

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061720\
 Data File : VX016830.D
 Acq On : 17 Jun 2020 20:21
 Operator : JC/SP
 Sample : L2984-09
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 S49-ER-2020-1

Quant Time: Jun 18 00:49:02 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X061520W.M
 Quant Title : SW846 8260
 QLast Update : Tue Jun 16 02:02:35 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.63	168	288171	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.83	114	392255	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.10	117	398044	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.06	152	244375	50.00	ug/l	0.00

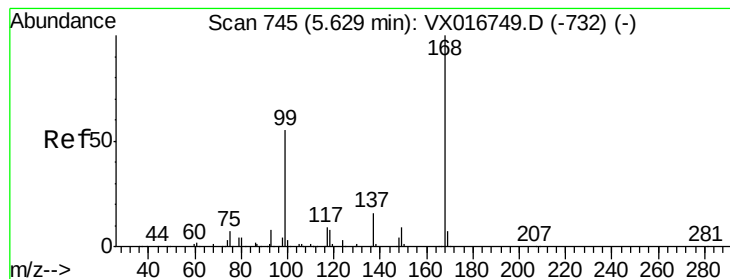
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.03	65	139628	43.09	ug/l	0.00
Spiked Amount	50.000		Recovery	=	86.18%	
35) Dibromofluoromethane	5.46	113	141111	58.31	ug/l	0.00
Spiked Amount	50.000		Recovery	=	116.62%	
50) Toluene-d8	8.70	98	576181	64.57	ug/l	0.00
Spiked Amount	50.000		Recovery	=	129.14%	
62) 4-Bromofluorobenzene	11.12	95	193900	56.81	ug/l	0.00
Spiked Amount	50.000		Recovery	=	113.62%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.18	85	246	0.221	ug/l #	42
4) Vinyl Chloride	1.39	62	2785	0.830	ug/l	89
5) Bromomethane	1.65	94	503	0.241	ug/l #	77
11) Tert butyl alcohol	3.00	59	193	0.237	ug/l #	73
12) 1,1-Dichloroethene	2.37	96	895	0.318	ug/l #	44
13) Acrolein	2.27	56	416	3.495	ug/l #	78
15) Acrylonitrile	3.11	53	631	0.382	ug/l #	89
16) Acetone	2.42	43	3741	2.544	ug/l	99
17) Carbon Disulfide	2.55	76	2925	0.363	ug/l #	88
20) Methylene Chloride	2.84	84	2315	0.731	ug/l #	82
25) 2-Butanone	4.64	43	2484	1.121	ug/l	99
27) cis-1,2-Dichloroethene	4.57	96	1792	0.518	ug/l	70
29) Tetrahydrofuran	5.09	42	19244	13.406	ug/l	98
31) Cyclohexane	5.63	56	4640	1.793	ug/l #	1
38) Carbon Tetrachloride	5.63	117	25903	6.580	ug/l #	16
39) Methylcyclohexane	7.45	83	416	1.055	ug/l	94
41) Methacrylonitrile	5.09	41	10964	5.417	ug/l #	41
44) Trichloroethene	7.20	130	2874	0.880	ug/l	94
65) Chlorobenzene	10.12	112	1679	0.208	ug/l #	79
76) 1,2,3-Trichloropropane	11.12	75	90391	17.589	ug/l #	37
81) trans-1,4-Dichloro-2-buten	11.12	75	90391	44.280	ug/l #	13
89) n-Butylbenzene	12.37	91	2941	0.258	ug/l	96
93) 1,2,4-Trichlorobenzene	13.63	180	2073	0.387	ug/l	89
94) Hexachlorobutadiene	13.76	225	1172	0.906	ug/l	97
95) Naphthalene	13.82	128	4282	0.255	ug/l	98
96) 1,2,3-Trichlorobenzene	14.01	180	1519	0.288	ug/l	83

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.00 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

Instrument :

MSVOA_X

ClientSampleId :

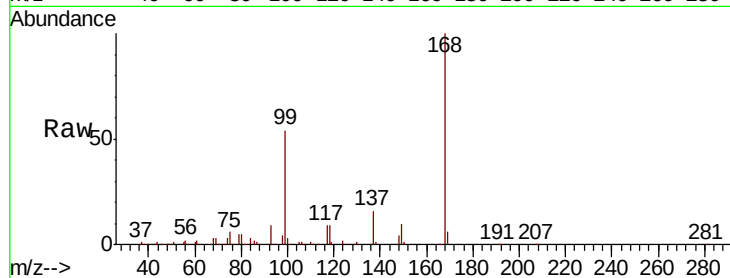
S49-ER-2020-1

Tot Ion:168 Resp: 288171

Ion Ratio Lower Upper

168 100

99 53.9 43.8 65.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

100000

80000

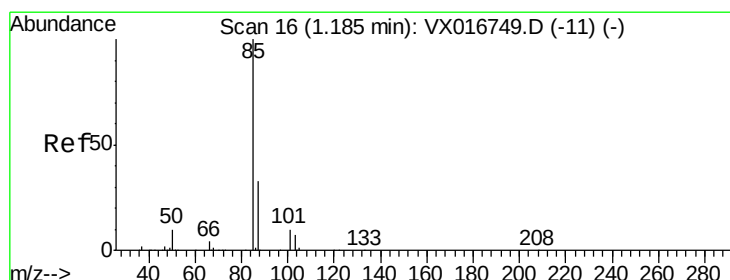
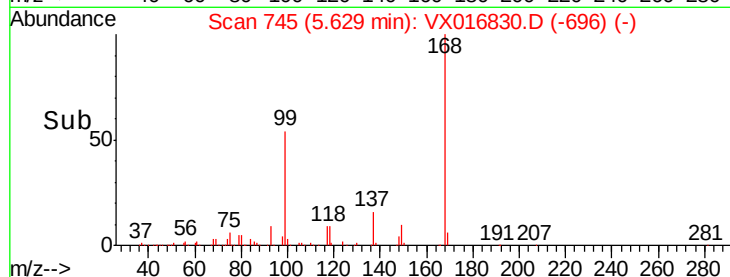
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.221 ug/l

RT: 1.18 min Scan# 16

Delta R.T. 0.00 min

Lab File: VX016830.D

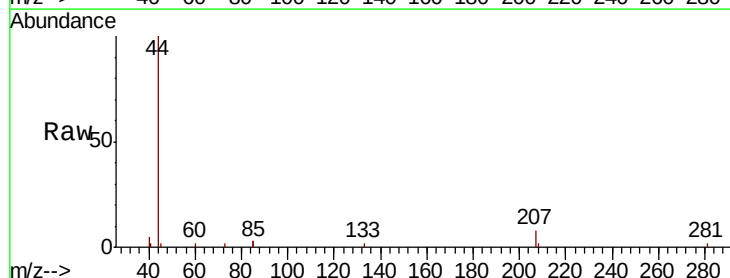
Acq: 17 Jun 2020 20:21

Tgt Ion: 85 Resp: 246

Ion Ratio Lower Upper

85 100

87 0.0 16.4 49.2#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.18

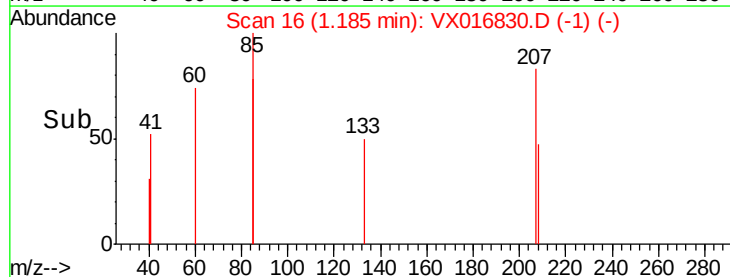
300

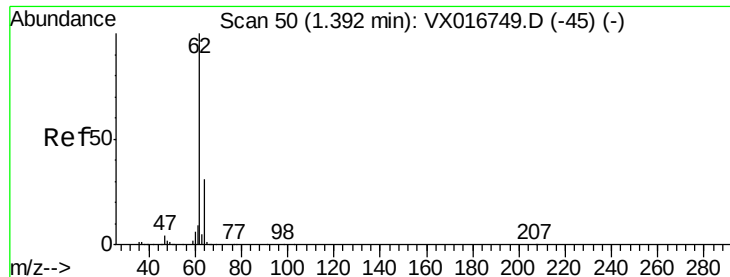
200

100

0

Time-->





#4

Vinyl Chloride

Concen: 0.830 ug/l

RT: 1.39 min Scan# 50

Delta R.T. -0.00 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

Instrument :

MSVOA_X

ClientSampleId :

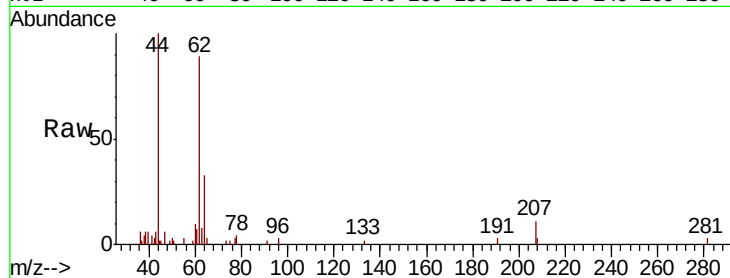
S49-ER-2020-1

Tot Ion: 62 Resp: 2785

Ion Ratio Lower Upper

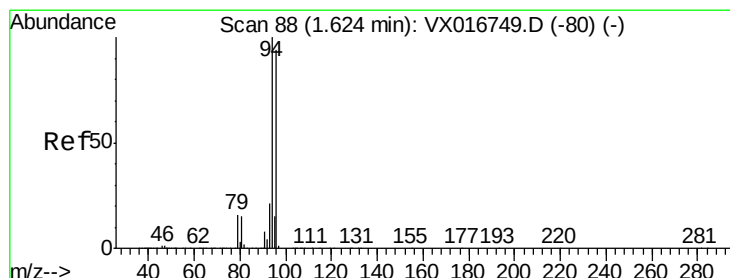
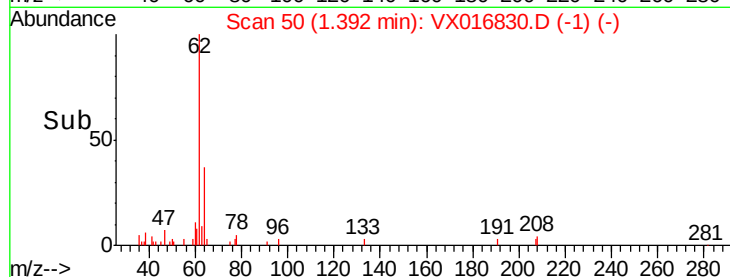
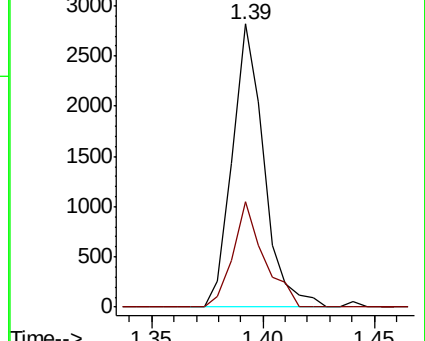
62 100

