

Data File : VU034814.D
Acq On : 25 Sep 2019 19:57
Operator : JC/SP
Sample : K4983-03
Misc : 5.0mL/MSVOA_U/WATER
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
BFDF4

Quant Time: Sep 26 07:00:23 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
Quant Title : VOC Analysis
QLast Update : Thu Sep 26 06:56:48 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.86	114	425796	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.07	117	411468	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.46	152	191679	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.39	65	197569	45.32	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	90.64%
7) Chloroethane-d5	1.67	69	170603	50.64	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	101.28%
11) 1,1-Dichloroethene-d2	2.26	63	263741	35.73	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	71.46%
21) 2-Butanone-d5	4.15	46	401088	120.06	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	120.06%
24) Chloroform-d	4.62	84	322628	50.91	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	101.82%
26) 1,2-Dichloroethane-d4	5.29	65	230012	49.37	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	98.74%
32) Benzene-d6	5.32	84	702540	55.09	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	110.18%
36) 1,2-Dichloropropane-d6	6.31	67	244434	54.83	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.66%
41) Toluene-d8	7.54	98	665795	54.87	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	109.74%
43) trans-1,3-Dichloropropene-	7.83	79	105819	49.56	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	99.12%
47) 2-Hexanone-d5	8.29	63	269752	120.49	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	120.49%
57) 1,1,2,2-Tetrachloroethane-	10.41	84	320844	51.87	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	103.74%
64) 1,2-Dichlorobenzene-d4	11.84	152	236105	58.74	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	117.48%

Target Compounds

						Qvalue
10) 1,1,2-Trichloro-1,2,2-trif	2.26	101	2197	0.757	ug/L #	22
12) 1,1-Dichloroethene	2.26	96	2646	0.950	ug/L #	1
13) Acetone	2.31	43	75422	19.408	ug/L	95
16) Methylene chloride	2.68	84	117654	33.341	ug/L	92
22) 2-Butanone	4.26	43	18937	4.096	ug/L	79
25) Chloroform	4.64	83	5726	0.832	ug/L	89
29) Cyclohexane	4.97	56	6148	0.905	ug/L #	80
33) Benzene	5.37	78	103562	7.257	ug/L	100
34) Trichloroethene	6.17	95	6417	1.821	ug/L	94
35) Methylcyclohexane	6.40	83	6699	1.120	ug/L	97
40) 4-Methyl-2-pentanone	7.44	43	38690	4.769	ug/L	95
42) Toluene	7.61	91	441494	28.626	ug/L	99
44) trans-1,3-Dichloropropene	7.83	75	5843	1.015	ug/L #	75
46) Tetrachloroethene	8.21	164	2834	1.143	ug/L	97
52) Ethylbenzene	9.23	91	233070	13.420	ug/L	98
53) m,p-Xylene	9.35	106	385226	62.624	ug/L	99
54) o-xylene	9.76	106	295408	48.553	ug/L	95

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
55) Styrene	9.76	104	15983	1.552	ug/L #	1
56) Isopropylbenzene	10.14	105	32823	2.001	ug/L	96
59) 1,2,3-Trichloropropane	11.46	75	29464	5.552	ug/L	89
63) 1,4-Dichlorobenzene	11.49	146	6002	0.888	ug/L #	79
65) 1,2-Dichlorobenzene	11.85	146	40324	6.012	ug/L	99
66) 1,2-Dibromo-3-chloropropan	12.33	75	1815	1.273	ug/L #	10
69) Naphthalene	13.72	128	314916	26.009	ug/L	99

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

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Sample : K4983-03

Misc : 5.0mL/MSVOA U/WATER

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ALS Vial      : 25      Sample Multiplier: 1
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Instrument :
MSVOA_U
ClientSampleId :
BFDF4

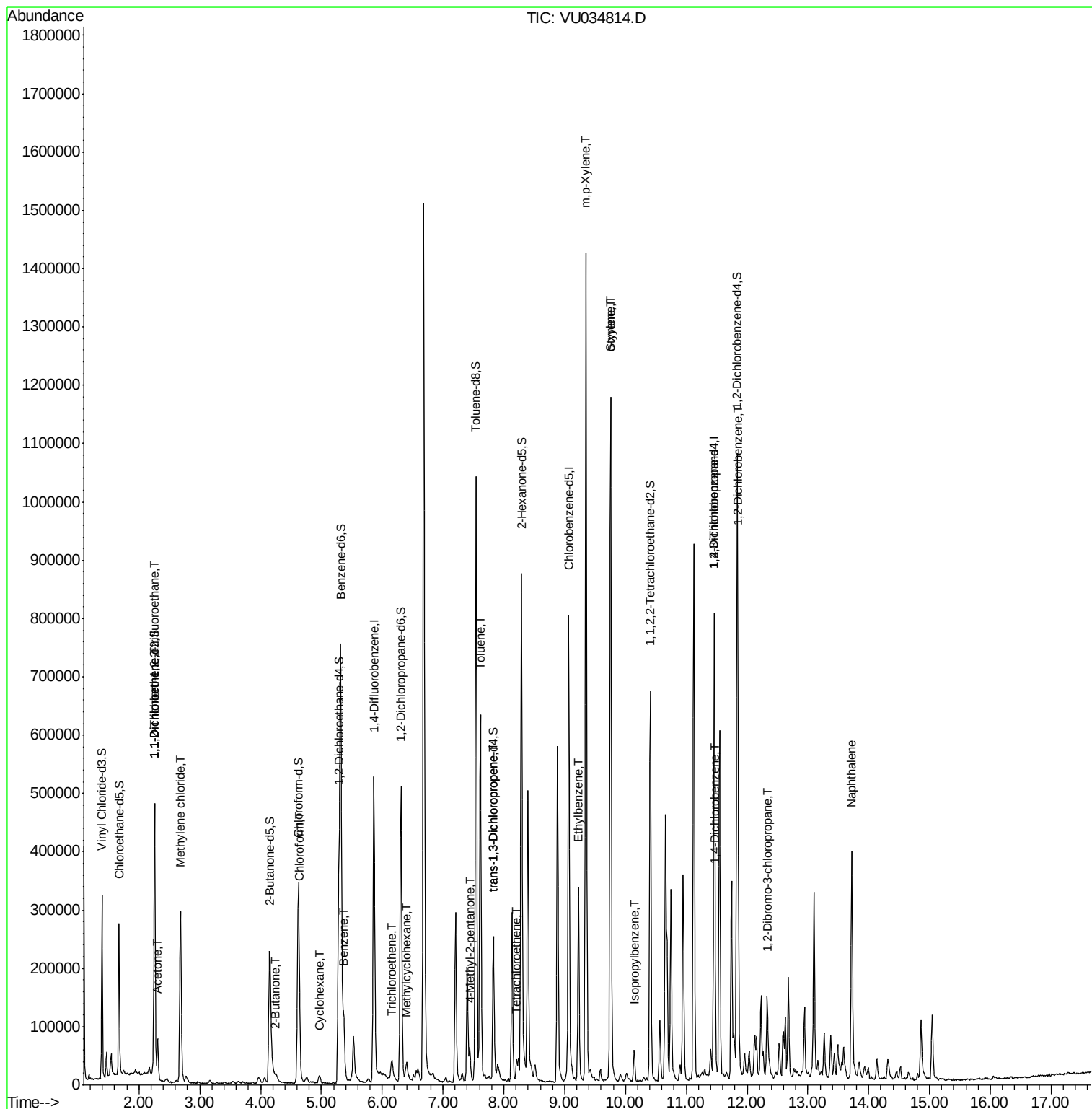
Quant Time: Sep 26 07:00:23 2019

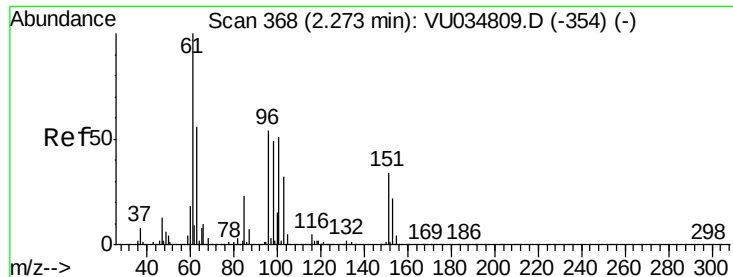
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_U\METHOD\SOMULM091919WMA.M

