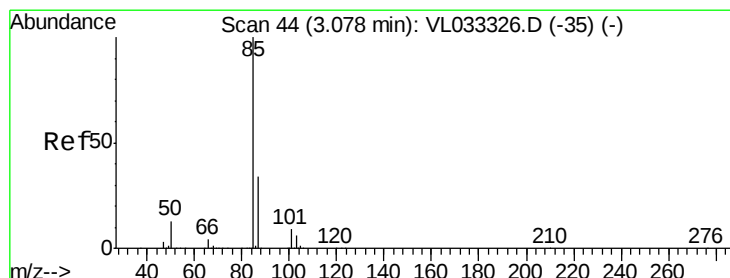
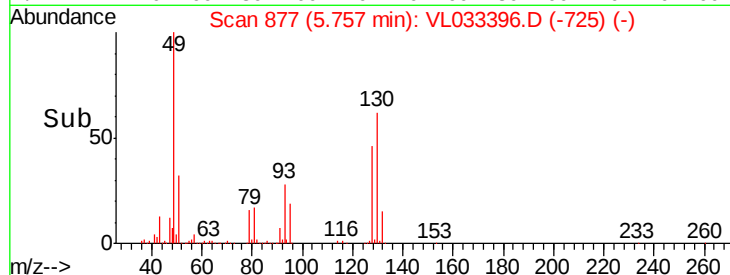
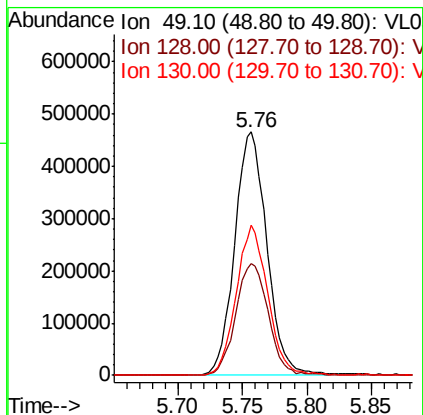
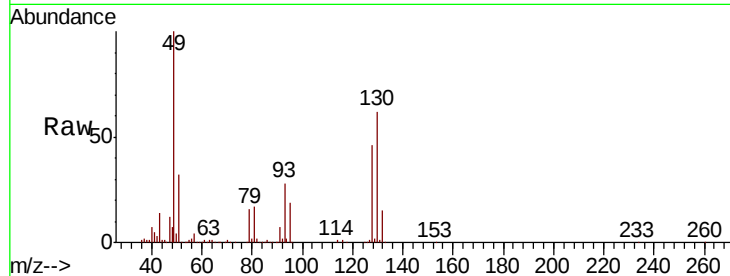
ClientSampleId :

QA1DUP

Tot Ion:	49	Resp:	807919
Ion	Ratio	Lower	Upper
49	100		
128	47.1	23.5	70.6
130	60.5	30.1	90.3

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#2

Dichlorodifluoromethane

Concen: 0.504 ppbv

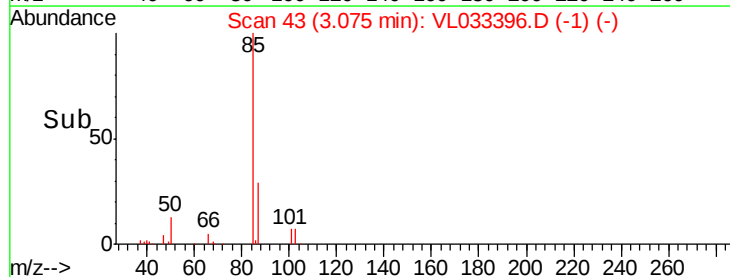
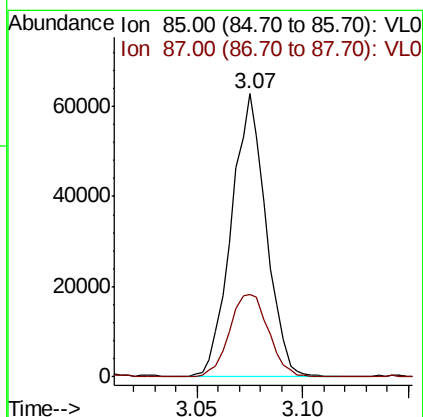
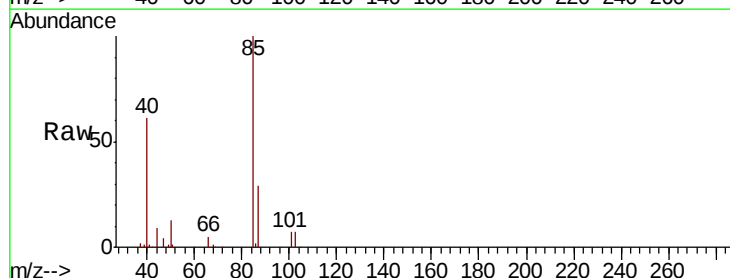
RT: 3.07 min Scan# 43

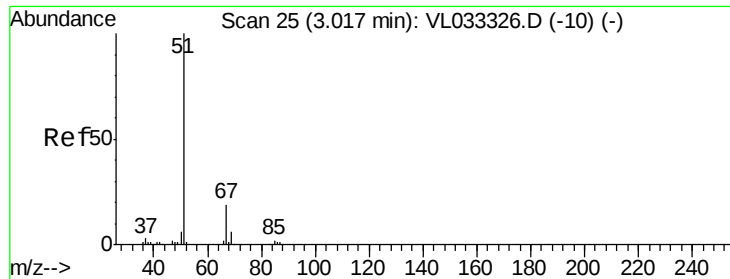
Delta R.T. -0.00 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Tgt Ion:	85	Resp:	71669
Ion	Ratio	Lower	Upper
85	100		
87	29.2	26.9	40.3





#3

Chlorodifluoromethane

Concen: 0.380 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

ClientSampleId :