64 37.3 25.1 37.7



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0



#5

Bromomethane

Concen: 0.241 ug/l

RT: 1.65 min Scan# 92

Delta R.T. 0.02 min

Lab File: VX016830.D

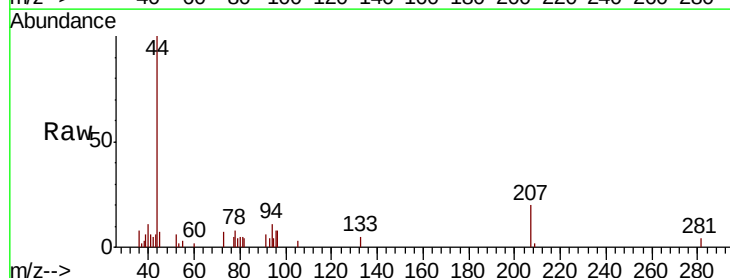
Acq: 17 Jun 2020 20:21

Tgt Ion: 94 Resp: 503

Ion Ratio Lower Upper

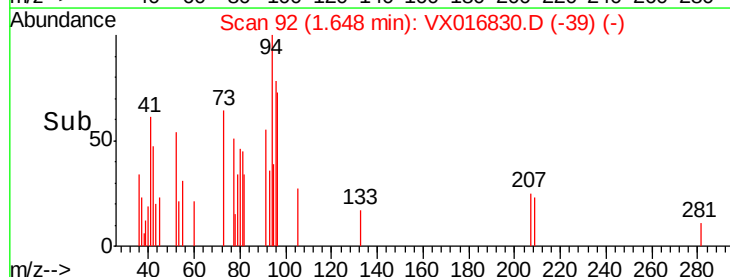
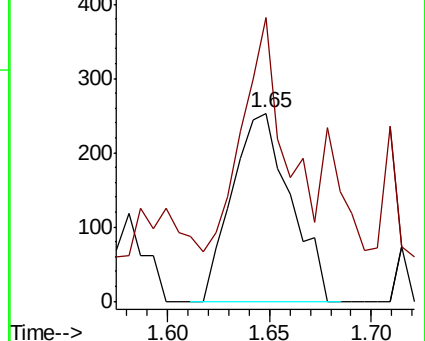
94 100

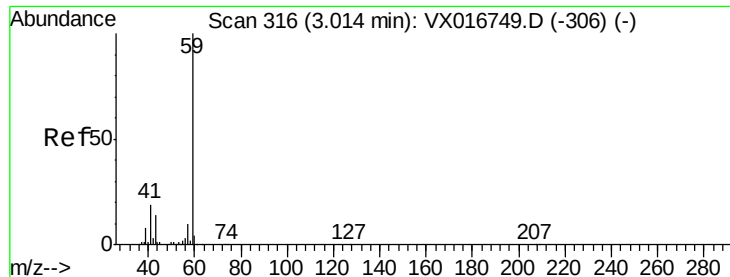
96 116.2 75.4 113.0#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

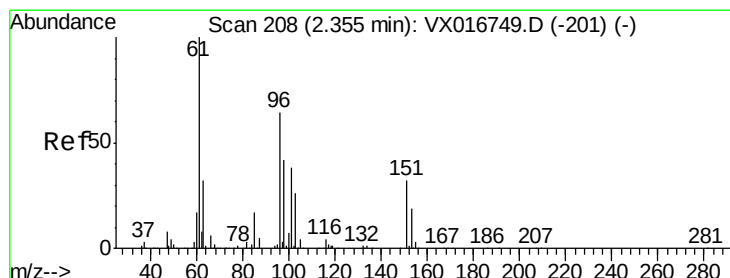
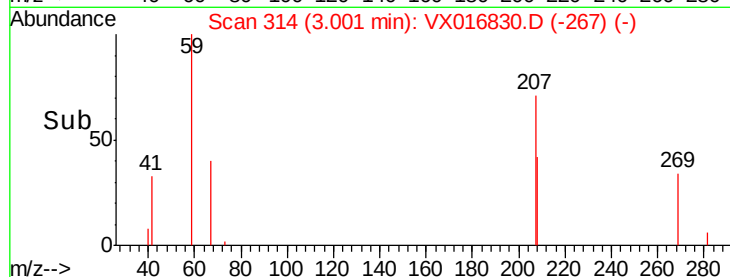
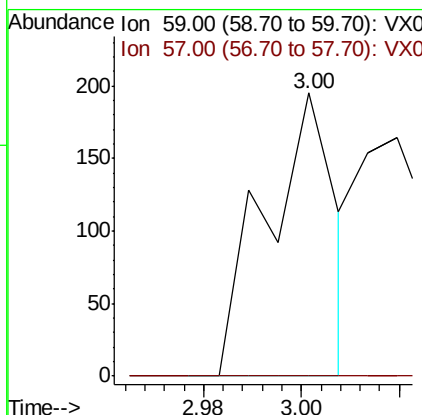
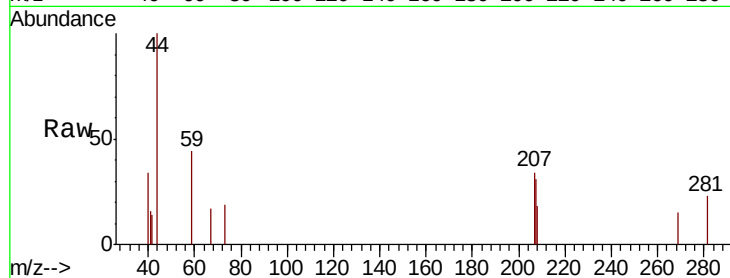




#11
Tert butyl alcohol
Concen: 0.237 ug/l
RT: 3.00 min Scan# 314
Delta R.T. -0.01 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

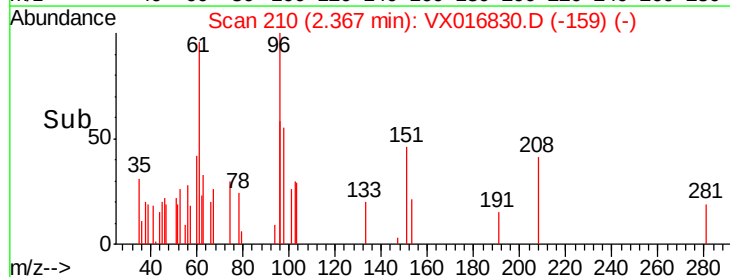
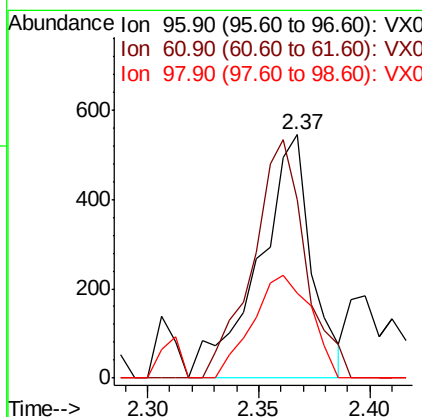
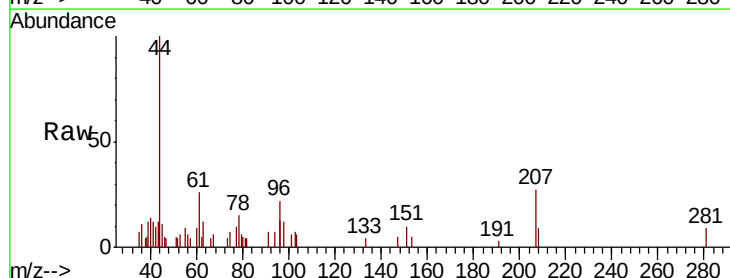
Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

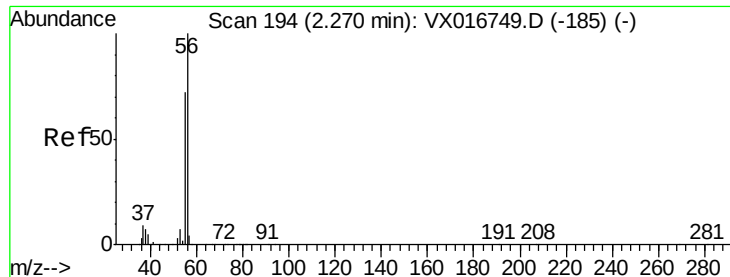
Tot Ion: 59 Resp: 193
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.2#



#12
1,1-Dichloroethene
Concen: 0.318 ug/l
RT: 2.37 min Scan# 210
Delta R.T. 0.01 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion: 96 Resp: 895
Ion Ratio Lower Upper
96 100
61 73.2 124.1 186.1#
98 34.9 52.7 79.1#

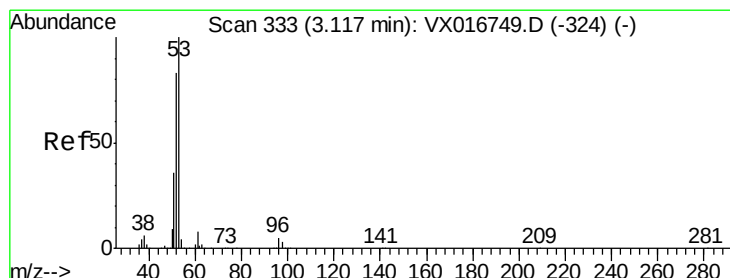
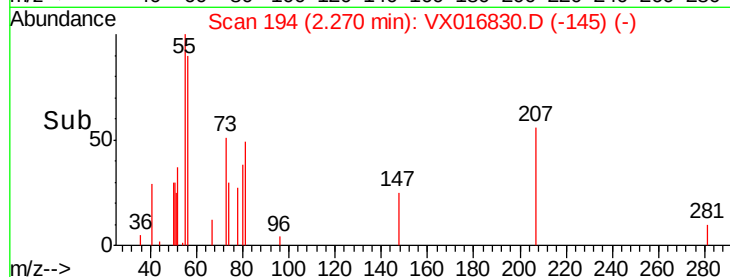
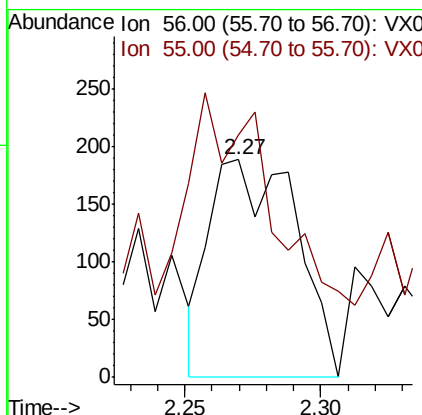
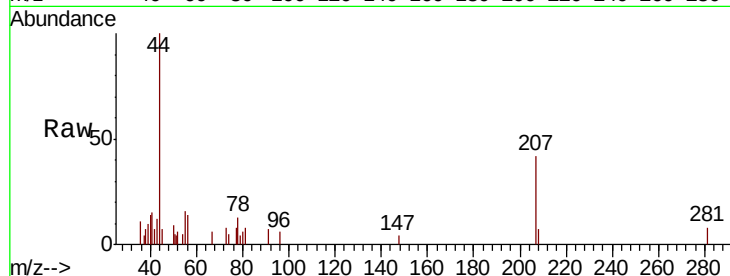




#13
Acrolein
Concen: 3.495 ug/l
RT: 2.27 min Scan# 194
Delta R.T. 0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

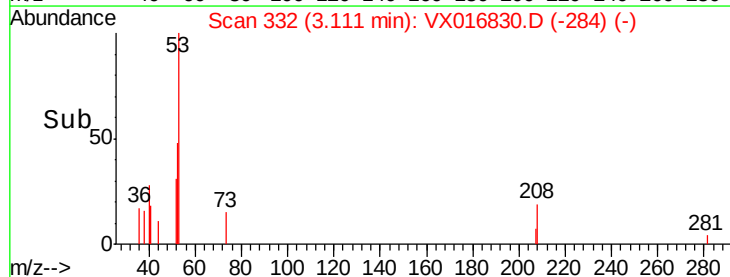
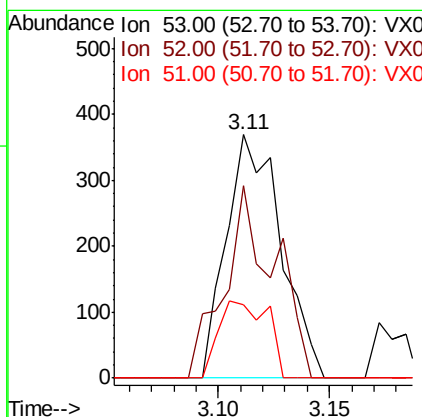
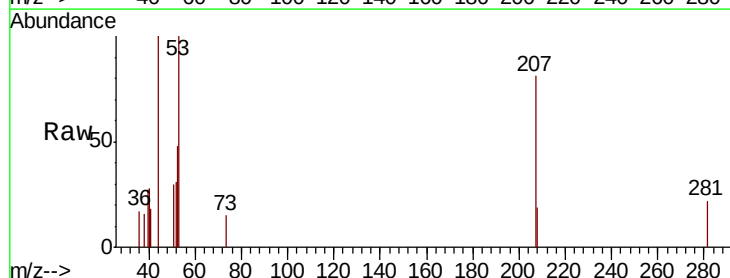
Instrument :
MSVOA_X
ClientSampled :
S49-ER-2020-1

