

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U120319\
 Data File : VU035953.D
 Acq On : 03 Dec 2019 17:32
 Operator : JC/SP
 Sample : K6056-04DL 20X
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 BFE11DL

Quant Time: Dec 04 04:40:41 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR120319WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Wed Dec 04 03:35:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.29	114	332202	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.45	117	344039	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.84	152	114256	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.61	65	172078	4.55	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	91.00%
7) Chloroethane-d5	1.93	69	139910	4.61	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	92.20%
11) 1,1-Dichloroethene-d2	2.59	63	205493	3.78	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	75.60%
20) 2-Butanone-d5	4.70	46	320662	47.82	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	95.64%
24) Chloroform-d	5.11	84	238676	4.59	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	91.80%
26) 1,2-Dichloroethane-d4	5.75	65	128038	4.65	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.00%
32) Benzene-d6	5.77	84	481284	4.72	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	94.40%
36) 1,2-Dichloropropane-d6	6.73	67	156051	4.73	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	94.60%
41) Toluene-d8	7.93	98	398098	4.24	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	84.80%
43) trans-1,3-Dichloropropene-	8.22	79	58484	4.39	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	87.80%
46) 2-Hexanone-d5	8.68	63	230144	43.91	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	87.82%
57) 1,1,2,2-Tetrachloroethane-	10.78	84	124355	4.49	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	89.80%
64) 1,2-Dichlorobenzene-d4	12.22	152	118462	5.02	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	100.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chloromethane	1.54	50	3550	0.090	ug/L	94
10) 1,1,2-Trichloro-1,2,2-trif	2.59	101	4498	0.176	ug/L #	65
12) 1,1-Dichloroethene	2.61	96	32340	1.358	ug/L #	31
13) Acetone	2.68	43	13675	2.256	ug/L	87
14) Carbon disulfide	2.82	76	7229	0.087	ug/L	96
16) Methylene chloride	3.08	84	19357	0.525	ug/L	91
18) trans-1,2-Dichloroethene	3.39	96	2255	0.089	ug/L	94
19) 1,1-Dichloroethane	3.92	63	21100	0.428	ug/L	97
22) cis-1,2-Dichloroethene	4.72	96	47784	1.794	ug/L	95
29) 1,1,1-Trichloroethane	5.36	97	10093	0.243	ug/L	91
30) Cyclohexane	5.43	56	3219	0.078	ug/L	90
33) Benzene	5.82	78	10106	0.093	ug/L	100
34) Trichloroethene	6.58	95	119246	4.358	ug/L	96
38) Bromodichloromethane	7.15	83	2372	0.068	ug/L	86
42) Toluene	8.00	91	9665	0.086	ug/L	98
45) 1,1,2-Trichloroethane	8.44	97	2011	0.101	ug/L #	84
47) Tetrachloroethene	8.58	164	32823	1.476	ug/L	97

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QLast Update : Wed Dec 04 03:35:54 2019
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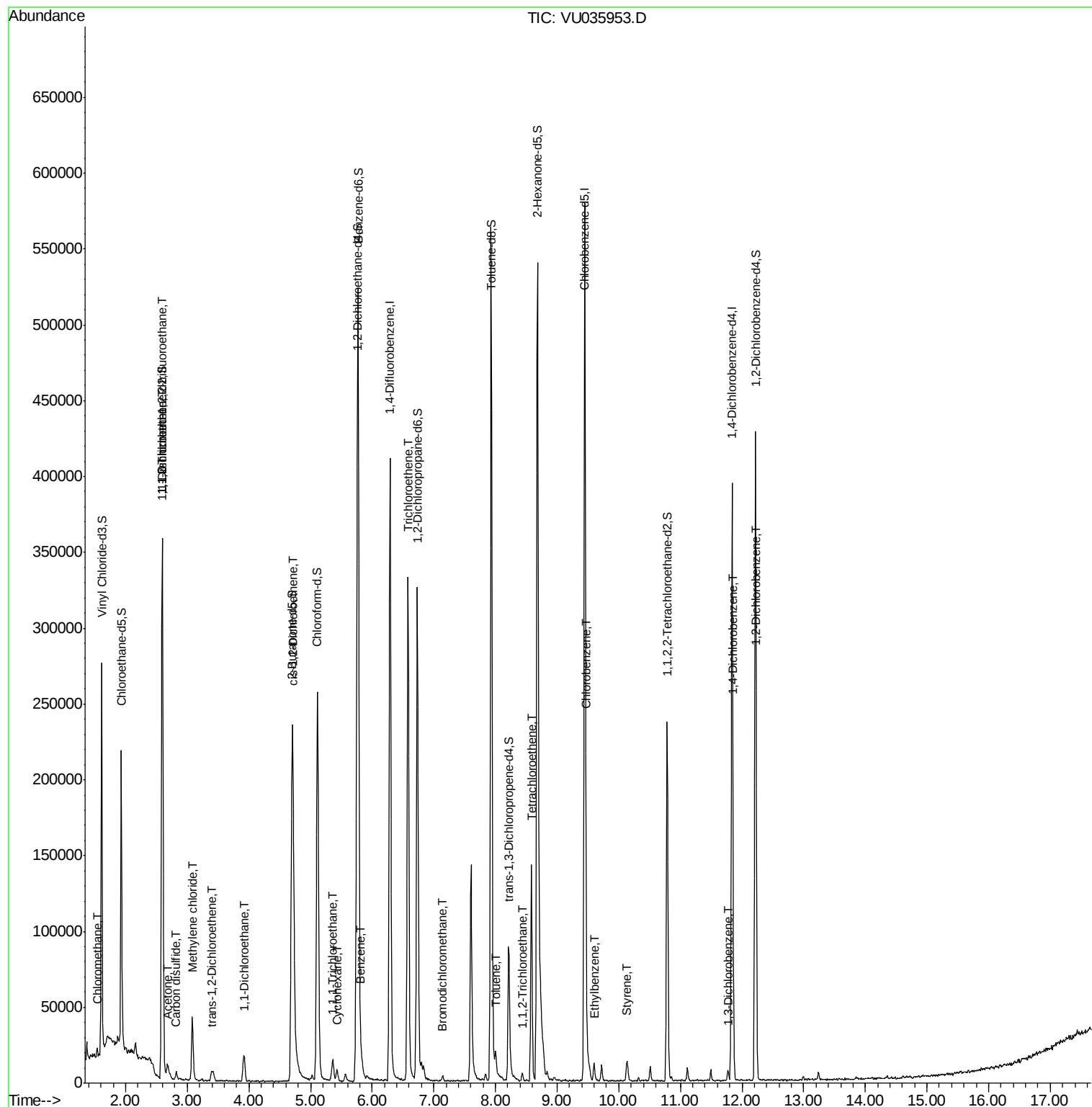
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) Chlorobenzene	9.47	112	6522	0.092	ug/L	95
52) Ethylbenzene	9.60	91	8392	0.073	ug/L	88
55) Styrene	10.14	104	4161	0.061	ug/L	95
62) 1,3-Dichlorobenzene	11.77	146	3083	0.081	ug/L	89
63) 1,4-Dichlorobenzene	11.86	146	3815	0.101	ug/L	83
65) 1,2-Dichlorobenzene	12.24	146	3752	0.103	ug/L	92

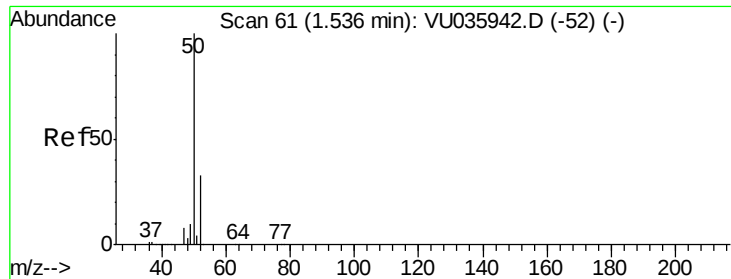
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU120319\
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#3

