

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U111819\
 Data File : VU035757.D
 Acq On : 18 Nov 2019 20:52
 Operator : JC/SP
 Sample : K5910-20
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :

Quant Time: Nov 19 00:38:17 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR110419WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Tue Nov 19 00:32:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.29	114	250915	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.45	117	266683	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.84	152	180519	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.61	65	87924	3.40	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	68.00%
7) Chloroethane-d5	1.93	69	85677	4.05	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	81.00%
11) 1,1-Dichloroethene-d2	2.59	63	142591	3.28	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	65.60%
20) 2-Butanone-d5	4.70	46	264516	46.39	ug/L	-0.01
Spiked Amount	50.000	Range	40 - 130	Recovery	=	92.78%
24) Chloroform-d	5.11	84	151993	3.69	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	73.80%
26) 1,2-Dichloroethane-d4	5.75	65	83923	3.88	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	77.60%
32) Benzene-d6	5.77	84	362863	4.32	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	86.40%
36) 1,2-Dichloropropane-d6	6.73	67	122248	4.51	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	90.20%
41) Toluene-d8	7.93	98	359481	4.52	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	90.40%
43) trans-1,3-Dichloropropene-	8.21	79	73803	6.81	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	136.20%#
46) 2-Hexanone-d5	8.68	63	225755	53.14	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	106.28%
57) 1,1,2,2-Tetrachloroethane-	10.79	84	105507	4.63	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	92.60%
64) 1,2-Dichlorobenzene-d4	12.22	152	163323	4.56	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	91.20%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
8) Chloroethane	2.01	64	27607	1.508	ug/L	100
13) Acetone	2.62	43	6084137	1479.875	ug/L	50
14) Carbon disulfide	2.83	76	28516	0.399	ug/L #	93
15) Methyl Acetate	3.07	43	15477320	1620.571	ug/L #	49
16) Methylene chloride	3.01	84	198286	7.580	ug/L #	3
17) Methyl tert-butyl Ether	3.41	73	5975	0.116	ug/L #	1
19) 1,1-Dichloroethane	3.88	63	12085	0.286	ug/L #	1
21) 2-Butanone	4.78	43	97117	15.909	ug/L	96
25) Chloroform	5.17	83	174110	3.795	ug/L #	25
27) 1,2-Dichloroethane	5.82	62	7263	0.284	ug/L #	1
30) Cyclohexane	5.43	56	6259208	178.331	ug/L #	93
33) Benzene	5.82	78	756335	8.059	ug/L	100
34) Trichloroethene	6.61	95	41933	1.746	ug/L #	14
35) Methylcyclohexane	6.80	83	2765469	75.579	ug/L #	84
38) Bromodichloromethane	7.16	83	17788	0.595	ug/L #	28
40) 4-Methyl-2-pentanone	7.87	43	76621	5.388	ug/L #	66
42) Toluene	8.00	91	155951	1.579	ug/L	98

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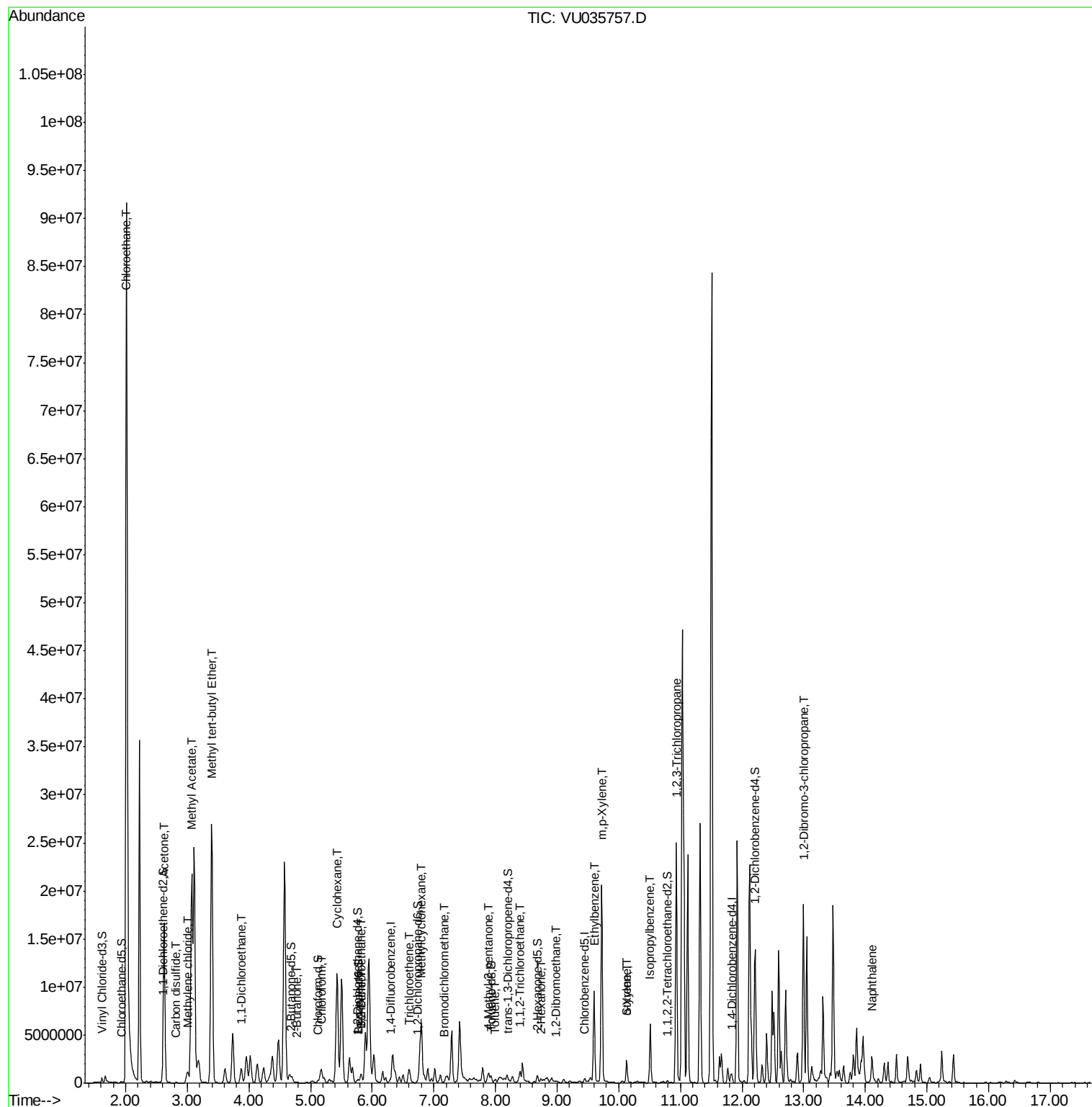
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,1,2-Trichloroethane	8.40	97	473915	26.760	ug/L #	19
48) 2-Hexanone	8.73	43	21535	2.131	ug/L #	87
50) 1,2-Dibromoethane	8.98	107	4051	0.241	ug/L #	1
52) Ethylbenzene	9.60	91	6890353	66.306	ug/L	99
53) m,p-Xylene	9.73	106	6238793	158.551	ug/L	97
54) o-Xylene	10.13	106	650063	17.094	ug/L	99
55) Styrene	10.13	104	34654	0.551	ug/L #	1
56) Isopropylbenzene	10.51	105	4079573	40.652	ug/L	100
59) 1,2,3-Trichloropropane	10.93	75	113824	6.960	ug/L #	1
66) 1,2-Dibromo-3-chloropropan	13.00	75	68193	18.814	ug/L #	1
69) Naphthalene	14.11	128	2279365	78.530	ug/L #	96

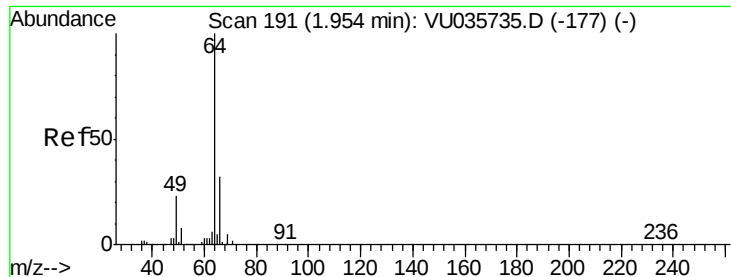
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#8

Chloroethane

Concen: 1.508 ug/L

RT: 2.01 min Scan# 207

Delta R.T. 0.05 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

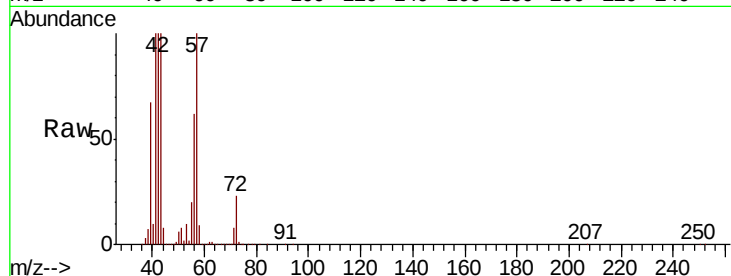
ClientSampleId :

Tot Ion: 64 Resp: 27607

Ion Ratio Lower Upper

64 100

66 31.9 22.5 41.7



Abundance Ion 64.10 (63.80 to 64.80): VU035735.D (-177) (-)

Ion 66.05 (65.75 to 66.75): VU035735.D (-177) (-)

2.01

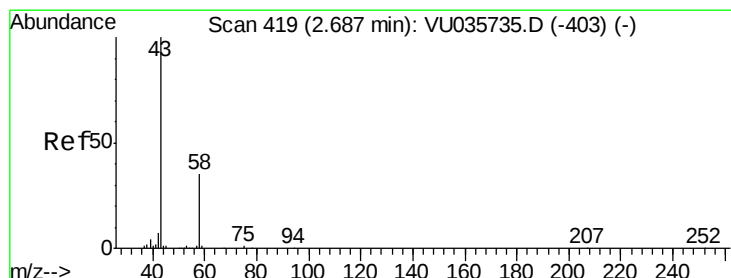
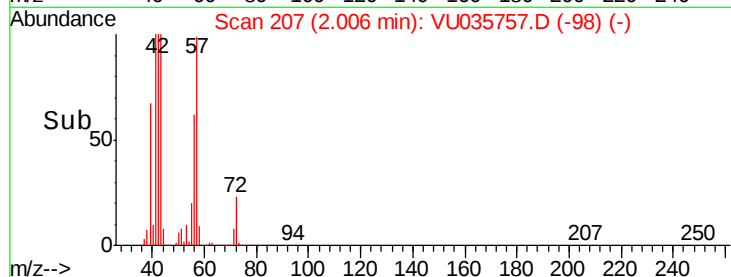
30000

