

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U122820\
 Data File : VU041826.D
 Acq On : 28 Dec 2020 14:16
 Operator : SY/MD
 Sample : L5175-01
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 X2T92

Quant Time: Dec 29 01:06:46 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SFAMUTR122820WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue Dec 29 01:00:42 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.26	114	155547	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.42	117	153153	5.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.81	152	72952	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.60	65	63552	5.16	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	103.20%
7) Chloroethane-d5	1.92	69	57354	4.93	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	98.60%
11) 1,1-Dichloroethene-d2	2.57	65	29216	4.76	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	95.20%
20) 2-Butanone-d5	4.66	46	196160	56.34	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	112.68%
24) Chloroform-d	5.08	84	119529	5.27	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	105.40%
26) 1,2-Dichloroethane-d4	5.71	65	62877	5.00	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.00%
32) Benzene-d6	5.74	84	223717	5.08	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	101.60%
36) 1,2-Dichloropropane-d6	6.70	67	63494	4.66	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	93.20%
41) Toluene-d8	7.90	98	183889	4.49	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	89.80%
43) trans-1,3-Dichloropropene-	8.18	79	27180	4.72	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	94.40%
46) 2-Hexanone-d5	8.64	63	149174	48.58	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	97.16%
56) 1,1,2,2-Tetrachloroethane-	10.75	84	60205	4.69	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	93.80%
66) 1,2-Dichlorobenzene-d4	12.19	152	72141	5.20	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	104.00%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	1.39	85	96078	6.748	ug/L	98
5) Vinyl chloride	1.61	62	216684	13.661	ug/L	99
12) 1,1-Dichloroethene	2.59	96	54294	4.436	ug/L	94
16) Methylene chloride	3.06	84	2919	0.188	ug/L	90
18) trans-1,2-Dichloroethene	3.37	96	27921	2.358	ug/L	97
19) 1,1-Dichloroethane	3.88	63	34284	1.631	ug/L	96
22) cis-1,2-Dichloroethene	4.68	96	2283	0.186	ug/L #	1
25) Chloroform	5.10	83	142831	6.730	ug/L	97
27) 1,2-Dichloroethane	5.73	62	1106	0.080	ug/L #	74
29) 1,1,1-Trichloroethane	5.33	97	41832	2.284	ug/L	98
31) Carbon tetrachloride	5.33	117	5507	0.339	ug/L	100
34) Trichloroethene	6.55	95	38252	3.205	ug/L	98
35) Methylcyclohexane	6.70	83	15868	0.867	ug/L #	19
37) 1,2-Dichloropropane	6.80	63	89808	7.917	ug/L	100
38) Bromodichloromethane	7.11	83	46734	3.137	ug/L	99
39) cis-1,3-Dichloropropene	7.57	75	1472	0.087	ug/L #	79
47) Tetrachloroethene	8.56	164	37983	4.071	ug/L	98

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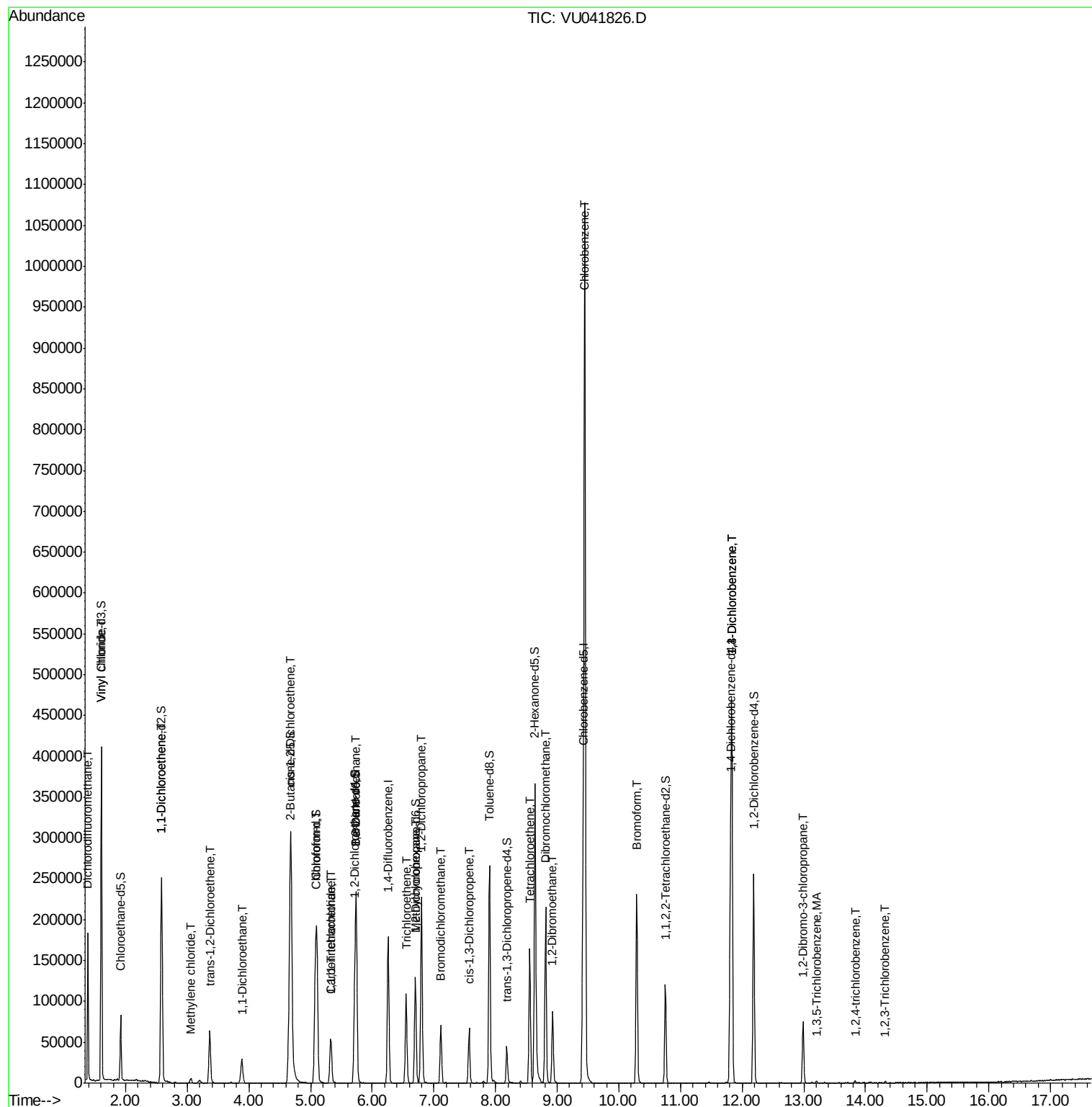
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Dibromochloromethane	8.81	129	115941	10.493	ug/L	97
50) 1,2-Dibromoethane	8.92	107	59396	6.531	ug/L	98
51) Chlorobenzene	9.45	112	602547	19.079	ug/L	98
59) Bromoform	10.29	173	108575	17.273	ug/L	98
64) 1,3-Dichlorobenzene	11.83	146	191459	8.674	ug/L	98
65) 1,4-Dichlorobenzene	11.83	146	191459	8.534	ug/L	100
68) 1,2-Dibromo-3-chloropropan	12.99	75	20385	10.813	ug/L	94
69) 1,3,5-Trichlorobenzene	13.21	180	1089	0.066	ug/L #	82
70) 1,2,4-trichlorobenzene	13.83	180	1298	0.108	ug/L #	77
72) 1,2,3-Trichlorobenzene	14.32	180	875	0.076	ug/L #	84

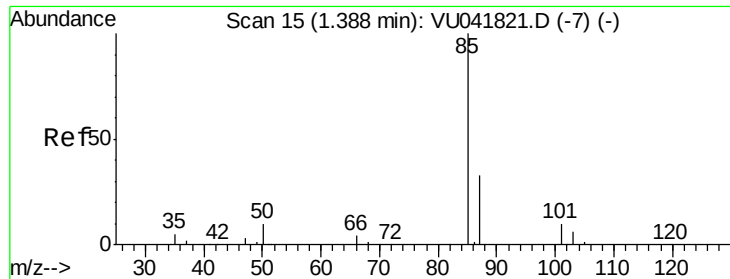
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 6.748 ug/L

RT: 1.39 min Scan# 15

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

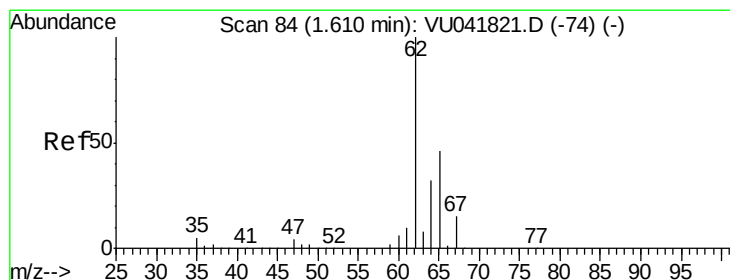
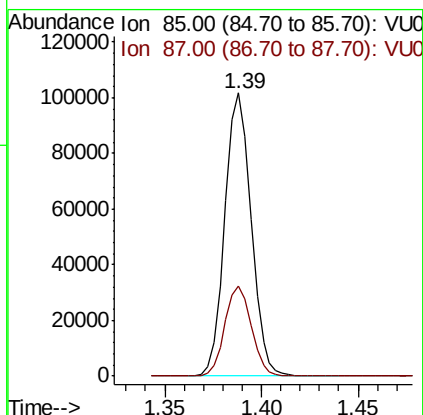
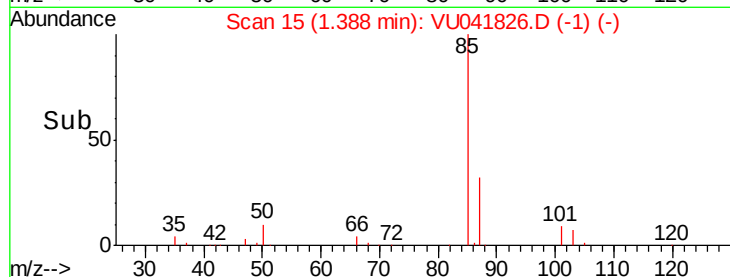
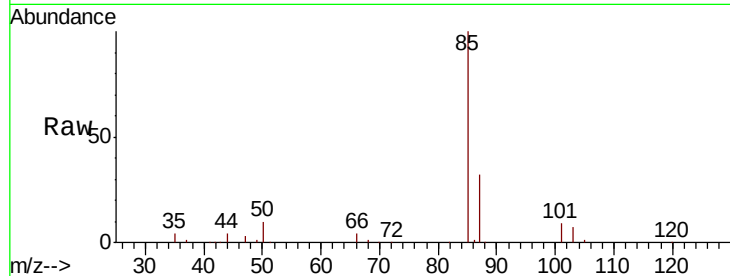
X2T92

