

Data File : VV013745.D
Acq On : 22 Nov 2019 19:48
Operator : SY/MD
Sample : K5941-18
Misc : 25.0mL/MSVOA_V/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
B0AD4

Quant Time: Nov 23 01:40:12 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR112219WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Sat Nov 23 01:35:18 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.66	114	340772	5.00	ug/L	0.00
28) Chlorobenzene-d5	8.89	117	342683	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.29	152	160306	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.32	65	104754	4.97	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	99.40%
7) Chloroethane-d5	1.58	69	95494	5.33	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	106.60%
11) 1,1-Dichloroethene-d2	2.13	63	226156	6.37	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	127.40%#
20) 2-Butanone-d5	3.92	46	259607	59.21	ug/L	-0.03
Spiked Amount	50.000	Range	40 - 130	Recovery	=	118.42%
24) Chloroform-d	4.40	84	220807	5.19	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	103.80%
26) 1,2-Dichloroethane-d4	5.08	65	112204	5.54	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	110.80%
32) Benzene-d6	5.09	84	429025	4.85	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	97.00%
36) 1,2-Dichloropropane-d6	6.11	67	133202	5.06	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	101.20%
41) Toluene-d8	7.36	98	373440	4.50	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	90.00%
43) trans-1,3-Dichloropropene-	7.66	79	46210	4.51	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	90.20%
46) 2-Hexanone-d5	8.13	63	198597	52.50	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	105.00%
57) 1,1,2,2-Tetrachloroethane-	10.26	84	101595	5.56	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	111.20%
64) 1,2-Dichlorobenzene-d4	11.67	152	159862	5.65	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	113.00%

Target Compounds

					Qvalue
3) Chloromethane	1.25	50	4009	0.201 ug/L	86
5) Vinyl chloride	1.32	62	37900	1.862 ug/L #	1
8) Chloroethane	1.60	64	50259	4.097 ug/L	84
10) 1,1,2-Trichloro-1,2,2-trif	2.13	101	2166	0.115 ug/L #	22
12) 1,1-Dichloroethene	2.14	96	164905	10.065 ug/L #	79
13) Acetone	2.46	43	5499	1.793 ug/L	81
14) Carbon disulfide	2.32	76	8922	0.236 ug/L #	94
15) Methyl Acetate	2.46	43	5499	0.801 ug/L #	87
16) Methylene chloride	2.53	84	6514	0.290 ug/L	85
17) Methyl tert-butyl Ether	2.80	73	69897	1.559 ug/L	97
18) trans-1,2-Dichloroethene	2.79	96	4401	0.238 ug/L	97
19) 1,1-Dichloroethane	3.23	63	505025	13.673 ug/L	98
22) cis-1,2-Dichloroethene	3.96	96	41838	1.928 ug/L	100
25) Chloroform	4.42	83	12062	0.308 ug/L	98
29) 1,1,1-Trichloroethane	4.66	97	137900	3.934 ug/L	97
31) Carbon tetrachloride	4.65	117	18735	0.607 ug/L	98
34) Trichloroethene	5.96	95	1112170	47.962 ug/L	97

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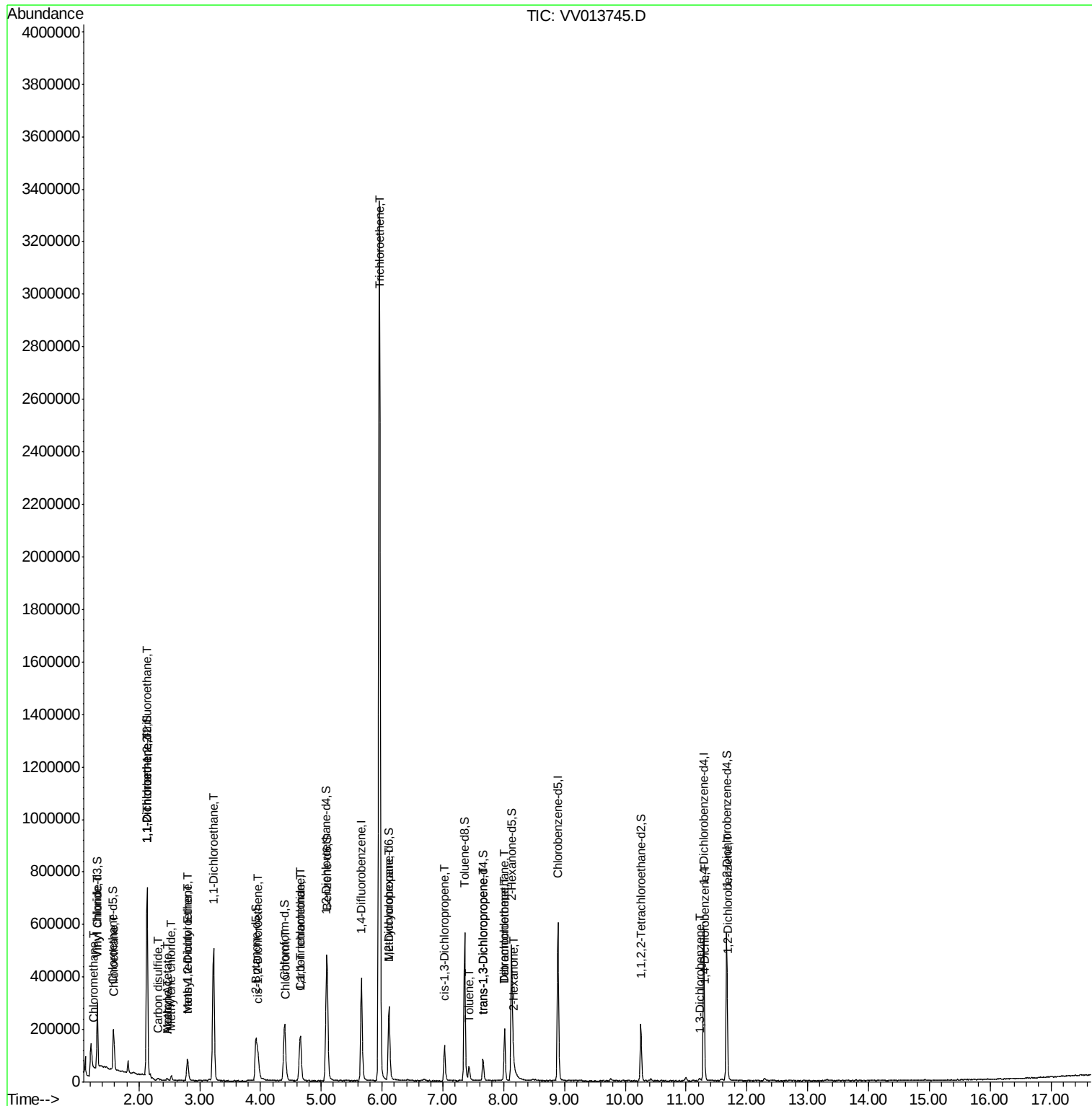
Quant Time: Nov 23 01:40:12 2019
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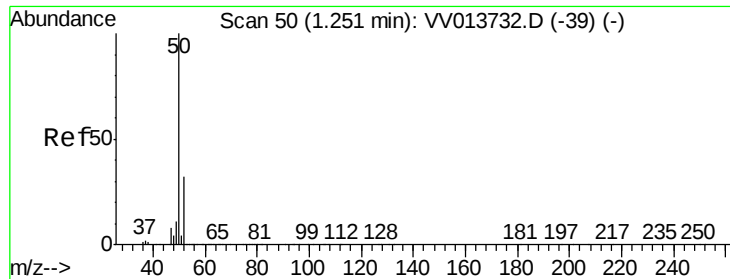
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) Methylcyclohexane	6.11	83	31673	1.024	ug/L #	19
39) cis-1,3-Dichloropropene	7.03	75	3274	0.107	ug/L #	68
42) Toluene	7.43	91	37220	0.413	ug/L	96
44) trans-1,3-Dichloropropene	7.66	75	2363	0.098	ug/L	90
47) Tetrachloroethene	8.02	164	47639	2.366	ug/L	95
48) 2-Hexanone	8.17	43	6713	0.746	ug/L #	42
49) Dibromochloromethane	8.02	129	37752	1.912	ug/L #	10
62) 1,3-Dichlorobenzene	11.22	146	4108	0.088	ug/L	96
63) 1,4-Dichlorobenzene	11.32	146	3724	0.079	ug/L	84
65) 1,2-Dichlorobenzene	11.69	146	3231	0.075	ug/L	95

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

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#3

Chloromethane

Concen: 0.201 ug/L

RT: 1.25 min Scan# 51

Delta R.T. 0.00 min

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Instrument :

MSVOA_V

ClientSampleId :

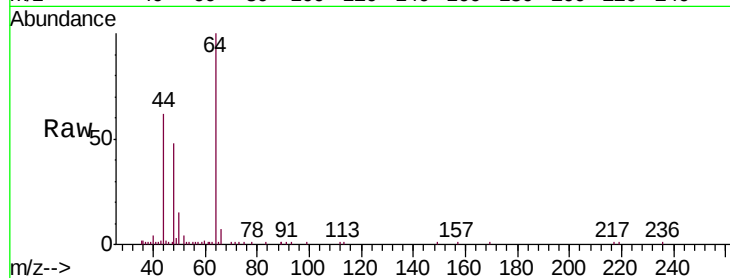
B0AD4

Tgt Ion: 50 Resp: 4009

Ion Ratio Lower Upper

50 100

52 24.2 22.5 41.7



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0

1.25

3000

2000

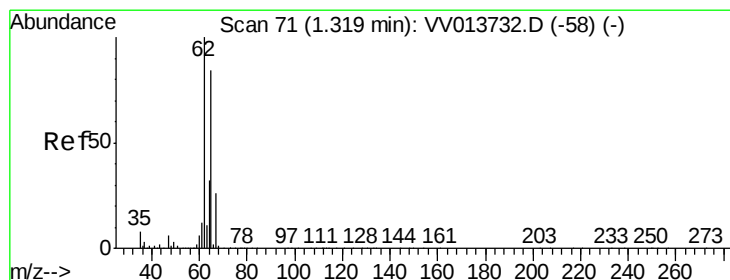
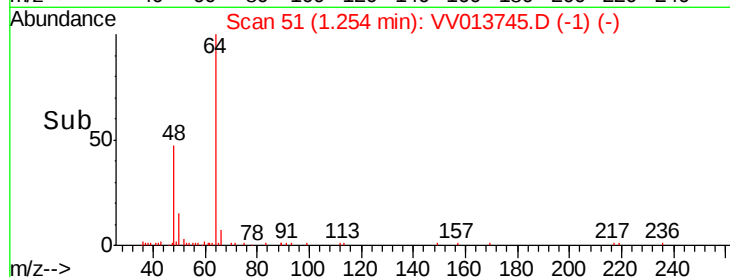
1000

