

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081418\
 Data File : VU026095.D
 Acq On : 14 Aug 2018 11:51
 Operator : MD/SY
 Sample : J4451-22
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 A4ZL2

Quant Time: Aug 16 09:05:00 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM080918WMA.M
 Quant Title : VOC Analysis
 QLast Update : Tue Aug 14 02:18:47 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.89	114	204395	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.09	117	197052	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.49	152	102619	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.40	65	66032	44.20	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	88.40%
7) Chloroethane-d5	1.66	69	59328	50.09	ug/L	-0.02
Spiked Amount	50.000	Range	70 - 130	Recovery	=	100.18%
11) 1,1-Dichloroethene-d2	2.27	63	102162	35.99	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	71.98%
21) 2-Butanone-d5	4.18	46	122534	98.40	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	98.40%
24) Chloroform-d	4.65	84	170833	53.92	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	107.84%
26) 1,2-Dichloroethane-d4	5.31	65	109719	51.27	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	102.54%
32) Benzene-d6	5.34	84	307743	50.29	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	100.58%
36) 1,2-Dichloropropane-d6	6.33	67	101203	51.11	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.22%
41) Toluene-d8	7.57	98	295889	50.54	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	101.08%
43) trans-1,3-Dichloropropene-	7.85	79	50515	50.64	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	101.28%
47) 2-Hexanone-d5	8.31	63	85900	95.52	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	95.52%
57) 1,1,2,2-Tetrachloroethane-	10.44	84	151392	52.29	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	104.58%
64) 1,2-Dichlorobenzene-d4	11.86	152	126864	50.15	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.30%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	1.20	85	27316	15.34	ug/L	98
3) Chloromethane	1.33	50	77642	48.59	ug/L	98
6) Bromomethane	1.61	94	8751	10.61	ug/L	94
9) Trichlorofluoromethane	1.88	101	87572	39.70	ug/L	98
10) 1,1,2-Trichloro-1,2,2-trif	2.28	101	49789	38.80	ug/L	98
14) Carbon disulfide	2.47	76	148874	38.35	ug/L	99
17) trans-1,2-Dichloroethene	2.98	96	100049	76.09	ug/L	98
18) Methyl tert-butyl Ether	3.00	73	671511	155.41	ug/L	99
25) Chloroform	4.67	83	163382	61.52	ug/L	100
27) 1,2-Dichloroethane	5.41	62	129614	59.09	ug/L	99
30) 1,1,1-Trichloroethane	4.91	97	71904	28.92	ug/L	99
31) Carbon tetrachloride	5.14	117	154484	68.04	ug/L	99
34) Trichloroethene	6.19	95	2734	1.86	ug/L	85
35) Methylcyclohexane	6.42	83	87016	38.87	ug/L	99
39) cis-1,3-Dichloropropene	7.27	75	105564	45.36	ug/L	99
40) 4-Methyl-2-pentanone	7.46	43	225375	106.81	ug/L	100
42) Toluene	7.64	91	453831	76.18	ug/L	100

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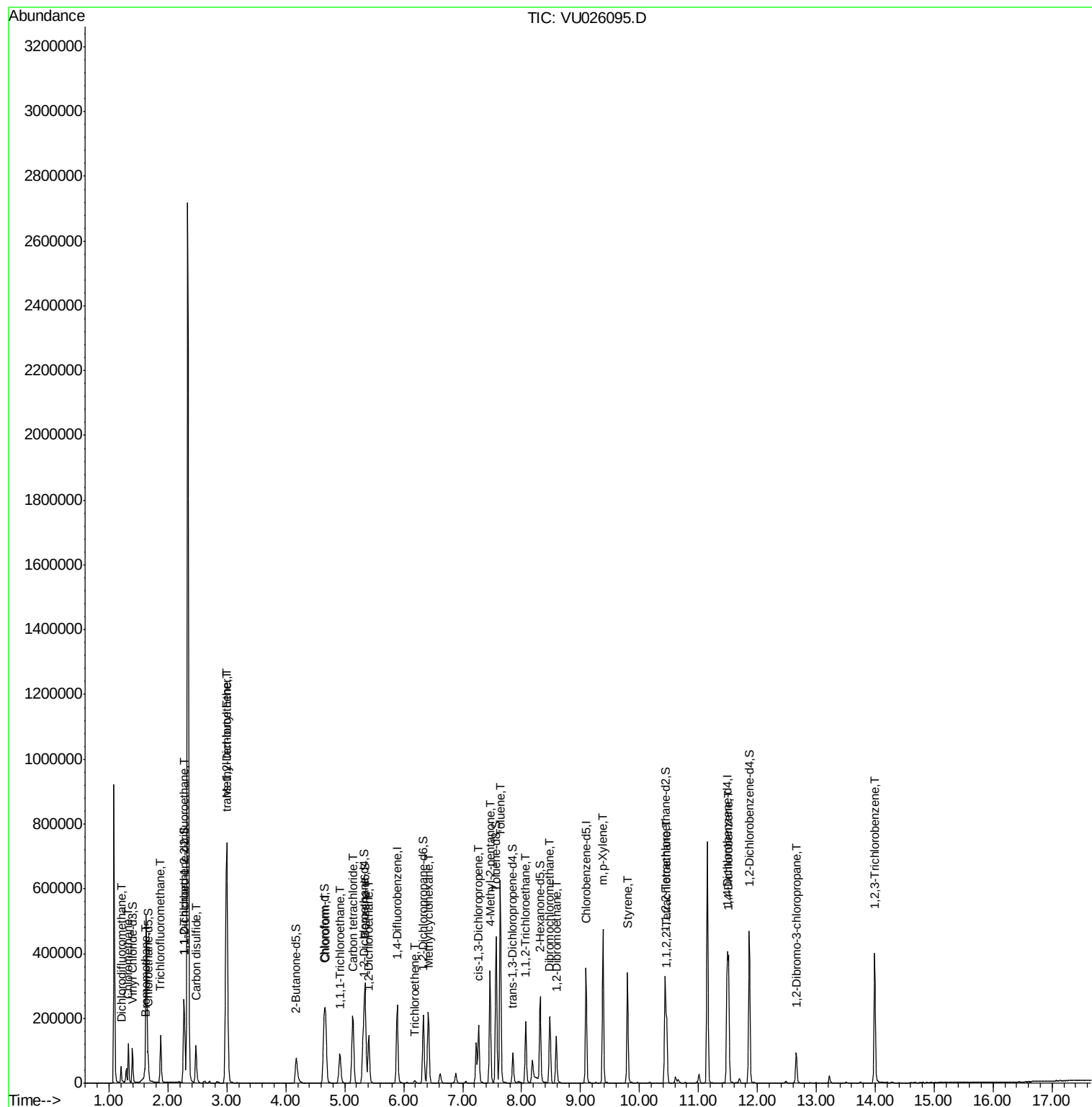
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,1,2-Trichloroethane	8.07	97	58156	39.72	ug/L	96
49) Dibromochloromethane	8.48	129	108144	61.25	ug/L	100
50) 1,2-Dibromoethane	8.59	107	93893	58.88	ug/L	98
53) m,p-Xylene	9.38	106	125093	50.22	ug/L	98
55) Styrene	9.80	104	163110	39.63	ug/L	97
58) 1,1,2,2-Tetrachloroethane	10.46	83	86693	34.84	ug/L	99
63) 1,4-Dichlorobenzene	11.51	146	140646	42.00	ug/L	98
66) 1,2-Dibromo-3-chloropropan	12.66	75	23979	40.18	ug/L	95
70) 1,2,3-Trichlorobenzene	13.99	180	129498	59.67	ug/L	99

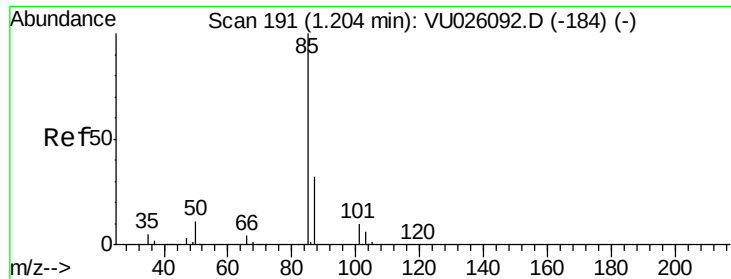
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 15.34 ug/L

RT: 1.20 min Scan# 190

Delta R.T. -0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

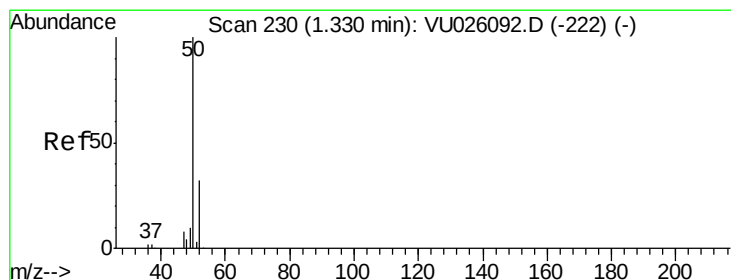
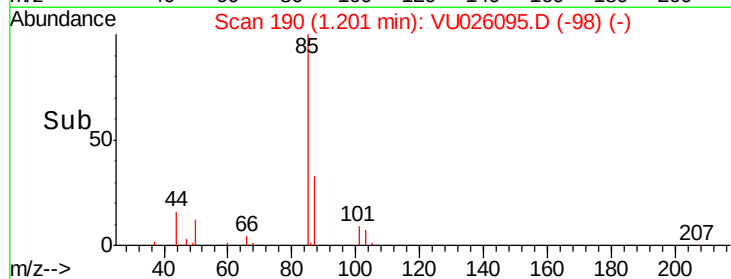
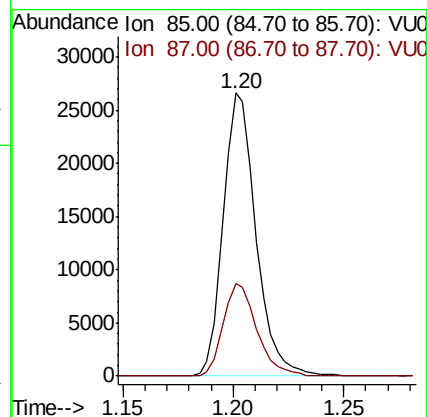
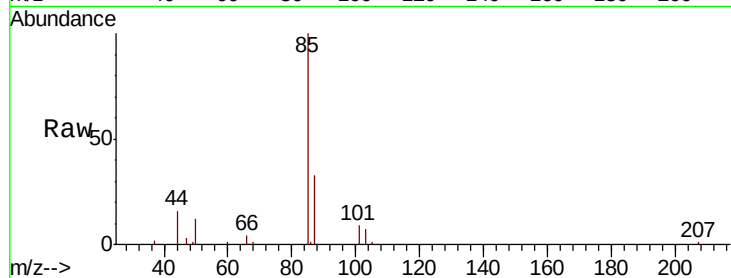
A4ZL2