Tot Ion: 85 Resp: 96078

Ion Ratio Lower Upper

85 100

87 32.0 26.3 39.5



#5

Vinyl chloride

Concen: 13.661 ug/L

RT: 1.61 min Scan# 83

Delta R.T. -0.00 min

Lab File: VU041826.D

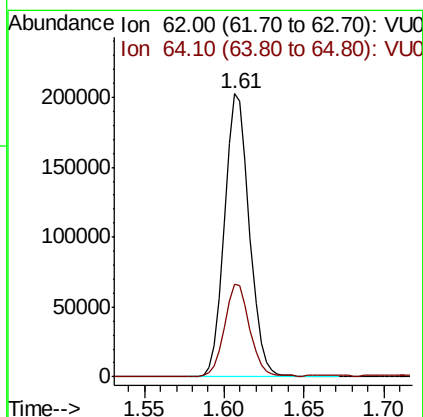
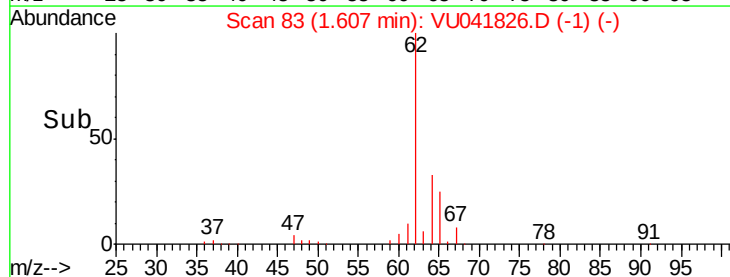
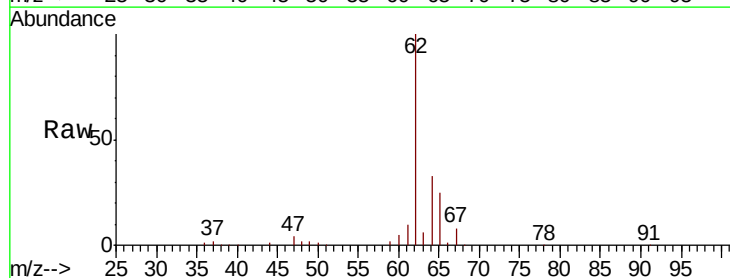
Acq: 28 Dec 2020 14:16

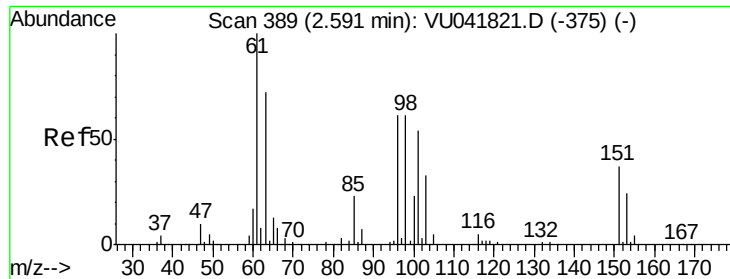
Tgt Ion: 62 Resp: 216684

Ion Ratio Lower Upper

62 100

64 32.9 22.8 42.4





#12

1,1-Dichloroethene

Concen: 4.436 ug/L

RT: 2.59 min Scan# 389

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

X2T92

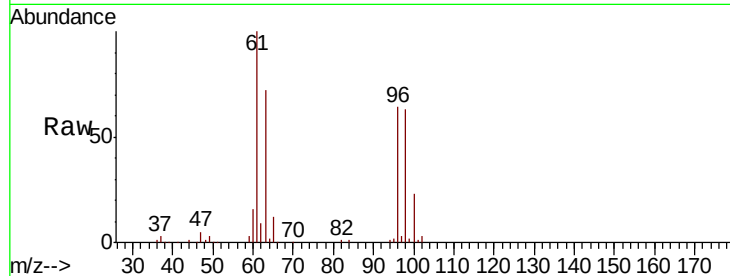
Tot Ion: 96 Resp: 54294

Ion Ratio Lower Upper

96 100

61 157.3 115.1 213.7

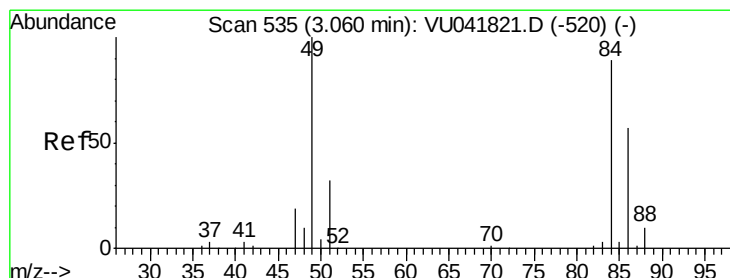
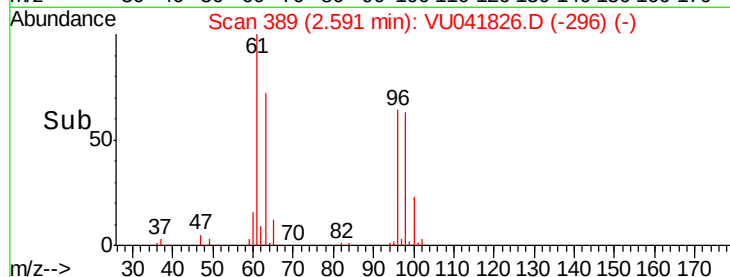
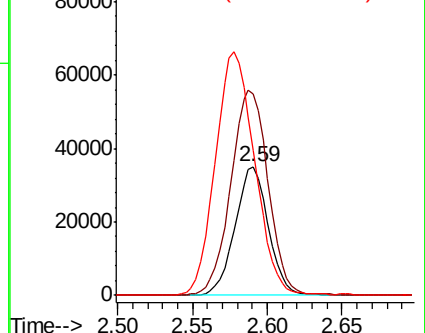
63 113.2 84.1 156.1



Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0



#16

Methylene chloride

Concen: 0.188 ug/L

RT: 3.06 min Scan# 534

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

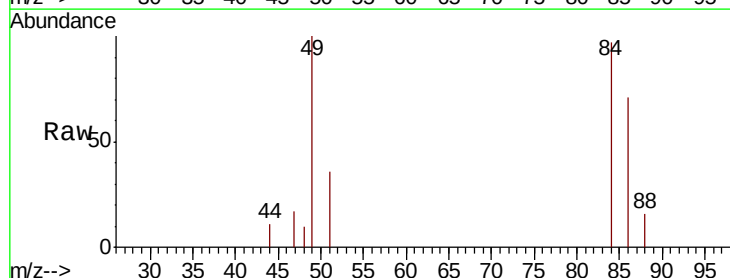
Tgt Ion: 84 Resp: 2919

Ion Ratio Lower Upper

84 100

86 73.8 44.9 83.5

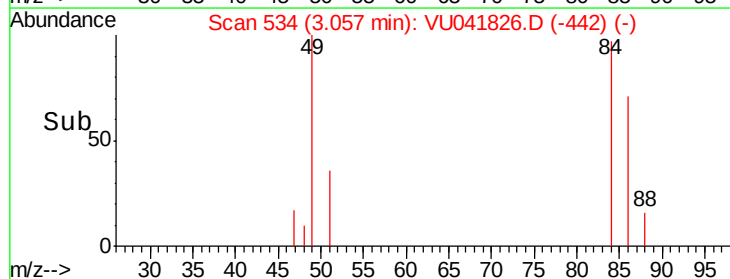
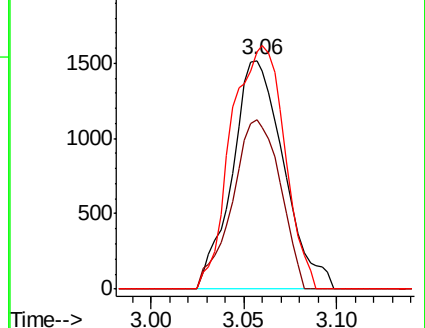
49 103.6 79.0 146.8

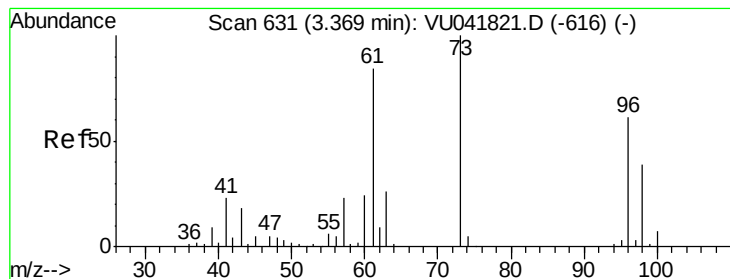


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0





#18

trans-1,2-Dichloroethene

Concen: 2.358 ug/L

RT: 3.37 min Scan# 630

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampled :

X2T92

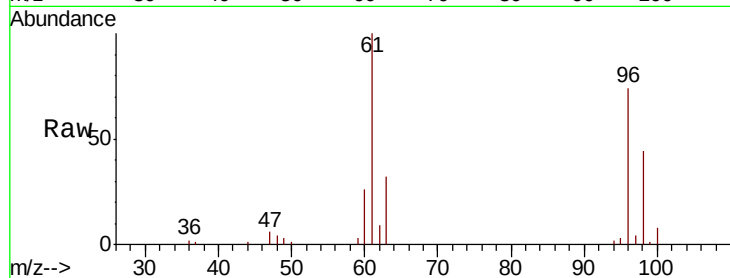
Tot Ion: 96 Resp: 27921

Ion Ratio Lower Upper

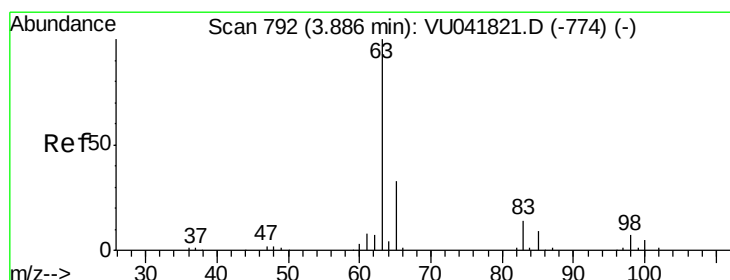
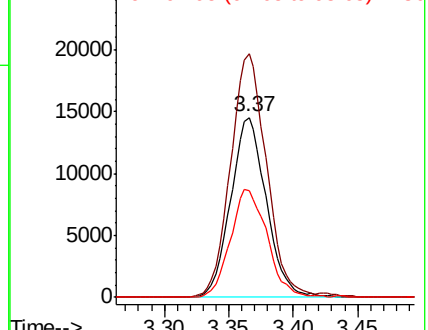
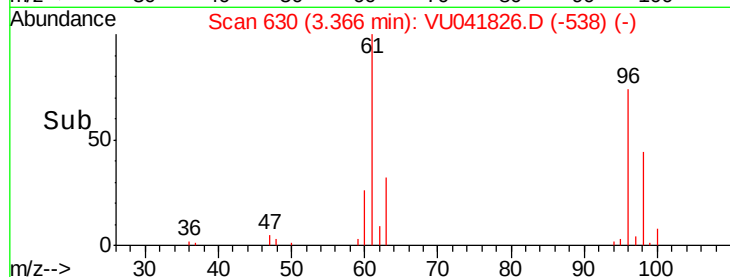
96 100

