

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121620\
 Data File : VL036168.D
 Acq On : 16 Dec 2020 16:05
 Operator : SY/AP
 Sample : L5082-02 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 17 03:39:55 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 07 16:56:49 2020
 QLast Update : Mon Dec 07 16:56:49 2020
 Response via : Initial Calibration

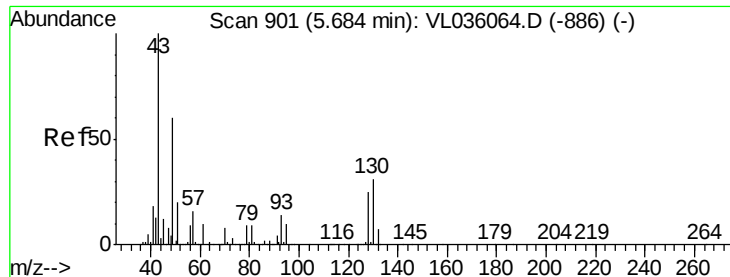
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1302694	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.16	114	2739189	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.07	117	2526815	10.00	ppbv	-0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2210204	11.02	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.97	51	10690	0.072	ppbv #	74
4) Chloromethane	3.13	50	2336	0.032	ppbv #	81
9) Propene	3.34	41	7617	0.102	ppbv	91
10) Heptane	8.10	43	19083	0.100	ppbv #	29
13) Ethanol	3.59	45	1167	0.114	ppbv #	29
15) Acetone	3.85	43	140622	0.898	ppbv #	83
20) Methylene Chloride	4.33	84	25695	0.400	ppbv	92
25) Ethyl Acetate	5.67	43	277243	0.886	ppbv #	77
26) Hexane	5.67	57	390575	2.775	ppbv #	38
29) Chloroform	5.74	83	34656	0.187	ppbv	100
34) 2-Butanone	5.25	43	11761	0.065	ppbv #	17
39) 1,2-Dichloropropane	7.16	63	883745	9.640	ppbv #	24
51) 2-Hexanone	10.10	43	35797	0.169	ppbv #	29
52) Tetrachloroethene	11.20	164	5333	0.063	ppbv	95
53) Toluene	9.79	91	63037	0.242	ppbv	96
57) Chlorobenzene	12.13	112	13268	0.075	ppbv #	30
58) Ethyl Benzene	12.95	91	36408	0.105	ppbv	100
59) m/p-Xylene	12.97	91	12443	0.043	ppbv #	34
60) o-Xylene	13.68	91	22485	0.082	ppbv	67
63) 1,1,2,2-Tetrachloroethane	13.66	83	17793	0.096	ppbv #	25
74) 1,2,4-Trimethylbenzene	16.74	105	13389	0.047	ppbv #	75

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.04 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

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ClientSampleId :

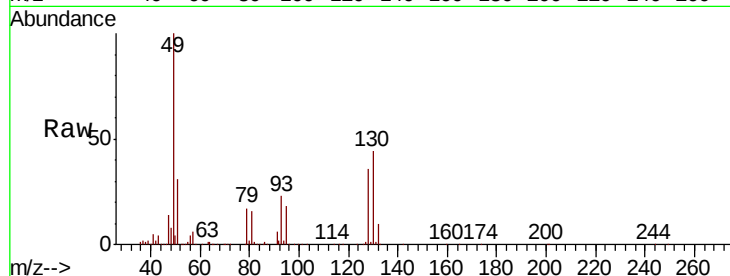
Tot Ion: 49 Resp: 1302694

Ion Ratio Lower Upper

49 100

128 38.7 21.1 63.1

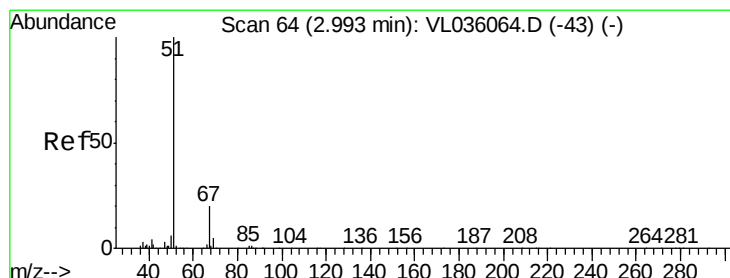
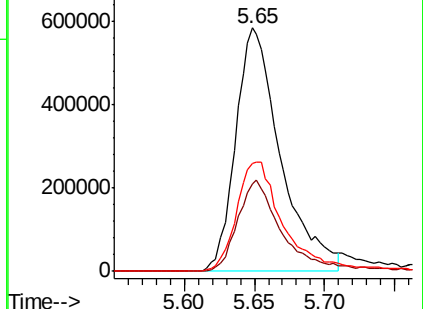
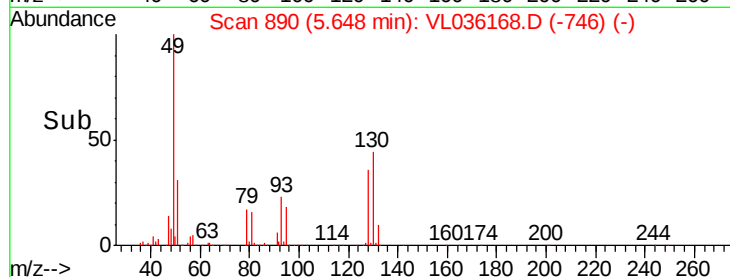
130 48.5 27.1 81.3



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#3

Chlorodifluoromethane

Concen: 0.072 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.02 min

Lab File: VL036168.D

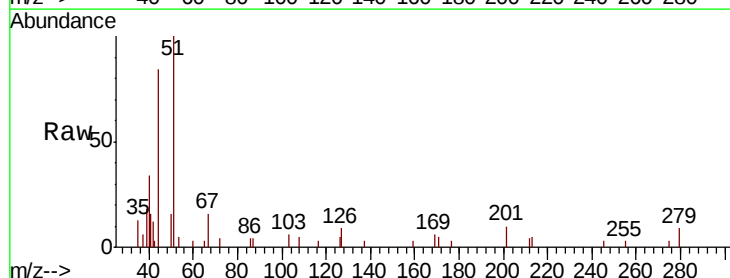
Acq: 16 Dec 2020 16:05

Tgt Ion: 51 Resp: 10690

Ion Ratio Lower Upper

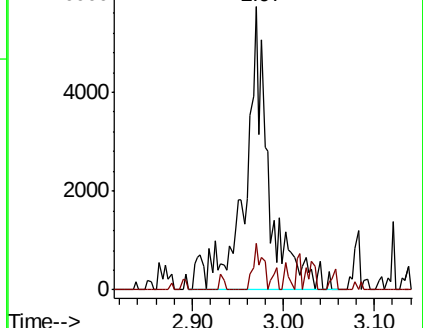
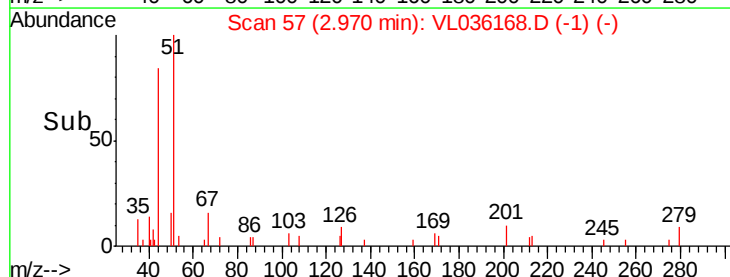
51 100

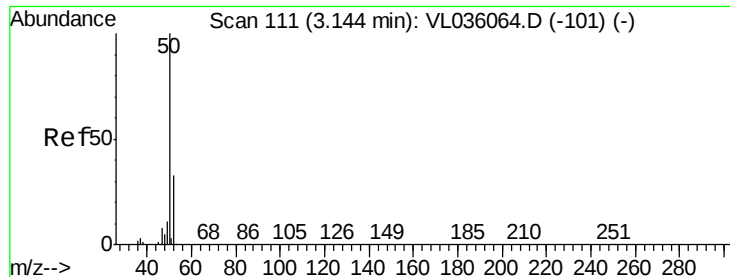
67 6.2 14.3 21.5#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.032 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.02 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

Instrument :

MSVOA_L

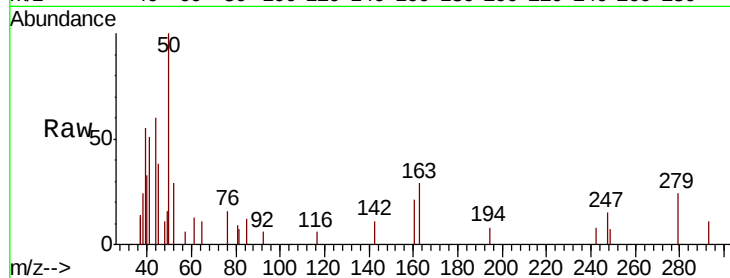
ClientSampleId :