Tot Ion: 85 Resp: 27316

Ion Ratio Lower Upper

85 100

87 33.5 26.1 39.1



#3

Chloromethane

Concen: 48.59 ug/L

RT: 1.33 min Scan# 229

Delta R.T. -0.00 min

Lab File: VU026095.D

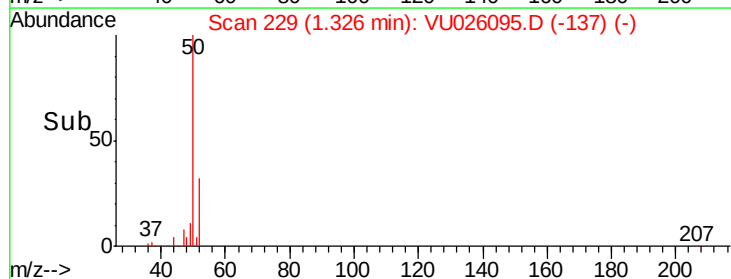
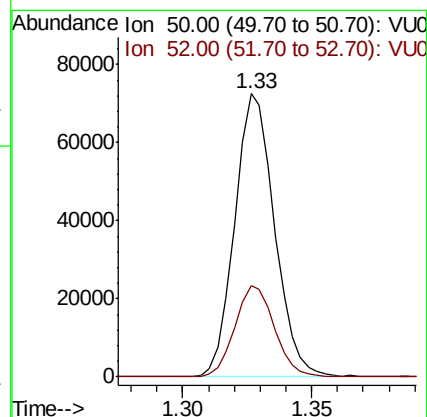
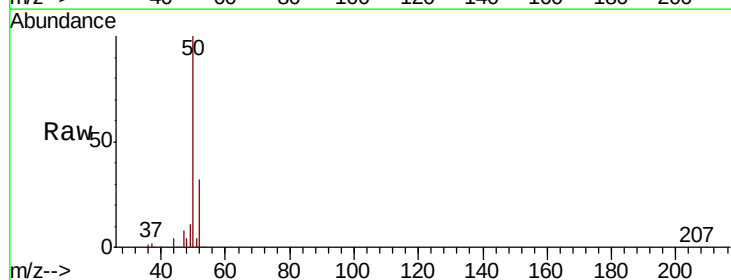
Acq: 14 Aug 2018 11:51

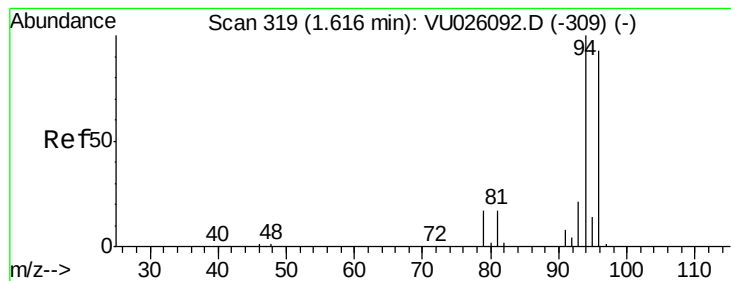
Tgt Ion: 50 Resp: 77642

Ion Ratio Lower Upper

50 100

52 32.1 23.4 43.4





#6

Bromomethane

Concen: 10.61 ug/L

RT: 1.61 min Scan# 316

Delta R.T. -0.02 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

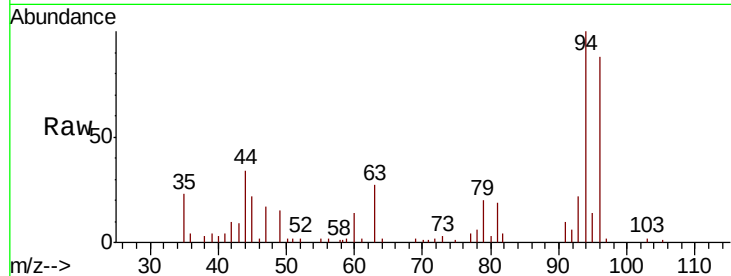
A4ZL2

Tot Ion: 94 Resp: 8751

Ion Ratio Lower Upper

94 100

96 87.7 65.6 121.8



Abundance Ion 94.00 (93.70 to 94.70): VU026095.D (-316) (-)

Ion 96.00 (95.70 to 96.70): VU026095.D (-316) (-)

1.61

8000

6000

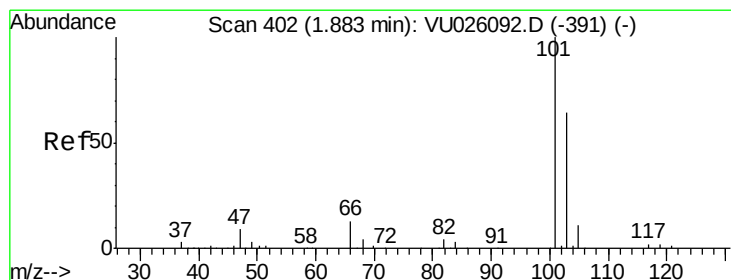
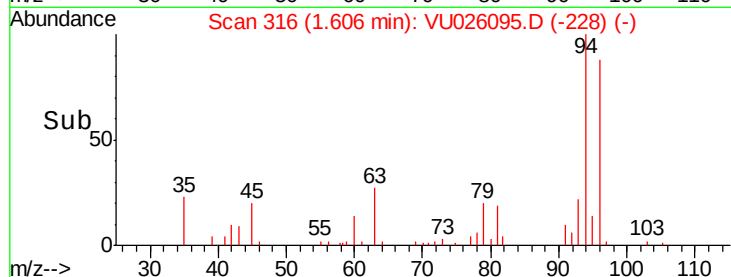
4000

2000

0

1.56 1.58 1.60 1.62 1.64

Time-->



#9

Trichlorofluoromethane

Concen: 39.70 ug/L

RT: 1.88 min Scan# 400

Delta R.T. -0.01 min

Lab File: VU026095.D

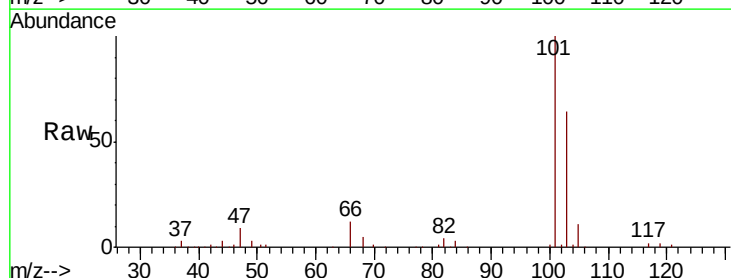
Acq: 14 Aug 2018 11:51

Tgt Ion: 101 Resp: 87572

Ion Ratio Lower Upper

101 100

103 64.4 52.7 79.1



Abundance Ion 101.00 (100.70 to 101.70): VU026095.D (-402) (-)

Ion 103.00 (102.70 to 103.70): VU026095.D (-402) (-)