20000

10000

0

Time--> 1.95 2.00 2.05 2.10



#13

Acetone

Concen: 1479.875 ug/L

RT: 2.62 min Scan# 399

Delta R.T. -0.06 min

Lab File: VU035757.D

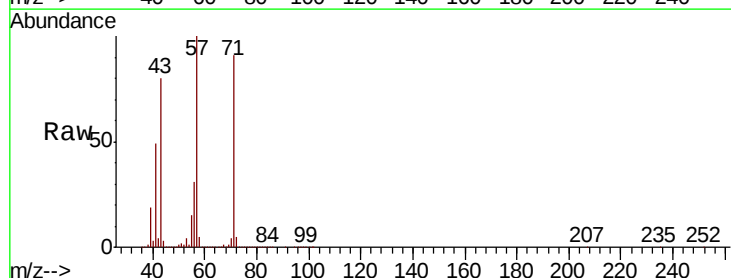
Acq: 18 Nov 2019 20:52

Tgt Ion: 43 Resp: 6084137

Ion Ratio Lower Upper

43 100

58 5.9 0.0 69.8



Abundance Ion 43.05 (42.75 to 43.75): VU035735.D (-403) (-)

Ion 58.05 (57.75 to 58.75): VU035735.D (-403) (-)

2.62

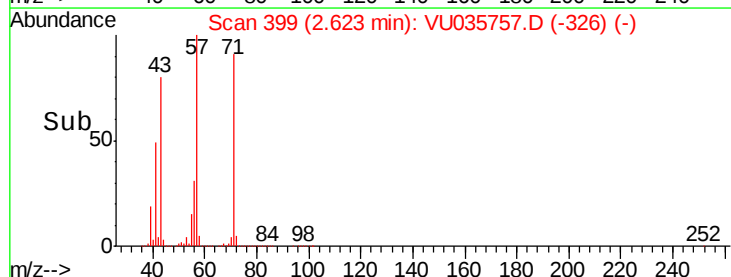
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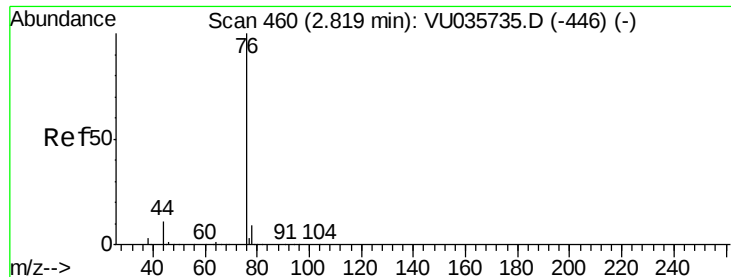
2000000

1000000

0

Time--> 2.50 2.60 2.70





#14

Carbon disulfide

Concen: 0.399 ug/L

RT: 2.83 min Scan# 462

Delta R.T. 0.01 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

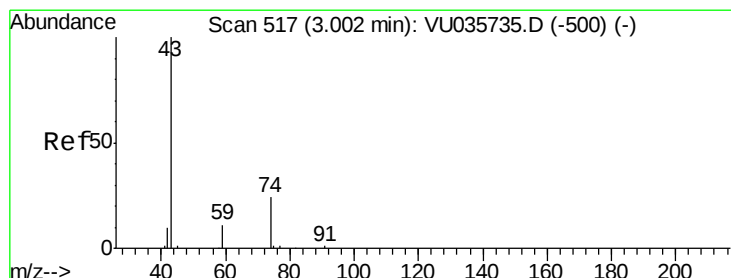
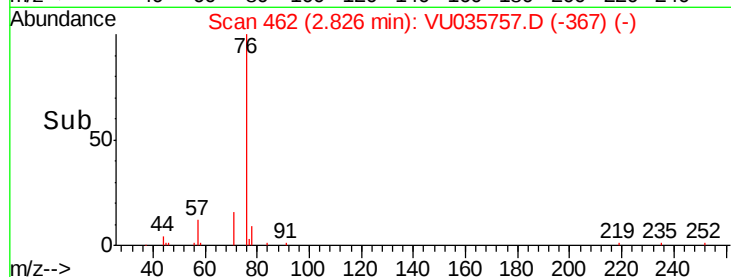
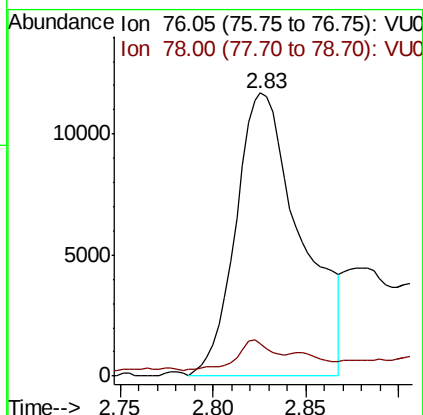
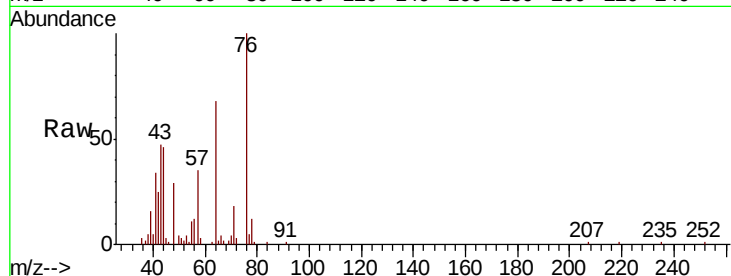
Instrument :
MSVOA_U
ClientSampleId :

Tot Ion: 76 Resp: 28516

Ion Ratio Lower Upper

76 100

78 11.6 7.4 11.0#



#15

Methyl Acetate

Concen: 1620.571 ug/L

RT: 3.07 min Scan# 539

Delta R.T. 0.07 min

Lab File: VU035757.D

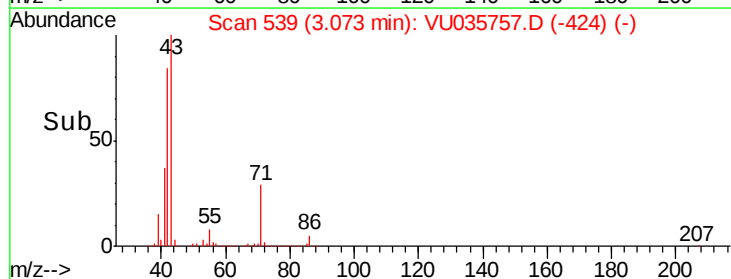
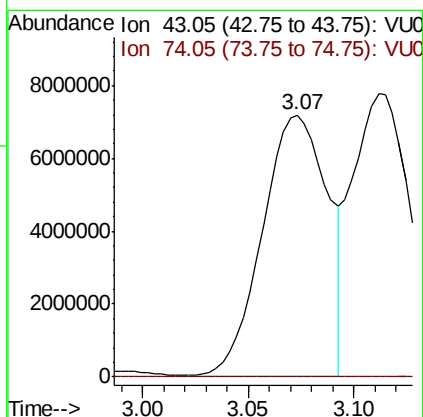
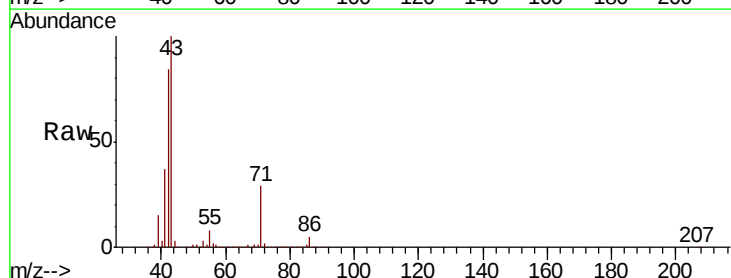
Acq: 18 Nov 2019 20:52

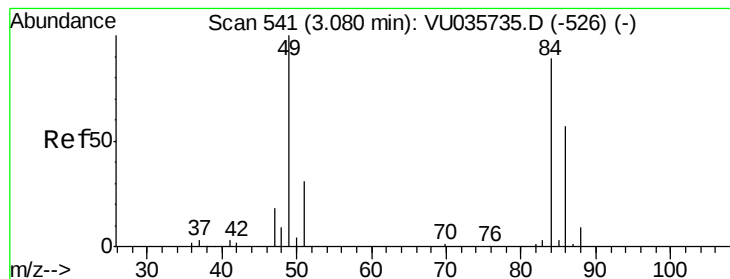
Tgt Ion: 43 Resp: 15477320

Ion Ratio Lower Upper

43 100

74 0.0 21.0 31.6#





#16

Methylene chloride

Concen: 7.580 ug/L

RT: 3.01 min Scan# 519

Delta R.T. -0.07 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

ClientSampleId :

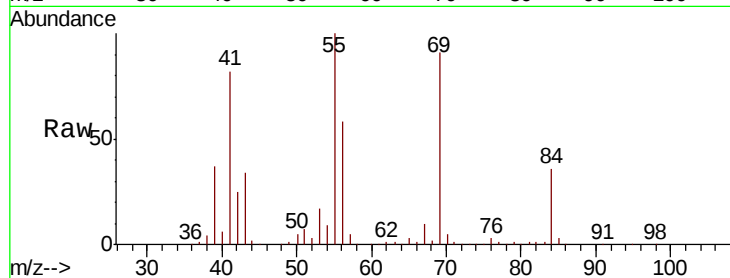
Tot Ion: 84 Resp: 198286

Ion Ratio Lower Upper

84 100

86 0.2 45.8 85.2#

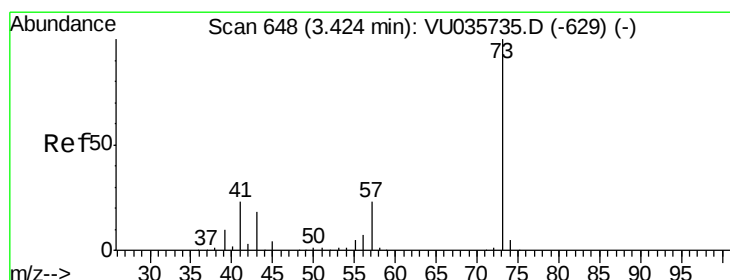
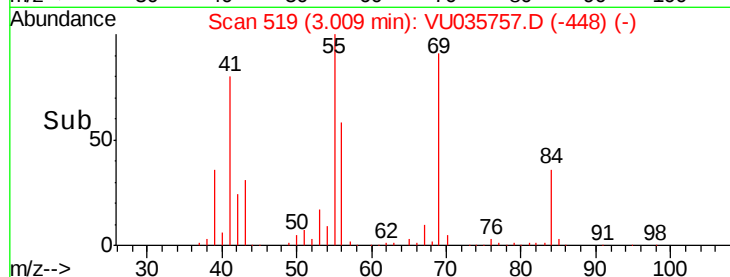
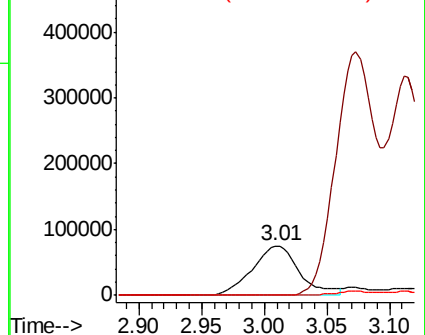
49 2.0 81.9 152.1#



