

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121219\
 Data File : VX013985.D
 Acq On : 12 Dec 2019 19:05
 Operator : JC/SP
 Sample : K6252-04
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 RE132D6-20191209

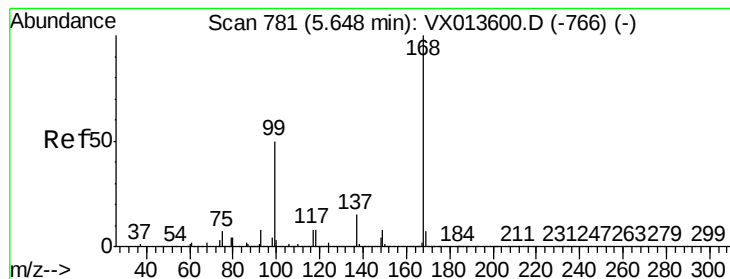
Quant Time: Dec 13 00:54:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X112619W.M
 Quant Title : SW846 8260
 QLast Update : Tue Nov 26 15:53:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	566953	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	868227	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	783541	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	337600	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.05	65	321634	48.87	ug/l	0.00
Spiked Amount			Recovery	=	97.74%	
35) Dibromofluoromethane	5.48	113	258798	48.22	ug/l	0.00
Spiked Amount			Recovery	=	96.44%	
50) Toluene-d8	8.71	98	1028412	49.18	ug/l	0.00
Spiked Amount			Recovery	=	98.36%	
62) 4-Bromofluorobenzene	11.14	95	348996	46.28	ug/l	0.00
Spiked Amount			Recovery	=	92.56%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.19	85	2216	0.351	ug/l	91
3) Chloromethane	1.31	50	1447	0.204	ug/l #	71
6) Chloroethane	1.62	64	20946	4.619	ug/l #	44
9) 1,1,2-Trichlorotrifluoroet	2.37	101	164555	30.443	ug/l	99
11) Tert butyl alcohol	3.03	59	2176	1.340	ug/l	100
12) 1,1-Dichloroethene	2.36	96	57390	10.637	ug/l	100
13) Acrolein	2.29	56	822	6.742	ug/l #	34
16) Acetone	2.44	43	5698	1.754	ug/l #	78
20) Methylene Chloride	2.84	84	1892	0.303	ug/l #	67
24) 1,1-Dichloroethane	3.69	63	20993	2.037	ug/l	97
27) cis-1,2-Dichloroethene	4.59	96	27074	4.011	ug/l	88
30) Chloroform	5.20	83	13641	1.305	ug/l	96
32) 1,1,1-Trichloroethane	5.49	97	6432	0.736	ug/l #	35
36) 1,1-Dichloropropene	5.65	75	40121	5.091	ug/l #	51
38) Carbon Tetrachloride	5.77	117	11254	1.549	ug/l	85
39) Methylcyclohexane	7.21	83	121230	12.444	ug/l #	1
44) Trichloroethene	7.21	130	10491709	1592.598	ug/l	100
47) Bromodichloromethane	7.90	83	1603	0.208	ug/l #	52
49) 1,4-Dioxane	7.75	88	3781	23.884	ug/l	93
55) 1,1,2-Trichloroethane	9.21	97	8153	1.357	ug/l #	85
64) Tetrachloroethene	9.33	164	18849	3.226	ug/l	97
76) 1,2,3-Trichloropropane	11.13	75	168132	22.142	ug/l #	39
81) trans-1,4-Dichloro-2-buten	11.13	75	168132	60.578	ug/l #	11

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.00 min

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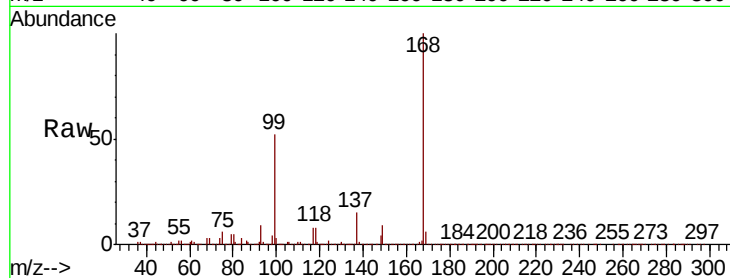
RE132D6-20191209

Tot Ion:168 Resp: 566953

Ion Ratio Lower Upper

168 100

99 51.7 39.8 59.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

150000

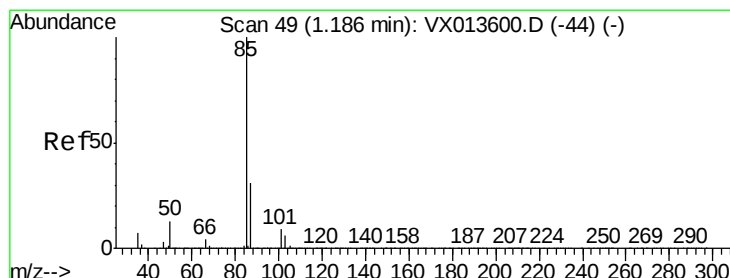
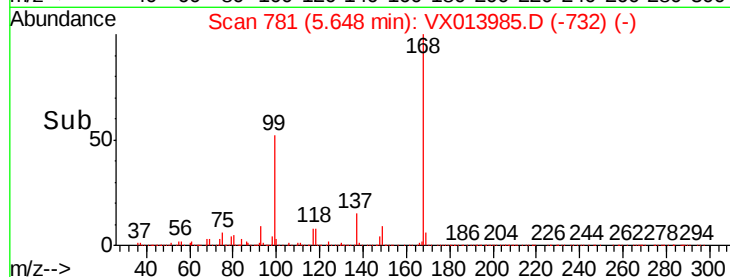
100000

50000

0

5.50 5.60 5.70 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.351 ug/l

RT: 1.19 min Scan# 49

Delta R.T. -0.00 min

Lab File: VX013985.D

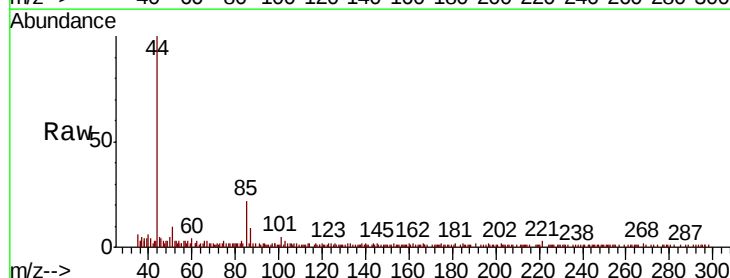
Acq: 12 Dec 2019 19:05

Tgt Ion: 85 Resp: 2216

Ion Ratio Lower Upper

85 100

87 36.3 15.7 47.1



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.19

2500

2000

1500

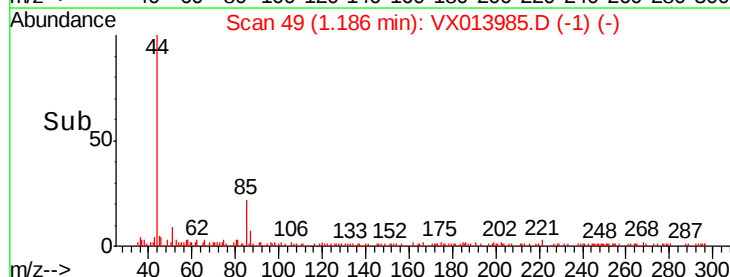
1000

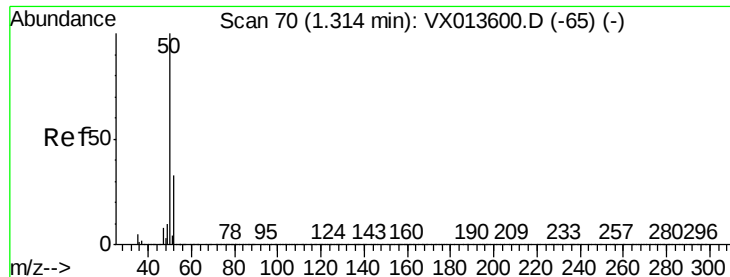
500

0

1.15 1.20

Time-->





#3

Chloromethane

Concen: 0.204 ug/l

RT: 1.31 min Scan# 70

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

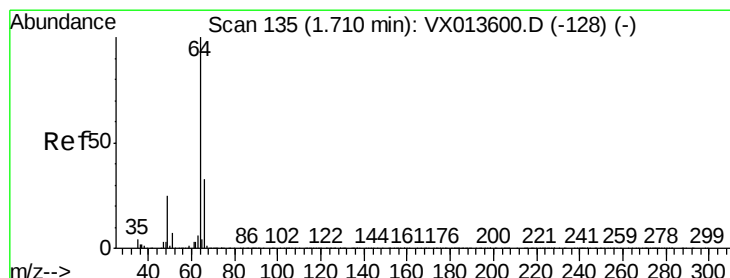
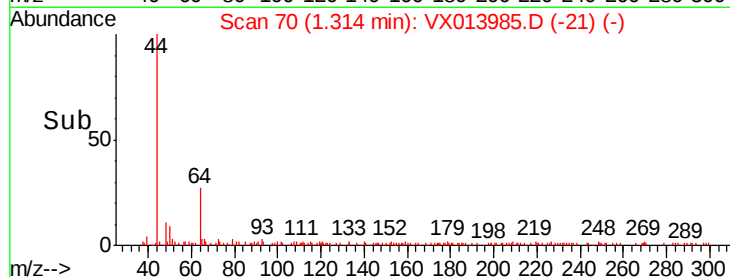
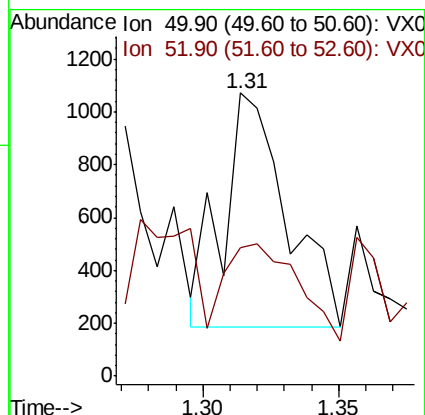
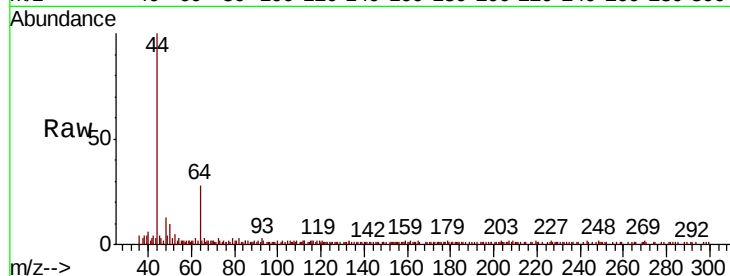
RE132D6-20191209

