

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX070220\
 Data File : VX017146.D
 Acq On : 02 Jul 2020 14:24
 Operator : JC/SP
 Sample : L3194-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TUNNEL-WALL-WASHWATER(EXH)

Quant Time: Jul 03 00:48:44 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X062520W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jun 26 09:03:25 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	4.98	128	39994	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.84	114	200060	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.10	117	190626	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.04	65	89338	28.70	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	95.67%
60) 4-Bromofluorobenzene	11.12	95	83323	26.21	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	87.37%
63) Toluene-d8	8.70	98	240274	28.59	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	95.30%

Target Compounds

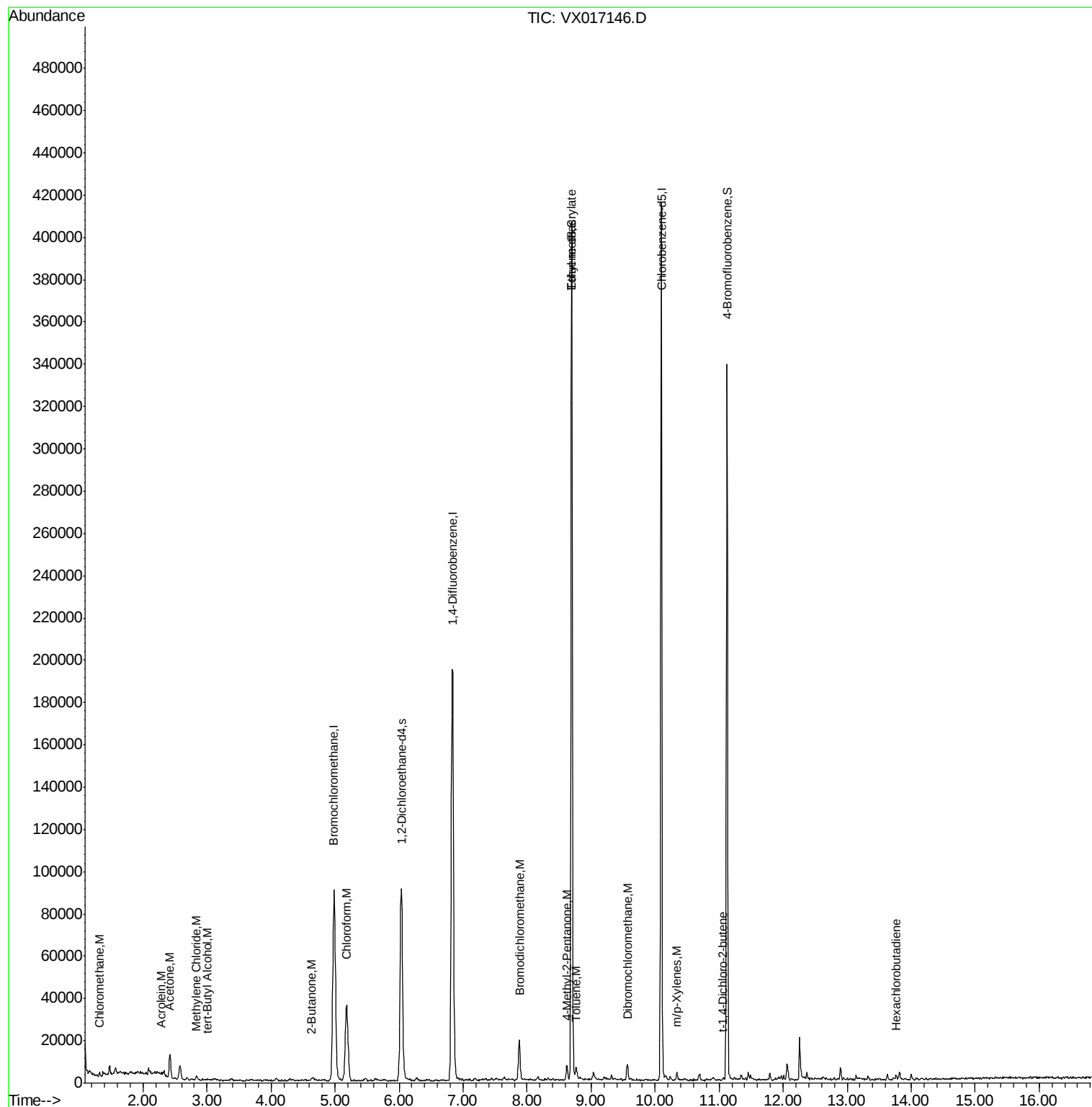
					Ovalue
3) Chloromethane	1.32	50	1233	0.468 ug/l #	87
13) Acrolein	2.29	56	217	0.476 ug/l	91
15) Acetone	2.42	58	4116	11.628 ug/l	92
18) Methylene Chloride	2.83	84	864	0.313 ug/l #	52
23) tert-Butyl Alcohol	3.01	59	446	0.736 ug/l #	98
25) Chloroform	5.18	83	42939	8.967 ug/l	99
30) 2-Butanone	4.63	43	837	0.493 ug/l #	84
41) Bromodichloromethane	7.87	83	11471	3.251 ug/l #	96
51) Ethyl methacrylate	8.70	69	1141	0.313 ug/l	81
53) Dibromochloromethane	9.57	129	2317	0.848 ug/l	85
58) 4-Methyl-2-Pentanone	8.62	43	4286	1.221 ug/l	94
62) Toluene	8.76	91	3214	0.308 ug/l	94
67) m/p-Xylenes	10.34	106	876	0.201 ug/l	86
77) t-1,4-Dichloro-2-butene	11.05	75	548	0.403 ug/l #	12
90) Hexachlorobutadiene	13.76	225	393	0.318 ug/l	77

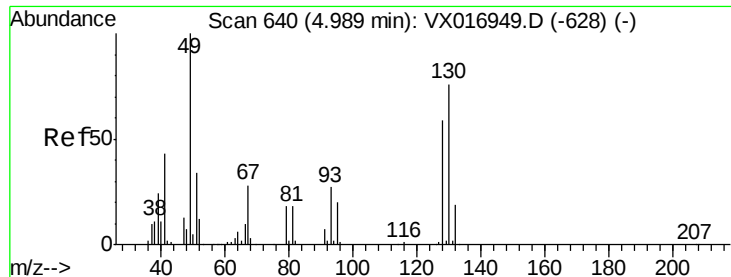
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Jul 03 00:48:44 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA X\METHOD\624X062520W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jun 26 09:03:25 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.98 min Scan# 639

Delta R.T. -0.01 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

TUNNEL-WALL-WASHWATER(EXH)

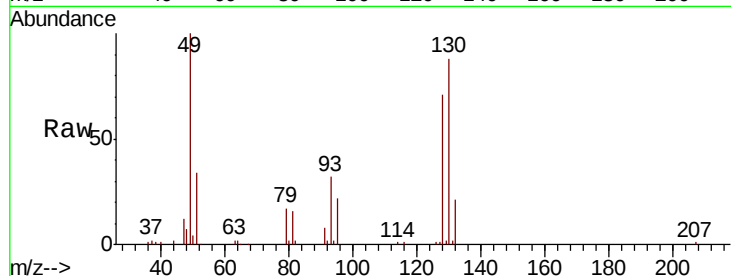
Tot Ion:128 Resp: 39994

Ion Ratio Lower Upper

128 100

49 150.4 0.0 428.0

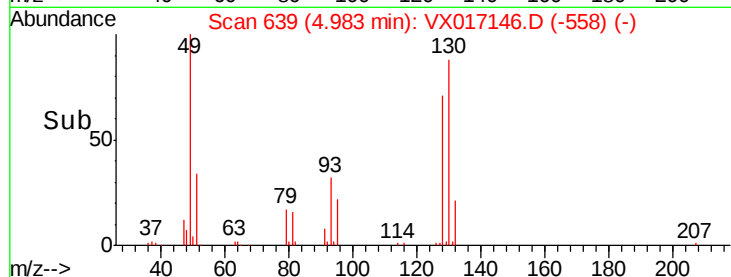
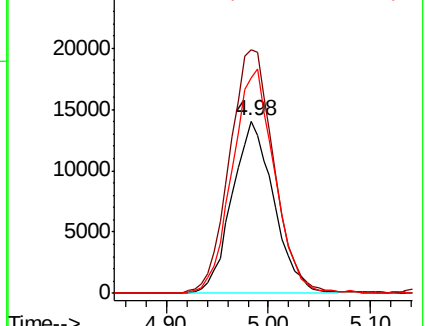
130 131.2 0.0 318.0