61 135.2 96.6 179.4

98 59.4 44.7 82.9



Abundance Ion 96.00 (95.70 to 96.70): VU041826.D (-538) (-)



#19

1,1-Dichloroethane

Concen: 1.631 ug/L

RT: 3.88 min Scan# 791

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

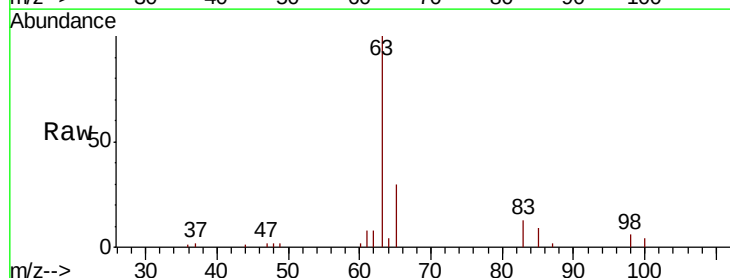
Tgt Ion: 63 Resp: 34284

Ion Ratio Lower Upper

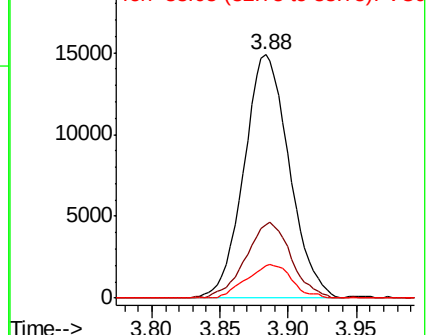
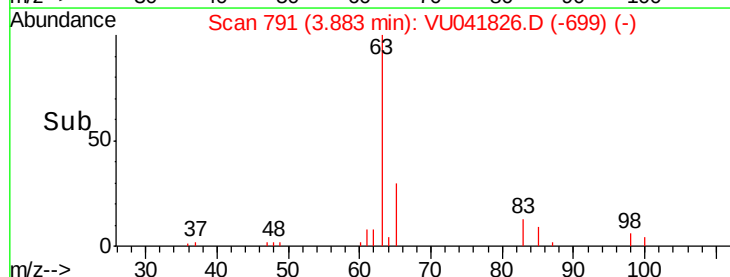
63 100

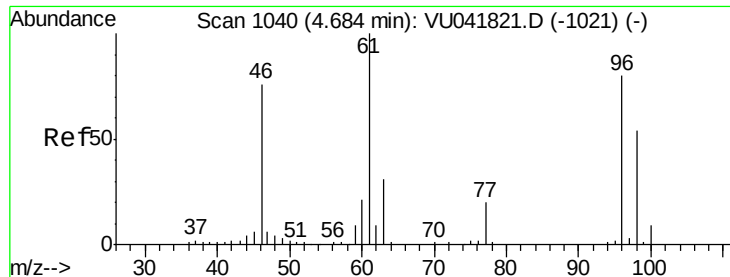
65 30.3 23.2 43.0

83 13.1 9.9 18.3



Abundance Ion 63.10 (62.80 to 63.80): VU041826.D (-699) (-)





#22

cis-1,2-Dichloroethene

Concen: 0.186 ug/L

RT: 4.68 min Scan# 1040

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

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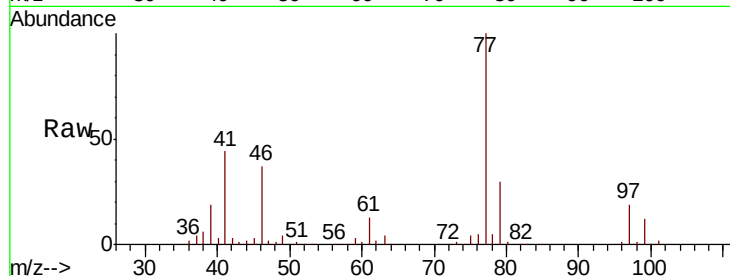
Tot Ion: 96 Resp: 2283

Ion Ratio Lower Upper

96 100

61 1245.6 87.4 162.4#

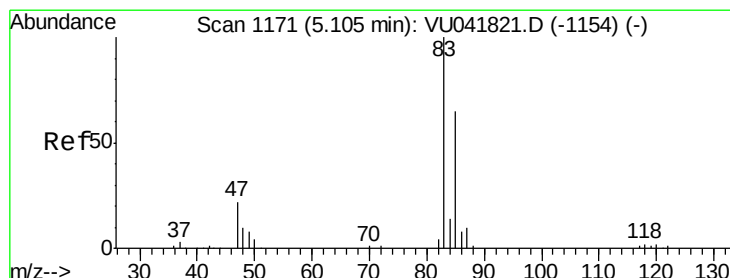
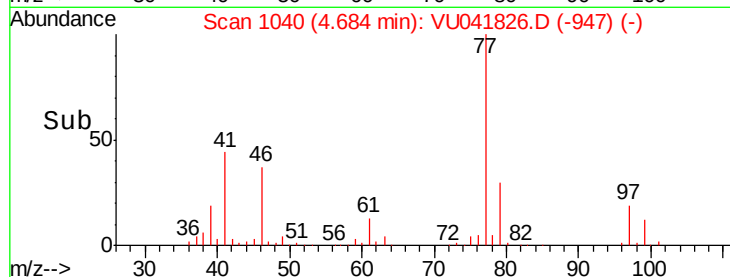
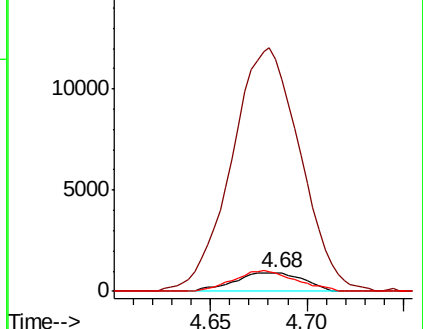
98 98.7 47.7 88.5#



Abundance Ion 96.00 (95.70 to 96.70): VU041826.D (-947) (-)

Ion 61.05 (60.75 to 61.75): VU041826.D (-947) (-)

Ion 98.00 (97.70 to 98.70): VU041826.D (-947) (-)



#25

Chloroform

Concen: 6.730 ug/L

RT: 5.10 min Scan# 1170

Delta R.T. -0.00 min

Lab File: VU041826.D

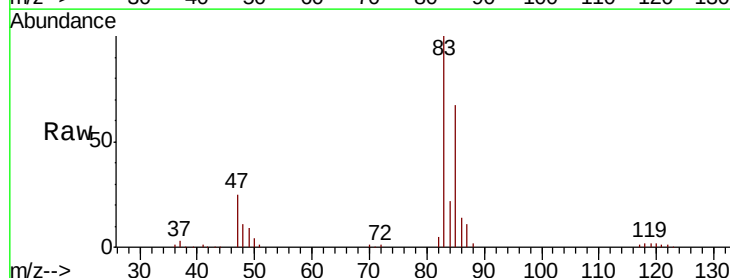
Acq: 28 Dec 2020 14:16

Tgt Ion: 83 Resp: 142831

Ion Ratio Lower Upper

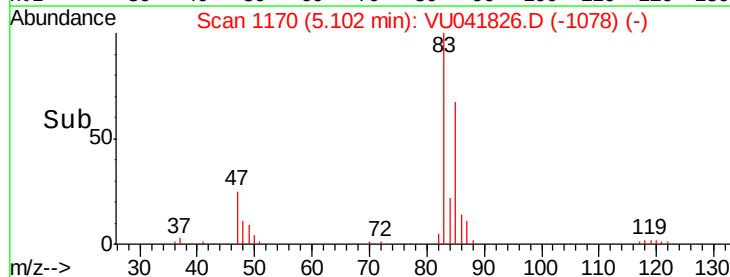
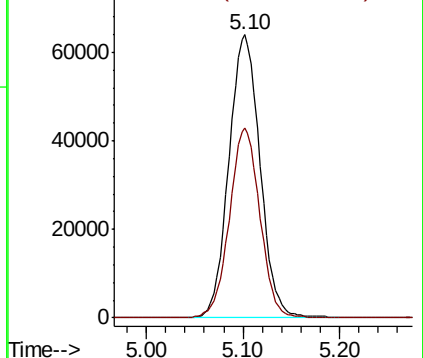
83 100

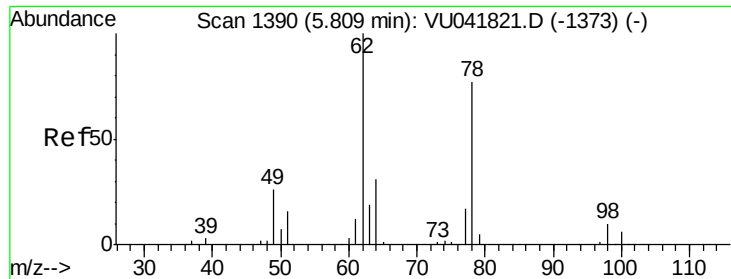
85 67.3 45.6 84.8



Abundance Ion 83.05 (82.75 to 83.75): VU041826.D (-1078) (-)

Ion 85.00 (84.70 to 85.70): VU041826.D (-1078) (-)

