

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092620\
 Data File : VU040315.D
 Acq On : 25 Sep 2020 21:20
 Operator : SY/MD
 Sample : L4139-03
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 BG4A4

Quant Time: Sep 26 06:52:57 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR083120WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Sat Sep 26 06:44:13 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.26	114	127030	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.42	117	121274	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.81	152	61257	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.60	65	31532	4.55	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	91.00%
7) Chloroethane-d5	1.92	69	31413	5.44	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	108.80%
11) 1,1-Dichloroethene-d2	2.58	63	54304	3.05	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	61.00%
20) 2-Butanone-d5	4.66	46	176241	63.53	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	127.06%
24) Chloroform-d	5.08	84	76339	4.71	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	94.20%
26) 1,2-Dichloroethane-d4	5.72	65	47565	4.76	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.20%
32) Benzene-d6	5.74	84	140021	4.95	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	99.00%
36) 1,2-Dichloropropane-d6	6.70	67	49684	5.32	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	106.40%
41) Toluene-d8	7.91	98	115578	4.52	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	90.40%
43) trans-1,3-Dichloropropene-	8.19	79	18511	4.32	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	86.40%
46) 2-Hexanone-d5	8.64	63	115679	56.96	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	113.92%
57) 1,1,2,2-Tetrachloroethane-	10.75	84	44235	5.48	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	109.60%
64) 1,2-Dichlorobenzene-d4	12.19	152	52317	5.28	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	105.60%

Target Compounds

					Ovalue
3) Chloromethane	1.53	50	775	0.064 ug/L #	64
8) Chloroethane	1.94	64	22188	3.017 ug/L	97
10) 1,1,2-Trichloro-1,2,2-trif	2.58	101	524	0.046 ug/L #	22
13) Acetone	2.67	43	2326	0.906 ug/L	84
14) Carbon disulfide	2.81	76	2673	0.085 ug/L	99
15) Methyl Acetate	3.10	43	47401	7.354 ug/L #	54
17) Methyl tert-butyl Ether	3.38	73	16079	0.543 ug/L #	1
25) Chloroform	5.11	83	13611	0.611 ug/L	98
27) 1,2-Dichloroethane	5.79	62	30852	1.889 ug/L #	78
30) Cyclohexane	5.40	56	9946	0.539 ug/L	96
33) Benzene	5.79	78	3173394	73.145 ug/L	100
35) Methylcyclohexane	6.77	83	7580	0.425 ug/L #	86
37) 1,2-Dichloropropane	6.70	63	5680	0.483 ug/L	99
39) cis-1,3-Dichloropropene	7.57	75	1324	0.076 ug/L #	68
42) Toluene	7.98	91	8282	0.185 ug/L	97
44) trans-1,3-Dichloropropene	8.19	75	848	0.053 ug/L #	76
51) Chlorobenzene	9.45	112	276960	9.984 ug/L	98

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Quant Title : TRACE VOA SOM01.0
QLast Update : Sat Sep 26 06:44:13 2020
Response via : Initial Calibration

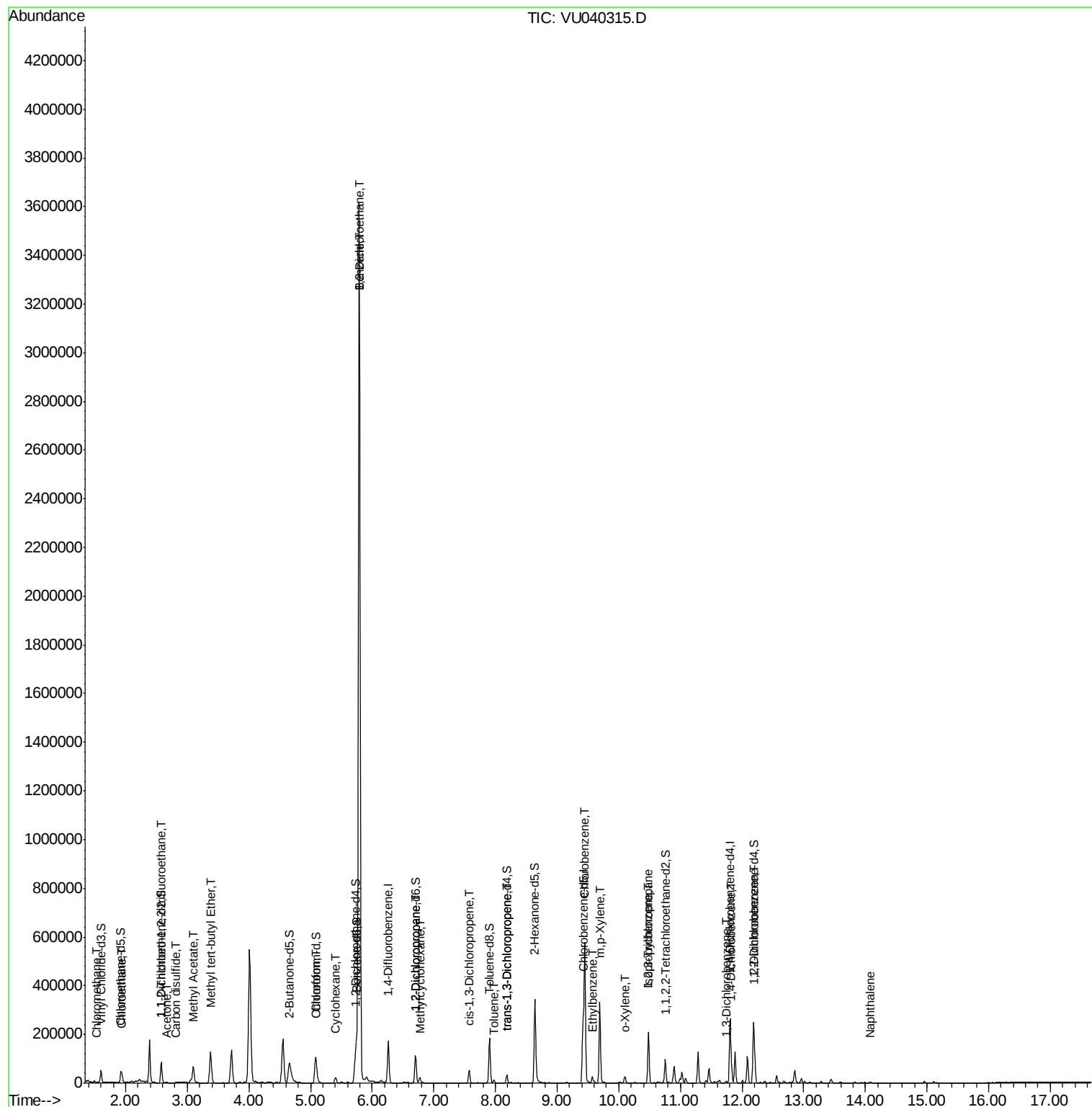
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Ethylbenzene	9.57	91	16283	0.321	ug/L	100
53) m,p-Xylene	9.69	106	87901	4.863	ug/L	100
54) o-Xylene	10.10	106	6018	0.349	ug/L	99
56) Isopropylbenzene	10.48	105	121477	2.586	ug/L	99
59) 1,2,3-Trichloropropane	10.48	75	1580	0.182	ug/L #	1
62) 1,3-Dichlorobenzene	11.74	146	2182	0.097	ug/L	91
63) 1,4-Dichlorobenzene	11.83	146	20024	0.884	ug/L	92
65) 1,2-Dichlorobenzene	12.20	146	33270	1.536	ug/L	99
69) Naphthalene	14.08	128	3085	0.109	ug/L #	95

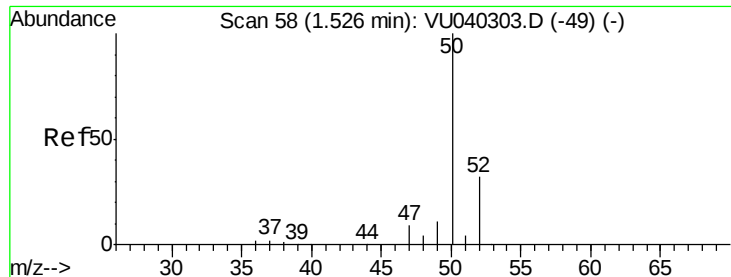
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#3

Chloromethane

Concen: 0.064 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

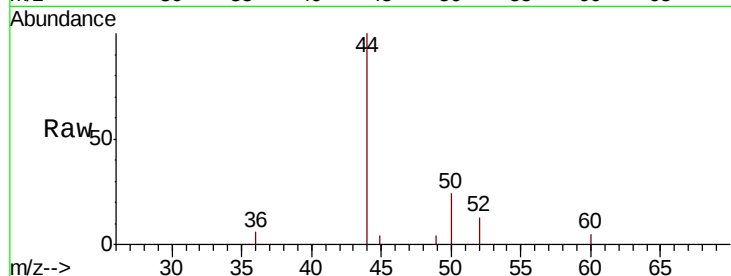
BG4A4

Tot Ion: 50 Resp: 775

Ion Ratio Lower Upper

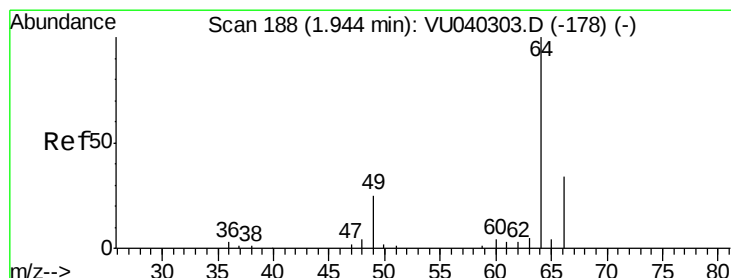
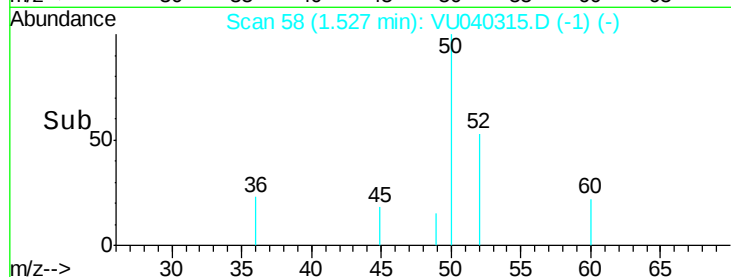
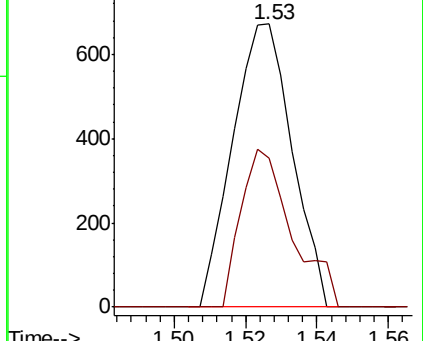
50 100