Tot Ion: 50 Resp: 1447

Ion Ratio Lower Upper

50 100

52 16.3 26.0 39.0#



#6

Chloroethane

Concen: 4.619 ug/l

RT: 1.62 min Scan# 120

Delta R.T. -0.09 min

Lab File: VX013985.D

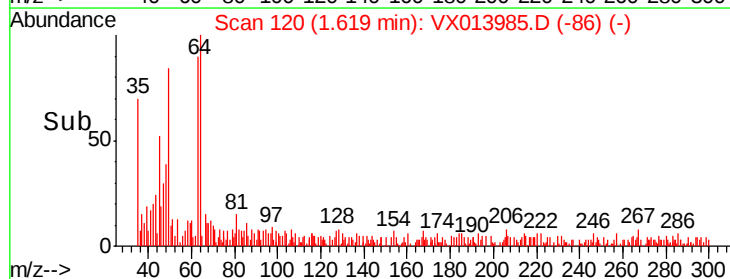
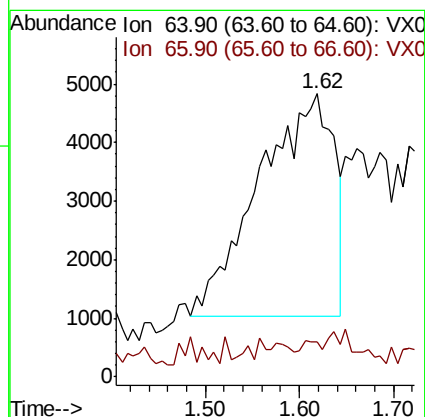
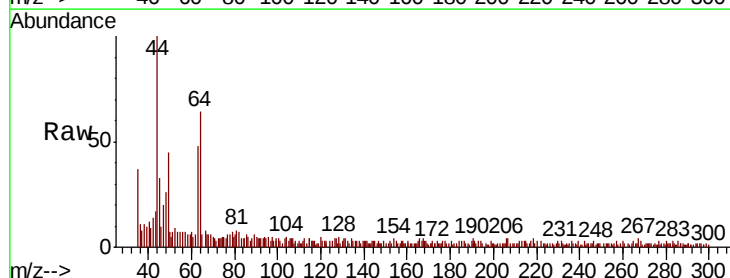
Acq: 12 Dec 2019 19:05

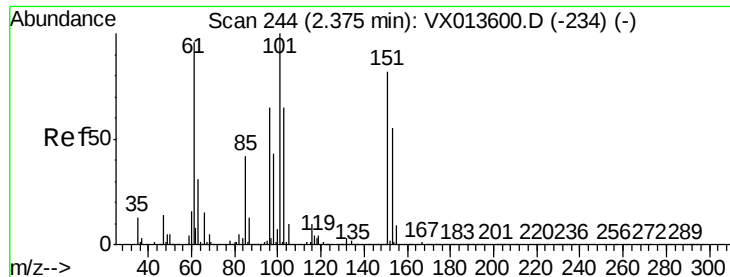
Tgt Ion: 64 Resp: 20946

Ion Ratio Lower Upper

64 100

66 1.5 26.7 40.1#





#9

1,1,2-Trichlorotrifluoroethane

Concen: 30.443 ug/l

RT: 2.37 min Scan# 244

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

RE132D6-20191209

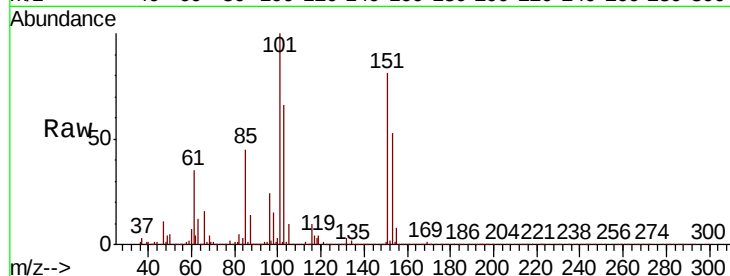
Tot Ion:101 Resp: 164555

Ion Ratio Lower Upper

101 100

85 42.0 33.9 50.9

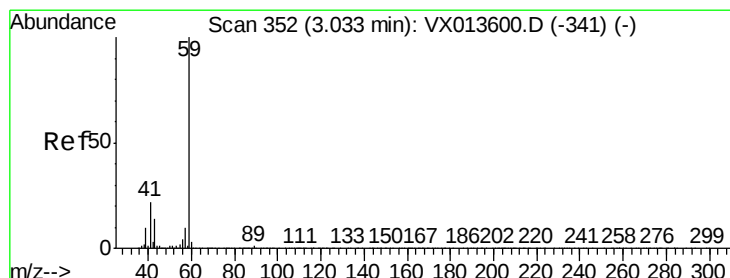
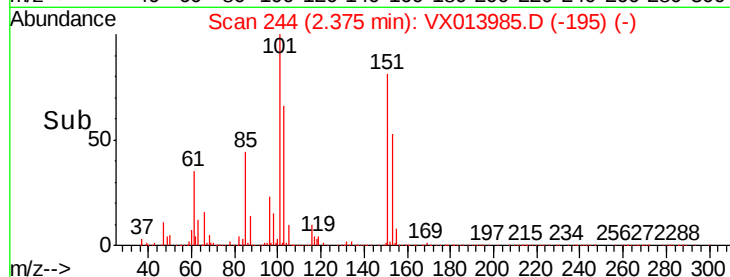
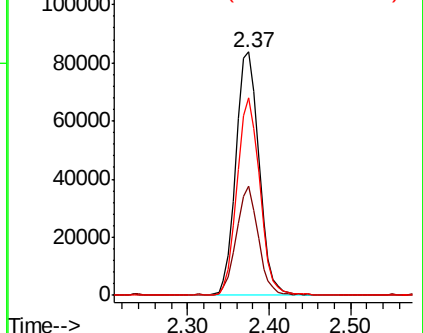
151 79.2 64.2 96.2



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V



#11

Tert butyl alcohol

Concen: 1.340 ug/l

RT: 3.03 min Scan# 352

Delta R.T. -0.00 min

Lab File: VX013985.D

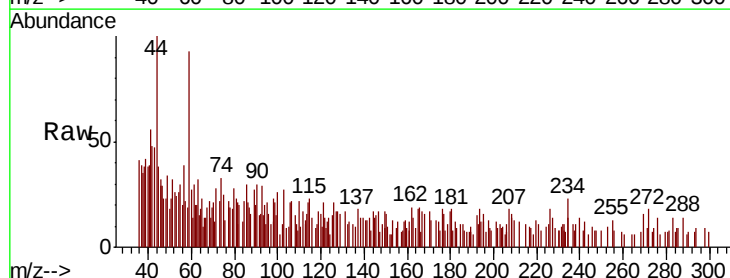
Acq: 12 Dec 2019 19:05

Tgt Ion: 59 Resp: 2176

Ion Ratio Lower Upper

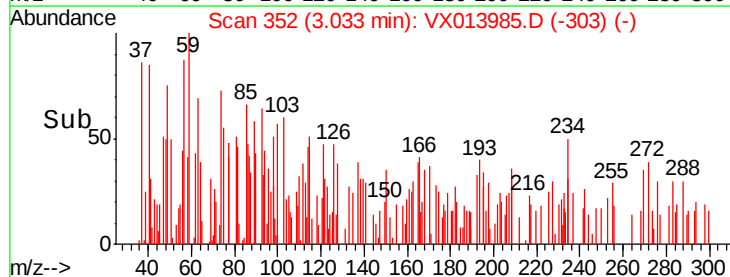
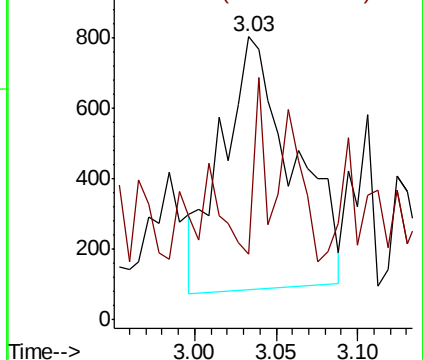
59 100

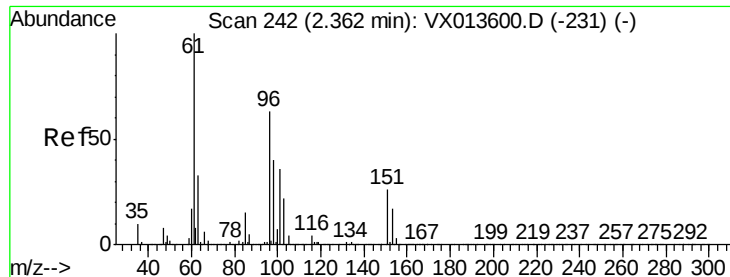
57 9.8 7.8 11.6



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#12

1,1-Dichloroethene

Concen: 10.637 ug/l

RT: 2.36 min Scan# 242

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :
MSVOA_X
ClientSampleId :
RE132D6-20191209

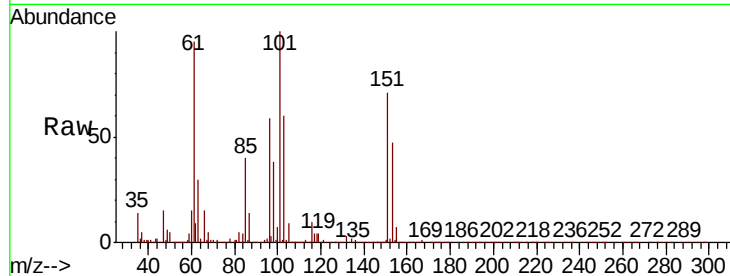
Tot Ion: 96 Resp: 57390

Ion Ratio Lower Upper

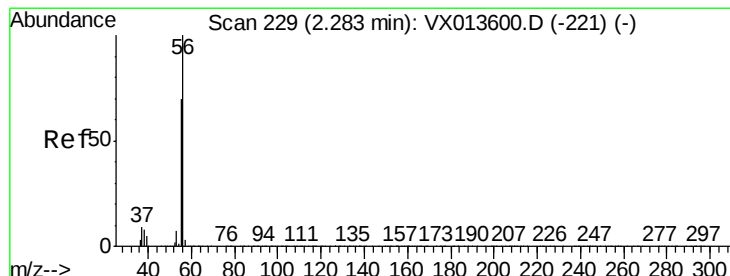
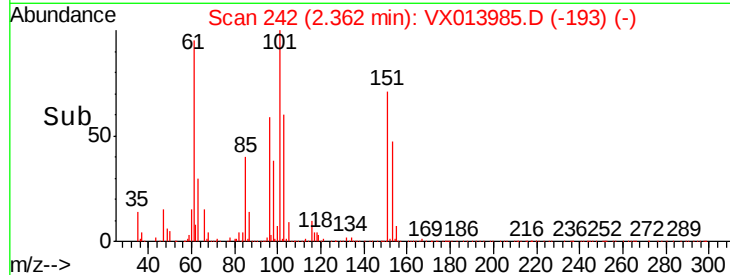
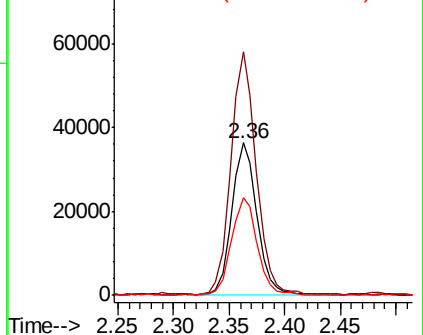
96 100