Tot Ion: 50 Resp: 2336

Ion Ratio Lower Upper

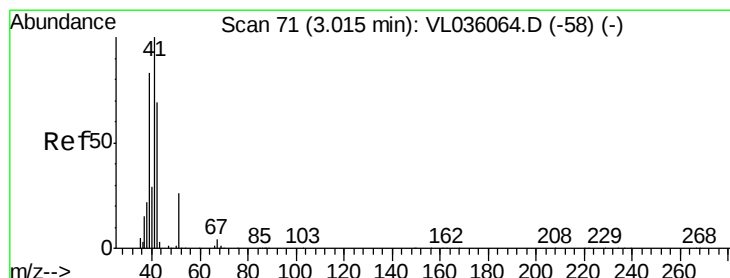
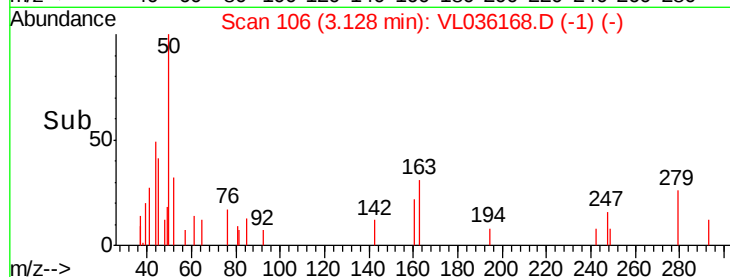
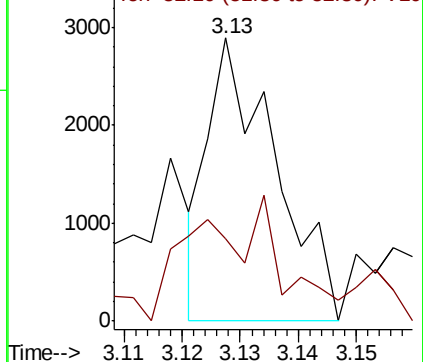
50 100

52 22.0 26.1 39.1#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 0.102 ppbv

RT: 3.34 min Scan# 172

Delta R.T. 0.32 min

Lab File: VL036168.D

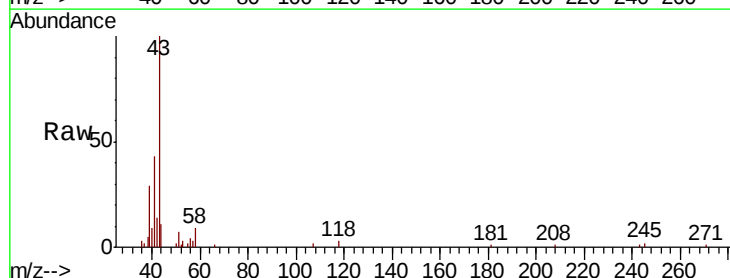
Acq: 16 Dec 2020 16:05

Tgt Ion: 41 Resp: 7617

Ion Ratio Lower Upper

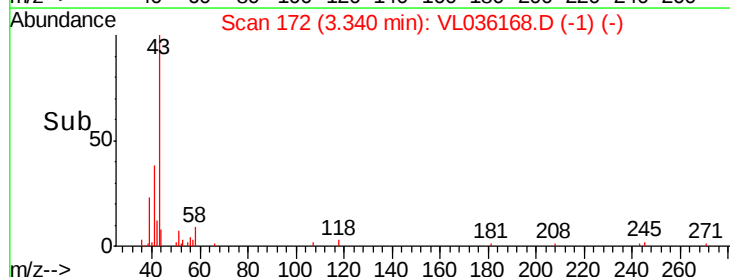
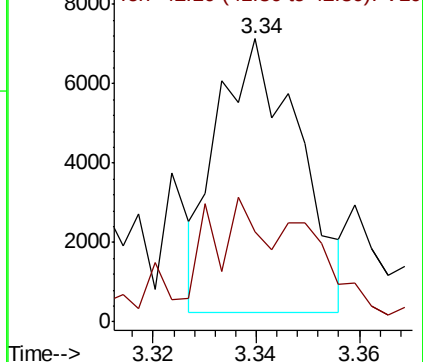
41 100

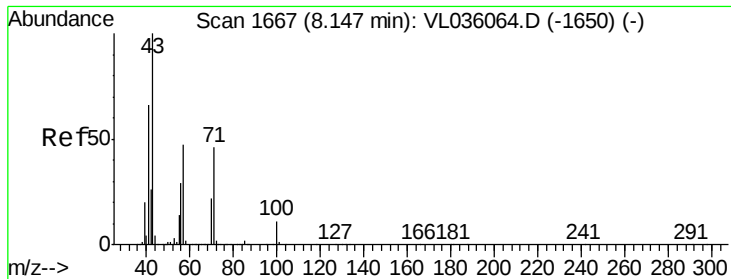
42 78.7 57.0 85.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

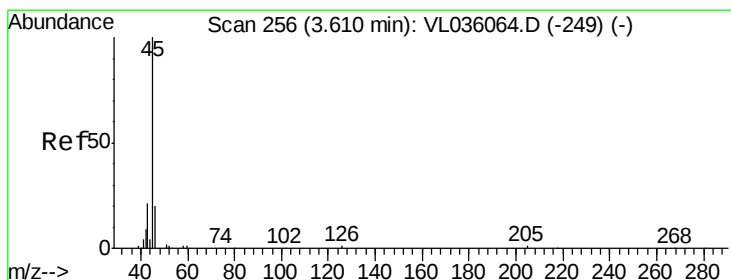
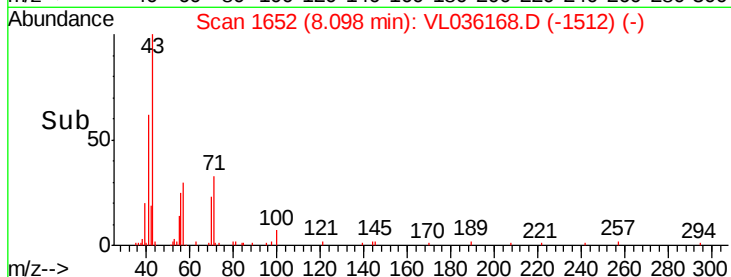
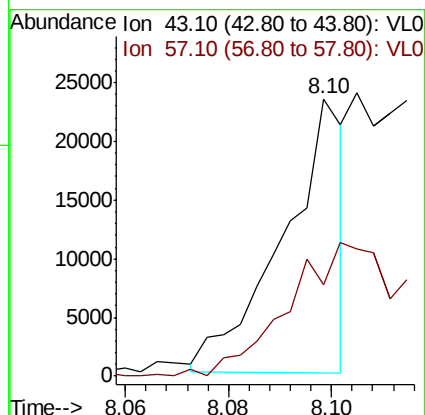
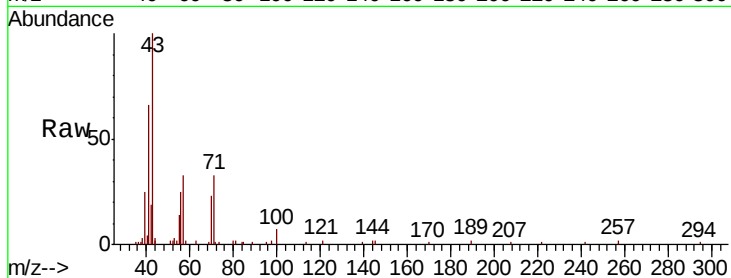




#10
Heptane
Concen: 0.100 ppbv
RT: 8.10 min Scan# 1652
Delta R.T. -0.05 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

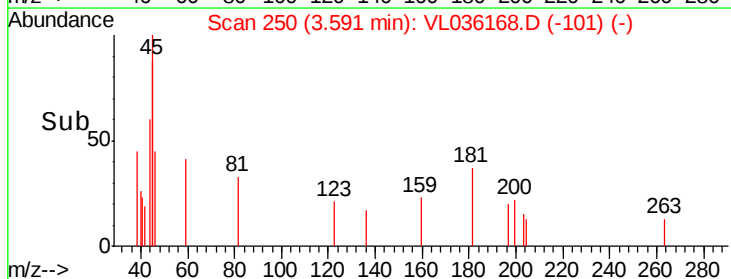
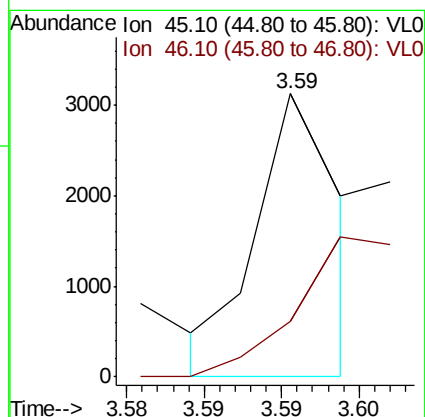
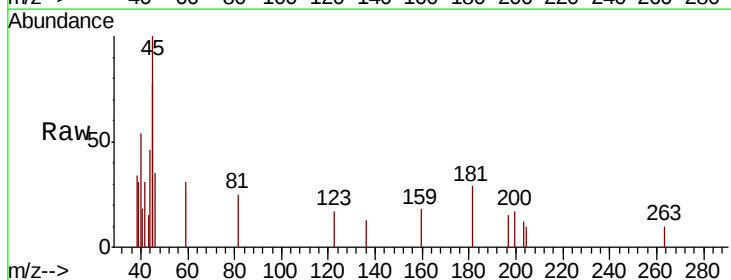
Instrument :
MSVOA_L
ClientSampled :

