

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081018\
 Data File : VU026037.D
 Acq On : 10 Aug 2018 12:36
 Operator : MD/SY
 Sample : J4401-23
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 A4ZG9

Quant Time: Aug 11 01:34:41 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM080918WMA.M
 Quant Title : VOC Analysis
 QLast Update : Sat Aug 11 00:58:27 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.89	114	286988	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.09	117	276403	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.49	152	141246	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.40	65	74757	35.64	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	71.28%
7) Chloroethane-d5	1.66	69	68841	41.39	ug/L	-0.02
Spiked Amount	50.000	Range	70 - 130	Recovery	=	82.78%
11) 1,1-Dichloroethene-d2	2.27	63	118270	29.67	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	59.34%#
21) 2-Butanone-d5	4.18	46	165258	94.52	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	94.52%
24) Chloroform-d	4.65	84	207689	46.69	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	93.38%
26) 1,2-Dichloroethane-d4	5.31	65	139977	46.58	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	93.16%
32) Benzene-d6	5.34	84	377088	43.93	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	87.86%
36) 1,2-Dichloropropane-d6	6.33	67	127755	46.00	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	92.00%
41) Toluene-d8	7.57	98	362036	44.09	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	88.18%
43) trans-1,3-Dichloropropene-	7.85	79	64448	46.06	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	92.12%
47) 2-Hexanone-d5	8.31	63	122345	96.99	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	96.99%
57) 1,1,2,2-Tetrachloroethane-	10.44	84	196994	48.51	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	97.02%
64) 1,2-Dichlorobenzene-d4	11.86	152	159180	45.72	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	91.44%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	1.20	85	25899	10.358	ug/L	99
3) Chloromethane	1.33	50	75448	33.630	ug/L	99
6) Bromomethane	1.60	94	8748	7.557	ug/L	96
9) Trichlorofluoromethane	1.88	101	86285	27.859	ug/L	98
10) 1,1,2-Trichloro-1,2,2-trif	2.28	101	47342	26.276	ug/L	99
13) Acetone	2.34	43	5001	4.604	ug/L	50
14) Carbon disulfide	2.47	76	153437	28.148	ug/L	99
15) Methyl Acetate	2.62	43	3534	1.553	ug/L	92
17) trans-1,2-Dichloroethene	2.98	96	98485	53.346	ug/L	98
18) Methyl tert-butyl Ether	3.00	73	663612	109.379	ug/L	99
25) Chloroform	4.67	83	158163	42.418	ug/L	99
27) 1,2-Dichloroethane	5.41	62	130386	42.338	ug/L	99
30) 1,1,1-Trichloroethane	4.91	97	70642	20.256	ug/L	99
31) Carbon tetrachloride	5.14	117	162665	51.079	ug/L	99
35) Methylcyclohexane	6.42	83	83901	26.717	ug/L	99
39) cis-1,3-Dichloropropene	7.27	75	98572	30.193	ug/L	98
40) 4-Methyl-2-pentanone	7.46	43	265751	89.790	ug/L	100

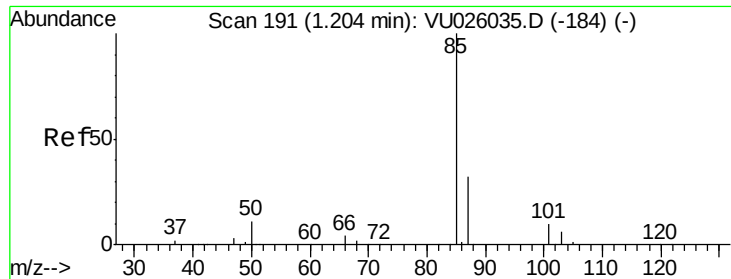
Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081018\
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 Quant Title : VOC Analysis
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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Toluene	7.64	91	443626	53.090	uq/L	98
45) 1,1,2-Trichloroethane	8.07	97	55903	27.221	uq/L	94
49) Dibromochloromethane	8.48	129	120271	48.566	uq/L	100
50) 1,2-Dibromoethane	8.59	107	93358	41.740	uq/L	98
53) m,p-Xylene	9.38	106	122074	34.939	uq/L	96
55) Styrene	9.80	104	188617	32.671	uq/L	95
58) 1,1,2,2-Tetrachloroethane	10.46	83	87101	24.955	uq/L	99
63) 1,4-Dichlorobenzene	11.51	146	137357	29.798	uq/L	96
66) 1,2-Dibromo-3-chloropropan	12.66	75	23094	28.112	uq/L	99
70) 1,2,3-Trichlorobenzene	13.99	180	131897	44.156	uq/L	99

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



#2

Dichlorodifluoromethane

Concen: 10.358 ug/L

RT: 1.20 min Scan# 190

Delta R.T. -0.00 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

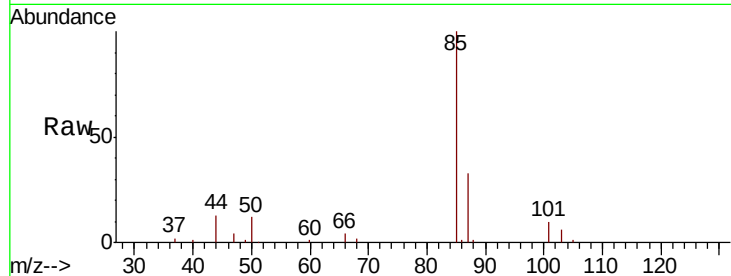
A4ZG9

Tot Ion: 85 Resp: 25899

Ion Ratio Lower Upper

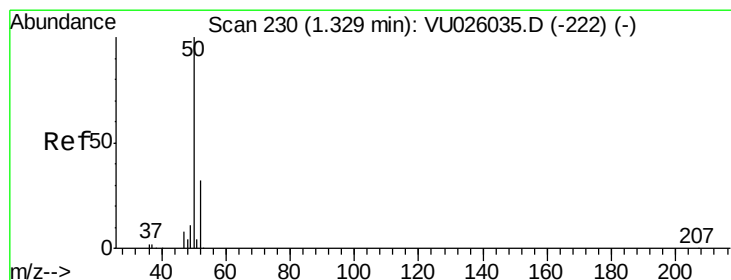
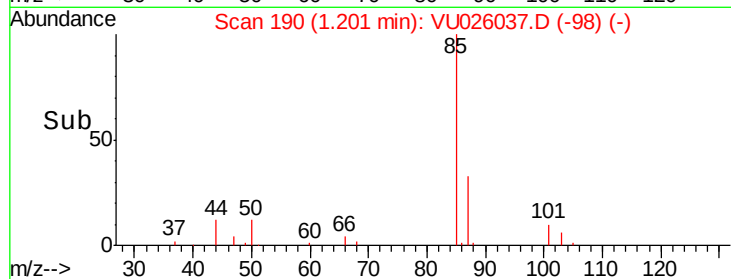
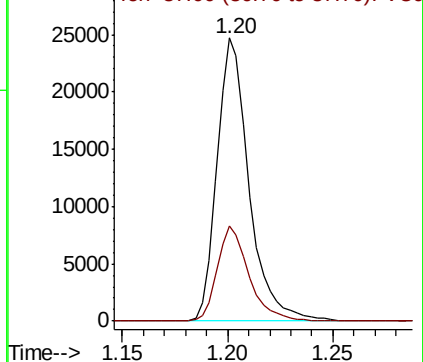
85 100

87 33.1 26.1 39.1



Abundance Ion 85.00 (84.70 to 85.70): VU0

Ion 87.00 (86.70 to 87.70): VU0



#3

Chloromethane

Concen: 33.630 ug/L

RT: 1.33 min Scan# 229

Delta R.T. -0.00 min

Lab File: VU026037.D

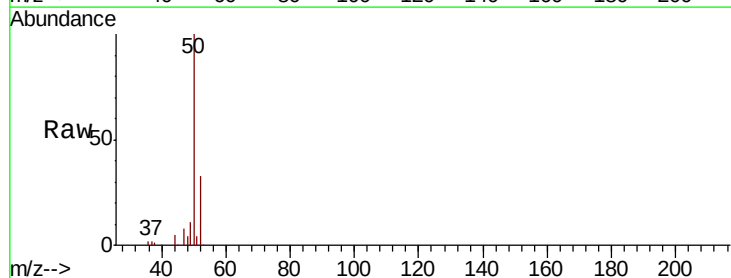
Acq: 10 Aug 2018 12:36

Tgt Ion: 50 Resp: 75448

Ion Ratio Lower Upper

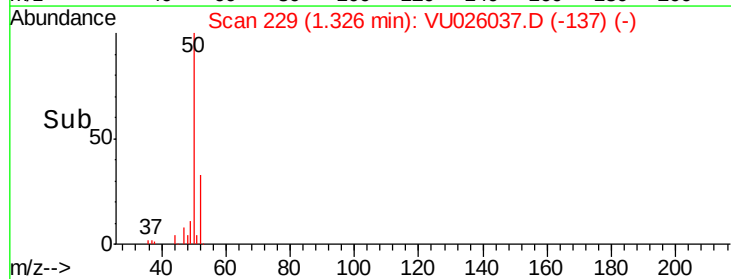
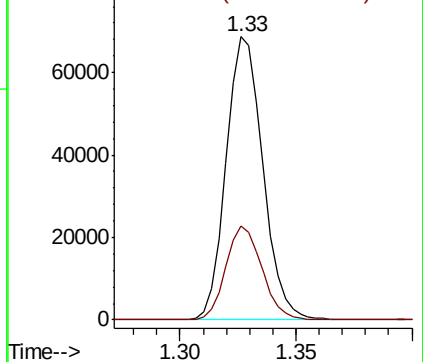
50 100

