

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX052720\
 Data File : VX016462.D
 Acq On : 27 May 2020 21:46
 Operator : JC/SP
 Sample : L2767-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TRE-1005

Quant Time: May 28 03:01:05 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X052720W.M
 Quant Title : SW846 8260
 QLast Update : Wed May 27 16:31:05 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.64	168	275396	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.84	114	446677	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.10	117	454988	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.06	152	234302	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.04	65	167989	49.12	ug/l	0.00
Spiked Amount			Recovery	=	98.24%	
35) Dibromofluoromethane	5.47	113	133257	48.45	ug/l	0.00
Spiked Amount			Recovery	=	96.90%	
50) Toluene-d8	8.70	98	562641	52.56	ug/l	0.00
Spiked Amount			Recovery	=	105.12%	
62) 4-Bromofluorobenzene	11.12	95	229350	55.45	ug/l	0.00
Spiked Amount			Recovery	=	110.90%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.64	94	462	0.274	ug/l #	48
8) Diethyl Ether	2.17	74	3875	2.043	ug/l	96
10) Methyl Iodide	2.50	142	138	3.099	ug/l #	40
11) Tert butyl alcohol	3.01	59	3982	4.540	ug/l	100
13) Acrolein	2.27	56	395	1.059	ug/l	92
16) Acetone	2.42	43	31603	21.091	ug/l	98
18) Methyl Acetate	2.75	43	4127	1.074	ug/l	95
20) Methylene Chloride	2.84	84	6635	2.140	ug/l #	86
25) 2-Butanone	4.64	43	12137	4.780	ug/l	94
29) Tetrahydrofuran	5.10	42	1037	0.632	ug/l #	85
31) Cyclohexane	5.63	56	5352	1.126	ug/l #	1
36) 1,1-Dichloropropene	5.64	75	20563	4.862	ug/l #	50
37) Ethyl Acetate	4.64	43	12339	2.430	ug/l #	72
38) Carbon Tetrachloride	5.63	117	26831	6.037	ug/l #	17
43) Isopropyl Acetate	6.41	43	78110	9.862	ug/l	100
48) Methyl methacrylate	7.85	41	106490	28.082	ug/l #	40
49) 1,4-Dioxane	7.84	88	168	1.893	ug/l #	1
51) 4-Methyl-2-Pentanone	8.59	43	70181	14.231	ug/l #	45
54) cis-1,3-Dichloropropene	8.60	75	31861	5.937	ug/l #	59
57) 1,3-Dichloropropane	9.52	76	5100	0.941	ug/l #	45
59) 2-Hexanone	9.52	43	65597	17.105	ug/l #	50
74) N-amyl acetate	10.80	43	5610	0.751	ug/l #	47
76) 1,2,3-Trichloropropane	11.12	75	112405	21.826	ug/l #	35
81) trans-1,4-Dichloro-2-buten	11.12	75	112405	53.688	ug/l #	14

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 746

Delta R.T. 0.01 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

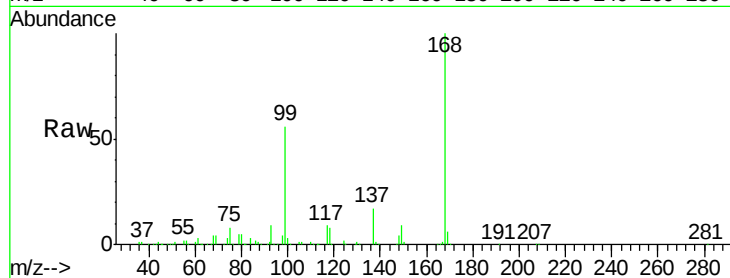
TRE-1005

Tot Ion:168 Resp: 275396

Ion Ratio Lower Upper

168 100

99 56.4 45.2 67.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.64

100000

80000

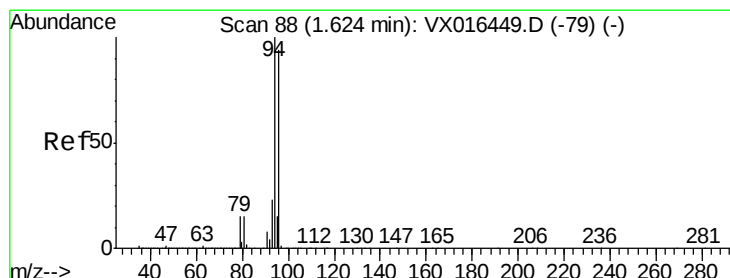
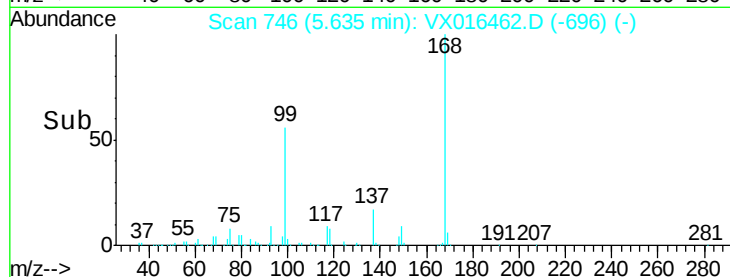
60000

40000

20000

0

Time-->



#5

Bromomethane

Concen: 0.274 ug/l

RT: 1.64 min Scan# 91

Delta R.T. 0.02 min

Lab File: VX016462.D

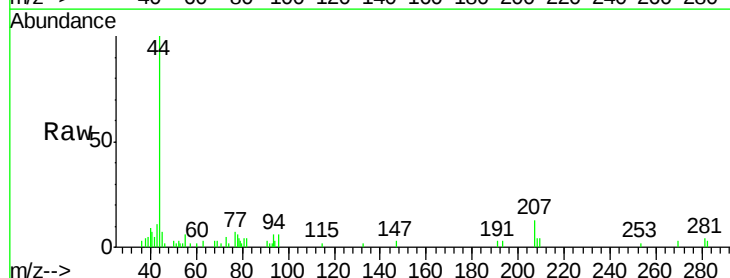
Acq: 27 May 2020 21:46

Tgt Ion: 94 Resp: 462

Ion Ratio Lower Upper

94 100

96 43.5 75.1 112.7#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

300

250

200

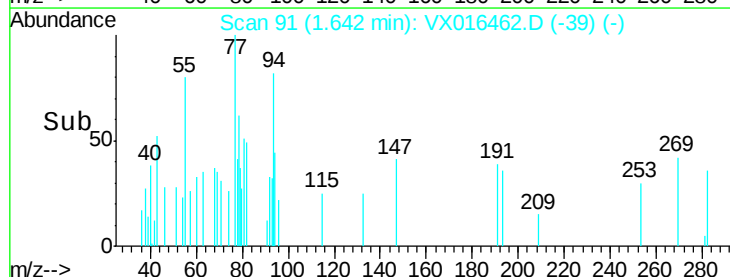
150

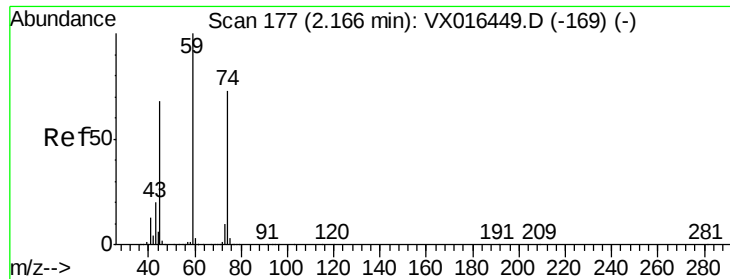
100

50

0

Time-->





#8

Diethyl Ether

Concen: 2.043 ug/l

RT: 2.17 min Scan# 177

Delta R.T. -0.00 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

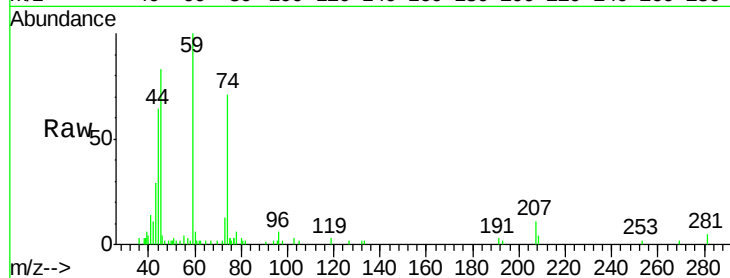
TRE-1005

Tot Ion: 74 Resp: 3875

Ion Ratio Lower Upper

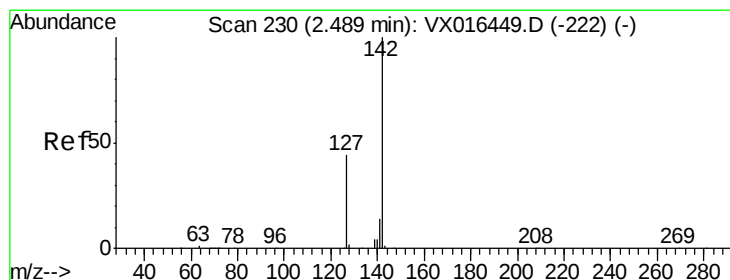
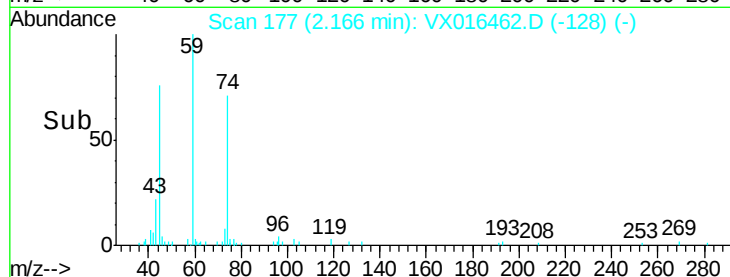
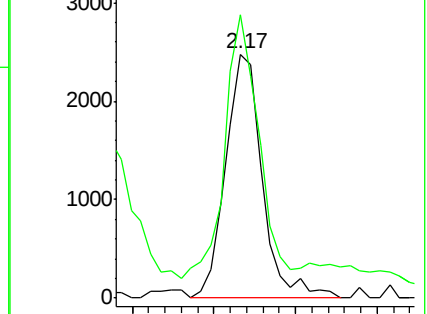
74 100

45 98.6 47.5 142.5



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



#10

Methyl Iodide

Concen: 3.099 ug/l

RT: 2.50 min Scan# 231

Delta R.T. 0.01 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

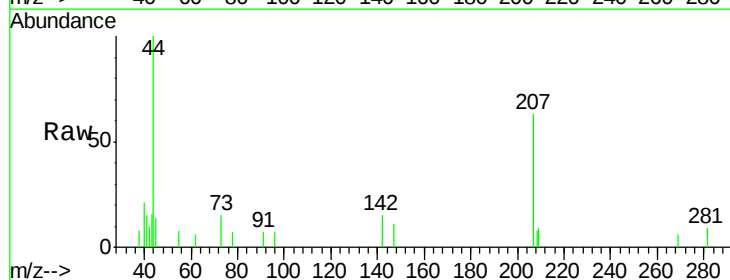
Tgt Ion: 142 Resp: 138

Ion Ratio Lower Upper

142 100

127 0.0 35.3 52.9#

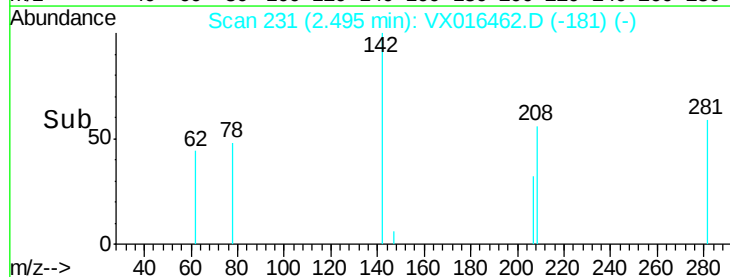
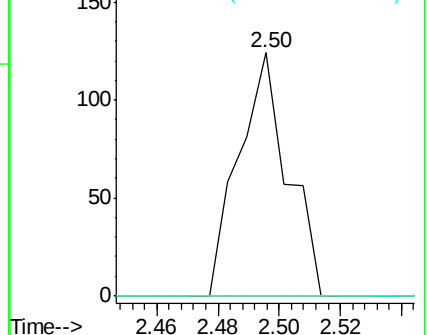
141 0.0 11.4 17.2#