0

Time-->

1.25

1.30



#5

Vinyl chloride

Concen: 1.862 ug/L

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VV013745.D

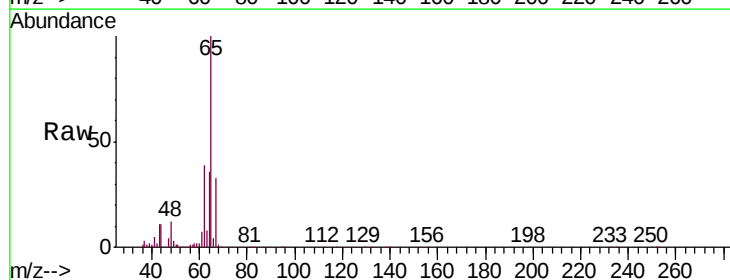
Acq: 22 Nov 2019 19:48

Tgt Ion: 62 Resp: 37900

Ion Ratio Lower Upper

62 100

64 92.4 23.3 43.3#



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.10 (63.80 to 64.80): VV0

1.32

40000

30000

20000

10000

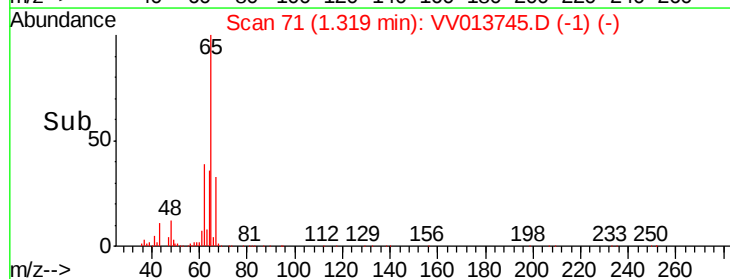
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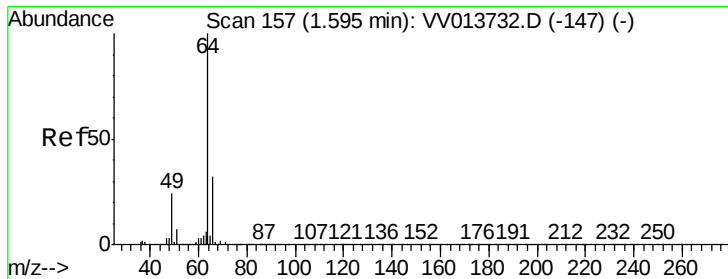
Time-->

1.25

1.30

1.35

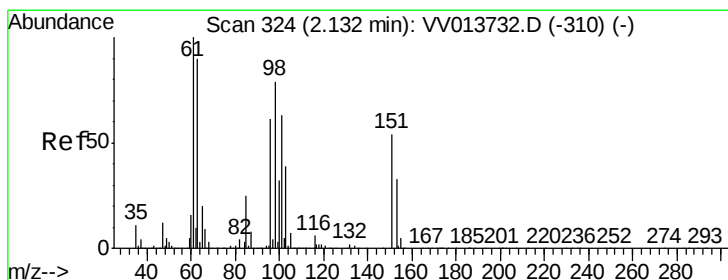
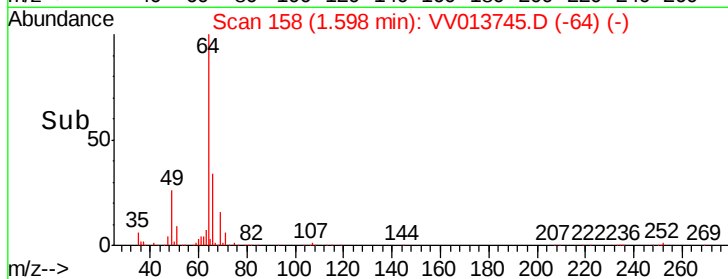
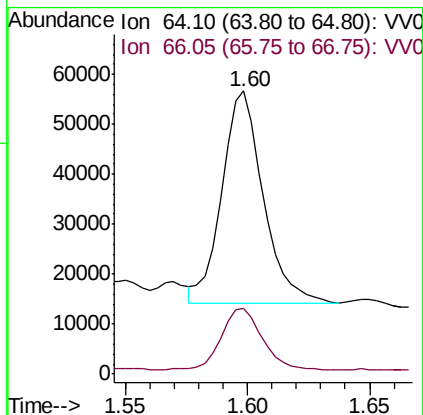
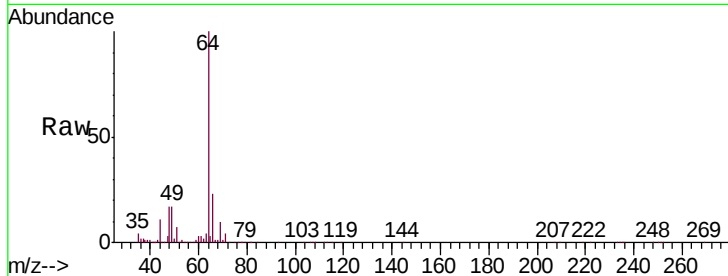




#8
Chloroethane
Concen: 4.097 ug/L
RT: 1.60 min Scan# 158
Delta R.T. 0.00 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

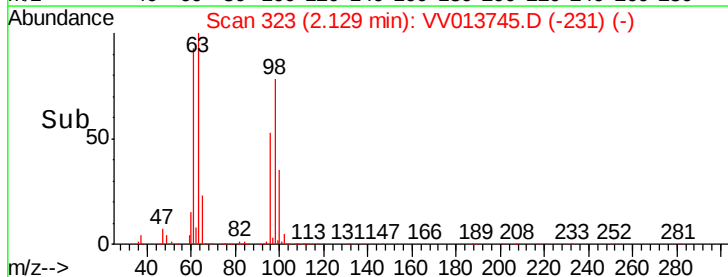
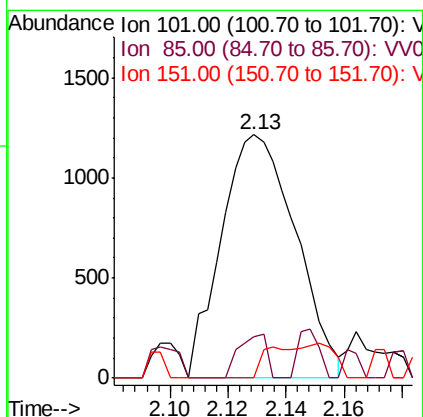
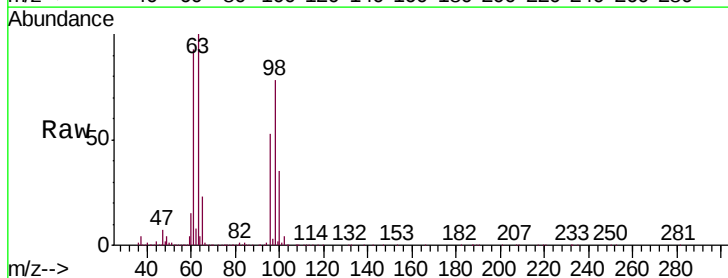
Instrument :
MSVOA_V
ClientSampleId :
B0AD4

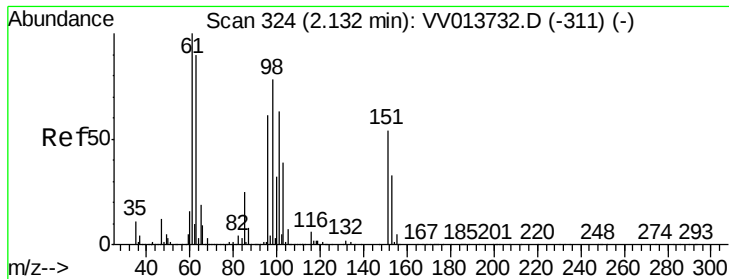
Tgt Ion: 64 Resp: 50259
Ion Ratio Lower Upper
64 100
66 23.3 22.6 42.0



#10
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.115 ug/L
RT: 2.13 min Scan# 323
Delta R.T. -0.00 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

Tgt Ion: 101 Resp: 2166
Ion Ratio Lower Upper
101 100
85 6.6 33.4 50.0#
151 5.2 69.4 104.0#

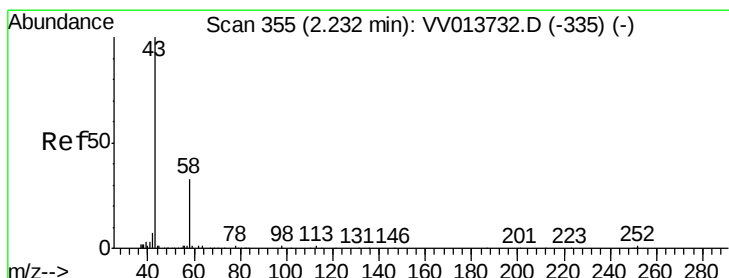
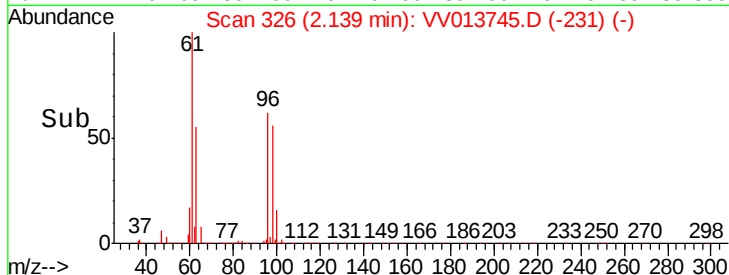
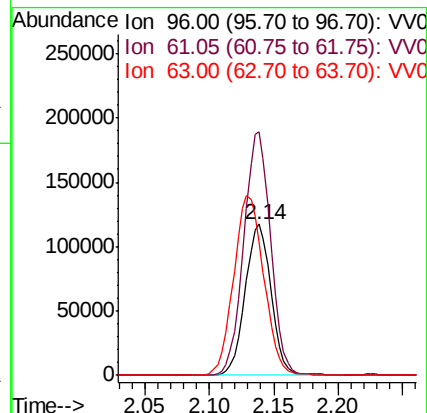
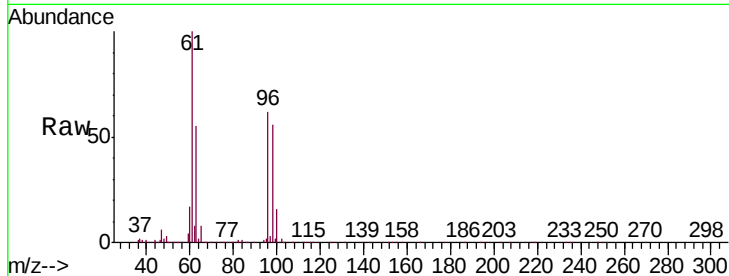




