

Data File : VU038031.D
Acq On : 07 May 2020 11:07
Operator : JC/MD
Sample : VSTD010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTD01003

Quant Time: May 07 11:31:31 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR050720WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Thu May 07 11:12:50 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.28	114	370006	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.44	117	358433	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.83	152	177893	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.61	65	321658	11.49	ug/L	0.00
7) Chloroethane-d5	1.93	69	272457	11.53	ug/L	0.00
11) 1,1-Dichloroethene-d2	2.59	63	529651	10.65	ug/L	0.00
20) 2-Butanone-d5	4.68	46	829552	107.88	ug/L	0.00
24) Chloroform-d	5.10	84	498978	11.16	ug/L	0.00
26) 1,2-Dichloroethane-d4	5.74	65	275273	10.71	ug/L	0.00
32) Benzene-d6	5.76	84	1043365	10.74	ug/L	0.00
36) 1,2-Dichloropropane-d6	6.72	67	336479	10.68	ug/L	0.00
41) Toluene-d8	7.92	98	932929	10.61	ug/L	0.00
43) trans-1,3-Dichloropropene-	8.20	79	138222	9.76	ug/L	0.00
46) 2-Hexanone-d5	8.65	63	657083	90.67	ug/L	0.00
57) 1,1,2,2-Tetrachloroethane-	10.77	84	272846	10.97	ug/L	0.00
64) 1,2-Dichlorobenzene-d4	12.20	152	327812	10.33	ug/L	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.39	85	323882	10.090	ug/L	98
3) Chloromethane	1.53	50	383483	9.663	ug/L	98
5) Vinyl chloride	1.62	62	385016	9.875	ug/L	99
6) Bromomethane	1.87	94	213462	9.536	ug/L	98
8) Chloroethane	1.95	64	230416	10.065	ug/L	100
9) Trichlorofluoromethane	2.16	101	390435	9.333	ug/L	99
10) 1,1,2-Trichloro-1,2,2-trif	2.61	101	240330	9.867	ug/L	99
12) 1,1-Dichloroethene	2.60	96	242898	9.513	ug/L	98
13) Acetone	2.68	43	506399	99.885	ug/L	100
14) Carbon disulfide	2.82	76	861820	9.244	ug/L	99
15) Methyl Acetate	2.99	43	136327	9.671	ug/L	100
16) Methylene chloride	3.08	84	280568	9.747	ug/L	99
17) Methyl tert-butyl Ether	3.40	73	706209	9.552	ug/L	99
18) trans-1,2-Dichloroethene	3.39	96	268192	9.688	ug/L	98
19) 1,1-Dichloroethane	3.91	63	526359	9.830	ug/L	99
21) 2-Butanone	4.76	43	911219	98.923	ug/L	100
22) cis-1,2-Dichloroethene	4.71	96	296743	9.921	ug/L	100
23) Bromochloromethane	5.01	128	127713	10.074	ug/L	95
25) Chloroform	5.12	83	487794	9.590	ug/L	100
27) 1,2-Dichloroethane	5.83	62	346608	10.082	ug/L	99
29) 1,1,1-Trichloroethane	5.35	97	401955	9.242	ug/L	99
30) Cyclohexane	5.42	56	480410	8.925	ug/L	99
31) Carbon tetrachloride	5.56	117	325080	9.380	ug/L	100
33) Benzene	5.81	78	1134140	9.577	ug/L	100
34) Trichloroethene	6.57	95	273959	9.413	ug/L	98
35) Methylcyclohexane	6.79	83	465724	9.131	ug/L	96
37) 1,2-Dichloropropane	6.82	63	301451	9.598	ug/L	99
38) Bromodichloromethane	7.13	83	356081	9.534	ug/L	99
39) cis-1,3-Dichloropropene	7.63	75	456450	9.284	ug/L	99
40) 4-Methyl-2-pentanone	7.82	43	2198621	95.215	ug/L	99

Data File : VU038031.D
Acq On : 07 May 2020 11:07
Operator : JC/MD
Sample : VSTD010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTD01003

Quant Time: May 07 11:31:31 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR050720WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Thu May 07 11:12:50 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) Toluene	7.99	91	1176684	9.486	ug/L	98
44) trans-1,3-Dichloropropene	8.23	75	389416	9.124	ug/L	98
45) 1,1,2-Trichloroethane	8.42	97	213317	10.079	ug/L	97
47) Tetrachloroethene	8.57	164	190155	9.092	ug/L	98
48) 2-Hexanone	8.71	43	1623290	98.187	ug/L	99
49) Dibromochloromethane	8.83	129	230700	9.538	ug/L	96
50) 1,2-Dibromoethane	8.94	107	202121	9.931	ug/L	100
51) Chlorobenzene	9.47	112	730274	9.649	ug/L	100
52) Ethylbenzene	9.59	91	1298554	9.409	ug/L	100
53) m,p-Xylene	9.71	106	502114	9.613	ug/L	97
54) o-Xylene	10.12	106	489208	9.516	ug/L	99
55) Styrene	10.13	104	830924	9.455	ug/L	99
56) Isopropylbenzene	10.50	105	1252000	9.284	ug/L	100
58) 1,1,2,2-Tetrachloroethane	10.80	83	274290	9.955	ug/L	97
59) 1,2,3-Trichloropropane	10.84	75	206460	10.044	ug/L	98
61) Bromoform	10.31	173	122170	8.644	ug/L	99
62) 1,3-Dichlorobenzene	11.76	146	558918	9.380	ug/L	99
63) 1,4-Dichlorobenzene	11.85	146	562774	9.419	ug/L	99
65) 1,2-Dichlorobenzene	12.22	146	538805	9.607	ug/L	99
66) 1,2-Dibromo-3-chloropropan	13.01	75	44005	8.464	ug/L	99
67) 1,3,5-Trichlorobenzene	13.24	180	404823	9.265	ug/L	99
68) 1,2,4-trichlorobenzene	13.86	180	382453	9.536	ug/L	99
69) Naphthalene	14.11	128	828977	10.207	ug/L	99
70) 1,2,3-Trichlorobenzene	14.36	180	347308	9.720	ug/L	98

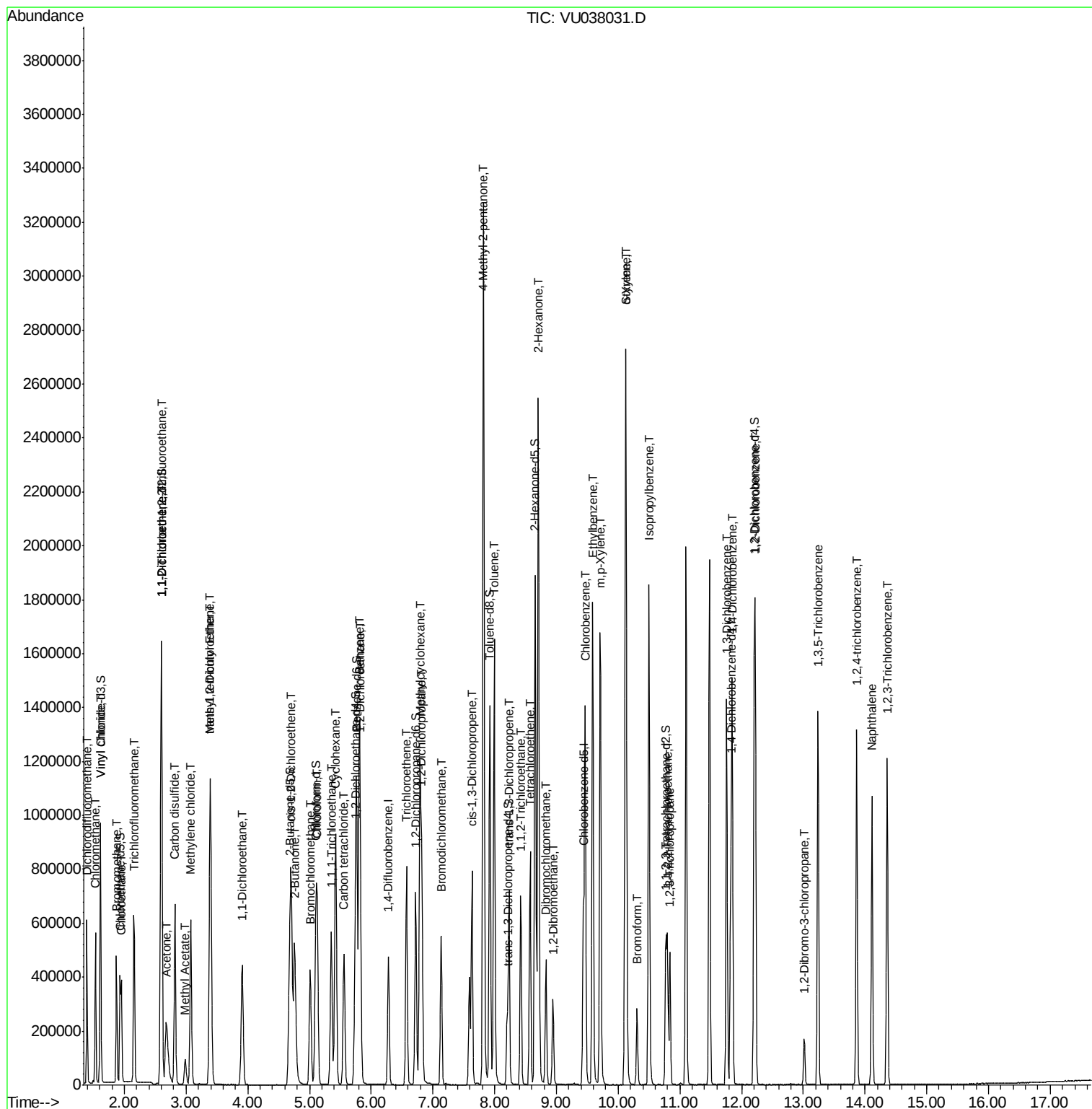
(#) = qualifier out of range (m) = manual integration (+) = signals summed

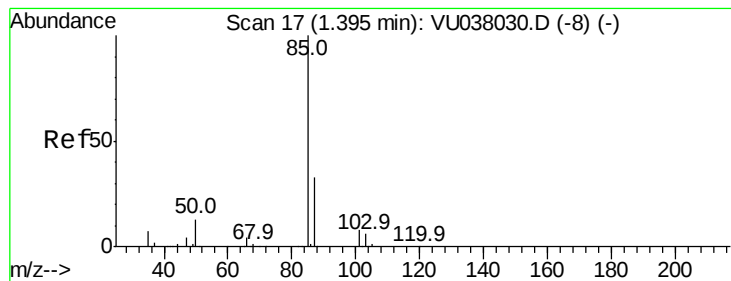
Data File : VU038031.D

```
Acq On       : 07 May 2020   11:07
Operator     : JC/MD
Sample       : VSTD010
Misc        : 25.0mL/MSVOA_U/WATER
ALS Vial     : 1      Sample Multiplier: 1
```