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VX0

Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 0.468 ug/l

RT: 1.32 min Scan# 38

Delta R.T. 0.00 min

Lab File: VX017146.D

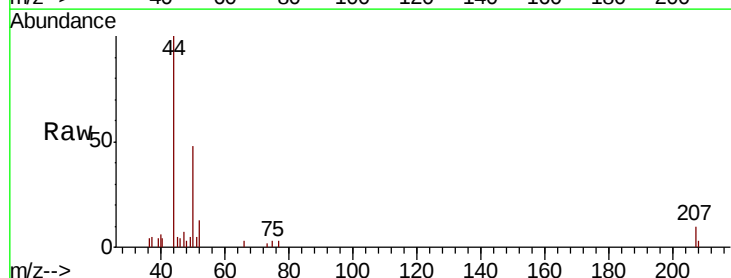
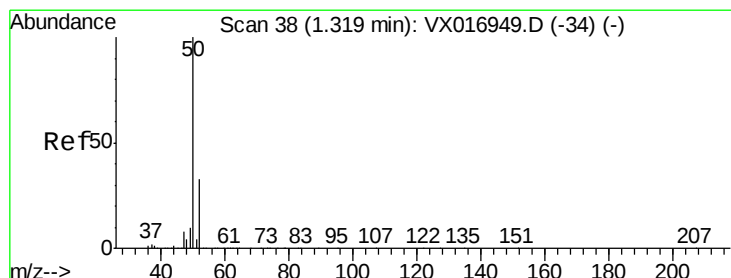
Acq: 02 Jul 2020 14:24

Tgt Ion: 50 Resp: 1233

Ion Ratio Lower Upper

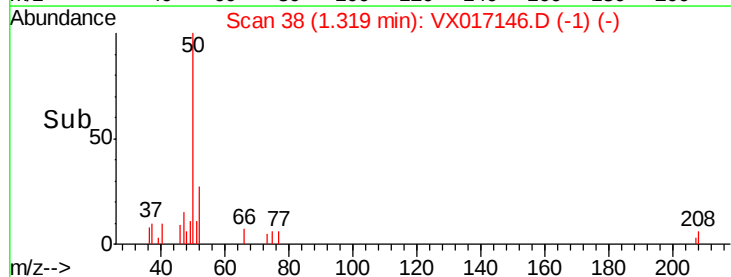
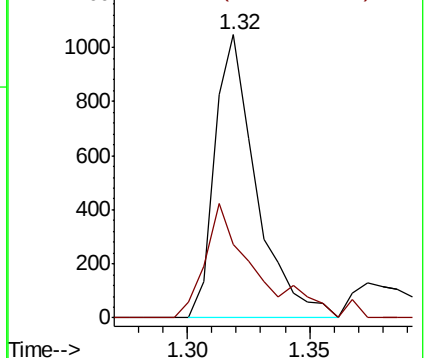
50 100

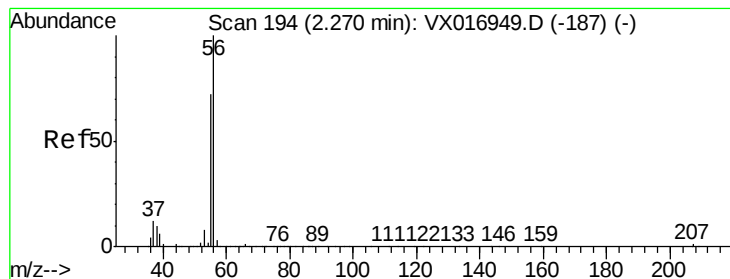
52 25.9 26.5 39.7#



Abundance Ion 50.00 (49.70 to 50.70): VX0

Ion 52.00 (51.70 to 52.70): VX0





#13

Acrolein

Concen: 0.476 ug/l

RT: 2.29 min Scan# 197

Delta R.T. 0.02 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

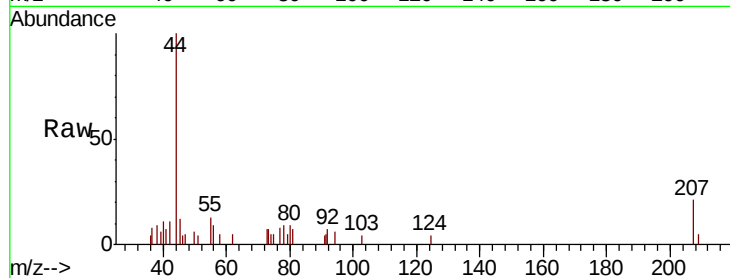
TUNNEL-WALL-WASHWATER(EXH)

Tot Ion: 56 Resp: 217

Ion Ratio Lower Upper

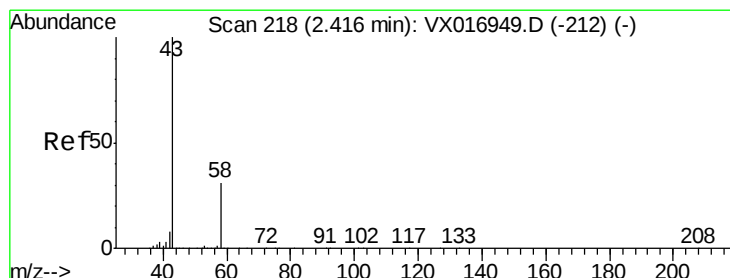
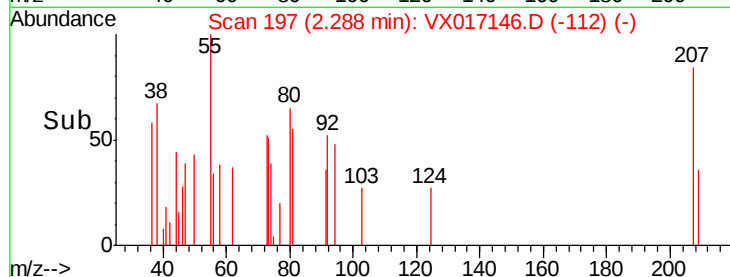
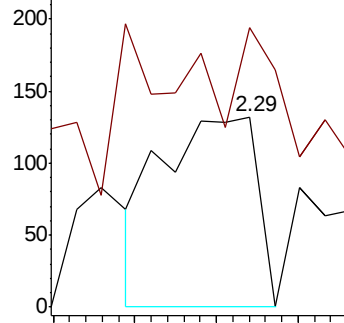
56 100

55 77.9 56.2 84.4



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#15

Acetone

Concen: 11.628 ug/l

RT: 2.42 min Scan# 218

Delta R.T. 0.00 min

Lab File: VX017146.D

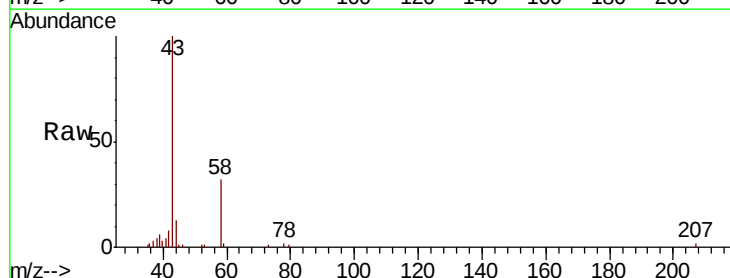
Acq: 02 Jul 2020 14:24

Tgt Ion: 58 Resp: 4116

Ion Ratio Lower Upper

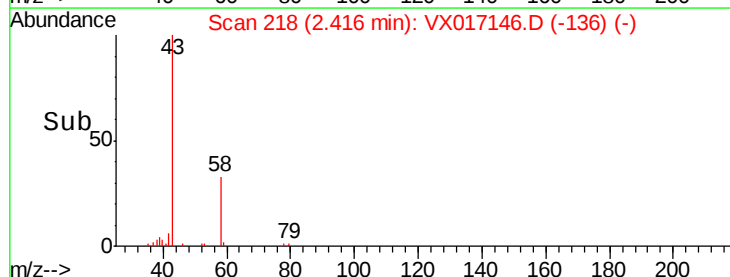
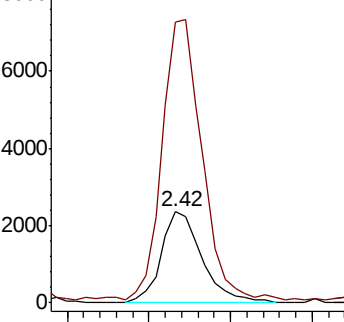
58 100