#12
 1,1-Dichloroethene
 Concen: 10.065 ug/L
 RT: 2.14 min Scan# 326
 Delta R.T. 0.01 min
 Lab File: VV013745.D
 Acq: 22 Nov 2019 19:48

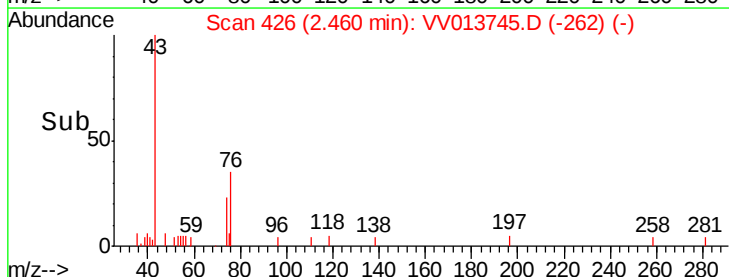
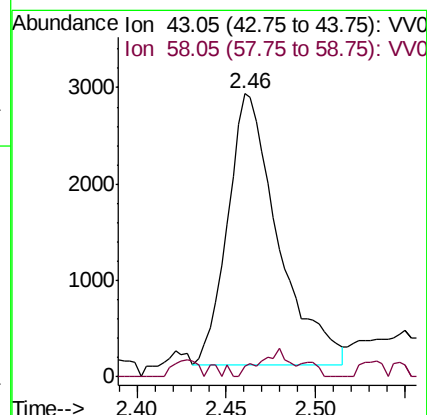
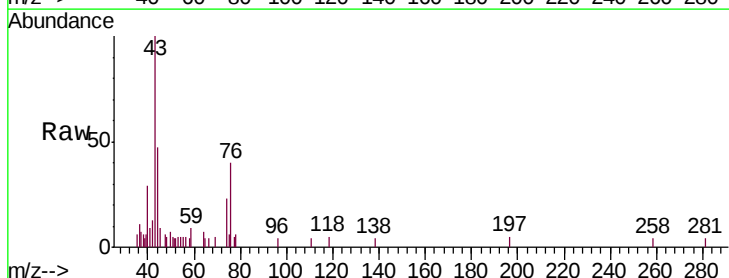
Instrument :
 MSVOA_V
 ClientSampleId :
 B0AD4

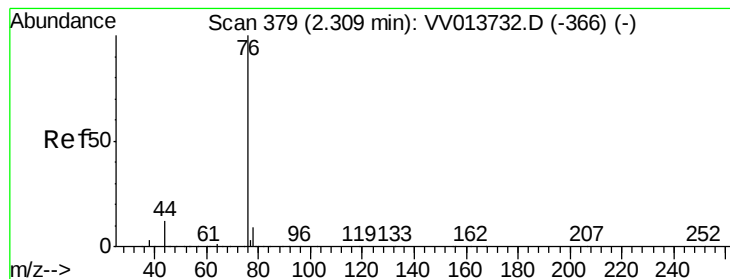
Tgt Ion: 96 Resp: 164905
 Ion Ratio Lower Upper
 96 100
 61 161.3 116.3 215.9
 63 88.3 96.7 179.7#



#13
 Acetone
 Concen: 1.793 ug/L
 RT: 2.46 min Scan# 426
 Delta R.T. 0.23 min
 Lab File: VV013745.D
 Acq: 22 Nov 2019 19:48

Tgt Ion: 43 Resp: 5499
 Ion Ratio Lower Upper
 43 100
 58 5.9 0.0 27.2





#14

Carbon disulfide

Concen: 0.236 ug/L

RT: 2.32 min Scan# 382

Delta R.T. 0.01 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Instrument :

MSVOA_V

ClientSampleId :

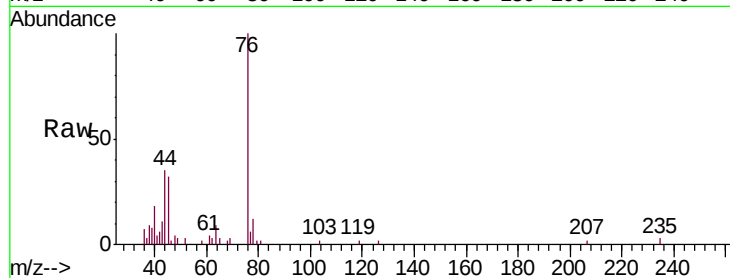
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Tgt Ion: 76 Resp: 8922

Ion Ratio Lower Upper

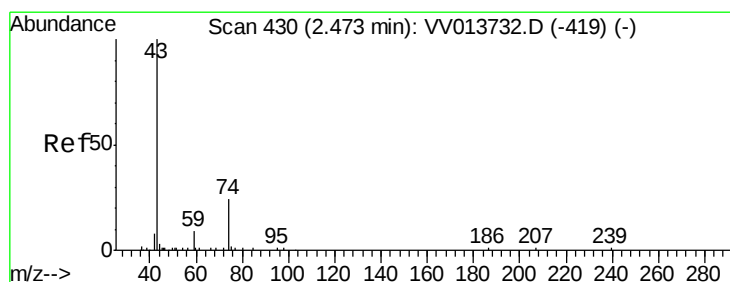
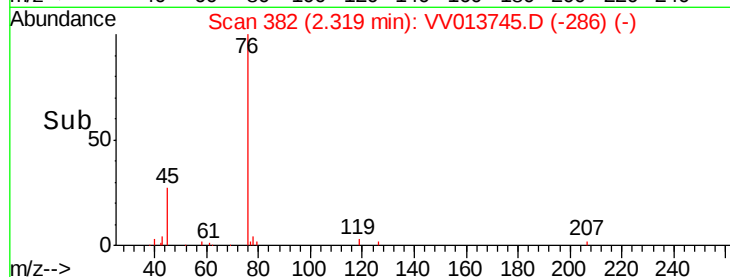
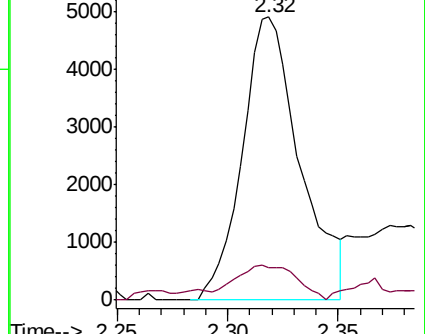
76 100

78 11.5 7.5 11.3#



Abundance Ion 76.05 (75.75 to 76.75): VV0

Ion 78.00 (77.70 to 78.70): VV0



#15

Methyl Acetate

Concen: 0.801 ug/L

RT: 2.46 min Scan# 426

Delta R.T. -0.01 min

Lab File: VV013745.D

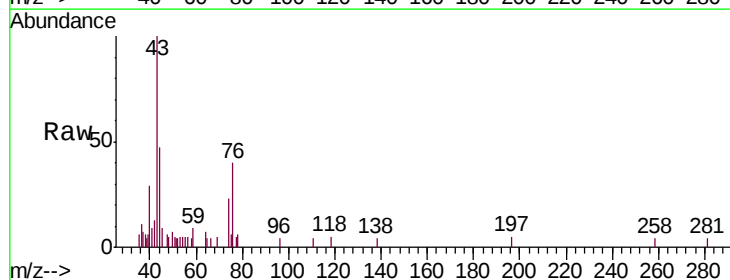
Acq: 22 Nov 2019 19:48

Tgt Ion: 43 Resp: 5499

Ion Ratio Lower Upper

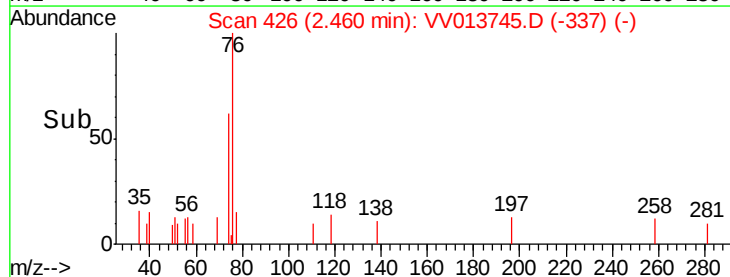
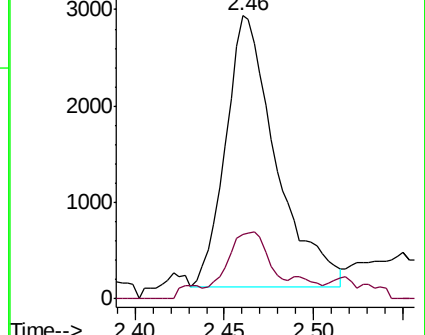
43 100

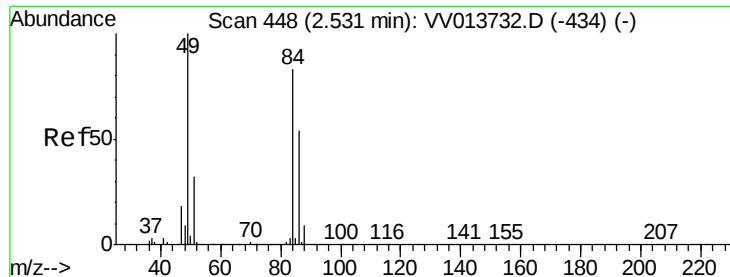
74 19.0 20.5 30.7#



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 74.05 (73.75 to 74.75): VV0