QA1DUP

Tot Ion: 51 Resp: 35195

Ion Ratio Lower Upper

51 100

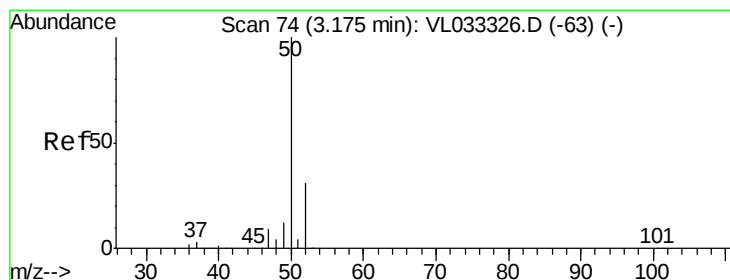
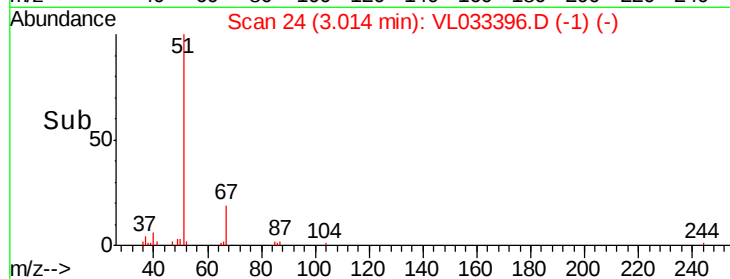
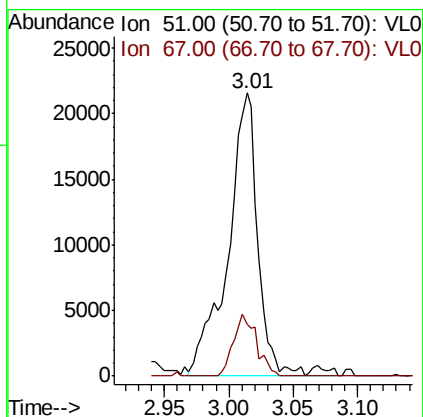
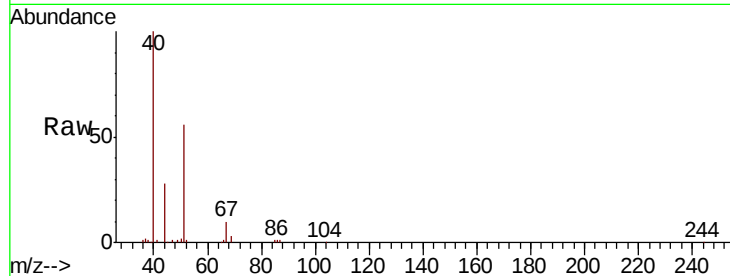
67 16.8 14.9 22.3

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#4

Chloromethane

Concen: 0.600 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033396.D

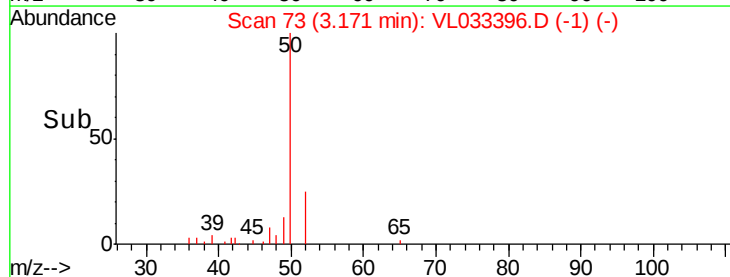
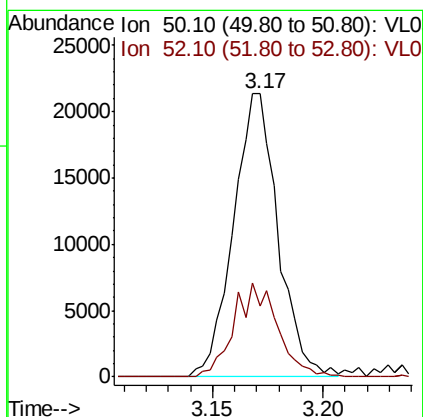
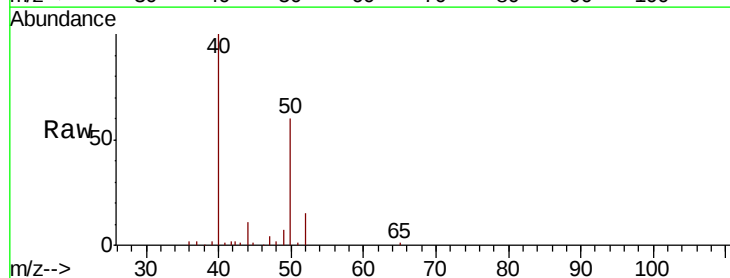
Acq: 20 Mar 2019 19:10

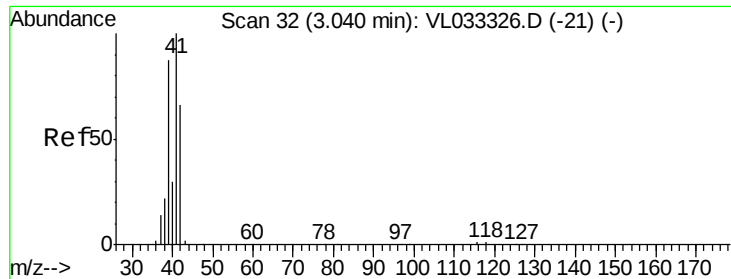
Tgt Ion: 50 Resp: 30121

Ion Ratio Lower Upper

50 100

52 25.0 25.0 37.6#





#9

Propene

Concen: 0.516 ppbv

RT: 3.05 min Scan# 34

Delta R.T. 0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

ClientSampleId :

QA1DUP

Tot Ion: 41 Resp: 21359

Ion Ratio Lower Upper

41 100

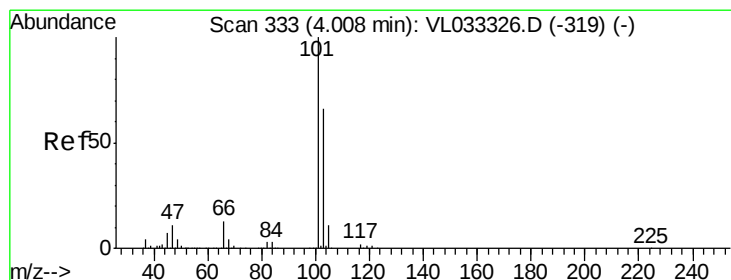
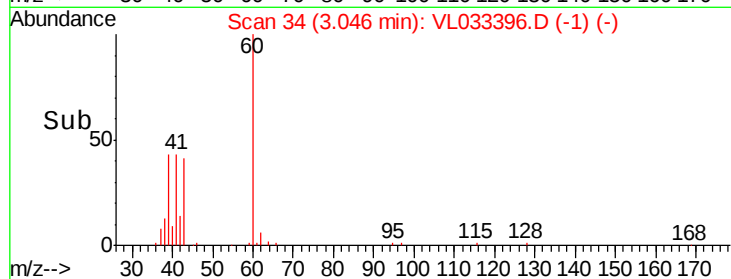
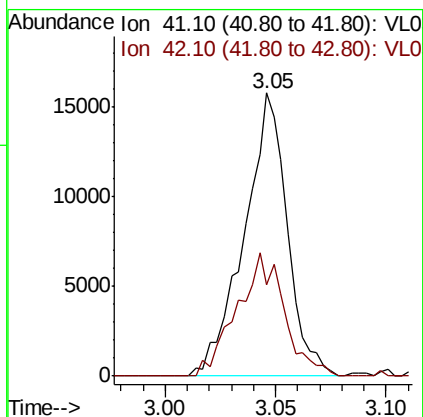
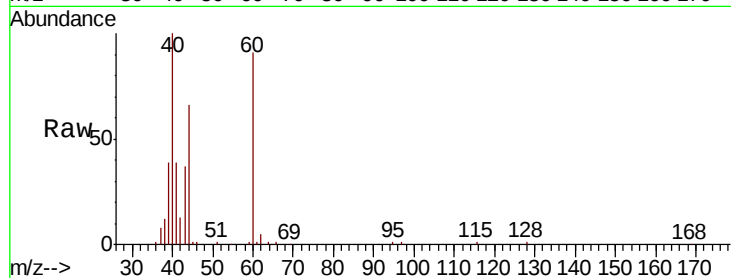
42 47.6 55.2 82.8#

