

Data File : VL032931.D
Acq On : 7 Dec 2018 12:34
Operator : SY/AP
Sample : J6176-03 1.2X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Quant Time: Dec 08 01:58:22 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 07 09:35:17 2018
QLast Update : Fri Dec 07 09:35:17 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1061163	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2691054	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2652258	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1972956	10.07	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.70%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.07	85	23812	0.168	ppbv	98
3) Chlorodifluoromethane	3.06	51	530361	6.599	ppbv #	55
4) Chloromethane	3.17	50	16082	0.344	ppbv	97
5) Vinyl Chloride	3.29	62	1916	0.040	ppbv #	56
6) Bromomethane	3.52	94	1010	0.034	ppbv #	40
7) Chloroethane	3.61	64	969	0.057	ppbv #	61
8) Dichlorotetrafluoroethane	3.22	85	5062	0.043	ppbv #	80
9) Propene	3.04	41	403304	12.691	ppbv	97
10) Heptane	8.25	43	23487	0.197	ppbv	91
11) Trichlorofluoromethane	4.01	101	16899	0.127	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.56	101	7560	0.066	ppbv	84
13) Ethanol	3.66	45	399600	36.522	ppbv	97
14) Bromoethene	3.79	108	1536	0.041	ppbv #	85
15) Acetone	3.90	43	2875122	31.566	ppbv #	77
16) 1,3-Butadiene	3.35	39	758665	20.994	ppbv #	10
17) tert-Butyl alcohol	4.38	59	62275	2.685	ppbv #	77
18) 1,1-Dichloroethene	4.35	96	2034	0.046	ppbv #	55
19) Isopropyl Alcohol	4.04	45	18022	0.315	ppbv #	95
20) Methylene Chloride	4.42	84	240848	5.410	ppbv	97
21) Allyl Chloride	4.38	41	24326	0.328	ppbv #	67
22) trans-1,2-Dichloroethene	4.97	96	1922	0.035	ppbv #	51
23) Vinyl Acetate	5.26	43	113464	0.736	ppbv #	22
24) 1,1-Dichloroethane	5.10	63	6231	0.046	ppbv #	87
25) Ethyl Acetate	5.78	43	359853	1.672	ppbv #	80
26) Hexane	5.79	57	500355	5.037	ppbv #	43
27) Carbon Disulfide	4.62	76	62829	0.506	ppbv #	82
28) Methyl tert-Butyl Ether	5.12	73	4810	0.032	ppbv #	54
29) Chloroform	5.86	83	23567	0.133	ppbv #	84
30) Cyclohexane	7.25	84	3084	0.037	ppbv #	1
31) cis-1,2-Dichloroethene	5.65	61	2812	0.031	ppbv #	77
32) 1,1,1-Trichloroethane	6.62	97	7114	0.038	ppbv	94
34) 2-Butanone	5.33	43	10125214	86.380	ppbv	96
35) Carbon Tetrachloride	7.14	117	16462	0.078	ppbv	95
36) Benzene	7.01	78	37810	0.191	ppbv #	89
37) 1,2-Dichloroethane	6.42	62	6743	0.050	ppbv	100
38) Trichloroethene	7.97	130	4876	0.059	ppbv #	79
39) 1,2-Dichloropropane	7.30	63	673193	8.968	ppbv #	21
41) Tetrahydrofuran	6.16	42	5944	0.082	ppbv #	1
42) Bromodichloromethane	7.93	83	8284	0.044	ppbv #	95
44) 2,2,4-Trimethylpentane	7.99	57	12212	0.036	ppbv #	37
51) 2-Hexanone	10.27	43	988153	7.773	ppbv #	99

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MMSV-08

Quant Time: Dec 08 01:58:22 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 07 09:35:17 2018
QLast Update : Fri Dec 07 09:35:17 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Tetrachloroethene	11.38	164	7200	0.100	ppbv	87
53) Toluene	9.95	91	149848	0.714	ppbv	99
54) 1,2-Dibromoethane	10.77	107	5037	0.039	ppbv	93
58) Ethyl Benzene	12.87	91	24274	0.086	ppbv	100
59) m/p-Xylene	13.15	91	37653	0.147	ppbv #	100
60) o-Xylene	13.85	91	13342	0.052	ppbv #	32
61) Styrene	13.70	104	36521	0.212	ppbv #	91
63) 1,1,2,2-Tetrachloroethane	13.84	83	26957	0.134	ppbv #	60
65) tert-Butylbenzene	16.91	119	14406	0.043	ppbv #	43
66) Benzyl Chloride	17.15	91	6126	0.033	ppbv #	1
67) sec-Butylbenzene	17.47	105	28814	0.058	ppbv	99
69) p-Isopropyltoluene	17.82	119	35137	0.088	ppbv #	61
70) n-Butylbenzene	18.72	91	19083	0.052	ppbv #	47
72) 4-Ethyltoluene	16.00	105	24379	0.084	ppbv #	58
73) 1,3,5-Trimethylbenzene	16.17	105	27775	0.098	ppbv	99
74) 1,2,4-Trimethylbenzene	16.93	105	70352	0.221	ppbv #	72
75) 1,3-Dichlorobenzene	17.17	146	10464	0.056	ppbv #	63
76) 1,4-Dichlorobenzene	17.32	146	7052	0.040	ppbv #	18
77) 1,2-Dichlorobenzene	17.99	146	7889	0.045	ppbv #	1
78) Hexachloro-1,3-Butadiene	23.55	225	8729	0.091	ppbv #	80
80) Naphthalene,2-methyl-	25.12	142	5271	0.120	ppbv #	86

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

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Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

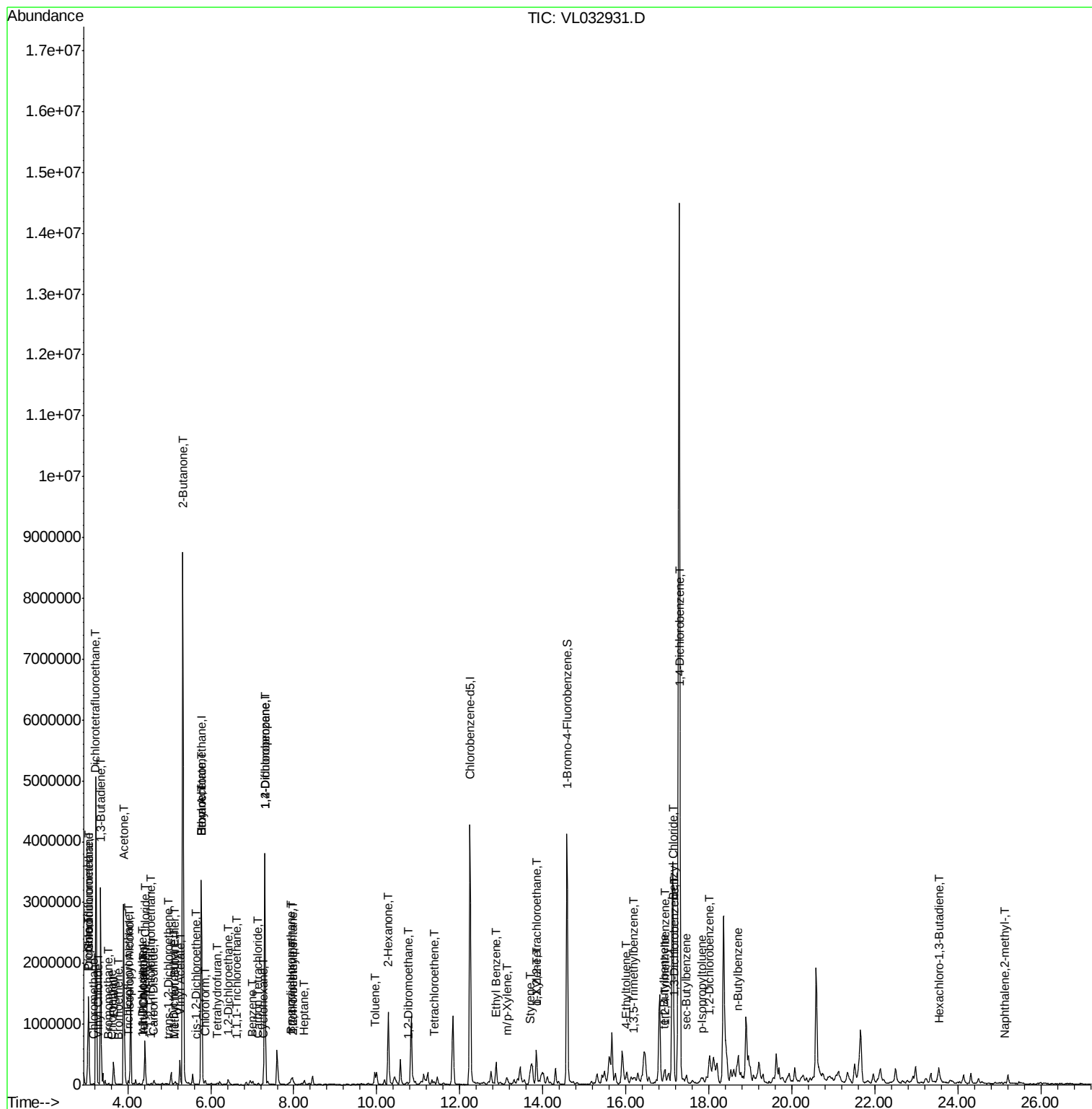
Quant Time: Dec 08 01:58:22 2018

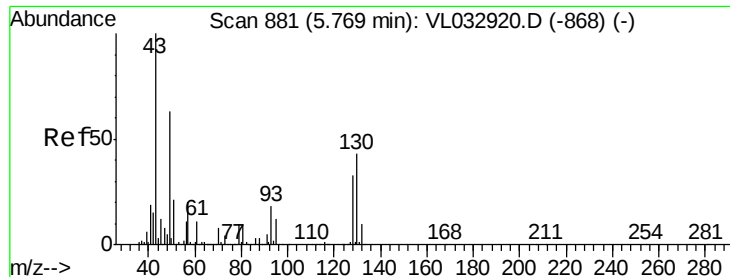
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A_L\METHODS\VL120718AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri Dec 07 09:35:17 2018

QLast Update : Fri Dec 07 09:35:17 2018

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

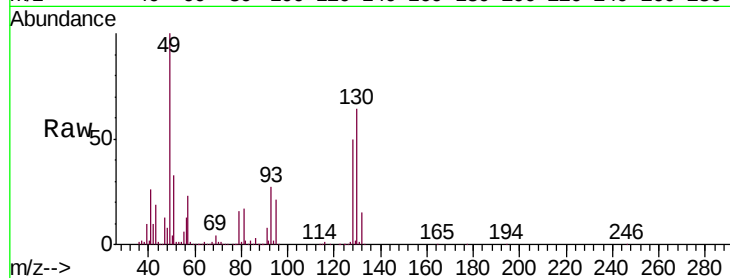
Tgt Ion: 49 Resp: 1061163

Ion Ratio Lower Upper

49 100

128 52.0 26.3 78.8

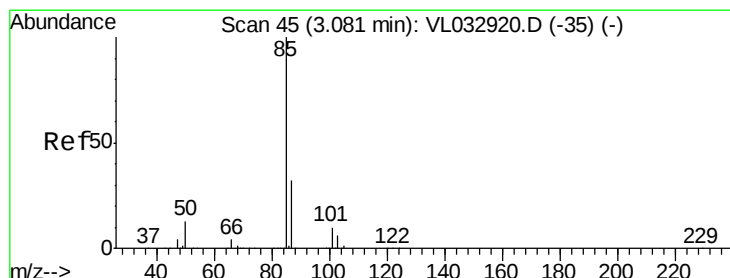
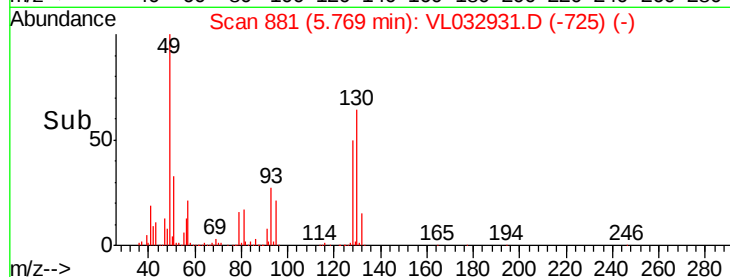
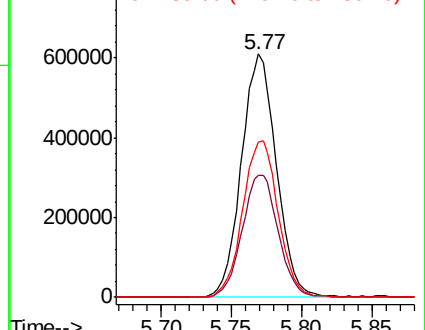
130 65.8 33.9 101.7



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.168 ppbv

RT: 3.07 min Scan# 43

Delta R.T. -0.01 min

Lab File: VL032931.D

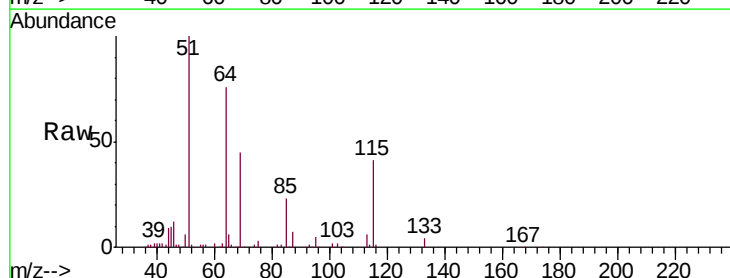
Acq: 7 Dec 2018 12:34

Tgt Ion: 85 Resp: 23812

Ion Ratio Lower Upper

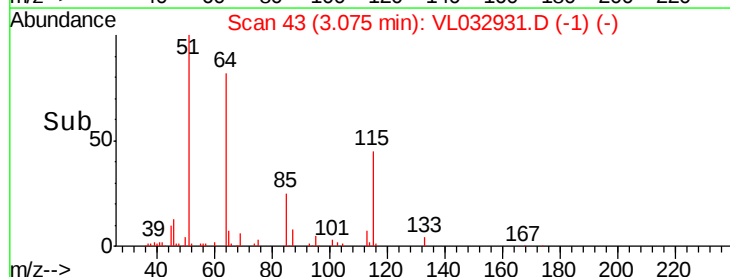
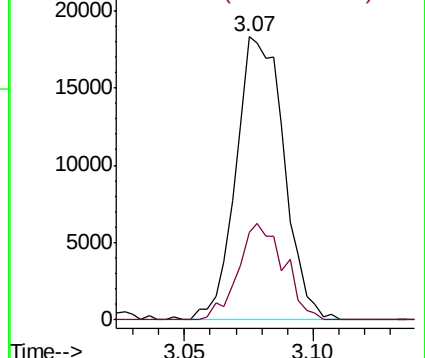
85 100

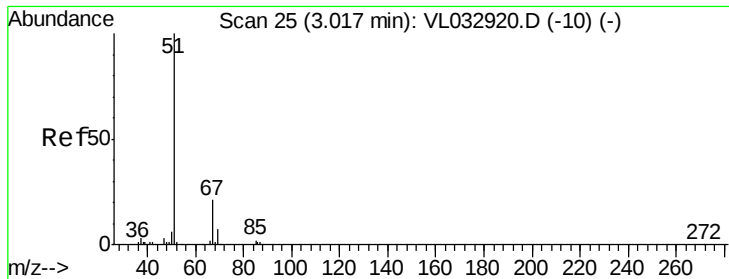
87 31.1 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 6.599 ppbv

RT: 3.06 min Scan# 38

Delta R.T. 0.04 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

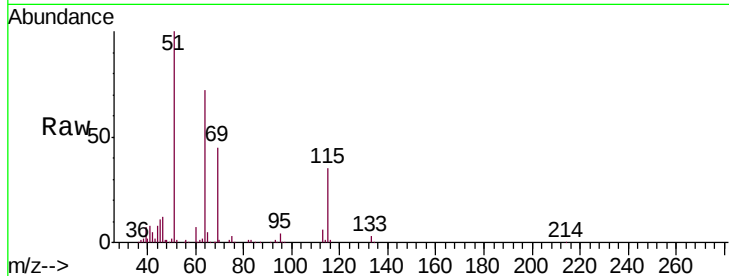
MMSV-08

Tgt Ion: 51 Resp: 530361

Ion Ratio Lower Upper

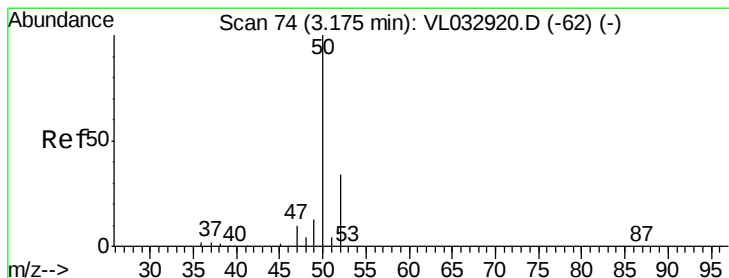
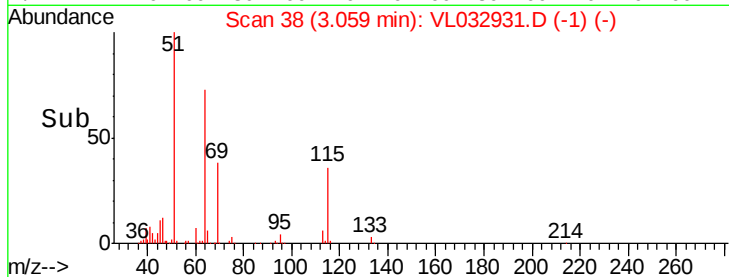
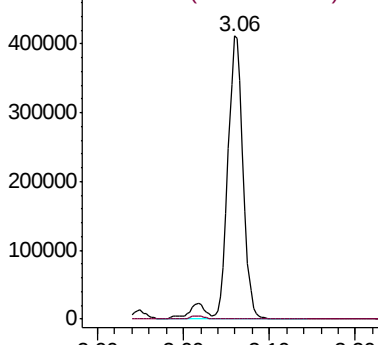
51 100

67 0.0 16.8 25.2#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.344 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL032931.D

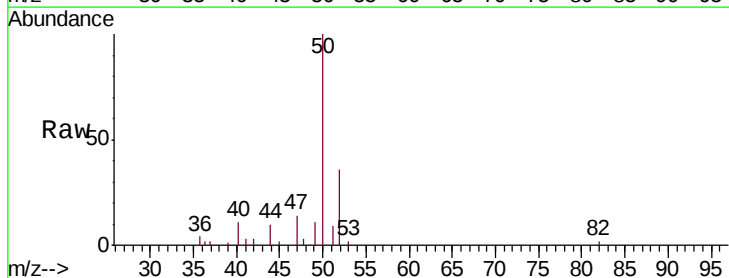
Acq: 7 Dec 2018 12:34

Tgt Ion: 50 Resp: 16082

Ion Ratio Lower Upper

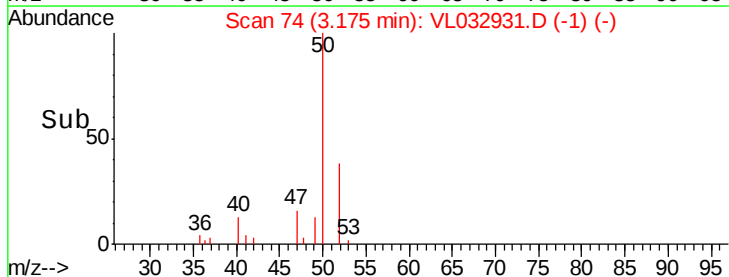
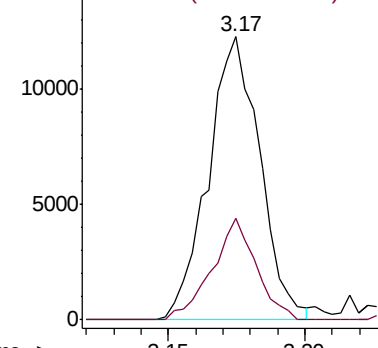
50 100

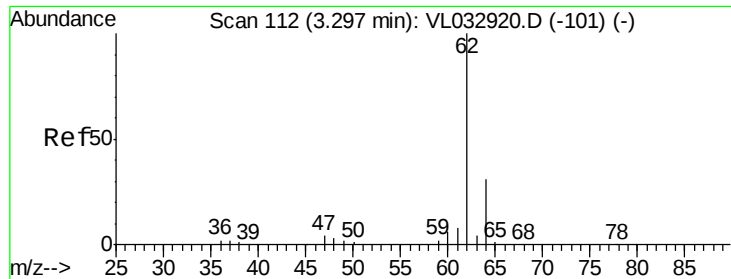
52 35.7 27.3 40.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.040 ppbv

RT: 3.29 min Scan# 111

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

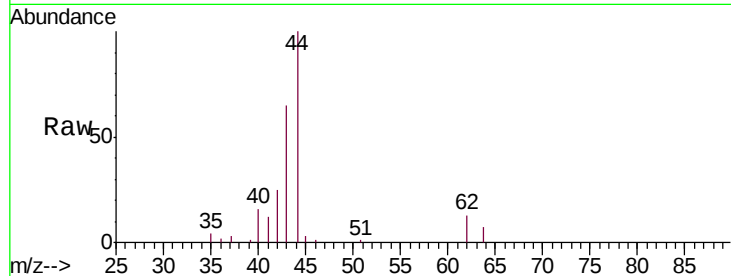
MMSV-08

Tgt Ion: 62 Resp: 1916

Ion Ratio Lower Upper

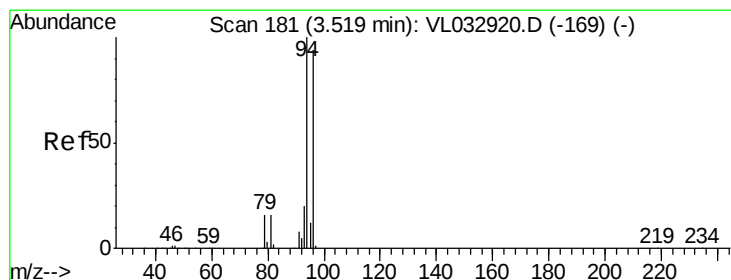
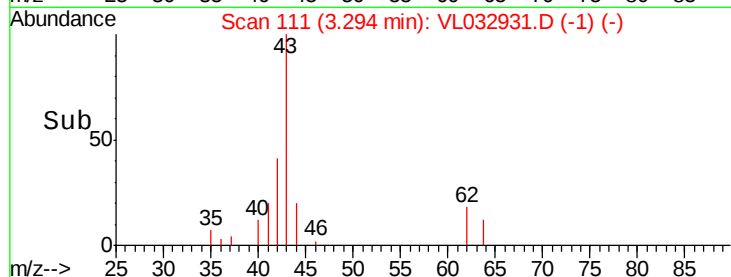
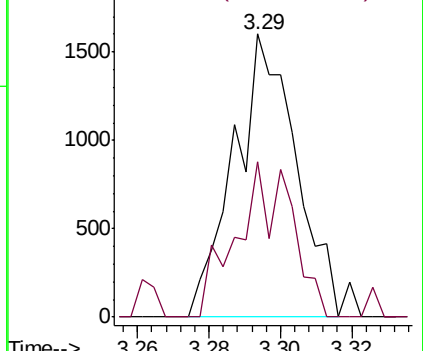
62 100

