

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU041720\
 Data File : VU037777.D
 Acq On : 17 Apr 2020 15:55
 Operator : JC/MD
 Sample : L2296-03DL 5X
 Misc : 25mL/MSVOA U/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :

Quant Time: Apr 18 01:23:47 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR041420WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Sat Apr 18 01:19:54 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.28	114	257018	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.44	117	248170	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.83	152	123426	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.61	65	86833	4.46	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	89.20%
7) Chloroethane-d5	1.93	69	75836	4.62	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	92.40%
11) 1,1-Dichloroethene-d2	2.59	63	116942	3.38	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	67.60%
20) 2-Butanone-d5	4.66	46	275398	51.56	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	103.12%
24) Chloroform-d	5.10	84	148385	4.78	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	95.60%
26) 1,2-Dichloroethane-d4	5.74	65	92971	5.21	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	104.20%
32) Benzene-d6	5.76	84	326369	4.85	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	97.00%
36) 1,2-Dichloropropane-d6	6.72	67	111345	5.10	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	102.00%
41) Toluene-d8	7.92	98	297155	4.88	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.60%
43) trans-1,3-Dichloropropene-	8.20	79	45167	4.61	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	92.20%
46) 2-Hexanone-d5	8.65	63	254284	50.68	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	101.36%
57) 1,1,2,2-Tetrachloroethane-	10.77	84	86336	5.01	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	100.20%
64) 1,2-Dichlorobenzene-d4	12.21	152	110814	5.03	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	100.60%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl chloride	1.62	62	90563	3.344	ug/L	97
12) 1,1-Dichloroethene	2.60	96	5817	0.328	ug/L #	1
15) Methyl Acetate	3.07	43	125444	12.812	ug/L #	54
16) Methylene chloride	3.08	84	2611	0.131	ug/L #	1
19) 1,1-Dichloroethane	3.91	63	87014	2.339	ug/L	98
22) cis-1,2-Dichloroethene	4.71	96	143134	6.889	ug/L	96
25) Chloroform	5.12	83	9882	0.280	ug/L	93
29) 1,1,1-Trichloroethane	5.35	97	209975	6.973	ug/L	98
30) Cyclohexane	5.42	56	135097	3.625	ug/L	96
31) Carbon tetrachloride	5.36	117	26965	1.124	ug/L	97
35) Methylcyclohexane	6.72	83	24786	0.702	ug/L #	17
37) 1,2-Dichloropropane	6.72	63	12259	0.564	ug/L #	87
39) cis-1,3-Dichloropropene	7.59	75	3057	0.090	ug/L #	72
42) Toluene	7.99	91	704469	8.202	ug/L	98
51) Chlorobenzene	9.47	112	140264	2.677	ug/L	98
52) Ethylbenzene	9.59	91	153541	1.607	ug/L	99
53) m,p-Xylene	9.71	106	101560	2.808	ug/L	95

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 Quant Title : TRACE VOA SOM01.0
 QLast Update : Sat Apr 18 01:19:54 2020
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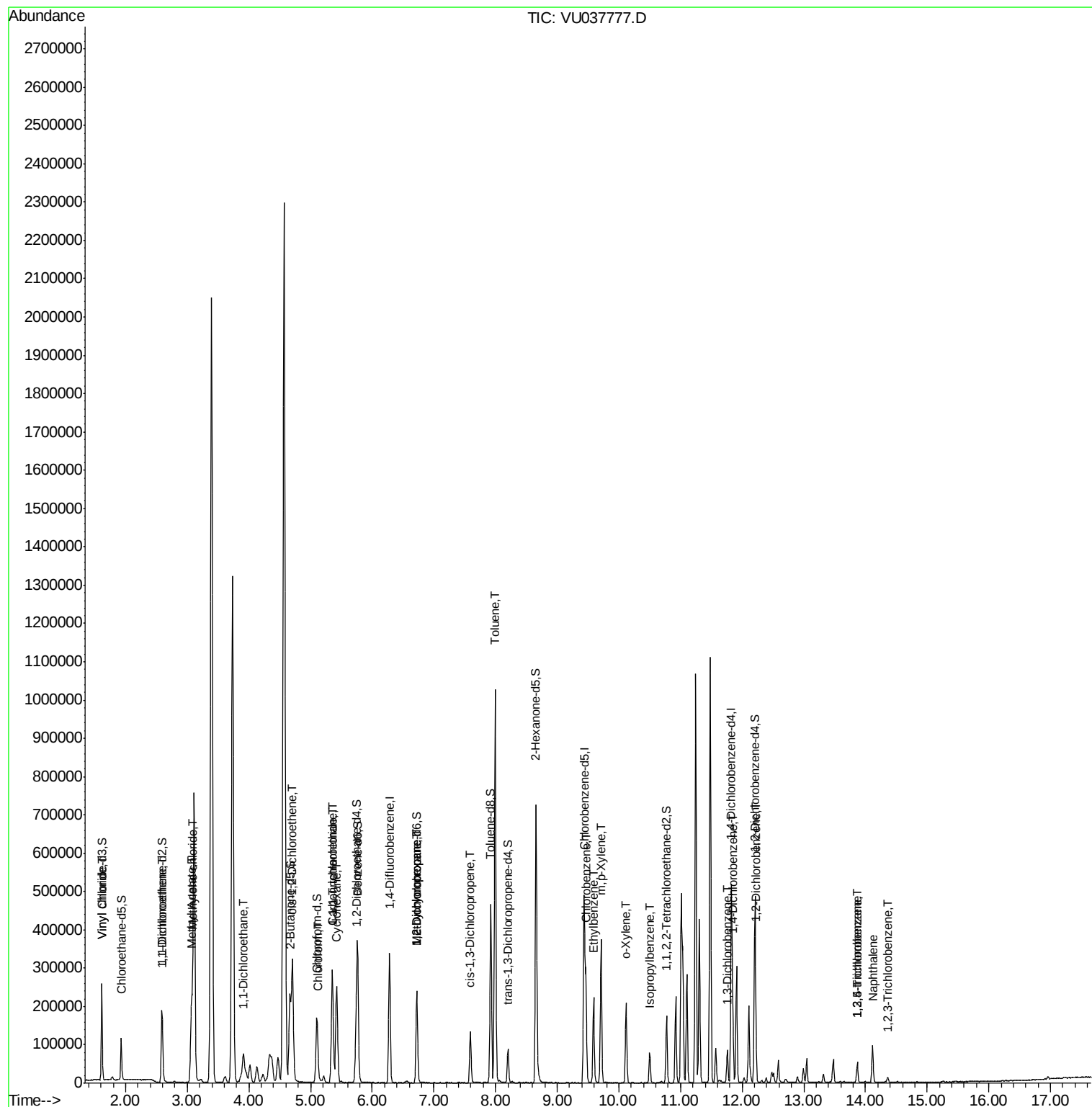
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
54) o-Xylene	10.12	106	53514	1.503	ug/L	97
56) Isopropylbenzene	10.50	105	49029	0.525	ug/L	99
62) 1,3-Dichlorobenzene	11.76	146	31525	0.763	ug/L	96
63) 1,4-Dichlorobenzene	11.85	146	51828	1.250	ug/L	99
65) 1,2-Dichlorobenzene	12.23	146	18191	0.467	ug/L	97
67) 1,3,5-Trichlorobenzene	13.87	180	14055	0.464	ug/L	97
68) 1,2,4-trichlorobenzene	13.87	180	14055	0.505	ug/L	97
69) Naphthalene	14.11	128	74356	1.320	ug/L	99
70) 1,2,3-Trichlorobenzene	14.36	180	4000	0.161	ug/L	100

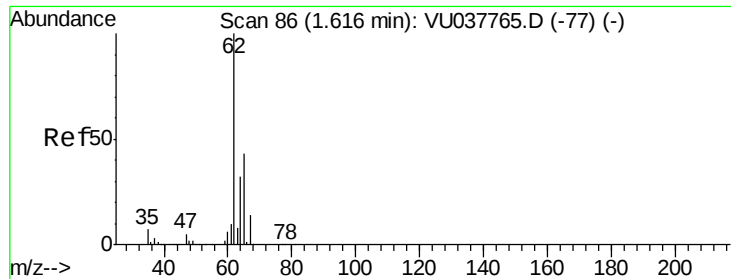
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#5

Vinyl chloride

Concen: 3.344 ug/L

RT: 1.62 min Scan# 86

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

Instrument :

MSVOA_U

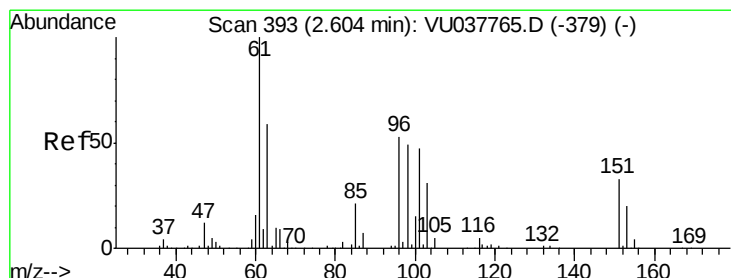
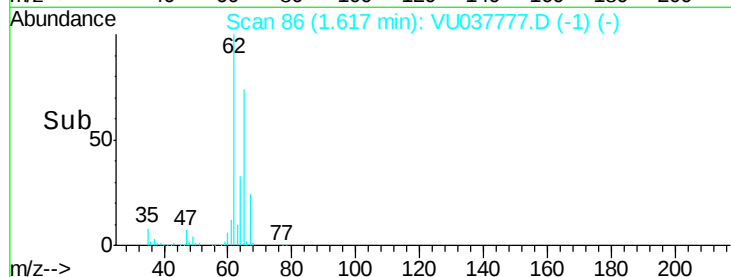
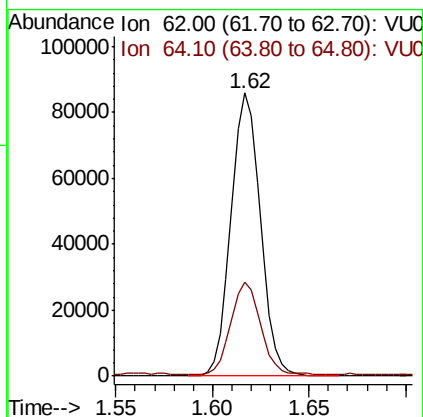
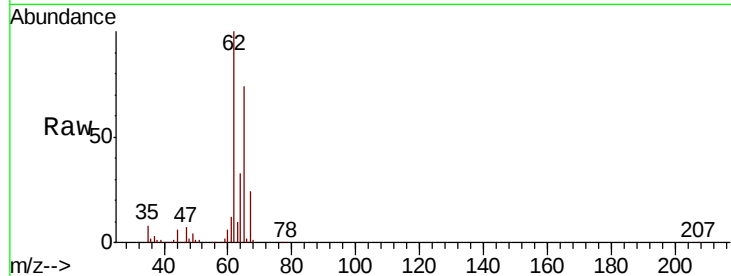
ClientSampleId :

