

Data File : VU036029.D
Acq On : 06 Dec 2019 17:43
Operator : JC/SP
Sample : K6168-04
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
BFE38

Quant Time: Dec 06 22:37:00 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR120319WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Fri Dec 06 22:30:31 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.29	114	290196	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.45	117	296521	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.84	152	86663	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.61	65	106320	3.21	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	64.20%
7) Chloroethane-d5	1.93	69	122834	4.63	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	92.60%
11) 1,1-Dichloroethene-d2	2.59	63	166114	3.50	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	70.00%
20) 2-Butanone-d5	4.68	46	274037	46.78	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	93.56%
24) Chloroform-d	5.11	84	197905	4.36	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	87.20%
26) 1,2-Dichloroethane-d4	5.74	65	105326	4.38	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	87.60%
32) Benzene-d6	5.77	84	377566	4.30	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	86.00%
36) 1,2-Dichloropropane-d6	6.73	67	120438	4.24	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	84.80%
41) Toluene-d8	7.93	98	315045	3.90	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	78.00%
43) trans-1,3-Dichloropropene-	8.21	79	41263	3.59	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	71.80%
46) 2-Hexanone-d5	8.67	63	235616	52.16	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	104.32%
57) 1,1,2,2-Tetrachloroethane-	10.78	84	104977	4.39	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	87.80%
64) 1,2-Dichlorobenzene-d4	12.22	152	89574	5.00	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	100.00%

Target Compounds

						Qvalue
3) Chloromethane	1.54	50	3664	0.107	ug/L	87
6) Bromomethane	1.87	94	2052	0.103	ug/L	74
9) Trichlorofluoromethane	2.16	101	7141	0.175	ug/L #	83
10) 1,1,2-Trichloro-1,2,2-trif	2.61	101	8758	0.393	ug/L #	93
12) 1,1-Dichloroethene	2.61	96	76582	3.682	ug/L	84
13) Acetone	2.66	43	5621	1.061	ug/L	83
17) Methyl tert-butyl Ether	3.41	73	124525	2.556	ug/L	99
18) trans-1,2-Dichloroethene	3.39	96	1853	0.084	ug/L #	76
19) 1,1-Dichloroethane	3.92	63	96156	2.234	ug/L	98
22) cis-1,2-Dichloroethene	4.72	96	387882	16.672	ug/L	90
25) Chloroform	5.14	83	25251	0.581	ug/L	97
29) 1,1,1-Trichloroethane	5.36	97	28427	0.793	ug/L	96
31) Carbon tetrachloride	5.37	117	3737	0.118	ug/L	97
33) Benzene	5.82	78	15581	0.167	ug/L	100
34) Trichloroethene	6.58	95	6188186	262.426	ug/L	94
35) Methylcyclohexane	6.73	83	28678	0.811	ug/L #	16
37) 1,2-Dichloropropane	6.73	63	12751	0.505	ug/L #	91

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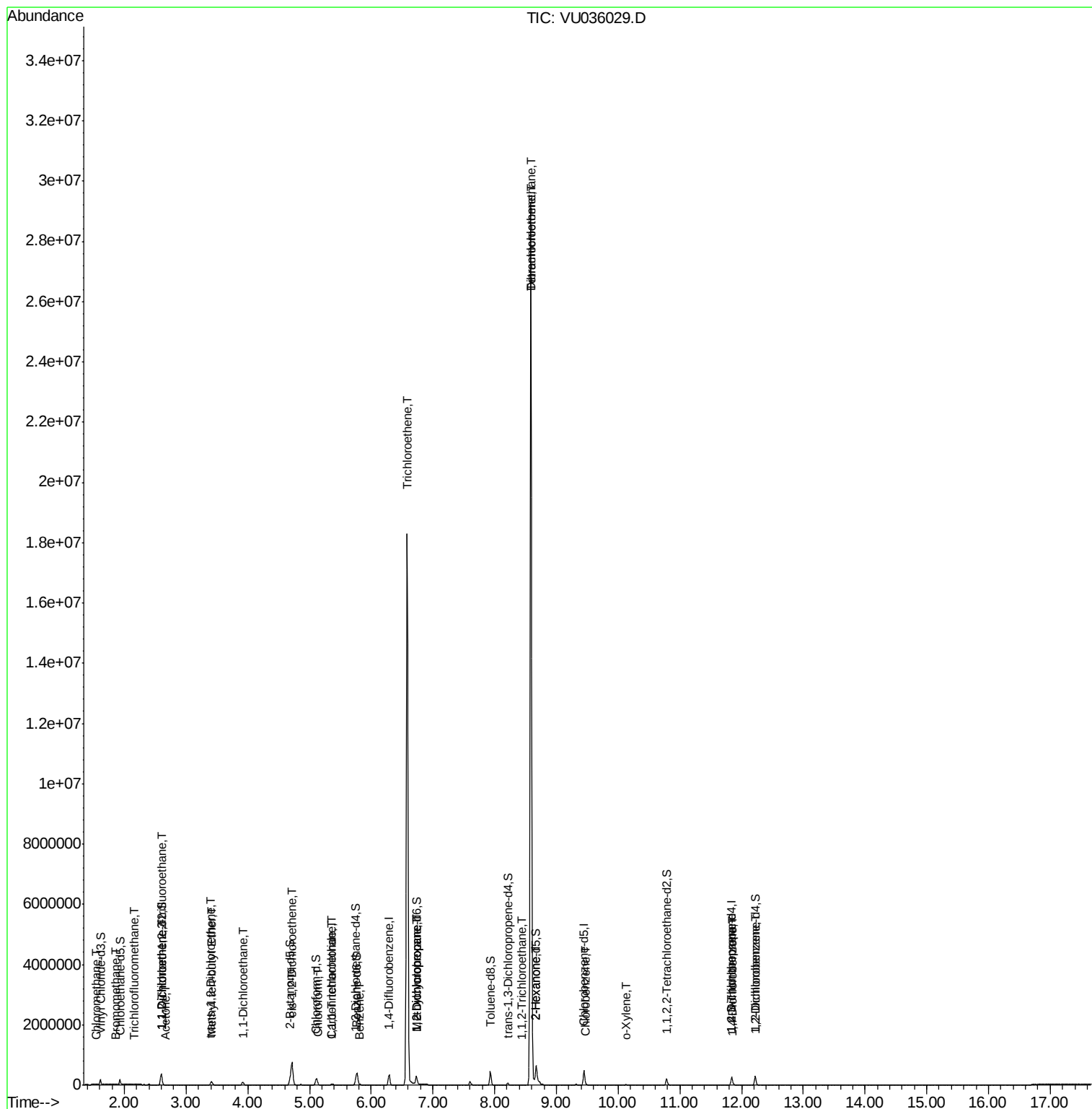
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,1,2-Trichloroethane	8.44	97	4803	0.279	ug/L	98
47) Tetrachloroethene	8.59	164	6917293	360.924	ug/L	95
48) 2-Hexanone	8.67	43	21537	1.965	ug/L #	77
49) Dibromochloromethane	8.59	129	6268682	299.064	ug/L #	12
51) Chlorobenzene	9.47	112	7002	0.115	ug/L	98
54) o-Xylene	10.13	106	3722	0.107	ug/L	99
59) 1,2,3-Trichloropropane	11.84	75	10442	0.636	ug/L	95
63) 1,4-Dichlorobenzene	11.86	146	3517	0.123	ug/L	95
65) 1,2-Dichlorobenzene	12.24	146	2941	0.107	ug/L	95

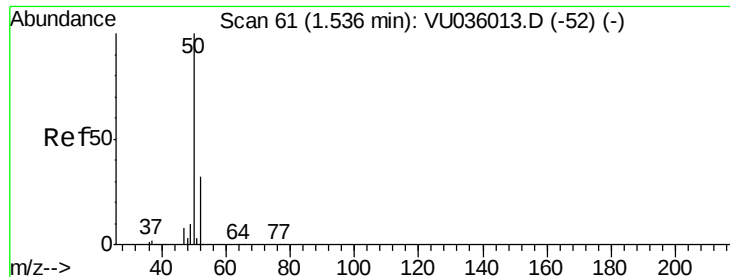
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#3

Chloromethane

Concen: 0.107 ug/L

RT: 1.54 min Scan# 61

Delta R.T. -0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampleId :

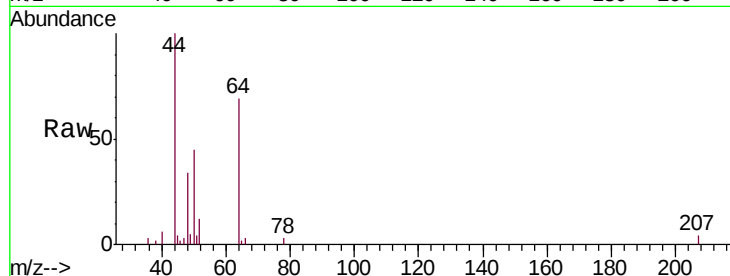
BFE38

Tgt Ion: 50 Resp: 3664

Ion Ratio Lower Upper

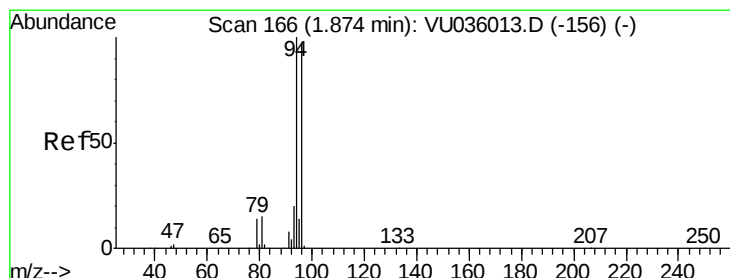
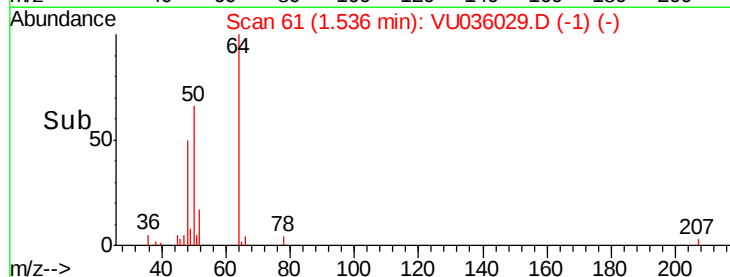
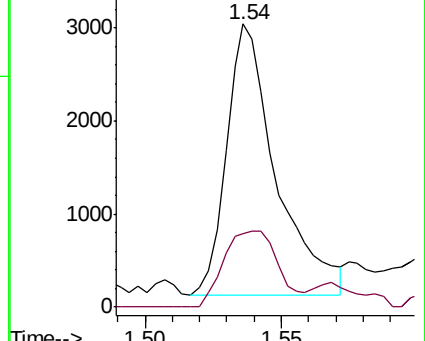
50 100