64 55.1 24.8 37.2#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.034 ppbv

RT: 3.52 min Scan# 182

Delta R.T. 0.00 min

Lab File: VL032931.D

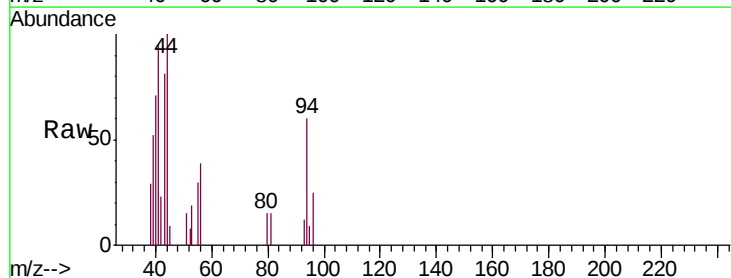
Acq: 7 Dec 2018 12:34

Tgt Ion: 94 Resp: 1010

Ion Ratio Lower Upper

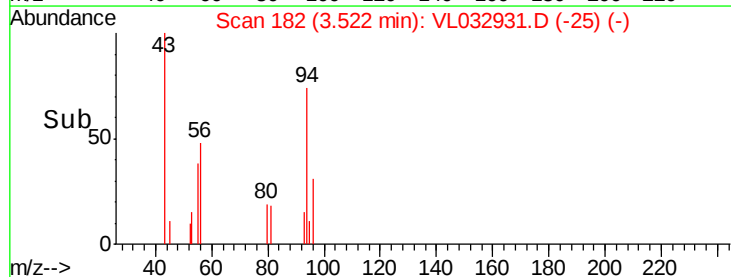
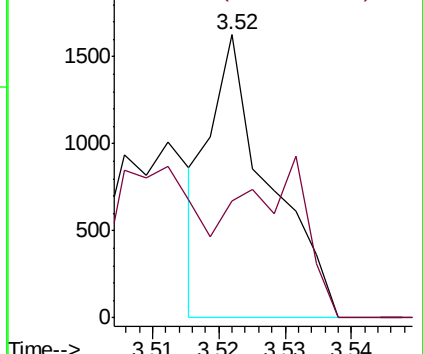
94 100

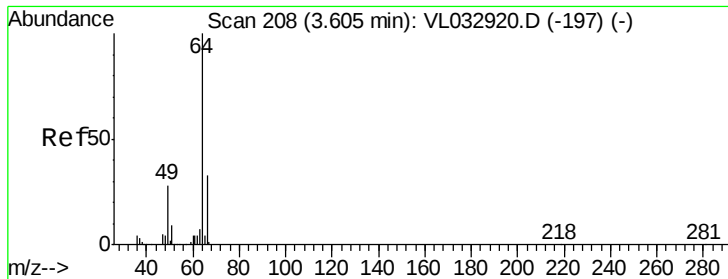
96 36.0 75.5 113.3#



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.057 ppbv

RT: 3.61 min Scan# 208

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

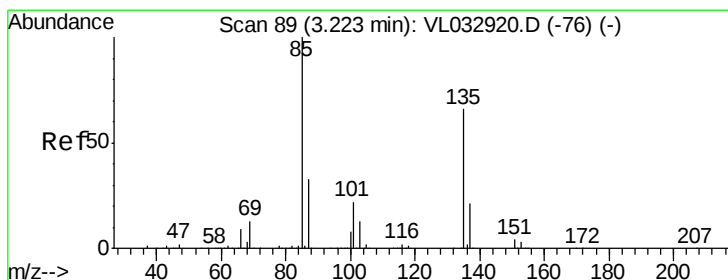
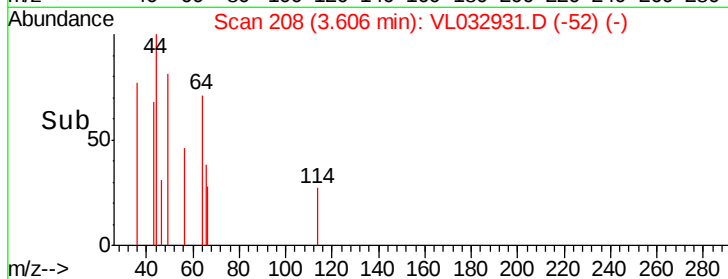
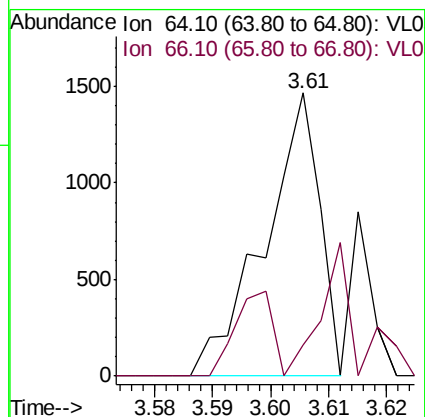
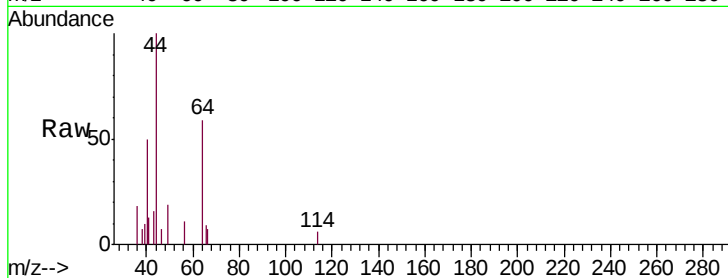
MMSV-08

Tgt Ion: 64 Resp: 969

Ion Ratio Lower Upper

64 100

66 11.1 26.6 40.0#



#8

Dichlorotetrafluoroethane

Concen: 0.043 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL032931.D

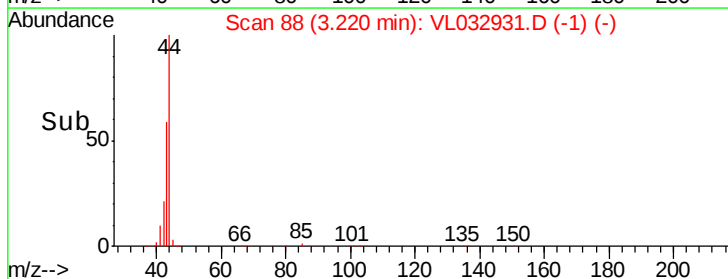
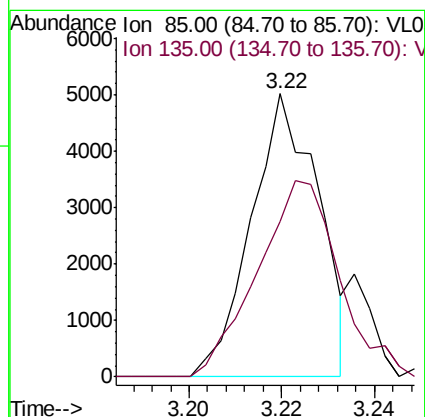
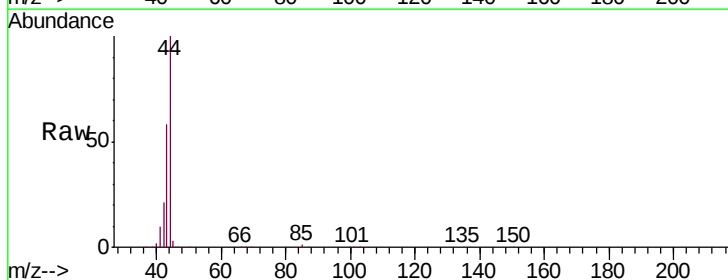
Acq: 7 Dec 2018 12:34

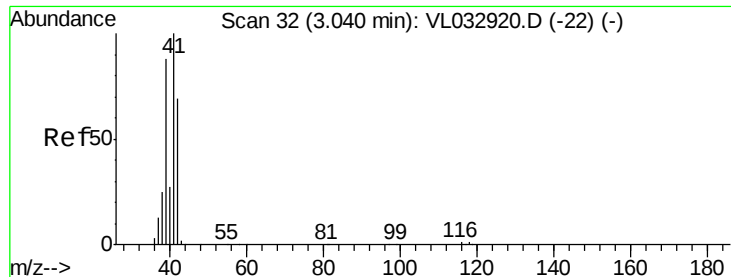
Tgt Ion: 85 Resp: 5062

Ion Ratio Lower Upper

85 100

135 84.2 54.5 81.7#





#9

Propene

Concen: 12.691 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

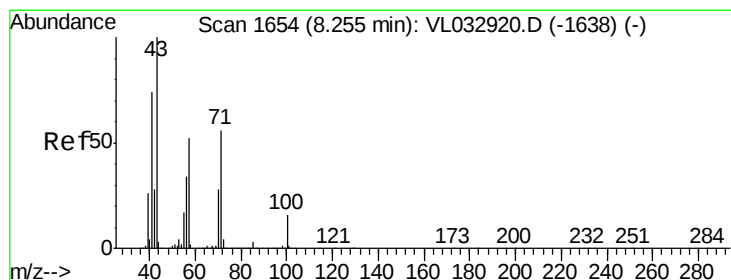
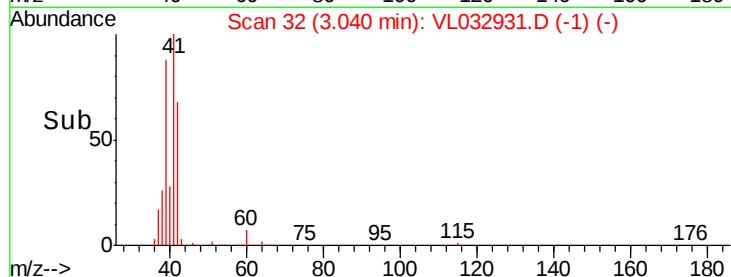
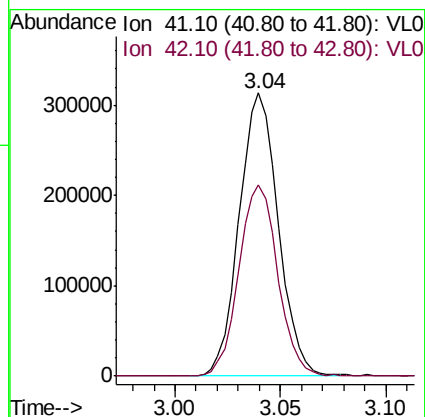
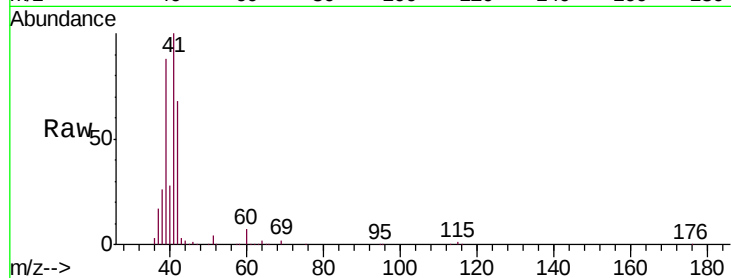
MMSV-08

Tgt Ion: 41 Resp: 403304

Ion Ratio Lower Upper

41 100

42 67.5 56.2 84.2



#10

Heptane

Concen: 0.197 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.01 min

Lab File: VL032931.D

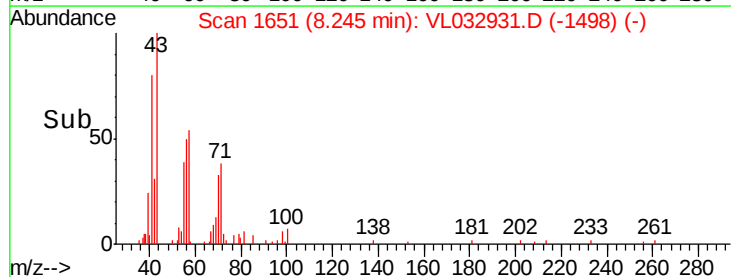
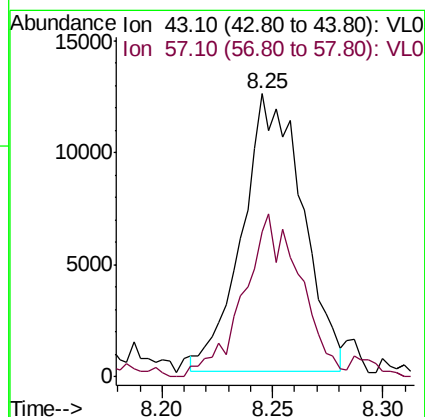
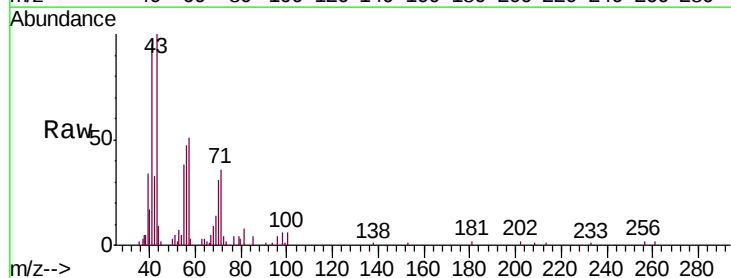
Acq: 7 Dec 2018 12:34

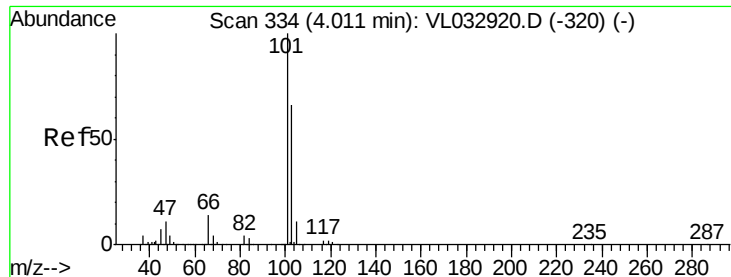
Tgt Ion: 43 Resp: 23487

Ion Ratio Lower Upper

43 100

57 58.5 41.8 62.6





#11

Trichlorofluoromethane

Concen: 0.127 ppbv

RT: 4.01 min Scan# 334

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

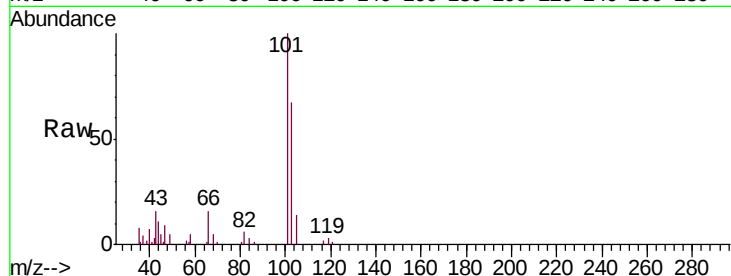
MMSV-08

Tgt Ion:101 Resp: 16899

Ion Ratio Lower Upper

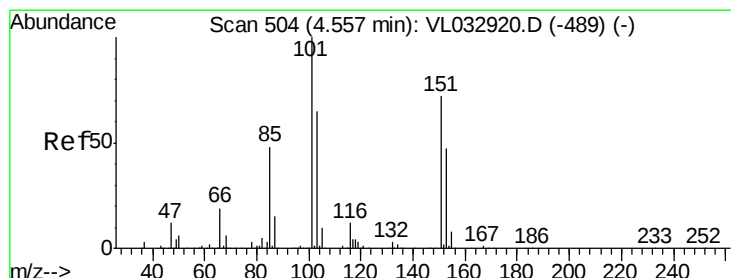
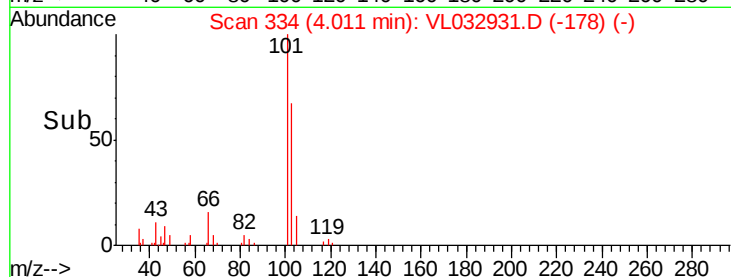
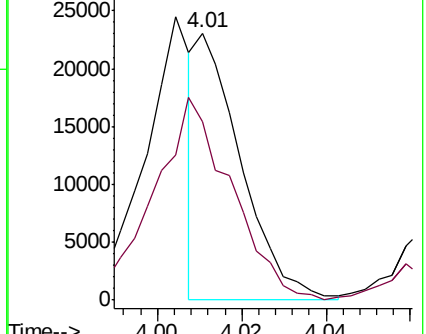
101 100

103 66.8 52.7 79.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.066 ppbv

RT: 4.56 min Scan# 505

Delta R.T. 0.00 min

Lab File: VL032931.D

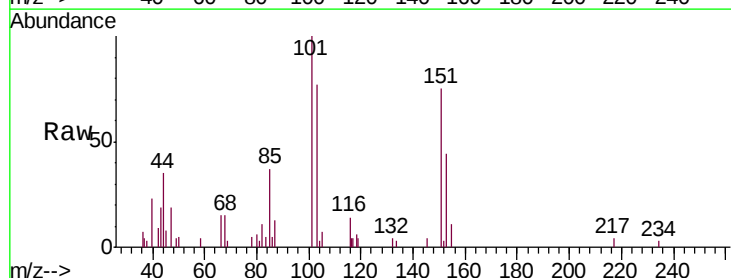
Acq: 7 Dec 2018 12:34

Tgt Ion:101 Resp: 7560

Ion Ratio Lower Upper

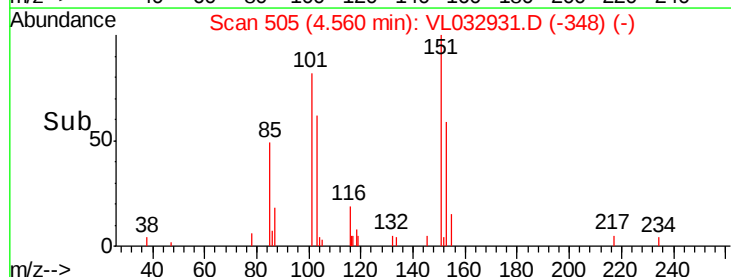
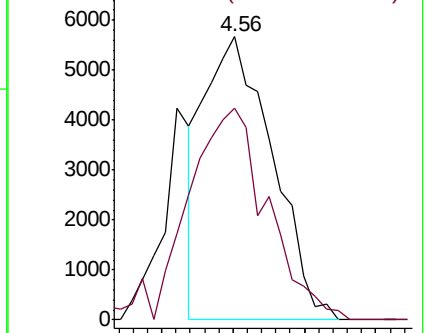
101 100

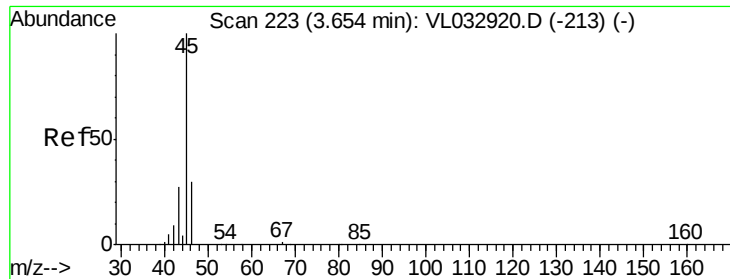
151 87.7 59.3 88.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 36.522 ppbv

RT: 3.66 min Scan# 225

Delta R.T. 0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

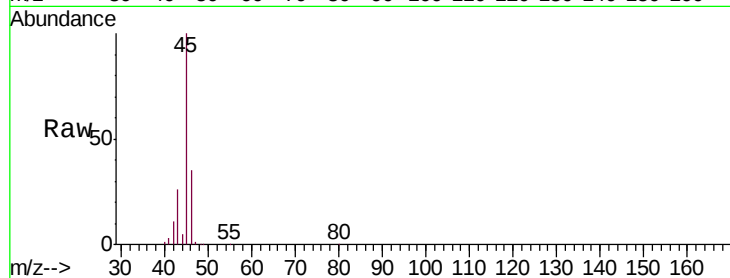
MMSV-08

Tgt Ion: 45 Resp: 399600

Ion Ratio Lower Upper

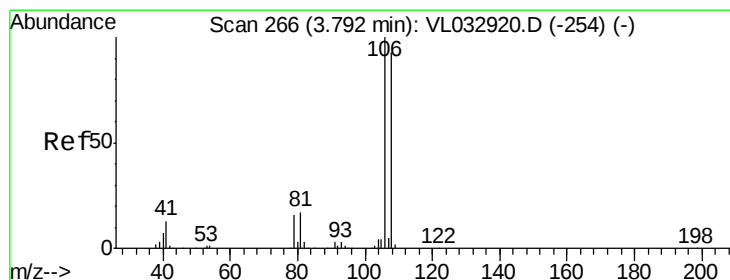
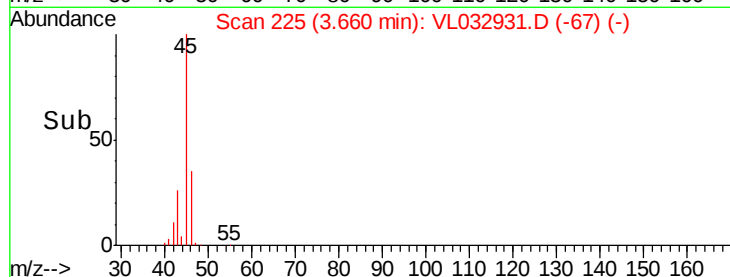
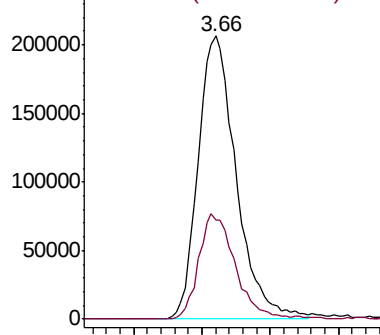
45 100

46 36.4 13.8 55.4



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#14

Bromoethene

Concen: 0.041 ppbv

RT: 3.79 min Scan# 265

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

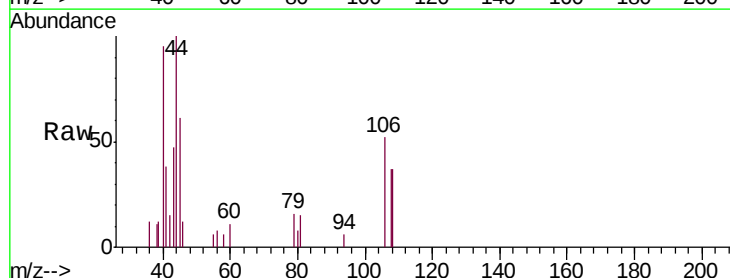
Tgt Ion: 108 Resp: 1536

Ion Ratio Lower Upper

108 100

106 117.1 85.4 128.2

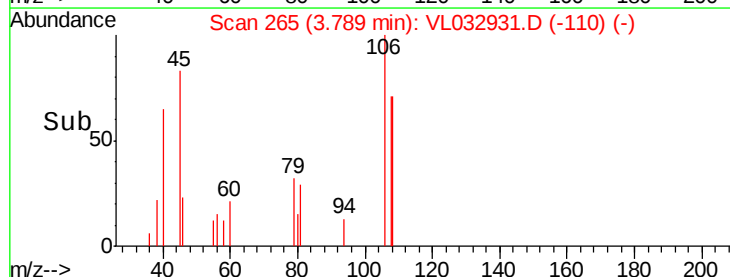
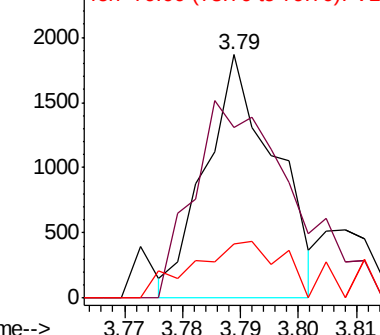
79 37.2 14.6 21.8#