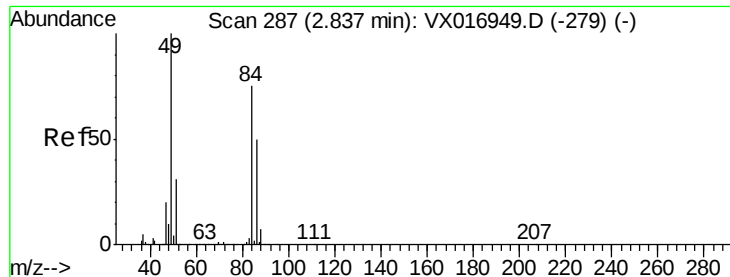
43 304.8 257.6 386.4



Abundance Ion 58.00 (57.70 to 58.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

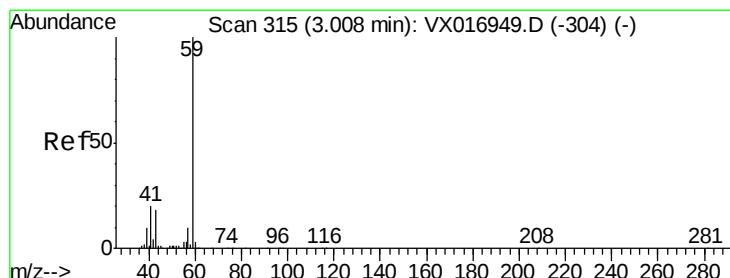
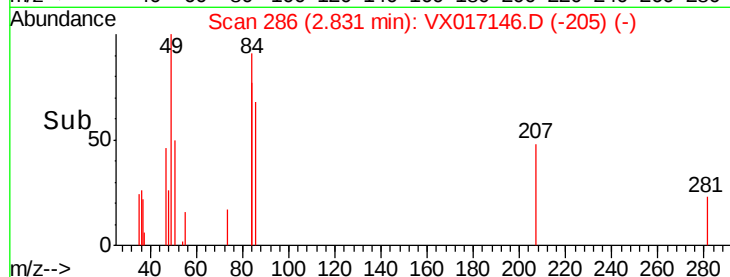
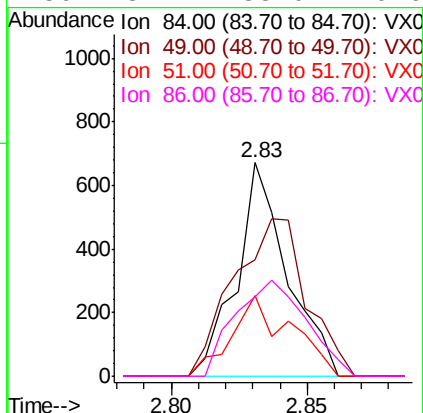
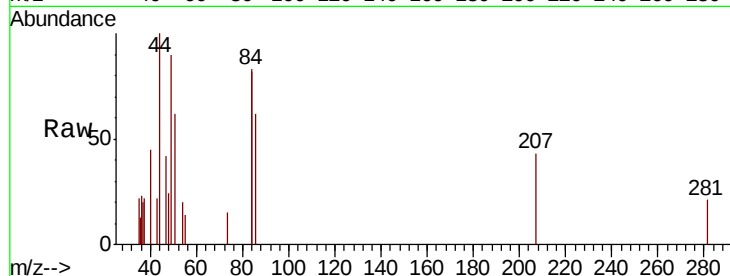




#18
Methvlene Chloride
Concen: 0.313 ug/l
RT: 2.83 min Scan# 286
Delta R.T. -0.01 min
Lab File: VX017146.D
Acq: 02 Jul 2020 14:24

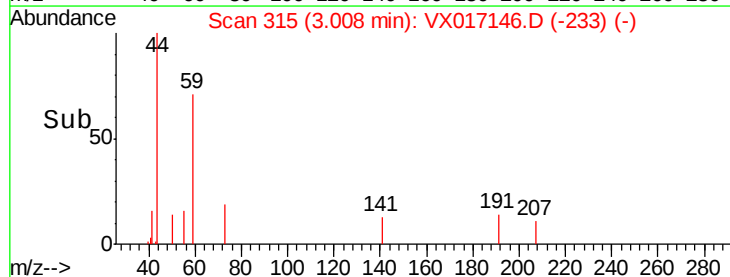
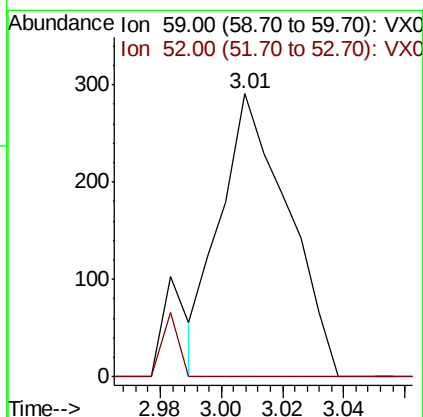
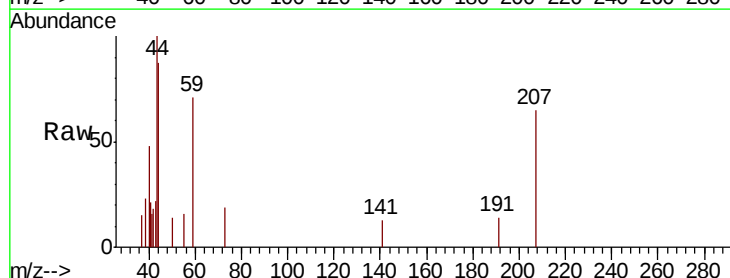
Instrument :
MSVOA_X
ClientSampleId :
TUNNEL-WALL-WASHWATER(EXH

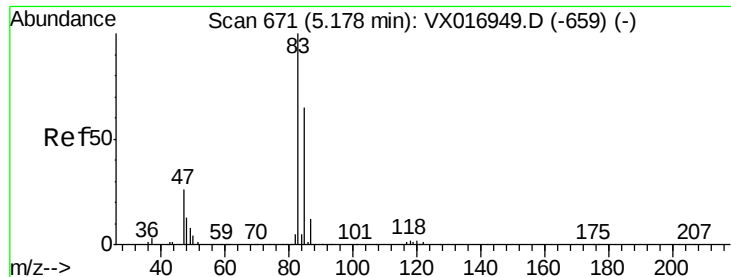
Tot Ion: 84 Resp: 864
Ion Ratio Lower Upper
84 100
49 54.8 106.6 159.8#
51 37.6 32.7 49.1
86 37.4 53.0 79.6#



#23
tert-Butyl Alcohol
Concen: 0.736 ug/l
RT: 3.01 min Scan# 315
Delta R.T. 0.00 min
Lab File: VX017146.D
Acq: 02 Jul 2020 14:24

Tgt Ion: 59 Resp: 446
Ion Ratio Lower Upper
59 100
52 4.5 0.1 0.1#





#25

Chloroform

Concen: 8.967 ug/l

RT: 5.18 min Scan# 672

Delta R.T. 0.01 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

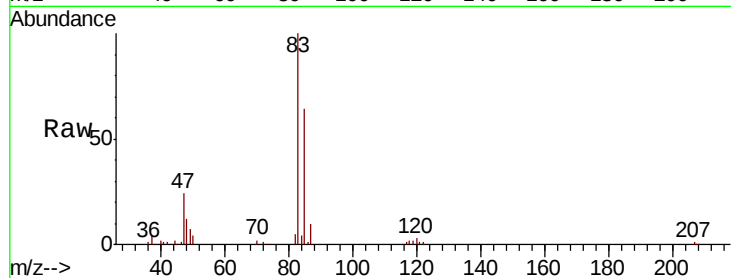
TUNNEL-WALL-WASHWATER(EXH)