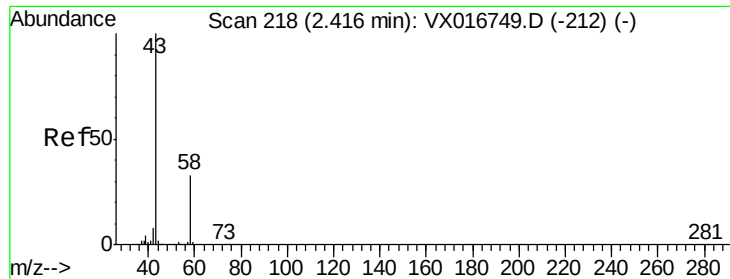
Tot Ion: 56 Resp: 416
Ion Ratio Lower Upper
56 100
55 91.3 58.2 87.4#



#15
Acrylonitrile
Concen: 0.382 ug/l
RT: 3.11 min Scan# 332
Delta R.T. -0.01 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion: 53 Resp: 631
Ion Ratio Lower Upper
53 100
52 72.7 65.5 98.3
51 28.2 28.6 42.8#





#16

Acetone

Concen: 2.544 ug/l

RT: 2.42 min Scan# 218

Delta R.T. -0.00 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

Instrument :

MSVOA_X

ClientSampleId :

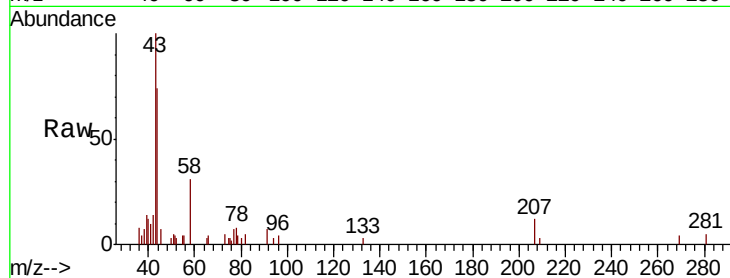
S49-ER-2020-1

Tot Ion: 43 Resp: 3741

Ion Ratio Lower Upper

43 100

58 33.3 26.3 39.5



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2500

2000

1500

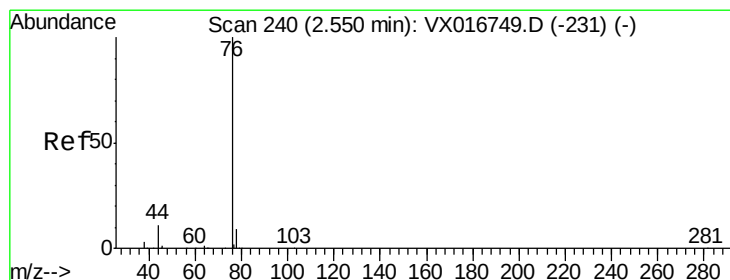
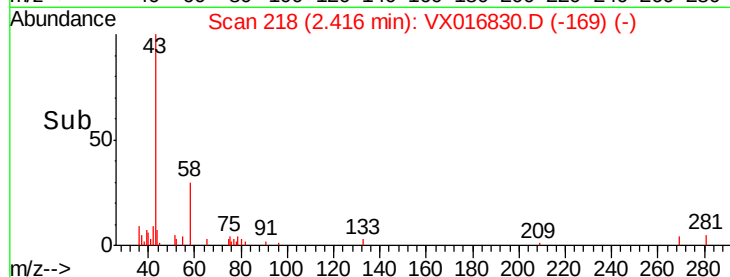
1000

500

0

Time--> 2.35 2.40 2.45

2.42



#17

Carbon Disulfide

Concen: 0.363 ug/l

RT: 2.55 min Scan# 240

Delta R.T. -0.00 min

Lab File: VX016830.D

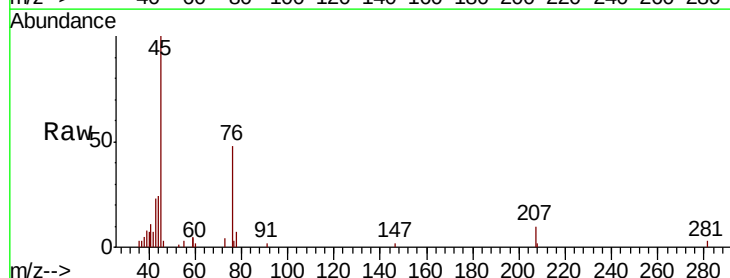
Acq: 17 Jun 2020 20:21

Tgt Ion: 76 Resp: 2925

Ion Ratio Lower Upper

76 100

78 13.5 7.3 10.9#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2000

1500

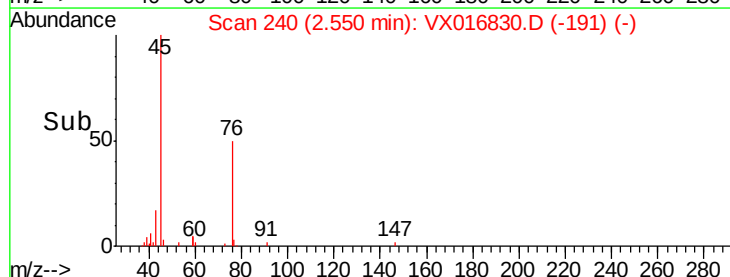
1000

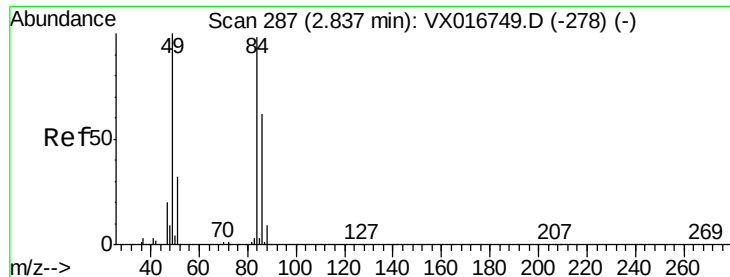
500

0

Time--> 2.50 2.55 2.60

2.55

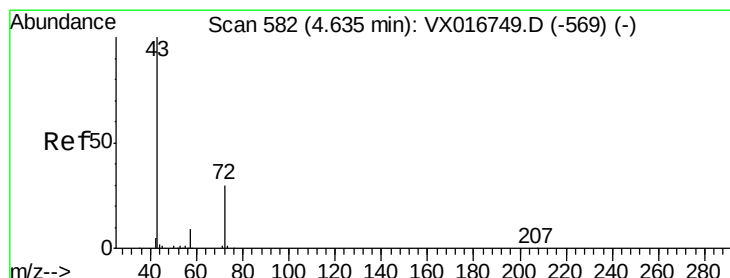
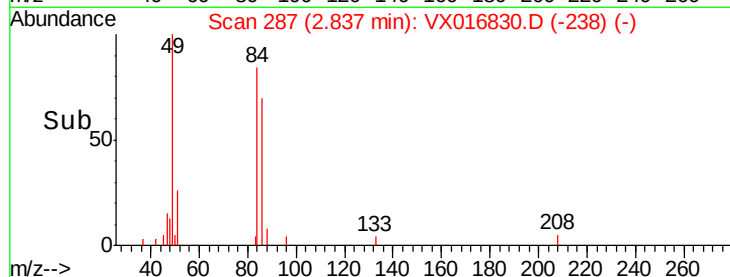
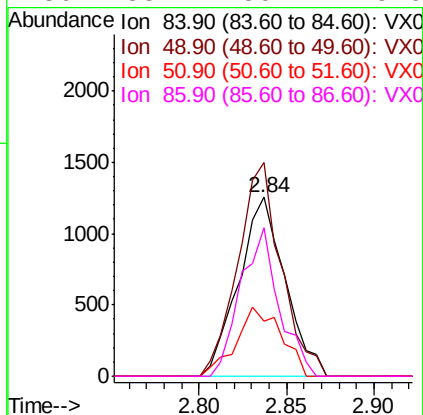
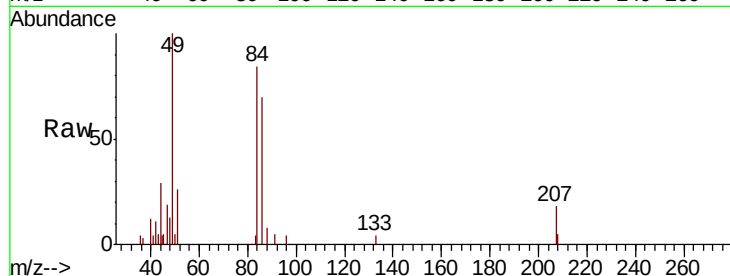




#20
Methvlene Chloride
Concen: 0.731 ug/l
RT: 2.84 min Scan# 287
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

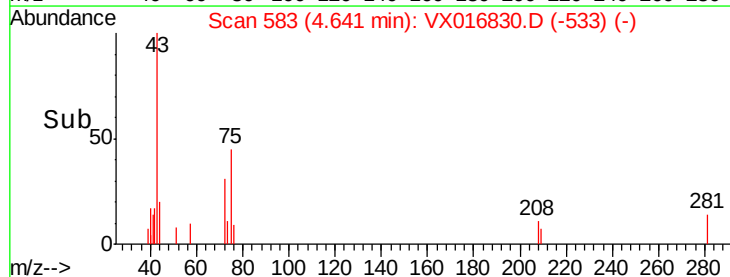
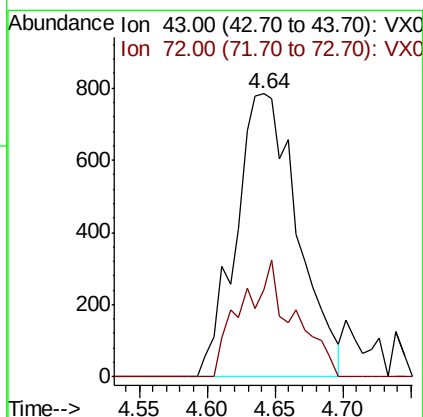
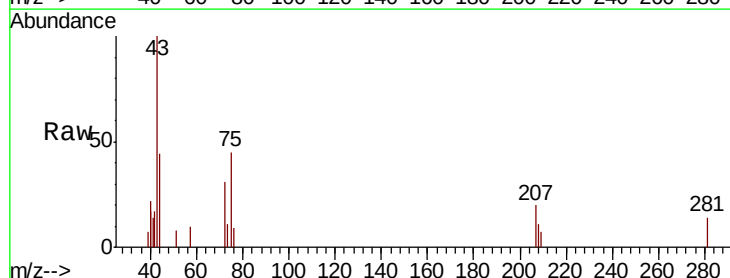
Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

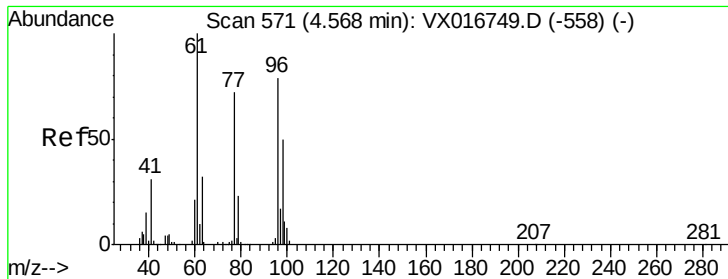
Tot Ion:	84	Resp:	2315
Ion	Ratio	Lower	Upper
84	100		
49	119.6	81.8	122.8
51	30.6	25.8	38.8
86	83.2	50.4	75.6#



#25
2-Butanone
Concen: 1.121 ug/l
RT: 4.64 min Scan# 583
Delta R.T. 0.01 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion:	43	Resp:	2484
Ion	Ratio	Lower	Upper
43	100		
72	31.0	24.2	36.4