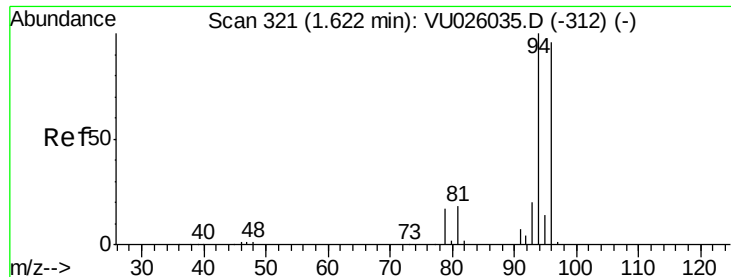
52 33.0 23.4 43.4



Abundance Ion 50.00 (49.70 to 50.70): VU0

Ion 52.00 (51.70 to 52.70): VU0





#6

Bromomethane

Concen: 7.557 ug/L

RT: 1.60 min Scan# 315

Delta R.T. -0.02 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

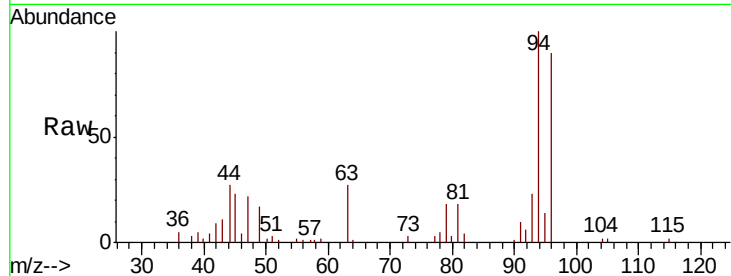
A4ZG9

Tot Ion: 94 Resp: 8748

Ion Ratio Lower Upper

94 100

96 89.9 65.6 121.8



Abundance Ion 94.00 (93.70 to 94.70): VU026037.D (-312) (-)

Ion 96.00 (95.70 to 96.70): VU026037.D (-312) (-)

1.60

8000

6000

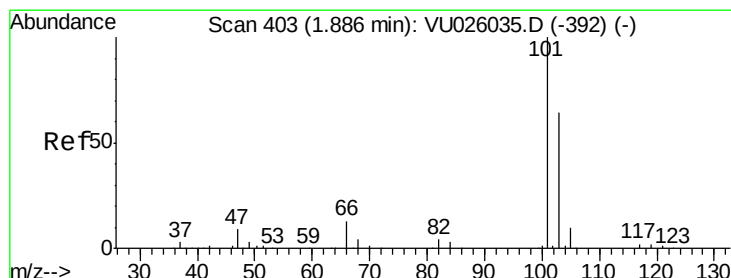
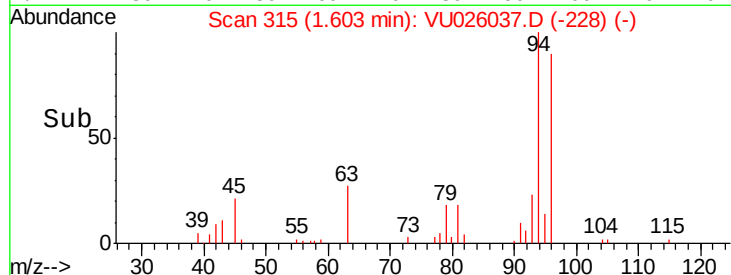
4000

2000

0

1.56 1.58 1.60 1.62 1.64

Time-->



#9

Trichlorofluoromethane

Concen: 27.859 ug/L

RT: 1.88 min Scan# 400

Delta R.T. -0.01 min

Lab File: VU026037.D

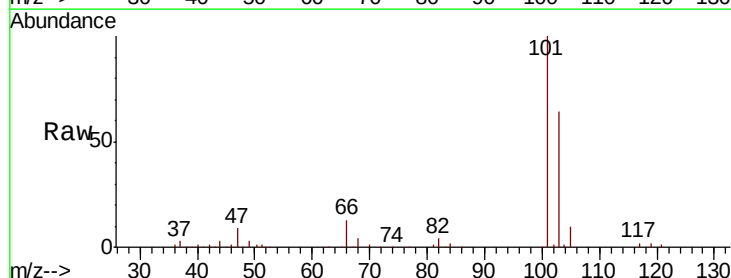
Acq: 10 Aug 2018 12:36

Tgt Ion:101 Resp: 86285

Ion Ratio Lower Upper

101 100

103 64.1 52.7 79.1



Abundance Ion 101.00 (100.70 to 101.70): VU026037.D (-392) (-)

Ion 103.00 (102.70 to 103.70): VU026037.D (-392) (-)

1.88

60000

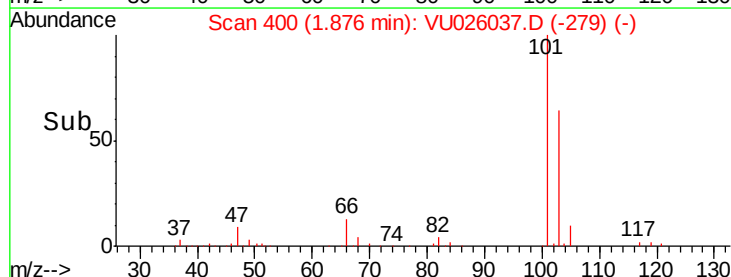
40000

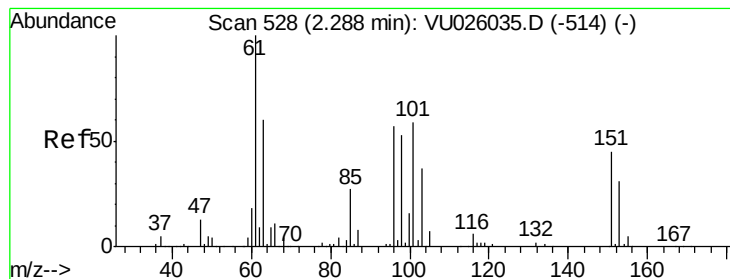
20000

0

1.80 1.85 1.90 1.95

Time-->





#10

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

Concen: 26.276 ug/L

RT: 2.28 min Scan# 526

Delta R.T. -0.01 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

A4ZG9

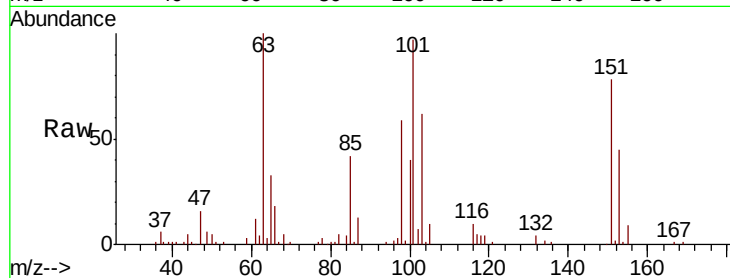
Tot Ion:101 Resp: 47342

Ion Ratio Lower Upper

101 100

85 43.6 36.0 54.0

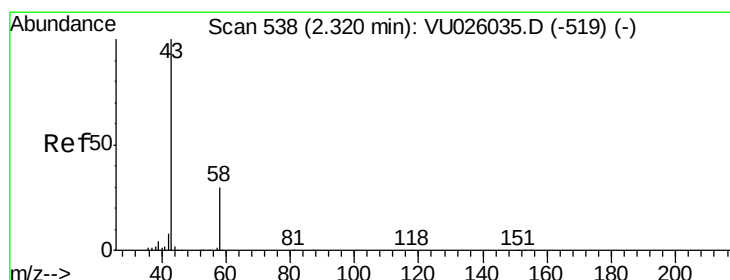
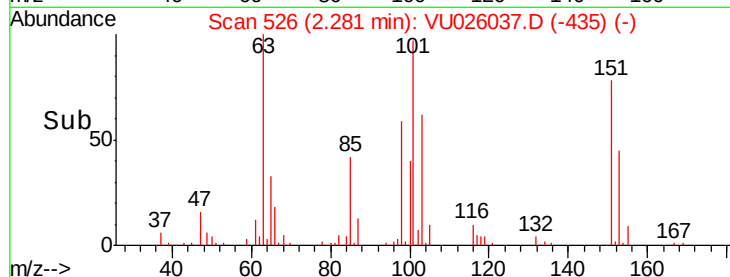
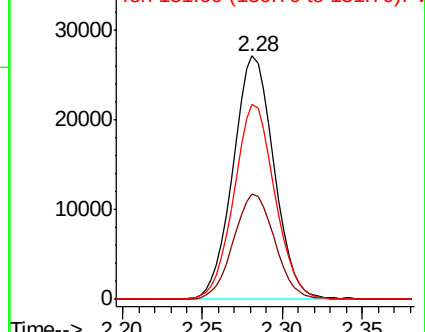
151 80.2 64.2 96.2



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



#13

Acetone

Concen: 4.604 ug/L

RT: 2.34 min Scan# 543

Delta R.T. 0.02 min

Lab File: VU026037.D

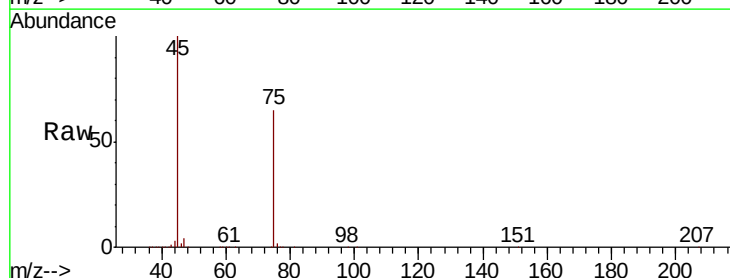
Acq: 10 Aug 2018 12:36

Tgt Ion: 43 Resp: 5001

Ion Ratio Lower Upper

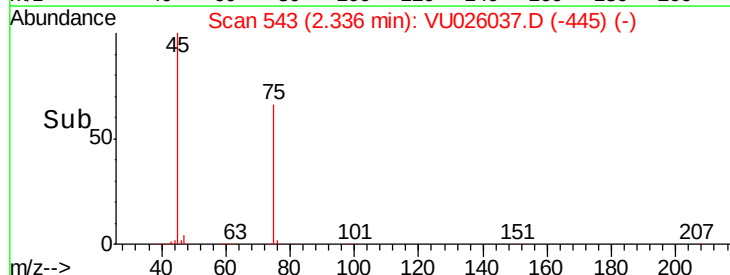
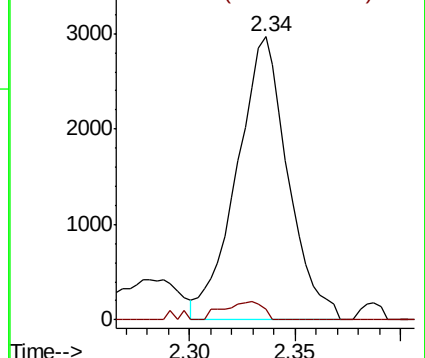
43 100

