

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U102020\
 Data File : VU040859.D
 Acq On : 20 Oct 2020 19:53
 Operator : SY/MD
 Sample : L4428-18MSD
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 ETZ50MSD

Quant Time: Oct 21 00:00:35 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR100820WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Tue Oct 20 23:49:45 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	6.26	114	118371	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.42	117	125417	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.81	152	51029	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.60	65	40725	4.15	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	83.00%
7) Chloroethane-d5	1.92	69	36908	4.88	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	97.60%
11) 1,1-Dichloroethene-d2	2.58	63	86642	4.52	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	90.40%
20) 2-Butanone-d5	4.65	46	169532	54.01	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	108.02%
24) Chloroform-d	5.08	84	89993	5.23	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	104.60%
26) 1,2-Dichloroethane-d4	5.72	65	54706	5.22	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	104.40%
32) Benzene-d6	5.74	84	159301	4.71	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	94.20%
36) 1,2-Dichloropropane-d6	6.70	67	57275	5.10	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	102.00%
41) Toluene-d8	7.91	98	129315	4.27	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	85.40%
43) trans-1,3-Dichloropropene-	8.19	79	22099	4.65	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	93.00%
46) 2-Hexanone-d5	8.64	63	123117	50.22	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	100.44%
57) 1,1,2,2-Tetrachloroethane-	10.75	84	50903	5.05	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	101.00%
64) 1,2-Dichlorobenzene-d4	12.19	152	52319	5.53	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	110.60%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chloromethane	1.53	50	3194	0.318	ug/L	93
5) Vinyl chloride	1.61	62	1120	0.106	ug/L #	1
8) Chloroethane	1.94	64	544	0.081	ug/L #	54
10) 1,1,2-Trichloro-1,2,2-trif	2.58	101	601	0.061	ug/L #	20
12) 1,1-Dichloroethene	2.59	96	38934	4.610	ug/L	97
13) Acetone	2.66	43	3995	1.642	ug/L	87
15) Methyl Acetate	2.98	43	531	0.096	ug/L #	56
22) cis-1,2-Dichloroethene	4.69	96	3132	0.329	ug/L	86
25) Chloroform	5.11	83	1520	0.081	ug/L	88
27) 1,2-Dichloroethane	5.80	62	2416	0.183	ug/L #	77
33) Benzene	5.79	78	184723	4.584	ug/L	100
34) Trichloroethene	6.56	95	46565	4.458	ug/L	98
35) Methylcyclohexane	6.70	83	13175	0.890	ug/L #	14
37) 1,2-Dichloropropane	6.70	63	6272	0.559	ug/L #	87
39) cis-1,3-Dichloropropene	7.57	75	1462	0.095	ug/L #	73
42) Toluene	7.98	91	181622	4.424	ug/L	99
44) trans-1,3-Dichloropropene	8.18	75	1197	0.085	ug/L	98

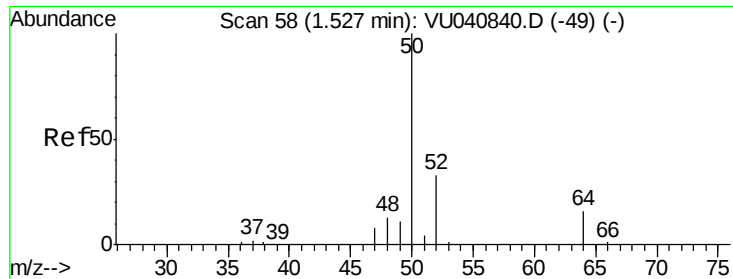
Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU102020\
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Quant Title : TRACE VOA SOM01.0
QLast Update : Tue Oct 20 23:49:45 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Tetrachloroethene	8.56	164	1400	0.188	ug/L #	85
49) Dibromochloromethane	8.55	129	1459	0.151	ug/L #	9
51) Chlorobenzene	9.45	112	128916	4.767	ug/L	98
53) m,p-Xylene	9.69	106	997	0.062	ug/L	90
59) 1,2,3-Trichloropropane	11.81	75	7491	0.908	ug/L	92

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



#3

Chloromethane

Concen: 0.318 ug/L

RT: 1.53 min Scan# 58

Delta R.T. -0.00 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

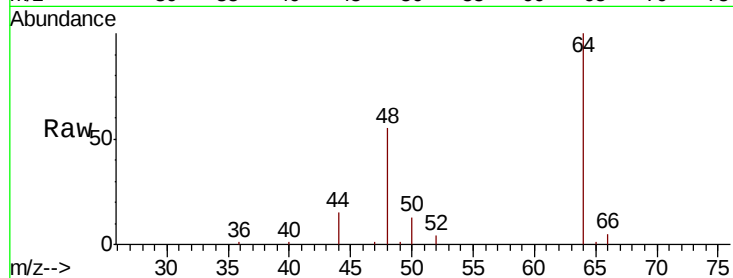
ETZ50MSD

Tot Ion: 50 Resp: 3194

Ion Ratio Lower Upper

50 100

52 27.5 21.9 40.7



Abundance Ion 50.05 (49.75 to 50.75): VU040840.D (-49) (-)

Ion 52.05 (51.75 to 52.75): VU040840.D (-49) (-)

1.53

1.55

1.57

1.59

1.61

1.63

1.65

1.67

1.69

1.71

1.73

1.75

1.77

1.79

1.81

1.83

1.85

1.87

1.89

1.91

1.93

1.95

1.97

1.99

2.01

2.03

2.05

2.07

2.09

2.11

2.13

2.15

2.17

2.19

2.21

2.23

2.25

2.27

2.29

2.31

2.33

2.35

2.37

2.39

2.41

2.43

2.45

2.47

2.49

2.51

2.53

2.55

2.57

2.59

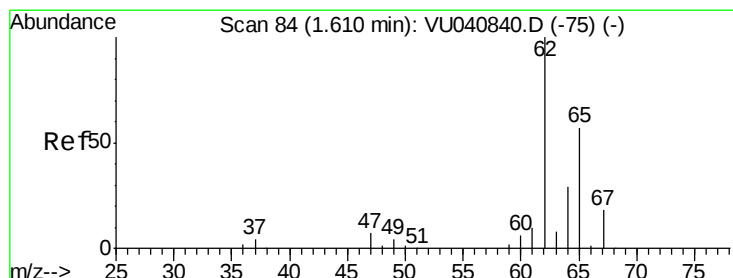
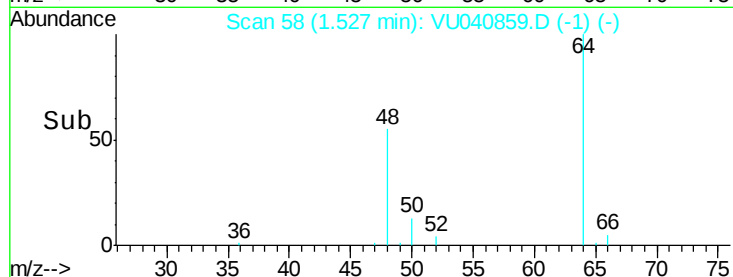
2.61

2.63

2.65

2.67

2.69



#5

Vinyl chloride

Concen: 0.106 ug/L

RT: 1.61 min Scan# 84

Delta R.T. -0.00 min

Lab File: VU040859.D

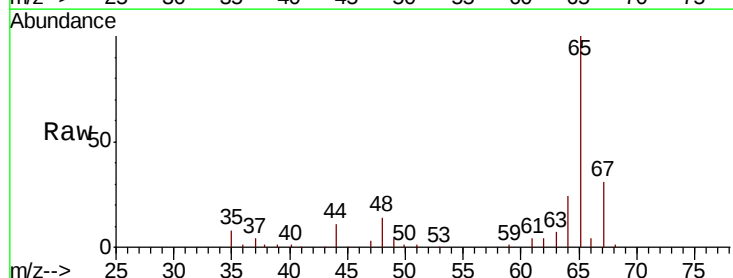
Acq: 20 Oct 2020 19:53

Tgt Ion: 62 Resp: 1120

Ion Ratio Lower Upper

62 100

64 651.3 23.7 44.1#



Abundance Ion 62.00 (61.70 to 62.70): VU040840.D (-75) (-)