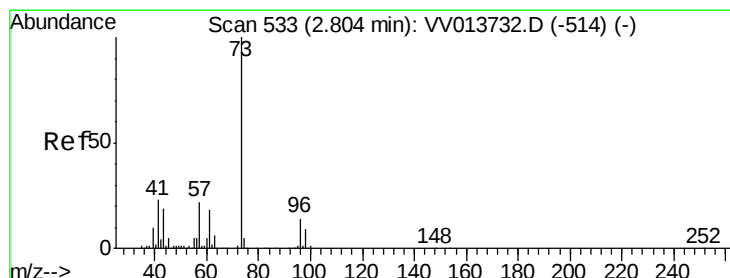
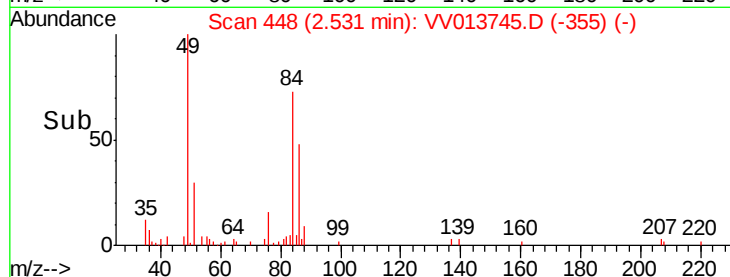
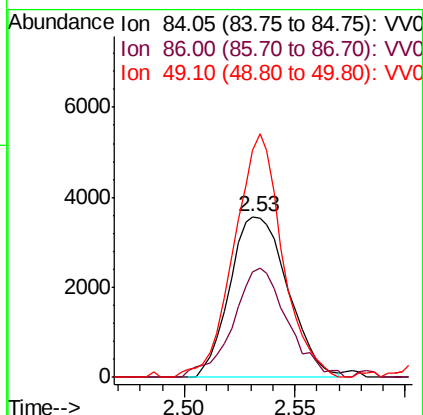
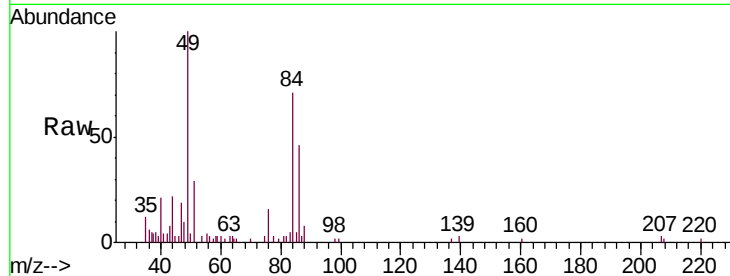




#16
Methylene chloride
Concen: 0.290 ug/L
RT: 2.53 min Scan# 448
Delta R.T. 0.00 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

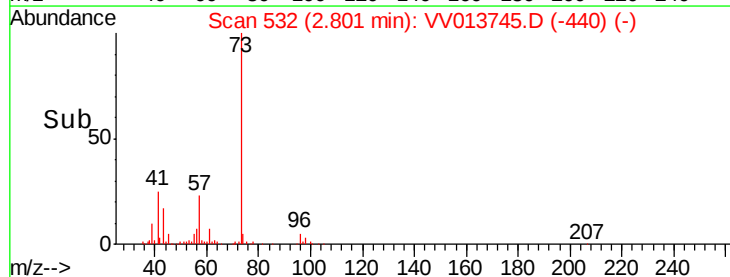
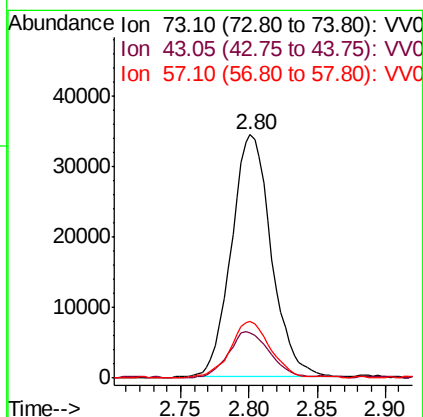
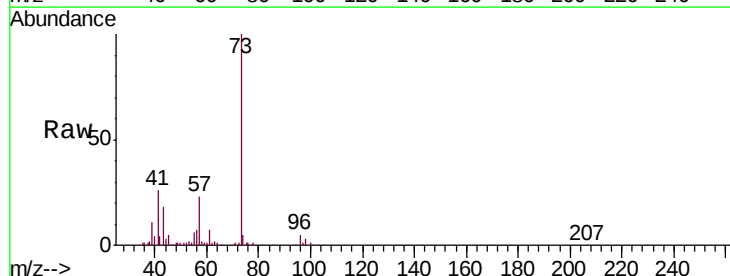
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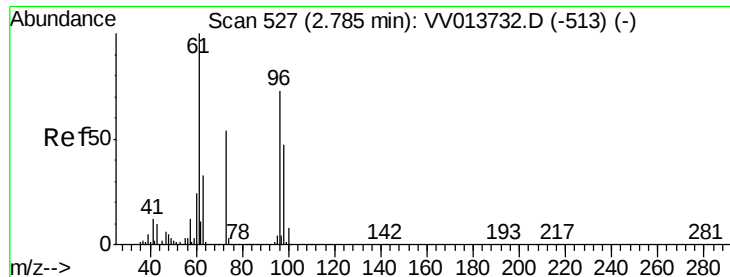
Tgt Ion: 84 Resp: 6514
Ion Ratio Lower Upper
84 100
86 65.1 44.0 81.6
49 140.7 81.5 151.5



#17
Methyl tert-butyl Ether
Concen: 1.559 ug/L
RT: 2.80 min Scan# 532
Delta R.T. -0.00 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

Tgt Ion: 73 Resp: 69897
Ion Ratio Lower Upper
73 100
43 20.0 15.5 23.3
57 23.9 17.5 26.3

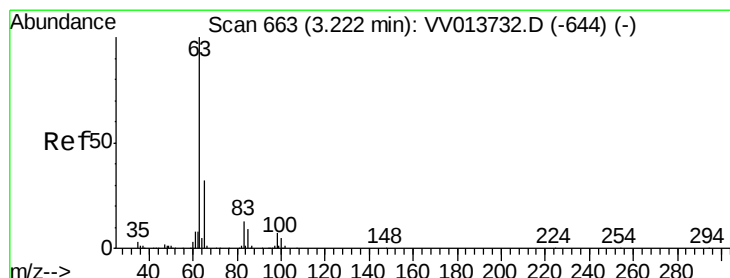
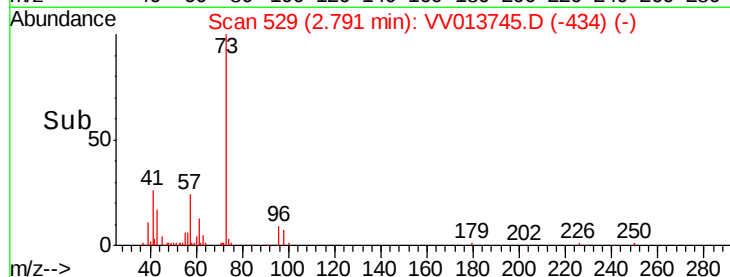
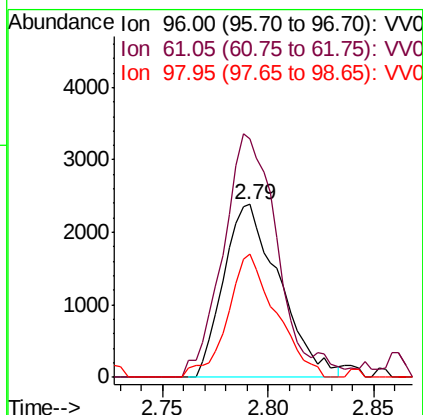
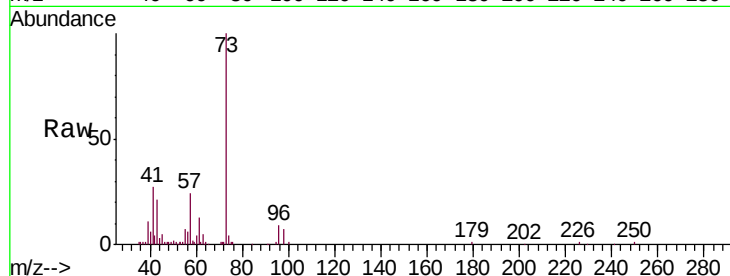




#18
trans-1,2-Dichloroethene
Concen: 0.238 ug/L
RT: 2.79 min Scan# 529
Delta R.T. 0.01 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

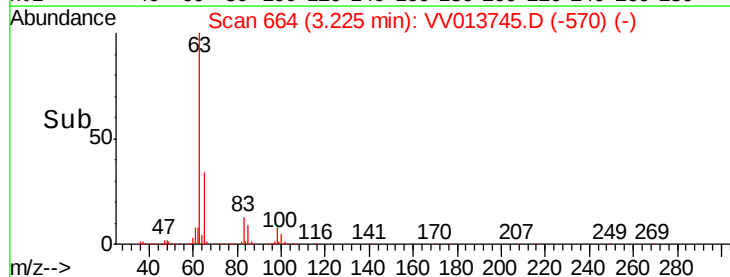
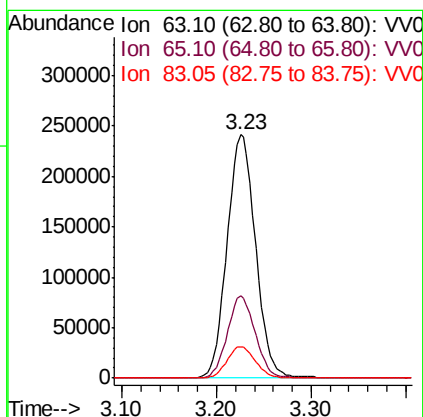
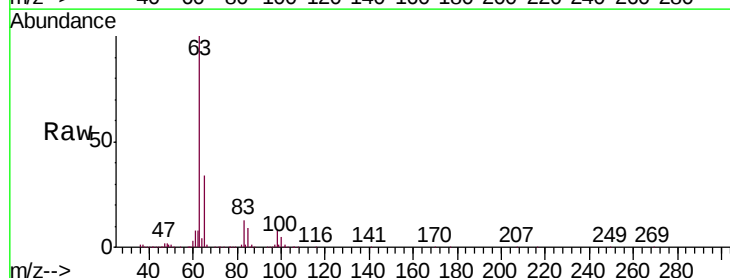
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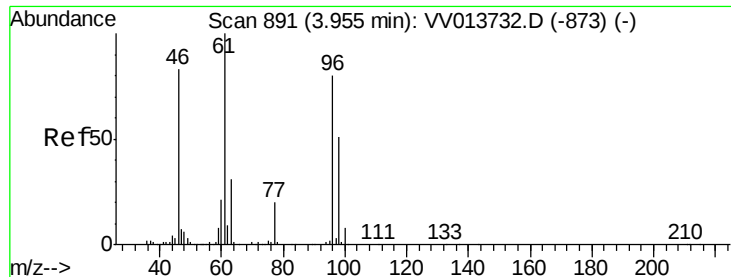
Tgt Ion: 96 Resp: 4401
Ion Ratio Lower Upper
96 100
61 138.1 95.1 176.7
98 71.8 46.5 86.3