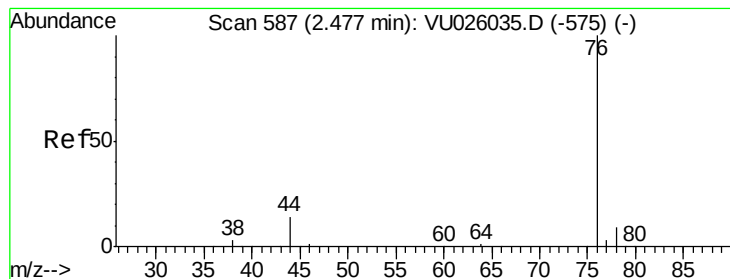
58 3.6 0.0 61.8



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0





#14

Carbon disulfide

Concen: 28.148 ug/L

RT: 2.47 min Scan# 585

Delta R.T. -0.01 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

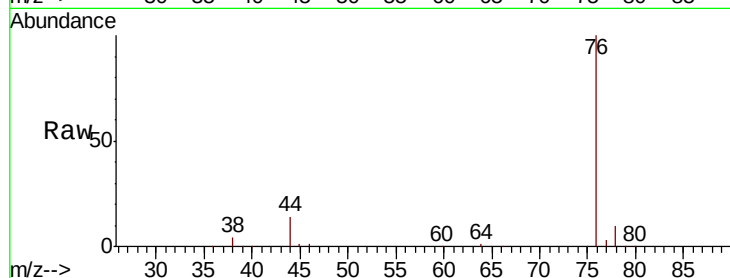
A4ZG9

Tot Ion: 76 Resp: 153437

Ion Ratio Lower Upper

76 100

78 9.5 7.2 10.8



Abundance Ion 76.00 (75.70 to 76.70): VU0

Ion 78.00 (77.70 to 78.70): VU0

2.47

100000

80000

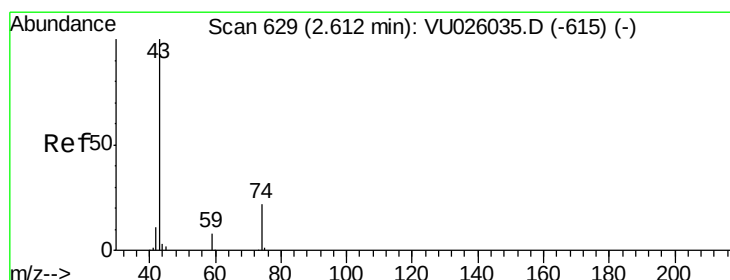
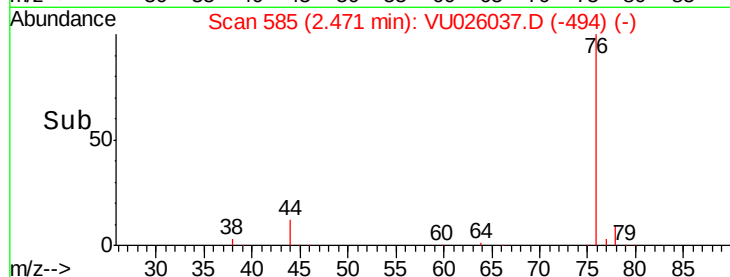
60000

40000

20000

0

Time-->



#15

Methyl Acetate

Concen: 1.553 ug/L

RT: 2.62 min Scan# 631

Delta R.T. 0.01 min

Lab File: VU026037.D

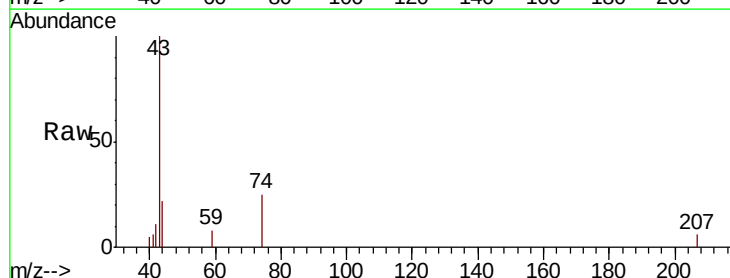
Acq: 10 Aug 2018 12:36

Tgt Ion: 43 Resp: 3534

Ion Ratio Lower Upper

43 100

74 18.6 17.8 26.8



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 74.00 (73.70 to 74.70): VU0

2.62

2000

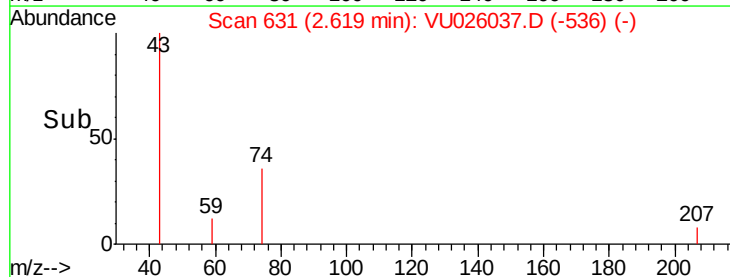
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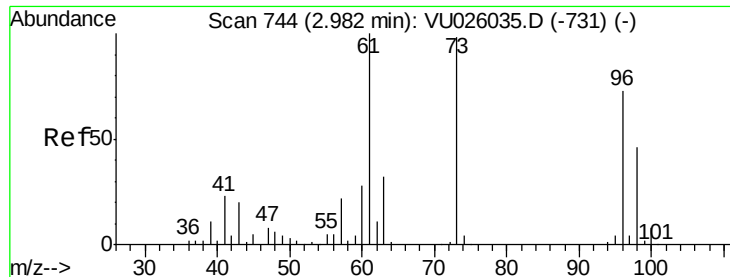
1000

500

0

Time-->





#17

trans-1,2-Dichloroethene

Concen: 53.346 ug/L

RT: 2.98 min Scan# 743

Delta R.T. -0.00 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

A4ZG9

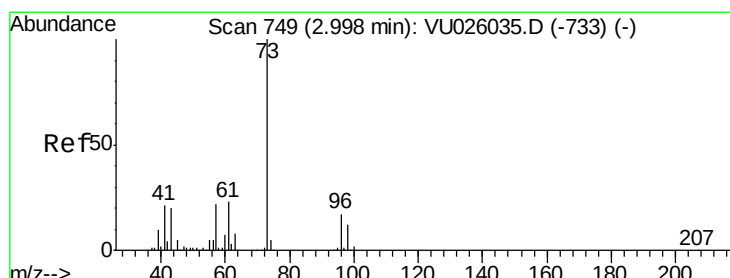
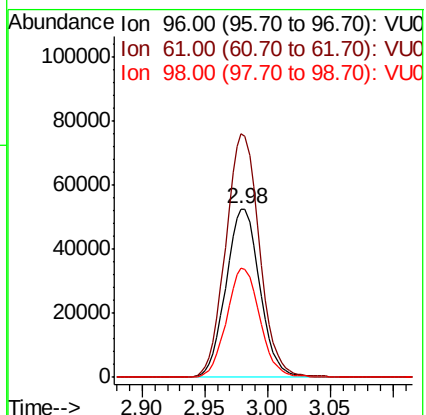
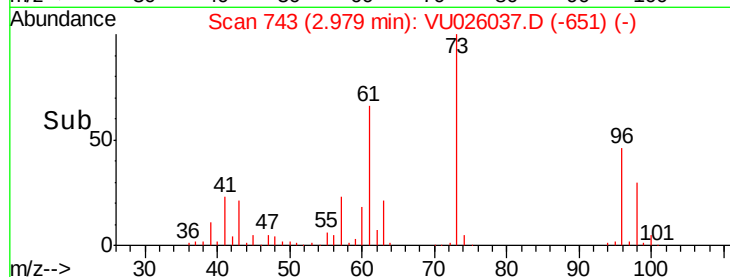
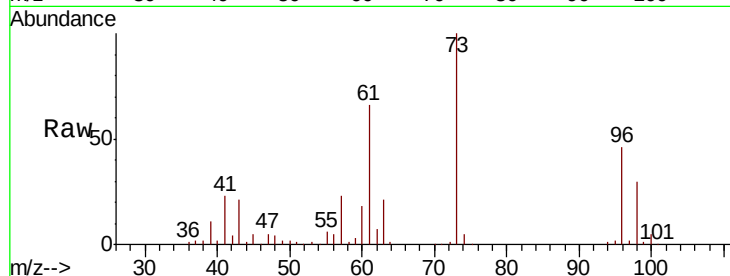
Tot Ion: 96 Resp: 98485