Abundance Ion 84.05 (83.75 to 84.75): VU035735.D (-526) (-)

Ion 86.00 (85.70 to 86.70): VU035735.D (-526) (-)

Ion 49.10 (48.80 to 49.80): VU035735.D (-526) (-)



#17

Methyl tert-butyl Ether

Concen: 0.116 ug/L

RT: 3.41 min Scan# 643

Delta R.T. -0.02 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

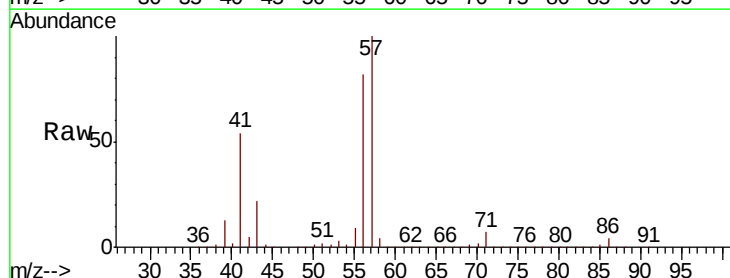
Tgt Ion: 73 Resp: 5975

Ion Ratio Lower Upper

73 100

43 69125.8 14.4 21.6#

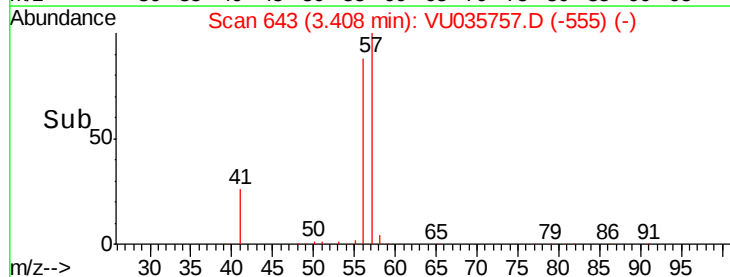
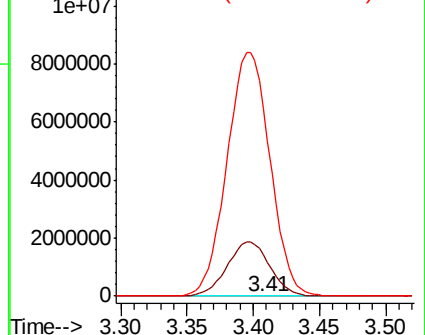
57 316344.3 18.2 27.2#

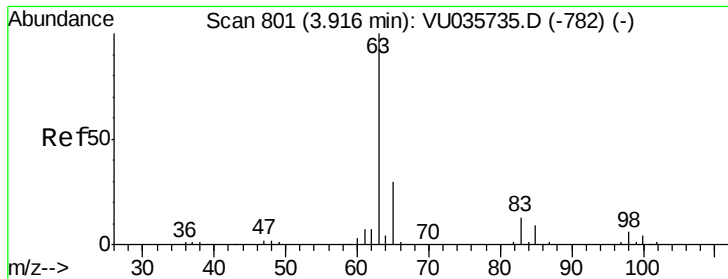


Abundance Ion 73.10 (72.80 to 73.80): VU035735.D (-629) (-)

Ion 43.05 (42.75 to 43.75): VU035735.D (-629) (-)

Ion 57.10 (56.80 to 57.80): VU035735.D (-629) (-)

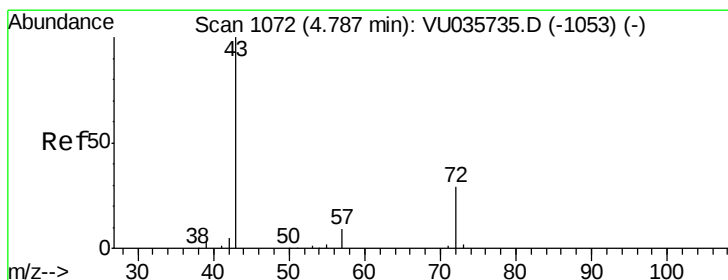
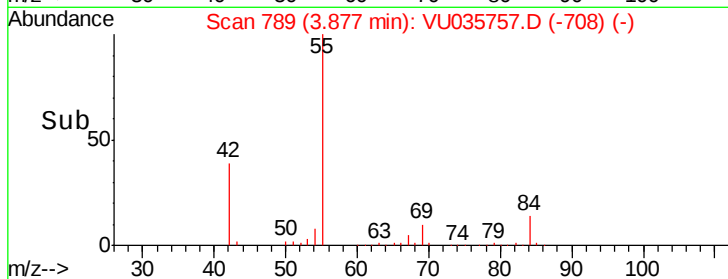
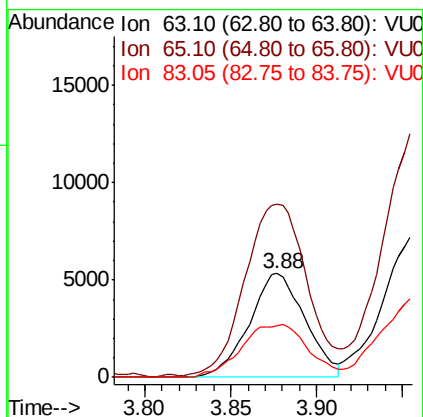
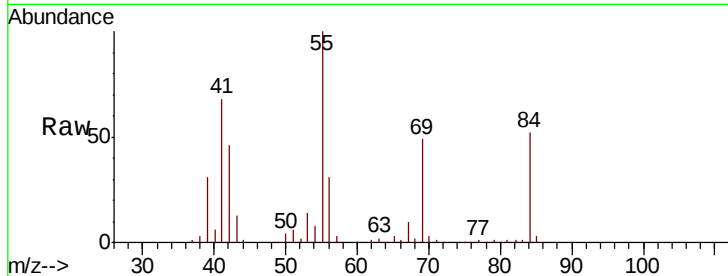




#19
 1,1-Dichloroethane
 Concen: 0.286 ug/L
 RT: 3.88 min Scan# 789
 Delta R.T. -0.04 min
 Lab File: VU035757.D
 Acq: 18 Nov 2019 20:52

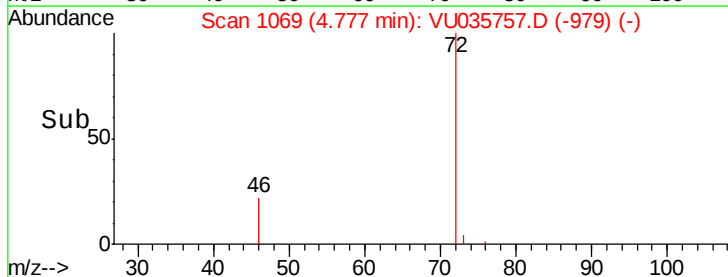
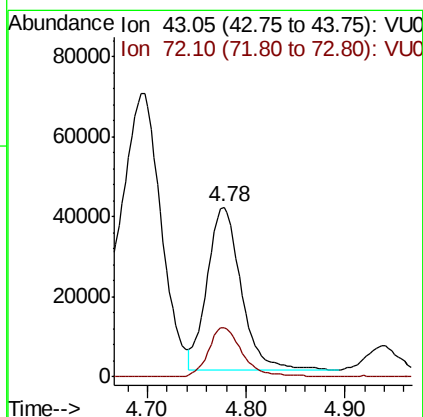
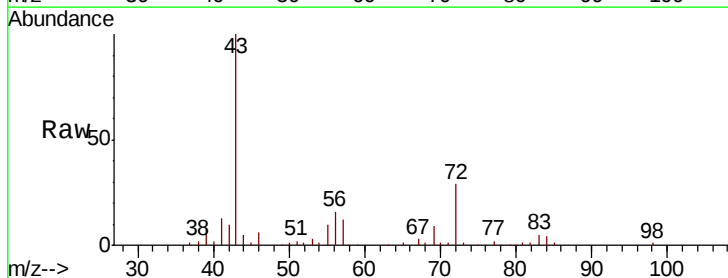
Instrument :
 MSVOA_U
 ClientSampled :

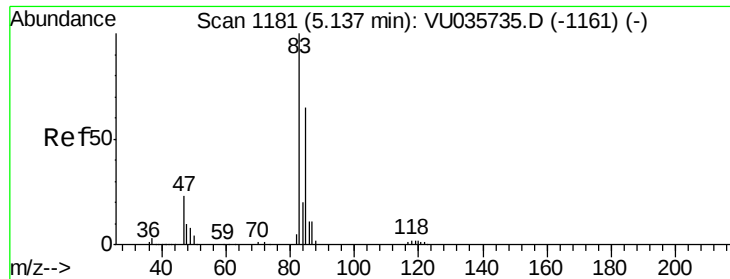
Tot Ion: 63 Resp: 12085
 Ion Ratio Lower Upper
 63 100
 65 167.0 22.0 40.8#
 83 49.7 9.3 17.3#



#21
 2-Butanone
 Concen: 15.909 ug/L
 RT: 4.78 min Scan# 1069
 Delta R.T. -0.01 min
 Lab File: VU035757.D
 Acq: 18 Nov 2019 20:52

Tgt Ion: 43 Resp: 97117
 Ion Ratio Lower Upper
 43 100
 72 30.6 14.3 42.9





#25

Chloroform

Concen: 3.795 ug/L

RT: 5.17 min Scan# 1191

Delta R.T. 0.03 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

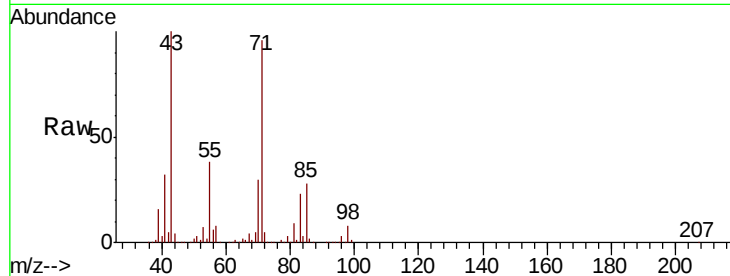
Instrument :
MSVOA_U
ClientSampled :