Instrument :
MSVOA_U
ClientSampleId :
VSTD01003

Quant Time: May 07 11:31:31 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR050720WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Thu May 07 11:12:50 2020
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 10.090 ug/L

RT: 1.39 min Scan# 17

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

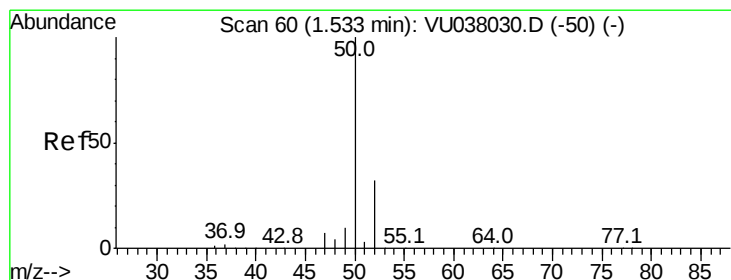
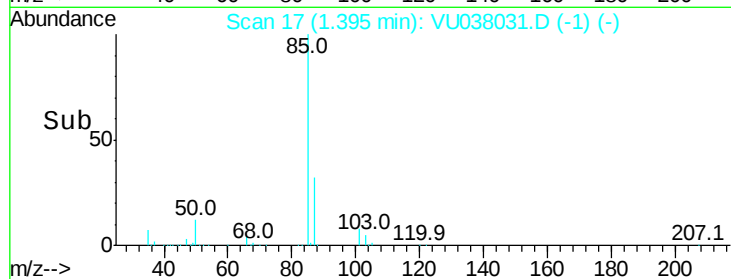
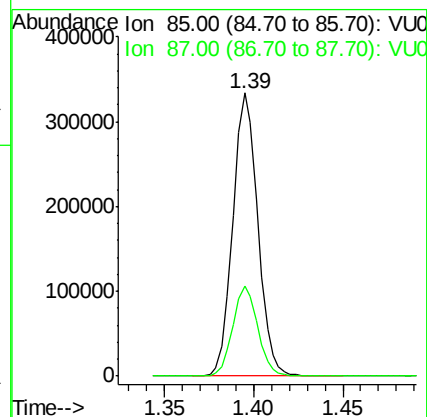
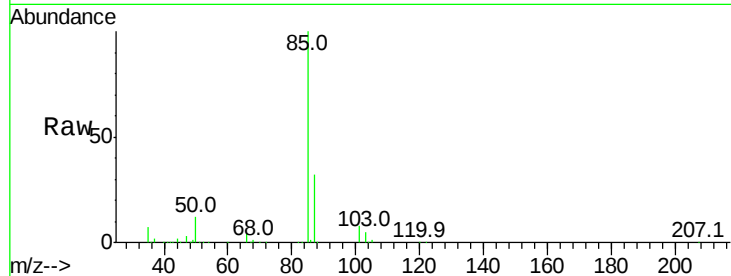
VSTD01003

Tgt Ion: 85 Resp: 323882

Ion Ratio Lower Upper

85 100

87 31.9 26.2 39.4



#3

Chloromethane

Concen: 9.663 ug/L

RT: 1.53 min Scan# 60

Delta R.T. 0.00 min

Lab File: VU038031.D

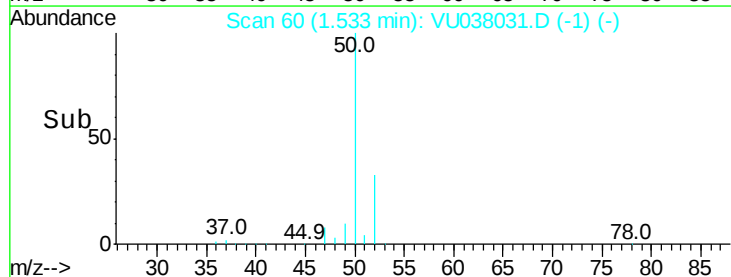
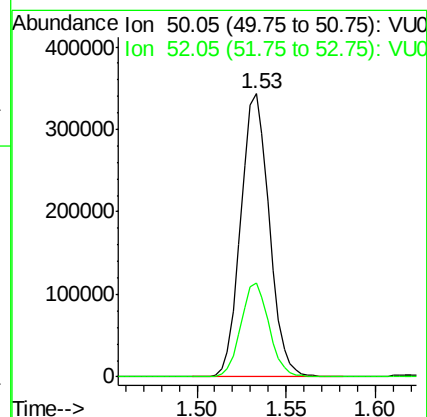
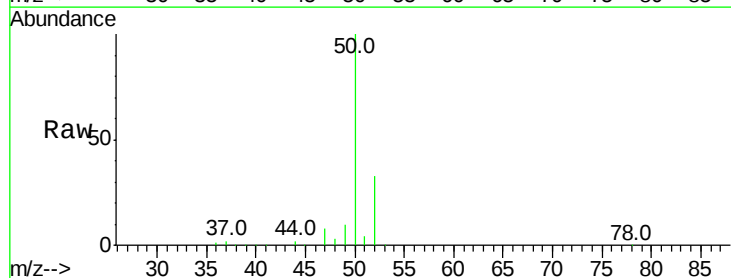
Acq: 07 May 2020 11:07

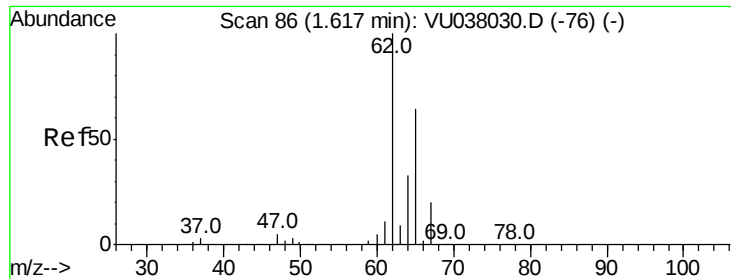
Tgt Ion: 50 Resp: 383483

Ion Ratio Lower Upper

50 100

52 33.3 22.5 41.7





#5

Vinyl chloride

Concen: 9.875 ug/L

RT: 1.62 min Scan# 86

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

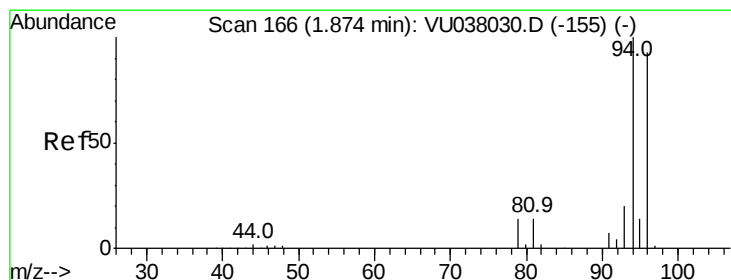
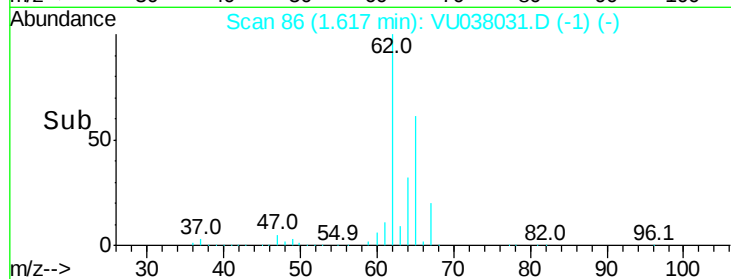
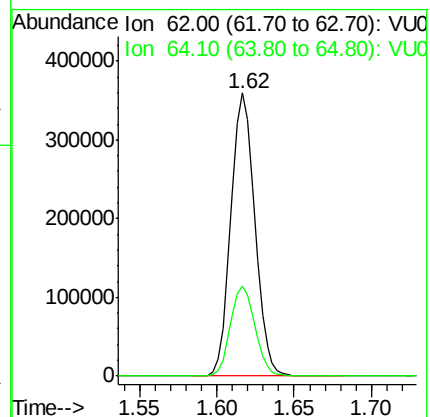
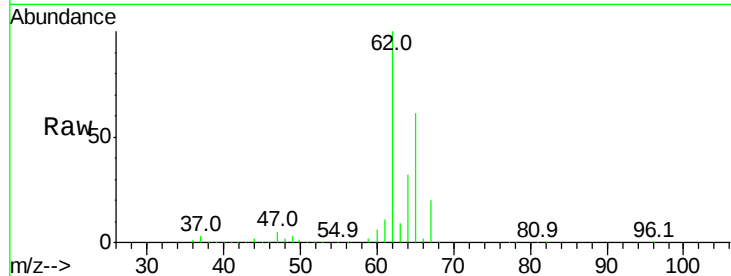
VSTD01003

Tgt Ion: 62 Resp: 385016

Ion Ratio Lower Upper

62 100

64 32.0 22.8 42.4



#6

Bromomethane

Concen: 9.536 ug/L

RT: 1.87 min Scan# 166

Delta R.T. 0.00 min

Lab File: VU038031.D

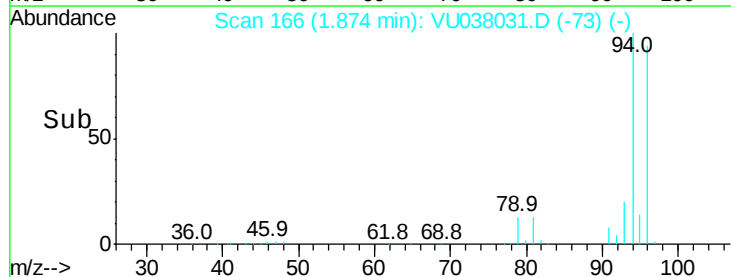
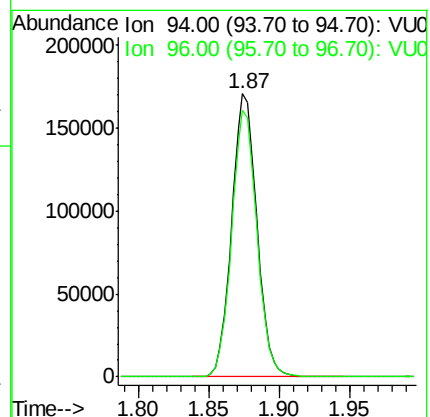
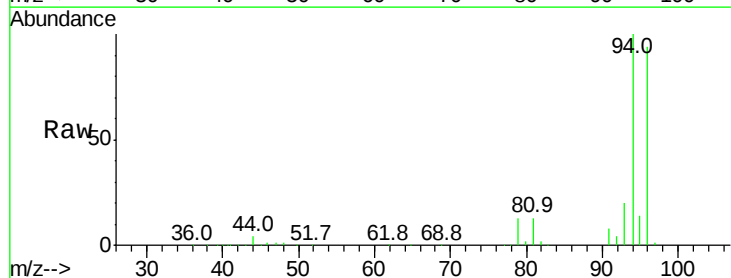
Acq: 07 May 2020 11:07