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#11

Trichlorofluoromethane

Concen: 0.268 ppbv

RT: 4.00 min Scan# 331

Delta R.T. -0.01 min

Lab File: VL033396.D

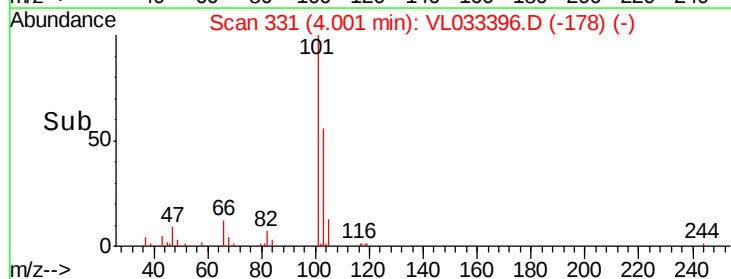
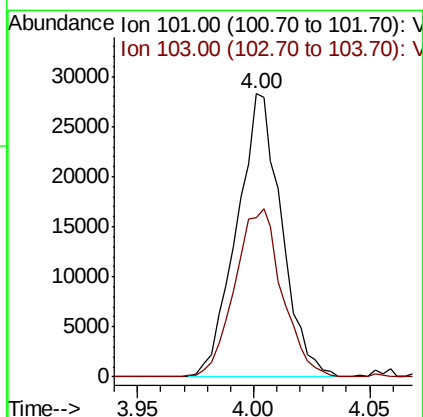
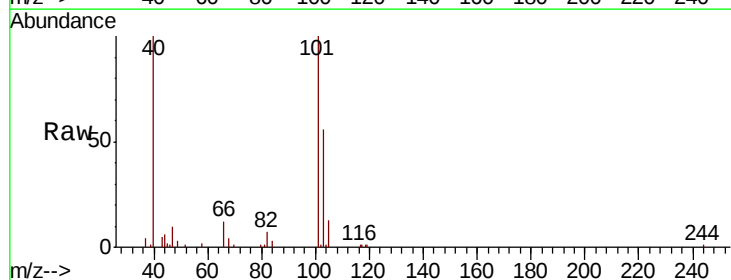
Acq: 20 Mar 2019 19:10

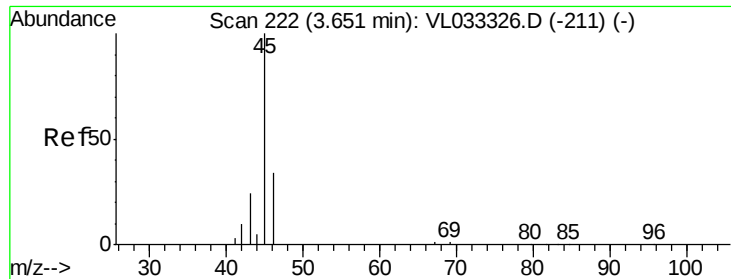
Tgt Ion: 101 Resp: 37948

Ion Ratio Lower Upper

101 100

103 56.2 52.9 79.3





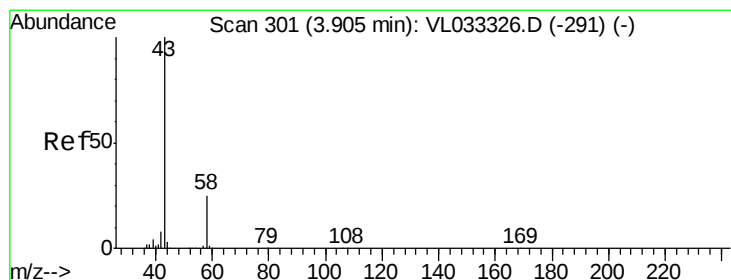
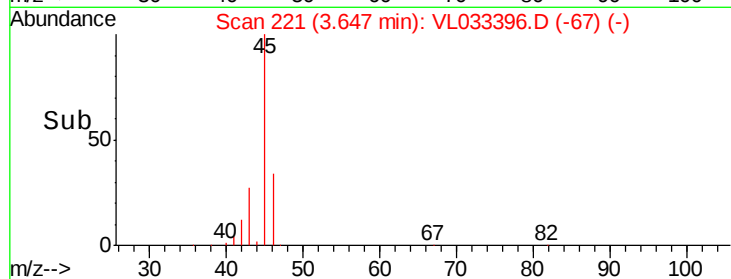
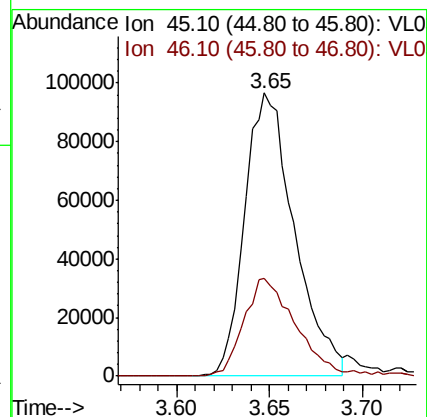
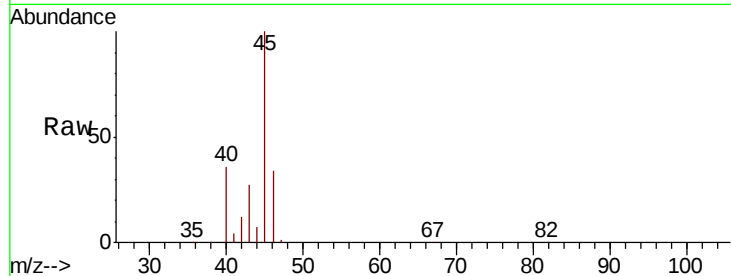
#13
Ethanol
Concen: 9.155 ppbv
RT: 3.65 min Scan# 221
Delta R.T. -0.00 min
Lab File: VL033396.D
Acq: 20 Mar 2019 19:10