Chloromethane

Concen: 0.090 ug/L

RT: 1.54 min Scan# 61

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

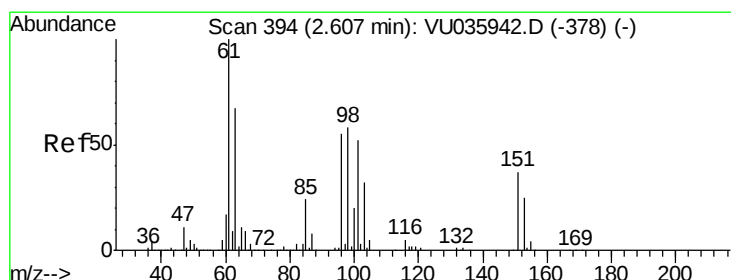
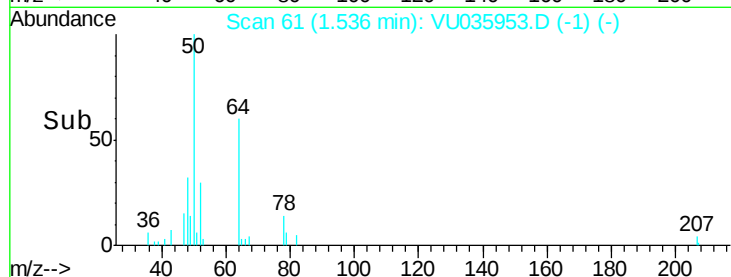
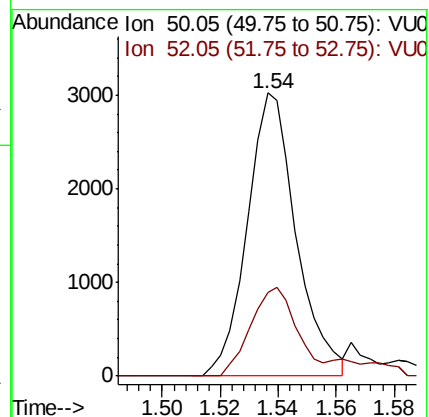
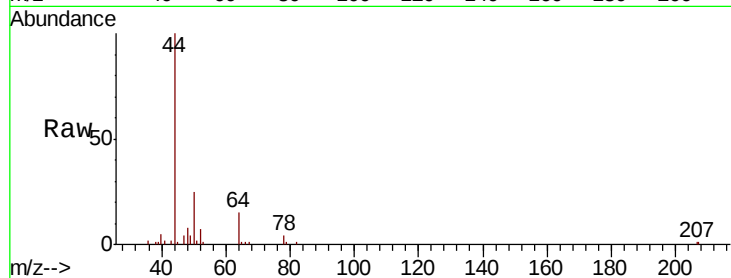
BFE11DL

Tot Ion: 50 Resp: 3550

Ion Ratio Lower Upper

50 100

52 29.5 23.1 42.9



#10

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

Concen: 0.176 ug/L

RT: 2.59 min Scan# 390

Delta R.T. -0.01 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

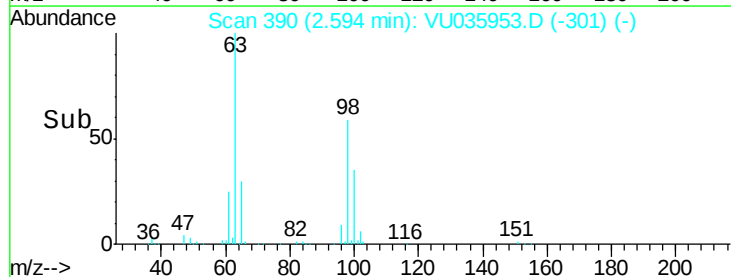
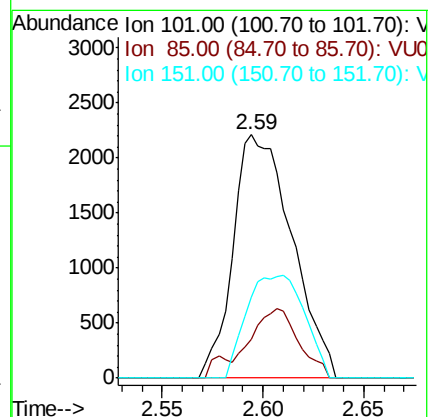
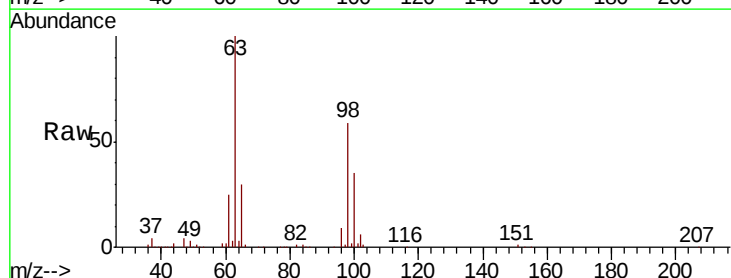
Tgt Ion: 101 Resp: 4498

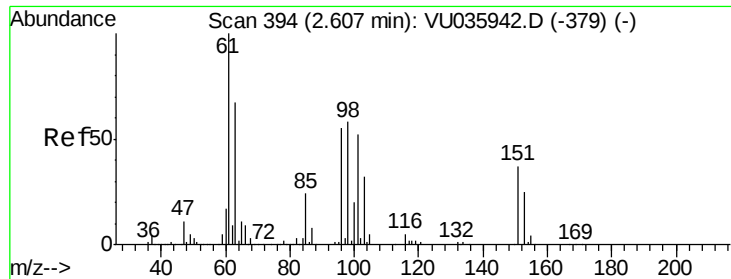
Ion Ratio Lower Upper

101 100

85 22.8 35.5 53.3#

151 41.6 57.5 86.3#





#12

1,1-Dichloroethene

Concen: 1.358 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

BFE11DL

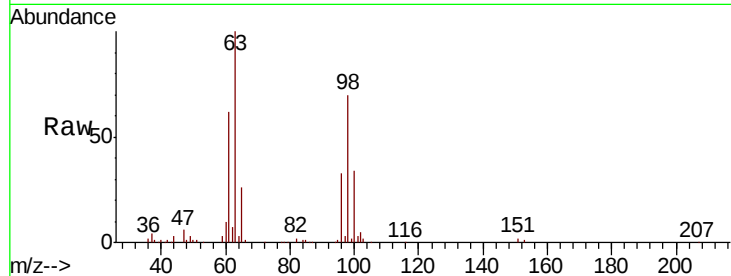
Tot Ion: 96 Resp: 32340

Ion Ratio Lower Upper

96 100

61 189.5 127.1 236.1

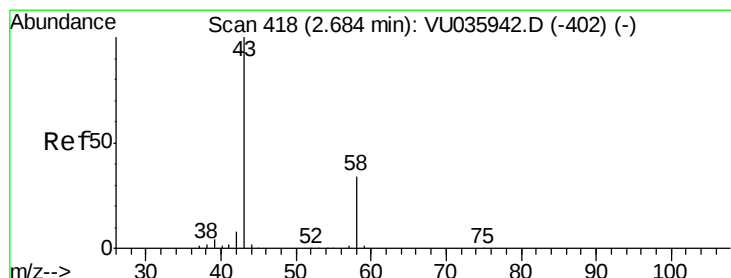
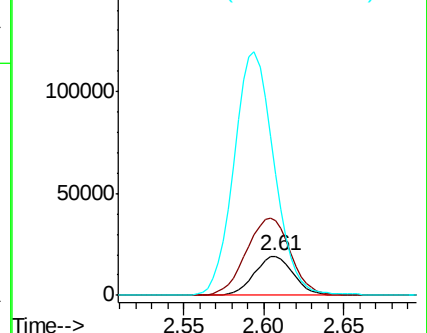
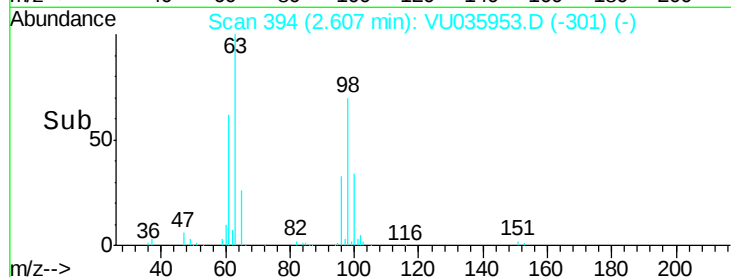
63 307.4 86.0 159.8#



Abundance Ion 96.00 (95.70 to 96.70): VU035953.D (-301) (-)

Ion 61.05 (60.75 to 61.75): VU035953.D (-301) (-)

Ion 63.00 (62.70 to 63.70): VU035953.D (-301) (-)



#13

Acetone

Concen: 2.256 ug/L

RT: 2.68 min Scan# 417

Delta R.T. -0.00 min

Lab File: VU035953.D

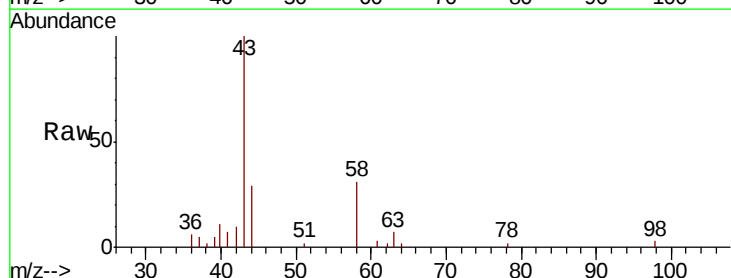
Acq: 03 Dec 2019 17:32

Tgt Ion: 43 Resp: 13675

Ion Ratio Lower Upper

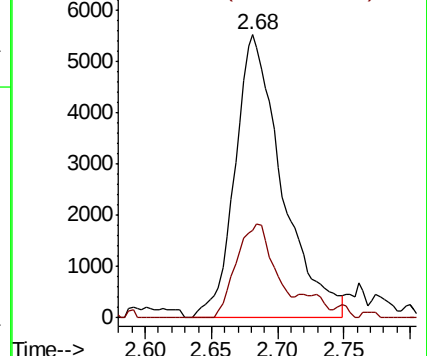
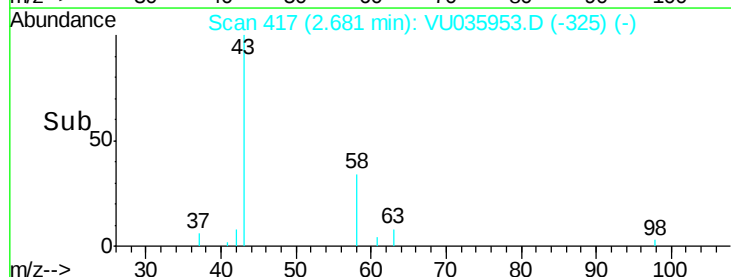
43 100