Tot Ion: 62 Resp: 90563

Ion Ratio Lower Upper

62 100

64 33.1 22.1 41.1



#12

1,1-Dichloroethene

Concen: 0.328 ug/L

RT: 2.60 min Scan# 393

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

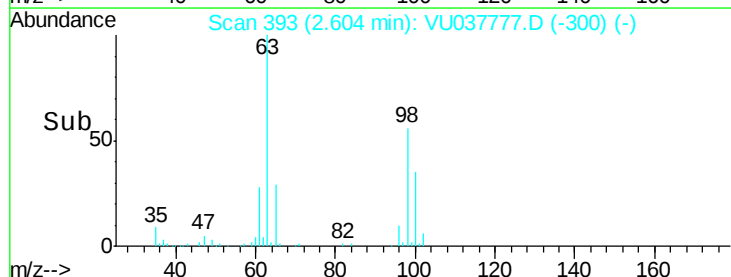
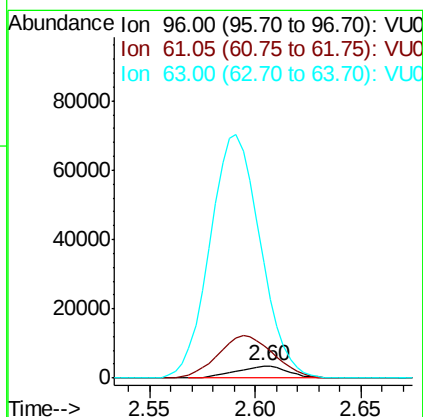
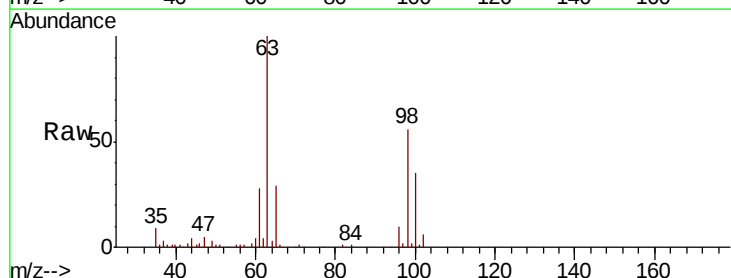
Tgt Ion: 96 Resp: 5817

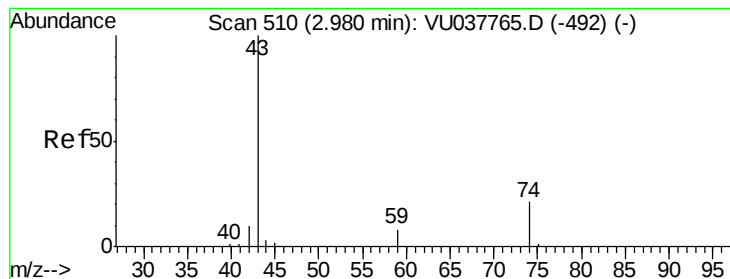
Ion Ratio Lower Upper

96 100

61 276.0 127.7 237.3#

63 974.0 85.0 157.8#





#15

Methyl Acetate

Concen: 12.812 ug/L

RT: 3.07 min Scan# 539

Delta R.T. 0.09 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

Instrument :

MSVOA_U

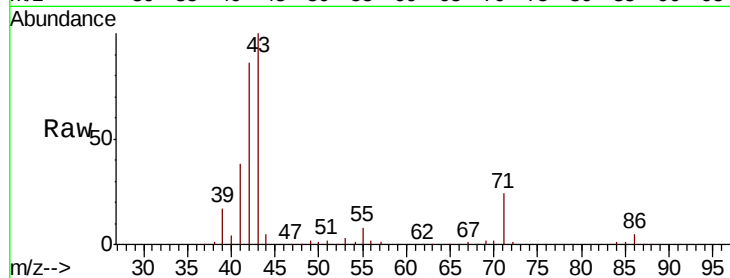
ClientSampled :

Tot Ion: 43 Resp: 125444

Ion Ratio Lower Upper

43 100

74 0.0 17.2 25.8#



Abundance Ion 43.05 (42.75 to 43.75): VU037777.D (-417) (-)

Ion 74.05 (73.75 to 74.75): VU037777.D (-417) (-)

250000

200000

150000

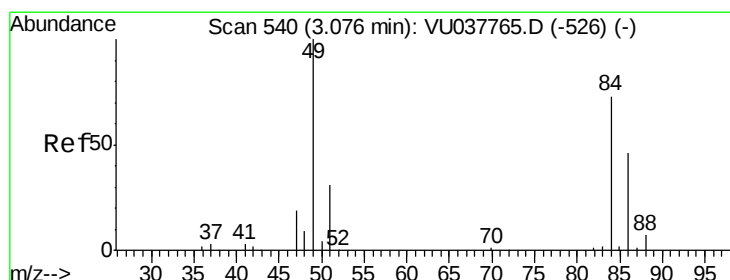
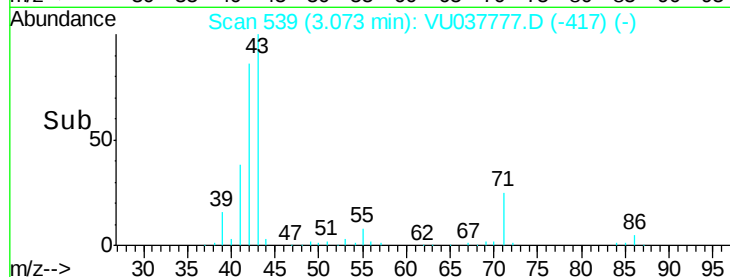
100000

50000

0

3.00 3.05 3.10

Time-->



#16

Methylene chloride

Concen: 0.131 ug/L

RT: 3.08 min Scan# 541

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

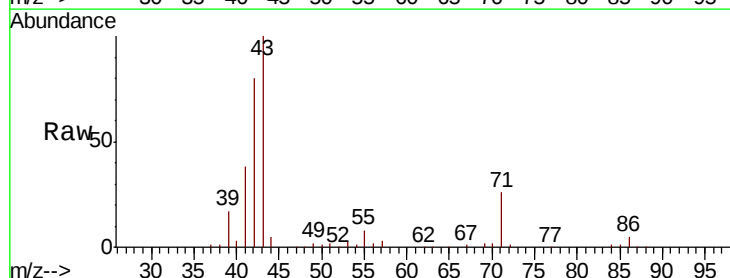
Tgt Ion: 84 Resp: 2611

Ion Ratio Lower Upper

84 100

86 375.5 44.2 82.0#

49 106.8 92.4 171.6



Abundance Ion 84.05 (83.75 to 84.75): VU037777.D (-447) (-)

Ion 86.00 (85.70 to 86.70): VU037777.D (-447) (-)

Ion 49.10 (48.80 to 49.80): VU037777.D (-447) (-)

12000

10000

8000

6000

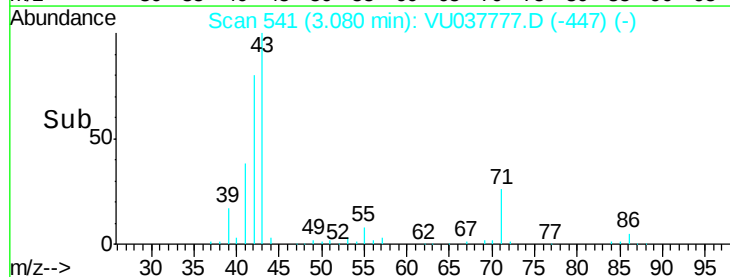
4000

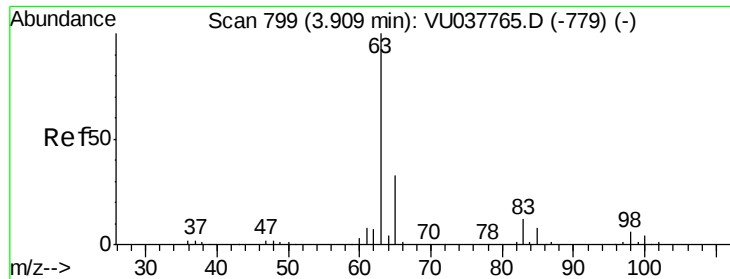
2000

0

3.05 3.10

Time-->

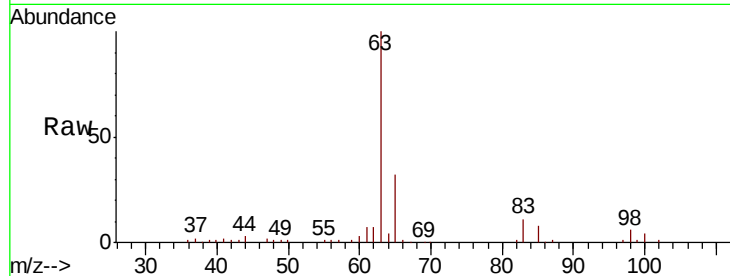




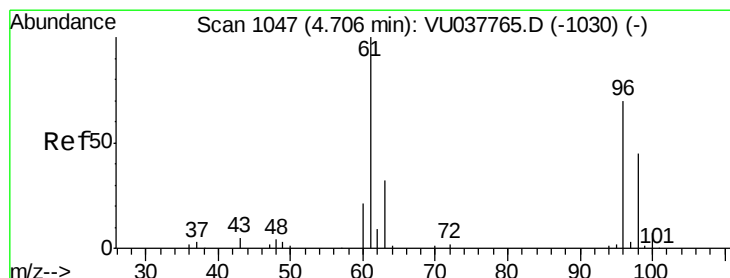
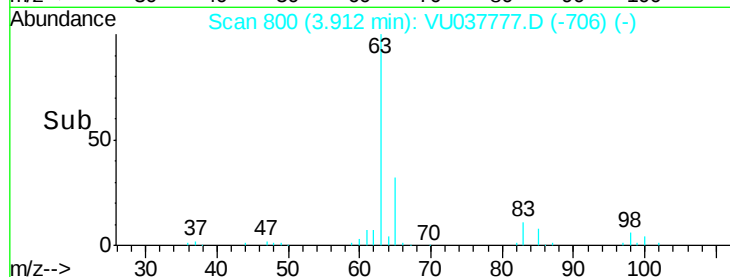
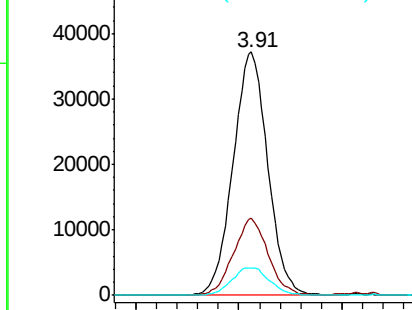
#19
 1,1-Dichloroethane
 Concen: 2.339 ug/L
 RT: 3.91 min Scan# 800
 Delta R.T. 0.00 min
 Lab File: VU037777.D
 Acq: 17 Apr 2020 15:55