1.88

60000

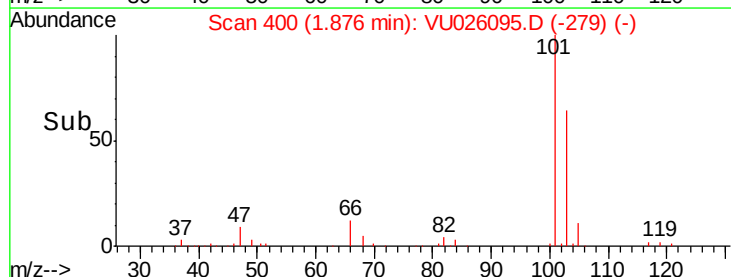
40000

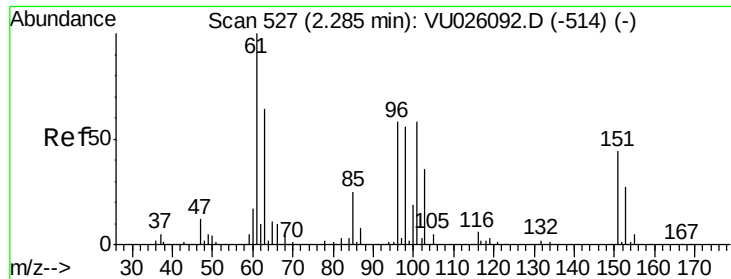
20000

0

1.80 1.85 1.90 1.95

Time-->





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 38.80 ug/L

RT: 2.28 min Scan# 526

Delta R.T. -0.01 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

A4ZL2

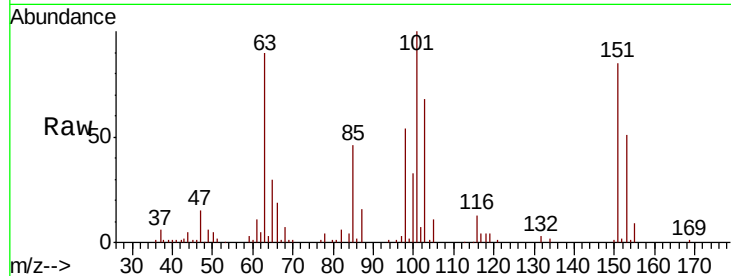
Tot Ion:101 Resp: 49789

Ion Ratio Lower Upper

101 100

85 45.7 36.0 54.0

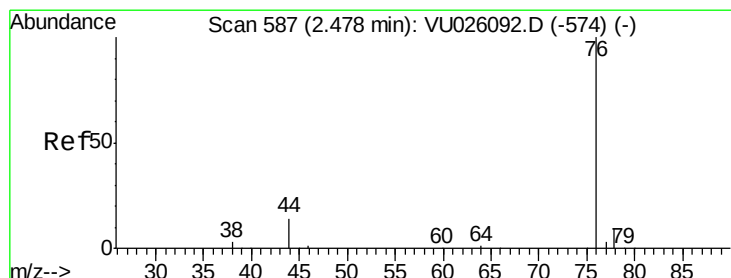
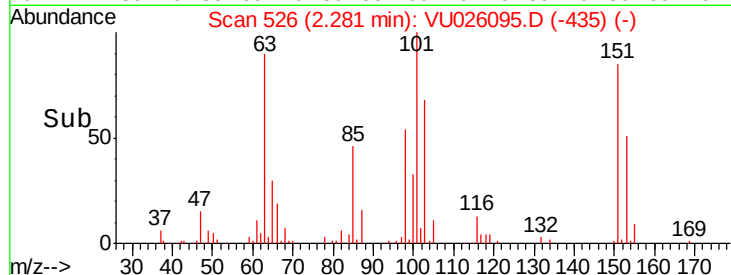
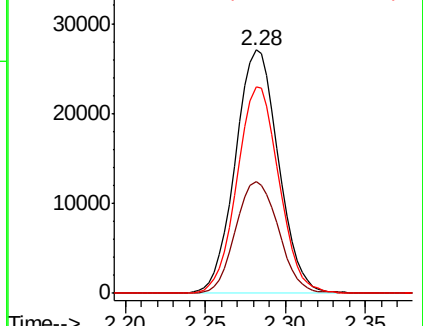
151 82.6 64.2 96.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#14

Carbon disulfide

Concen: 38.35 ug/L

RT: 2.47 min Scan# 585

Delta R.T. -0.01 min

Lab File: VU026095.D

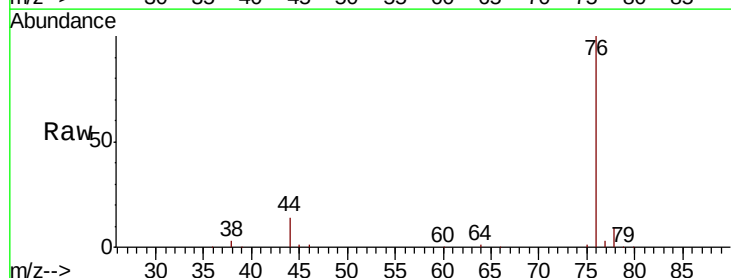
Acq: 14 Aug 2018 11:51

Tgt Ion: 76 Resp: 148874

Ion Ratio Lower Upper

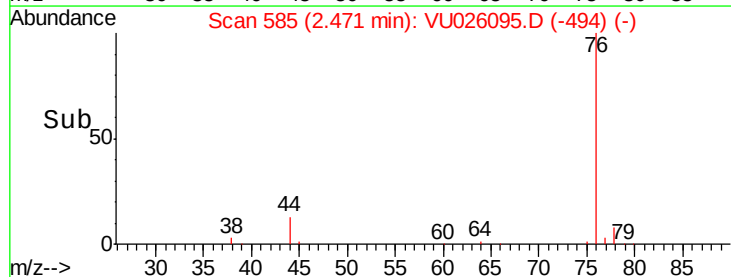
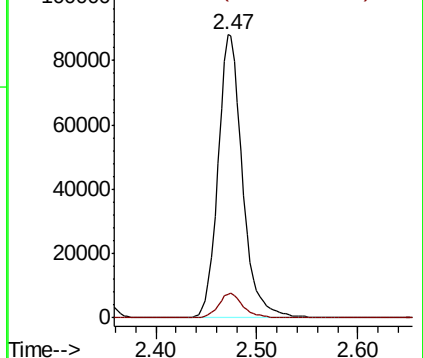
76 100

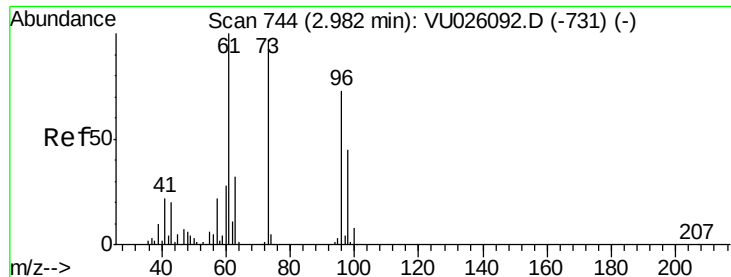
78 8.5 7.2 10.8



Abundance Ion 76.00 (75.70 to 76.70): VU0

Ion 78.00 (77.70 to 78.70): VU0





#17

trans-1,2-Dichloroethene

Concen: 76.09 ug/L

RT: 2.98 min Scan# 743

Delta R.T. -0.01 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

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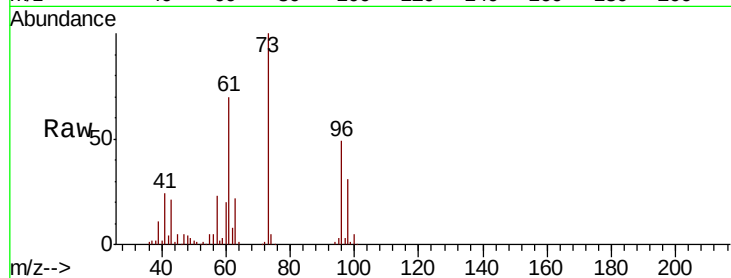
Tot Ion: 96 Resp: 100049

Ion Ratio Lower Upper

96 100

61 144.1 102.8 190.8

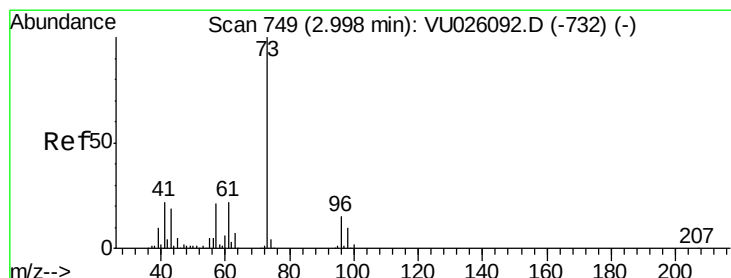
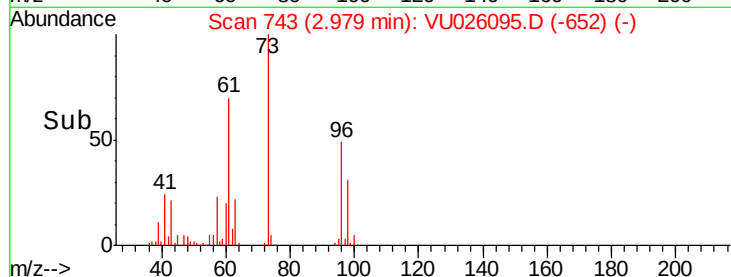
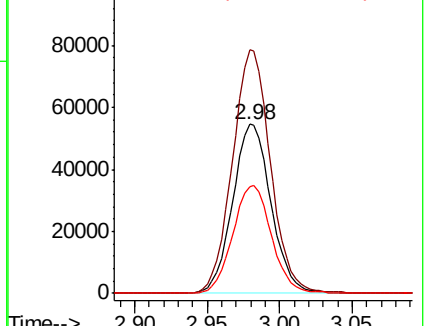
98 63.4 44.7 83.1



Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 98.00 (97.70 to 98.70): VU0



#18

Methyl tert-butyl Ether

Concen: 155.41 ug/L

RT: 3.00 min Scan# 749

Delta R.T. -0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

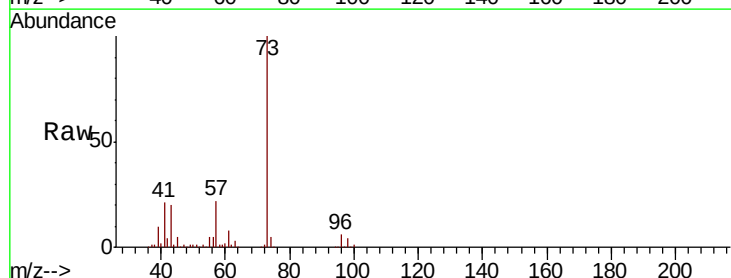
Tgt Ion: 73 Resp: 671511

Ion Ratio Lower Upper

73 100

43 19.8 16.3 24.5

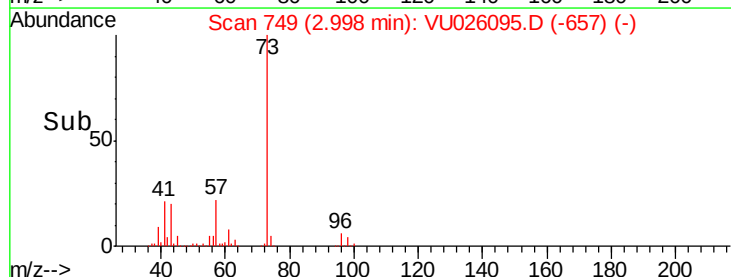
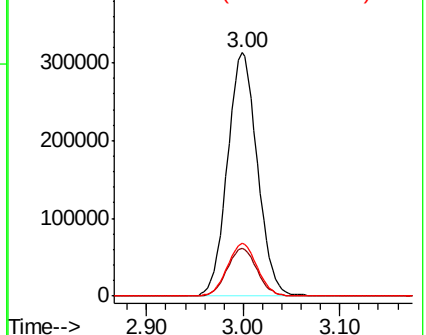
57 21.7 17.1 25.7