52 25.9 23.1 42.9



Abundance Ion 50.05 (49.75 to 50.75): VU036029.D (-52) (-)

Ion 52.05 (51.75 to 52.75): VU036029.D (-52) (-)



#6

Bromomethane

Concen: 0.103 ug/L

RT: 1.87 min Scan# 164

Delta R.T. -0.01 min

Lab File: VU036029.D

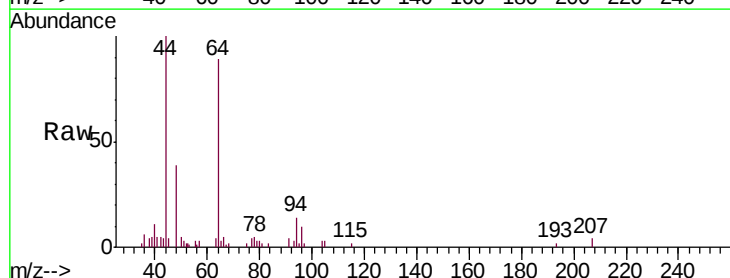
Acq: 06 Dec 2019 17:43

Tgt Ion: 94 Resp: 2052

Ion Ratio Lower Upper

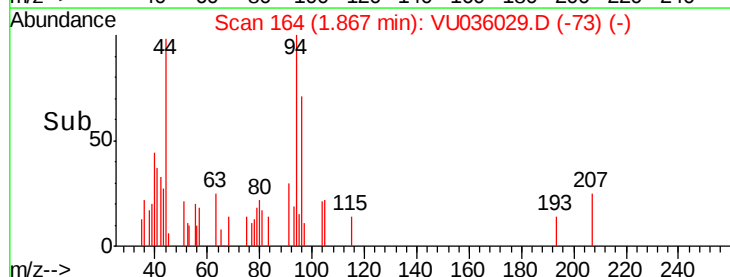
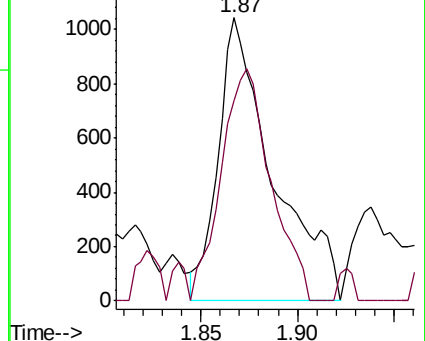
94 100

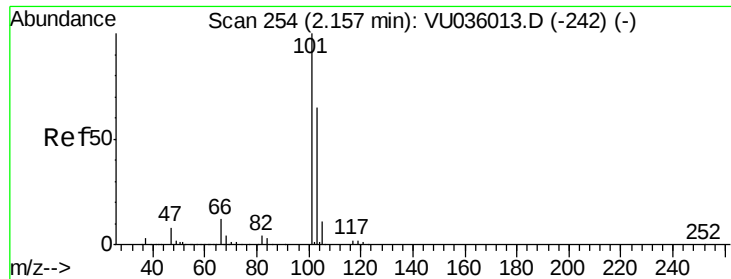
96 70.8 67.3 124.9



Abundance Ion 94.00 (93.70 to 94.70): VU036029.D (-156) (-)

Ion 96.00 (95.70 to 96.70): VU036029.D (-156) (-)





#9

Trichlorofluoromethane

Concen: 0.175 ug/L

RT: 2.16 min Scan# 254

Delta R.T. -0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampleId :

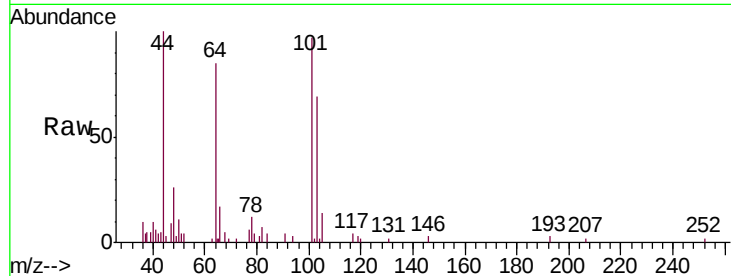
BFE38

Tgt Ion:101 Resp: 7141

Ion Ratio Lower Upper

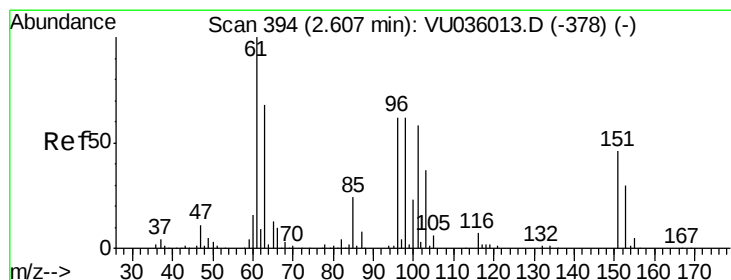
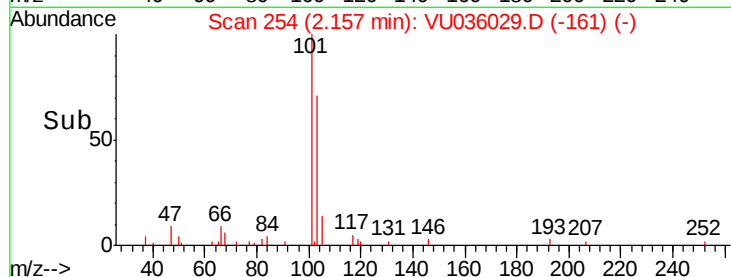
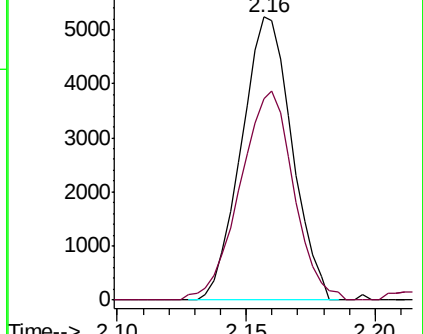
101 100

103 78.3 51.8 77.8#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#10

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

Concen: 0.393 ug/L

RT: 2.61 min Scan# 394

Delta R.T. -0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

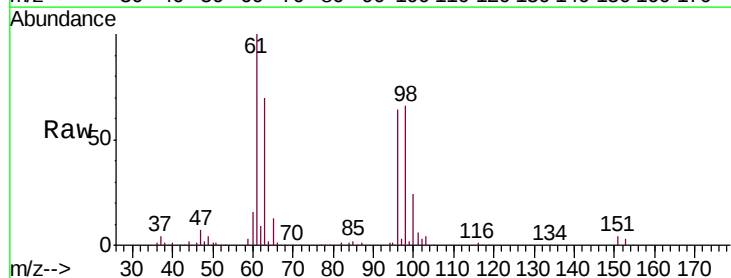
Tgt Ion:101 Resp: 8758

Ion Ratio Lower Upper

101 100

85 33.7 35.5 53.3#

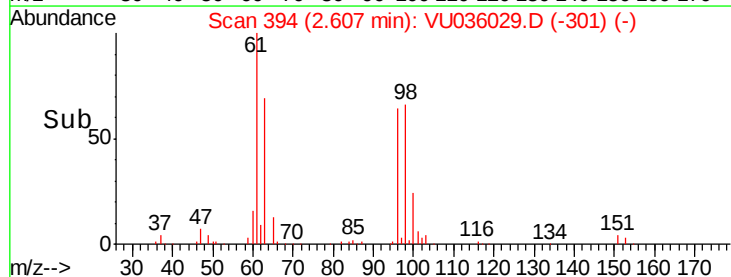
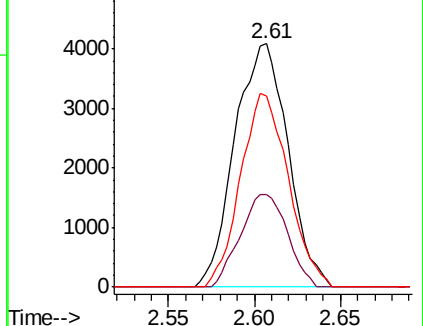
151 71.5 57.5 86.3