Instrument :
 MSVOA_U
 ClientSampleId :

Tot Ion: 63 Resp: 87014
 Ion Ratio Lower Upper
 63 100
 65 31.6 21.6 40.2
 83 11.3 8.6 16.0

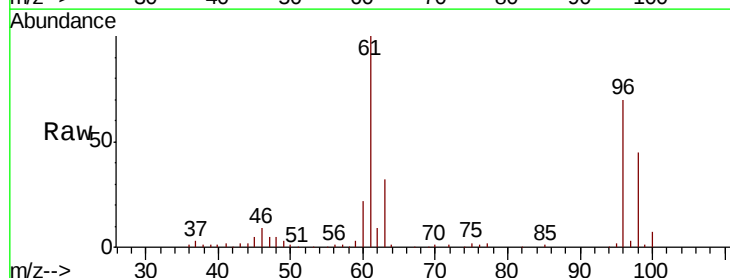


Abundance Ion 63.10 (62.80 to 63.80): VU0
 Ion 65.10 (64.80 to 65.80): VU0
 Ion 83.05 (82.75 to 83.75): VU0

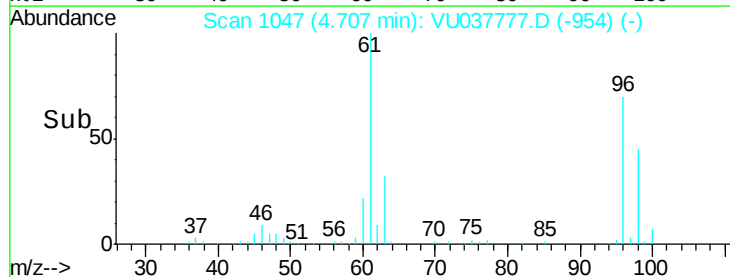
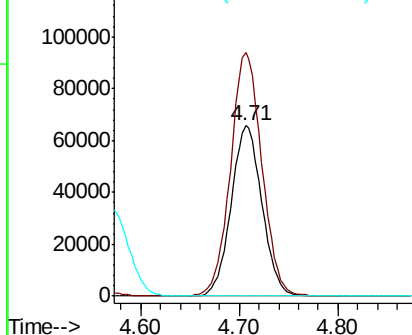


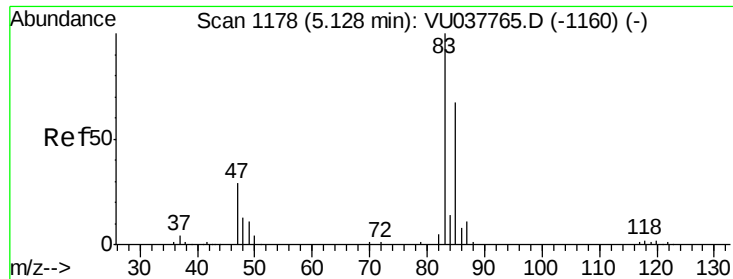
#22
 cis-1,2-Dichloroethene
 Concen: 6.889 ug/L
 RT: 4.71 min Scan# 1047
 Delta R.T. 0.00 min
 Lab File: VU037777.D
 Acq: 17 Apr 2020 15:55

Tgt Ion: 96 Resp: 143134
 Ion Ratio Lower Upper
 96 100
 61 143.1 97.0 180.2
 68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU0
 Ion 61.05 (60.75 to 61.75): VU0
 Ion 68.15 (67.85 to 68.85): VU0

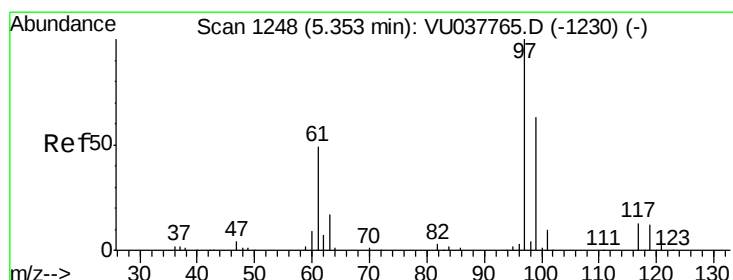
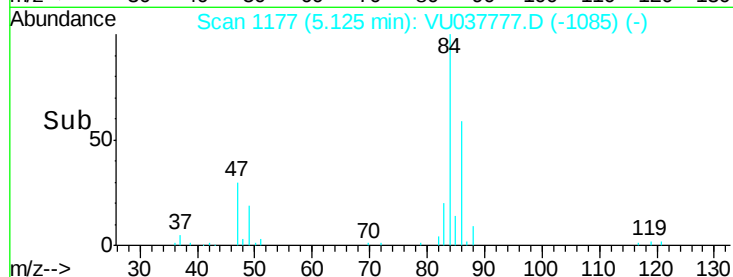
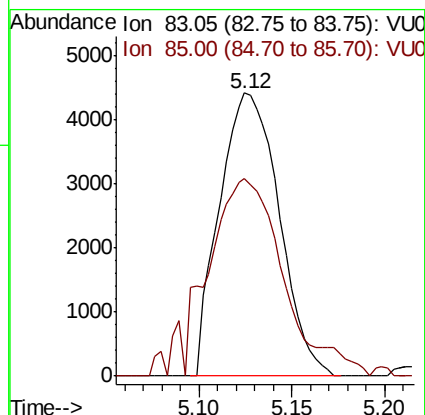
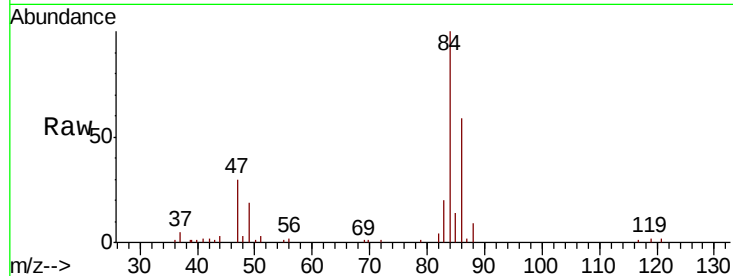




#25
Chloroform
Concen: 0.280 ug/L
RT: 5.12 min Scan# 1177
Delta R.T. -0.00 min
Lab File: VU037777.D
Acq: 17 Apr 2020 15:55

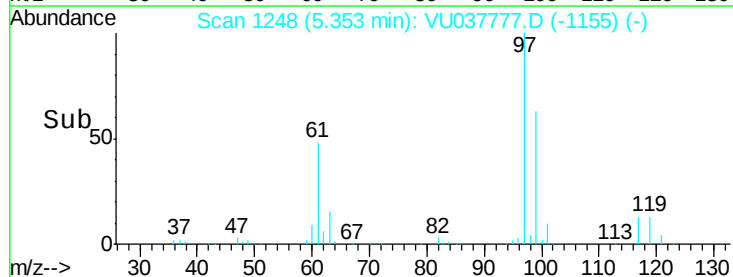
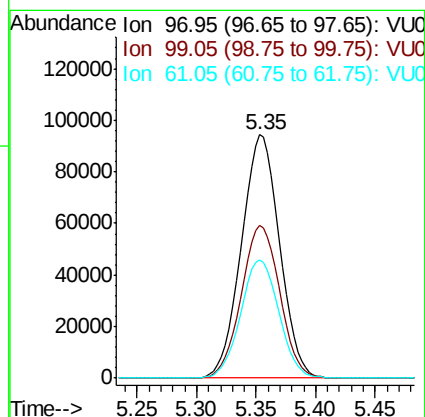
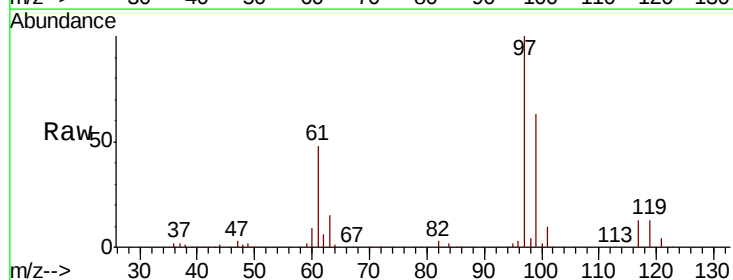
Instrument :
MSVOA_U
ClientSampleId :

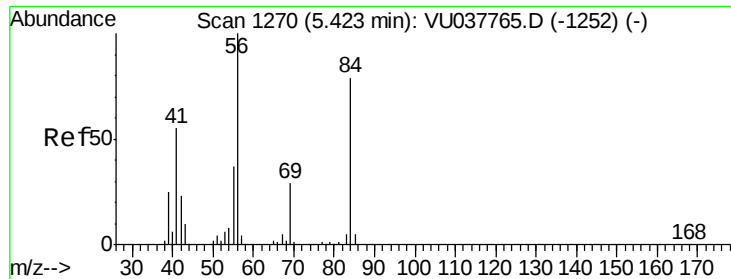
Tot Ion: 83 Resp: 9882
Ion Ratio Lower Upper
83 100
85 69.6 44.9 83.3