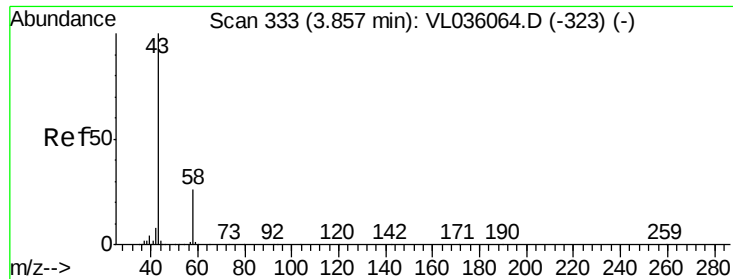
Tot Ion: 43 Resp: 19083
Ion Ratio Lower Upper
43 100
57 0.0 37.9 56.9#



#13
Ethanol
Concen: 0.114 ppbv
RT: 3.59 min Scan# 250
Delta R.T. -0.02 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

Tgt Ion: 45 Resp: 1167
Ion Ratio Lower Upper
45 100
46 0.0 19.0 75.8#





#15

Acetone

Concen: 0.898 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.01 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

Instrument :

MSVOA_L

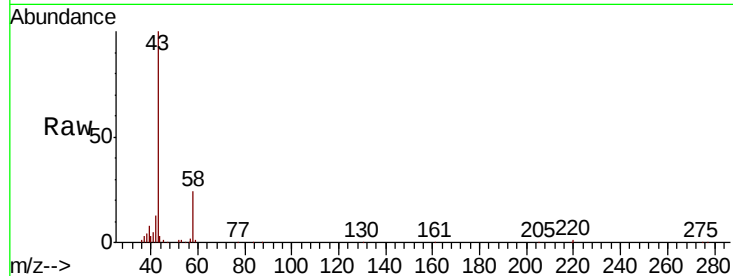
ClientSampleId :

Tot Ion: 43 Resp: 140622

Ion Ratio Lower Upper

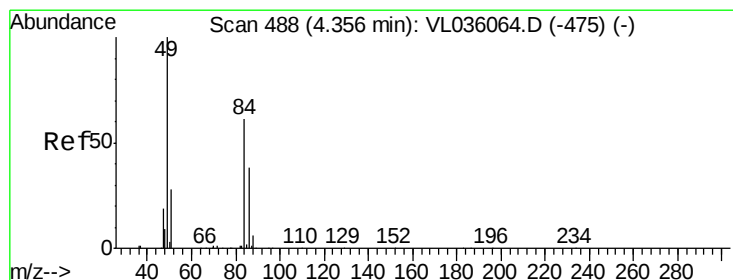
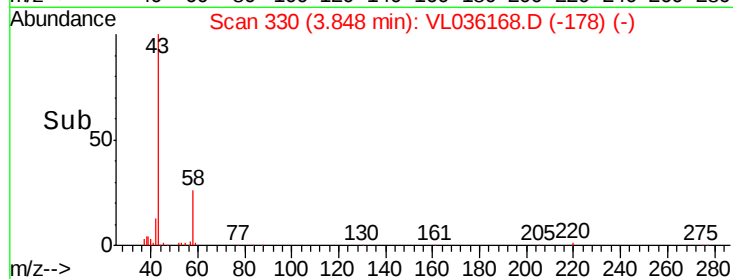
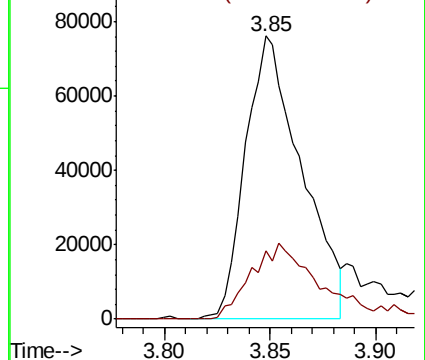
43 100

58 34.8 20.9 31.3#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 0.400 ppbv

RT: 4.33 min Scan# 480

Delta R.T. -0.03 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

Tgt Ion: 84 Resp: 25695

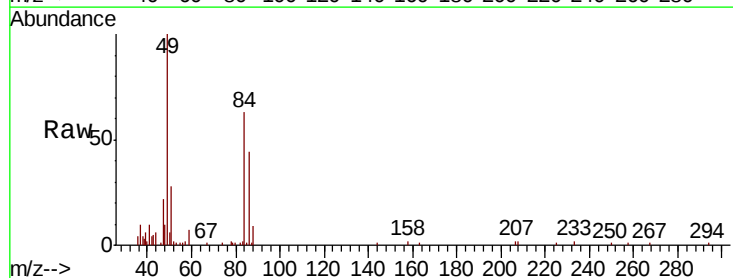
Ion Ratio Lower Upper

84 100

49 157.1 133.0 199.4

51 42.3 38.9 58.3

86 70.4 48.8 73.2

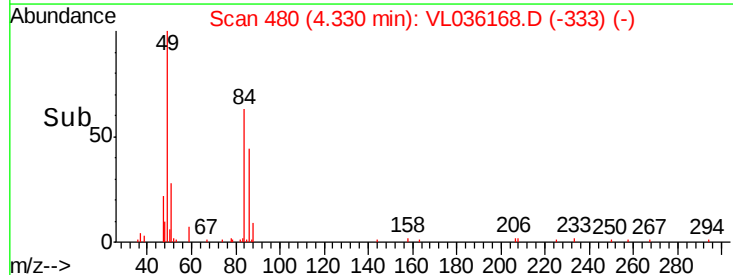
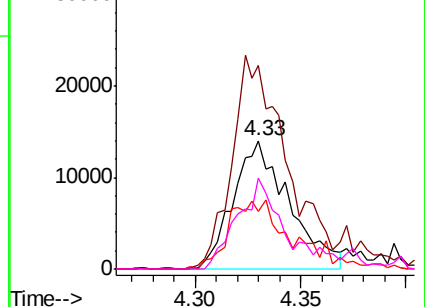


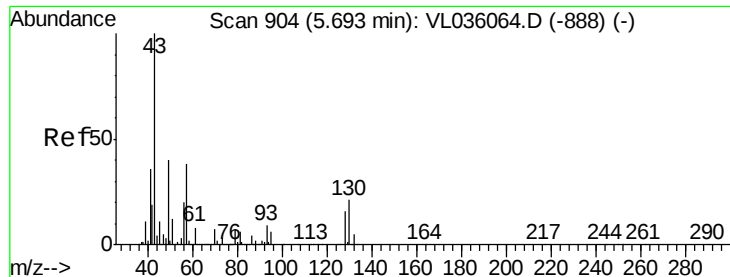
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

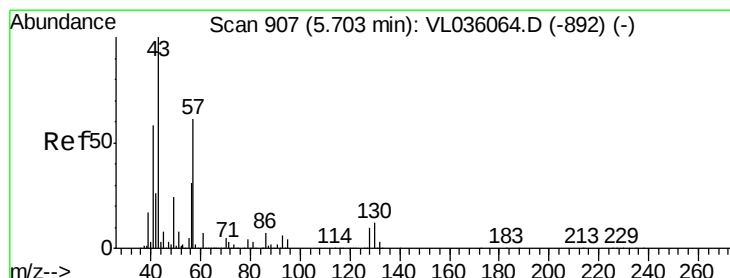
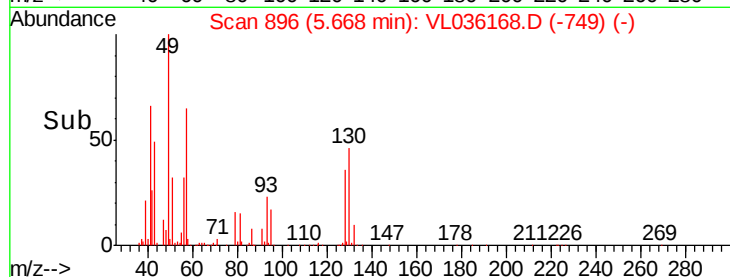
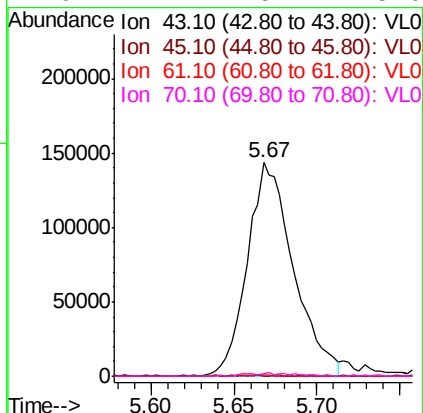
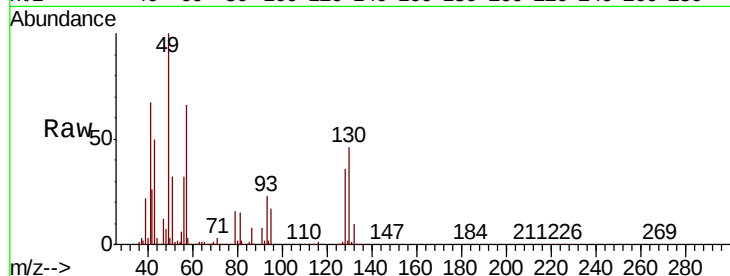