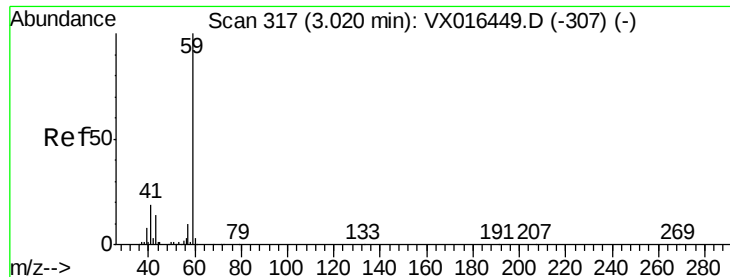


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

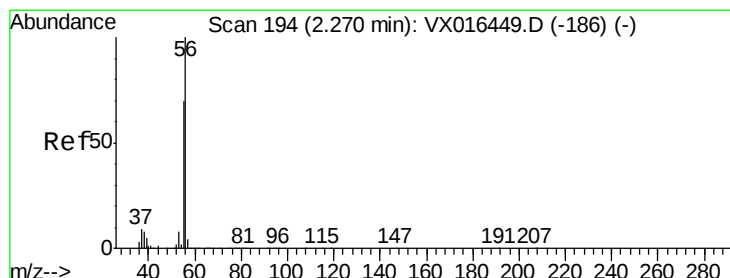
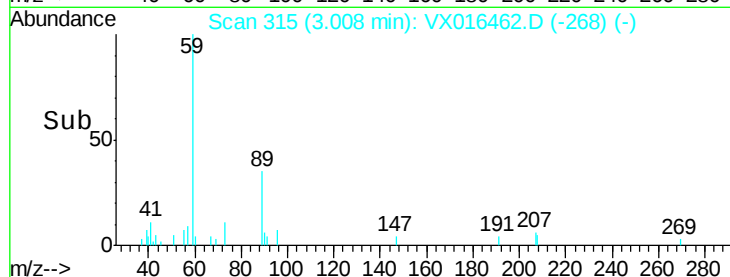
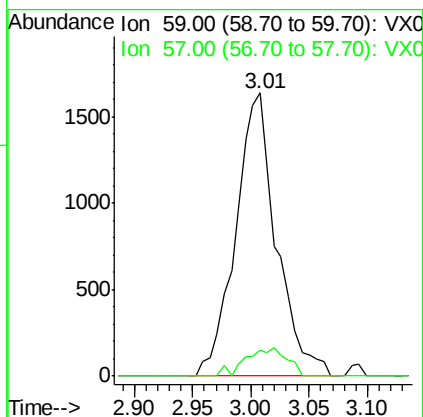
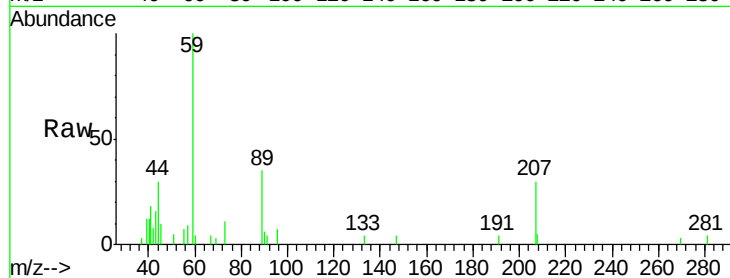




#11
Tert butyl alcohol
Concen: 4.540 ug/l
RT: 3.01 min Scan# 315
Delta R.T. -0.01 min
Lab File: VX016462.D
Acq: 27 May 2020 21:46

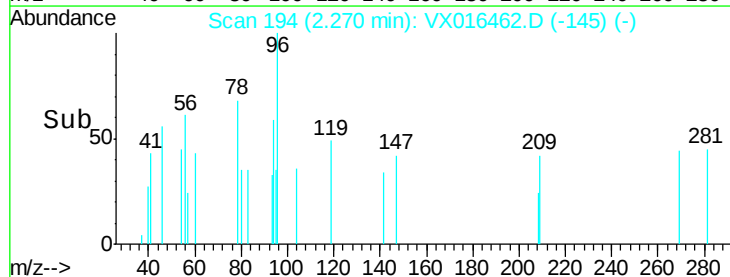
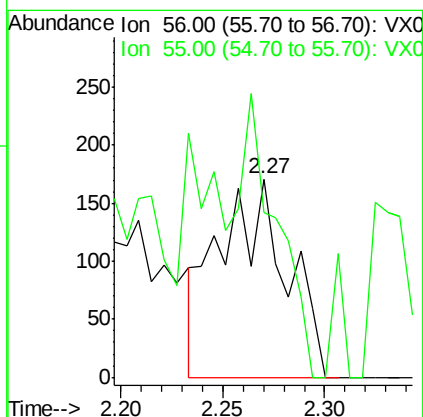
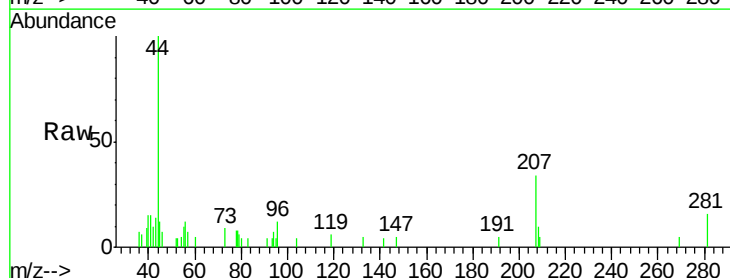
Instrument :
MSVOA_X
ClientSampleId :
TRE-1005

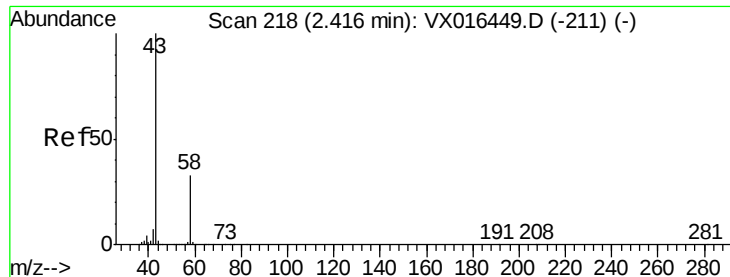
Tot Ion: 59 Resp: 3982
Ion Ratio Lower Upper
59 100
57 10.3 8.2 12.4



#13
Acrolein
Concen: 1.059 ug/l
RT: 2.27 min Scan# 194
Delta R.T. -0.00 min
Lab File: VX016462.D
Acq: 27 May 2020 21:46

Tgt Ion: 56 Resp: 395
Ion Ratio Lower Upper
56 100
55 79.2 58.3 87.5





#16

Acetone

Concen: 21.091 ug/l

RT: 2.42 min Scan# 218

Delta R.T. -0.00 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

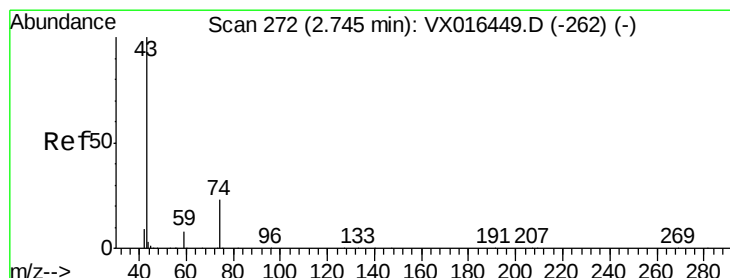
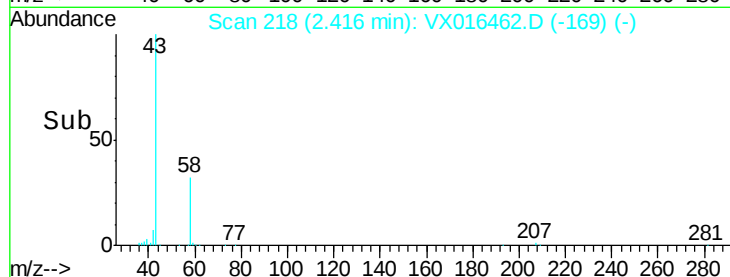
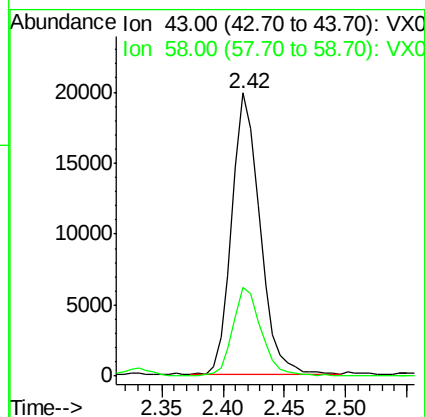
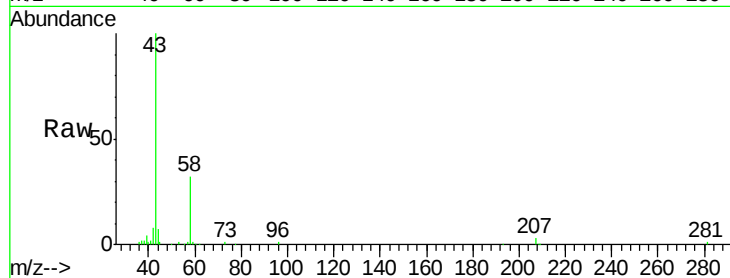
TRE-1005

Tot Ion: 43 Resp: 31603

Ion Ratio Lower Upper

43 100

58 31.7 26.1 39.1



#18

Methyl Acetate

Concen: 1.074 ug/l

RT: 2.75 min Scan# 272

Delta R.T. -0.00 min

Lab File: VX016462.D

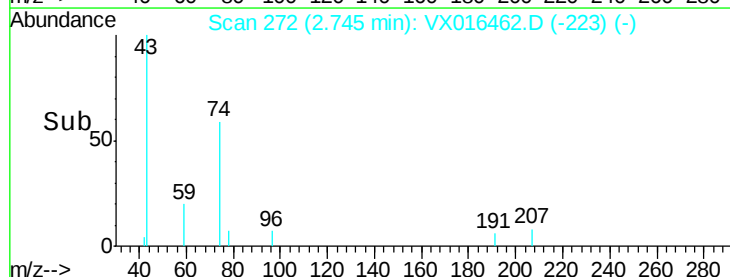
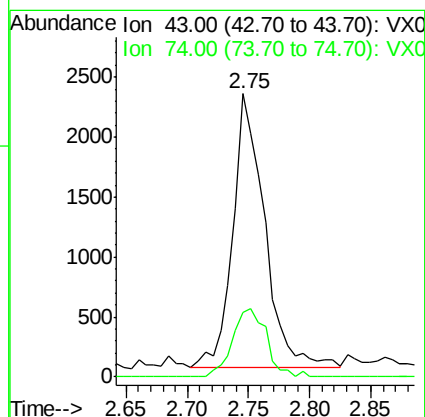
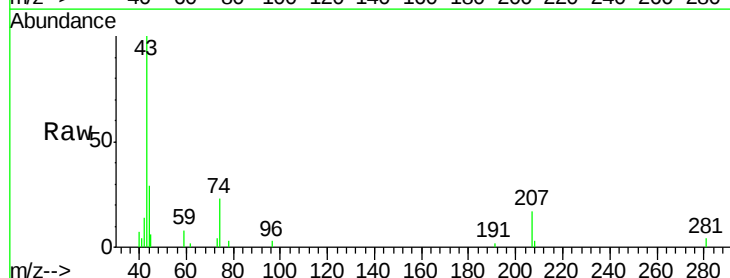
Acq: 27 May 2020 21:46