Ion 64.10 (63.80 to 64.80): VU040840.D (-75) (-)

1.61

1.63

1.65

1.67

1.69

1.71

1.73

1.75

1.77

1.79

1.81

1.83

1.85

1.87

1.89

1.91

1.93

1.95

1.97

1.99

2.01

2.03

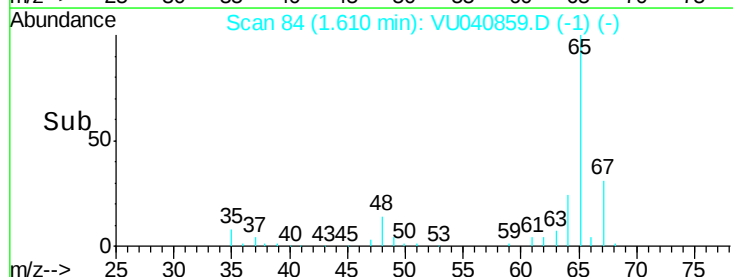
2.05

2.07

2.09

2.11

2.13



1.61

1.63

1.65

1.67

1.69

1.71

1.73

1.75

1.77

1.79

1.81

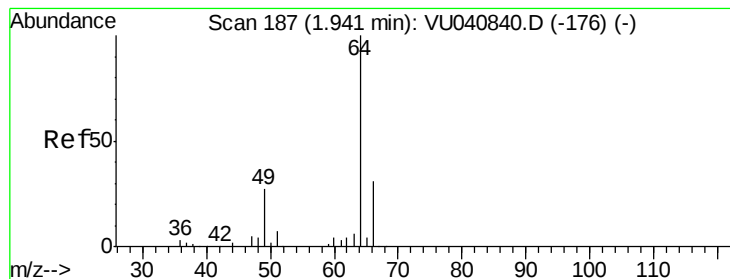
1.83

1.85

1.87

1.89

1.91



#8

Chloroethane

Concen: 0.081 ug/L

RT: 1.94 min Scan# 187

Delta R.T. -0.00 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

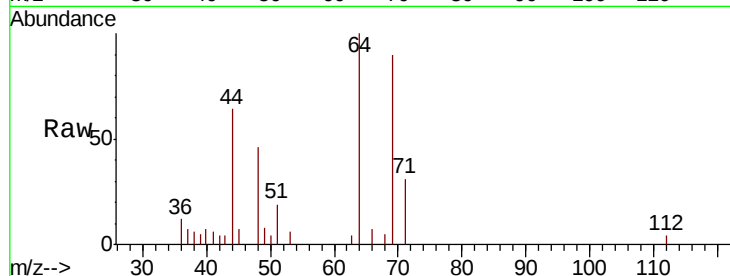
ETZ50MSD

Tot Ion: 64 Resp: 544

Ion Ratio Lower Upper

64 100

66 7.4 23.3 43.3#



Abundance Ion 64.10 (63.80 to 64.80): VU040840.D (-176) (-)

Ion 66.05 (65.75 to 66.75): VU040840.D (-176) (-)

1.94

2500

2000

1500

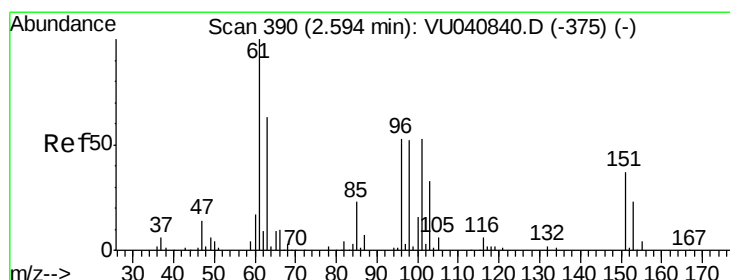
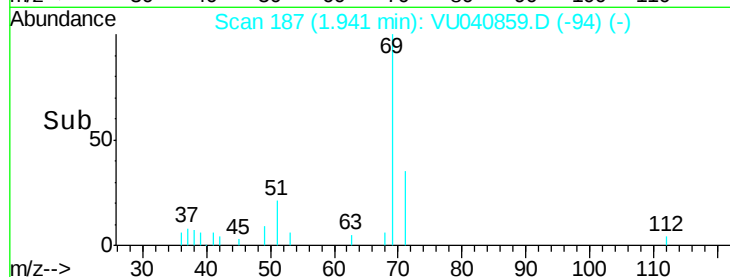
1000

500

0

1.92 1.94 1.96

Time-->



#10

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

Concen: 0.061 ug/L

RT: 2.58 min Scan# 387

Delta R.T. -0.01 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

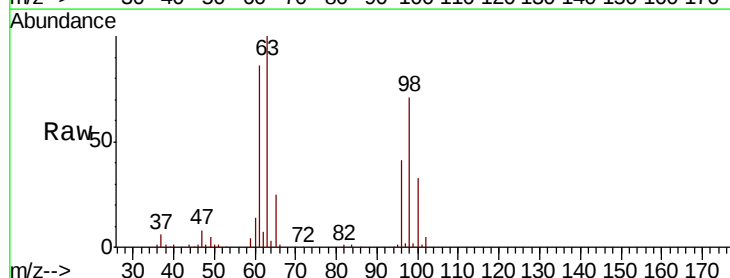
Tgt Ion:101 Resp: 601

Ion Ratio Lower Upper

101 100

85 0.0 36.7 55.1#

151 0.0 58.0 87.0#



Abundance Ion 101.00 (100.70 to 101.70): VU040840.D (-375) (-)

Ion 85.00 (84.70 to 85.70): VU040840.D (-375) (-)

Ion 151.00 (150.70 to 151.70): VU040840.D (-375) (-)