Tot Ion: 83 Resp: 42939

Ion Ratio Lower Upper

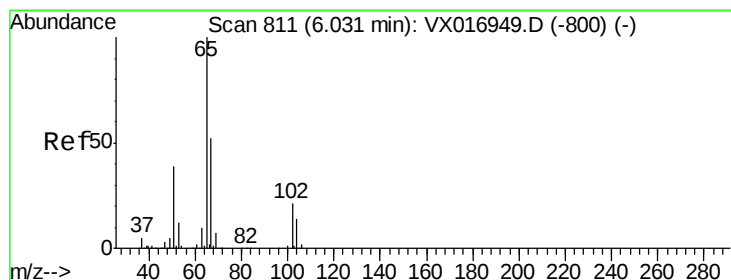
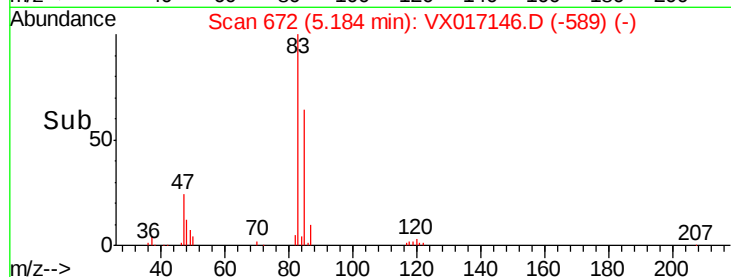
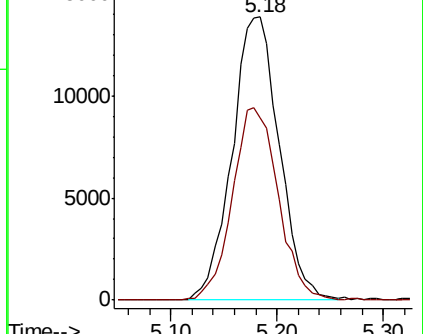
83 100

85 64.2 52.1 78.1



Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 85.00 (84.70 to 85.70): VX0



#27

1,2-Dichloroethane-d4

Concen: 28.699 ug/l

RT: 6.04 min Scan# 812

Delta R.T. 0.01 min

Lab File: VX017146.D

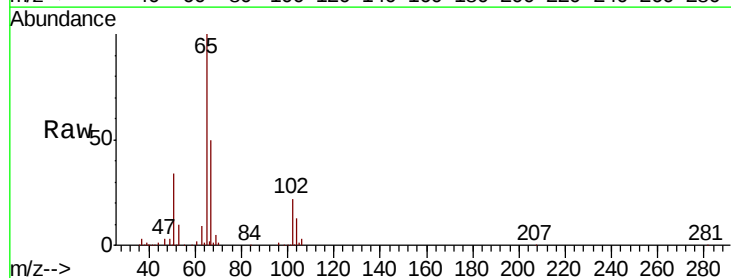
Acq: 02 Jul 2020 14:24

Tgt Ion: 65 Resp: 89338

Ion Ratio Lower Upper

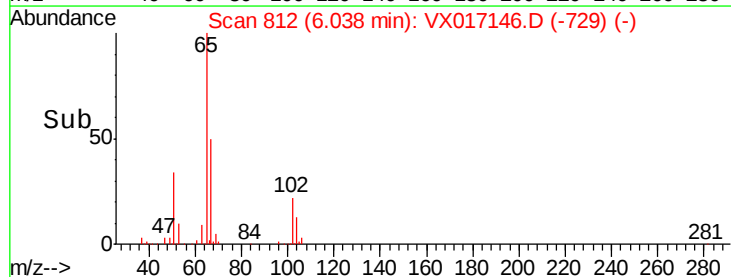
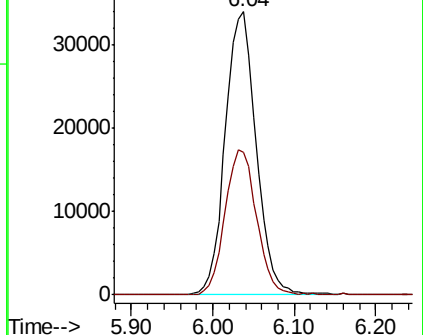
65 100

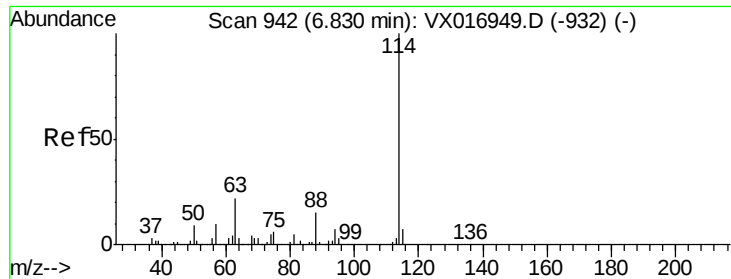
67 51.9 41.5 62.3



Abundance Ion 65.00 (64.70 to 65.70): VX0

Ion 67.00 (66.70 to 67.70): VX0

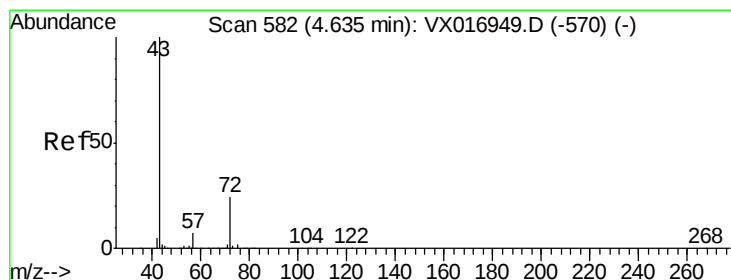
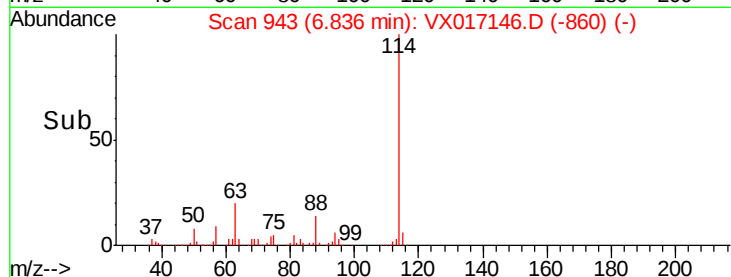
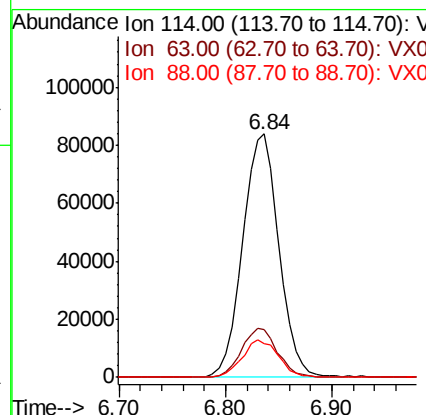
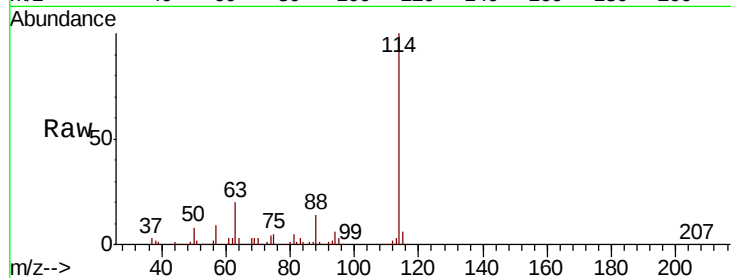




#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 6.84 min Scan# 943
 Delta R.T. 0.01 min
 Lab File: VX017146.D
 Acq: 02 Jul 2020 14:24

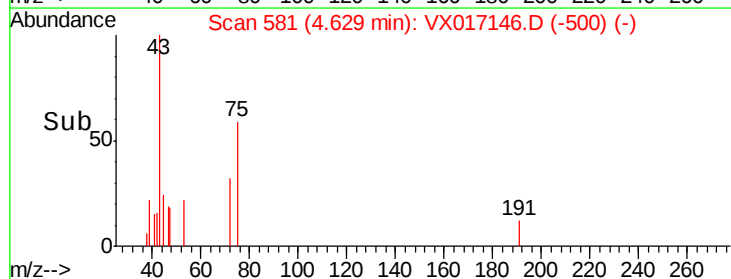
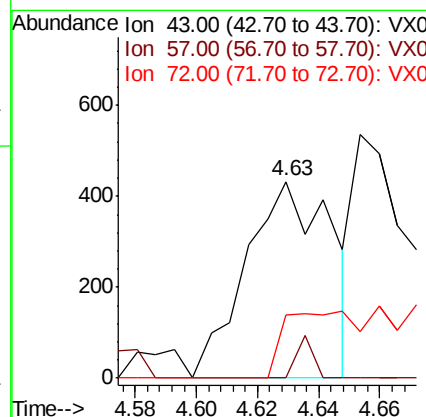
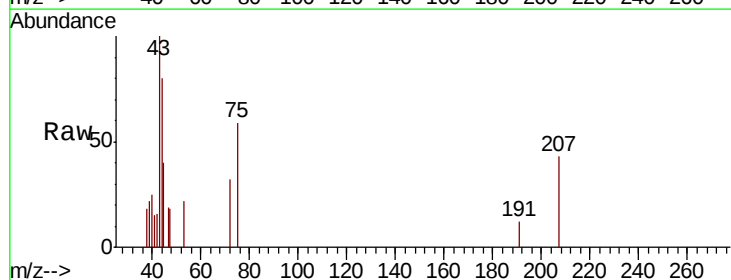
Instrument :
 MSVOA_X
 ClientSampleId :
 TUNNEL-WALL-WASHWATER(EXH)