52 52.7 22.8 42.4#



Abundance Ion 50.05 (49.75 to 50.75): VU0

Ion 52.05 (51.75 to 52.75): VU0



#8

Chloroethane

Concen: 3.017 ug/L

RT: 1.94 min Scan# 188

Delta R.T. 0.00 min

Lab File: VU040315.D

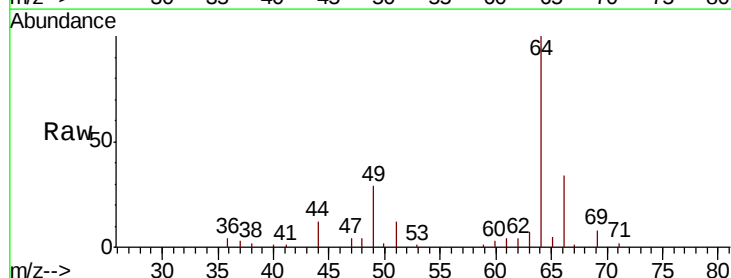
Acq: 25 Sep 2020 21:20

Tgt Ion: 64 Resp: 22188

Ion Ratio Lower Upper

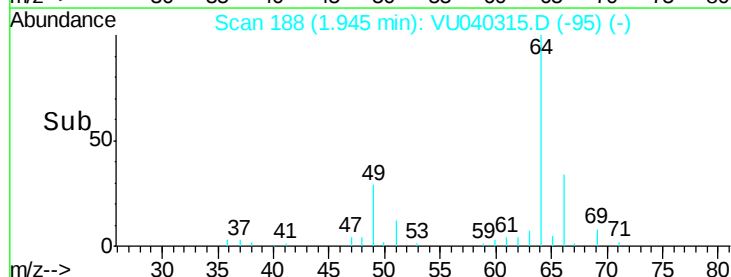
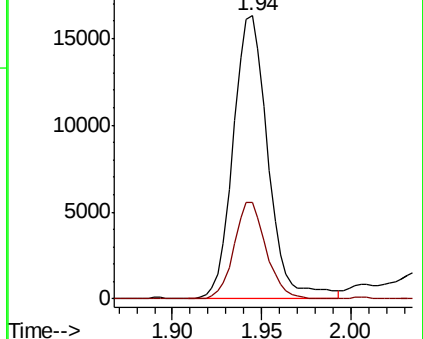
64 100

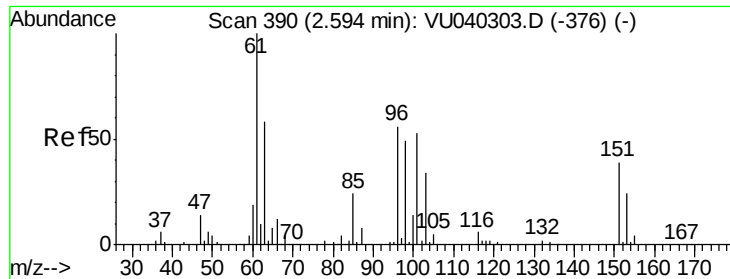
66 34.2 22.7 42.1



Abundance Ion 64.10 (63.80 to 64.80): VU0

Ion 66.05 (65.75 to 66.75): VU0





#10

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

Concen: 0.046 ug/L

RT: 2.58 min Scan# 386

Delta R.T. -0.01 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

BG4A4

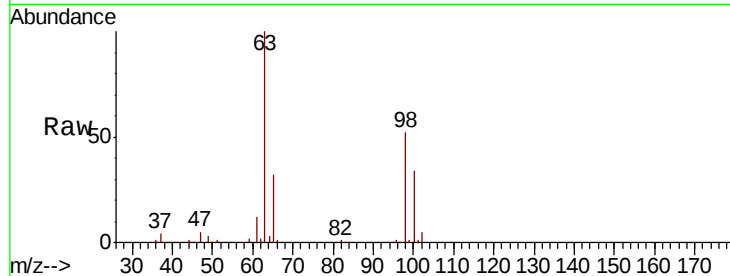
Tot Ion:101 Resp: 524

Ion Ratio Lower Upper

101 100

85 0.0 37.7 56.5#

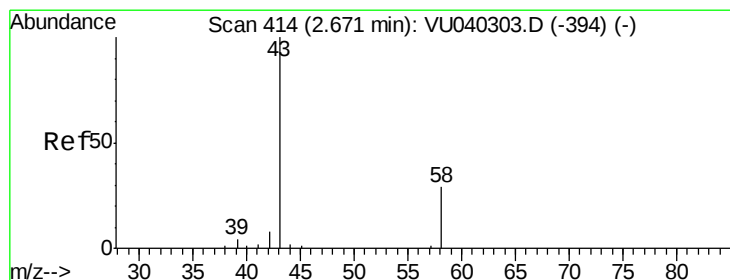
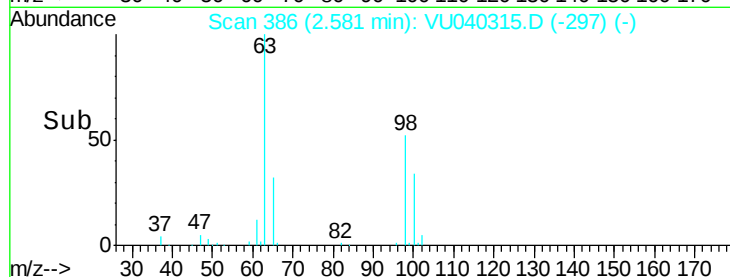
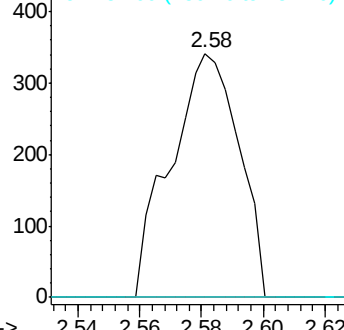
151 0.0 53.9 80.9#



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: 0.906 ug/L

RT: 2.67 min Scan# 413

Delta R.T. -0.00 min

Lab File: VU040315.D

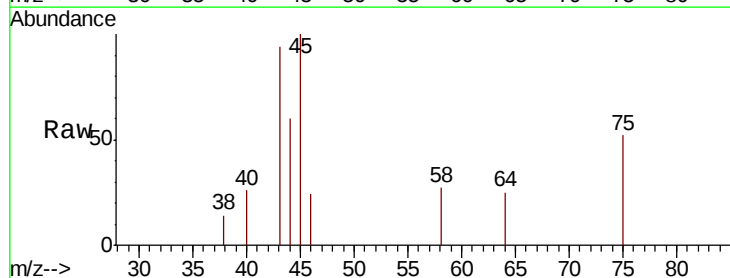
Acq: 25 Sep 2020 21:20

Tgt Ion: 43 Resp: 2326

Ion Ratio Lower Upper

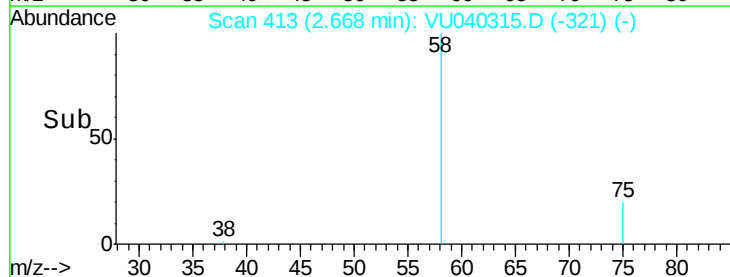
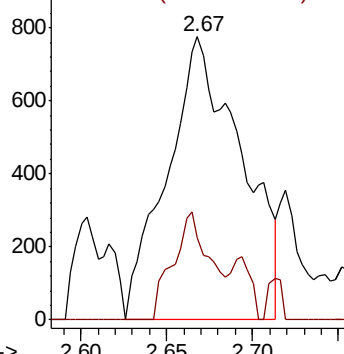
43 100