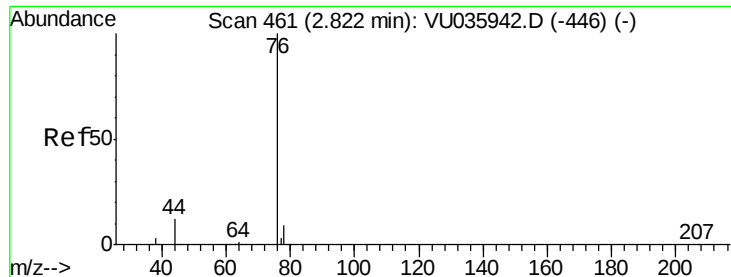
58 27.0 0.0 68.6



Abundance Ion 43.05 (42.75 to 43.75): VU035953.D (-325) (-)

Ion 58.05 (57.75 to 58.75): VU035953.D (-325) (-)





#14

Carbon disulfide

Concen: 0.087 ug/L

RT: 2.82 min Scan# 461

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

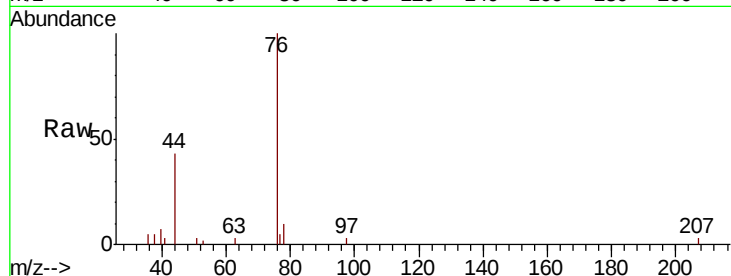
BFE11DL

Tot Ion: 76 Resp: 7229

Ion Ratio Lower Upper

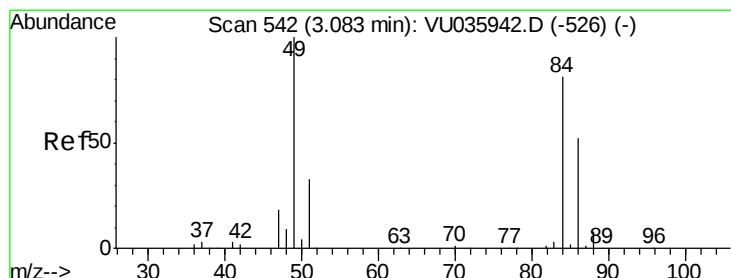
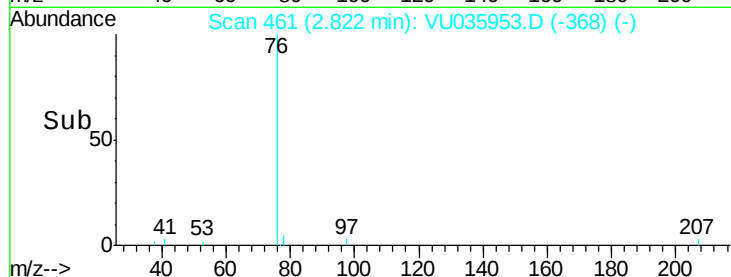
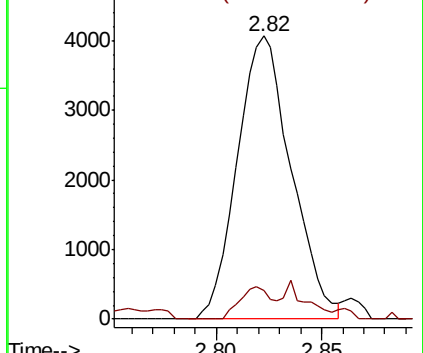
76 100

78 9.9 6.9 10.3



Abundance Ion 76.05 (75.75 to 76.75): VU035942.D (-446) (-)

Ion 78.00 (77.70 to 78.70): VU035942.D (-446) (-)



#16

Methylene chloride

Concen: 0.525 ug/L

RT: 3.08 min Scan# 542

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

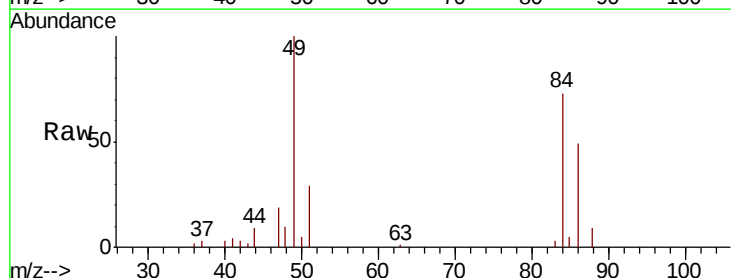
Tgt Ion: 84 Resp: 19357

Ion Ratio Lower Upper

84 100

86 66.3 44.7 82.9

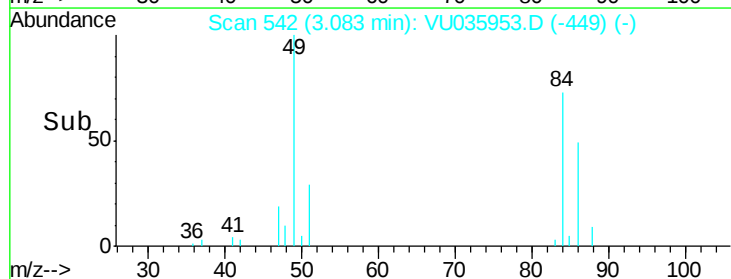
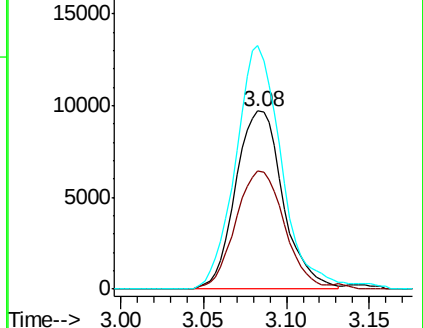
49 136.7 86.2 160.2

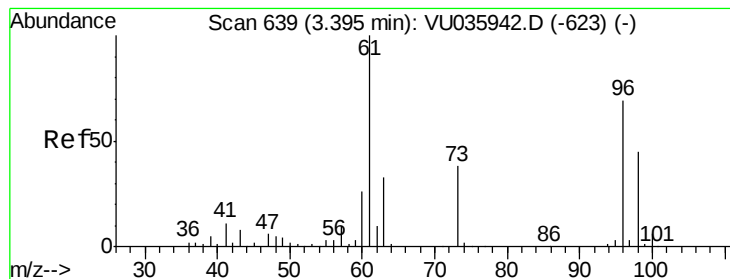


Abundance Ion 84.05 (83.75 to 84.75): VU035942.D (-526) (-)

Ion 86.00 (85.70 to 86.70): VU035942.D (-526) (-)

Ion 49.10 (48.80 to 49.80): VU035942.D (-526) (-)





#18

trans-1,2-Dichloroethene

Concen: 0.089 ug/L

RT: 3.39 min Scan# 639

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

BFE11DL

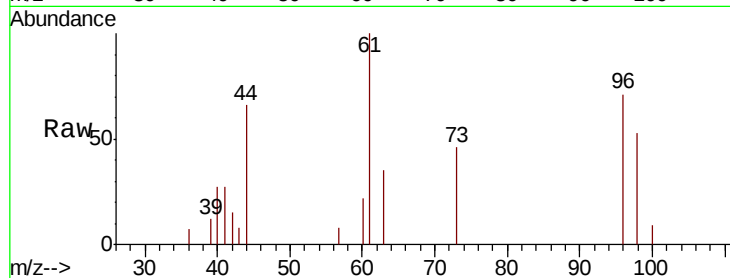
Tot Ion: 96 Resp: 2255

Ion Ratio Lower Upper

96 100

61 140.5 101.2 187.8

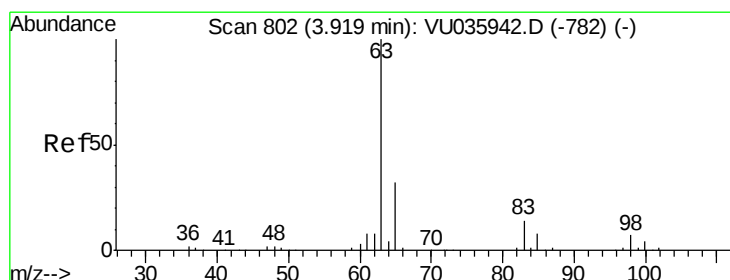
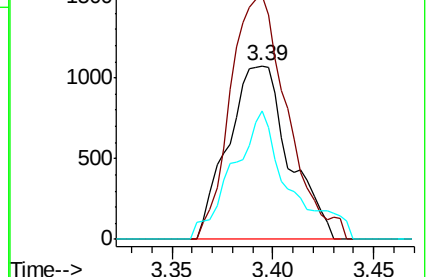
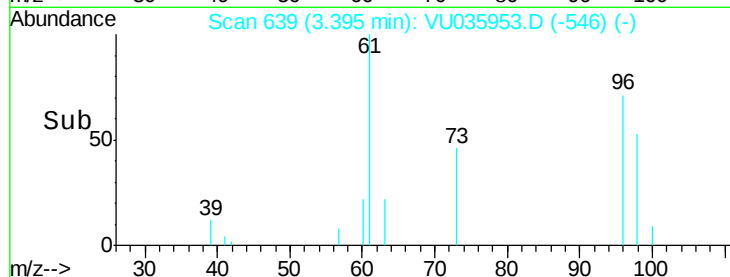
98 74.2 45.0 83.6