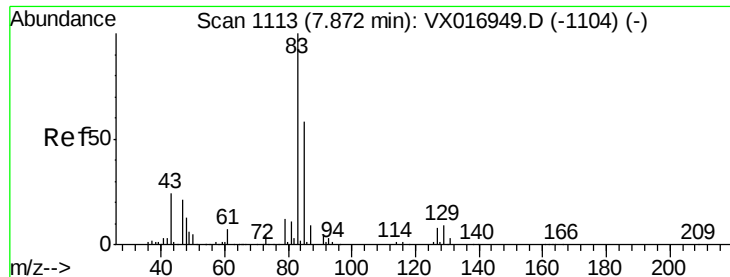
Tot Ion:114 Resp: 200060
 Ion Ratio Lower Upper
 114 100
 63 20.0 17.4 26.2
 88 15.6 13.0 19.6



#30
 2-Butanone
 Concen: 0.493 ug/l
 RT: 4.63 min Scan# 581
 Delta R.T. -0.01 min
 Lab File: VX017146.D
 Acq: 02 Jul 2020 14:24

Tgt Ion: 43 Resp: 837
 Ion Ratio Lower Upper
 43 100
 57 0.0 6.2 9.4#
 72 18.4 20.6 31.0#





#41

Bromodichloromethane

Concen: 3.251 ug/l

RT: 7.87 min Scan# 1113

Delta R.T. 0.00 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

TUNNEL-WALL-WASHWATER(EXH)

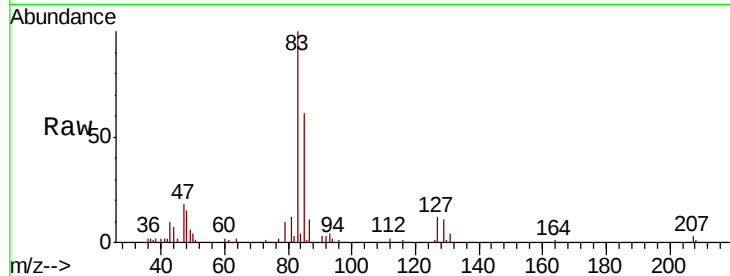
Tot Ion: 83 Resp: 11471

Ion Ratio Lower Upper

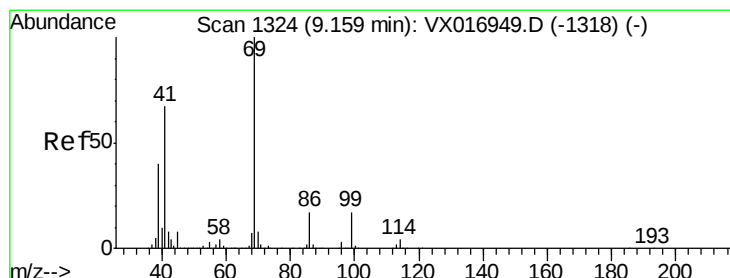
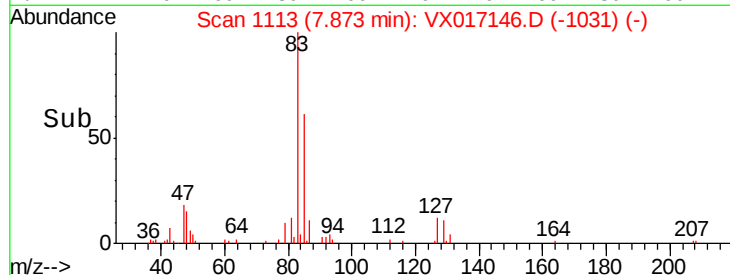
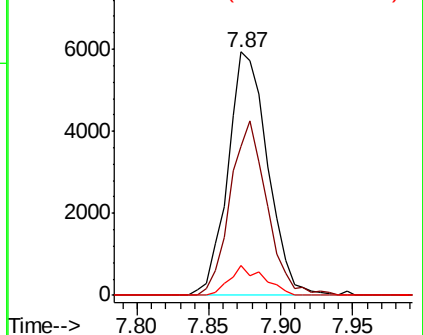
83 100

85 61.0 46.7 70.1

127 12.1 6.5 9.7#



Abundance Ion 83.00 (82.70 to 83.70): VX0
Ion 85.00 (84.70 to 85.70): VX0
Ion 127.00 (126.70 to 127.70): V



#51

Ethyl methacrylate

Concen: 0.313 ug/l

RT: 8.70 min Scan# 1249

Delta R.T. -0.46 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

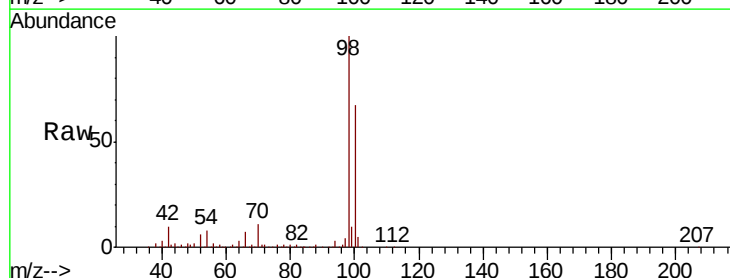
Tgt Ion: 69 Resp: 1141

Ion Ratio Lower Upper

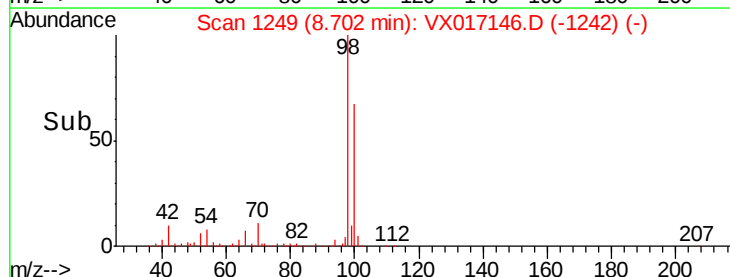
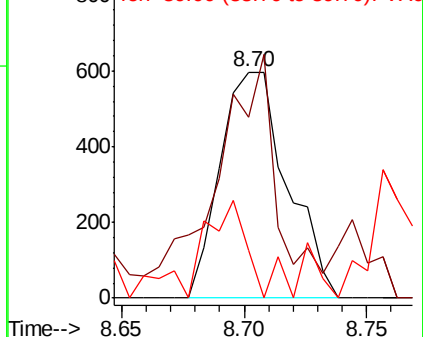
69 100

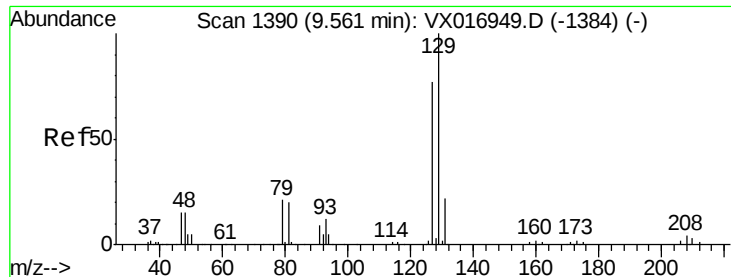
41 57.3 33.7 101.1

39 21.3 19.9 59.7



Abundance Ion 69.00 (68.70 to 69.70): VX0
Ion 41.00 (40.70 to 41.70): VX0
Ion 39.00 (38.70 to 39.70): VX0