61 158.6 126.6 190.0

98 63.3 50.6 76.0



Abundance Ion 95.90 (95.60 to 96.60): VX0
Ion 60.90 (60.60 to 61.60): VX0
Ion 97.90 (97.60 to 98.60): VX0



#13

Acrolein

Concen: 6.742 ug/l

RT: 2.29 min Scan# 230

Delta R.T. 0.01 min

Lab File: VX013985.D

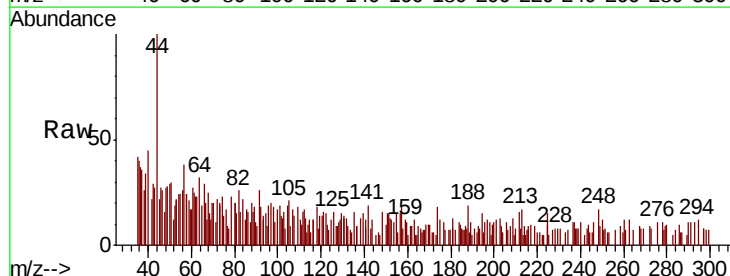
Acq: 12 Dec 2019 19:05

Tgt Ion: 56 Resp: 822

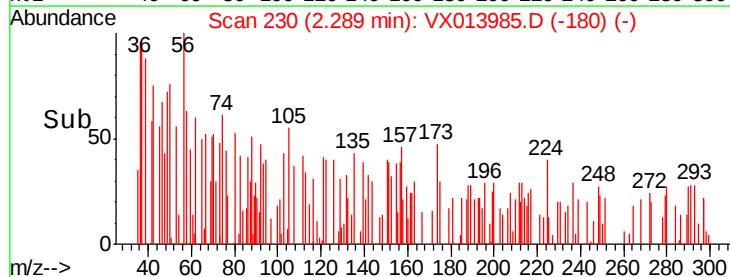
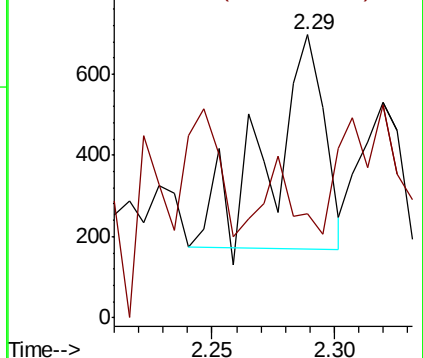
Ion Ratio Lower Upper

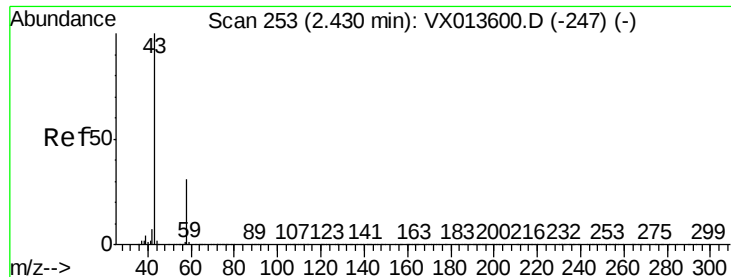
56 100

55 16.4 56.2 84.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0
Ion 55.00 (54.70 to 55.70): VX0





#16

Acetone

Concen: 1.754 ug/l

RT: 2.44 min Scan# 254

Delta R.T. 0.01 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

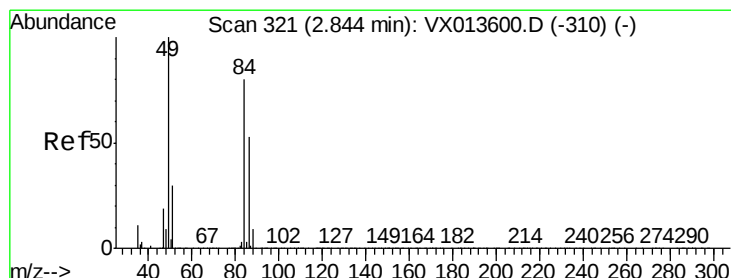
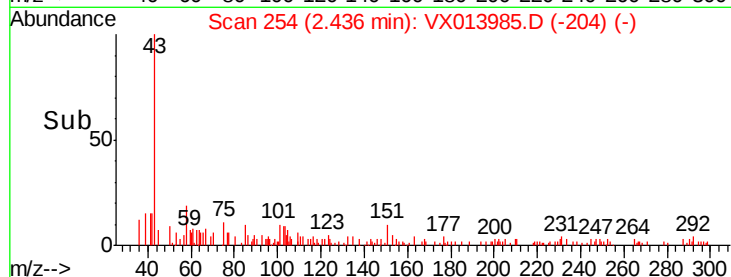
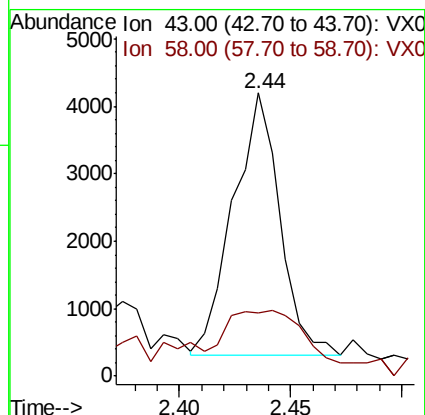
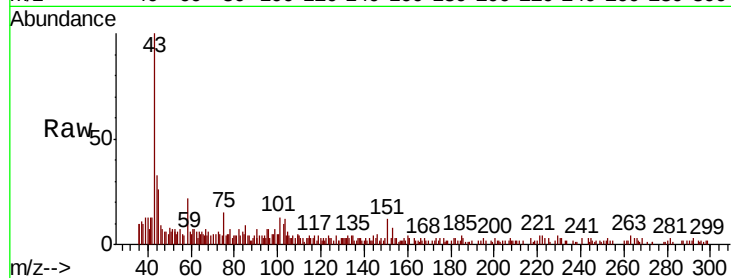
RE132D6-20191209

Tot Ion: 43 Resp: 5698

Ion Ratio Lower Upper

43 100

58 18.8 24.6 36.8#



#20

Methylene Chloride

Concen: 0.303 ug/l

RT: 2.84 min Scan# 321

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Tgt Ion: 84 Resp: 1892

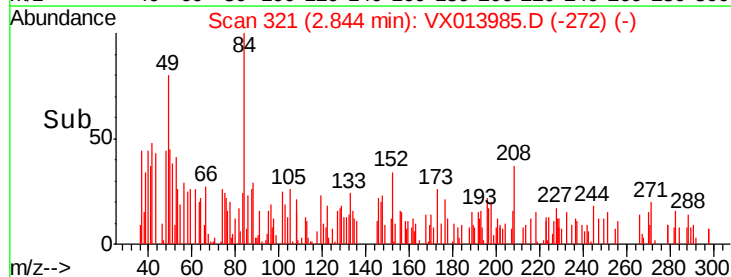
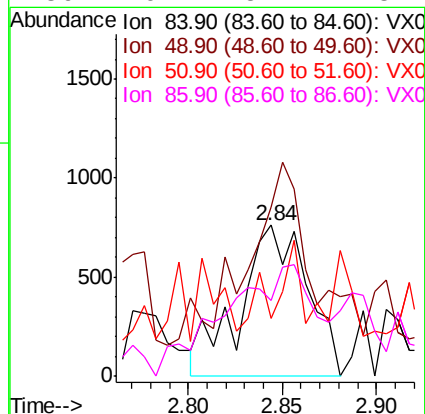
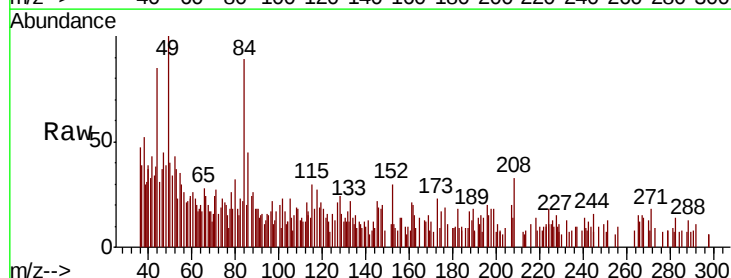
Ion Ratio Lower Upper

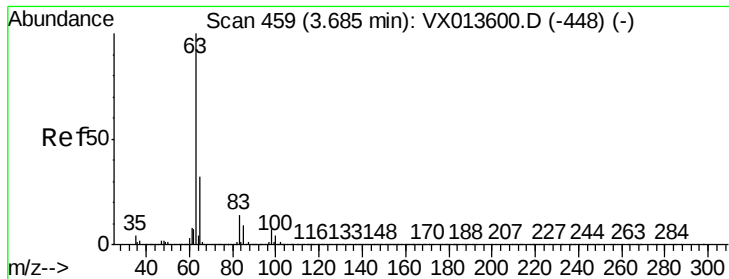
84 100

49 88.8 99.7 149.5#

51 0.0 29.9 44.9#

86 49.1 52.2 78.4#





#24

1,1-Dichloroethane

Concen: 2.037 ug/l

RT: 3.69 min Scan# 459

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

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RE132D6-20191209

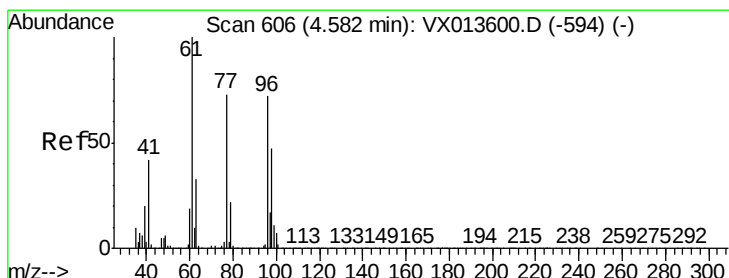
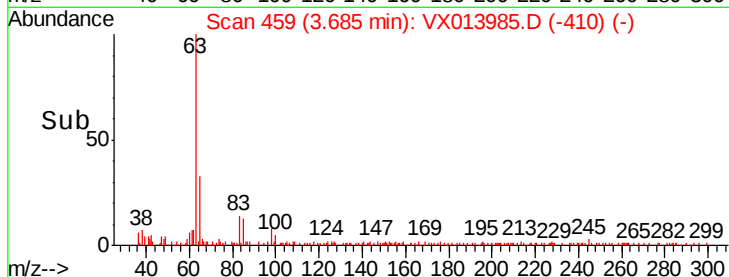
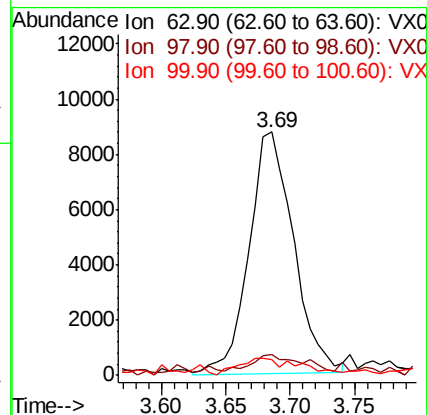
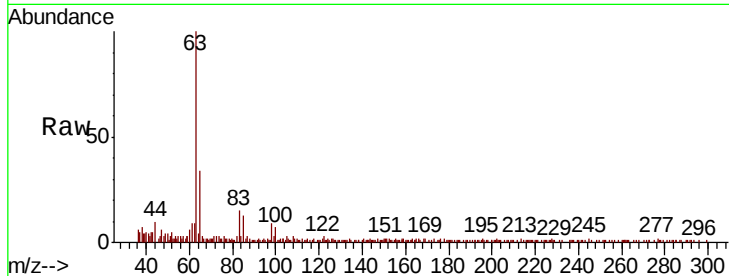
Tot Ion: 63 Resp: 20993