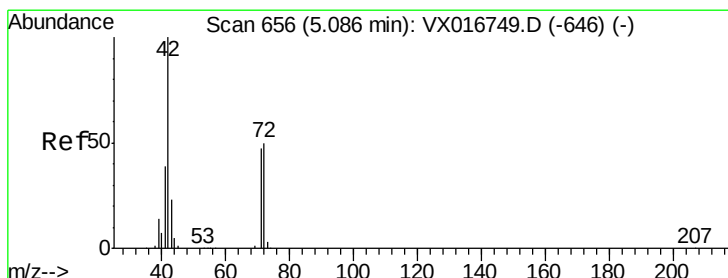
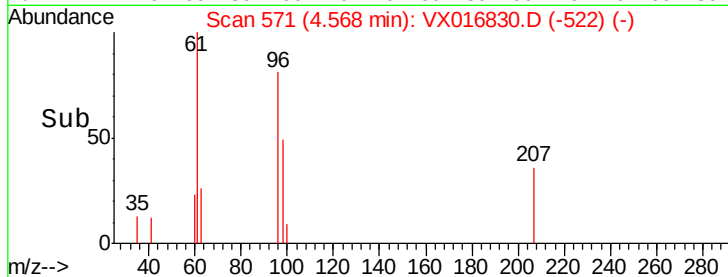
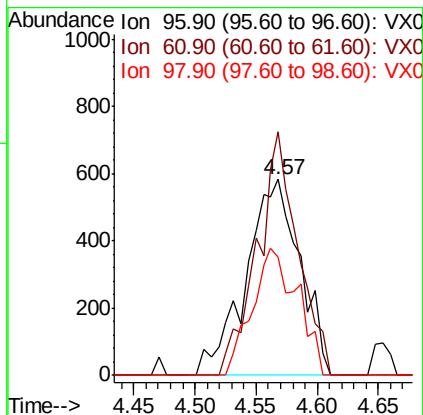
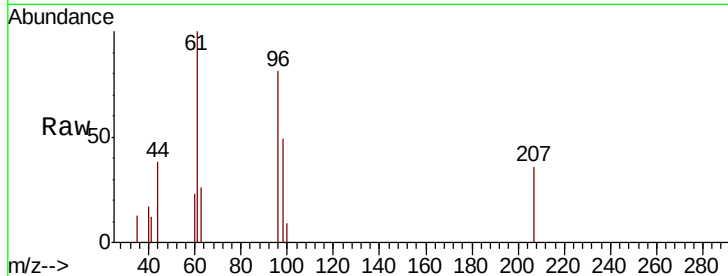


#27

cis-1,2-Dichloroethene
 Concen: 0.518 ug/l
 RT: 4.57 min Scan# 571
 Delta R.T. -0.00 min
 Lab File: VX016830.D
 Acq: 17 Jun 2020 20:21

Instrument :
 MSVOA_X
 ClientSampleId :
 S49-ER-2020-1

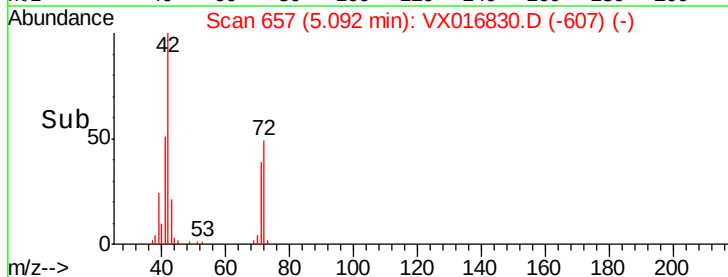
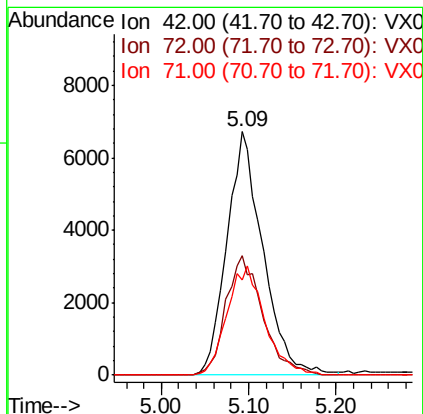
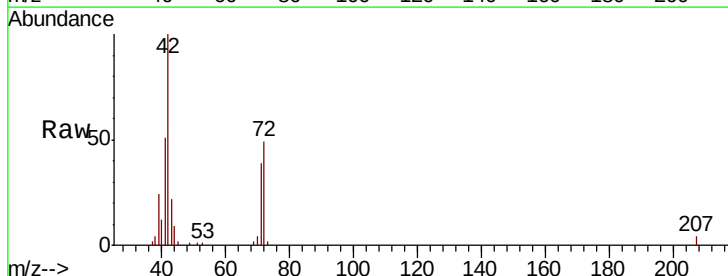
Tot Ion	Ratio	Lower	Upper
96	100		
61	93.2	0.0	276.2
98	54.4	0.0	130.0

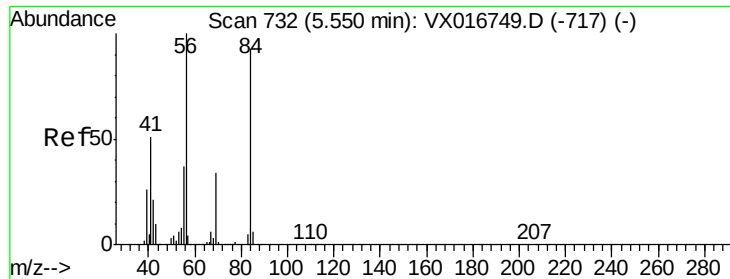


#29

Tetrahydrofuran
 Concen: 13.406 ug/l
 RT: 5.09 min Scan# 657
 Delta R.T. 0.01 min
 Lab File: VX016830.D
 Acq: 17 Jun 2020 20:21

Tgt Ion	Ratio	Lower	Upper
42	100		
72	50.1	41.0	61.6
71	46.8	38.2	57.4

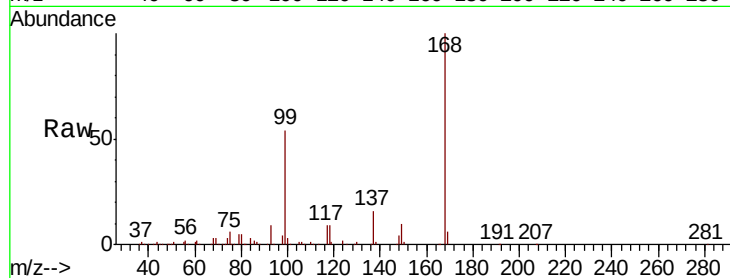




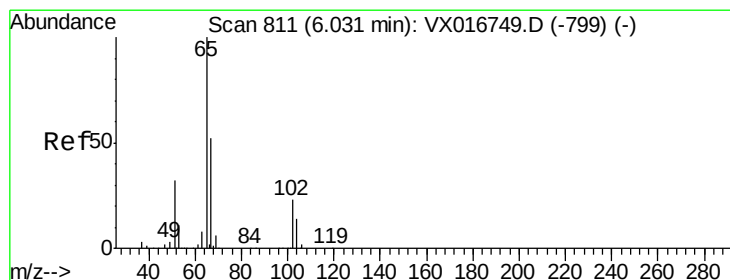
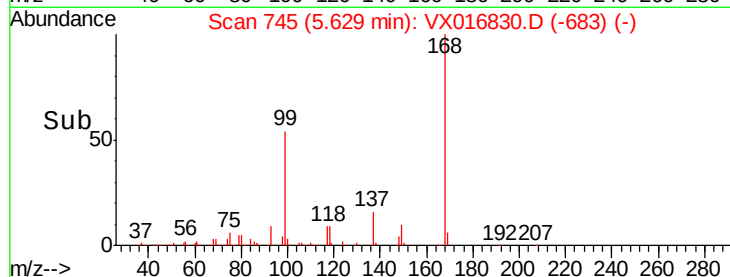
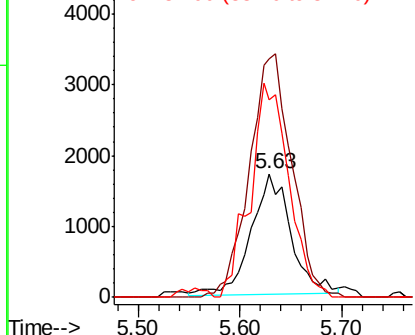
#31
Cyclohexane
Concen: 1.793 ug/l
RT: 5.63 min Scan# 745
Delta R.T. 0.08 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

Tot Ion: 56 Resp: 4640
Ion Ratio Lower Upper
56 100
69 198.5 27.1 40.7#
84 165.2 74.0 111.0#

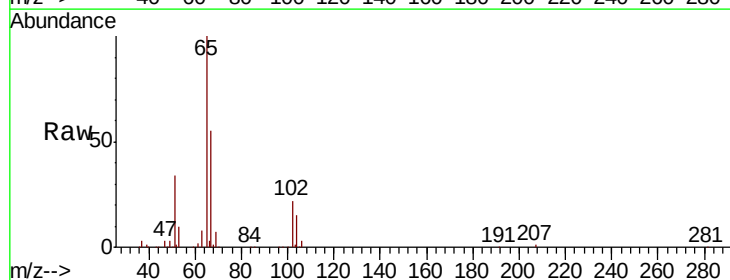


Abundance Ion 56.00 (55.70 to 56.70): VX0
Ion 69.00 (68.70 to 69.70): VX0
Ion 84.00 (83.70 to 84.70): VX0

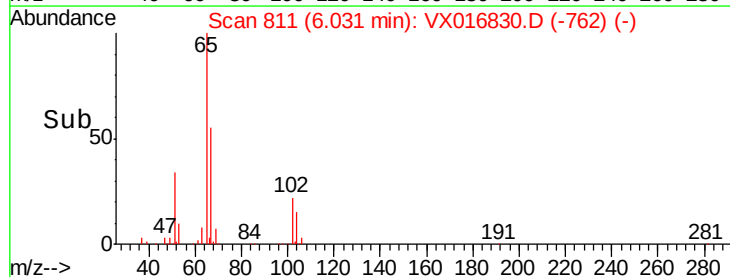
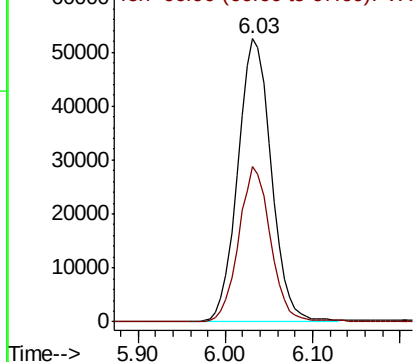


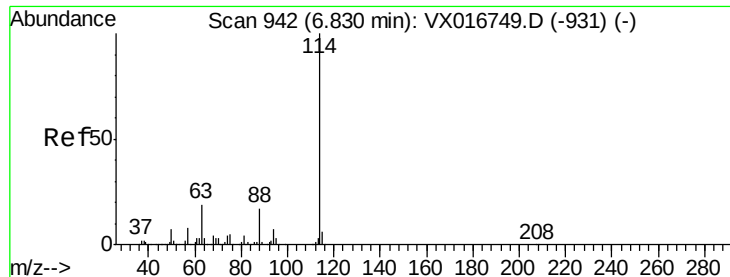
#33
1,2-Dichloroethane-d4
Concen: 43.086 ug/l
RT: 6.03 min Scan# 811
Delta R.T. 0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion: 65 Resp: 139628
Ion Ratio Lower Upper
65 100
67 52.2 0.0 103.0