Abundance Ion 96.00 (95.70 to 96.70): VU035953.D (-546) (-)

Ion 61.05 (60.75 to 61.75): VU035953.D (-546) (-)

Ion 97.95 (97.65 to 98.65): VU035953.D (-546) (-)



#19

1,1-Dichloroethane

Concen: 0.428 ug/L

RT: 3.92 min Scan# 803

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

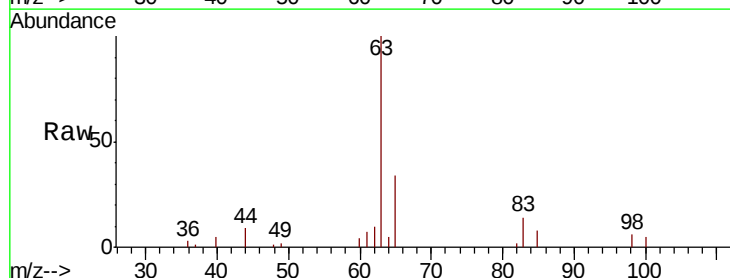
Tgt Ion: 63 Resp: 21100

Ion Ratio Lower Upper

63 100

65 34.5 22.4 41.6

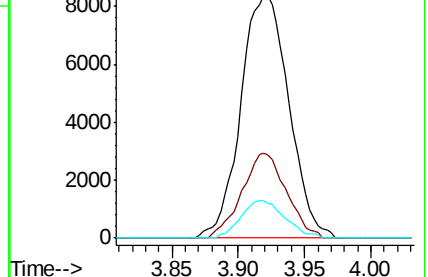
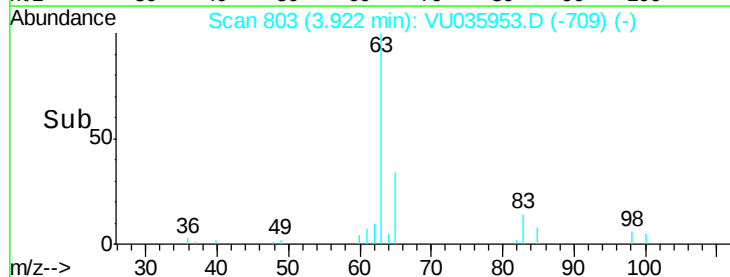
83 14.5 9.8 18.2

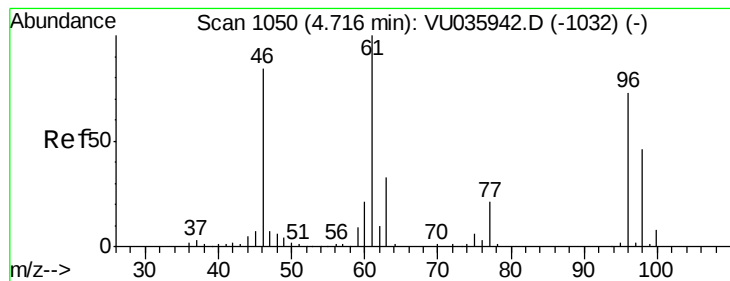


Abundance Ion 63.10 (62.80 to 63.80): VU035953.D (-709) (-)

Ion 65.10 (64.80 to 65.80): VU035953.D (-709) (-)

Ion 83.05 (82.75 to 83.75): VU035953.D (-709) (-)





#22

cis-1,2-Dichloroethene

Concen: 1.794 ug/L

RT: 4.72 min Scan# 1051

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

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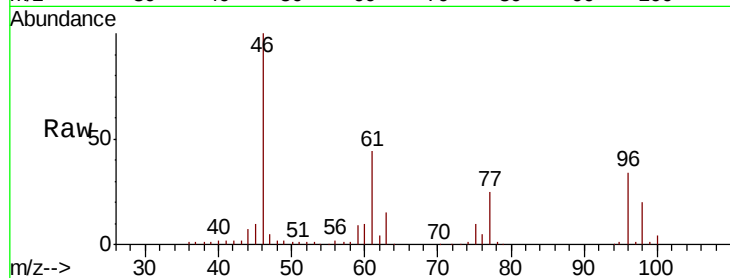
Tot Ion: 96 Resp: 47784

Ion Ratio Lower Upper

96 100

61 130.4 95.7 177.7

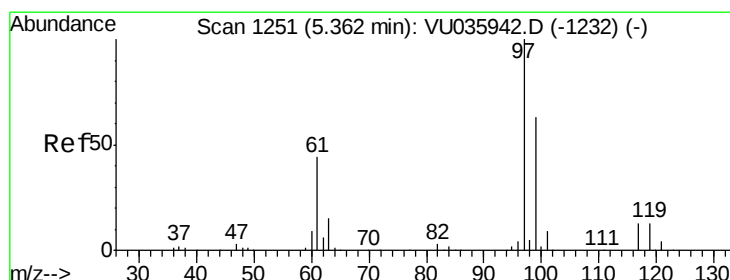
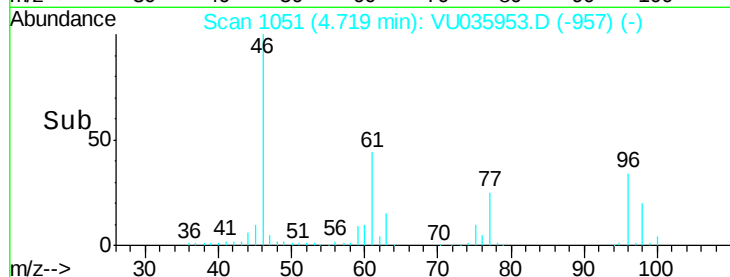
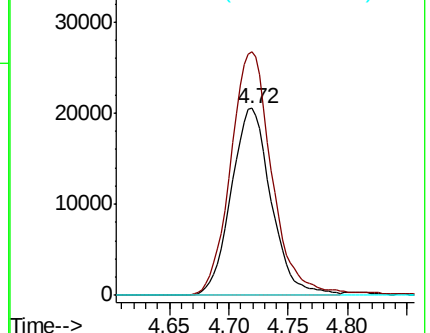
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU035953.D (-1057) (-)

Ion 61.05 (60.75 to 61.75): VU035953.D (-1057) (-)

Ion 68.15 (67.85 to 68.85): VU035953.D (-1057) (-)



#29

1,1,1-Trichloroethane

Concen: 0.243 ug/L

RT: 5.36 min Scan# 1250

Delta R.T. -0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

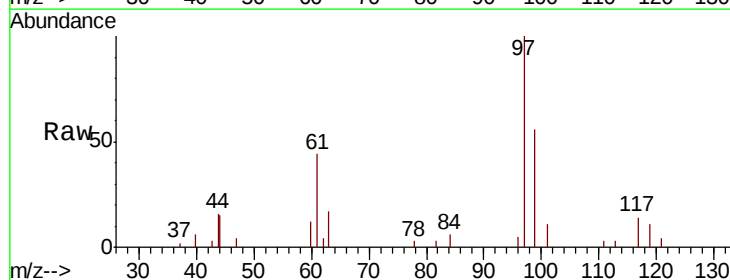
Tgt Ion: 97 Resp: 10093

Ion Ratio Lower Upper

97 100

99 57.3 51.8 77.8

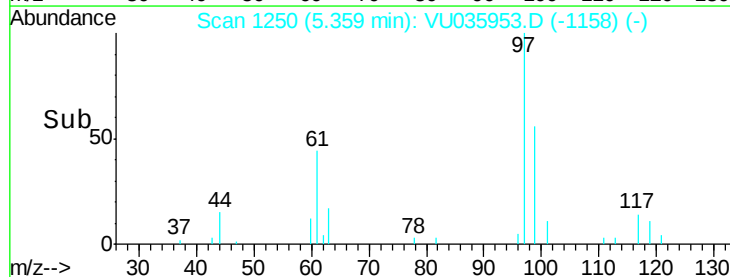
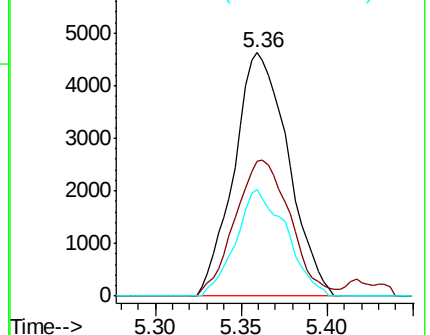
61 41.0 37.6 56.4