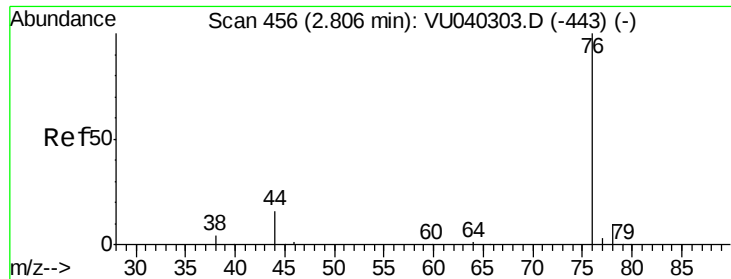
58 19.1 0.0 55.4



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0





#14

Carbon disulfide

Concen: 0.085 ug/L

RT: 2.81 min Scan# 458

Delta R.T. 0.01 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

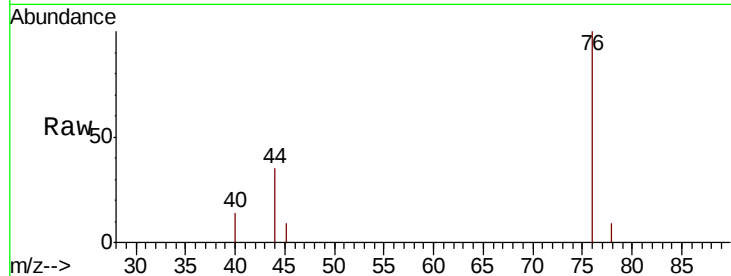
BG4A4

Tot Ion: 76 Resp: 2673

Ion Ratio Lower Upper

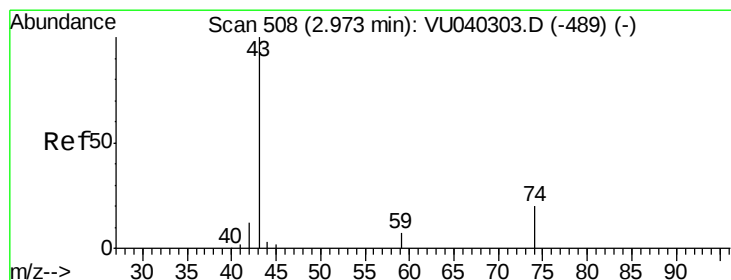
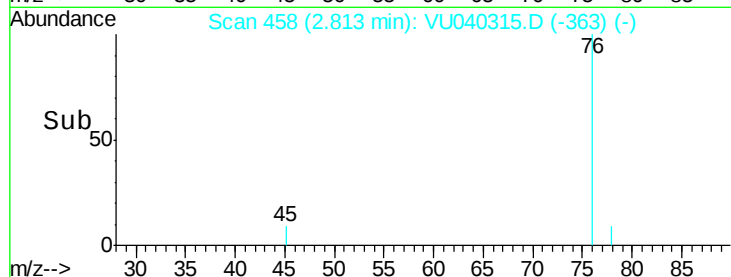
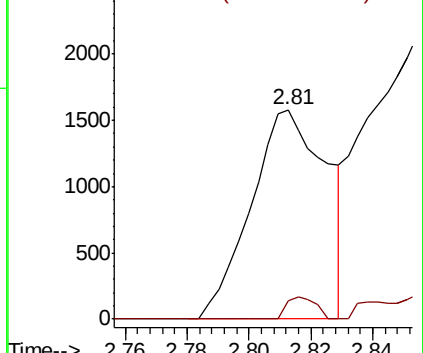
76 100

78 8.8 7.2 10.8



Abundance Ion 76.05 (75.75 to 76.75): VU040315.D (-363) (-)

Ion 78.00 (77.70 to 78.70): VU040315.D (-363) (-)



#15

Methyl Acetate

Concen: 7.354 ug/L

RT: 3.10 min Scan# 547

Delta R.T. 0.13 min

Lab File: VU040315.D

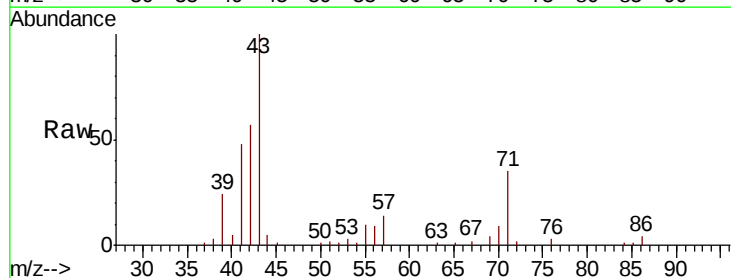
Acq: 25 Sep 2020 21:20

Tgt Ion: 43 Resp: 47401

Ion Ratio Lower Upper

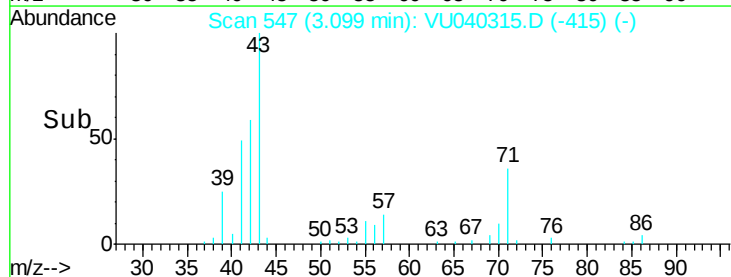
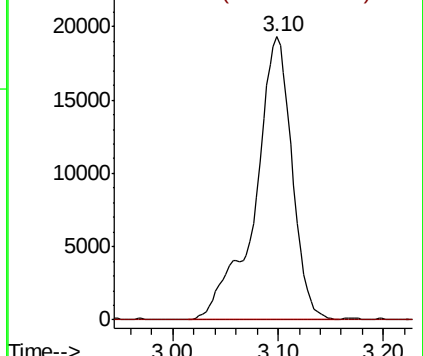
43 100

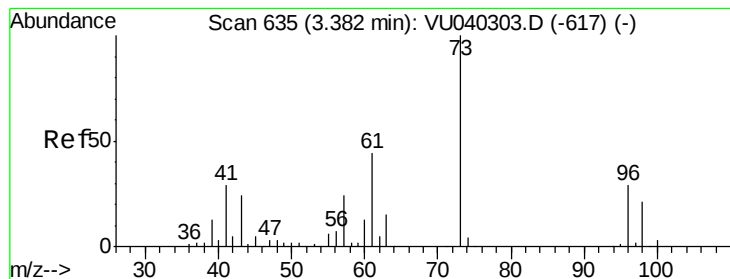
74 0.0 17.4 26.0#



Abundance Ion 43.05 (42.75 to 43.75): VU040315.D (-415) (-)

Ion 74.05 (73.75 to 74.75): VU040315.D (-415) (-)



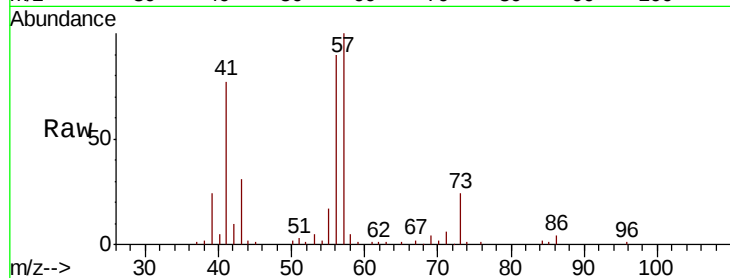


#17

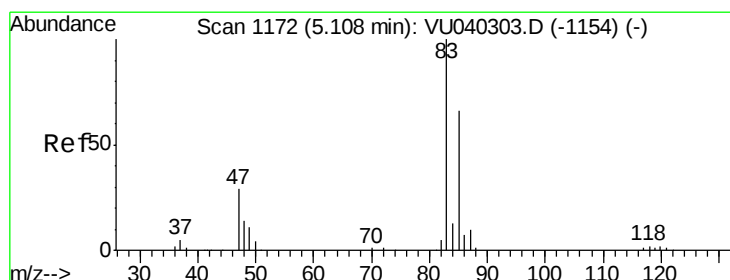
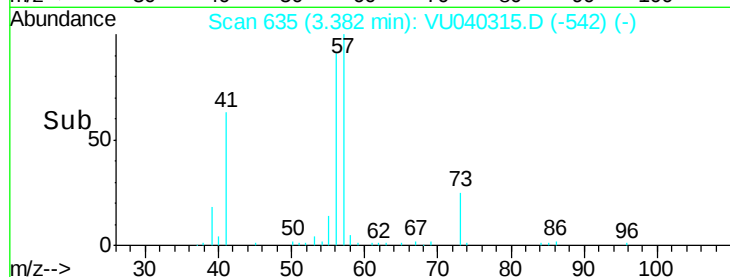
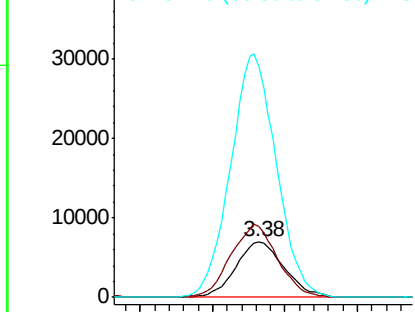
Methvl tert-butvl Ether
 Concen: 0.543 ug/L
 RT: 3.38 min Scan# 635
 Delta R.T. 0.00 min
 Lab File: VU040315.D
 Acq: 25 Sep 2020 21:20

Instrument :
 MSVOA_U
 ClientSampleId :
 BG4A4

Tot Ion: 73 Resp: 16079
 Ion Ratio Lower Upper
 73 100
 43 127.7 19.1 28.7#
 57 417.2 18.3 27.5#



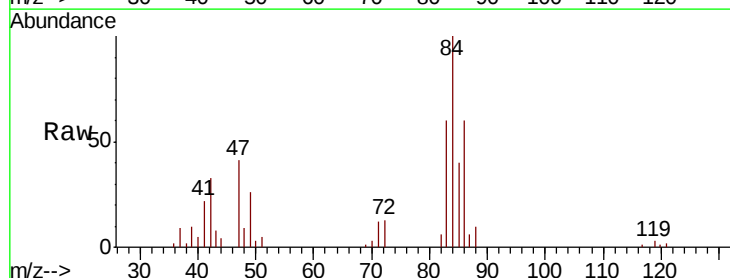
Abundance Ion 73.10 (72.80 to 73.80): VU0
 Ion 43.05 (42.75 to 43.75): VU0
 Ion 57.10 (56.80 to 57.80): VU0



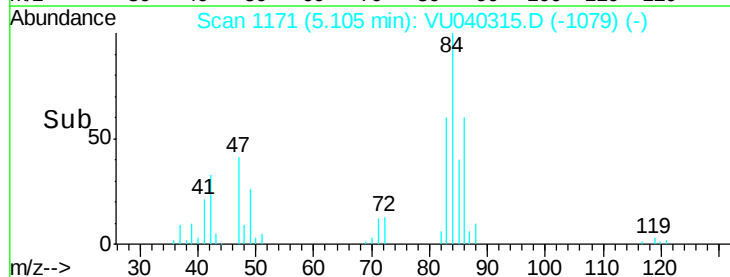
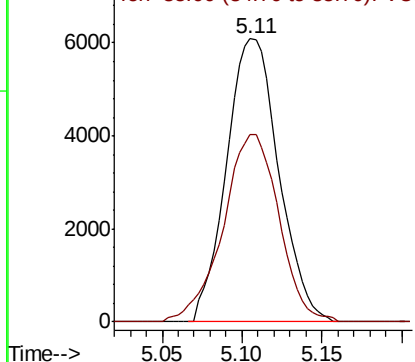
#25