2.58

500

400

300

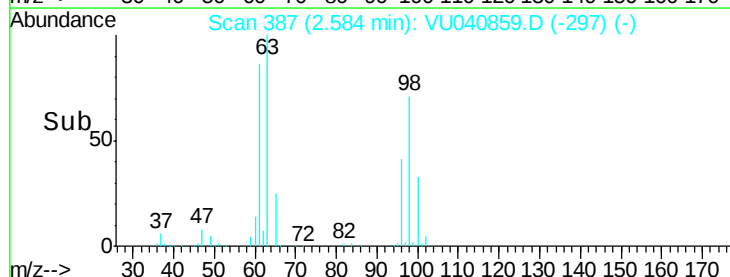
200

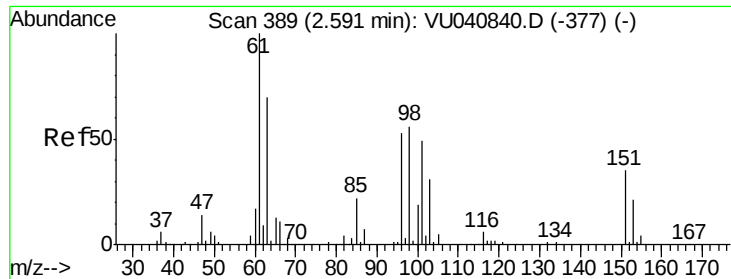
100

0

2.54 2.56 2.58 2.60 2.62

Time-->

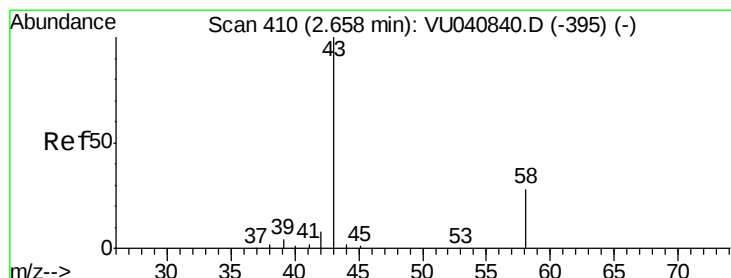
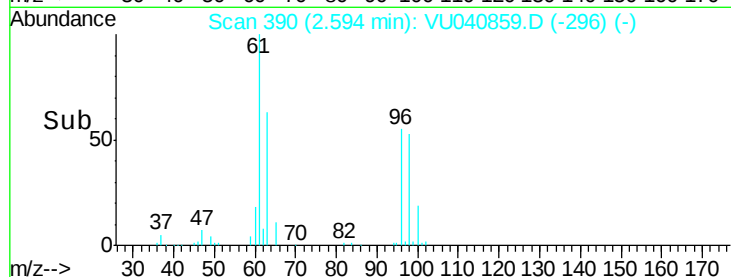
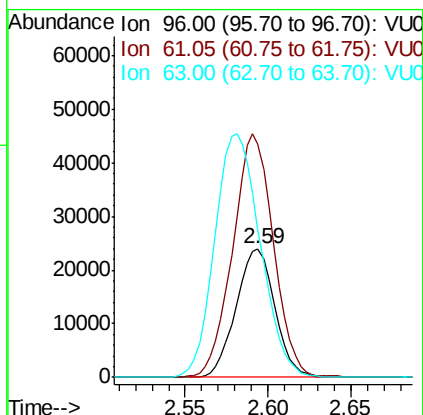
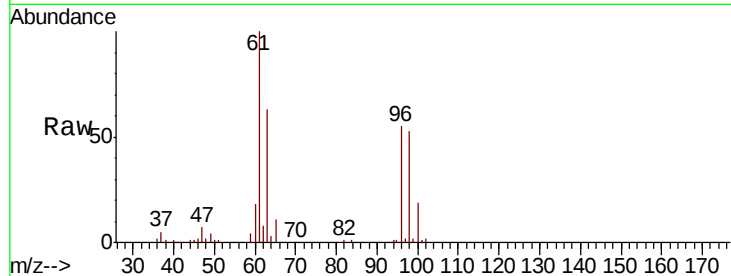




#12
 1,1-Dichloroethene
 Concen: 4.610 ug/L
 RT: 2.59 min Scan# 390
 Delta R.T. 0.00 min
 Lab File: VU040859.D
 Acq: 20 Oct 2020 19:53

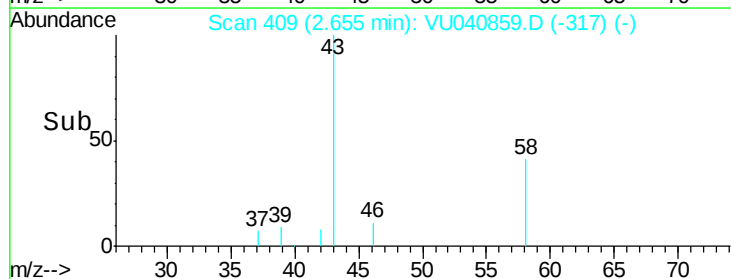
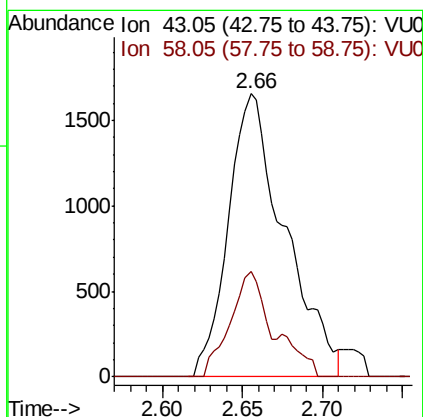
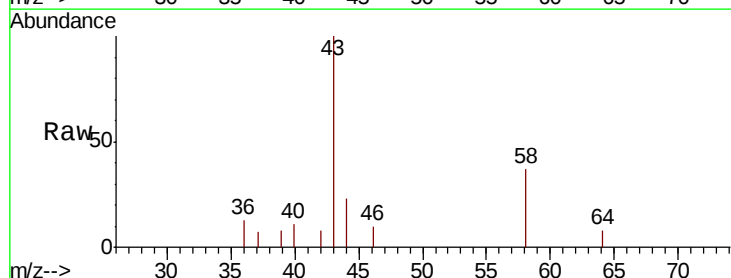
Instrument :
 MSVOA_U
 ClientSampleId :
 ETZ50MSD

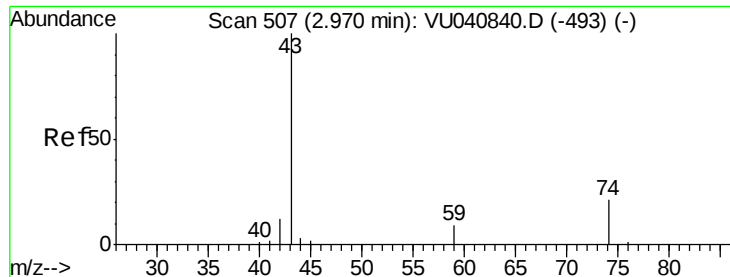
Tot Ion	Ratio	Lower	Upper
96	100		
61	181.9	128.8	239.2
63	115.1	84.6	157.2



#13
 Acetone
 Concen: 1.642 ug/L
 RT: 2.66 min Scan# 409
 Delta R.T. -0.00 min
 Lab File: VU040859.D
 Acq: 20 Oct 2020 19:53

Tgt Ion	Ratio	Lower	Upper
43	100		
58	23.1	0.0	60.6

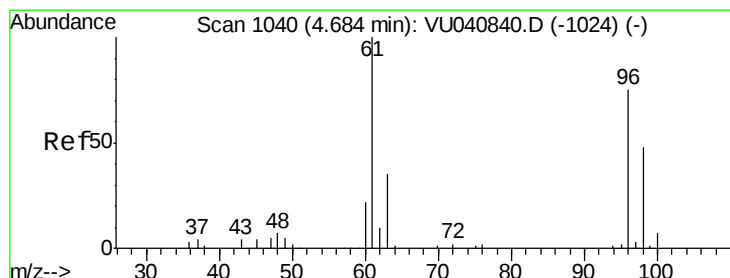
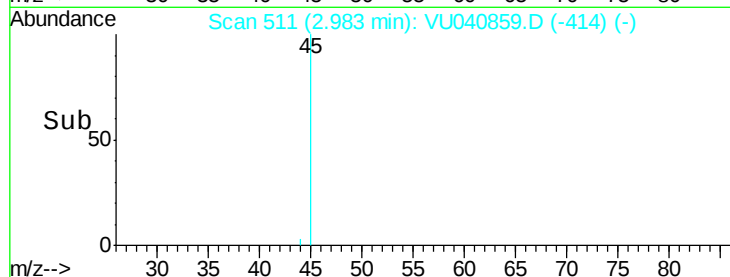
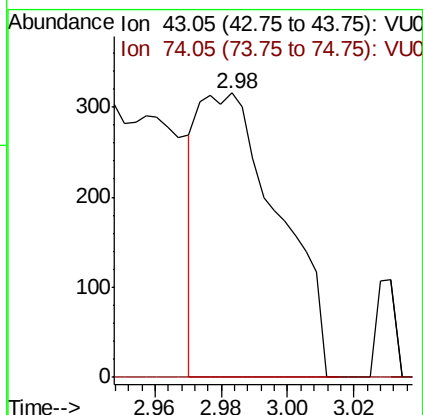
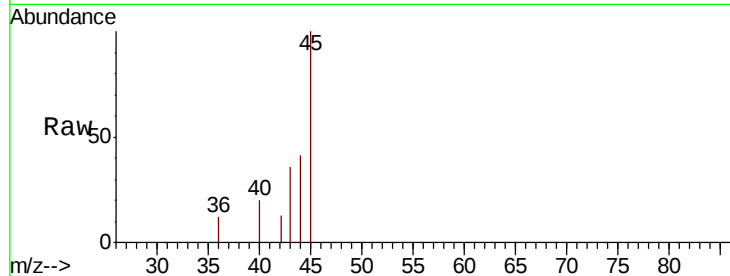




#15
Methyl Acetate
Concen: 0.096 ug/L
RT: 2.98 min Scan# 511
Delta R.T. 0.01 min
Lab File: VU040859.D
Acq: 20 Oct 2020 19:53