Ion Ratio Lower Upper

63 100

98 7.8 3.5 10.4

100 5.5 2.1 6.3



#27

cis-1,2-Dichloroethene

Concen: 4.011 ug/l

RT: 4.59 min Scan# 607

Delta R.T. 0.01 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

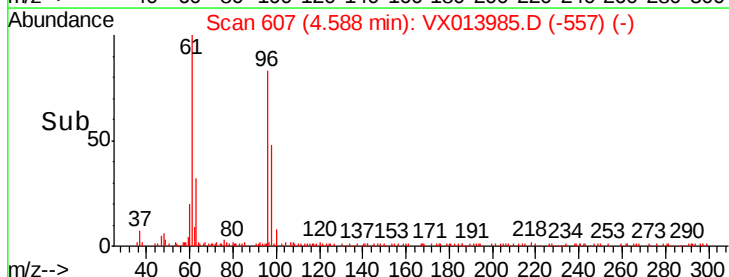
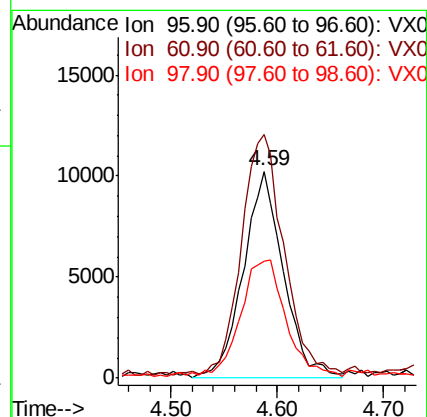
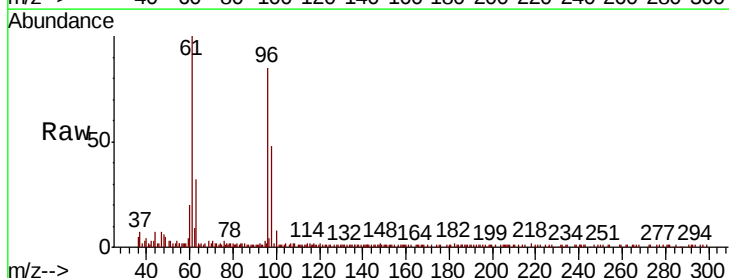
Tgt Ion: 96 Resp: 27074

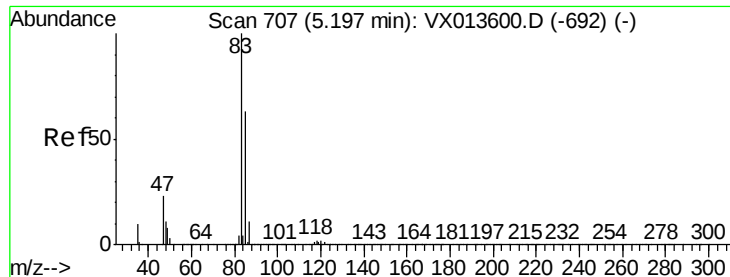
Ion Ratio Lower Upper

96 100

61 123.3 0.0 286.4

98 62.2 0.0 127.4





#30

Chloroform

Concen: 1.305 ug/l

RT: 5.20 min Scan# 707

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

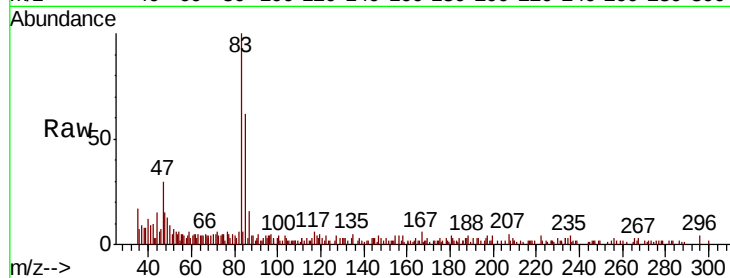
RE132D6-20191209

Tot Ion: 83 Resp: 13641

Ion Ratio Lower Upper

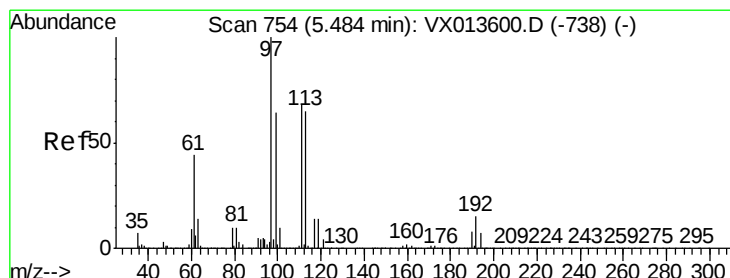
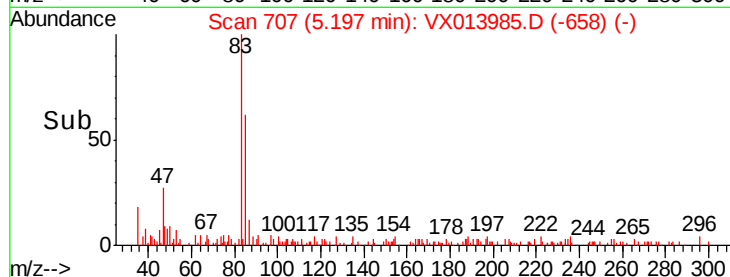
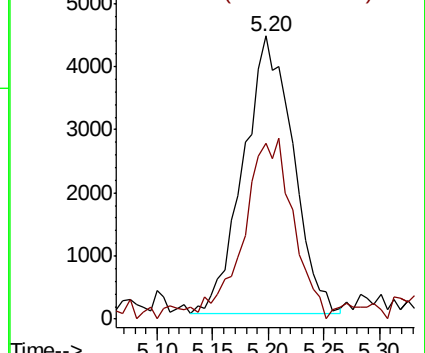
83 100

85 59.4 50.2 75.4



Abundance Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0



#32

1,1,1-Trichloroethane

Concen: 0.736 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.01 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

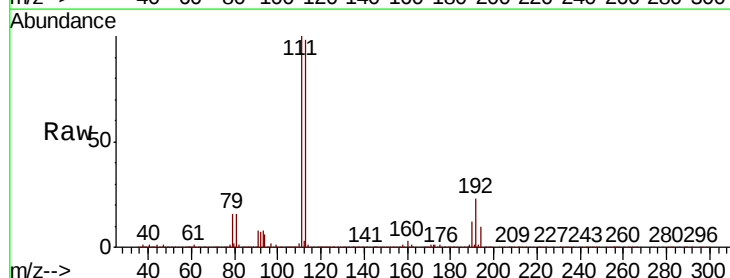
Tgt Ion: 97 Resp: 6432

Ion Ratio Lower Upper

97 100

99 0.0 51.6 77.4#

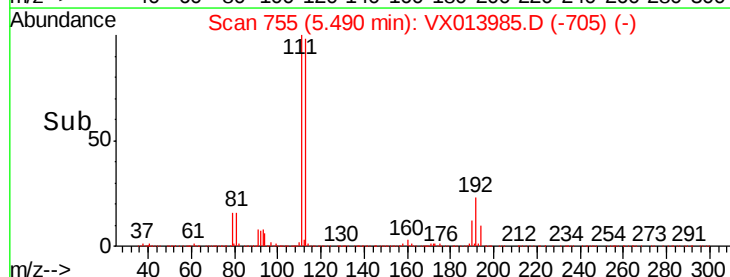
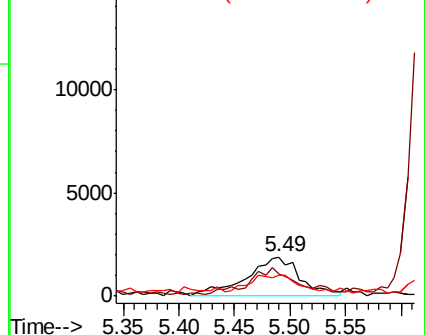
61 18.3 36.1 54.1#

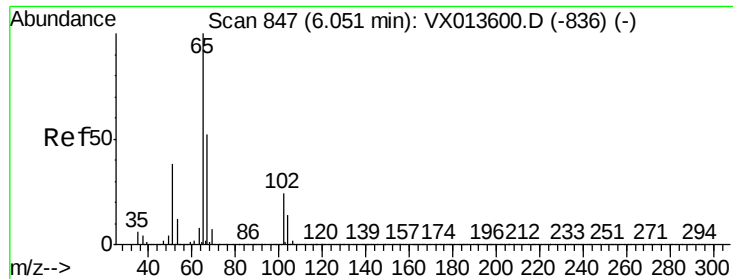


Abundance Ion 96.90 (96.60 to 97.60): VX0

Ion 98.90 (98.60 to 99.60): VX0

Ion 60.90 (60.60 to 61.60): VX0





#33

1,2-Dichloroethane-d4

Concen: 48.873 ug/l

RT: 6.05 min Scan# 847

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

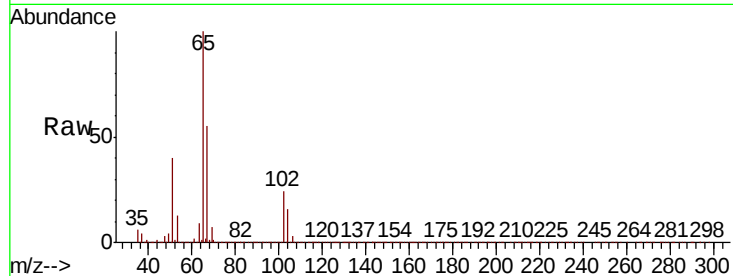
RE132D6-20191209

Tot Ion: 65 Resp: 321634

Ion Ratio Lower Upper

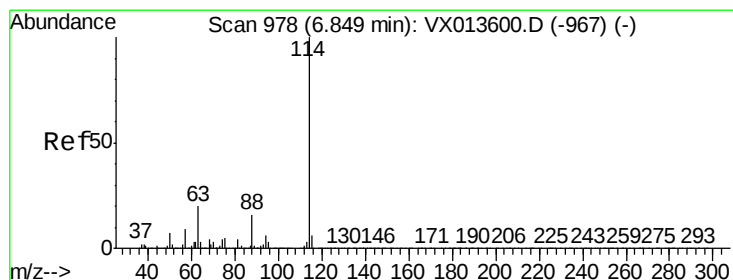
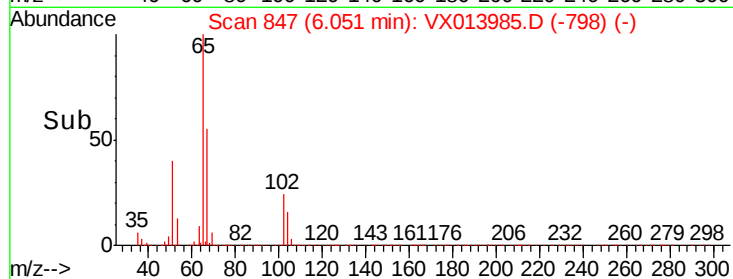
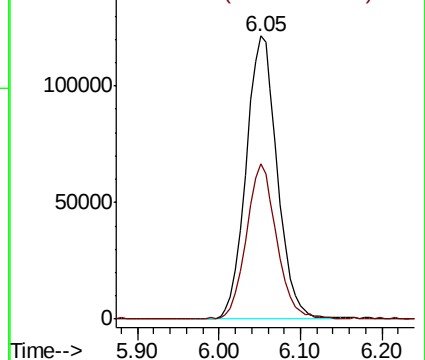
65 100