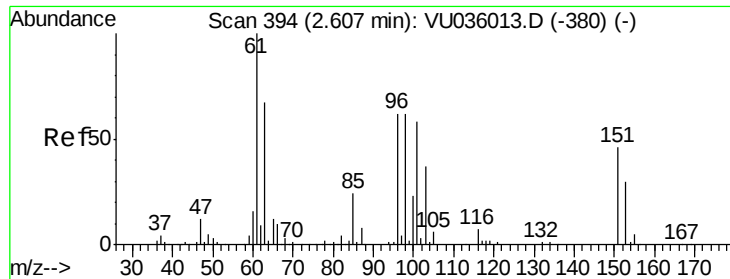


Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V

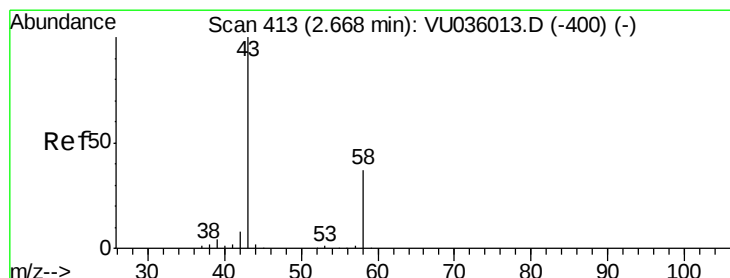
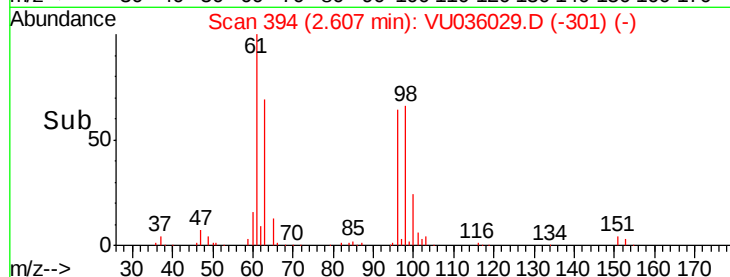
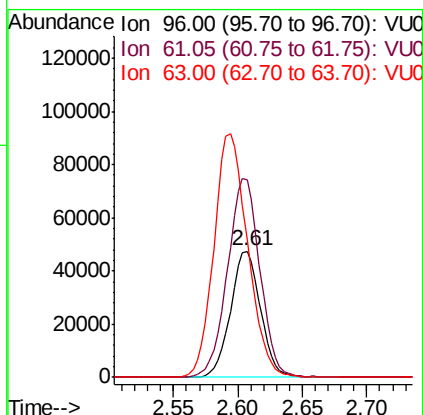
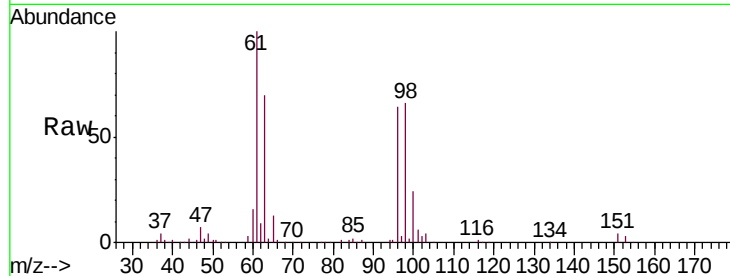




#12
 1,1-Dichloroethene
 Concen: 3.682 ug/L
 RT: 2.61 min Scan# 394
 Delta R.T. -0.00 min
 Lab File: VU036029.D
 Acq: 06 Dec 2019 17:43

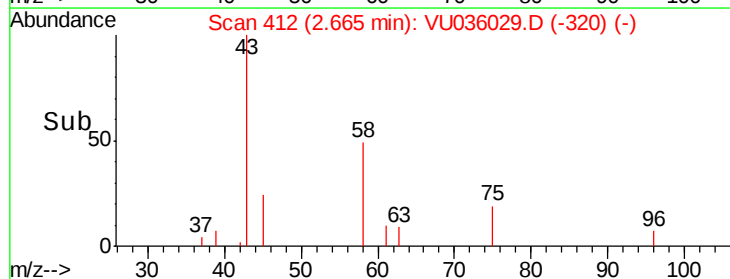
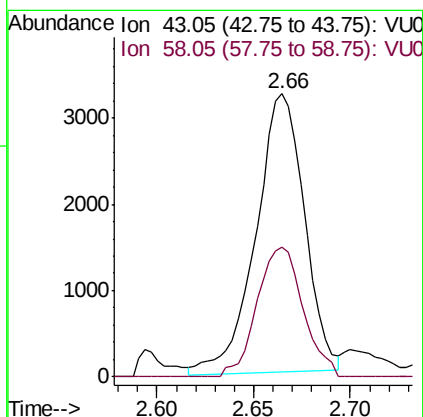
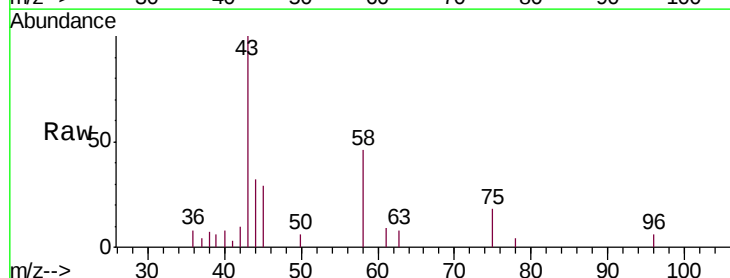
Instrument :
 MSVOA_U
 ClientSampleID :
 BFE38

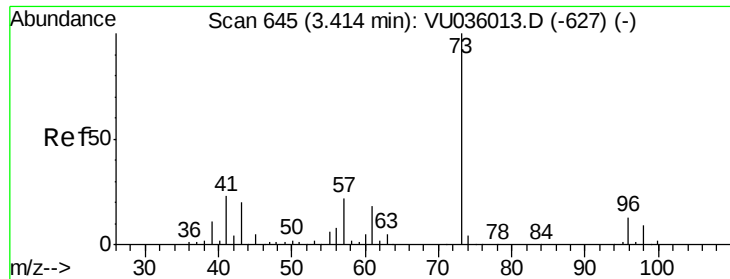
Tgt Ion: 96 Resp: 76582
 Ion Ratio Lower Upper
 96 100
 61 156.4 127.1 236.1
 63 108.8 86.0 159.8



#13
 Acetone
 Concen: 1.061 ug/L
 RT: 2.66 min Scan# 412
 Delta R.T. -0.00 min
 Lab File: VU036029.D
 Acq: 06 Dec 2019 17:43

Tgt Ion: 43 Resp: 5621
 Ion Ratio Lower Upper
 43 100
 58 44.2 0.0 68.6





#17

Methyl tert-butyl Ether

Concen: 2.556 ug/L

RT: 3.41 min Scan# 645

Delta R.T. -0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampleId :

BFE38

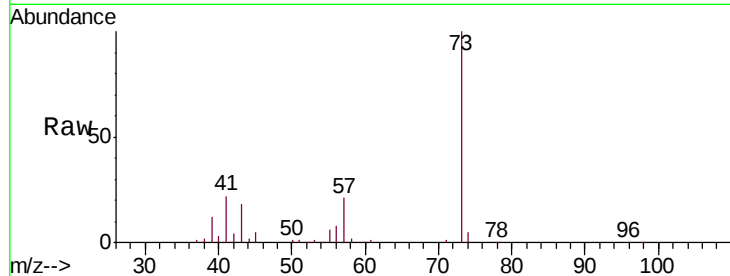
Tgt Ion: 73 Resp: 124525

Ion Ratio Lower Upper

73 100

43 20.3 15.9 23.9

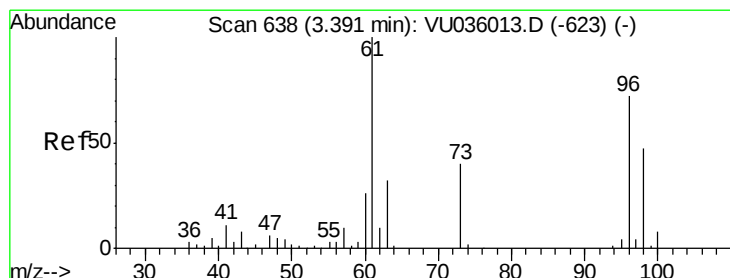
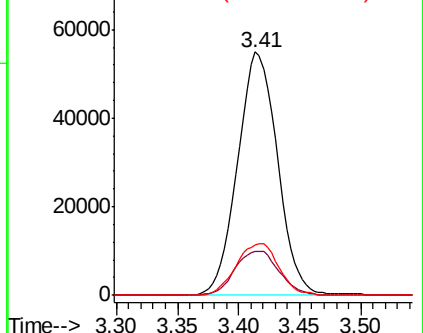
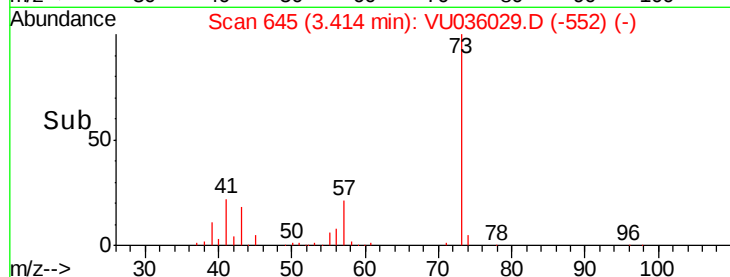
57 22.7 18.8 28.2



Abundance Ion 73.10 (72.80 to 73.80): VU036029.D (-552) (-)

Ion 43.05 (42.75 to 43.75): VU036029.D (-552) (-)

Ion 57.10 (56.80 to 57.80): VU036029.D (-552) (-)



#18

trans-1,2-Dichloroethene

Concen: 0.084 ug/L

RT: 3.39 min Scan# 639

Delta R.T. 0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

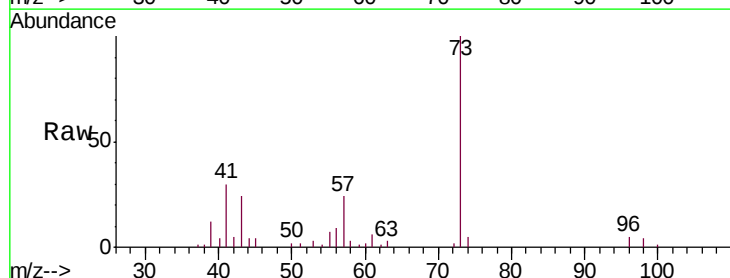
Tgt Ion: 96 Resp: 1853

Ion Ratio Lower Upper

96 100

61 116.0 101.2 187.8

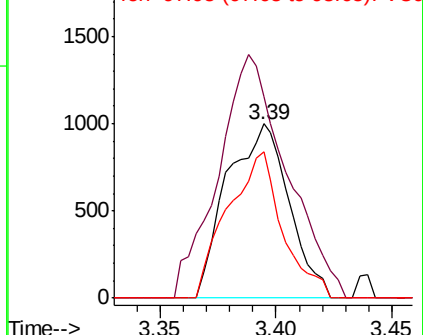
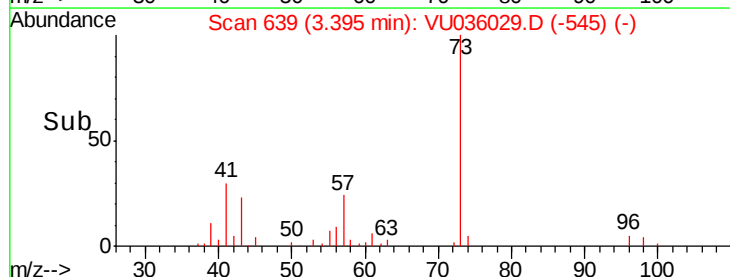
98 84.3 45.0 83.6#