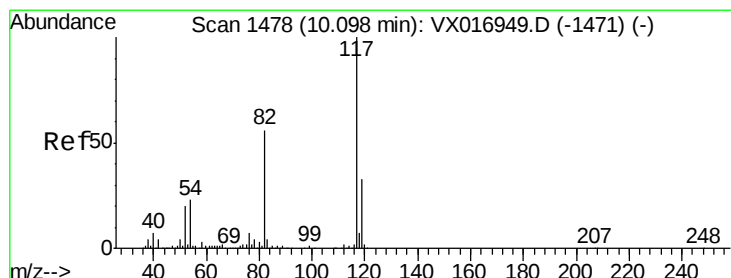
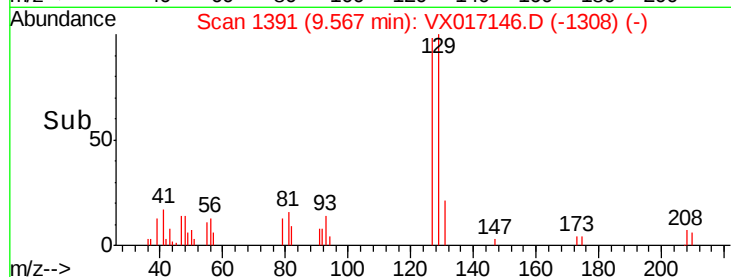
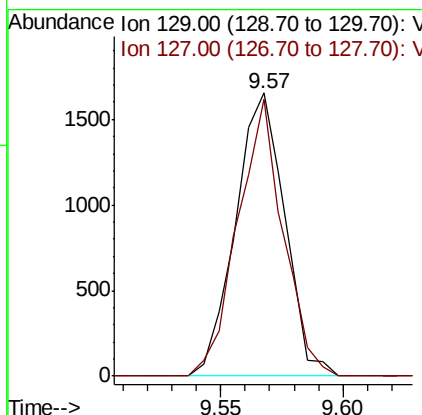
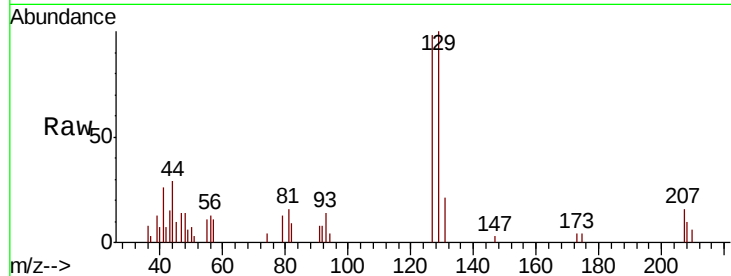




#53
Dibromochloromethane
Concen: 0.848 ug/l
RT: 9.57 min Scan# 1391
Delta R.T. 0.01 min
Lab File: VX017146.D
Acq: 02 Jul 2020 14:24

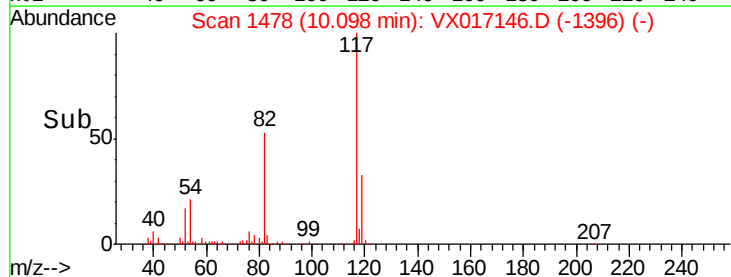
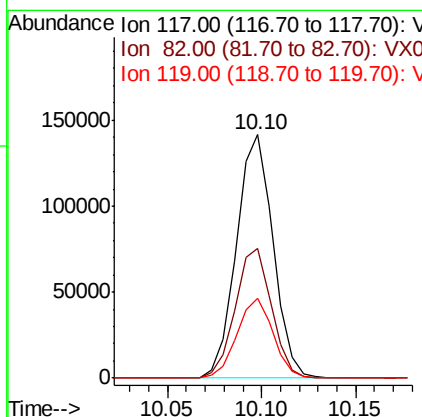
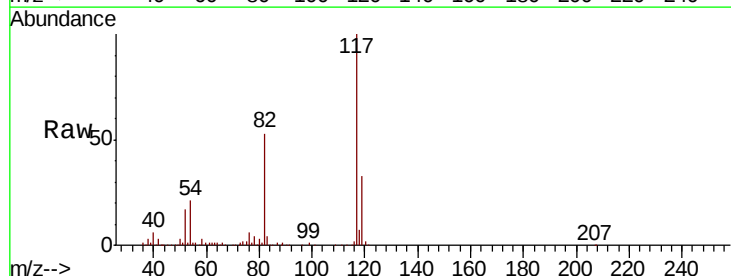
Instrument :
MSVOA_X
ClientSampleId :
TUNNEL-WALL-WASHWATER(EXH)

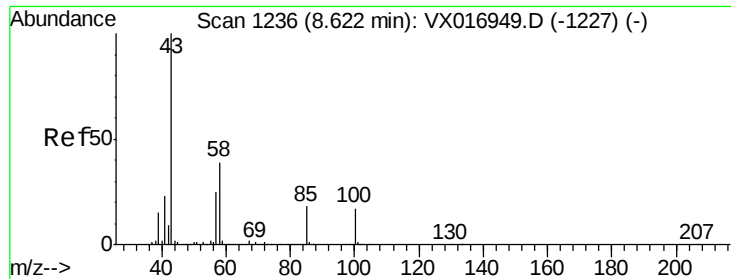
Tot Ion:129 Resp: 2317
Ion Ratio Lower Upper
129 100
127 90.4 38.7 116.1



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.10 min Scan# 1478
Delta R.T. 0.00 min
Lab File: VX017146.D
Acq: 02 Jul 2020 14:24

Tgt Ion:117 Resp: 190626
Ion Ratio Lower Upper
117 100
82 52.7 44.9 67.3
119 32.1 25.8 38.8

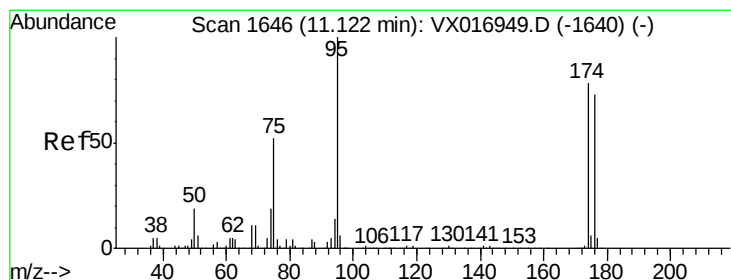
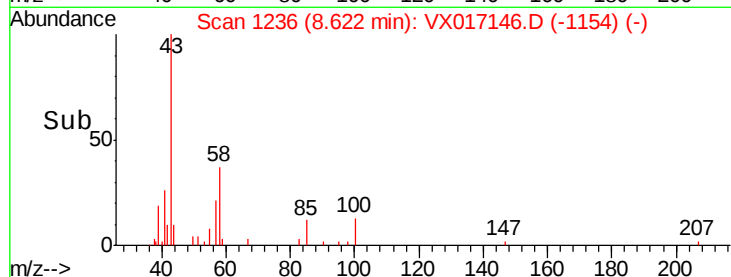
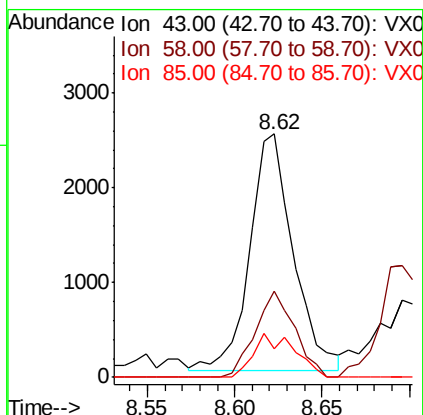
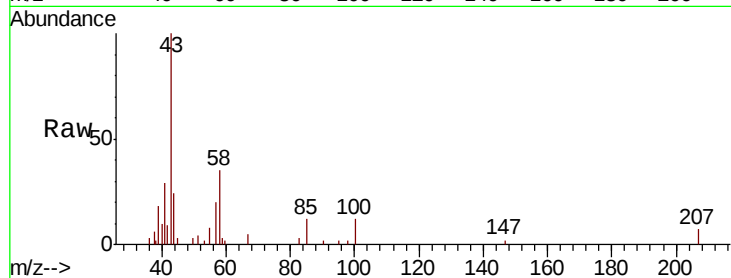