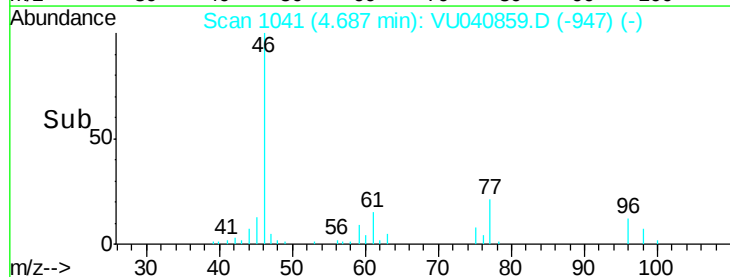
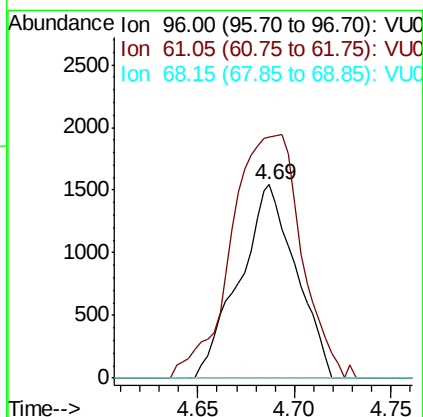
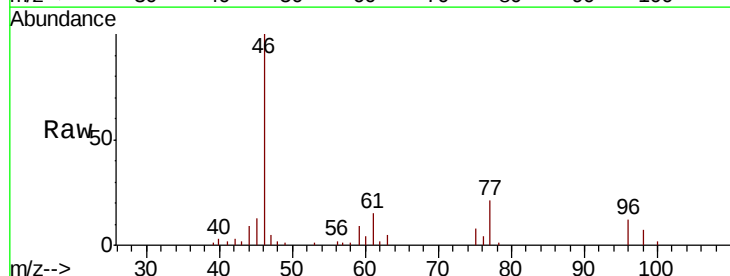
Instrument :
MSVOA_U
ClientSampleId :
ETZ50MSD

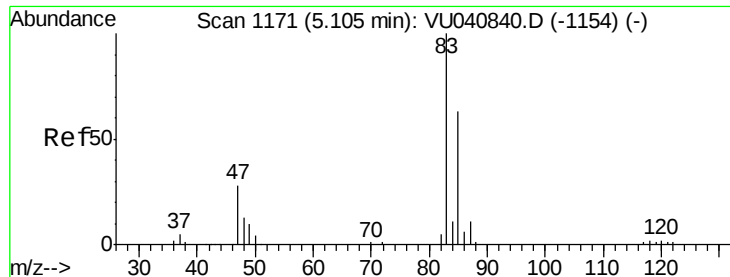
Tot Ion: 43 Resp: 531
Ion Ratio Lower Upper
43 100
74 0.0 16.5 24.7#



#22
cis-1,2-Dichloroethene
Concen: 0.329 ug/L
RT: 4.69 min Scan# 1041
Delta R.T. 0.00 min
Lab File: VU040859.D
Acq: 20 Oct 2020 19:53

Tgt Ion: 96 Resp: 3132
Ion Ratio Lower Upper
96 100
61 124.9 99.8 185.4
68 0.0 0.0 0.0

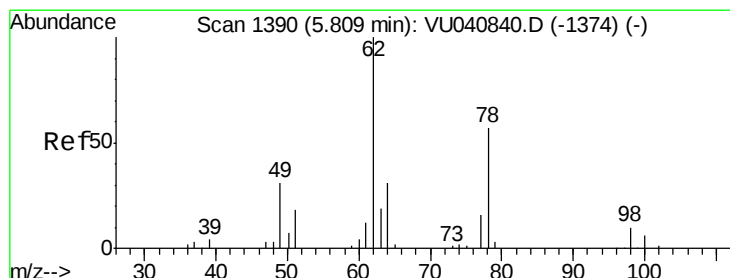
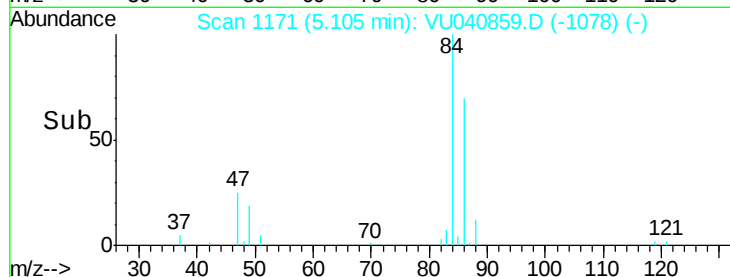
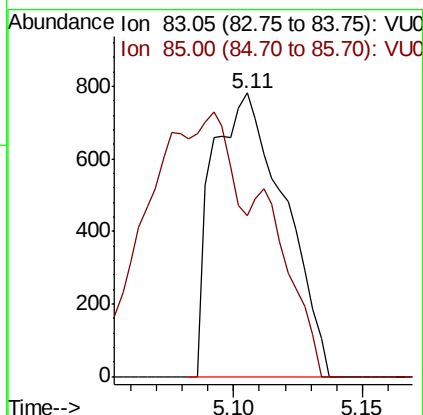
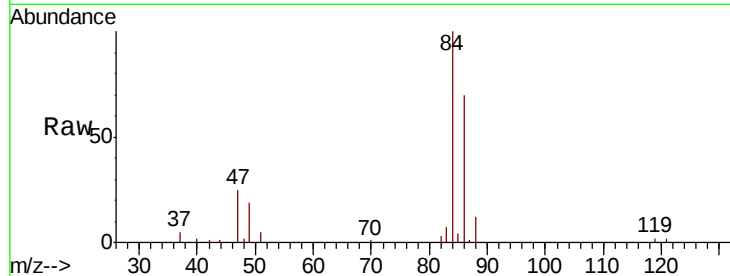




#25
Chloroform
Concen: 0.081 ug/L
RT: 5.11 min Scan# 1171
Delta R.T. -0.00 min
Lab File: VU040859.D
Acq: 20 Oct 2020 19:53

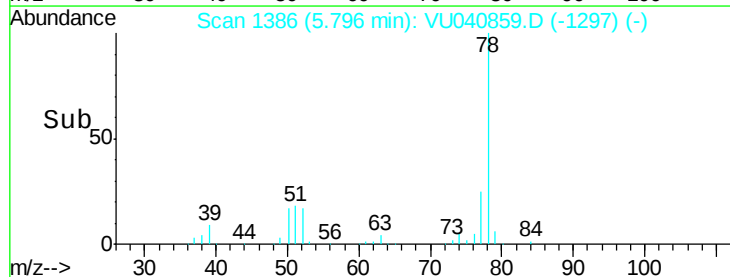
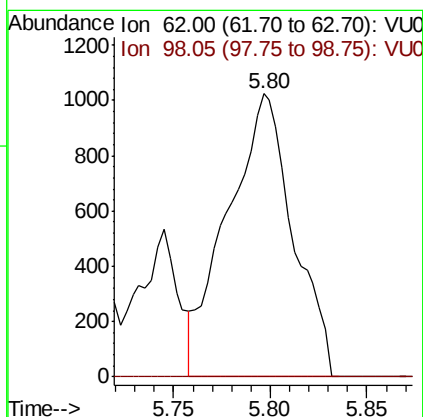
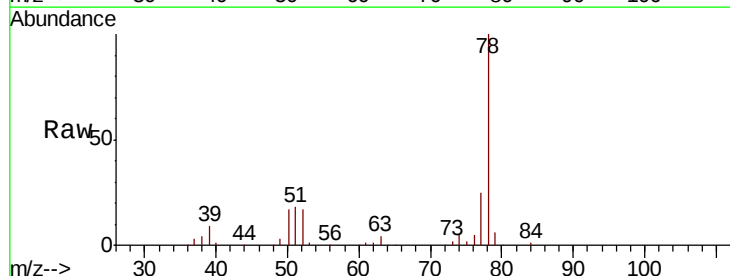
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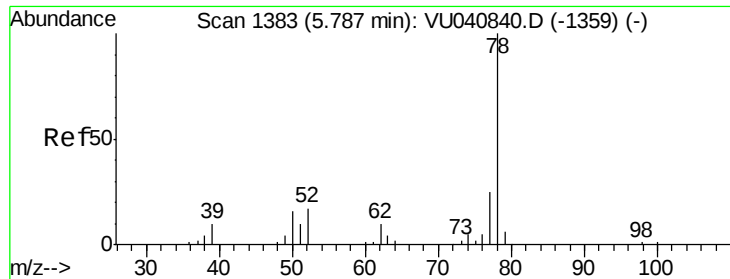
Tot Ion: 83 Resp: 1520
Ion Ratio Lower Upper
83 100
85 56.9 46.5 86.5