Quant Title : VOC Analysis

QLast Update : Thu Sep 26 06:56:48 2019

Response via : Initial Calibration





#10

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

Concen: 0.757 ug/L

RT: 2.26 min Scan# 364

Delta R.T. -0.01 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

BPDF4

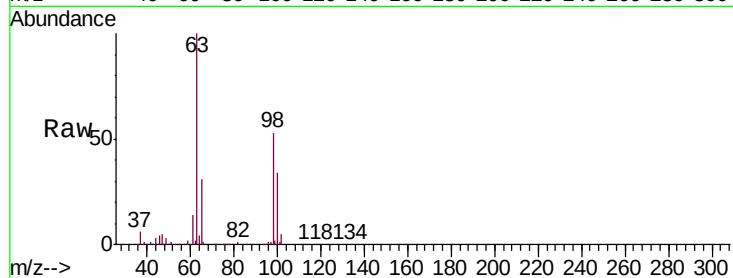
Tgt Ion: 101 Resp: 2197

Ion Ratio Lower Upper

101 100

85 0.0 39.0 58.4#

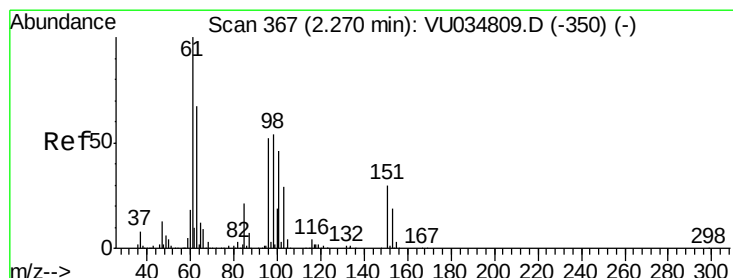
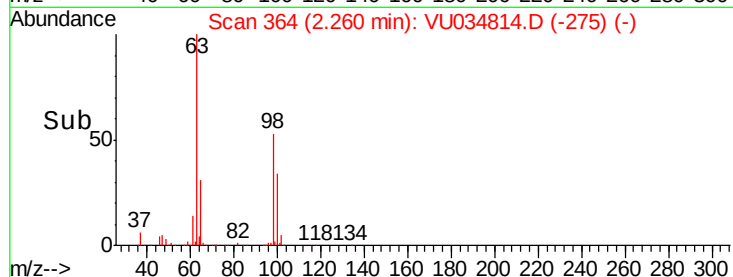
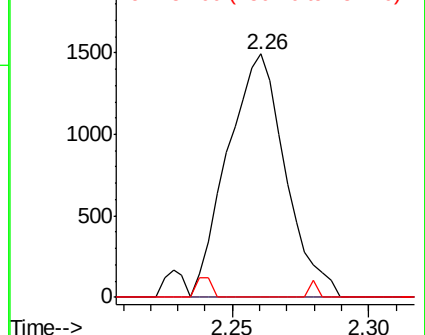
151 0.0 52.8 79.2#



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



#12

1,1-Dichloroethene

Concen: 0.950 ug/L

RT: 2.26 min Scan# 364

Delta R.T. -0.01 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

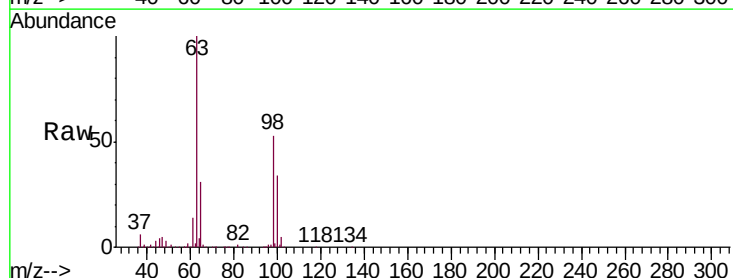
Tgt Ion: 96 Resp: 2646

Ion Ratio Lower Upper

96 100

61 1355.5 153.2 284.4#

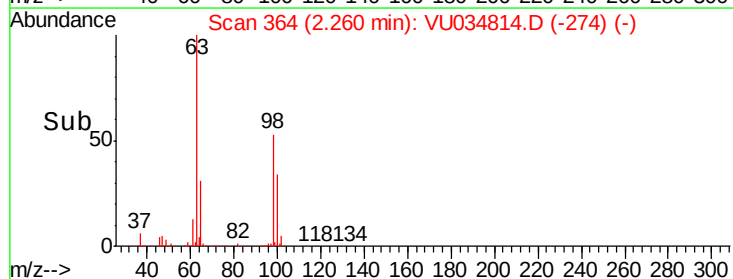
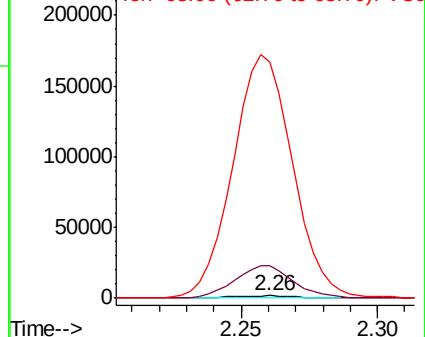
63 10004.6 113.8 211.3#

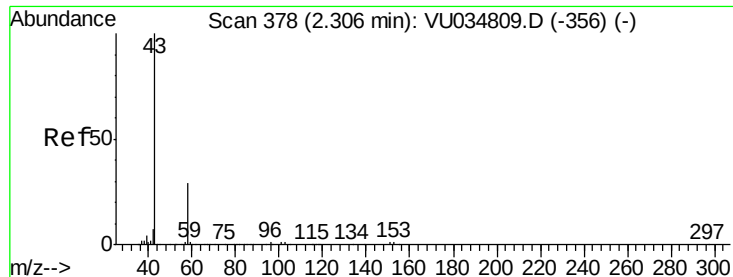


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 19.408 ug/L

RT: 2.31 min Scan# 378

Delta R.T. -0.00 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

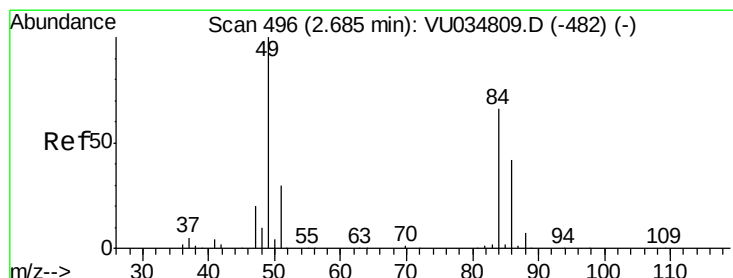
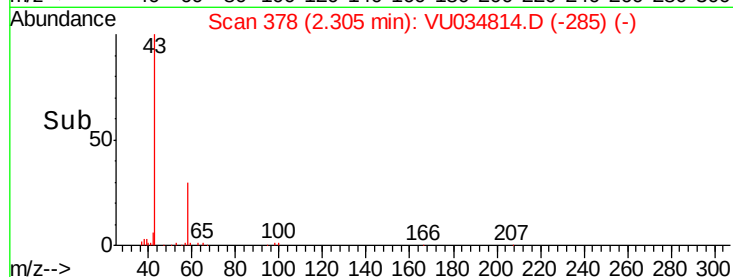
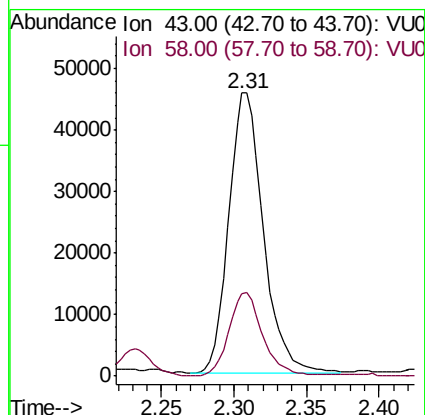
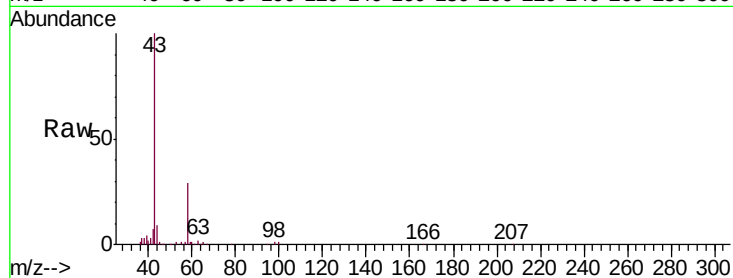
BPDF4

Tgt Ion: 43 Resp: 75422

Ion Ratio Lower Upper

43 100

58 29.0 0.0 53.4



#16

Methylene chloride

Concen: 33.341 ug/L

RT: 2.68 min Scan# 496

Delta R.T. -0.00 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

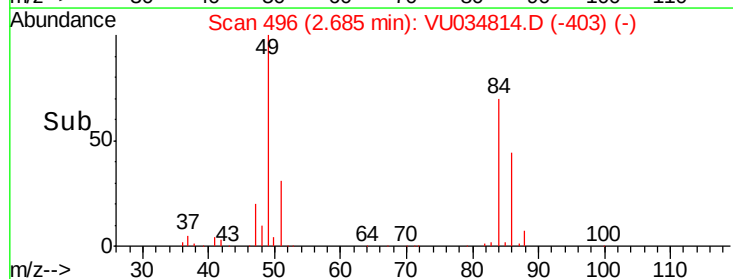
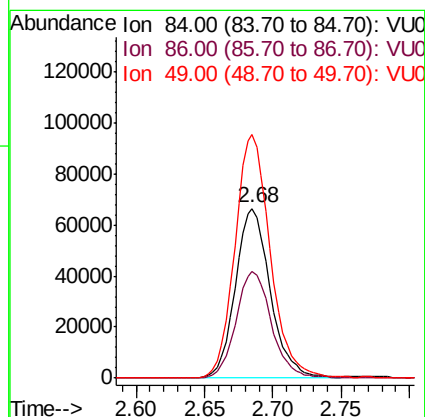
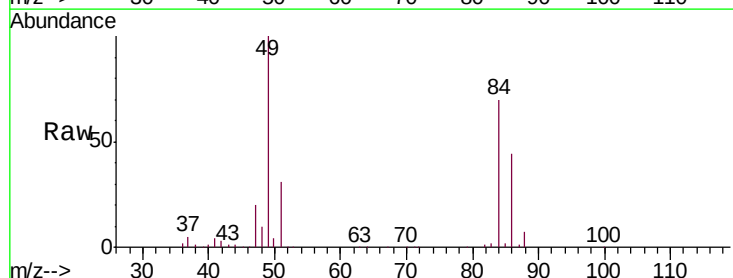
Tgt Ion: 84 Resp: 117654