Abundance Ion 64.90 (64.60 to 65.60): VX0
Ion 66.90 (66.60 to 67.60): VX0

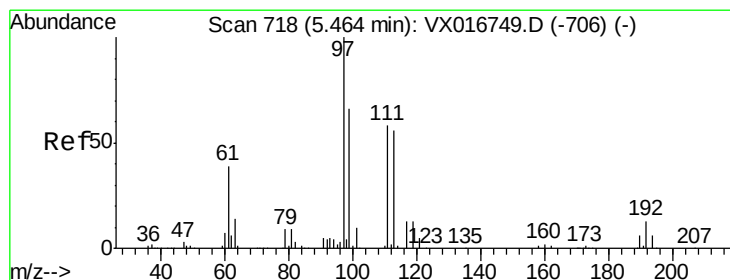
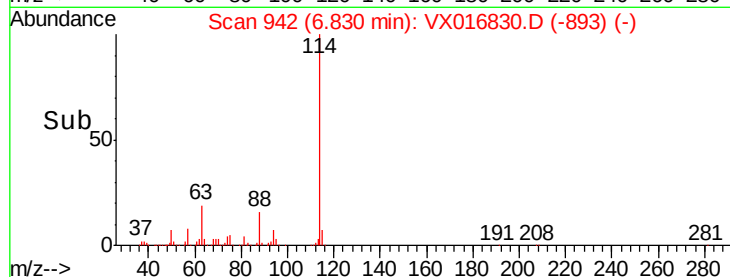
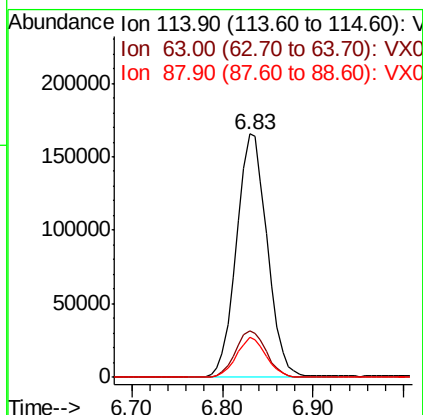
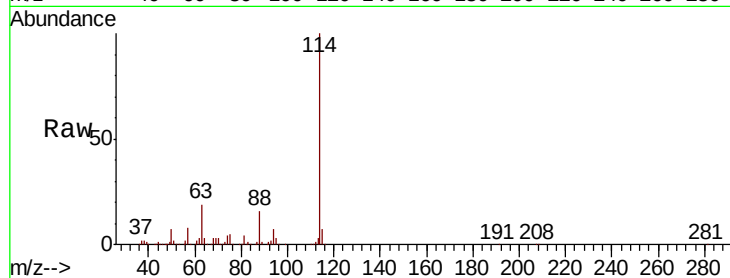




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.83 min Scan# 942
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

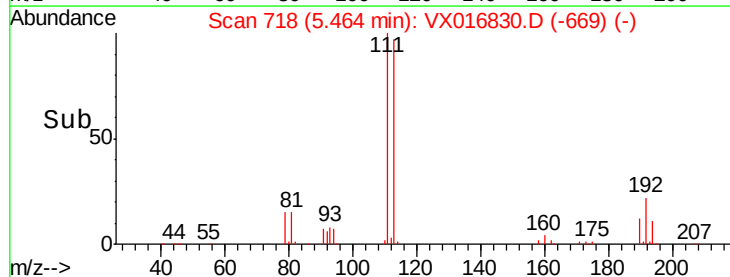
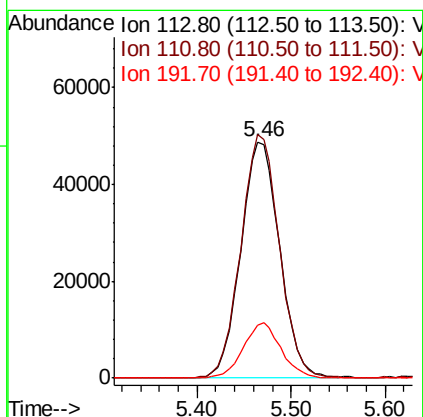
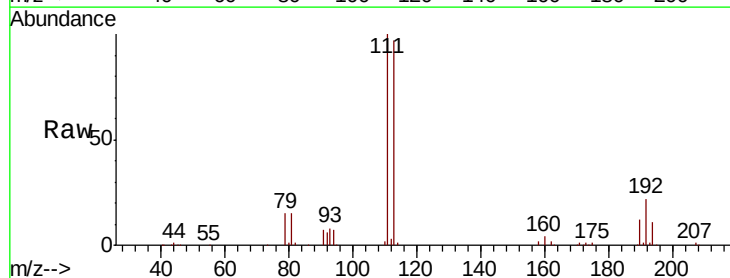
Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

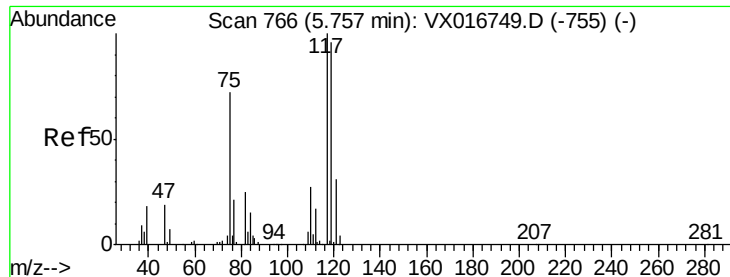
Tot Ion	Ratio	Lower	Upper
114	100		
63	19.1	0.0	38.8
88	16.3	0.0	33.4



#35
Dibromofluoromethane
Concen: 58.307 ug/l
RT: 5.46 min Scan# 718
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.4	81.8	122.6
192	22.9	18.2	27.4





#38

Carbon Tetrachloride

Concen: 6.580 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.13 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

Instrument :

MSVOA_X

ClientSampleId :

S49-ER-2020-1

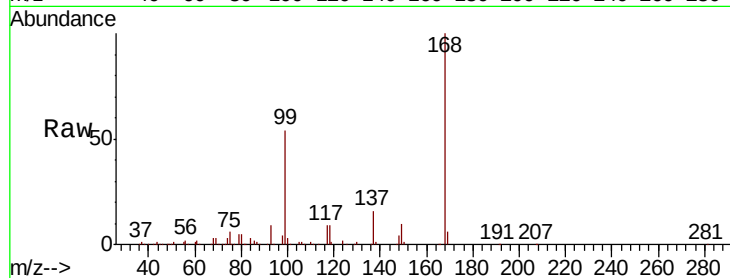
Tot Ion:117 Resp: 25903

Ion Ratio Lower Upper

117 100

119 5.5 76.7 115.1#

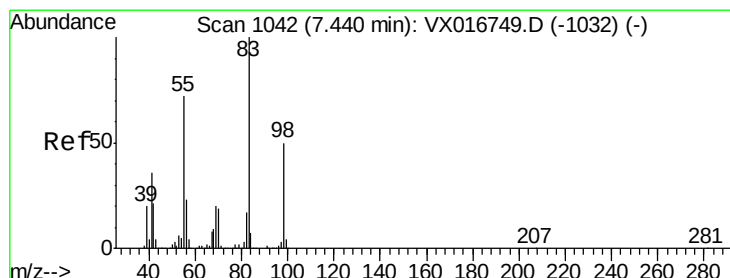
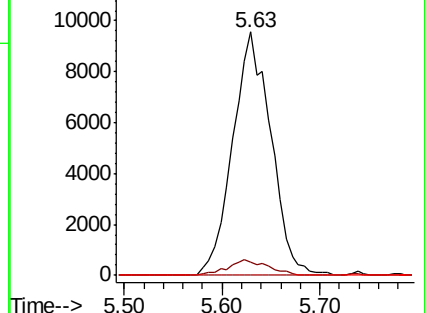
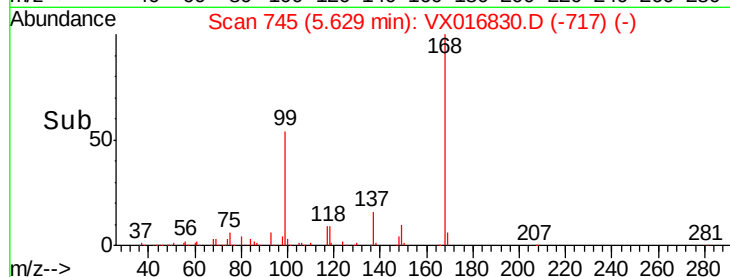
121 0.0 24.7 37.1#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#39

Methylcyclohexane

Concen: 1.055 ug/l

RT: 7.45 min Scan# 1044

Delta R.T. 0.01 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

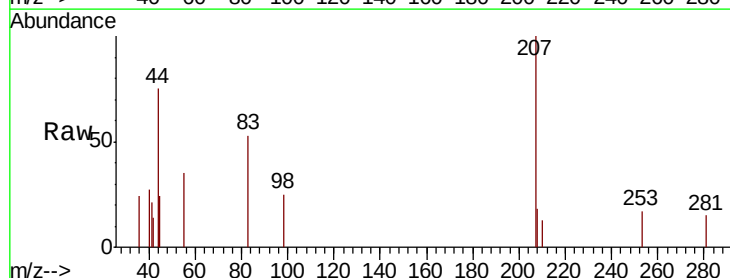
Tgt Ion: 83 Resp: 416

Ion Ratio Lower Upper

83 100

55 66.7 57.3 85.9

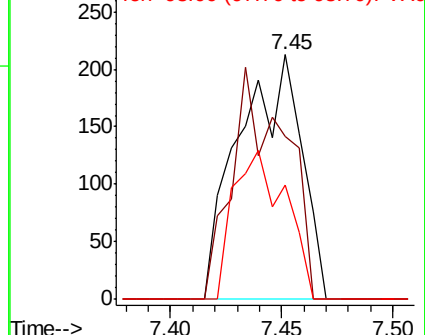
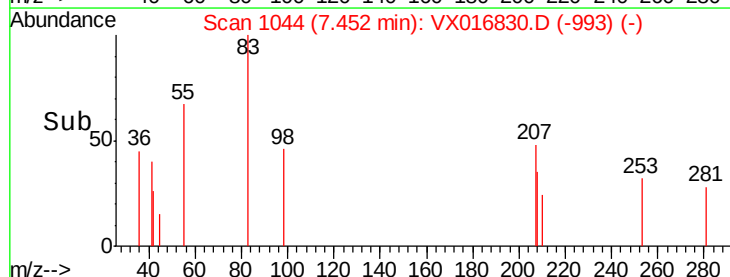
98 46.5 40.3 60.5

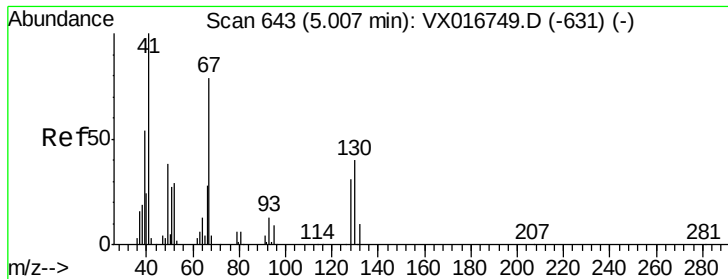


Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 98.00 (97.70 to 98.70): VX0

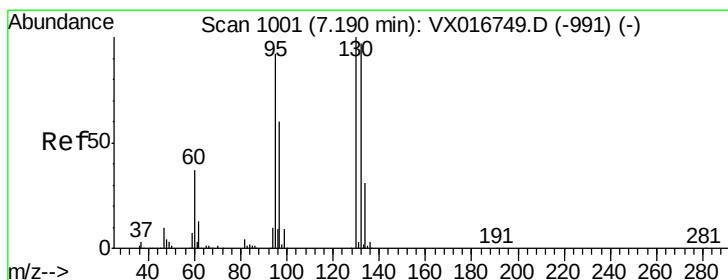
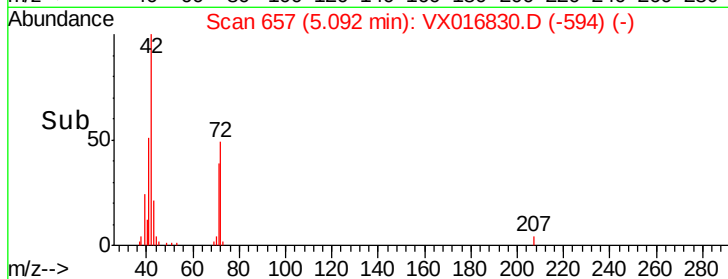
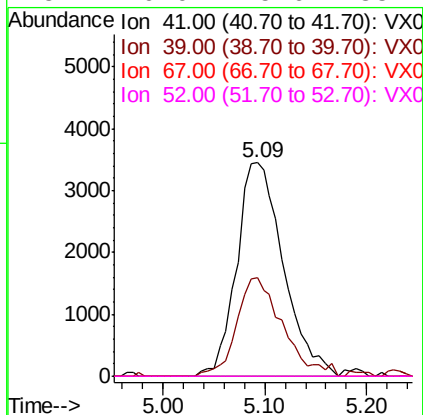
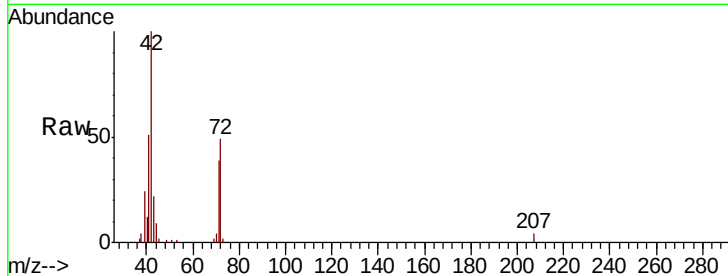