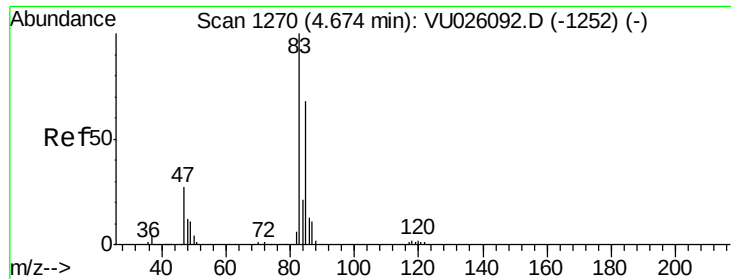


Abundance Ion 73.00 (72.70 to 73.70): VU0

Ion 43.00 (42.70 to 43.70): VU0

Ion 57.00 (56.70 to 57.70): VU0

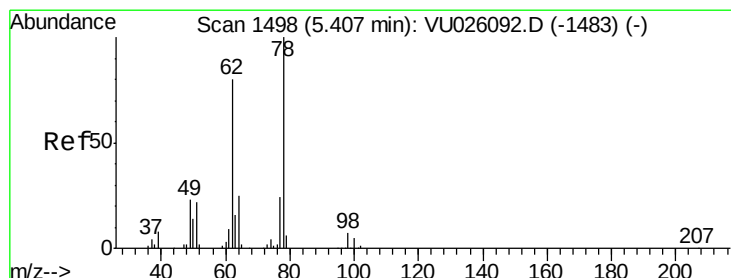
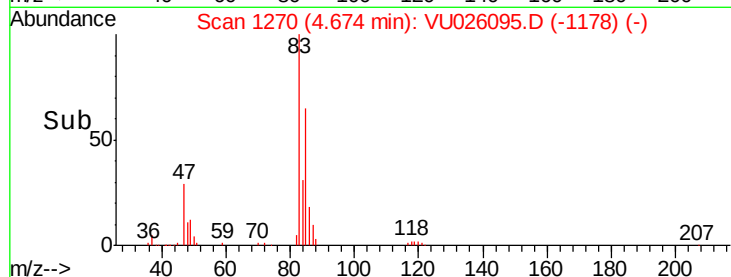
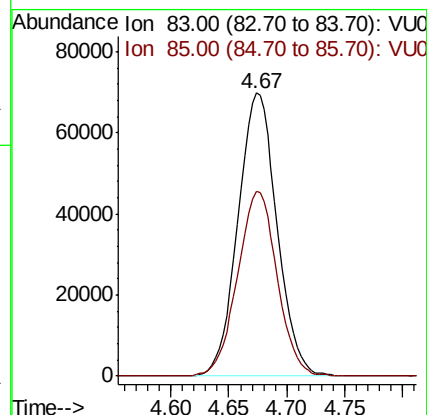
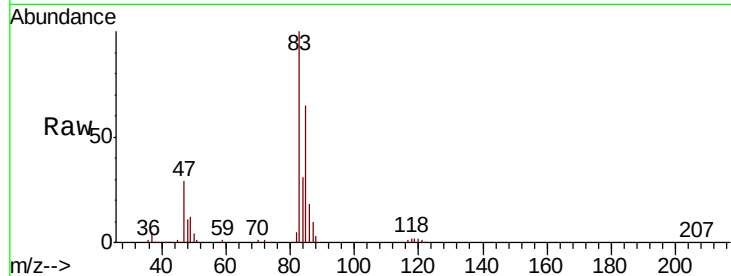




#25
Chloroform
Concen: 61.52 ug/L
RT: 4.67 min Scan# 1270
Delta R.T. -0.00 min
Lab File: VU026095.D
Acq: 14 Aug 2018 11:51

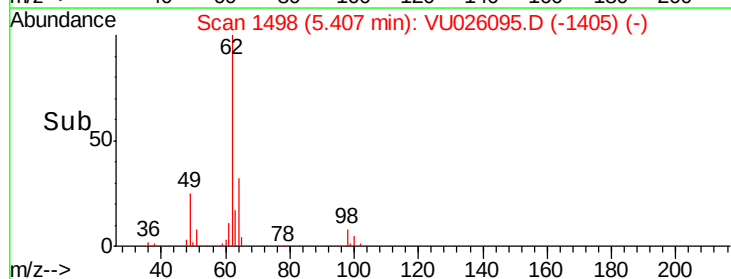
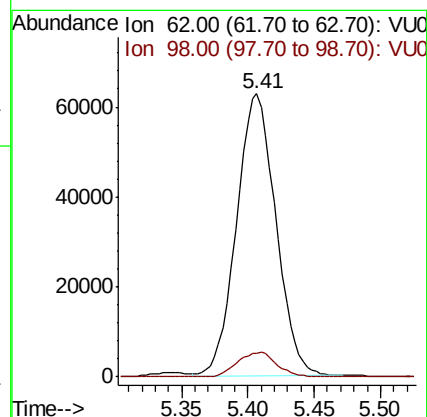
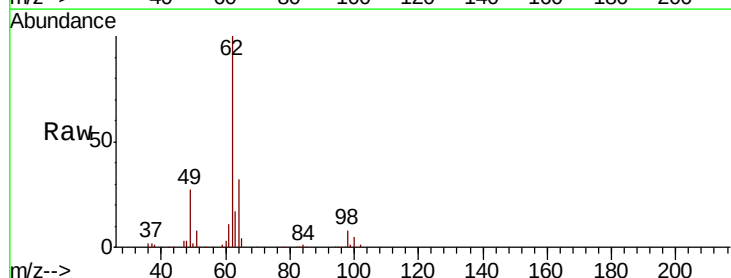
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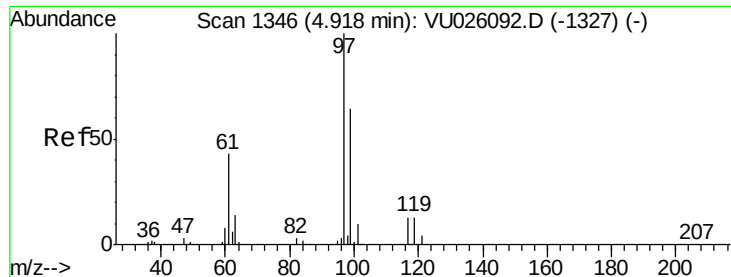
Tot Ion: 83 Resp: 163382
Ion Ratio Lower Upper
83 100
85 65.2 45.9 85.3



#27
1,2-Dichloroethane
Concen: 59.09 ug/L
RT: 5.41 min Scan# 1498
Delta R.T. 0.00 min
Lab File: VU026095.D
Acq: 14 Aug 2018 11:51

Tgt Ion: 62 Resp: 129614
Ion Ratio Lower Upper
62 100
98 8.5 7.0 10.4

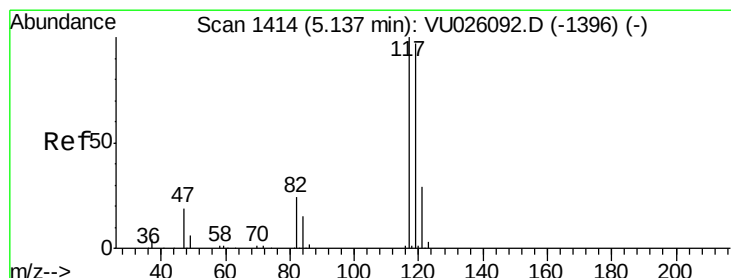
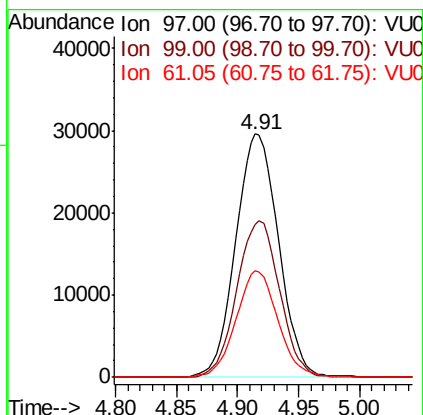
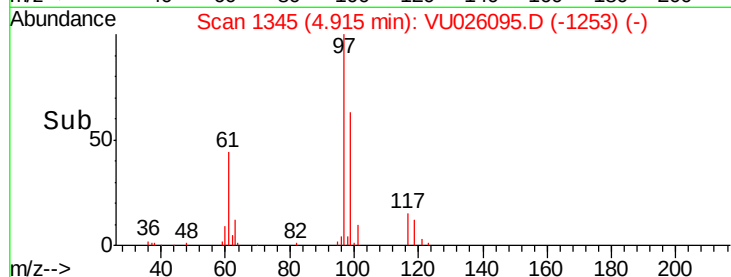
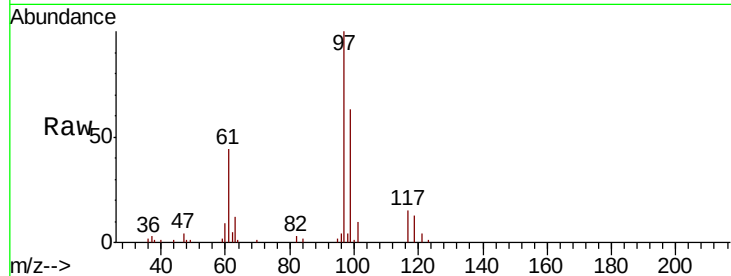




#30
 1,1,1-Trichloroethane
 Concen: 28.92 ug/L
 RT: 4.91 min Scan# 1345
 Delta R.T. -0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

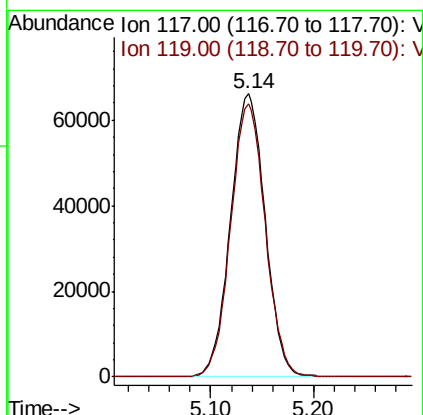
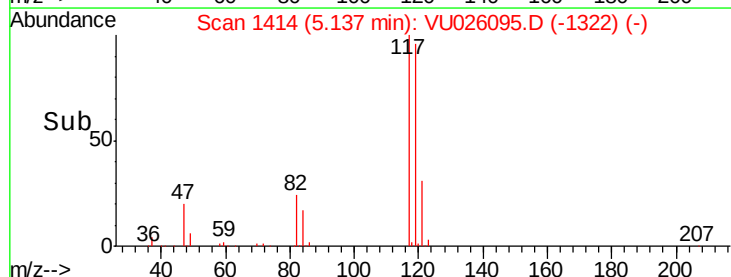
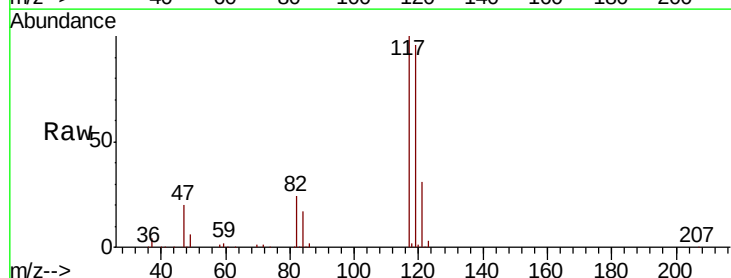
Instrument :
 MSVOA_U
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 A4ZL2