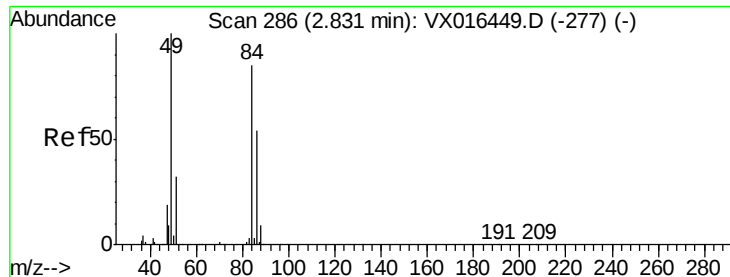
Tgt Ion: 43 Resp: 4127

Ion Ratio Lower Upper

43 100

74 26.8 19.7 29.5

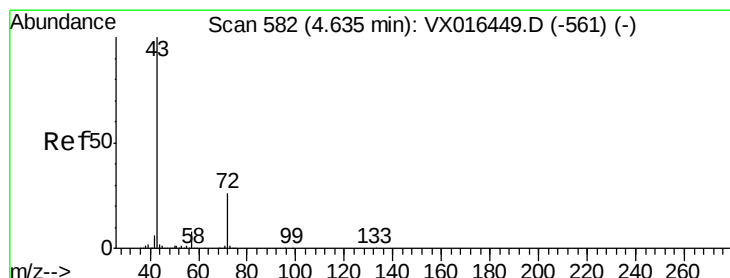
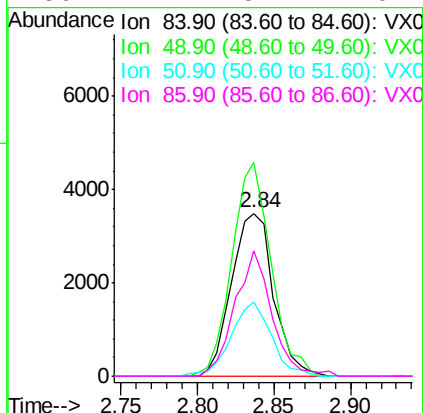
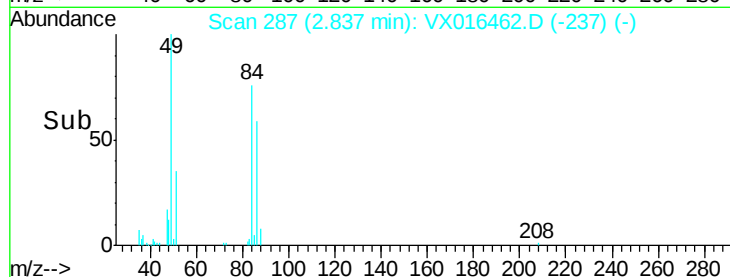
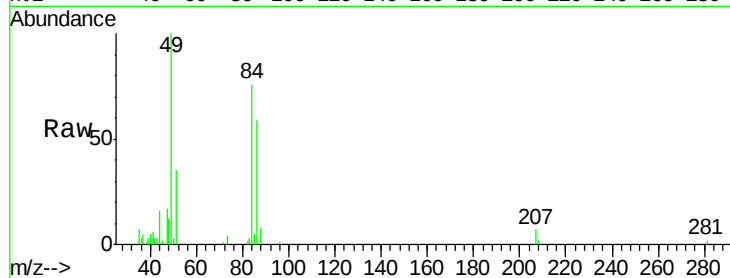




#20
Methylene Chloride
Concen: 2.140 ug/l
RT: 2.84 min Scan# 287
Delta R.T. 0.01 min
Lab File: VX016462.D
Acq: 27 May 2020 21:46

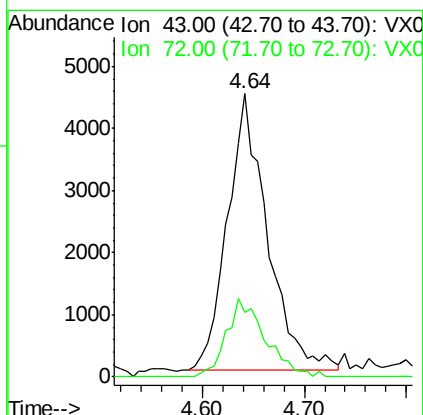
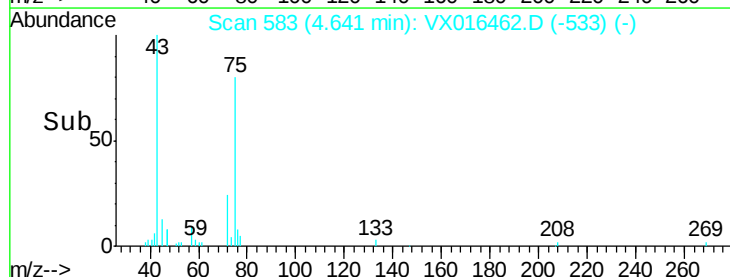
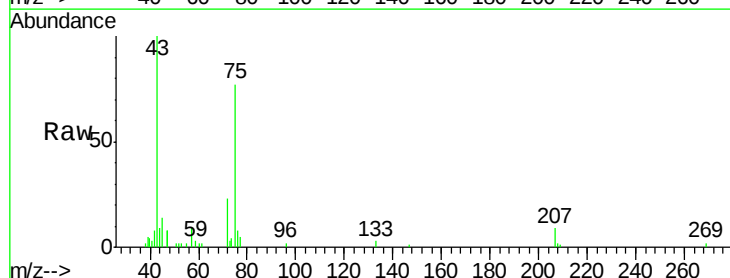
Instrument :
MSVOA_X
ClientSampleId :
TRE-1005

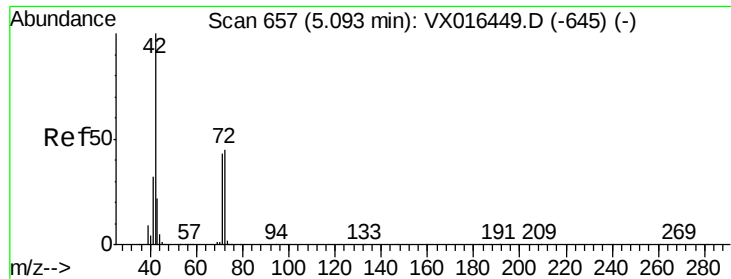
Tot Ion: 84 Resp: 6635
Ion Ratio Lower Upper
84 100
49 131.2 94.5 141.7
51 45.7 30.2 45.4#
86 77.2 51.1 76.7#



#25
2-Butanone
Concen: 4.780 ug/l
RT: 4.64 min Scan# 583
Delta R.T. 0.01 min
Lab File: VX016462.D
Acq: 27 May 2020 21:46

Tgt Ion: 43 Resp: 12137
Ion Ratio Lower Upper
43 100
72 23.3 21.0 31.6





#29

Tetrahydrofuran

Concen: 0.632 ug/l

RT: 5.10 min Scan# 659

Delta R.T. 0.01 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

TRE-1005

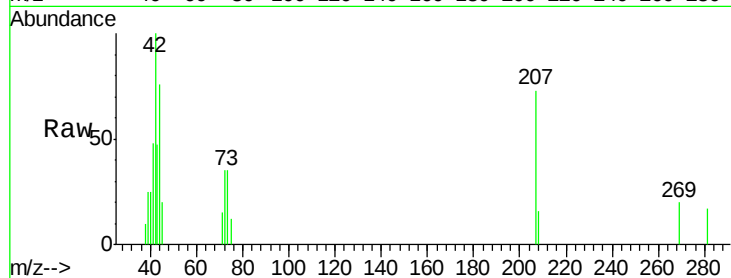
Tot Ion: 42 Resp: 1037

Ion Ratio Lower Upper

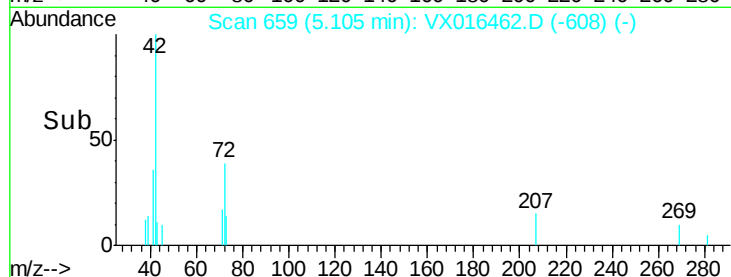
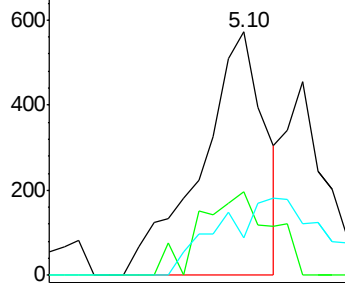
42 100

72 38.5 37.0 55.4

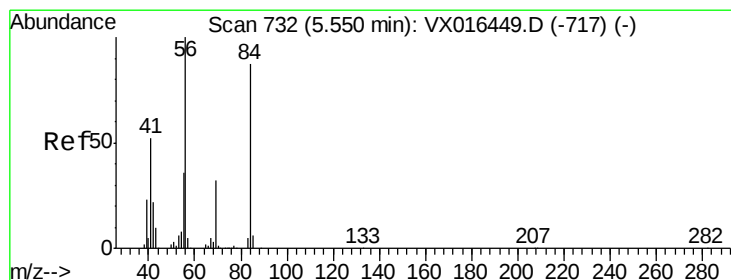
71 54.5 34.1 51.1#



Abundance Ion 42.00 (41.70 to 42.70): VX0
Ion 72.00 (71.70 to 72.70): VX0
Ion 71.00 (70.70 to 71.70): VX0



Time-->



#31

Cyclohexane

Concen: 1.126 ug/l

RT: 5.63 min Scan# 745

Delta R.T. 0.08 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

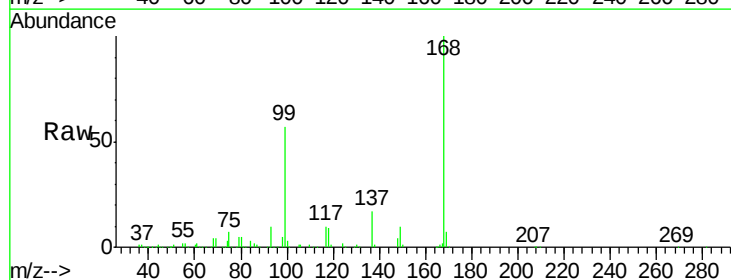
Tgt Ion: 56 Resp: 5352

Ion Ratio Lower Upper

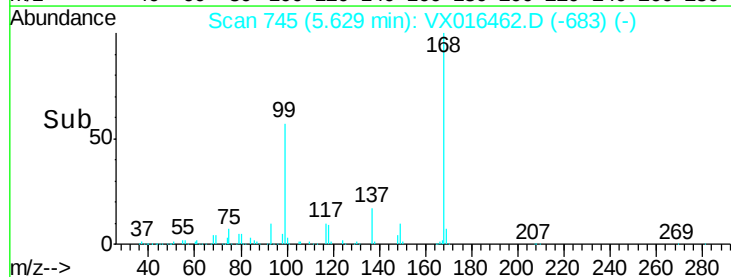
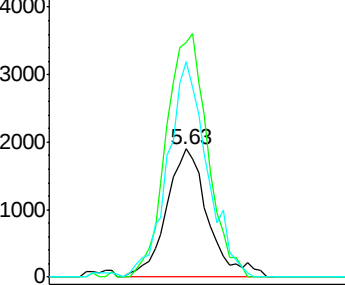
56 100