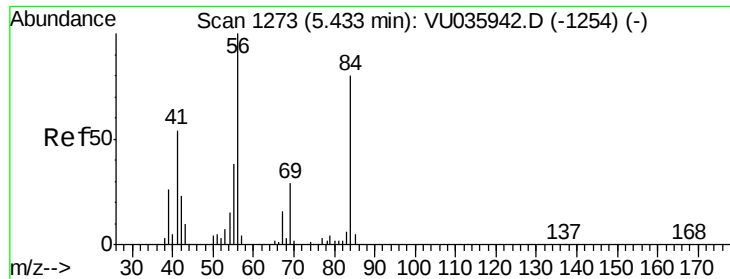


Abundance Ion 96.95 (96.65 to 97.65): VU035953.D (-1158) (-)

Ion 99.05 (98.75 to 99.75): VU035953.D (-1158) (-)

Ion 61.05 (60.75 to 61.75): VU035953.D (-1158) (-)

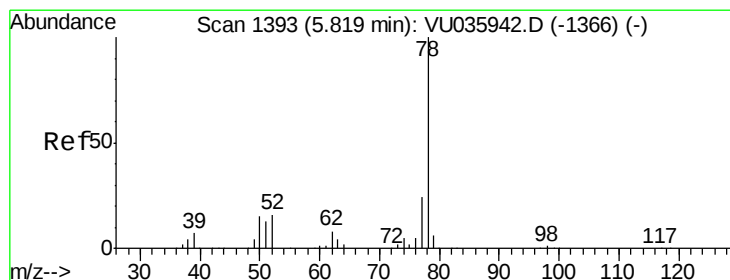
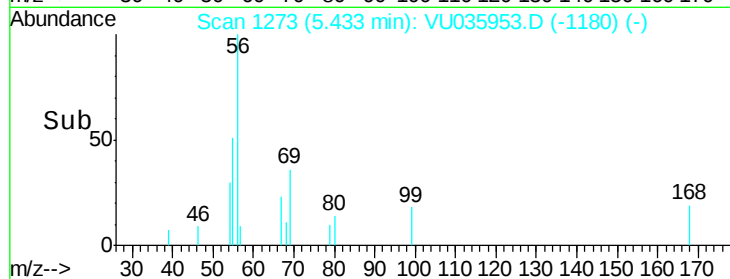
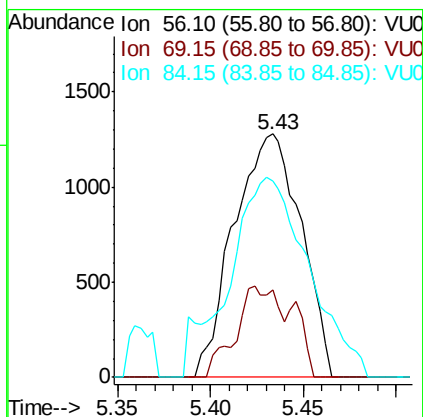
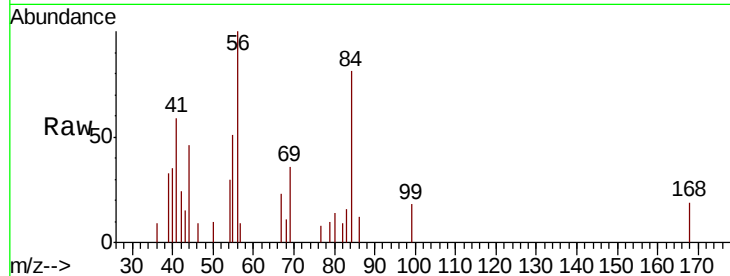




#30
Cyclohexane
Concen: 0.078 ug/L
RT: 5.43 min Scan# 1273
Delta R.T. 0.00 min
Lab File: VU035953.D
Acq: 03 Dec 2019 17:32

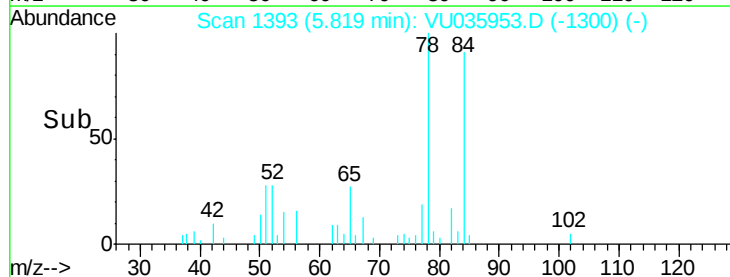
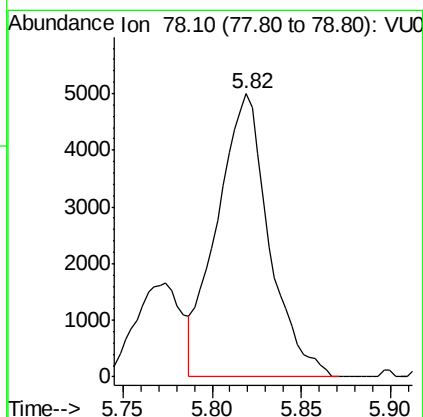
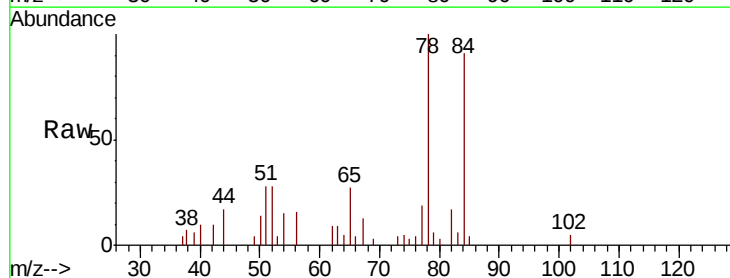
Instrument :
MSVOA_U
ClientSampleId :
BFE11DL

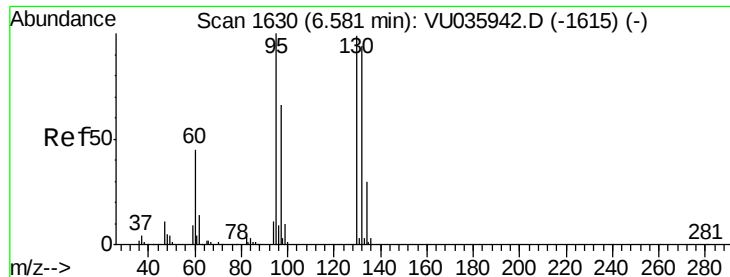
Tot Ion: 56 Resp: 3219
Ion Ratio Lower Upper
56 100
69 24.3 24.0 36.0
84 92.5 66.9 100.3



#33
Benzene
Concen: 0.093 ug/L
RT: 5.82 min Scan# 1393
Delta R.T. 0.00 min
Lab File: VU035953.D
Acq: 03 Dec 2019 17:32

Tgt Ion: 78 Resp: 10106





#34

Trichloroethene

Concen: 4.358 ug/L

RT: 6.58 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

BFE11DL

Tot Ion: 95 Resp: 119246

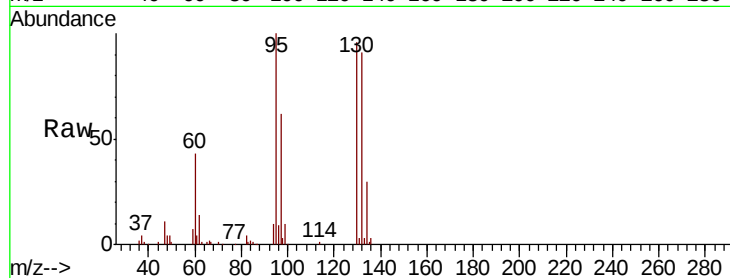
Ion Ratio Lower Upper

95 100

97 61.9 46.3 85.9

132 91.3 65.7 122.1

130 95.6 69.2 128.6

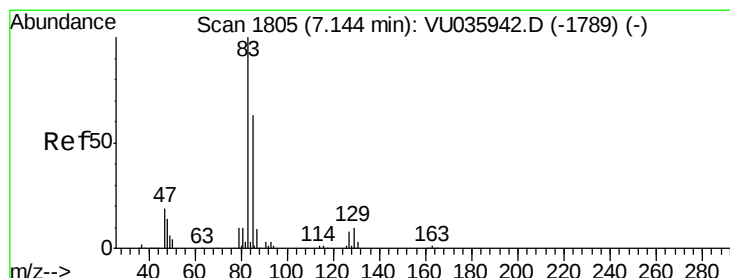
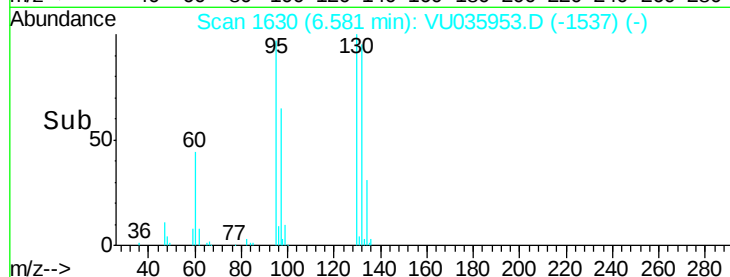
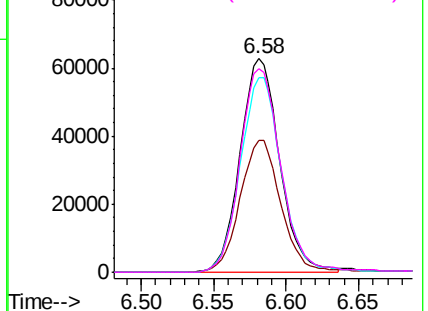