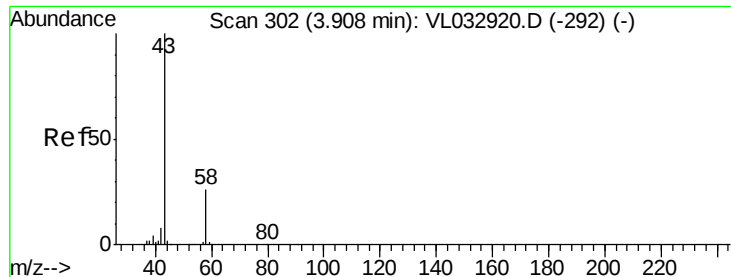


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0





#15

Acetone

Concen: 31.566 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

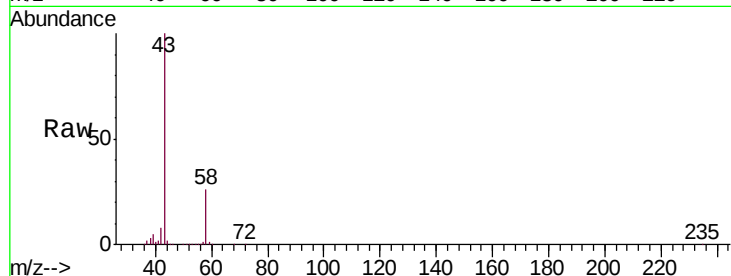
MMSV-08

Tgt Ion: 43 Resp: 2875122

Ion Ratio Lower Upper

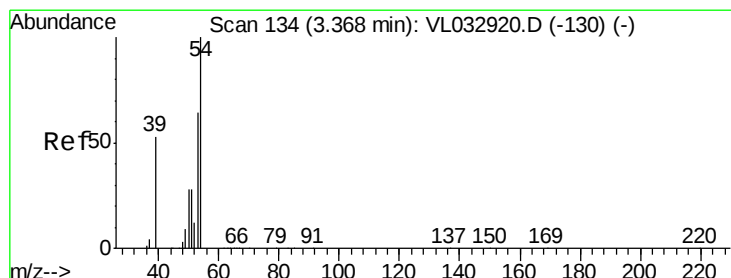
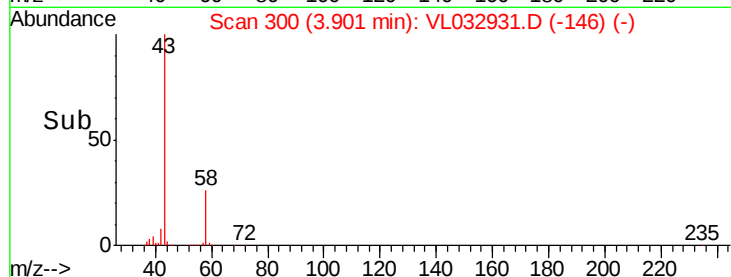
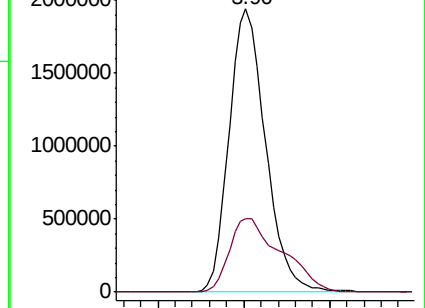
43 100

58 37.4 20.6 30.8#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 20.994 ppbv

RT: 3.35 min Scan# 128

Delta R.T. -0.02 min

Lab File: VL032931.D

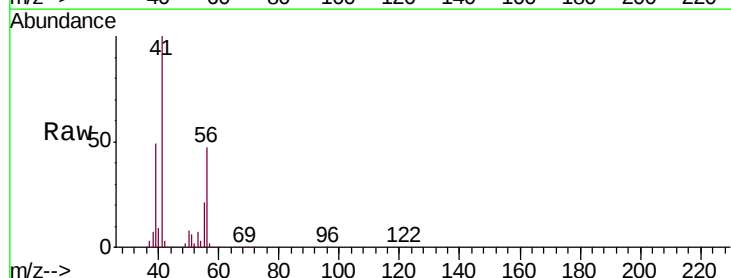
Acq: 7 Dec 2018 12:34

Tgt Ion: 39 Resp: 758665

Ion Ratio Lower Upper

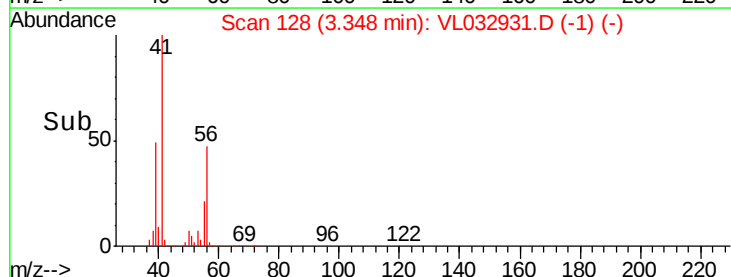
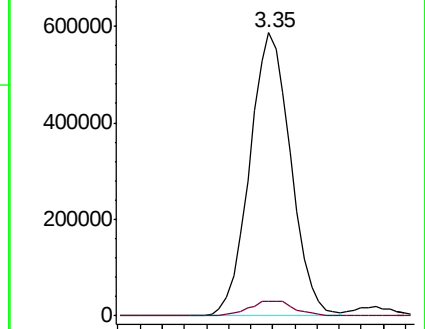
39 100

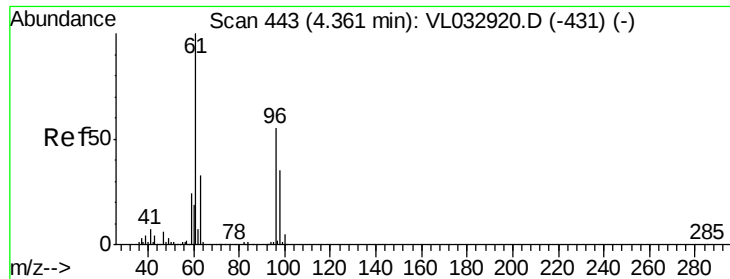
54 6.0 72.7 109.1#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

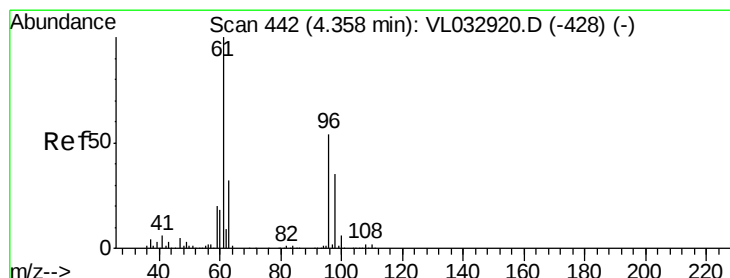
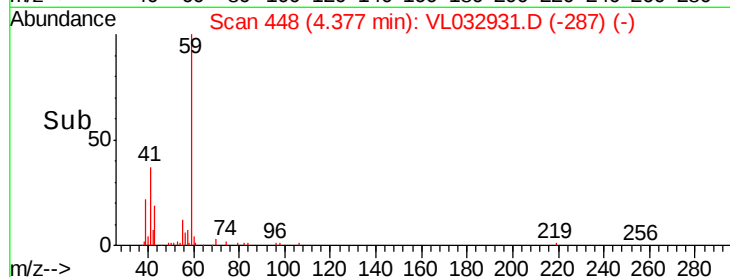
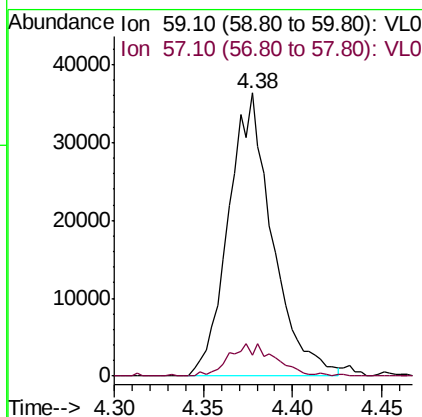
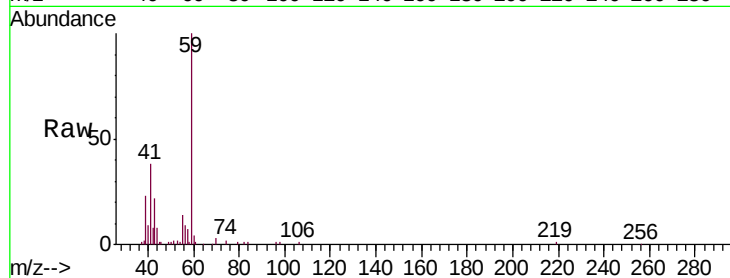




#17
tert-Butyl alcohol
Concen: 2.685 ppbv
RT: 4.38 min Scan# 448
Delta R.T. 0.02 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

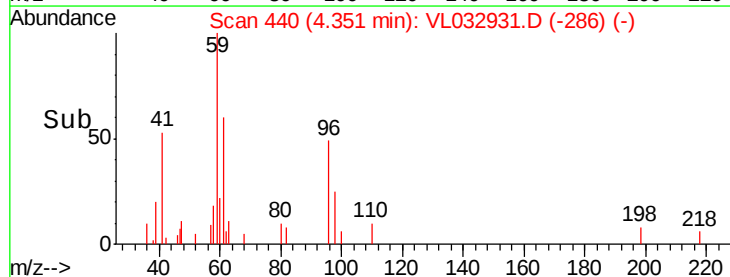
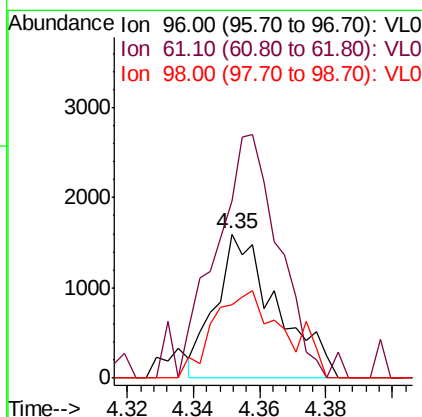
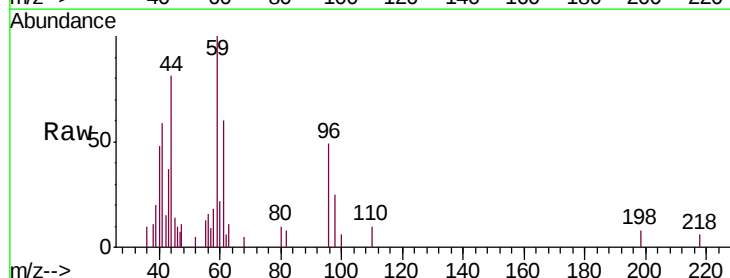
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

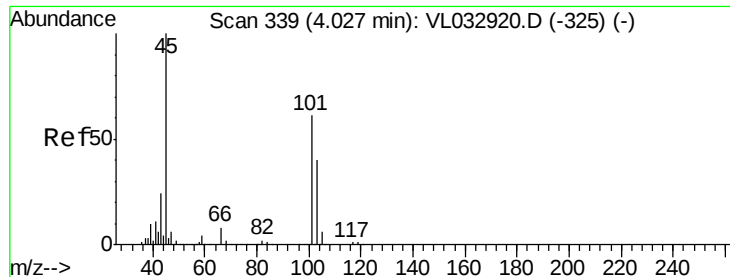
Tgt Ion: 59 Resp: 62275
Ion Ratio Lower Upper
59 100
57 12.1 0.6 1.0#



#18
1,1-Dichloroethene
Concen: 0.046 ppbv
RT: 4.35 min Scan# 440
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 96 Resp: 2034
Ion Ratio Lower Upper
96 100
61 105.0 147.0 220.4#
98 50.6 50.7 76.1#





#19

Isopropyl Alcohol

Concen: 0.315 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.02 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

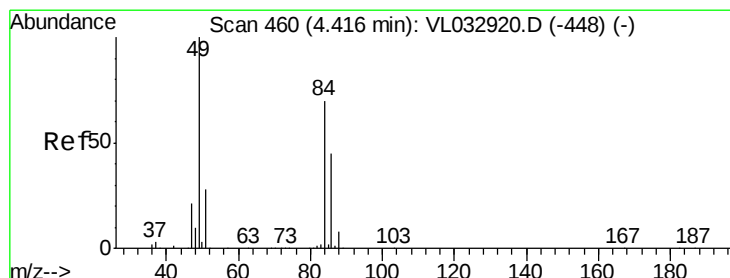
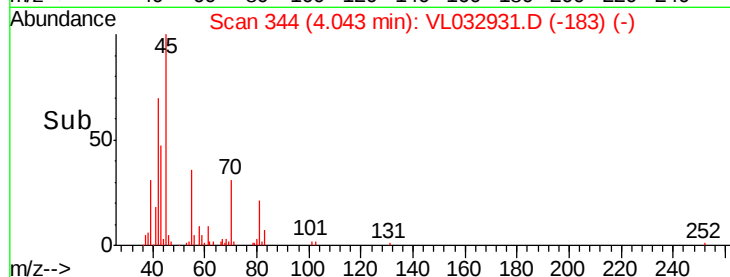
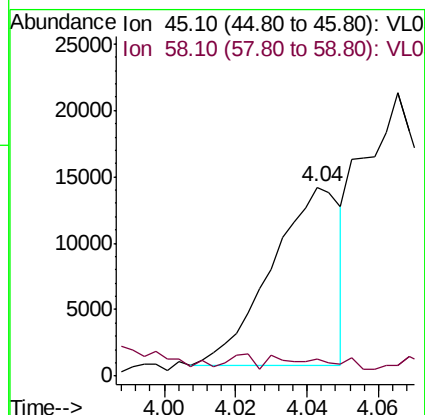
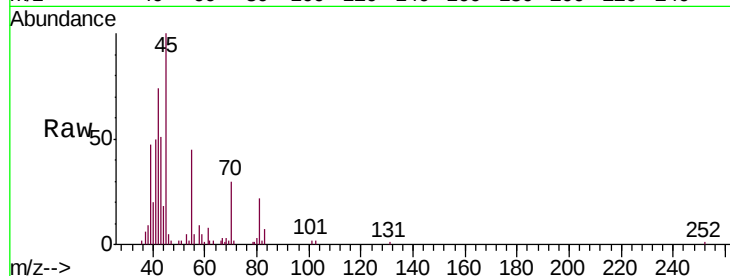
MMSV-08

Tgt Ion: 45 Resp: 18022

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.2#



#20

Methylene Chloride

Concen: 5.410 ppbv

RT: 4.42 min Scan# 460

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Tgt Ion: 84 Resp: 240848

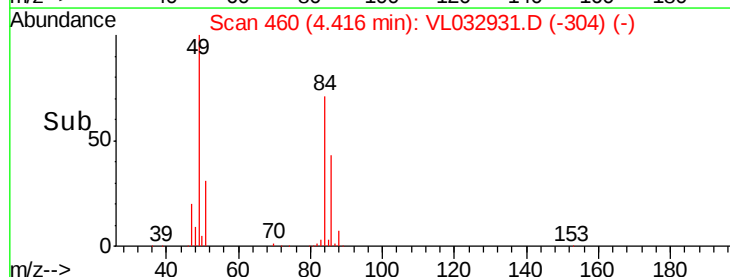
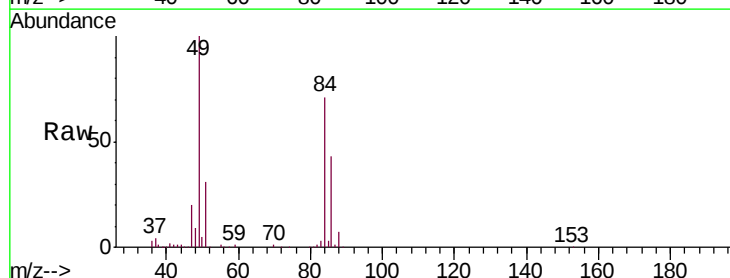
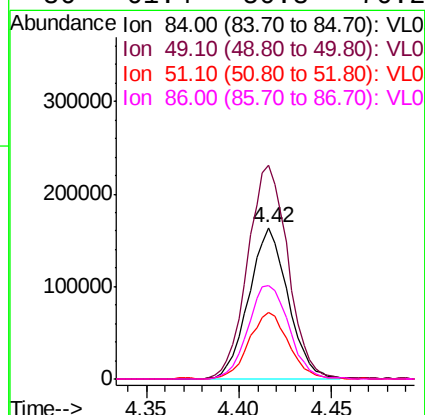
Ion Ratio Lower Upper

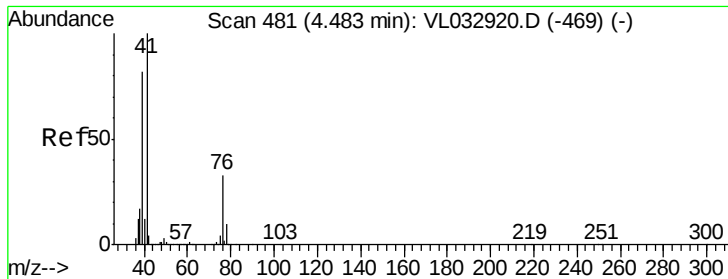
84 100

49 140.4 113.8 170.8

51 43.7 31.8 47.8

86 61.4 50.8 76.2

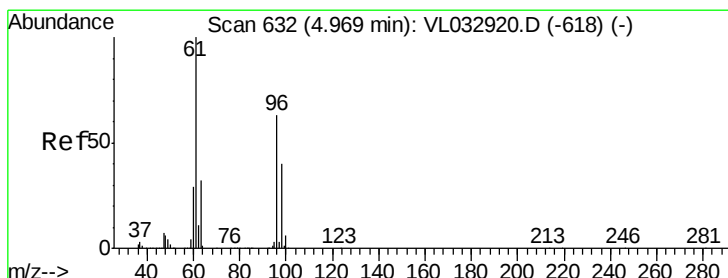
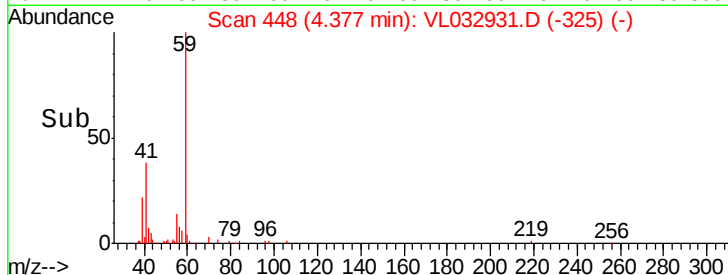
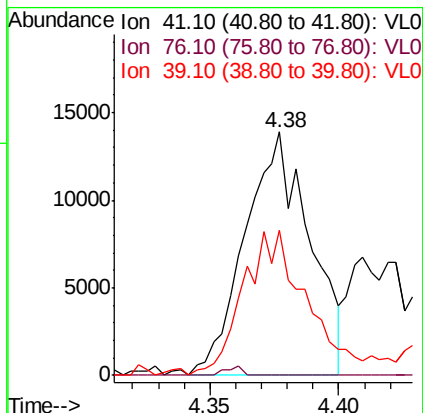
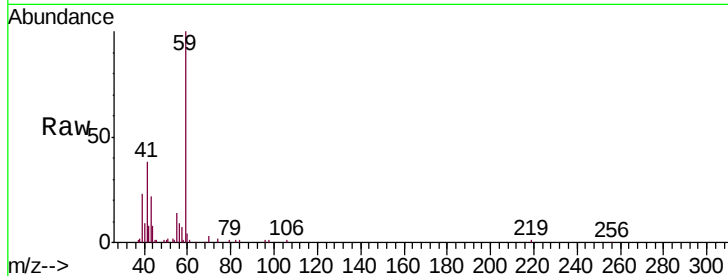




#21
 Allyl Chloride
 Concen: 0.328 ppbv
 RT: 4.38 min Scan# 448
 Delta R.T. -0.11 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

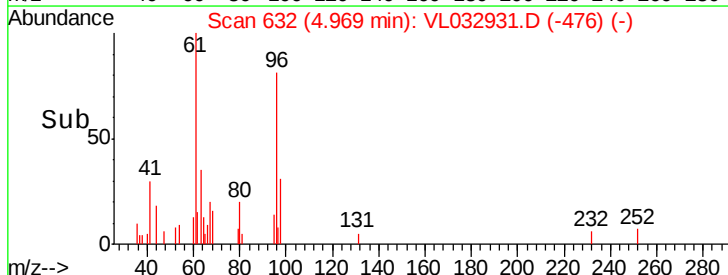
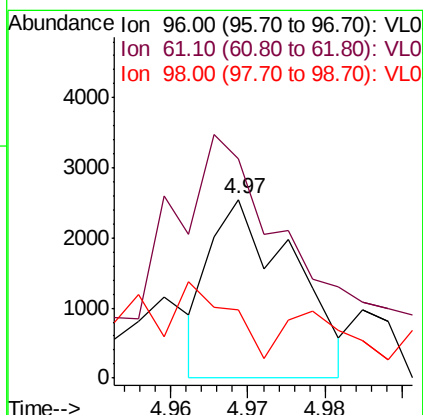
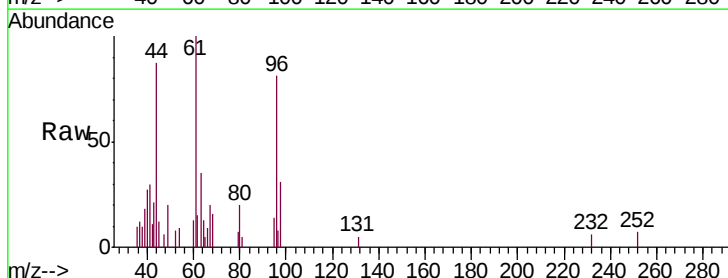
Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

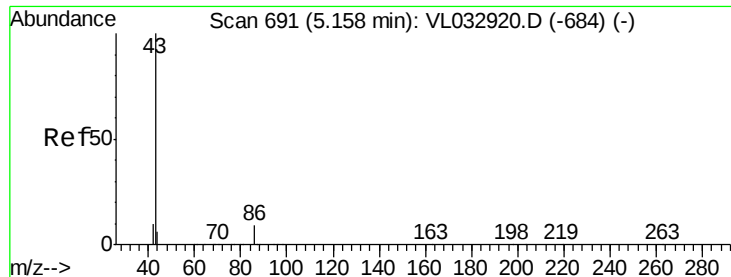
Tgt Ion: 41 Resp: 24326
 Ion Ratio Lower Upper
 41 100
 76 0.0 25.2 37.8#
 39 60.1 65.2 97.8#



#22
 trans-1,2-Dichloroethene
 Concen: 0.035 ppbv
 RT: 4.97 min Scan# 632
 Delta R.T. 0.00 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Tgt Ion: 96 Resp: 1922
 Ion Ratio Lower Upper
 96 100
 61 103.3 127.1 190.7#
 98 13.6 51.3 76.9#





#23

Vinyl Acetate

Concen: 0.736 ppbv

RT: 5.26 min Scan# 722

Delta R.T. 0.10 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion: 43 Resp: 113464

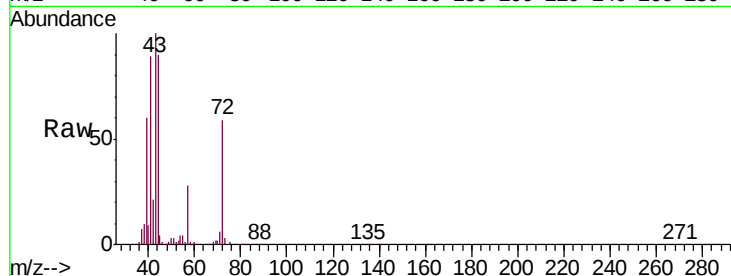
Ion Ratio Lower Upper

43 100

86 0.0 6.6 9.8#

42 21.6 8.3 12.5#

44 91.2 4.2 6.4#

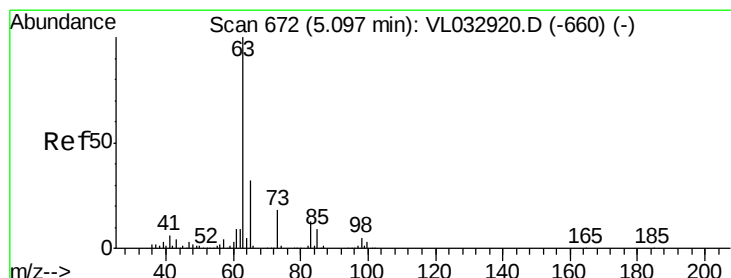
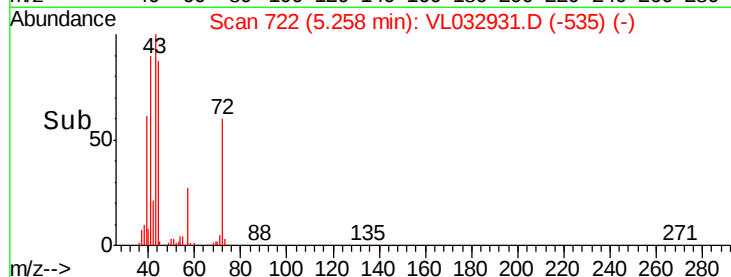
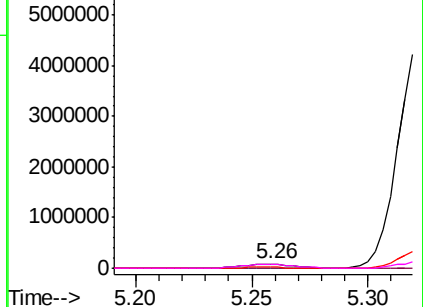