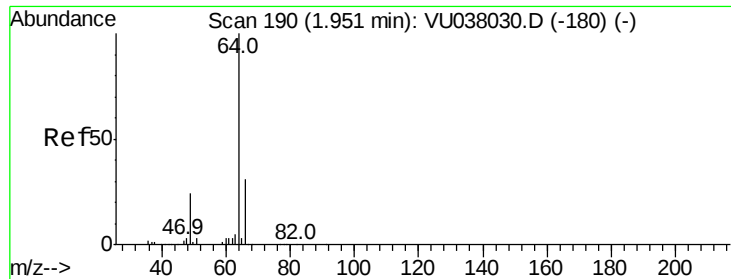
Tgt Ion: 94 Resp: 213462

Ion Ratio Lower Upper

94 100

96 94.5 65.0 120.8





#8

Chloroethane

Concen: 10.065 ug/L

RT: 1.95 min Scan# 190

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

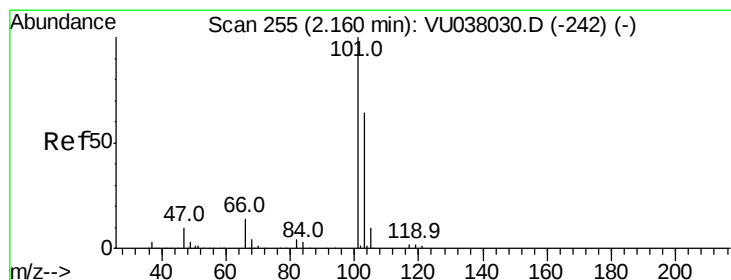
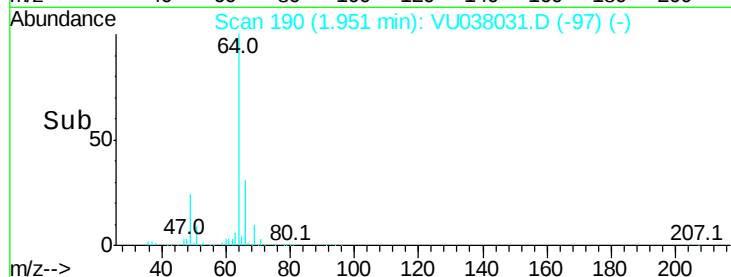
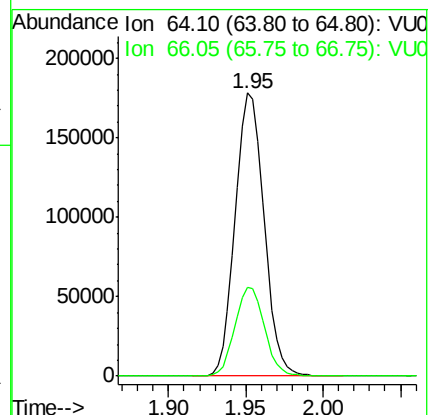
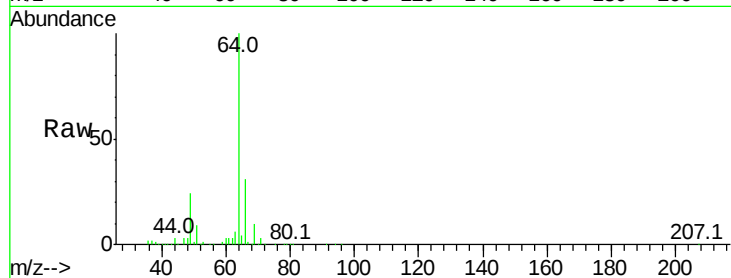
VSTD01003

Tgt Ion: 64 Resp: 230416

Ion Ratio Lower Upper

64 100

66 31.2 21.8 40.4



#9

Trichlorofluoromethane

Concen: 9.333 ug/L

RT: 2.16 min Scan# 254

Delta R.T. -0.00 min

Lab File: VU038031.D

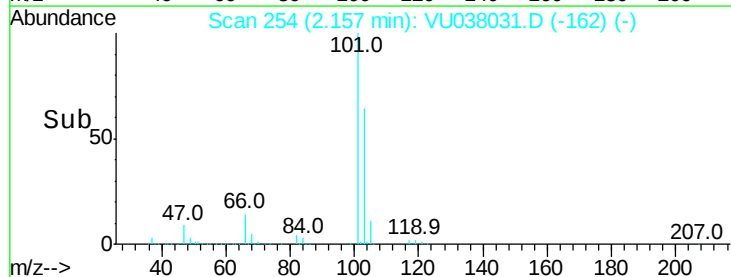
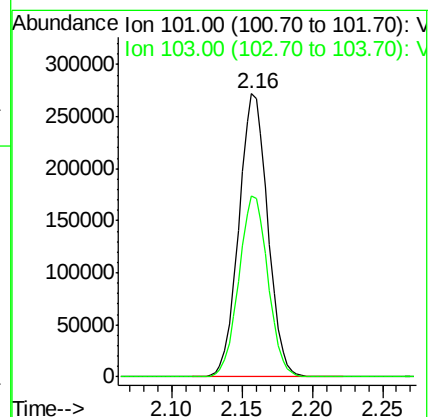
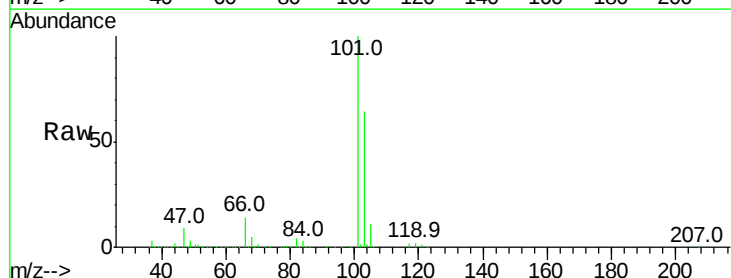
Acq: 07 May 2020 11:07

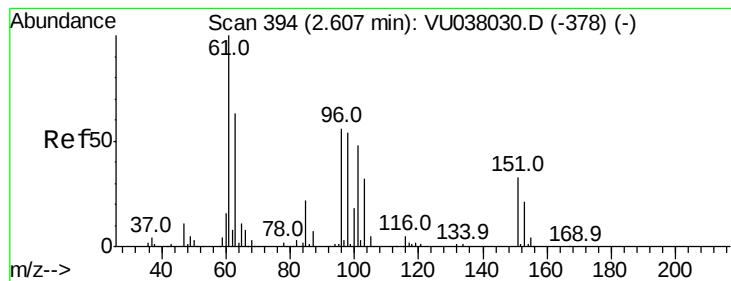
Tgt Ion: 101 Resp: 390435

Ion Ratio Lower Upper

101 100

103 64.3 51.0 76.4





#10

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

Concen: 9.867 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

VSTD01003

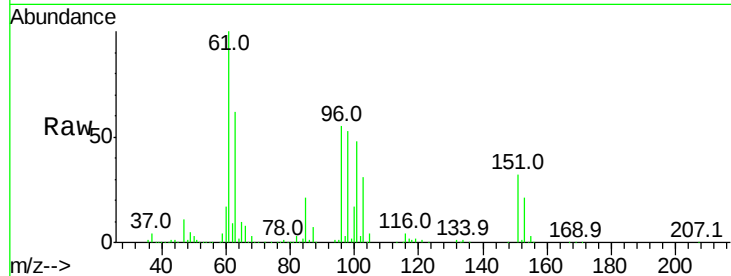
Tgt Ion: 101 Resp: 240330

Ion Ratio Lower Upper

101 100

85 43.3 35.3 52.9

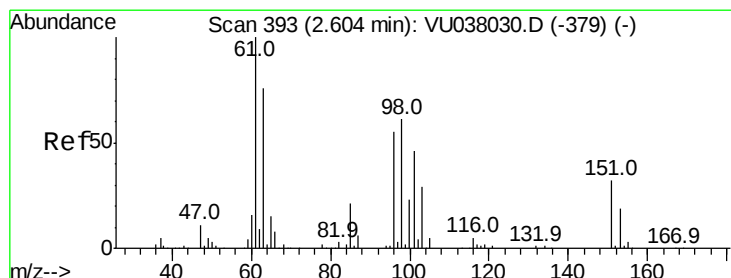
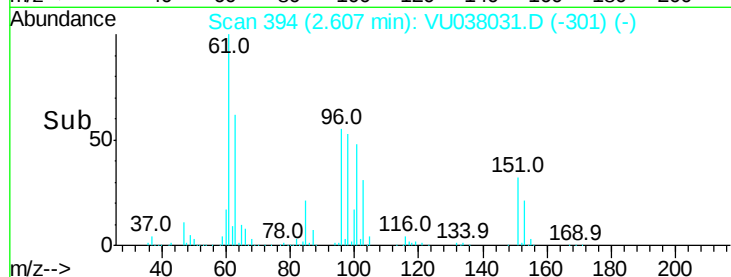
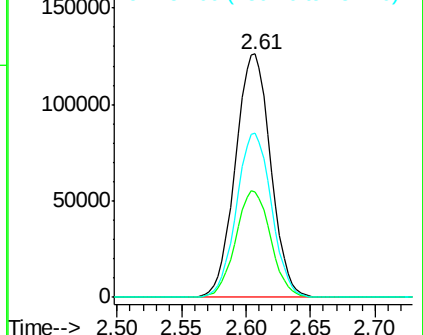
151 67.0 54.2 81.2



