

Data File : VU030397.D
Acq On : 25 Mar 2019 04:25
Operator : JC/SP
Sample : K2070-12
Misc : 5.0mL/MSVOA_U/WATER
ALS Vial : 43 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
C09D7

Quant Time: Mar 25 05:54:46 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM032319WMA.M
Quant Title : VOC Analysis
QLast Update : Mon Mar 25 05:48:44 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.88	114	452739	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.15	117	490117	50.00	ug/L	0.06
60) 1,4-Dichlorobenzene-d4	11.42	152	2201	50.00	ug/L	-0.05

System Monitoring Compounds

4) Vinyl Chloride-d3	1.40	65	125345	34.40	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	68.80%
7) Chloroethane-d5	1.67	69	113727	39.38	ug/L	0.02
Spiked Amount	50.000	Range	70 - 130	Recovery	=	78.76%
11) 1,1-Dichloroethene-d2	2.27	63	198142	28.67	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	57.34%#
21) 2-Butanone-d5	4.18	46	308798	90.16	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	90.16%
24) Chloroform-d	4.65	84	452778	72.12	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	144.24%#
26) 1,2-Dichloroethane-d4	5.32	65	187526	45.65	ug/L	0.02
Spiked Amount	50.000	Range	70 - 125	Recovery	=	91.30%
32) Benzene-d6	5.35	84	563509	40.09	ug/L	0.02
Spiked Amount	50.000	Range	70 - 125	Recovery	=	80.18%
36) 1,2-Dichloropropane-d6	6.33	67	201478	41.90	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	83.80%
41) Toluene-d8	7.56	98	516757	40.94	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	81.88%
43) trans-1,3-Dichloropropene-	7.85	79	87792	38.83	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	77.66%
47) 2-Hexanone-d5	8.31	63	227663	87.36	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	87.36%
57) 1,1,2,2-Tetrachloroethane-	10.43	84	304182	44.20	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	88.40%
64) 1,2-Dichlorobenzene-d4	11.92	152	301250	6830.92	ug/L	0.06
Spiked Amount	50.000	Range	80 - 120	Recovery	=	13661.84%#

Target Compounds

					Qvalue
8) Chloroethane	1.60	64	2841	0.950 ug/L #	50
12) 1,1-Dichloroethene	2.27	96	1897	0.586 ug/L #	1
13) Acetone	2.32	43	231292	66.773 ug/L	99
14) Carbon disulfide	2.47	76	6019	0.562 ug/L	97
16) Methylene chloride	2.70	84	8265	2.164 ug/L	89
22) 2-Butanone	4.28	43	18823	4.496 ug/L	96
25) Chloroform	4.67	83	4572682	689.801 ug/L	98
27) 1,2-Dichloroethane	5.43	62	2153666	414.032 ug/L #	75
29) Cyclohexane	4.99	56	73733	9.941 ug/L	98
31) Carbon tetrachloride	5.14	117	1294661	254.519 ug/L	98
34) Trichloroethene	6.19	95	18314	4.465 ug/L	96
35) Methylcyclohexane	6.41	83	20630	3.057 ug/L #	76
38) Bromodichloromethane	6.76	83	49014	8.712 ug/L	98
40) 4-Methyl-2-pentanone	7.47	43	8084	1.016 ug/L #	58
42) Toluene	7.64	91	51162	2.955 ug/L	99
44) trans-1,3-Dichloropropene	7.85	75	3322	0.555 ug/L #	80
46) Tetrachloroethene	8.23	164	11607	4.052 ug/L	99

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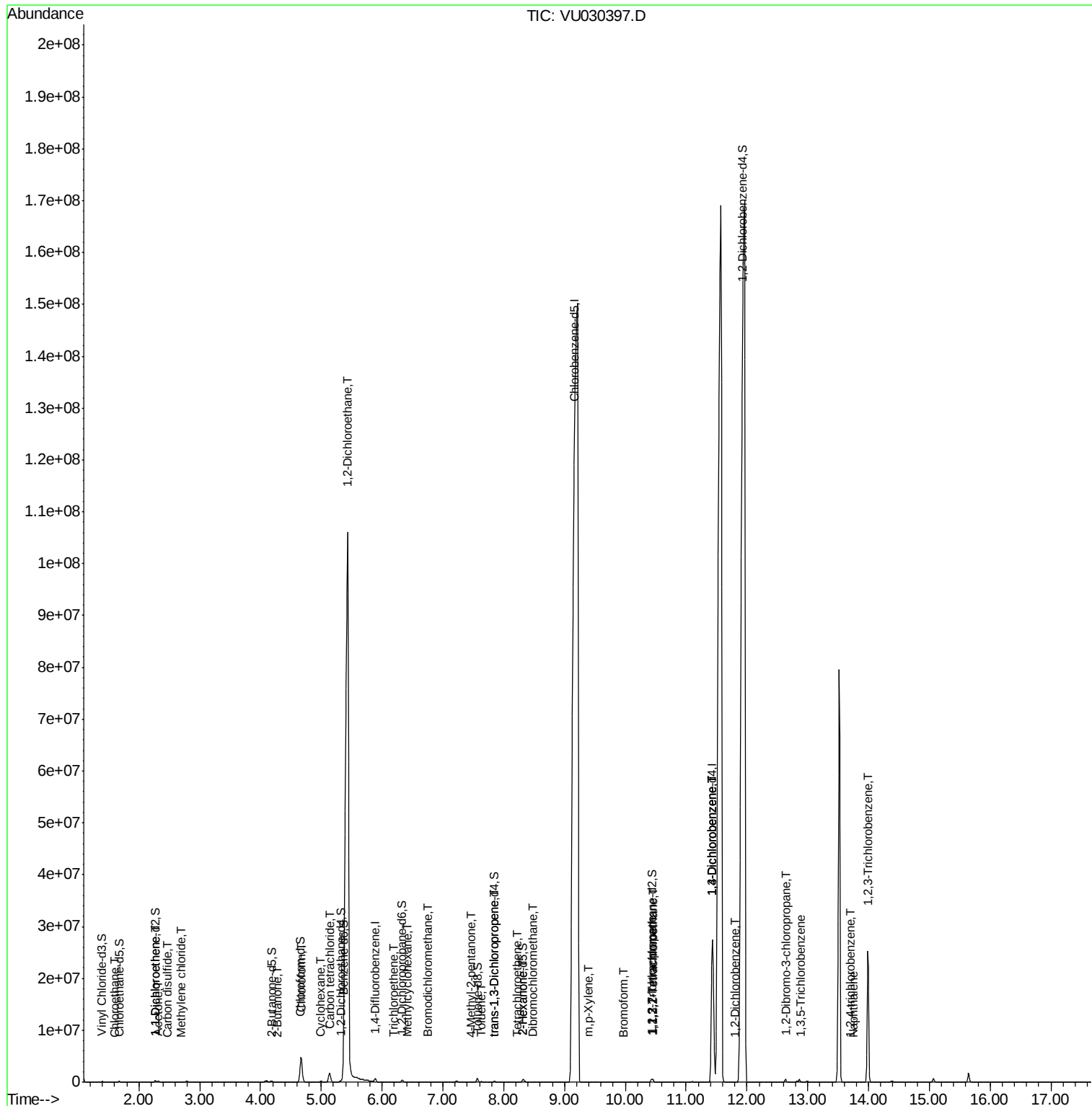
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 2-Hexanone	8.31	43	26716	4.099	ug/L #	74
49) Dibromochloromethane	8.48	129	26869	6.464	ug/L	100
53) m,p-Xylene	9.39	106	3738	0.552	ug/L	99
58) 1,1,2,2-Tetrachloroethane	10.46	83	3954	0.536	ug/L #	90
59) 1,2,3-Trichloropropane	10.45	75	12851	2.230	ug/L #	1
61) Bromoform	9.96	173	11308	386.419	ug/L	99
62) 1,3-Dichlorobenzene	11.43	146	17963510	249567.196	ug/L	99
63) 1,4-Dichlorobenzene	11.43	146	17963510	242422.060	ug/L	99
65) 1,2-Dichlorobenzene	11.82	146	507	6.966	ug/L #	88
66) 1,2-Dibromo-3-chloropropan	12.63	75	86171	5317.273	ug/L #	7
67) 1,3,5-Trichlorobenzene	12.89	180	11794	218.873	ug/L	97
68) 1,2,4-trichlorobenzene	13.70	180	200	4.272	ug/L #	22
69) Naphthalene	13.75	128	12726	76.441	ug/L	99
70) 1,2,3-Trichlorobenzene	13.99	180	7531571	152340.445	ug/L	99

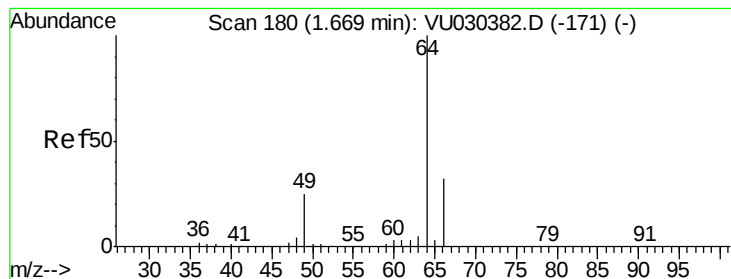
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#8

Chloroethane

Concen: 0.950 ug/L

RT: 1.60 min Scan# 158

Delta R.T. -0.07 min

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Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampled :

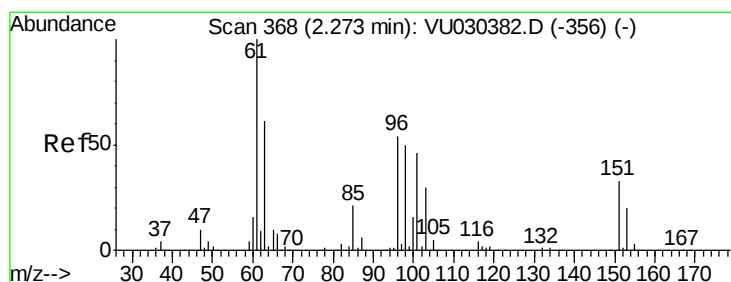
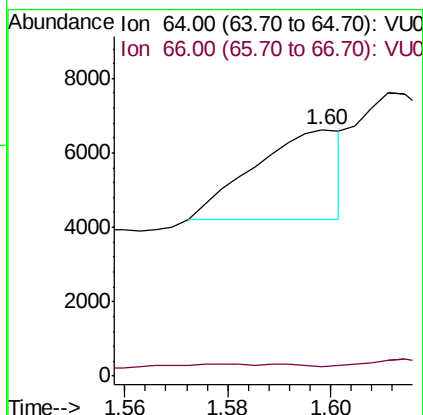
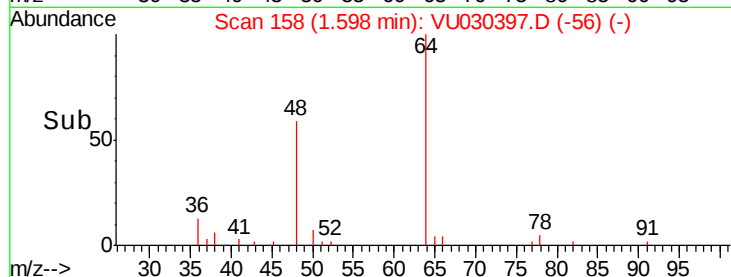
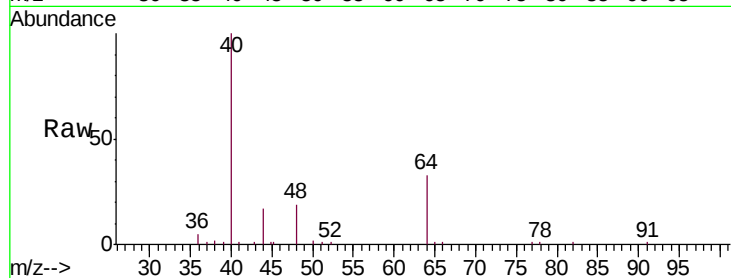
C09D7