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 0.046 ppbv

RT: 5.10 min Scan# 672

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

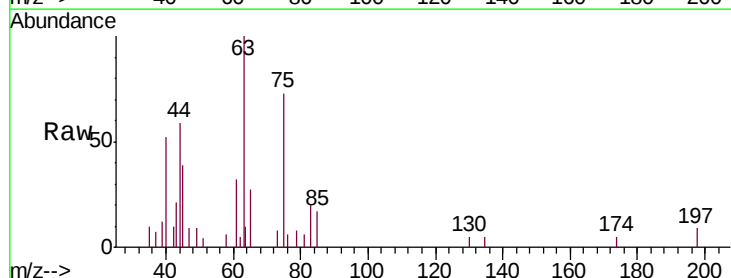
Tgt Ion: 63 Resp: 6231

Ion Ratio Lower Upper

63 100

98 0.0 2.5 7.5#

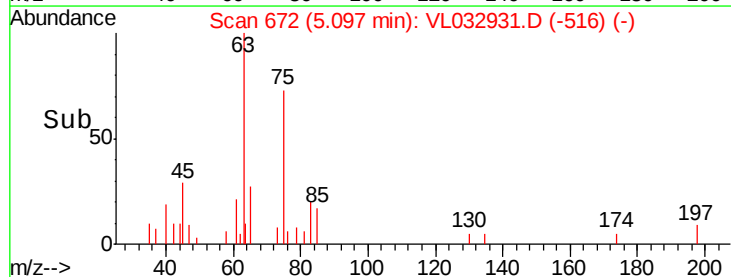
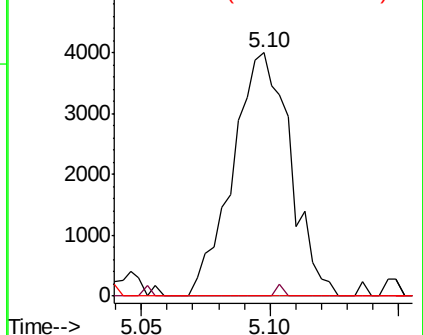
100 0.0 1.4 4.2#

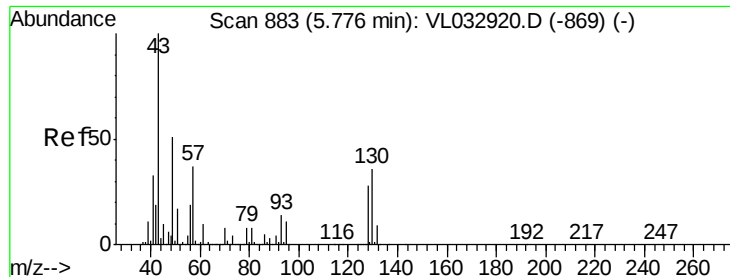


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

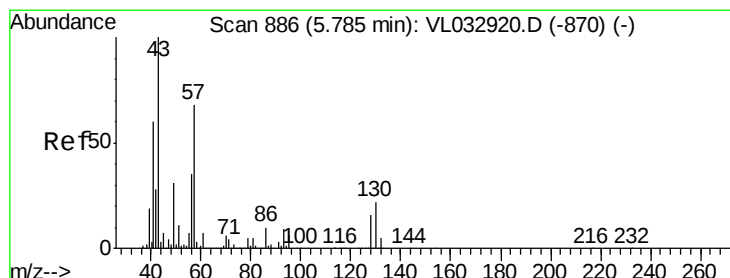
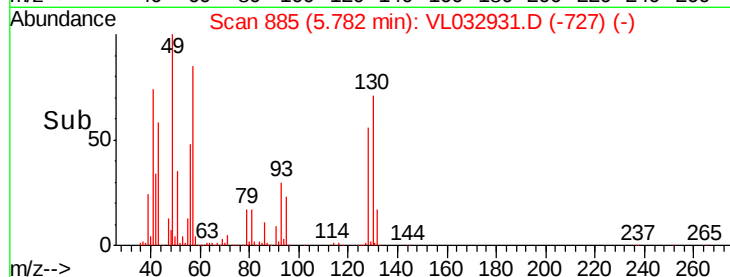
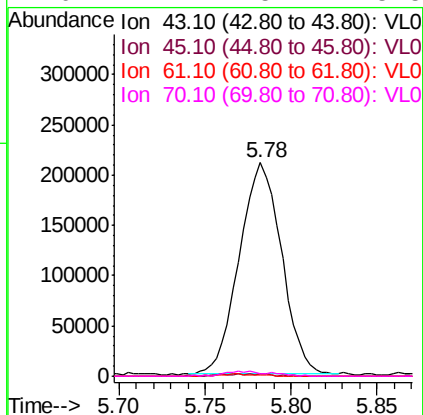
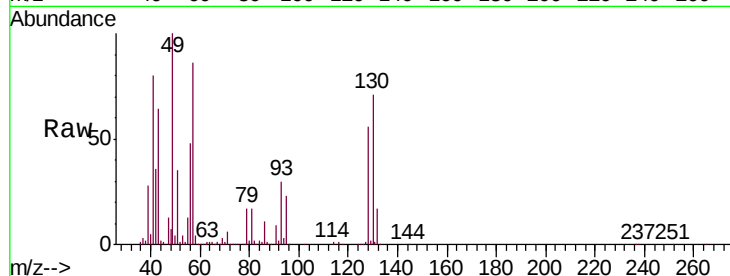




#25
Ethyl Acetate
Concen: 1.672 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

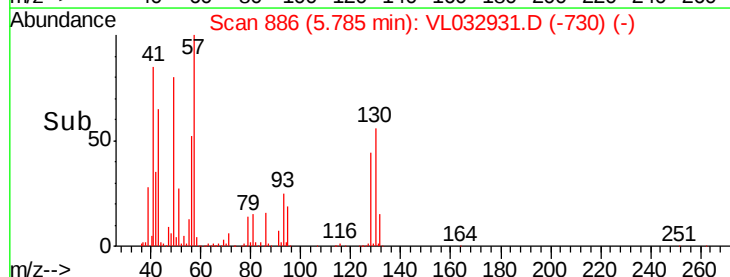
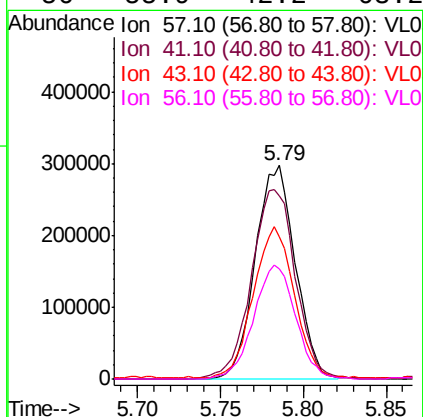
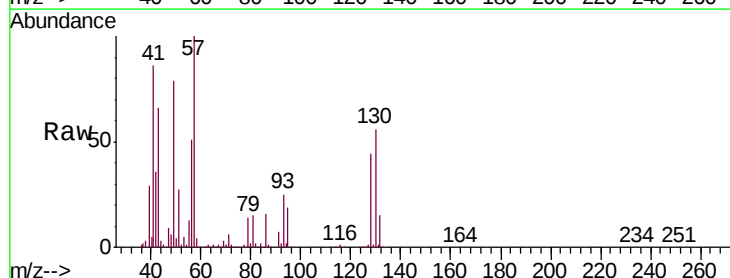
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

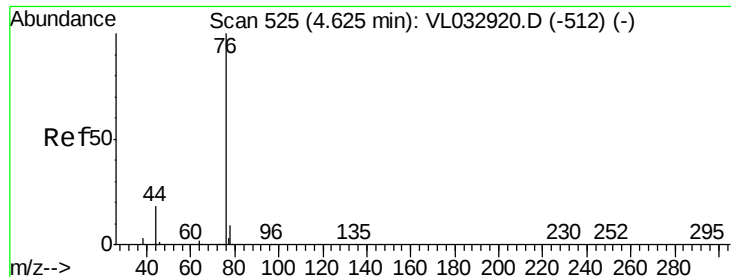
Tgt Ion:	43	Resp:	359853
Ion	Ratio	Lower	Upper
43	100		
45	1.5	7.8	11.6#
61	1.1	7.4	11.2#
70	2.7	5.7	8.5#



#26
Hexane
Concen: 5.037 ppbv
RT: 5.79 min Scan# 886
Delta R.T. 0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion:	57	Resp:	500355
Ion	Ratio	Lower	Upper
57	100		
41	97.8	72.2	108.2
43	72.7	171.9	257.9#
56	55.9	42.2	63.2





#27

Carbon Disulfide

Concen: 0.506 ppbv

RT: 4.62 min Scan# 525

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

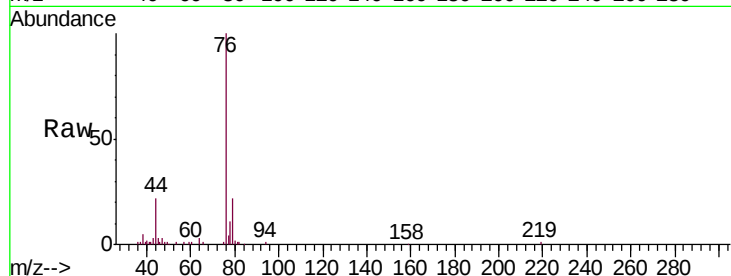
Tgt Ion: 76 Resp: 62829

Ion Ratio Lower Upper

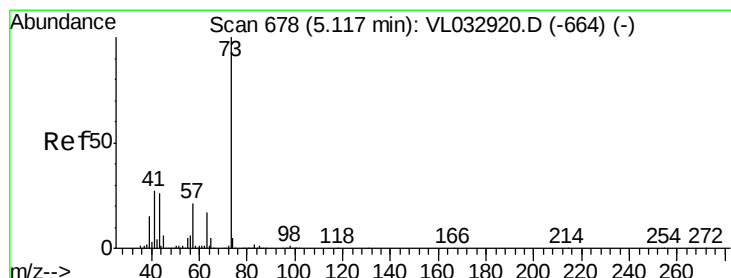
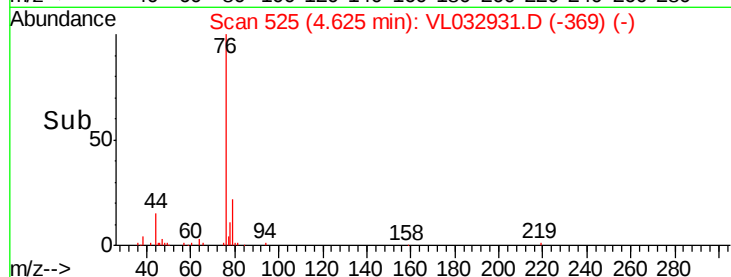
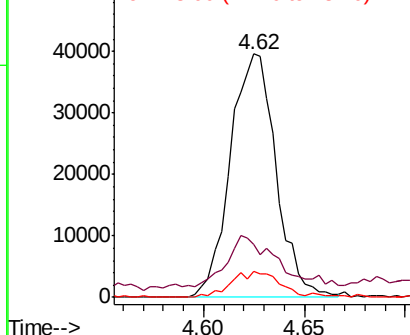
76 100

44 28.9 14.7 22.1#

78 12.1 7.4 11.2#



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 0.032 ppbv

RT: 5.12 min Scan# 679

Delta R.T. 0.00 min

Lab File: VL032931.D

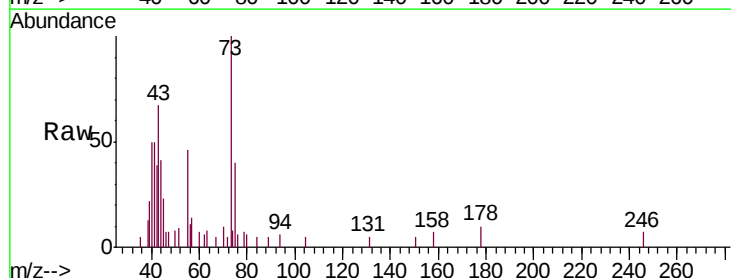
Acq: 7 Dec 2018 12:34

Tgt Ion: 73 Resp: 4810

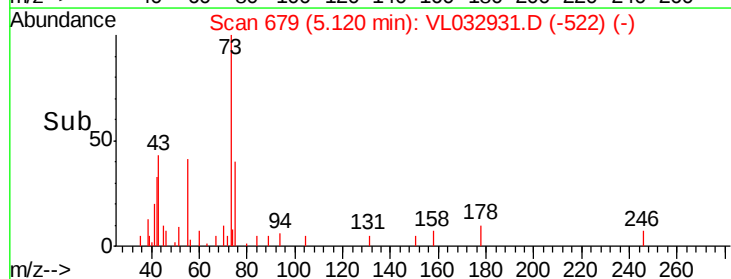
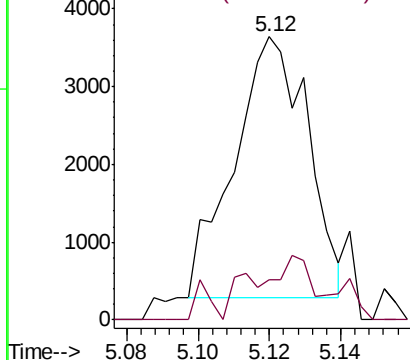
Ion Ratio Lower Upper

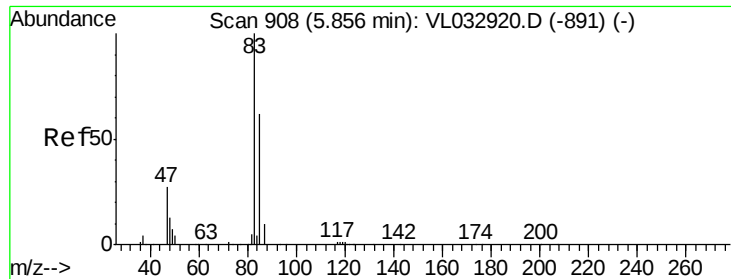
73 100

57 0.0 17.4 26.0#



Abundance Ion 73.10 (72.80 to 73.80): VL0
Ion 57.10 (56.80 to 57.80): VL0





#29

Chloroform

Concen: 0.133 ppbv

RT: 5.86 min Scan# 908

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

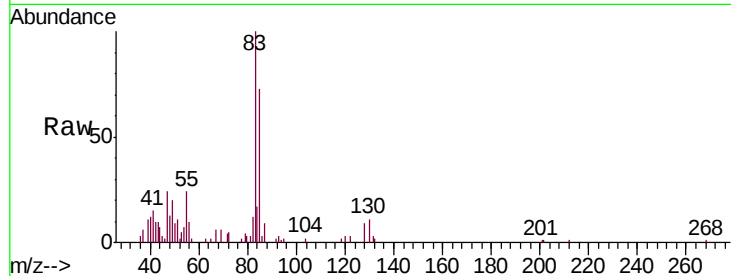
MMSV-08

Tgt Ion: 83 Resp: 23567

Ion Ratio Lower Upper

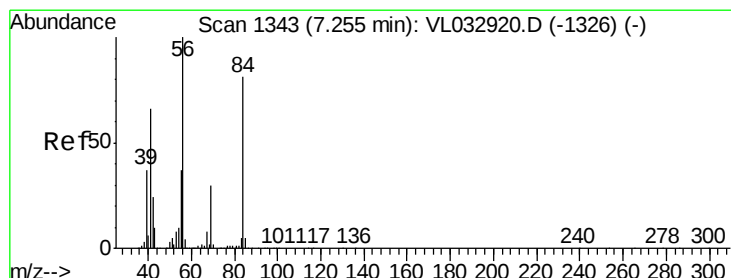
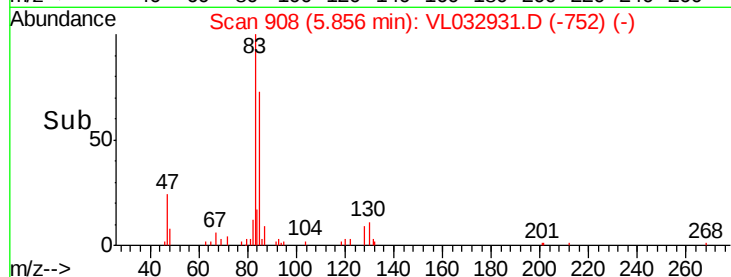
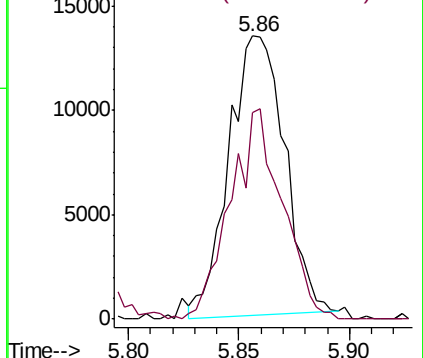
83 100

85 75.0 49.8 74.8#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#30

Cyclohexane

Concen: 0.037 ppbv

RT: 7.25 min Scan# 1342

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

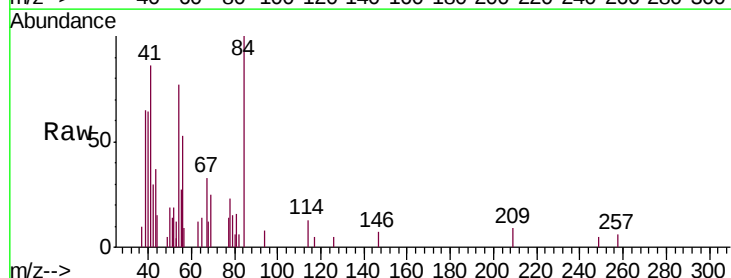
Tgt Ion: 84 Resp: 3084

Ion Ratio Lower Upper

84 100

56 0.0 102.5 153.7#

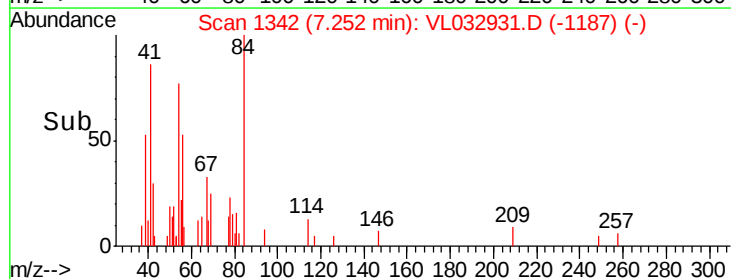
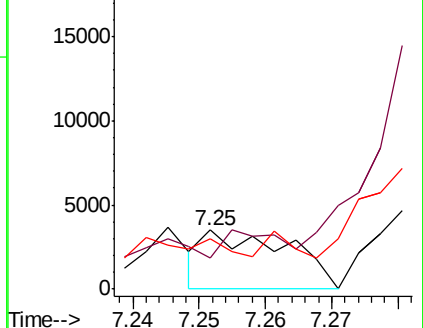
41 0.0 64.1 96.1#

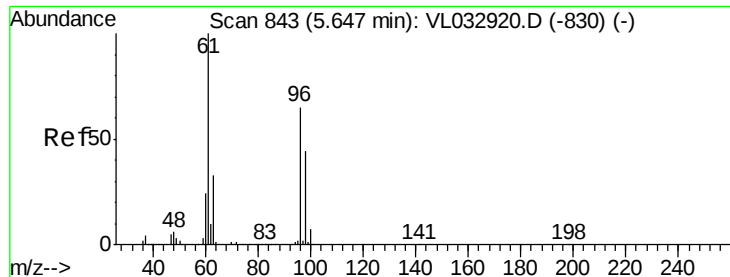


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0



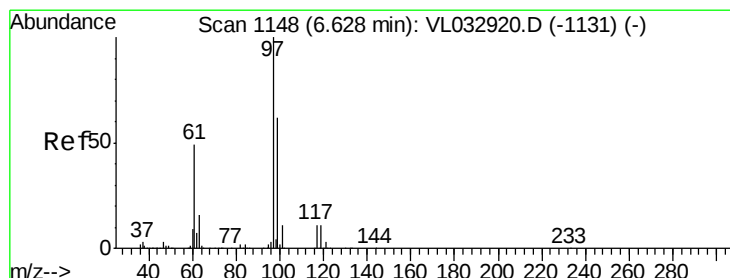
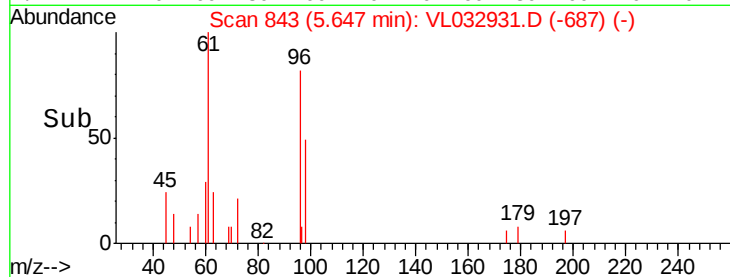
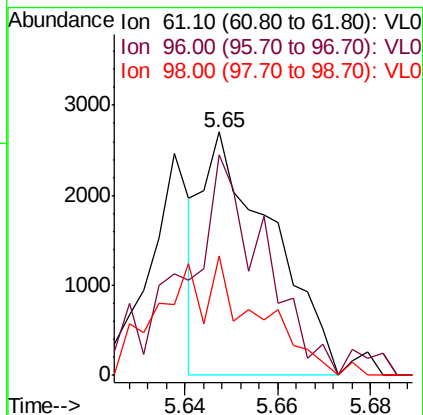
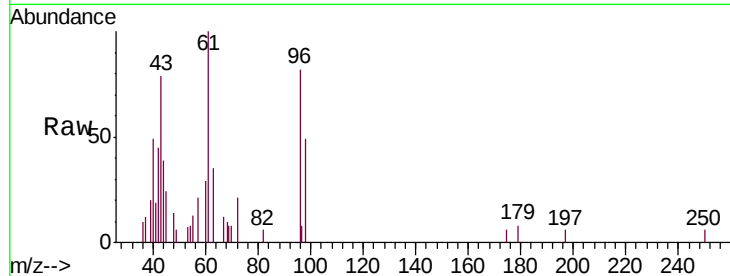


#31

cis-1,2-Dichloroethene
 Concen: 0.031 ppbv
 RT: 5.65 min Scan# 843
 Delta R.T. 0.00 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

