

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092319\
 Data File : VU034747.D
 Acq On : 23 Sep 2019 20:55
 Operator : JC/SP
 Sample : K4932-03
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 BFDG5

Quant Time: Sep 24 04:42:51 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM091919WMA.M
 Quant Title : VOC Analysis
 QLast Update : Tue Sep 24 03:36:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.86	114	481129	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.07	117	461538	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.46	152	231461	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.39	65	203108	41.24	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	82.48%
7) Chloroethane-d5	1.67	69	170859	44.88	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	89.76%
11) 1,1-Dichloroethene-d2	2.26	63	281899	33.80	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	67.60%
21) 2-Butanone-d5	4.15	46	444503	117.75	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	117.75%
24) Chloroform-d	4.62	84	352750	49.26	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	98.52%
26) 1,2-Dichloroethane-d4	5.29	65	254710	48.39	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	96.78%
32) Benzene-d6	5.32	84	725623	50.72	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	101.44%
36) 1,2-Dichloropropane-d6	6.31	67	253762	50.75	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.50%
41) Toluene-d8	7.54	98	698952	51.36	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.72%
43) trans-1,3-Dichloropropene-	7.83	79	117791	49.19	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	98.38%
47) 2-Hexanone-d5	8.29	63	300258	119.56	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	119.56%
57) 1,1,2,2-Tetrachloroethane-	10.41	84	341004	49.15	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	98.30%
64) 1,2-Dichlorobenzene-d4	11.84	152	252278	51.98	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	103.96%

Target Compounds

					Ovalue
5) Vinyl chloride	1.40	62	7925	1.461 ug/L #	36
13) Acetone	2.31	43	459577	104.658 ug/L	99
15) Methyl Acetate	2.61	43	6285	1.071 ug/L #	81
16) Methylene chloride	2.69	84	126376	31.694 ug/L	95
19) 1,1-Dichloroethane	3.42	63	8386	1.062 ug/L	94
20) cis-1,2-Dichloroethene	4.20	96	174863	43.453 ug/L	97
22) 2-Butanone	4.24	43	111375	21.319 ug/L	98
27) 1,2-Dichloroethane	5.38	62	25455	3.790 ug/L	100
29) Cyclohexane	4.97	56	42838	5.623 ug/L	92
33) Benzene	5.37	78	1090498	68.125 ug/L	100
34) Trichloroethene	6.16	95	29397	7.436 ug/L	92
35) Methylcyclohexane	6.39	83	37690	5.618 ug/L	96
37) 1,2-Dichloropropane	6.41	63	20080	4.213 ug/L	99
40) 4-Methyl-2-pentanone	7.44	43	5430808	596.805 ug/L	99
42) Toluene	7.62	91	8772733	507.110 ug/L	99
46) Tetrachloroethene	8.21	164	17637	6.342 ug/L	94
51) Chlorobenzene	9.10	112	21111	2.007 ug/L	97

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Quant Title : VOC Analysis
QLast Update : Tue Sep 24 03:36:55 2019
Response via : Initial Calibration

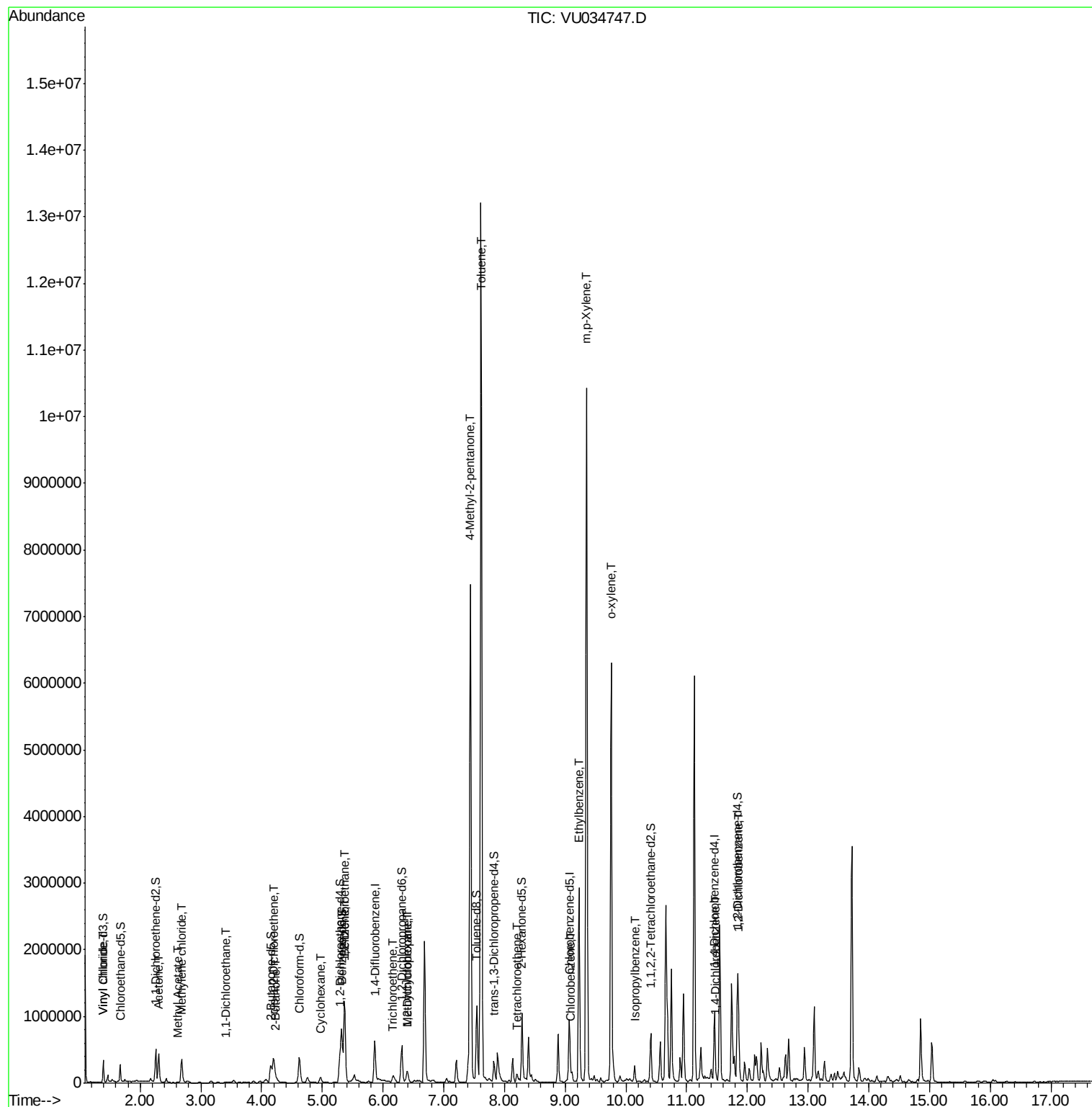
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Ethylbenzene	9.23	91	1941536	99.665	ug/L	99
53) m,p-Xylene	9.35	106	2596725	376.340	ug/L	99
54) o-xylene	9.76	106	1469754	215.360	ug/L	96
56) Isopropylbenzene	10.14	105	135598	7.369	ug/L	99
63) 1,4-Dichlorobenzene	11.49	146	15318	1.876	ug/L	97
65) 1,2-Dichlorobenzene	11.86	146	145150	17.922	ug/L	97

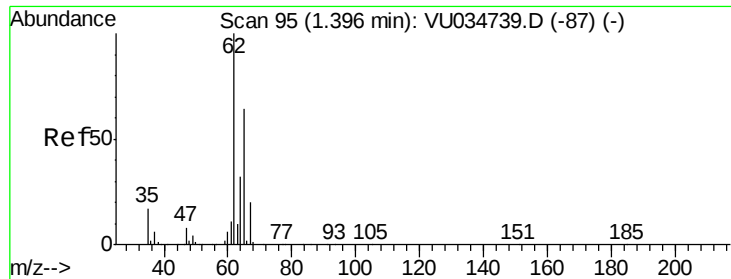
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU092319\
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#5