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: 9.513 ug/L

RT: 2.60 min Scan# 393

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

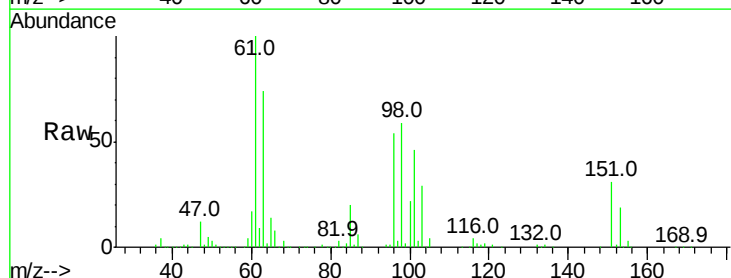
Tgt Ion: 96 Resp: 242898

Ion Ratio Lower Upper

96 100

61 184.8 126.2 234.4

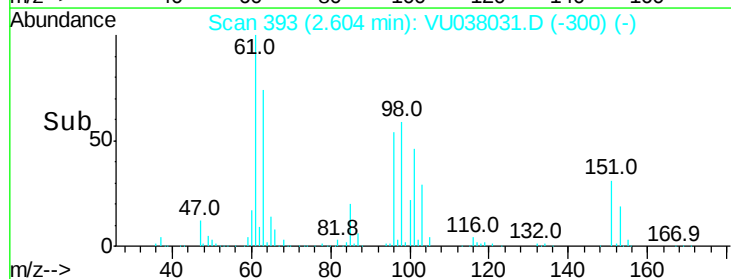
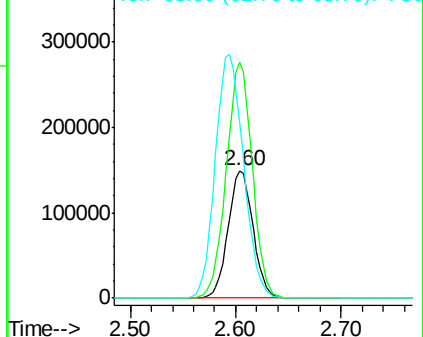
63 137.6 96.9 179.9

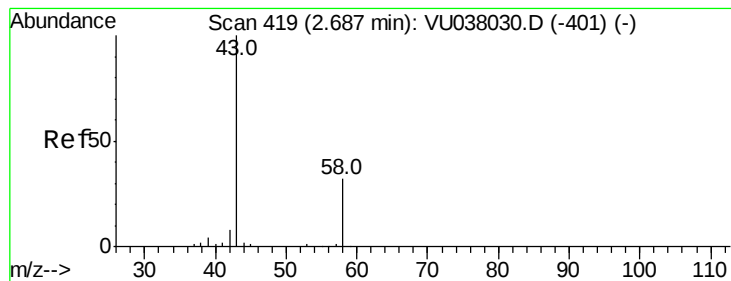


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 99.885 ug/L

RT: 2.68 min Scan# 417

Delta R.T. -0.01 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

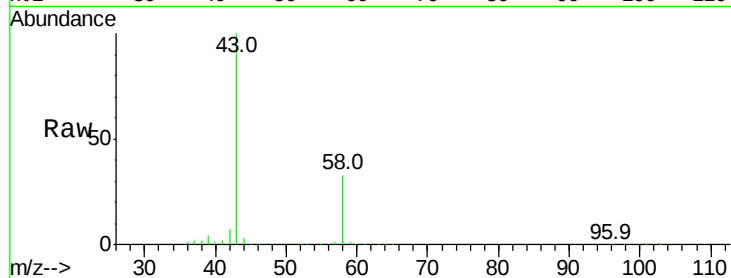
VSTD01003

Tgt Ion: 43 Resp: 506399

Ion Ratio Lower Upper

43 100

58 31.8 0.0 63.6



Abundance Ion 43.05 (42.75 to 43.75): VU038031.D (-326) (-)

Ion 58.05 (57.75 to 58.75): VU038031.D (-326) (-)

2.68

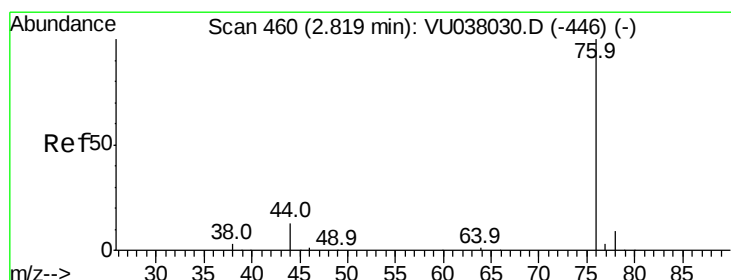
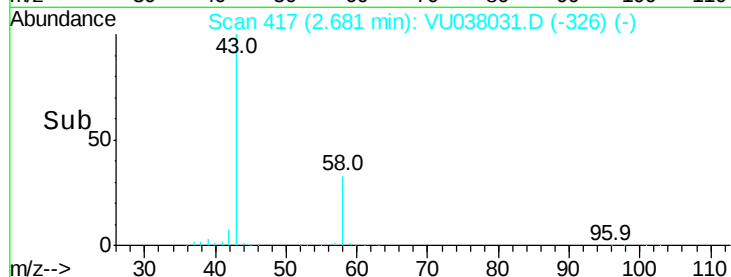
150000

100000

50000

0

Time-->



#14

Carbon disulfide

Concen: 9.244 ug/L

RT: 2.82 min Scan# 460

Delta R.T. 0.00 min

Lab File: VU038031.D

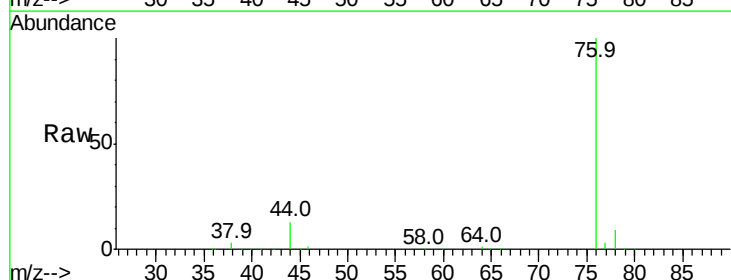
Acq: 07 May 2020 11:07

Tgt Ion: 76 Resp: 861820

Ion Ratio Lower Upper

76 100

78 9.1 7.1 10.7



Abundance Ion 76.05 (75.75 to 76.75): VU038031.D (-367) (-)

Ion 78.00 (77.70 to 78.70): VU038031.D (-367) (-)

2.82

600000

500000

400000

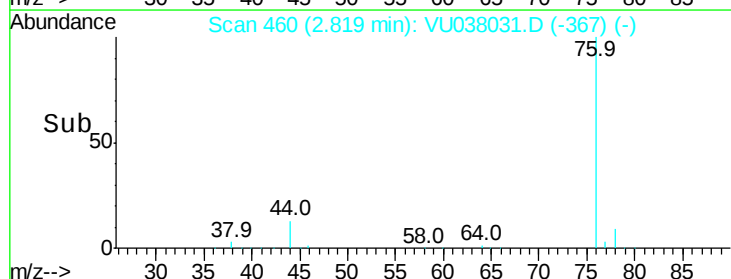
300000

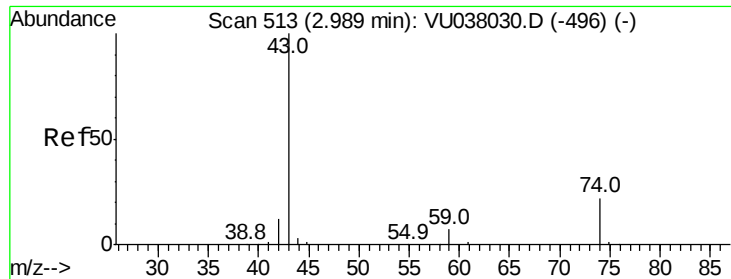
200000

100000

0

Time-->

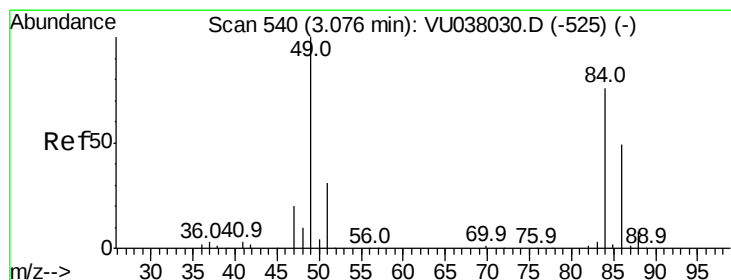
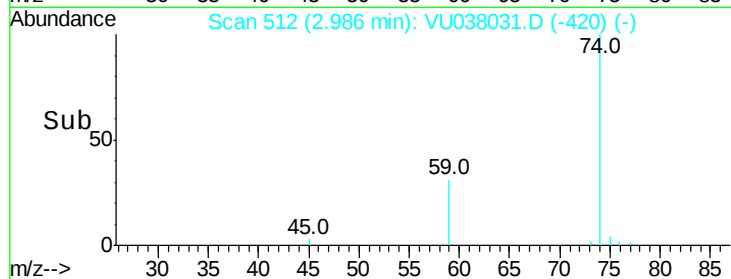
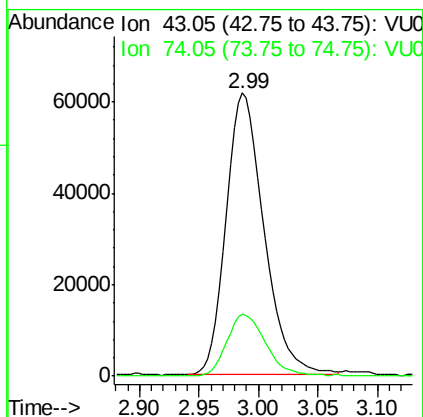
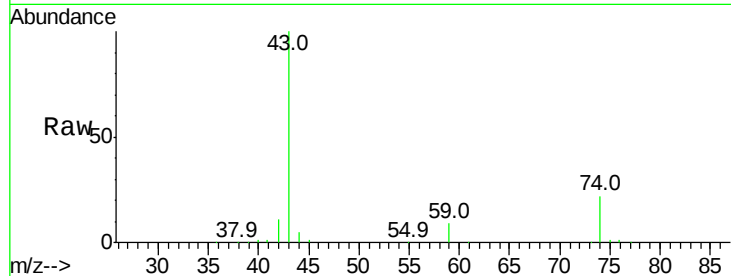




#15
Methyl Acetate
Concen: 9.671 ug/L
RT: 2.99 min Scan# 512
Delta R.T. -0.00 min
Lab File: VU038031.D
Acq: 07 May 2020 11:07