#19
1,1-Dichloroethane
Concen: 13.673 ug/L
RT: 3.23 min Scan# 664
Delta R.T. 0.00 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

Tgt Ion: 63 Resp: 505025
Ion Ratio Lower Upper
63 100
65 33.8 22.7 42.1
83 13.0 9.2 17.2





#22

cis-1,2-Dichloroethene

Concen: 1.928 ug/L

RT: 3.96 min Scan# 893

Delta R.T. 0.01 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Instrument :

MSVOA_V

ClientSampleId :

B0AD4

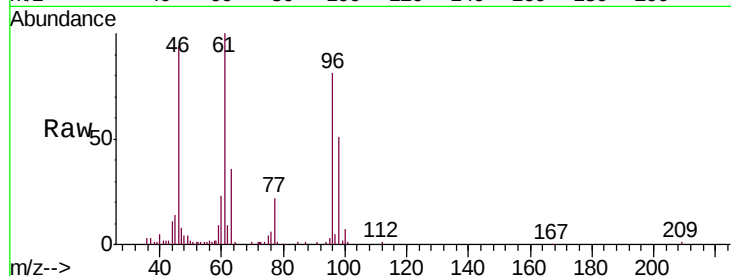
Tgt Ion: 96 Resp: 41838

Ion Ratio Lower Upper

96 100

61 123.2 86.1 159.9

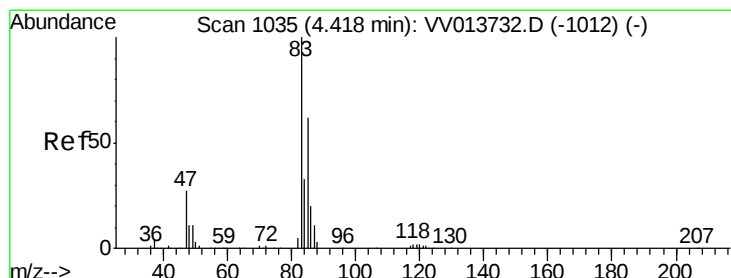
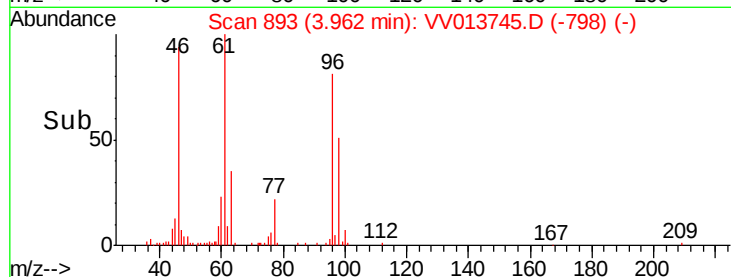
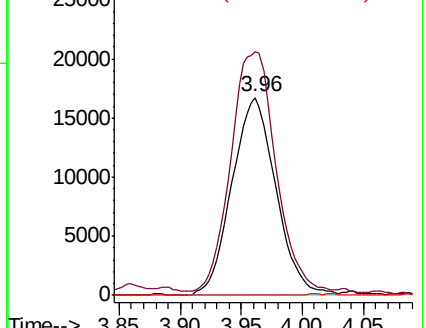
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 68.15 (67.85 to 68.85): VV0



#25

Chloroform

Concen: 0.308 ug/L

RT: 4.42 min Scan# 1036

Delta R.T. 0.00 min

Lab File: VV013745.D

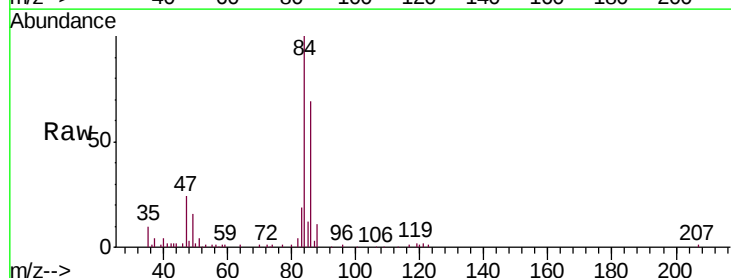
Acq: 22 Nov 2019 19:48

Tgt Ion: 83 Resp: 12062

Ion Ratio Lower Upper

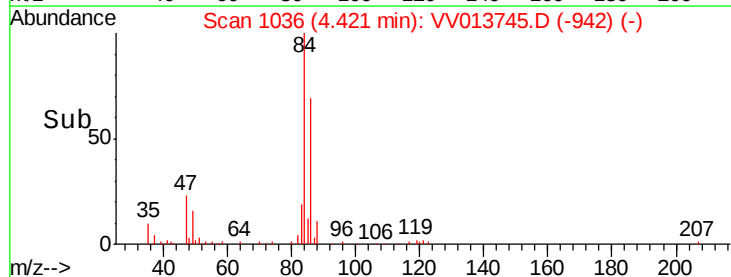
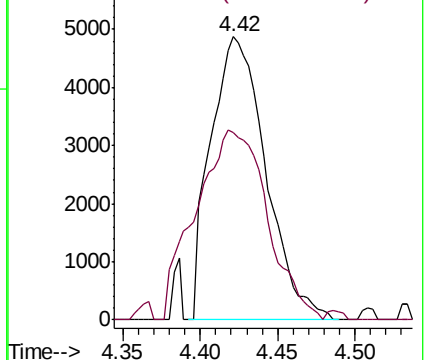
83 100

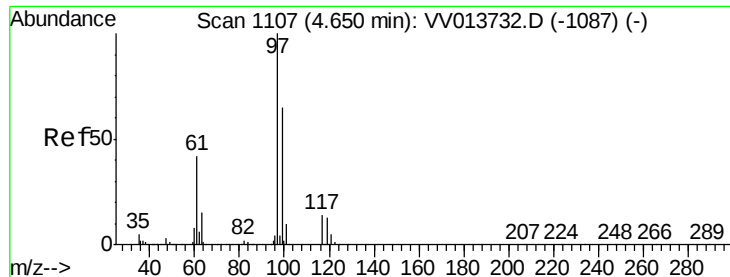
85 66.3 45.1 83.7



Abundance Ion 83.05 (82.75 to 83.75): VV0

Ion 85.00 (84.70 to 85.70): VV0





#29

1,1,1-Trichloroethane

Concen: 3.934 ug/L

RT: 4.66 min Scan# 1109

Delta R.T. 0.01 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Instrument :

MSVOA_V

ClientSampleId :

B0AD4

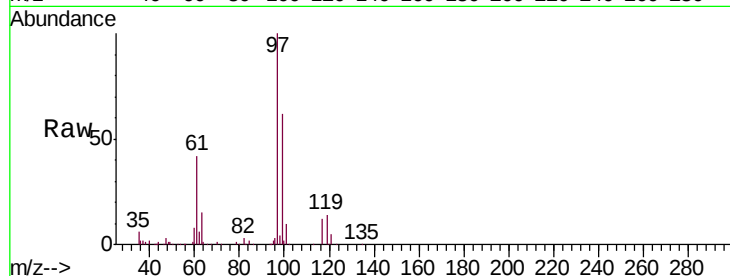
Tgt Ion: 97 Resp: 137900

Ion Ratio Lower Upper

97 100

99 62.4 51.7 77.5

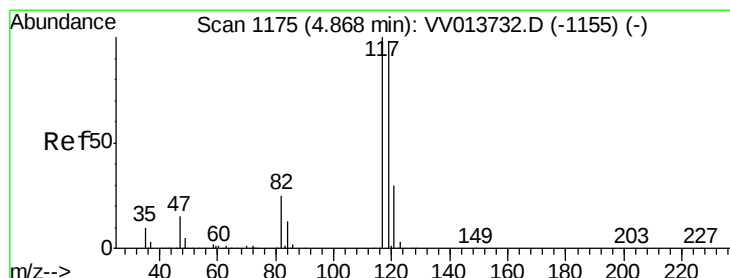
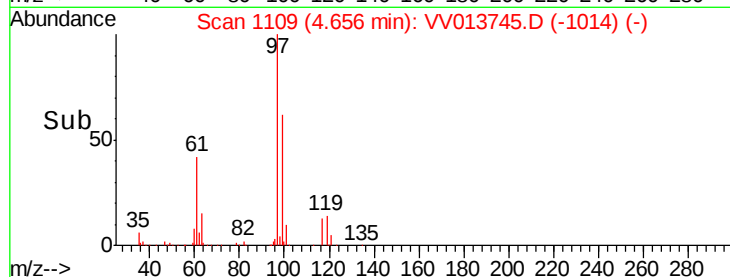
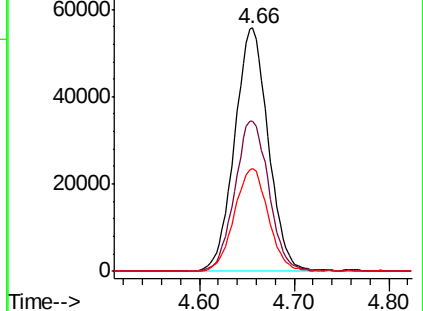
61 42.4 35.0 52.6



Abundance Ion 96.95 (96.65 to 97.65): VV013745.D (-1087) (-)

Ion 99.05 (98.75 to 99.75): VV013745.D (-1087) (-)

Ion 61.05 (60.75 to 61.75): VV013745.D (-1087) (-)