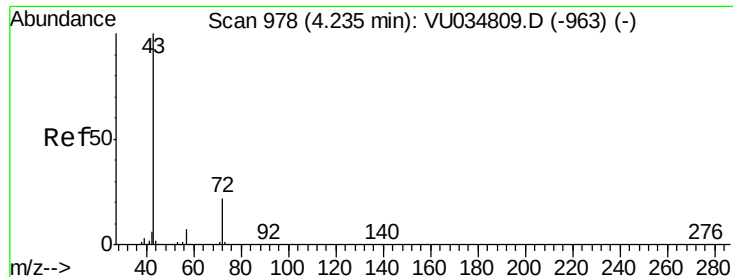
Ion Ratio Lower Upper

84 100

86 62.9 43.0 80.0

49 143.4 109.7 203.7





#22

2-Butanone

Concen: 4.096 ug/L

RT: 4.26 min Scan# 985

Delta R.T. 0.02 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

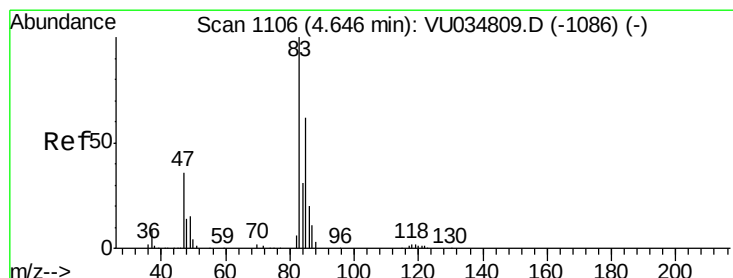
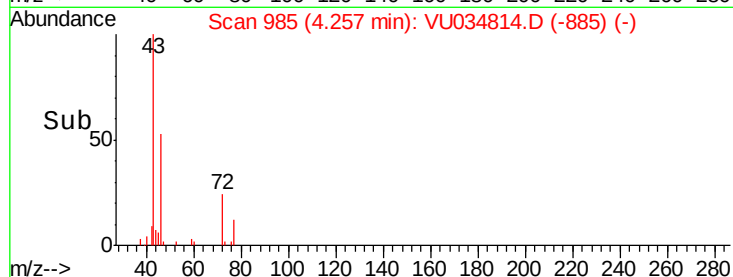
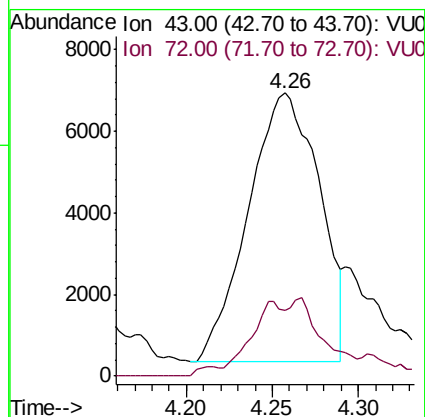
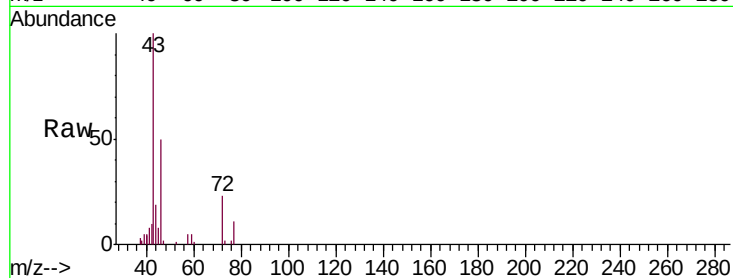
BPDF4

Tgt Ion: 43 Resp: 18937

Ion Ratio Lower Upper

43 100

72 10.7 10.2 30.6



#25

Chloroform

Concen: 0.832 ug/L

RT: 4.64 min Scan# 1105

Delta R.T. -0.00 min

Lab File: VU034814.D

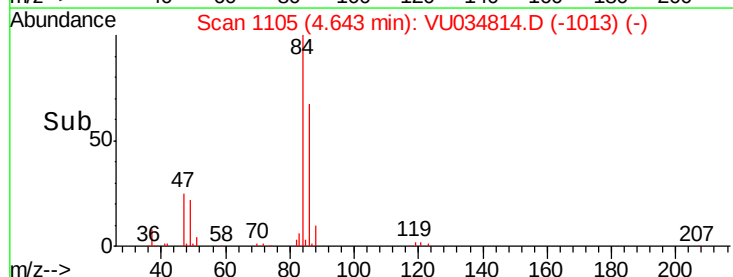
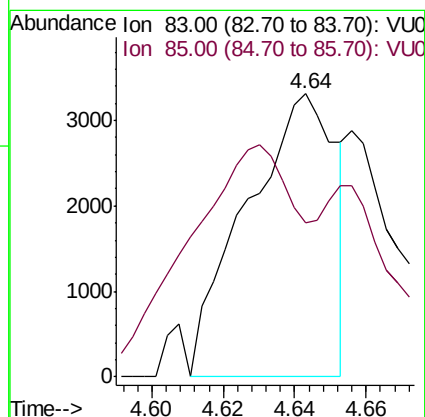
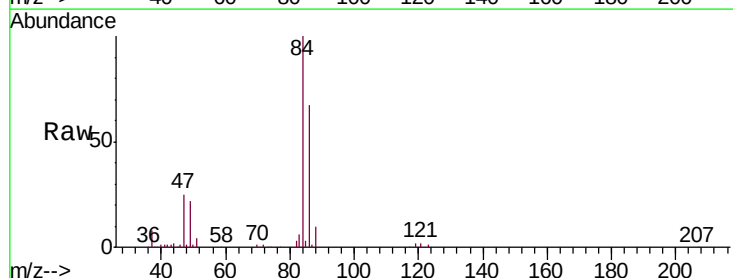
Acq: 25 Sep 2019 19:57

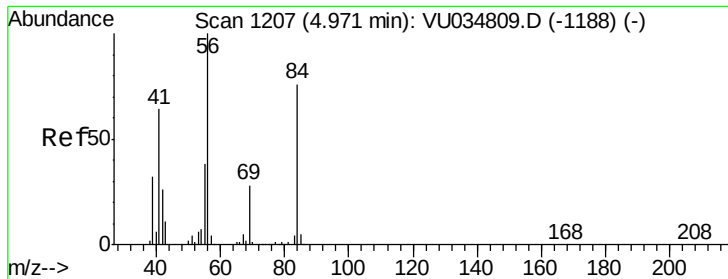
Tgt Ion: 83 Resp: 5726

Ion Ratio Lower Upper

83 100

85 54.6 44.0 81.6

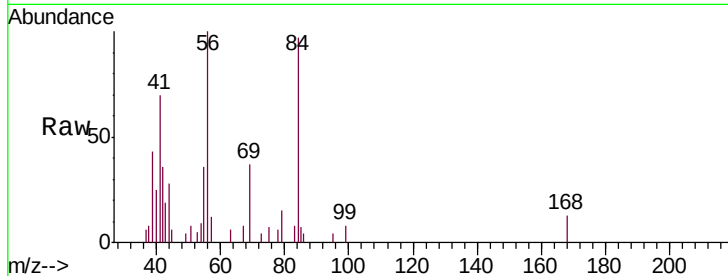




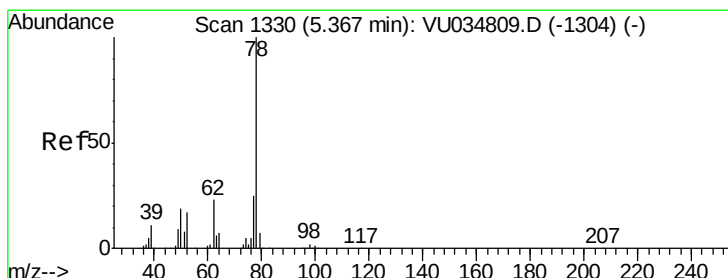
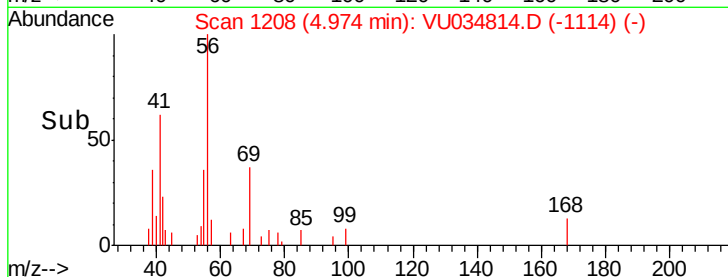
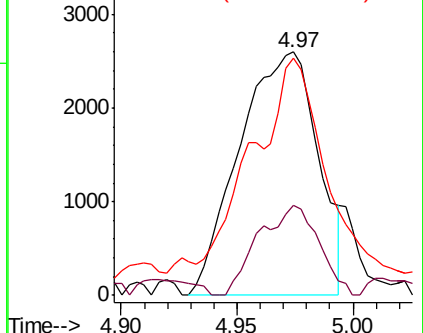
#29
Cyclohexane
Concen: 0.905 ug/L
RT: 4.97 min Scan# 1208
Delta R.T. 0.00 min
Lab File: VU034814.D
Acq: 25 Sep 2019 19:57

Instrument :
MSVOA_U
ClientSampleId :
BDF4

Tgt Ion: 56 Resp: 6148
Ion Ratio Lower Upper
56 100
69 18.8 21.7 32.5#
84 55.3 58.8 88.2#