67 53.6 0.0 104.4



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: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

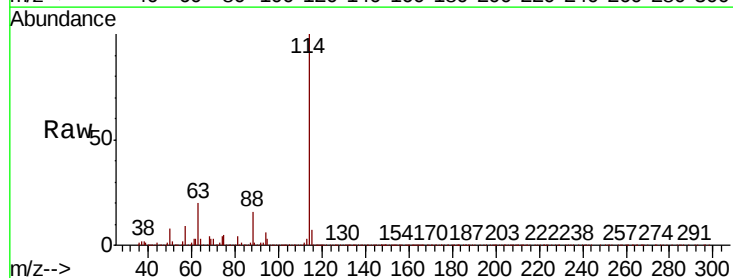
Tgt Ion: 114 Resp: 868227

Ion Ratio Lower Upper

114 100

63 20.4 0.0 39.6

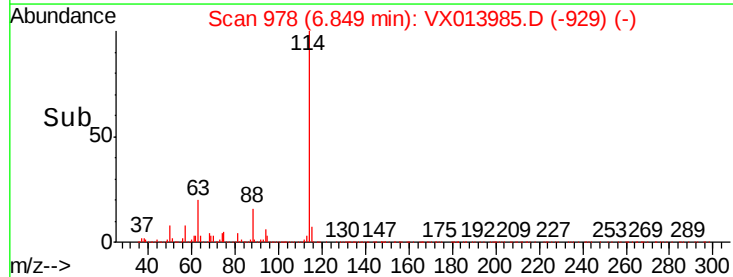
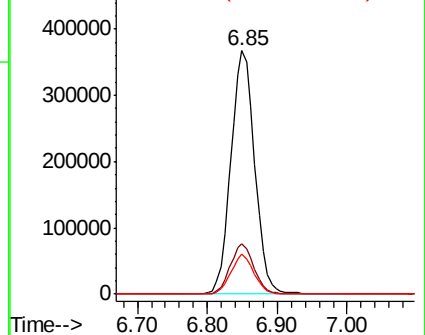
88 16.3 0.0 31.4

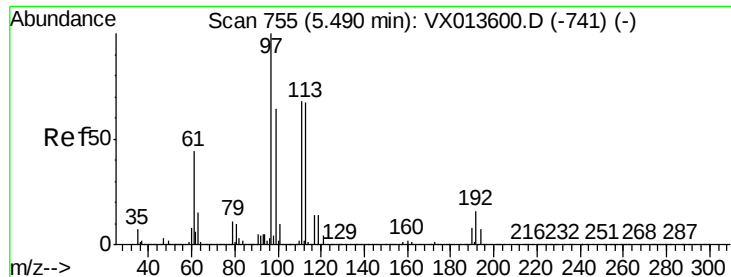


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 48.216 ug/l

RT: 5.48 min Scan# 754

Delta R.T. -0.01 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

RE132D6-20191209

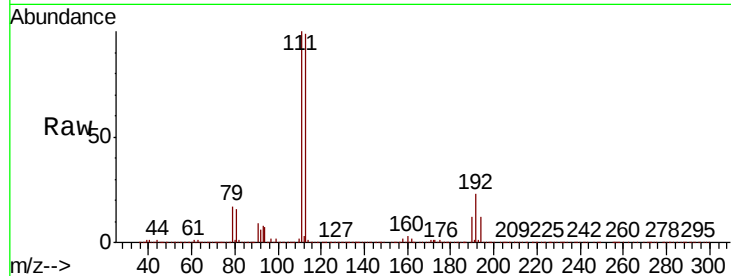
Tot Ion:113 Resp: 258798

Ion Ratio Lower Upper

113 100

111 102.8 83.6 125.4

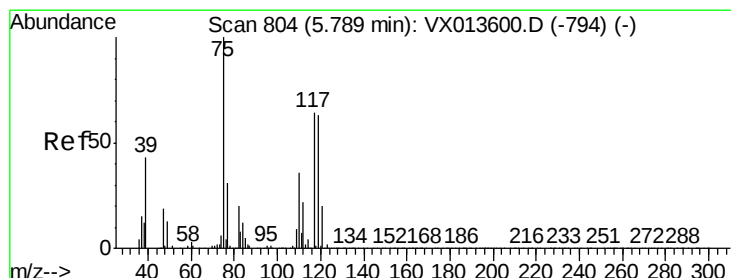
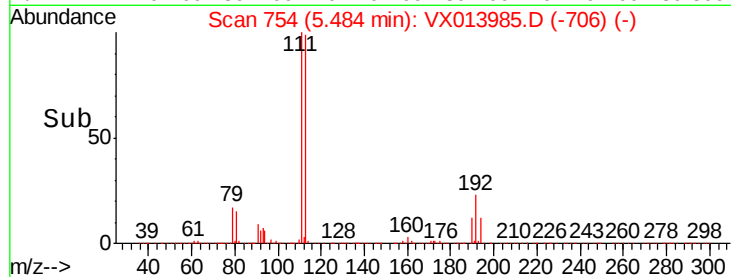
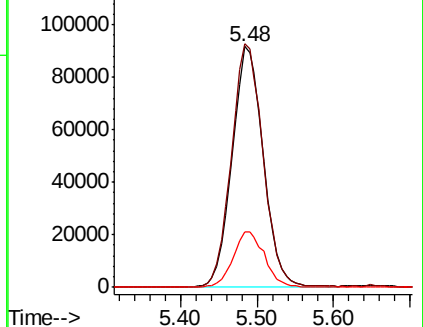
192 23.4 19.2 28.8



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.091 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.13 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

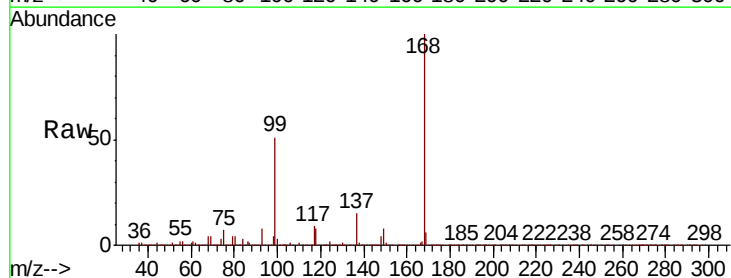
Tgt Ion: 75 Resp: 40121

Ion Ratio Lower Upper

75 100

110 10.0 18.1 54.1#

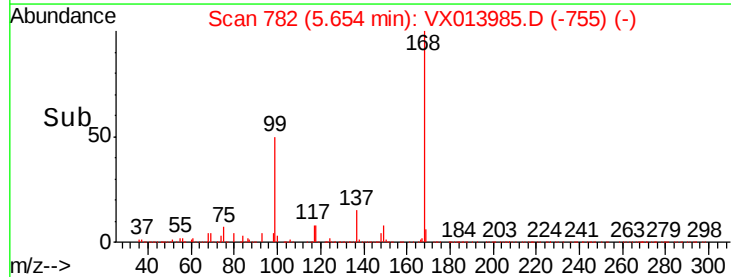
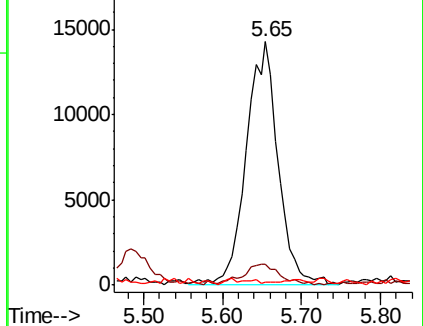
77 0.5 24.5 36.7#

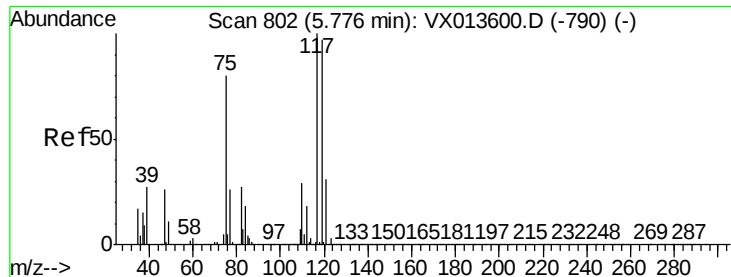


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

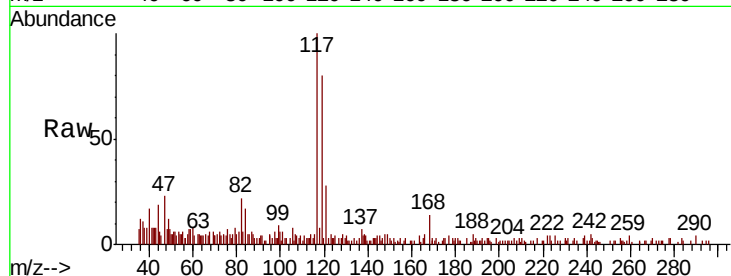




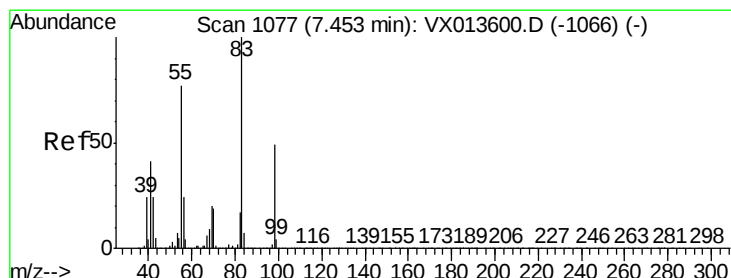
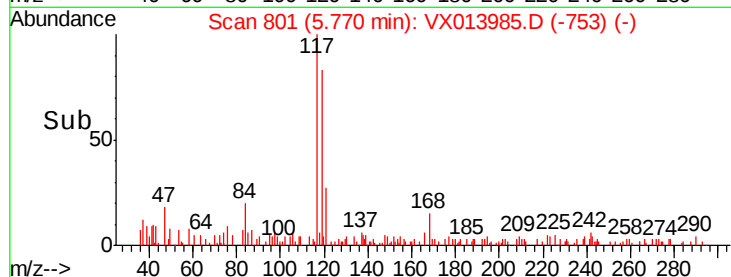
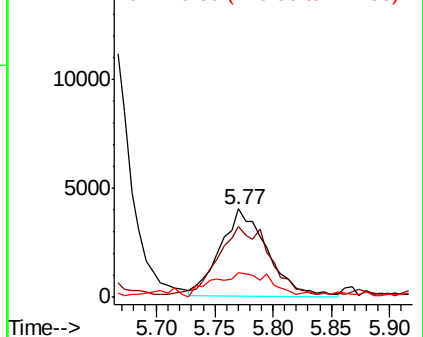
#38
Carbon Tetrachloride
Concen: 1.549 ug/l
RT: 5.77 min Scan# 801
Delta R.T. -0.01 min
Lab File: VX013985.D
Acq: 12 Dec 2019 19:05