#27
1,2-Dichloroethane
Concen: 0.183 ug/L
RT: 5.80 min Scan# 1386
Delta R.T. -0.01 min
Lab File: VU040859.D
Acq: 20 Oct 2020 19:53

Tgt Ion: 62 Resp: 2416
Ion Ratio Lower Upper
62 100
98 0.0 6.6 10.0#





#33

Benzene

Concen: 4.584 ug/L

RT: 5.79 min Scan# 1384

Delta R.T. 0.00 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

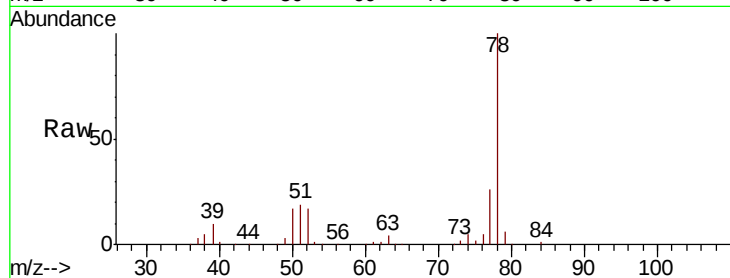
Instrument :

MSVOA_U

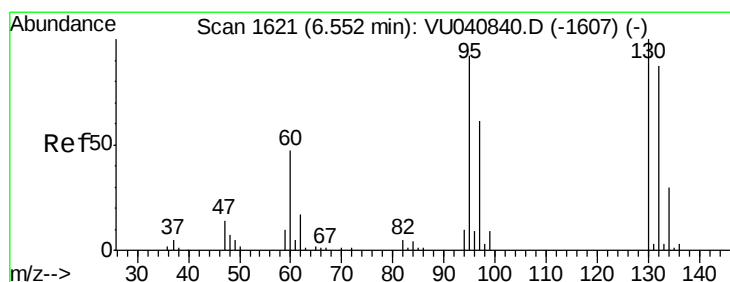
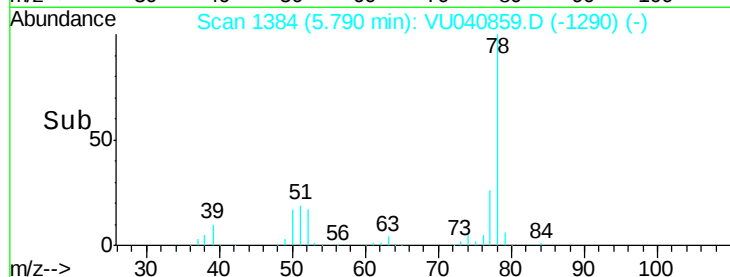
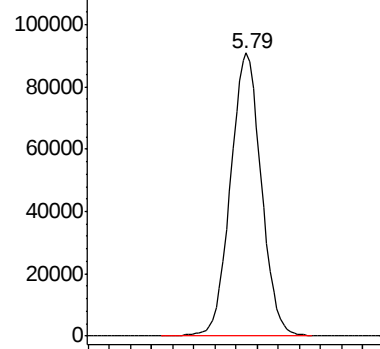
ClientSampleId :

ETZ50MSD

Tgt Ion: 78 Resp: 184723



Abundance Ion 78.10 (77.80 to 78.80): VU0



#34

Trichloroethene

Concen: 4.458 ug/L

RT: 6.56 min Scan# 1622

Delta R.T. 0.00 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Tgt Ion: 95 Resp: 46565

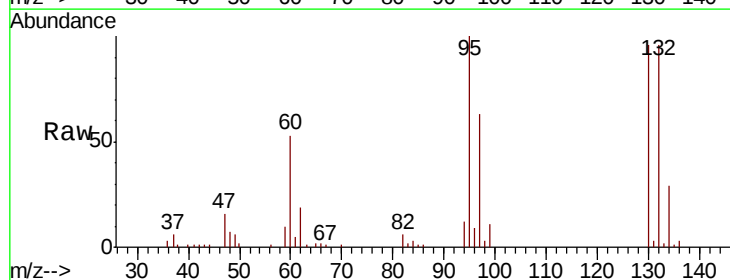
Ion	Ratio	Lower	Upper
95	100		
97	62.9	45.5	84.5
132	95.9	67.5	125.4
130	96.0	69.9	129.9

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): VU0

Ion 129.95 (129.65 to 130.65): VU0



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): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

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Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

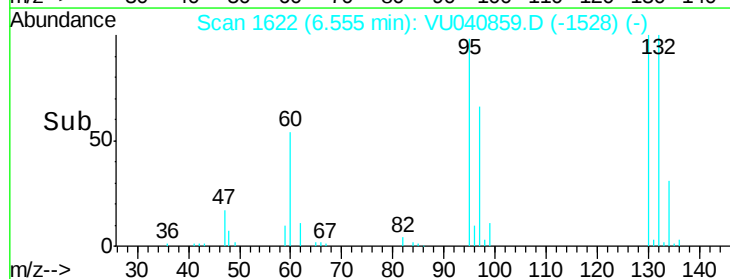
Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0



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): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

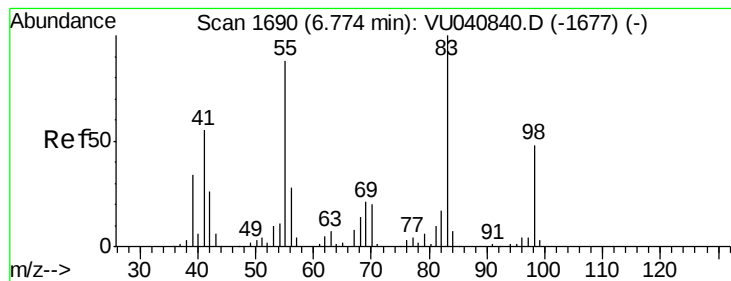
Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0

Ion 129.95 (129.65 to 130.65): VU0



#35

Methvlcvclohexane

Concen: 0.890 ug/L

RT: 6.70 min Scan# 1668

Delta R.T. -0.07 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

ETZ50MSD

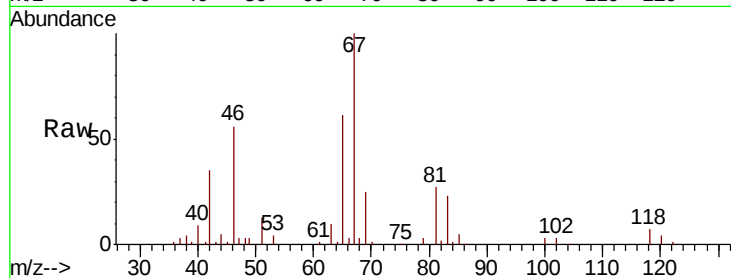
Tot Ion: 83 Resp: 13175

Ion Ratio Lower Upper

83 100

55 0.0 70.7 106.1#

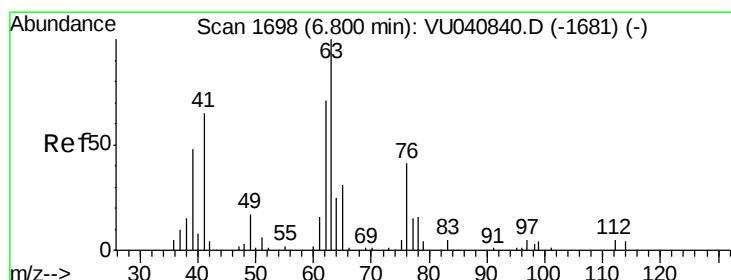
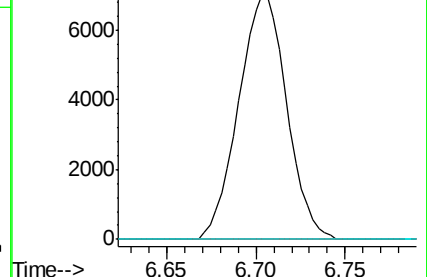
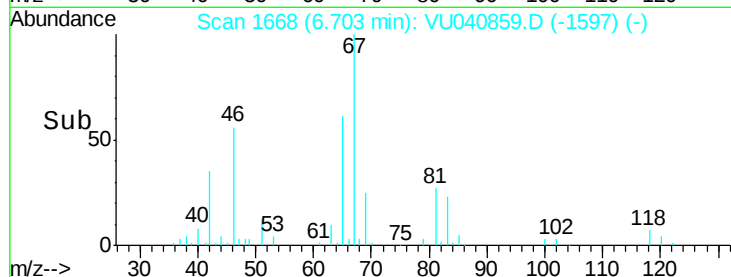
98 0.0 38.4 57.6#