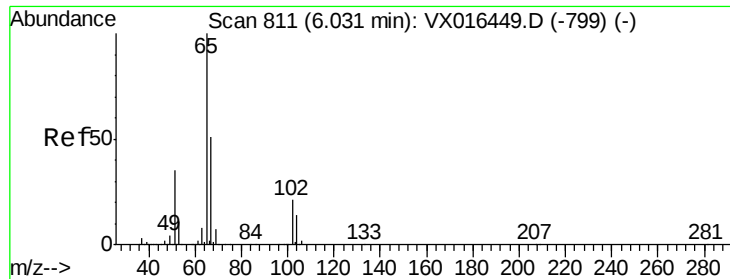
69 182.5 25.7 38.5#

84 167.9 70.0 105.0#



Abundance Ion 56.00 (55.70 to 56.70): VX0
Ion 69.00 (68.70 to 69.70): VX0
Ion 84.00 (83.70 to 84.70): VX0

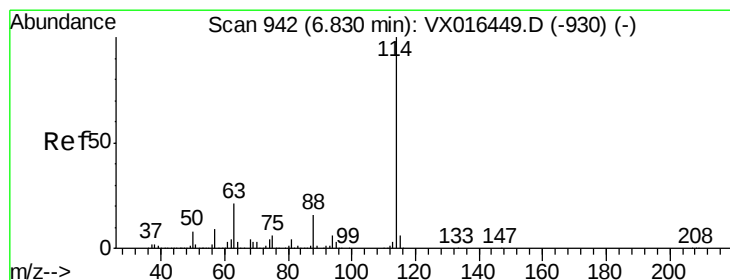
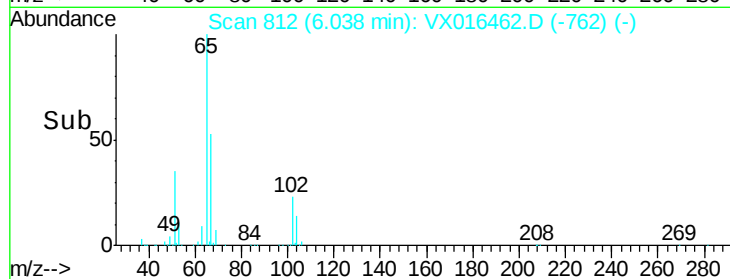
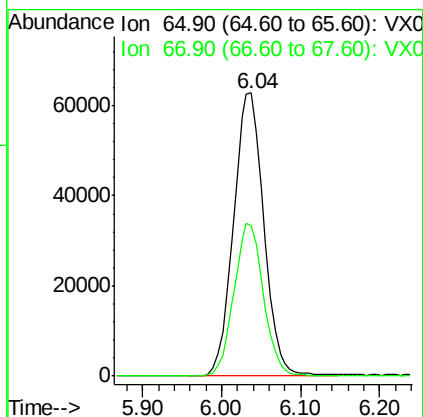
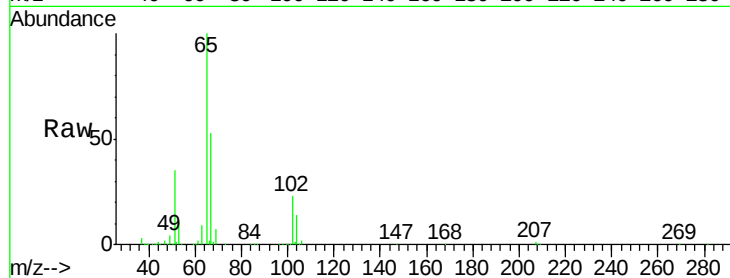




#33
 1,2-Dichloroethane-d4
 Concen: 49.119 ug/l
 RT: 6.04 min Scan# 812
 Delta R.T. 0.01 min
 Lab File: VX016462.D
 Acq: 27 May 2020 21:46

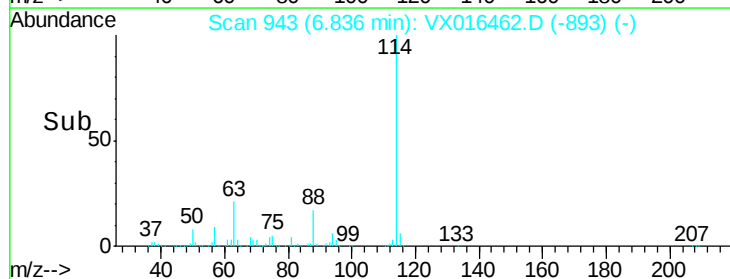
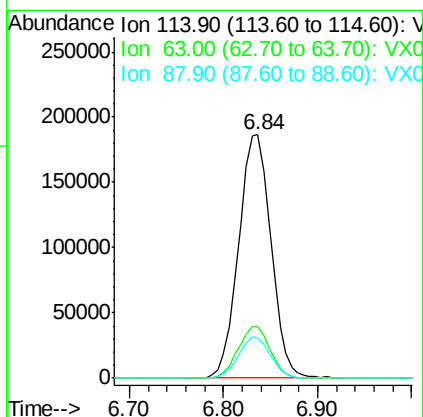
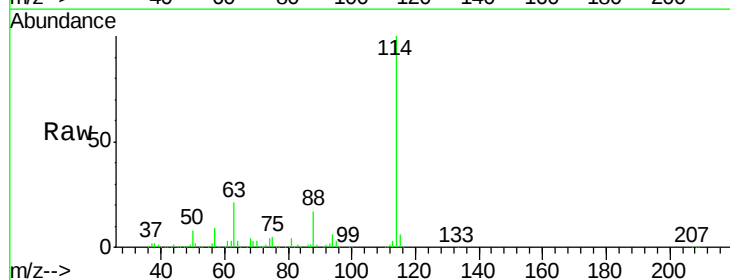
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 TRE-1005

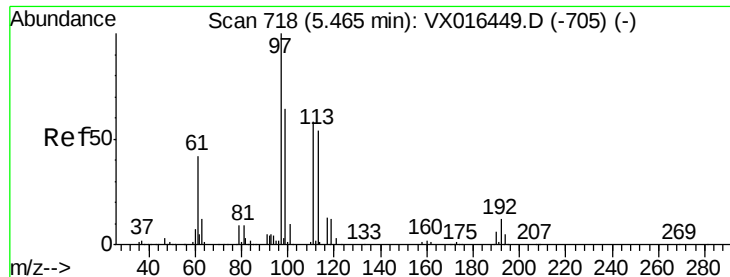
Tot Ion: 65 Resp: 167989
 Ion Ratio Lower Upper
 65 100
 67 52.6 0.0 104.8



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.84 min Scan# 943
 Delta R.T. 0.01 min
 Lab File: VX016462.D
 Acq: 27 May 2020 21:46

Tgt Ion: 114 Resp: 446677
 Ion Ratio Lower Upper
 114 100
 63 21.1 0.0 42.6
 88 16.5 0.0 32.8





#35

Dibromofluoromethane

Concen: 48.450 ug/l

RT: 5.47 min Scan# 719

Delta R.T. 0.01 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

TRE-1005

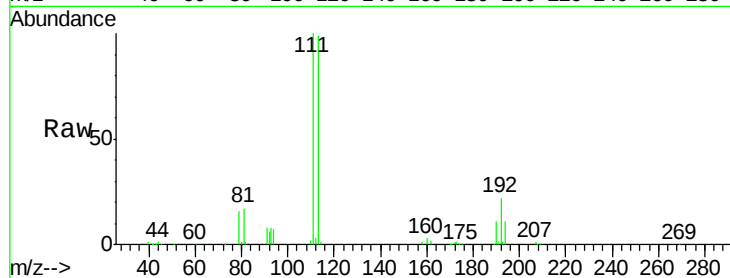
Tot Ion:113 Resp: 133257

Ion Ratio Lower Upper

113 100

111 102.9 83.0 124.6

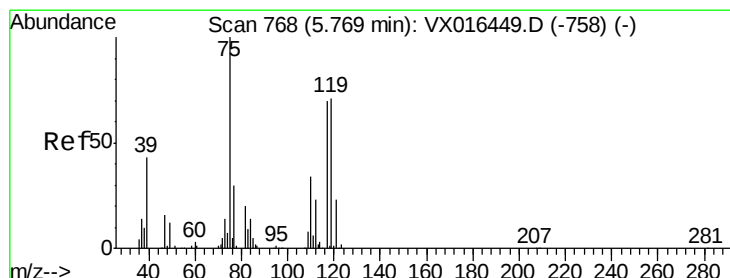
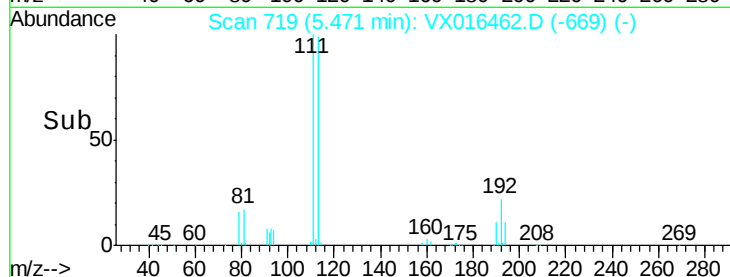
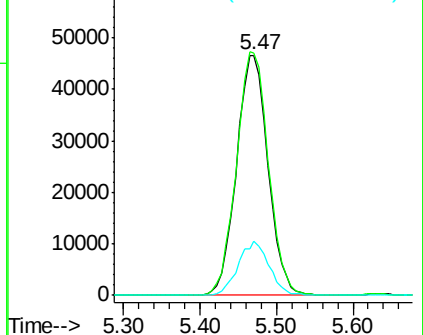
192 21.9 17.7 26.5