Instrument :
MSVOA_L
ClientSampled :
QA1DUP

Tot Ion	45.10	Resp	180662
Ion Ratio	Lower	Upper	
45	100		
46	36.6	14.9	59.7

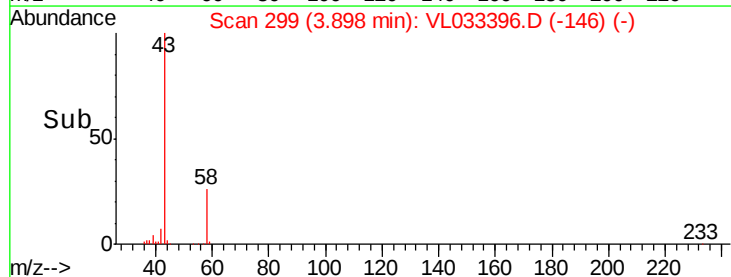
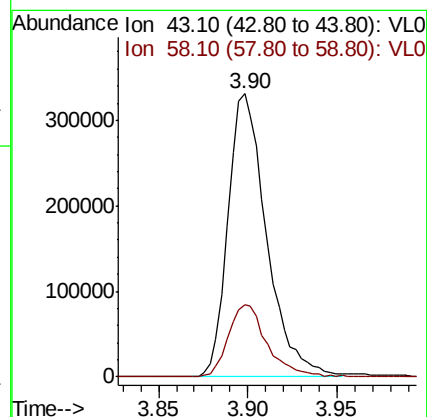
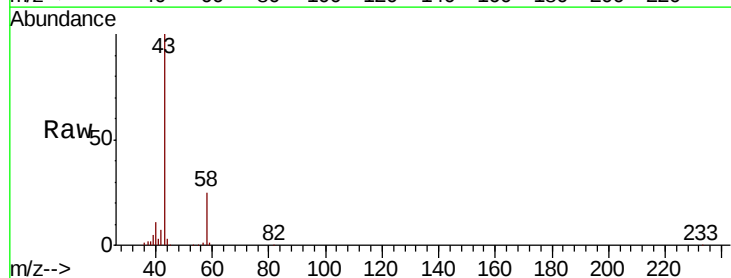
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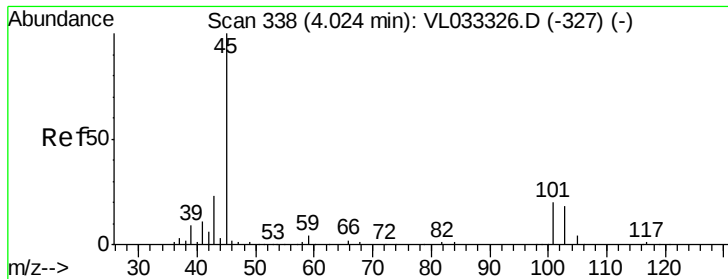
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#15
Acetone
Concen: 3.941 ppbv
RT: 3.90 min Scan# 299
Delta R.T. -0.01 min
Lab File: VL033396.D
Acq: 20 Mar 2019 19:10

Tgt Ion	43	Resp	494921
Ion Ratio	Lower	Upper	
43	100		
58	25.8	20.4	30.6





#19

Isopropyl Alcohol

Concen: 0.843 ppbv

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

ClientSampleID :

QA1DUP

Tot Ion: 45 Resp: 50374

Ion Ratio Lower Upper

45 100

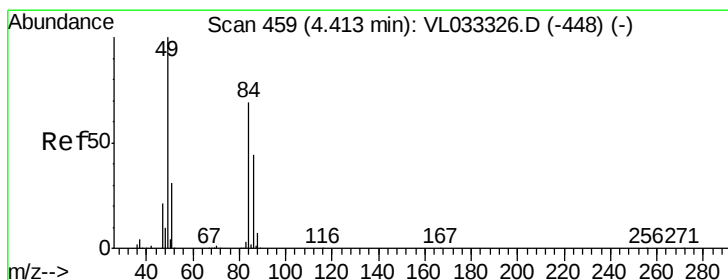
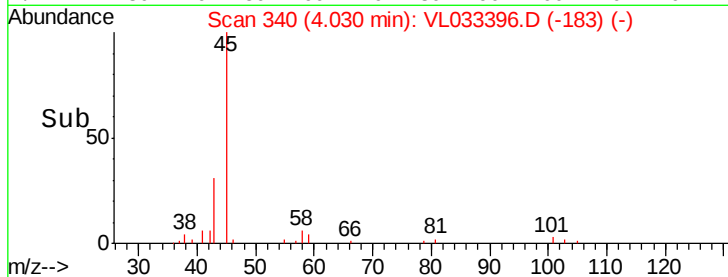
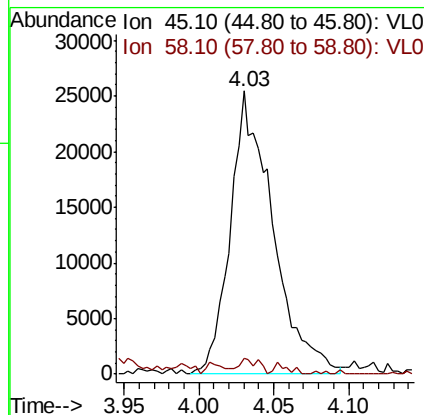
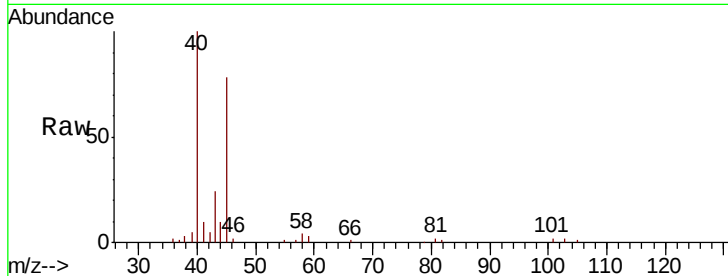
58 255.3 1.5 2.3#

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#20

Methylene Chloride

Concen: 3.359 ppbv

RT: 4.41 min Scan# 458

Delta R.T. -0.00 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Tgt Ion: 84 Resp: 137570

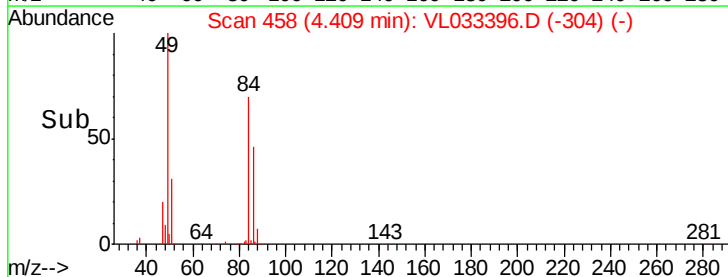
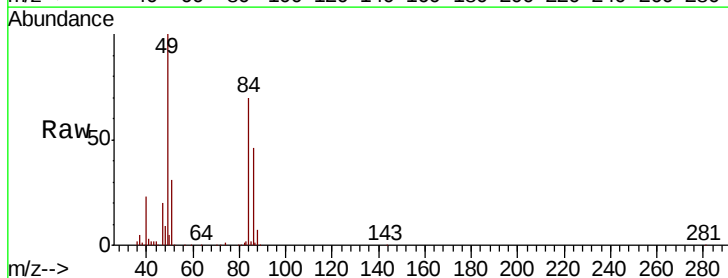
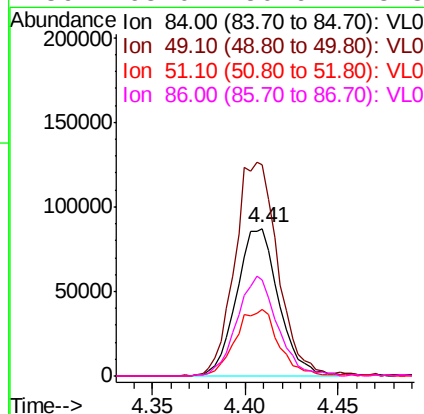
Ion Ratio Lower Upper