Tot Ion: 83 Resp: 174110

Ion Ratio Lower Upper

83 100

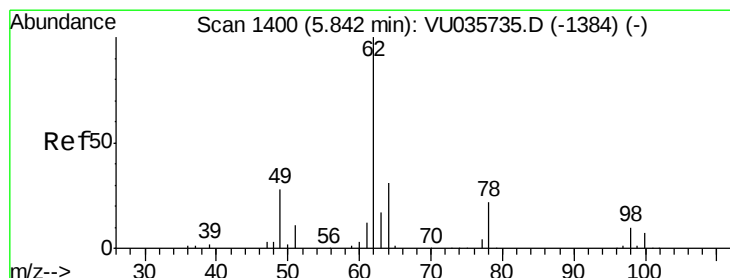
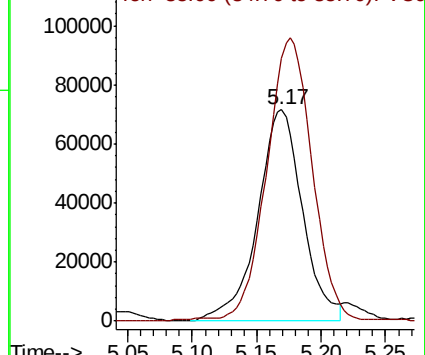
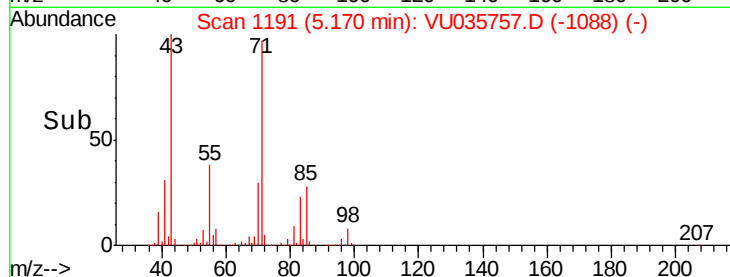
85 124.1 45.4 84.2#



Abundance Ion 83.05 (82.75 to 83.75): VU035735.D (-1161) (-)

Ion 85.00 (84.70 to 85.70): VU035735.D (-1161) (-)

Time-->



#27

1,2-Dichloroethane

Concen: 0.284 ug/L

RT: 5.82 min Scan# 1393

Delta R.T. -0.02 min

Lab File: VU035757.D

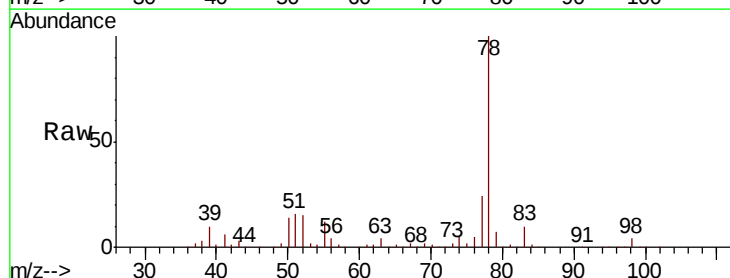
Acq: 18 Nov 2019 20:52

Tgt Ion: 62 Resp: 7263

Ion Ratio Lower Upper

62 100

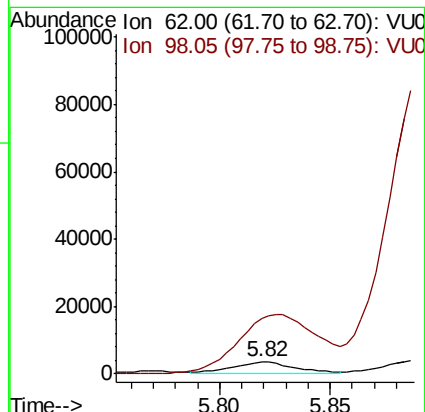
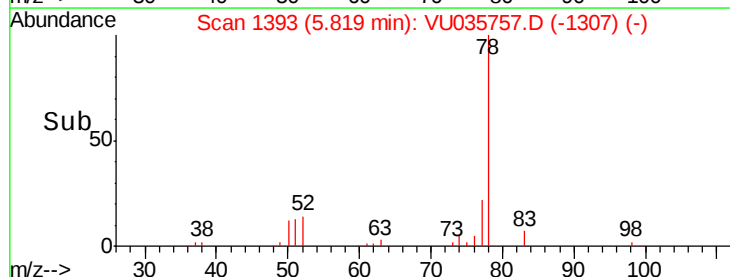
98 454.9 8.0 12.0#

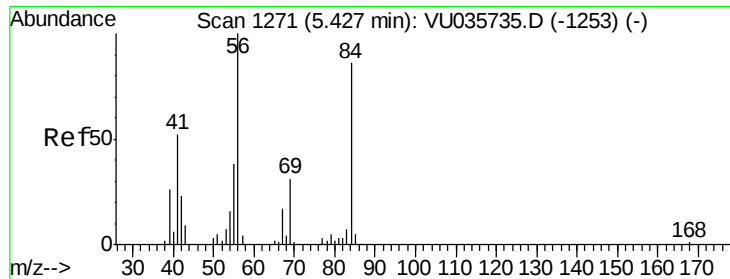


Abundance Ion 62.00 (61.70 to 62.70): VU035735.D (-1384) (-)

Ion 98.05 (97.75 to 98.75): VU035735.D (-1384) (-)

Time-->

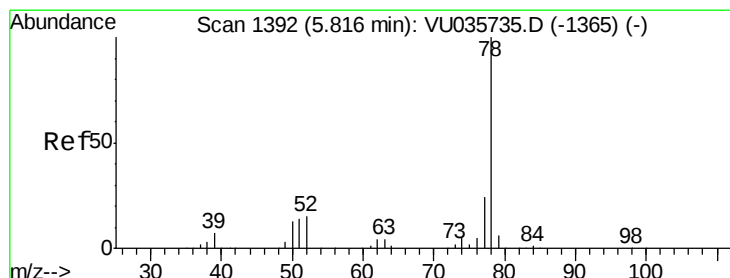
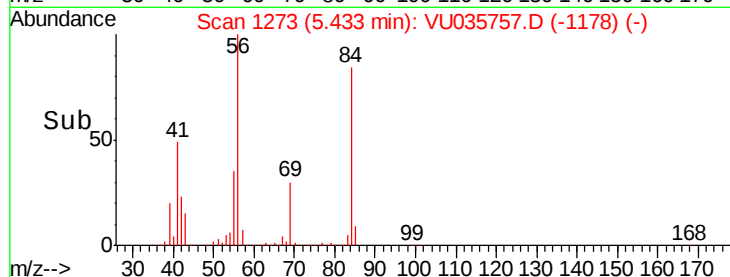
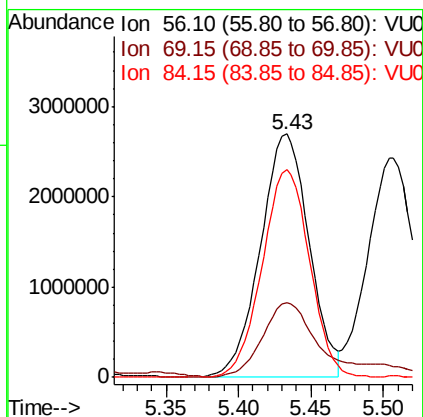
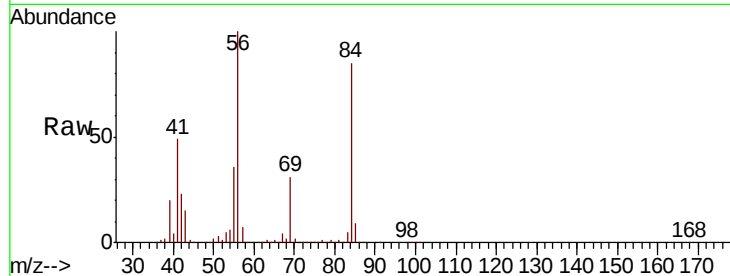




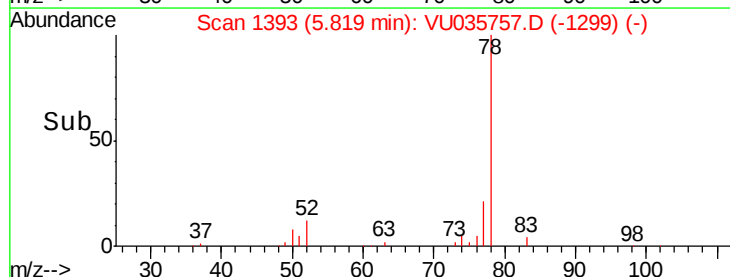
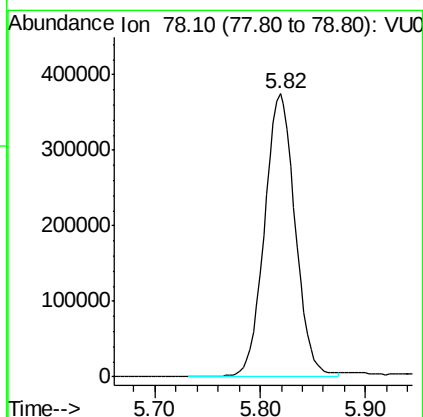
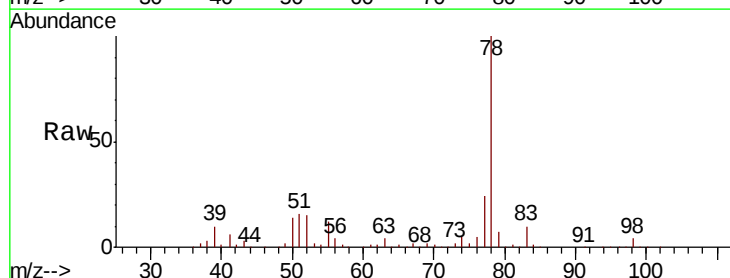
#30
Cyclohexane
Concen: 178.331 ug/L
RT: 5.43 min Scan# 1273
Delta R.T. 0.01 min
Lab File: VU035757.D
Acq: 18 Nov 2019 20:52

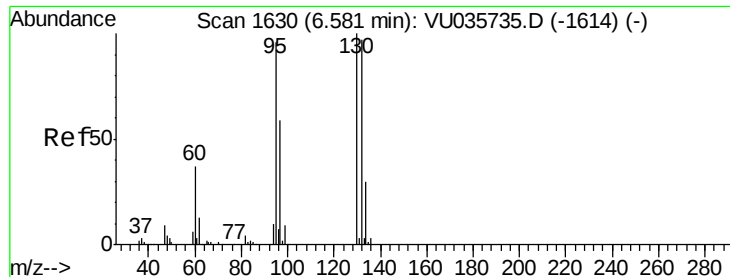
Instrument :
MSVOA_U
ClientSampleId :

Tot Ion: 56 Resp: 6259208
Ion Ratio Lower Upper
56 100
69 39.7 24.6 37.0#
84 83.8 69.7 104.5



#33
Benzene
Concen: 8.059 ug/L
RT: 5.82 min Scan# 1393
Delta R.T. 0.00 min
Lab File: VU035757.D
Acq: 18 Nov 2019 20:52
Tgt Ion: 78 Resp: 756335





#34

Trichloroethene

Concen: 1.746 ug/L

RT: 6.61 min Scan# 1640

Delta R.T. 0.03 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

ClientSampleId :