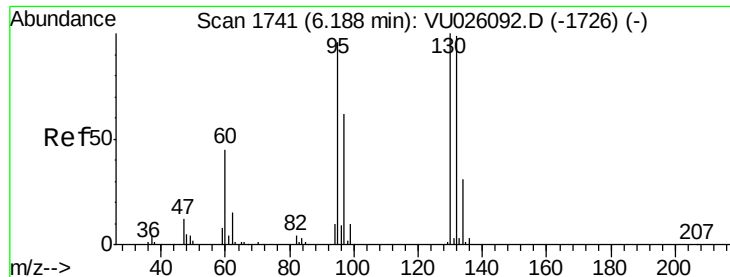
Tot Ion: 97 Resp: 71904
 Ion Ratio Lower Upper
 97 100
 99 64.1 51.8 77.6
 61 42.7 34.7 52.1



#31
 Carbon tetrachloride
 Concen: 68.04 ug/L
 RT: 5.14 min Scan# 1414
 Delta R.T. -0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

Tgt Ion: 117 Resp: 154484
 Ion Ratio Lower Upper
 117 100
 119 96.5 76.3 114.5

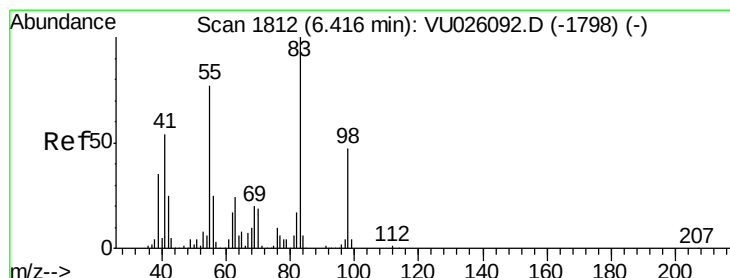
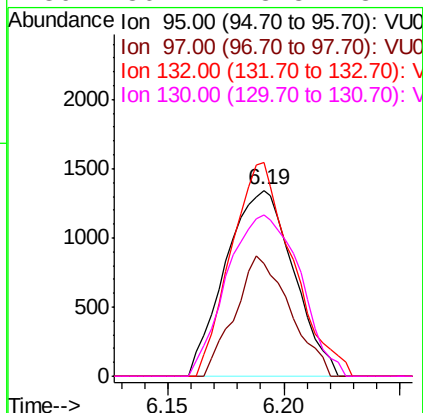
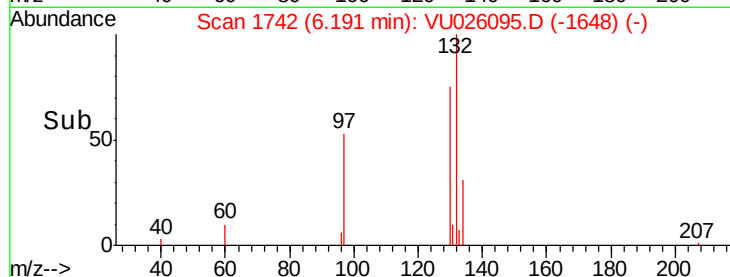
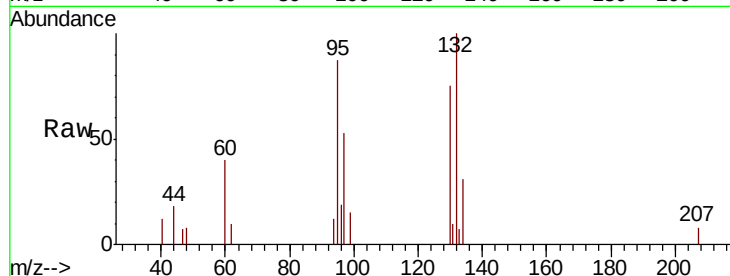




#34
 Trichloroethene
 Concen: 1.86 ug/L
 RT: 6.19 min Scan# 1742
 Delta R.T. 0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

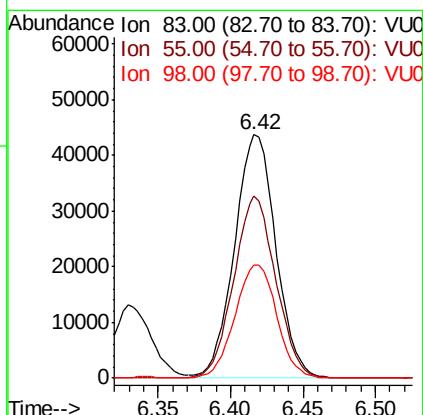
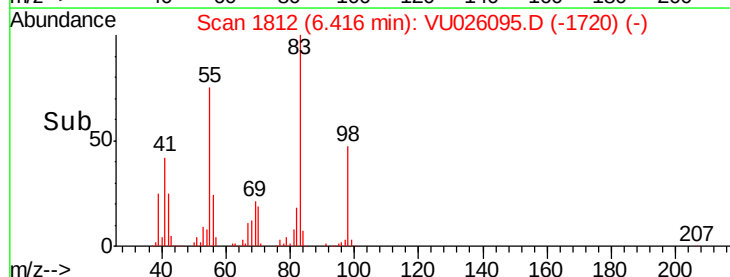
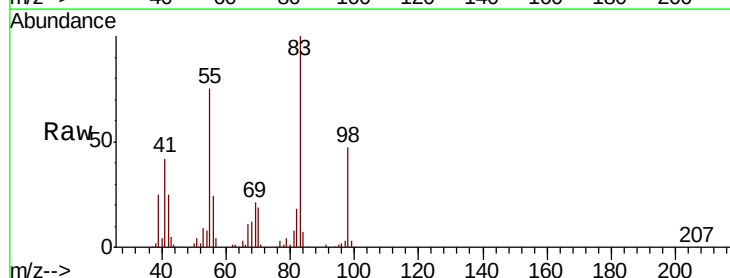
Instrument :
 MSVOA_U
 ClientSampled :
 A4ZL2

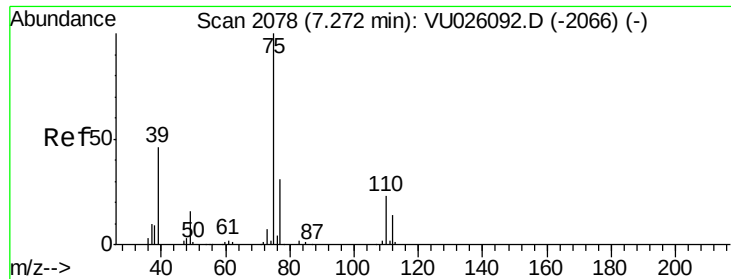
Tot Ion: 95 Resp: 2734
 Ion Ratio Lower Upper
 95 100
 97 60.7 45.2 84.0
 132 115.0 68.2 126.6
 130 86.7 73.8 137.2



#35
 Methylcyclohexane
 Concen: 38.87 ug/L
 RT: 6.42 min Scan# 1812
 Delta R.T. -0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

Tgt Ion: 83 Resp: 87016
 Ion Ratio Lower Upper
 83 100
 55 75.5 61.0 91.6
 98 47.0 38.1 57.1

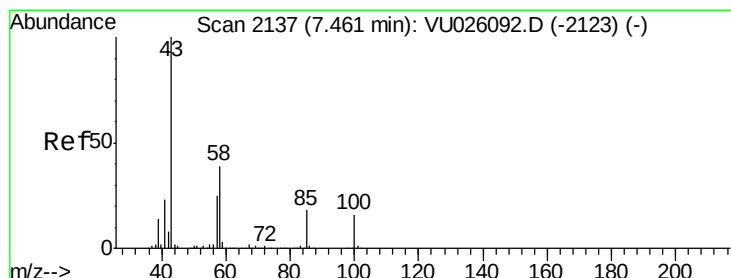
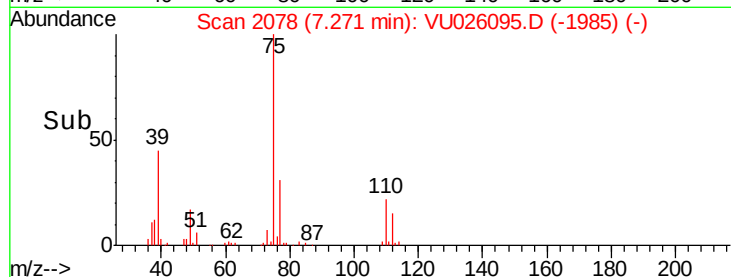
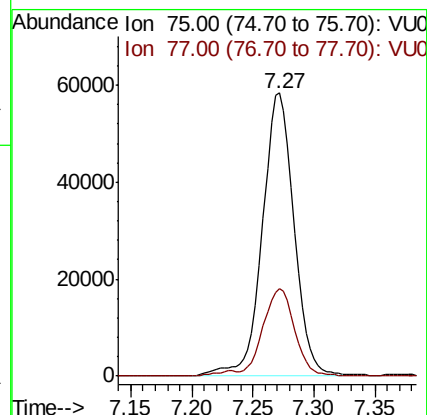
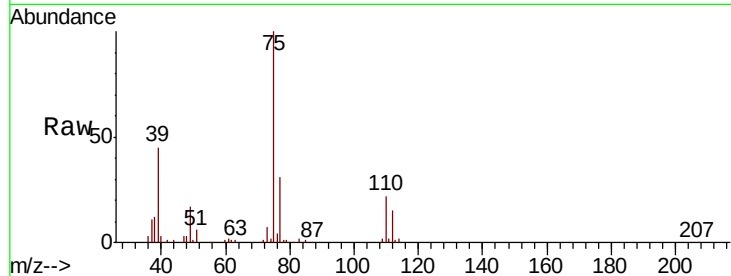