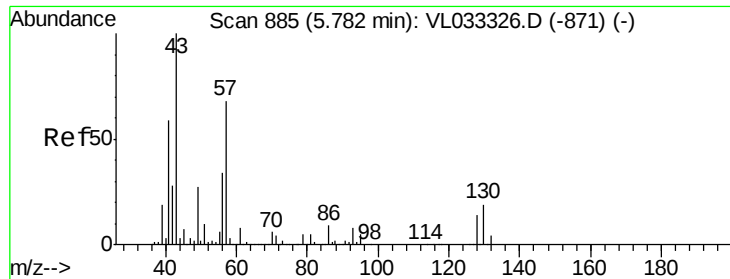
84 100

49 142.8 115.4 173.0

51 44.9 35.8 53.6

86 65.0 50.6 75.8





#26

Hexane

Concen: 1.839 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

ClientSampleId :

QA1DUP

Tot Ion: 57 Resp: 150075

Ion Ratio Lower Upper

57 100

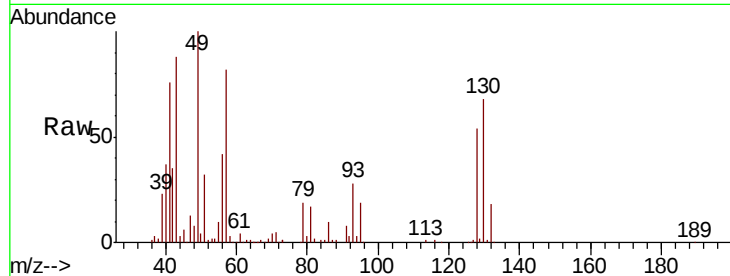
41 97.8 70.5 105.7

43 143.5 181.8 272.8#

56 53.9 42.2 63.2

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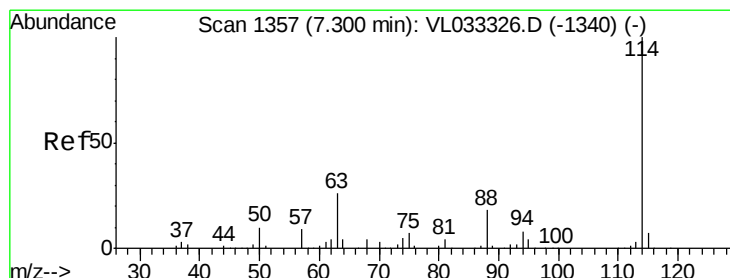
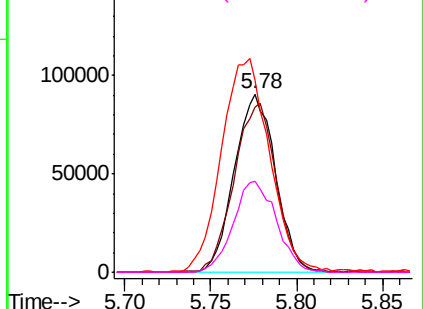
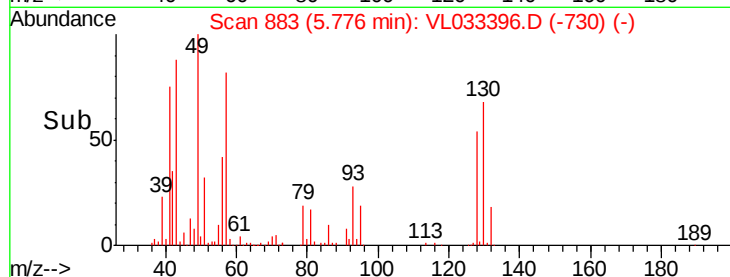


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.02 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

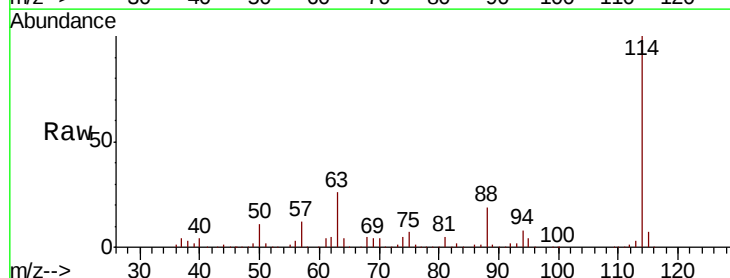
Tgt Ion:114 Resp: 1803028

Ion Ratio Lower Upper

114 100

63 27.4 21.4 32.2

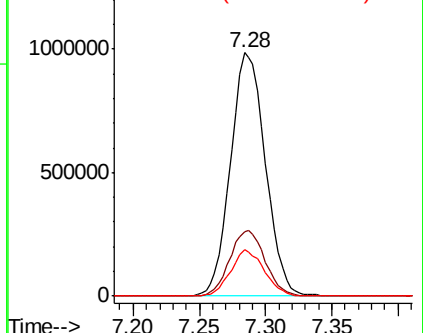
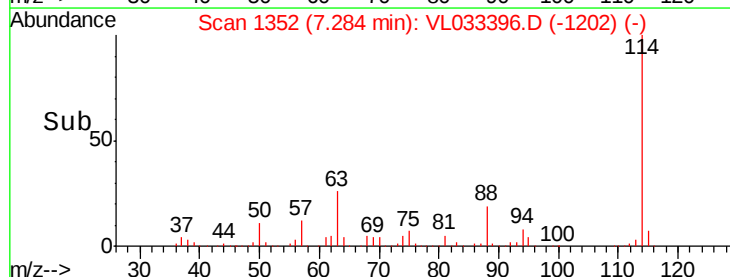
88 18.5 14.5 21.7