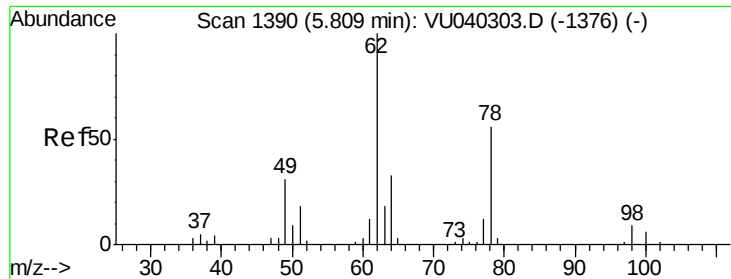
Chloroform
 Concen: 0.611 ug/L
 RT: 5.11 min Scan# 1171
 Delta R.T. -0.00 min
 Lab File: VU040315.D
 Acq: 25 Sep 2020 21:20

Tgt Ion: 83 Resp: 13611
 Ion Ratio Lower Upper
 83 100
 85 66.1 45.3 84.1



Abundance Ion 83.05 (82.75 to 83.75): VU0
 Ion 85.00 (84.70 to 85.70): VU0





#27

1,2-Dichloroethane

Concen: 1.889 ug/L

RT: 5.79 min Scan# 1384

Delta R.T. -0.02 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

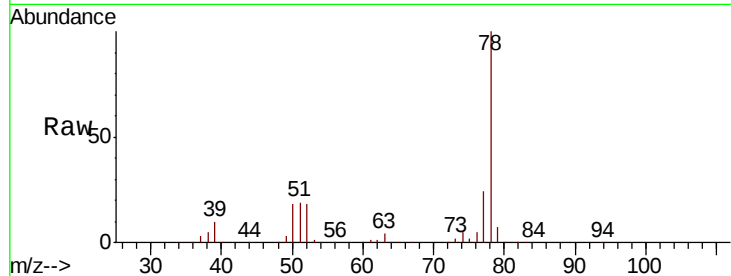
BG4A4

Tot Ion: 62 Resp: 30852

Ion Ratio Lower Upper

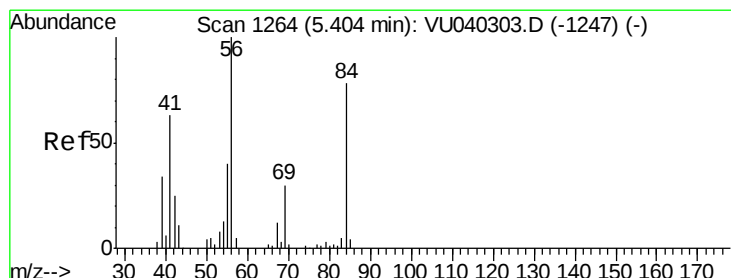
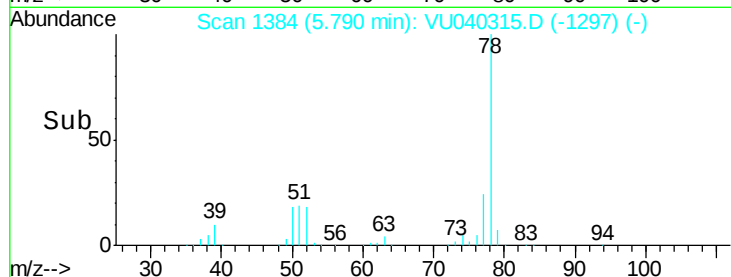
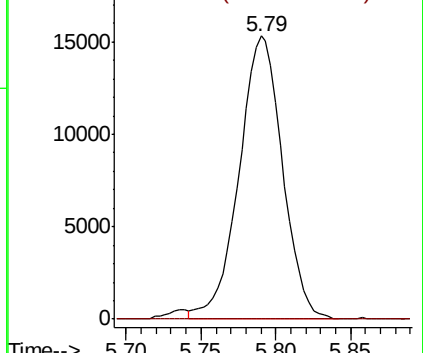
62 100

98 0.0 6.1 9.1#



Abundance Ion 62.00 (61.70 to 62.70): VU040303.D (-1376) (-)

Ion 98.05 (97.75 to 98.75): VU040303.D (-1376) (-)



#30

Cyclohexane

Concen: 0.539 ug/L

RT: 5.40 min Scan# 1264

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

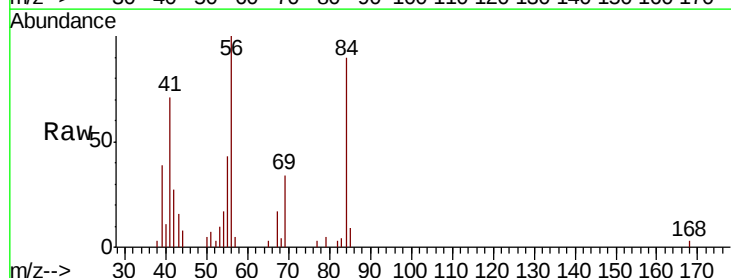
Tgt Ion: 56 Resp: 9946

Ion Ratio Lower Upper

56 100

69 34.1 24.1 36.1

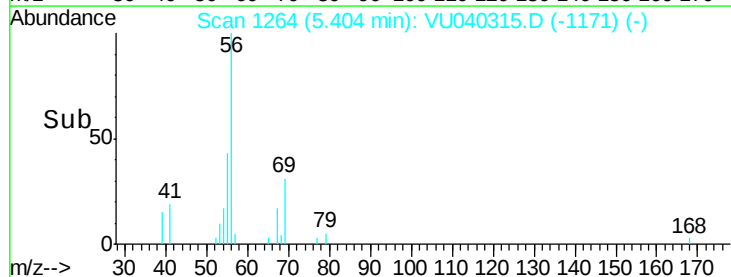
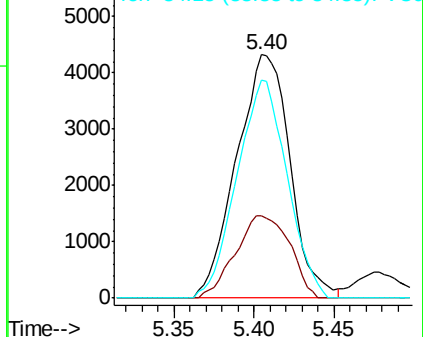
84 83.6 65.0 97.4

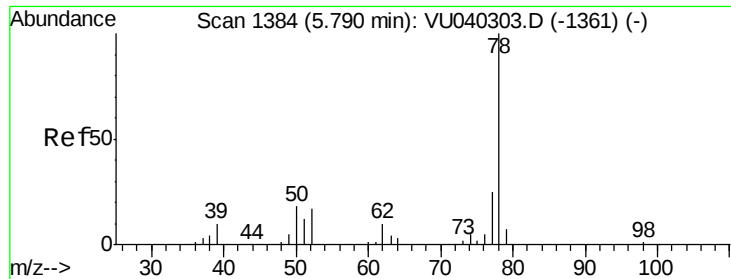


Abundance Ion 56.10 (55.80 to 56.80): VU040303.D (-1247) (-)

Ion 69.15 (68.85 to 69.85): VU040303.D (-1247) (-)

Ion 84.15 (83.85 to 84.85): VU040303.D (-1247) (-)





#33

Benzene

Concen: 73.145 ug/L

RT: 5.79 min Scan# 1384

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

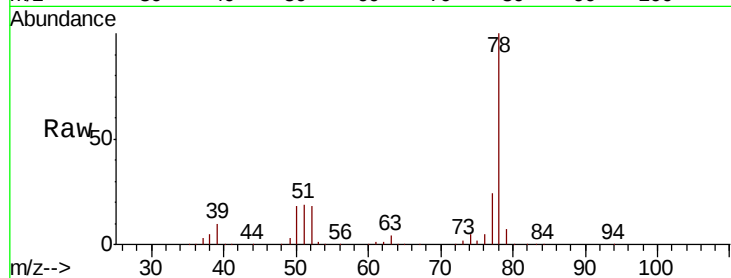
Instrument :

MSVOA_U

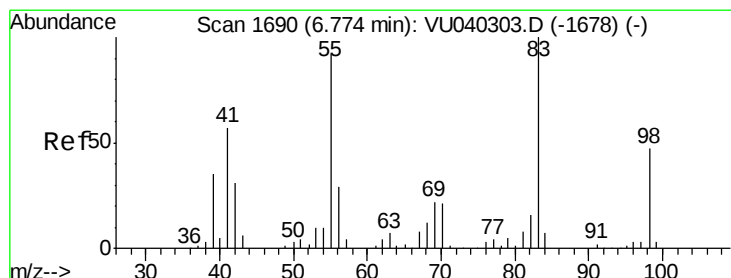
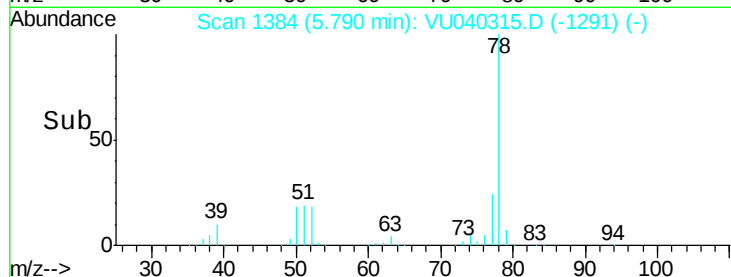
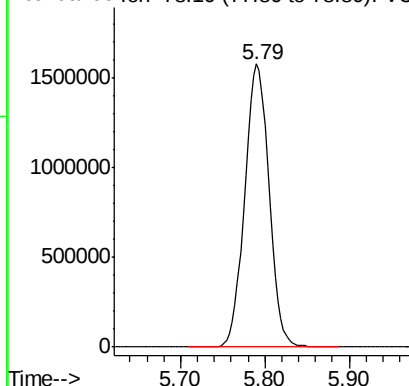
ClientSampled :