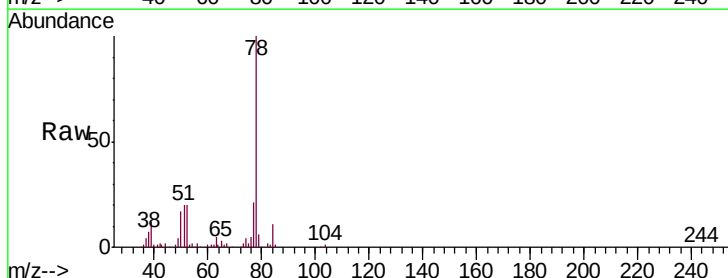


Abundance Ion 56.00 (55.70 to 56.70): VU0
Ion 69.00 (68.70 to 69.70): VU0
Ion 84.00 (83.70 to 84.70): VU0

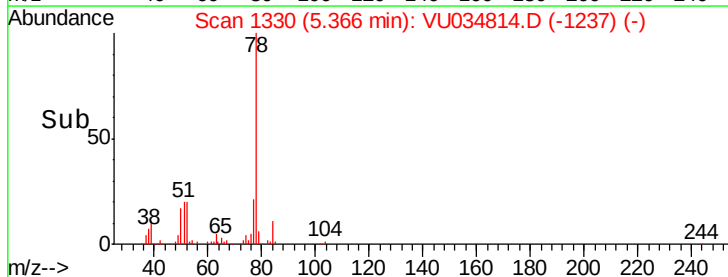
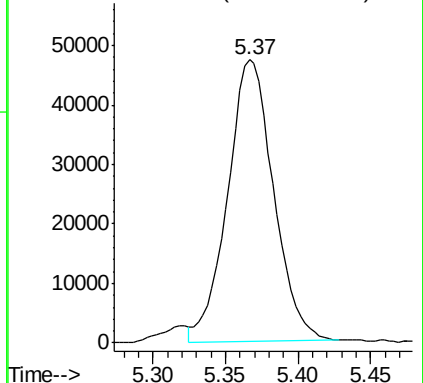


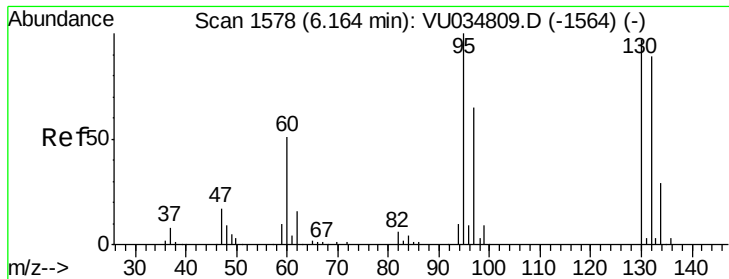
#33
Benzene
Concen: 7.257 ug/L
RT: 5.37 min Scan# 1330
Delta R.T. -0.00 min
Lab File: VU034814.D
Acq: 25 Sep 2019 19:57

Tgt Ion: 78 Resp: 103562



Abundance Ion 78.00 (77.70 to 78.70): VU0





#34

Trichloroethene

Concen: 1.821 ug/L

RT: 6.17 min Scan# 1580

Delta R.T. 0.01 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

BPDF4

Tgt Ion: 95 Resp: 6417

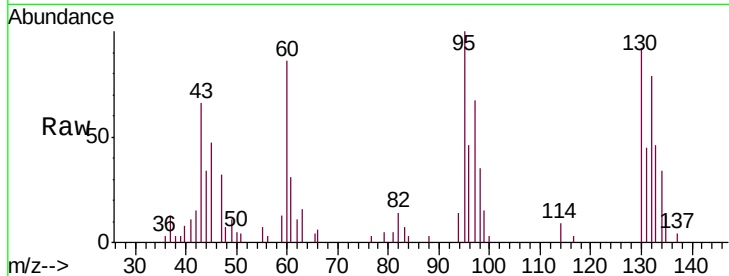
Ion Ratio Lower Upper

95 100

97 67.3 43.7 81.1

132 78.9 61.0 113.2

130 91.6 65.7 121.9

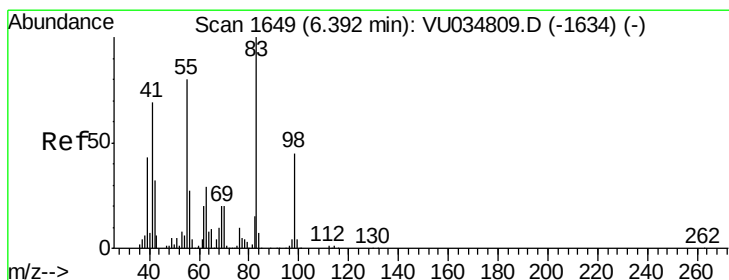
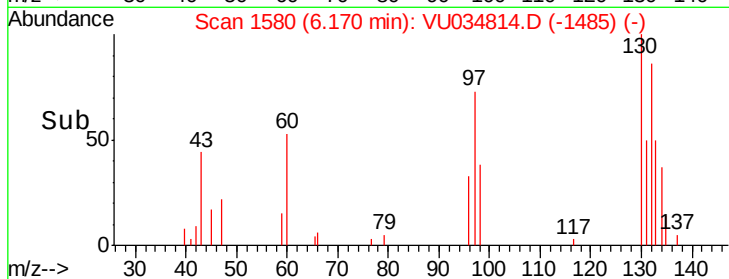
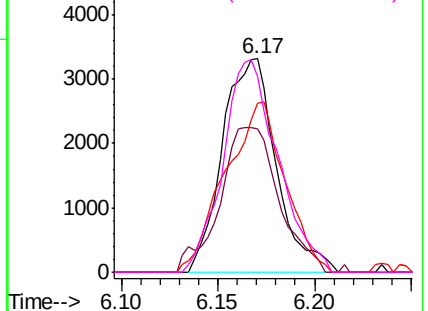


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#35

Methylcyclohexane

Concen: 1.120 ug/L

RT: 6.40 min Scan# 1650

Delta R.T. 0.00 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

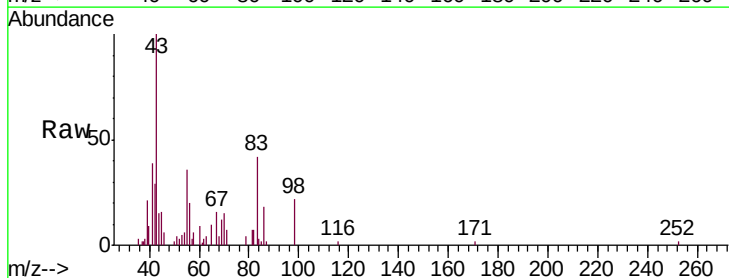
Tgt Ion: 83 Resp: 6699

Ion Ratio Lower Upper

83 100

55 86.7 71.6 107.4

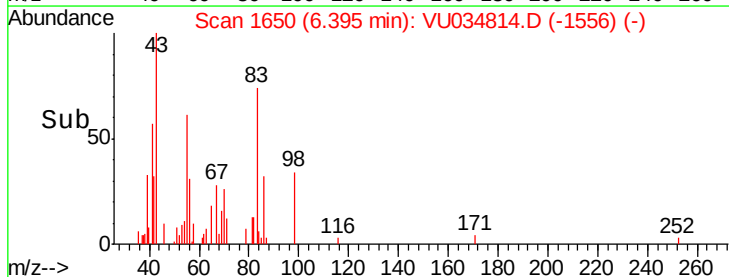
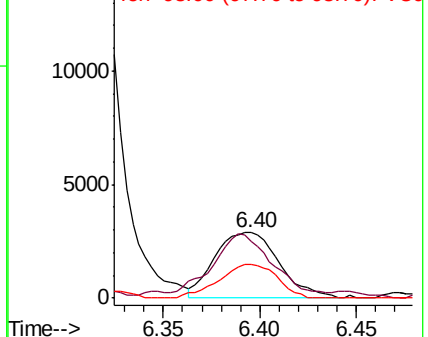
98 46.4 35.7 53.5