Vinyl chloride

Concen: 1.461 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

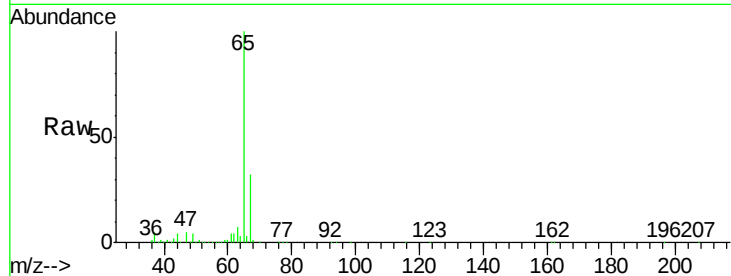
BFDG5

Tot Ion: 62 Resp: 7925

Ion Ratio Lower Upper

62 100

64 67.4 22.2 41.2#



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0

8000

6000

4000

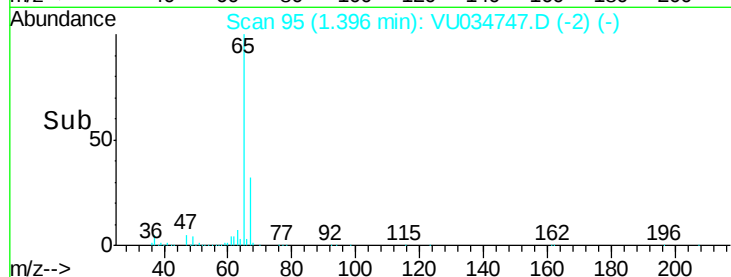
2000

0

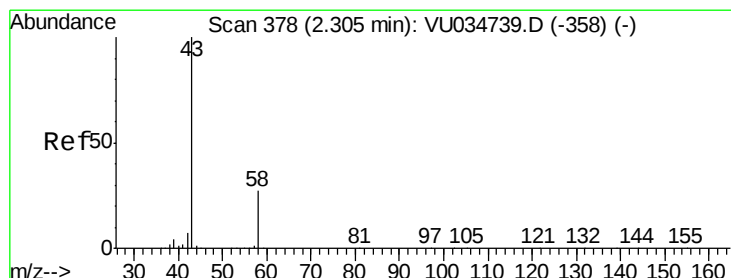
1.35

1.40

1.45



Time-->



#13

Acetone

Concen: 104.658 ug/L

RT: 2.31 min Scan# 378

Delta R.T. 0.00 min

Lab File: VU034747.D

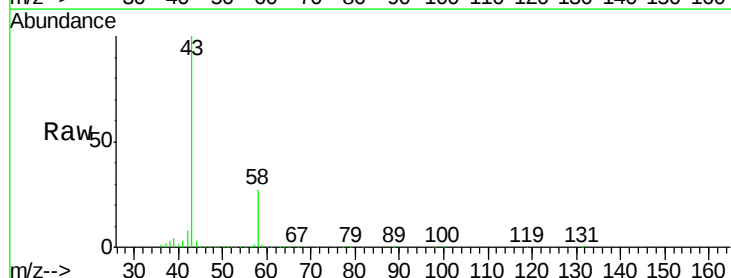
Acq: 23 Sep 2019 20:55

Tgt Ion: 43 Resp: 459577

Ion Ratio Lower Upper

43 100

58 26.1 0.0 53.4



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0

300000

250000

200000

150000

100000

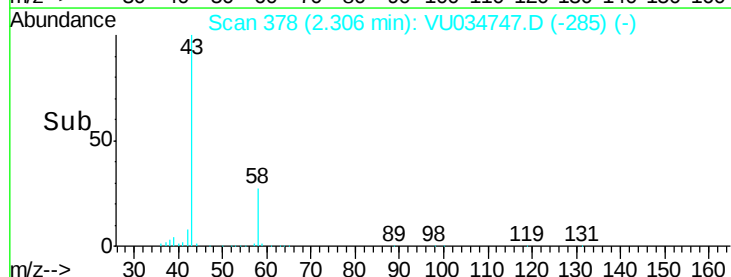
50000

0

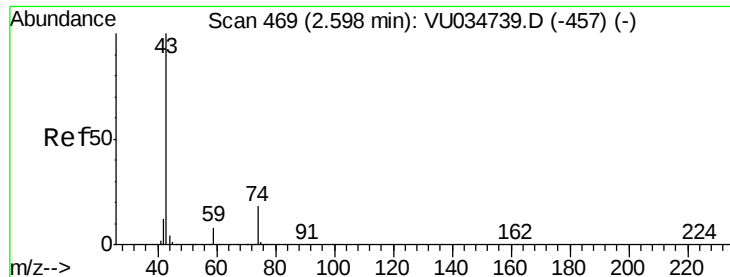
2.20

2.30

2.40



Time-->



#15

Methyl Acetate

Concen: 1.071 ug/L

RT: 2.61 min Scan# 472

Delta R.T. 0.01 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

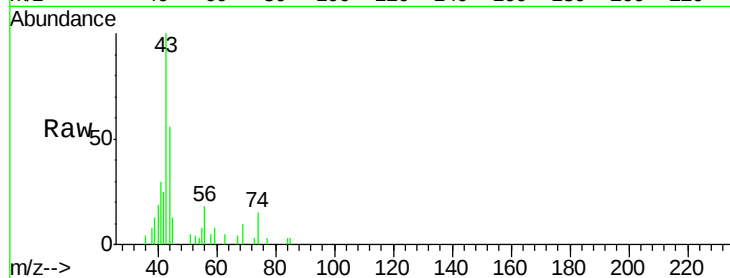
BFDG5

Tot Ion: 43 Resp: 6285

Ion Ratio Lower Upper

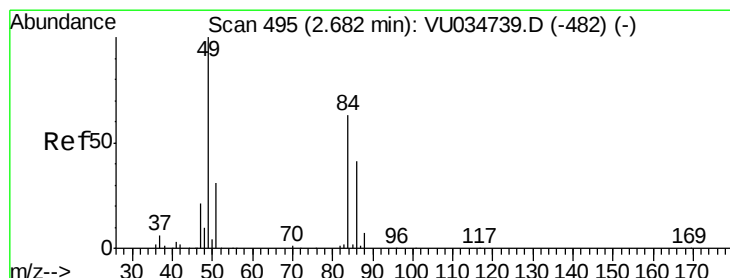
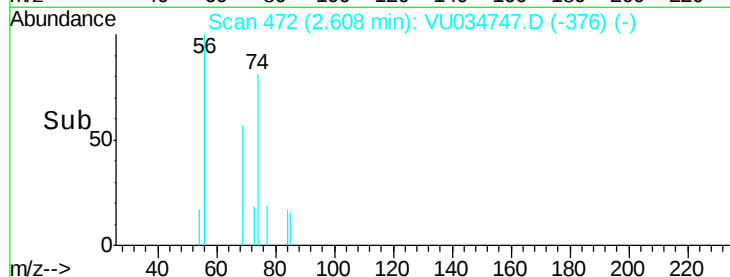
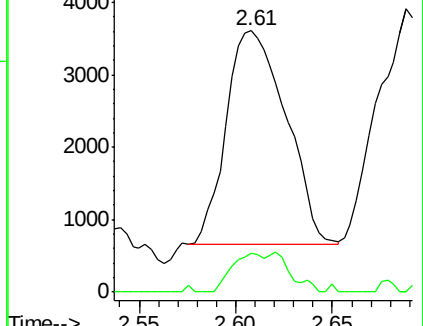
43 100

74 9.8 14.4 21.6#



Abundance Ion 43.00 (42.70 to 43.70): VU034739.D (-457) (-)

Ion 74.00 (73.70 to 74.70): VU034739.D (-457) (-)



#16

Methylene chloride

Concen: 31.694 ug/L

RT: 2.69 min Scan# 496

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

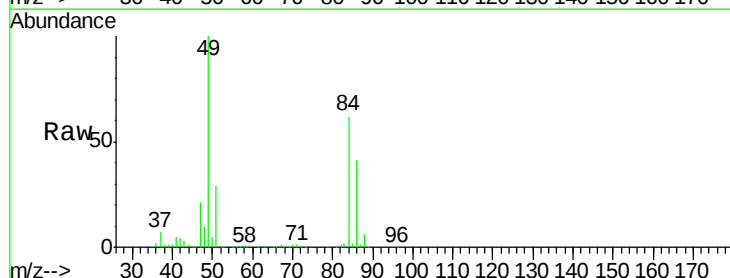
Tgt Ion: 84 Resp: 126376

Ion Ratio Lower Upper

84 100

86 66.3 43.0 80.0

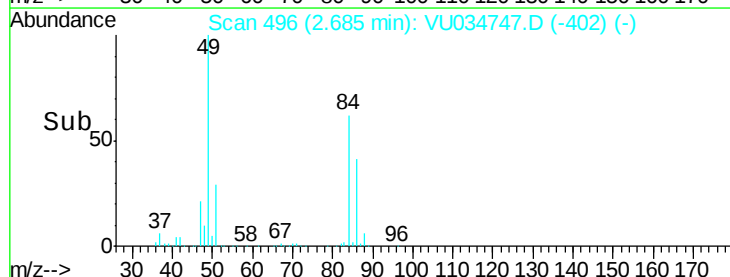
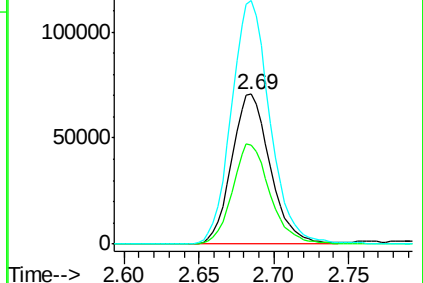
49 162.2 109.7 203.7