Tgt Ion: 64 Resp: 2841

Ion Ratio Lower Upper

64 100

66 4.0 22.5 41.7#



#12

1,1-Dichloroethene

Concen: 0.586 ug/L

RT: 2.27 min Scan# 367

Delta R.T. -0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

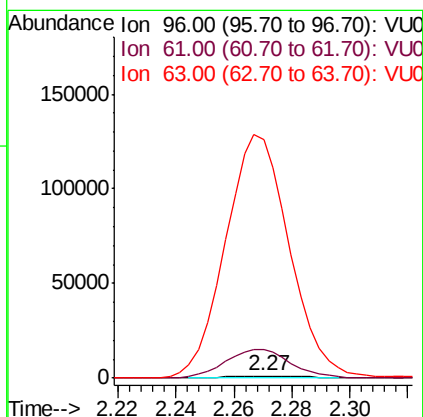
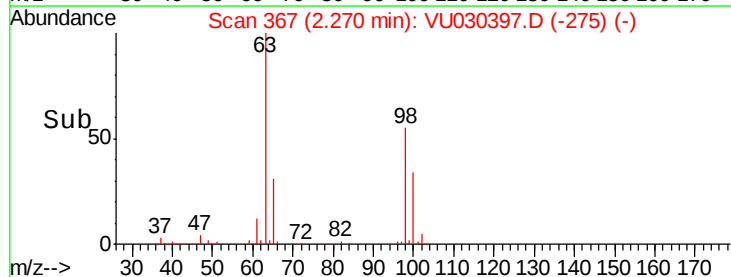
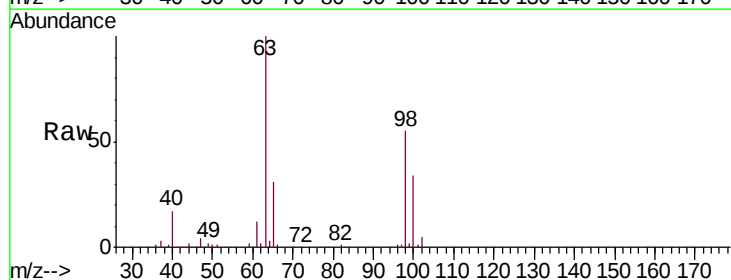
Tgt Ion: 96 Resp: 1897

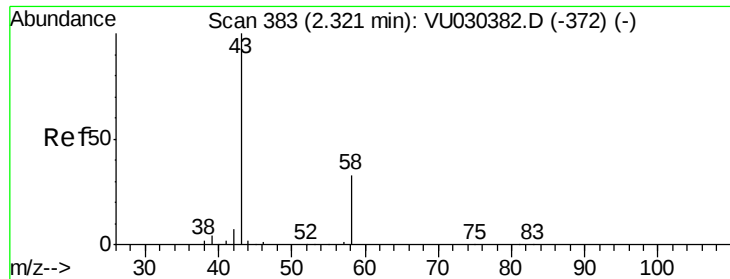
Ion Ratio Lower Upper

96 100

61 1428.6 131.0 243.4#

63 11742.5 92.4 171.6#





#13

Acetone

Concen: 66.773 ug/L

RT: 2.32 min Scan# 382

Delta R.T. -0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampleId :

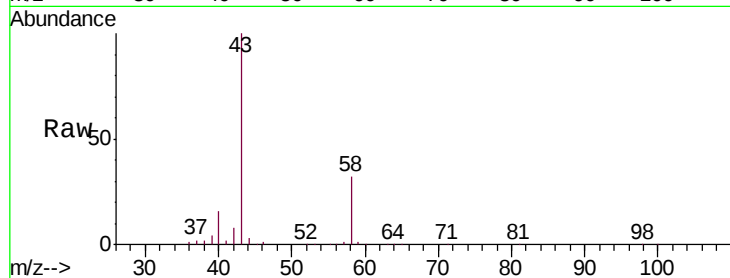
C09D7

Tgt Ion: 43 Resp: 231292

Ion Ratio Lower Upper

43 100

58 32.0 0.0 62.8



Abundance Ion 43.00 (42.70 to 43.70): VU030382.D (-372) (-)

Ion 58.00 (57.70 to 58.70): VU030382.D (-372) (-)

2.32

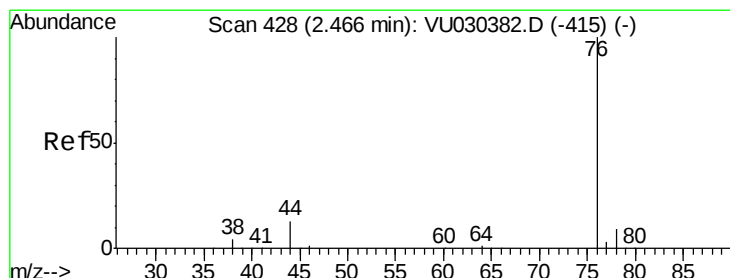
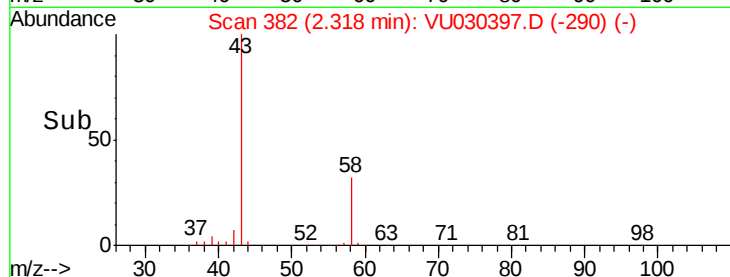
150000

100000

50000

0

Time-->



#14

Carbon disulfide

Concen: 0.562 ug/L

RT: 2.47 min Scan# 430

Delta R.T. 0.01 min

Lab File: VU030397.D

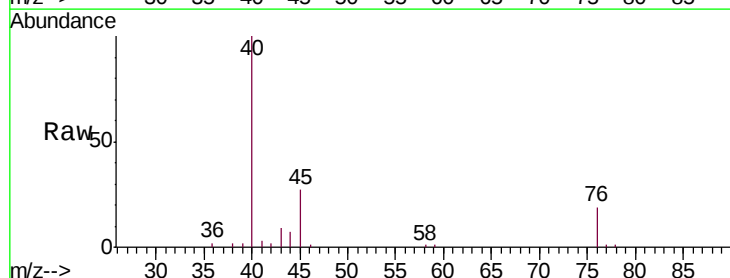
Acq: 25 Mar 2019 04:25

Tgt Ion: 76 Resp: 6019

Ion Ratio Lower Upper

76 100

78 8.0 7.3 10.9



Abundance Ion 76.00 (75.70 to 76.70): VU030382.D (-415) (-)

Ion 78.00 (77.70 to 78.70): VU030382.D (-415) (-)

2.47

4000

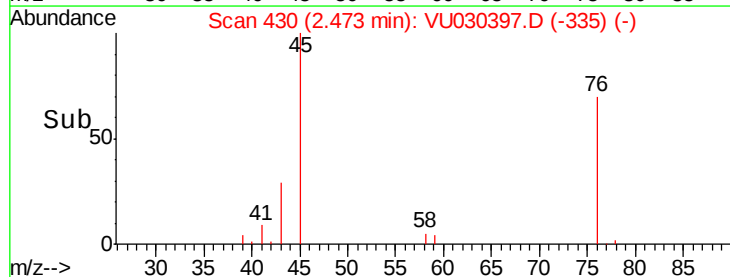
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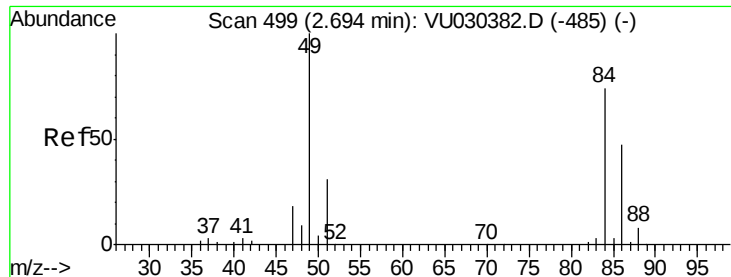
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1000

0

Time-->

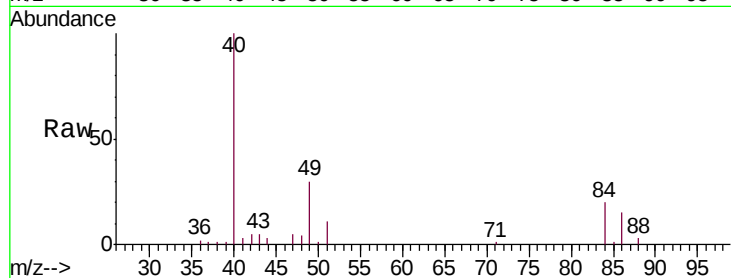




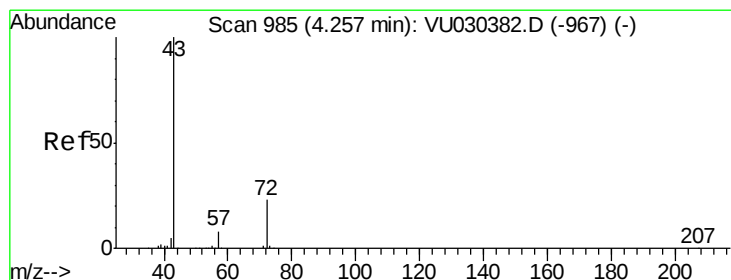
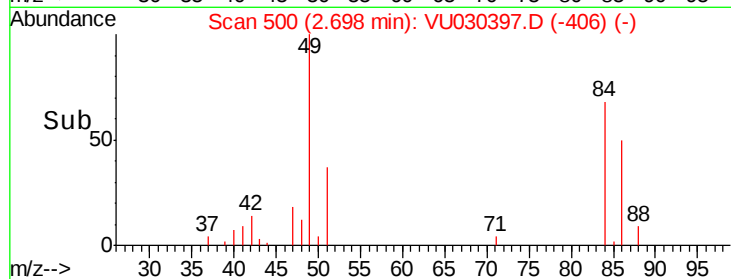
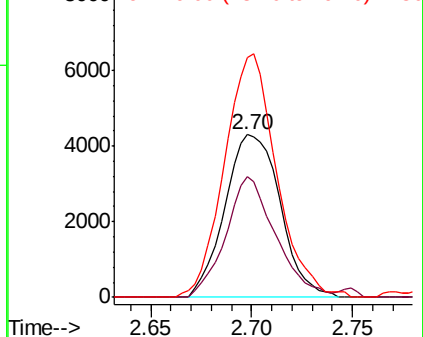
#16
Methylene chloride
Concen: 2.164 ug/L
RT: 2.70 min Scan# 500
Delta R.T. 0.00 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