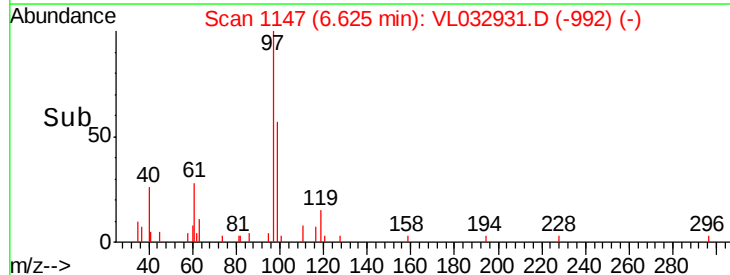
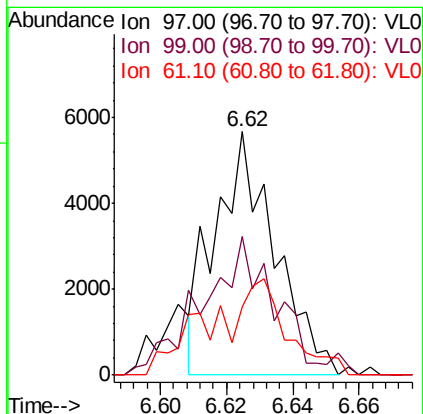
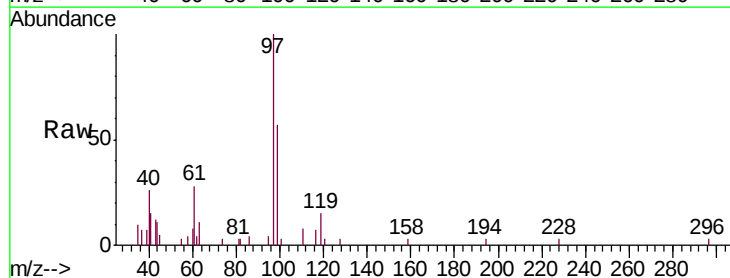
Tgt Ion: 61 Resp: 2812
 Ion Ratio Lower Upper
 61 100
 96 90.5 51.9 77.9#
 98 49.3 35.0 52.4

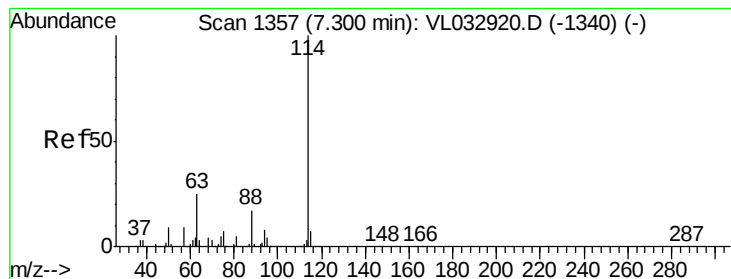


#32

1,1,1-Trichloroethane
 Concen: 0.038 ppbv
 RT: 6.62 min Scan# 1147
 Delta R.T. -0.00 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Tgt Ion: 97 Resp: 7114
 Ion Ratio Lower Upper
 97 100
 99 70.2 51.1 76.7
 61 50.6 39.3 58.9





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1357

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

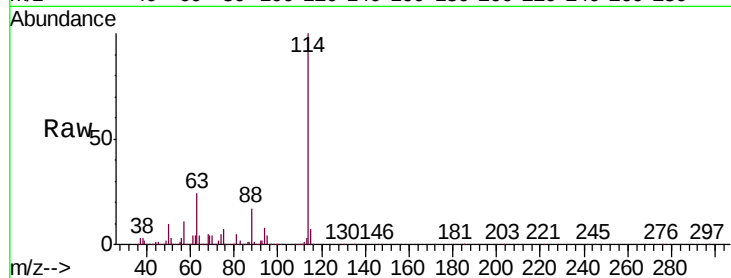
Tgt Ion:114 Resp: 2691054

Ion Ratio Lower Upper

114 100

63 25.1 20.1 30.1

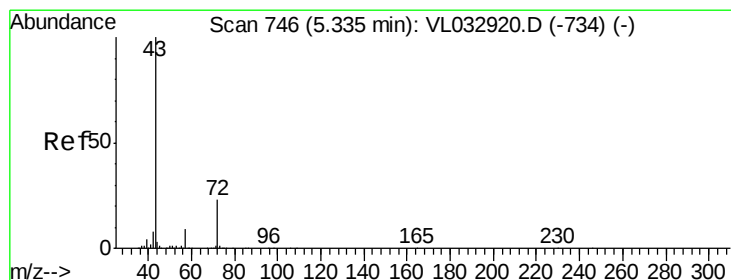
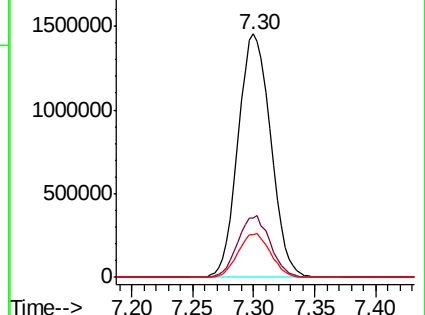
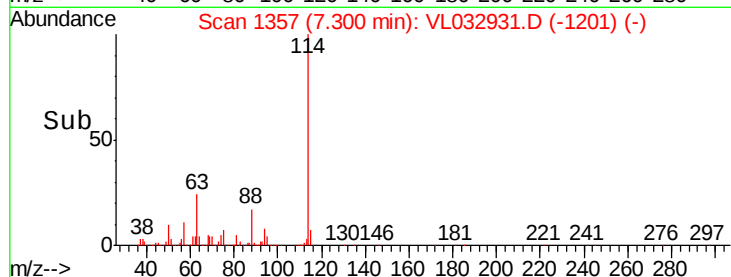
88 17.8 14.2 21.4



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 86.380 ppbv

RT: 5.33 min Scan# 744

Delta R.T. -0.01 min

Lab File: VL032931.D

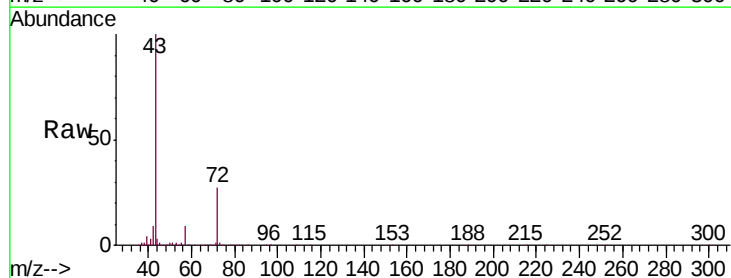
Acq: 7 Dec 2018 12:34

Tgt Ion: 43 Resp:10125214

Ion Ratio Lower Upper

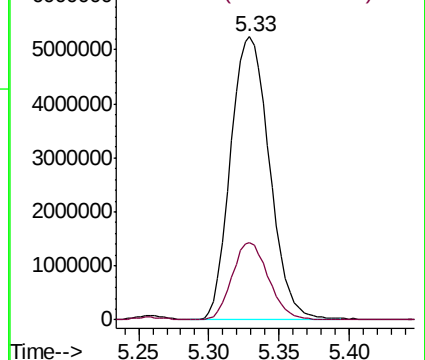
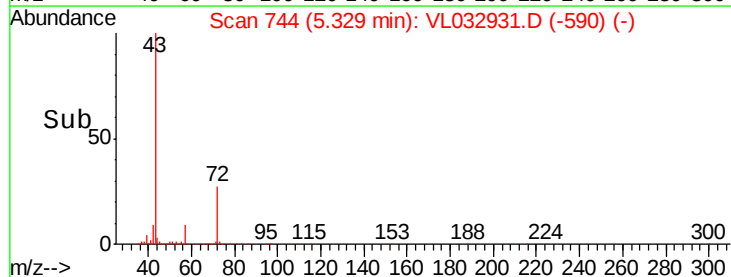
43 100

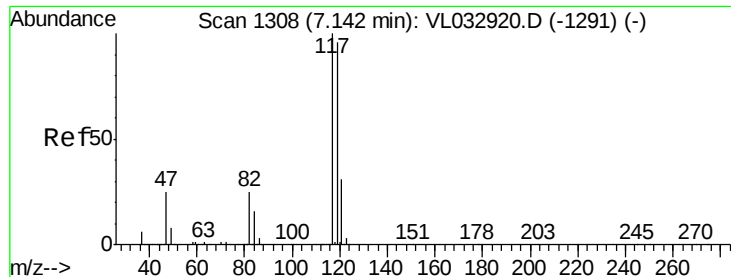
72 25.7 18.8 28.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

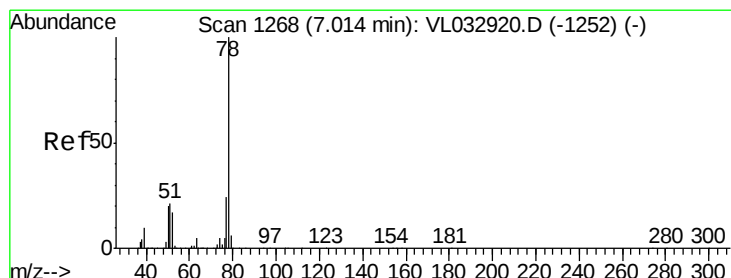
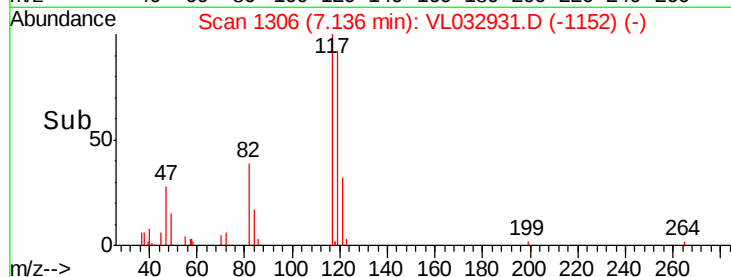
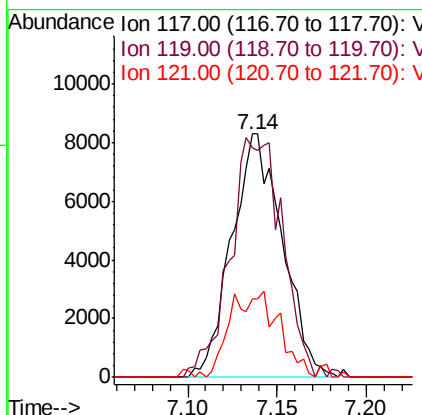
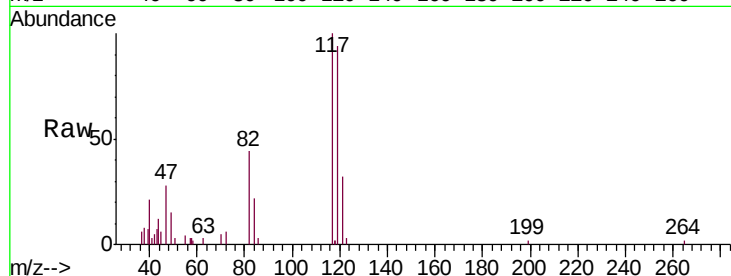




#35
Carbon Tetrachloride
Concen: 0.078 ppbv
RT: 7.14 min Scan# 1306
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

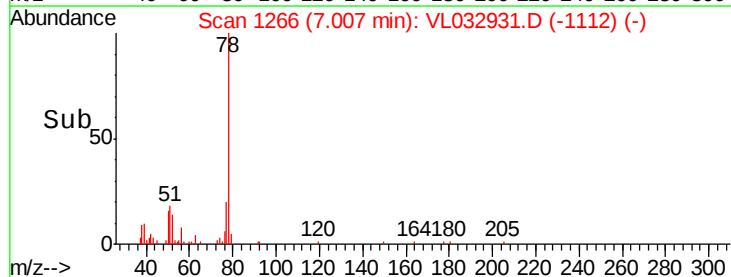
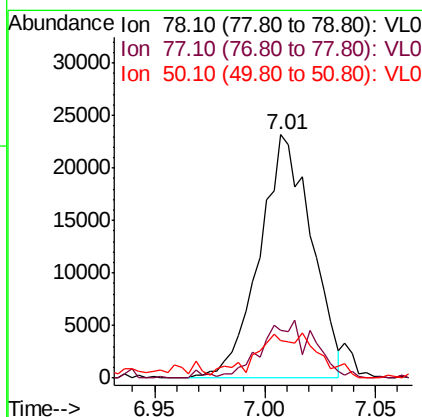
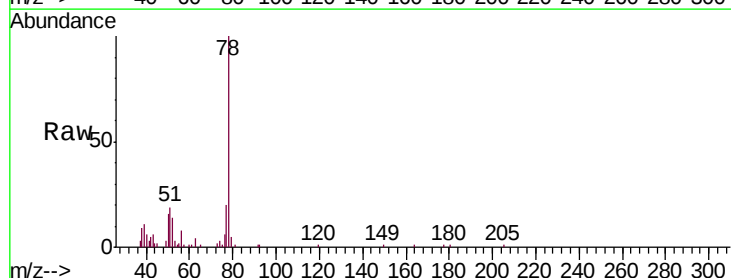
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

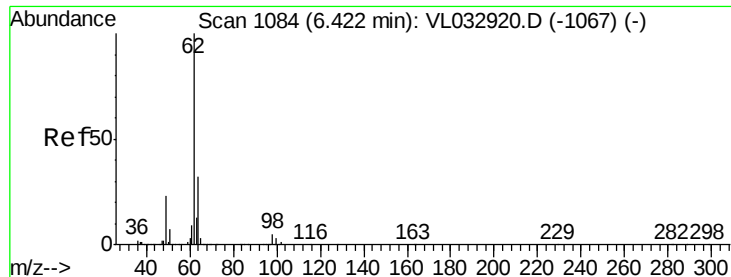
Tgt Ion:117 Resp: 16462
Ion Ratio Lower Upper
117 100
119 89.6 76.5 114.7
121 31.5 24.5 36.7



#36
Benzene
Concen: 0.191 ppbv
RT: 7.01 min Scan# 1266
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 78 Resp: 37810
Ion Ratio Lower Upper
78 100
77 19.8 18.9 28.3
50 13.8 16.1 24.1#





#37

1,2-Dichloroethane

Concen: 0.050 ppbv

RT: 6.42 min Scan# 1083

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

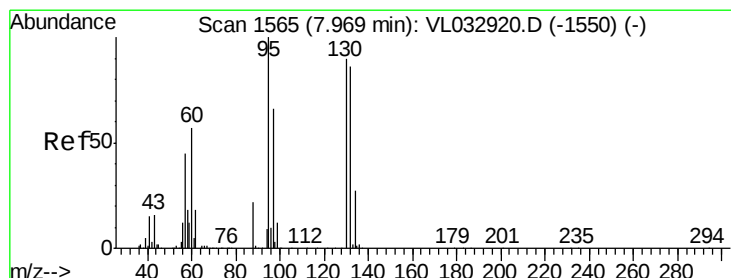
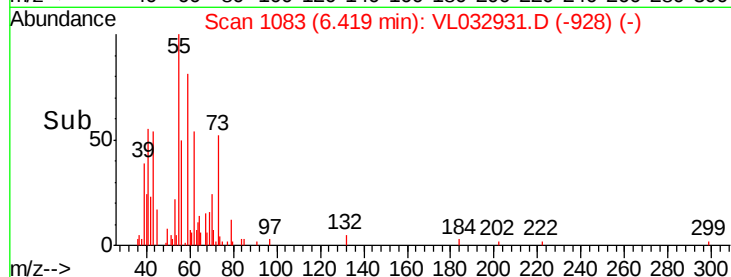
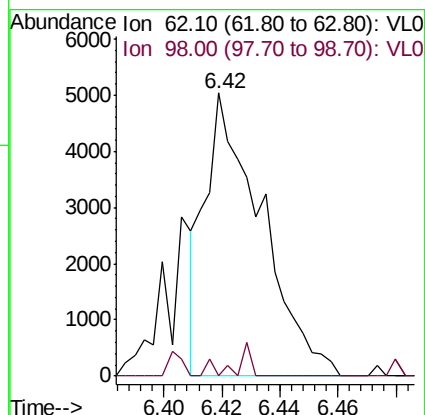
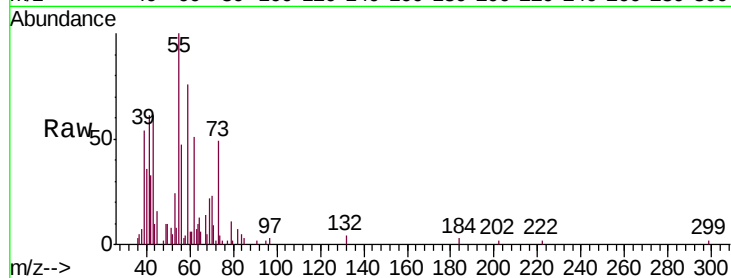
MMSV-08

Tgt Ion: 62 Resp: 6743

Ion Ratio Lower Upper

62 100

98 5.2 4.3 6.5



#38

Trichloroethene

Concen: 0.059 ppbv

RT: 7.97 min Scan# 1564

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Tgt Ion: 130 Resp: 4876

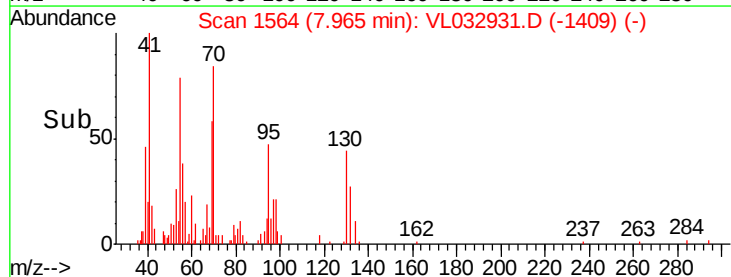
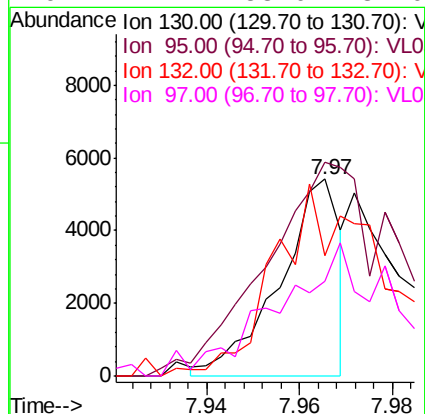
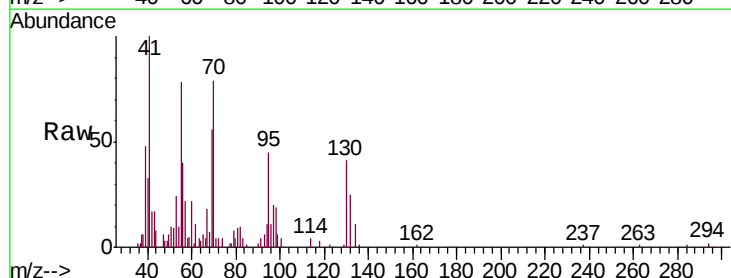
Ion Ratio Lower Upper

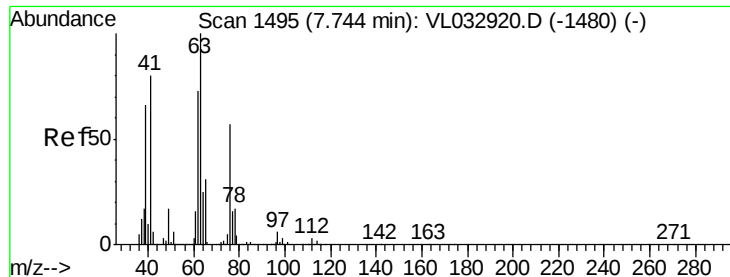
130 100

95 107.5 88.6 132.8

132 61.3 76.1 114.1#

97 47.7 58.0 87.0#





#39

1,2-Dichloropropane

Concen: 8.968 ppbv

RT: 7.30 min Scan# 1358

Delta R.T. -0.44 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

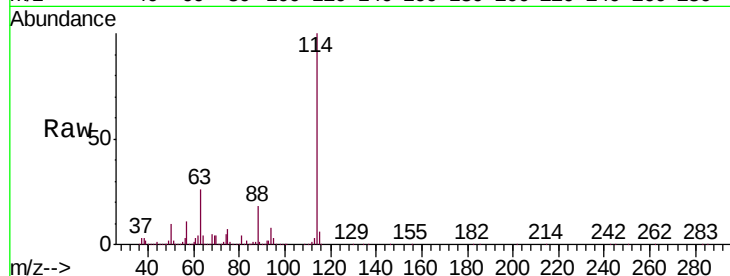
Tgt Ion: 63 Resp: 673193

Ion Ratio Lower Upper

63 100

41 0.8 63.9 95.9#

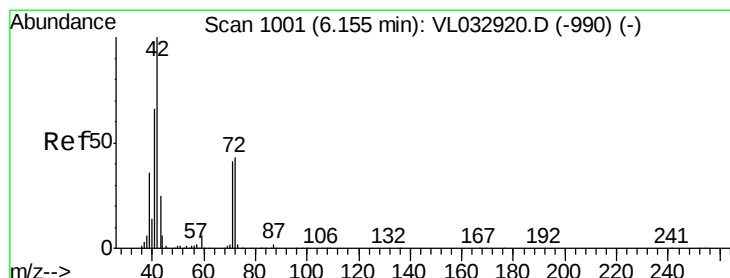
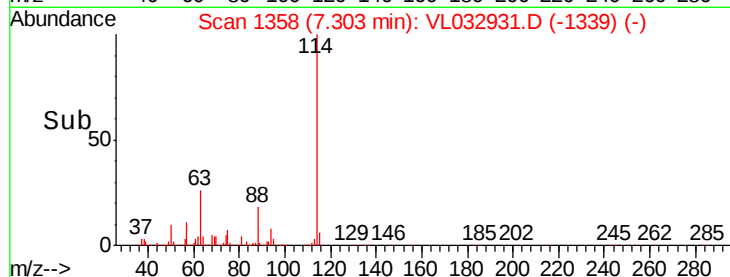
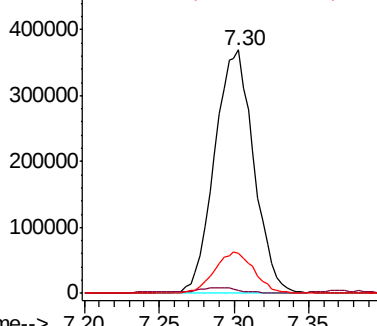
62 16.7 58.8 88.2#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#41

Tetrahydrofuran

Concen: 0.082 ppbv

RT: 6.16 min Scan# 1004

Delta R.T. 0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

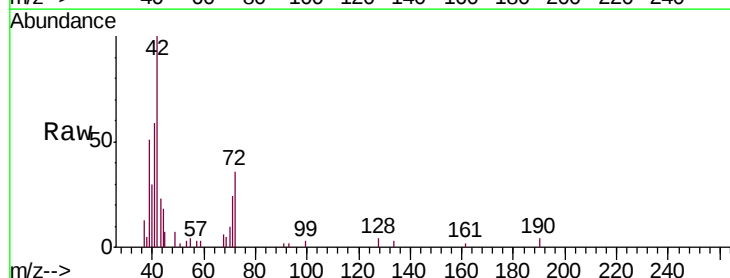
Tgt Ion: 42 Resp: 5944

Ion Ratio Lower Upper

42 100

72 127.0 32.9 49.3#

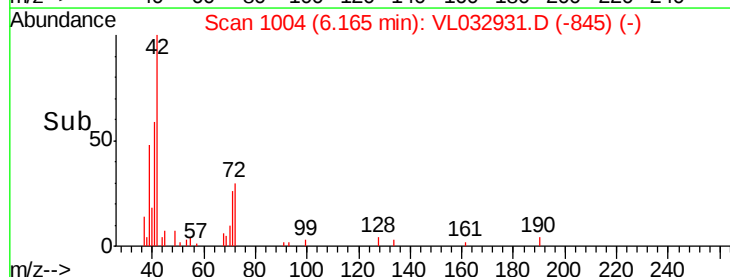
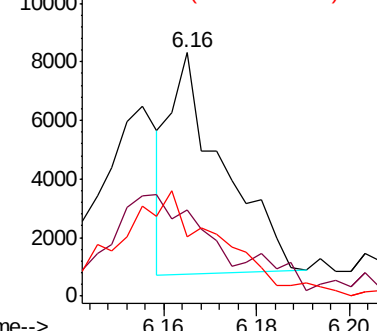
71 98.5 32.0 48.0#