#29
1,1,1-Trichloroethane
Concen: 6.973 ug/L
RT: 5.35 min Scan# 1248
Delta R.T. 0.00 min
Lab File: VU037777.D
Acq: 17 Apr 2020 15:55

Tgt Ion: 97 Resp: 209975
Ion Ratio Lower Upper
97 100
99 63.3 52.0 78.0
61 48.7 37.8 56.8

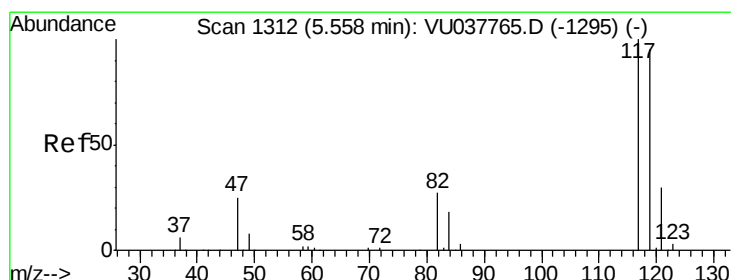
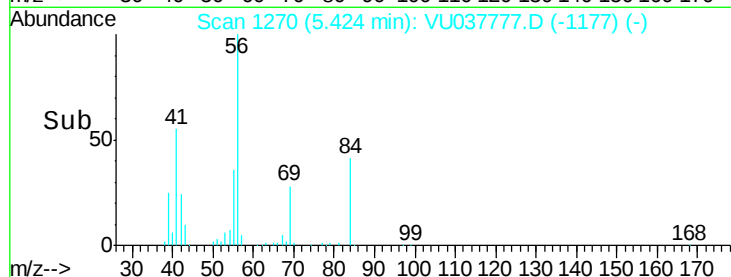
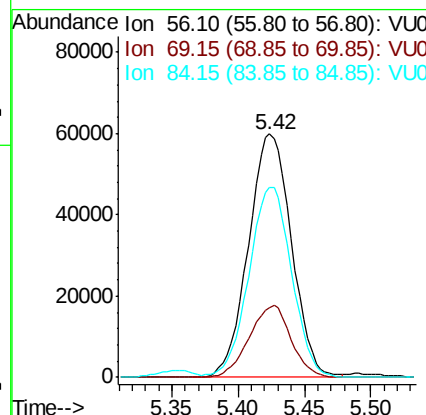
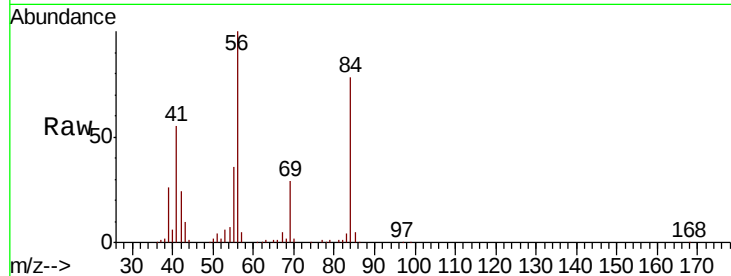




#30
Cyclohexane
Concen: 3.625 ug/L
RT: 5.42 min Scan# 1270
Delta R.T. 0.00 min
Lab File: VU037777.D
Acq: 17 Apr 2020 15:55

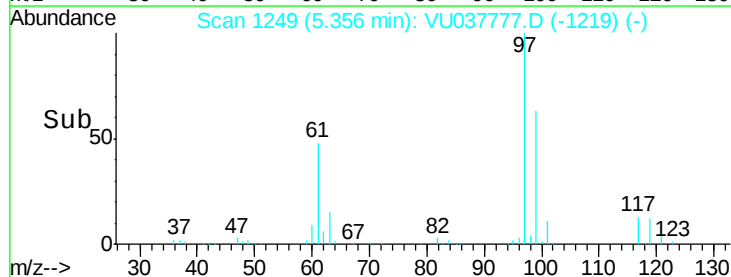
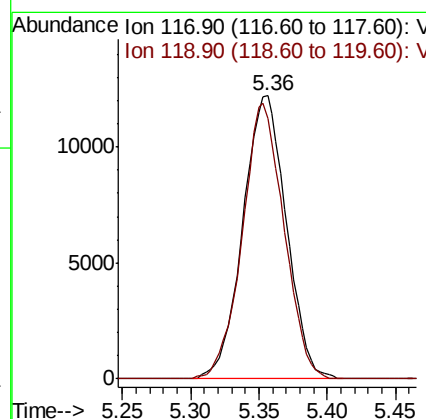
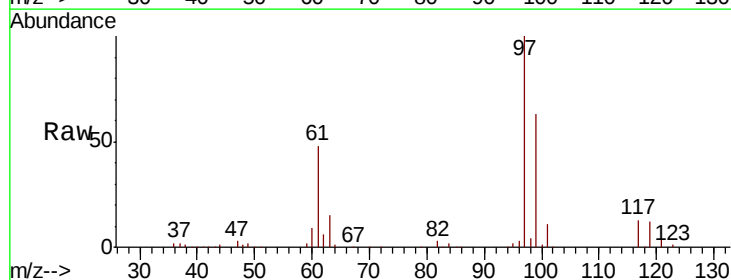
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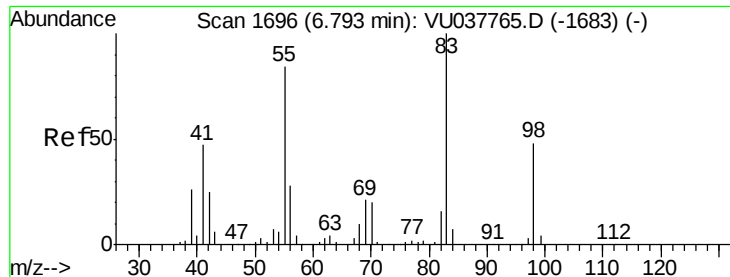
Tot Ion	56.10 (55.80 to 56.80): VU0	Resp	135097
Ion	Ratio	Lower	Upper
56	100		
69	28.6	23.9	35.9
84	77.6	65.6	98.4



#31
Carbon tetrachloride
Concen: 1.124 ug/L
RT: 5.36 min Scan# 1249
Delta R.T. -0.20 min
Lab File: VU037777.D
Acq: 17 Apr 2020 15:55

Tgt Ion	117	Resp	26965
Ion	Ratio	Lower	Upper
117	100		
119	93.3	77.4	116.0

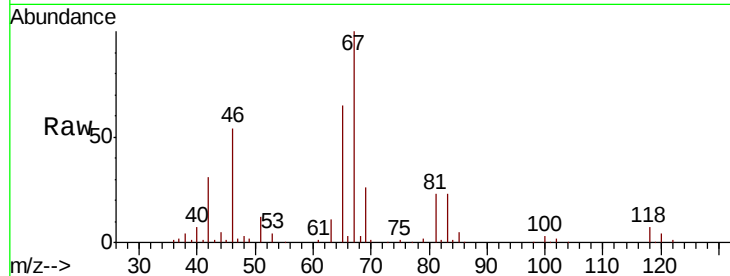




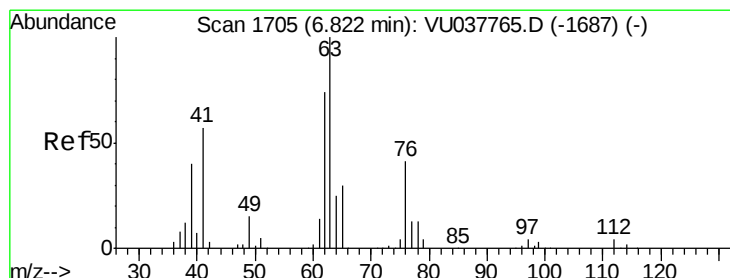
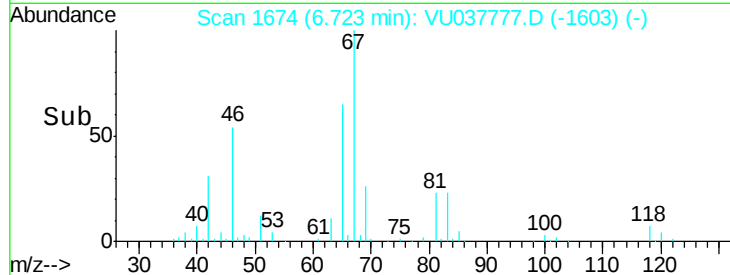
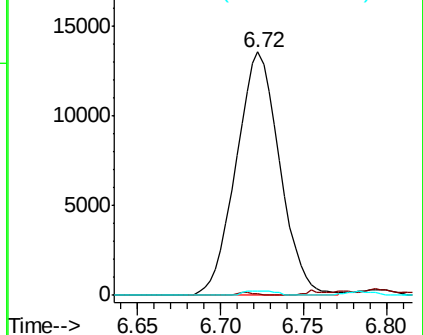
#35
Methvlcvclohexane
Concen: 0.702 ug/L
RT: 6.72 min Scan# 1674
Delta R.T. -0.07 min
Lab File: VU037777.D
Acq: 17 Apr 2020 15:55

Instrument :
MSVOA_U
ClientSampleId :

Tot Ion: 83 Resp: 24786
Ion Ratio Lower Upper
83 100
55 0.5 65.5 98.3#
98 1.3 38.2 57.4#

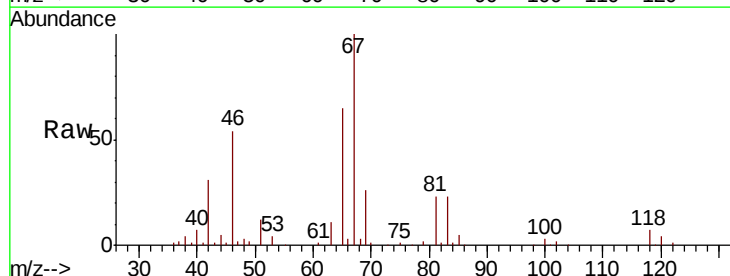


Abundance Ion 83.15 (82.85 to 83.85): VU0
Ion 55.10 (54.80 to 55.80): VU0
Ion 98.15 (97.85 to 98.85): VU0