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.862 ug/l

RT: 5.64 min Scan# 746

Delta R.T. -0.13 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

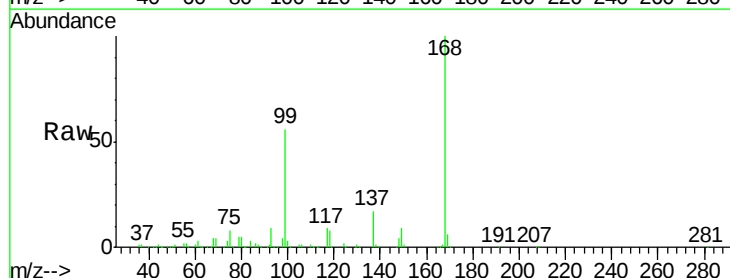
Tgt Ion: 75 Resp: 20563

Ion Ratio Lower Upper

75 100

110 9.1 17.4 52.3#

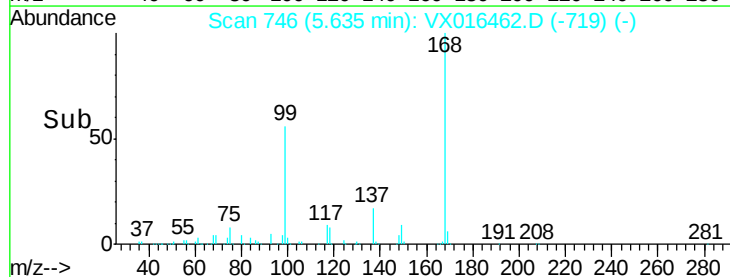
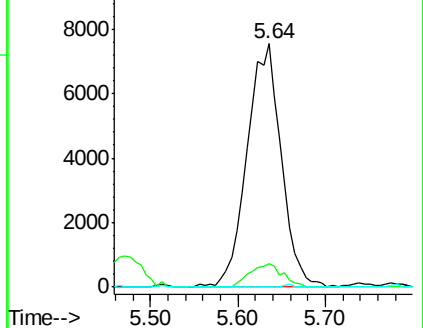
77 0.0 24.2 36.4#

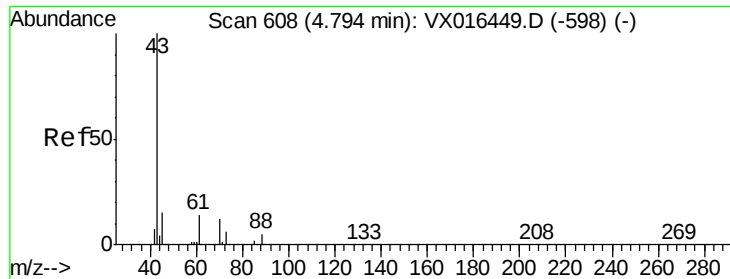


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

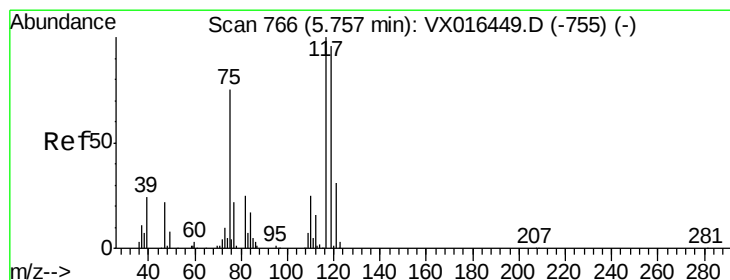
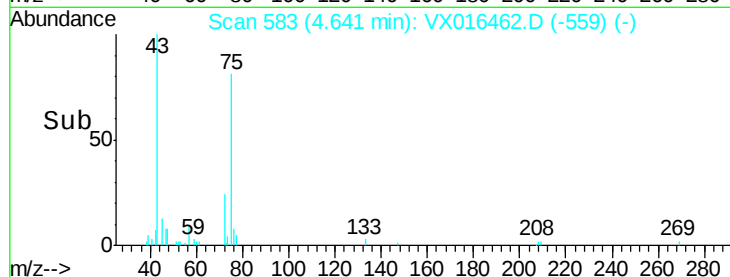
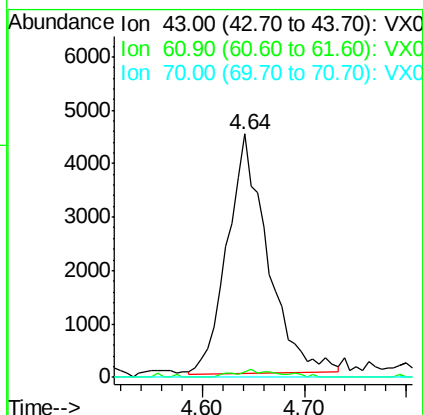
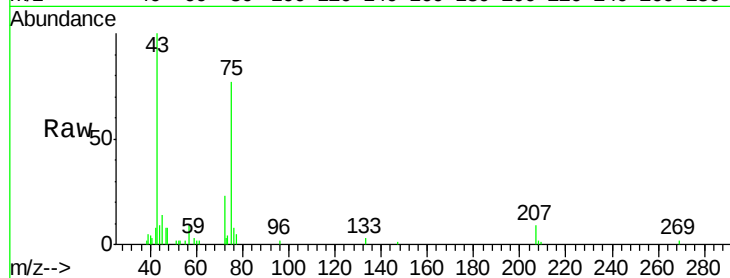




#37
Ethyl Acetate
Concen: 2.430 ug/l
RT: 4.64 min Scan# 583
Delta R.T. -0.15 min
Lab File: VX016462.D
Acq: 27 May 2020 21:46

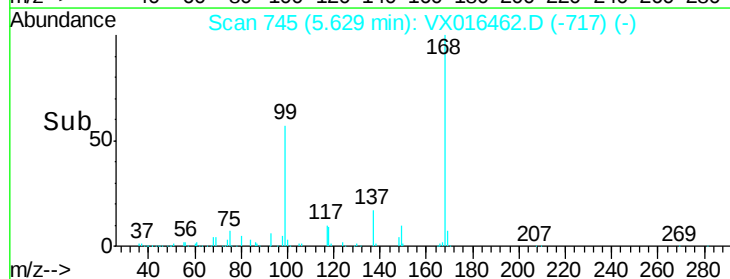
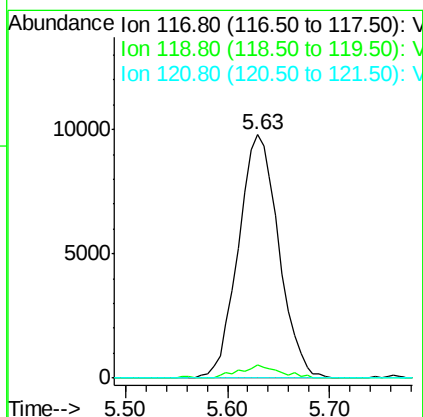
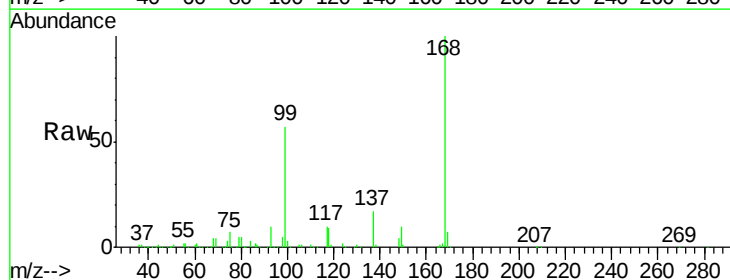
Instrument :
MSVOA_X
ClientSampleId :
TRE-1005

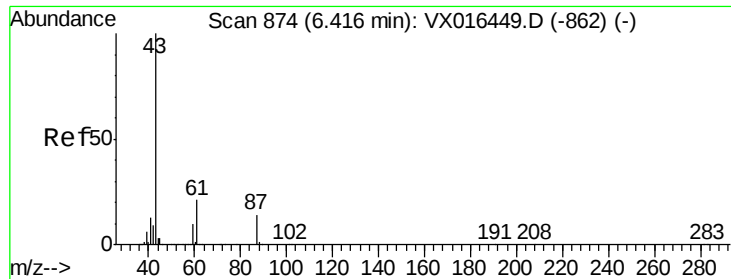
Tot Ion	43	Resp	12339
Ion Ratio	Lower	Upper	
43	100		
61	3.7	11.3	16.9#
70	0.0	9.3	13.9#



#38
Carbon Tetrachloride
Concen: 6.037 ug/l
RT: 5.63 min Scan# 745
Delta R.T. -0.13 min
Lab File: VX016462.D
Acq: 27 May 2020 21:46

Tgt Ion	117	Resp	26831
Ion Ratio	Lower	Upper	
117	100		
119	5.6	76.3	114.5#
121	0.0	24.6	37.0#



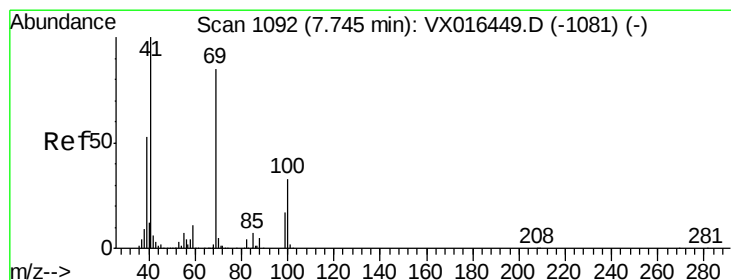
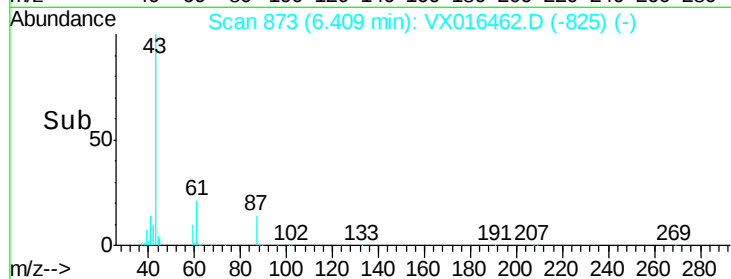
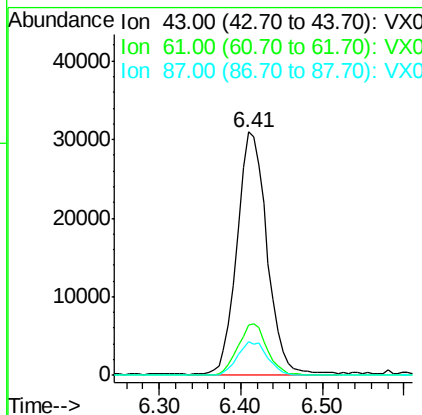
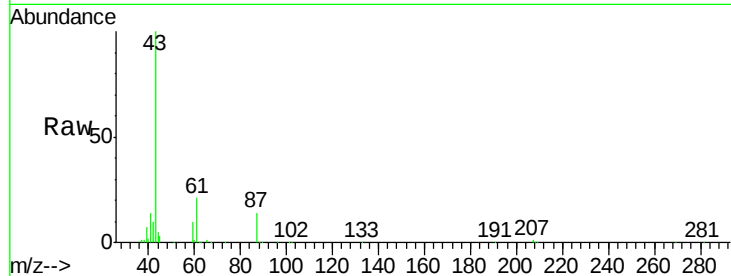


#43

Isopropyl Acetate
 Concen: 9.862 ug/l
 RT: 6.41 min Scan# 873
 Delta R.T. -0.01 min
 Lab File: VX016462.D
 Acq: 27 May 2020 21:46