#41
Methacrylonitrile
Concen: 5.417 ug/l
RT: 5.09 min Scan# 657
Delta R.T. 0.09 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

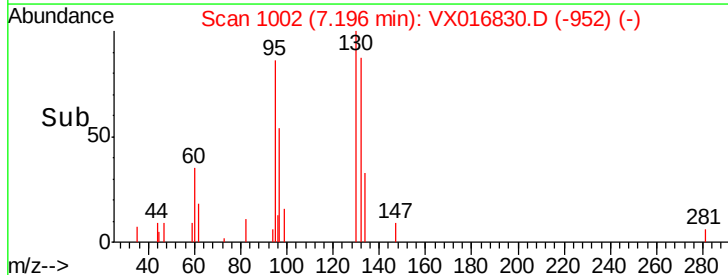
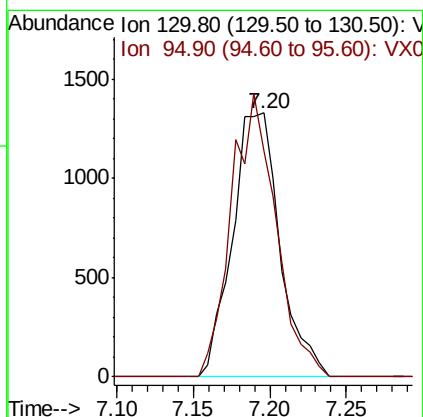
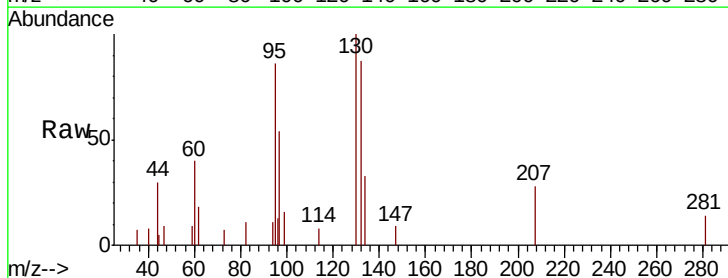
Instrument :
MSVOA_X
ClientSampled :
S49-ER-2020-1

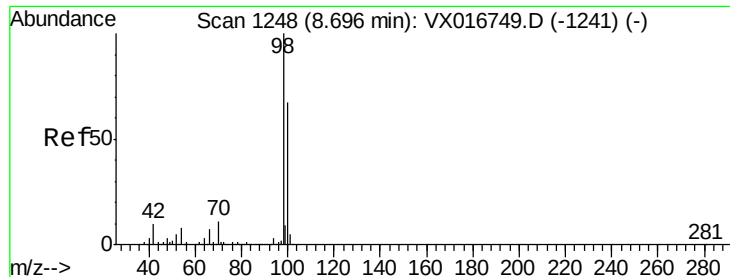
Tot Ion:	41	Resp:	10964
Ion	Ratio	Lower	Upper
41	100		
39	45.1	43.7	65.5
67	0.0	64.6	96.8#
52	0.0	25.6	38.4#



#44
Trichloroethene
Concen: 0.880 ug/l
RT: 7.20 min Scan# 1002
Delta R.T. 0.01 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion:	130	Resp:	2874
Ion	Ratio	Lower	Upper
130	100		
95	85.6	0.0	183.6

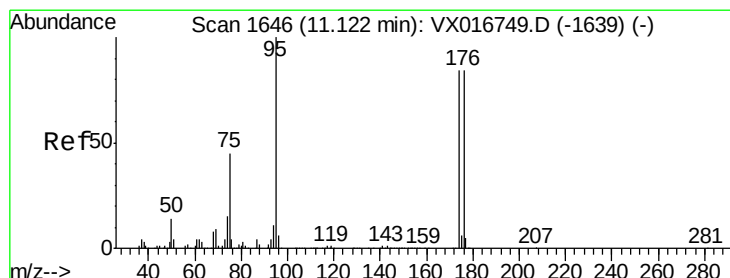
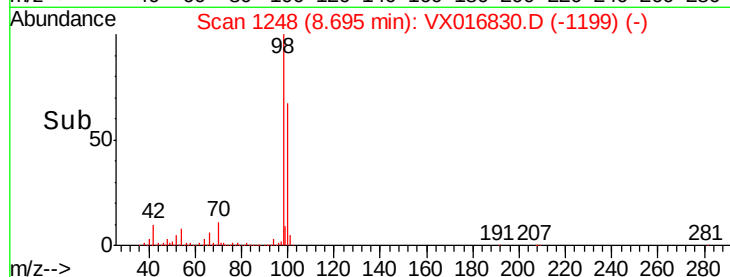
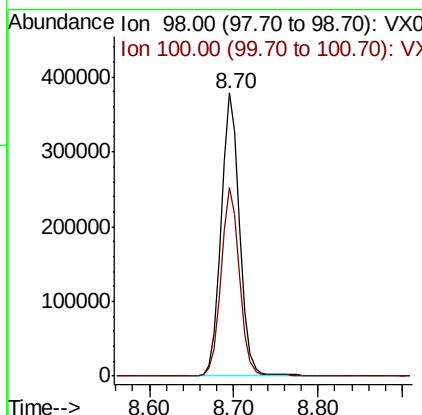
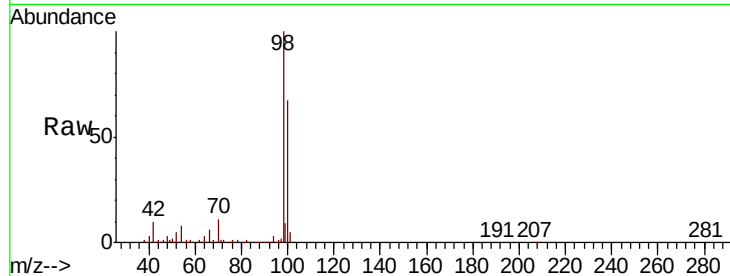




#50
Toluene-d8
Concen: 64.567 ug/l
RT: 8.70 min Scan# 1248
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

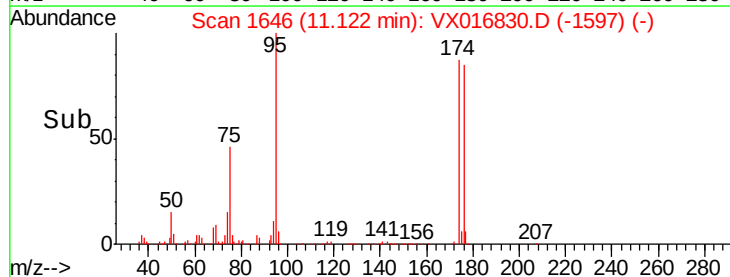
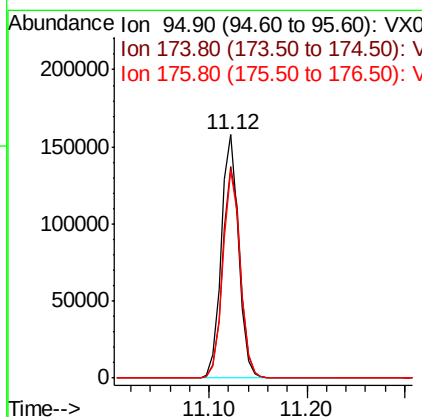
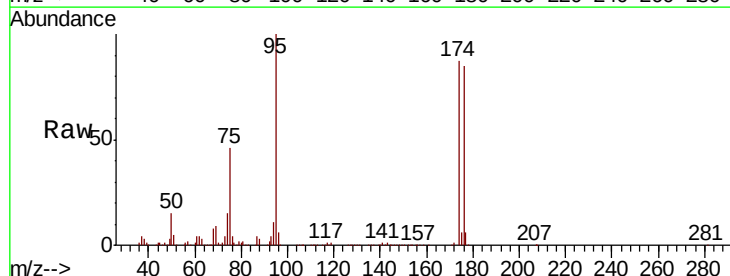
Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

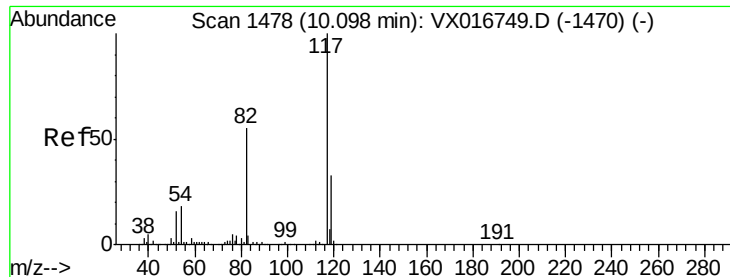
Tot Ion: 98 Resp: 576181
Ion Ratio Lower Upper
98 100
100 66.6 53.9 80.9



#62
4-Bromofluorobenzene
Concen: 56.807 ug/l
RT: 11.12 min Scan# 1646
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion: 95 Resp: 193900
Ion Ratio Lower Upper
95 100
174 88.3 0.0 171.0
176 85.4 0.0 166.2

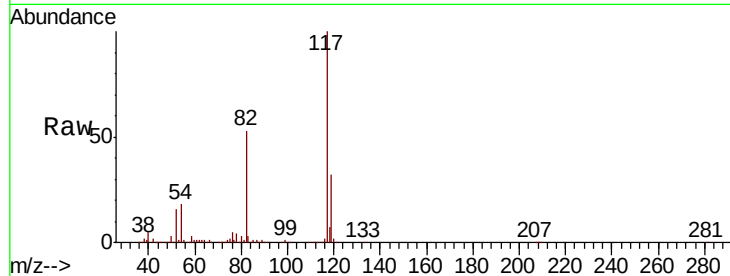




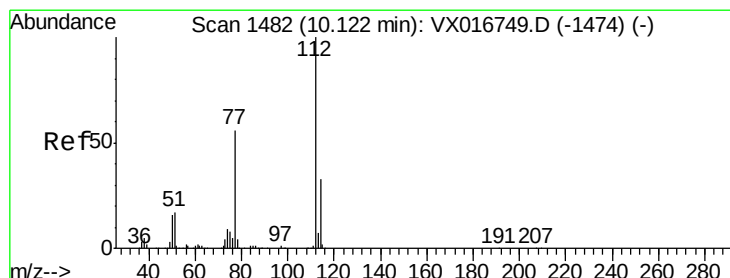
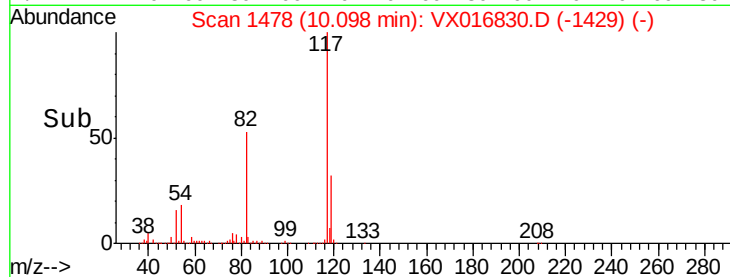
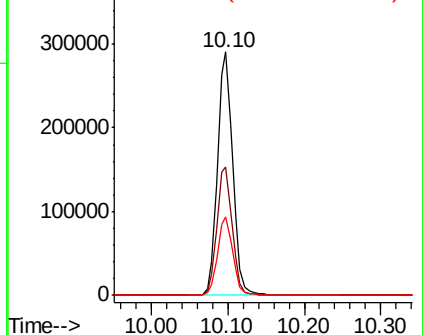
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.10 min Scan# 1478
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

Tot Ion:117 Resp: 398044
Ion Ratio Lower Upper
117 100
82 52.9 43.8 65.6
119 32.1 26.2 39.4