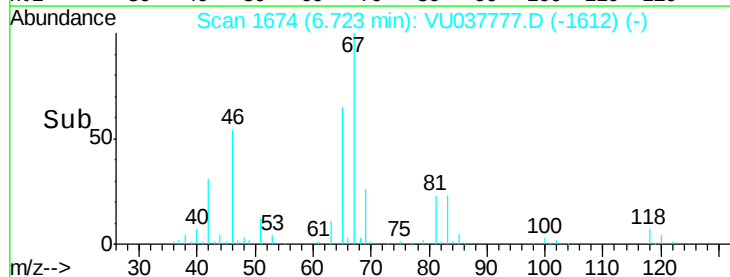
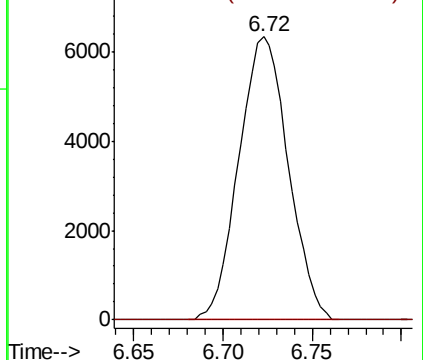


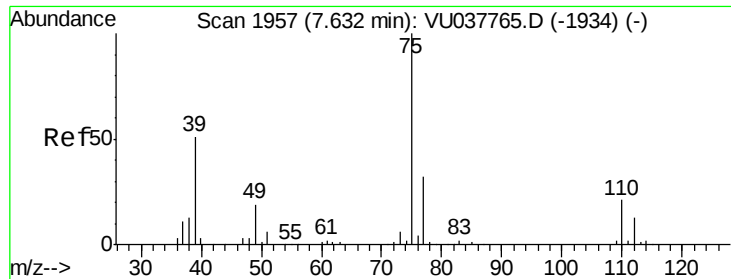
#37
1,2-Dichloropropane
Concen: 0.564 ug/L
RT: 6.72 min Scan# 1674
Delta R.T. -0.10 min
Lab File: VU037777.D
Acq: 17 Apr 2020 15:55

Tgt Ion: 63 Resp: 12259
Ion Ratio Lower Upper
63 100
112 0.0 3.4 5.0#



Abundance Ion 63.10 (62.80 to 63.80): VU0
Ion 112.10 (111.80 to 112.80): V

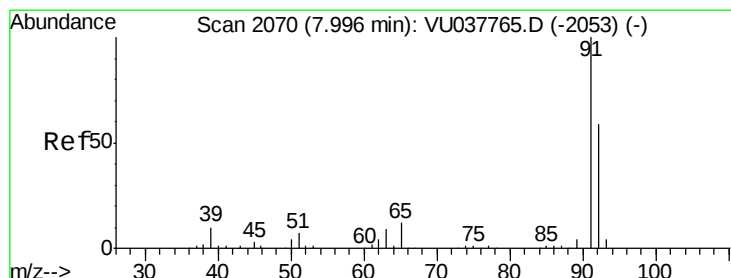
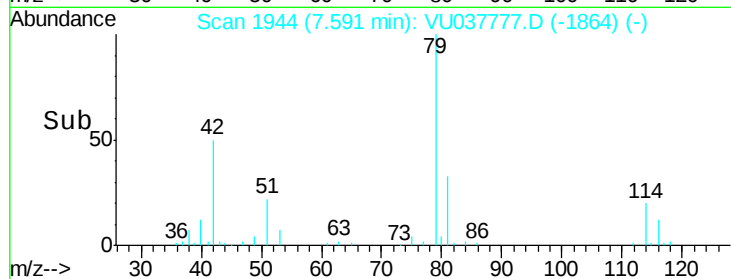
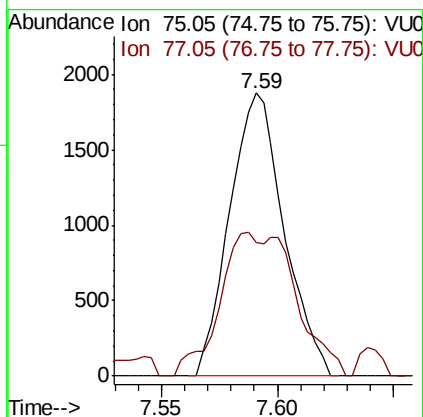
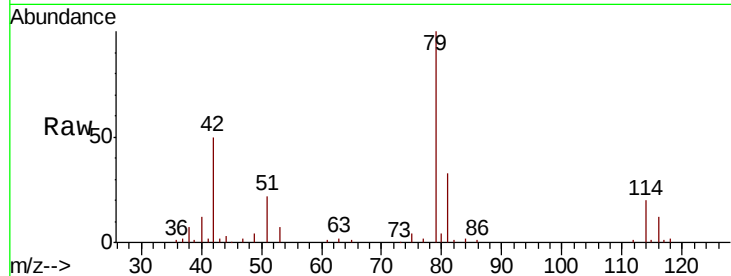




#39
 cis-1,3-Dichloropropene
 Concen: 0.090 ug/L
 RT: 7.59 min Scan# 1944
 Delta R.T. -0.04 min
 Lab File: VU037777.D
 Acq: 17 Apr 2020 15:55

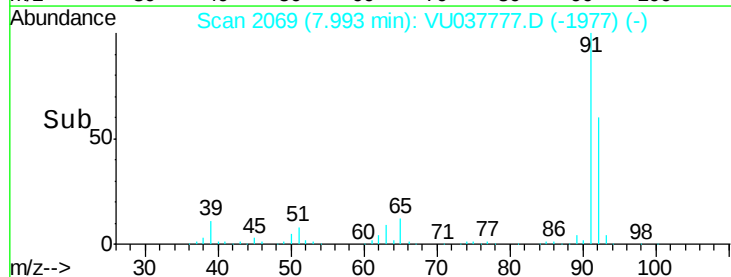
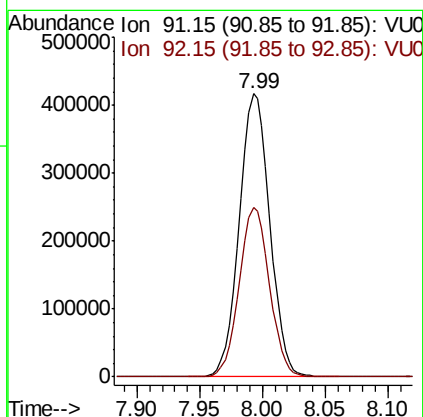
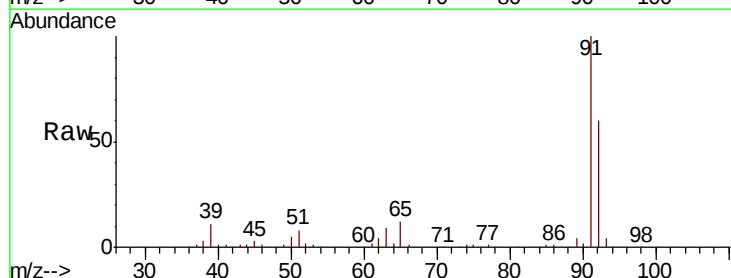
Instrument :
 MSVOA_U
 ClientSampleId :

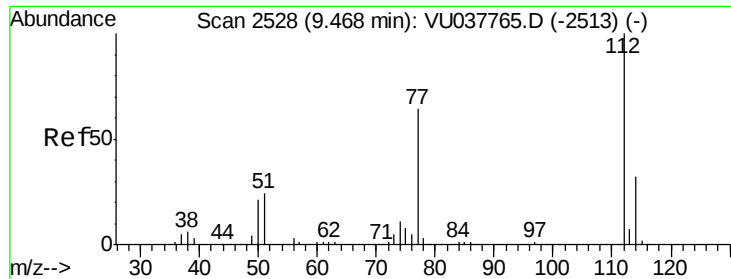
Tot Ion: 75 Resp: 3057
 Ion Ratio Lower Upper
 75 100
 77 47.2 22.2 41.2#



#42
 Toluene
 Concen: 8.202 ug/L
 RT: 7.99 min Scan# 2069
 Delta R.T. -0.00 min
 Lab File: VU037777.D
 Acq: 17 Apr 2020 15:55

Tgt Ion: 91 Resp: 704469
 Ion Ratio Lower Upper
 91 100
 92 60.0 41.1 76.3





#51

Chlorobenzene

Concen: 2.677 ug/L

RT: 9.47 min Scan# 2527

Delta R.T. -0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

Instrument :
MSVOA_U
ClientSampled :

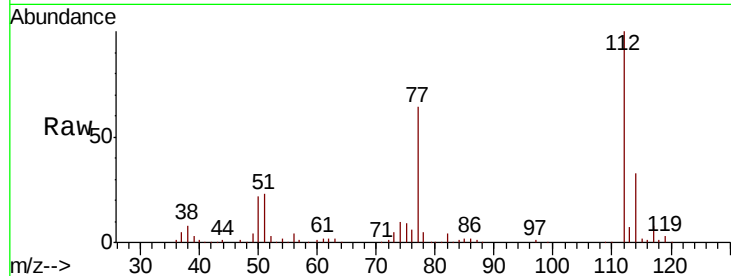
Tot Ion:112 Resp: 140264

Ion Ratio Lower Upper

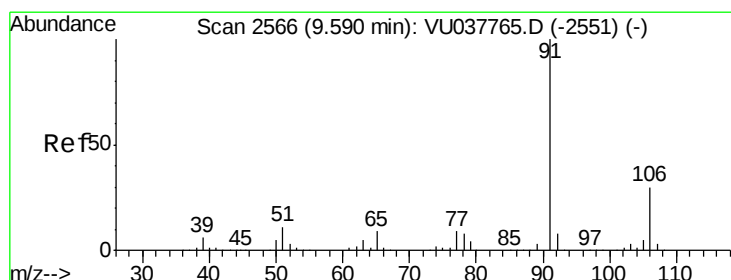
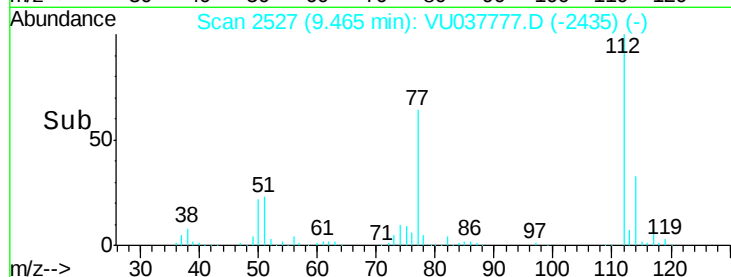
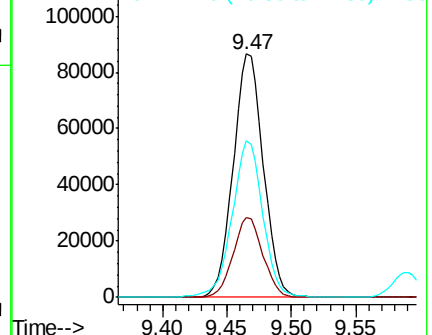
112 100