Instrument :
MSVOA_X
ClientSampleId :
RE132D6-20191209

Tot Ion:117 Resp: 11254
Ion Ratio Lower Upper
117 100
119 79.0 77.5 116.3
121 29.5 25.0 37.6

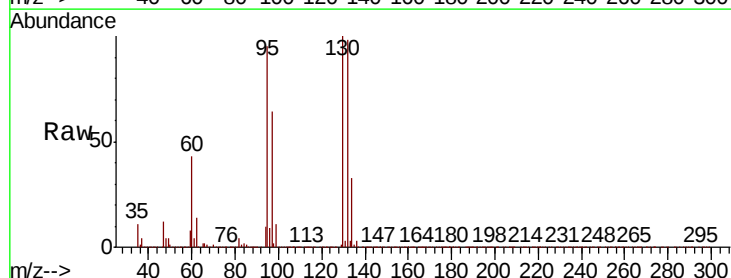


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V

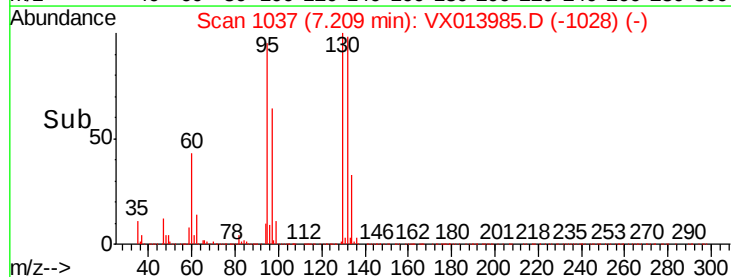
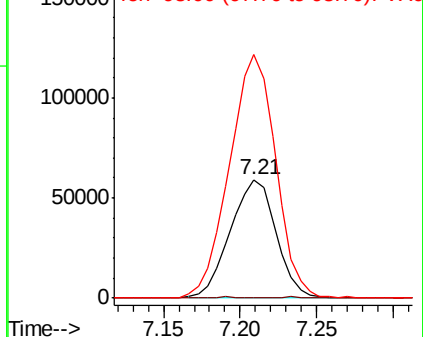


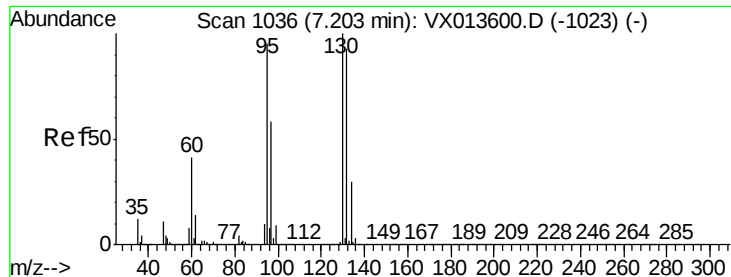
#39
Methylcyclohexane
Concen: 12.444 ug/l
RT: 7.21 min Scan# 1037
Delta R.T. -0.24 min
Lab File: VX013985.D
Acq: 12 Dec 2019 19:05

Tgt Ion: 83 Resp: 121230
Ion Ratio Lower Upper
83 100
55 0.0 61.9 92.9#
98 206.4 39.4 59.0#



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





#44

Trichloroethene

Concen: 1592.598 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. 0.01 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

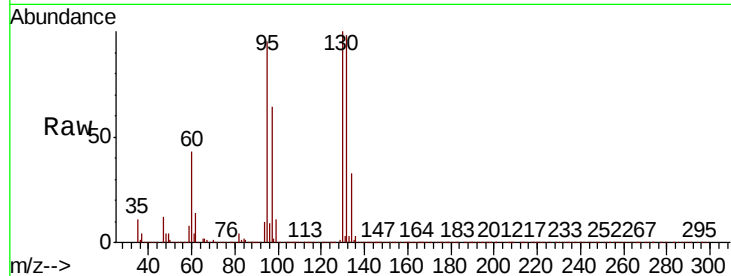
RE132D6-20191209

Tot Ion:130 Resp:10491709

Ion Ratio Lower Upper

130 100

95 95.1 0.0 190.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

7.21

5000000

4000000

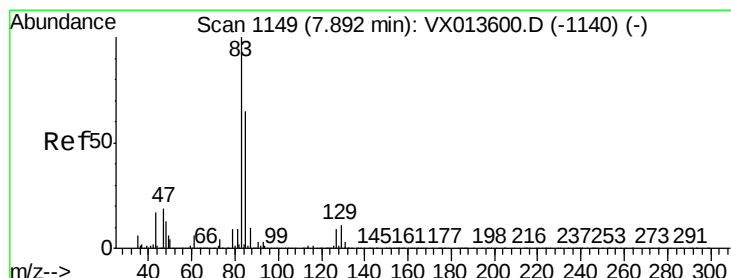
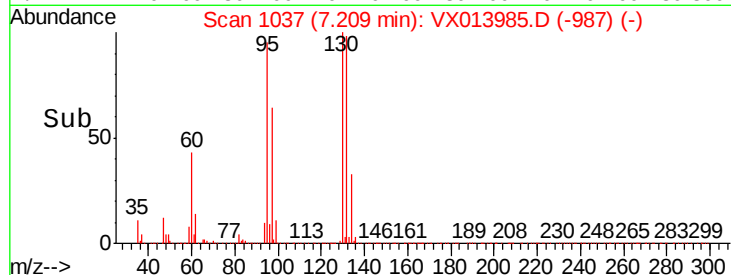
3000000

2000000

1000000

0

Time-->



#47

Bromodichloromethane

Concen: 0.208 ug/l

RT: 7.90 min Scan# 1150

Delta R.T. 0.01 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

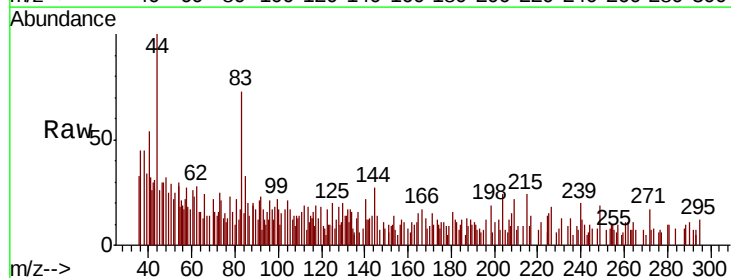
Tgt Ion: 83 Resp: 1603

Ion Ratio Lower Upper

83 100

85 24.8 52.1 78.1#

127 0.0 7.0 10.4#



Abundance Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0

Ion 126.80 (126.50 to 127.50): V

7.90

1000

800

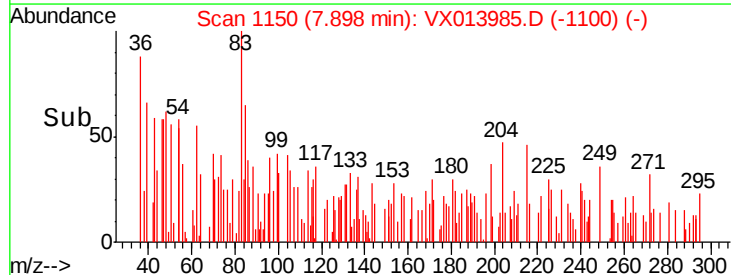
600

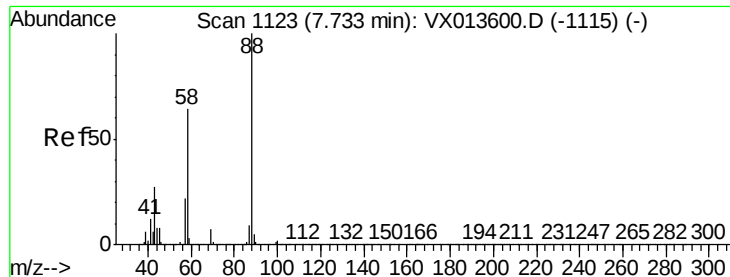
400

200

0

Time-->





#49

1,4-Dioxane

Concen: 23.884 ug/l

RT: 7.75 min Scan# 1126

Delta R.T. 0.02 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

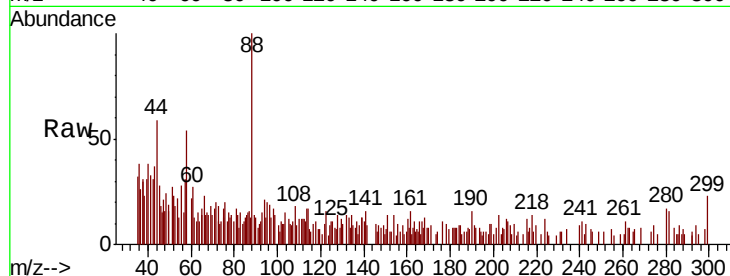
MSVOA_X

ClientSampleId :

RE132D6-20191209

Tot Ion: 88 Resp: 3781

Ion	Ratio	Lower	Upper
88	100		
43	36.4	25.8	38.6
58	73.5	54.6	82.0

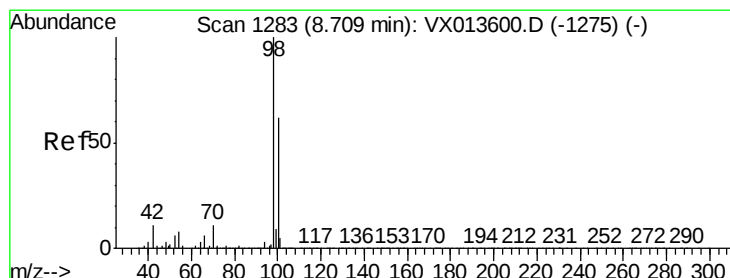
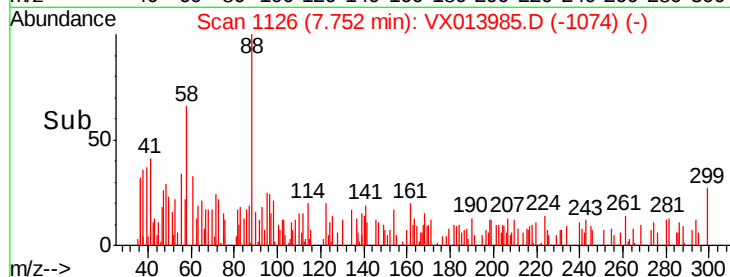
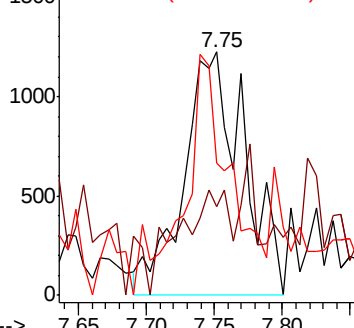