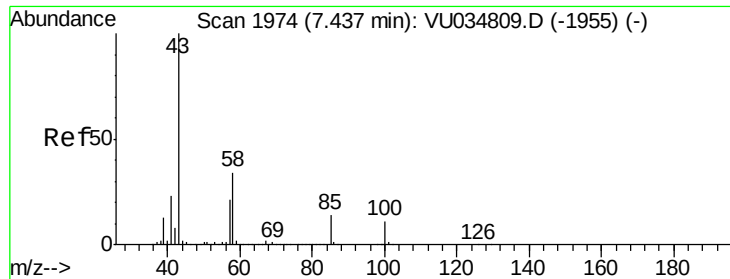


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0

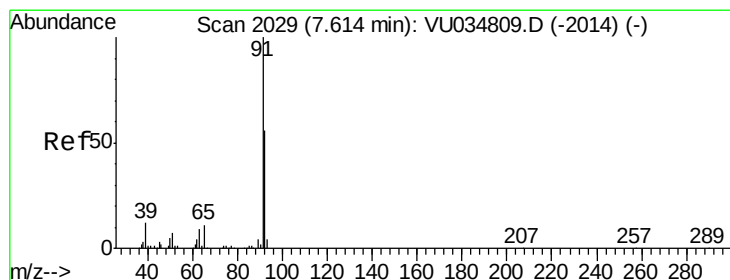
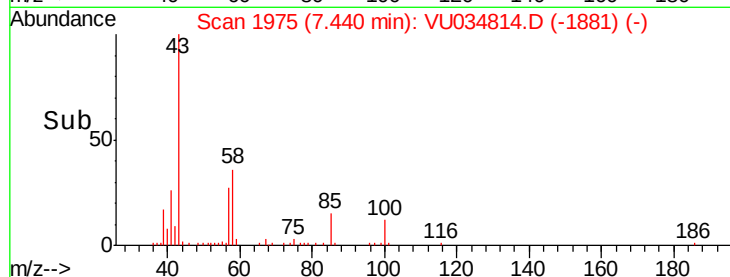
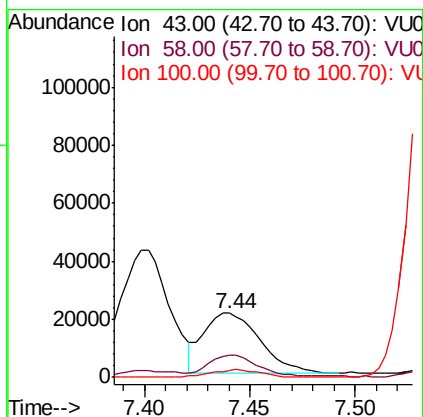
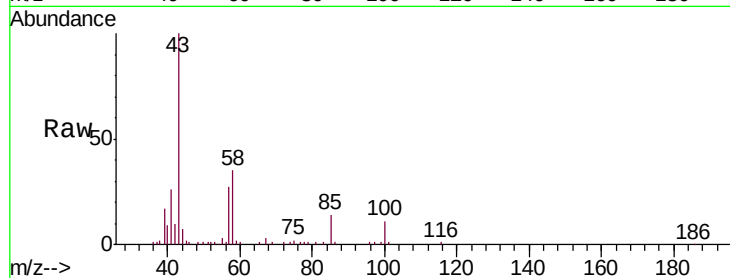




#40
 4-Methyl-2-pentanone
 Concen: 4.769 ug/L
 RT: 7.44 min Scan# 1975
 Delta R.T. 0.00 min
 Lab File: VU034814.D
 Acq: 25 Sep 2019 19:57

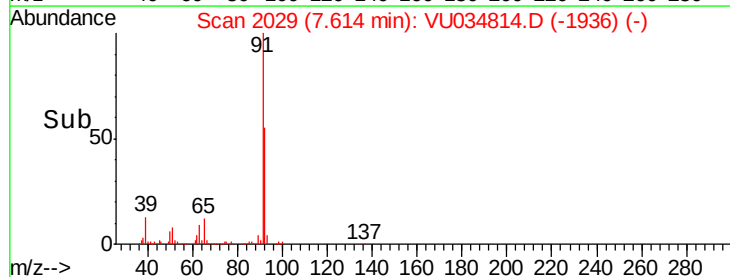
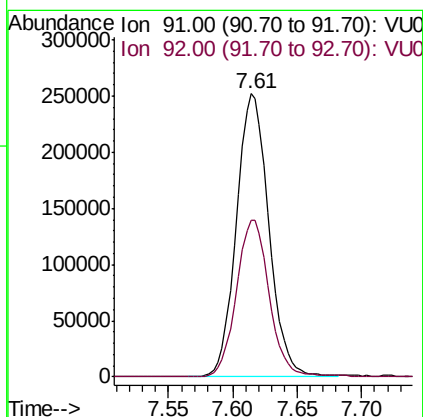
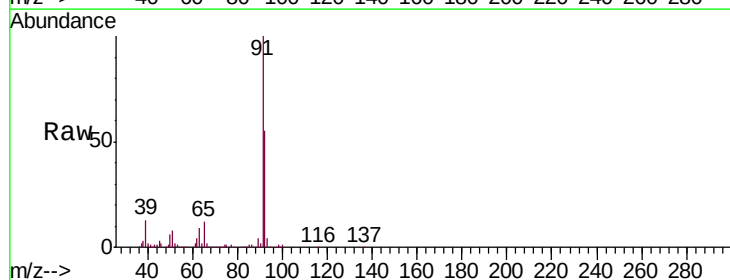
Instrument :
 MSVOA_U
 ClientSampleId :
 BPDF4

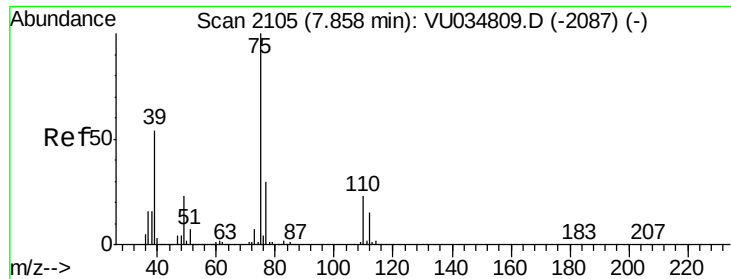
Tgt Ion: 43 Resp: 38690
 Ion Ratio Lower Upper
 43 100
 58 34.2 25.2 37.8
 100 11.3 7.7 11.5



#42
 Toluene
 Concen: 28.626 ug/L
 RT: 7.61 min Scan# 2029
 Delta R.T. -0.00 min
 Lab File: VU034814.D
 Acq: 25 Sep 2019 19:57

Tgt Ion: 91 Resp: 441494
 Ion Ratio Lower Upper
 91 100
 92 55.4 38.2 71.0





#44

trans-1,3-Dichloropropene

Concen: 1.015 ug/L

RT: 7.83 min Scan# 2095

Delta R.T. -0.03 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

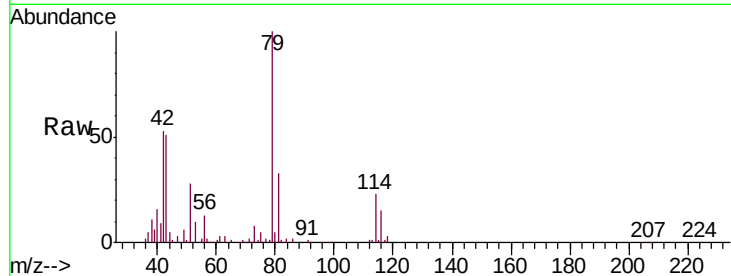
BDF4

Tgt Ion: 75 Resp: 5843

Ion Ratio Lower Upper

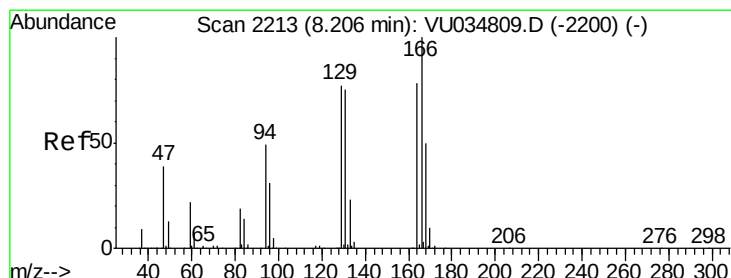
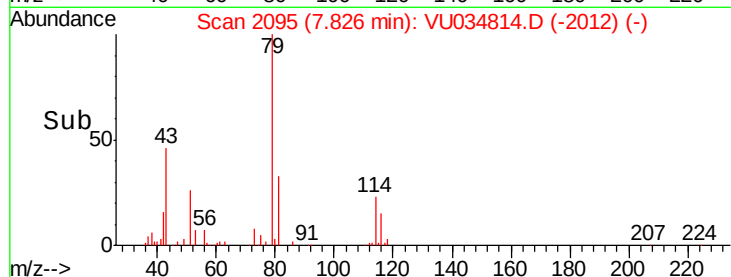
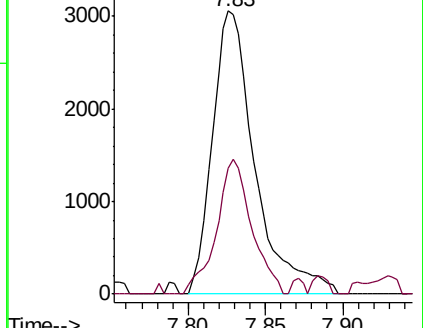
75 100

77 44.5 21.4 39.8#



Abundance Ion 75.00 (74.70 to 75.70): VU034809.D (-2087) (-)

Ion 77.00 (76.70 to 77.70): VU034809.D (-2087) (-)



#46

Tetrachloroethene

Concen: 1.143 ug/L

RT: 8.21 min Scan# 2215

Delta R.T. 0.01 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Tgt Ion: 164 Resp: 2834

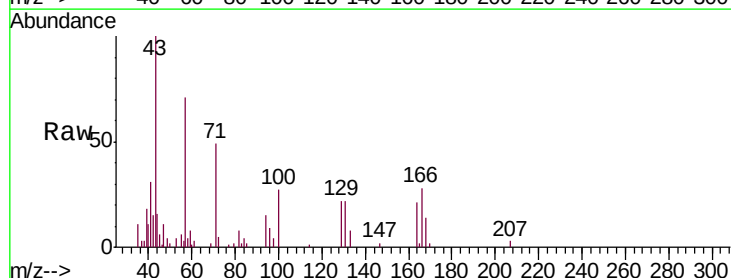
Ion Ratio Lower Upper

164 100

129 102.6 71.9 133.5

131 103.0 66.3 123.1

166 133.8 93.4 173.6

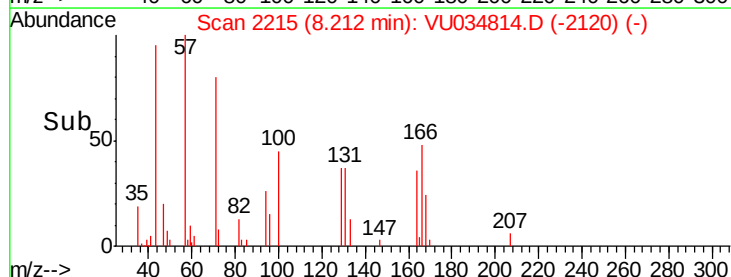
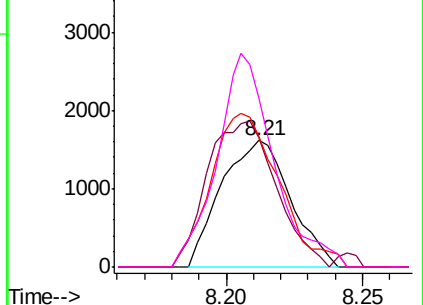