Abundance Ion 95.00 (94.70 to 95.70): VU035942.D (-1615) (-)

Ion 96.95 (96.65 to 97.65): VU035942.D (-1615) (-)

Ion 131.95 (131.65 to 132.65): VU035942.D (-1615) (-)

Ion 129.95 (129.65 to 130.65): VU035942.D (-1615) (-)



#38

Bromodichloromethane

Concen: 0.068 ug/L

RT: 7.15 min Scan# 1806

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

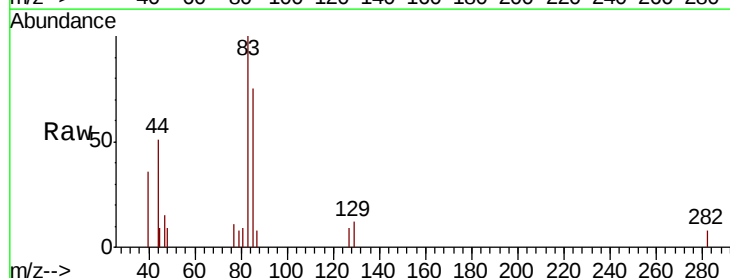
Tgt Ion: 83 Resp: 2372

Ion Ratio Lower Upper

83 100

85 74.5 44.0 81.8

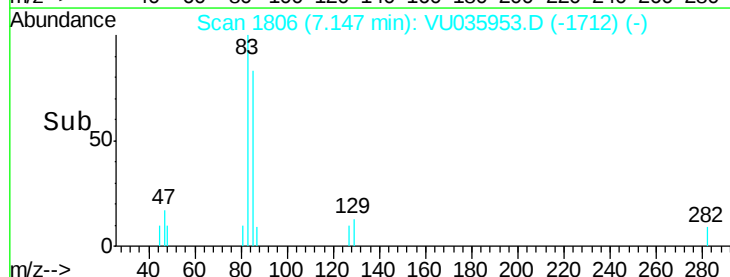
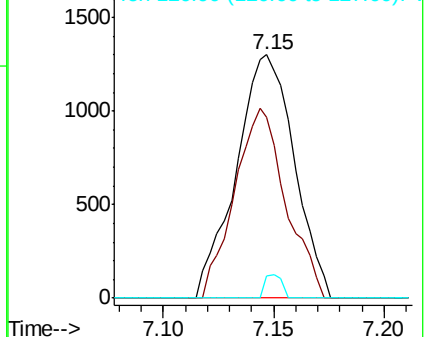
127 9.3 6.5 9.7

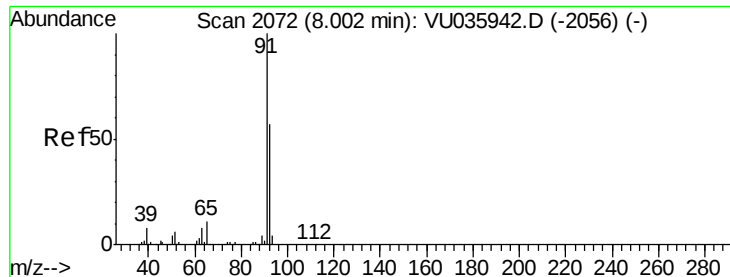


Abundance Ion 82.95 (82.65 to 83.65): VU035942.D (-1789) (-)

Ion 85.00 (84.70 to 85.70): VU035942.D (-1789) (-)

Ion 126.90 (126.60 to 127.60): VU035942.D (-1789) (-)





#42

Toluene

Concen: 0.086 ug/L

RT: 8.00 min Scan# 2072

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

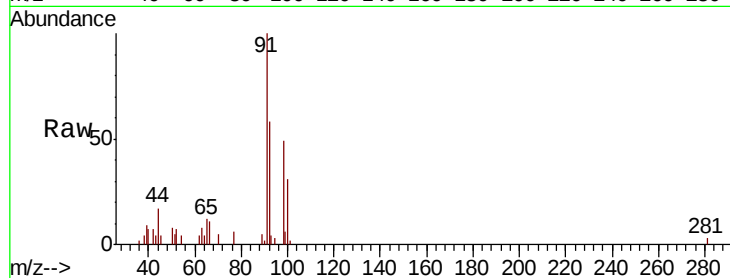
BFE11DL

Tot Ion: 91 Resp: 9665

Ion Ratio Lower Upper

91 100

92 58.2 39.8 74.0



Abundance Ion 91.15 (90.85 to 91.85): VU035942.D (-2056) (-)

Ion 92.15 (91.85 to 92.85): VU035942.D (-2056) (-)

8.00

6000

5000

4000

3000

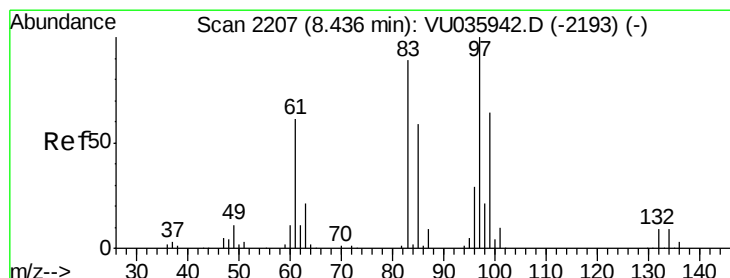
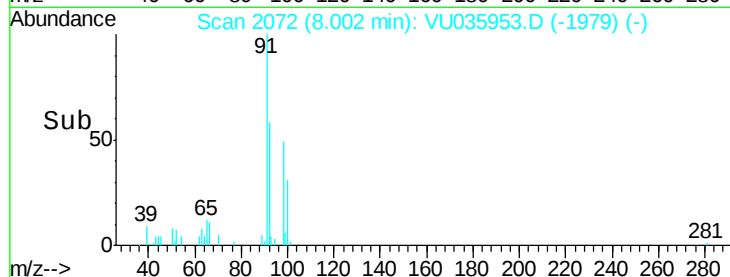
2000

1000

0

7.95 8.00 8.05

Time-->



#45

1,1,2-Trichloroethane

Concen: 0.101 ug/L

RT: 8.44 min Scan# 2208

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Tgt Ion: 97 Resp: 2011

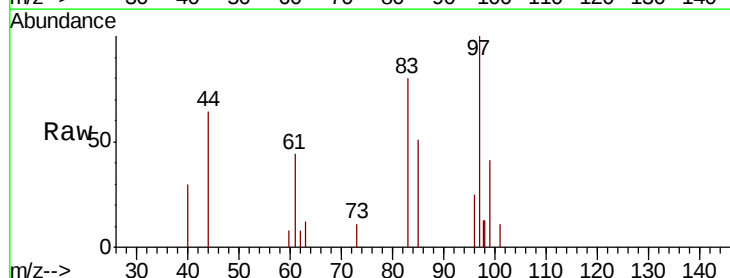
Ion Ratio Lower Upper

97 100

99 40.9 45.0 83.6#

83 80.2 62.1 115.3

85 51.1 41.4 77.0



Abundance Ion 96.95 (96.65 to 97.65): VU035942.D (-2193) (-)

Ion 99.05 (98.75 to 99.75): VU035942.D (-2193) (-)

Ion 82.95 (82.65 to 83.65): VU035942.D (-2193) (-)

Ion 85.00 (84.70 to 85.70): VU035942.D (-2193) (-)