#25
Ethyl Acetate
Concen: 0.886 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.03 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

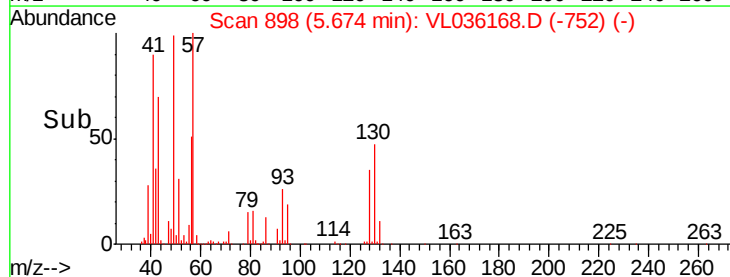
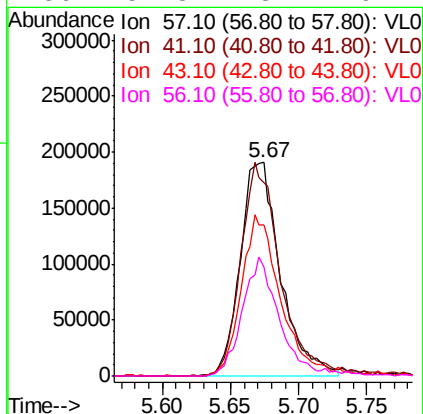
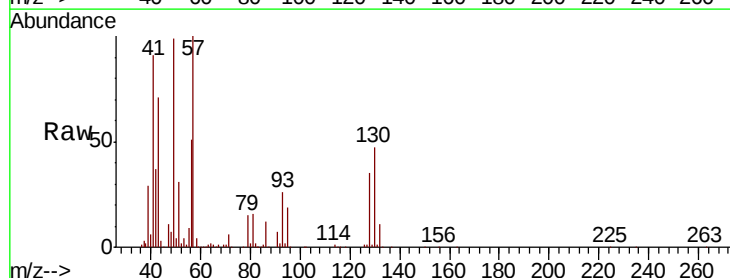
Instrument :
MSVOA_L
ClientSampleId :

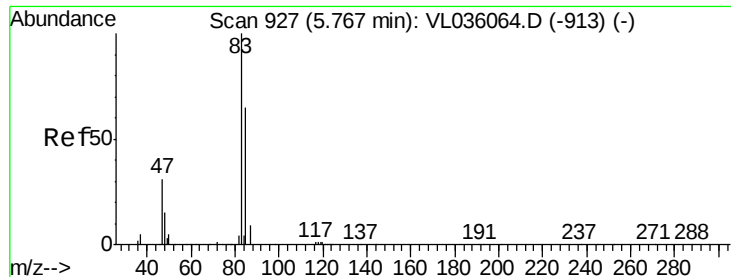
Tot Ion:	43	Resp:	277243
Ion	Ratio	Lower	Upper
43	100		
45	0.5	8.2	12.4#
61	0.5	7.4	11.2#
70	1.7	5.4	8.0#



#26
Hexane
Concen: 2.775 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.03 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

Tgt Ion:	57	Resp:	390575
Ion	Ratio	Lower	Upper
57	100		
41	101.2	82.9	124.3
43	75.5	199.9	299.9#
56	51.8	43.1	64.7





#29

Chloroform

Concen: 0.187 ppbv

RT: 5.74 min Scan# 917

Delta R.T. -0.03 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

Instrument :

MSVOA_L

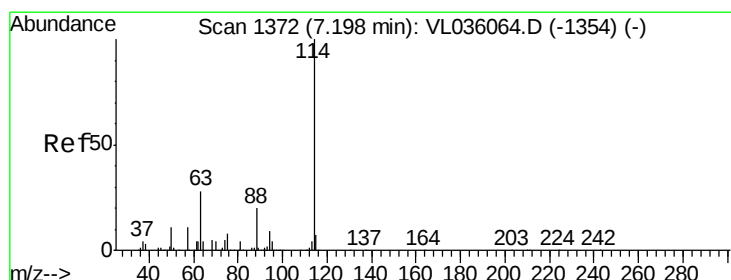
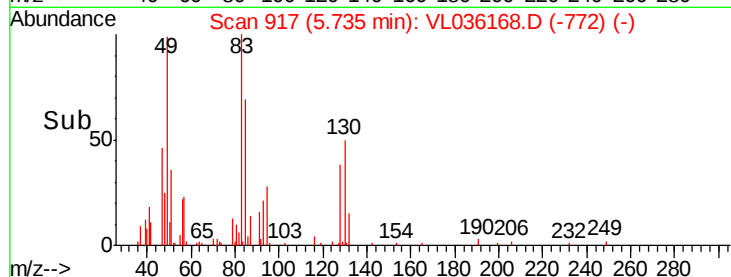
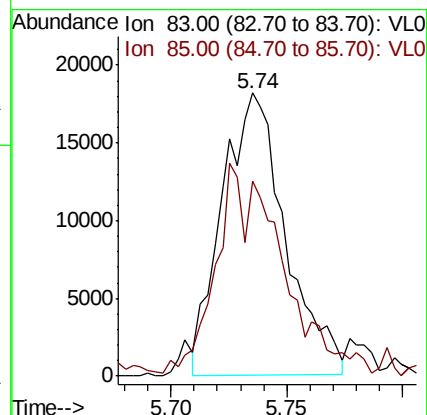
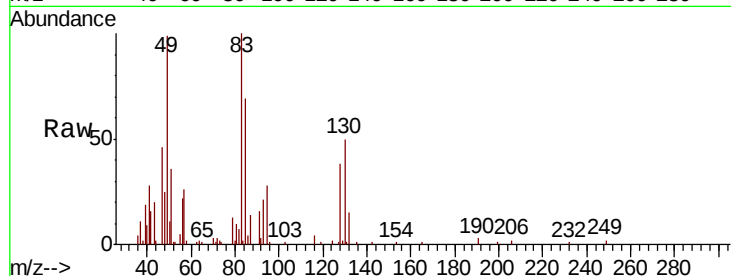
ClientSampleId :

Tot Ion: 83 Resp: 34656

Ion Ratio Lower Upper

83 100

85 64.5 51.8 77.6



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1359

Delta R.T. -0.04 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

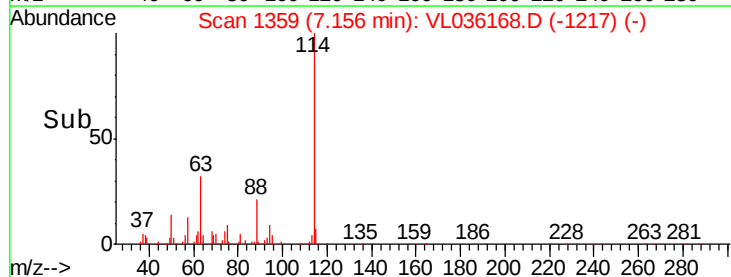
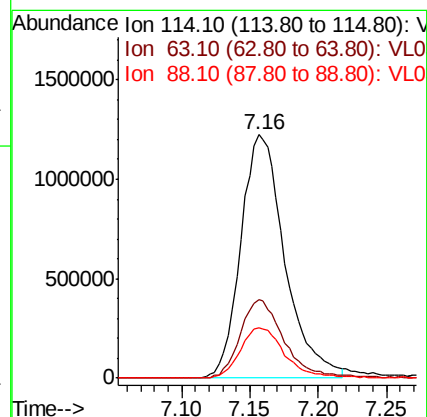
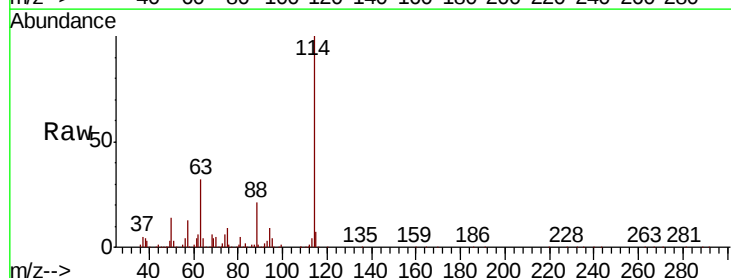
Tgt Ion: 114 Resp: 2739189