#39
 cis-1,3-Dichloropropene
 Concen: 45.36 ug/L
 RT: 7.27 min Scan# 2078
 Delta R.T. -0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

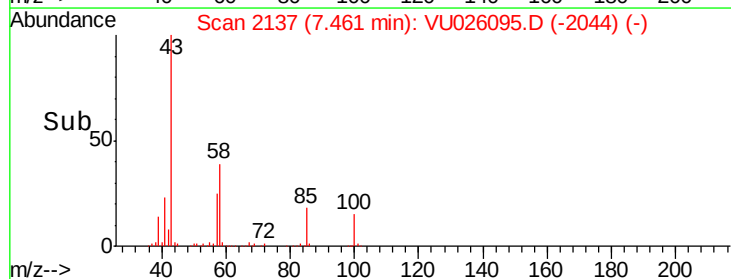
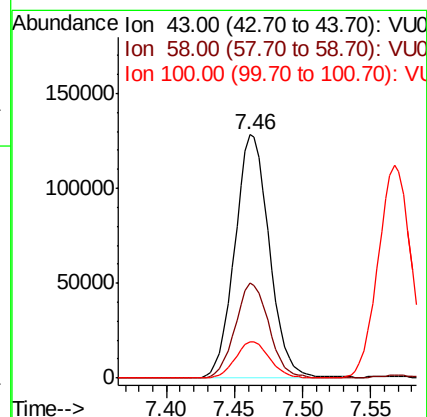
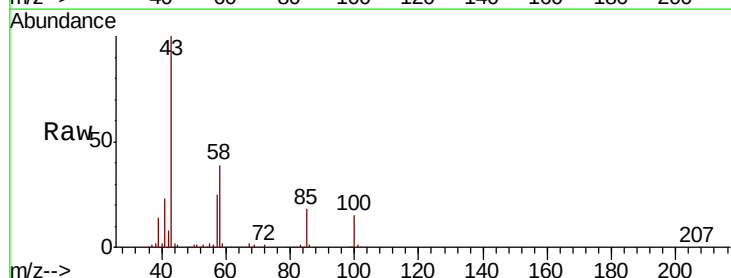
Instrument :
 MSVOA_U
 ClientSampleId :
 A4ZL2

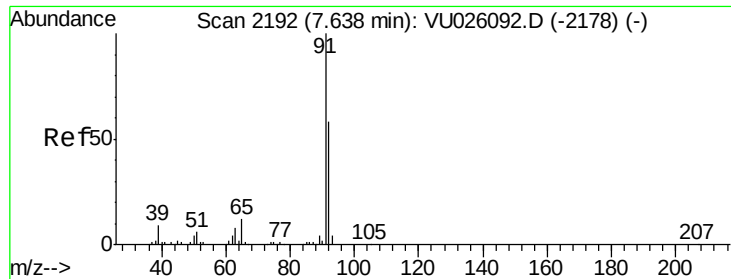
Tot Ion: 75 Resp: 105564
 Ion Ratio Lower Upper
 75 100
 77 30.9 22.1 41.1



#40
 4-Methyl-2-pentanone
 Concen: 106.81 ug/L
 RT: 7.46 min Scan# 2137
 Delta R.T. -0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

Tgt Ion: 43 Resp: 225375
 Ion Ratio Lower Upper
 43 100
 58 38.1 30.6 46.0
 100 14.9 11.8 17.6





#42

Toluene

Concen: 76.18 ug/L

RT: 7.64 min Scan# 2192

Delta R.T. 0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

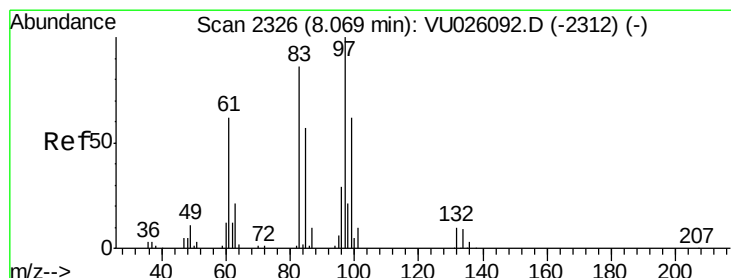
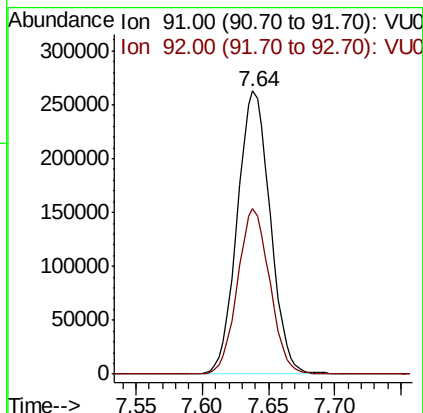
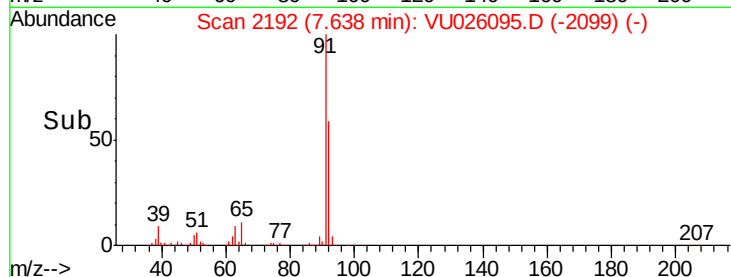
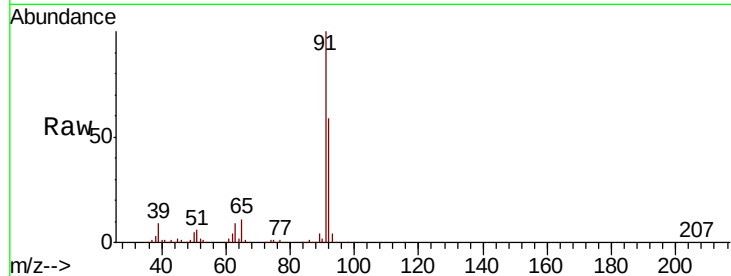
A4ZL2

Tot Ion: 91 Resp: 453831

Ion Ratio Lower Upper

91 100

92 58.5 41.0 76.2



#45

1,1,2-Trichloroethane

Concen: 39.72 ug/L

RT: 8.07 min Scan# 2326

Delta R.T. 0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Tgt Ion: 97 Resp: 58156

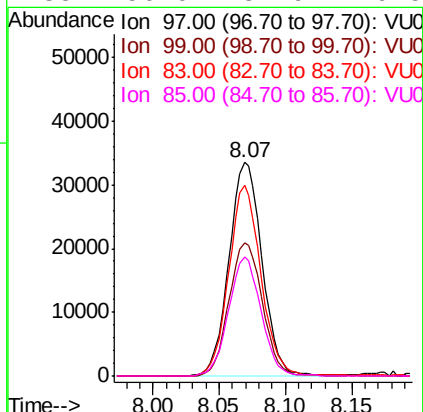
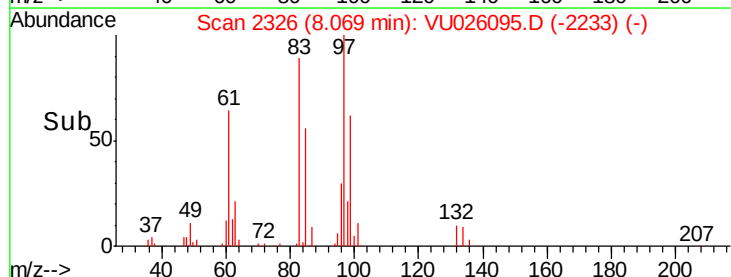
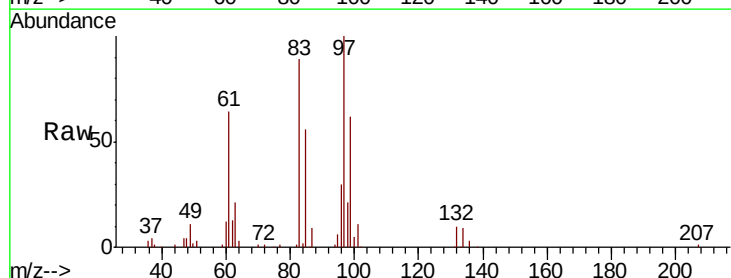
Ion Ratio Lower Upper