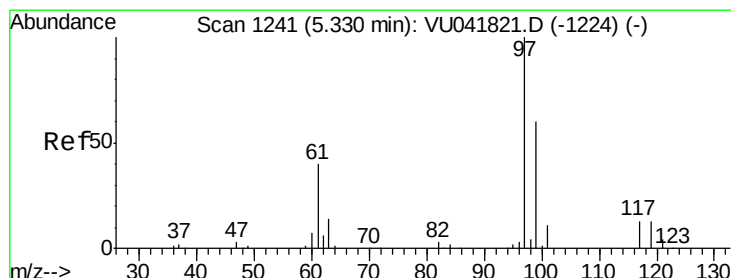
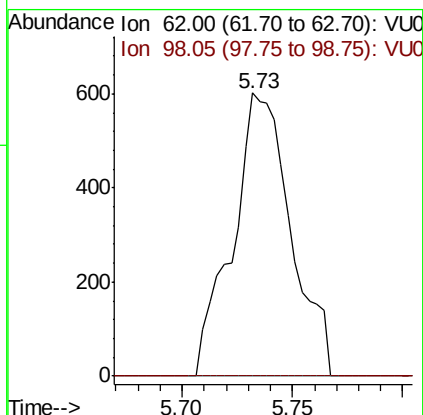
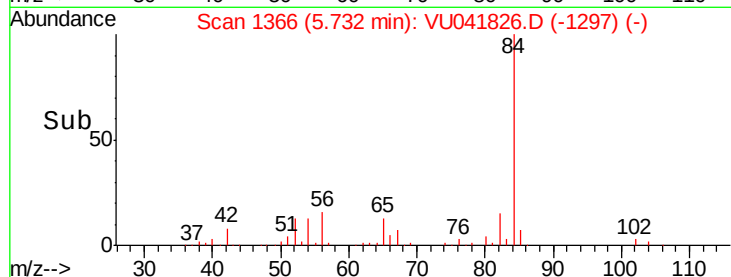
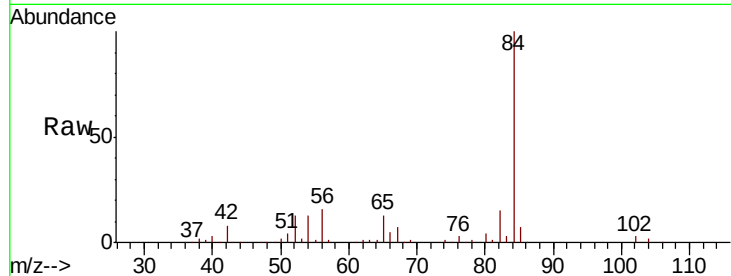




#27
 1,2-Dichloroethane
 Concen: 0.080 ug/L
 RT: 5.73 min Scan# 1366
 Delta R.T. -0.08 min
 Lab File: VU041826.D
 Acq: 28 Dec 2020 14:16

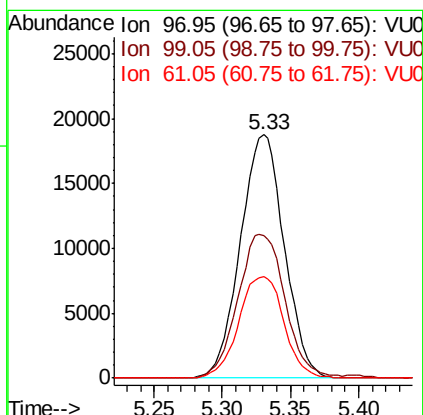
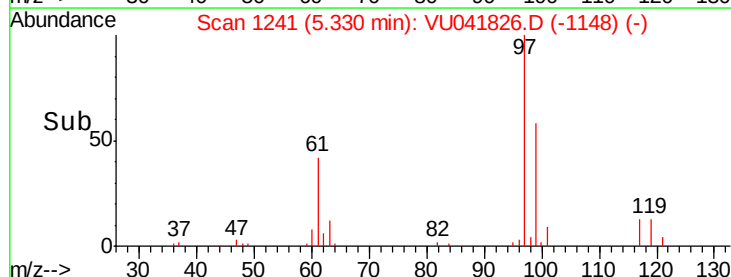
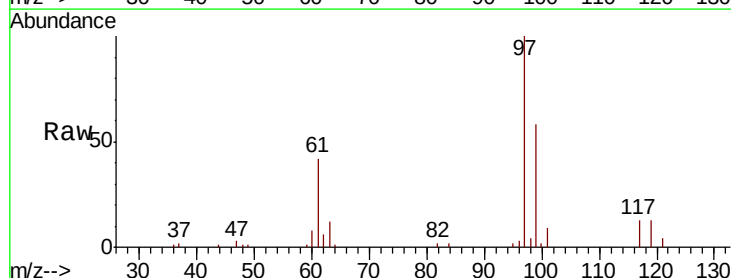
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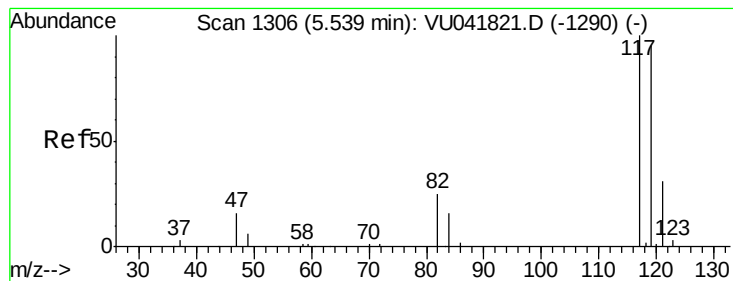
Tot Ion: 62 Resp: 1106
 Ion Ratio Lower Upper
 62 100
 98 0.0 7.5 11.3#



#29
 1,1,1-Trichloroethane
 Concen: 2.284 ug/L
 RT: 5.33 min Scan# 1241
 Delta R.T. -0.00 min
 Lab File: VU041826.D
 Acq: 28 Dec 2020 14:16

Tgt Ion: 97 Resp: 41832
 Ion Ratio Lower Upper
 97 100
 99 63.5 50.3 75.5
 61 42.9 32.7 49.1





#31

Carbon tetrachloride

Concen: 0.339 ug/L

RT: 5.33 min Scan# 1242

Delta R.T. -0.21 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

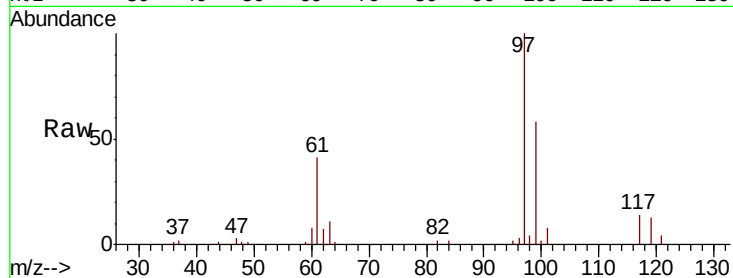
X2T92

Tot Ion:117 Resp: 5507

Ion Ratio Lower Upper

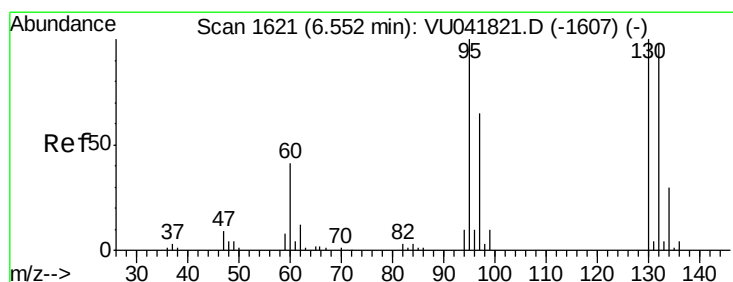
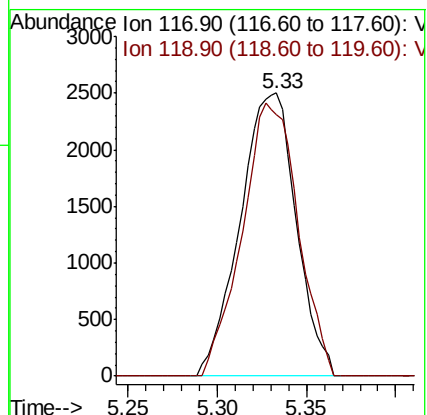
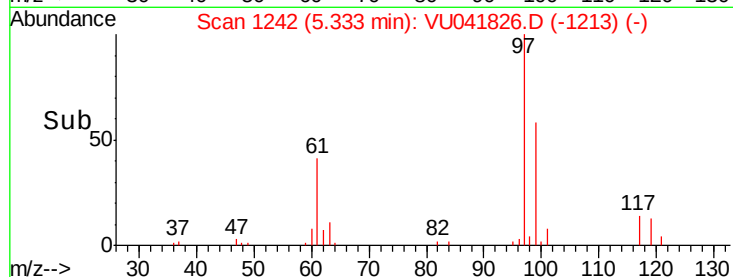
117 100

119 95.7 76.2 114.4



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#34

Trichloroethene

Concen: 3.205 ug/L

RT: 6.55 min Scan# 1620

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Tgt Ion: 95 Resp: 38252

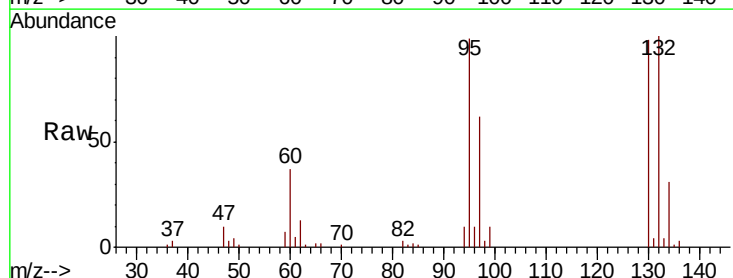
Ion Ratio Lower Upper

95 100

97 62.9 45.8 85.2

132 101.3 68.7 127.7

130 99.8 70.1 130.3

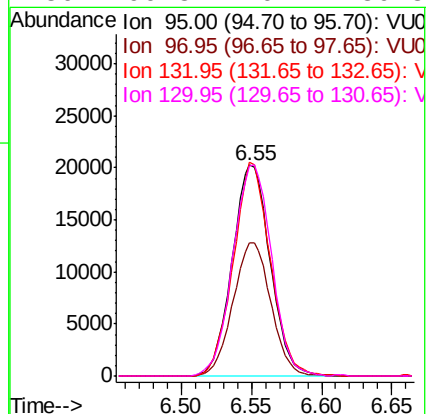
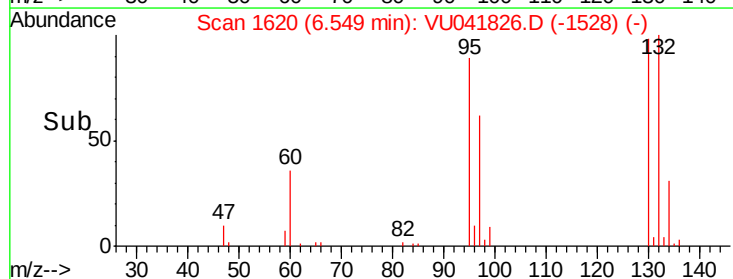