114 33.0 22.6 42.0

77 64.1 50.2 75.4



Abundance Ion 112.10 (111.80 to 112.80): V
Ion 114.05 (113.75 to 114.75): V
Ion 77.10 (76.80 to 77.80): V



#52

Ethylbenzene

Concen: 1.607 ug/L

RT: 9.59 min Scan# 2566

Delta R.T. 0.00 min

Lab File: VU037777.D

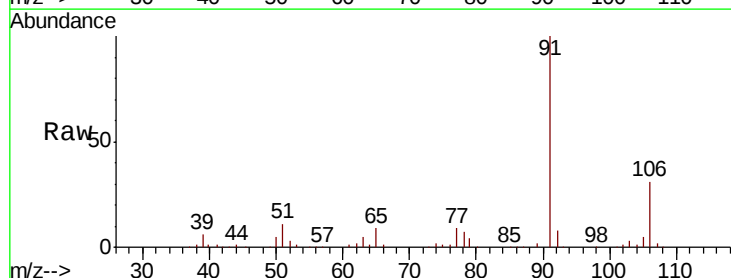
Acq: 17 Apr 2020 15:55

Tgt Ion: 91 Resp: 153541

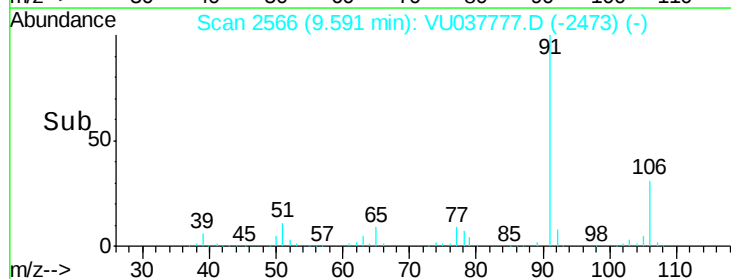
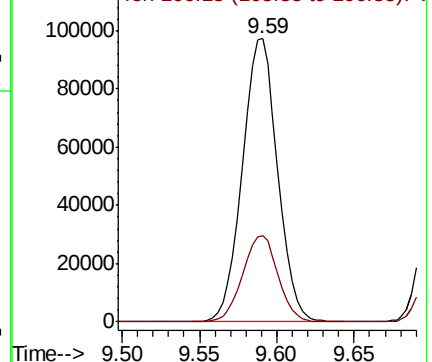
Ion Ratio Lower Upper

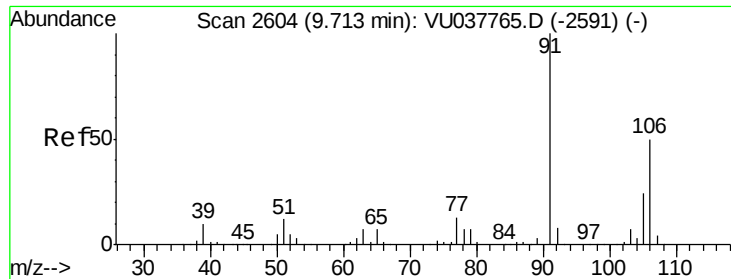
91 100

106 30.5 21.7 40.3



Abundance Ion 91.15 (90.85 to 91.85): V
Ion 106.15 (105.85 to 106.85): V





#53

m,p-Xylene

Concen: 2.808 ug/L

RT: 9.71 min Scan# 2604

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

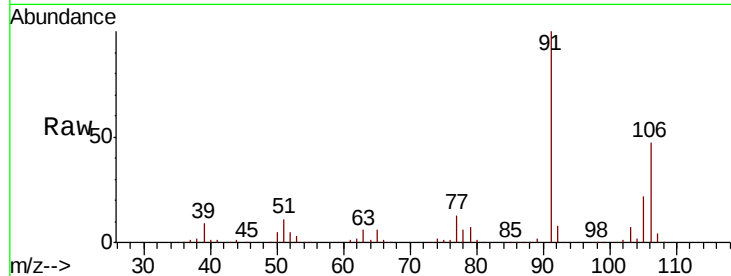
Instrument :
MSVOA_U
ClientSampled :

Tot Ion:106 Resp: 101560

Ion Ratio Lower Upper

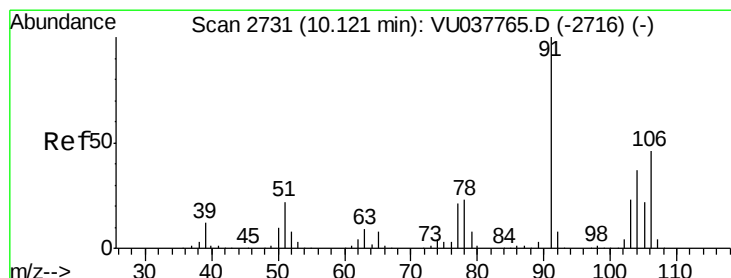
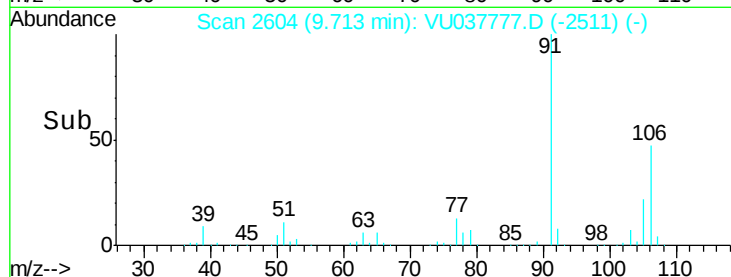
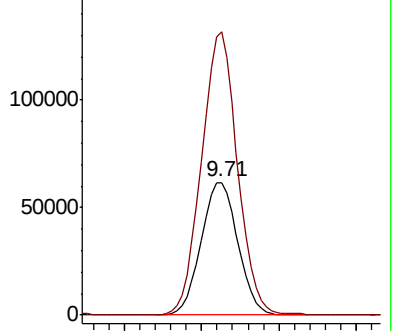
106 100

91 213.4 143.9 267.3



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#54

o-Xylene

Concen: 1.503 ug/L

RT: 10.12 min Scan# 2730

Delta R.T. -0.00 min

Lab File: VU037777.D

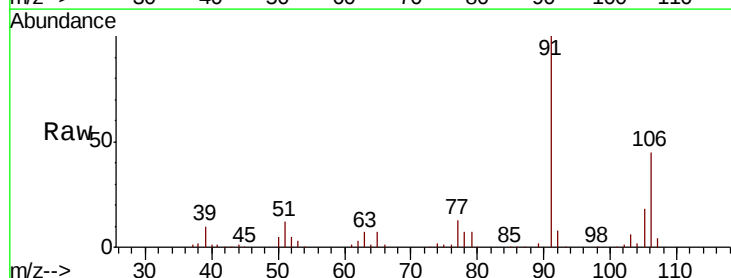
Acq: 17 Apr 2020 15:55

Tgt Ion:106 Resp: 53514

Ion Ratio Lower Upper

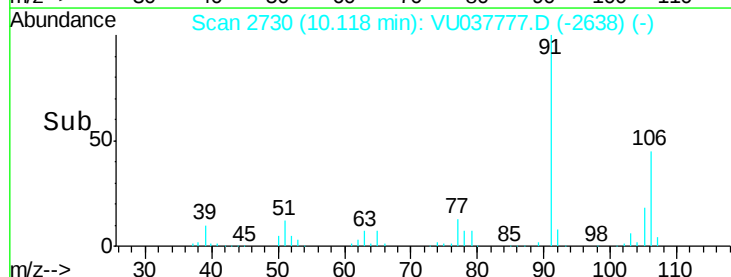
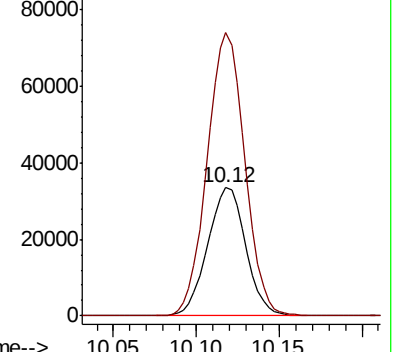
106 100

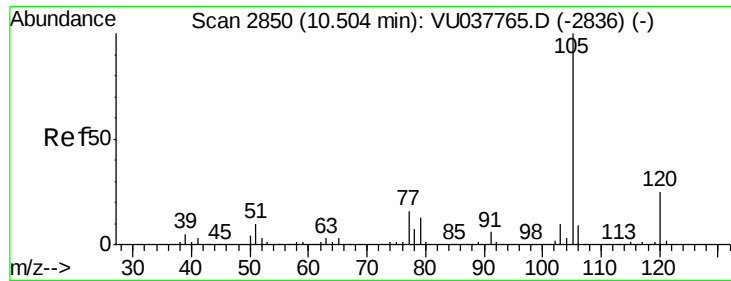
91 221.3 151.1 280.7



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0





#56

Isopropylbenzene

Concen: 0.525 ug/L

RT: 10.50 min Scan# 2849

Delta R.T. -0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

Instrument :

MSVOA_U

ClientSampleId :