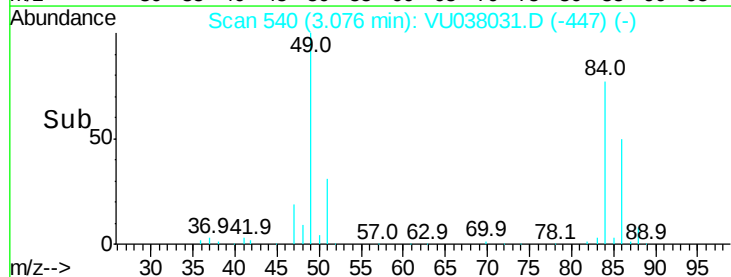
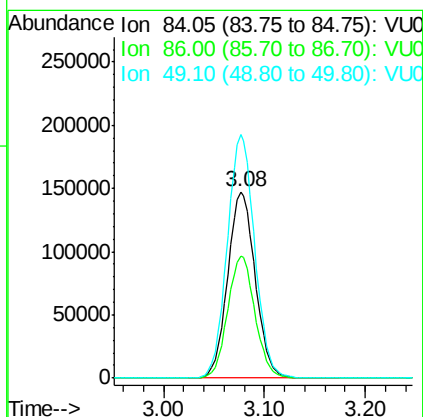
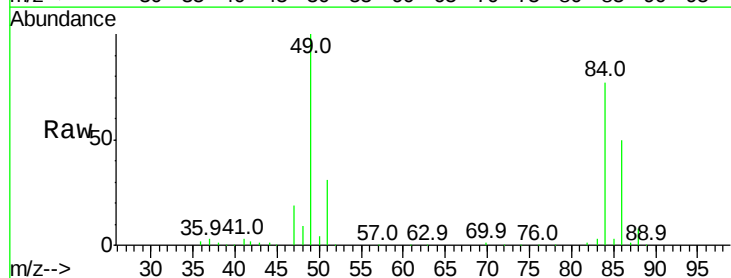
Instrument :
MSVOA_U
ClientSampleId :
VSTD01003

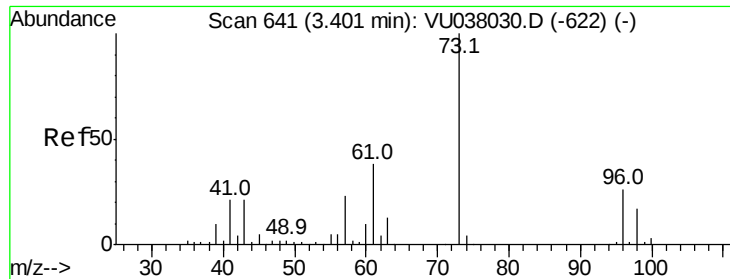
Tgt Ion: 43 Resp: 136327
Ion Ratio Lower Upper
43 100
74 22.6 18.0 27.0



#16
Methylene chloride
Concen: 9.747 ug/L
RT: 3.08 min Scan# 540
Delta R.T. 0.00 min
Lab File: VU038031.D
Acq: 07 May 2020 11:07

Tgt Ion: 84 Resp: 280568
Ion Ratio Lower Upper
84 100
86 65.6 44.9 83.3
49 130.5 92.0 170.9

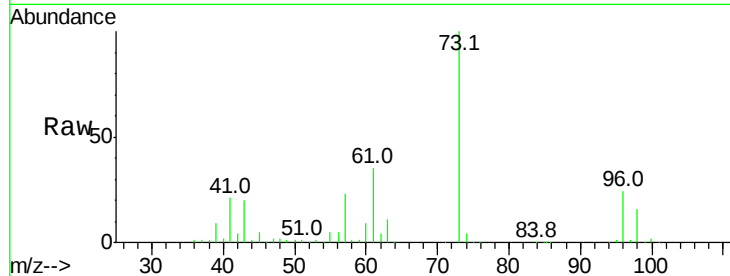




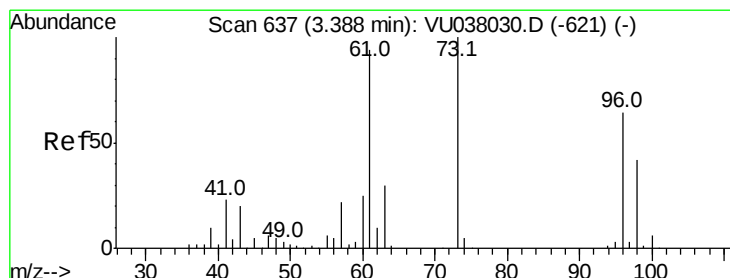
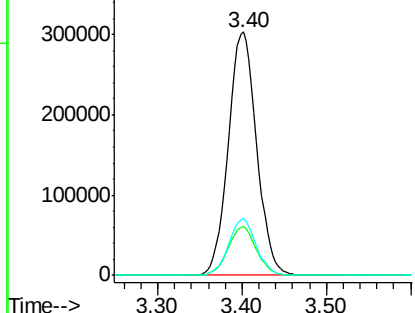
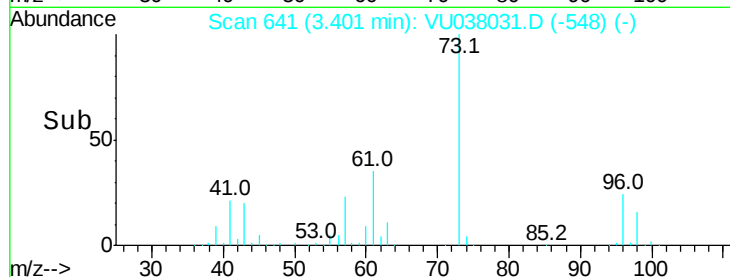
#17
Methyl tert-butyl Ether
Concen: 9.552 ug/L
RT: 3.40 min Scan# 641
Delta R.T. 0.00 min
Lab File: VU038031.D
Acq: 07 May 2020 11:07

Instrument :
MSVOA_U
ClientSampleId :
VSTD01003

Tgt Ion: 73 Resp: 706209
Ion Ratio Lower Upper
73 100
43 19.9 16.9 25.3
57 22.7 18.2 27.2

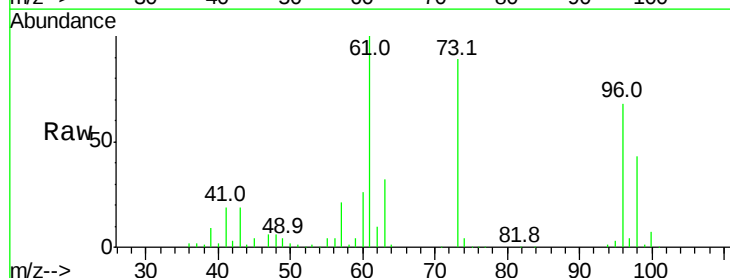


Abundance Ion 73.10 (72.80 to 73.80): VU0
Ion 43.05 (42.75 to 43.75): VU0
Ion 57.10 (56.80 to 57.80): VU0

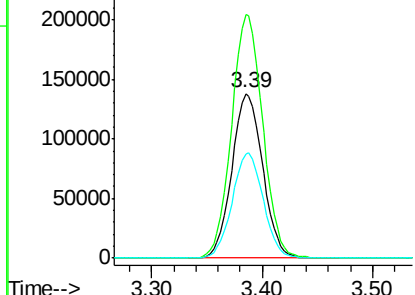
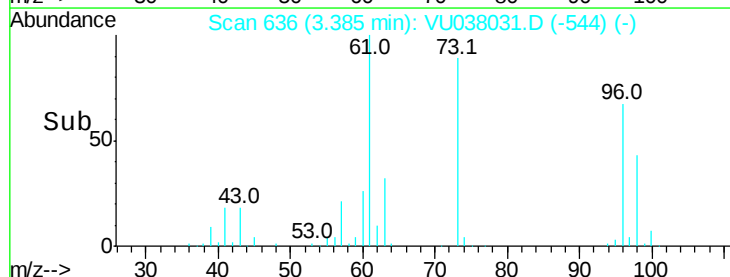


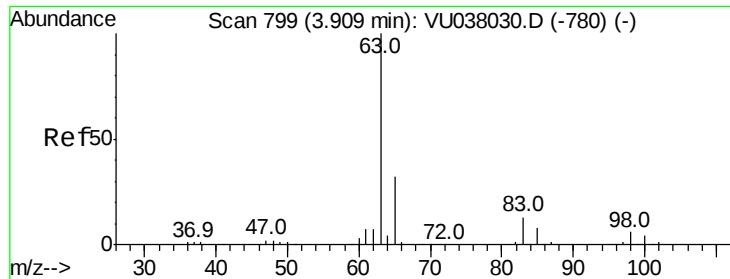
#18
trans-1,2-Dichloroethene
Concen: 9.688 ug/L
RT: 3.39 min Scan# 636
Delta R.T. -0.00 min
Lab File: VU038031.D
Acq: 07 May 2020 11:07

Tgt Ion: 96 Resp: 268192
Ion Ratio Lower Upper
96 100
61 148.1 102.1 189.5
98 63.5 45.6 84.8



Abundance Ion 96.00 (95.70 to 96.70): VU0
Ion 61.05 (60.75 to 61.75): VU0
Ion 97.95 (97.65 to 98.65): VU0

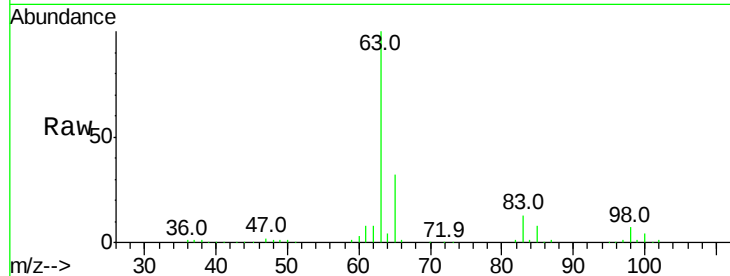




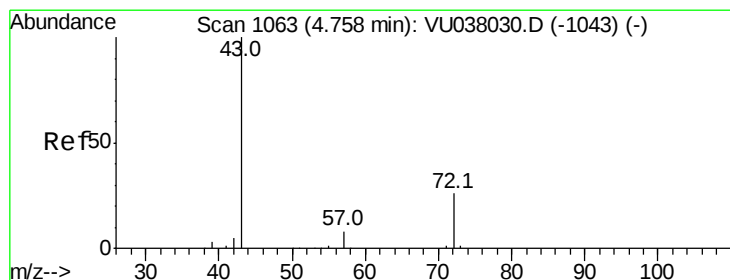
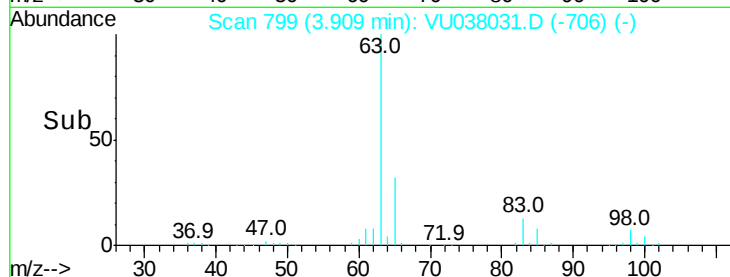
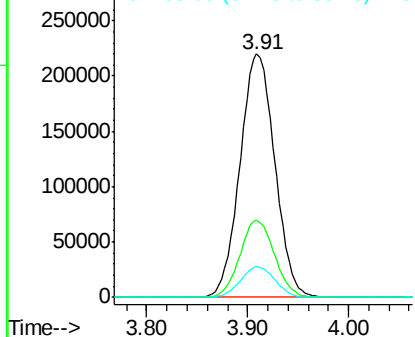
#19
 1,1-Dichloroethane
 Concen: 9.830 ug/L
 RT: 3.91 min Scan# 799
 Delta R.T. 0.00 min
 Lab File: VU038031.D
 Acq: 07 May 2020 11:07