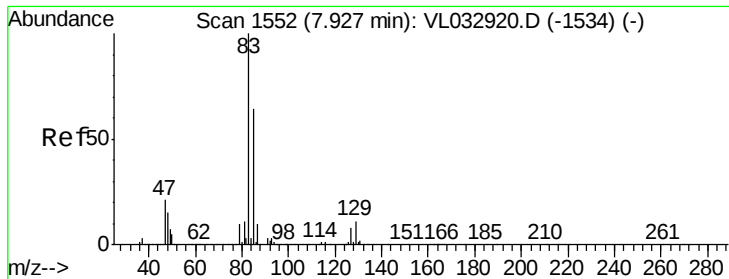


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





#42

Bromodichloromethane

Concen: 0.044 ppbv

RT: 7.93 min Scan# 1552

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

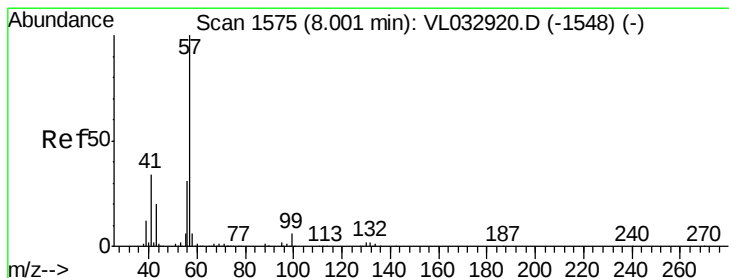
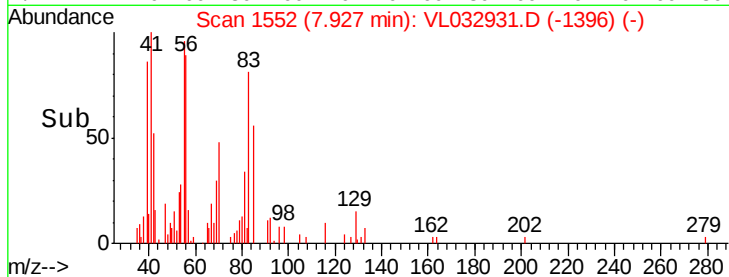
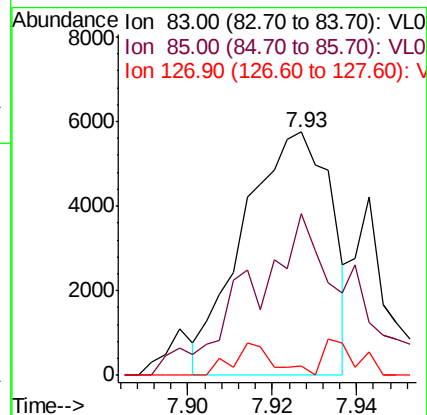
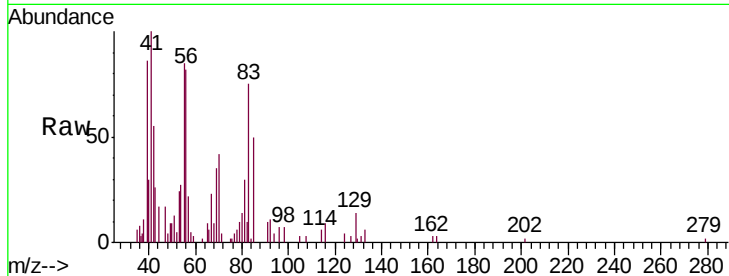
Tgt Ion: 83 Resp: 8284

Ion Ratio Lower Upper

83 100

85 66.6 50.9 76.3

127 4.2 6.7 10.1#



#44

2,2,4-Trimethylpentane

Concen: 0.036 ppbv

RT: 7.99 min Scan# 1573

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

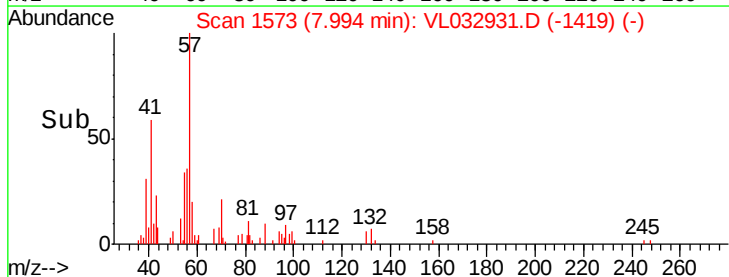
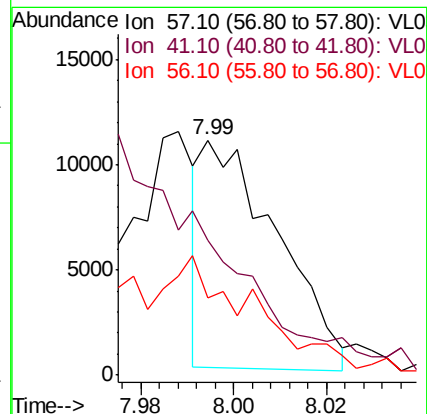
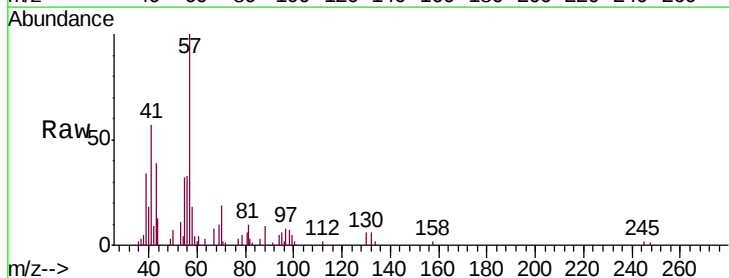
Tgt Ion: 57 Resp: 12212

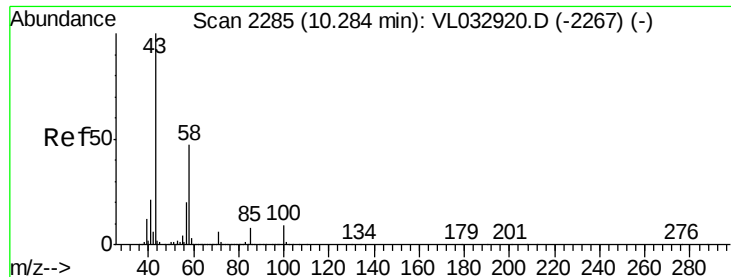
Ion Ratio Lower Upper

57 100

41 0.0 27.0 40.4#

56 67.4 24.6 37.0#

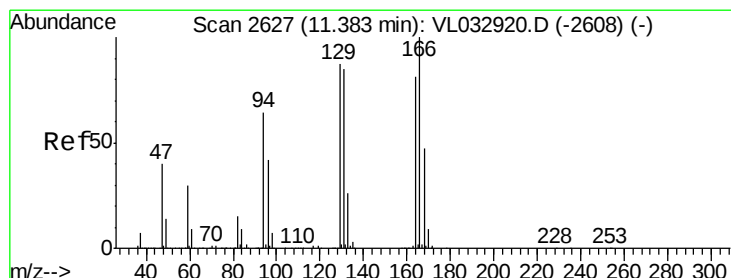
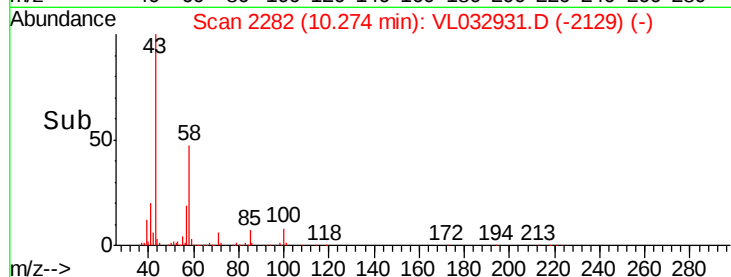
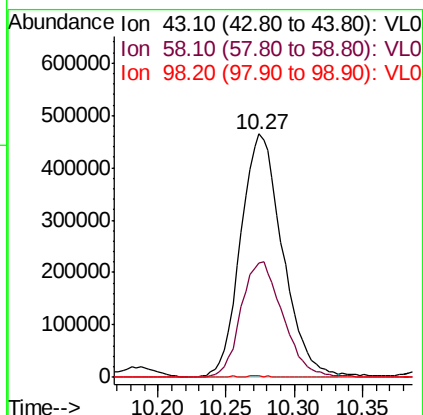
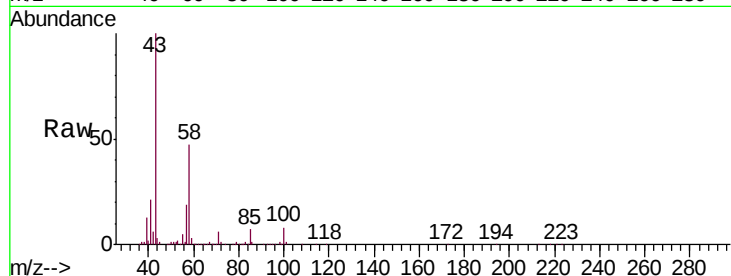




#51
2-Hexanone
Concen: 7.773 ppbv
RT: 10.27 min Scan# 2282
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

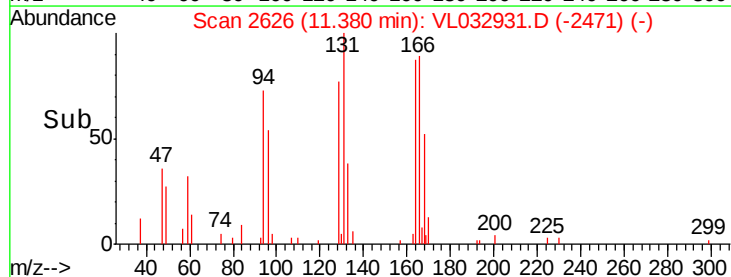
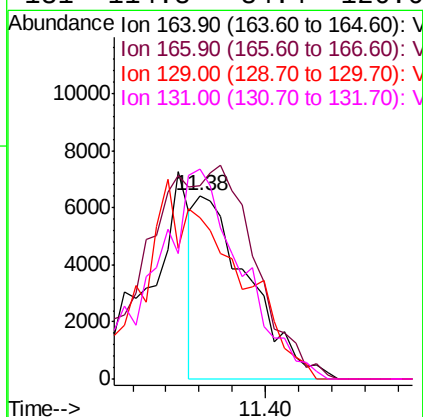
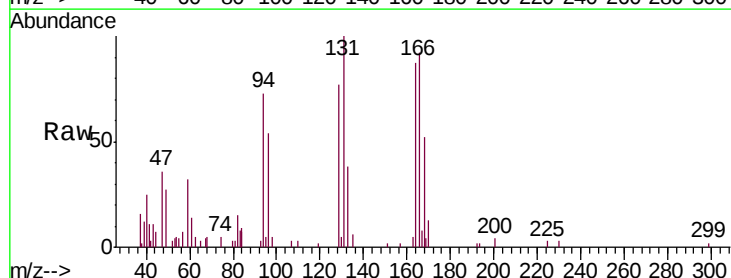
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

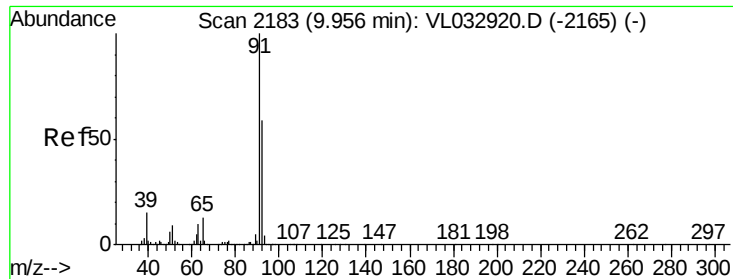
Tgt Ion: 43 Resp: 988153
Ion Ratio Lower Upper
43 100
58 48.0 38.1 57.1
98 0.8 0.4 0.6#



#52
Tetrachloroethene
Concen: 0.100 ppbv
RT: 11.38 min Scan# 2626
Delta R.T. -0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 164 Resp: 7200
Ion Ratio Lower Upper
164 100
166 105.7 98.8 148.2
129 93.8 85.5 128.3
131 114.8 84.4 126.6





#53

Toluene

Concen: 0.714 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

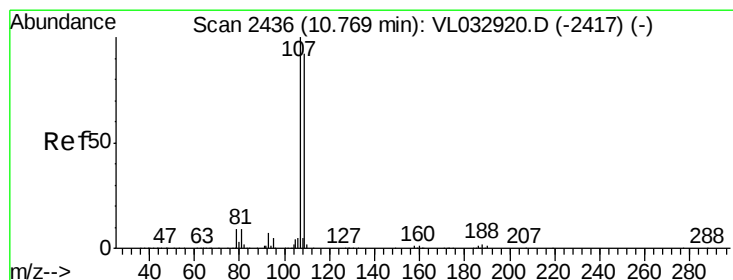
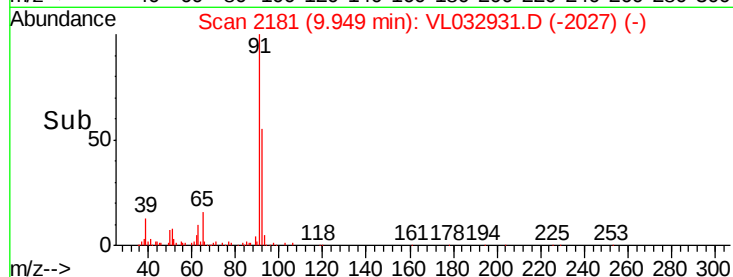
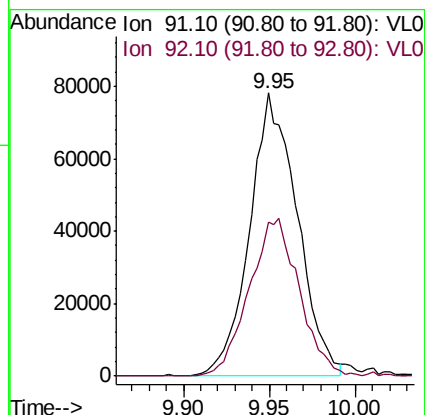
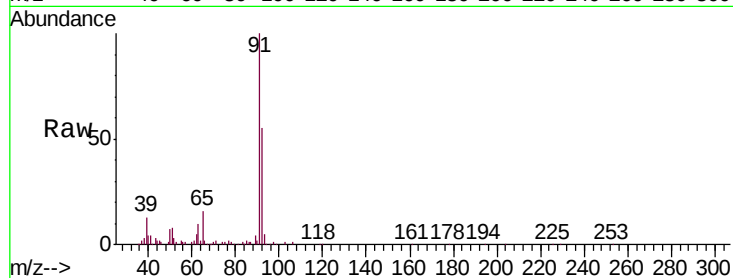
MMSV-08

Tgt Ion: 91 Resp: 149848

Ion Ratio Lower Upper

91 100

92 58.7 47.4 71.0



#54

1,2-Dibromoethane

Concen: 0.039 ppbv

RT: 10.77 min Scan# 2435

Delta R.T. -0.00 min

Lab File: VL032931.D

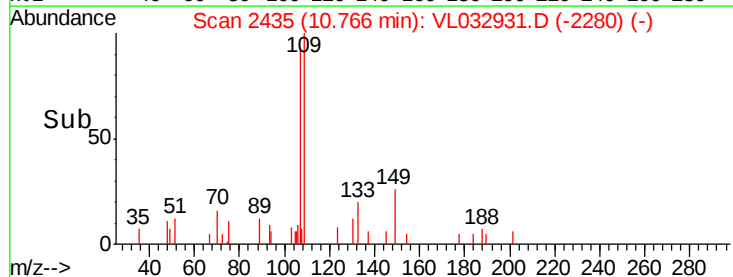
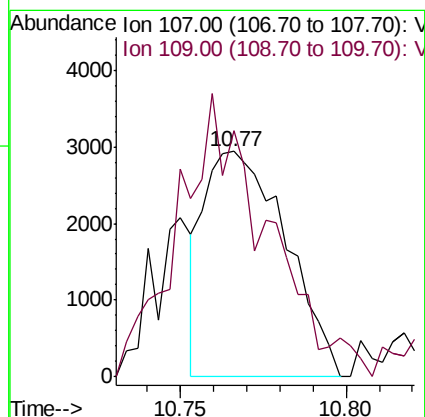
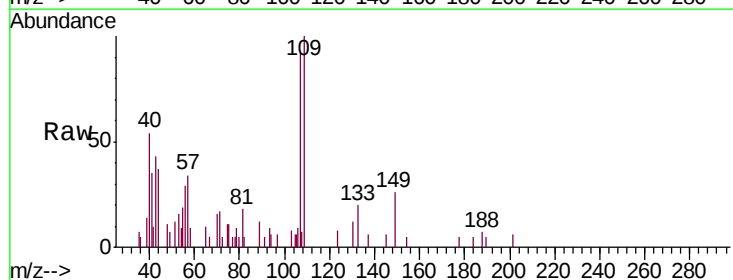
Acq: 7 Dec 2018 12:34

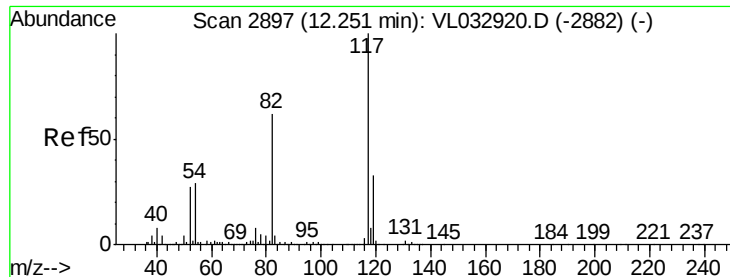
Tgt Ion: 107 Resp: 5037

Ion Ratio Lower Upper

107 100

109 85.4 73.4 110.2

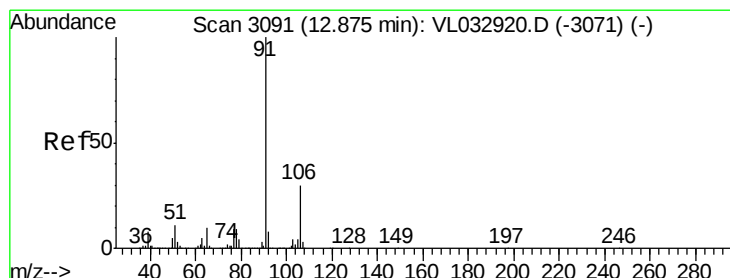
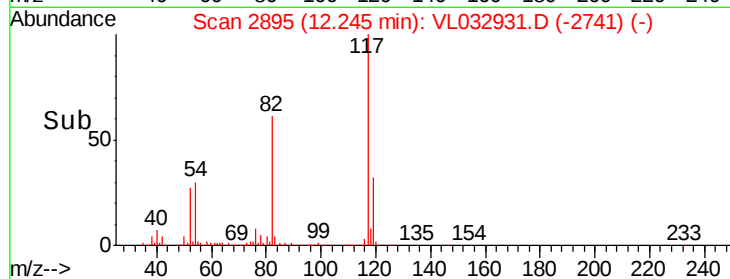
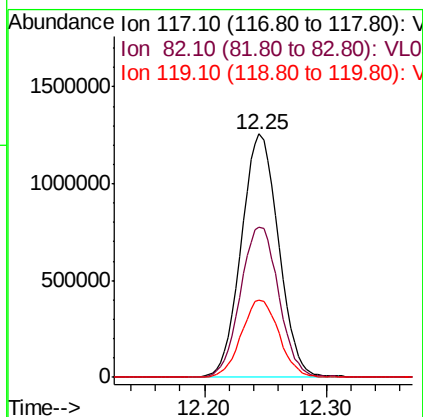
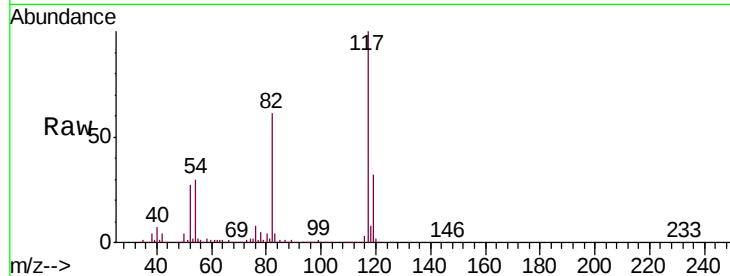




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2895
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

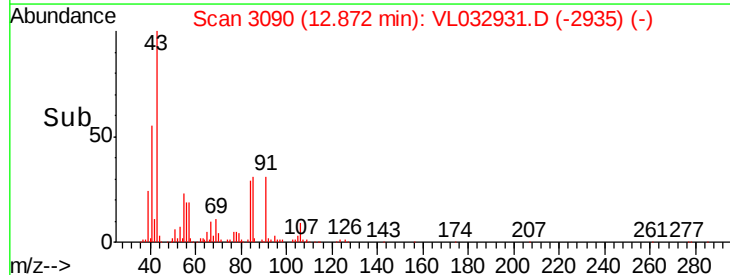
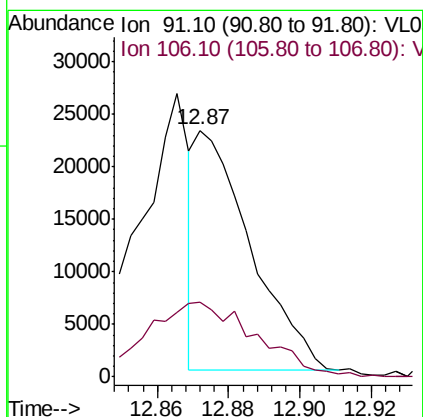
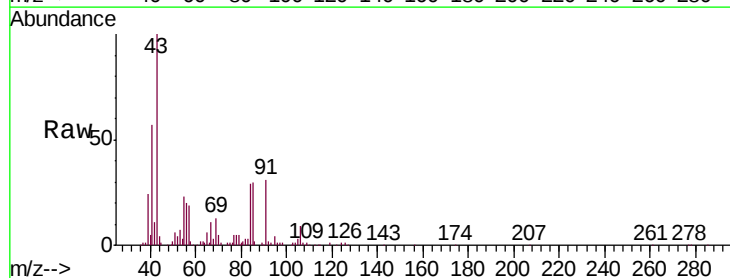
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

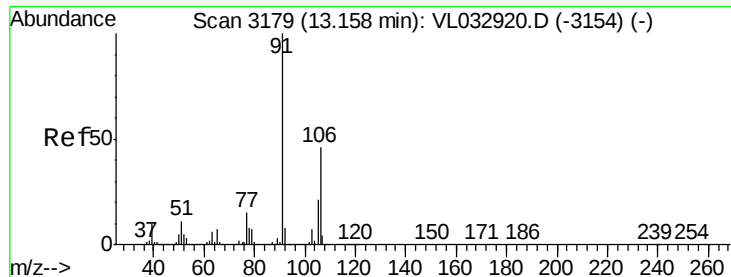
Tgt Ion: 117 Resp: 2652258
Ion Ratio Lower Upper
117 100
82 63.9 47.8 71.8
119 32.3 43.1 64.7#



#58
Ethyl Benzene
Concen: 0.086 ppbv
RT: 12.87 min Scan# 3090
Delta R.T. -0.00 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 91 Resp: 24274
Ion Ratio Lower Upper
91 100
106 29.8 23.9 35.9