Tot Ion: 95 Resp: 41933

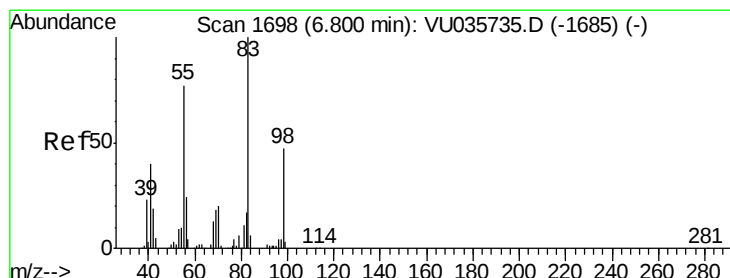
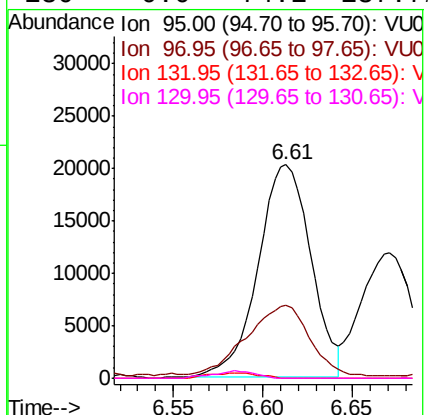
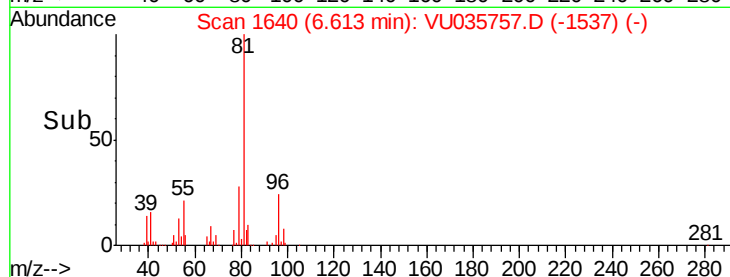
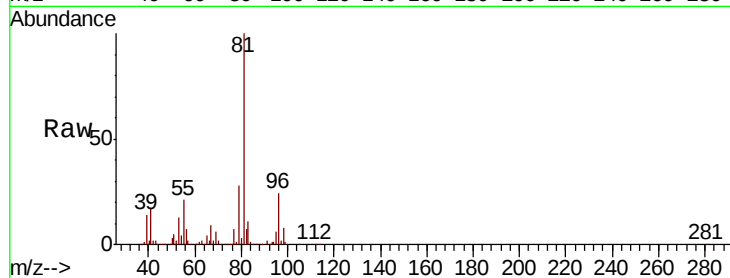
Ion Ratio Lower Upper

95 100

97 34.4 44.5 82.7#

132 0.0 69.9 129.7#

130 0.0 74.1 137.7#



#35

Methylcyclohexane

Concen: 75.579 ug/L

RT: 6.80 min Scan# 1698

Delta R.T. 0.00 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

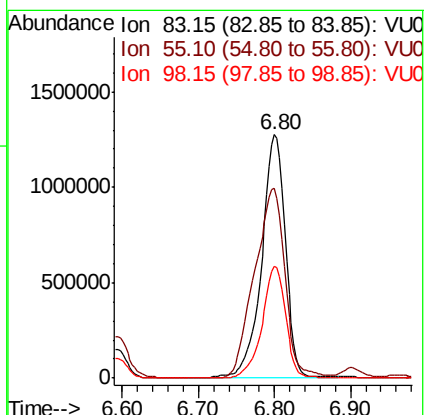
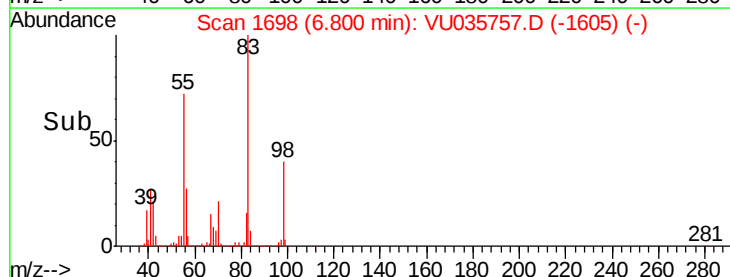
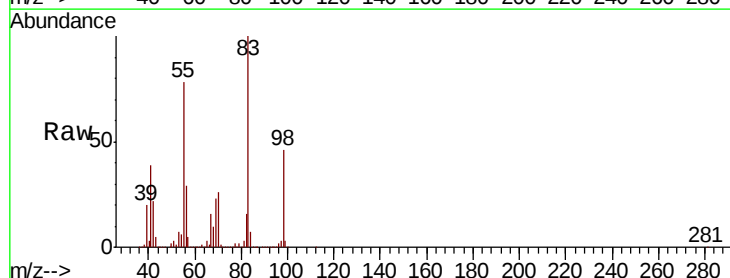
Tgt Ion: 83 Resp: 2765469

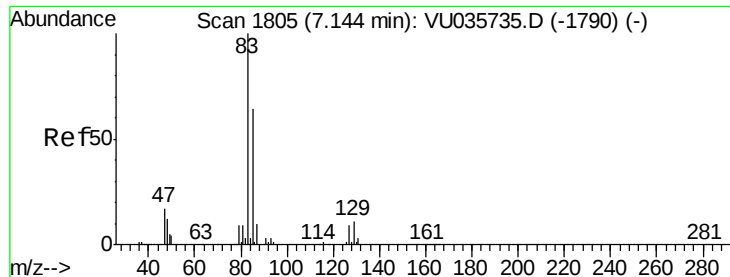
Ion Ratio Lower Upper

83 100

55 99.5 62.6 93.8#

98 45.2 37.2 55.8





#38

Bromodichloromethane

Concen: 0.595 ug/L

RT: 7.16 min Scan# 1810

Delta R.T. 0.02 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

ClientSampled :

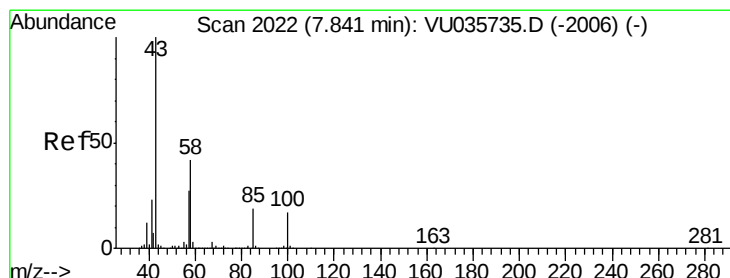
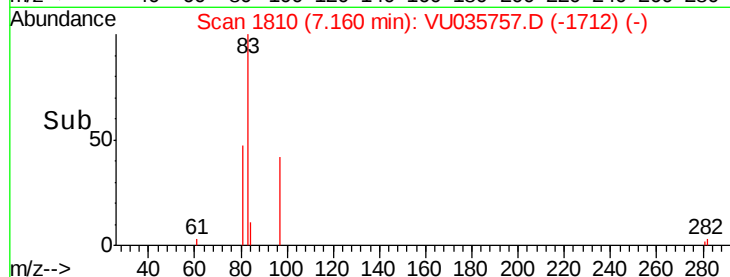
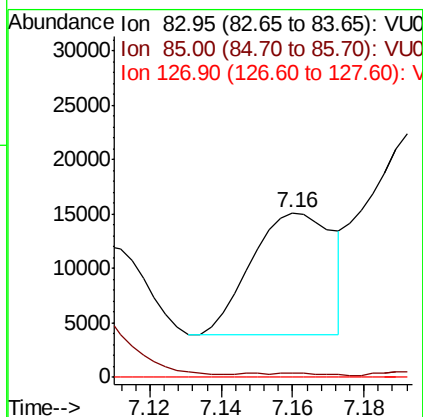
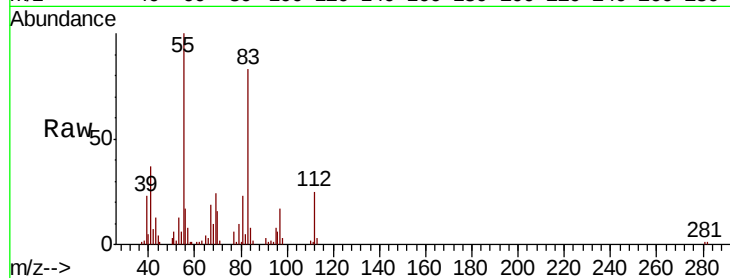
Tot Ion: 83 Resp: 17788

Ion Ratio Lower Upper

83 100

85 2.7 44.7 82.9#

127 0.0 7.1 10.7#



#40

4-Methyl-2-pentanone

Concen: 5.388 ug/L

RT: 7.87 min Scan# 2031

Delta R.T. 0.03 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

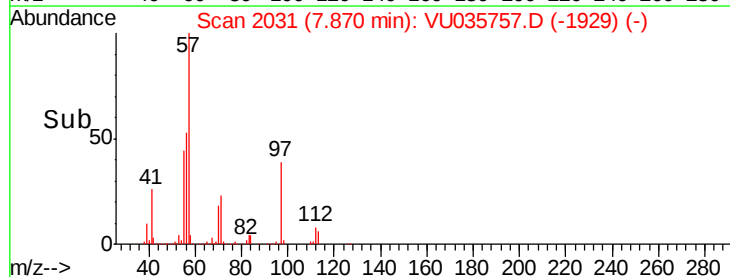
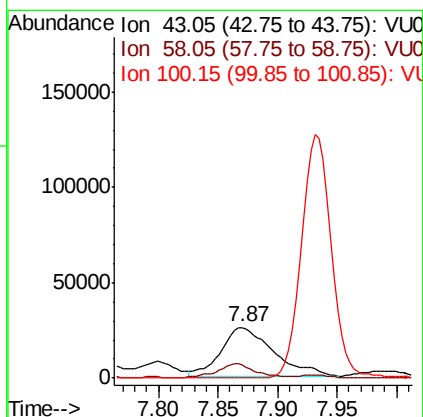
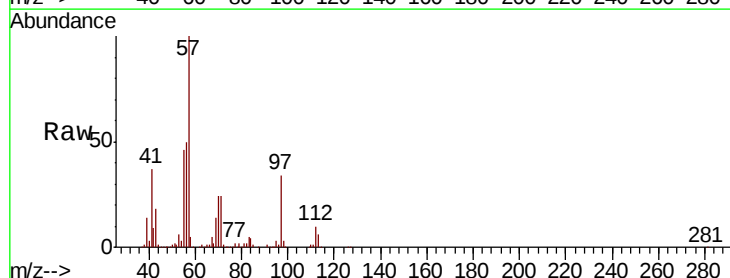
Tgt Ion: 43 Resp: 76621