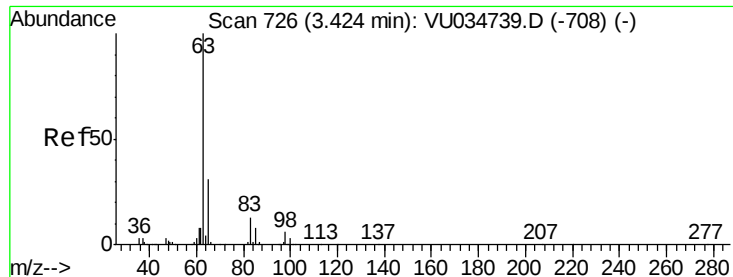


Abundance Ion 84.00 (83.70 to 84.70): VU034739.D (-482) (-)

Ion 86.00 (85.70 to 86.70): VU034739.D (-482) (-)

Ion 49.00 (48.70 to 49.70): VU034739.D (-482) (-)





#19

1,1-Dichloroethane

Concen: 1.062 ug/L

RT: 3.42 min Scan# 726

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

BFDG5

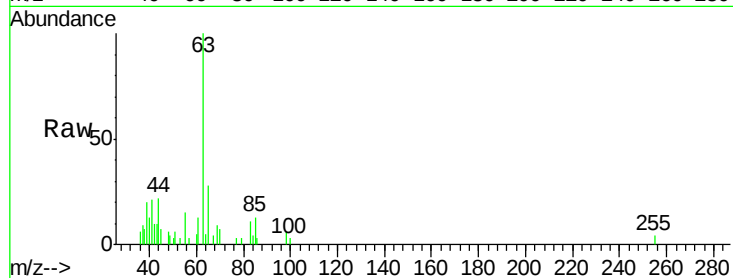
Tot Ion: 63 Resp: 8386

Ion Ratio Lower Upper

63 100

65 27.7 22.0 40.8

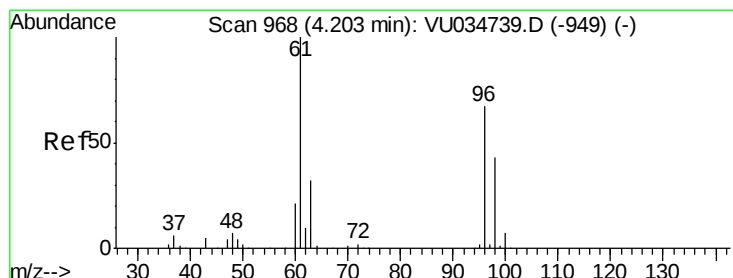
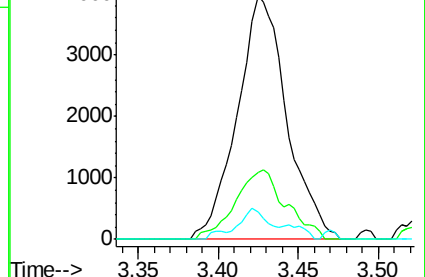
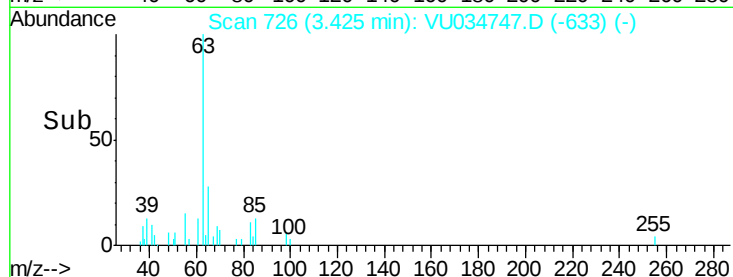
83 11.2 8.9 16.5



Abundance Ion 63.00 (62.70 to 63.70): VU034747.D (-633) (-)

Ion 65.00 (64.70 to 65.70): VU034747.D (-653) (-)

Ion 83.00 (82.70 to 83.70): VU034747.D (-833) (-)



#20

cis-1,2-Dichloroethene

Concen: 43.453 ug/L

RT: 4.20 min Scan# 967

Delta R.T. -0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

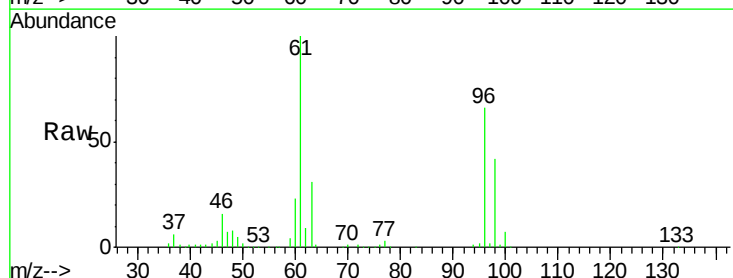
Tgt Ion: 96 Resp: 174863

Ion Ratio Lower Upper

96 100

61 151.0 108.8 202.2

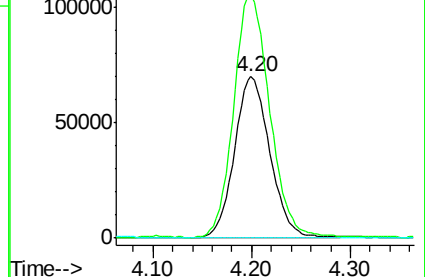
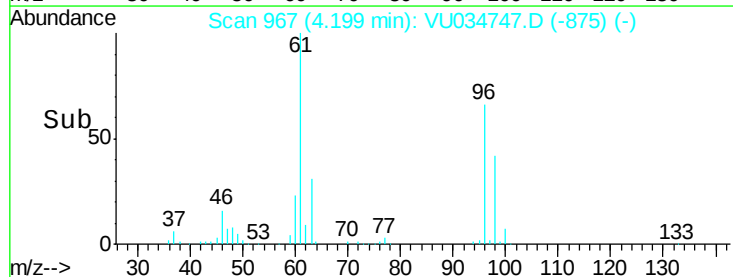
68 0.0 0.0 0.0

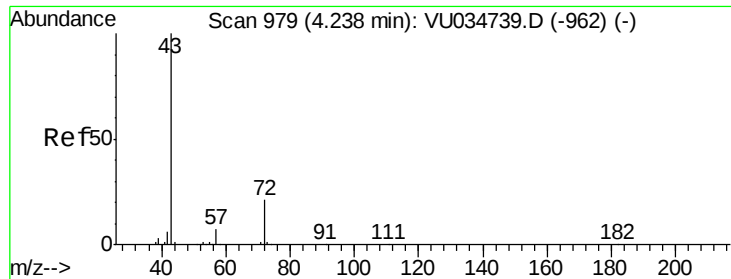


Abundance Ion 96.00 (95.70 to 96.70): VU034747.D (-875) (-)

Ion 61.00 (60.70 to 61.70): VU034747.D (-855) (-)

Ion 68.00 (67.70 to 68.70): VU034747.D (-885) (-)





#22

2-Butanone

Concen: 21.319 ug/L

RT: 4.24 min Scan# 980

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

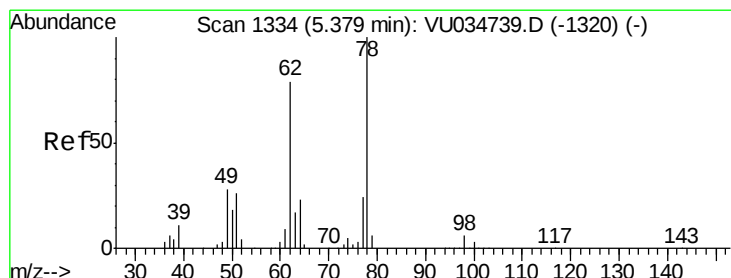
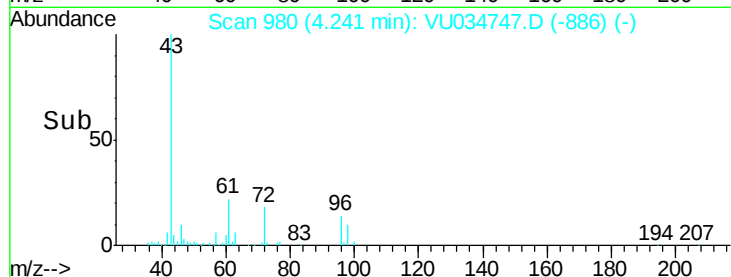
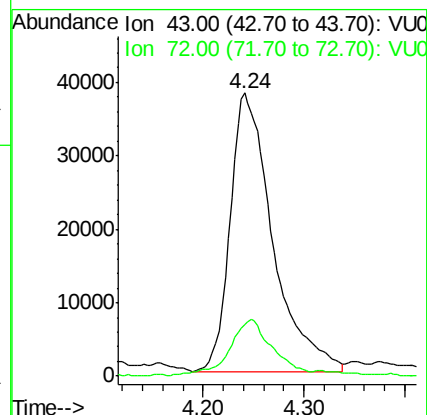
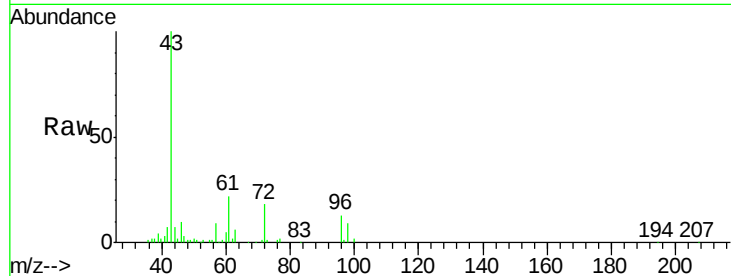
BFDG5