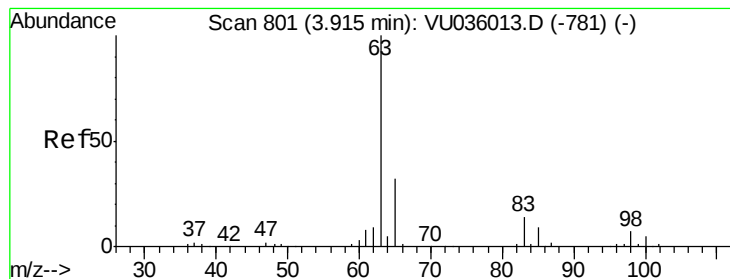


Abundance Ion 96.00 (95.70 to 96.70): VU036029.D (-545) (-)

Ion 61.05 (60.75 to 61.75): VU036029.D (-545) (-)

Ion 97.95 (97.65 to 98.65): VU036029.D (-545) (-)





#19

1,1-Dichloroethane

Concen: 2.234 ug/L

RT: 3.92 min Scan# 802

Delta R.T. 0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampled :

BFE38

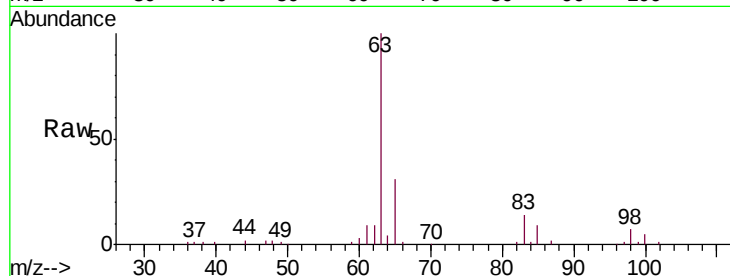
Tgt Ion: 63 Resp: 96156

Ion Ratio Lower Upper

63 100

65 30.8 22.4 41.6

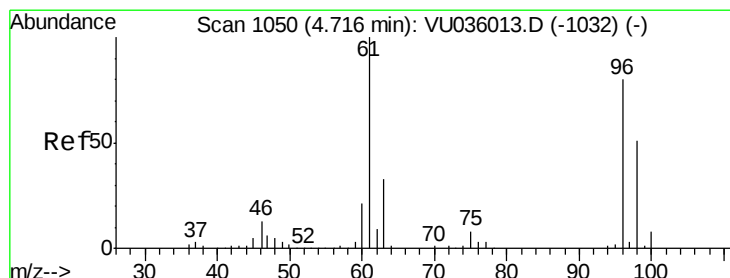
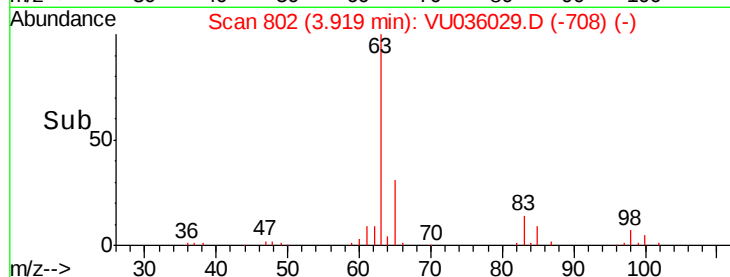
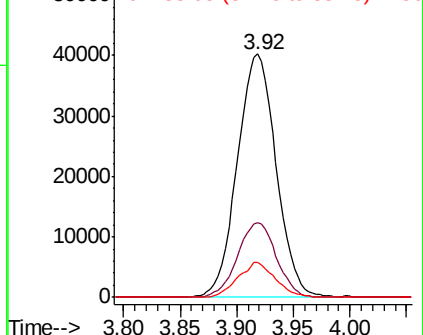
83 14.4 9.8 18.2



Abundance Ion 63.10 (62.80 to 63.80): VU036013.D (-781) (-)

Ion 65.10 (64.80 to 65.80): VU036013.D (-781) (-)

Ion 83.05 (82.75 to 83.75): VU036013.D (-781) (-)



#22

cis-1,2-Dichloroethene

Concen: 16.672 ug/L

RT: 4.72 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

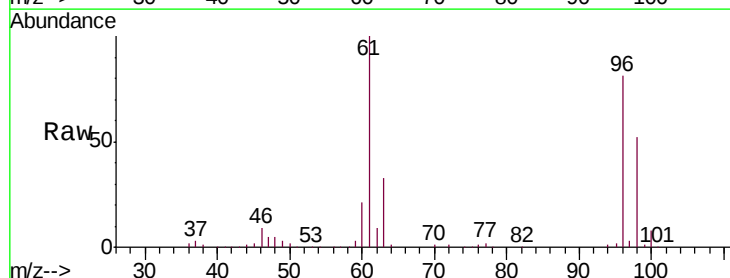
Tgt Ion: 96 Resp: 387882

Ion Ratio Lower Upper

96 100

61 124.2 95.7 177.7

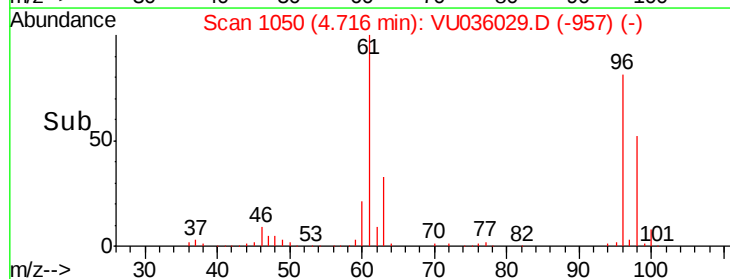
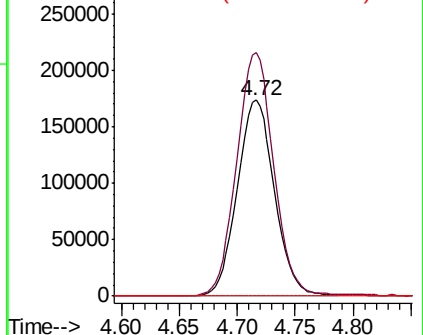
68 0.0 0.0 0.0

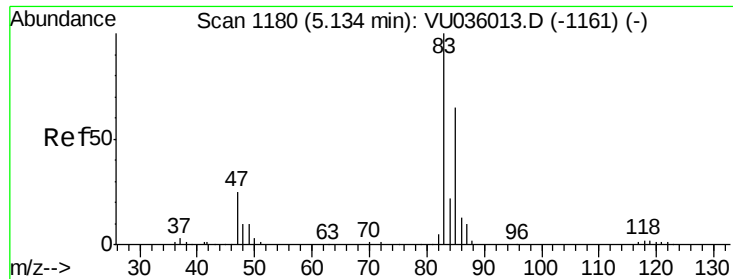


Abundance Ion 96.00 (95.70 to 96.70): VU036013.D (-1032) (-)

Ion 61.05 (60.75 to 61.75): VU036013.D (-1032) (-)

Ion 68.15 (67.85 to 68.85): VU036013.D (-1032) (-)

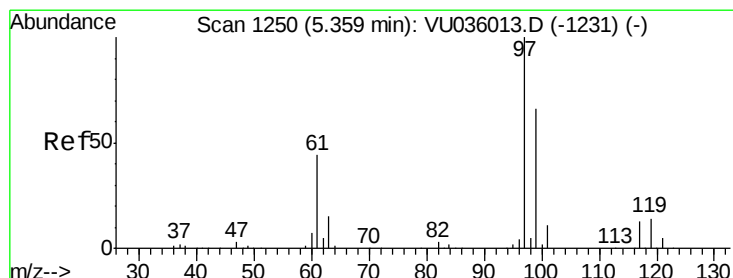
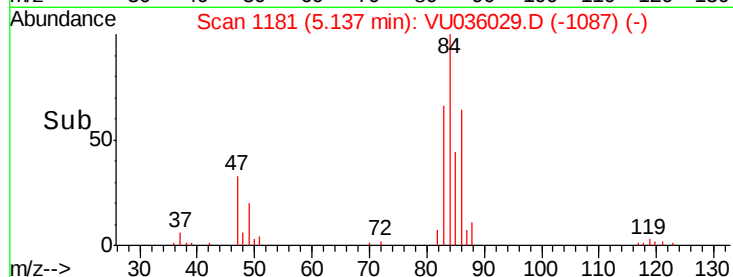
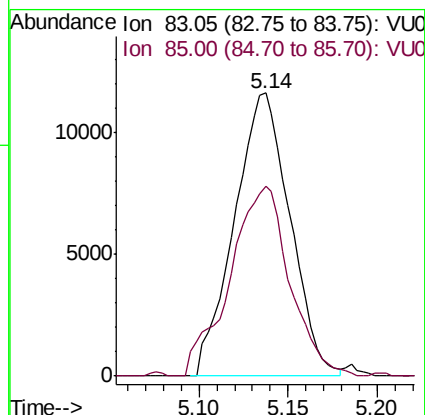
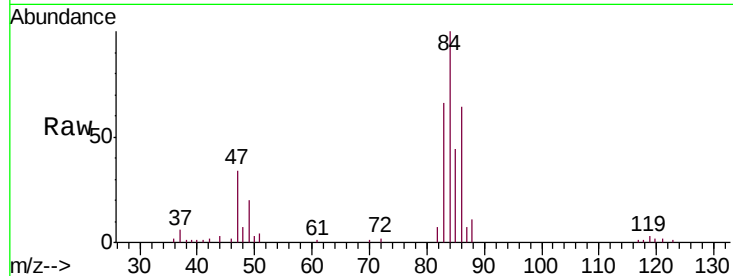




#25
Chloroform
Concen: 0.581 ug/L
RT: 5.14 min Scan# 1181
Delta R.T. 0.00 min
Lab File: VU036029.D
Acq: 06 Dec 2019 17:43