Abundance Ion 83.15 (82.85 to 83.85): VU040859.D (-1668) (-)

Ion 55.10 (54.80 to 55.80): VU040859.D (-1668) (-)

Ion 98.15 (97.85 to 98.85): VU040859.D (-1668) (-)



#37

1,2-Dichloropropane

Concen: 0.559 ug/L

RT: 6.70 min Scan# 1668

Delta R.T. -0.10 min

Lab File: VU040859.D

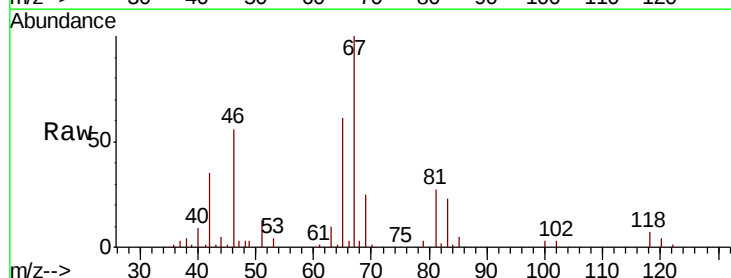
Acq: 20 Oct 2020 19:53

Tgt Ion: 63 Resp: 6272

Ion Ratio Lower Upper

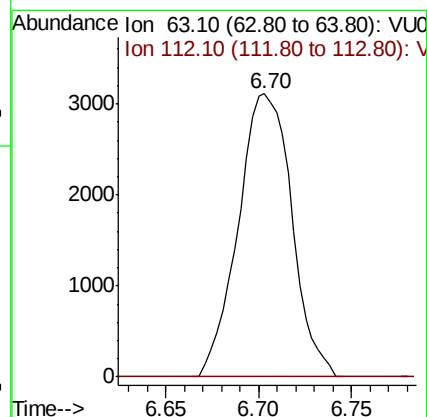
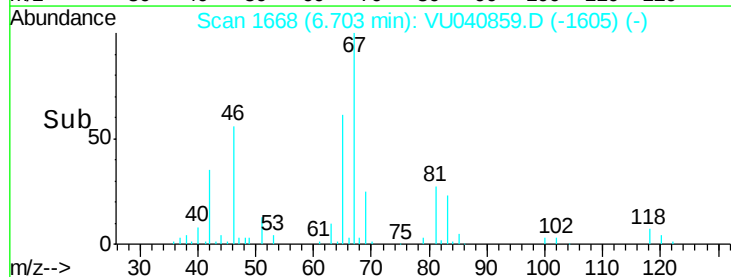
63 100

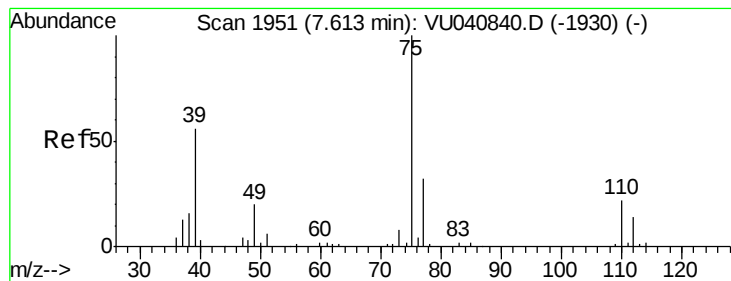
112 0.0 3.5 5.3#



Abundance Ion 63.10 (62.80 to 63.80): VU040859.D (-1668) (-)

Ion 112.10 (111.80 to 112.80): VU040859.D (-1668) (-)





#39

cis-1,3-Dichloropropene

Concen: 0.095 ug/L

RT: 7.57 min Scan# 1938

Delta R.T. -0.04 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

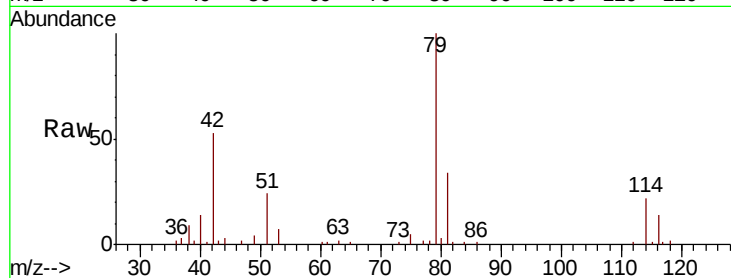
ETZ50MSD

Tot Ion: 75 Resp: 1462

Ion Ratio Lower Upper

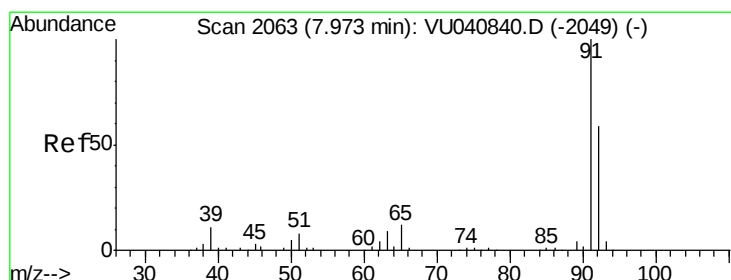
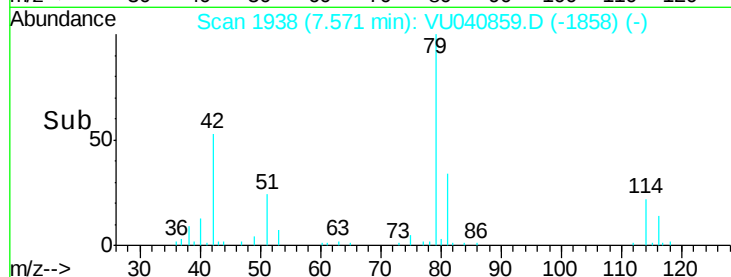
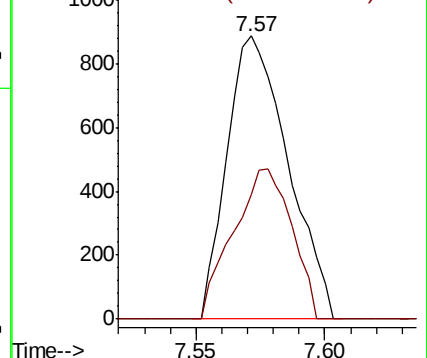
75 100

77 44.0 20.5 38.1#



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0



#42

Toluene

Concen: 4.424 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. 0.00 min

Lab File: VU040859.D

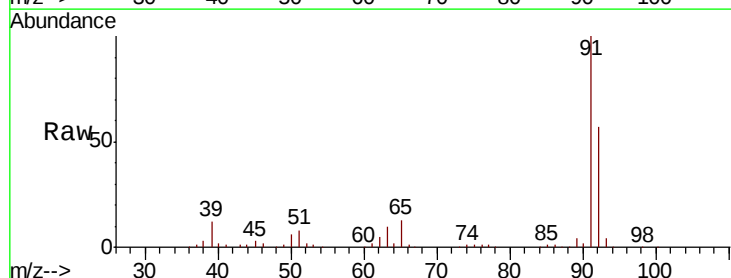
Acq: 20 Oct 2020 19:53

Tgt Ion: 91 Resp: 181622

Ion Ratio Lower Upper

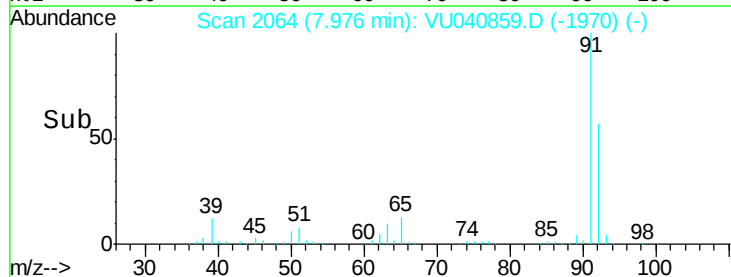
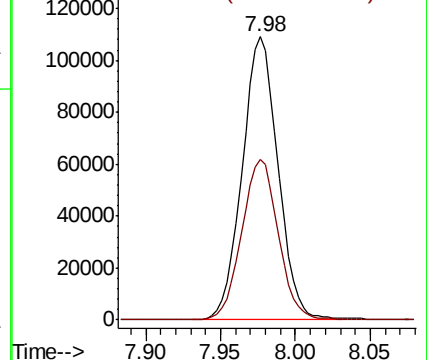
91 100