Tot Ion: 43 Resp: 111375

Ion Ratio Lower Upper

43 100

72 19.7 10.2 30.6



#27

1,2-Dichloroethane

Concen: 3.790 ug/L

RT: 5.38 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VU034747.D

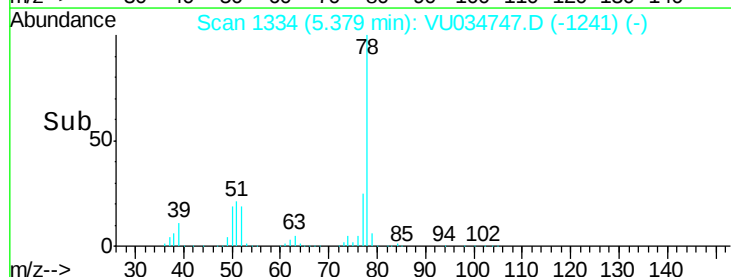
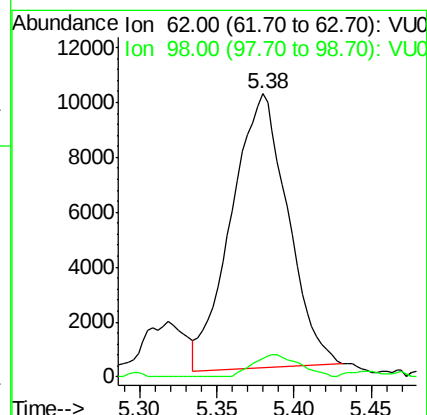
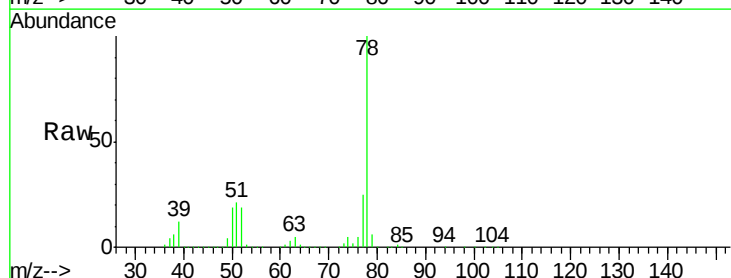
Acq: 23 Sep 2019 20:55

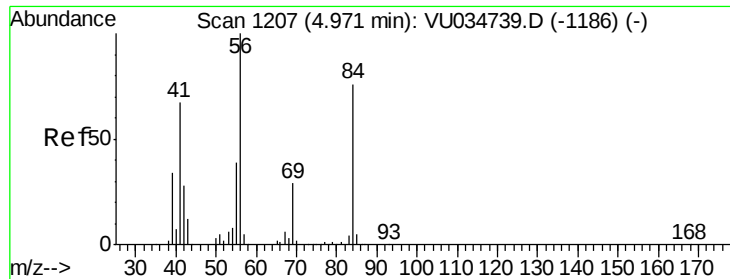
Tgt Ion: 62 Resp: 25455

Ion Ratio Lower Upper

62 100

98 6.7 5.3 7.9

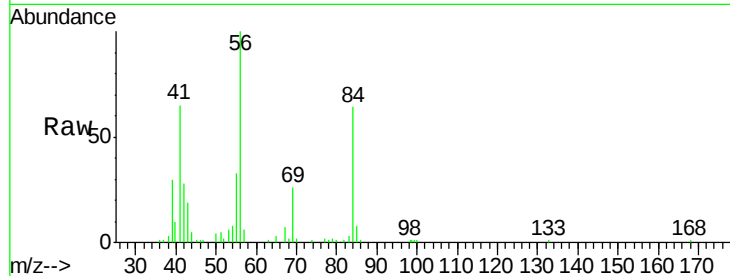




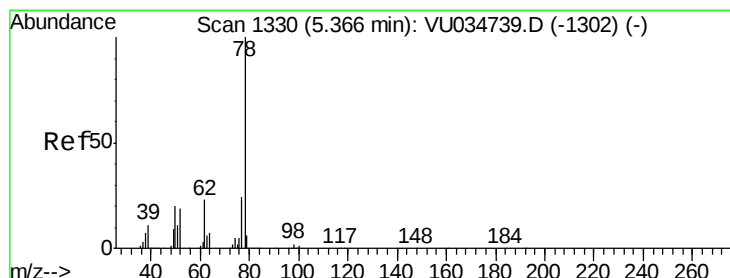
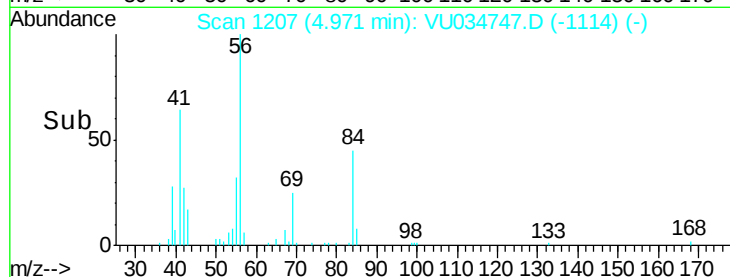
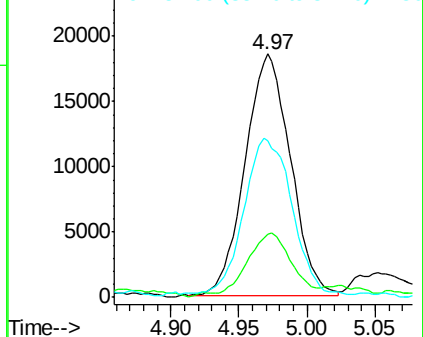
#29
Cyclohexane
Concen: 5.623 ug/L
RT: 4.97 min Scan# 1207
Delta R.T. 0.00 min
Lab File: VU034747.D
Acq: 23 Sep 2019 20:55

Instrument :
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ClientSampled :
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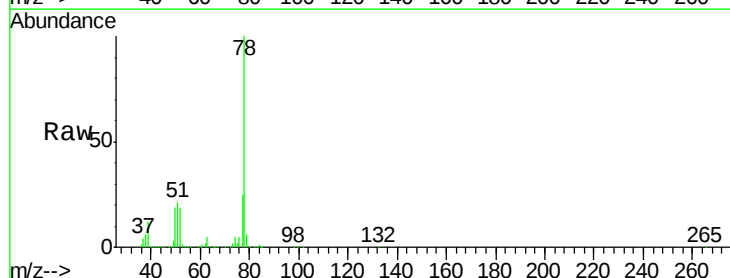
Tot Ion: 56 Resp: 42838
Ion Ratio Lower Upper
56 100
69 23.4 21.7 32.5
84 66.9 58.8 88.2



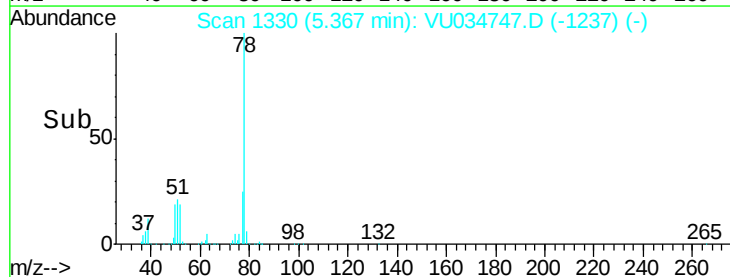
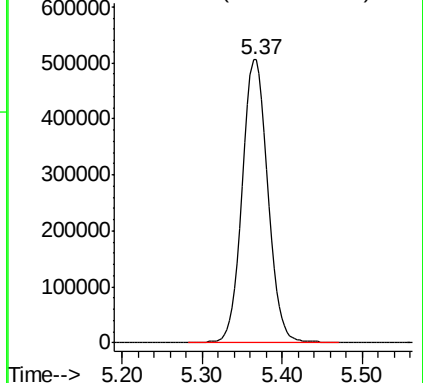
Abundance Ion 56.00 (55.70 to 56.70): VU0
Ion 69.00 (68.70 to 69.70): VU0
Ion 84.00 (83.70 to 84.70): VU0