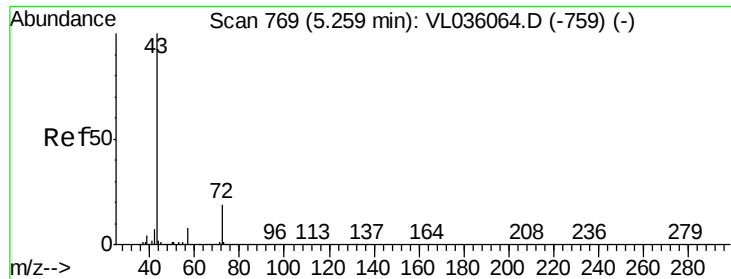
Ion Ratio Lower Upper

114 100

63 32.7 23.6 35.4

88 21.3 15.8 23.6

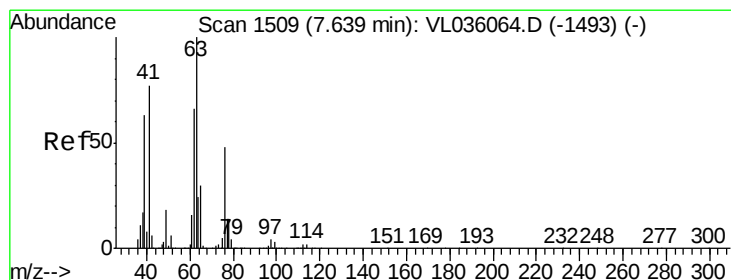
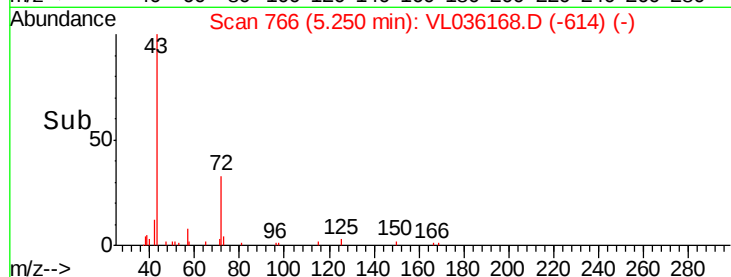
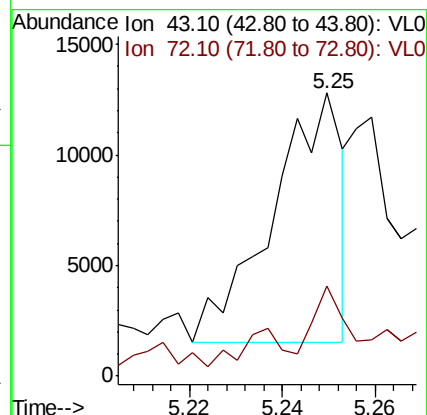
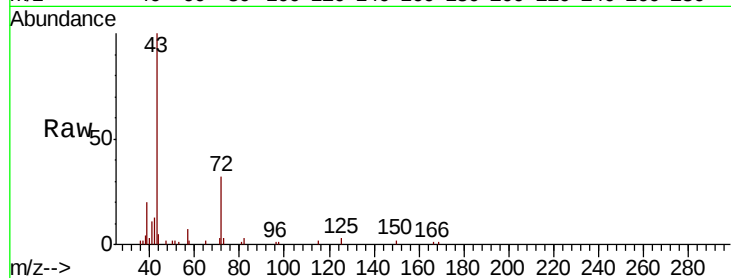




#34
2-Butanone
Concen: 0.065 ppbv
RT: 5.25 min Scan# 766
Delta R.T. -0.01 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

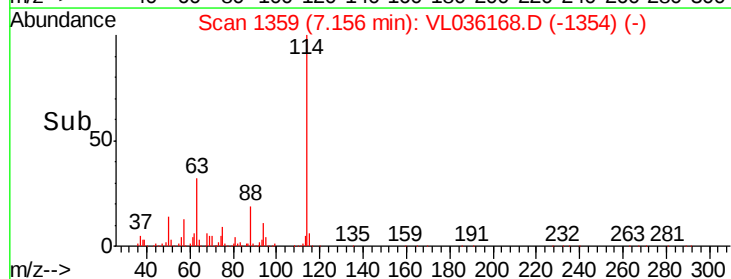
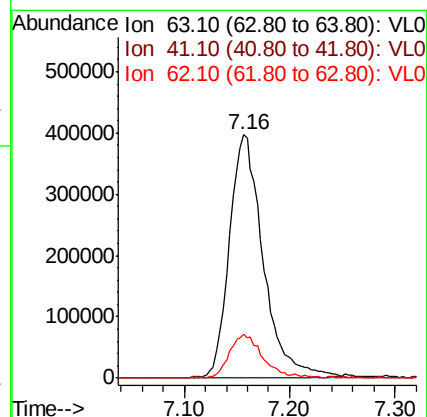
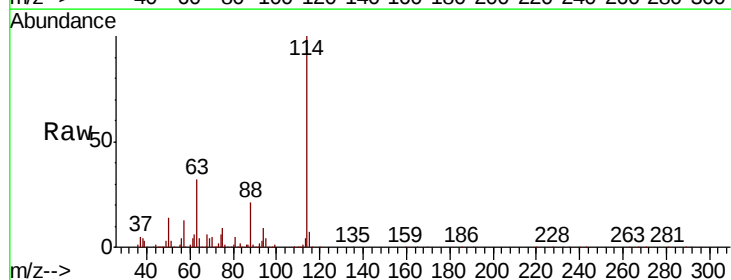
Instrument :
MSVOA_L
ClientSampled :

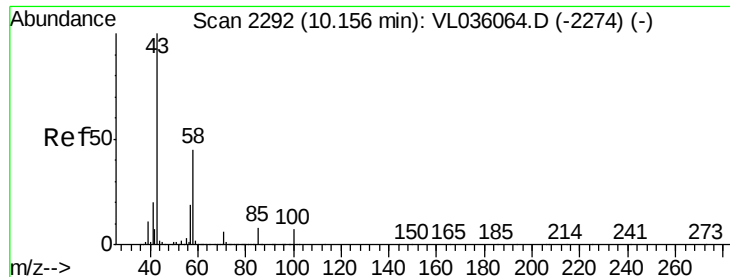
Tot Ion: 43 Resp: 11761
Ion Ratio Lower Upper
43 100
72 59.4 16.5 24.7#



#39
1,2-Dichloropropane
Concen: 9.640 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.48 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

Tgt Ion: 63 Resp: 883745
Ion Ratio Lower Upper
63 100
41 0.0 61.9 92.9#
62 18.0 52.5 78.7#

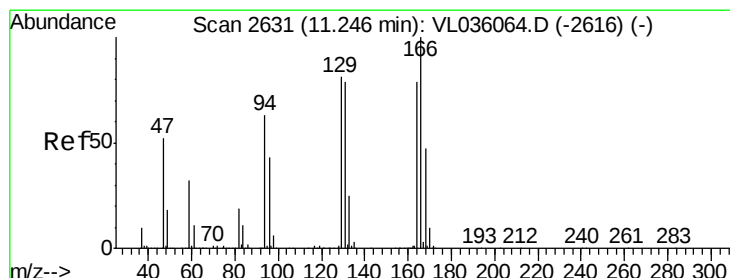
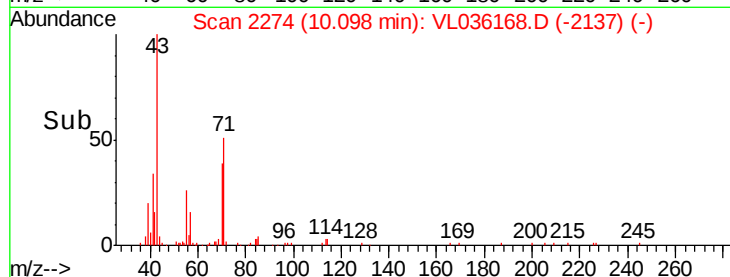
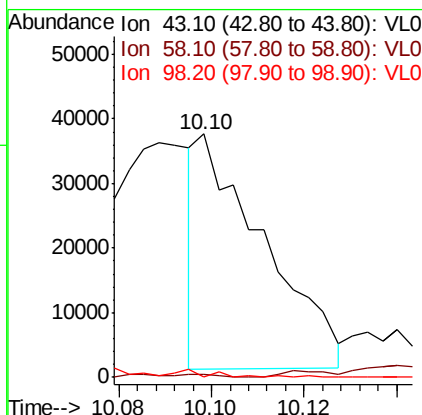
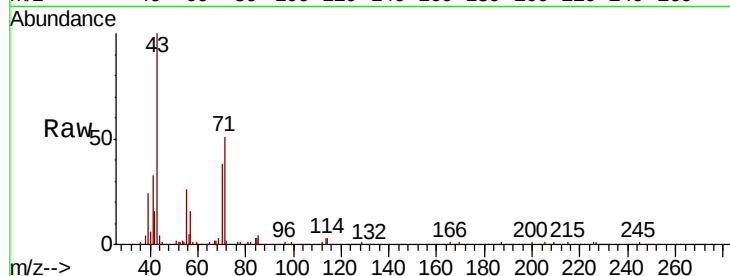