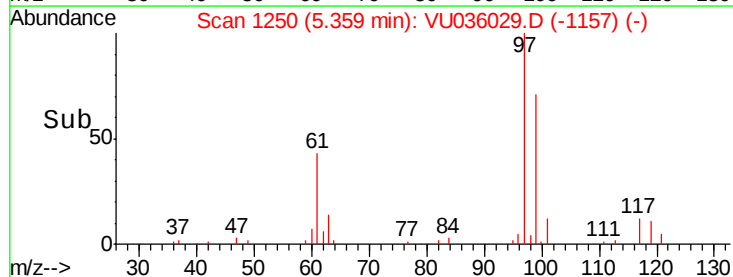
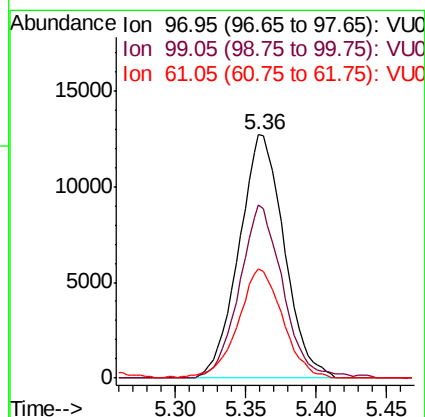
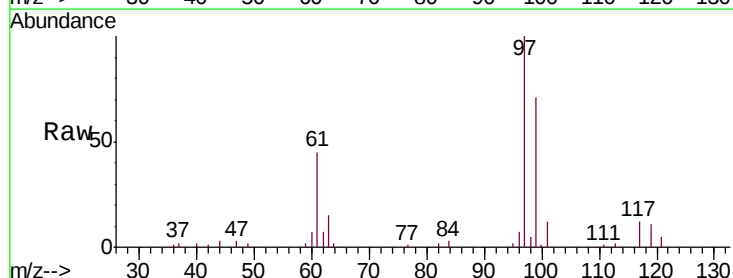
Instrument :
MSVOA_U
ClientSampleId :
BFE38

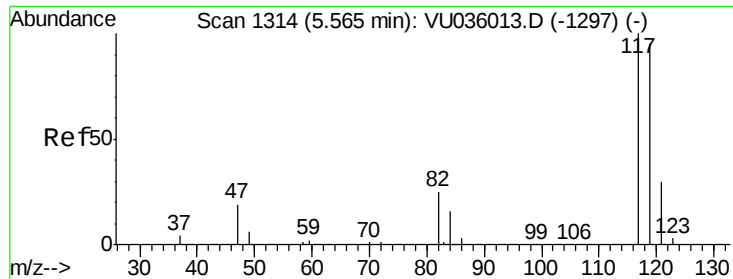
Tgt Ion: 83 Resp: 25251
Ion Ratio Lower Upper
83 100
85 67.0 45.4 84.2



#29
1,1,1-Trichloroethane
Concen: 0.793 ug/L
RT: 5.36 min Scan# 1250
Delta R.T. -0.00 min
Lab File: VU036029.D
Acq: 06 Dec 2019 17:43

Tgt Ion: 97 Resp: 28427
Ion Ratio Lower Upper
97 100
99 68.4 51.8 77.8
61 44.5 37.6 56.4





#31

Carbon tetrachloride

Concen: 0.118 ug/L

RT: 5.37 min Scan# 1252

Delta R.T. -0.20 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampleId :

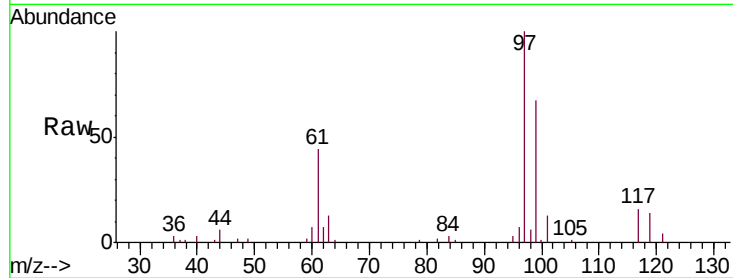
BFE38

Tgt Ion:117 Resp: 3737

Ion Ratio Lower Upper

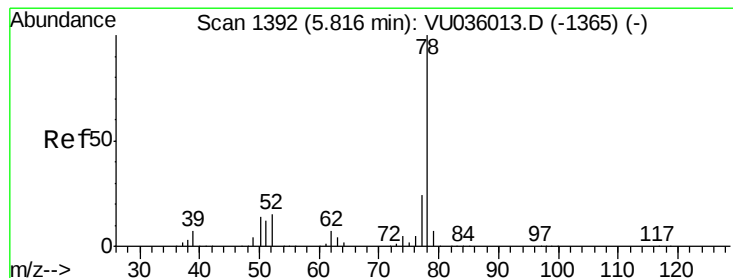
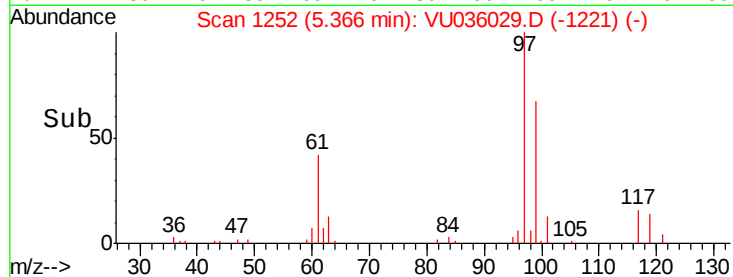
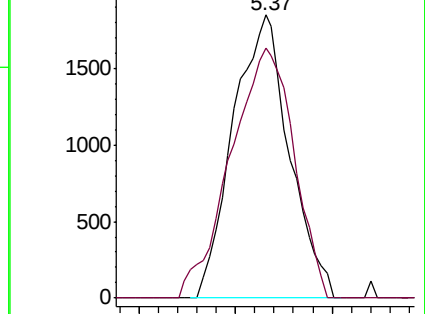
117 100

119 99.2 76.9 115.3



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 0.167 ug/L

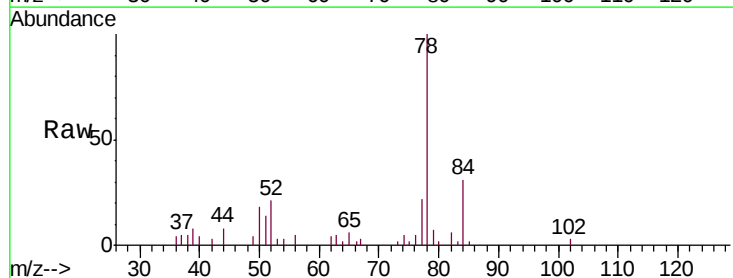
RT: 5.82 min Scan# 1392

Delta R.T. -0.00 min

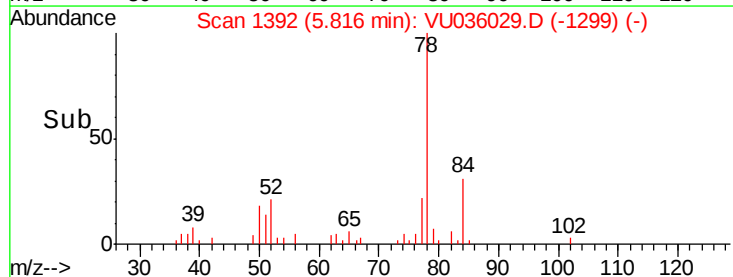
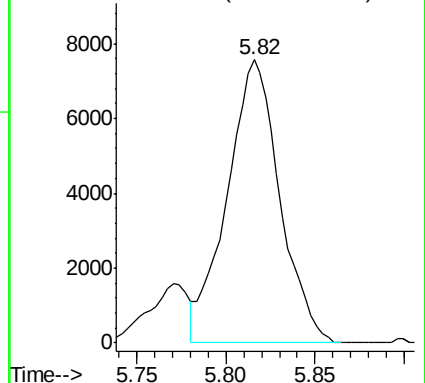
Lab File: VU036029.D

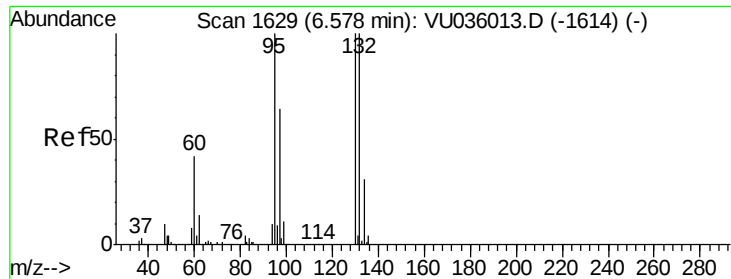
Acq: 06 Dec 2019 17:43

Tgt Ion: 78 Resp: 15581



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 262.426 ug/L

RT: 6.58 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampled :

BFE38

Tgt Ion: 95 Resp: 6188186

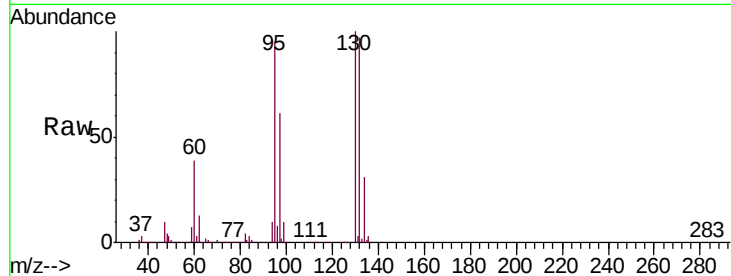
Ion Ratio Lower Upper

95 100

97 64.3 46.3 85.9

132 102.0 65.7 122.1

130 105.3 69.2 128.6

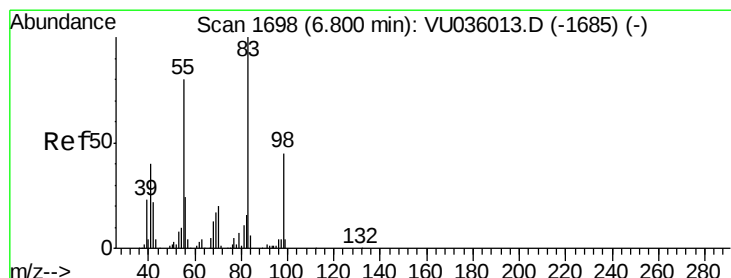
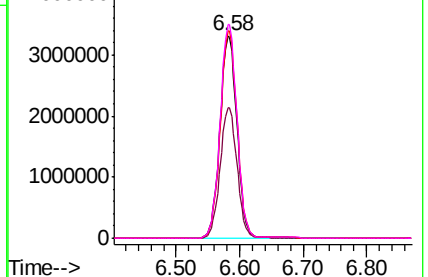
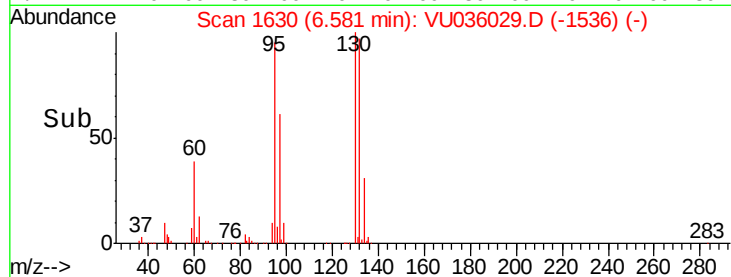