Abundance

Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#50

Toluene-d8

Concen: 49.177 ug/l

RT: 8.71 min Scan# 1283

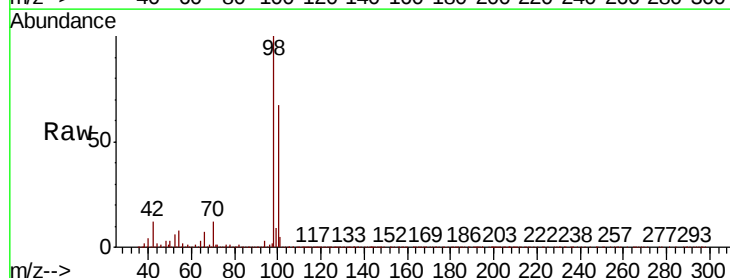
Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Tgt Ion: 98 Resp: 1028412

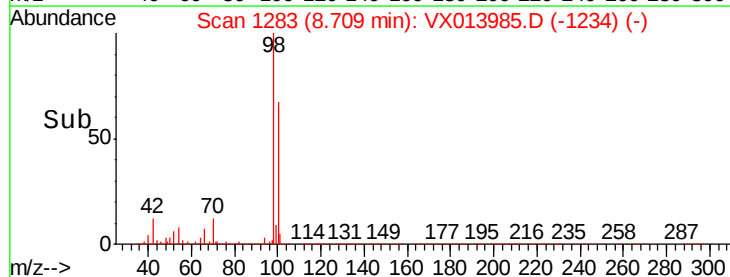
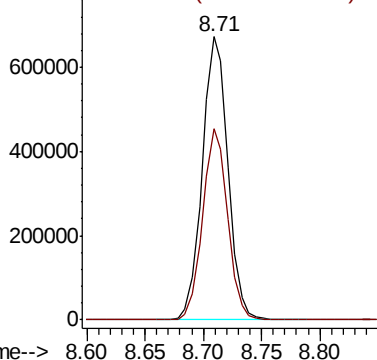
Ion	Ratio	Lower	Upper
98	100		
100	65.9	53.1	79.7

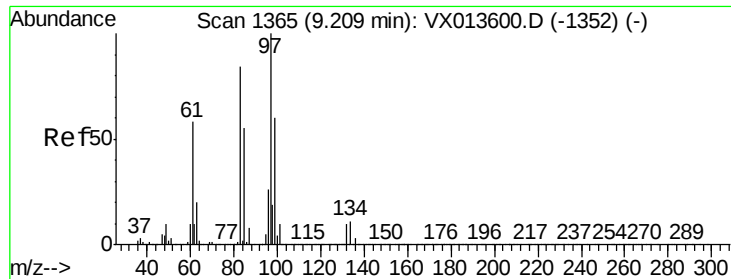


Abundance

Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

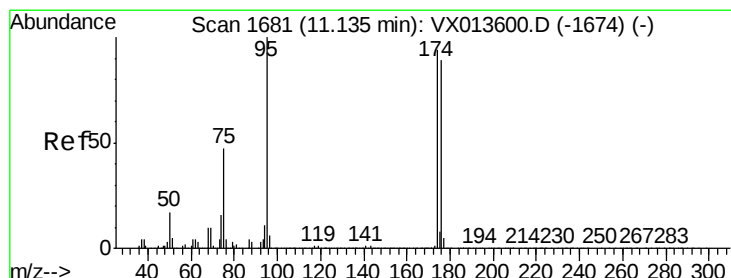
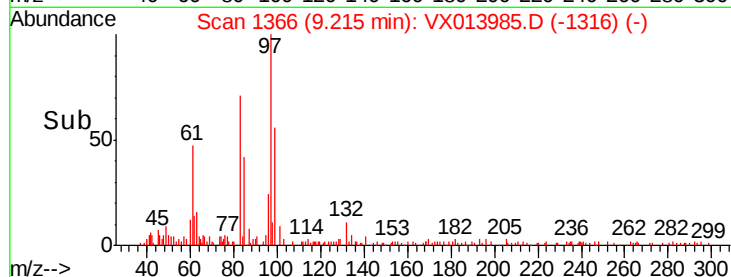
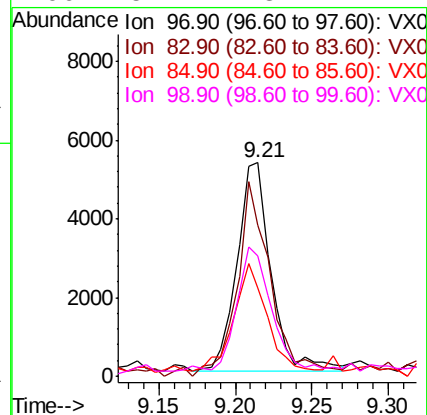
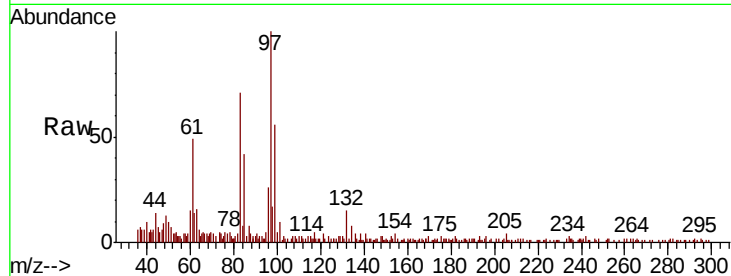




#55
 1,1,2-Trichloroethane
 Concen: 1.357 ug/l
 RT: 9.21 min Scan# 1366
 Delta R.T. 0.01 min
 Lab File: VX013985.D
 Acq: 12 Dec 2019 19:05

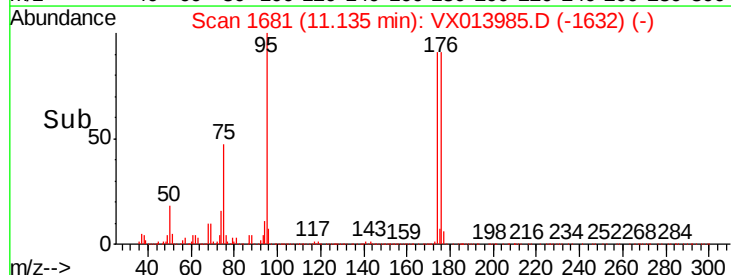
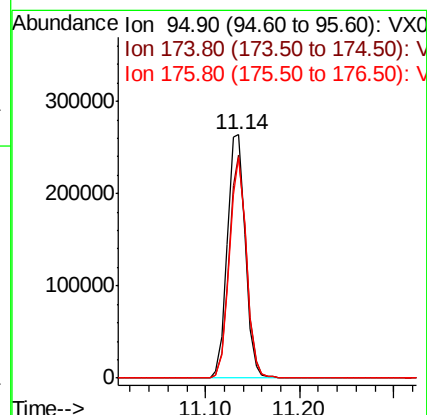
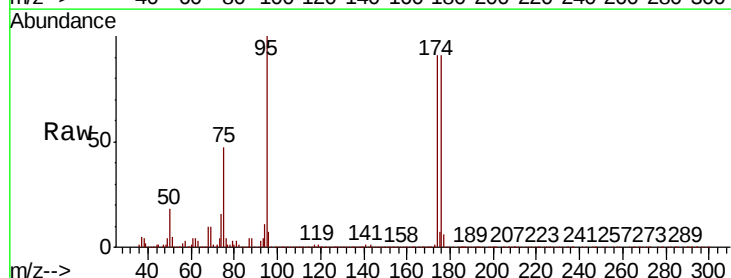
Instrument :
 MSVOA_X
 ClientSampleId :
 RE132D6-20191209

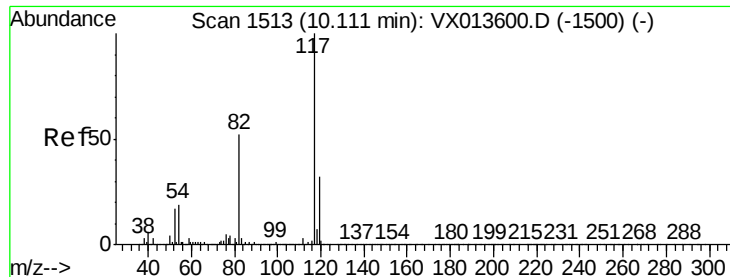
Tot Ion:	97	Resp:	8153
Ion	Ratio	Lower	Upper
97	100		
83	69.5	67.3	100.9
85	40.1	43.6	65.4#
99	54.2	48.2	72.4



#62
 4-Bromofluorobenzene
 Concen: 46.280 ug/l
 RT: 11.14 min Scan# 1681
 Delta R.T. -0.00 min
 Lab File: VX013985.D
 Acq: 12 Dec 2019 19:05

Tgt Ion:	95	Resp:	348996
Ion	Ratio	Lower	Upper
95	100		
174	87.7	0.0	180.0
176	85.9	0.0	173.6

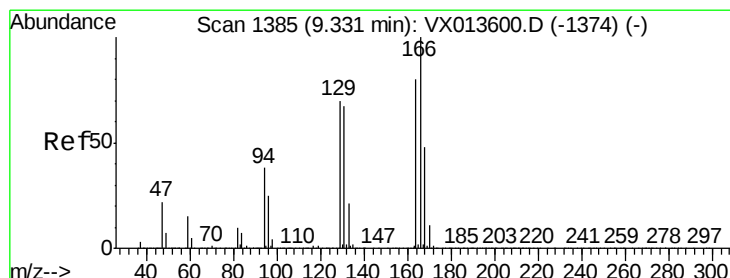
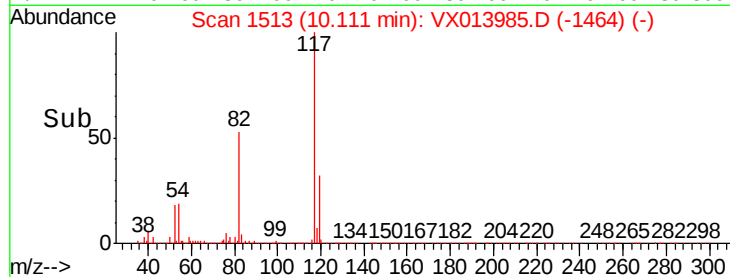
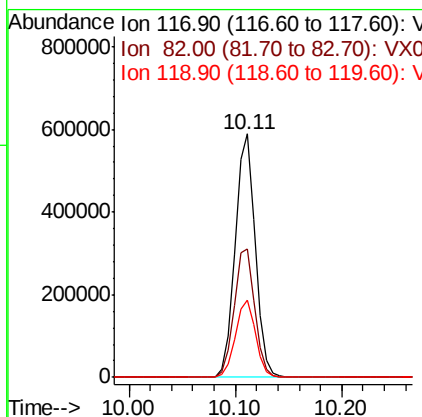
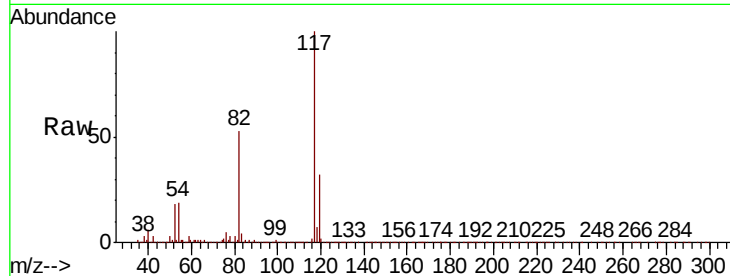