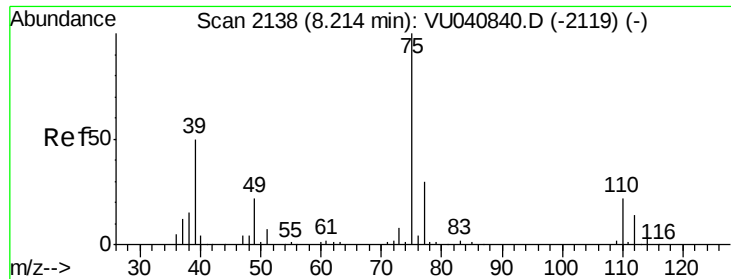
92 56.7 40.2 74.6



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0





#44

trans-1,3-Dichloropropene

Concen: 0.085 ug/L

RT: 8.18 min Scan# 2128

Delta R.T. -0.03 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

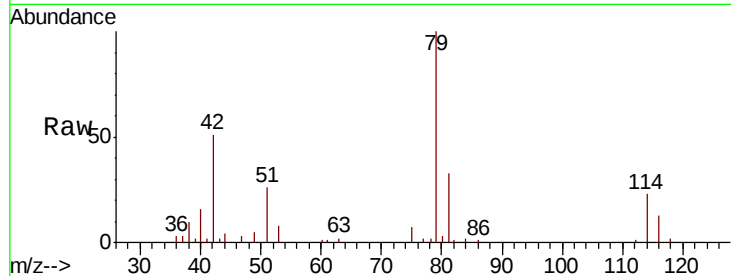
ETZ50MSD

Tot Ion: 75 Resp: 1197

Ion Ratio Lower Upper

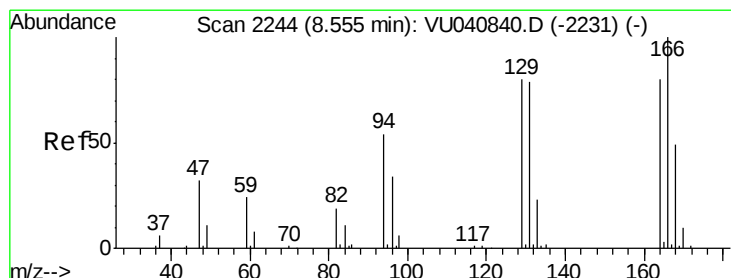
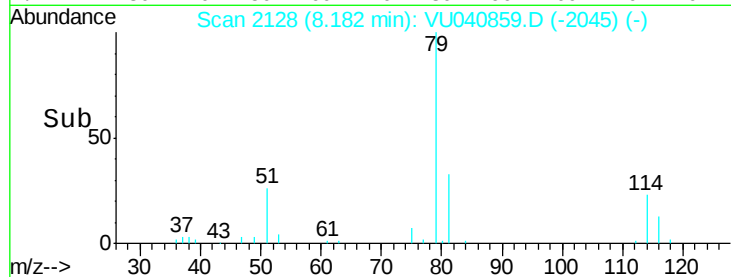
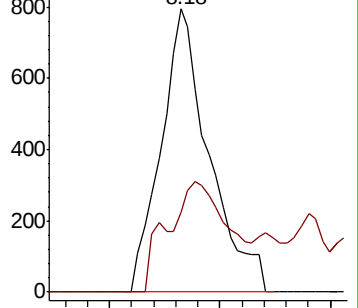
75 100

77 28.3 20.4 38.0



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0



#47

Tetrachloroethene

Concen: 0.188 ug/L

RT: 8.56 min Scan# 2244

Delta R.T. -0.00 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Tgt Ion:164 Resp: 1400

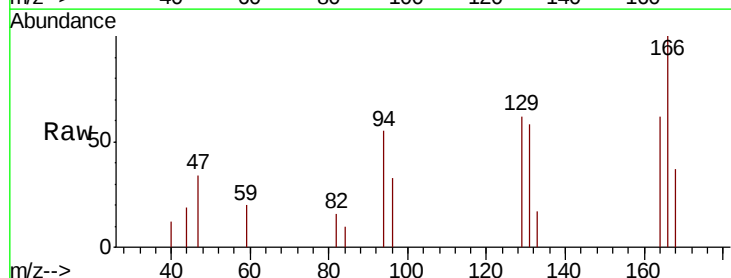
Ion Ratio Lower Upper

164 100

129 99.9 68.8 127.8

131 94.2 66.7 123.9

166 161.8 83.9 155.7#

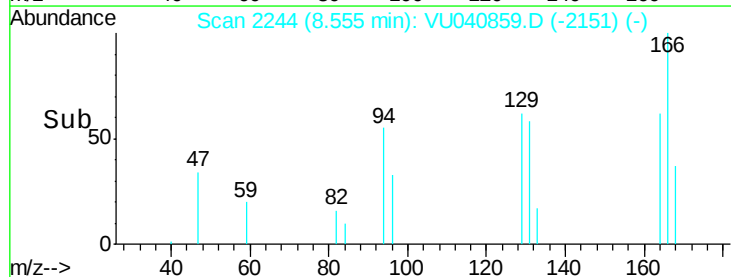
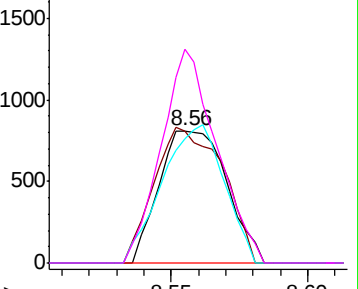


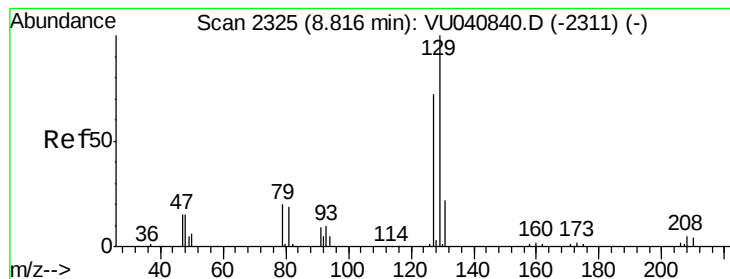
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V