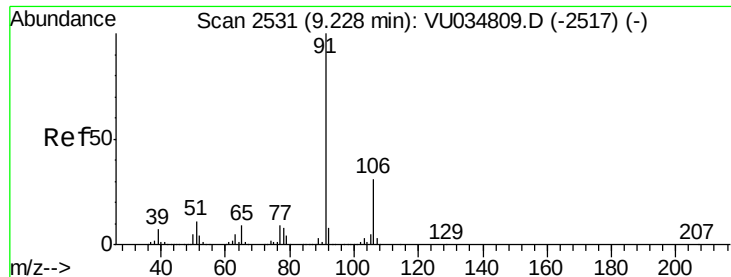
Abundance Ion 164.00 (163.70 to 164.70): VU034809.D (-2200) (-)

Ion 129.00 (128.70 to 129.70): VU034809.D (-2200) (-)

Ion 131.00 (130.70 to 131.70): VU034809.D (-2200) (-)

Ion 166.00 (165.70 to 166.70): VU034809.D (-2200) (-)





#52

Ethylbenzene

Concen: 13.420 ug/L

RT: 9.23 min Scan# 2531

Delta R.T. -0.00 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

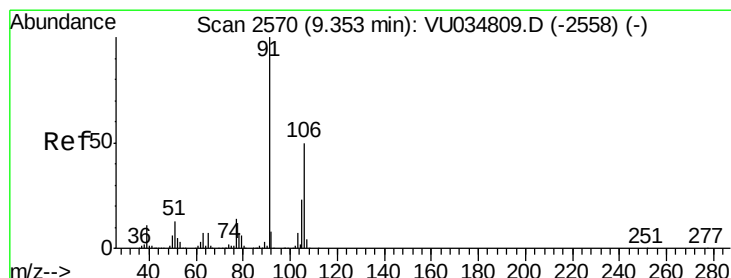
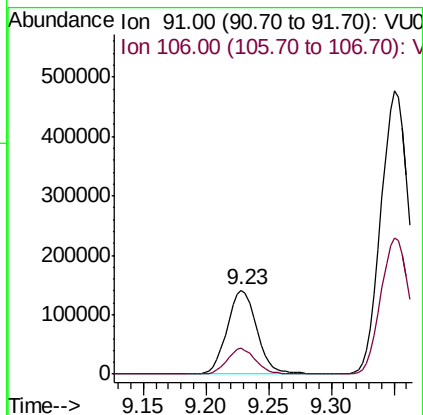
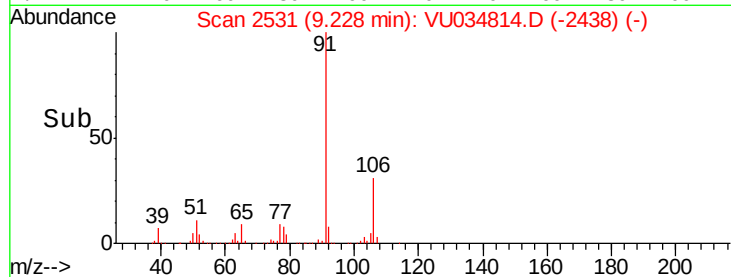
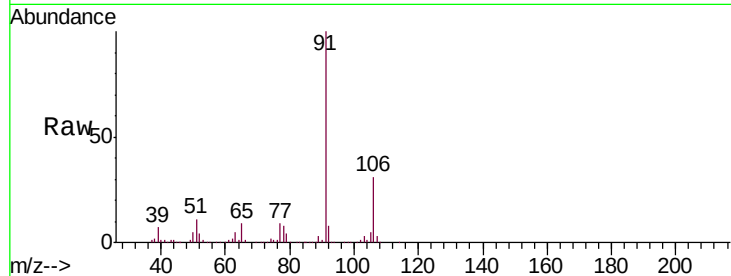
BFDF4

Tgt Ion: 91 Resp: 233070

Ion Ratio Lower Upper

91 100

106 30.6 20.6 38.4



#53

m,p-Xylene

Concen: 62.624 ug/L

RT: 9.35 min Scan# 2569

Delta R.T. -0.00 min

Lab File: VU034814.D

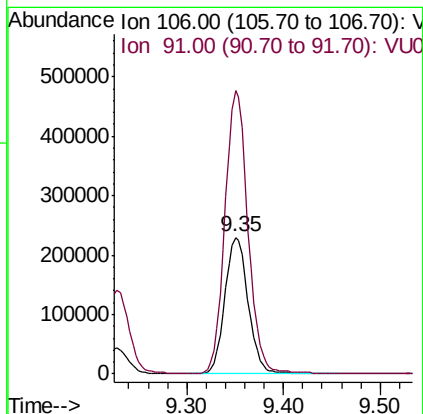
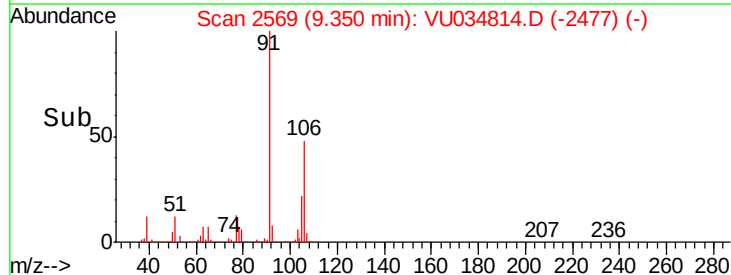
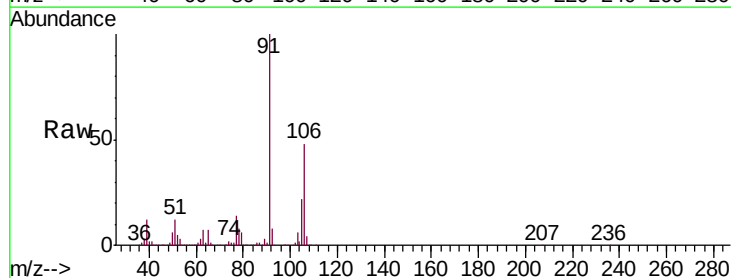
Acq: 25 Sep 2019 19:57

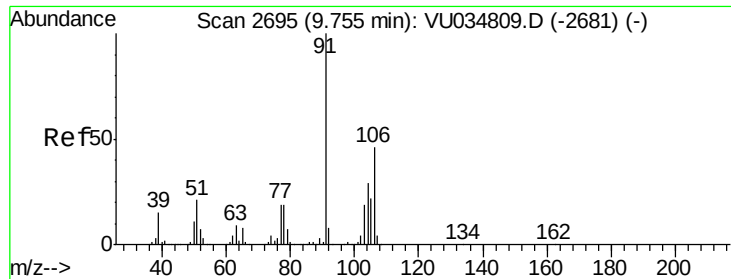
Tgt Ion: 106 Resp: 385226

Ion Ratio Lower Upper

106 100

91 207.7 146.9 272.7

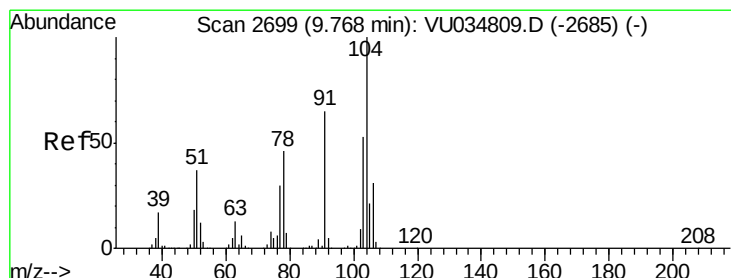
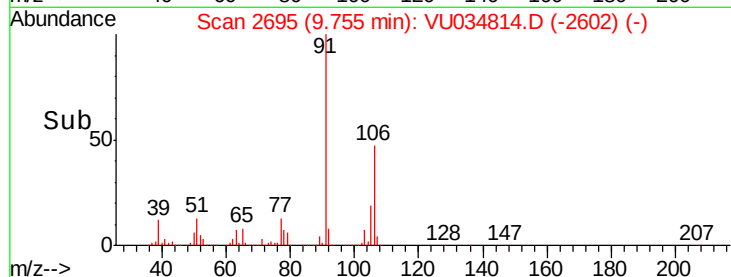
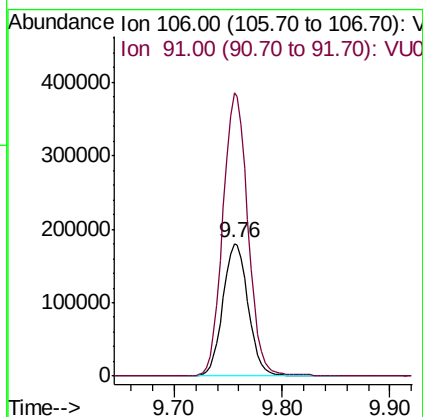
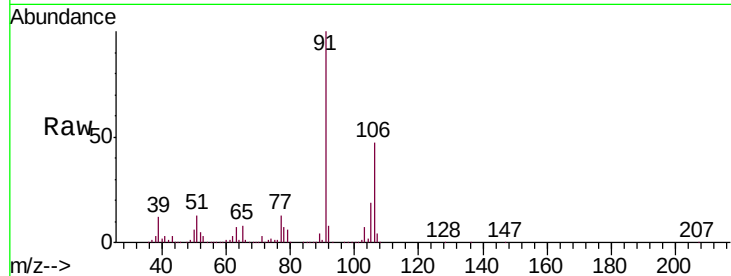