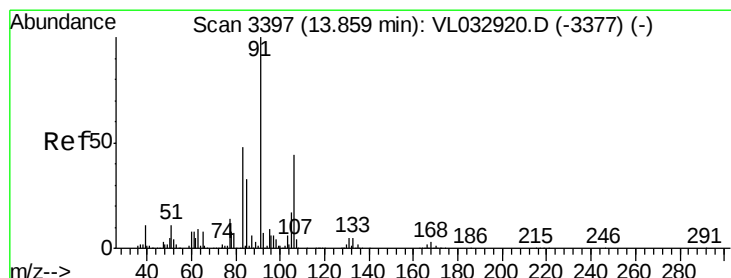
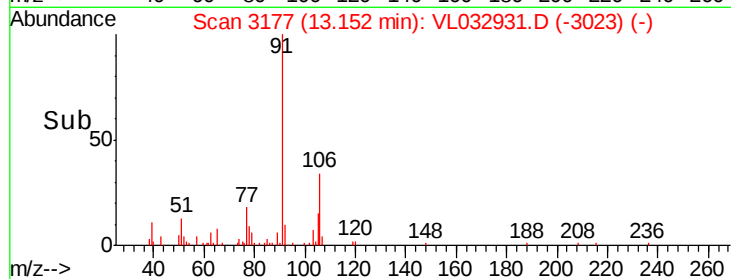
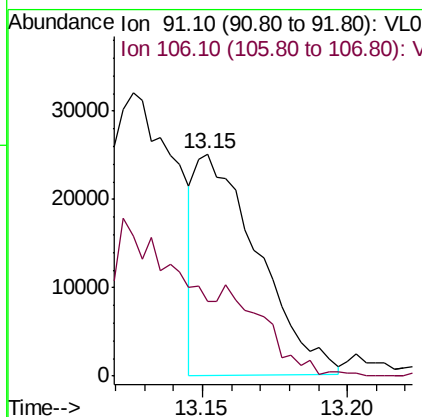
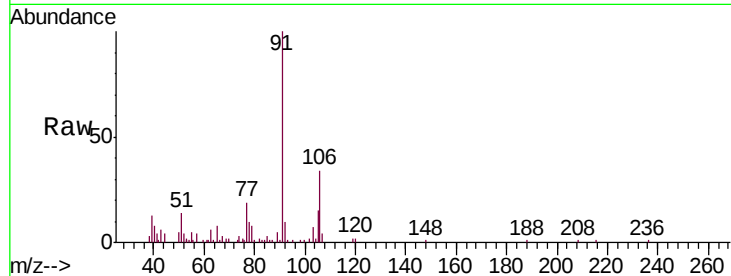




#59
m/p-Xylene
Concen: 0.147 ppbv
RT: 13.15 min Scan# 3177
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

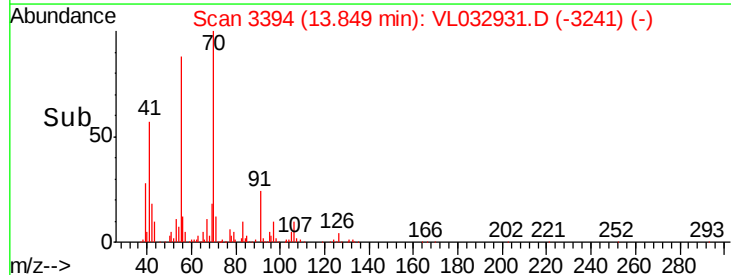
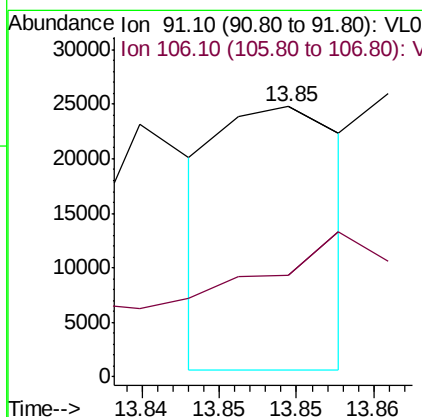
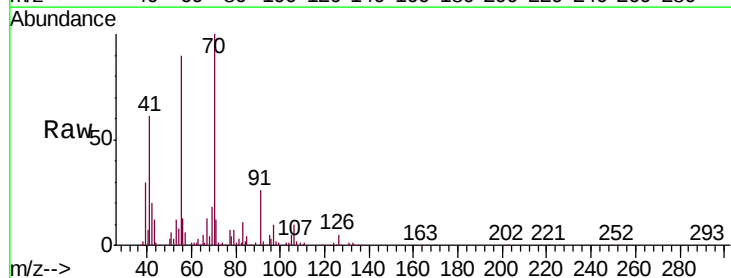
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

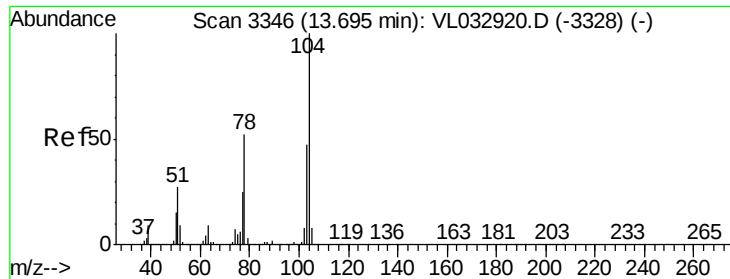
Tgt Ion: 91 Resp: 37653
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0



#60
o-Xylene
Concen: 0.052 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. -0.01 min
Lab File: VL032931.D
Acq: 7 Dec 2018 12:34

Tgt Ion: 91 Resp: 13342
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.8#





#61

Styrene

Concen: 0.212 ppbv

RT: 13.70 min Scan# 3346

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

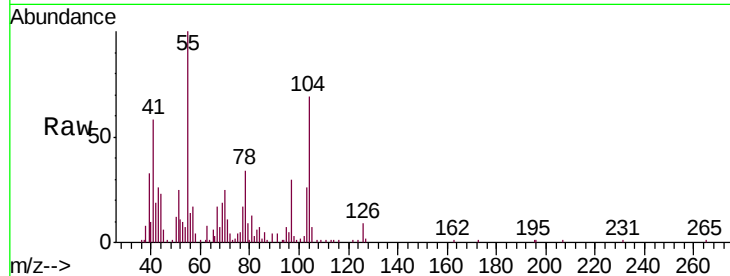
Tgt Ion:104 Resp: 36521

Ion Ratio Lower Upper

104 100

78 63.4 42.0 63.0#

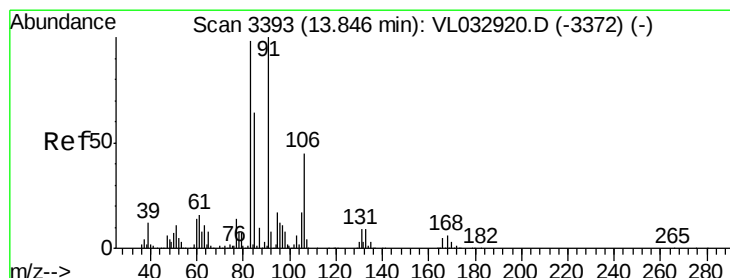
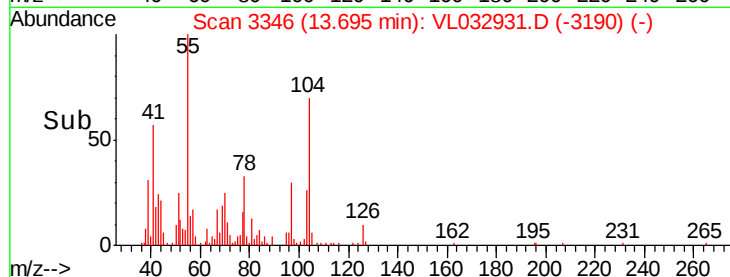
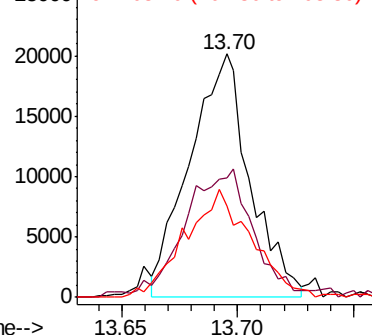
103 48.9 38.3 57.5



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#63

1,1,2,2-Tetrachloroethane

Concen: 0.134 ppbv

RT: 13.84 min Scan# 3391

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

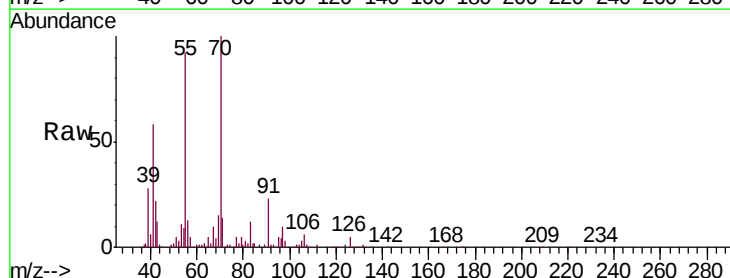
Tgt Ion: 83 Resp: 26957

Ion Ratio Lower Upper

83 100

131 4.1 4.9 14.6#

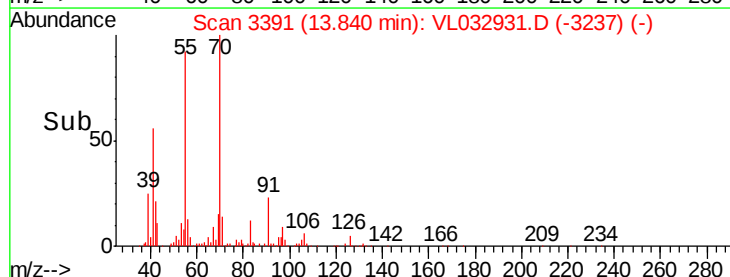
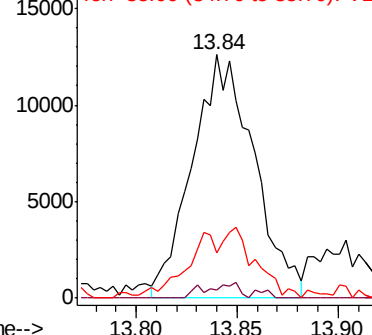
85 31.4 32.9 98.6#

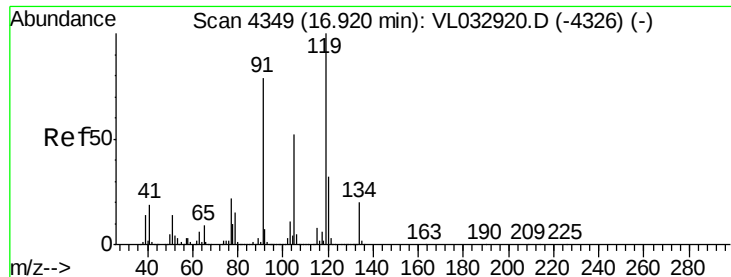


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VL0





#65

tert-Butylbenzene

Concen: 0.043 ppbv

RT: 16.91 min Scan# 4347

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

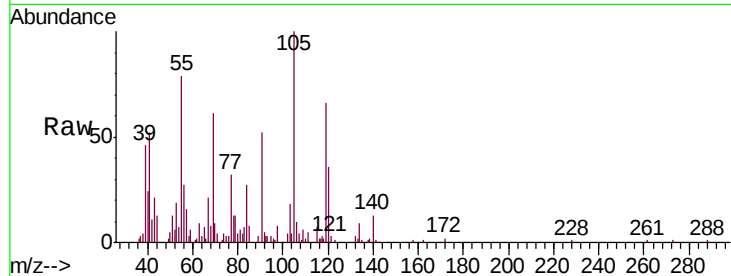
Tgt Ion: 119 Resp: 14406

Ion Ratio Lower Upper

119 100

91 139.5 64.5 96.7#

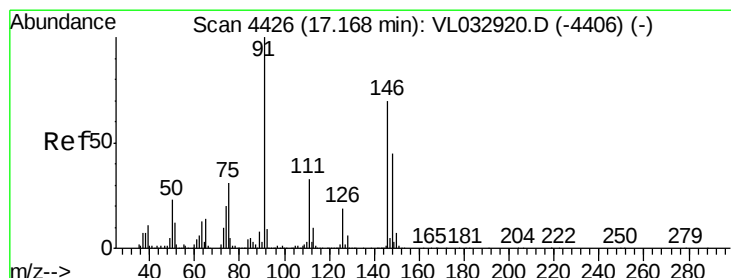
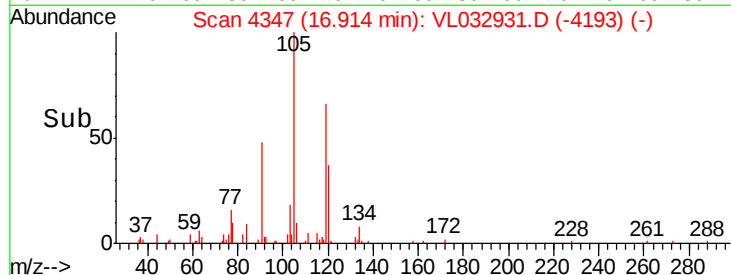
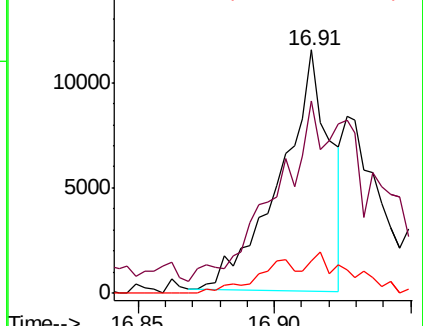
134 28.6 15.7 23.5#



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 0.033 ppbv

RT: 17.15 min Scan# 4422

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

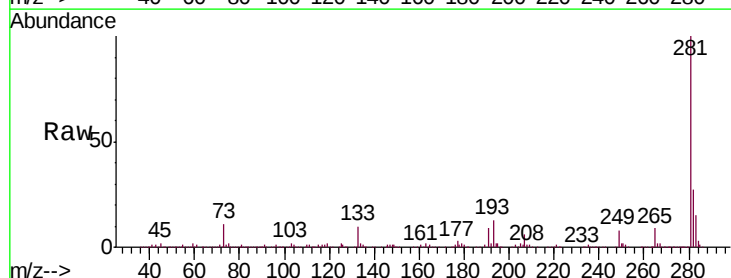
Tgt Ion: 91 Resp: 6126

Ion Ratio Lower Upper

91 100

126 77.0 14.1 21.1#

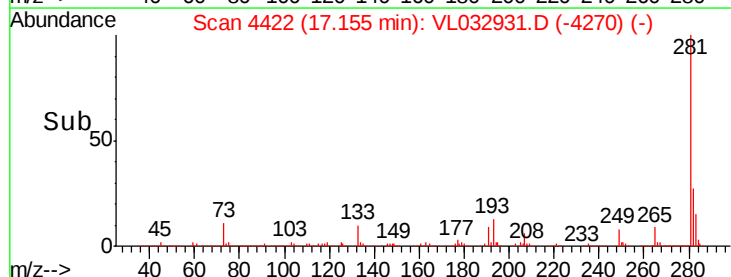
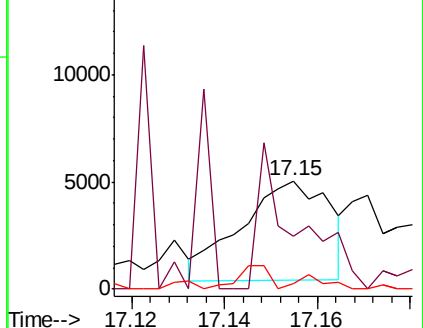
128 16.9 4.5 6.7#

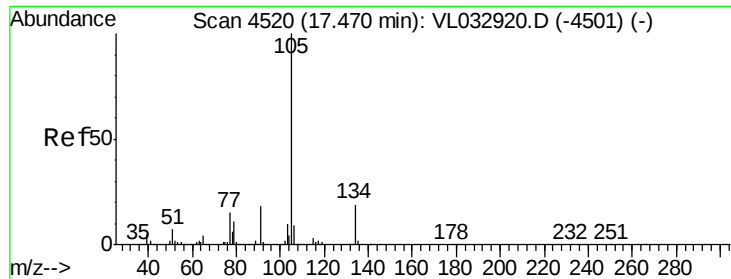


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 0.058 ppbv

RT: 17.47 min Scan# 4519

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

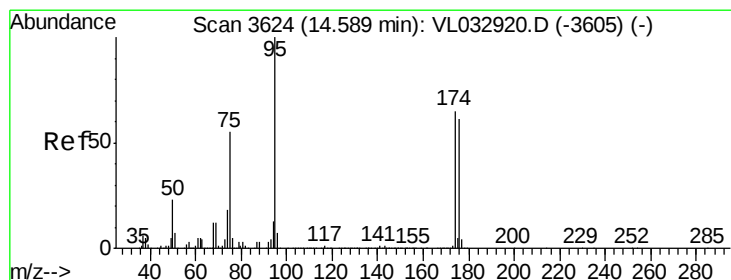
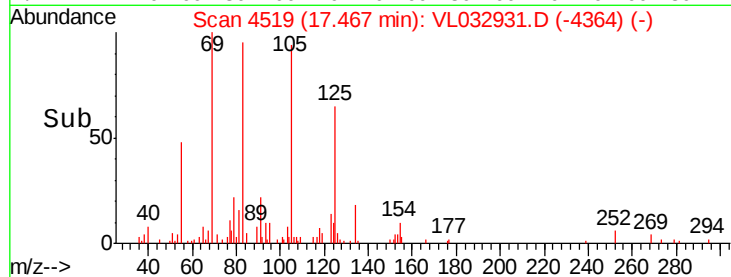
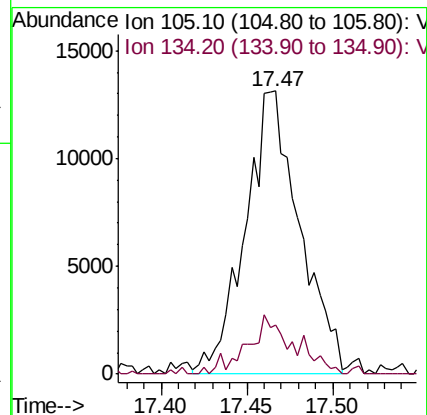
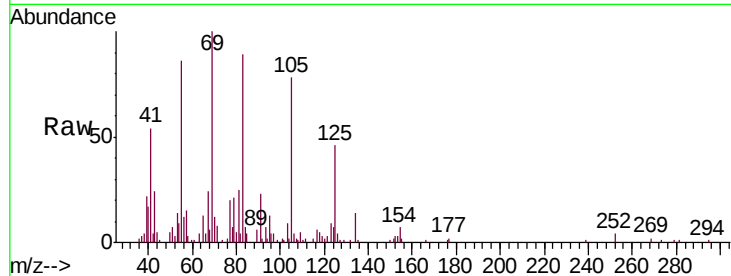
MMSV-08

Tgt Ion: 105 Resp: 28814

Ion Ratio Lower Upper

105 100

134 18.5 14.6 21.8



#68

1-Bromo-4-Fluorobenzene

Concen: 10.069 ppbv

RT: 14.58 min Scan# 3622

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

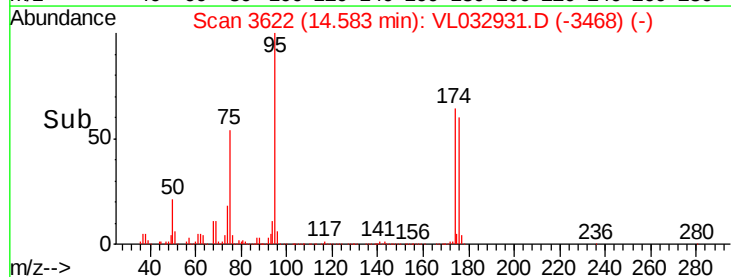
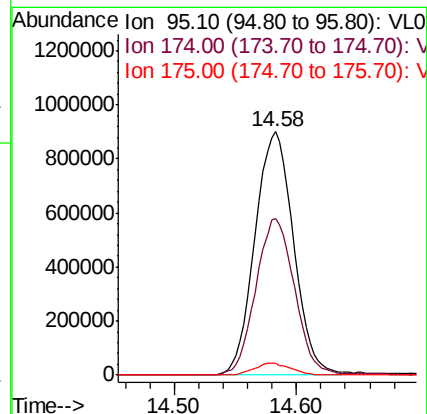
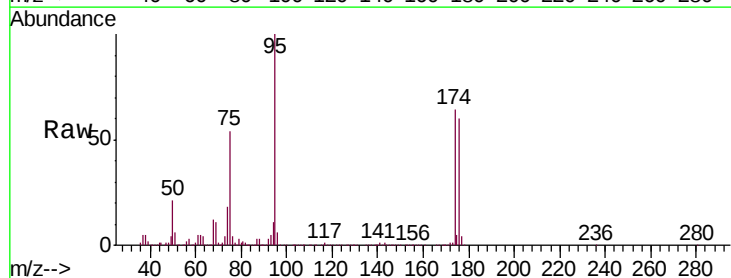
Tgt Ion: 95 Resp: 1972956

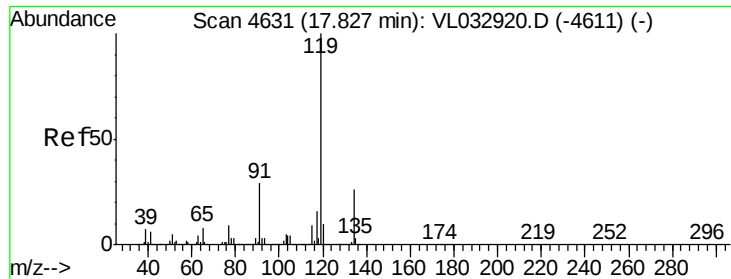
Ion Ratio Lower Upper

95 100

174 65.7 51.4 77.0

175 4.8 3.8 5.6

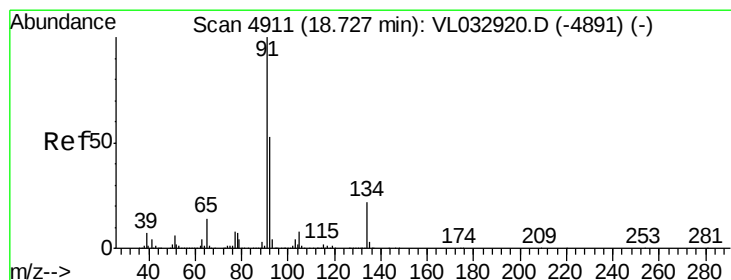
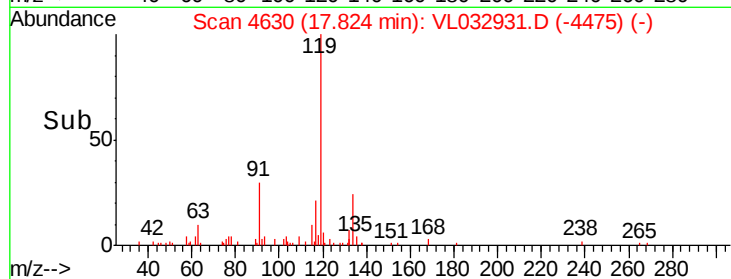
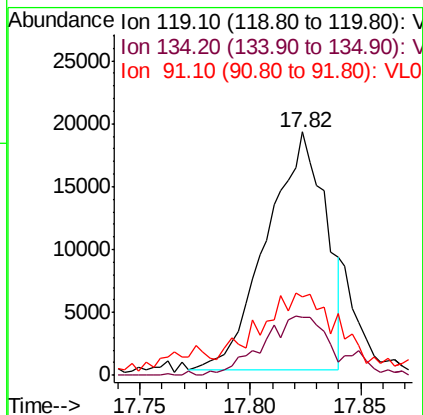
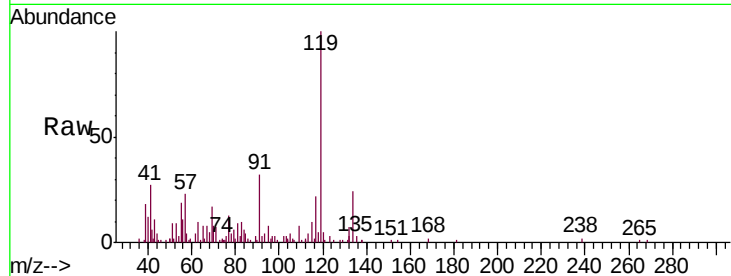