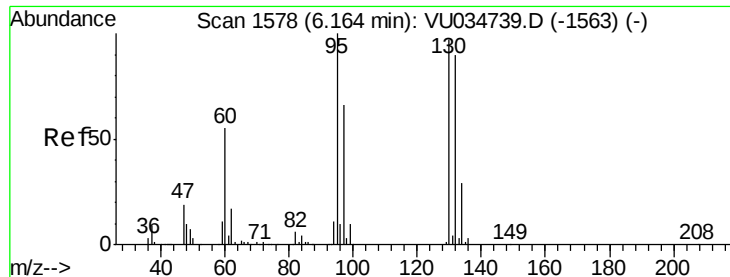


#33
Benzene
Concen: 68.125 ug/L
RT: 5.37 min Scan# 1330
Delta R.T. 0.00 min
Lab File: VU034747.D
Acq: 23 Sep 2019 20:55
Tgt Ion: 78 Resp: 1090498



Abundance Ion 78.00 (77.70 to 78.70): VU0





#34

Trichloroethene

Concen: 7.436 ug/L

RT: 6.16 min Scan# 1578

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

BFDG5

Tot Ion: 95 Resp: 29397

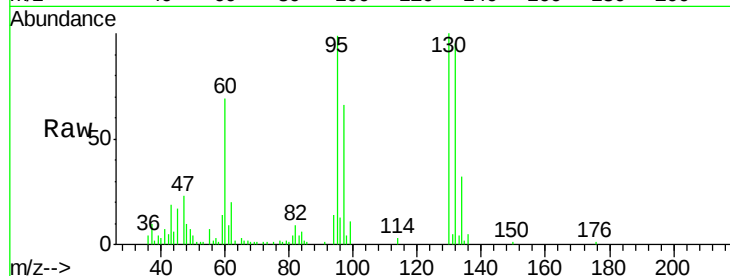
Ion Ratio Lower Upper

95 100

97 67.1 43.7 81.1

132 96.1 61.0 113.2

130 101.2 65.7 121.9

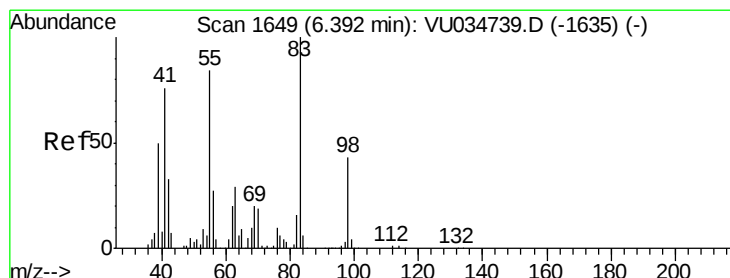
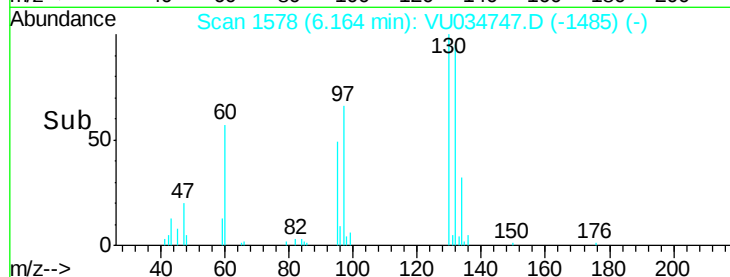
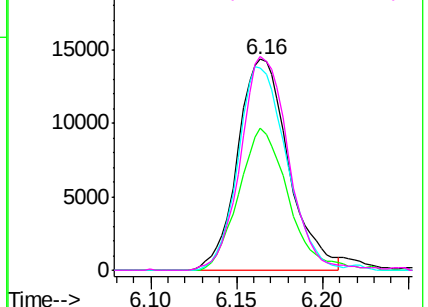


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 5.618 ug/L

RT: 6.39 min Scan# 1649

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

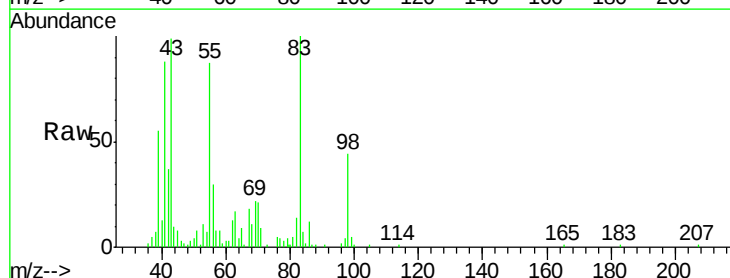
Tgt Ion: 83 Resp: 37690

Ion Ratio Lower Upper

83 100

55 94.4 71.6 107.4

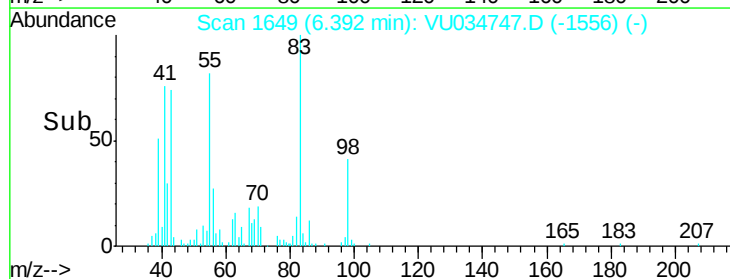
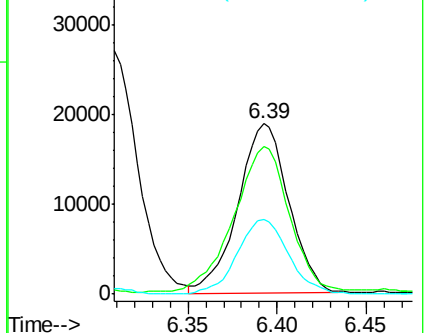
98 44.2 35.7 53.5

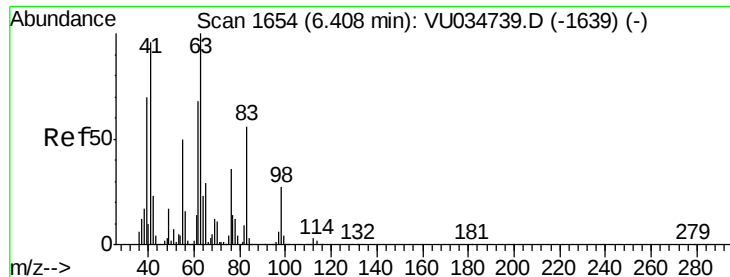


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0

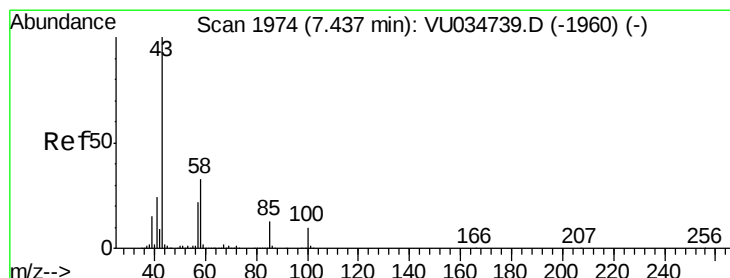
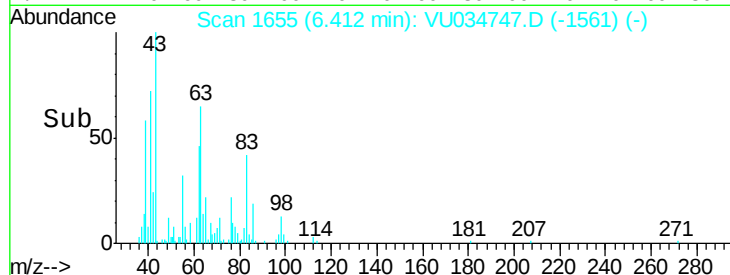
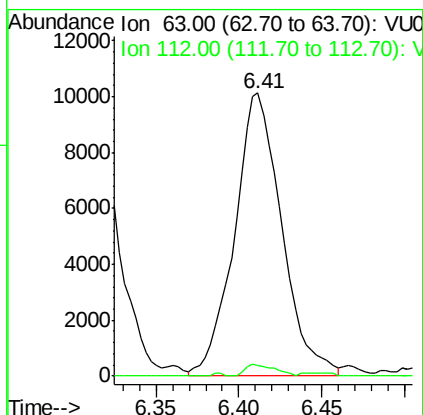
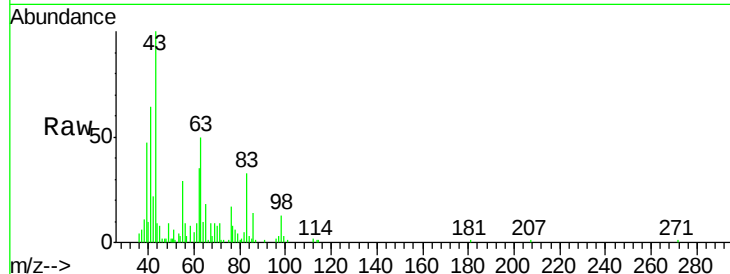