Abundance Ion 95.00 (94.70 to 95.70): VU036029.D (-1636) (-)

Ion 96.95 (96.65 to 97.65): VU036029.D (-1636) (-)

Ion 131.95 (131.65 to 132.65): VU036029.D (-1636) (-)

Ion 129.95 (129.65 to 130.65): VU036029.D (-1636) (-)



#35

Methylcyclohexane

Concen: 0.811 ug/L

RT: 6.73 min Scan# 1677

Delta R.T. -0.07 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

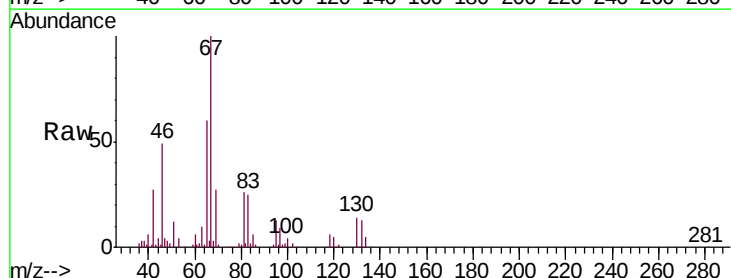
Tgt Ion: 83 Resp: 28678

Ion Ratio Lower Upper

83 100

55 0.1 67.4 101.0#

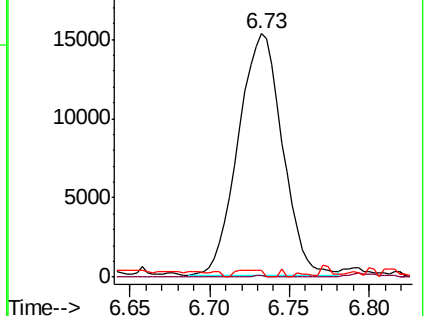
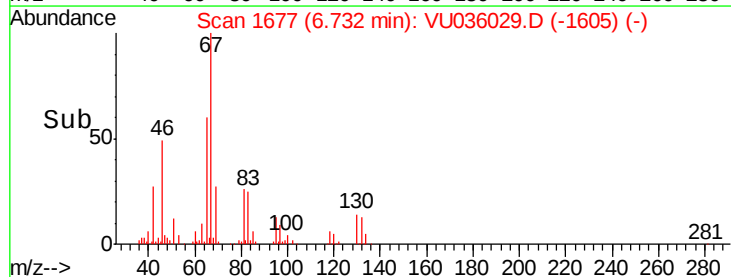
98 0.0 34.6 52.0#

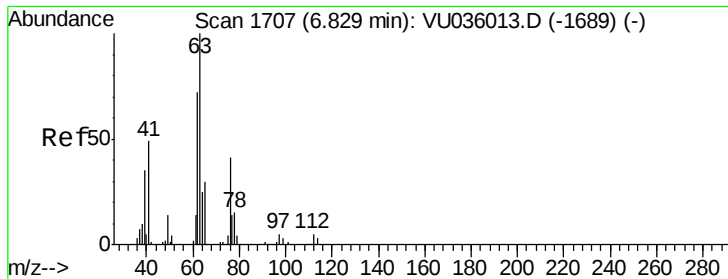


Abundance Ion 83.15 (82.85 to 83.85): VU036029.D (-1677) (-)

Ion 55.10 (54.80 to 55.80): VU036029.D (-1677) (-)

Ion 98.15 (97.85 to 98.85): VU036029.D (-1677) (-)





#37

1,2-Dichloropropane

Concen: 0.505 ug/L

RT: 6.73 min Scan# 1676

Delta R.T. -0.10 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampleId :

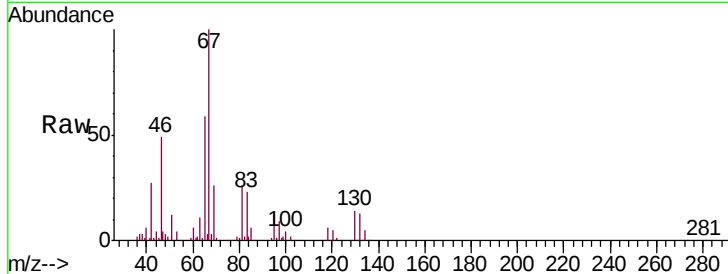
BFE38

Tgt Ion: 63 Resp: 12751

Ion Ratio Lower Upper

63 100

112 1.0 3.3 4.9#



Abundance Ion 63.10 (62.80 to 63.80): VU036013.D (-1689) (-)

Ion 112.10 (111.80 to 112.80): VU036013.D (-1689) (-)

6.73

6000

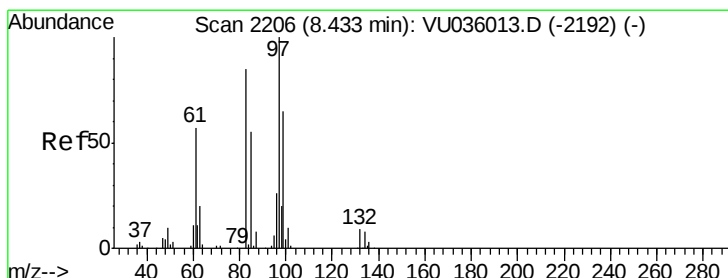
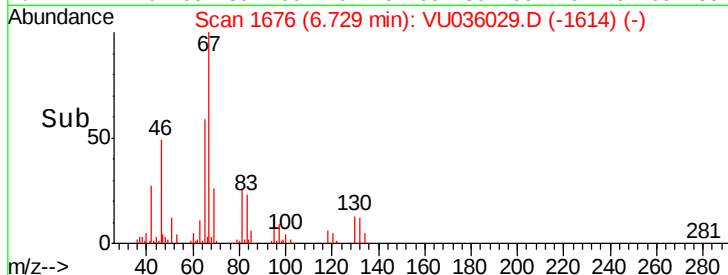
4000

2000

0

6.70 6.75

Time-->



#45

1,1,2-Trichloroethane

Concen: 0.279 ug/L

RT: 8.44 min Scan# 2208

Delta R.T. 0.01 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Tgt Ion: 97 Resp: 4803

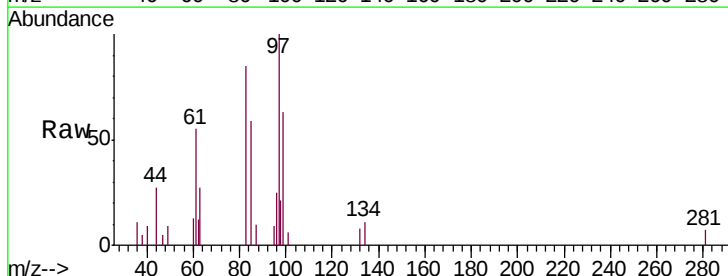
Ion Ratio Lower Upper

97 100

99 63.5 45.0 83.6

83 85.3 62.1 115.3

85 59.0 41.4 77.0



Abundance Ion 96.95 (96.65 to 97.65): VU036013.D (-2192) (-)

Ion 99.05 (98.75 to 99.75): VU036013.D (-2192) (-)

Ion 82.95 (82.65 to 83.65): VU036013.D (-2192) (-)

Ion 85.00 (84.70 to 85.70): VU036013.D (-2192) (-)