Instrument :
 MSVOA_X
 ClientSampleId :
 TRE-1005

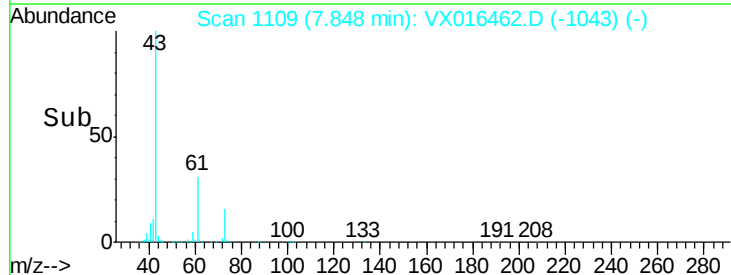
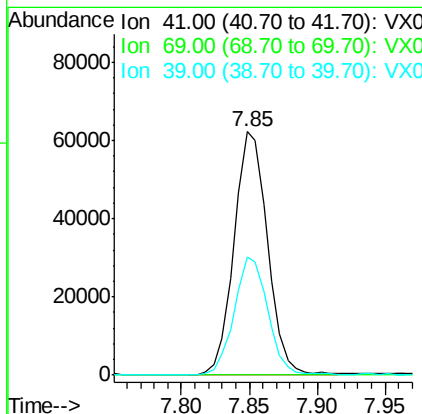
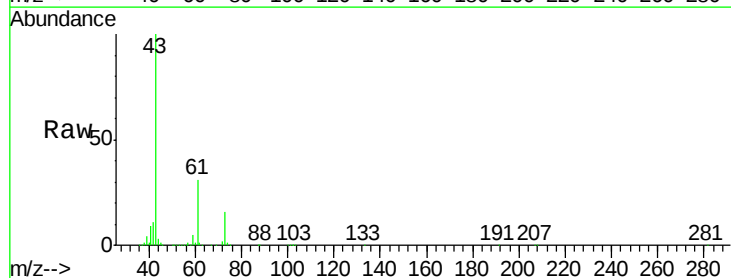
Tot Ion	43	Resp	78110
Ion Ratio	Lower	Upper	
43	100		
61	20.8	16.8	25.2
87	13.9	11.2	16.8

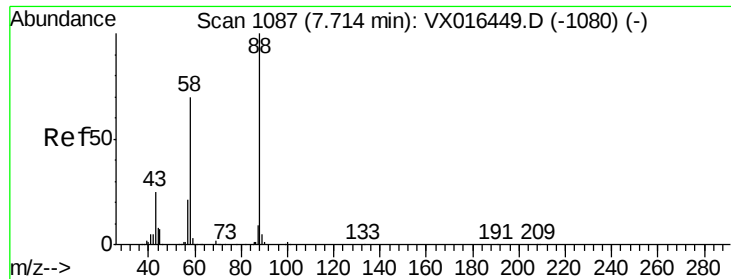


#48

Methyl methacrylate
 Concen: 28.082 ug/l
 RT: 7.85 min Scan# 1109
 Delta R.T. 0.10 min
 Lab File: VX016462.D
 Acq: 27 May 2020 21:46

Tgt Ion	41	Resp	106490
Ion Ratio	Lower	Upper	
41	100		
69	0.2	68.6	102.8#
39	49.2	42.4	63.6





#49

1,4-Dioxane

Concen: 1.893 ug/l

RT: 7.84 min Scan# 1108

Delta R.T. 0.13 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

TRE-1005

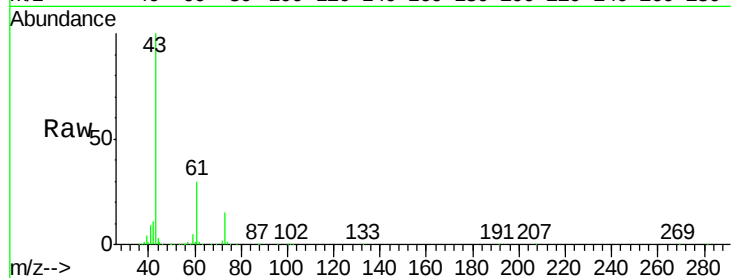
Tot Ion: 88 Resp: 168

Ion Ratio Lower Upper

88 100

43 707602.4 24.2 36.4#

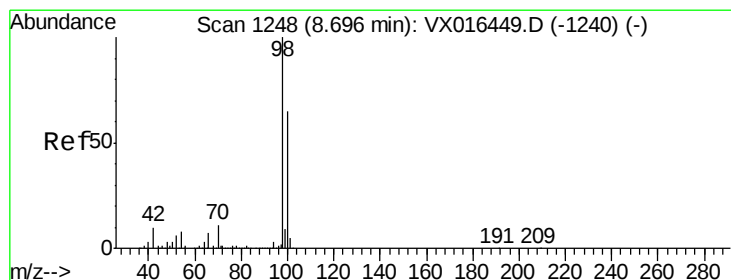
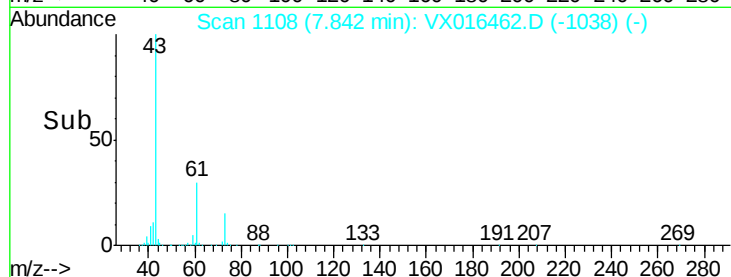
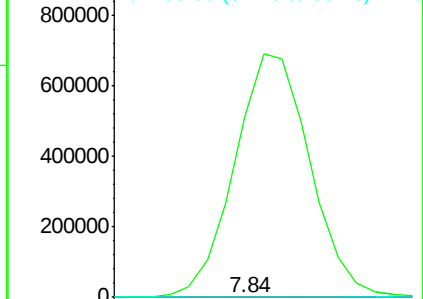
58 3119.6 56.5 84.7#



Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#50

Toluene-d8

Concen: 52.558 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. -0.00 min

Lab File: VX016462.D

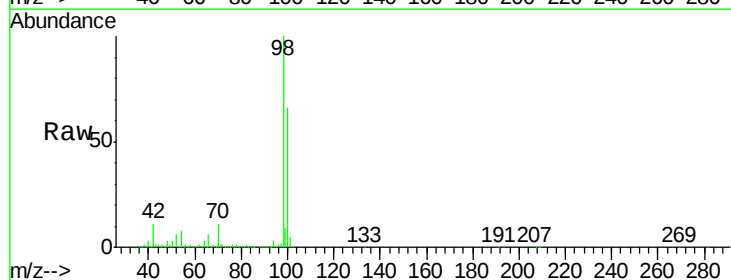
Acq: 27 May 2020 21:46

Tgt Ion: 98 Resp: 562641

Ion Ratio Lower Upper

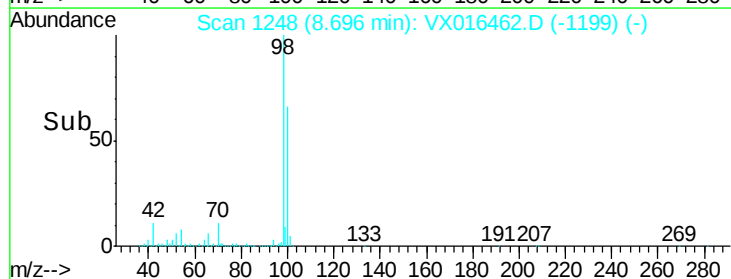
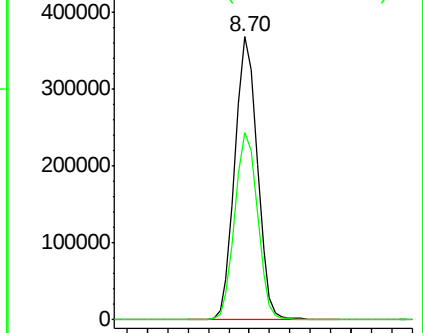
98 100

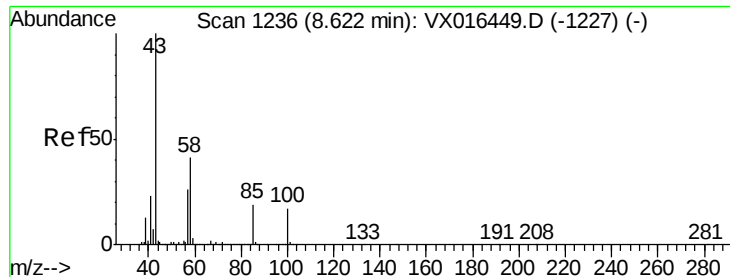
100 66.8 53.8 80.6



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0





#51

4-Methyl-2-Pentanone

Concen: 14.231 ug/l

RT: 8.59 min Scan# 1231

Delta R.T. -0.03 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

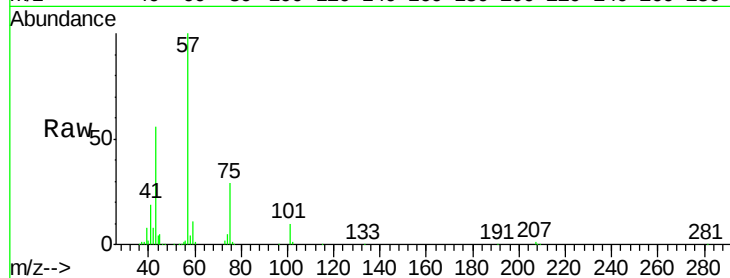
TRE-1005

Tot Ion: 43 Resp: 70181

Ion Ratio Lower Upper

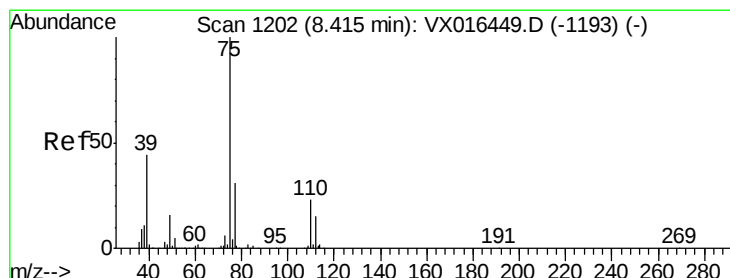
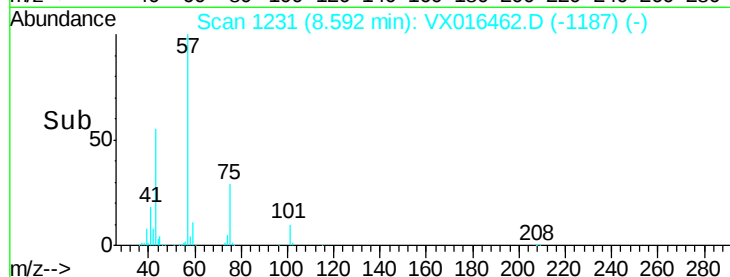
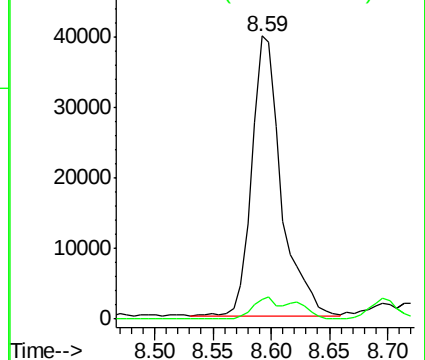
43 100