#37
 1,2-Dichloropropane
 Concen: 4.213 ug/L
 RT: 6.41 min Scan# 1655
 Delta R.T. 0.00 min
 Lab File: VU034747.D
 Acq: 23 Sep 2019 20:55

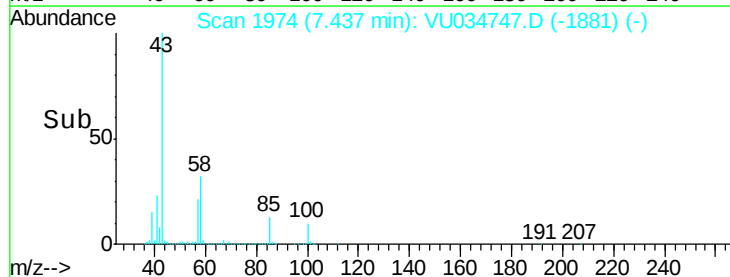
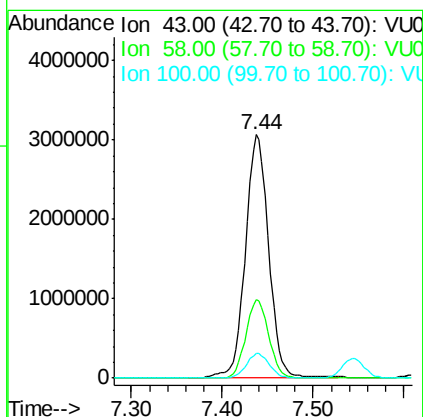
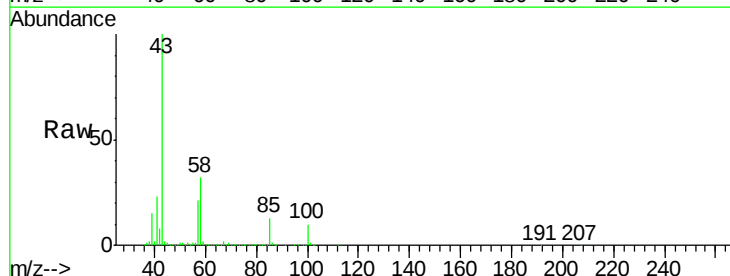
Instrument :
 MSVOA_U
 ClientSampleId :
 BFDG5

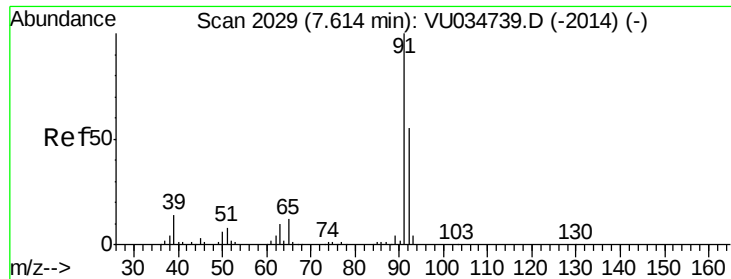
Tot Ion: 63 Resp: 20080
 Ion Ratio Lower Upper
 63 100
 112 2.5 2.4 3.6



#40
 4-Methyl-2-pentanone
 Concen: 596.805 ug/L
 RT: 7.44 min Scan# 1974
 Delta R.T. 0.00 min
 Lab File: VU034747.D
 Acq: 23 Sep 2019 20:55

Tgt Ion: 43 Resp: 5430808
 Ion Ratio Lower Upper
 43 100
 58 31.9 25.2 37.8
 100 9.9 7.7 11.5





#42

Toluene

Concen: 507.110 ug/L

RT: 7.62 min Scan# 2030

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleID :

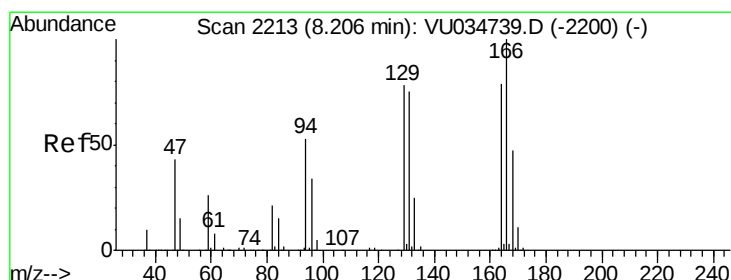
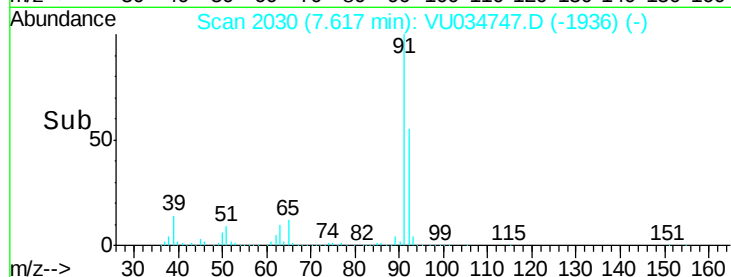
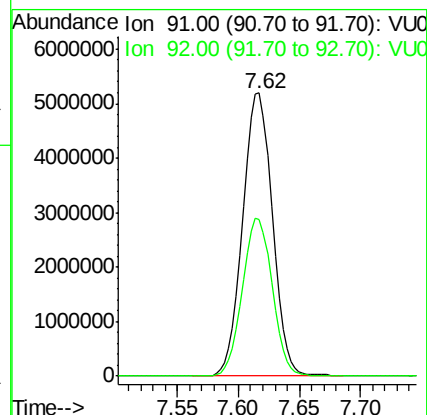
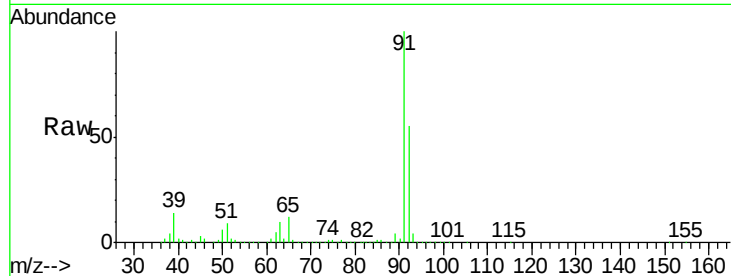
BFDG5

Tot Ion: 91 Resp: 8772733

Ion Ratio Lower Upper

91 100

92 55.4 38.2 71.0



#46

Tetrachloroethene

Concen: 6.342 ug/L

RT: 8.21 min Scan# 2213

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Tgt Ion: 164 Resp: 17637

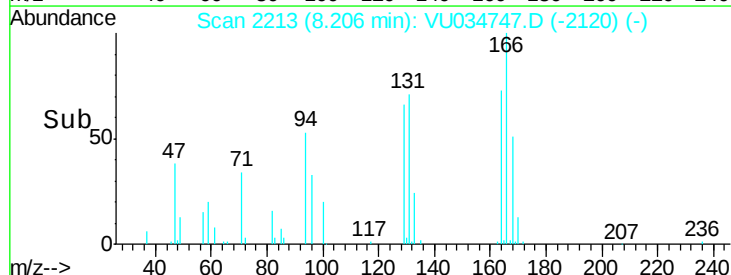
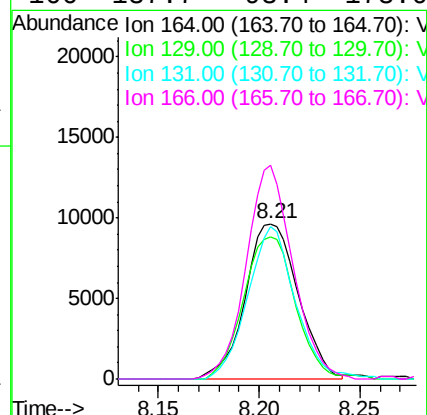
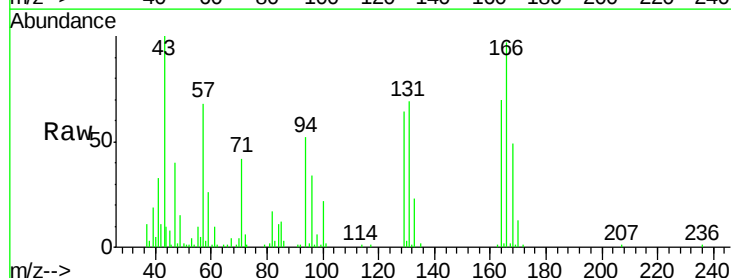
Ion Ratio Lower Upper