BG4A4

Tgt Ion: 78 Resp: 3173394



Abundance Ion 78.10 (77.80 to 78.80): VU0



#35

Methylcyclohexane

Concen: 0.425 ug/L

RT: 6.77 min Scan# 1690

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

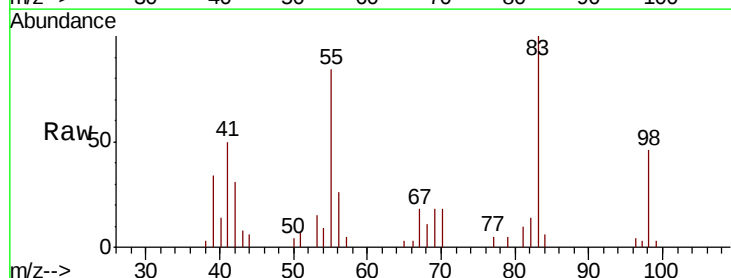
Tgt Ion: 83 Resp: 7580

Ion Ratio Lower Upper

83 100

55 107.8 70.5 105.7#

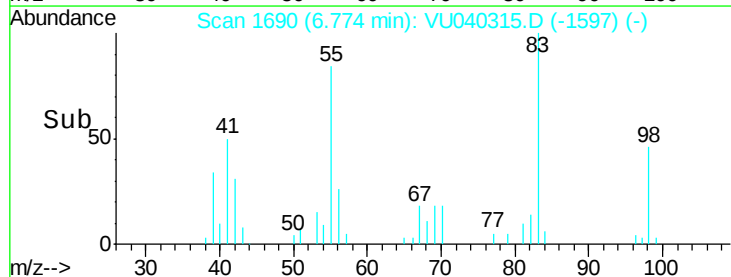
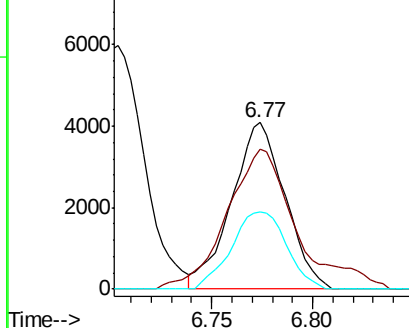
98 47.8 37.8 56.6

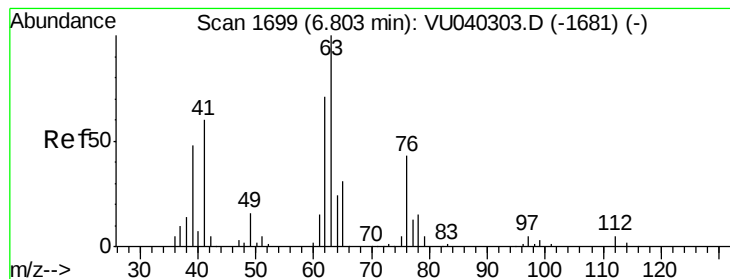


Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0





#37

1,2-Dichloropropane

Concen: 0.483 ug/L

RT: 6.70 min Scan# 1668

Delta R.T. -0.10 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

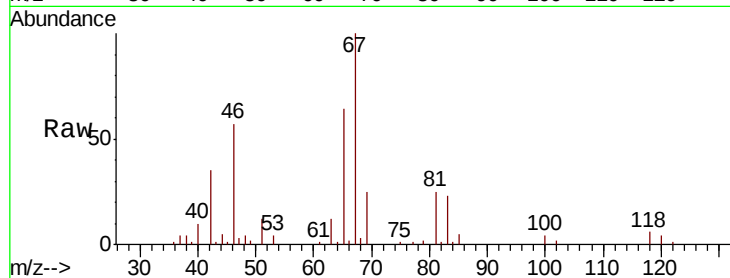
BG4A4

Tot Ion: 63 Resp: 5680

Ion Ratio Lower Upper

63 100

112 3.6 3.2 4.8



Abundance Ion 63.10 (62.80 to 63.80): VU040315.D (-1668) (-)

Ion 112.10 (111.80 to 112.80): VU040315.D (-1668) (-)

6.70

3000

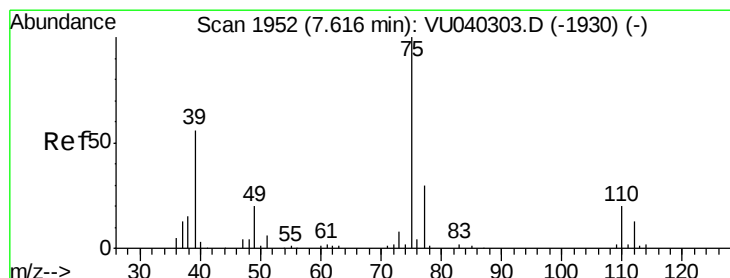
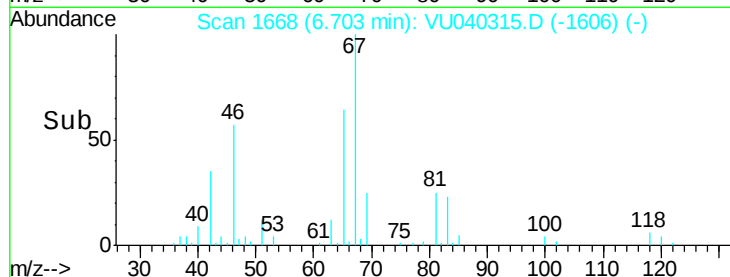
2000

1000

0

6.65 6.70 6.75

Time-->



#39

cis-1,3-Dichloropropene

Concen: 0.076 ug/L

RT: 7.57 min Scan# 1939

Delta R.T. -0.04 min

Lab File: VU040315.D

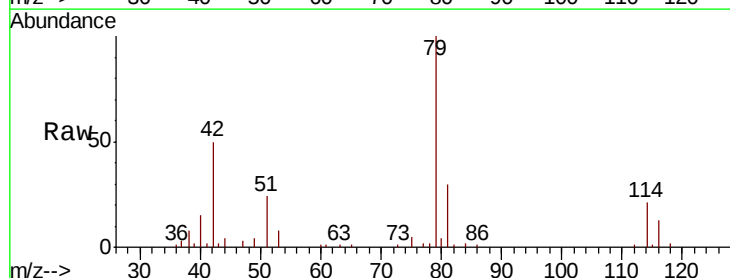
Acq: 25 Sep 2020 21:20

Tgt Ion: 75 Resp: 1324

Ion Ratio Lower Upper

75 100

77 47.6 21.1 39.3#



Abundance Ion 75.05 (74.75 to 75.75): VU040315.D (-1859) (-)

Ion 77.05 (76.75 to 77.75): VU040315.D (-1859) (-)

7.57

800

600

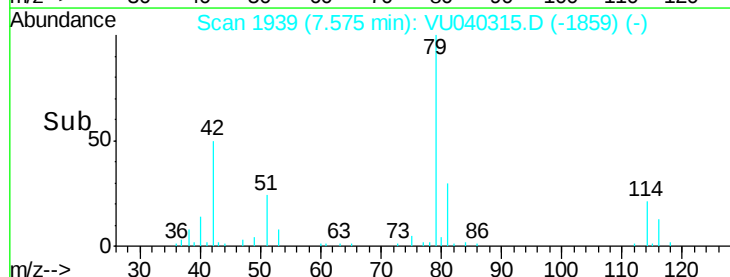
400

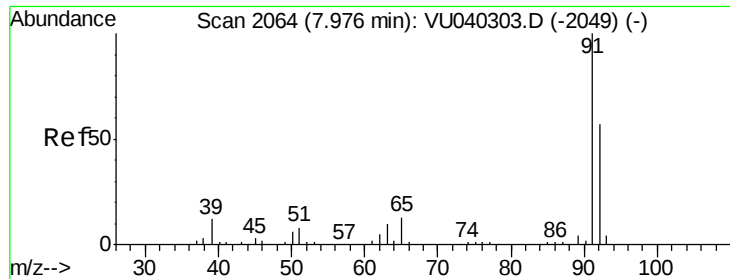
200

0

7.55 7.60

Time-->





#42

Toluene

Concen: 0.185 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

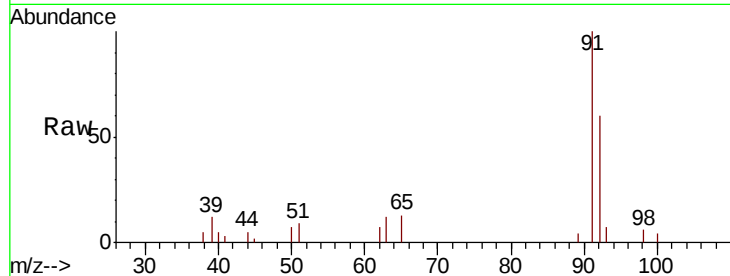
BG4A4

Tot Ion: 91 Resp: 8282

Ion Ratio Lower Upper

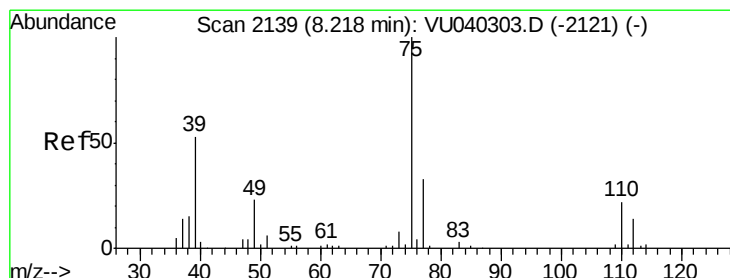
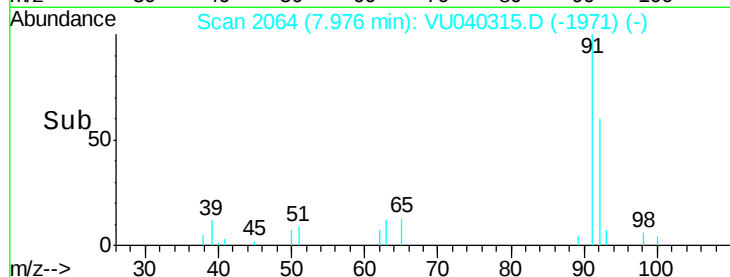
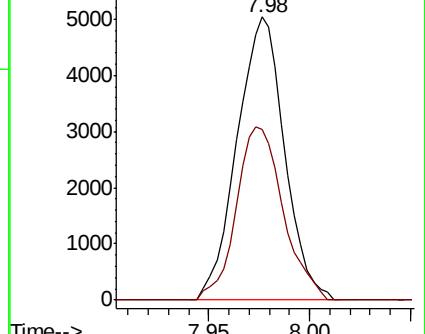
91 100