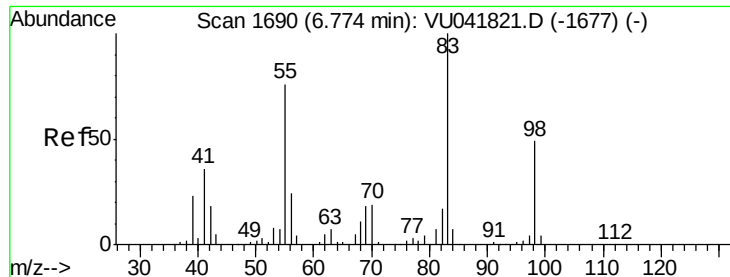
Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V

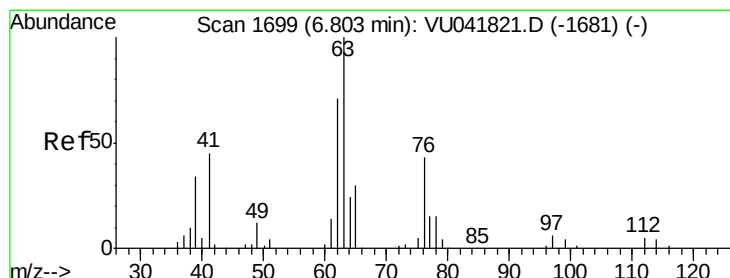
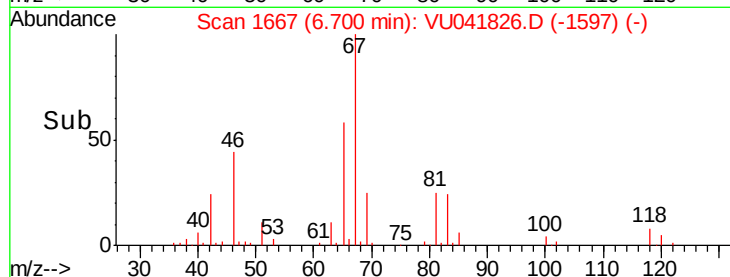
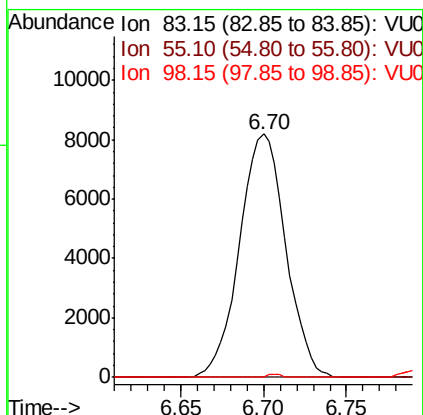
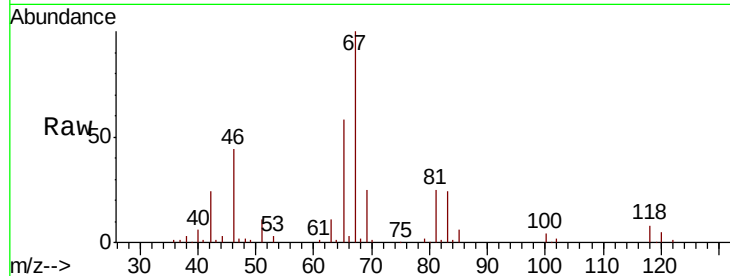




#35
Methylcyclohexane
Concen: 0.867 ug/L
RT: 6.70 min Scan# 1667
Delta R.T. -0.07 min
Lab File: VU041826.D
Acq: 28 Dec 2020 14:16

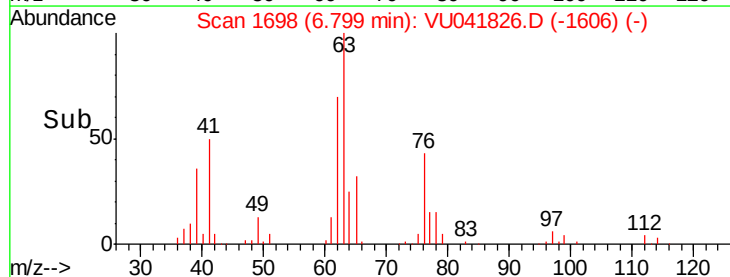
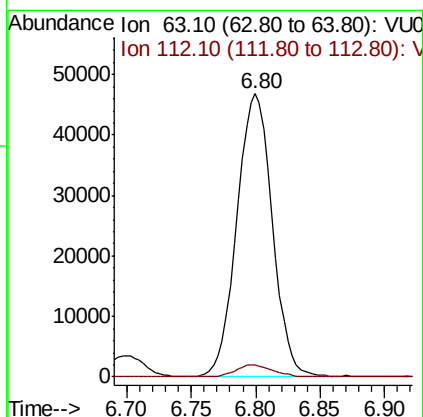
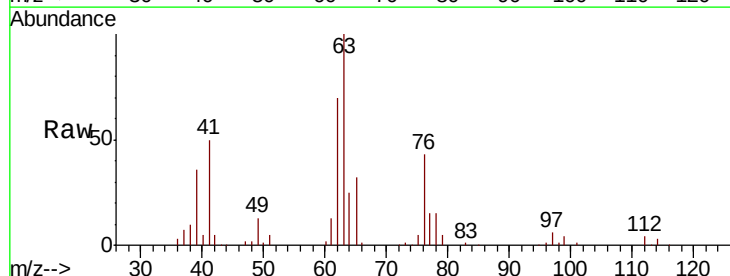
Instrument :
MSVOA_U
ClientSampleId :
X2T92

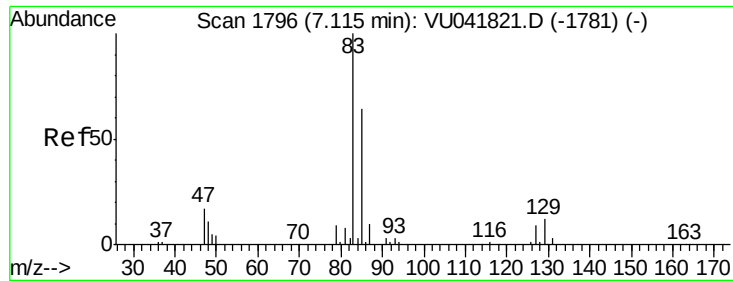
Tot Ion	Ratio	Lower	Upper
83	100		
55	0.0	59.5	89.3#
98	0.4	37.9	56.9#



#37
1,2-Dichloropropane
Concen: 7.917 ug/L
RT: 6.80 min Scan# 1698
Delta R.T. -0.00 min
Lab File: VU041826.D
Acq: 28 Dec 2020 14:16

Tgt Ion	Ratio	Lower	Upper
63	100		
112	4.3	3.5	5.3





#38

Bromodichloromethane

Concen: 3.137 ug/L

RT: 7.11 min Scan# 1795

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

X2T92

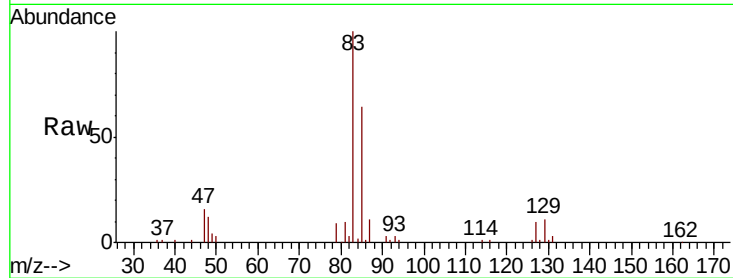
Tot Ion: 83 Resp: 46734

Ion Ratio Lower Upper

83 100

85 64.0 44.6 82.8

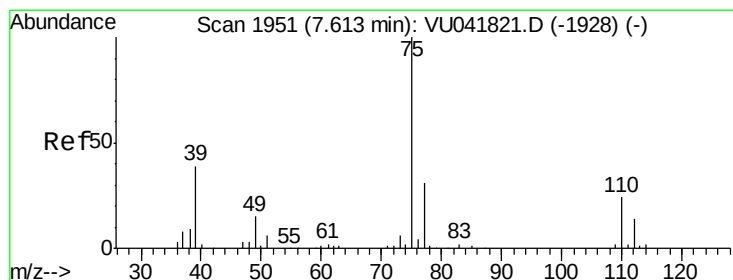
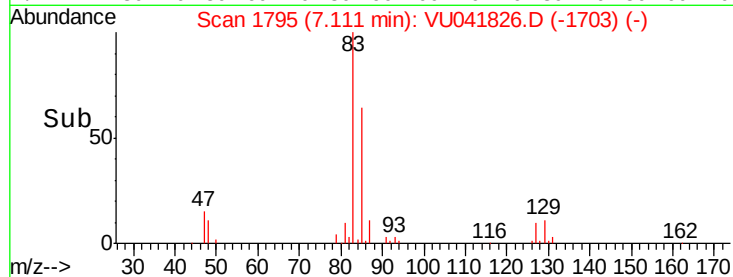
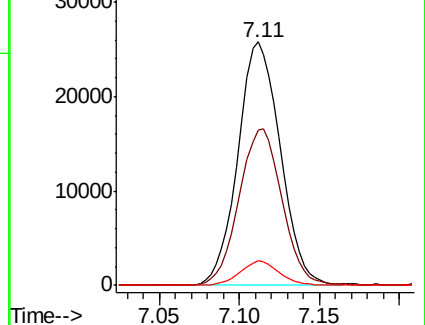
127 10.0 7.4 11.2



Abundance Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 126.90 (126.60 to 127.60): VU0