#69
 p-Isopropyltoluene
 Concen: 0.088 ppbv
 RT: 17.82 min Scan# 4630
 Delta R.T. -0.00 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

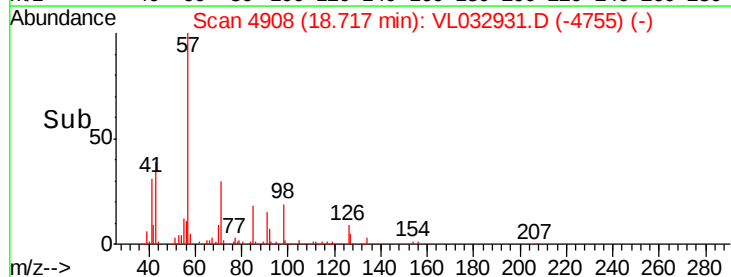
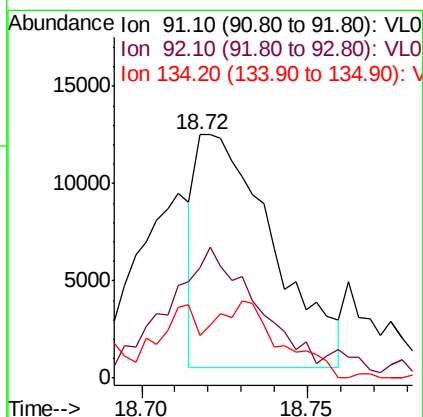
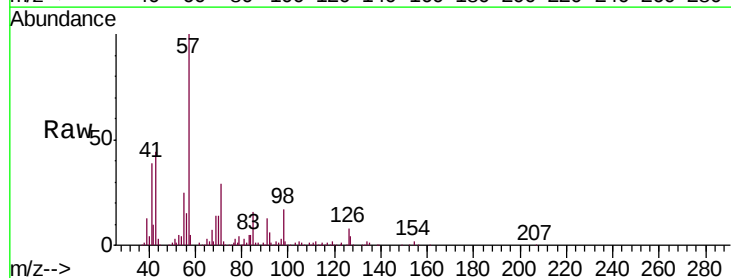
Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

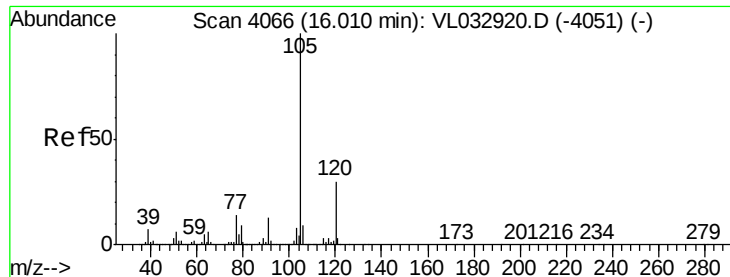
Tgt Ion: 119 Resp: 35137
 Ion Ratio Lower Upper
 119 100
 134 31.0 20.2 30.2#
 91 62.1 22.9 34.3#



#70
 n-Butylbenzene
 Concen: 0.052 ppbv
 RT: 18.72 min Scan# 4908
 Delta R.T. -0.01 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Tgt Ion: 91 Resp: 19083
 Ion Ratio Lower Upper
 91 100
 92 88.7 42.7 64.1#
 134 52.5 18.0 27.0#





#72

4-Ethyltoluene

Concen: 0.084 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. -0.01 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

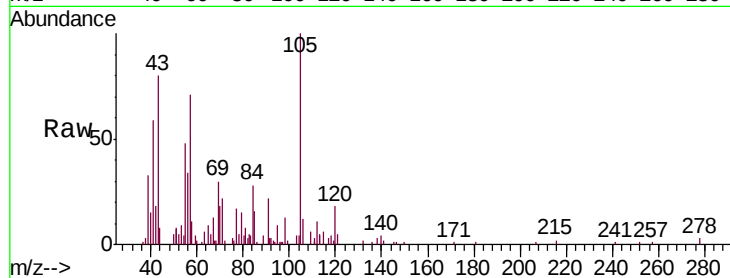
Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tgt Ion:	105	Resp:	24379
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.0	34.4#
91	22.1	10.4	15.6#
77	0.0	11.0	16.4#

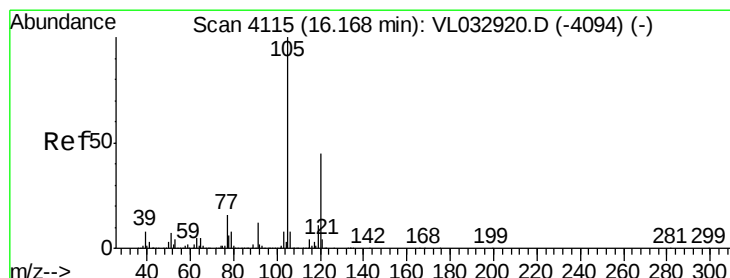
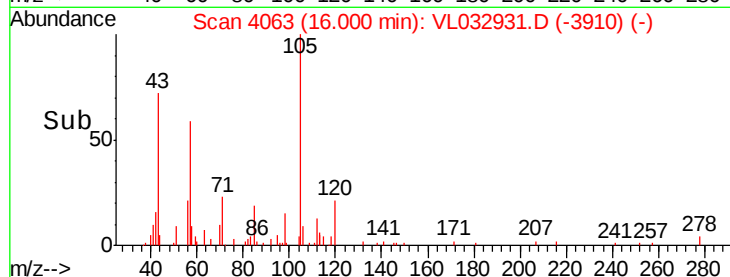
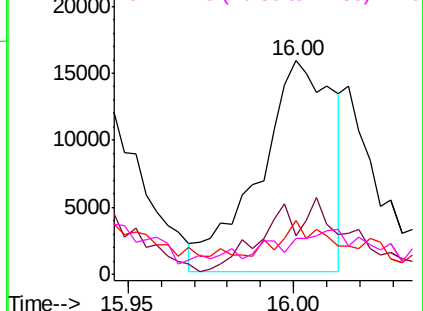


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.098 ppbv

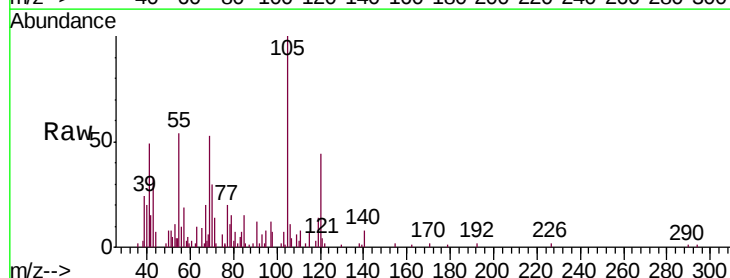
RT: 16.17 min Scan# 4115

Delta R.T. 0.00 min

Lab File: VL032931.D

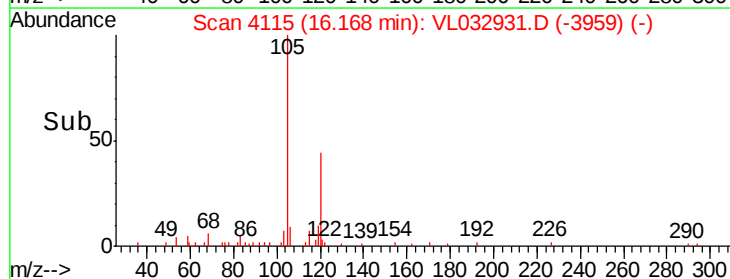
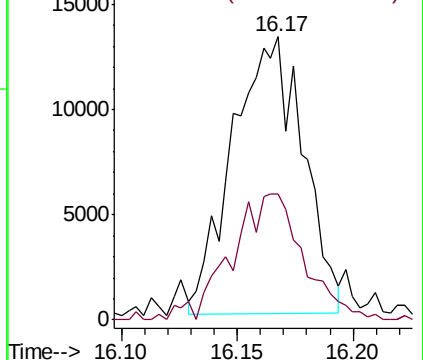
Acq: 7 Dec 2018 12:34

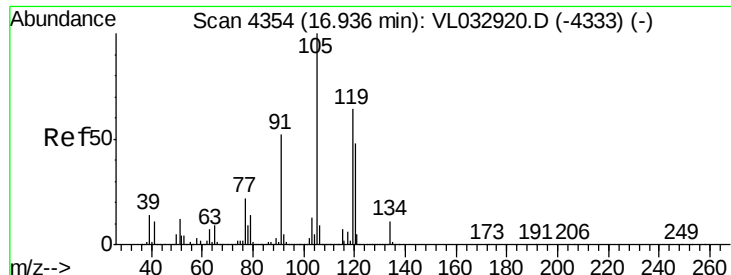
Tgt Ion:	105	Resp:	27775
Ion	Ratio	Lower	Upper
105	100		
120	44.5	36.0	54.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

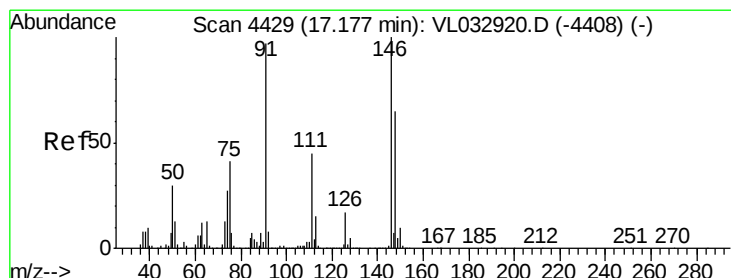
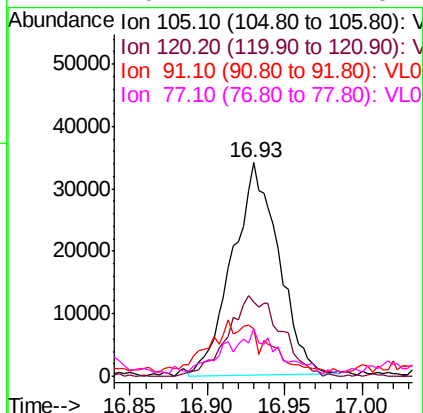
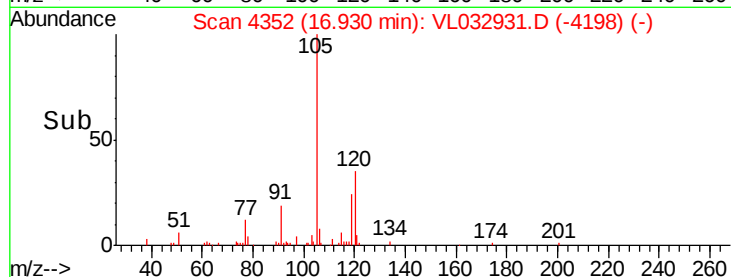
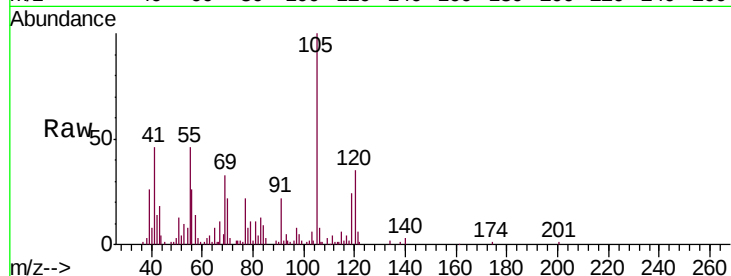




#74
 1,2,4-Trimethylbenzene
 Concen: 0.221 ppbv
 RT: 16.93 min Scan# 4352
 Delta R.T. -0.01 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

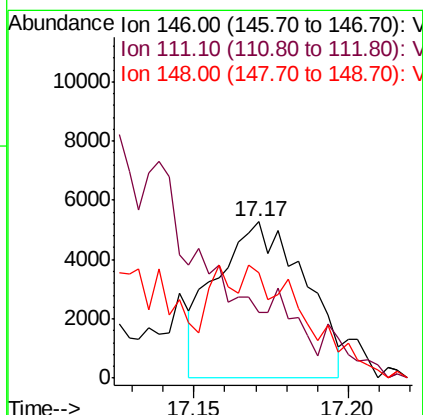
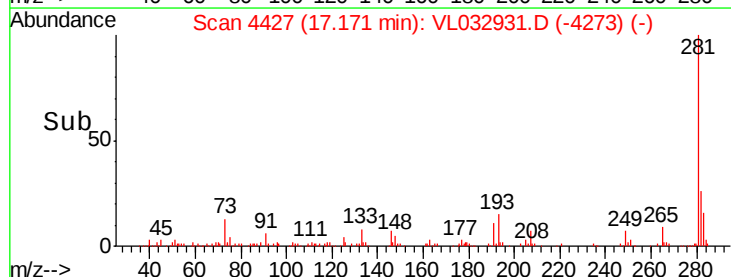
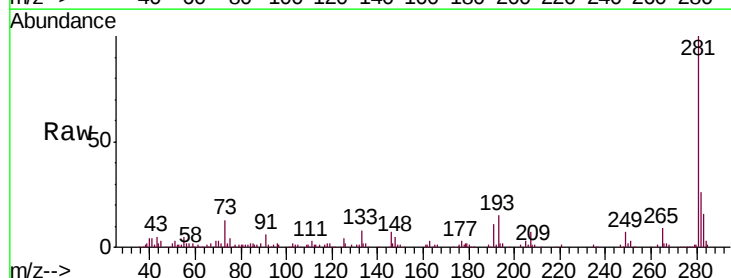
Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

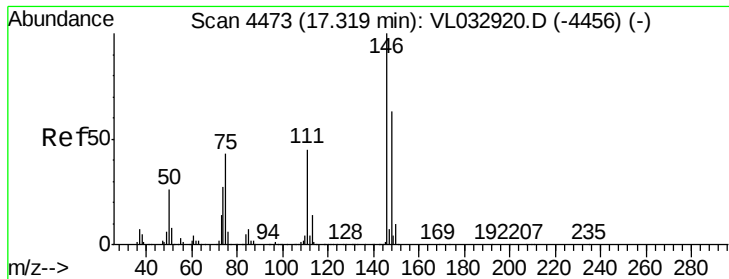
Tgt Ion:	105	Resp:	70352
Ion	Ratio	Lower	Upper
105	100		
120	35.1	38.6	58.0#
91	20.1	41.7	62.5#
77	20.2	17.4	26.2



#75
 1,3-Dichlorobenzene
 Concen: 0.056 ppbv
 RT: 17.17 min Scan# 4427
 Delta R.T. -0.01 min
 Lab File: VL032931.D
 Acq: 7 Dec 2018 12:34

Tgt Ion:	146	Resp:	10464
Ion	Ratio	Lower	Upper
146	100		
111	0.0	23.6	70.8#
148	74.0	32.1	96.3





#76

1,4-Dichlorobenzene

Concen: 0.040 ppbv

RT: 17.32 min Scan# 4472

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

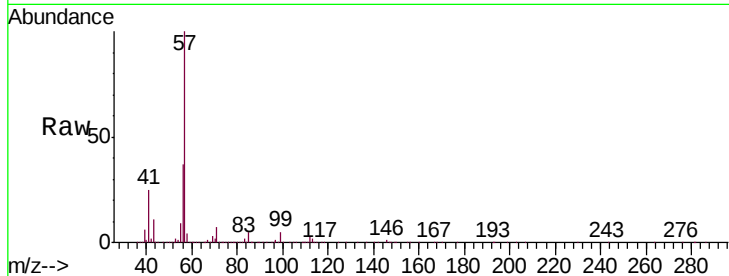
Tgt Ion:146 Resp: 7052

Ion Ratio Lower Upper

146 100

111 0.0 22.8 68.4#

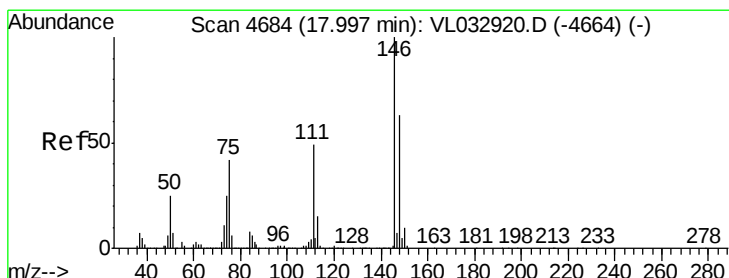
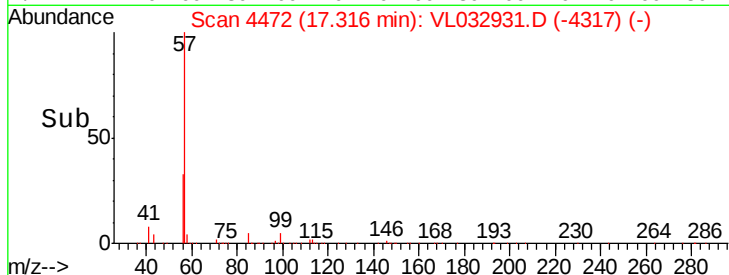
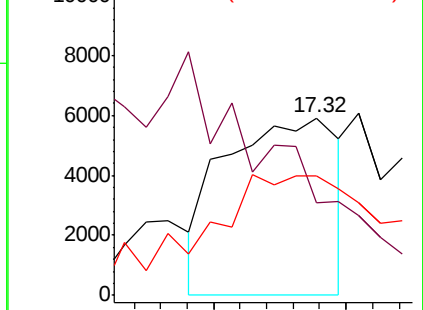
148 135.0 32.0 96.2#



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#77

1,2-Dichlorobenzene

Concen: 0.045 ppbv

RT: 17.99 min Scan# 4683

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

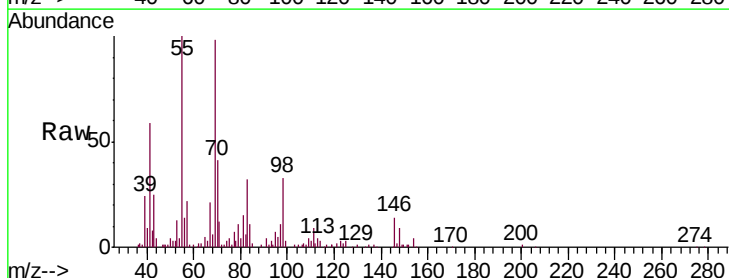
Tgt Ion:146 Resp: 7889

Ion Ratio Lower Upper

146 100

111 147.5 24.3 72.9#

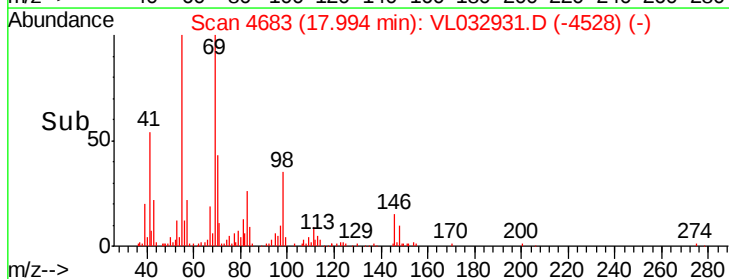
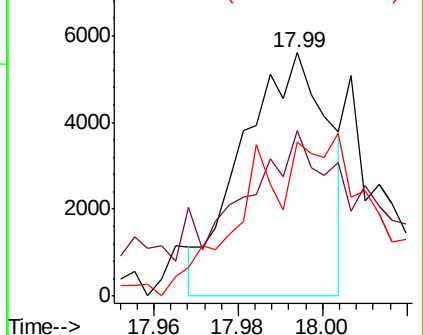
148 0.0 32.0 96.2#

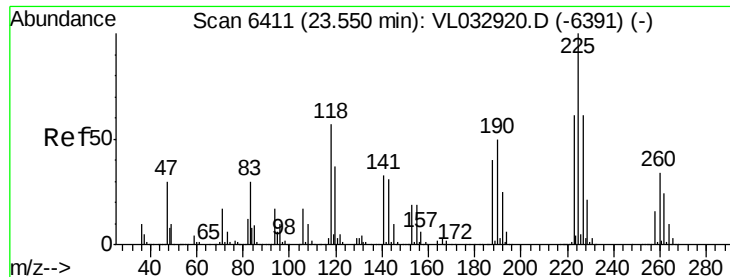


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#78

Hexachloro-1,3-Butadiene

Concen: 0.091 ppbv

RT: 23.55 min Scan# 6412

Delta R.T. 0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

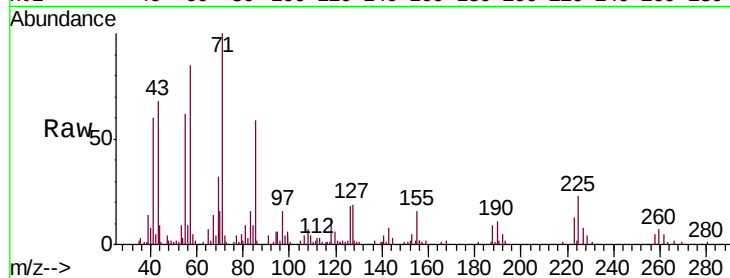
Tgt Ion:225 Resp: 8729

Ion Ratio Lower Upper

225 100

223 79.1 50.6 75.8#

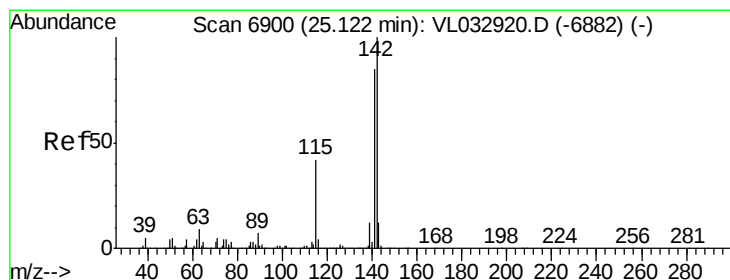
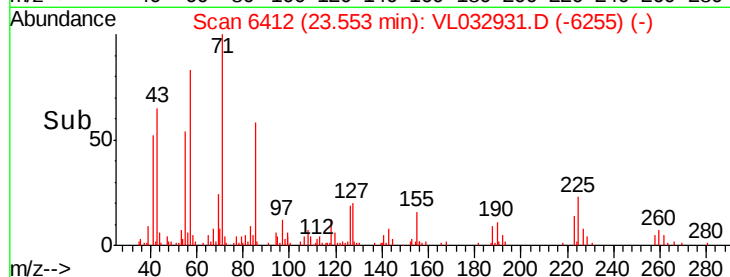
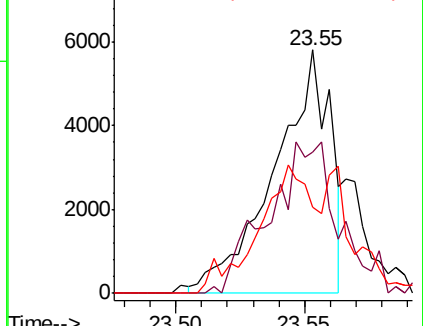
227 78.6 50.4 75.6#



Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V



#80

Naphthalene, 2-methyl-

Concen: 0.120 ppbv

RT: 25.12 min Scan# 6899

Delta R.T. -0.00 min

Lab File: VL032931.D

Acq: 7 Dec 2018 12:34

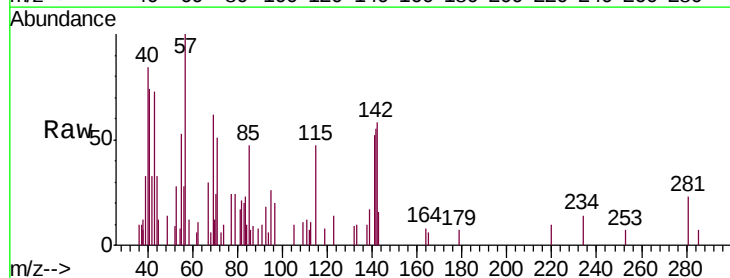
Tgt Ion:142 Resp: 5271

Ion Ratio Lower Upper

142 100

141 94.5 68.2 102.2

115 56.8 35.1 52.7#



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