92 60.3 40.7 75.5



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0



#44

trans-1,3-Dichloropropene

Concen: 0.053 ug/L

RT: 8.19 min Scan# 2129

Delta R.T. -0.03 min

Lab File: VU040315.D

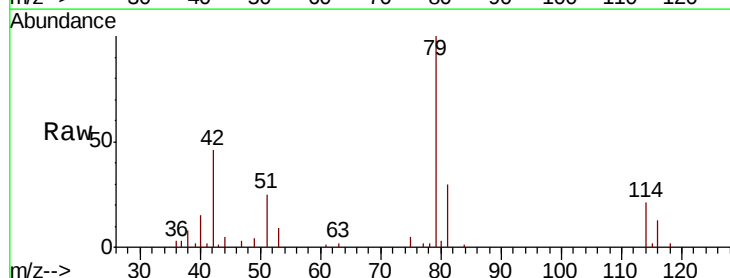
Acq: 25 Sep 2020 21:20

Tgt Ion: 75 Resp: 848

Ion Ratio Lower Upper

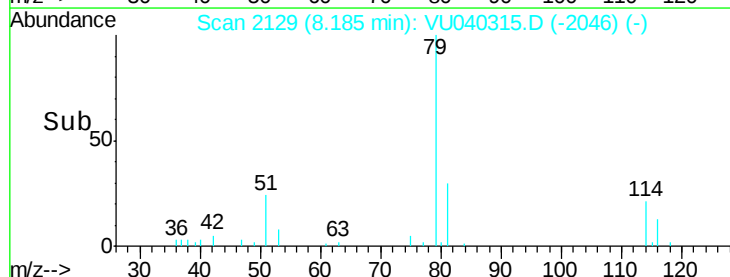
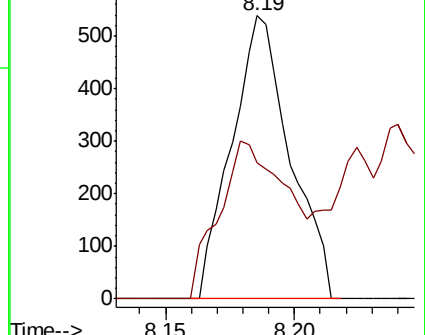
75 100

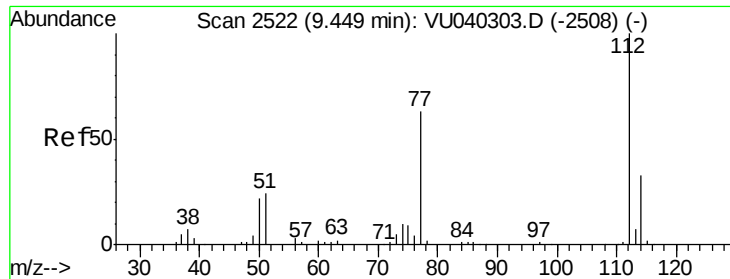
77 48.0 23.9 44.3#



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0





#51

Chlorobenzene

Concen: 9.984 ug/L

RT: 9.45 min Scan# 2522

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

BG4A4

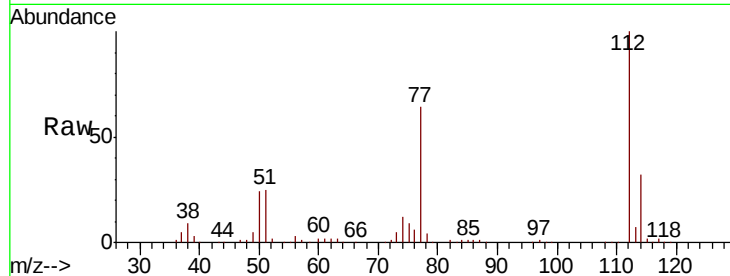
Tot Ion:112 Resp: 276960

Ion Ratio Lower Upper

112 100

114 32.4 22.7 42.3

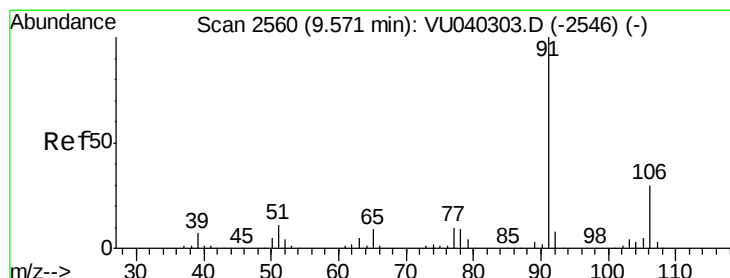
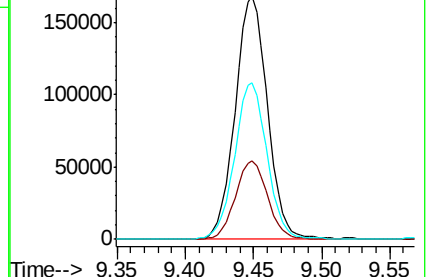
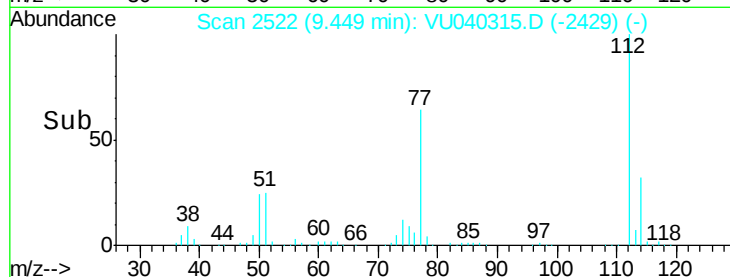
77 64.5 53.2 79.8



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): V



#52

Ethylbenzene

Concen: 0.321 ug/L

RT: 9.57 min Scan# 2560

Delta R.T. 0.00 min

Lab File: VU040315.D

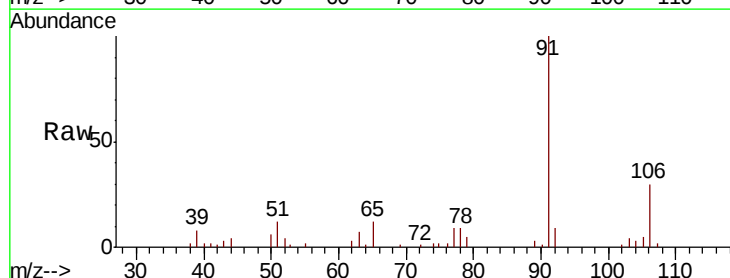
Acq: 25 Sep 2020 21:20

Tgt Ion: 91 Resp: 16283

Ion Ratio Lower Upper

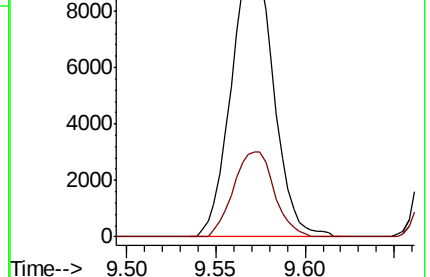
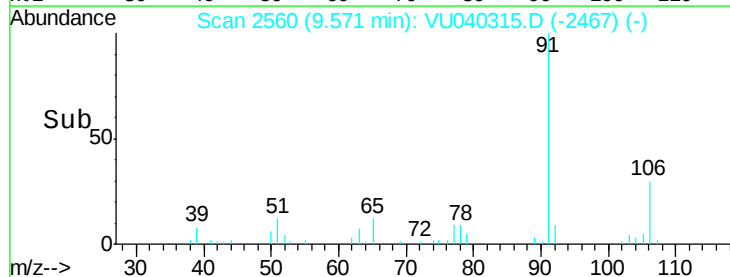
91 100