#39

cis-1,3-Dichloropropene

Concen: 0.087 ug/L

RT: 7.57 min Scan# 1937

Delta R.T. -0.05 min

Lab File: VU041826.D

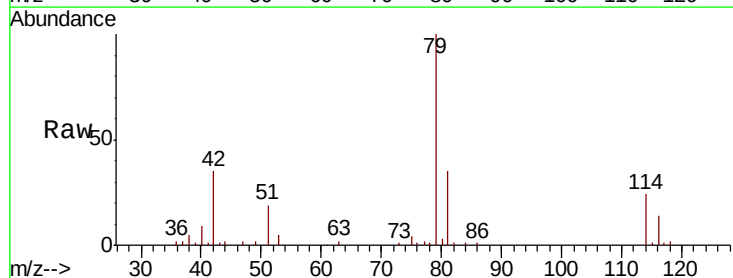
Acq: 28 Dec 2020 14:16

Tgt Ion: 75 Resp: 1472

Ion Ratio Lower Upper

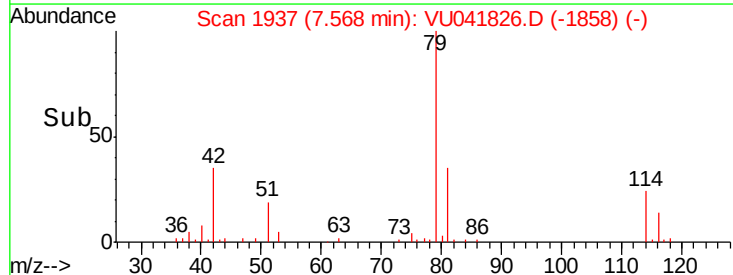
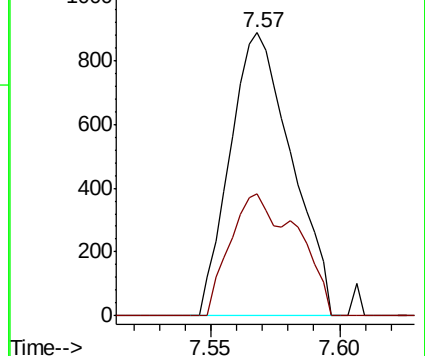
75 100

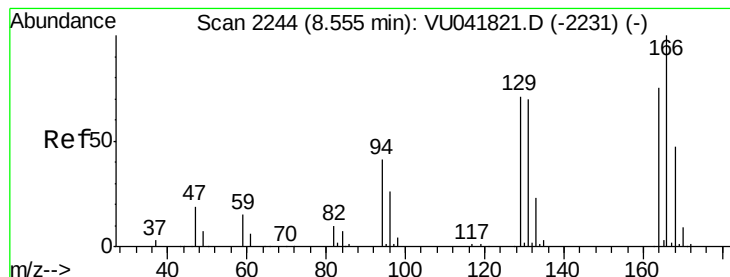
77 43.0 21.8 40.6#



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0





#47

Tetrachloroethene

Concen: 4.071 ug/L

RT: 8.56 min Scan# 2244

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

X2T92

Tot Ion:164 Resp: 37983

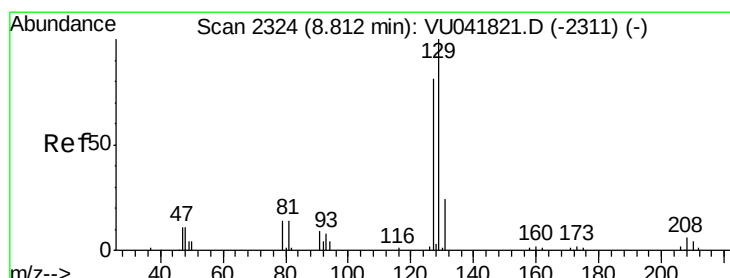
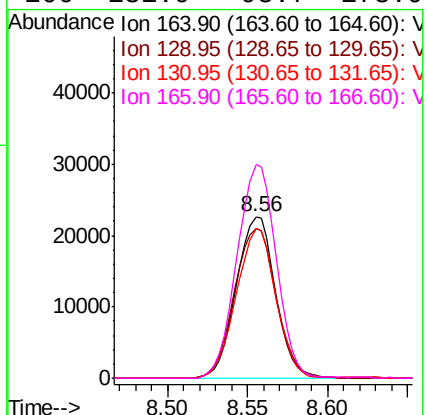
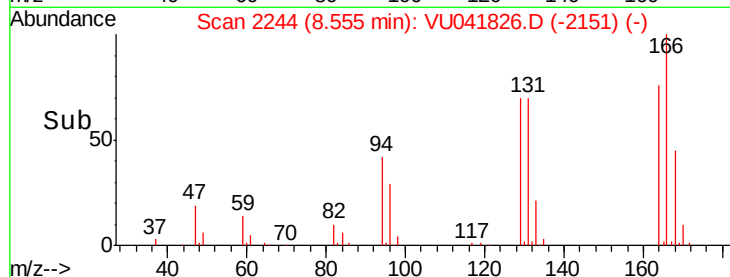
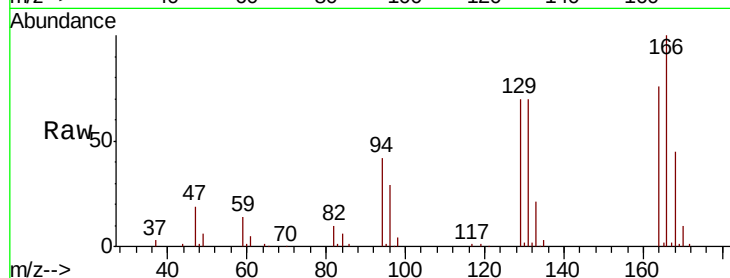
Ion Ratio Lower Upper

164 100

129 92.5 66.6 123.8

131 92.4 65.9 122.3

166 131.9 93.7 173.9



#49

Dibromochloromethane

Concen: 10.493 ug/L

RT: 8.81 min Scan# 2324

Delta R.T. -0.00 min

Lab File: VU041826.D

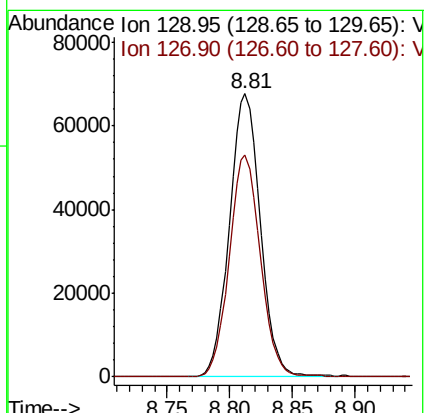
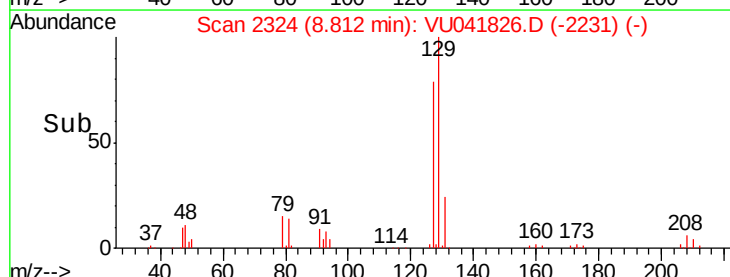
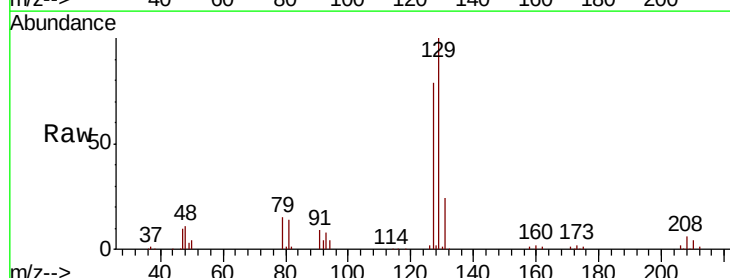
Acq: 28 Dec 2020 14:16

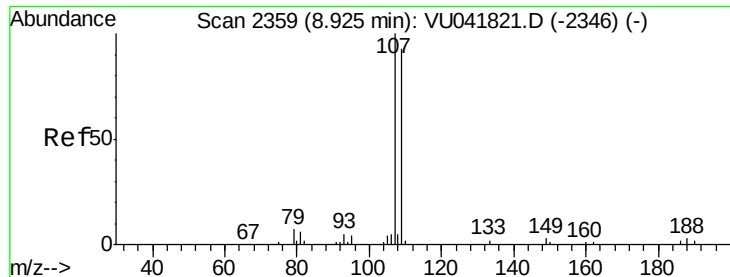
Tgt Ion:129 Resp: 115941

Ion Ratio Lower Upper

129 100

127 78.6 56.6 105.2

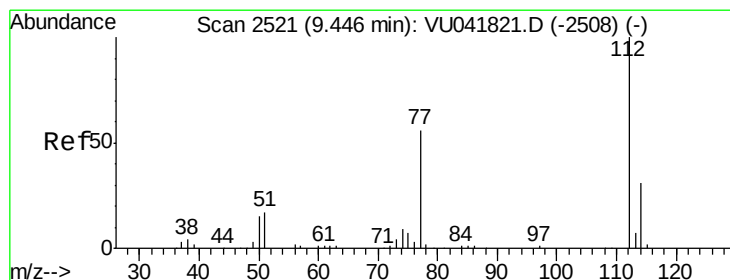
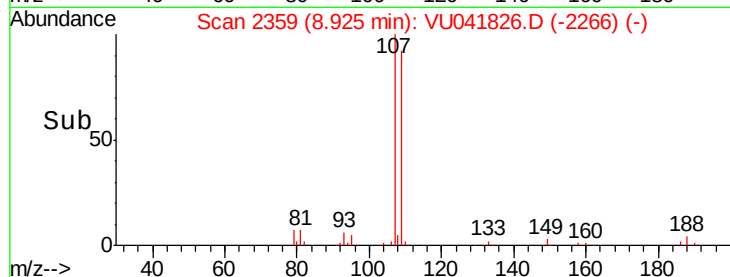
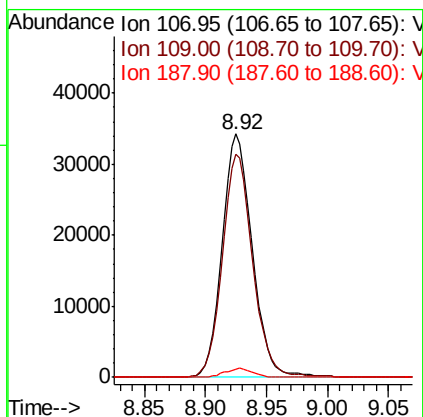
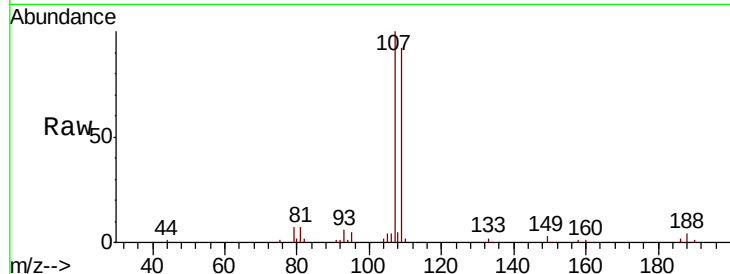




#50
1,2-Dibromoethane
Concen: 6.531 ug/L
RT: 8.92 min Scan# 2359
Delta R.T. -0.00 min
Lab File: VU041826.D
Acq: 28 Dec 2020 14:16