Instrument :
MSVOA_U
ClientSampled :
C09D7

Tgt Ion: 84 Resp: 8265
Ion Ratio Lower Upper
84 100
86 74.0 44.3 82.3
49 147.0 94.9 176.3

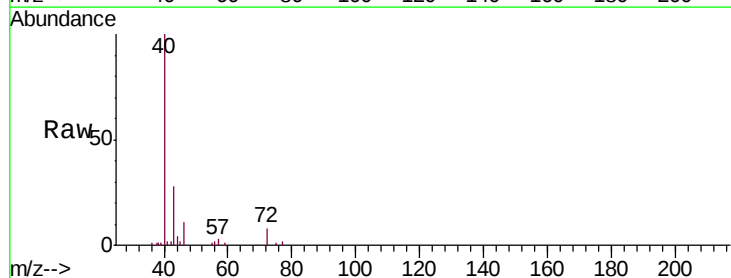


Abundance Ion 84.00 (83.70 to 84.70): VU0
Ion 86.00 (85.70 to 86.70): VU0
Ion 49.00 (48.70 to 49.70): VU0

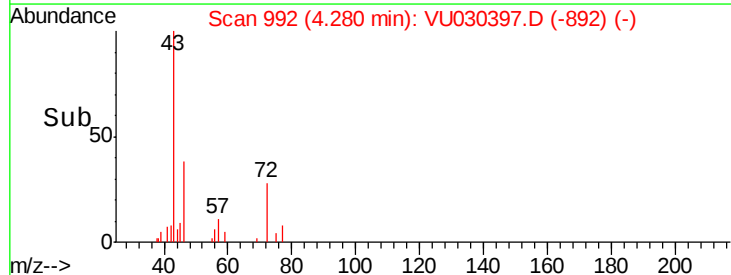
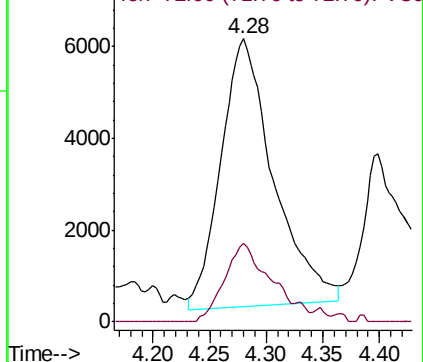


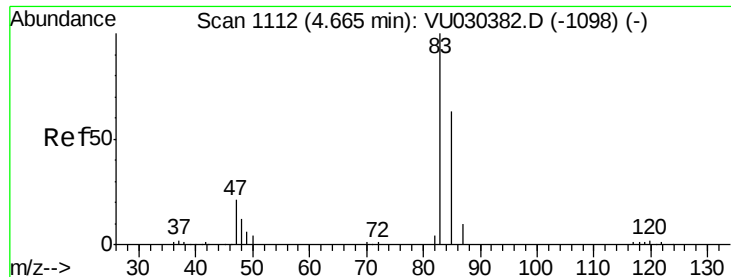
#22
2-Butanone
Concen: 4.496 ug/L
RT: 4.28 min Scan# 992
Delta R.T. 0.02 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

Tgt Ion: 43 Resp: 18823
Ion Ratio Lower Upper
43 100
72 21.9 12.0 36.1



Abundance Ion 43.00 (42.70 to 43.70): VU0
Ion 72.00 (71.70 to 72.70): VU0

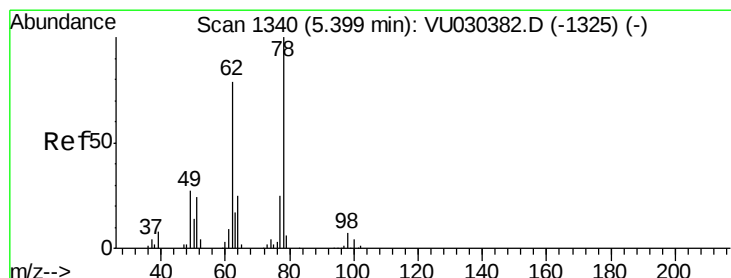
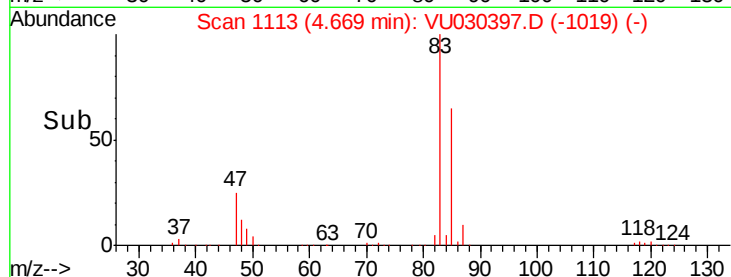
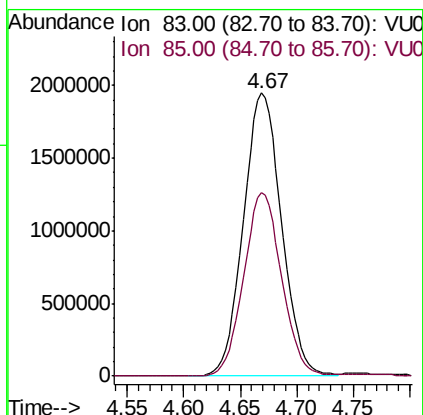
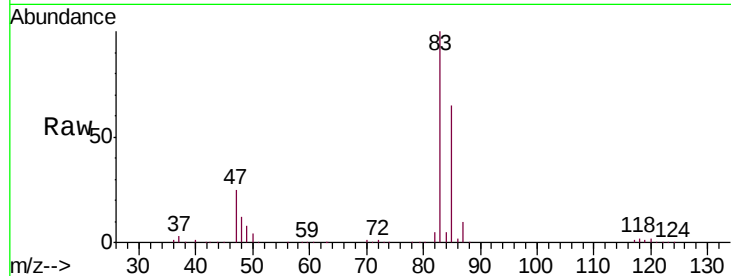




#25
Chloroform
Concen: 689.801 ug/L
RT: 4.67 min Scan# 1113
Delta R.T. 0.00 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

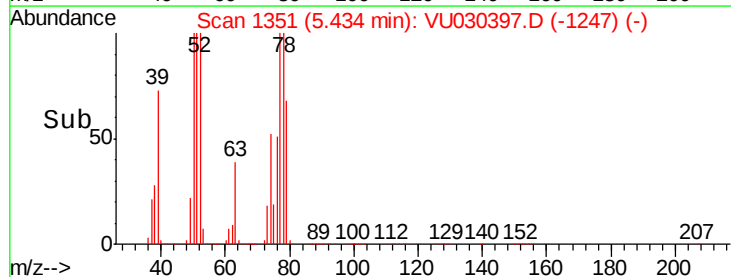
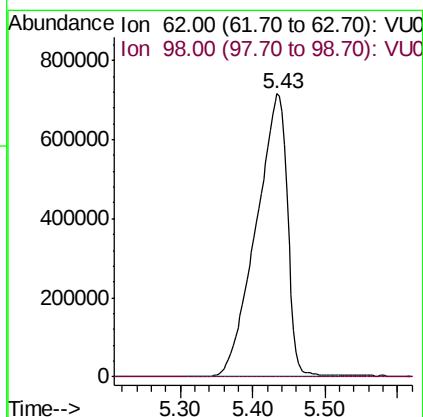
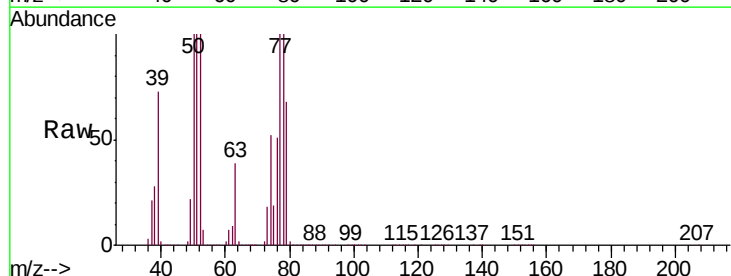
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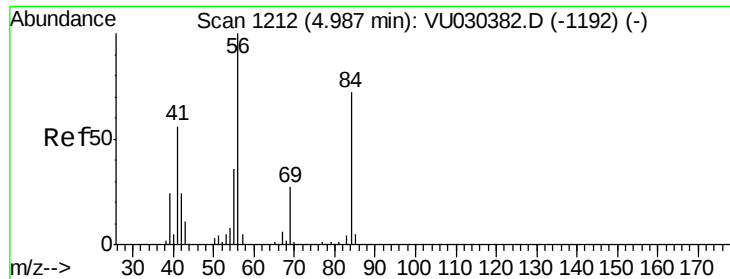
Tgt Ion: 83 Resp: 4572682
Ion Ratio Lower Upper
83 100
85 65.0 44.4 82.4



#27
1,2-Dichloroethane
Concen: 414.032 ug/L
RT: 5.43 min Scan# 1351
Delta R.T. 0.04 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