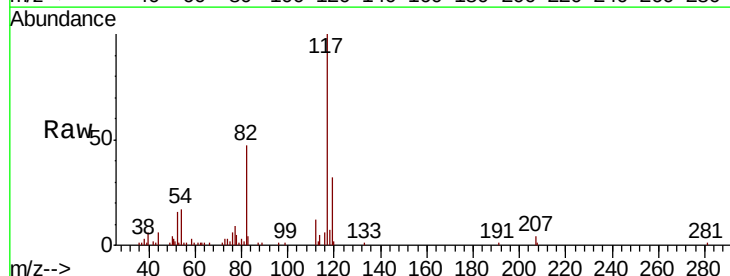


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VX0
Ion 118.90 (118.60 to 119.60): V

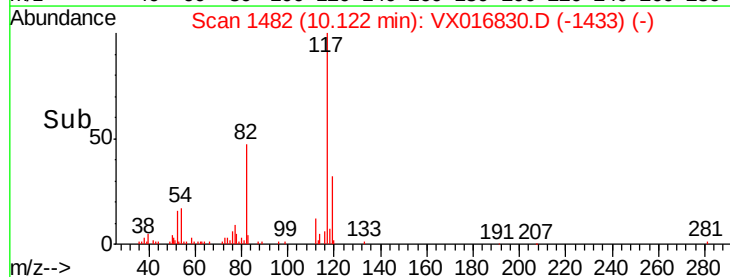
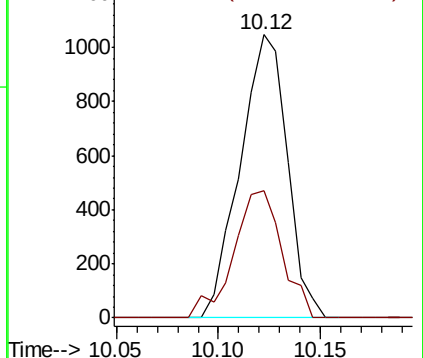


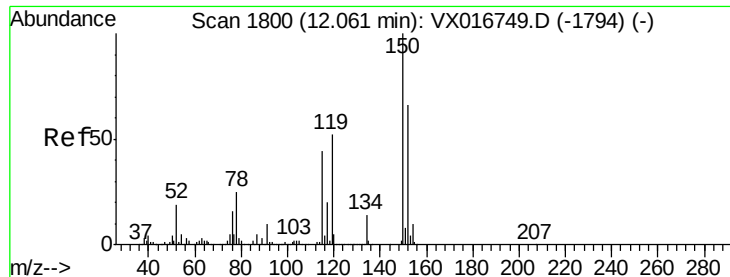
#65
Chlorobenzene
Concen: 0.208 ug/l
RT: 10.12 min Scan# 1482
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion:112 Resp: 1679
Ion Ratio Lower Upper
112 100
114 44.9 26.2 39.4#



Abundance Ion 111.90 (111.60 to 112.60): V
Ion 113.90 (113.60 to 114.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. -0.00 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

Instrument :

MSVOA_X

ClientSampleId :

S49-ER-2020-1

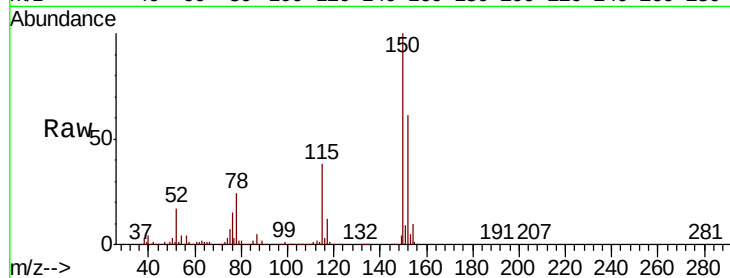
Tot Ion:152 Resp: 244375

Ion Ratio Lower Upper

152 100

115 58.7 40.3 120.8

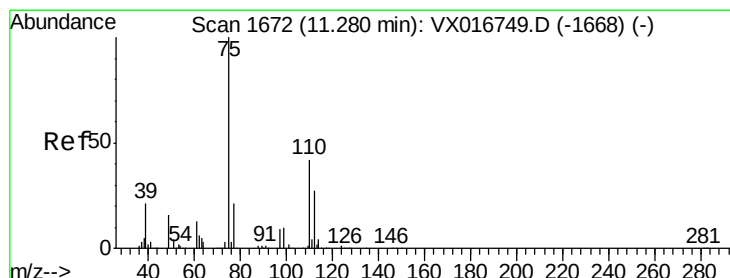
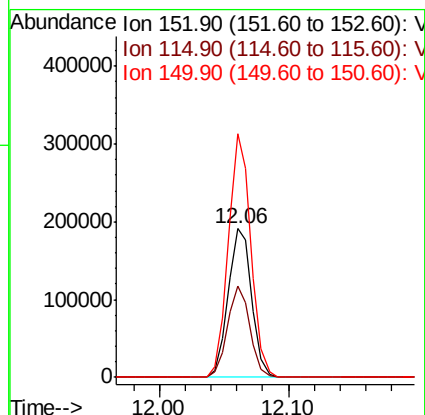
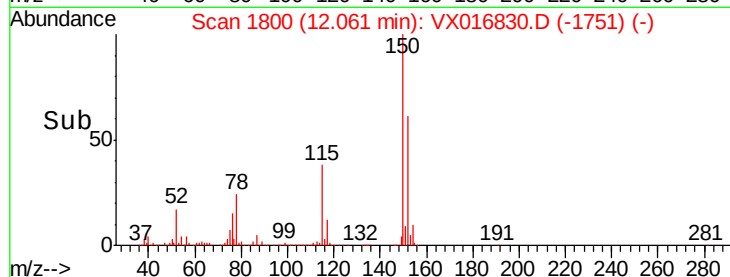
150 157.9 0.0 337.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 17.589 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX016830.D

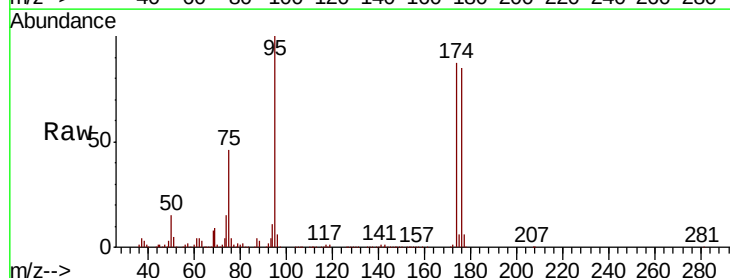
Acq: 17 Jun 2020 20:21

Tgt Ion: 75 Resp: 90391

Ion Ratio Lower Upper

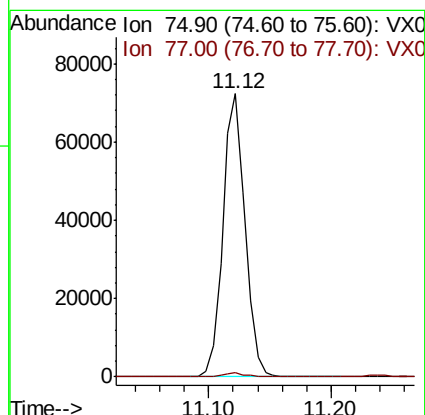
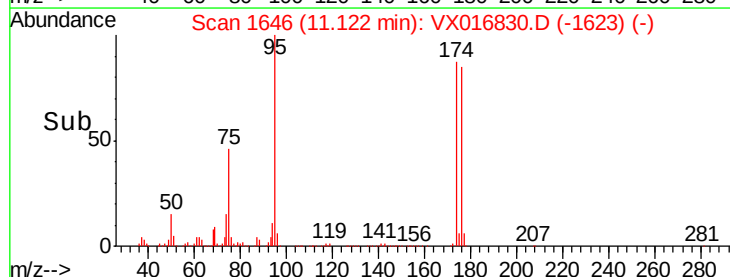
75 100

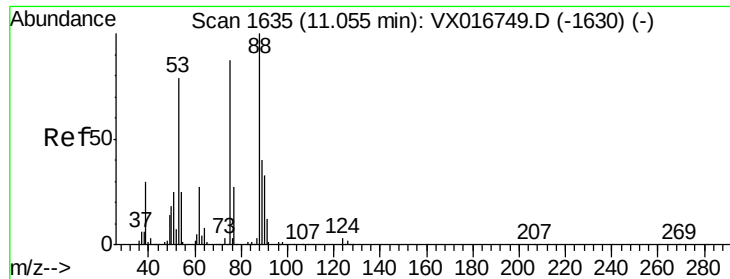
77 1.5 20.3 60.9#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

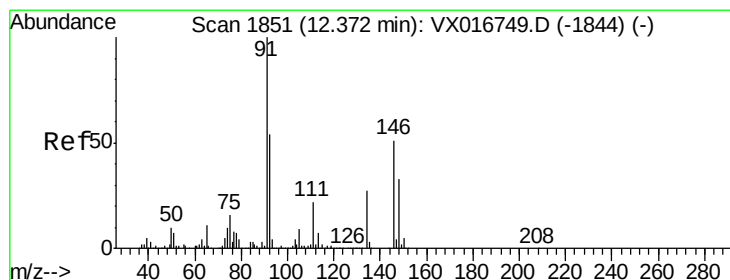
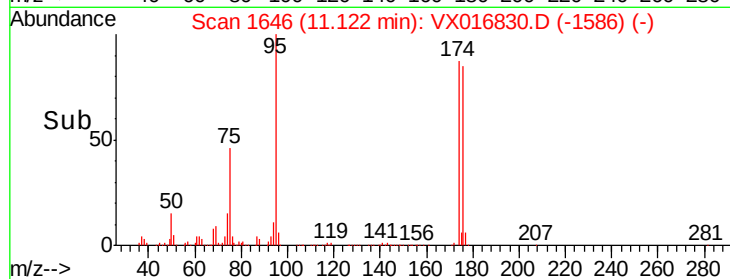
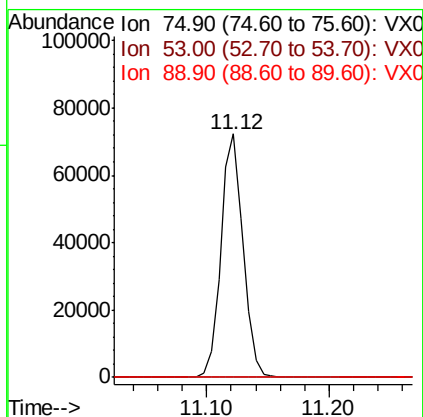
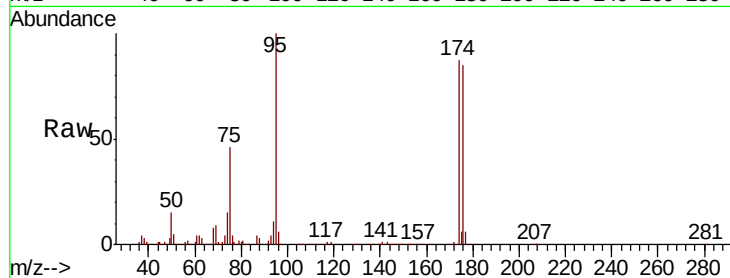




#81
trans-1,4-Dichloro-2-butene
Concen: 44.280 ug/l
RT: 11.12 min Scan# 1646
Delta R.T. 0.07 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

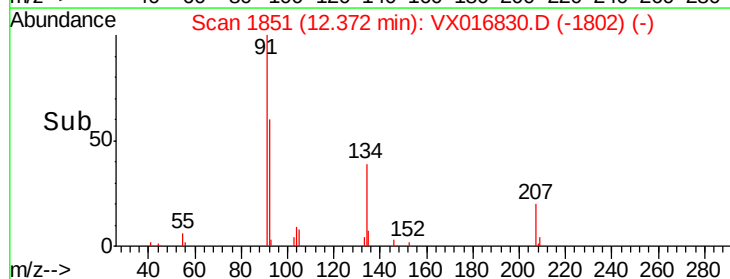
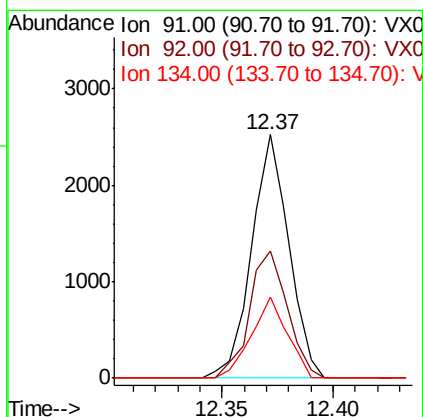
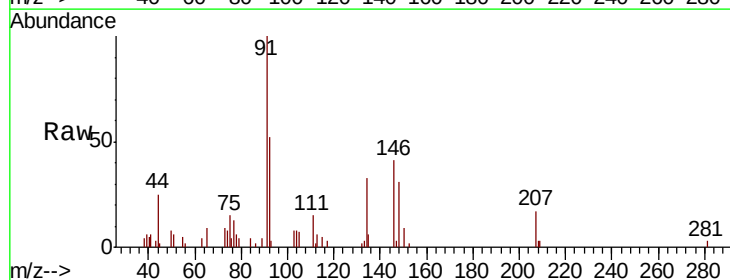
Instrument :
MSVOA_X
ClientSampleId :
S49-ER-2020-1