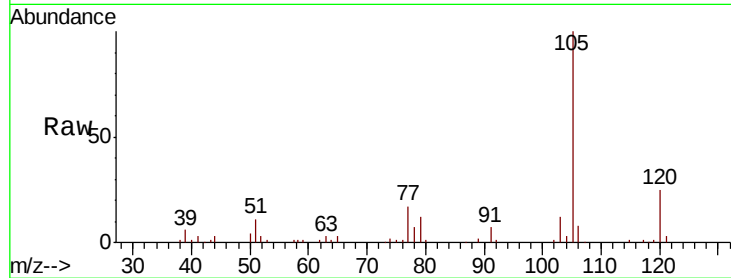
Tot Ion:105 Resp: 49029

Ion Ratio Lower Upper

105 100

120 26.2 20.6 31.0

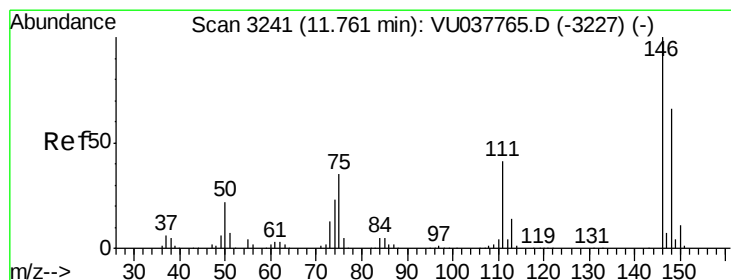
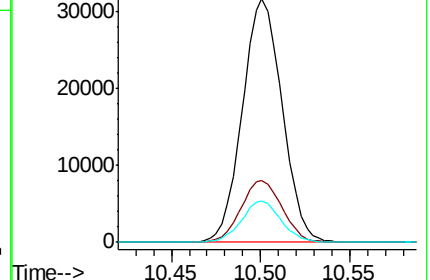
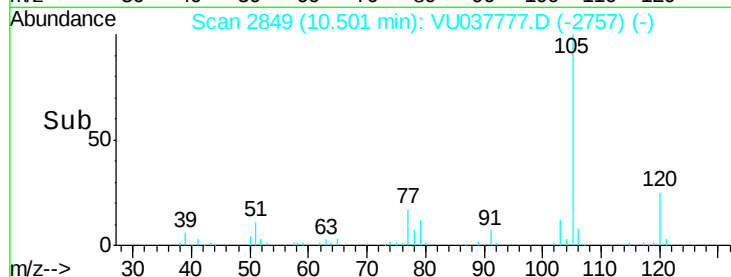
77 17.0 13.2 19.8



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): VU0



#62

1,3-Dichlorobenzene

Concen: 0.763 ug/L

RT: 11.76 min Scan# 3241

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

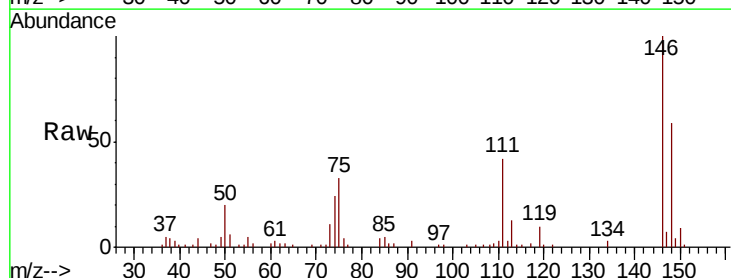
Tgt Ion:146 Resp: 31525

Ion Ratio Lower Upper

146 100

111 42.0 29.8 55.3

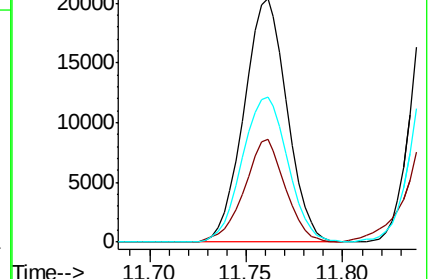
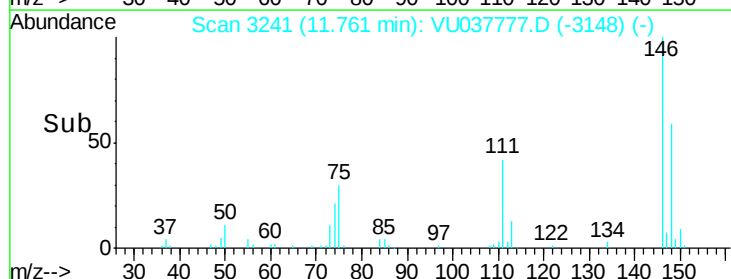
148 59.3 44.5 82.7

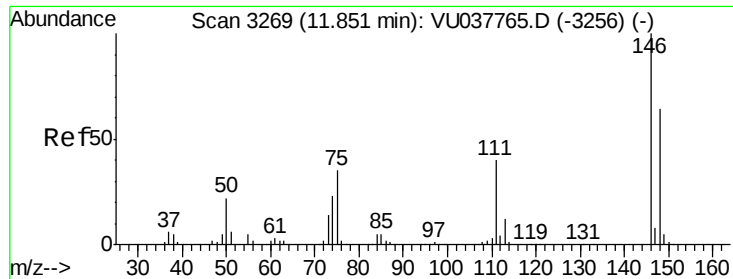


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#63

1,4-Dichlorobenzene

Concen: 1.250 ug/L

RT: 11.85 min Scan# 3269

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

Instrument :

MSVOA_U

ClientSampleId :

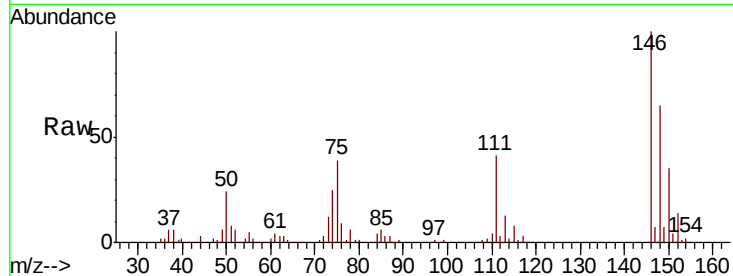
Tot Ion:146 Resp: 51828

Ion Ratio Lower Upper

146 100

111 40.8 28.4 52.8

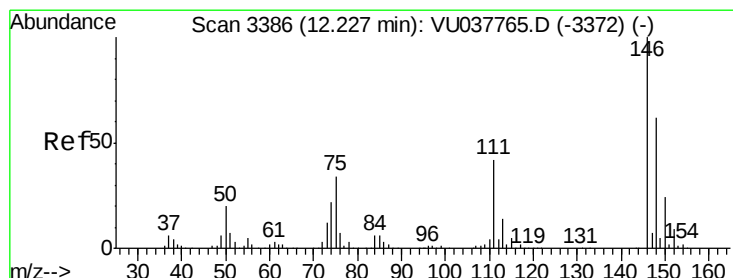
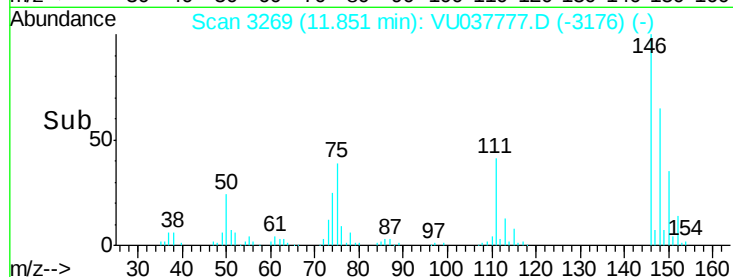
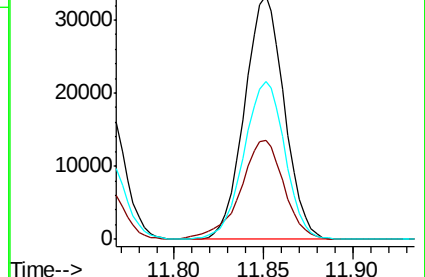
148 64.7 44.9 83.3



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

1,2-Dichlorobenzene

Concen: 0.467 ug/L

RT: 12.23 min Scan# 3386

Delta R.T. 0.00 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

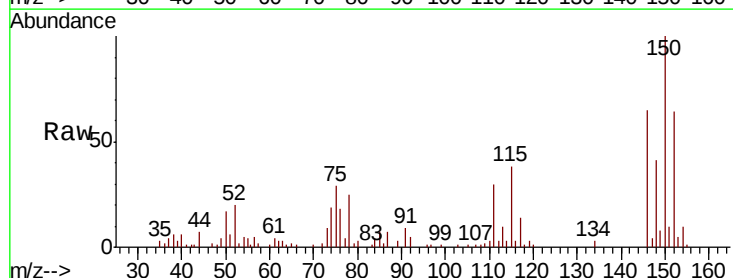
Tgt Ion:146 Resp: 18191

Ion Ratio Lower Upper

146 100

111 46.0 35.0 52.6

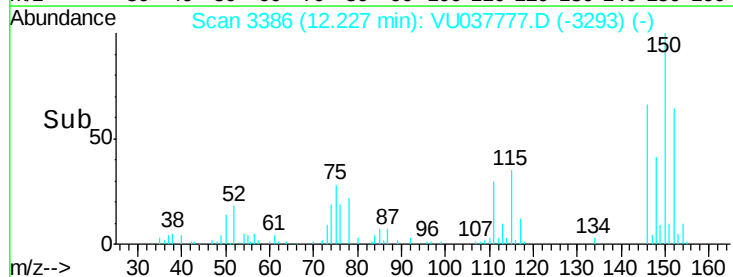
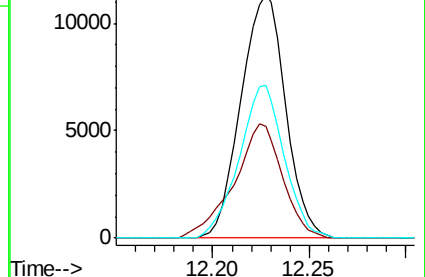
148 62.8 51.5 77.3