#58
4-Methyl-2-Pentanone
Concen: 1.221 ug/l
RT: 8.62 min Scan# 1236
Delta R.T. 0.00 min
Lab File: VX017146.D
Acq: 02 Jul 2020 14:24

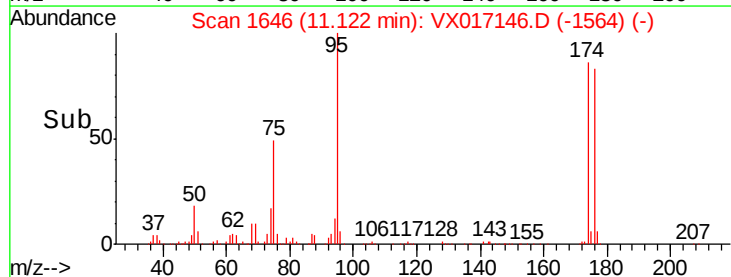
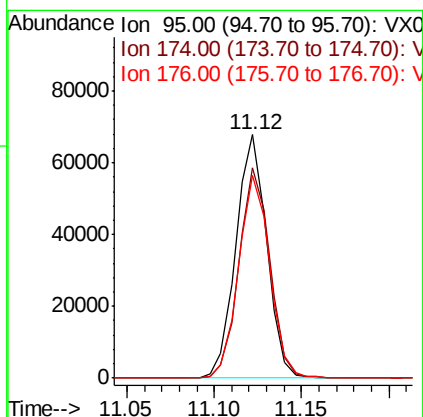
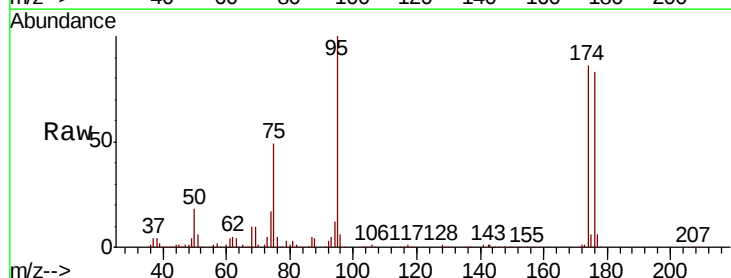
Instrument :
MSVOA_X
ClientSampleId :
TUNNEL-WALL-WASHWATER(EXH)

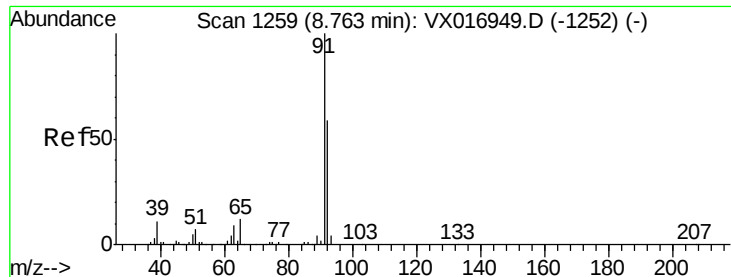
Tot Ion: 43 Resp: 4286
Ion Ratio Lower Upper
43 100
58 33.5 30.4 45.6
85 17.5 13.5 20.3



#60
4-Bromofluorobenzene
Concen: 26.210 ug/l
RT: 11.12 min Scan# 1646
Delta R.T. 0.00 min
Lab File: VX017146.D
Acq: 02 Jul 2020 14:24

Tgt Ion: 95 Resp: 83323
Ion Ratio Lower Upper
95 100
174 86.1 62.2 93.4
176 84.3 58.9 88.3





#62

Toluene

Concen: 0.308 ug/l

RT: 8.76 min Scan# 1259

Delta R.T. 0.00 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

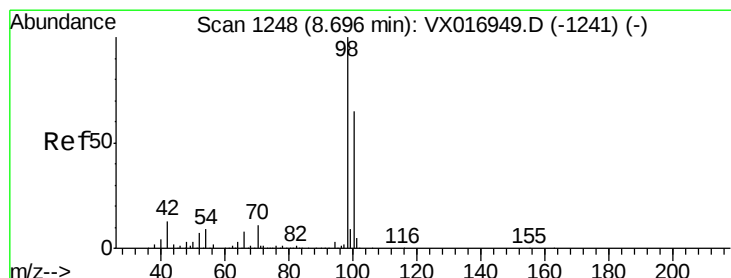
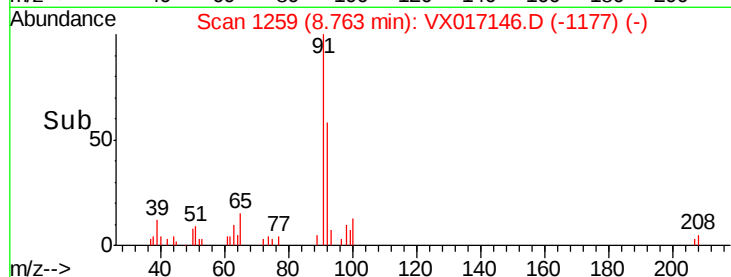
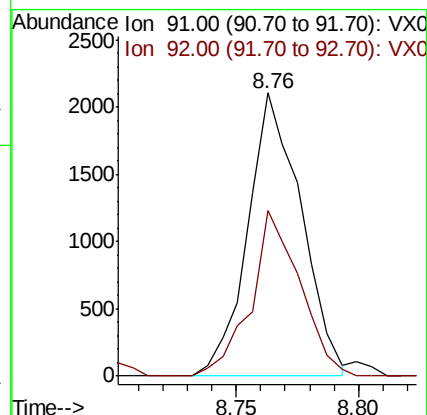
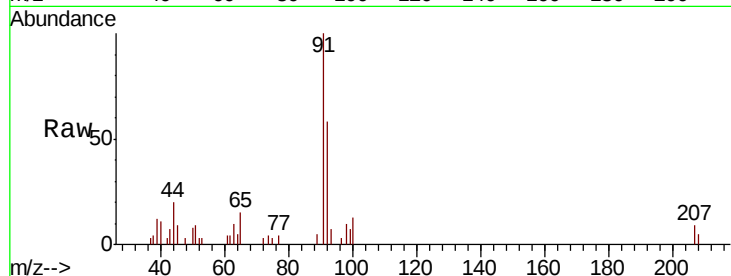
TUNNEL-WALL-WASHWATER(EXH)

Tot Ion: 91 Resp: 3214

Ion Ratio Lower Upper

91 100

92 53.7 46.8 70.2



#63

Toluene-d8

Concen: 28.594 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. 0.00 min

Lab File: VX017146.D

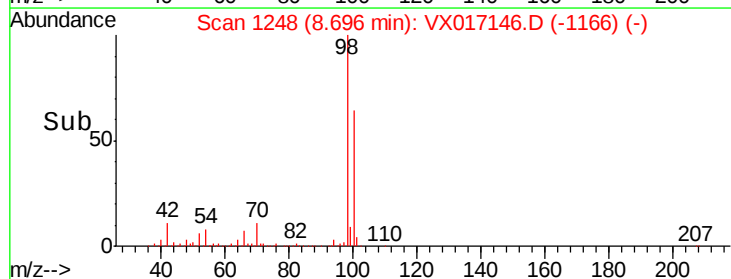
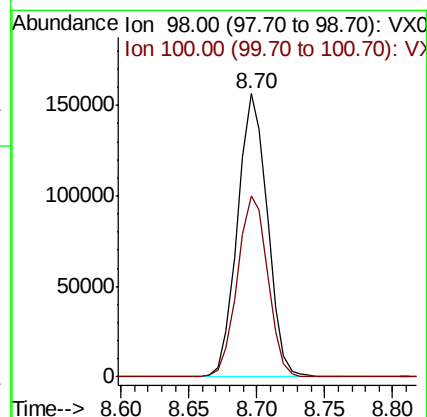
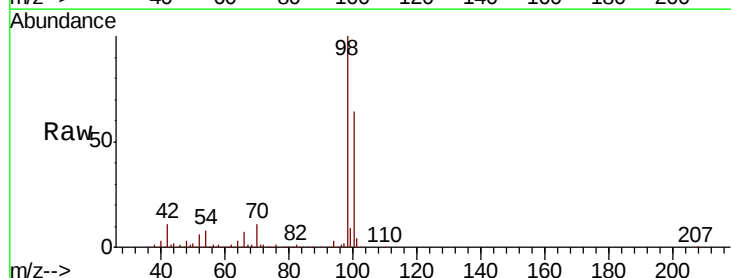
Acq: 02 Jul 2020 14:24