Ion Ratio Lower Upper

96 100

61 144.5 102.8 190.8

98 64.8 44.7 83.1



#18

Methyl tert-butyl Ether

Concen: 109.379 ug/L

RT: 3.00 min Scan# 749

Delta R.T. 0.00 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

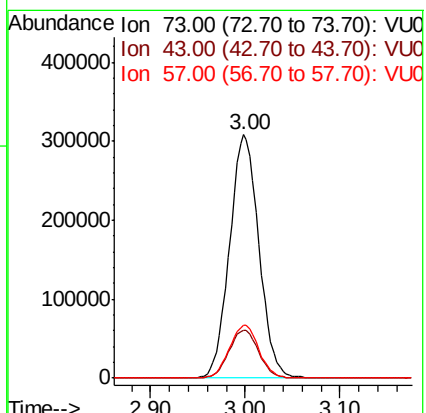
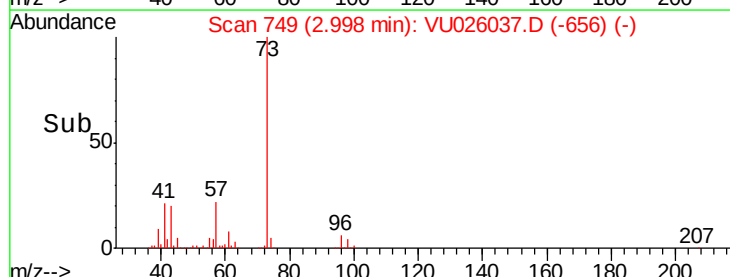
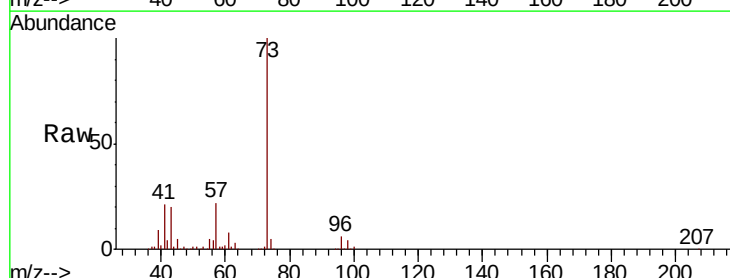
Tgt Ion: 73 Resp: 663612

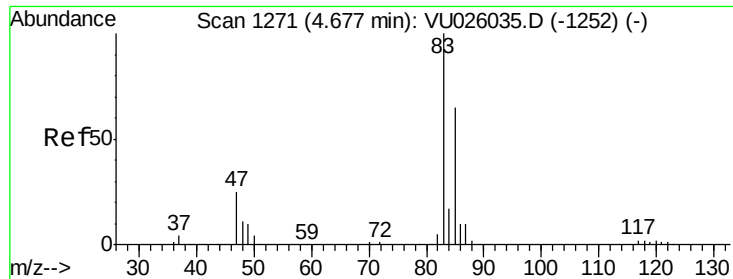
Ion Ratio Lower Upper

73 100

43 20.1 16.3 24.5

57 21.9 17.1 25.7

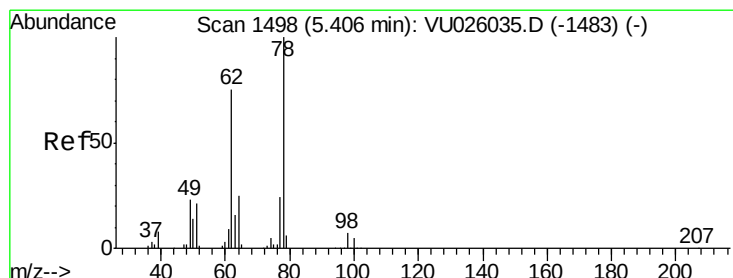
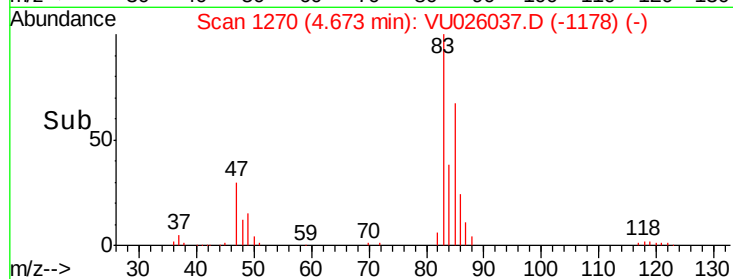
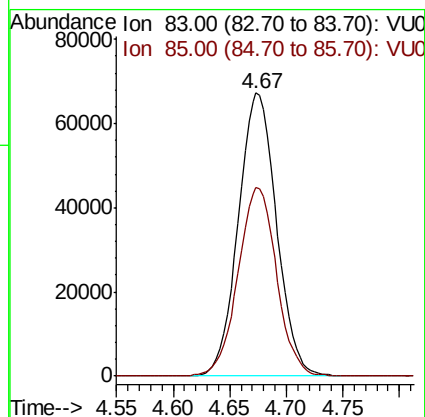
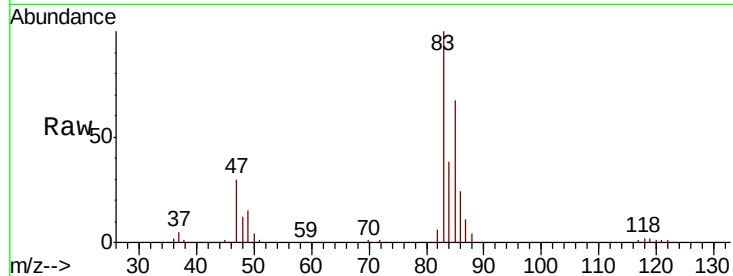




#25
Chloroform
Concen: 42.418 ug/L
RT: 4.67 min Scan# 1270
Delta R.T. -0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

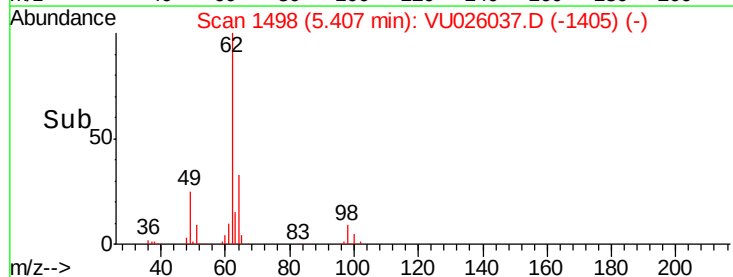
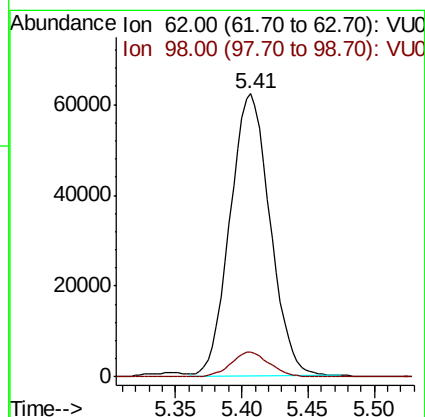
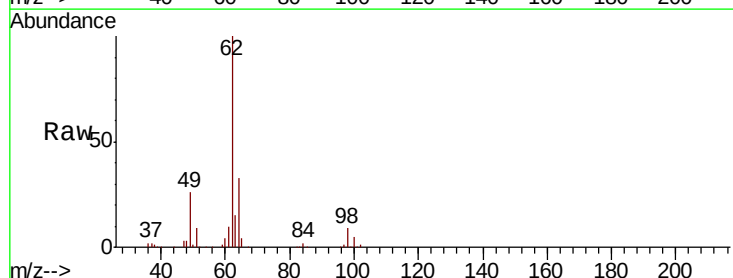
Instrument :
MSVOA_U
ClientSampleId :
A4ZG9

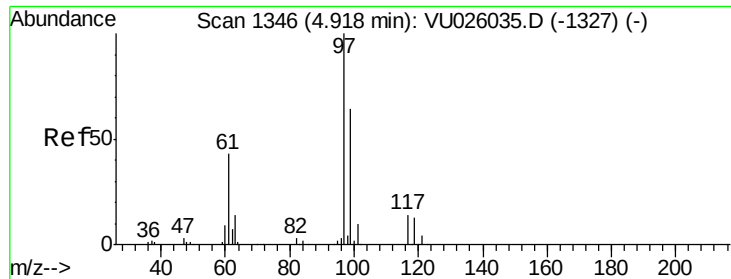
Tot Ion: 83 Resp: 158163
Ion Ratio Lower Upper
83 100
85 66.5 45.9 85.3



#27
1,2-Dichloroethane
Concen: 42.338 ug/L
RT: 5.41 min Scan# 1498
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

Tgt Ion: 62 Resp: 130386
Ion Ratio Lower Upper
62 100
98 9.0 7.0 10.4

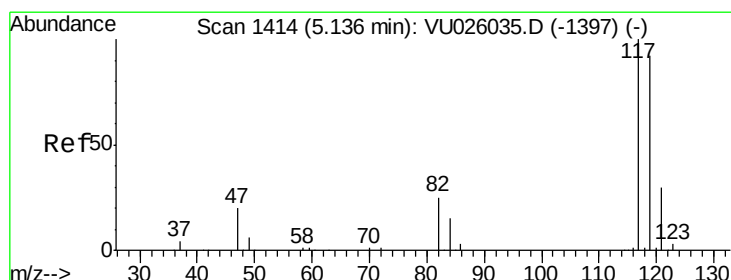
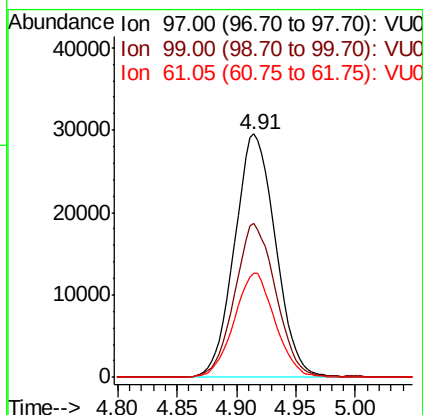
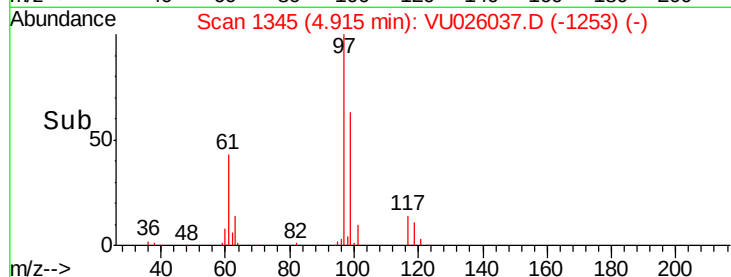
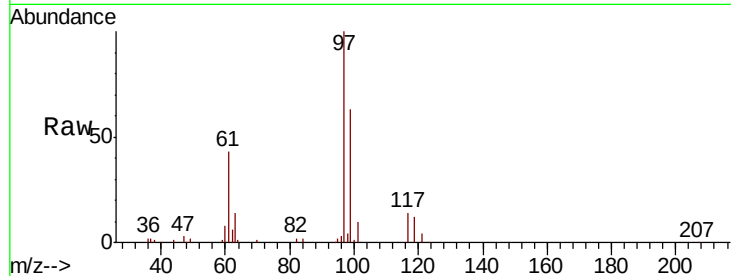