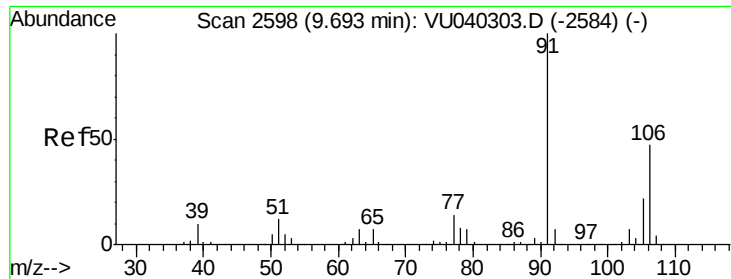
106 30.1 21.0 39.0



Abundance Ion 91.15 (90.85 to 91.85): V

Ion 106.15 (105.85 to 106.85): V





#53

m,p-Xylene

Concen: 4.863 ug/L

RT: 9.69 min Scan# 2598

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

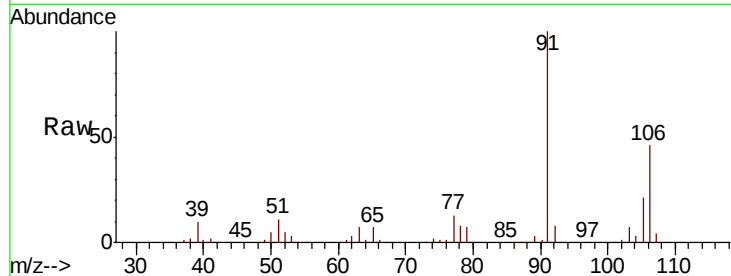
BG4A4

Tot Ion:106 Resp: 87901

Ion Ratio Lower Upper

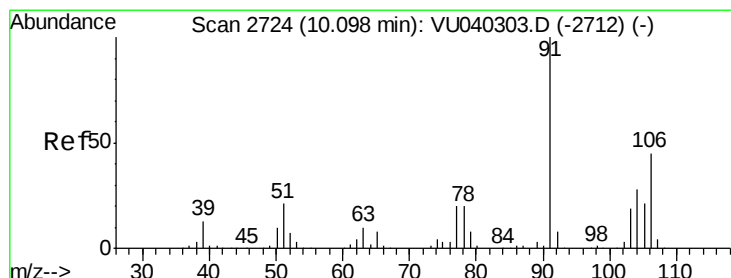
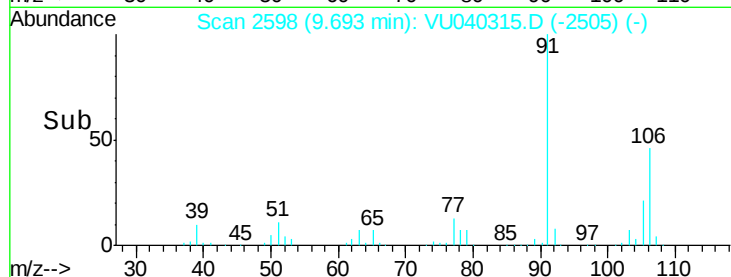
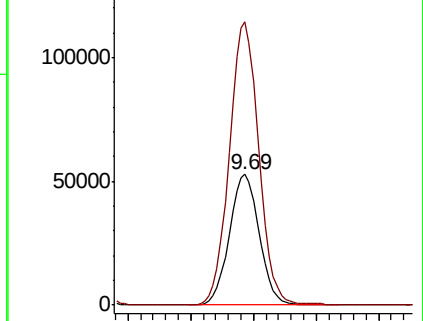
106 100

91 216.8 151.7 281.7



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#54

o-Xylene

Concen: 0.349 ug/L

RT: 10.10 min Scan# 2724

Delta R.T. 0.00 min

Lab File: VU040315.D

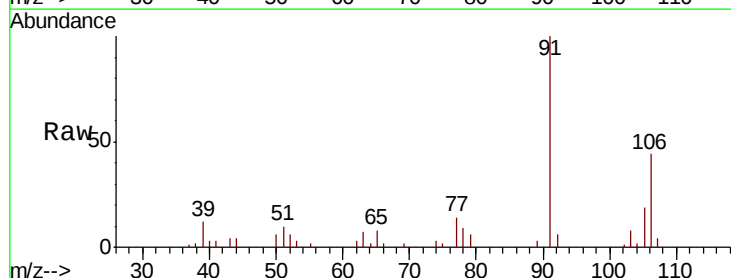
Acq: 25 Sep 2020 21:20

Tgt Ion:106 Resp: 6018

Ion Ratio Lower Upper

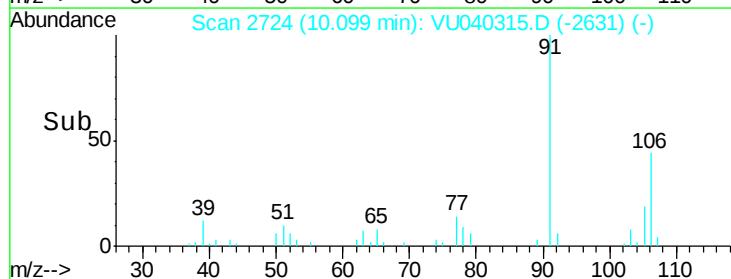
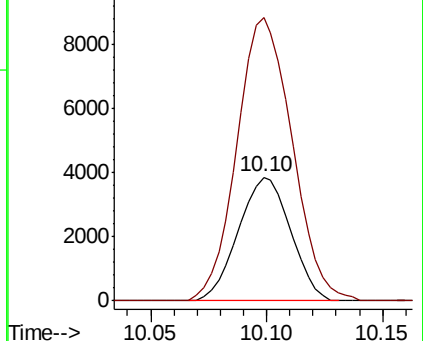
106 100

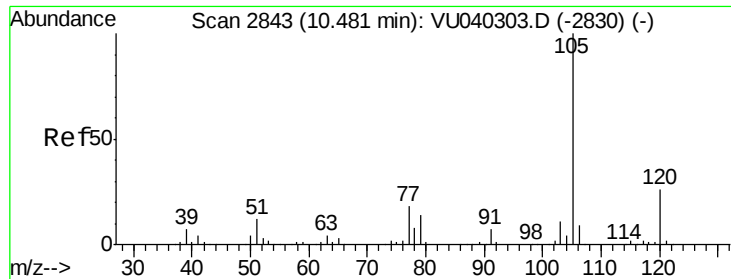
91 228.6 160.8 298.6



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0





#56

Isopropylbenzene

Concen: 2.586 ug/L

RT: 10.48 min Scan# 2843

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

BG4A4

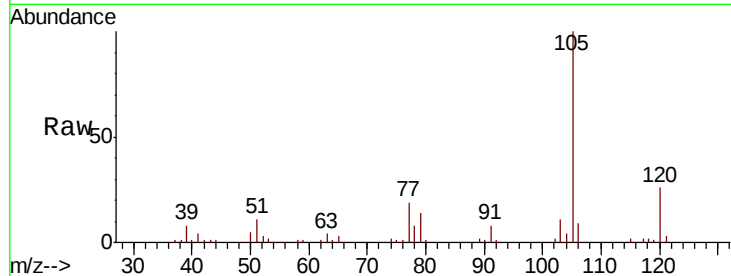
Tot Ion:105 Resp: 121477

Ion Ratio Lower Upper

105 100

120 26.2 20.1 30.1

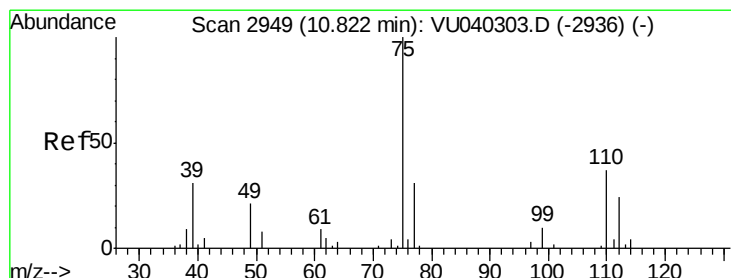
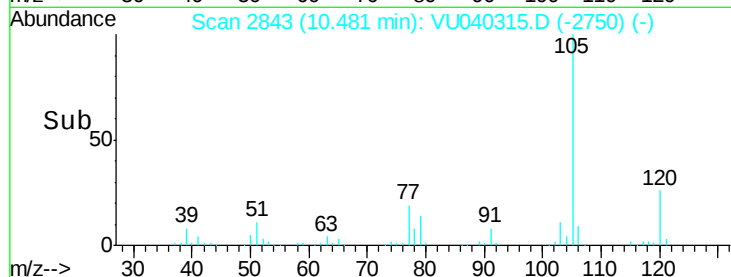
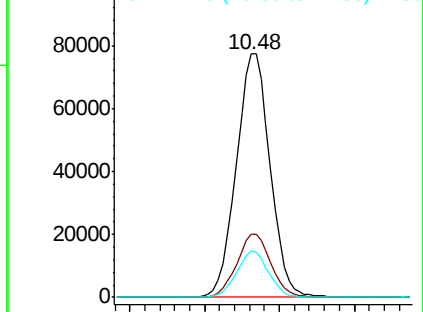
77 18.0 14.4 21.6



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): V



#59

1,2,3-Trichloropropane

Concen: 0.182 ug/L

RT: 10.48 min Scan# 2843

Delta R.T. -0.34 min

Lab File: VU040315.D

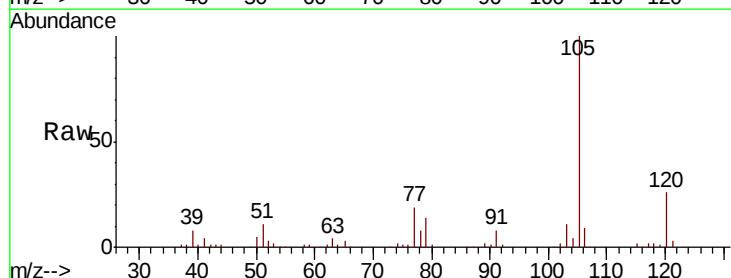
Acq: 25 Sep 2020 21:20

Tgt Ion: 75 Resp: 1580

Ion Ratio Lower Upper

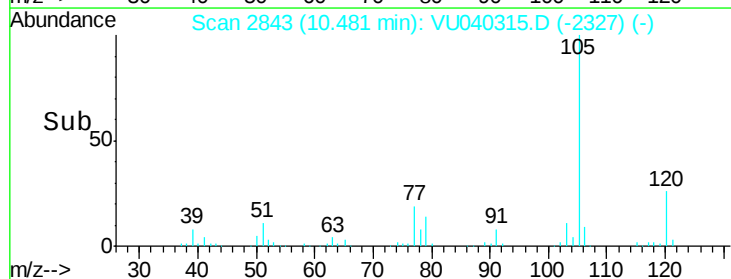
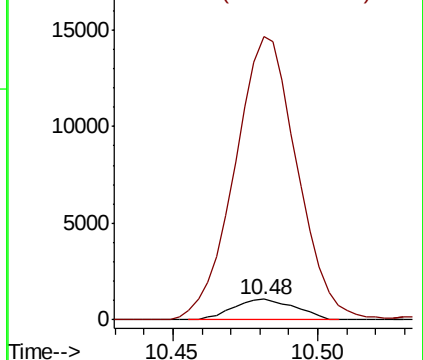
75 100