#31

Carbon tetrachloride

Concen: 0.607 ug/L

RT: 4.65 min Scan# 1108

Delta R.T. -0.22 min

Lab File: VV013745.D

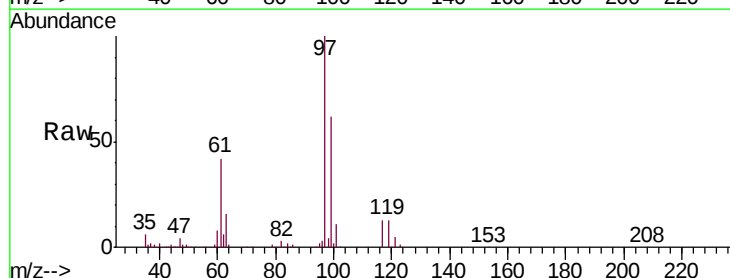
Acq: 22 Nov 2019 19:48

Tgt Ion: 117 Resp: 18735

Ion Ratio Lower Upper

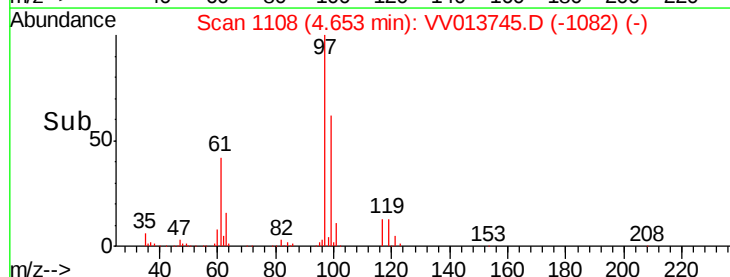
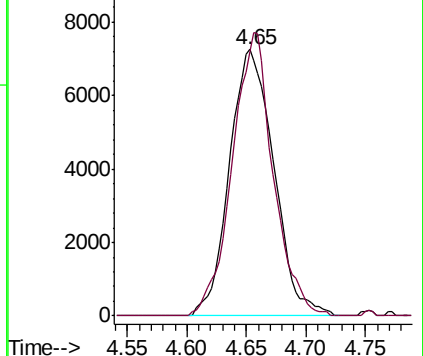
117 100

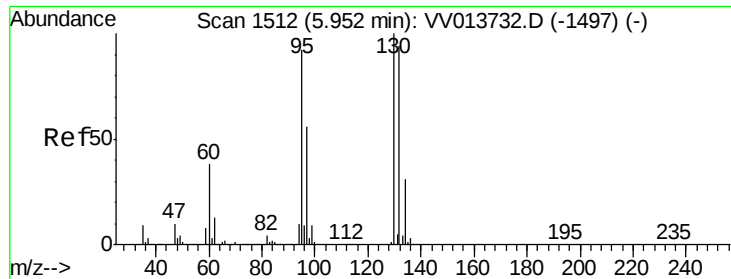
119 98.1 76.8 115.2



Abundance Ion 116.90 (116.60 to 117.60): VV013745.D (-1082) (-)

Ion 118.90 (118.60 to 119.60): VV013745.D (-1082) (-)





#34

Trichloroethene

Concen: 47.962 ug/L

RT: 5.96 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Instrument :

MSVOA_V

ClientSampleId :

B0AD4

Tgt Ion: 95 Resp: 1112170

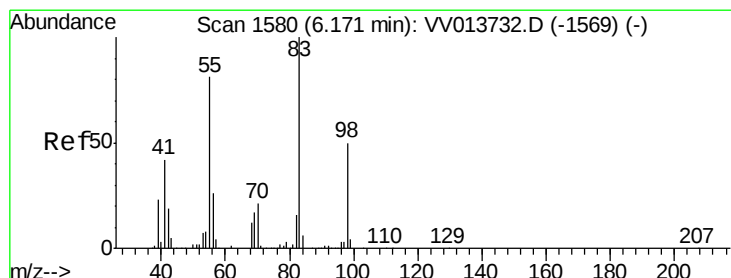
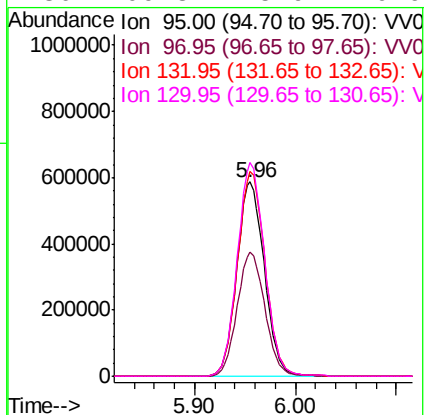
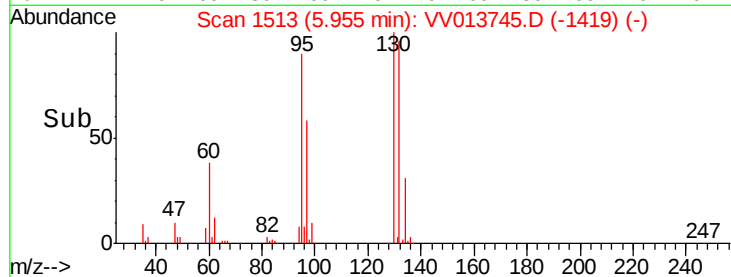
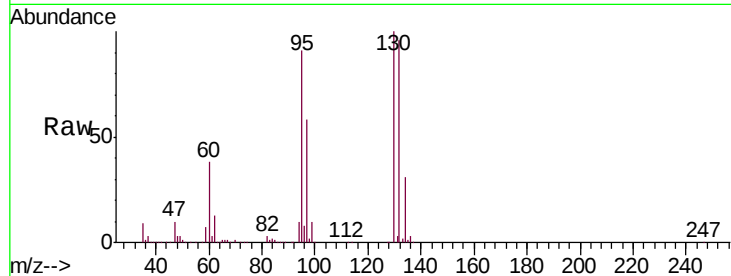
Ion Ratio Lower Upper

95 100

97 63.8 45.6 84.8

132 105.0 70.5 130.9

130 109.8 75.9 140.9



#35

Methylcyclohexane

Concen: 1.024 ug/L

RT: 6.11 min Scan# 1562

Delta R.T. -0.06 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

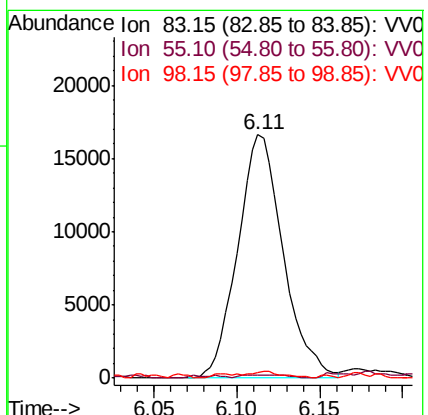
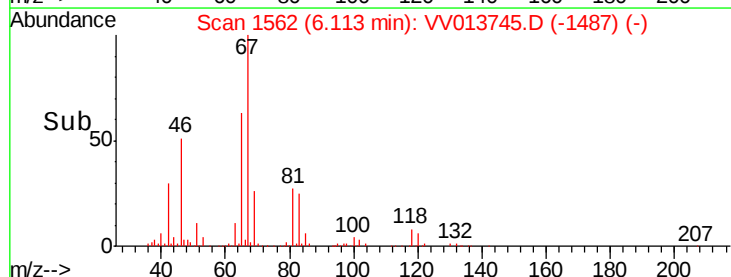
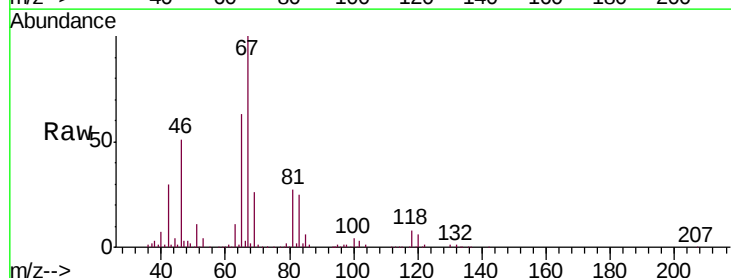
Tgt Ion: 83 Resp: 31673

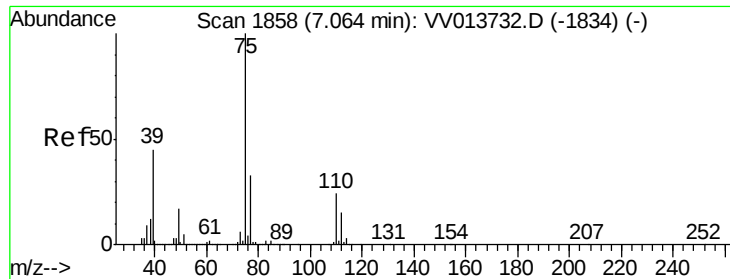
Ion Ratio Lower Upper

83 100

55 1.3 60.3 90.5#

98 0.0 38.1 57.1#





#39

cis-1,3-Dichloropropene

Concen: 0.107 ug/L

RT: 7.03 min Scan# 1847

Delta R.T. -0.04 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Instrument :

MSVOA_V

ClientSampleId :

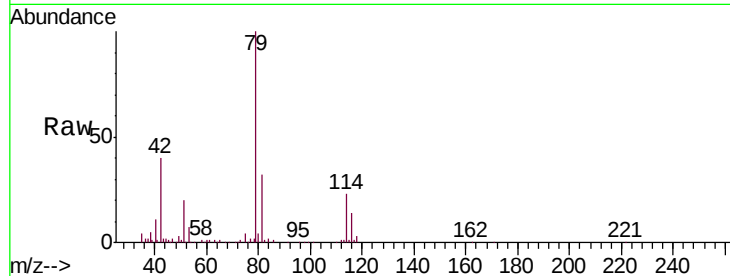
B0AD4

Tgt Ion: 75 Resp: 3274

Ion Ratio Lower Upper

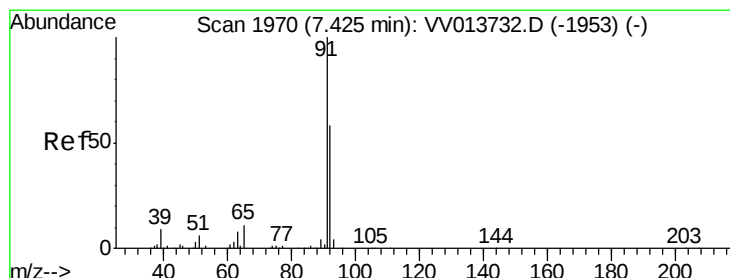
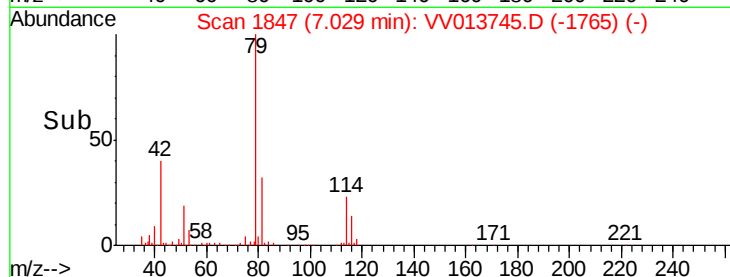
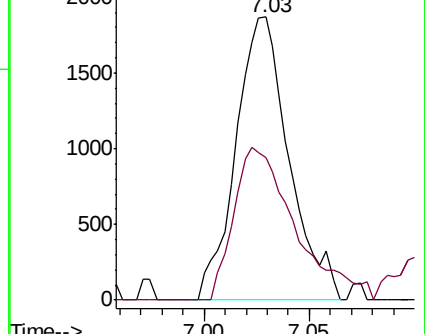
75 100