58 6.9 33.0 49.6#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#54

cis-1,3-Dichloropropene

Concen: 5.937 ug/l

RT: 8.60 min Scan# 1232

Delta R.T. 0.18 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

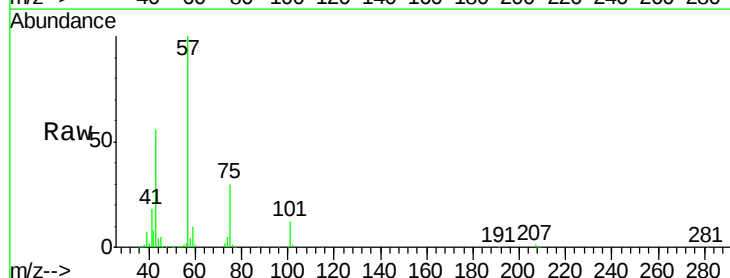
Tgt Ion: 75 Resp: 31861

Ion Ratio Lower Upper

75 100

77 0.7 24.6 36.8#

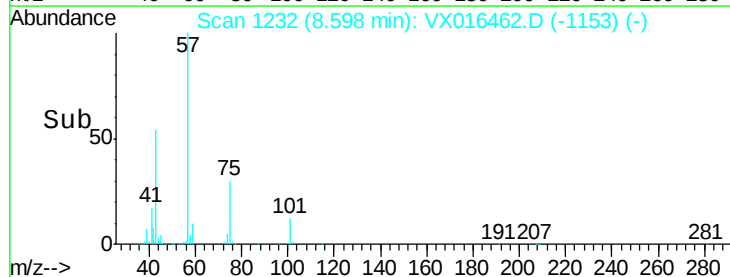
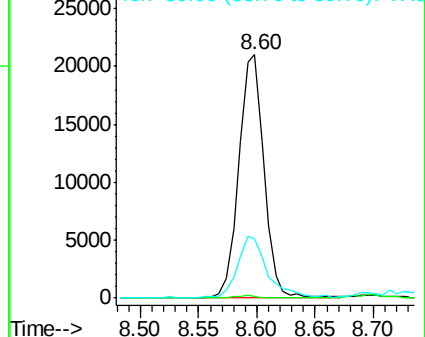
39 23.9 35.3 52.9#

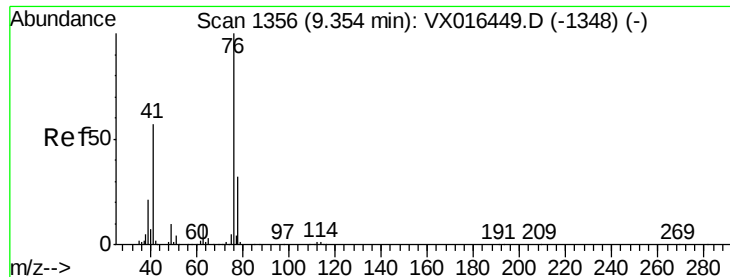


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0

Ion 39.00 (38.70 to 39.70): VX0





#57

1,3-Dichloropropane

Concen: 0.941 ug/l

RT: 9.52 min Scan# 1384

Delta R.T. 0.17 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

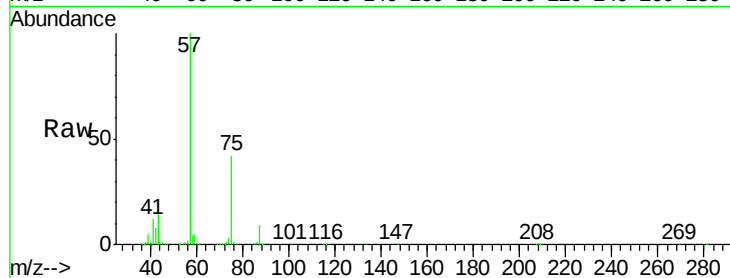
TRE-1005

Tot Ion: 76 Resp: 5100

Ion Ratio Lower Upper

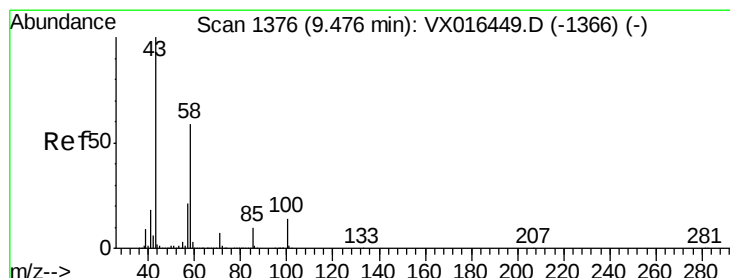
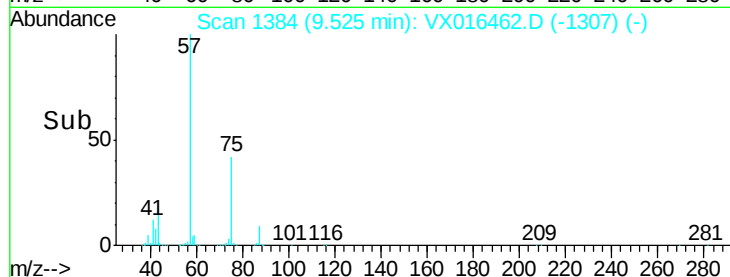
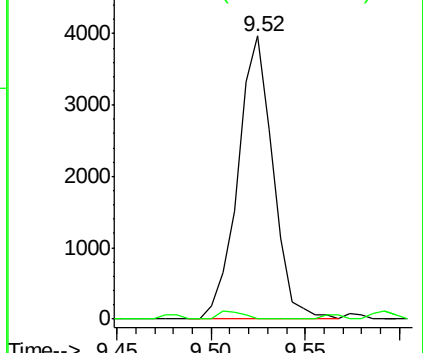
76 100

78 1.9 26.2 39.4#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



#59

2-Hexanone

Concen: 17.105 ug/l

RT: 9.52 min Scan# 1384

Delta R.T. 0.05 min

Lab File: VX016462.D

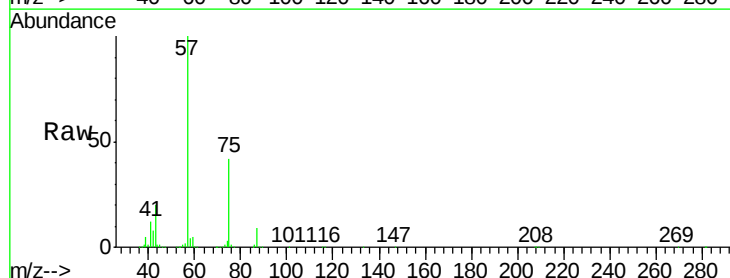
Acq: 27 May 2020 21:46

Tgt Ion: 43 Resp: 65597

Ion Ratio Lower Upper

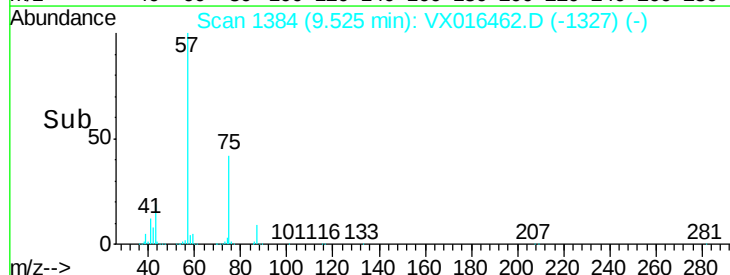
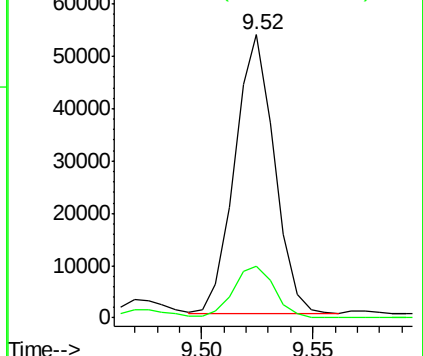
43 100

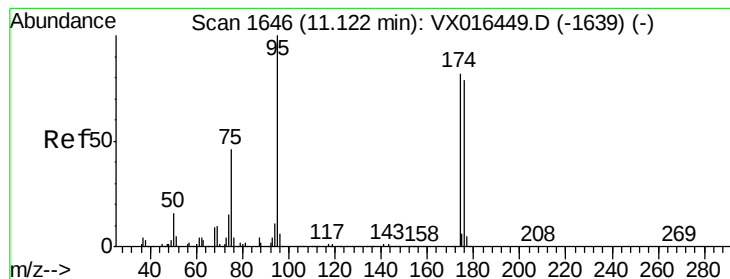
58 20.3 28.8 86.4#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#62

4-Bromofluorobenzene

Concen: 55.446 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

TRE-1005

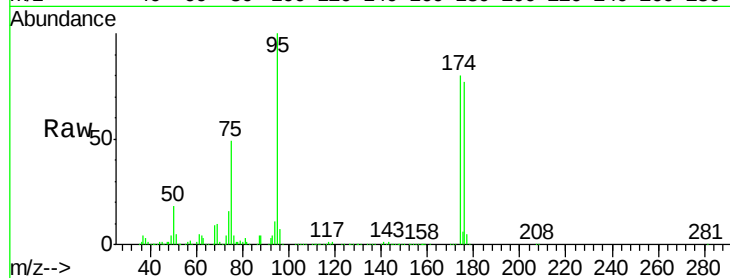
Tot Ion: 95 Resp: 229350

Ion Ratio Lower Upper

95 100

174 81.1 0.0 163.0

176 78.0 0.0 156.8



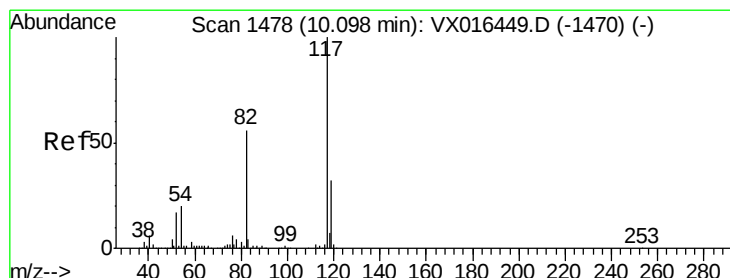
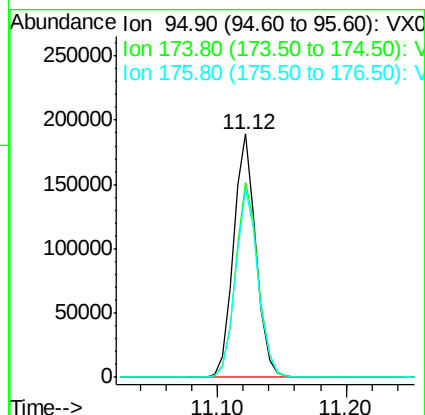
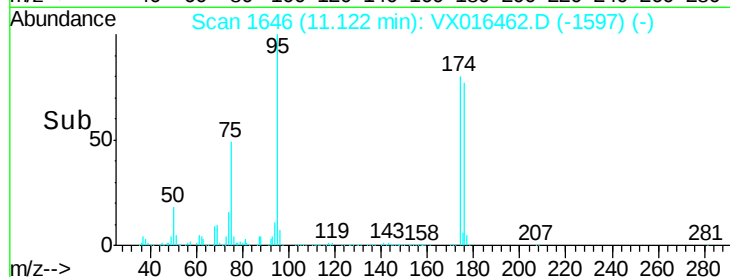
Abundance Ion 94.90 (94.60 to 95.60): VX016449.D (-1639) (-)

Ion 173.80 (173.50 to 174.50): VX016449.D (-1639) (-)

Ion 175.80 (175.50 to 176.50): VX016449.D (-1639) (-)