8.44

3000

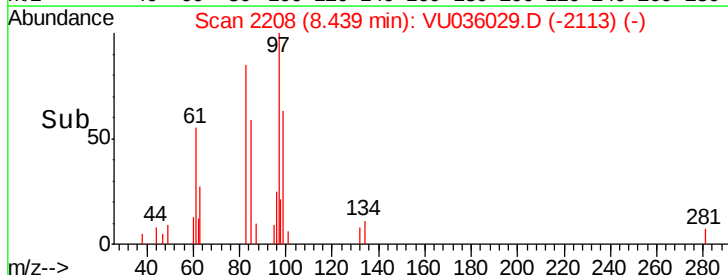
2000

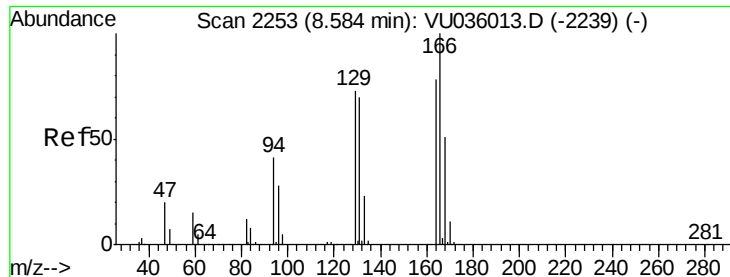
1000

0

8.40 8.45 8.50

Time-->

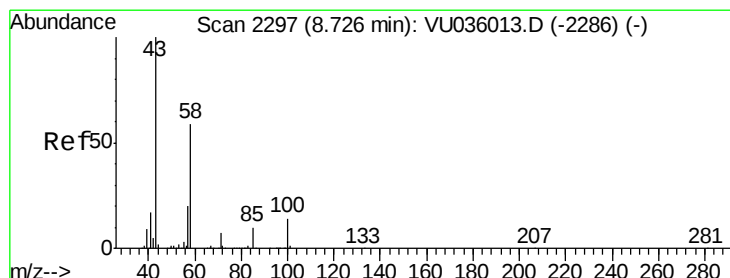
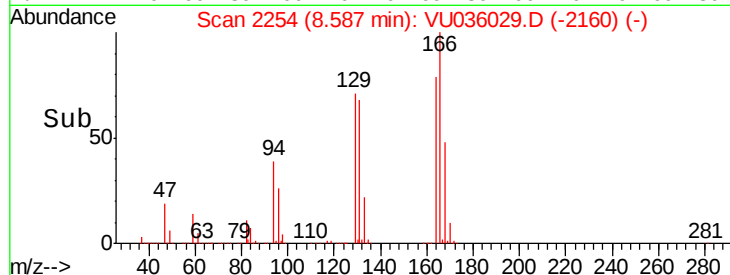
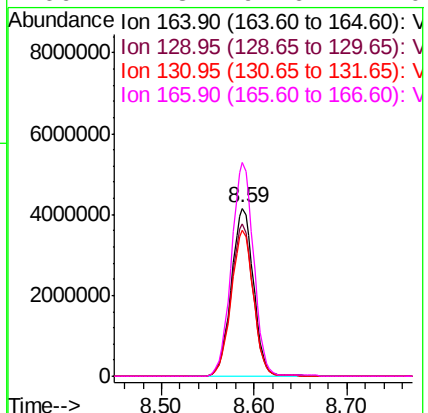
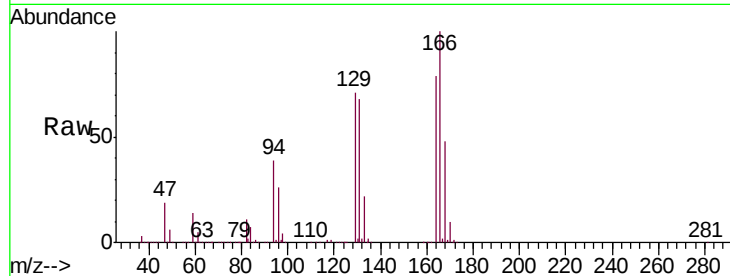




#47
Tetrachloroethene
Concen: 360.924 ug/L
RT: 8.59 min Scan# 2254
Delta R.T. 0.00 min
Lab File: VU036029.D
Acq: 06 Dec 2019 17:43

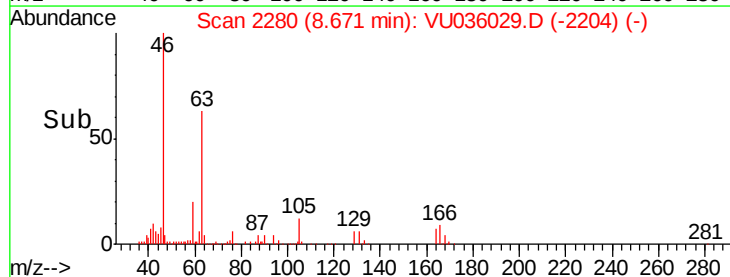
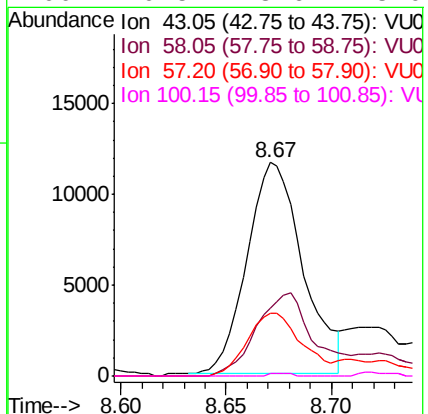
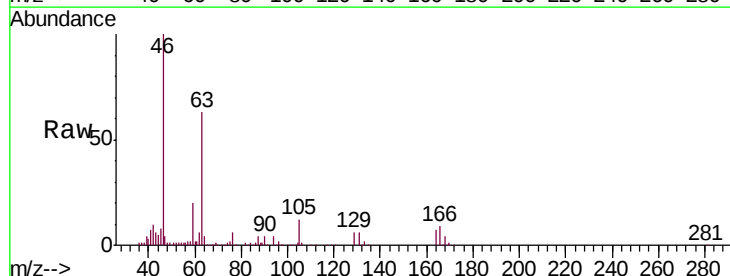
Instrument :
MSVOA_U
ClientSampleId :
BFE38

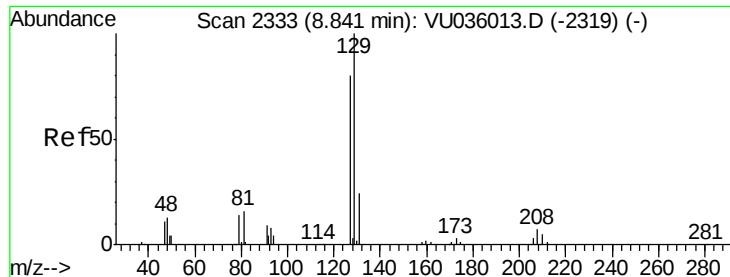
Tgt Ion:164 Resp: 6917293
Ion Ratio Lower Upper
164 100
129 90.5 67.9 126.1
131 87.1 64.1 119.1
166 127.3 92.6 172.0



#48
2-Hexanone
Concen: 1.965 ug/L
RT: 8.67 min Scan# 2280
Delta R.T. -0.05 min
Lab File: VU036029.D
Acq: 06 Dec 2019 17:43

Tgt Ion: 43 Resp: 21537
Ion Ratio Lower Upper
43 100
58 40.2 45.4 68.2#
57 28.8 14.9 22.3#
100 0.5 8.6 13.0#





#49

Dibromochloromethane

Concen: 299.064 ug/L

RT: 8.59 min Scan# 2254

Delta R.T. -0.25 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

Instrument :

MSVOA_U

ClientSampleId :

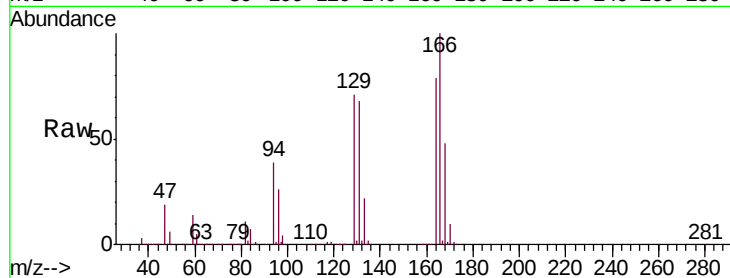
BFE38

Tgt Ion:129 Resp: 6268682

Ion Ratio Lower Upper

129 100

127 0.0 52.8 98.0#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V

8.59

4000000

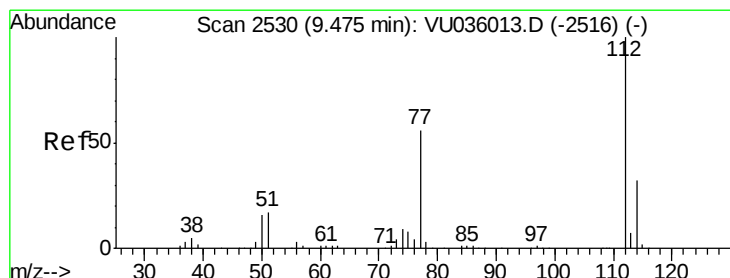
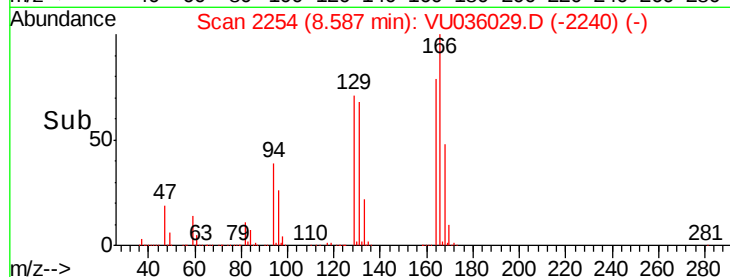
3000000