#51
2-Hexanone
Concen: 0.169 ppbv
RT: 10.10 min Scan# 2274
Delta R.T. -0.06 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

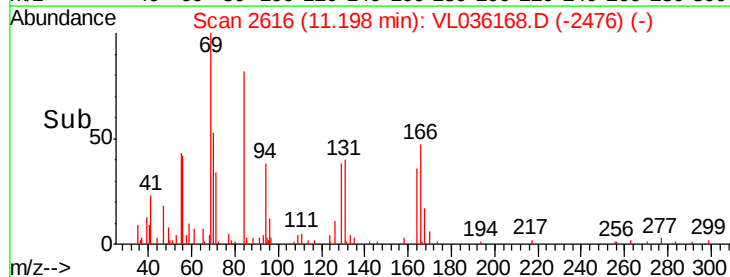
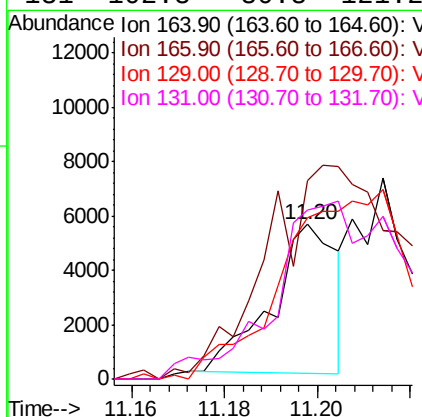
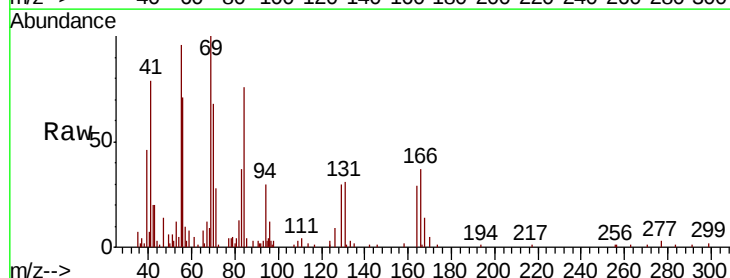
Instrument :
MSVOA_L
ClientSampleId :

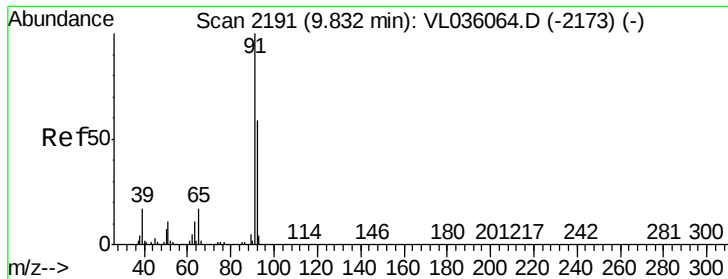
Tot Ion: 43 Resp: 35797
Ion Ratio Lower Upper
43 100
58 0.0 38.7 58.1#
98 0.0 0.1 0.1#



#52
Tetrachloroethene
Concen: 0.063 ppbv
RT: 11.20 min Scan# 2616
Delta R.T. -0.05 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

Tgt Ion: 164 Resp: 5333
Ion Ratio Lower Upper
164 100
166 133.9 101.9 152.9
129 109.3 82.1 123.1
131 102.8 80.8 121.2





#53

Toluene

Concen: 0.242 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. -0.04 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

Instrument :

MSVOA_L

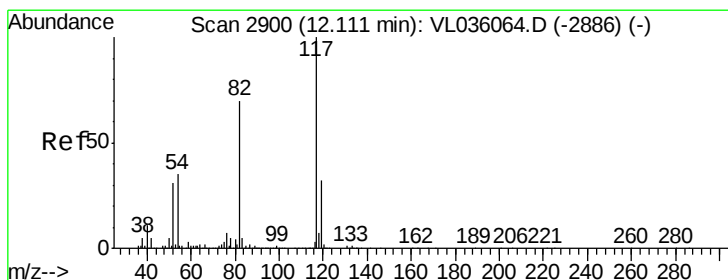
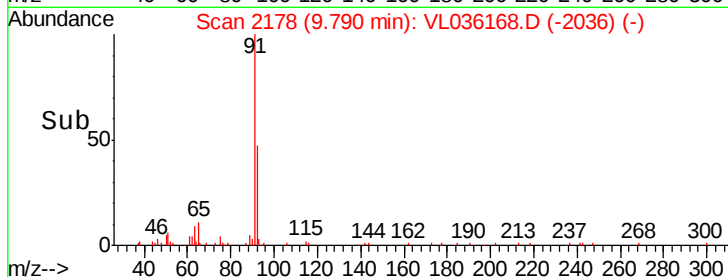
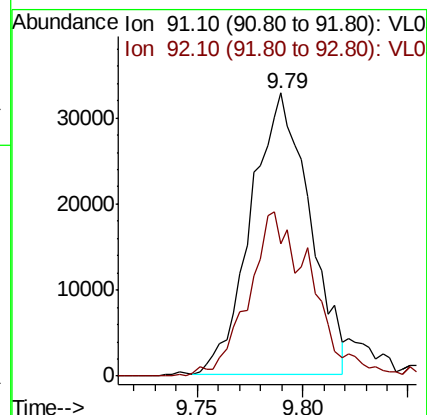
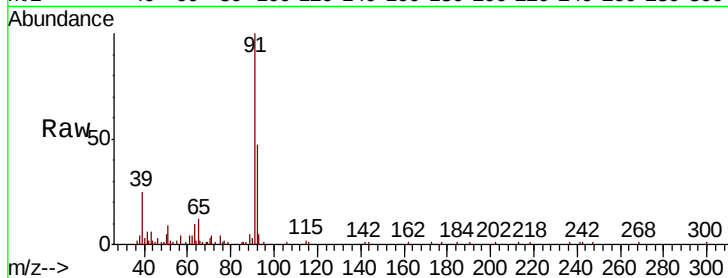
ClientSampleId :

Tot Ion: 91 Resp: 63037

Ion Ratio Lower Upper

91 100

92 63.4 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. -0.04 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

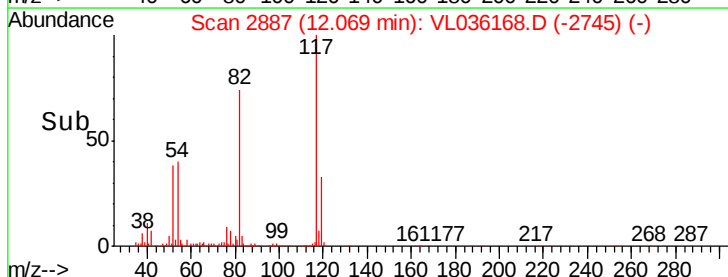
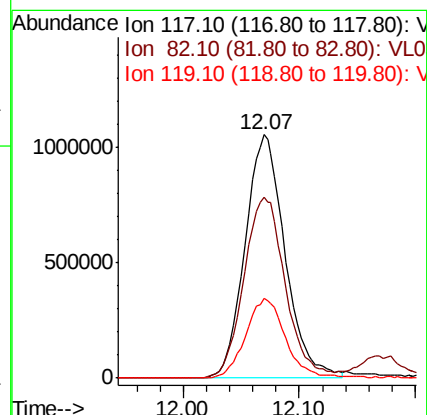
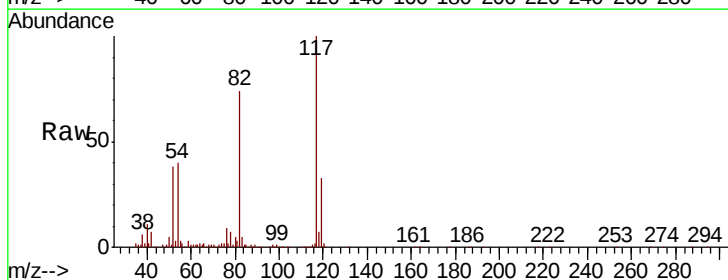
Tgt Ion: 117 Resp: 2526815

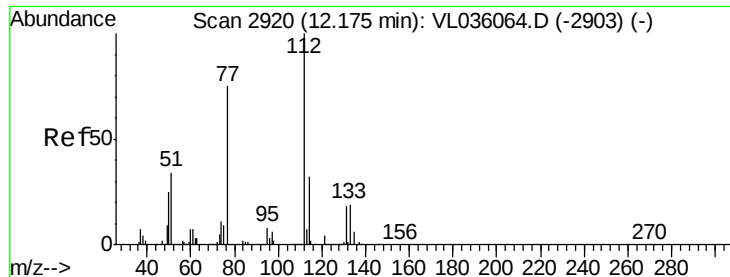
Ion Ratio Lower Upper

117 100

82 77.0 0.0 0.0#

119 32.8 0.0 0.0#





#57

Chlorobenzene

Concen: 0.075 ppbv

RT: 12.13 min Scan# 2905

Delta R.T. -0.05 min

Lab File: VL036168.D

Acq: 16 Dec 2020 16:05

Instrument :