#49

Dibromochloromethane

Concen: 0.151 ug/L

RT: 8.55 min Scan# 2243

Delta R.T. -0.26 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

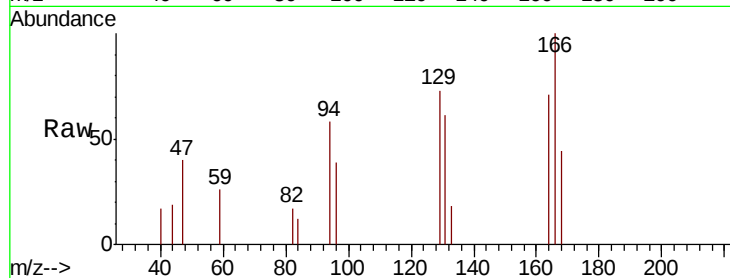
ETZ50MSD

Tot Ion:129 Resp: 1459

Ion Ratio Lower Upper

129 100

127 0.0 55.8 103.6#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V

8.55

800

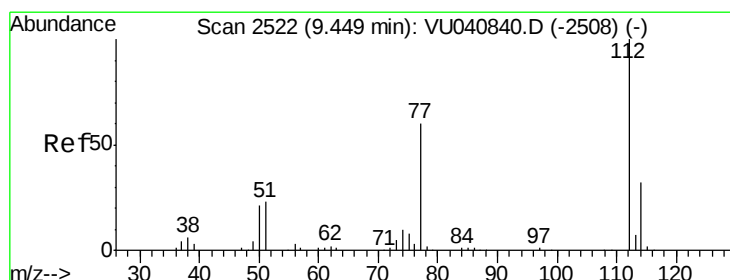
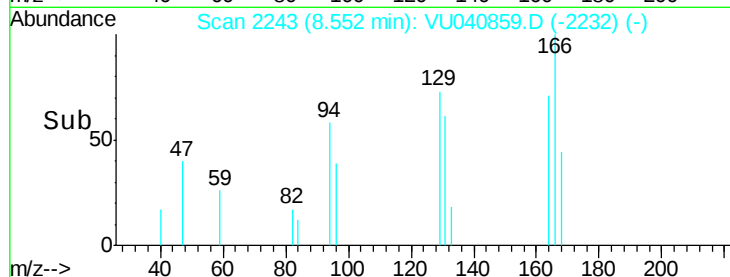
600

400

200

0

Time-->



#51

Chlorobenzene

Concen: 4.767 ug/L

RT: 9.45 min Scan# 2522

Delta R.T. -0.00 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

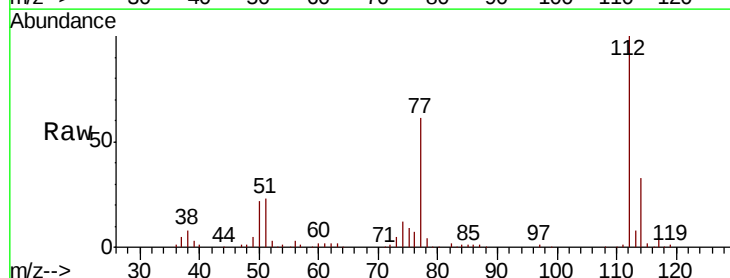
Tgt Ion:112 Resp: 128916

Ion Ratio Lower Upper

112 100

114 32.7 23.1 42.9

77 60.7 50.3 75.5



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VU0

100000

80000

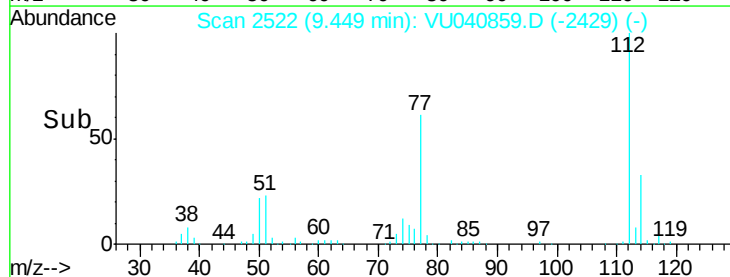
60000

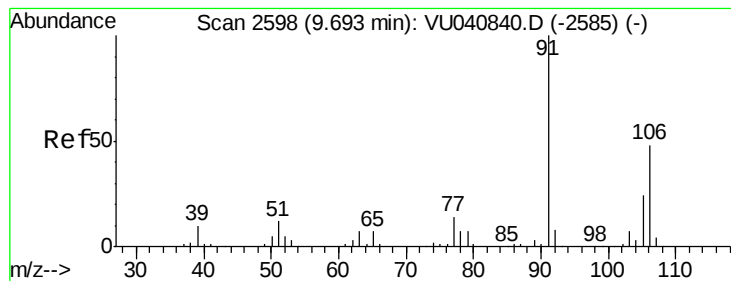
40000

20000

0

Time-->





#53

m,p-Xylene

Concen: 0.062 ug/L

RT: 9.69 min Scan# 2596

Delta R.T. -0.01 min

Lab File: VU040859.D

Acq: 20 Oct 2020 19:53

Instrument :

MSVOA_U

ClientSampleId :

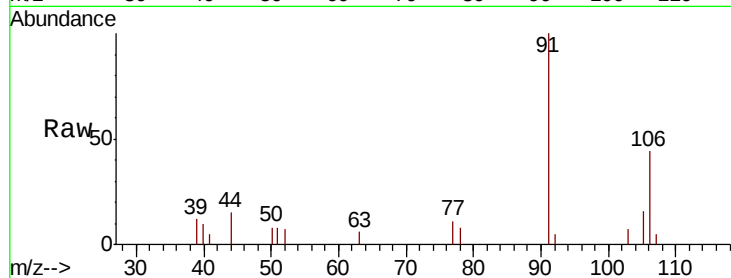
ETZ50MSD

Tot Ion:106 Resp: 997

Ion Ratio Lower Upper

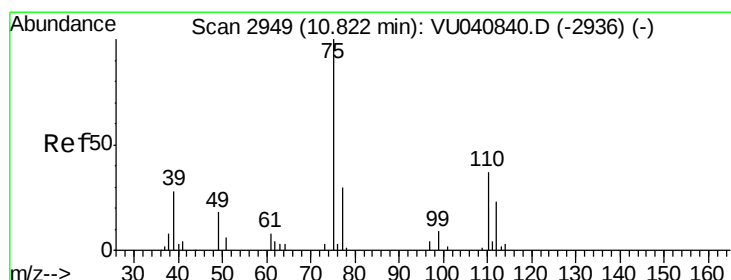
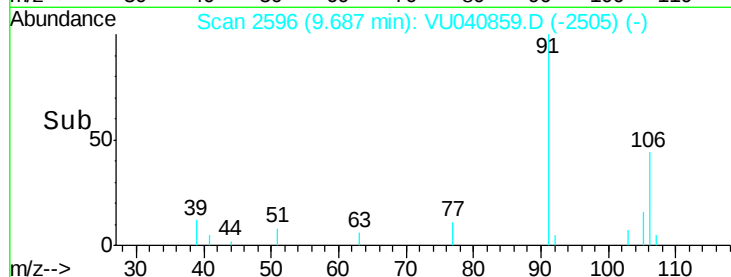
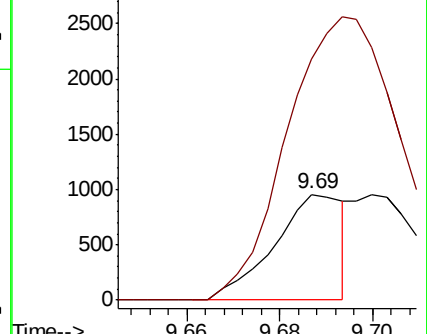
106 100

91 228.5 148.5 275.7



Abundance Ion 106.15 (105.85 to 106.85): VU040840.D (-2585) (-)

Ion 91.15 (90.85 to 91.85): VU040840.D (-2585) (-)



#59

1,2,3-Trichloropropane

Concen: 0.908 ug/L

RT: 11.81 min Scan# 3255

Delta R.T. 0.98 min

Lab File: VU040859.D

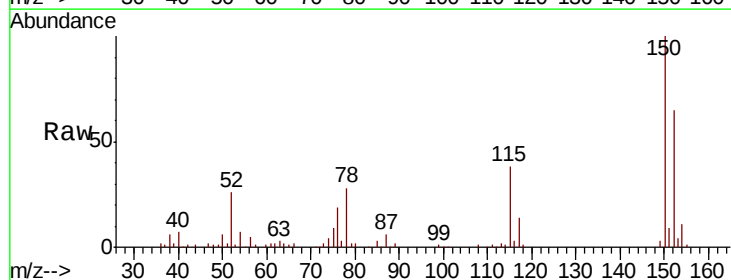
Acq: 20 Oct 2020 19:53

Tgt Ion: 75 Resp: 7491

Ion Ratio Lower Upper

75 100

77 37.6 26.4 39.6



Abundance Ion 75.00 (74.70 to 75.70): VU040840.D (-2936) (-)

Ion 77.00 (76.70 to 77.70): VU040840.D (-2936) (-)