2000000

1000000

0

Time-->



#51

Chlorobenzene

Concen: 0.115 ug/L

RT: 9.47 min Scan# 2530

Delta R.T. -0.00 min

Lab File: VU036029.D

Acq: 06 Dec 2019 17:43

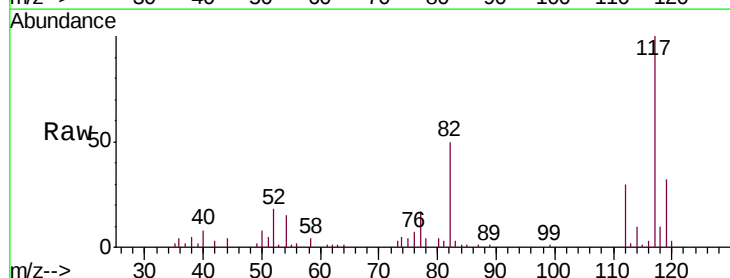
Tgt Ion:112 Resp: 7002

Ion Ratio Lower Upper

112 100

114 33.1 22.5 41.7

77 57.7 47.7 71.5



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): VU0

6000

5000

4000

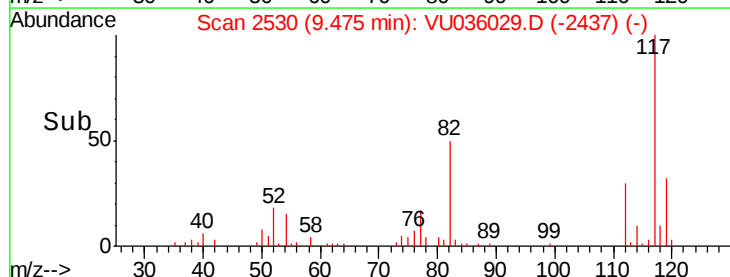
3000

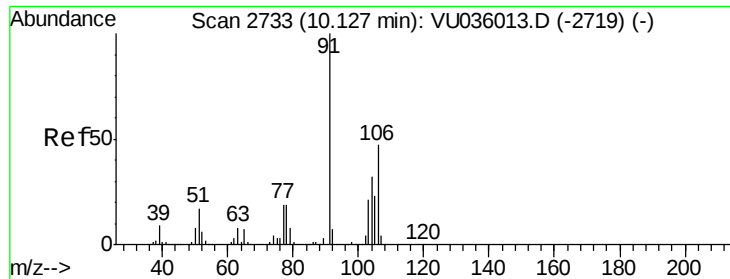
2000

1000

0

Time-->

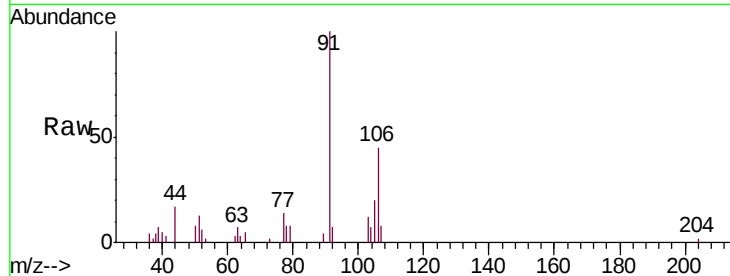




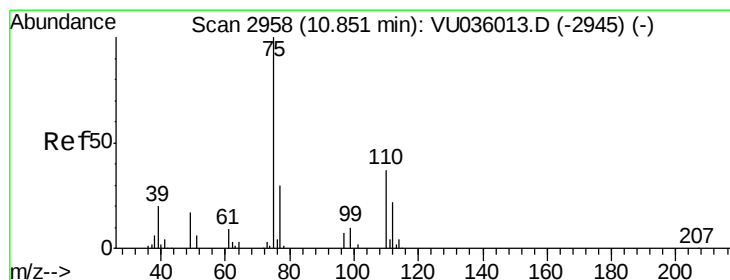
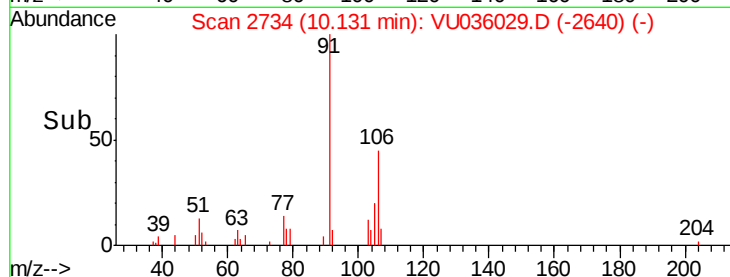
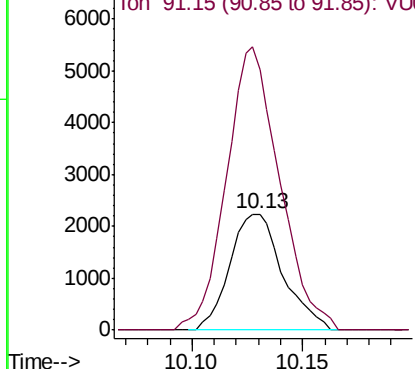
#54
o-Xylene
Concen: 0.107 ug/L
RT: 10.13 min Scan# 2734
Delta R.T. 0.00 min
Lab File: VU036029.D
Acq: 06 Dec 2019 17:43

Instrument :
MSVOA_U
ClientSampleId :
BFE38

Tgt Ion: 106 Resp: 3722
Ion Ratio Lower Upper
106 100
91 223.6 155.3 288.3

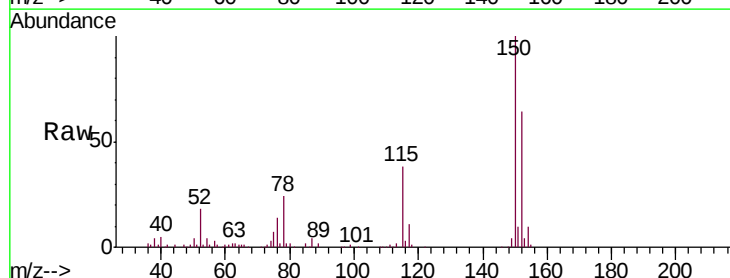


Abundance Ion 106.15 (105.85 to 106.85): VU036013.D (-2719) (-)
Ion 91.15 (90.85 to 91.85): VU036013.D (-2719) (-)

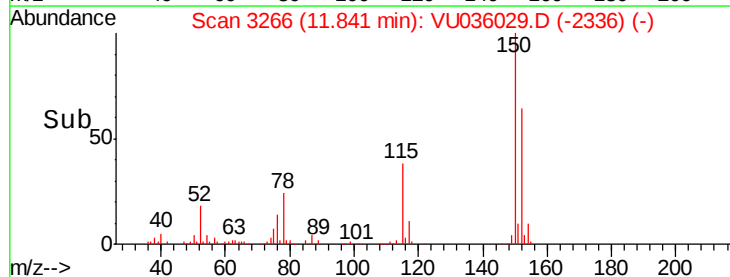
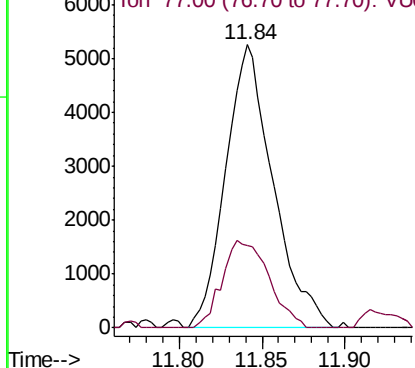


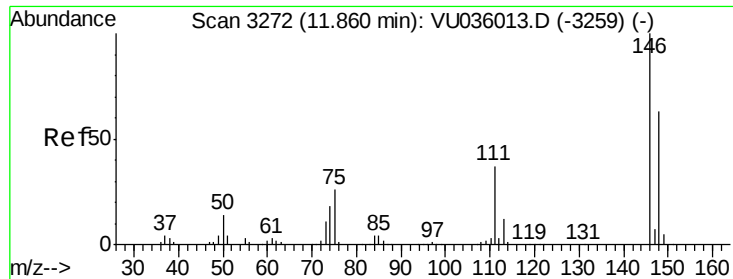
#59
1,2,3-Trichloropropane
Concen: 0.636 ug/L
RT: 11.84 min Scan# 3266
Delta R.T. 0.99 min
Lab File: VU036029.D
Acq: 06 Dec 2019 17:43

Tgt Ion: 75 Resp: 10442
Ion Ratio Lower Upper
75 100
77 30.3 26.6 39.8



Abundance Ion 75.00 (74.70 to 75.70): VU036013.D (-2945) (-)
Ion 77.00 (76.70 to 77.70): VU036013.D (-2945) (-)

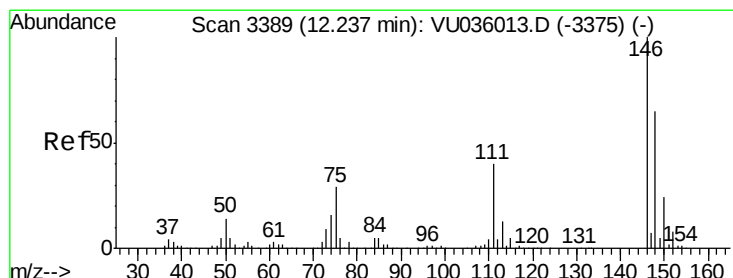
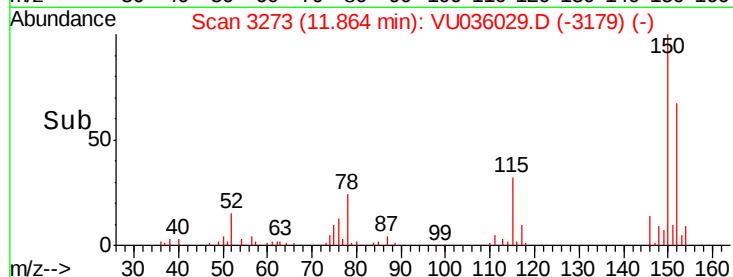
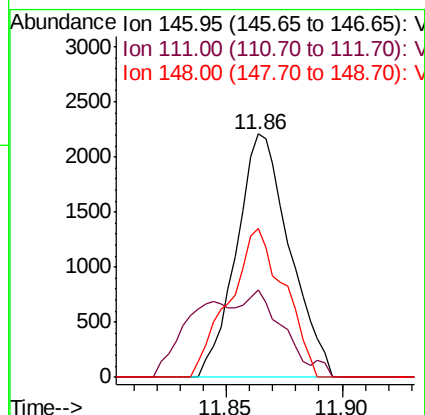
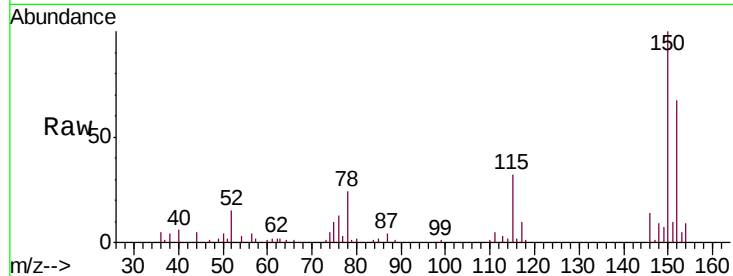




#63
 1,4-Dichlorobenzene
 Concen: 0.123 ug/L
 RT: 11.86 min Scan# 3273
 Delta R.T. 0.00 min
 Lab File: VU036029.D
 Acq: 06 Dec 2019 17:43

Instrument :
 MSVOA_U
 ClientSampleId :
 BFE38

Tgt Ion:146 Resp: 3517
 Ion Ratio Lower Upper
 146 100
 111 35.7 28.5 52.9
 148 61.0 44.4 82.5



#65
 1,2-Dichlorobenzene
 Concen: 0.107 ug/L
 RT: 12.24 min Scan# 3390
 Delta R.T. 0.00 min
 Lab File: VU036029.D
 Acq: 06 Dec 2019 17:43

Tgt Ion:146 Resp: 2941
 Ion Ratio Lower Upper
 146 100
 111 41.4 32.6 48.8
 148 58.0 50.9 76.3