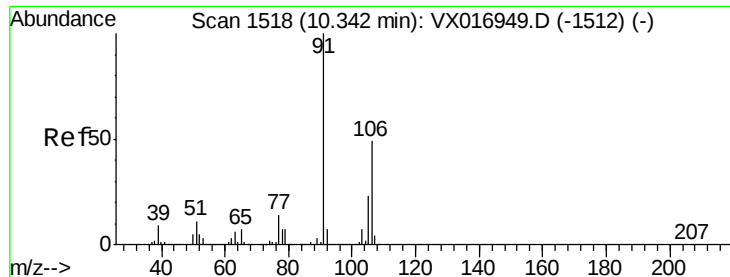
Tgt Ion: 98 Resp: 240274

Ion Ratio Lower Upper

98 100

100 65.0 52.3 78.5





#67

m/p-Xvlenes

Concen: 0.201 ug/l

RT: 10.34 min Scan# 1518

Delta R.T. 0.00 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

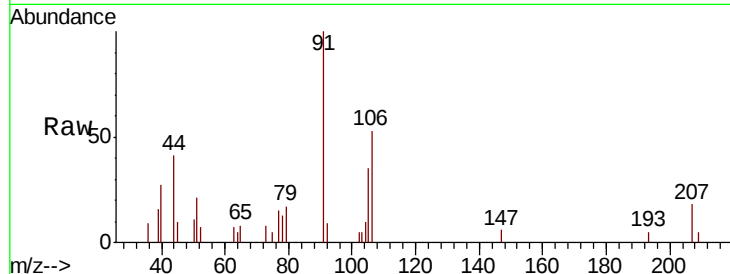
TUNNEL-WALL-WASHWATER(EXH)

Tot Ion:106 Resp: 876

Ion Ratio Lower Upper

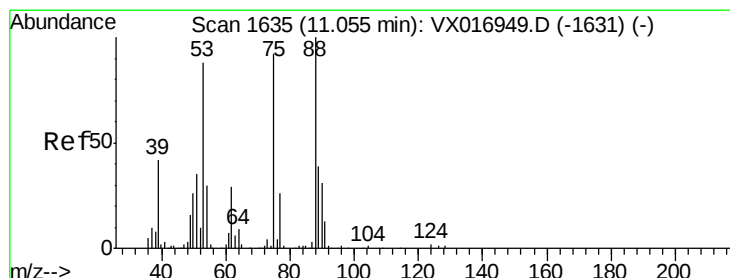
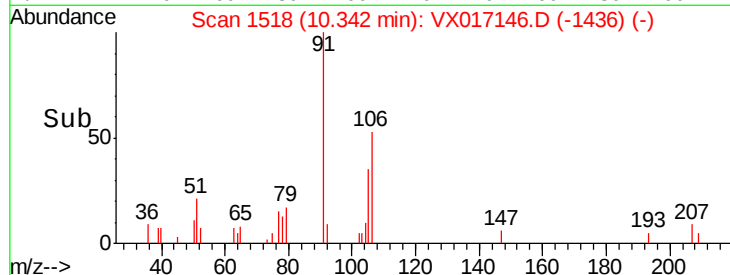
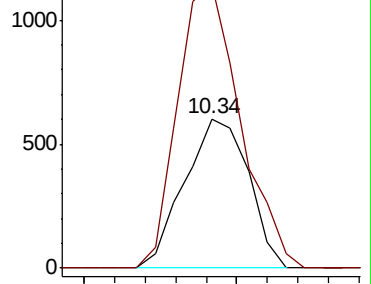
106 100

91 184.4 164.5 246.7



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#77

t-1,4-Dichloro-2-butene

Concen: 0.403 ug/l

RT: 11.05 min Scan# 1634

Delta R.T. -0.01 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

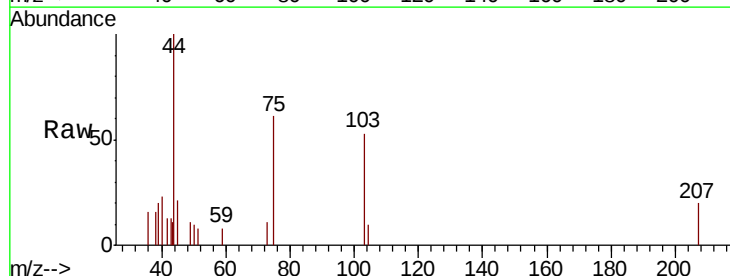
Tgt Ion: 75 Resp: 548

Ion Ratio Lower Upper

75 100

53 0.0 47.6 142.9#

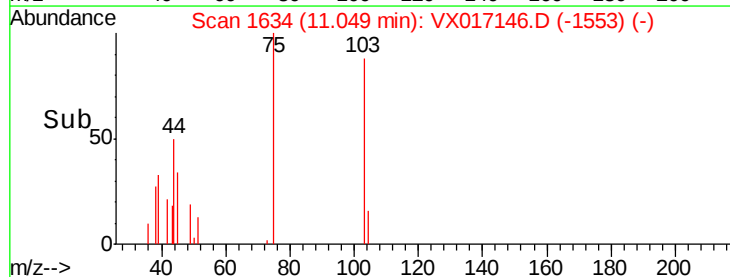
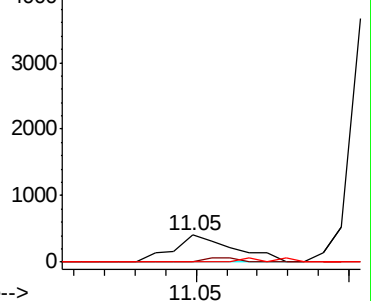
89 0.0 21.1 63.4#

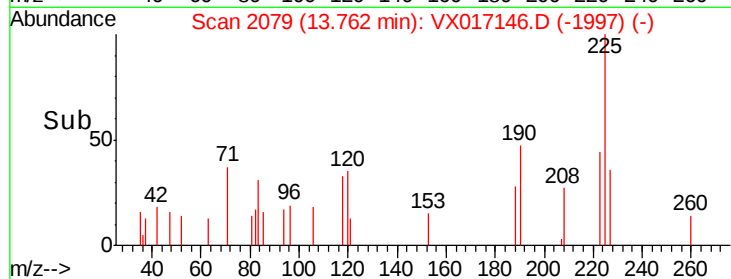
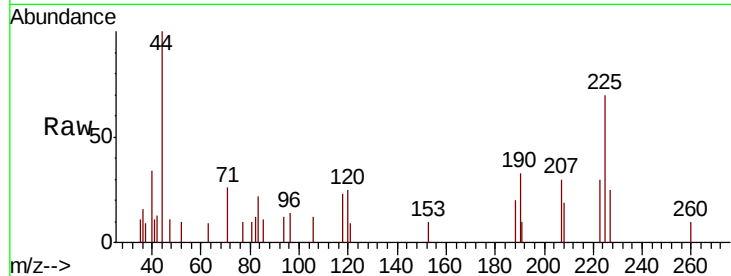
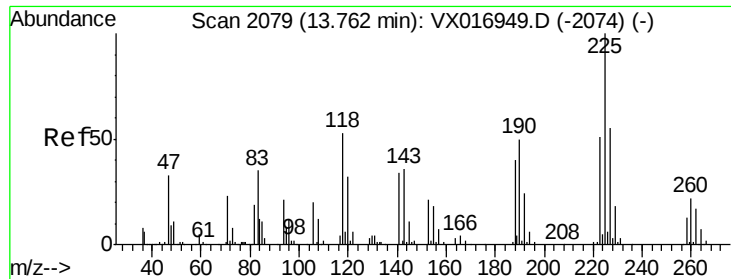


Abundance Ion 75.00 (74.70 to 75.70): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 89.00 (88.70 to 89.70): VX0





#90

Hexachlorobutadiene

Concen: 0.318 ug/l

RT: 13.76 min Scan# 2079

Delta R.T. 0.00 min

Lab File: VX017146.D

Acq: 02 Jul 2020 14:24

Instrument :

MSVOA_X

ClientSampleId :

TUNNEL-WALL-WASHWATER(EXH

Tot Ion:225 Resp: 393

Ion Ratio Lower Upper

225 100

223 40.7 0.0 125.0

227 48.6 0.0 124.0

Abundance Ion 225.00 (224.70 to 225.70): V
Ion 223.00 (222.70 to 223.70): V
Ion 227.00 (226.70 to 227.70): V