#54
o-xylene
Concen: 48.553 ug/L
RT: 9.76 min Scan# 2695
Delta R.T. -0.00 min
Lab File: VU034814.D
Acq: 25 Sep 2019 19:57

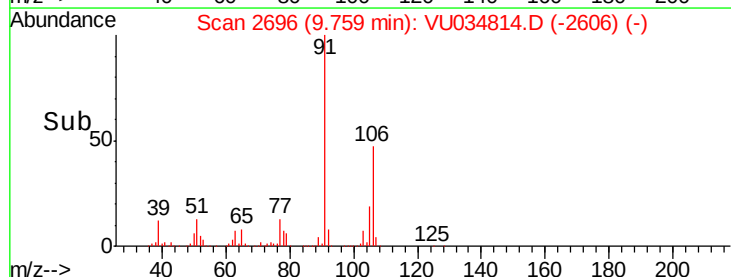
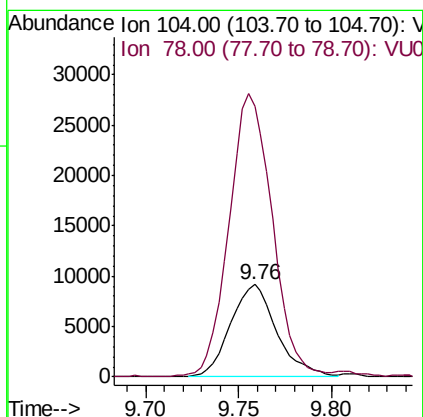
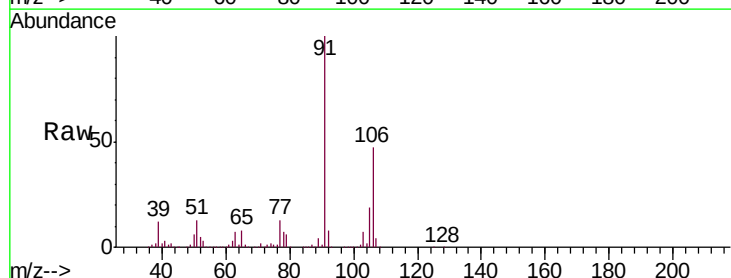
Instrument :
MSVOA_U
ClientSampleId :
BPDF4

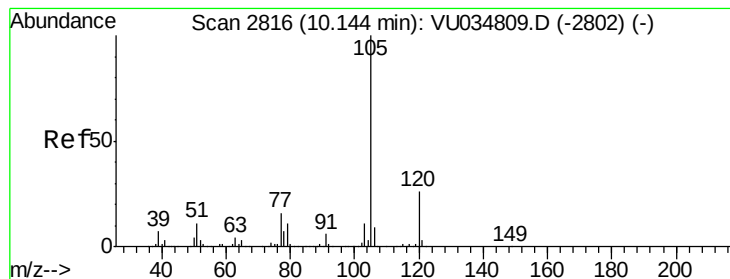
Tgt Ion:106 Resp: 295408
Ion Ratio Lower Upper
106 100
91 213.6 155.6 289.0



#55
Styrene
Concen: 1.552 ug/L
RT: 9.76 min Scan# 2696
Delta R.T. -0.01 min
Lab File: VU034814.D
Acq: 25 Sep 2019 19:57

Tgt Ion:104 Resp: 15983
Ion Ratio Lower Upper
104 100
78 292.8 35.1 65.3#





#56

Isopropylbenzene

Concen: 2.001 ug/L

RT: 10.14 min Scan# 2816

Delta R.T. -0.00 min

Lab File: VU034814.D

Acq: 25 Sep 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

BPDF4

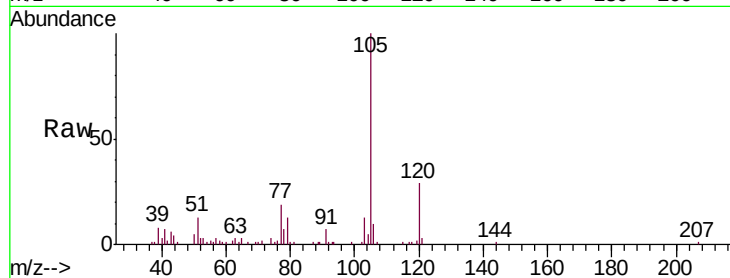
Tgt Ion:105 Resp: 32823

Ion Ratio Lower Upper

105 100

120 28.7 20.4 30.6

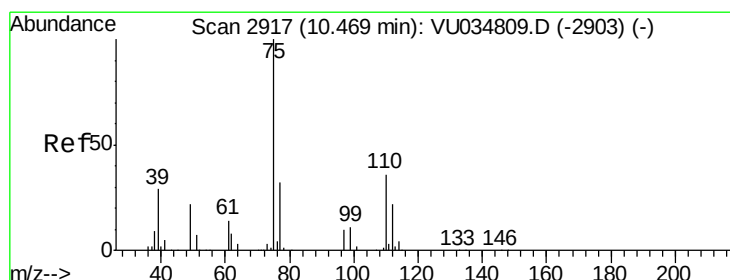
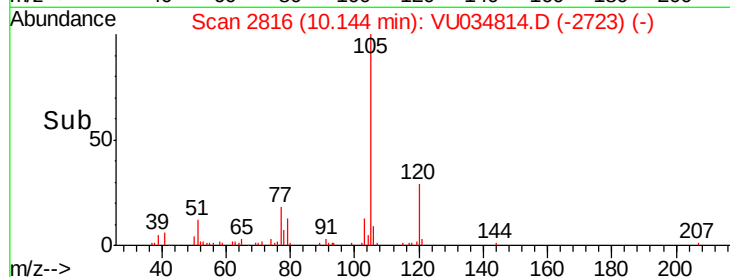
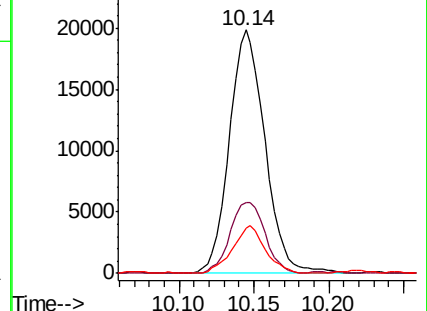
77 17.9 14.2 21.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): VU



#59

1,2,3-Trichloropropane

Concen: 5.552 ug/L

RT: 11.46 min Scan# 3225

Delta R.T. 0.99 min

Lab File: VU034814.D

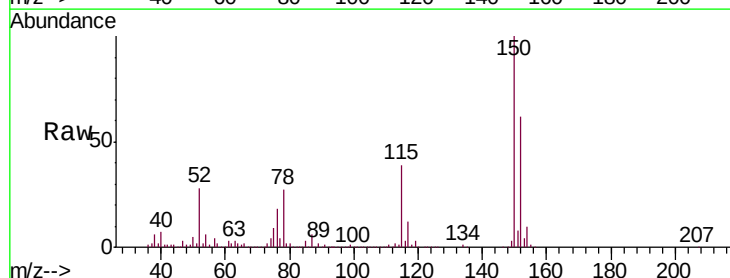
Acq: 25 Sep 2019 19:57

Tgt Ion: 75 Resp: 29464

Ion Ratio Lower Upper

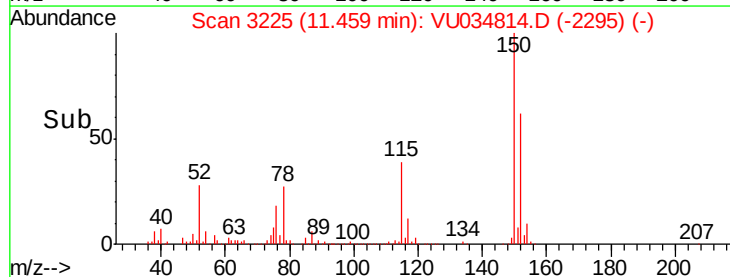
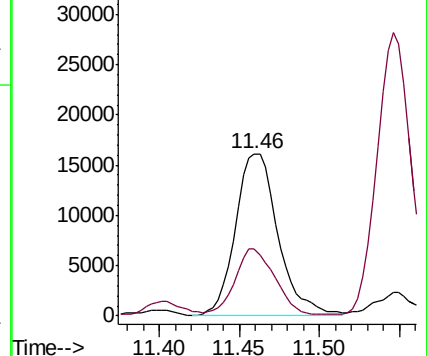
75 100