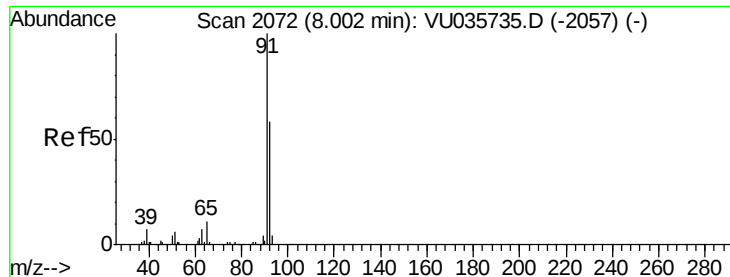
Ion Ratio Lower Upper

43 100

58 21.3 33.4 50.2#

100 0.0 12.7 19.1#





#42

Toluene

Concen: 1.579 ug/L

RT: 8.00 min Scan# 2072

Delta R.T. 0.00 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

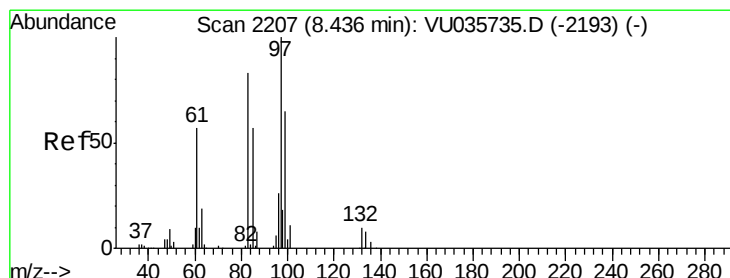
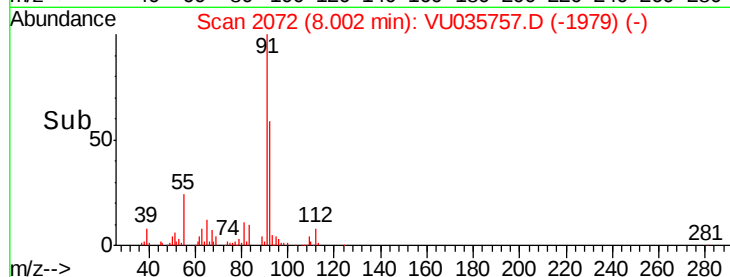
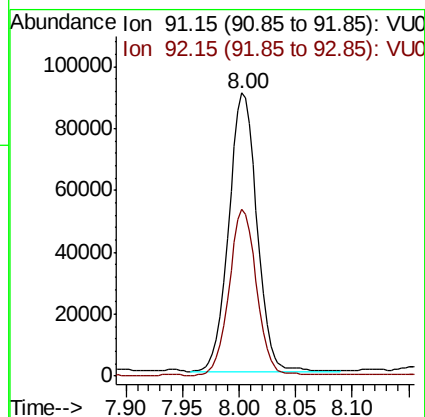
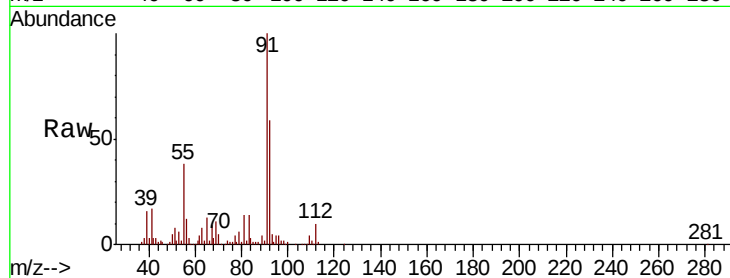
Instrument :
MSVOA_U
ClientSampled :

Tot Ion: 91 Resp: 155951

Ion Ratio Lower Upper

91 100

92 59.0 40.5 75.3



#45

1,1,2-Trichloroethane

Concen: 26.760 ug/L

RT: 8.40 min Scan# 2196

Delta R.T. -0.04 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Tgt Ion: 97 Resp: 473915

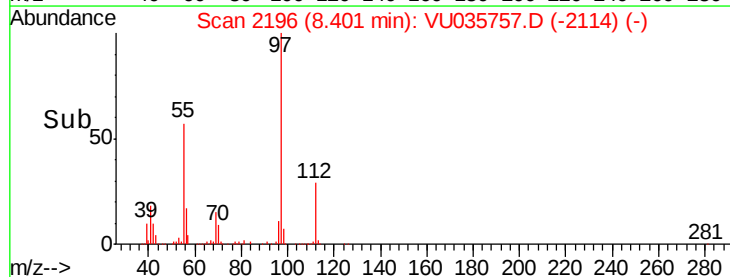
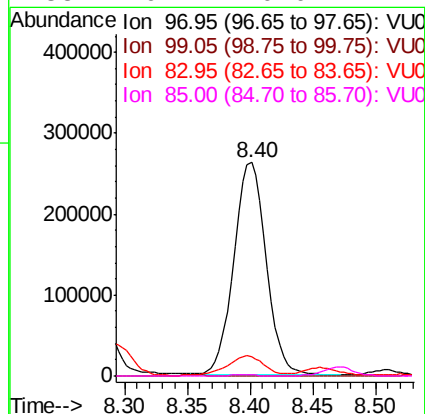
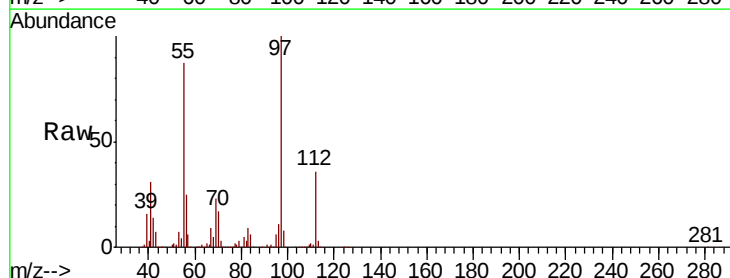
Ion Ratio Lower Upper

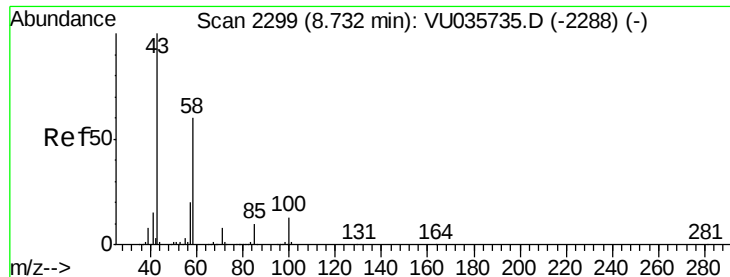
97 100

99 0.2 43.8 81.4#

83 9.0 61.6 114.4#

85 0.4 40.0 74.4#

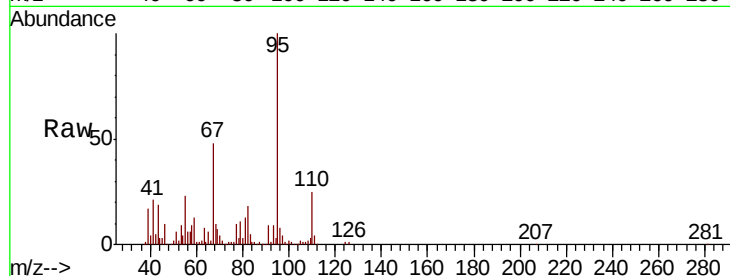




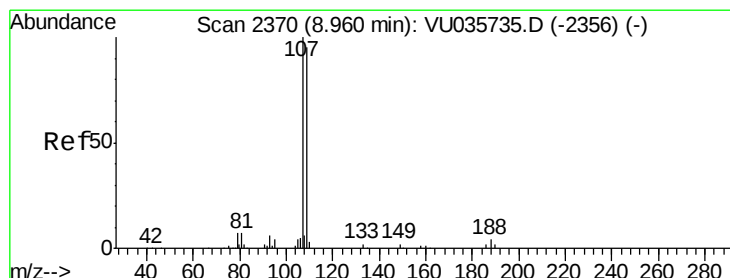
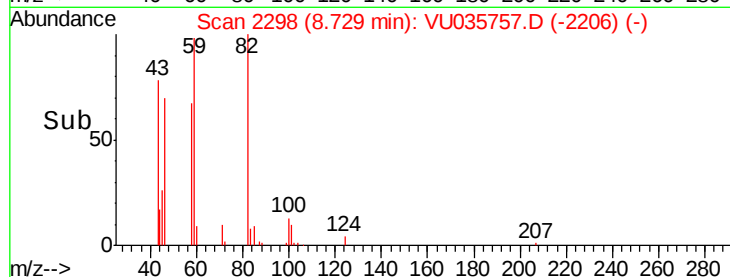
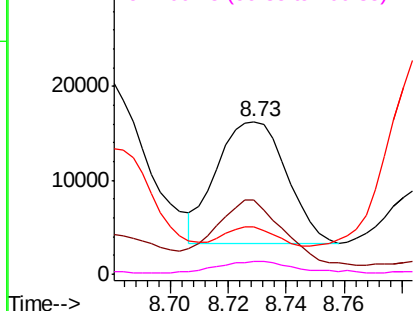
#48
2-Hexanone
Concen: 2.131 ug/L
RT: 8.73 min Scan# 2298
Delta R.T. -0.00 min
Lab File: VU035757.D
Acq: 18 Nov 2019 20:52

Instrument :
MSVOA_U
ClientSampleId :

Tot Ion: 43 Resp: 21535
Ion Ratio Lower Upper
43 100
58 64.6 44.1 66.1
57 11.3 15.1 22.7#
100 13.4 9.4 14.2

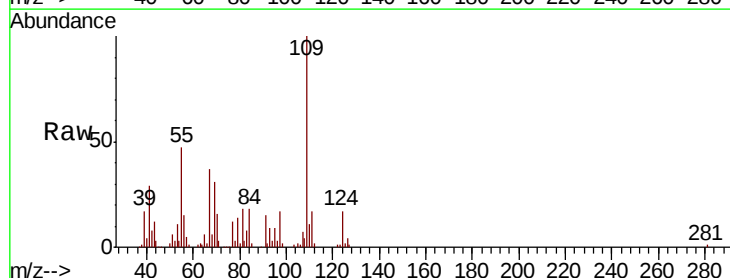


Abundance Ion 43.05 (42.75 to 43.75): VU0
Ion 58.05 (57.75 to 58.75): VU0
Ion 57.20 (56.90 to 57.90): VU0
Ion 100.15 (99.85 to 100.85): VU0

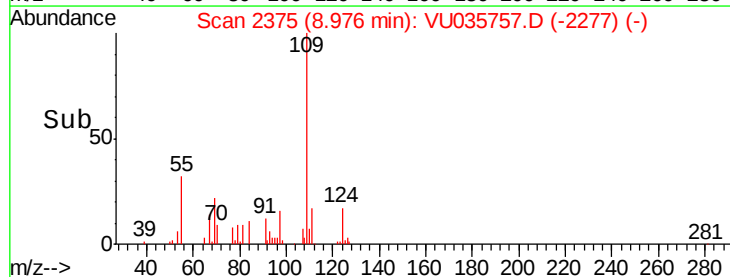
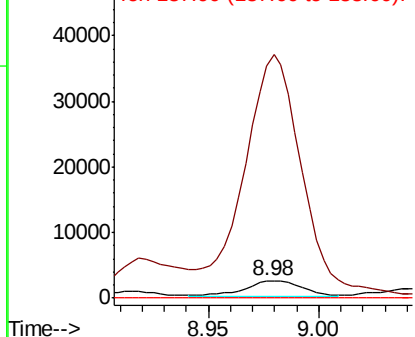