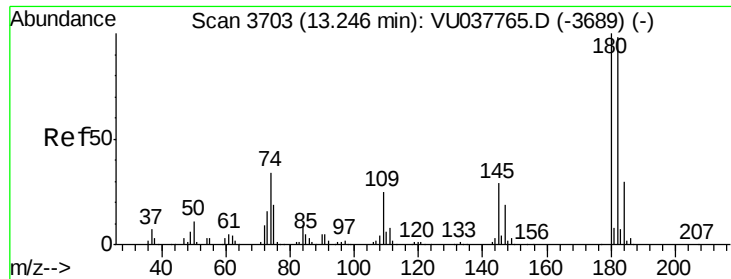


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

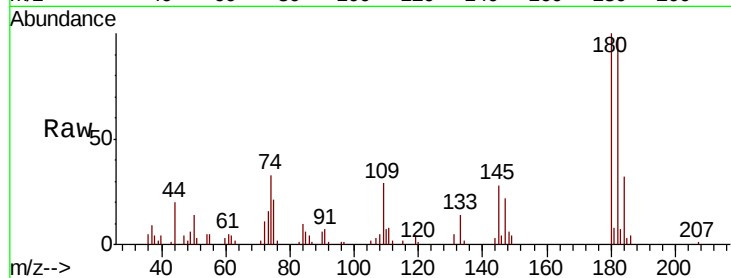




#67
 1,3,5-Trichlorobenzene
 Concen: 0.464 ug/L
 RT: 13.87 min Scan# 3896
 Delta R.T. 0.62 min
 Lab File: VU037777.D
 Acq: 17 Apr 2020 15:55

Instrument :
 MSVOA_U
 ClientSampled :

Tot Ion:180	Resp:	14055
Ion Ratio	Lower	Upper
180	100	
182	92.0	77.1 115.7
184	30.1	24.7 37.1
145	31.1	24.6 37.0

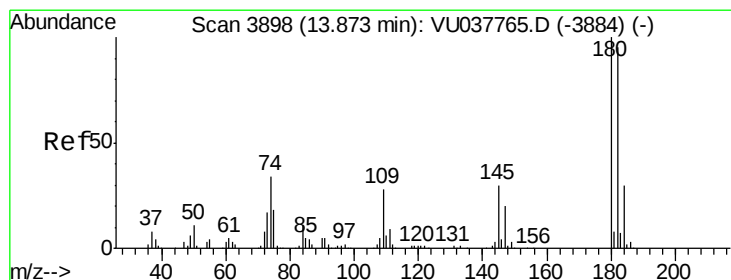
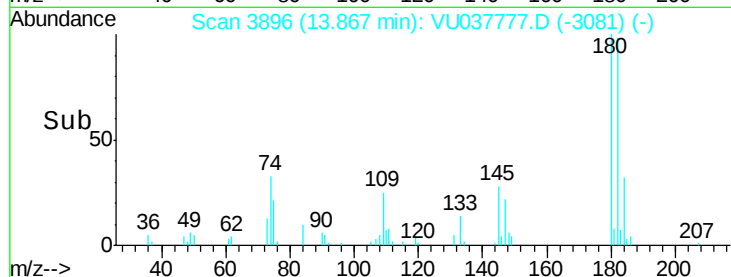
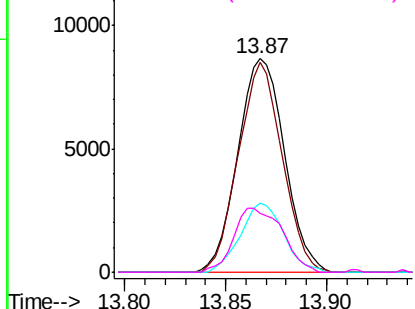


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

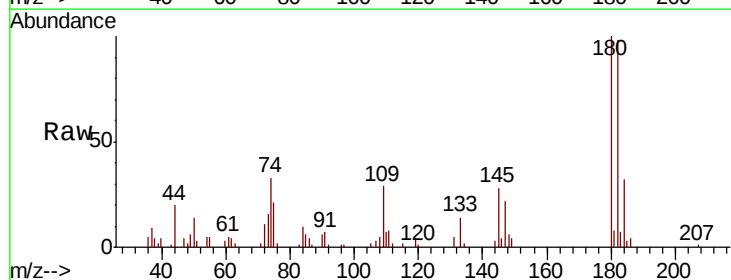
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68
 1,2,4-trichlorobenzene
 Concen: 0.505 ug/L
 RT: 13.87 min Scan# 3896
 Delta R.T. -0.01 min
 Lab File: VU037777.D
 Acq: 17 Apr 2020 15:55

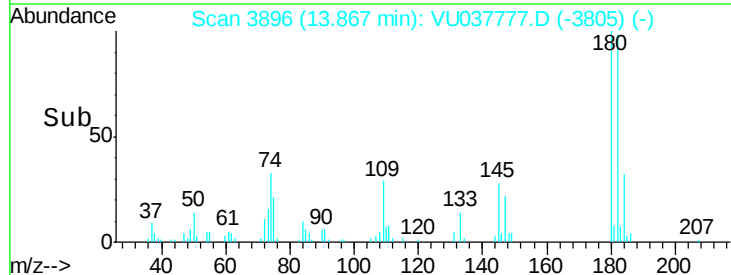
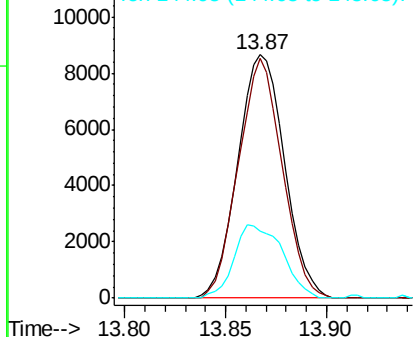
Tgt Ion:180	Resp:	14055
Ion Ratio	Lower	Upper
180	100	
182	92.0	76.4 114.6
145	31.1	25.1 37.7

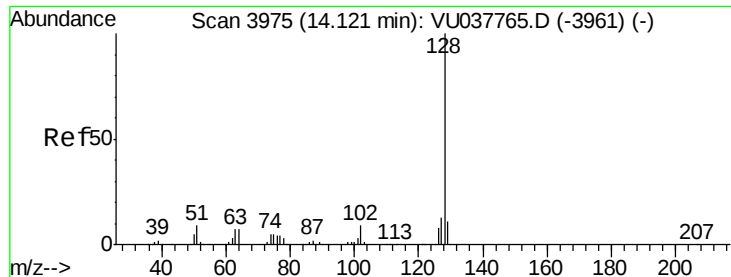


Abundance Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 1.320 ug/L

RT: 14.11 min Scan# 3973

Delta R.T. -0.01 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

Instrument :

MSVOA_U

ClientSampleId :

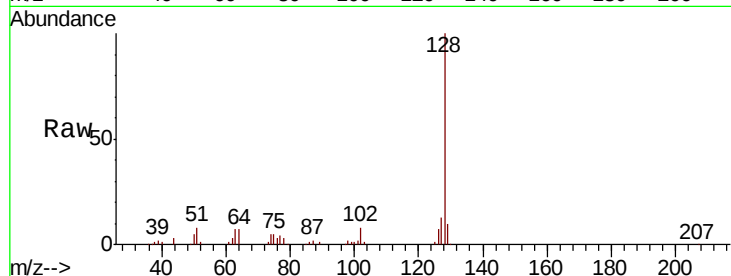
Tot Ion:128 Resp: 74356

Ion Ratio Lower Upper

128 100

129 10.0 8.6 12.8

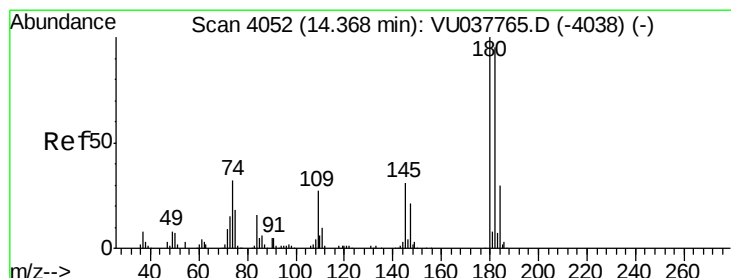
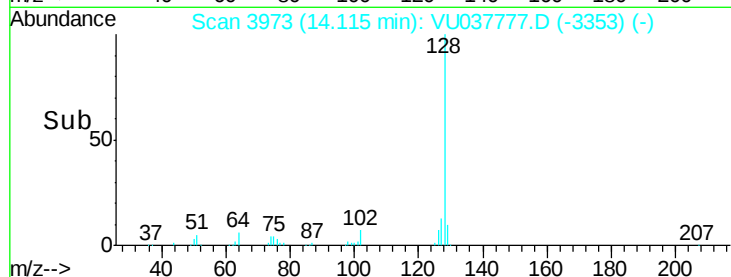
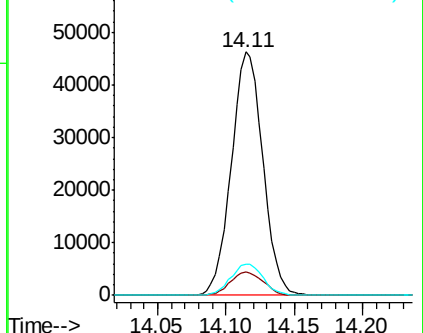
127 13.2 10.4 15.6



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 0.161 ug/L

RT: 14.36 min Scan# 4049

Delta R.T. -0.01 min

Lab File: VU037777.D

Acq: 17 Apr 2020 15:55

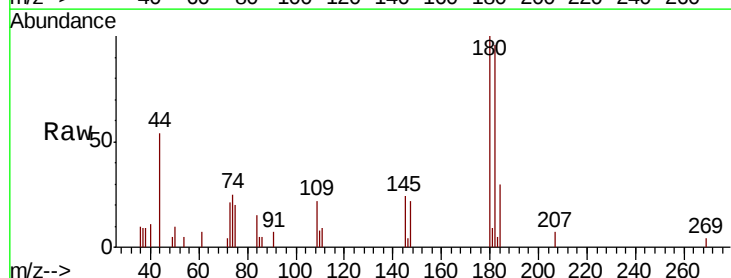
Tgt Ion:180 Resp: 4000

Ion Ratio Lower Upper

180 100

182 95.6 76.6 115.0

145 33.1 26.7 40.1



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