Tgt Ion: 62 Resp: 2153666
Ion Ratio Lower Upper
62 100
98 0.0 7.2 10.8#

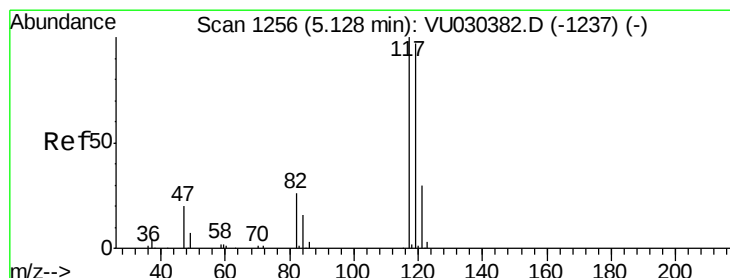
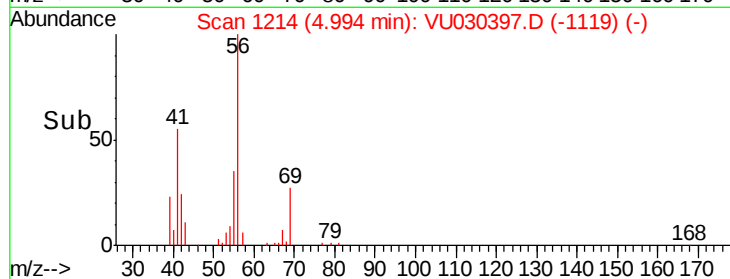
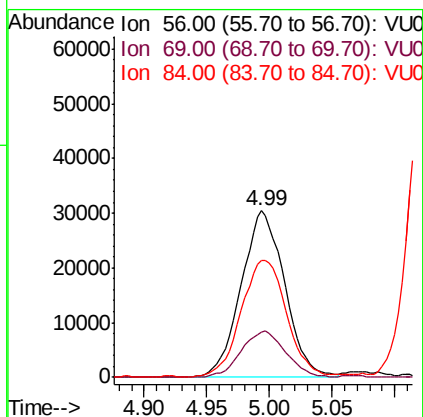
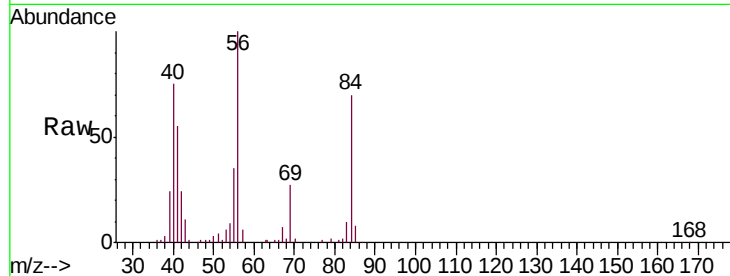




#29
Cyclohexane
Concen: 9.941 ug/L
RT: 4.99 min Scan# 1214
Delta R.T. 0.01 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

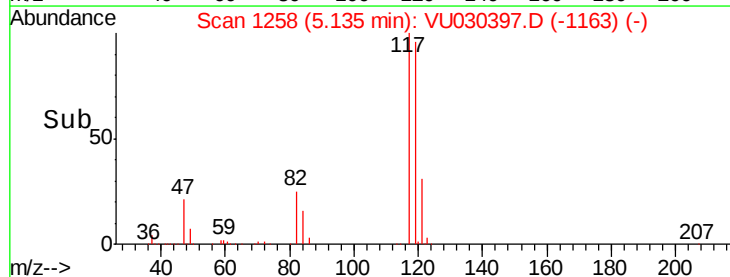
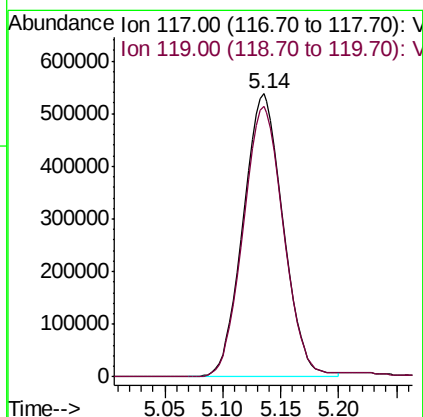
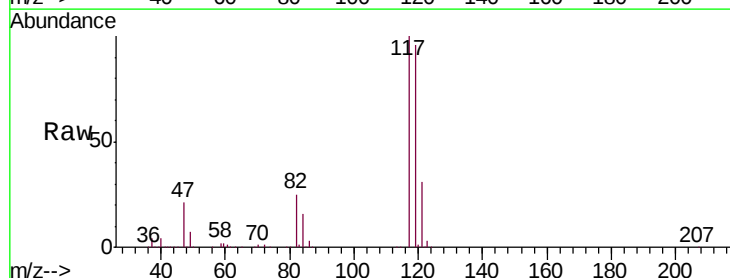
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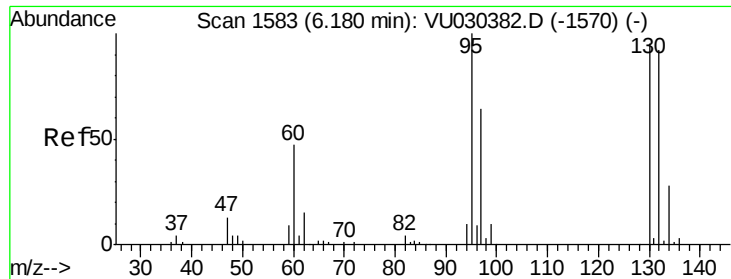
Tgt Ion: 56 Resp: 73733
Ion Ratio Lower Upper
56 100
69 28.2 22.9 34.3
84 72.0 58.9 88.3



#31
Carbon tetrachloride
Concen: 254.519 ug/L
RT: 5.14 min Scan# 1258
Delta R.T. 0.01 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

Tgt Ion: 117 Resp: 1294661
Ion Ratio Lower Upper
117 100
119 96.3 75.4 113.2





#34

Trichloroethene

Concen: 4.465 ug/L

RT: 6.19 min Scan# 1585

Delta R.T. 0.01 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampled :

C09D7

Tgt Ion: 95 Resp: 18314

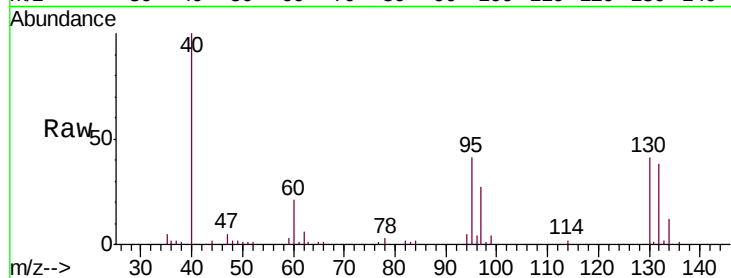
Ion Ratio Lower Upper

95 100

97 67.2 45.7 84.9

132 93.4 63.8 118.4

130 99.6 65.7 121.9

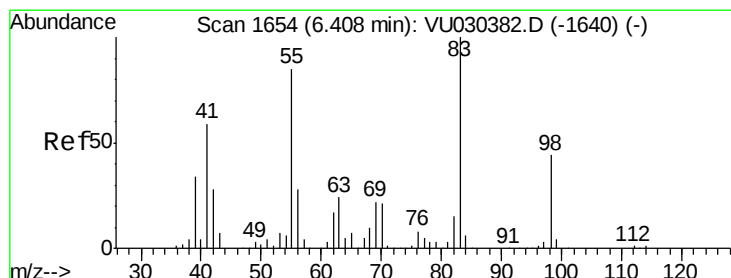
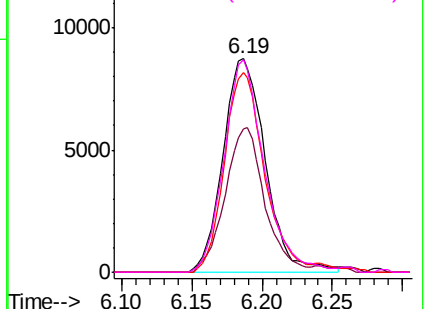
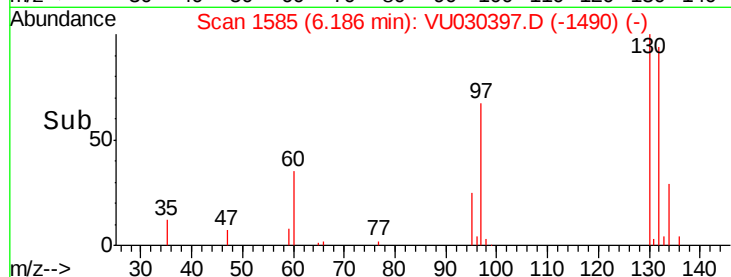


Abundance Ion 95.00 (94.70 to 95.70): VU030397.D (-1490) (-)

Ion 97.00 (96.70 to 97.70): VU030397.D (-1490) (-)

Ion 132.00 (131.70 to 132.70): VU030397.D (-1490) (-)

Ion 130.00 (129.70 to 130.70): VU030397.D (-1490) (-)



#35

Methylcyclohexane

Concen: 3.057 ug/L

RT: 6.41 min Scan# 1655

Delta R.T. 0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

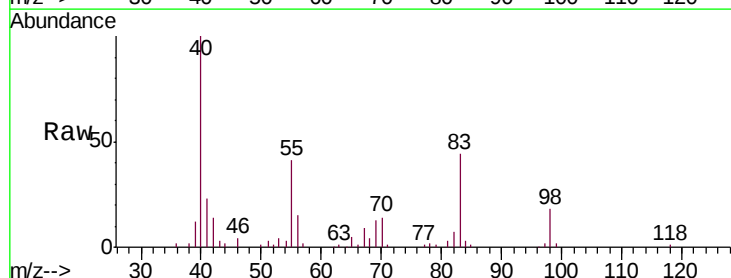
Tgt Ion: 83 Resp: 20630

Ion Ratio Lower Upper

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55 123.2 71.4 107.0#

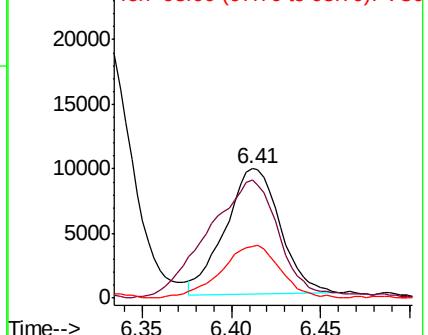
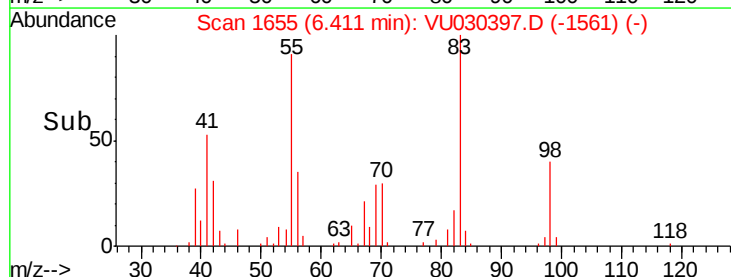
98 45.3 36.0 54.0

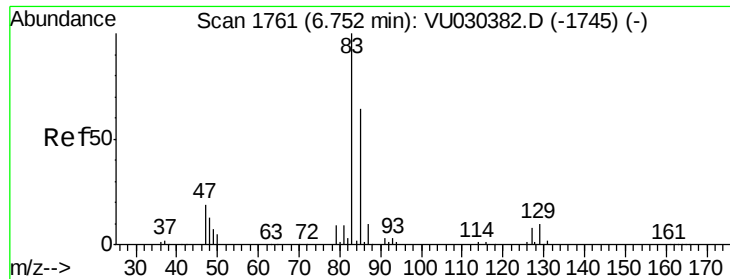


Abundance Ion 83.00 (82.70 to 83.70): VU030397.D (-1561) (-)

Ion 55.00 (54.70 to 55.70): VU030397.D (-1561) (-)

Ion 98.00 (97.70 to 98.70): VU030397.D (-1561) (-)