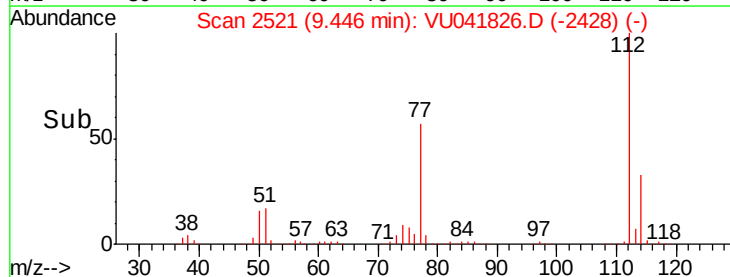
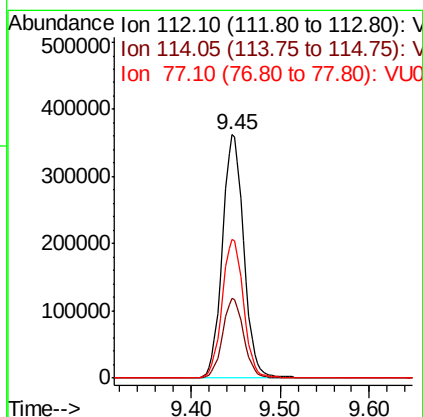
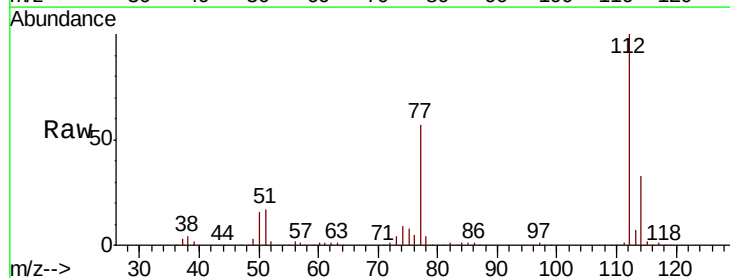
Instrument :
MSVOA_U
ClientSampleId :
X2T92

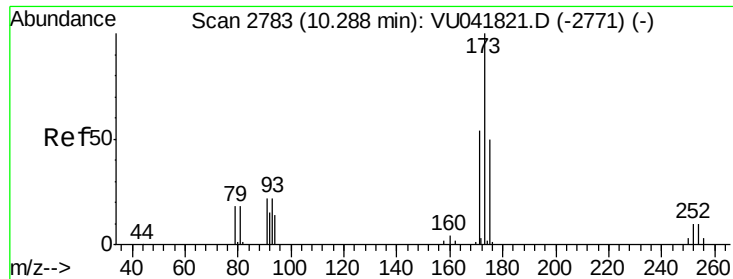
Tot Ion:107 Resp: 59396
Ion Ratio Lower Upper
107 100
109 91.7 65.4 121.4
188 3.5 2.5 3.7



#51
Chlorobenzene
Concen: 19.079 ug/L
RT: 9.45 min Scan# 2521
Delta R.T. -0.00 min
Lab File: VU041826.D
Acq: 28 Dec 2020 14:16

Tgt Ion:112 Resp: 602547
Ion Ratio Lower Upper
112 100
114 32.7 21.9 40.7
77 57.1 45.1 67.7





#59

Bromoform

Concen: 17.273 ug/L

RT: 10.29 min Scan# 2784

Delta R.T. 0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

X2T92

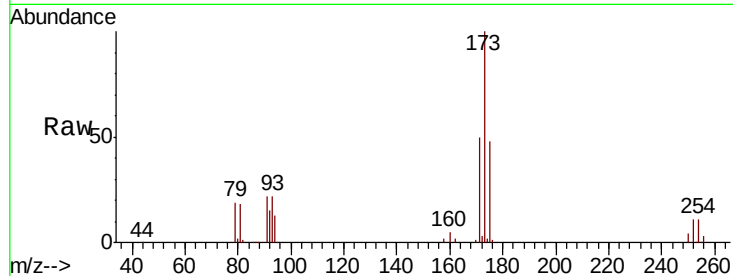
Tot Ion:173 Resp: 108575

Ion Ratio Lower Upper

173 100

175 48.2 39.4 59.0

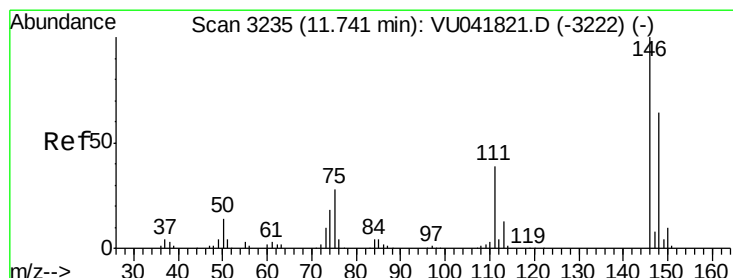
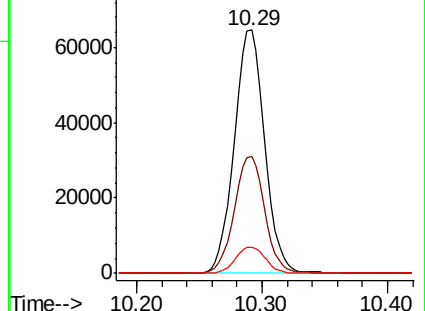
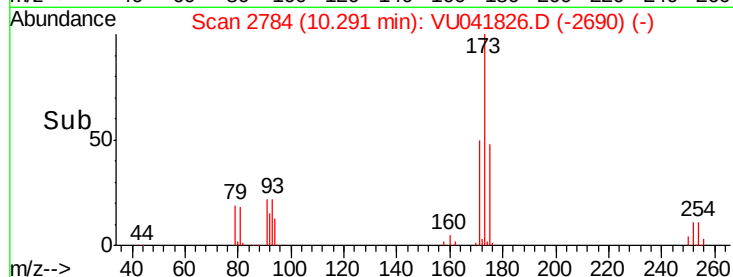
254 10.7 8.0 12.0



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 253.75 (253.45 to 254.45): V



#64

1,3-Dichlorobenzene

Concen: 8.674 ug/L

RT: 11.83 min Scan# 3263

Delta R.T. 0.09 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

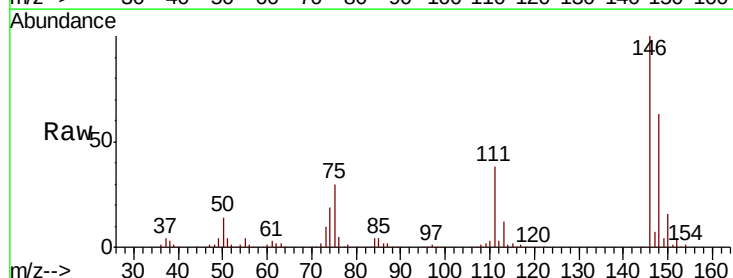
Tgt Ion:146 Resp: 191459

Ion Ratio Lower Upper

146 100

111 37.8 27.6 51.2

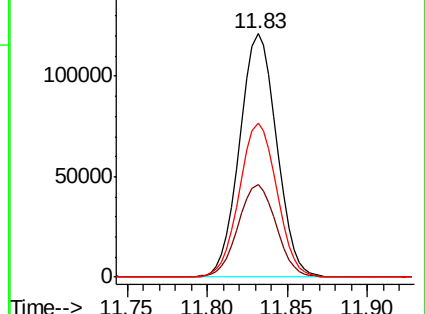
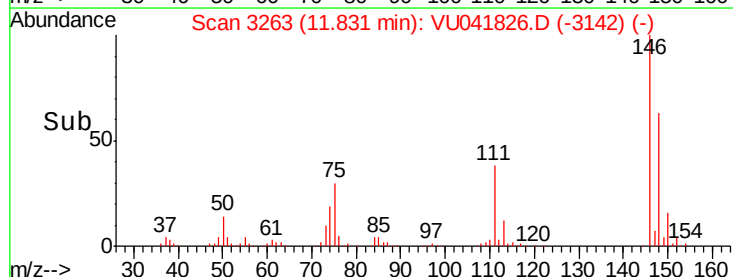
148 63.0 44.9 83.3

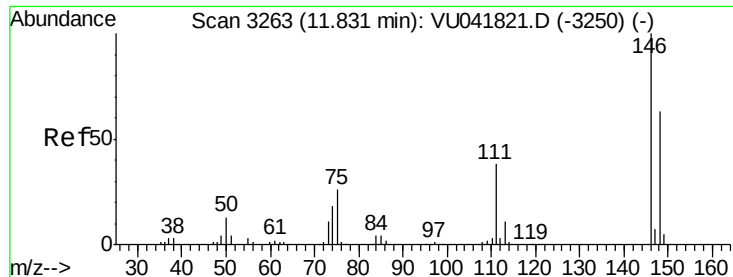


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,4-Dichlorobenzene

Concen: 8.534 ug/L

RT: 11.83 min Scan# 3263

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

Instrument :

MSVOA_U

ClientSampleId :

X2T92

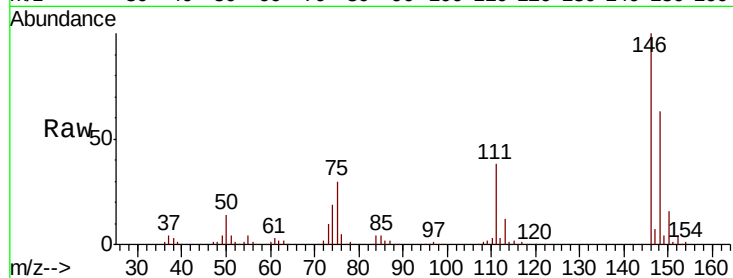
Tot Ion:146 Resp: 191459

Ion Ratio Lower Upper

146 100

111 37.8 26.7 49.5

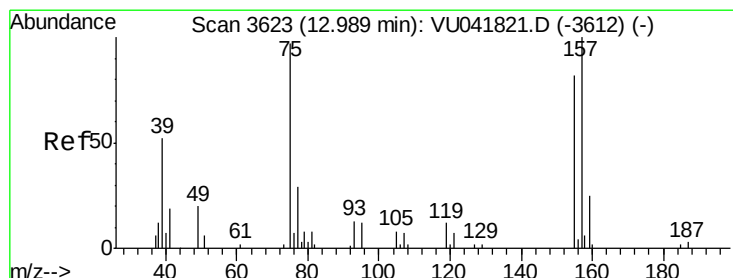
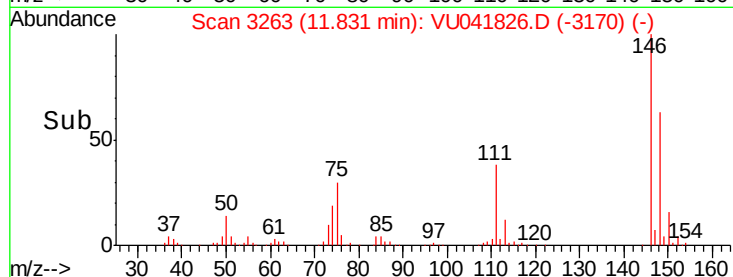
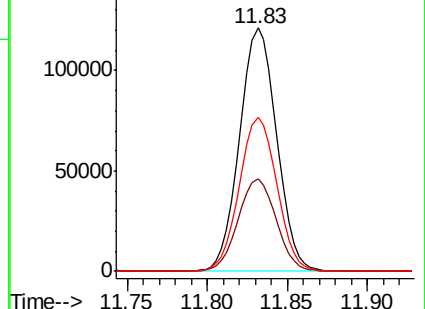
148 63.0 43.9 81.5