#30
 1,1,1-Trichloroethane
 Concen: 20.256 ug/L
 RT: 4.91 min Scan# 1345
 Delta R.T. -0.00 min
 Lab File: VU026037.D
 Acq: 10 Aug 2018 12:36

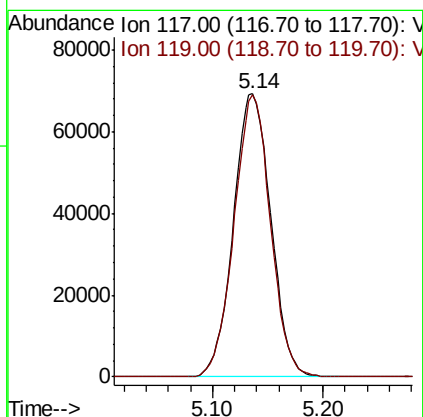
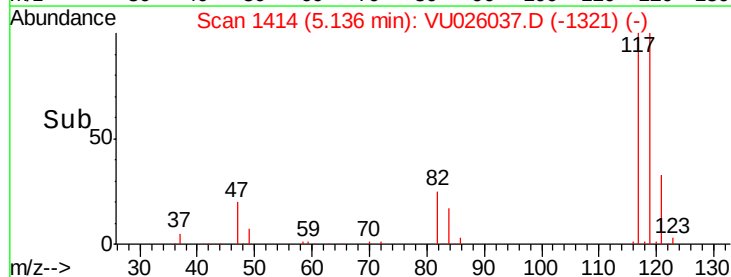
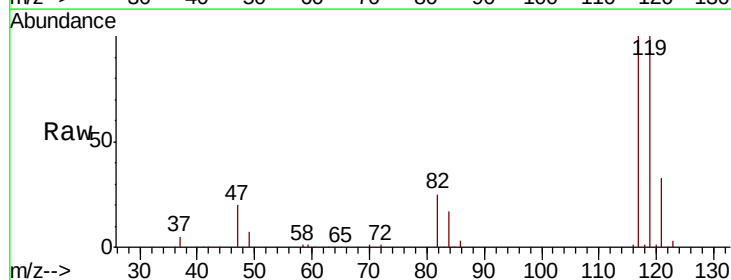
Instrument :
 MSVOA_U
 ClientSampleId :
 A4ZG9

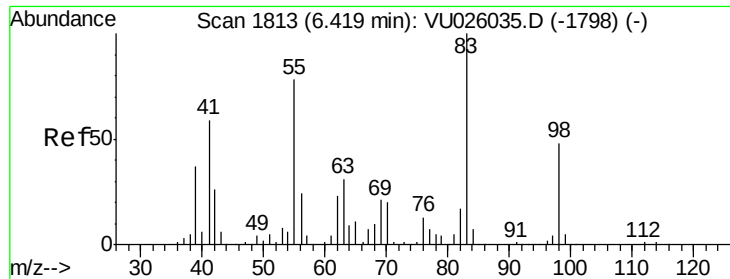
Tot Ion: 97 Resp: 70642
 Ion Ratio Lower Upper
 97 100
 99 63.3 51.8 77.6
 61 42.7 34.7 52.1



#31
 Carbon tetrachloride
 Concen: 51.079 ug/L
 RT: 5.14 min Scan# 1414
 Delta R.T. 0.00 min
 Lab File: VU026037.D
 Acq: 10 Aug 2018 12:36

Tgt Ion: 117 Resp: 162665
 Ion Ratio Lower Upper
 117 100
 119 96.7 76.3 114.5

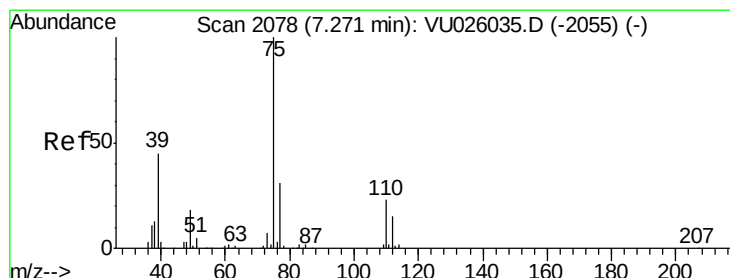
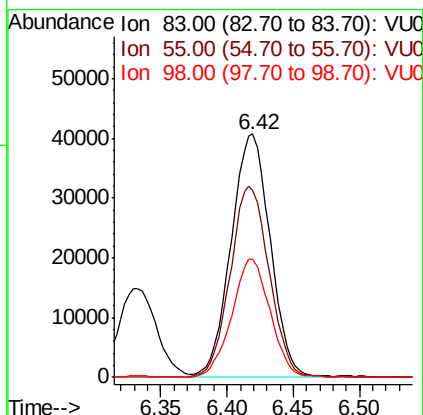
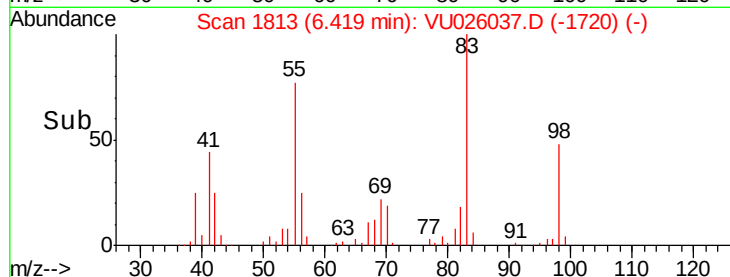
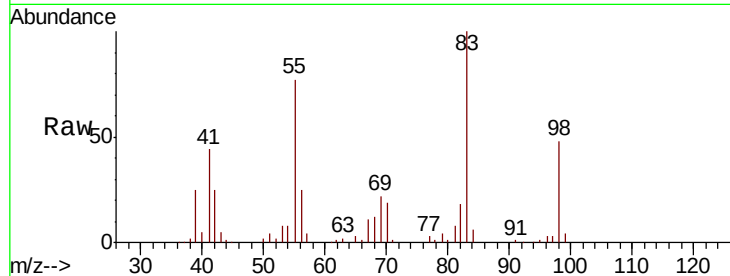




#35
Methylvlcyclohexane
Concen: 26.717 ug/L
RT: 6.42 min Scan# 1813
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

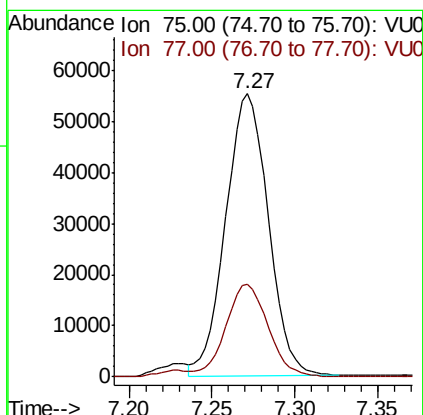
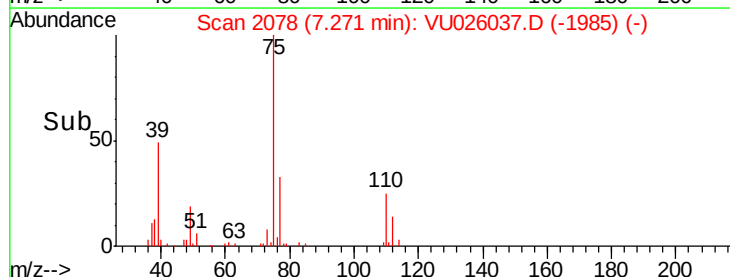
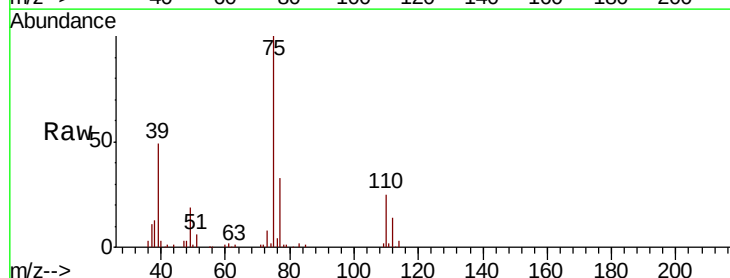
Instrument :
MSVOA_U
ClientSampleId :
A4ZG9

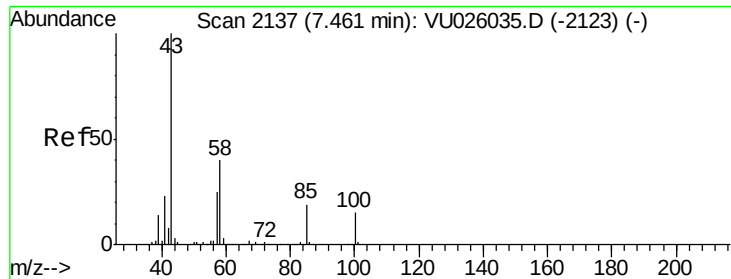
Tot Ion: 83 Resp: 83901
Ion Ratio Lower Upper
83 100
55 77.8 61.0 91.6
98 47.4 38.1 57.1



#39
cis-1,3-Dichloropropene
Concen: 30.193 ug/L
RT: 7.27 min Scan# 2078
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