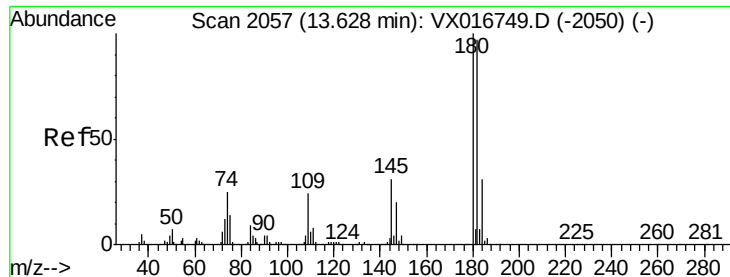
Tot Ion: 75 Resp: 90391
Ion Ratio Lower Upper
75 100
53 0.0 71.4 107.0#
89 0.0 39.1 58.7#



#89
n-Butylbenzene
Concen: 0.258 ug/l
RT: 12.37 min Scan# 1851
Delta R.T. -0.00 min
Lab File: VX016830.D
Acq: 17 Jun 2020 20:21

Tgt Ion: 91 Resp: 2941
Ion Ratio Lower Upper
91 100
92 53.2 27.0 80.8
134 32.0 13.7 41.0

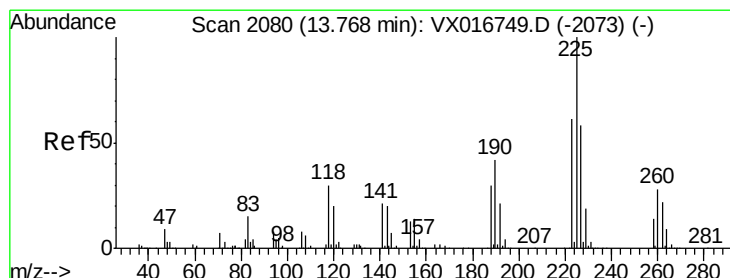
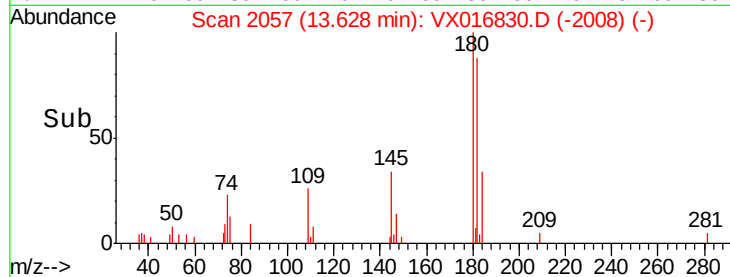
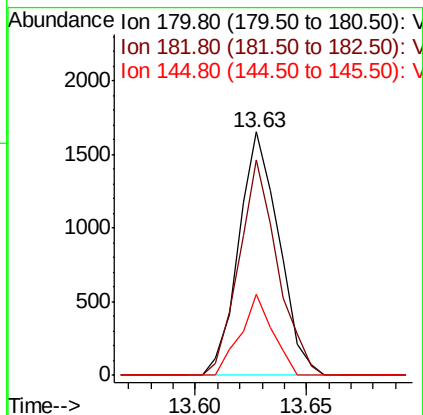
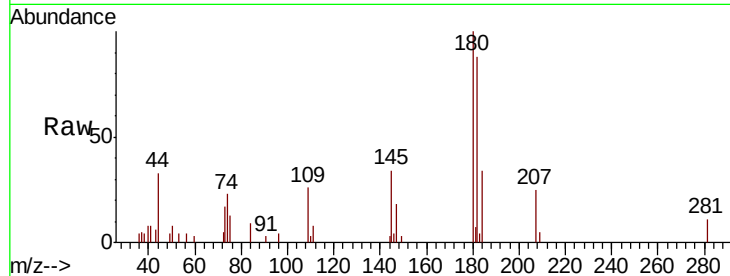




#93
 1,2,4-Trichlorobenzene
 Concen: 0.387 ug/l
 RT: 13.63 min Scan# 2057
 Delta R.T. -0.00 min
 Lab File: VX016830.D
 Acq: 17 Jun 2020 20:21

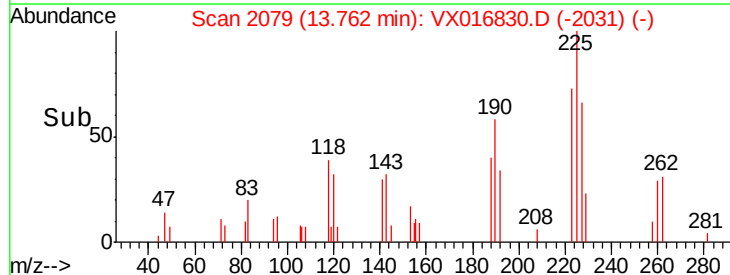
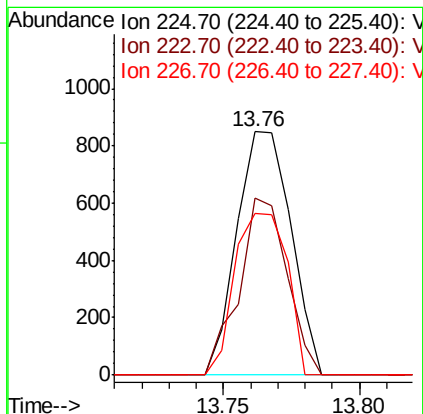
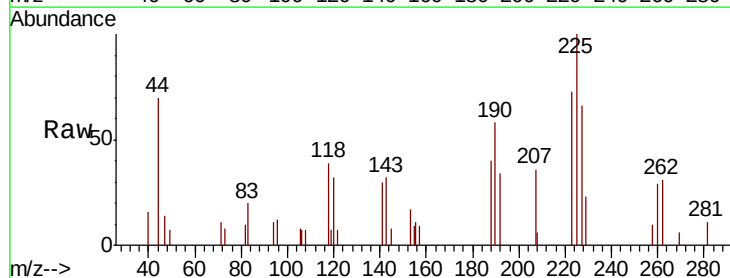
Instrument :
 MSVOA_X
 ClientSampleId :
 S49-ER-2020-1

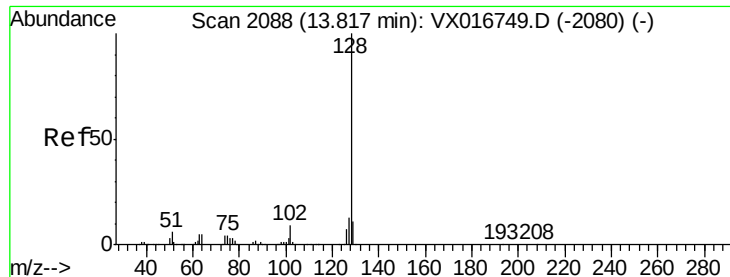
Tot Ion:180 Resp: 2073
 Ion Ratio Lower Upper
 180 100
 182 85.0 48.6 145.8
 145 26.7 15.4 46.4



#94
 Hexachlorobutadiene
 Concen: 0.906 ug/l
 RT: 13.76 min Scan# 2079
 Delta R.T. -0.01 min
 Lab File: VX016830.D
 Acq: 17 Jun 2020 20:21

Tgt Ion:225 Resp: 1172
 Ion Ratio Lower Upper
 225 100
 223 64.6 31.1 93.5
 227 64.4 30.9 92.7





#95

Naphthalene

Concen: 0.255 ug/l

RT: 13.82 min Scan# 2088

Delta R.T. -0.00 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

Instrument :

MSVOA_X

ClientSampleId :

S49-ER-2020-1

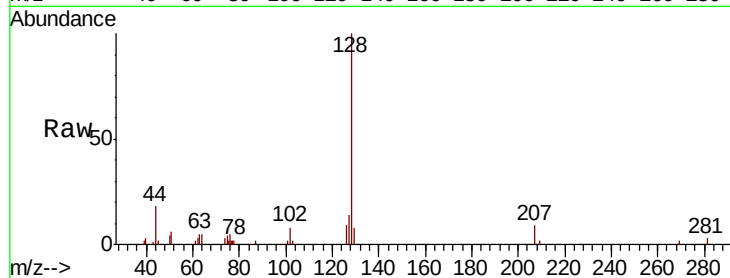
Tot Ion:128 Resp: 4282

Ion Ratio Lower Upper

128 100

127 13.9 10.2 15.4

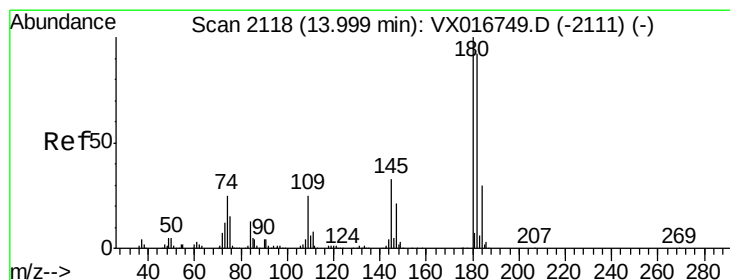
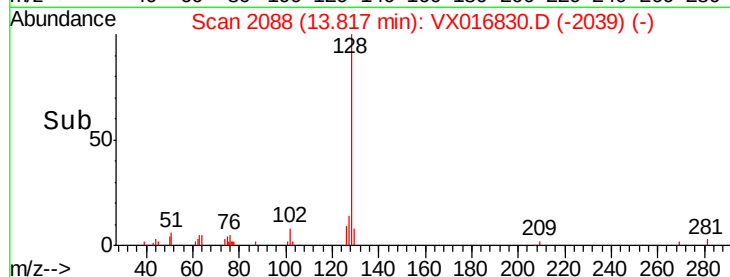
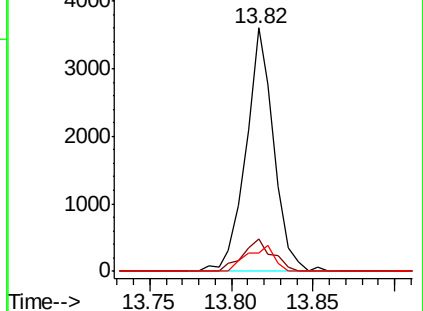
129 10.3 8.8 13.2



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#96

1,2,3-Trichlorobenzene

Concen: 0.288 ug/l

RT: 14.01 min Scan# 2119

Delta R.T. 0.01 min

Lab File: VX016830.D

Acq: 17 Jun 2020 20:21

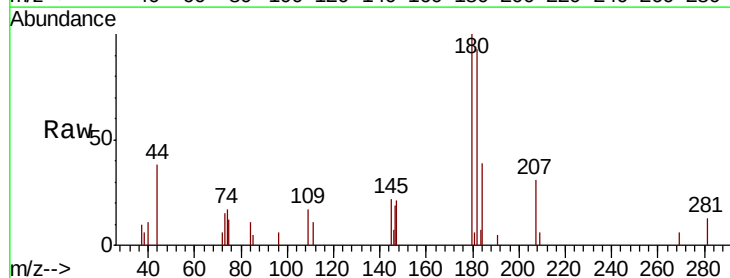
Tgt Ion:180 Resp: 1519

Ion Ratio Lower Upper

180 100

182 116.6 47.1 141.4

145 31.4 15.9 47.7



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