77 50.3 22.5 41.9#



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0



#42

Toluene

Concen: 0.413 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.01 min

Lab File: VV013745.D

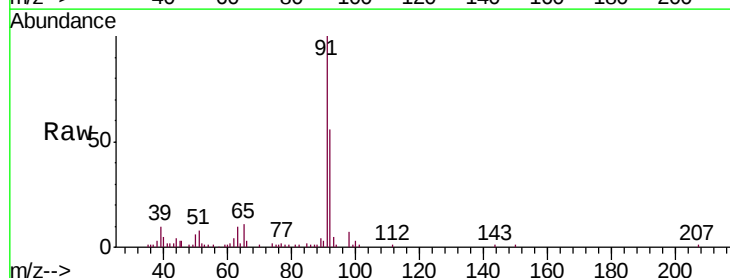
Acq: 22 Nov 2019 19:48

Tgt Ion: 91 Resp: 37220

Ion Ratio Lower Upper

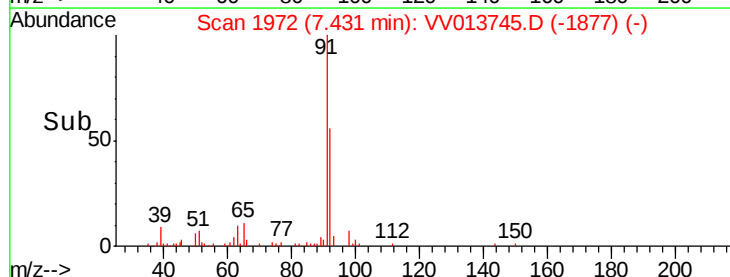
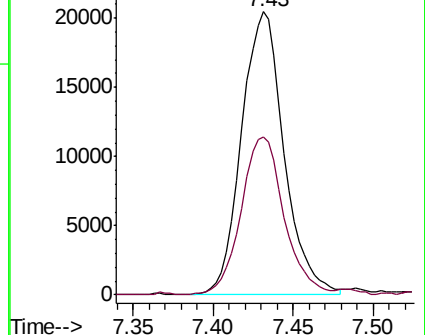
91 100

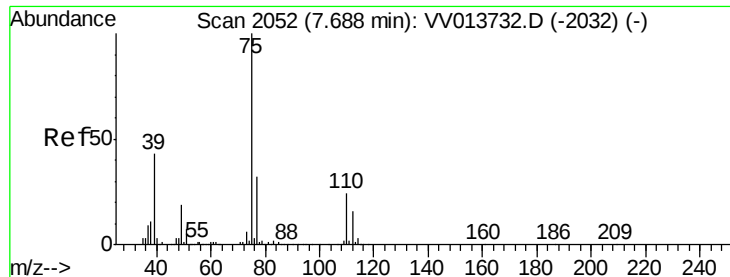
92 55.8 41.1 76.3



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0





#44

trans-1,3-Dichloropropene

Concen: 0.098 ug/L

RT: 7.66 min Scan# 2043

Delta R.T. -0.03 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Instrument :

MSVOA_V

ClientSampleId :

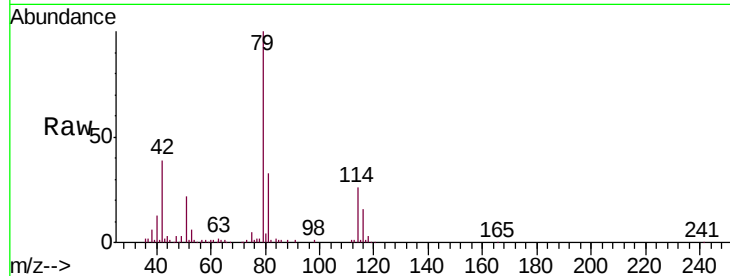
B0AD4

Tgt Ion: 75 Resp: 2363

Ion Ratio Lower Upper

75 100

77 38.3 23.0 42.8



Abundance Ion 75.05 (74.75 to 75.75): VV013732.D (-2032) (-)

Ion 77.05 (76.75 to 77.75): VV013732.D (-2032) (-)

7.66

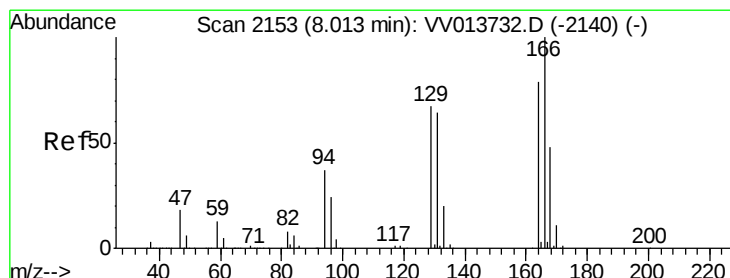
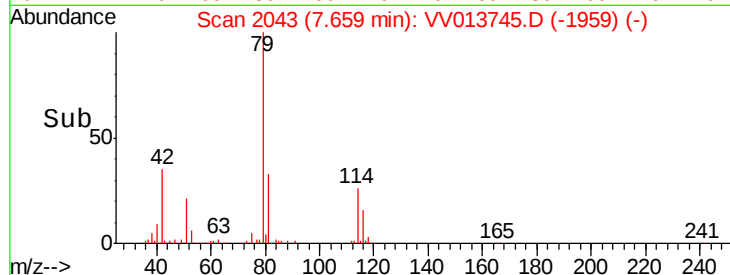
1500

1000

500

0

Time-->



#47

Tetrachloroethene

Concen: 2.366 ug/L

RT: 8.02 min Scan# 2154

Delta R.T. 0.00 min

Lab File: VV013745.D

Acq: 22 Nov 2019 19:48

Tgt Ion: 164 Resp: 47639

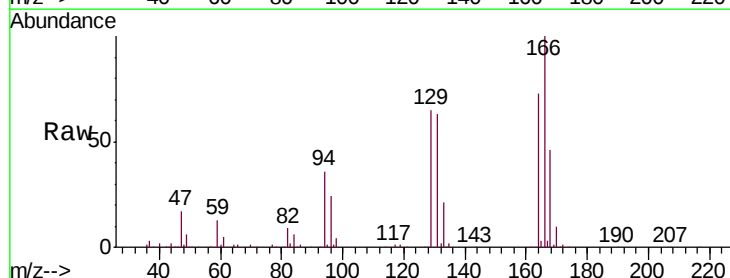
Ion Ratio Lower Upper

164 100

129 89.2 60.3 112.1

131 87.1 59.9 111.3

166 137.9 89.1 165.5



Abundance Ion 163.90 (163.60 to 164.60): VV013732.D (-2140) (-)

Ion 128.95 (128.65 to 129.65): VV013732.D (-2140) (-)

Ion 130.95 (130.65 to 131.65): VV013732.D (-2140) (-)

Ion 165.90 (165.60 to 166.60): VV013732.D (-2140) (-)

8.02

60000

50000

40000

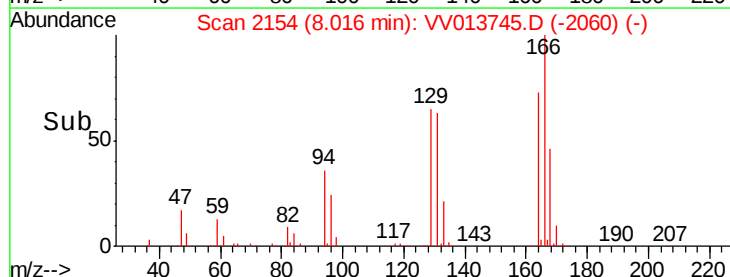
30000

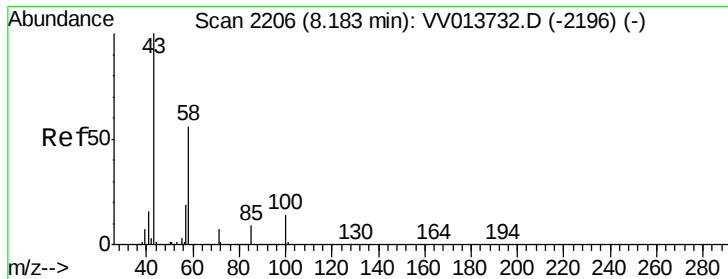
20000

10000

0

Time-->

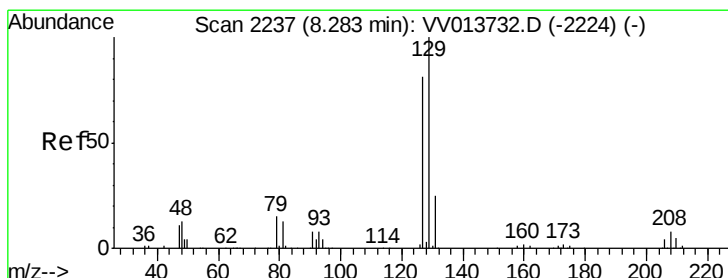
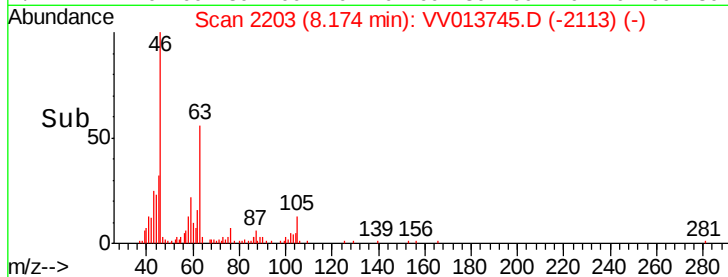
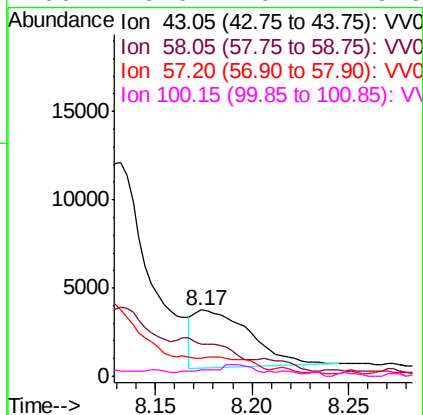
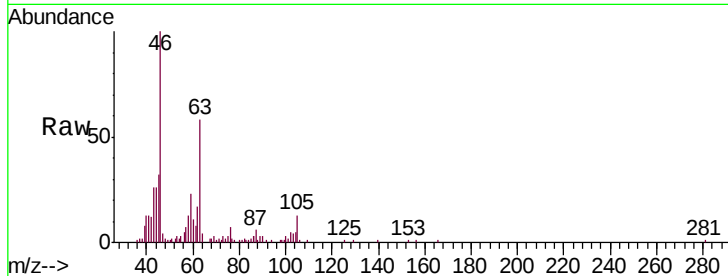