2000

1500

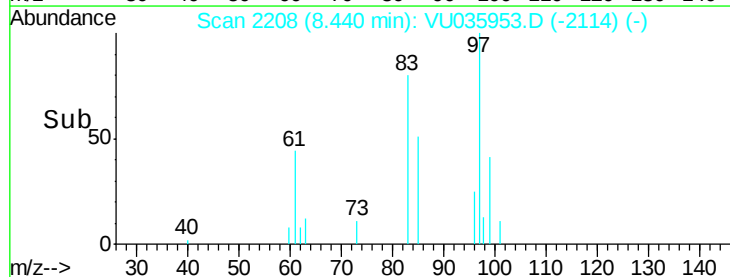
1000

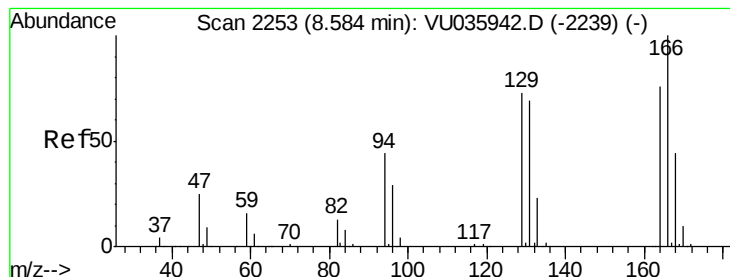
500

0

8.40 8.44 8.48

Time-->





#47

Tetrachloroethene

Concen: 1.476 ug/L

RT: 8.58 min Scan# 2253

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

BFE11DL

Tot Ion:164 Resp: 32823

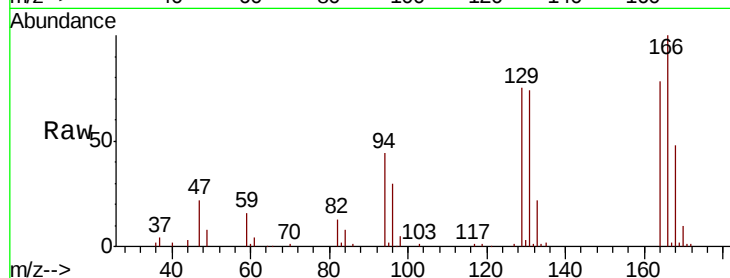
Ion Ratio Lower Upper

164 100

129 95.9 67.9 126.1

131 94.6 64.1 119.1

166 127.9 92.6 172.0

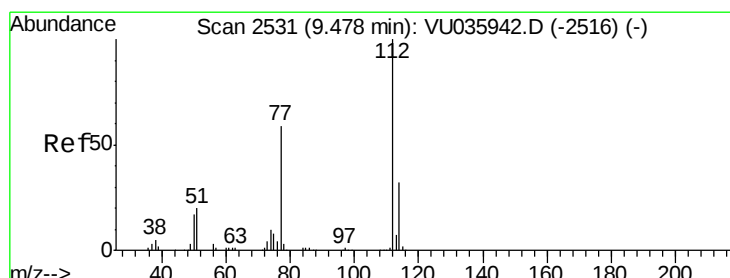
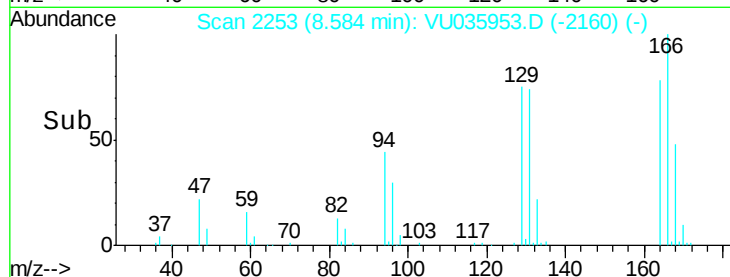
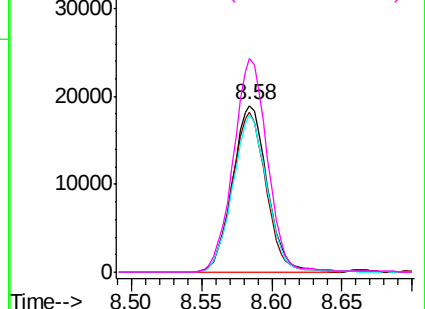


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V



#51

Chlorobenzene

Concen: 0.092 ug/L

RT: 9.47 min Scan# 2530

Delta R.T. -0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

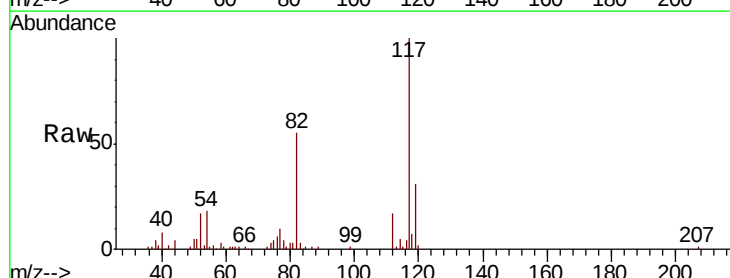
Tgt Ion:112 Resp: 6522

Ion Ratio Lower Upper

112 100

114 27.0 22.5 41.7

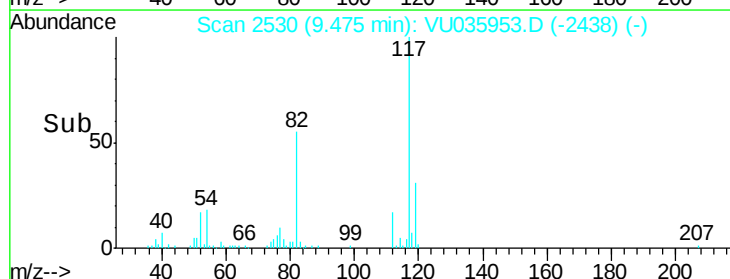
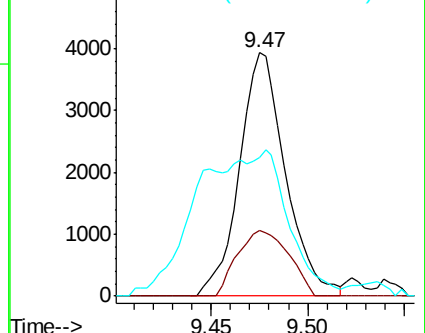
77 57.1 47.7 71.5

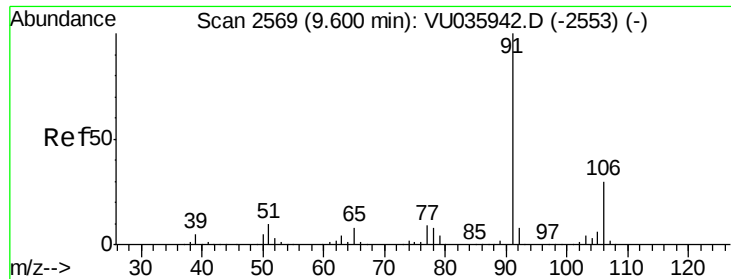


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VU0





#52

Ethylbenzene

Concen: 0.073 ug/L

RT: 9.60 min Scan# 2569

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

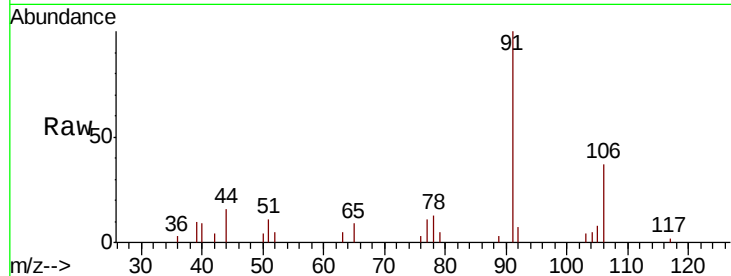
BFE11DL

Tot Ion: 91 Resp: 8392

Ion Ratio Lower Upper

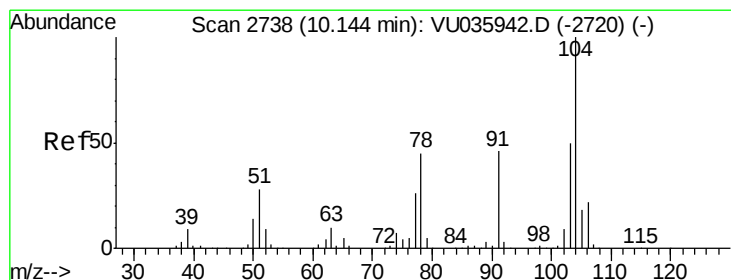
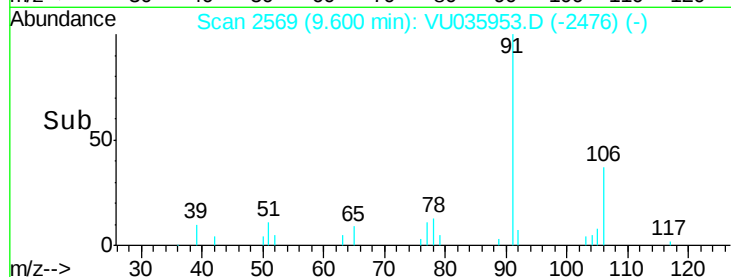
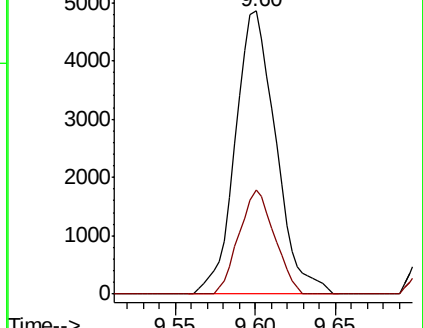
91 100

106 36.6 21.1 39.3



Abundance Ion 91.15 (90.85 to 91.85): VU035942.D (-2553) (-)

Ion 106.15 (105.85 to 106.85): VU035942.D (-2553) (-)