Tgt Ion: 75 Resp: 98572
Ion Ratio Lower Upper
75 100
77 32.7 22.1 41.1

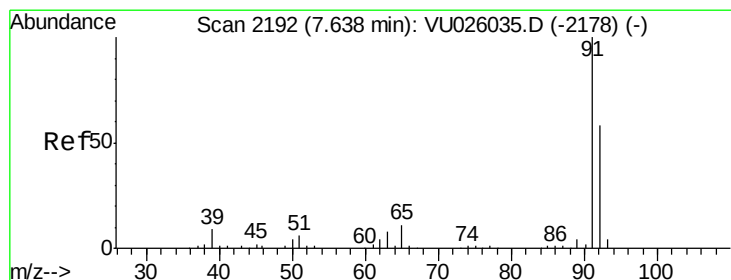
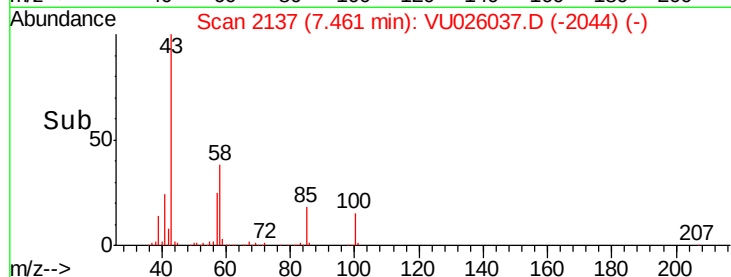
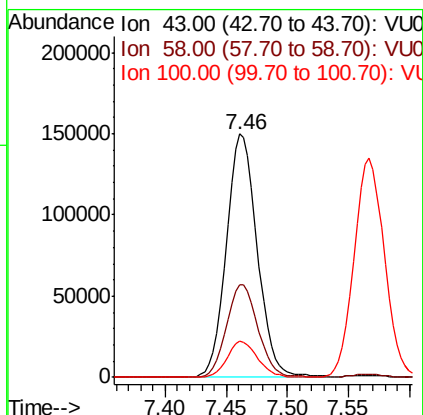
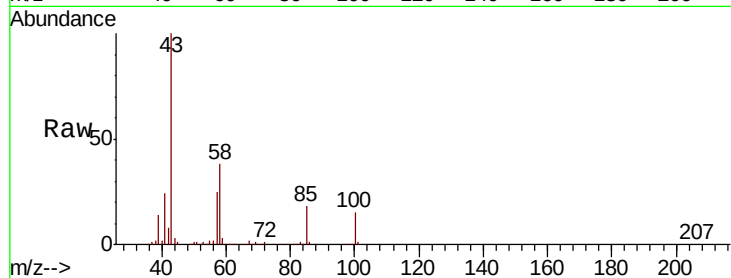




#40
4-Methyl-2-pentanone
Concen: 89.790 ug/L
RT: 7.46 min Scan# 2137
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

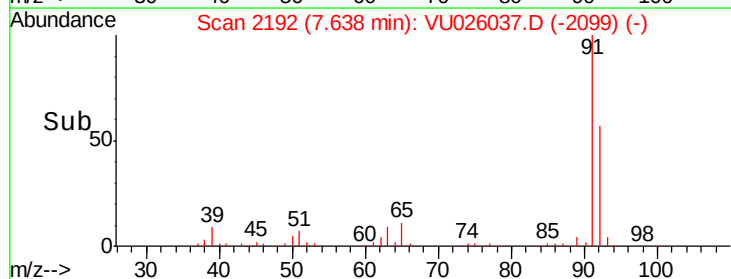
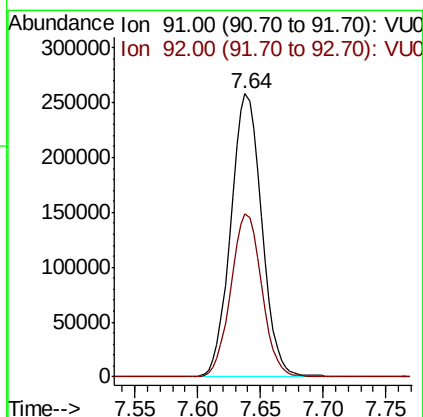
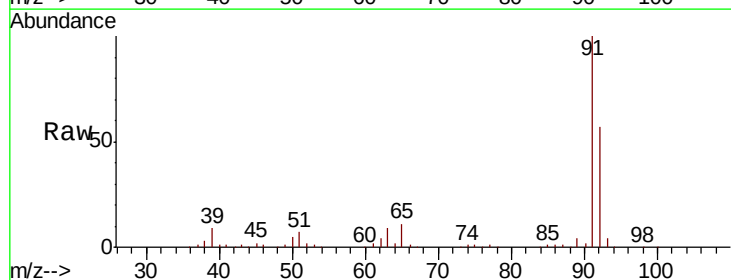
Instrument :
MSVOA_U
ClientSampleId :
A4ZG9

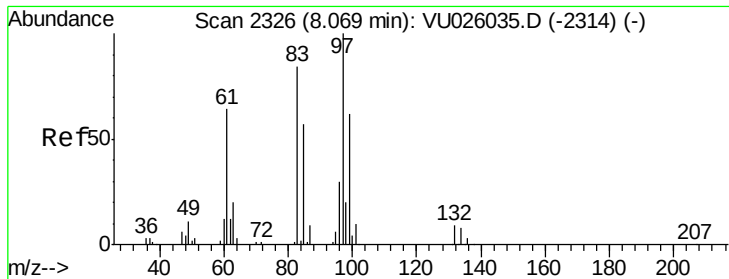
Tot Ion: 43 Resp: 265751
Ion Ratio Lower Upper
43 100
58 38.6 30.6 46.0
100 14.7 11.8 17.6



#42
Toluene
Concen: 53.090 ug/L
RT: 7.64 min Scan# 2192
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

Tgt Ion: 91 Resp: 443626
Ion Ratio Lower Upper
91 100
92 57.5 41.0 76.2

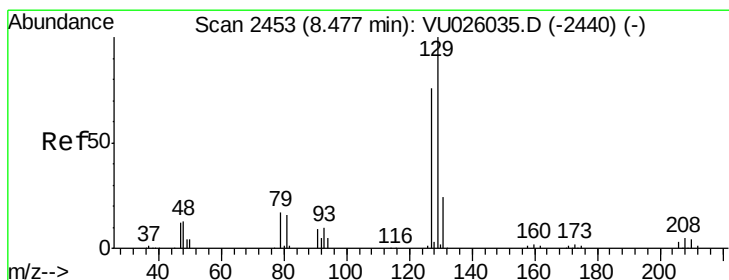
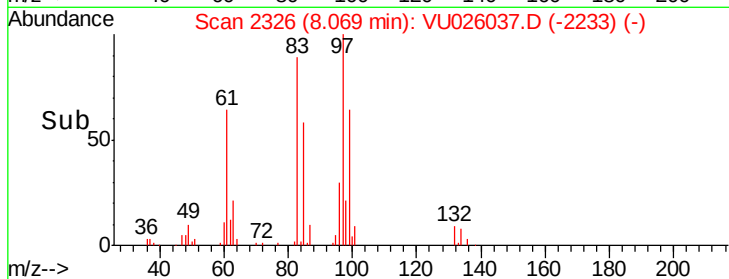
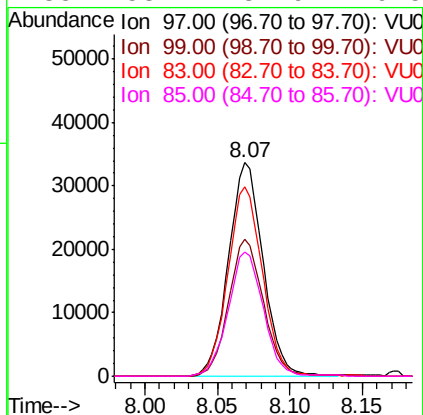
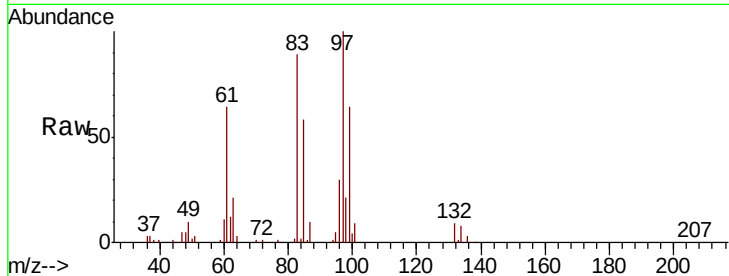




#45
 1,1,2-Trichloroethane
 Concen: 27.221 ug/L
 RT: 8.07 min Scan# 2326
 Delta R.T. 0.00 min
 Lab File: VU026037.D
 Acq: 10 Aug 2018 12:36

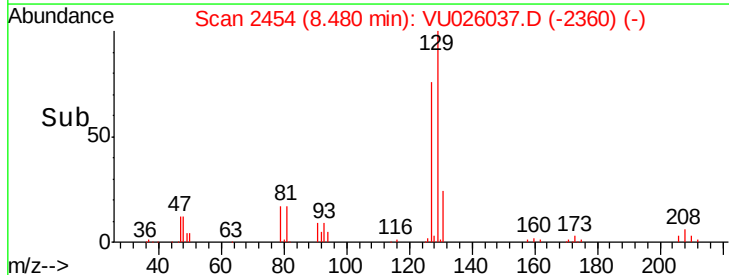
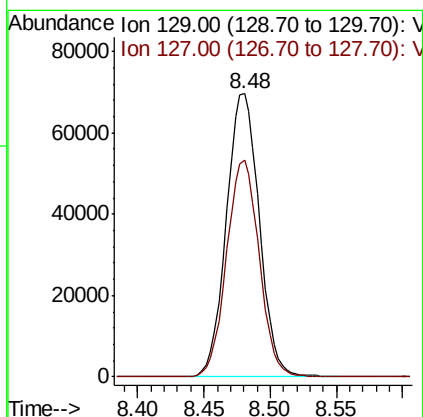
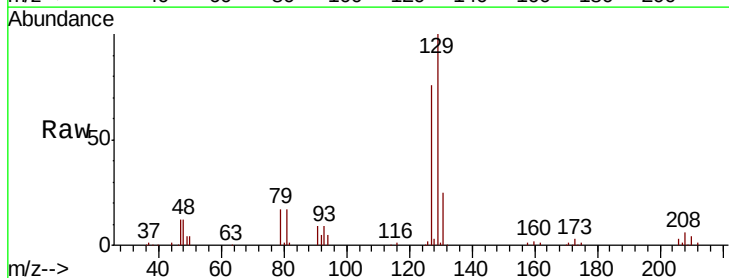
Instrument :
 MSVOA_U
 ClientSampleId :
 A4ZG9