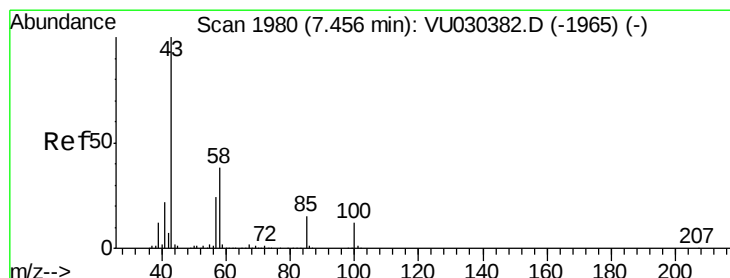
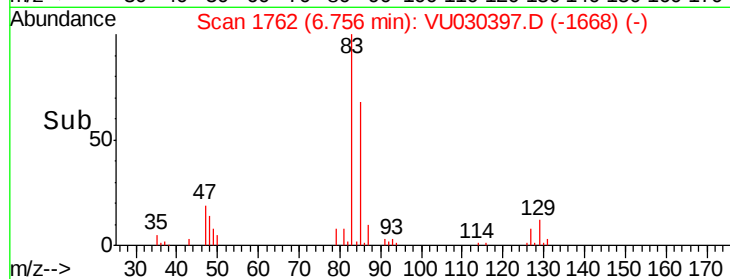
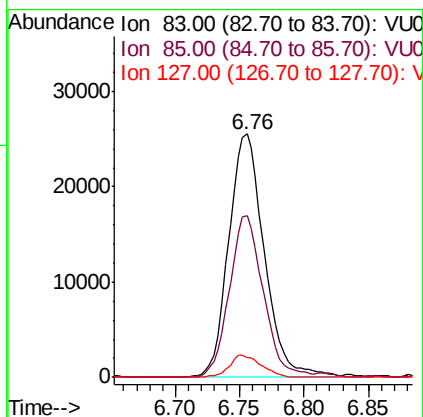
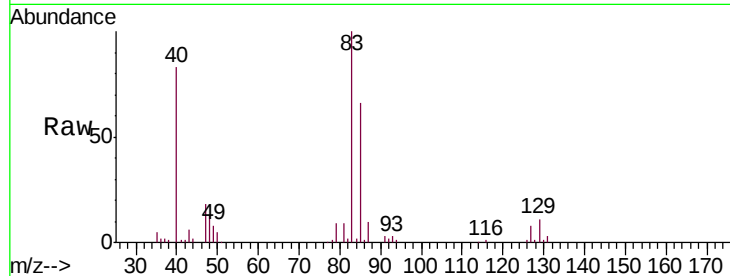




#38
Bromodichloromethane
Concen: 8.712 ug/L
RT: 6.76 min Scan# 1762
Delta R.T. 0.00 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

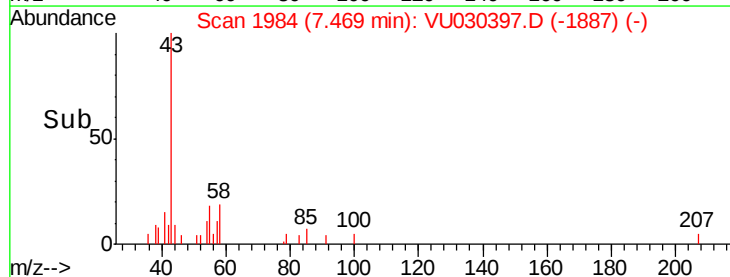
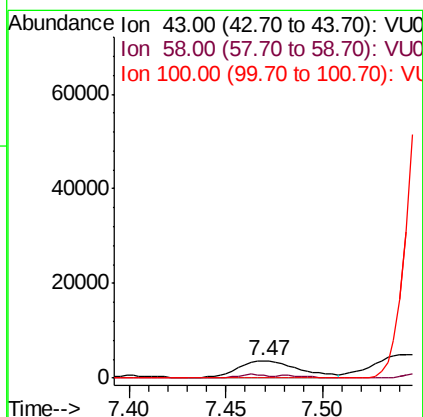
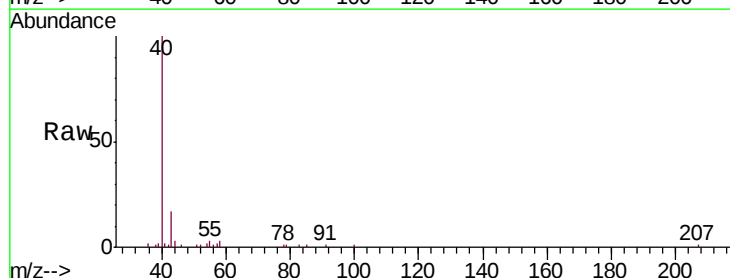
Instrument :
MSVOA_U
ClientSampleId :
C09D7

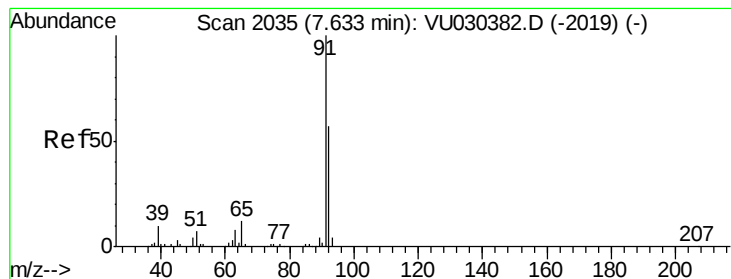
Tgt Ion: 83 Resp: 49014
Ion Ratio Lower Upper
83 100
85 66.2 45.0 83.6
127 8.3 6.6 10.0



#40
4-Methyl-2-pentanone
Concen: 1.016 ug/L
RT: 7.47 min Scan# 1984
Delta R.T. 0.01 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

Tgt Ion: 43 Resp: 8084
Ion Ratio Lower Upper
43 100
58 9.9 30.6 45.8#
100 1.8 9.5 14.3#





#42

Toluene

Concen: 2.955 ug/L

RT: 7.64 min Scan# 2036

Delta R.T. 0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampleId :

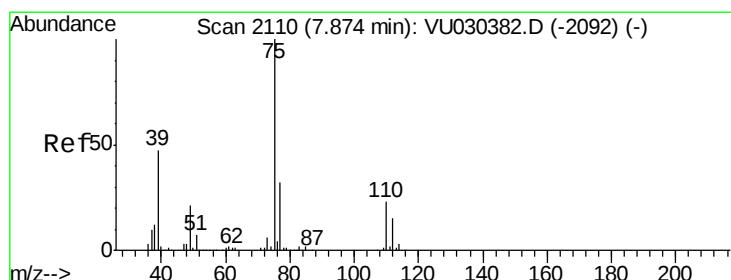
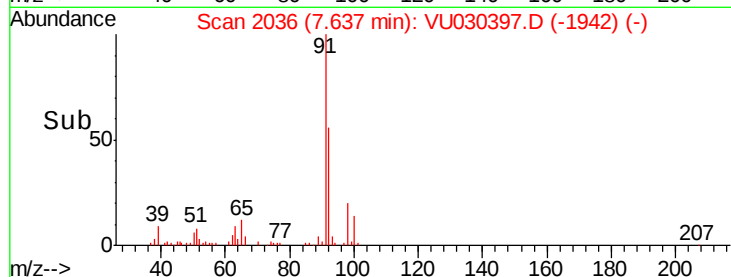
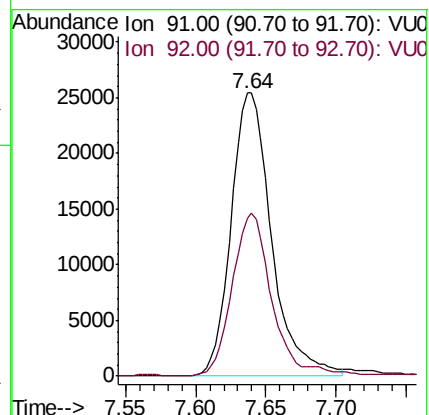
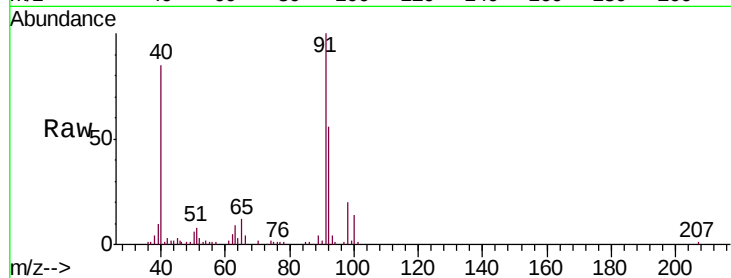
C09D7

Tgt Ion: 91 Resp: 51162

Ion Ratio Lower Upper

91 100

92 55.8 39.7 73.7



#44

trans-1,3-Dichloropropene

Concen: 0.555 ug/L

RT: 7.85 min Scan# 2101

Delta R.T. -0.03 min

Lab File: VU030397.D

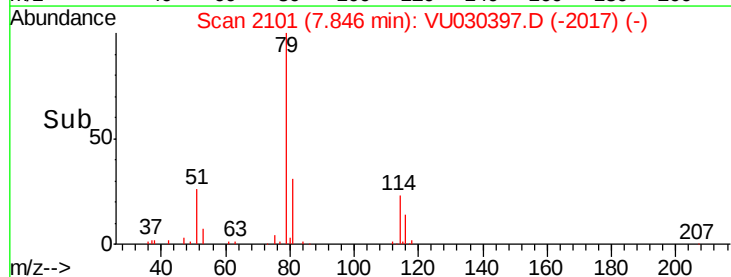
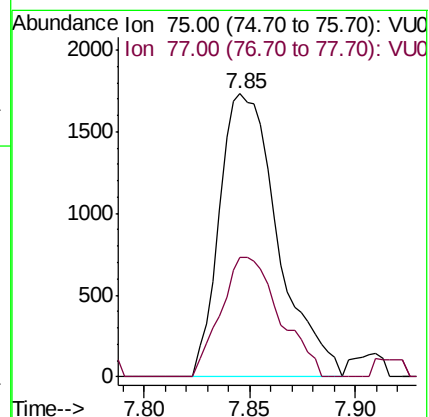
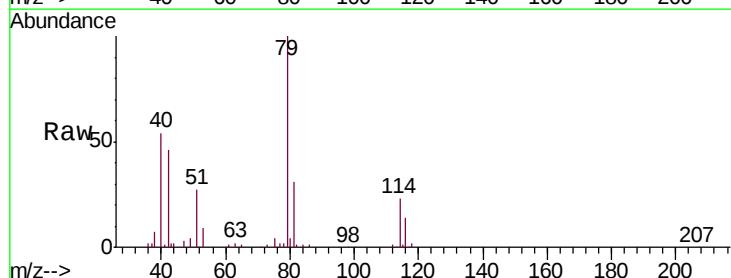
Acq: 25 Mar 2019 04:25