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1513
Delta R.T. -0.00 min
Lab File: VX013985.D
Acq: 12 Dec 2019 19:05

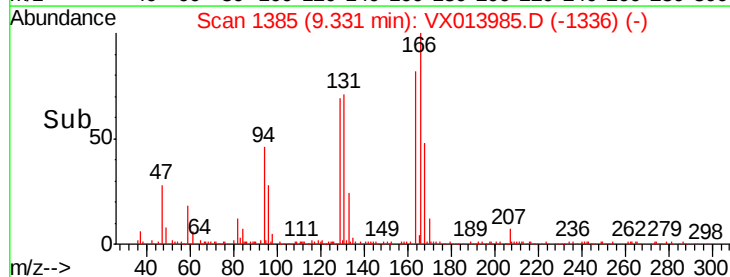
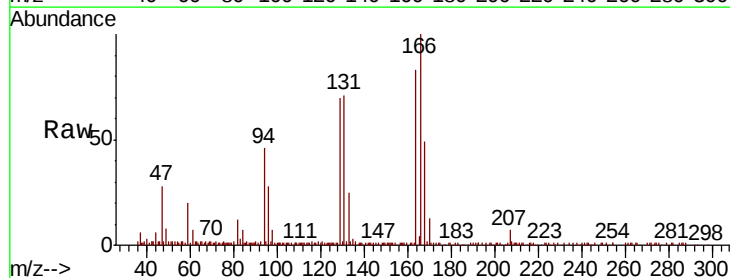
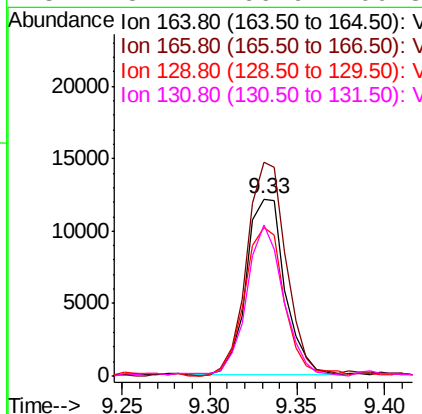
Instrument :
MSVOA_X
ClientSampleId :
RE132D6-20191209

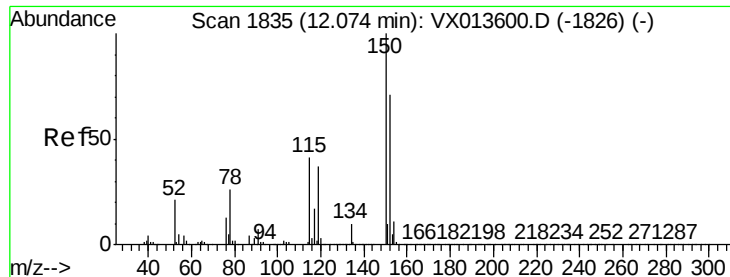
Tot Ion	Ratio	Lower	Upper
117	100		
82	52.8	41.8	62.8
119	31.9	25.8	38.8



#64
Tetrachloroethene
Concen: 3.226 ug/l
RT: 9.33 min Scan# 1385
Delta R.T. -0.00 min
Lab File: VX013985.D
Acq: 12 Dec 2019 19:05

Tgt Ion	Ratio	Lower	Upper
164	100		
166	120.7	99.7	149.5
129	84.3	70.1	105.1
131	84.7	66.9	100.3





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VX013985.D

Acq: 12 Dec 2019 19:05

Instrument :

MSVOA_X

ClientSampleId :

RE132D6-20191209

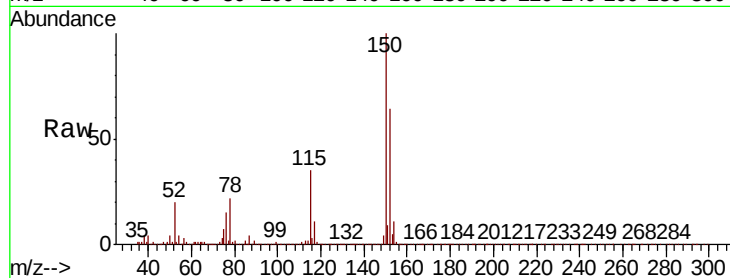
Tot Ion:152 Resp: 337600

Ion Ratio Lower Upper

152 100

115 54.9 38.4 115.1

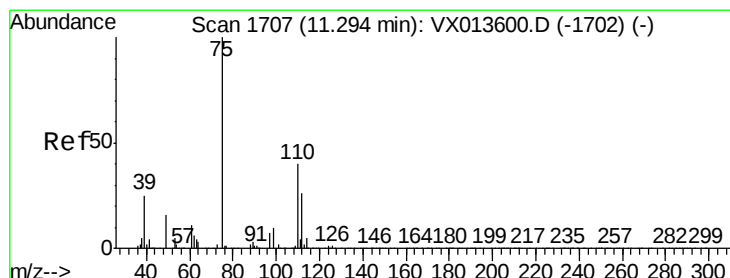
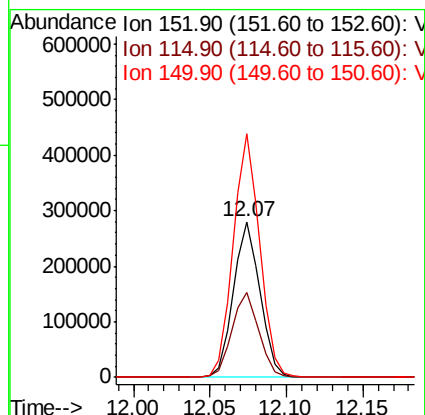
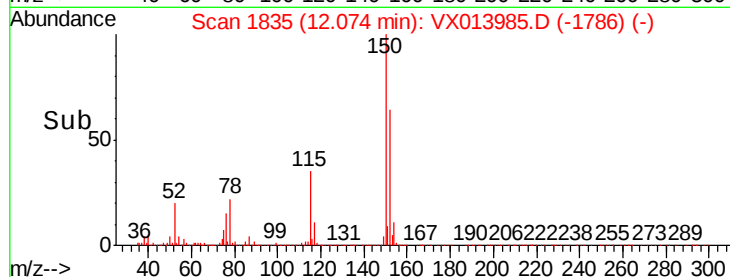
150 155.9 0.0 346.8



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: 22.142 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX013985.D

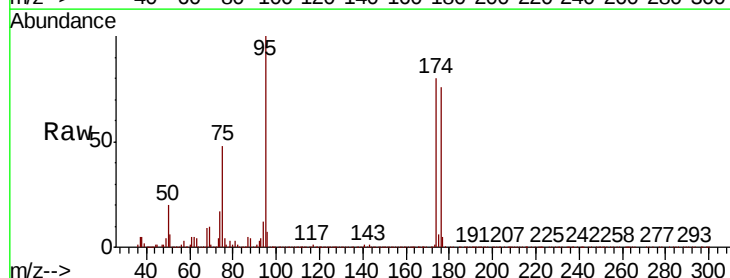
Acq: 12 Dec 2019 19:05

Tgt Ion: 75 Resp: 168132

Ion Ratio Lower Upper

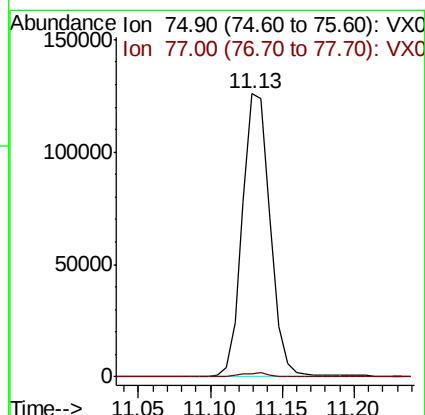
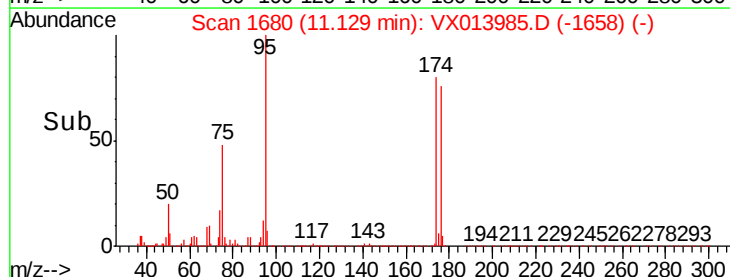
75 100

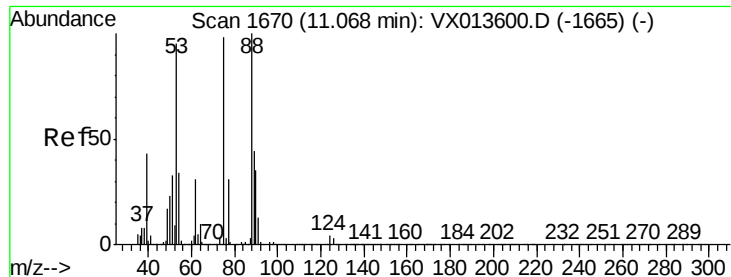
77 1.3 19.1 57.5#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

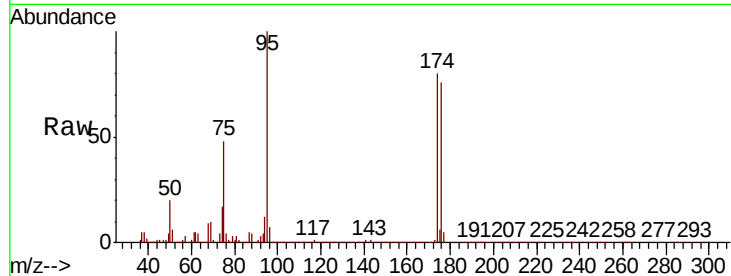




#81
trans-1,4-Dichloro-2-butene
Concen: 60.578 ug/l
RT: 11.13 min Scan# 1680
Delta R.T. 0.06 min
Lab File: VX013985.D
Acq: 12 Dec 2019 19:05

Instrument :
MSVOA_X
ClientSampleId :
RE132D6-20191209

Tot Ion	Ratio	Lower	Upper
75	100		
53	0.1	78.2	117.2#
89	0.0	35.4	53.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0
Ion 53.00 (52.70 to 53.70): VX0
Ion 88.90 (88.60 to 89.60): VX0