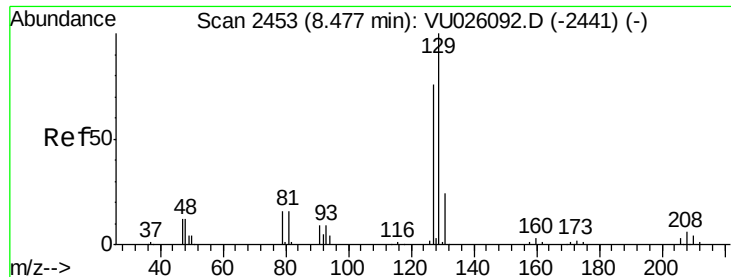
97 100

99 62.4 41.6 77.2

83 89.2 59.0 109.6

85 56.0 37.9 70.5





#49

Dibromochloromethane

Concen: 61.25 ug/L

RT: 8.48 min Scan# 2453

Delta R.T. -0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

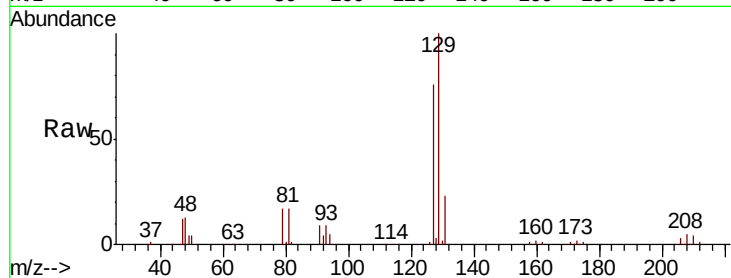
A4ZL2

Tot Ion:129 Resp: 108144

Ion Ratio Lower Upper

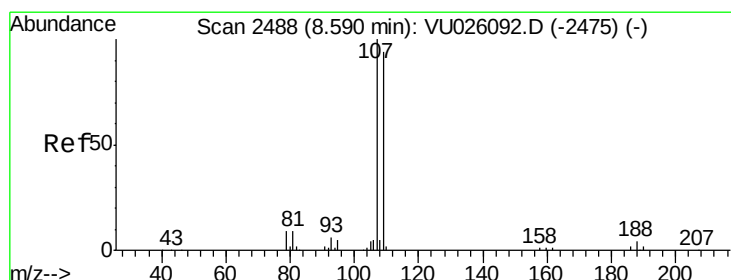
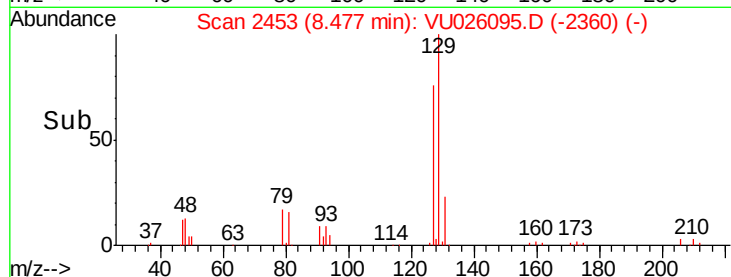
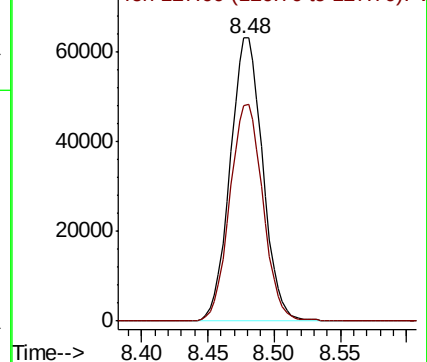
129 100

127 76.1 53.5 99.3



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#50

1,2-Dibromoethane

Concen: 58.88 ug/L

RT: 8.59 min Scan# 2488

Delta R.T. 0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

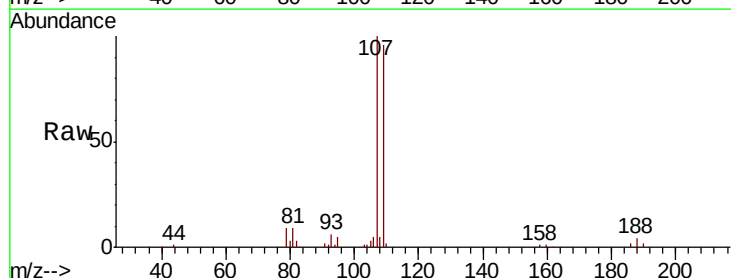
Tgt Ion:107 Resp: 93893

Ion Ratio Lower Upper

107 100

109 96.0 66.1 122.7

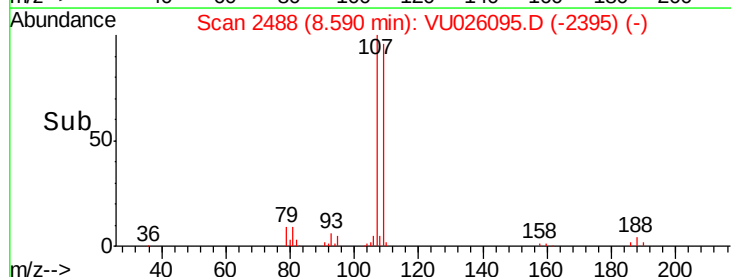
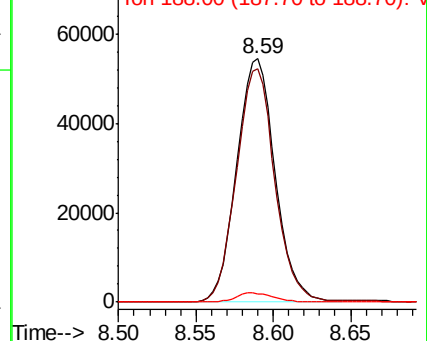
188 3.6 2.9 4.3

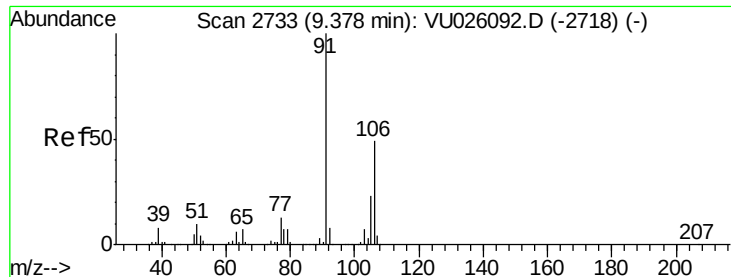


Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V





#53

m,p-Xylene

Concen: 50.22 ug/L

RT: 9.38 min Scan# 2734

Delta R.T. 0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

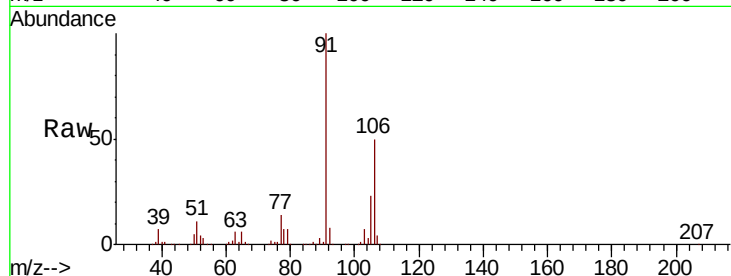
A4ZL2

Tot Ion:106 Resp: 125093

Ion Ratio Lower Upper

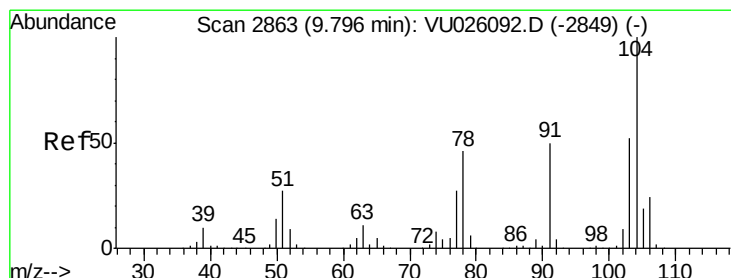
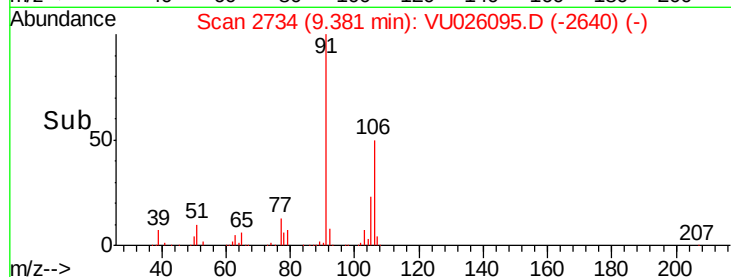
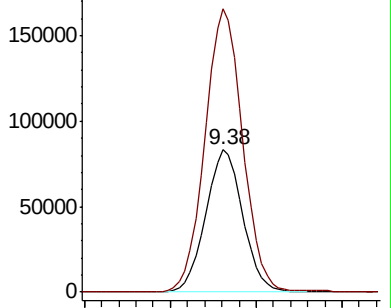
106 100

91 199.3 141.3 262.5



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 39.63 ug/L

RT: 9.80 min Scan# 2863

Delta R.T. 0.00 min

Lab File: VU026095.D

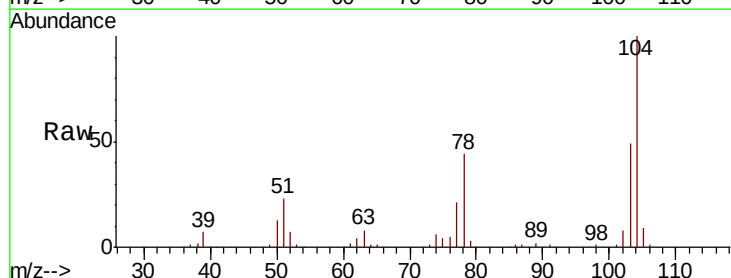
Acq: 14 Aug 2018 11:51

Tgt Ion:104 Resp: 163110

Ion Ratio Lower Upper

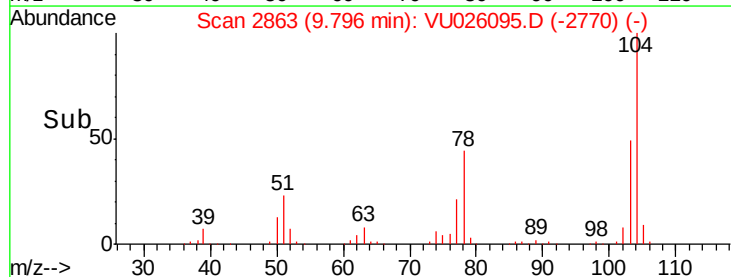
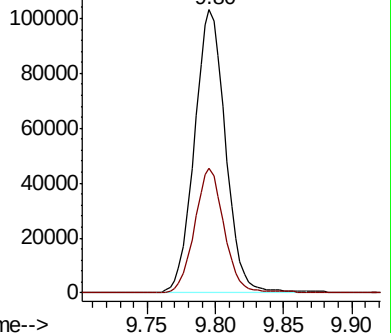
104 100