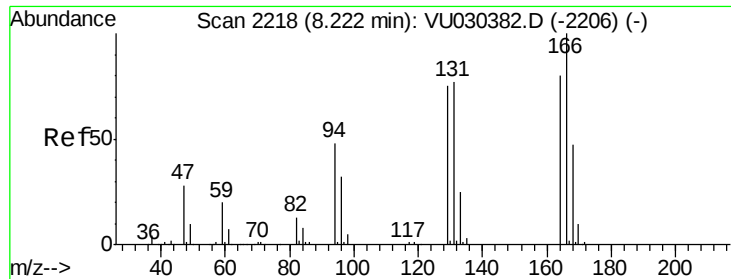
Tgt Ion: 75 Resp: 3322

Ion Ratio Lower Upper

75 100

77 42.4 22.0 40.8#

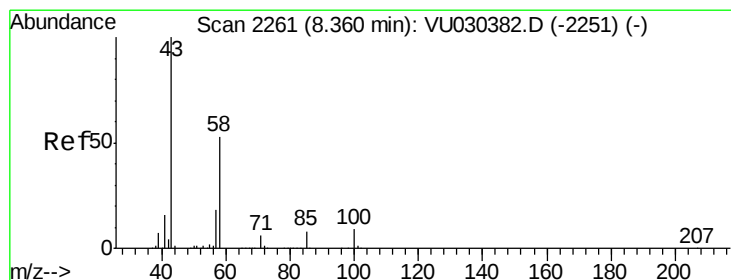
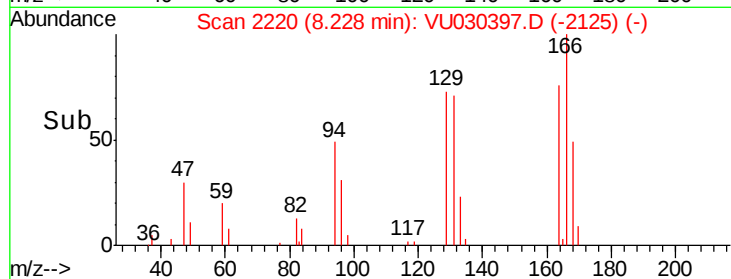
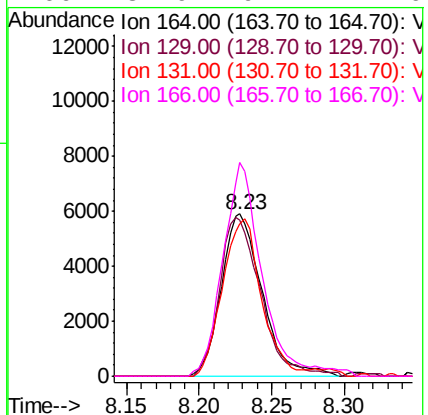
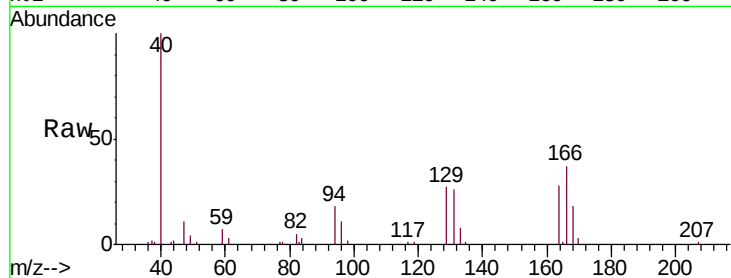




#46
Tetrachloroethene
Concen: 4.052 ug/L
RT: 8.23 min Scan# 2220
Delta R.T. 0.01 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

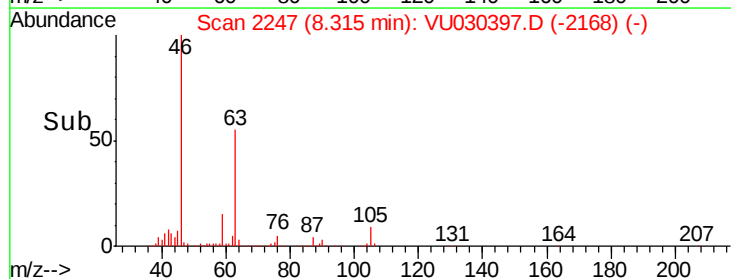
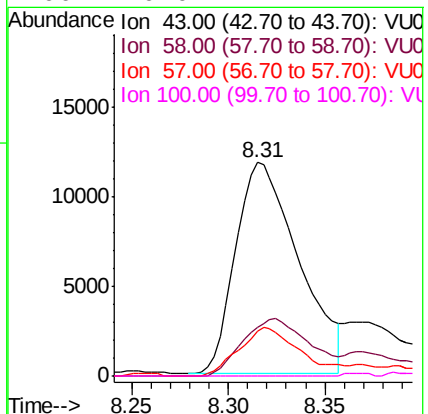
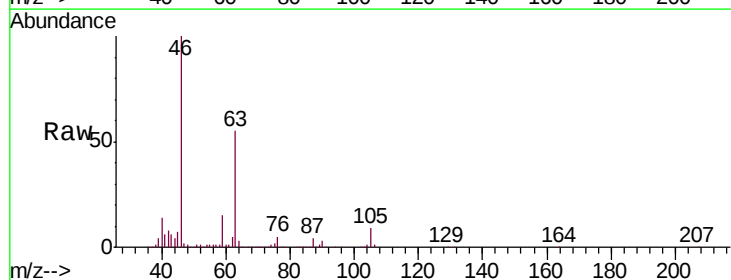
Instrument :
MSVOA_U
ClientSampleId :
C09D7

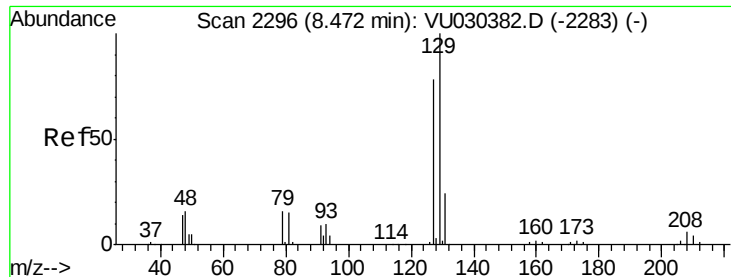
Tgt Ion:164 Resp: 11607
Ion Ratio Lower Upper
164 100
129 96.3 68.1 126.5
131 94.2 67.7 125.7
166 131.9 92.4 171.6



#48
2-Hexanone
Concen: 4.099 ug/L
RT: 8.31 min Scan# 2247
Delta R.T. -0.04 min
Lab File: VU030397.D
Acq: 25 Mar 2019 04:25

Tgt Ion: 43 Resp: 26716
Ion Ratio Lower Upper
43 100
58 28.8 42.5 63.7#
57 21.0 15.0 22.6
100 0.0 7.4 11.2#





#49

Dibromochloromethane

Concen: 6.464 ug/L

RT: 8.48 min Scan# 2297

Delta R.T. 0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampleId :

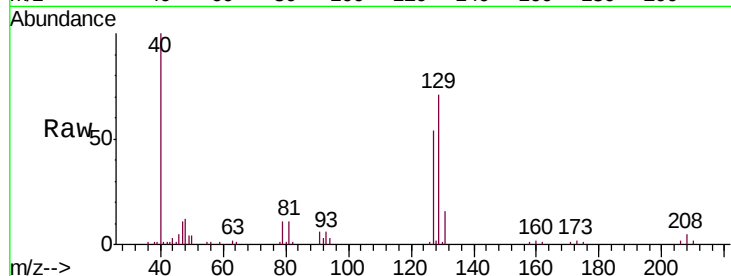
C09D7

Tgt Ion:129 Resp: 26869

Ion Ratio Lower Upper

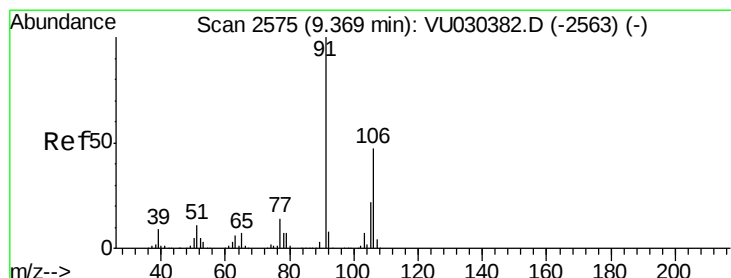
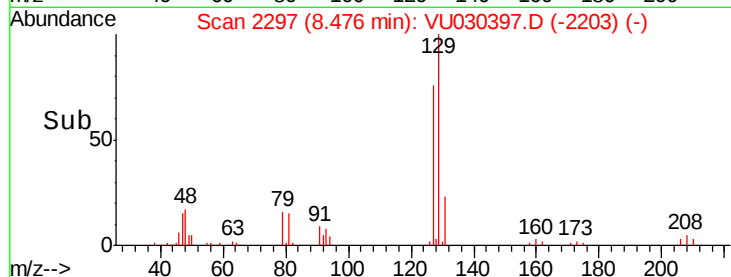
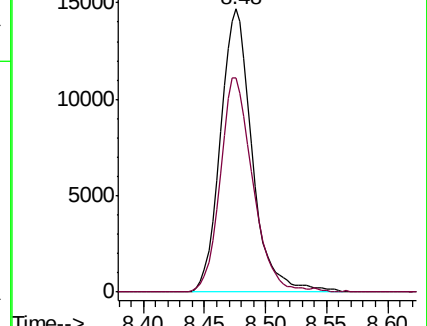
129 100

127 75.7 53.2 98.8



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#53

m,p-Xylene

Concen: 0.552 ug/L

RT: 9.39 min Scan# 2581

Delta R.T. 0.02 min

Lab File: VU030397.D

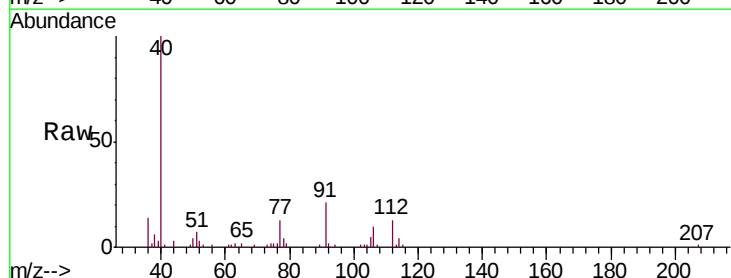
Acq: 25 Mar 2019 04:25

Tgt Ion:106 Resp: 3738

Ion Ratio Lower Upper

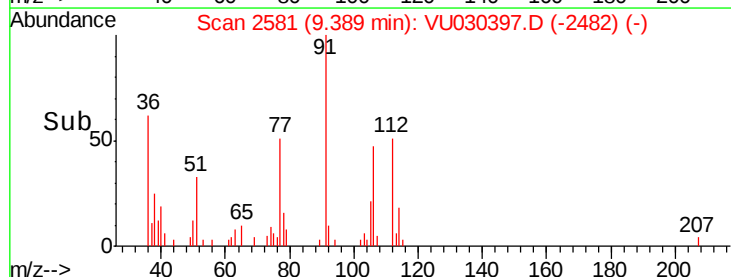
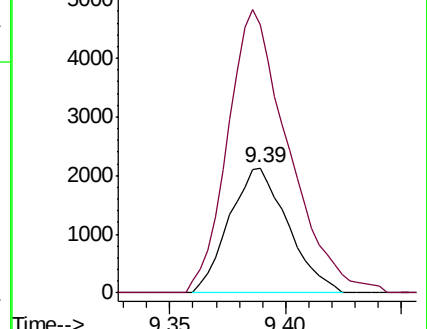
106 100