#48
2-Hexanone
Concen: 0.746 ug/L
RT: 8.17 min Scan# 2203
Delta R.T. -0.01 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

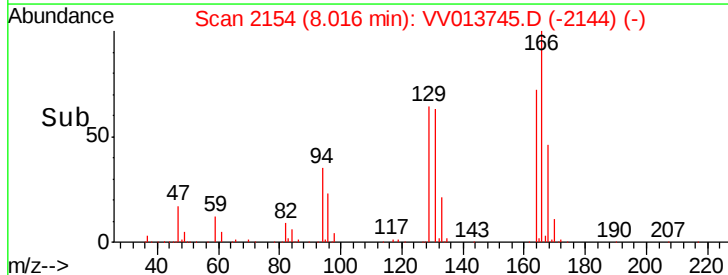
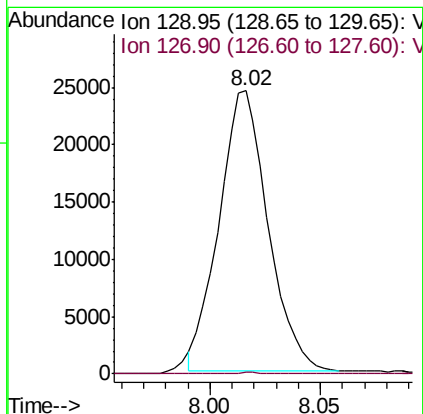
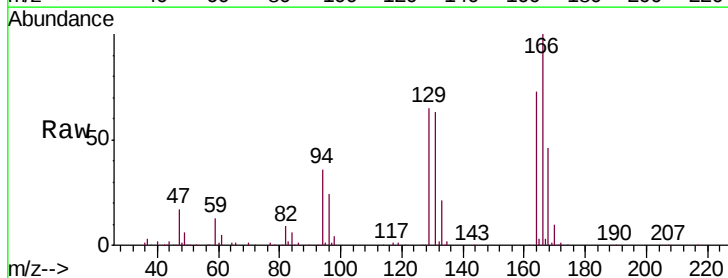
Instrument :
MSVOA_V
ClientSampleId :
B0AD4

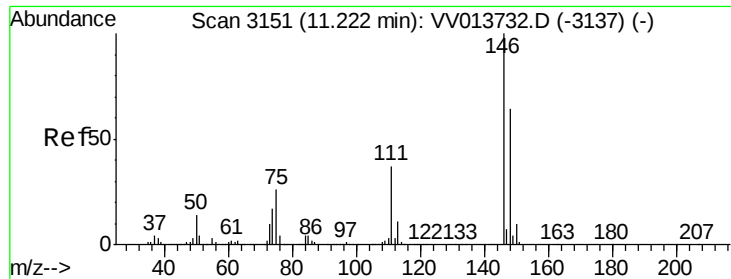
Tgt Ion:	43	Resp:	6713
Ion	Ratio	Lower	Upper
43	100		
58	0.0	43.2	64.8#
57	0.0	15.4	23.2#
100	10.6	10.4	15.6



#49
Dibromochloromethane
Concen: 1.912 ug/L
RT: 8.02 min Scan# 2154
Delta R.T. -0.27 min
Lab File: VV013745.D
Acq: 22 Nov 2019 19:48

Tgt Ion:	129	Resp:	37752
Ion	Ratio	Lower	Upper
129	100		
127	0.6	55.7	103.5#

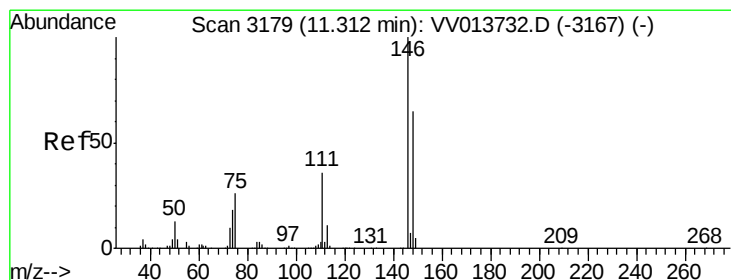
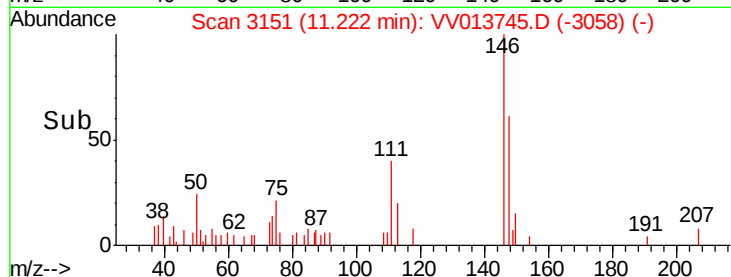
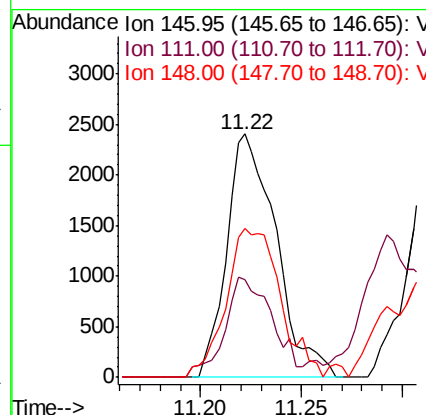
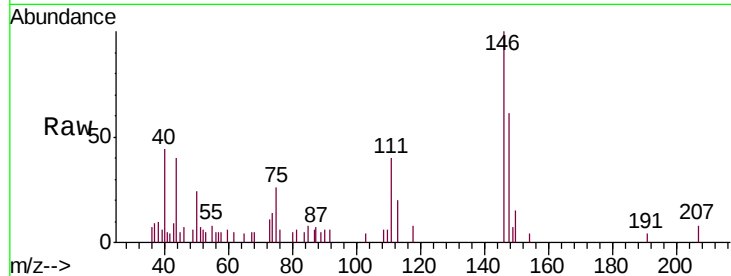




#62
 1,3-Dichlorobenzene
 Concen: 0.088 ug/L
 RT: 11.22 min Scan# 3151
 Delta R.T. 0.00 min
 Lab File: VV013745.D
 Acq: 22 Nov 2019 19:48

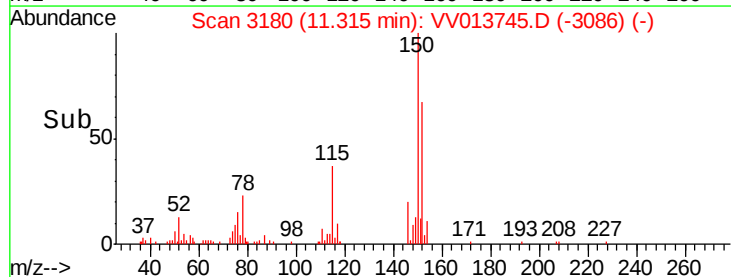
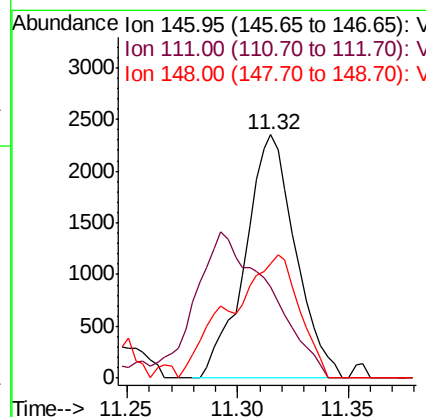
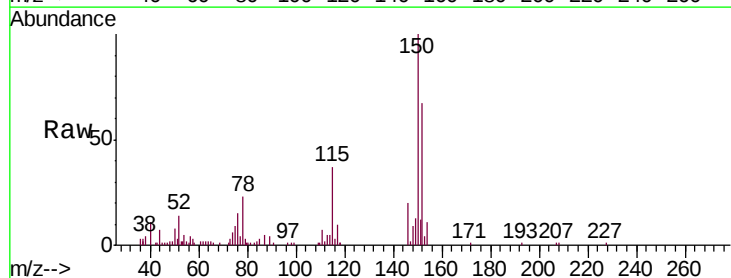
Instrument :
 MSVOA_V
 ClientSampleId :
 B0AD4

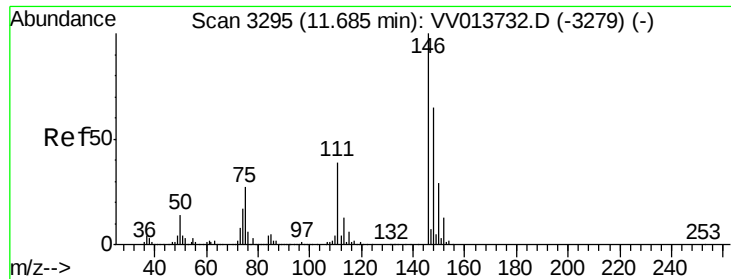
Tgt Ion:146 Resp: 4108
 Ion Ratio Lower Upper
 146 100
 111 40.3 25.6 47.6
 148 61.4 44.7 82.9



#63
 1,4-Dichlorobenzene
 Concen: 0.079 ug/L
 RT: 11.32 min Scan# 3180
 Delta R.T. 0.00 min
 Lab File: VV013745.D
 Acq: 22 Nov 2019 19:48

Tgt Ion:146 Resp: 3724
 Ion Ratio Lower Upper
 146 100
 111 37.3 25.0 46.4
 148 46.7 45.4 84.2





#65
 1,2-Dichlorobenzene
 Concen: 0.075 ug/L
 RT: 11.69 min Scan# 3296
 Delta R.T. 0.00 min
 Lab File: VV013745.D
 Acq: 22 Nov 2019 19:48

Instrument :
 MSVOA_V
 ClientSampleId :
 B0AD4

Tgt Ion:146 Resp: 3231
 Ion Ratio Lower Upper
 146 100
 111 46.4 31.3 46.9
 148 65.3 52.2 78.2