11.12

11.10 11.20



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1478

Delta R.T. -0.00 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

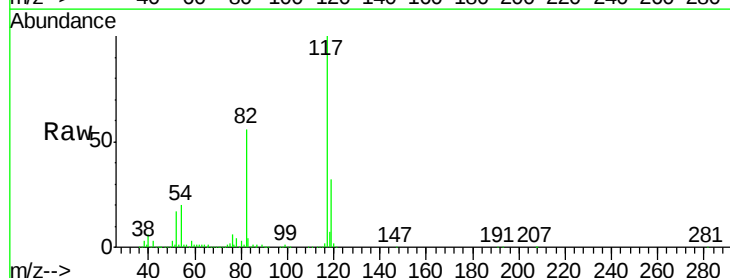
Tgt Ion: 117 Resp: 454988

Ion Ratio Lower Upper

117 100

82 55.7 45.0 67.6

119 32.0 25.8 38.8



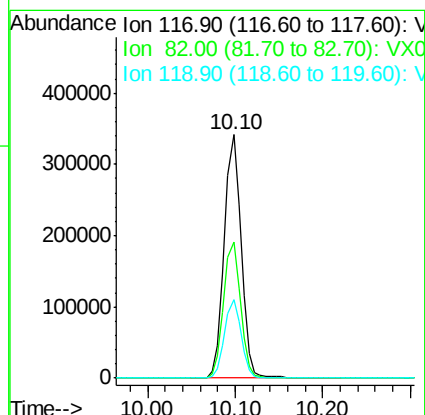
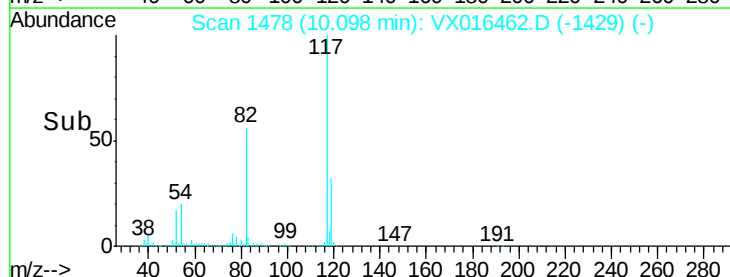
Abundance Ion 116.90 (116.60 to 117.60): VX016449.D (-1470) (-)

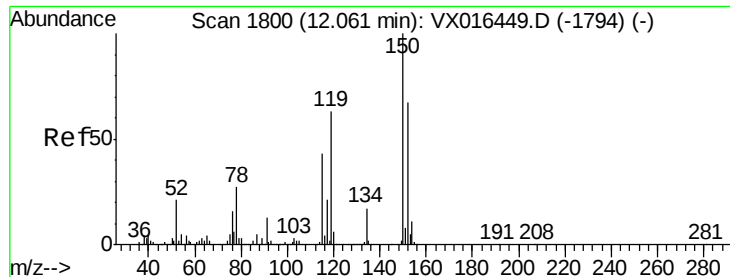
Ion 82.00 (81.70 to 82.70): VX016449.D (-1470) (-)

Ion 118.90 (118.60 to 119.60): VX016449.D (-1470) (-)

10.10

10.00 10.20





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. -0.00 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

TRE-1005

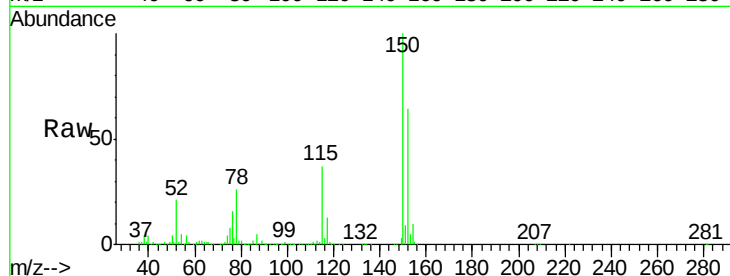
Tot Ion:152 Resp: 234302

Ion Ratio Lower Upper

152 100

115 58.1 39.9 119.6

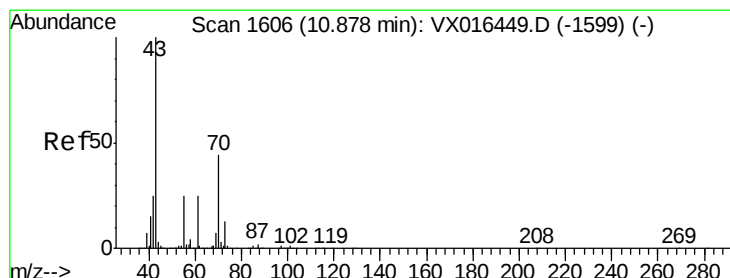
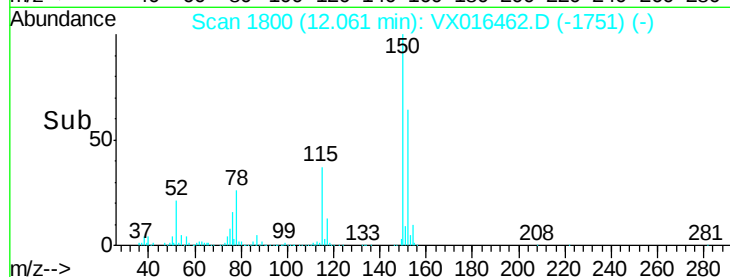
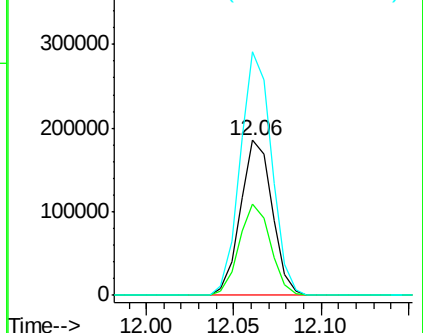
150 155.2 0.0 341.0



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 0.751 ug/l

RT: 10.80 min Scan# 1594

Delta R.T. -0.07 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Tgt Ion: 43 Resp: 5610

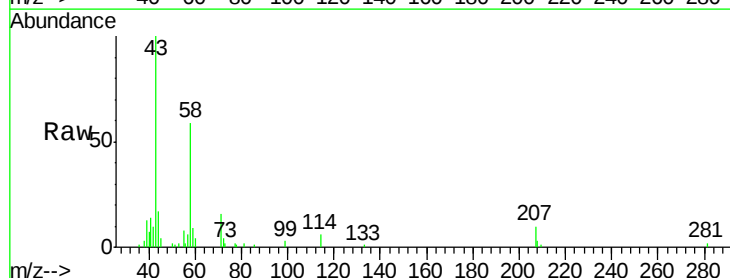
Ion Ratio Lower Upper

43 100

70 0.0 36.1 54.1#

55 10.9 20.2 30.4#

61 0.0 20.3 30.5#

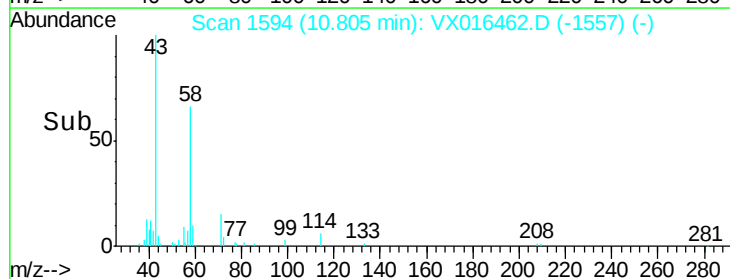
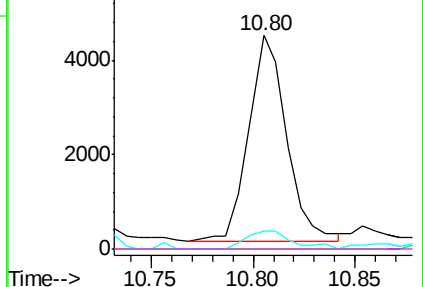


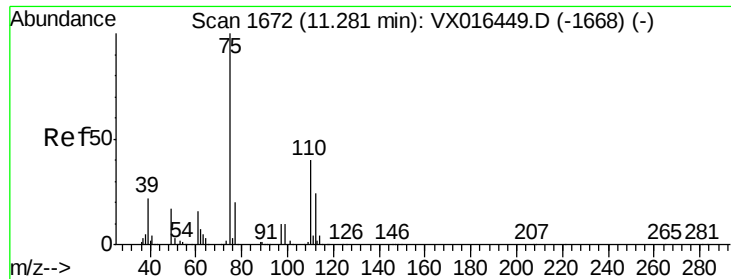
Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0





#76

1,2,3-Trichloropropane

Concen: 21.826 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

Instrument :

MSVOA_X

ClientSampleId :

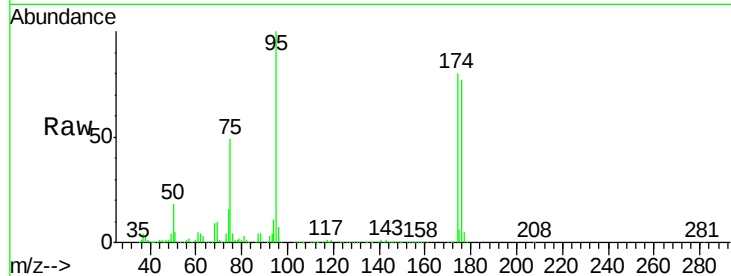
TRE-1005

Tot Ion: 75 Resp: 112405

Ion Ratio Lower Upper

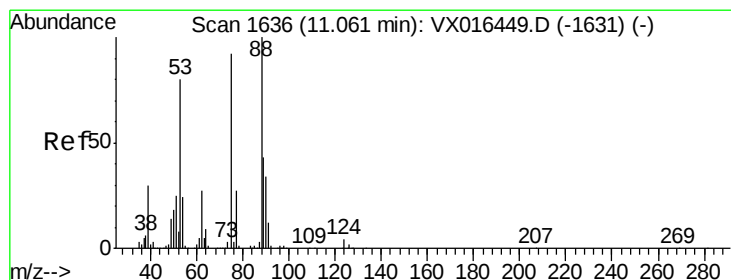
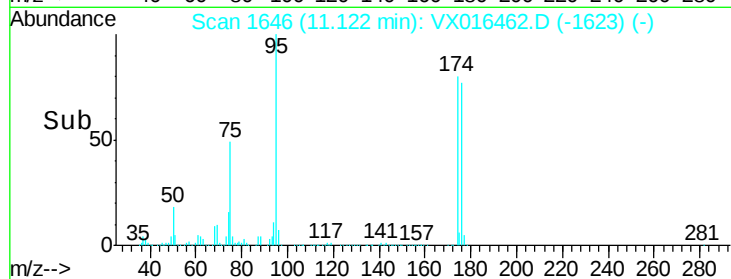
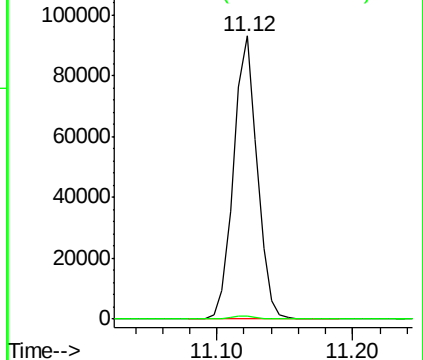
75 100

77 1.3 21.3 63.7#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0



#81

trans-1,4-Dichloro-2-butene

Concen: 53.688 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.06 min

Lab File: VX016462.D

Acq: 27 May 2020 21:46

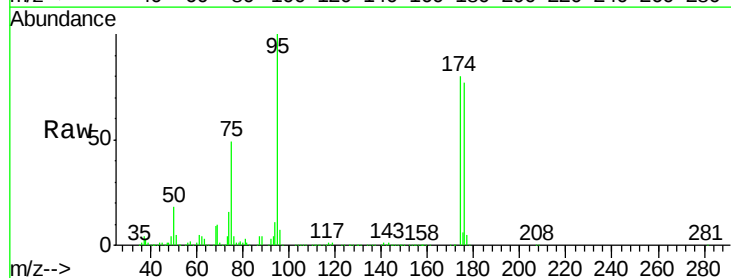
Tgt Ion: 75 Resp: 112405

Ion Ratio Lower Upper

75 100

53 0.0 71.3 106.9#

89 0.0 36.6 55.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