MSVOA_L

ClientSampleId :

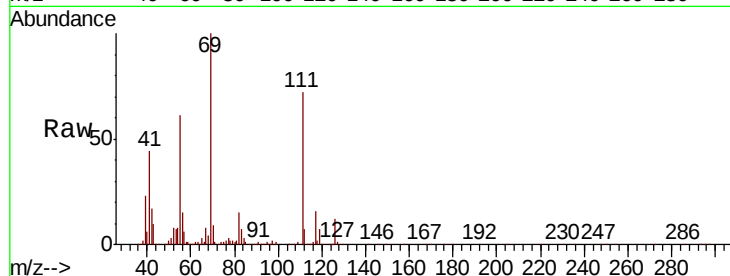
Tot Ion:112 Resp: 13268

Ion Ratio Lower Upper

112 100

77 11.6 60.5 90.7#

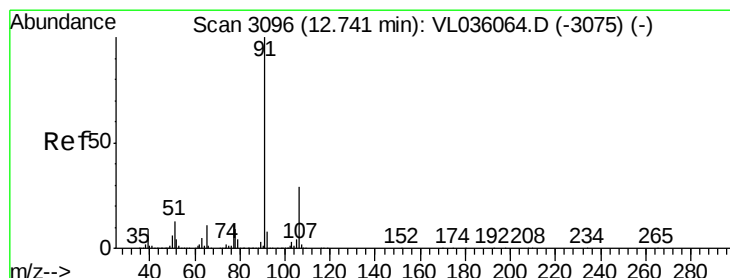
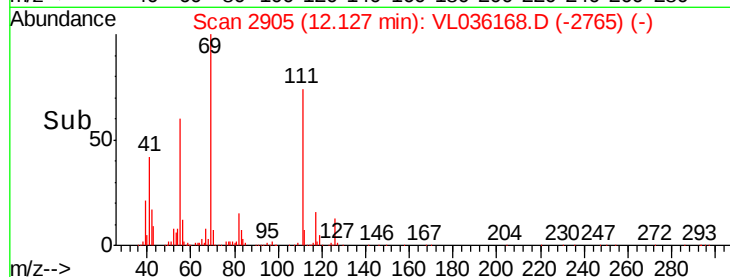
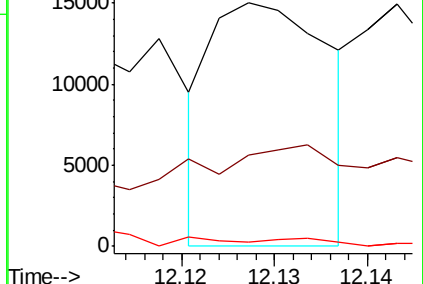
114 0.1 29.2 35.6#



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 0.105 ppbv

RT: 12.95 min Scan# 3162

Delta R.T. 0.21 min

Lab File: VL036168.D

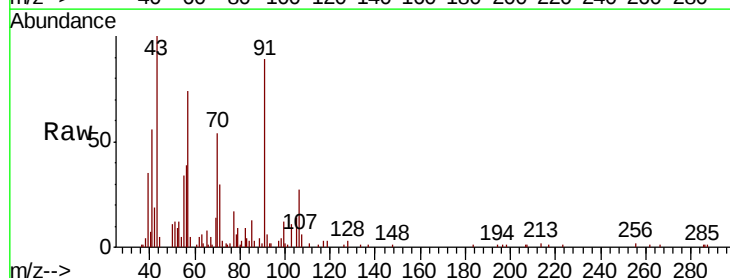
Acq: 16 Dec 2020 16:05

Tgt Ion: 91 Resp: 36408

Ion Ratio Lower Upper

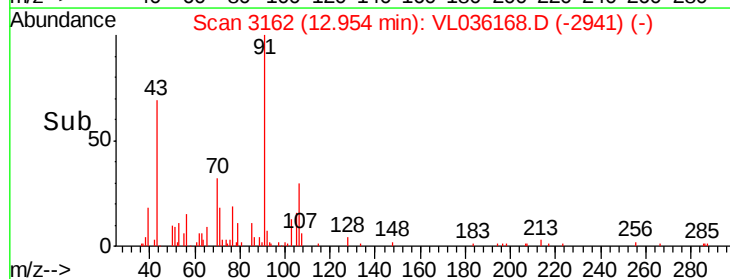
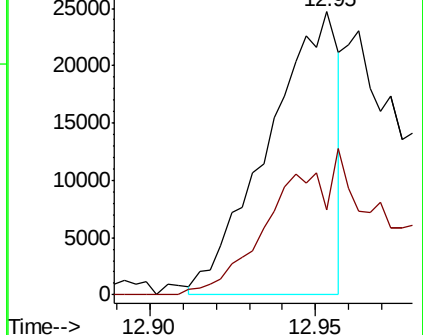
91 100

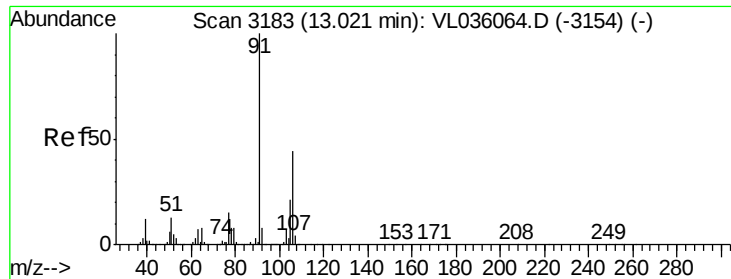
106 29.0 23.0 34.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

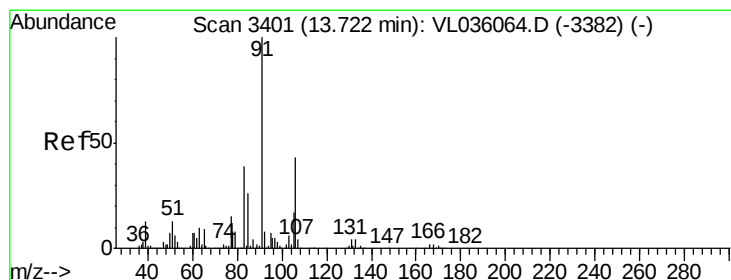
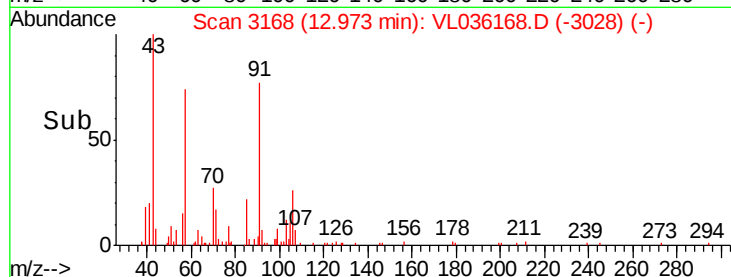
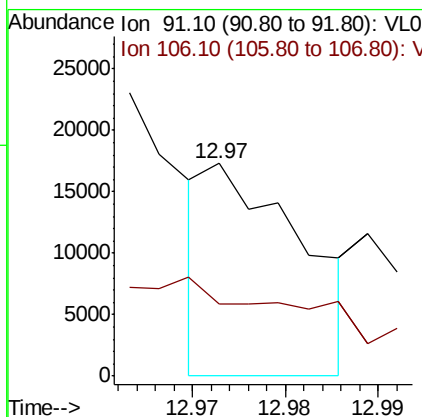
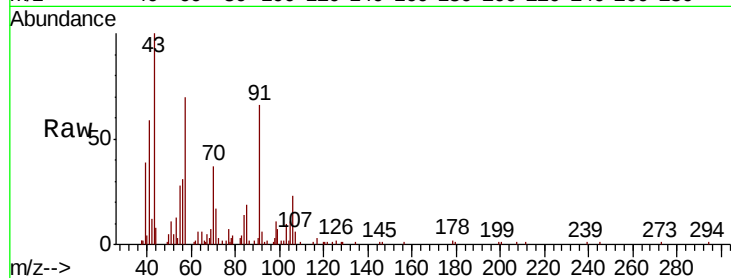




#59
m/p-Xylene
Concen: 0.043 ppbv
RT: 12.97 min Scan# 3168
Delta R.T. -0.05 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