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#68

1,2-Dibromo-3-chloropropane

Concen: 10.813 ug/L

RT: 12.99 min Scan# 3623

Delta R.T. -0.00 min

Lab File: VU041826.D

Acq: 28 Dec 2020 14:16

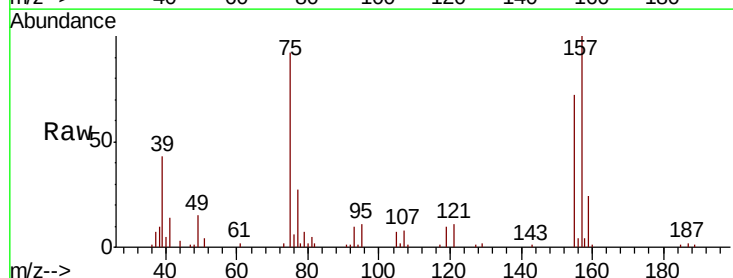
Tgt Ion: 75 Resp: 20385

Ion Ratio Lower Upper

75 100

155 78.0 67.8 101.8

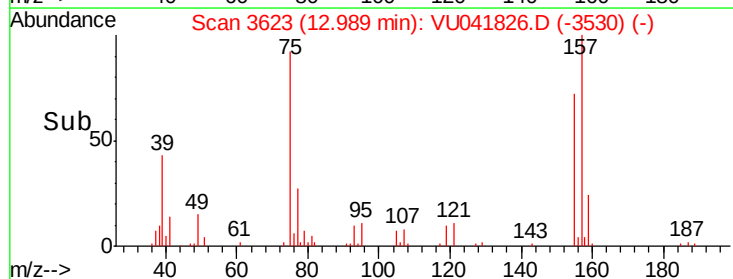
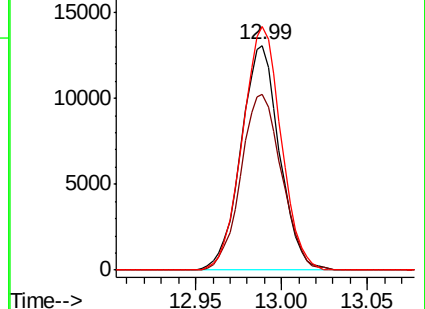
157 108.2 82.4 123.6

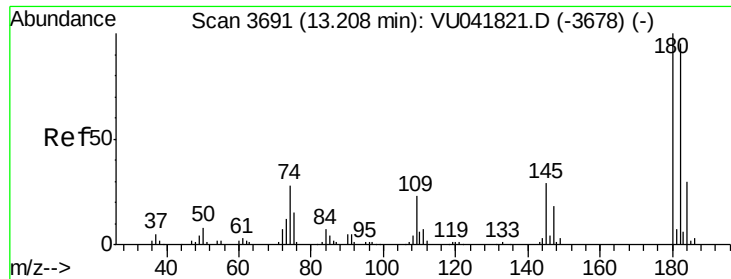


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

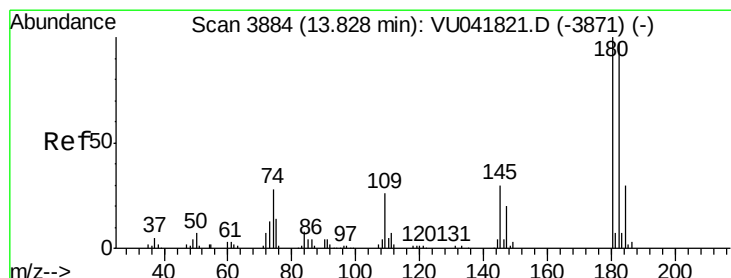
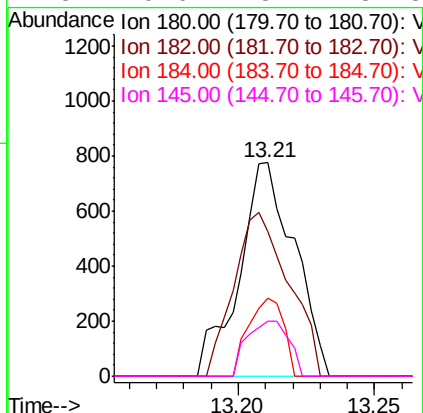
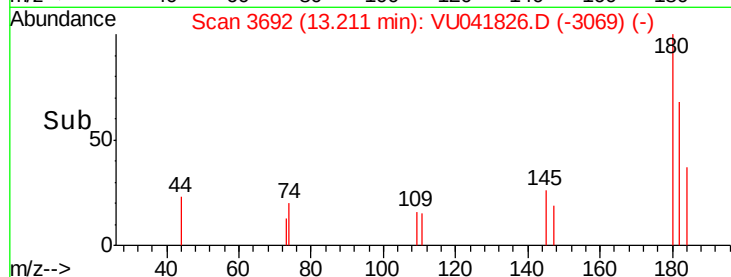
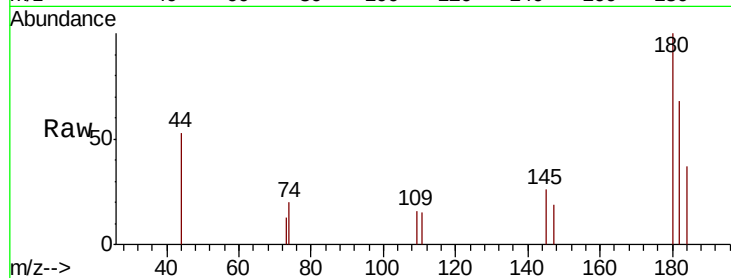




#69
 1,3,5-Trichlorobenzene
 Concen: 0.066 ug/L
 RT: 13.21 min Scan# 3692
 Delta R.T. 0.00 min
 Lab File: VU041826.D
 Acq: 28 Dec 2020 14:16

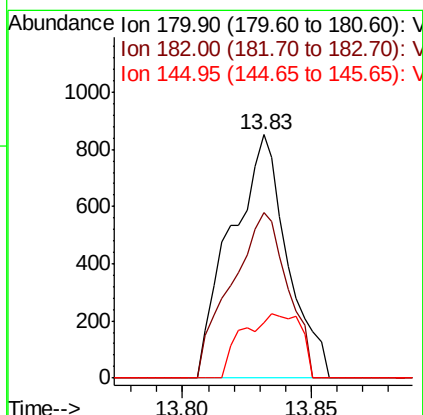
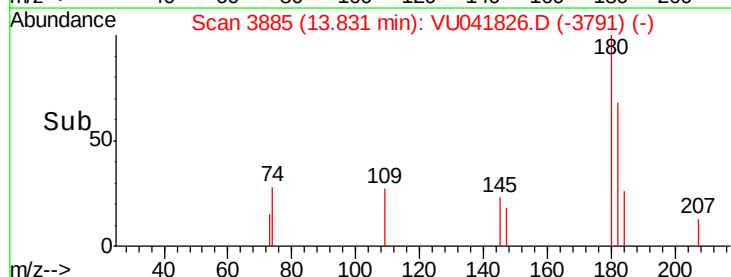
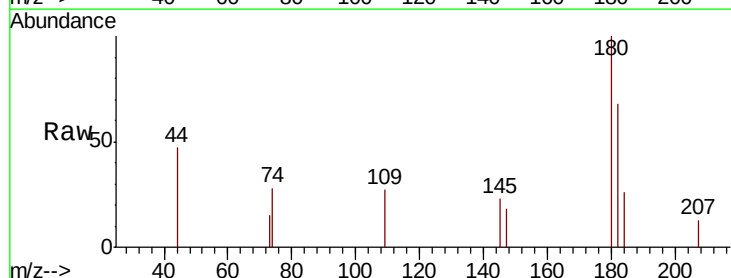
Instrument :
 MSVOA_U
 ClientSampleId :
 X2T92

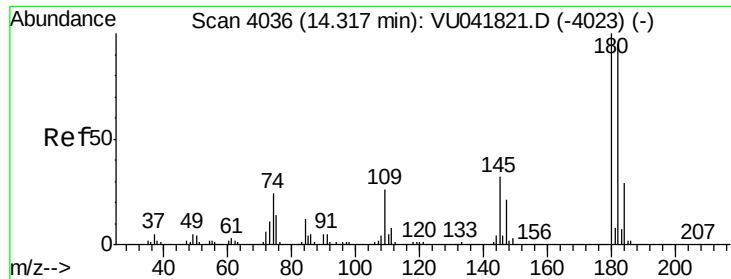
Tot Ion:180 Resp: 1089
 Ion Ratio Lower Upper
 180 100
 182 76.5 76.1 114.1
 184 23.0 24.0 36.0#
 145 19.6 23.2 34.8#



#70
 1,2,4-trichlorobenzene
 Concen: 0.108 ug/L
 RT: 13.83 min Scan# 3885
 Delta R.T. 0.00 min
 Lab File: VU041826.D
 Acq: 28 Dec 2020 14:16

Tgt Ion:180 Resp: 1298
 Ion Ratio Lower Upper
 180 100
 182 67.9 76.5 114.7#
 145 27.2 24.1 36.1





#72
 1,2,3-Trichlorobenzene
 Concen: 0.076 ug/L
 RT: 14.32 min Scan# 4036
 Delta R.T. -0.00 min
 Lab File: VU041826.D
 Acq: 28 Dec 2020 14:16

Instrument :
 MSVOA_U
 ClientSampleId :
 X2T92

Tot Ion:180 Resp: 875
 Ion Ratio Lower Upper
 180 100
 182 84.2 75.8 113.8
 145 14.2 25.0 37.4#