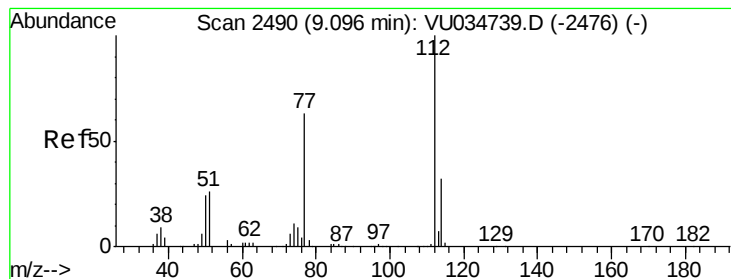
164 100

129 91.5 71.9 133.5

131 98.2 66.3 123.1

166 137.7 93.4 173.6





#51

Chlorobenzene

Concen: 2.007 ug/L

RT: 9.10 min Scan# 2490

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

BFDG5

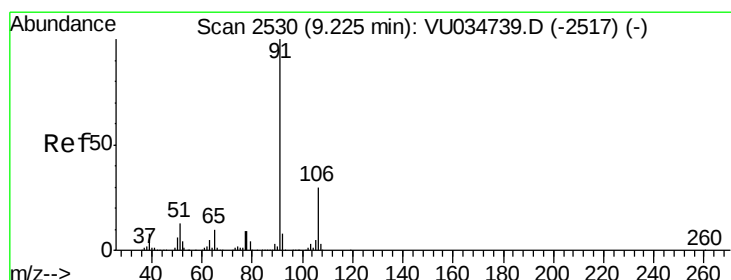
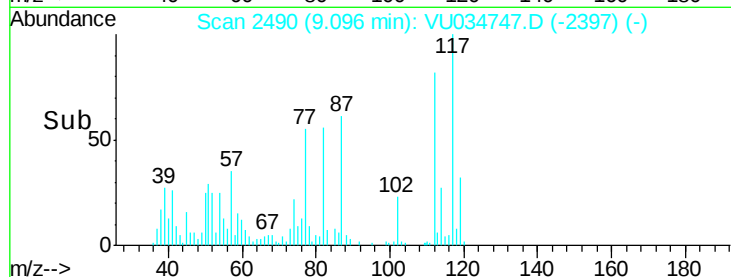
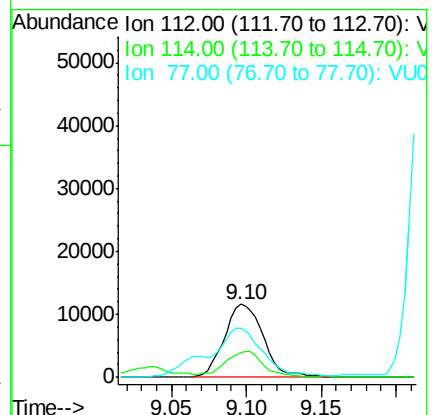
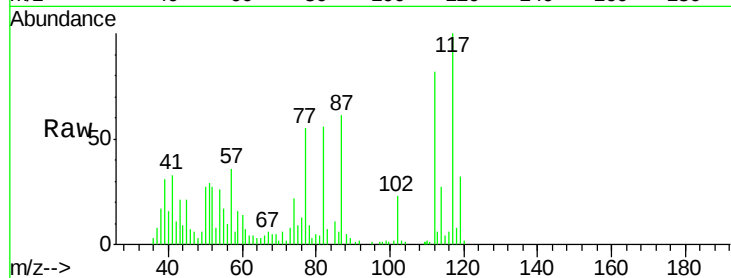
Tot Ion:112 Resp: 21111

Ion Ratio Lower Upper

112 100

114 33.1 22.8 42.4

77 67.8 51.5 77.3



#52

Ethylbenzene

Concen: 99.665 ug/L

RT: 9.23 min Scan# 2531

Delta R.T. 0.00 min

Lab File: VU034747.D

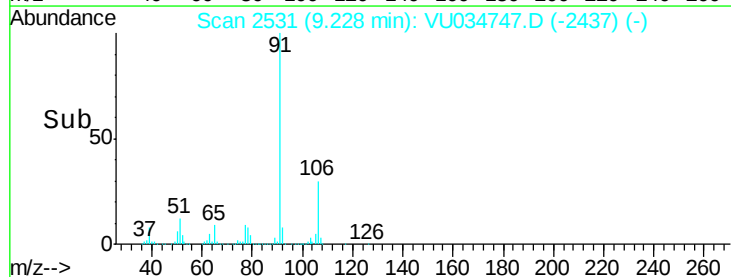
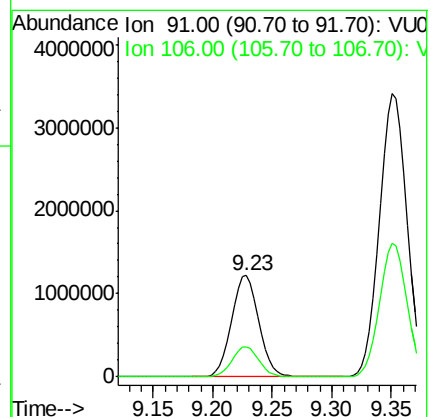
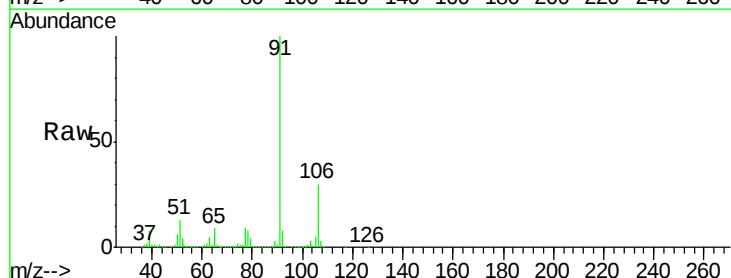
Acq: 23 Sep 2019 20:55

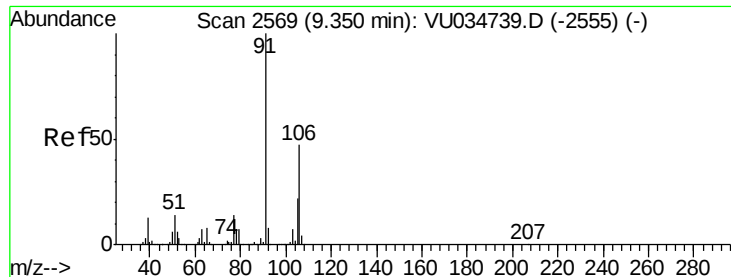
Tgt Ion: 91 Resp: 1941536

Ion Ratio Lower Upper

91 100

106 29.9 20.6 38.4





#53

m,p-Xylene

Concen: 376.340 ug/L

RT: 9.35 min Scan# 2569

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

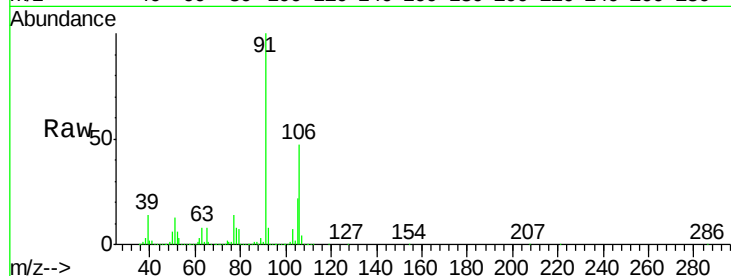
BFDG5

Tot Ion:106 Resp: 2596725

Ion Ratio Lower Upper

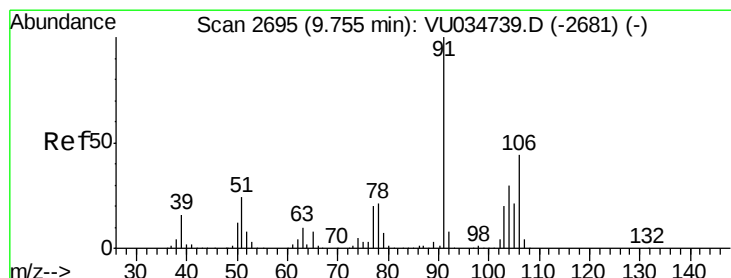
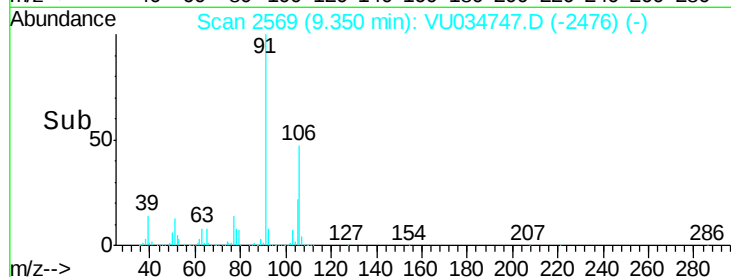
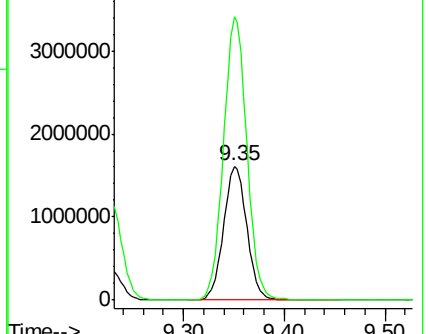
106 100