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD01003

Tgt Ion: 63 Resp: 526359
 Ion Ratio Lower Upper
 63 100
 65 31.6 22.5 41.7
 83 12.6 8.9 16.5

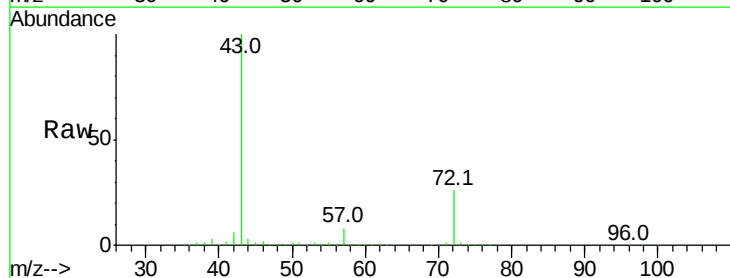


Abundance Ion 63.10 (62.80 to 63.80): VU0
 Ion 65.10 (64.80 to 65.80): VU0
 Ion 83.05 (82.75 to 83.75): VU0

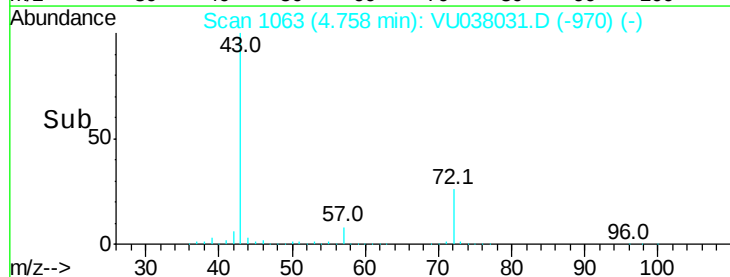
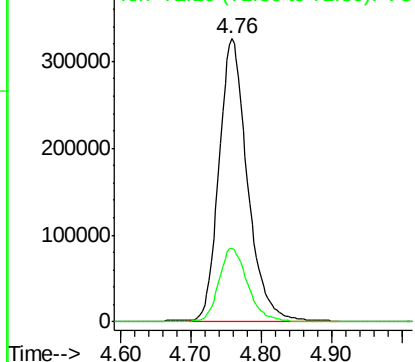


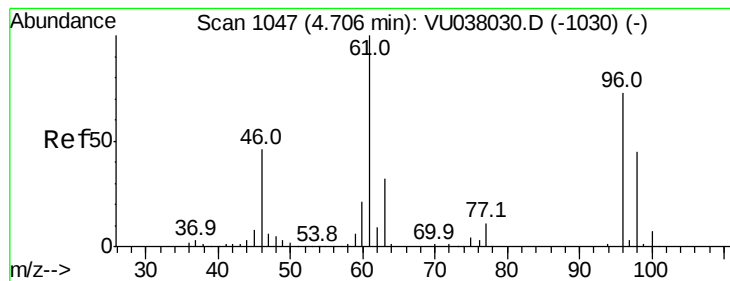
#21
 2-Butanone
 Concen: 98.923 ug/L
 RT: 4.76 min Scan# 1063
 Delta R.T. 0.00 min
 Lab File: VU038031.D
 Acq: 07 May 2020 11:07

Tgt Ion: 43 Resp: 911219
 Ion Ratio Lower Upper
 43 100
 72 26.8 13.5 40.4



Abundance Ion 43.05 (42.75 to 43.75): VU0
 Ion 72.10 (71.80 to 72.80): VU0





#22

cis-1,2-Dichloroethene

Concen: 9.921 ug/L

RT: 4.71 min Scan# 1047

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

VSTD01003

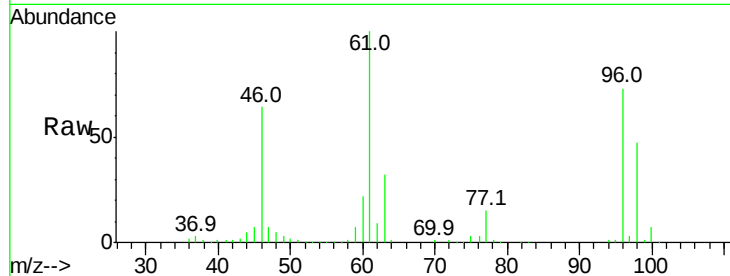
Tgt Ion: 96 Resp: 296743

Ion Ratio Lower Upper

96 100

61 136.6 95.3 176.9

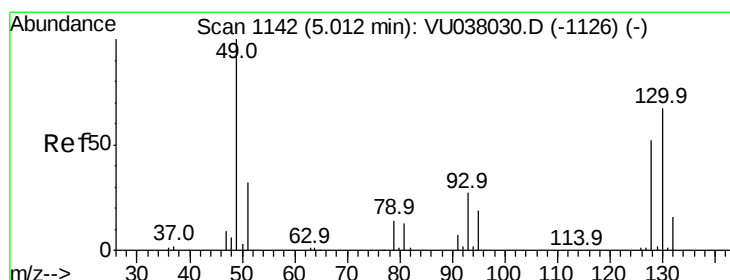
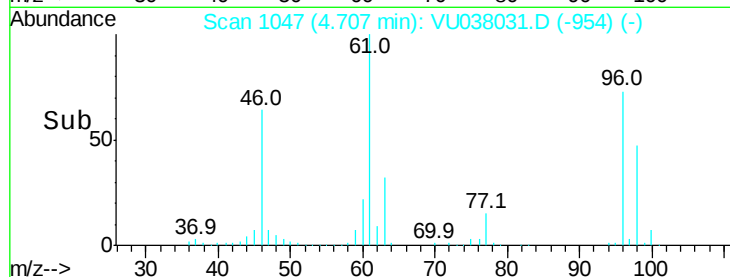
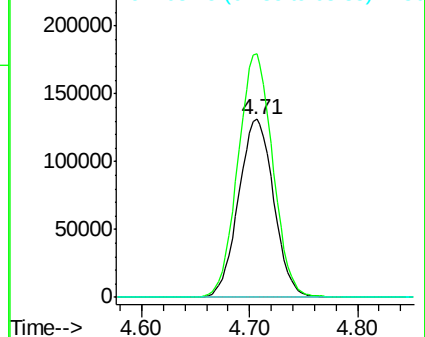
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU038031.D (-1049) (-)

Ion 61.05 (60.75 to 61.75): VU038031.D (-1049) (-)

Ion 68.15 (67.85 to 68.85): VU038031.D (-1049) (-)



#23

Bromochloromethane

Concen: 10.074 ug/L

RT: 5.01 min Scan# 1142

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Tgt Ion: 128 Resp: 127713

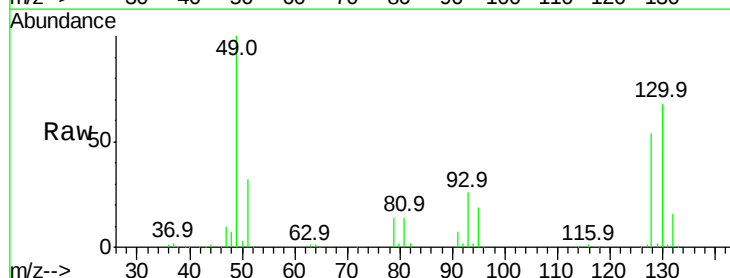
Ion Ratio Lower Upper

128 100

49 184.2 135.6 251.8

130 125.1 91.4 169.8

51 59.6 49.6 74.4

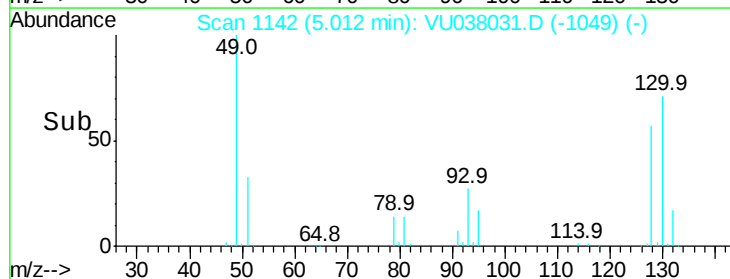
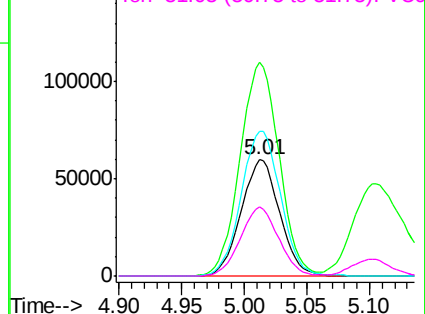


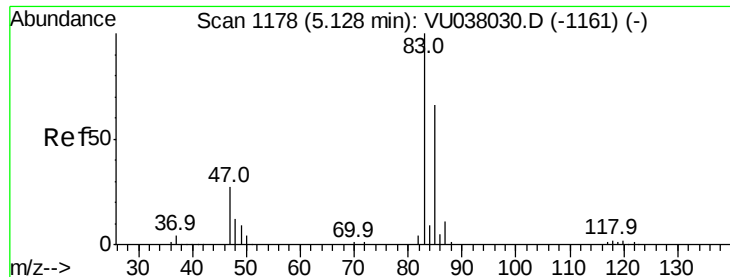
Abundance Ion 127.90 (127.60 to 128.60): VU038031.D (-1049) (-)