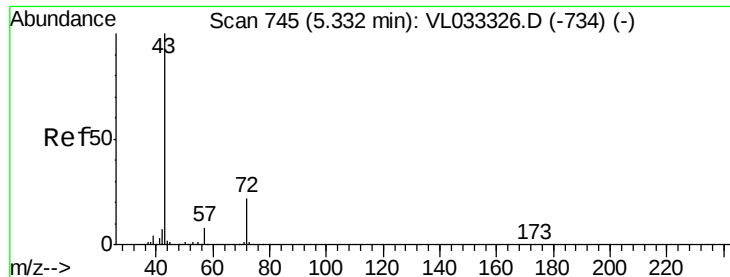


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





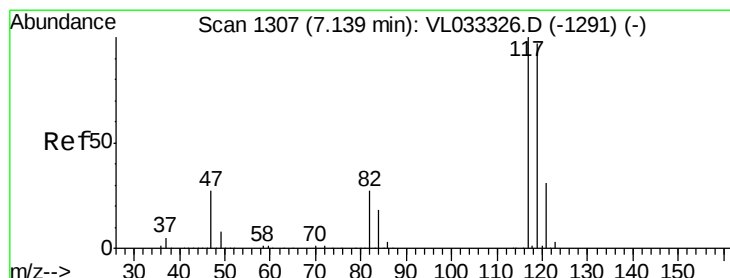
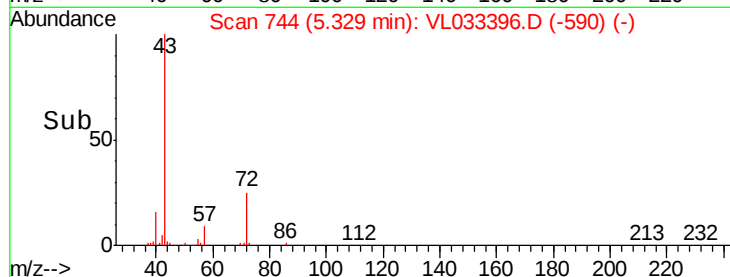
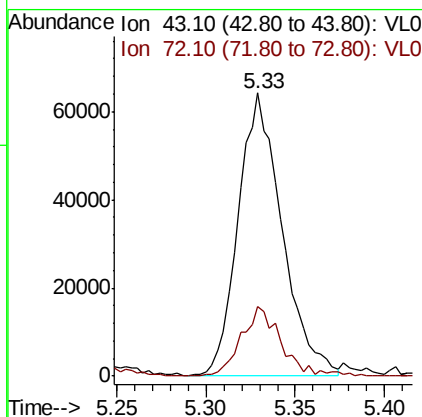
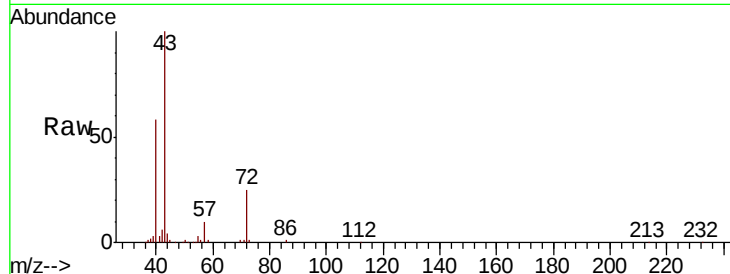
#34
2-Butanone
Concen: 0.925 ppbv
RT: 5.33 min Scan# 744
Delta R.T. -0.00 min
Lab File: VL033396.D
Acq: 20 Mar 2019 19:10

Instrument :
MSVOA_L
ClientSampleId :
QA1DUP

Tot Ion	43	Resp	109500
Ion Ratio	43	100	Lower Upper
	72	22.5	17.7 26.5

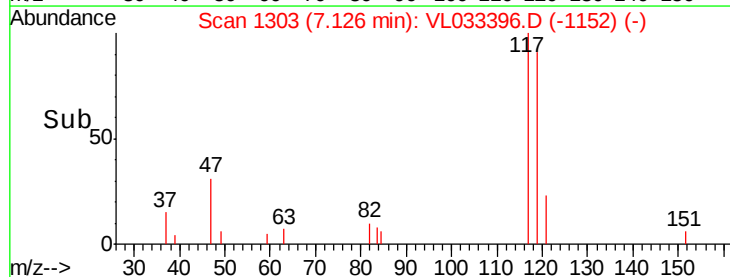
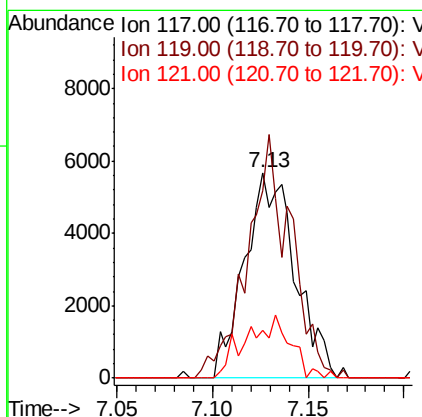
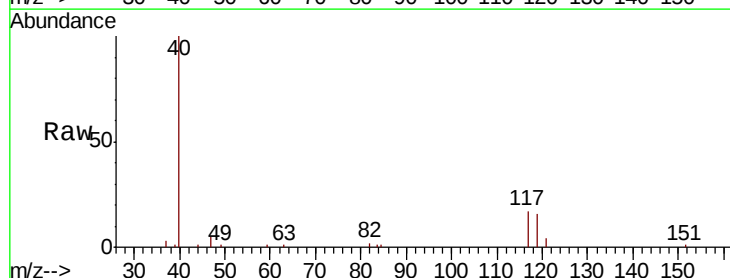
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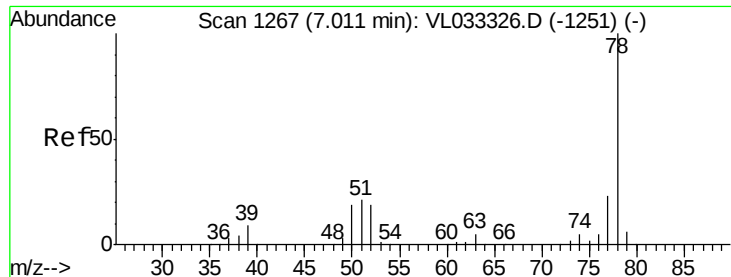
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#35
Carbon Tetrachloride
Concen: 0.082 ppbv m
RT: 7.13 min Scan# 1303
Delta R.T. -0.01 min
Lab File: VL033396.D
Acq: 20 Mar 2019 19:10

Tgt Ion	117	Resp	10466
Ion Ratio	117	100	Lower Upper
	119	91.0	77.4 116.0
	121	23.2	24.9 37.3#