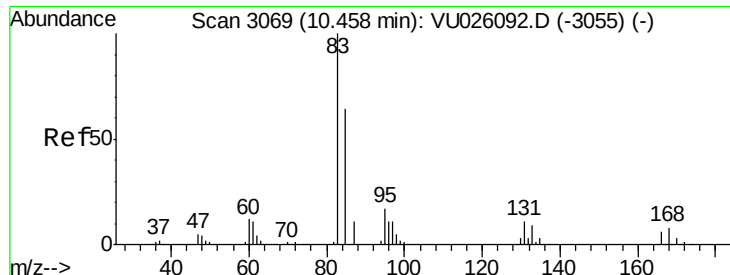
78 43.9 32.1 59.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0





#58

1,1,2,2-Tetrachloroethane

Concen: 34.84 ug/L

RT: 10.46 min Scan# 3070

Delta R.T. 0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

Instrument :

MSVOA_U

ClientSampleId :

A4ZL2

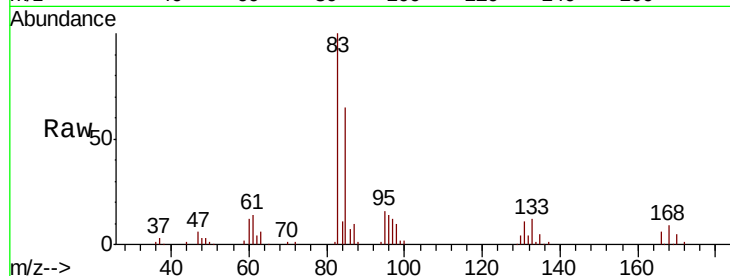
Tot Ion: 83 Resp: 86693

Ion Ratio Lower Upper

83 100

85 65.0 45.0 83.6

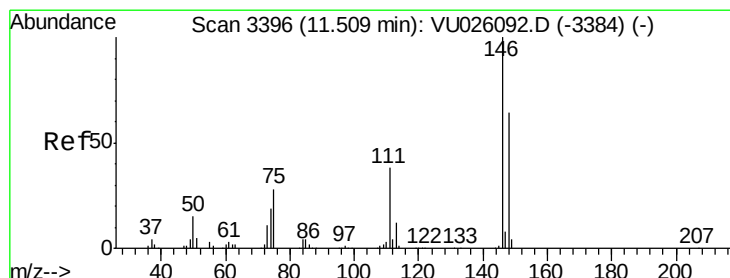
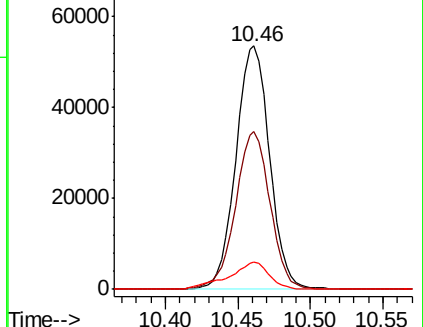
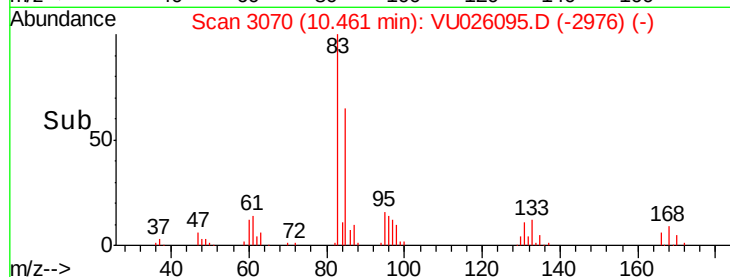
131 11.3 8.6 12.8



Abundance Ion 83.00 (82.70 to 83.70): VU026095.D (-3055) (-)

Ion 85.00 (84.70 to 85.70): VU026095.D (-3055) (-)

Ion 131.00 (130.70 to 131.70): VU026095.D (-3055) (-)



#63

1,4-Dichlorobenzene

Concen: 42.00 ug/L

RT: 11.51 min Scan# 3396

Delta R.T. -0.00 min

Lab File: VU026095.D

Acq: 14 Aug 2018 11:51

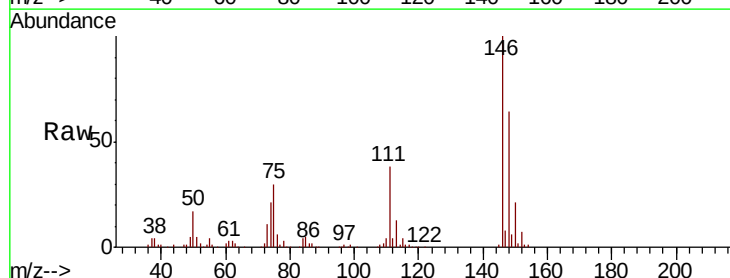
Tgt Ion: 146 Resp: 140646

Ion Ratio Lower Upper

146 100

111 38.3 26.4 49.0

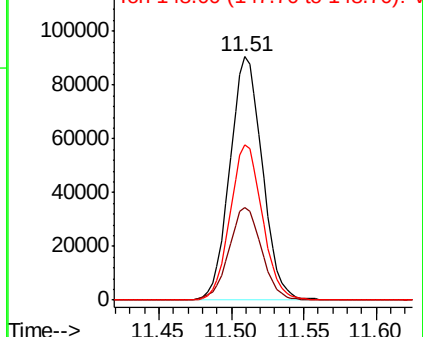
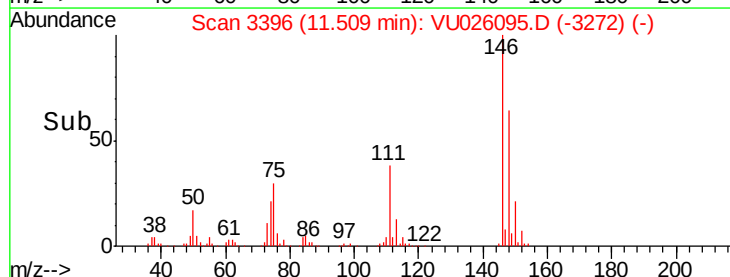
148 64.0 43.8 81.4

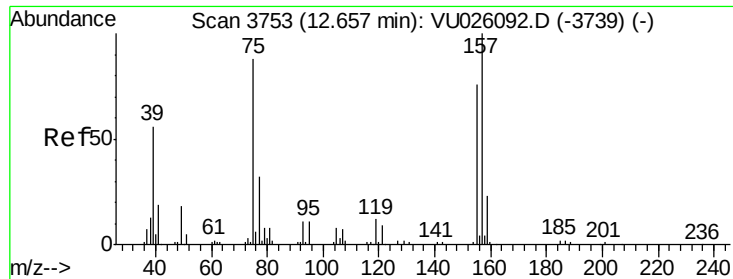


Abundance Ion 146.00 (145.70 to 146.70): VU026095.D (-3272) (-)

Ion 111.00 (110.70 to 111.70): VU026095.D (-3272) (-)

Ion 148.00 (147.70 to 148.70): VU026095.D (-3272) (-)

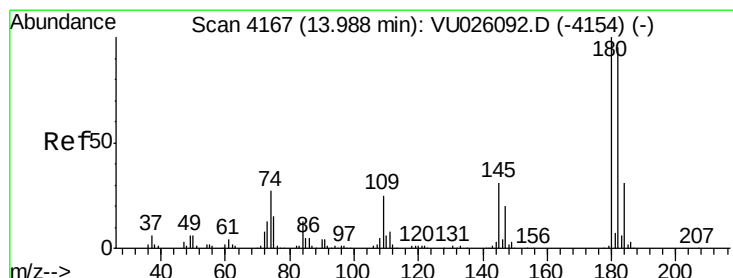
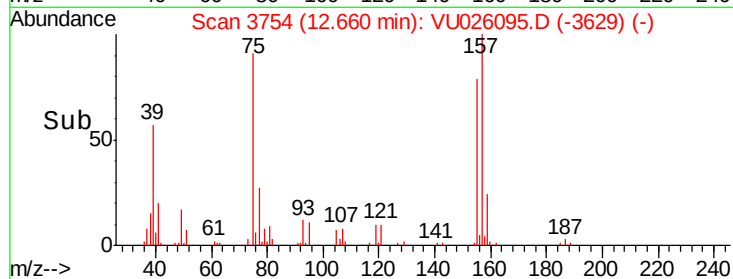
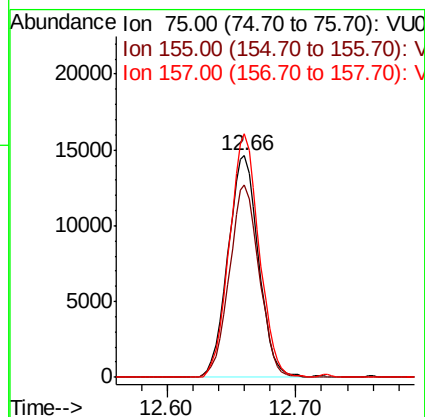
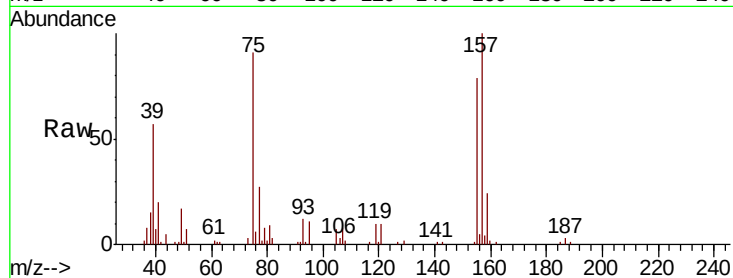




#66
 1,2-Dibromo-3-chloropropane
 Concen: 40.18 ug/L
 RT: 12.66 min Scan# 3754
 Delta R.T. 0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

Instrument :
 MSVOA_U
 ClientSampleId :
 A4ZL2

Tot Ion: 75 Resp: 23979
 Ion Ratio Lower Upper
 75 100
 155 87.1 71.8 107.8
 157 109.9 93.0 139.6



#70
 1,2,3-Trichlorobenzene
 Concen: 59.67 ug/L
 RT: 13.99 min Scan# 4168
 Delta R.T. 0.00 min
 Lab File: VU026095.D
 Acq: 14 Aug 2018 11:51

Tgt Ion: 180 Resp: 129498
 Ion Ratio Lower Upper
 180 100
 182 96.3 76.5 114.7
 145 30.1 24.7 37.1