Ion 49.10 (48.80 to 49.80): VU038031.D (-1049) (-)

Ion 129.95 (129.65 to 130.65): VU038031.D (-1049) (-)

Ion 51.05 (50.75 to 51.75): VU038031.D (-1049) (-)

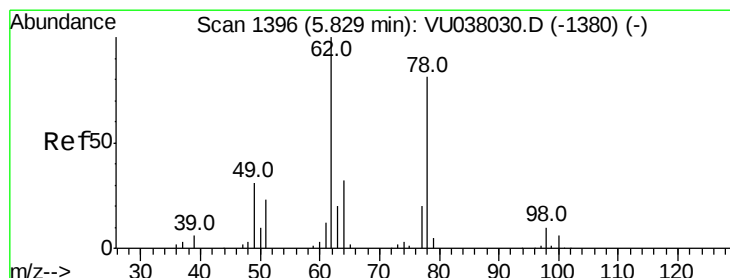
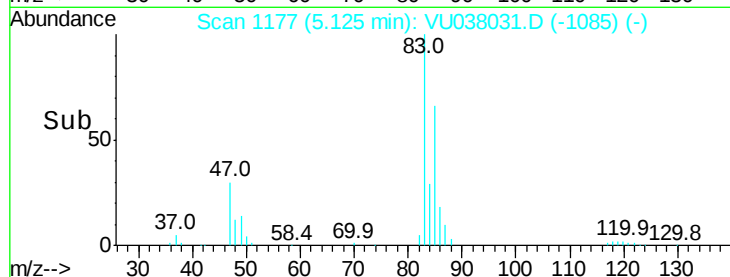
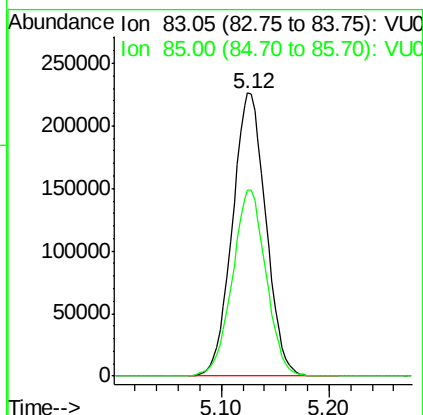
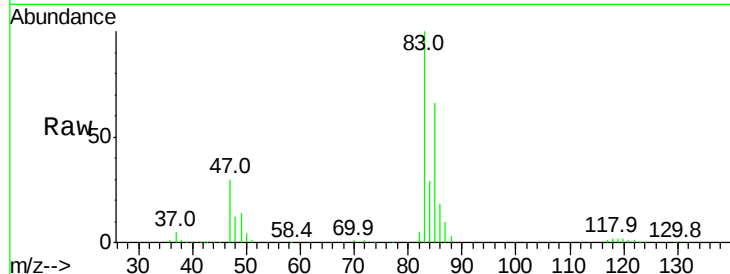




#25
Chloroform
Concen: 9.590 ug/L
RT: 5.12 min Scan# 1177
Delta R.T. -0.00 min
Lab File: VU038031.D
Acq: 07 May 2020 11:07

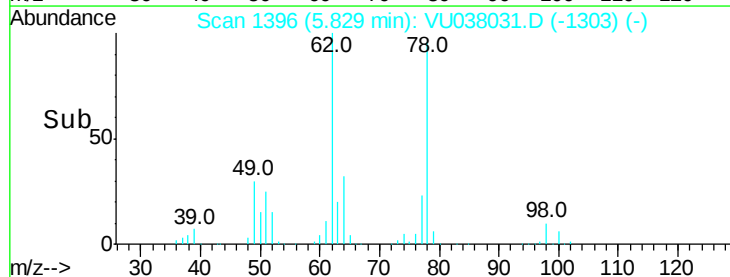
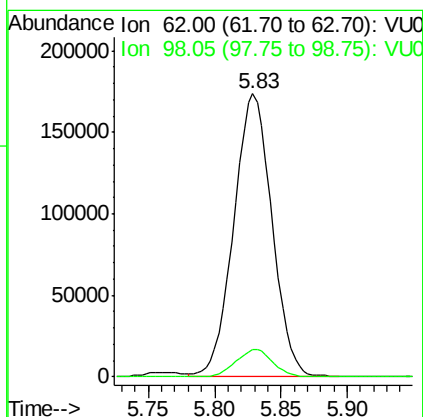
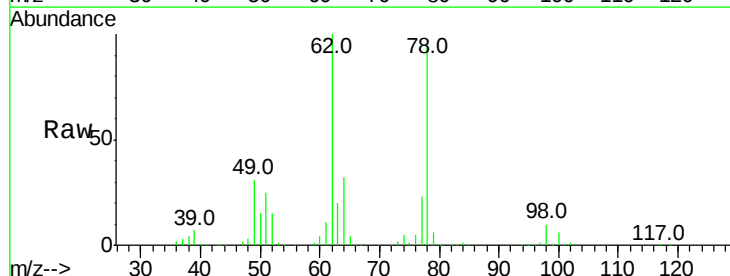
Instrument :
MSVOA_U
ClientSampleId :
VSTD01003

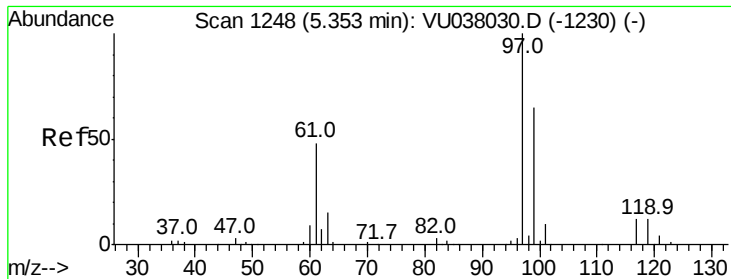
Tgt Ion: 83 Resp: 487794
Ion Ratio Lower Upper
83 100
85 65.7 46.2 85.8



#27
1,2-Dichloroethane
Concen: 10.082 ug/L
RT: 5.83 min Scan# 1396
Delta R.T. 0.00 min
Lab File: VU038031.D
Acq: 07 May 2020 11:07

Tgt Ion: 62 Resp: 346608
Ion Ratio Lower Upper
62 100
98 9.6 7.8 11.8

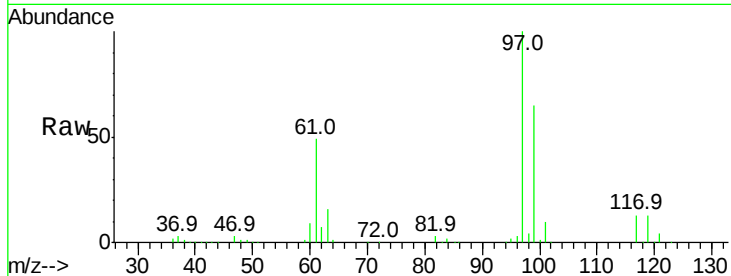




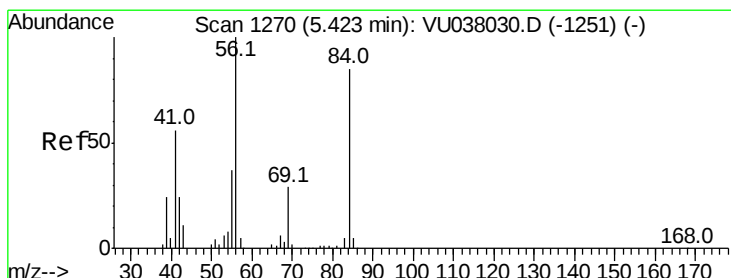
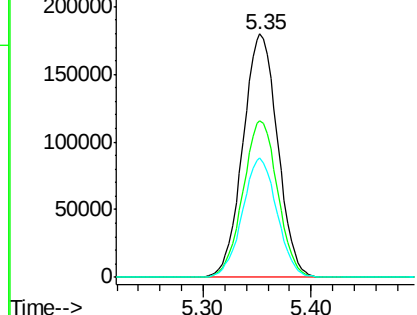
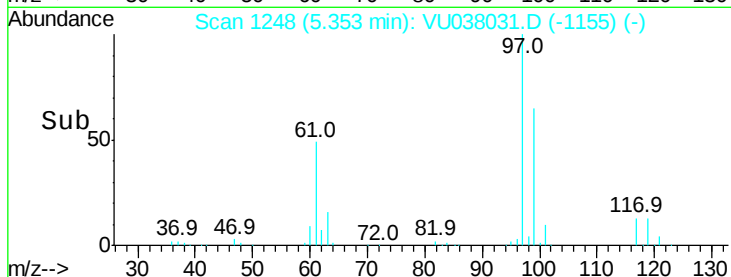
#29
 1,1,1-Trichloroethane
 Concen: 9.242 ug/L
 RT: 5.35 min Scan# 1248
 Delta R.T. 0.00 min
 Lab File: VU038031.D
 Acq: 07 May 2020 11:07

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD01003

Tgt Ion: 97 Resp: 401955
 Ion Ratio Lower Upper
 97 100
 99 64.4 51.0 76.4
 61 48.8 38.2 57.4

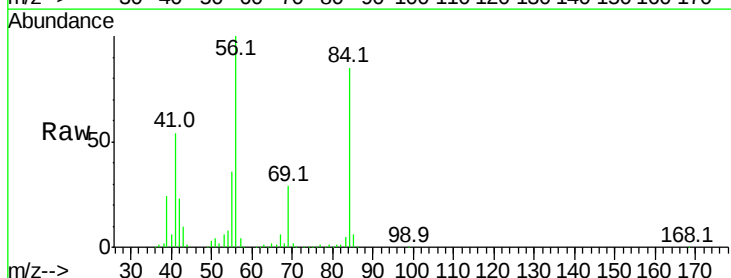


Abundance Ion 96.95 (96.65 to 97.65): VU0
 Ion 99.05 (98.75 to 99.75): VU0
 Ion 61.05 (60.75 to 61.75): VU0