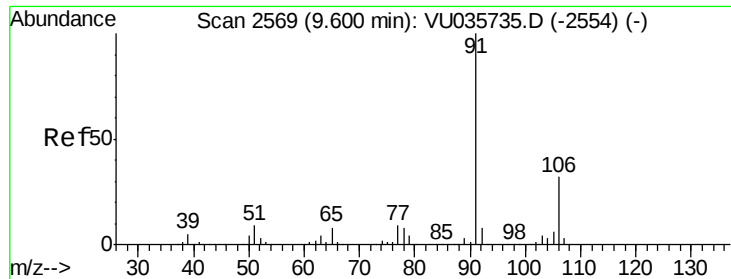
#50
1,2-Dibromoethane
Concen: 0.241 ug/L
RT: 8.98 min Scan# 2375
Delta R.T. 0.02 min
Lab File: VU035757.D
Acq: 18 Nov 2019 20:52

Tgt Ion:107 Resp: 4051
Ion Ratio Lower Upper
107 100
109 1347.0 66.5 123.5#
188 0.0 3.1 4.7#



Abundance Ion 106.95 (106.65 to 107.65): V
Ion 109.00 (108.70 to 109.70): V
Ion 187.90 (187.60 to 188.60): V





#52

Ethylbenzene

Concen: 66.306 ug/L

RT: 9.60 min Scan# 2569

Delta R.T. 0.00 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

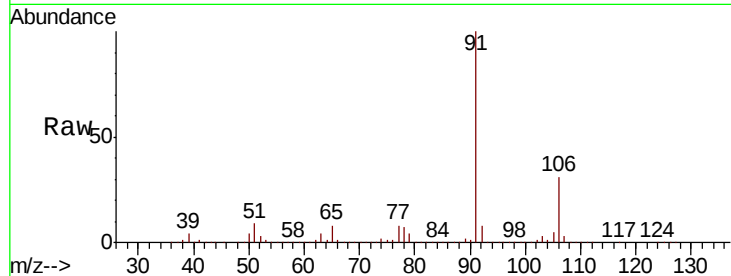
ClientSampleId :

Tot Ion: 91 Resp: 6890353

Ion Ratio Lower Upper

91 100

106 31.4 22.4 41.6



Abundance Ion 91.15 (90.85 to 91.85): VU035735.D (-2554) (-)

Ion 106.15 (105.85 to 106.85): VU035735.D (-2554) (-)

8000000

6000000

4000000

2000000

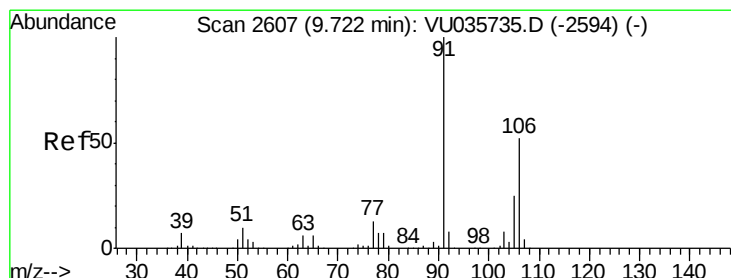
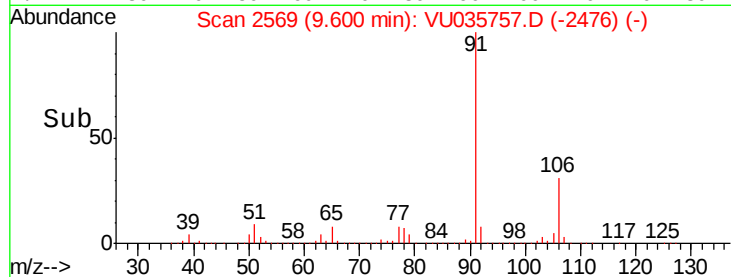
0

9.50

9.60

9.70

Time-->



#53

m,p-Xylene

Concen: 158.551 ug/L

RT: 9.73 min Scan# 2608

Delta R.T. 0.00 min

Lab File: VU035757.D

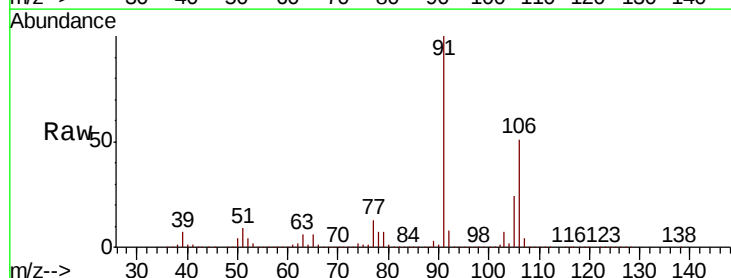
Acq: 18 Nov 2019 20:52

Tgt Ion: 106 Resp: 6238793

Ion Ratio Lower Upper

106 100

91 194.6 139.4 259.0



Abundance Ion 106.15 (105.85 to 106.85): VU035735.D (-2594) (-)

Ion 91.15 (90.85 to 91.85): VU035735.D (-2594) (-)

8000000

6000000

4000000

2000000

0

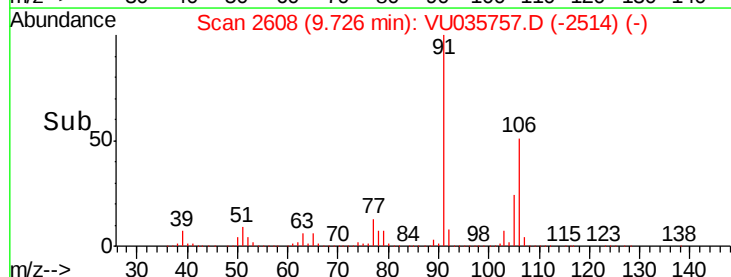
9.60

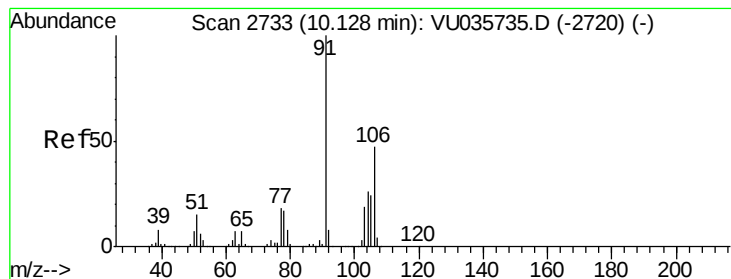
9.70

9.80

9.90

Time-->





#54

o-Xylene

Concen: 17.094 ug/L

RT: 10.13 min Scan# 2733

Delta R.T. 0.00 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

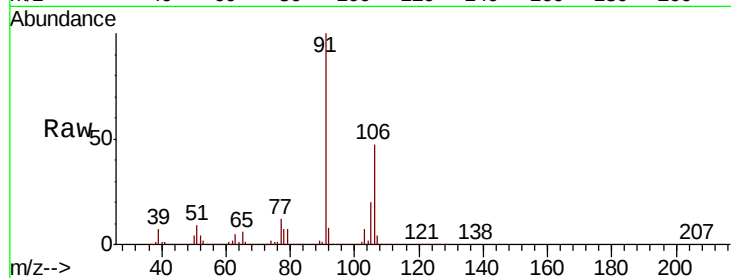
ClientSampleId :

Tot Ion:106 Resp: 650063

Ion Ratio Lower Upper

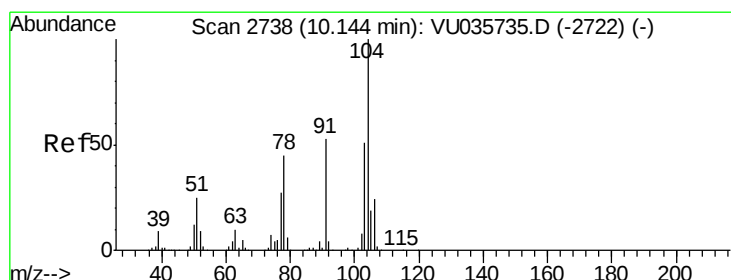
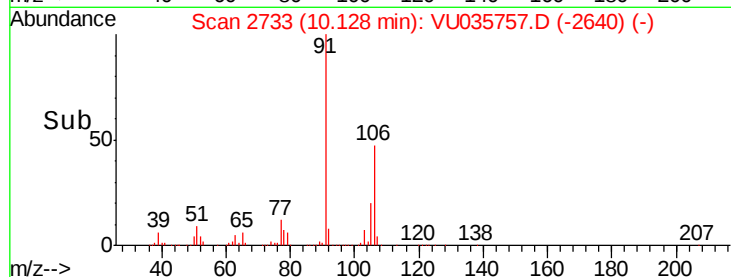
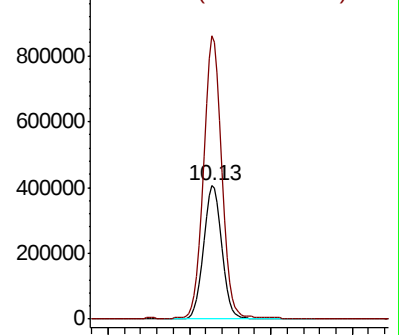
106 100

91 212.2 147.7 274.3



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#55

Styrene

Concen: 0.551 ug/L

RT: 10.13 min Scan# 2733

Delta R.T. -0.02 min

Lab File: VU035757.D

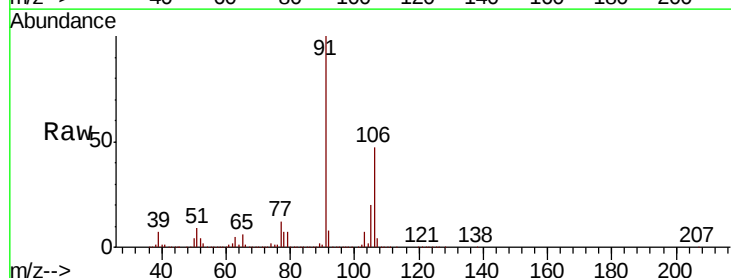
Acq: 18 Nov 2019 20:52

Tgt Ion:104 Resp: 34654

Ion Ratio Lower Upper

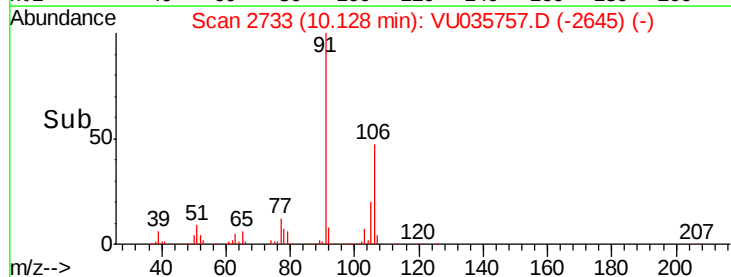
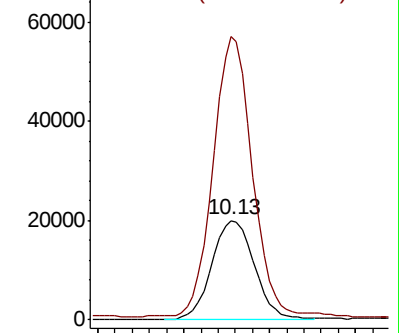
104 100