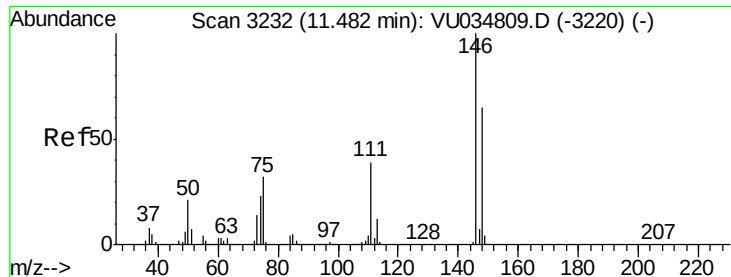
77 36.6 24.6 37.0



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0

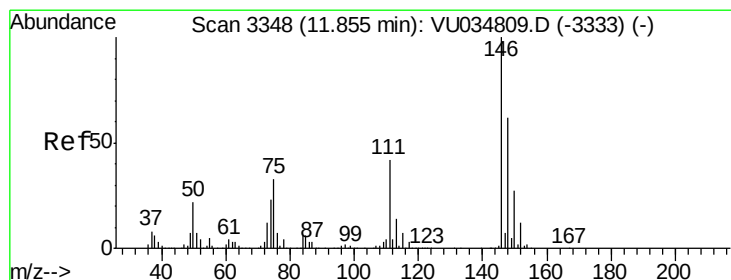
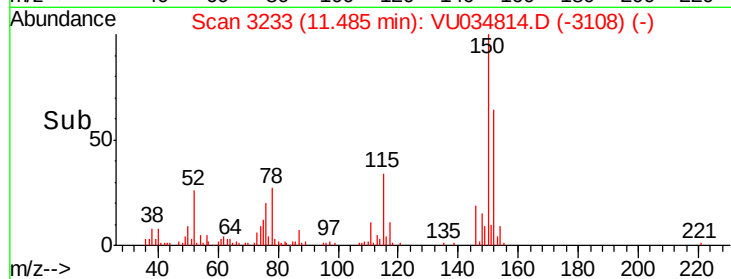
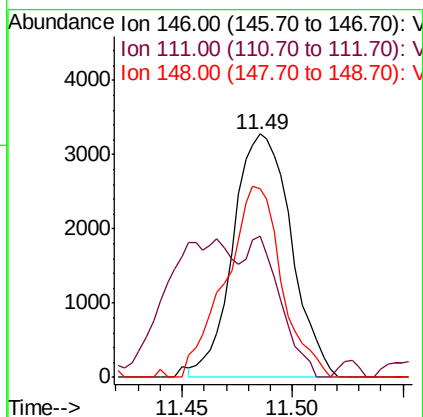
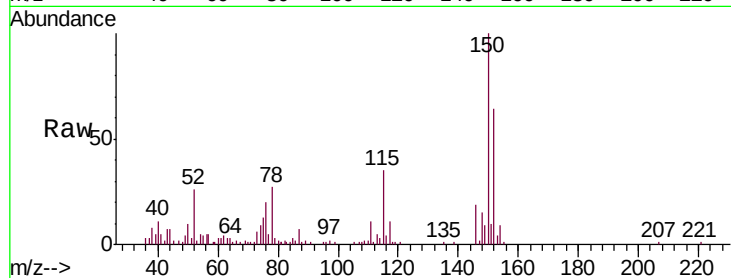




#63
 1,4-Dichlorobenzene
 Concen: 0.888 ug/L
 RT: 11.49 min Scan# 3233
 Delta R.T. 0.00 min
 Lab File: VU034814.D
 Acq: 25 Sep 2019 19:57

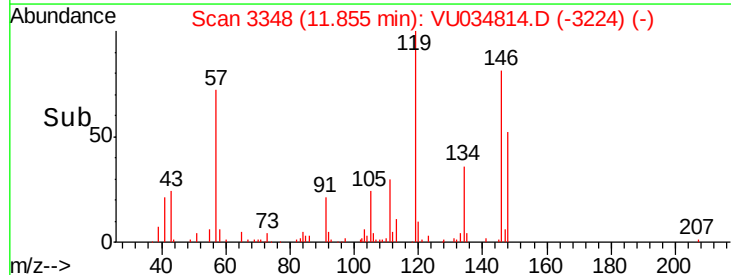
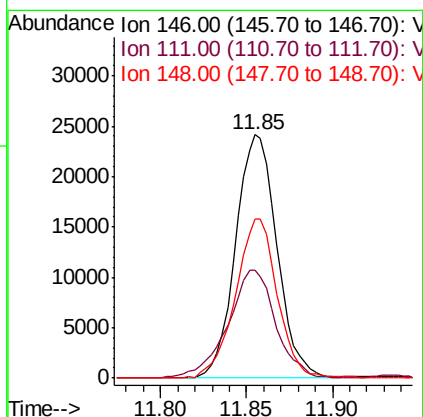
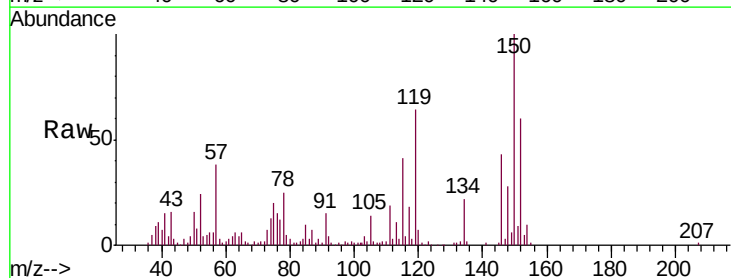
Instrument :
 MSVOA_U
 ClientSampleId :
 BPDF4

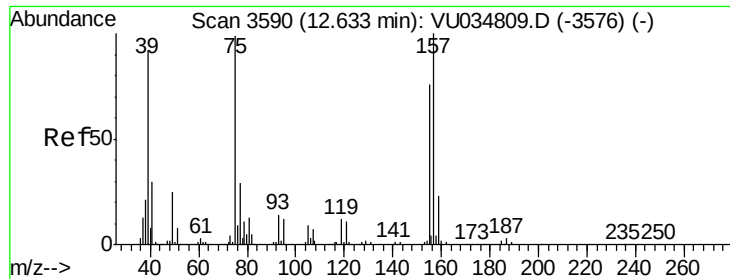
Tgt Ion:146 Resp: 6002
 Ion Ratio Lower Upper
 146 100
 111 58.1 29.5 54.9#
 148 77.3 44.4 82.4



#65
 1,2-Dichlorobenzene
 Concen: 6.012 ug/L
 RT: 11.85 min Scan# 3348
 Delta R.T. -0.00 min
 Lab File: VU034814.D
 Acq: 25 Sep 2019 19:57

Tgt Ion:146 Resp: 40324
 Ion Ratio Lower Upper
 146 100
 111 44.1 35.2 52.8
 148 65.4 53.0 79.6

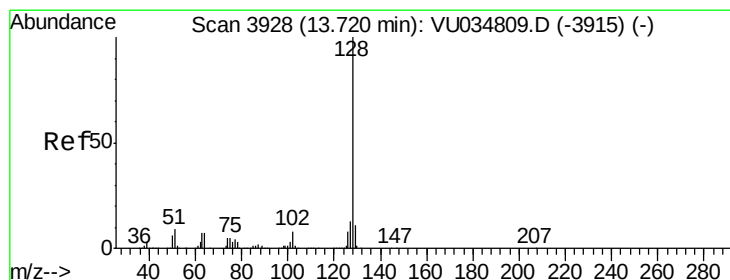
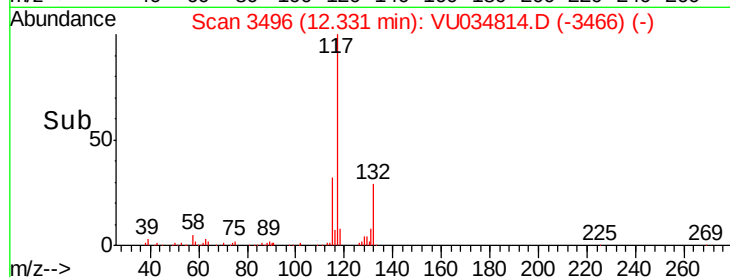
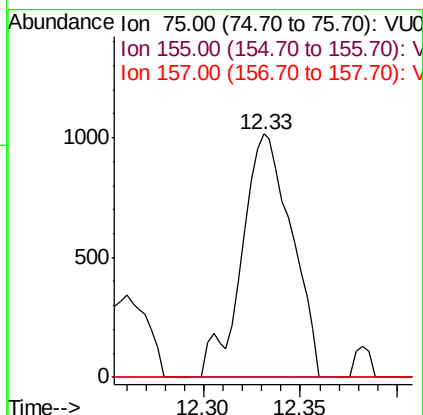
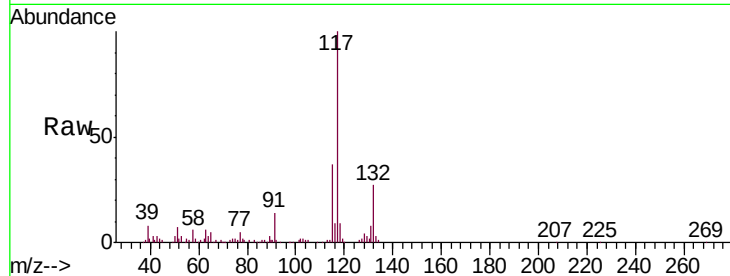




#66
1,2-Dibromo-3-chloropropane
Concen: 1.273 ug/L
RT: 12.33 min Scan# 3496
Delta R.T. -0.30 min
Lab File: VU034814.D
Acq: 25 Sep 2019 19:57

Instrument :
MSVOA_U
ClientSampleId :
BFDF4

Tgt Ion: 75 Resp: 1815
Ion Ratio Lower Upper
75 100
155 0.0 54.7 82.1#
157 0.0 69.9 104.9#



#69
Naphthalene
Concen: 26.009 ug/L
RT: 13.72 min Scan# 3928
Delta R.T. -0.00 min
Lab File: VU034814.D
Acq: 25 Sep 2019 19:57

Tgt Ion: 128 Resp: 314916
Ion Ratio Lower Upper
128 100
127 13.2 10.8 16.2
129 10.4 8.6 12.8