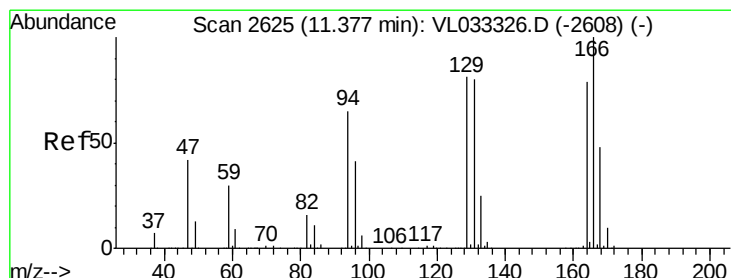
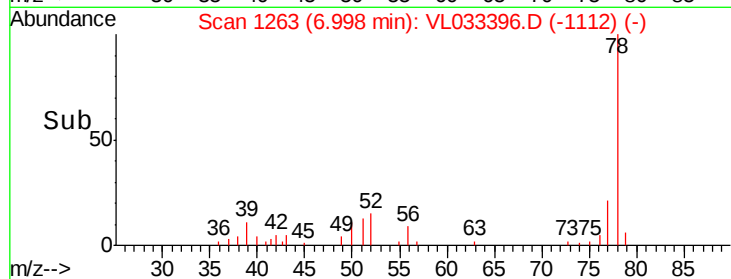
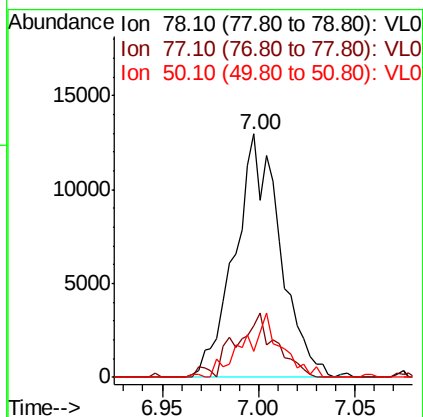
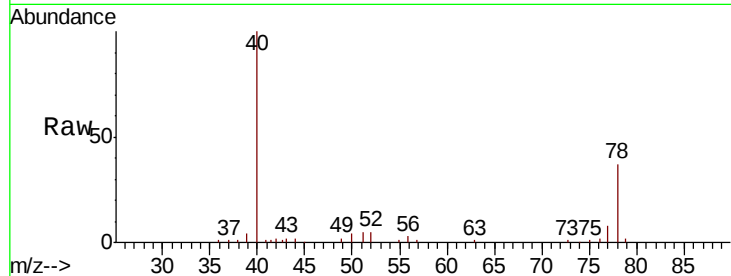
#36
Benzene
Concen: 0.131 ppbv m
RT: 7.00 min Scan# 1263
Delta R.T. -0.01 min
Lab File: VL033396.D
Acq: 20 Mar 2019 19:10

Instrument :
MSVOA_L
ClientSampleId :
QA1DUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.4	18.1	27.1
50	10.5	15.2	22.8

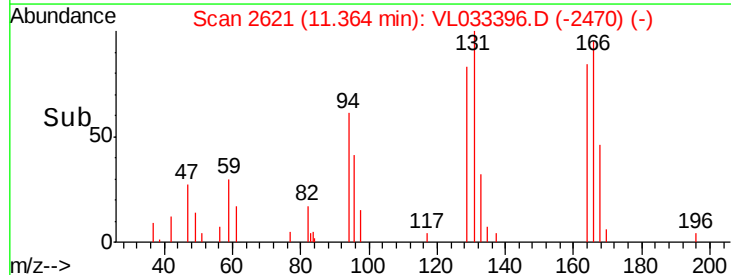
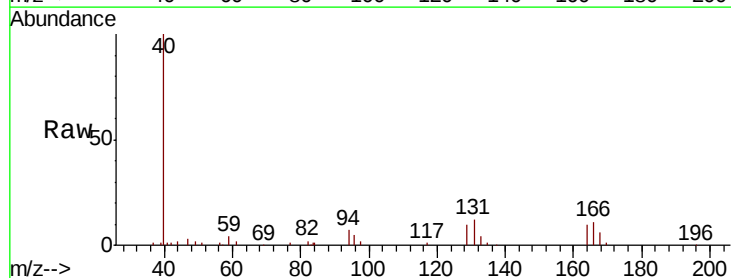
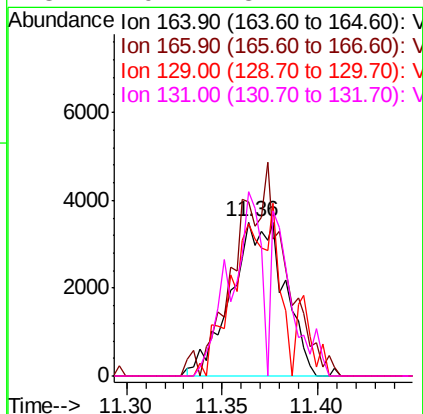
Manual Integrations
APPROVED

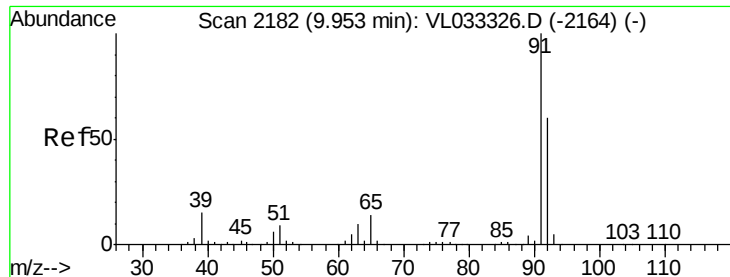
MMDadoda
3/25/2019 8:26:28 AM



#52
Tetrachloroethene
Concen: 0.102 ppbv m
RT: 11.36 min Scan# 2621
Delta R.T. -0.01 min
Lab File: VL033396.D
Acq: 20 Mar 2019 19:10

Tgt Ion	Ratio	Lower	Upper
164	100		
166	112.7	101.5	152.3
129	98.9	82.2	123.2
131	119.2	81.1	121.7





#53

Toluene

Concen: 1.450 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

ClientSampleId :

QA1DUP

Tot Ion: 91 Resp: 265781

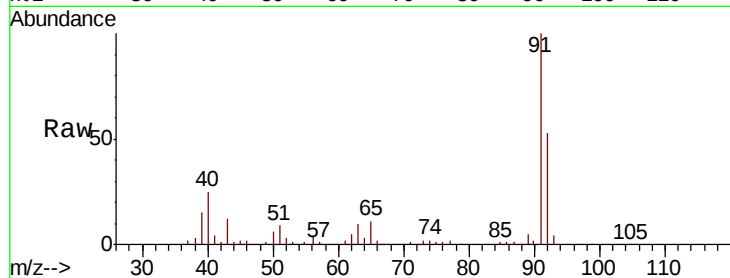
Ion Ratio Lower Upper

91 100

92 57.9 47.4 71.0

Manual Integrations
APPROVED

MMDadoda
3/25/2019 8:26:28 AM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.94