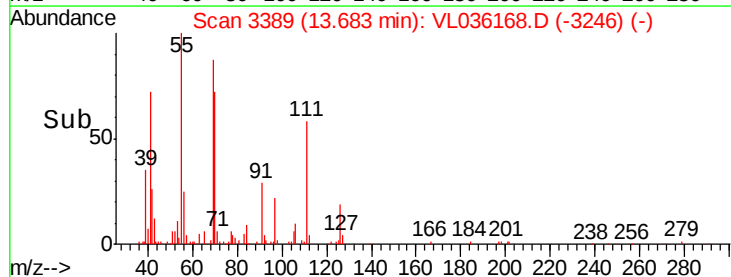
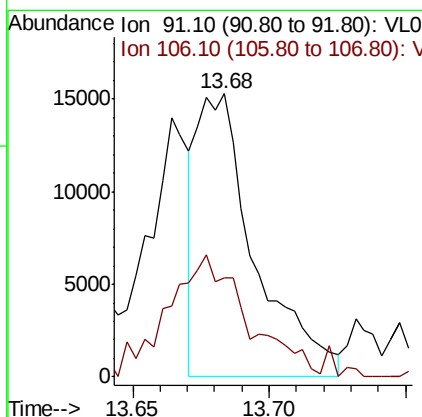
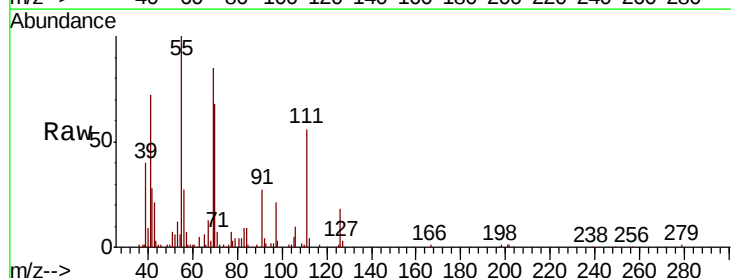
Instrument :
MSVOA_L
ClientSampled :

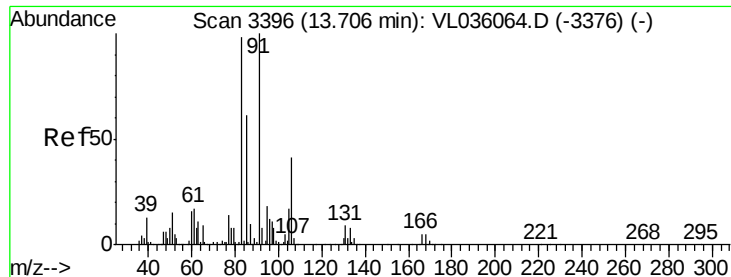
Tot Ion: 91 Resp: 12443
Ion Ratio Lower Upper
91 100
106 0.0 33.6 50.4#



#60
o-Xylene
Concen: 0.082 ppbv
RT: 13.68 min Scan# 3389
Delta R.T. -0.04 min
Lab File: VL036168.D
Acq: 16 Dec 2020 16:05

Tgt Ion: 91 Resp: 22485
Ion Ratio Lower Upper
91 100
106 64.2 21.6 64.6

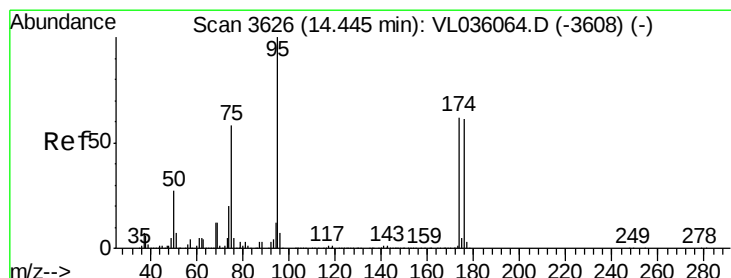
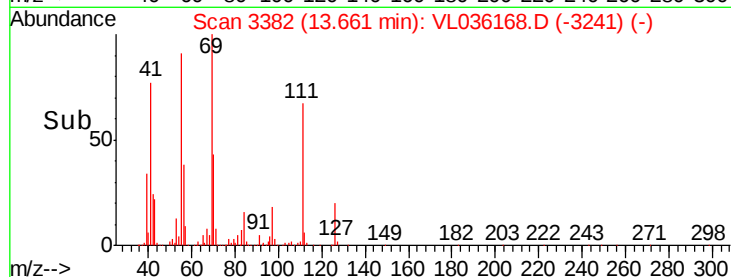
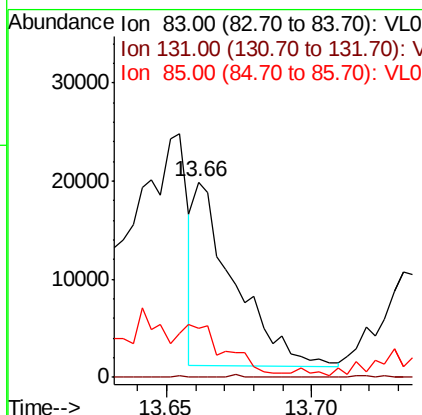
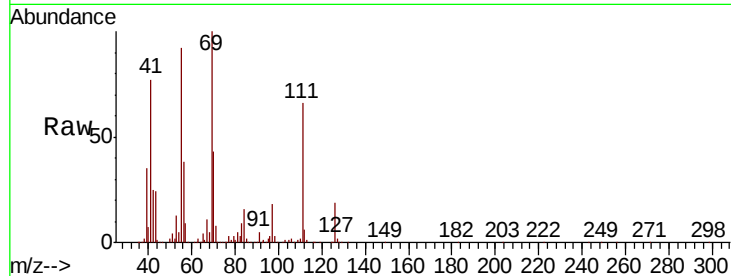




#63
 1,1,2,2-Tetrachloroethane
 Concen: 0.096 ppbv
 RT: 13.66 min Scan# 3382
 Delta R.T. -0.05 min
 Lab File: VL036168.D
 Acq: 16 Dec 2020 16:05

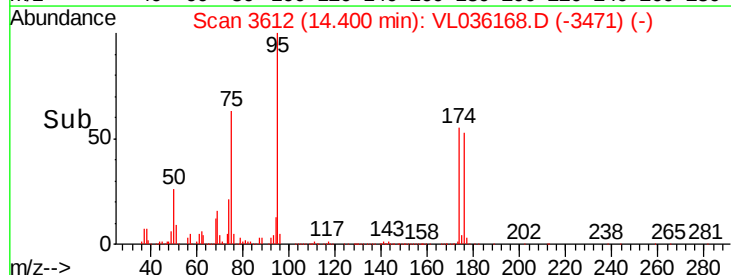
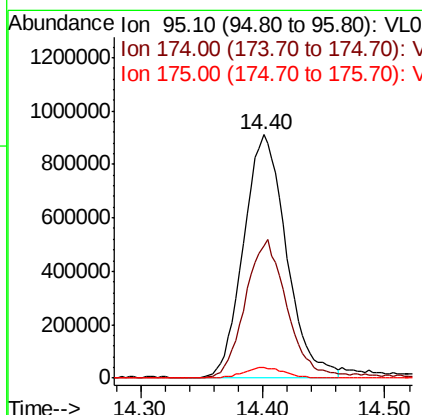
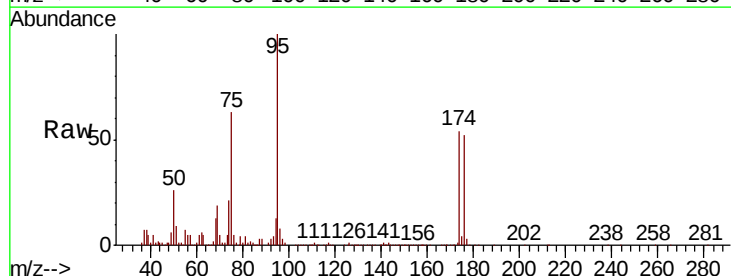
Instrument :
 MSVOA_L
 ClientSampleId :

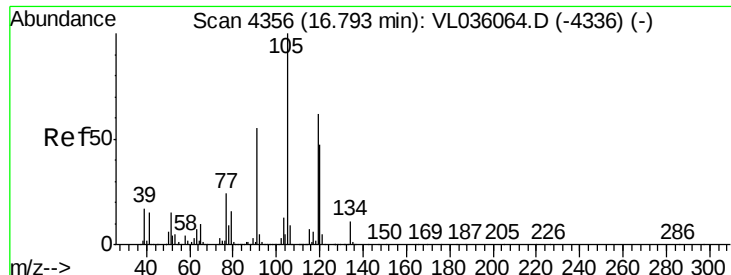
Tot Ion: 83 Resp: 17793
 Ion Ratio Lower Upper
 83 100
 131 0.0 4.6 13.8#
 85 0.0 32.5 97.5#



#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.016 ppbv
 RT: 14.40 min Scan# 3612
 Delta R.T. -0.05 min
 Lab File: VL036168.D
 Acq: 16 Dec 2020 16:05

Tgt Ion: 95 Resp: 2210204
 Ion Ratio Lower Upper
 95 100
 174 58.2 50.7 76.1
 175 4.3 4.0 6.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.047 ppbv
 RT: 16.74 min Scan# 4341
 Delta R.T. -0.05 min
 Lab File: VL036168.D
 Acq: 16 Dec 2020 16:05

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:	105	Resp:	13389
Ion	Ratio	Lower	Upper
105	100		
120	52.1	37.4	56.0
91	25.7	45.6	68.4#
77	16.6	19.4	29.2#