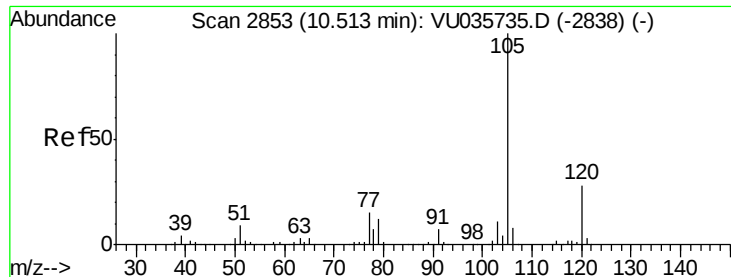
78 285.2 30.8 57.2#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 40.652 ug/L

RT: 10.51 min Scan# 2852

Delta R.T. -0.00 min

Lab File: VU035757.D

Acq: 18 Nov 2019 20:52

Instrument :

MSVOA_U

ClientSampleId :

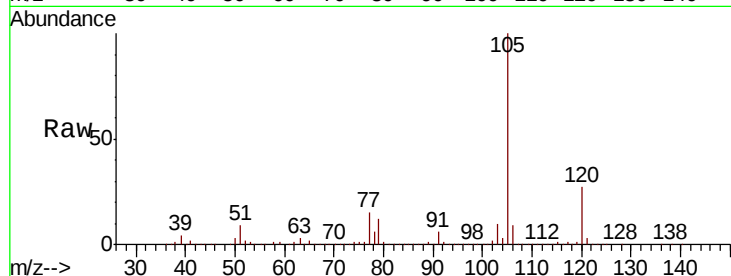
Tot Ion:105 Resp: 4079573

Ion Ratio Lower Upper

105 100

120 27.0 21.4 32.2

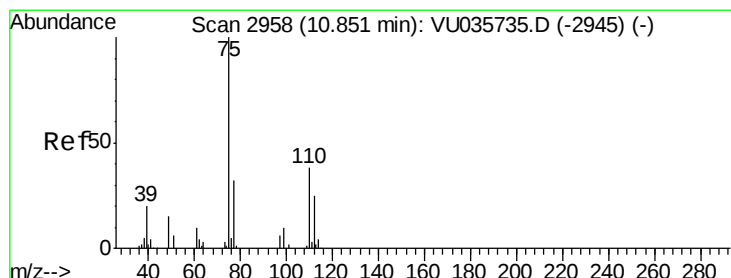
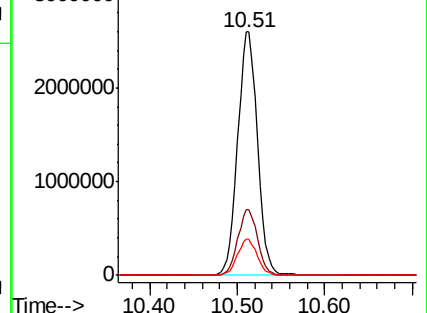
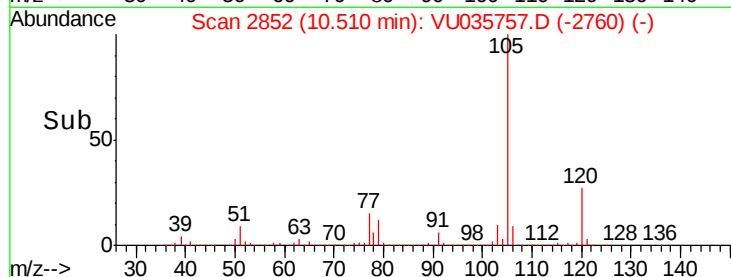
77 14.8 11.8 17.8



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): VU



#59

1,2,3-Trichloropropane

Concen: 6.960 ug/L

RT: 10.93 min Scan# 2984

Delta R.T. 0.08 min

Lab File: VU035757.D

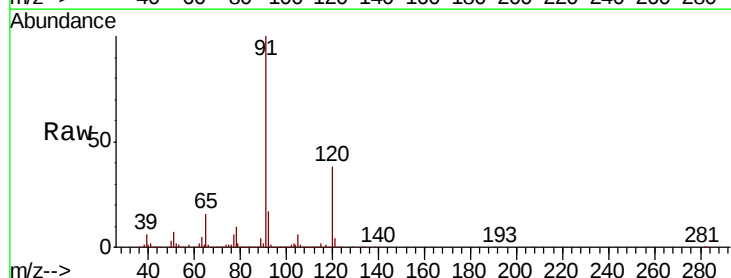
Acq: 18 Nov 2019 20:52

Tgt Ion: 75 Resp: 113824

Ion Ratio Lower Upper

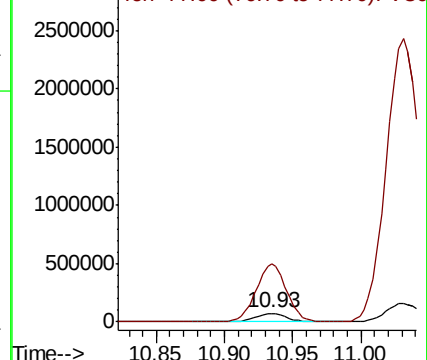
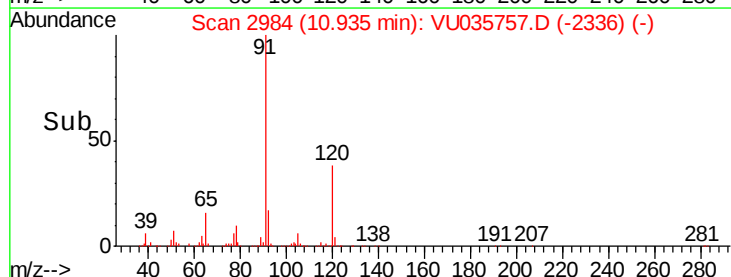
75 100

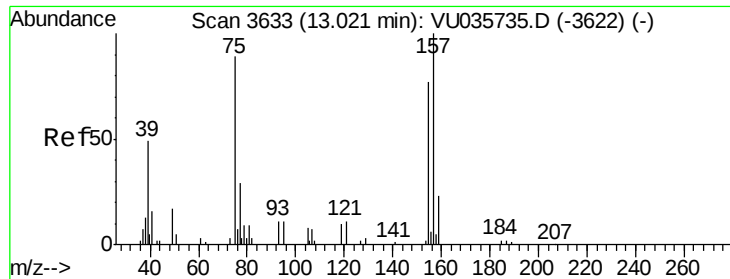
77 669.3 26.8 40.2#



Abundance Ion 75.00 (74.70 to 75.70): VU

Ion 77.00 (76.70 to 77.70): VU

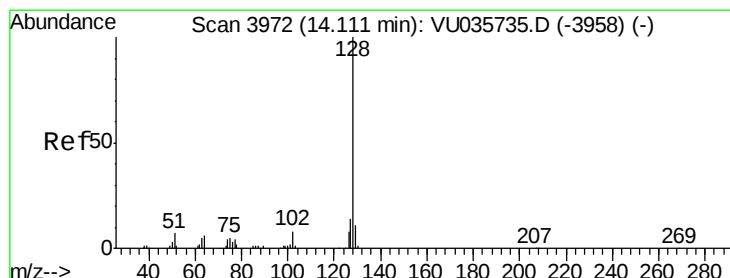
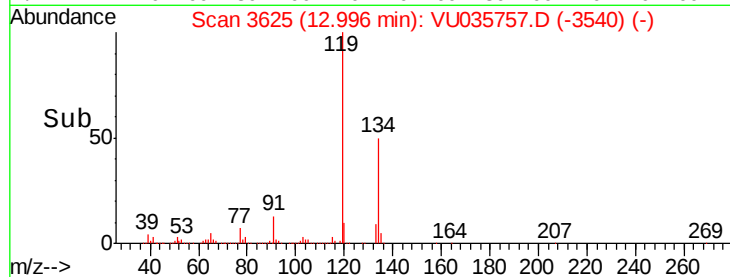
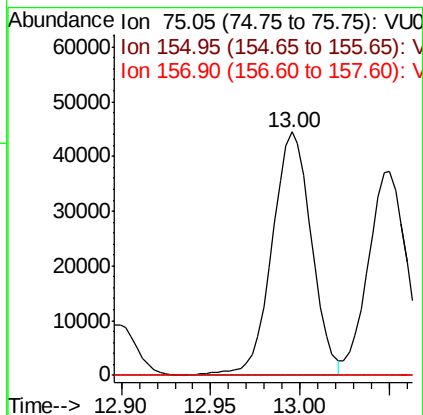
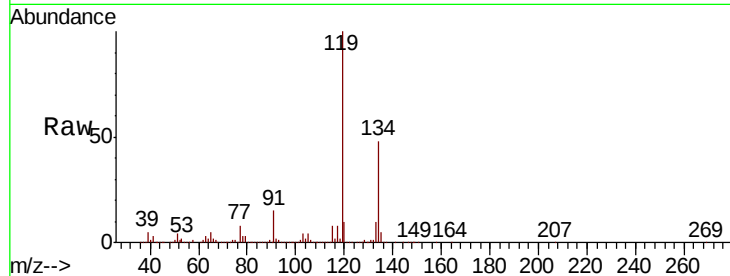




#66
 1,2-Dibromo-3-chloropropane
 Concen: 18.814 ug/L
 RT: 13.00 min Scan# 3625
 Delta R.T. -0.03 min
 Lab File: VU035757.D
 Acq: 18 Nov 2019 20:52

Instrument :
 MSVOA_U
 ClientSampleId :

Tot Ion: 75 Resp: 68193
 Ion Ratio Lower Upper
 75 100
 155 0.0 73.3 109.9#
 157 0.0 102.2 153.4#



#69
 Naphthalene
 Concen: 78.530 ug/L
 RT: 14.11 min Scan# 3971
 Delta R.T. -0.00 min
 Lab File: VU035757.D
 Acq: 18 Nov 2019 20:52

Tgt Ion:128 Resp: 2279365
 Ion Ratio Lower Upper
 128 100
 129 12.5 8.1 12.1#
 127 13.2 11.0 16.4