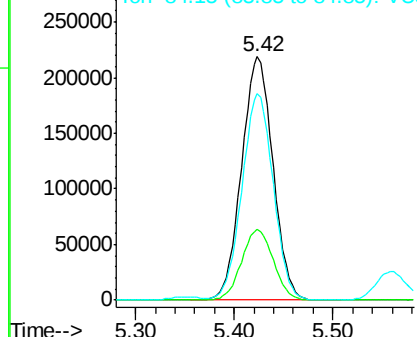
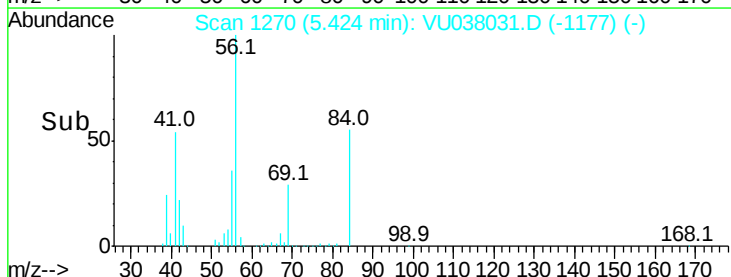


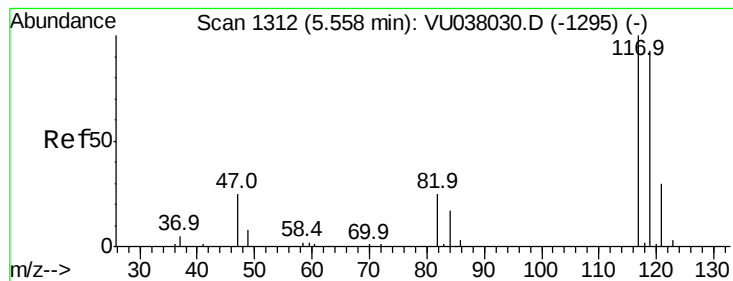
#30
 Cyclohexane
 Concen: 8.925 ug/L
 RT: 5.42 min Scan# 1270
 Delta R.T. 0.00 min
 Lab File: VU038031.D
 Acq: 07 May 2020 11:07

Tgt Ion: 56 Resp: 480410
 Ion Ratio Lower Upper
 56 100
 69 29.4 24.2 36.4
 84 84.8 68.5 102.7



Abundance Ion 56.10 (55.80 to 56.80): VU0
 Ion 69.15 (68.85 to 69.85): VU0
 Ion 84.15 (83.85 to 84.85): VU0





#31

Carbon tetrachloride

Concen: 9.380 ug/L

RT: 5.56 min Scan# 1312

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

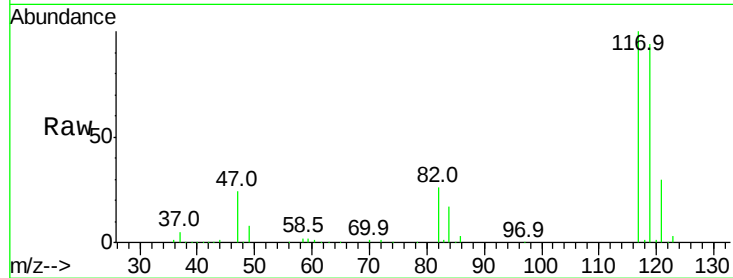
VSTD01003

Tgt Ion:117 Resp: 325080

Ion Ratio Lower Upper

117 100

119 94.1 75.4 113.2



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V

150000

100000

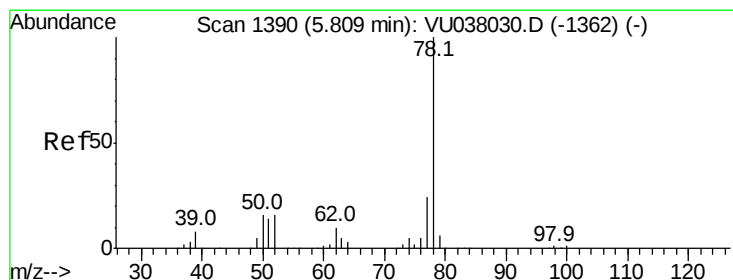
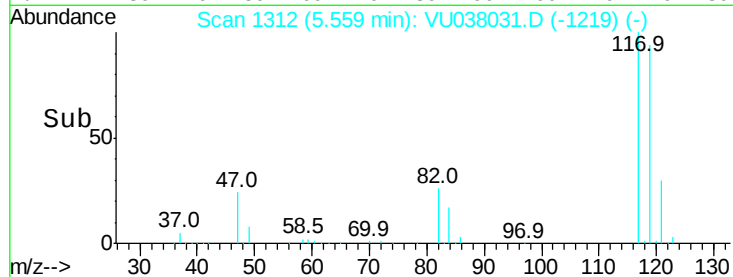
50000

0

5.56

5.50 5.55 5.60

Time-->



#33

Benzene

Concen: 9.577 ug/L

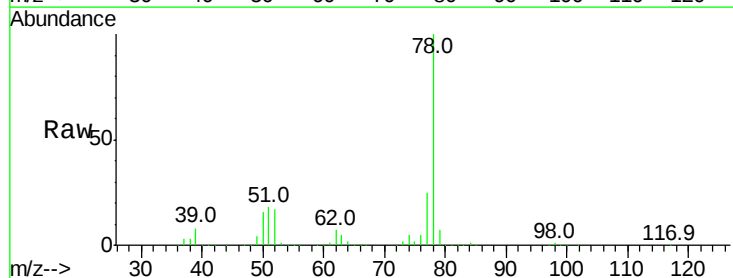
RT: 5.81 min Scan# 1389

Delta R.T. -0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Tgt Ion: 78 Resp: 1134140



Abundance Ion 78.10 (77.80 to 78.80): VU0

600000

500000

400000

300000

200000

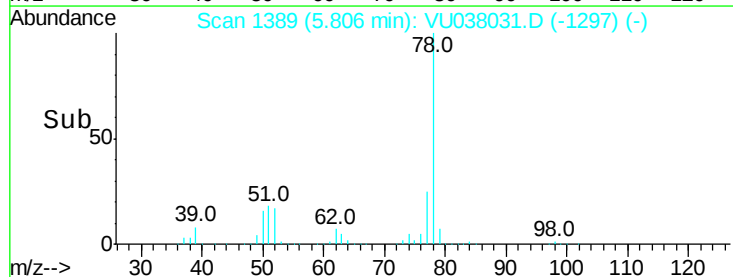
100000

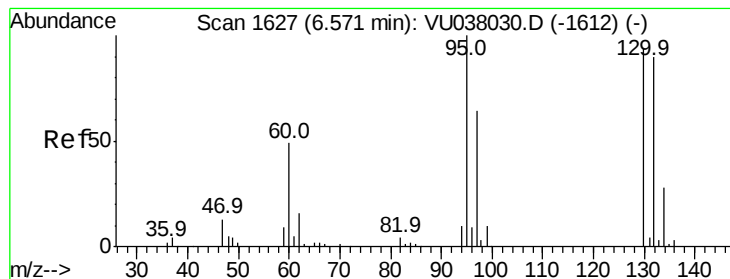
0

5.81

5.70 5.80 5.90

Time-->





#34

Trichloroethene

Concen: 9.413 ug/L

RT: 6.57 min Scan# 1627

Delta R.T. 0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

Instrument :

MSVOA_U

ClientSampleId :

VSTD01003

Tgt Ion: 95 Resp: 273959

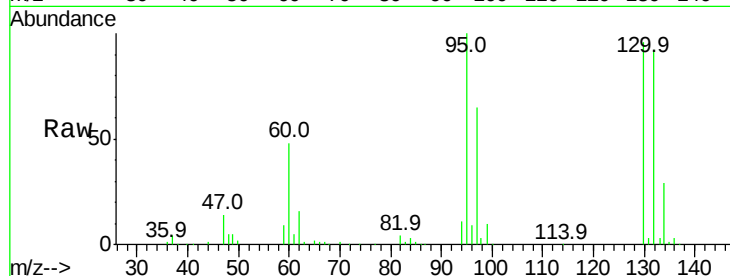
Ion Ratio Lower Upper

95 100

97 65.0 44.9 83.3

132 92.3 63.3 117.5

130 96.5 65.7 122.1

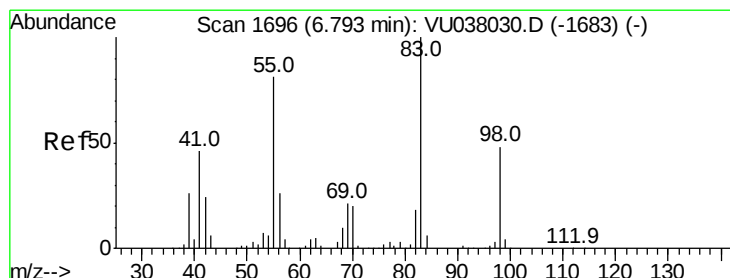
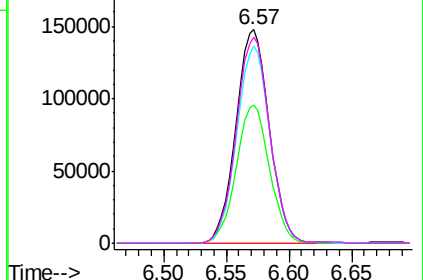
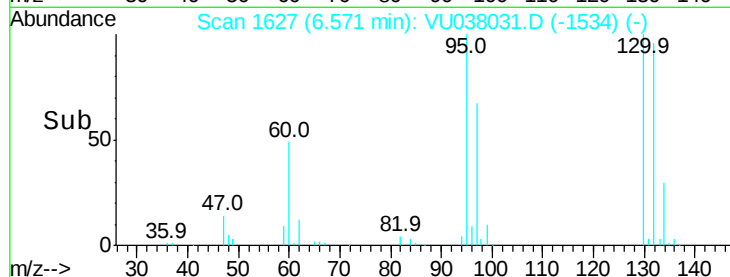


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35

Methylcyclohexane

Concen: 9.131 ug/L

RT: 6.79 min Scan# 1695

Delta R.T. -0.00 min

Lab File: VU038031.D

Acq: 07 May 2020 11:07

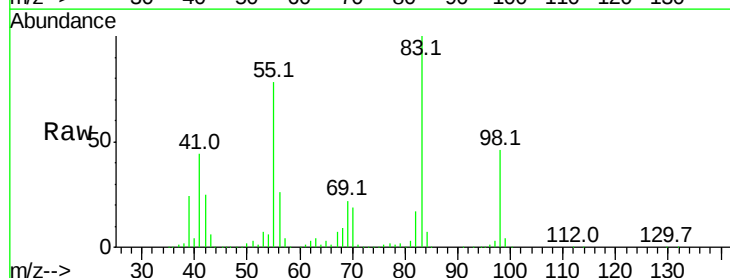
Tgt Ion: 83 Resp: 465724

Ion Ratio Lower Upper

83 100

55 79.2 66.7 100.1

98 47.9 39.4 59.2



Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0