#55

Styrene

Concen: 0.061 ug/L

RT: 10.14 min Scan# 2738

Delta R.T. 0.00 min

Lab File: VU035953.D

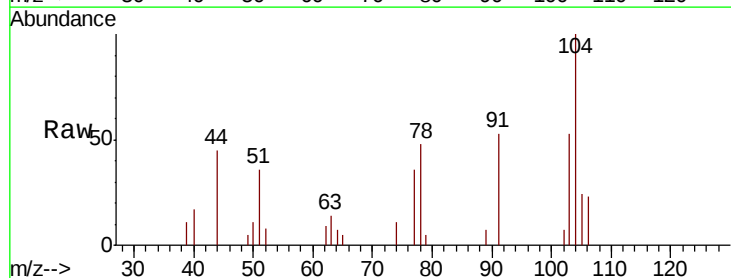
Acq: 03 Dec 2019 17:32

Tgt Ion: 104 Resp: 4161

Ion Ratio Lower Upper

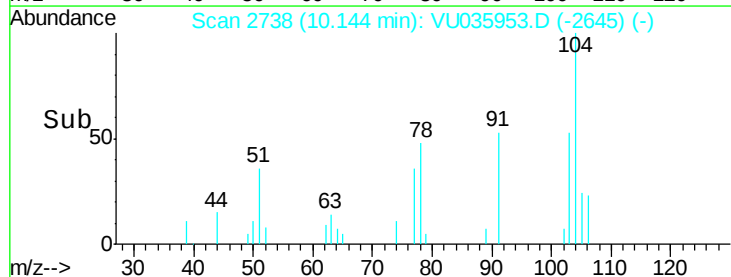
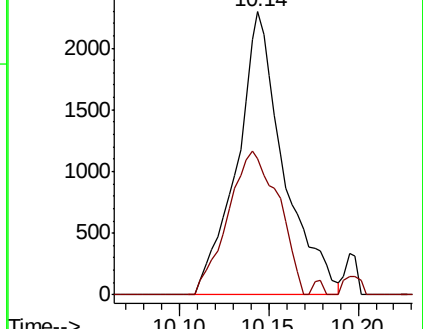
104 100

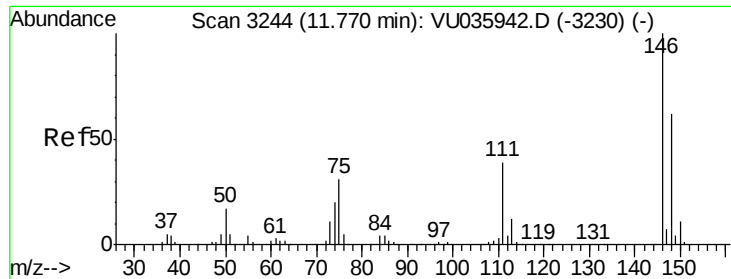
78 48.1 31.2 58.0



Abundance Ion 104.10 (103.80 to 104.80): VU035942.D (-2720) (-)

Ion 78.10 (77.80 to 78.80): VU035942.D (-2720) (-)





#62

1,3-Dichlorobenzene

Concen: 0.081 ug/L

RT: 11.77 min Scan# 3244

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

Instrument :

MSVOA_U

ClientSampleId :

BFE11DL

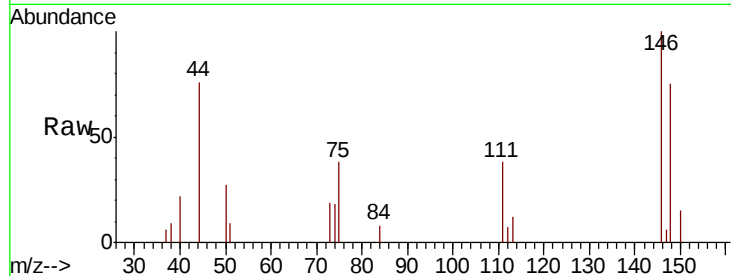
Tot Ion:146 Resp: 3083

Ion Ratio Lower Upper

146 100

111 37.9 27.6 51.4

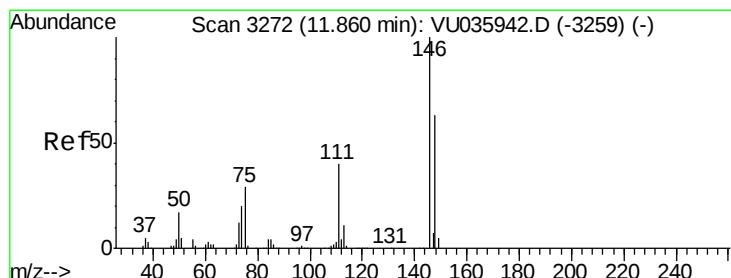
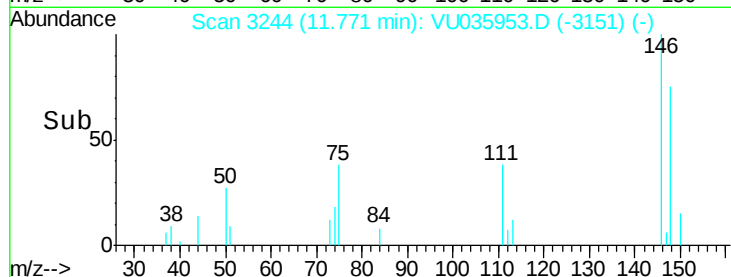
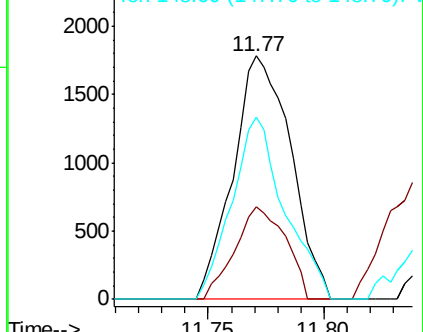
148 75.0 43.4 80.6



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: 0.101 ug/L

RT: 11.86 min Scan# 3272

Delta R.T. 0.00 min

Lab File: VU035953.D

Acq: 03 Dec 2019 17:32

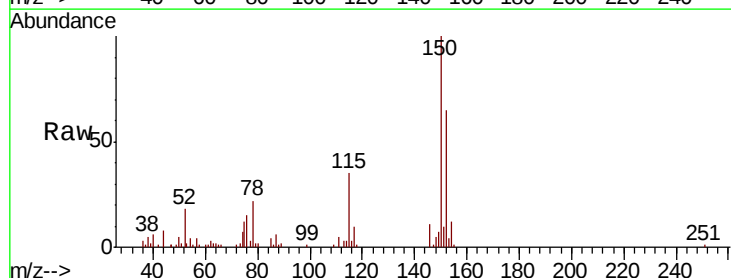
Tgt Ion:146 Resp: 3815

Ion Ratio Lower Upper

146 100

111 48.5 28.5 52.9

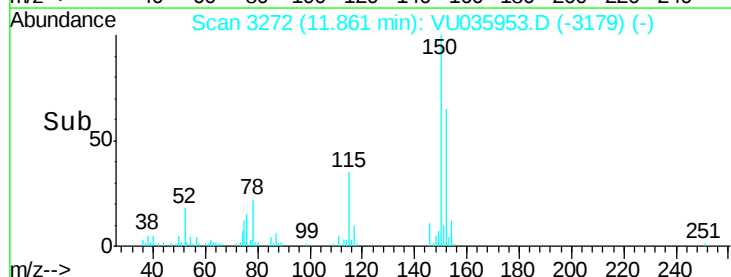
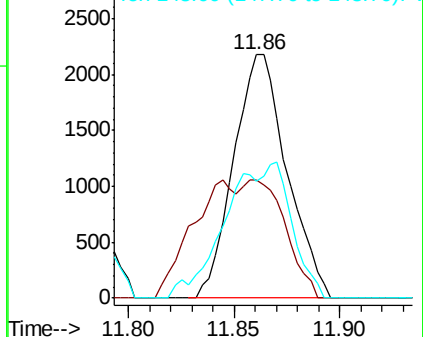
148 48.3 44.4 82.5

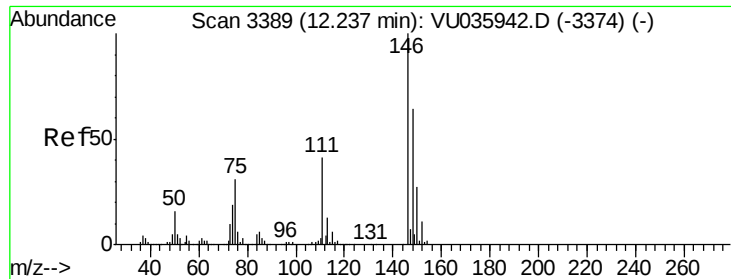


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65
 1,2-Dichlorobenzene
 Concen: 0.103 ug/L
 RT: 12.24 min Scan# 3390
 Delta R.T. 0.00 min
 Lab File: VU035953.D
 Acq: 03 Dec 2019 17:32

Instrument :
 MSVOA_U
 ClientSampleId :
 BFE11DL

Tot Ion	Ratio	Lower	Upper
146	100		
111	35.6	32.6	48.8
148	70.2	50.9	76.3