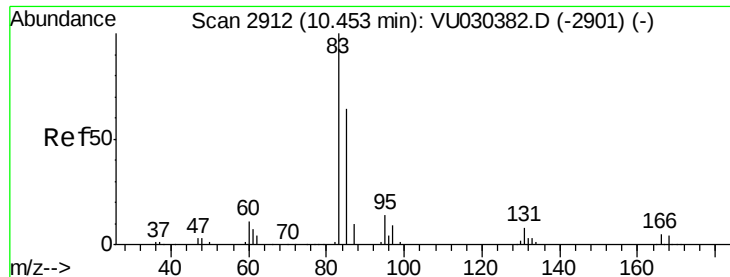
91 214.6 151.2 280.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0





#58

1,1,2,2-Tetrachloroethane

Concen: 0.536 ug/L

RT: 10.46 min Scan# 2913

Delta R.T. 0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampleId :

C09D7

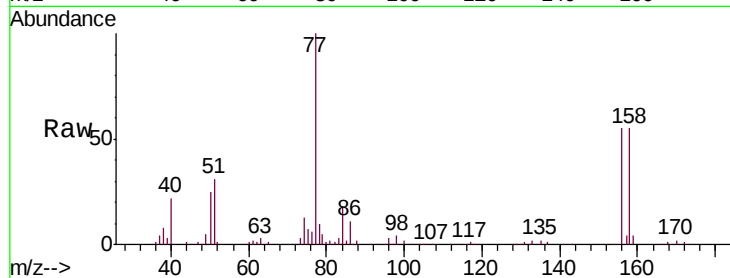
Tgt Ion: 83 Resp: 3954

Ion Ratio Lower Upper

83 100

85 59.7 44.3 82.3

131 27.6 6.7 10.1#

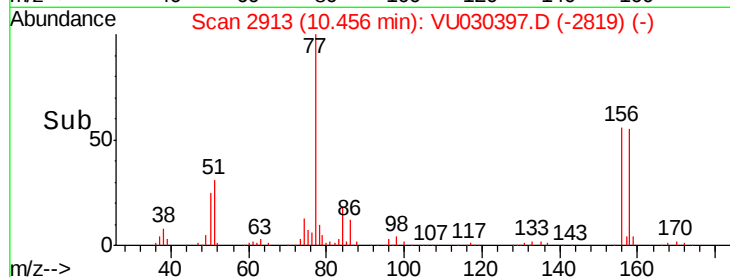


Abundance Ion 83.00 (82.70 to 83.70): VU030382.D (-2901) (-)

Ion 85.00 (84.70 to 85.70): VU030382.D (-2901) (-)

Ion 131.00 (130.70 to 131.70): VU030382.D (-2901) (-)

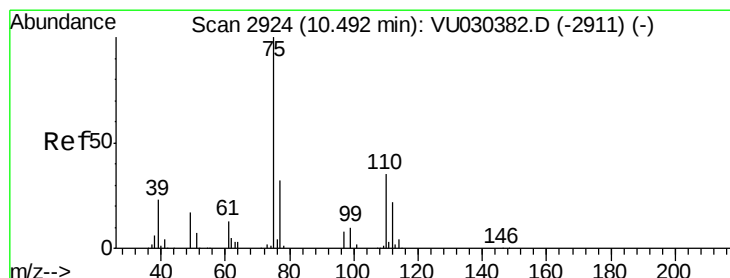
Time-->



Abundance Ion 75.00 (74.70 to 75.70): VU030382.D (-2911) (-)

Ion 77.00 (76.70 to 77.70): VU030382.D (-2911) (-)

Time-->



#59

1,2,3-Trichloropropane

Concen: 2.230 ug/L

RT: 10.45 min Scan# 2912

Delta R.T. -0.04 min

Lab File: VU030397.D

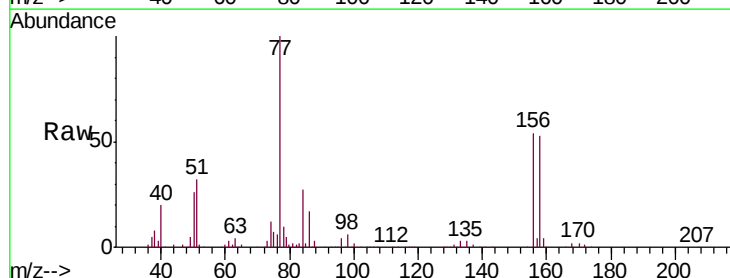
Acq: 25 Mar 2019 04:25

Tgt Ion: 75 Resp: 12851

Ion Ratio Lower Upper

75 100

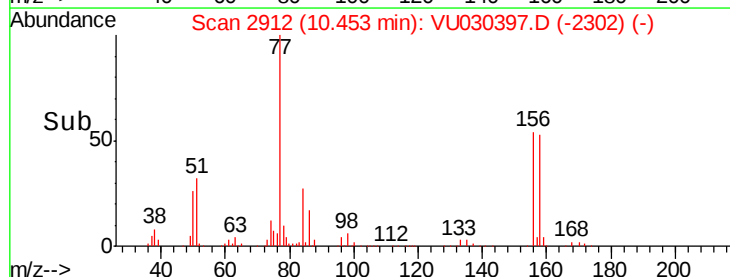
77 1360.2 25.4 38.2#



Abundance Ion 75.00 (74.70 to 75.70): VU030382.D (-2911) (-)

Ion 77.00 (76.70 to 77.70): VU030382.D (-2911) (-)

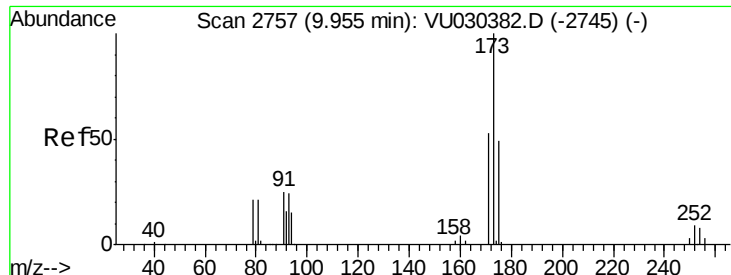
Time-->



Abundance Ion 75.00 (74.70 to 75.70): VU030382.D (-2911) (-)

Ion 77.00 (76.70 to 77.70): VU030382.D (-2911) (-)

Time-->



#61

Bromoform

Concen: 386.419 ug/L

RT: 9.96 min Scan# 2759

Delta R.T. 0.01 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampleId :

C09D7

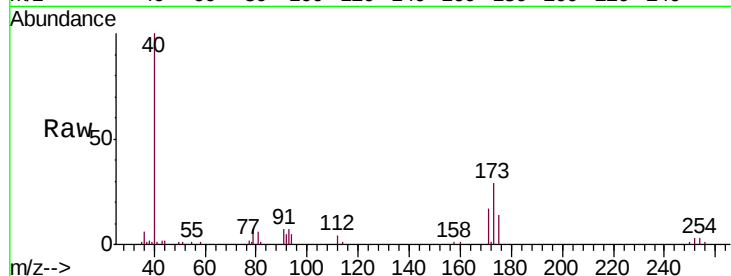
Tgt Ion:173 Resp: 11308

Ion Ratio Lower Upper

173 100

175 47.7 38.5 57.7

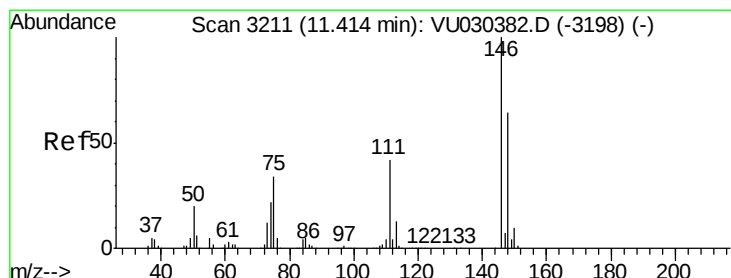
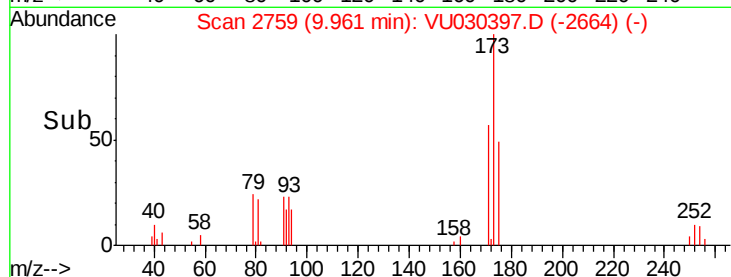
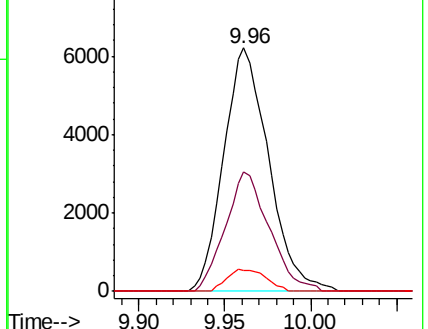
254 7.8 6.8 10.2



Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V



#62

1,3-Dichlorobenzene

Concen: 249567.196 ug/L

RT: 11.43 min Scan# 3217

Delta R.T. 0.02 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

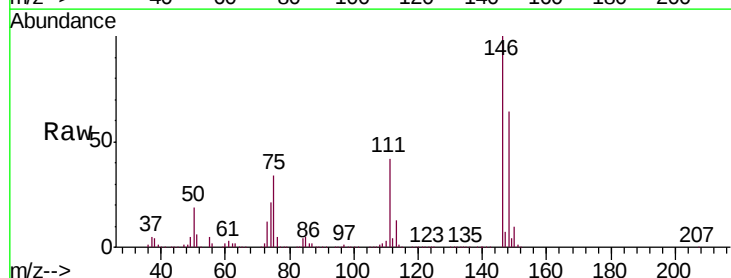
Tgt Ion:146 Resp:17963510

Ion Ratio Lower Upper

146 100

111 42.1 29.2 54.2

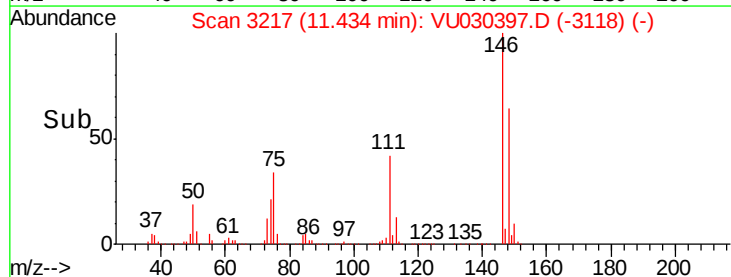
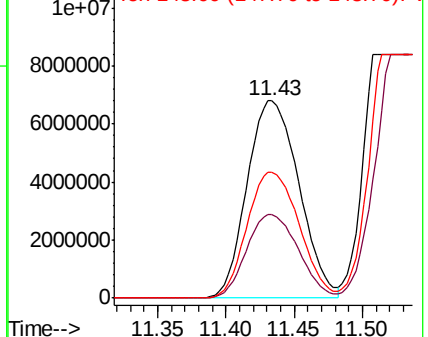
148 64.0 44.4 82.4