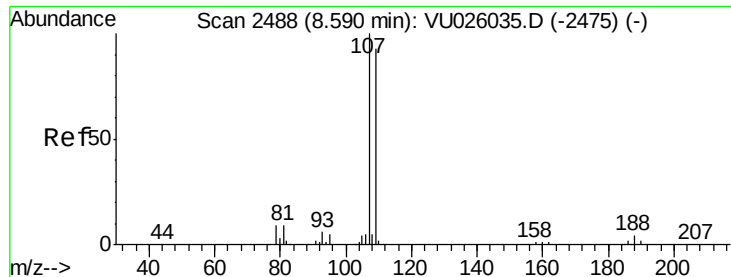
Tot Ion:	97	Resp:	55903
Ion	Ratio	Lower	Upper
97	100		
99	64.0	41.6	77.2
83	88.9	59.0	109.6
85	58.4	37.9	70.5



#49
 Dibromochloromethane
 Concen: 48.566 ug/L
 RT: 8.48 min Scan# 2454
 Delta R.T. 0.00 min
 Lab File: VU026037.D
 Acq: 10 Aug 2018 12:36

Tgt Ion:	129	Resp:	120271
Ion	Ratio	Lower	Upper
129	100		
127	76.5	53.5	99.3

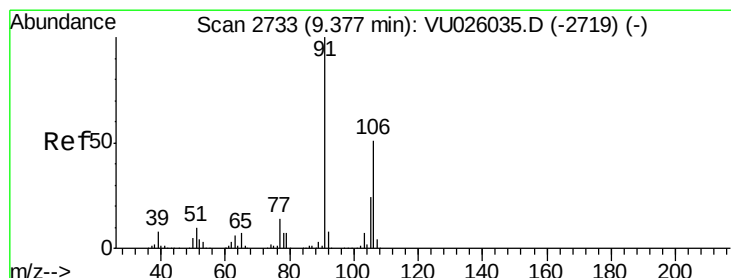
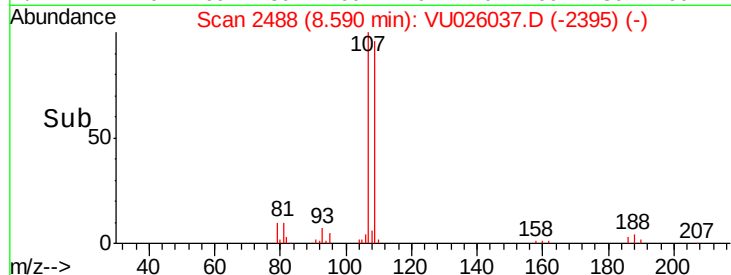
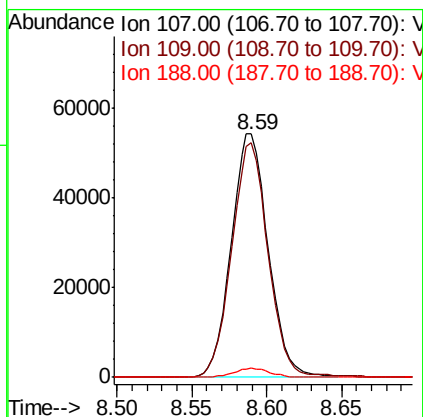
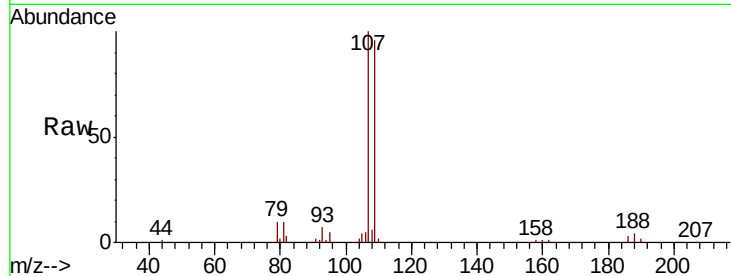




#50
1,2-Dibromoethane
Concen: 41.740 ug/L
RT: 8.59 min Scan# 2488
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

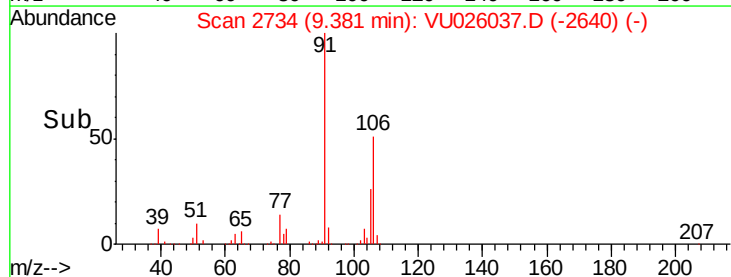
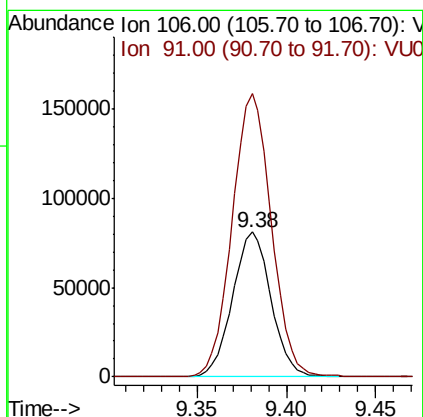
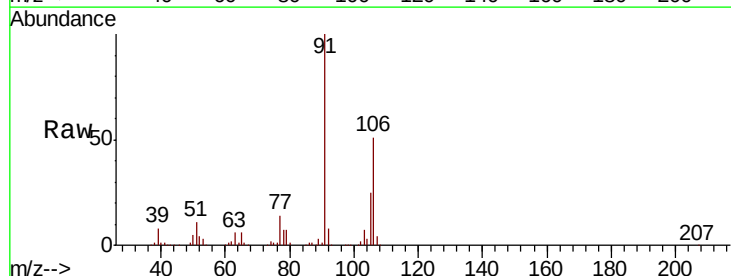
Instrument :
MSVOA_U
ClientSampleId :
A4ZG9

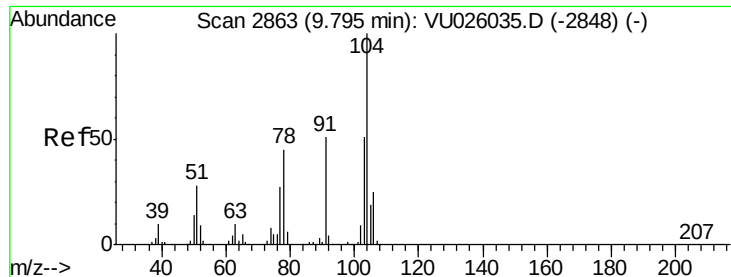
Tot Ion	Ratio	Lower	Upper
107	100		
109	96.5	66.1	122.7
188	3.7	2.9	4.3



#53
m,p-Xylene
Concen: 34.939 ug/L
RT: 9.38 min Scan# 2734
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

Tgt Ion	Ratio	Lower	Upper
106	100		
91	195.8	141.3	262.5

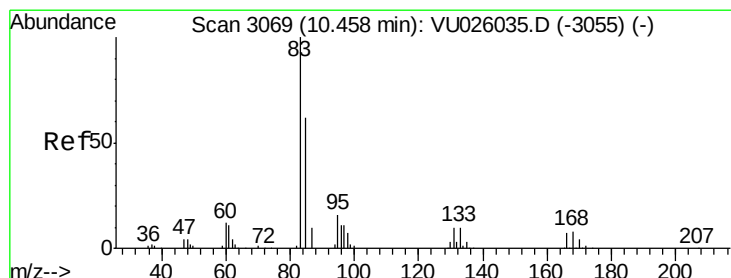
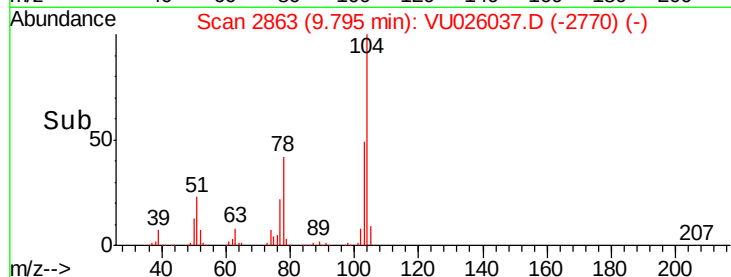
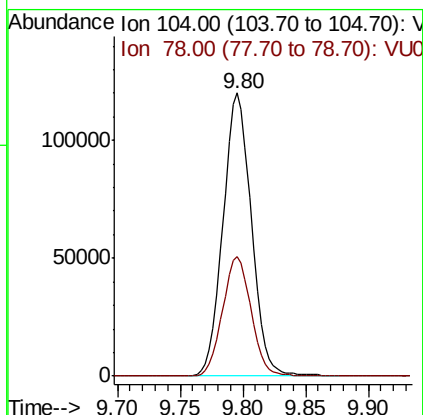
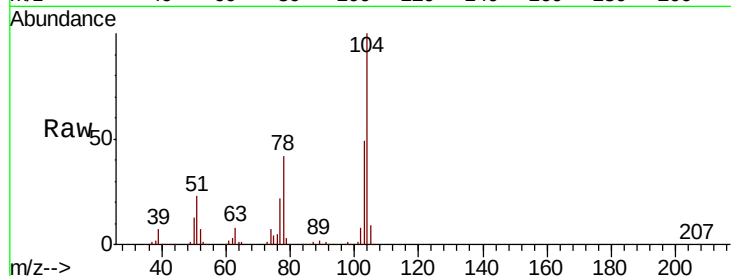




#55
Styrene
Concen: 32.671 ug/L
RT: 9.80 min Scan# 2863
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