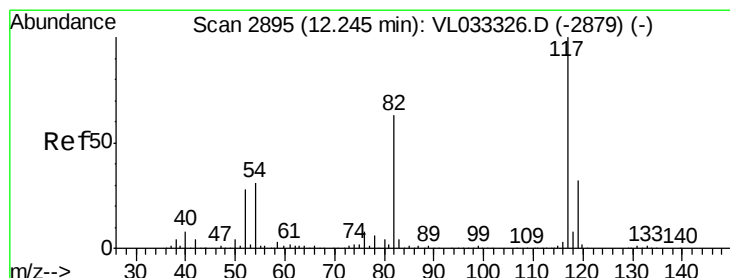
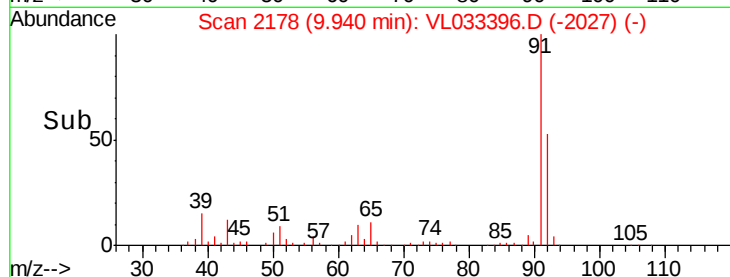
150000

100000

50000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

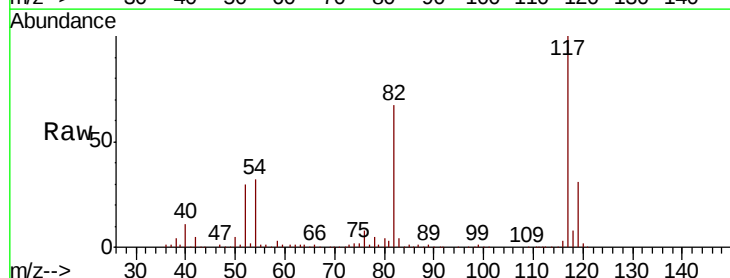
Tgt Ion: 117 Resp: 1774876

Ion Ratio Lower Upper

117 100

82 67.4 53.4 80.2

119 32.5 27.3 40.9



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

1000000

800000

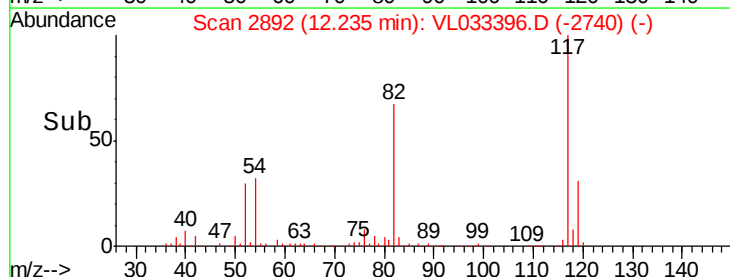
600000

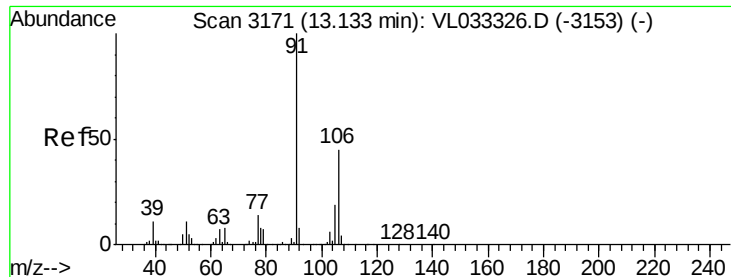
400000

200000

0

Time-->





#59

m/p-Xylene

Concen: 0.221 ppbv m

RT: 13.12 min Scan# 3167

Delta R.T. -0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

Instrument :

MSVOA_L

ClientSampleId :

QA1DUP

Tot Ion: 91 Resp: 47757

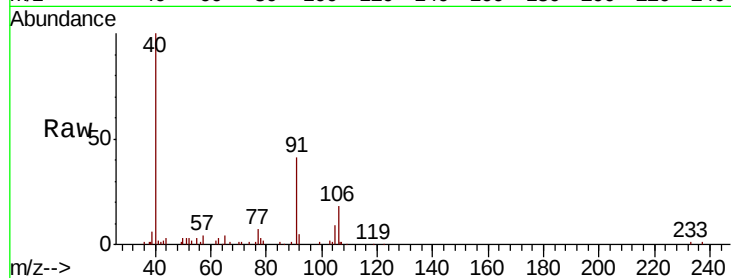
Ion Ratio Lower Upper

91 100

106 44.9 0.0 0.0#

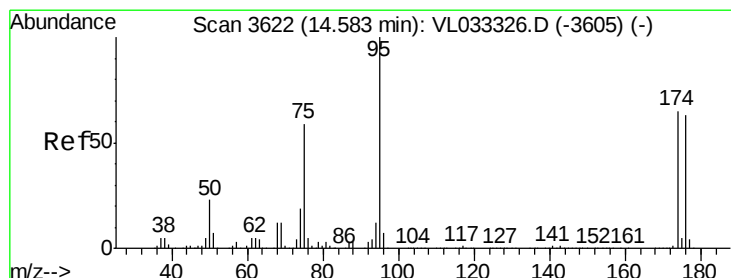
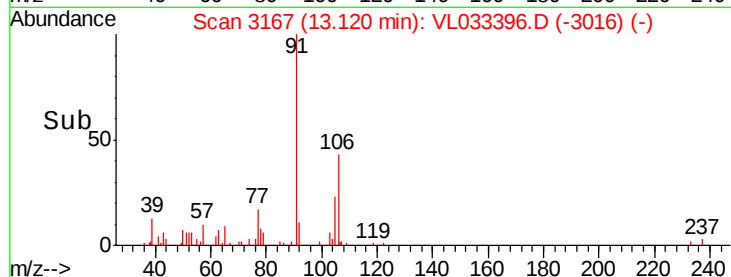
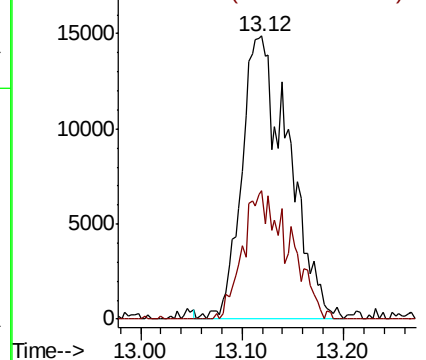
Manual Integrations
APPROVED

MMDadoda
3/25/2019 8:26:28 AM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.489 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.01 min

Lab File: VL033396.D

Acq: 20 Mar 2019 19:10

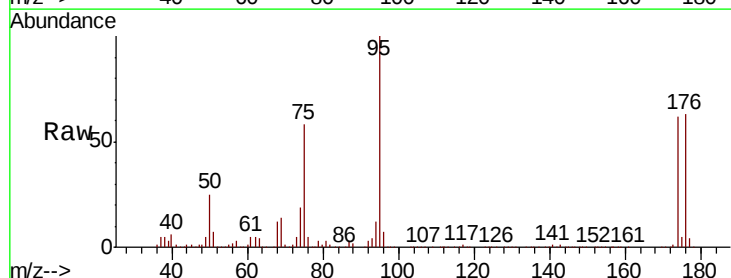
Tgt Ion: 95 Resp: 1379510

Ion Ratio Lower Upper

95 100

174 64.4 51.5 77.3

175 4.6 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