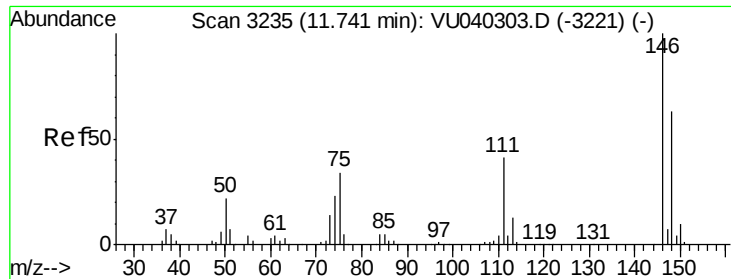
77 1384.8 24.9 37.3#



Abundance Ion 75.00 (74.70 to 75.70): V

Ion 77.00 (76.70 to 77.70): V





#62

1,3-Dichlorobenzene

Concen: 0.097 ug/L

RT: 11.74 min Scan# 3236

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampleId :

BG4A4

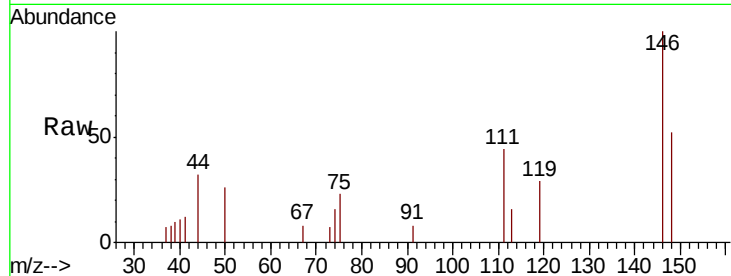
Tot Ion:146 Resp: 2182

Ion Ratio Lower Upper

146 100

111 44.1 31.6 58.8

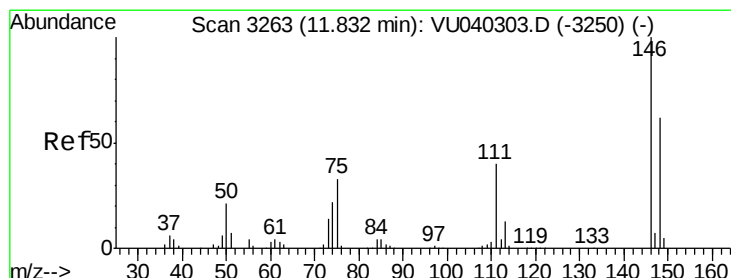
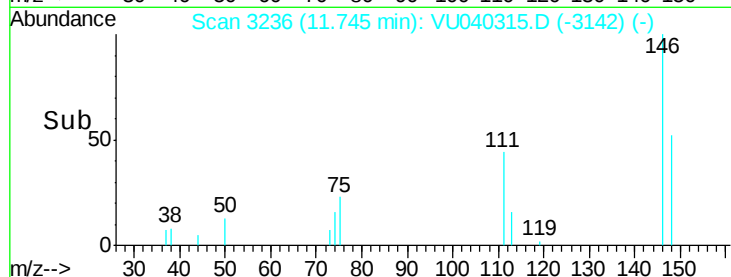
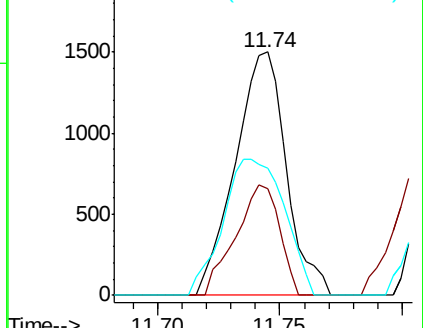
148 52.1 44.2 82.0



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 0.884 ug/L

RT: 11.83 min Scan# 3262

Delta R.T. -0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

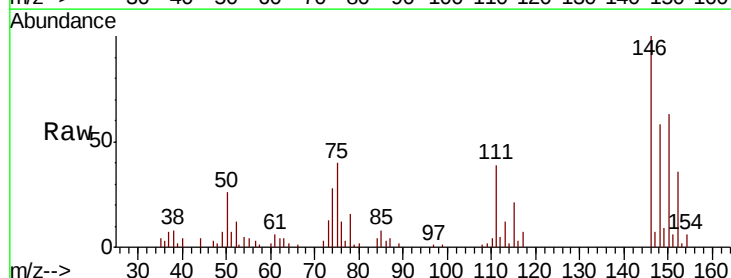
Tgt Ion:146 Resp: 20024

Ion Ratio Lower Upper

146 100

111 39.3 30.5 56.7

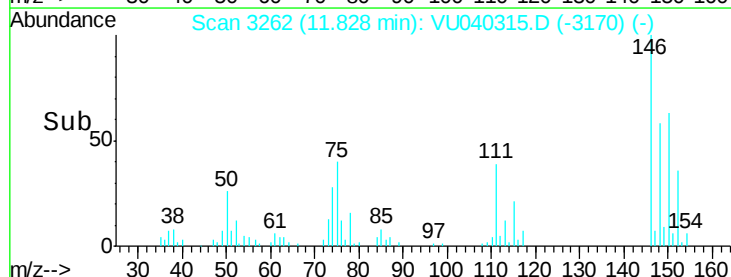
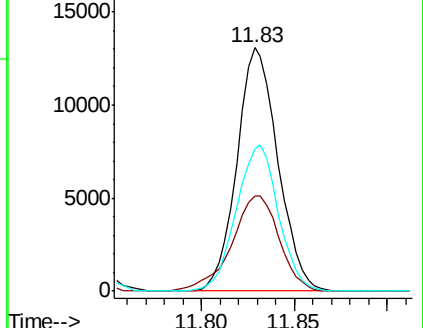
148 58.4 45.4 84.4

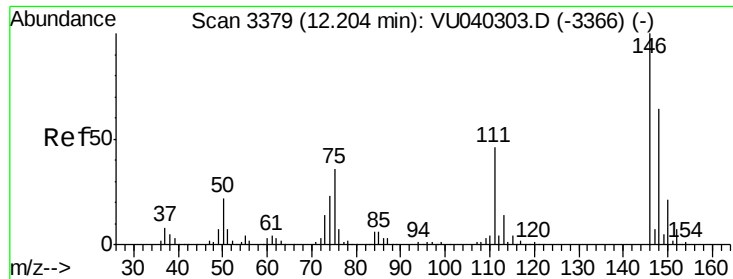


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 1.536 ug/L

RT: 12.20 min Scan# 3379

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

Instrument :

MSVOA_U

ClientSampled :

BG4A4

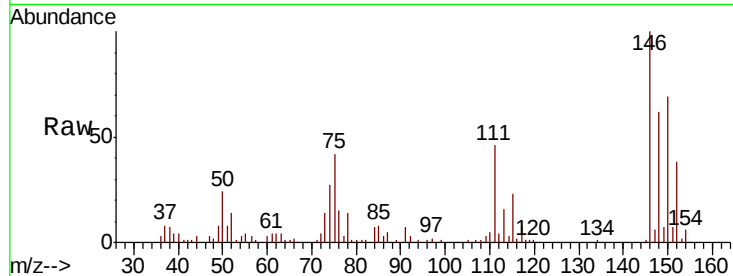
Tot Ion:146 Resp: 33270

Ion Ratio Lower Upper

146 100

111 45.9 36.5 54.7

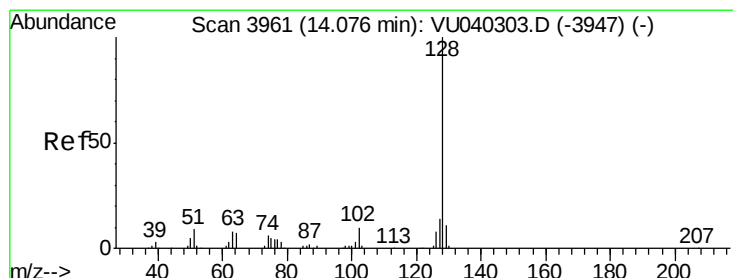
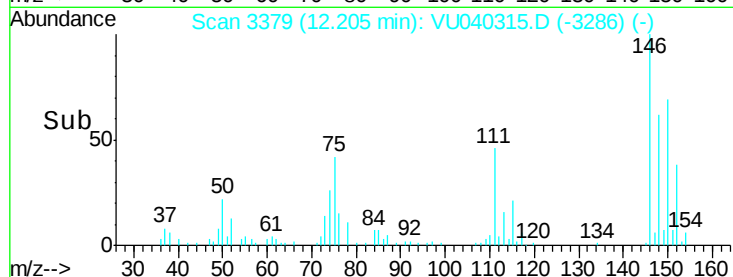
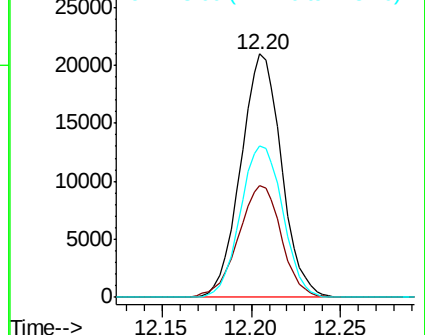
148 62.2 48.6 72.8



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#69

Naphthalene

Concen: 0.109 ug/L

RT: 14.08 min Scan# 3961

Delta R.T. 0.00 min

Lab File: VU040315.D

Acq: 25 Sep 2020 21:20

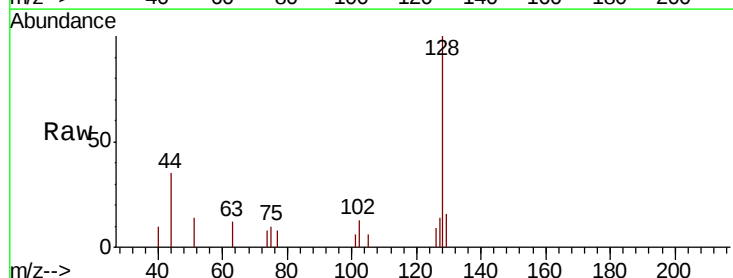
Tgt Ion:128 Resp: 3085

Ion Ratio Lower Upper

128 100

129 7.0 8.7 13.1#

127 13.2 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