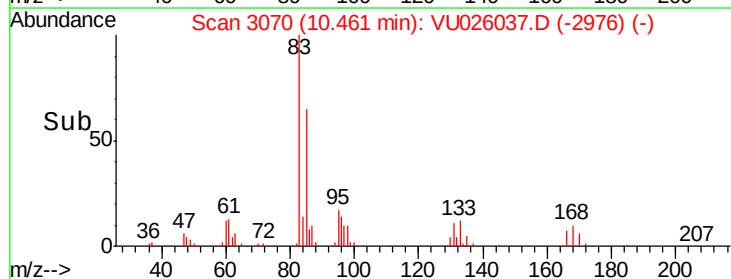
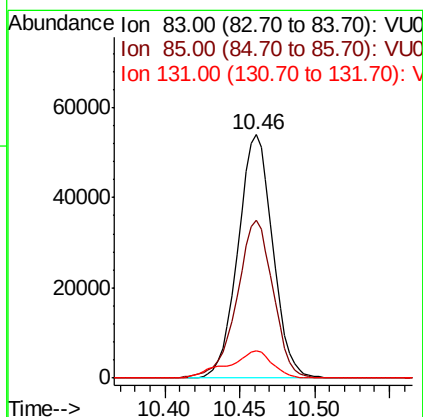
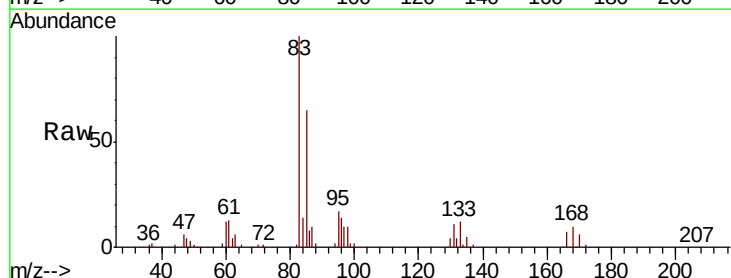
Instrument :
MSVOA_U
ClientSampled :
A4ZG9

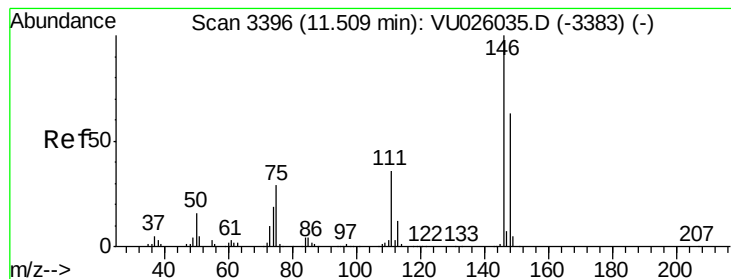
Tot Ion:104 Resp: 188617
Ion Ratio Lower Upper
104 100
78 42.5 32.1 59.5



#58
1,1,2,2-Tetrachloroethane
Concen: 24.955 ug/L
RT: 10.46 min Scan# 3070
Delta R.T. 0.00 min
Lab File: VU026037.D
Acq: 10 Aug 2018 12:36

Tgt Ion: 83 Resp: 87101
Ion Ratio Lower Upper
83 100
85 64.8 45.0 83.6
131 11.3 8.6 12.8





#63

1,4-Dichlorobenzene

Concen: 29.798 ug/L

RT: 11.51 min Scan# 3396

Delta R.T. 0.00 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

A4ZG9

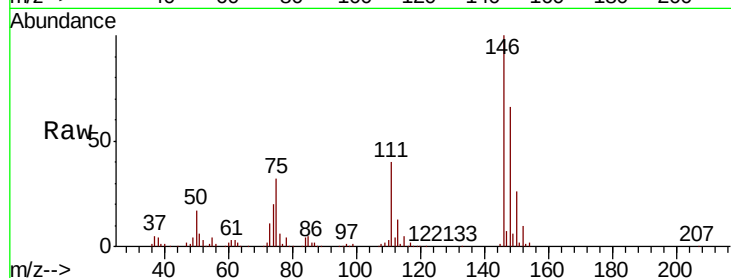
Tot Ion:146 Resp: 137357

Ion Ratio Lower Upper

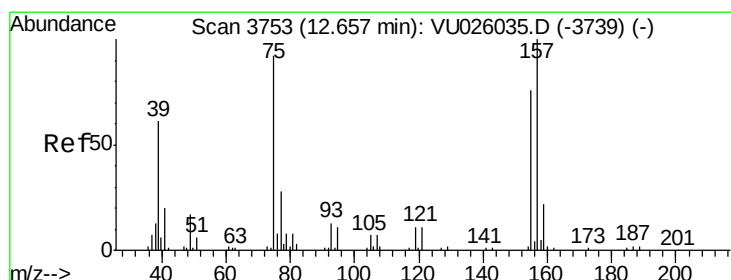
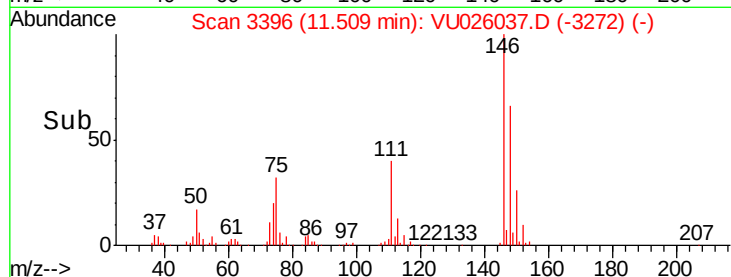
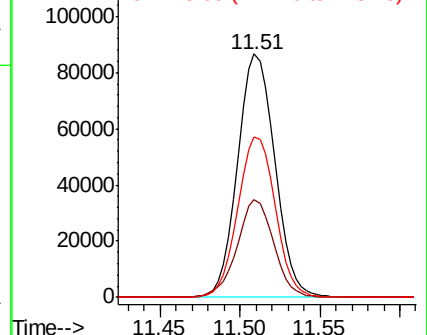
146 100

111 40.3 26.4 49.0

148 65.7 43.8 81.4



Abundance Ion 146.00 (145.70 to 146.70): V
Ion 111.00 (110.70 to 111.70): V
Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 28.112 ug/L

RT: 12.66 min Scan# 3754

Delta R.T. 0.00 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

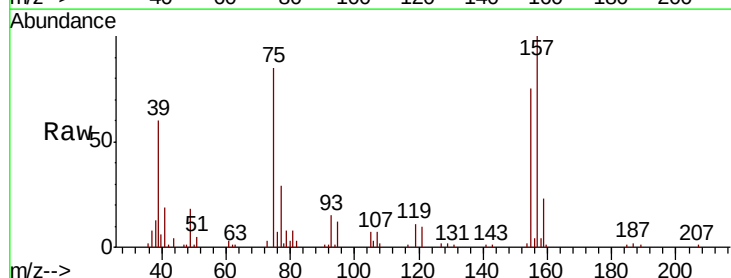
Tgt Ion: 75 Resp: 23094

Ion Ratio Lower Upper

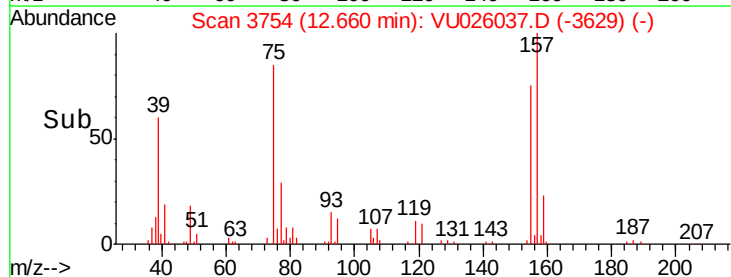
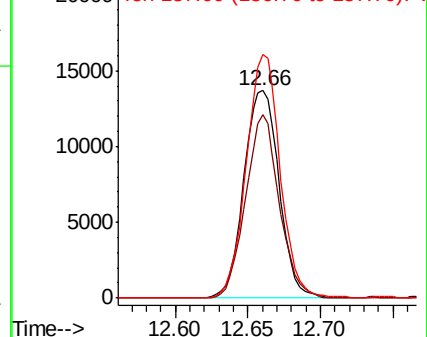
75 100

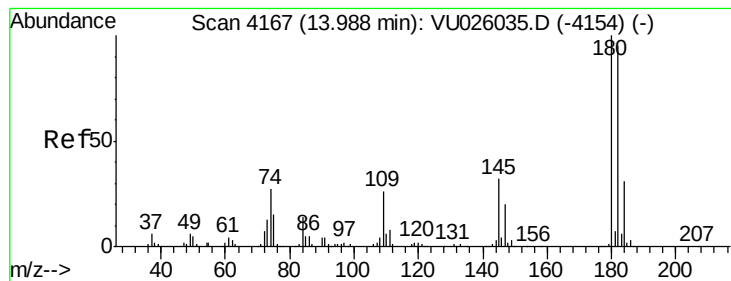
155 88.6 71.8 107.8

157 117.5 93.0 139.6



Abundance Ion 75.00 (74.70 to 75.70): VU0
Ion 155.00 (154.70 to 155.70): V
Ion 157.00 (156.70 to 157.70): V





#70

1,2,3-Trichlorobenzene

Concen: 44.156 ug/L

RT: 13.99 min Scan# 4168

Delta R.T. 0.00 min

Lab File: VU026037.D

Acq: 10 Aug 2018 12:36

Instrument :

MSVOA_U

ClientSampleId :

A4ZG9

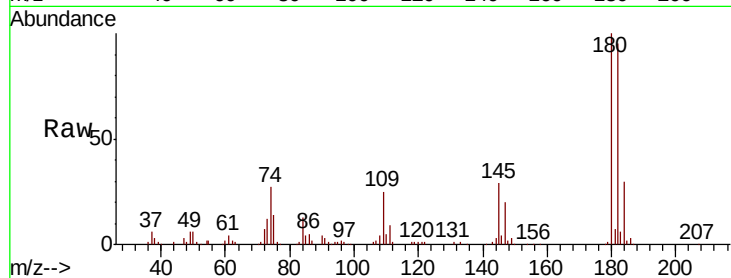
Tot Ion:180 Resp: 131897

Ion Ratio Lower Upper

180 100

182 95.4 76.5 114.7

145 30.1 24.7 37.1



Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