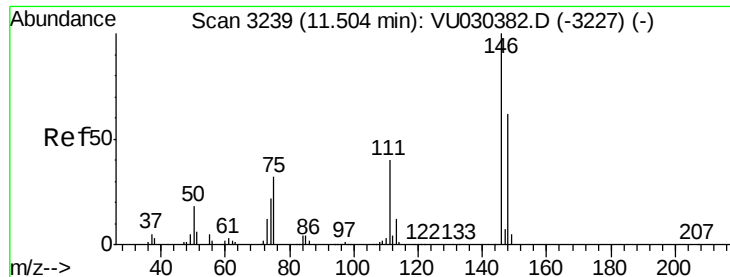


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

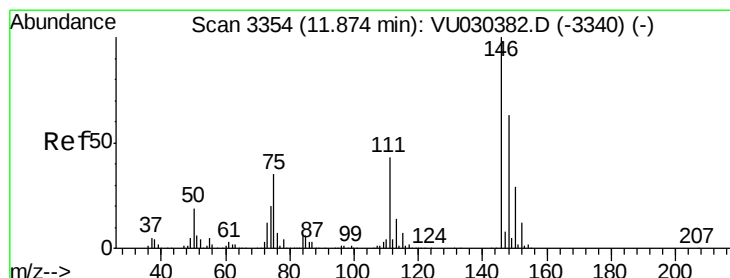
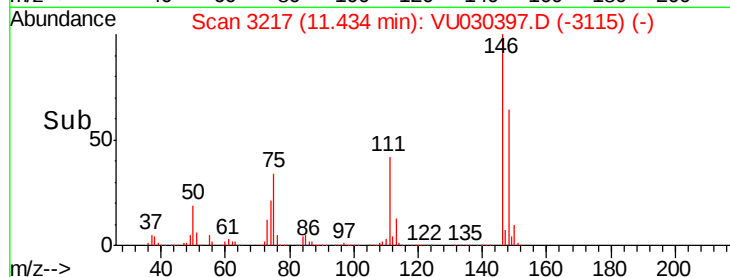
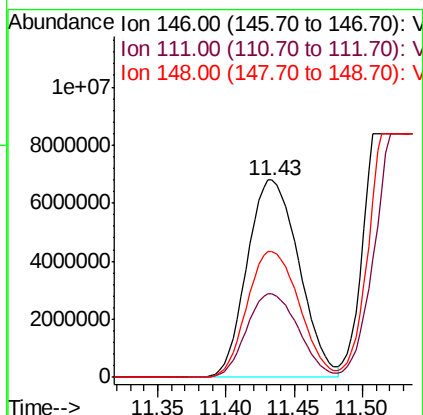
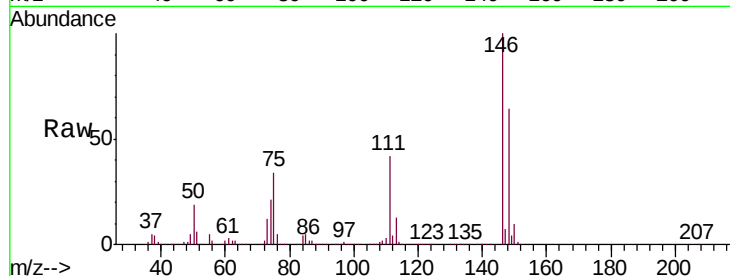




#63
 1,4-Dichlorobenzene
 Concen: 242422.060 ug/L
 RT: 11.43 min Scan# 3217
 Delta R.T. -0.07 min
 Lab File: VU030397.D
 Acq: 25 Mar 2019 04:25

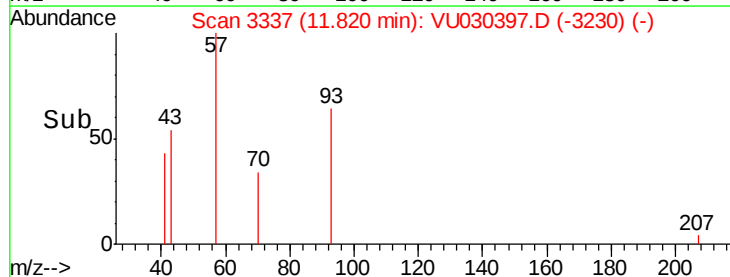
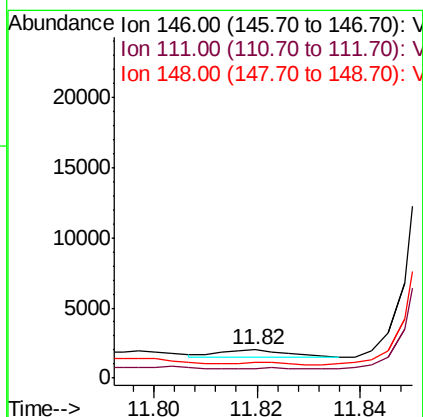
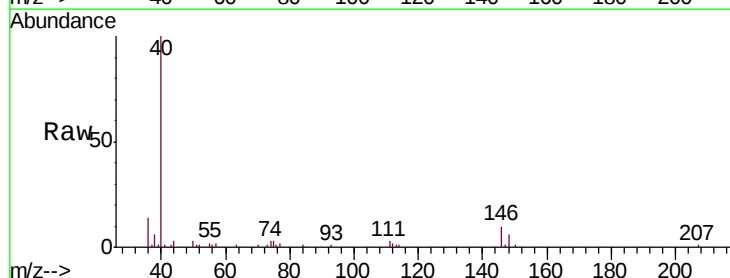
Instrument :
 MSVOA_U
 ClientSampled :
 C09D7

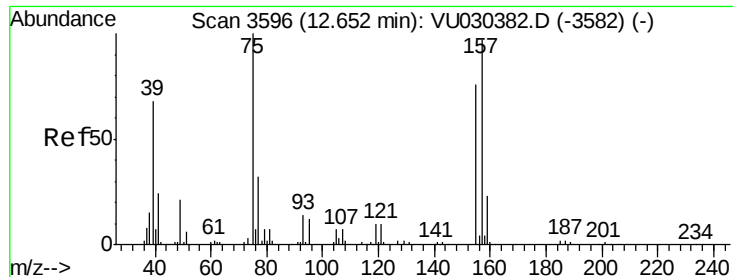
Tgt Ion:146 Resp:17963510
 Ion Ratio Lower Upper
 146 100
 111 42.1 28.7 53.3
 148 64.0 44.3 82.3



#65
 1,2-Dichlorobenzene
 Concen: 6.966 ug/L
 RT: 11.82 min Scan# 3337
 Delta R.T. -0.05 min
 Lab File: VU030397.D
 Acq: 25 Mar 2019 04:25

Tgt Ion:146 Resp: 507
 Ion Ratio Lower Upper
 146 100
 111 33.8 34.9 52.3#
 148 57.0 51.2 76.8





#66

1,2-Dibromo-3-chloropropane

Concen: 5317.273 ug/L

RT: 12.63 min Scan# 3590

Delta R.T. -0.02 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Instrument :

MSVOA_U

ClientSampleId :

C09D7

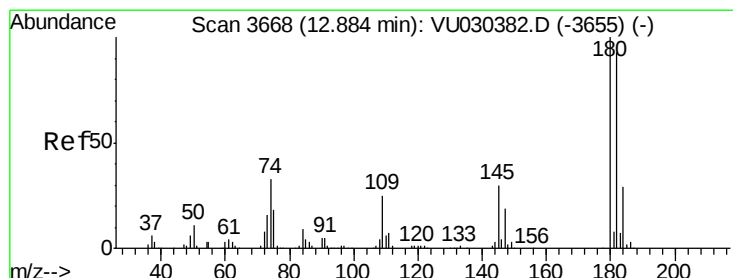
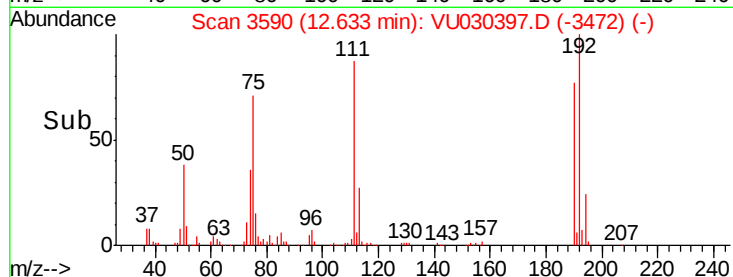
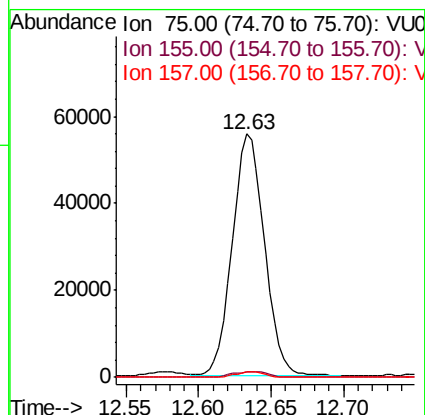
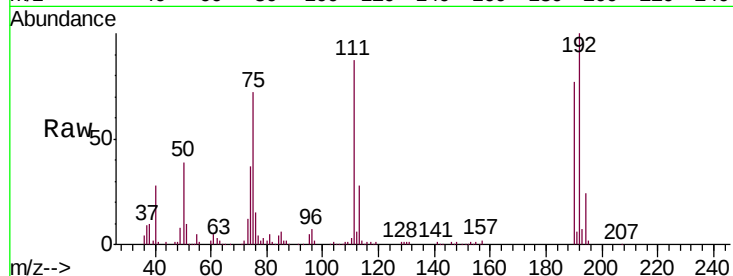
Tgt Ion: 75 Resp: 86171

Ion Ratio Lower Upper

75 100

155 2.1 61.8 92.6#

157 2.2 80.2 120.4#



#67

1,3,5-Trichlorobenzene

Concen: 218.873 ug/L

RT: 12.89 min Scan# 3669

Delta R.T. 0.00 min

Lab File: VU030397.D

Acq: 25 Mar 2019 04:25

Tgt Ion: 180 Resp: 11794

Ion Ratio Lower Upper

180 100

182 90.2 75.9 113.9

184 29.4 24.1 36.1

145 29.3 23.8 35.8