91 211.1 146.9 272.7



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#54

o-xylene

Concen: 215.360 ug/L

RT: 9.76 min Scan# 2695

Delta R.T. 0.00 min

Lab File: VU034747.D

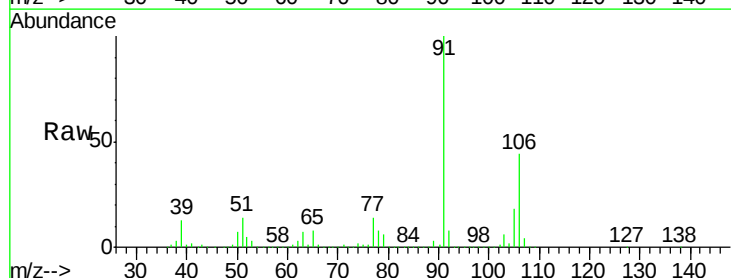
Acq: 23 Sep 2019 20:55

Tgt Ion:106 Resp: 1469754

Ion Ratio Lower Upper

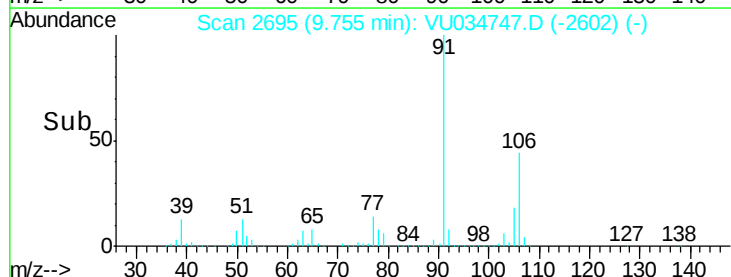
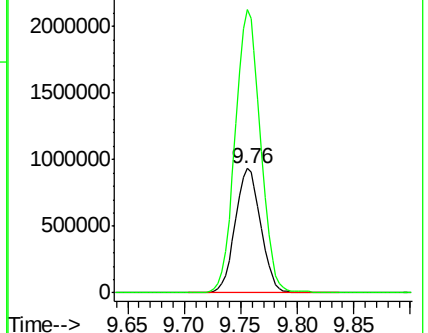
106 100

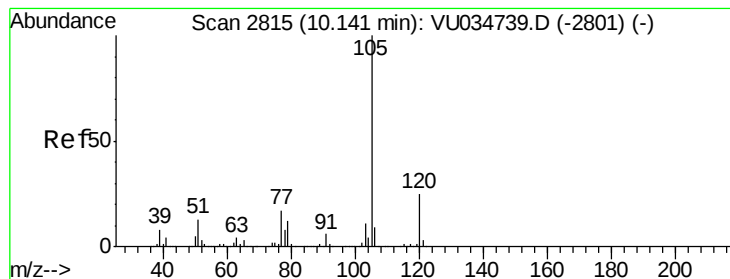
91 228.2 155.6 289.0



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0





#56

Isopropylbenzene

Concen: 7.369 ug/L

RT: 10.14 min Scan# 2816

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

Instrument :

MSVOA_U

ClientSampleId :

BFDG5

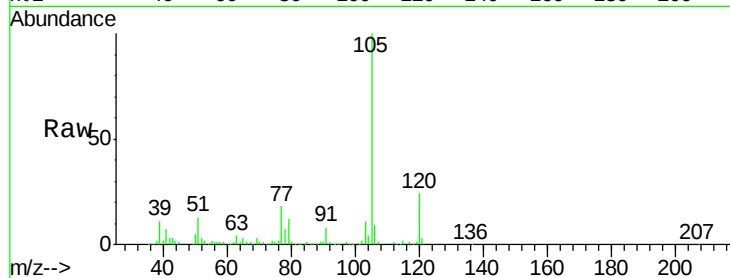
Tot Ion:105 Resp: 135598

Ion Ratio Lower Upper

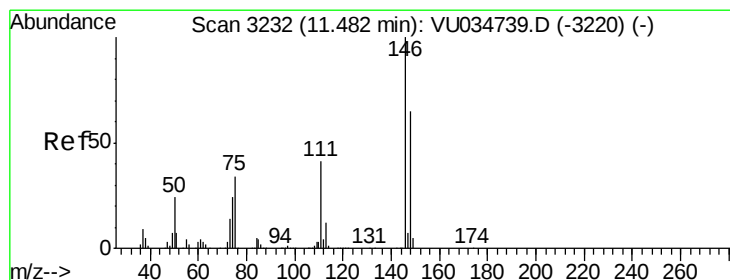
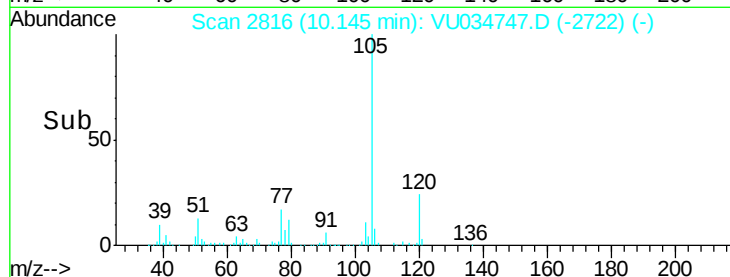
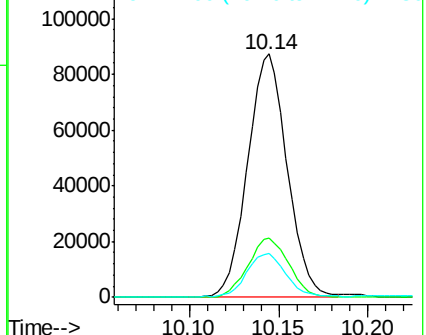
105 100

120 25.0 20.4 30.6

77 17.2 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): V



#63

1,4-Dichlorobenzene

Concen: 1.876 ug/L

RT: 11.49 min Scan# 3233

Delta R.T. 0.00 min

Lab File: VU034747.D

Acq: 23 Sep 2019 20:55

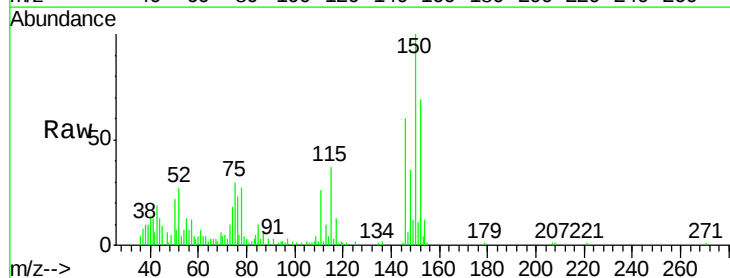
Tgt Ion:146 Resp: 15318

Ion Ratio Lower Upper

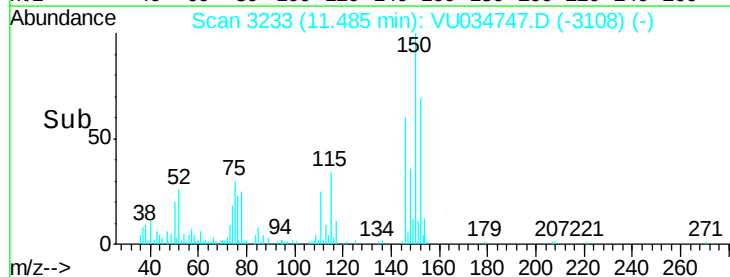
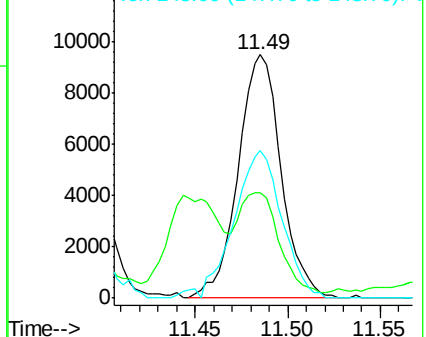
146 100

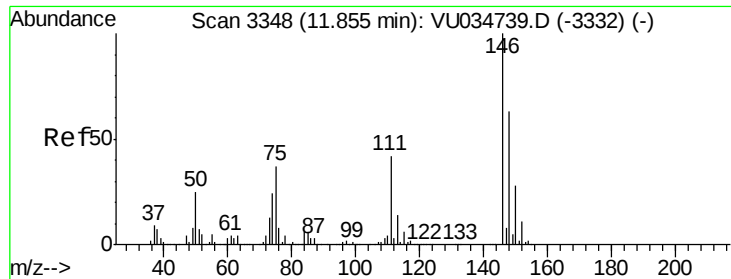
111 43.4 29.5 54.9

148 60.4 44.4 82.4



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





#65
 1,2-Dichlorobenzene
 Concen: 17.922 ug/L
 RT: 11.86 min Scan# 3348
 Delta R.T. 0.00 min
 Lab File: VU034747.D
 Acq: 23 Sep 2019 20:55

Instrument :
 MSVOA_U
 ClientSampleId :
 BFDG5

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.2	35.2	52.8
148	63.6	53.0	79.6

