

Data File : VL035401.D
Acq On : 13 Aug 2020 11:34
Operator : SY/AP
Sample : VL0813ABS01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Aug 14 04:23:55 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 12 20:32:44 2020
QLast Update : Wed Aug 12 20:32:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1410480	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3332446	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	4025755	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2724657	8.38	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	83.80%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.04	85	1638860	9.648	ppbv	100
3) Chlorodifluoromethane	2.98	51	1570463	9.577	ppbv	97
4) Chloromethane	3.13	50	847786	9.251	ppbv	97
5) Vinyl Chloride	3.25	62	807187	8.912	ppbv	98
6) Bromomethane	3.47	94	488694	9.730	ppbv	93
7) Chloroethane	3.55	64	297540	9.313	ppbv	98
8) Dichlorotetrafluoroethane	3.18	85	1829364	9.278	ppbv	96
9) Propene	3.00	41	741448	8.728	ppbv	99
10) Heptane	8.13	43	1945076	8.840	ppbv	99
11) Trichlorofluoromethane	3.94	101	1947003	9.452	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.48	101	1284237	9.161	ppbv	95
13) Ethanol	3.60	45	189632	6.807	ppbv	98
14) Bromoethene	3.73	108	586146	9.359	ppbv	99
15) Acetone	3.84	43	1452862	8.178	ppbv	99
16) 1,3-Butadiene	3.32	39	767976	8.419	ppbv	98
17) tert-Butyl alcohol	4.29	59	1778063	8.581	ppbv	100
18) 1,1-Dichloroethene	4.29	96	589631	9.181	ppbv	98
19) Isopropyl Alcohol	3.96	45	1218859	8.792	ppbv #	45
20) Methylene Chloride	4.34	84	536242	7.994	ppbv	95
21) Allyl Chloride	4.41	41	1018349	8.730	ppbv	98
22) trans-1,2-Dichloroethene	4.88	96	604930	9.376	ppbv	95
23) Vinyl Acetate	5.07	43	2467767	8.701	ppbv	99
24) 1,1-Dichloroethane	5.01	63	1710187	9.157	ppbv	99
25) Ethyl Acetate	5.68	43	3134871	8.549	ppbv	99
26) Hexane	5.69	57	1375824	8.575	ppbv	99
27) Carbon Disulfide	4.55	76	1568414	9.156	ppbv	99
28) Methyl tert-Butyl Ether	5.03	73	2321828	8.764	ppbv	99
29) Chloroform	5.75	83	2182670	9.532	ppbv	99
30) Cyclohexane	7.13	84	1199478	9.070	ppbv	97
31) cis-1,2-Dichloroethene	5.55	61	1491870	9.377	ppbv	99
32) 1,1,1-Trichloroethane	6.51	97	2183429	8.741	ppbv	100
34) 2-Butanone	5.24	43	2168912	9.133	ppbv	99
35) Carbon Tetrachloride	7.02	117	2155312	9.304	ppbv	95
36) Benzene	6.90	78	2901743	9.080	ppbv	99
37) 1,2-Dichloroethane	6.31	62	1724138	9.720	ppbv	99
38) Trichloroethene	7.84	130	1015087	8.106	ppbv	96
39) 1,2-Dichloropropane	7.62	63	1158380	9.155	ppbv	95
40) 1,4-Dioxane	7.84	88	464517	9.013	ppbv #	1
41) Tetrahydrofuran	6.05	42	1278088	9.021	ppbv	98
42) Bromodichloromethane	7.80	83	2386169	9.550	ppbv	99
43) Methyl Methacrylate	8.02	69	1316394	9.286	ppbv	99

Data File : VL035401.D
Acq On : 13 Aug 2020 11:34
Operator : SY/AP
Sample : VL0813ABS01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Aug 14 04:23:55 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081220AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 12 20:32:44 2020
QLast Update : Wed Aug 12 20:32:44 2020
Response via : Initial Calibration

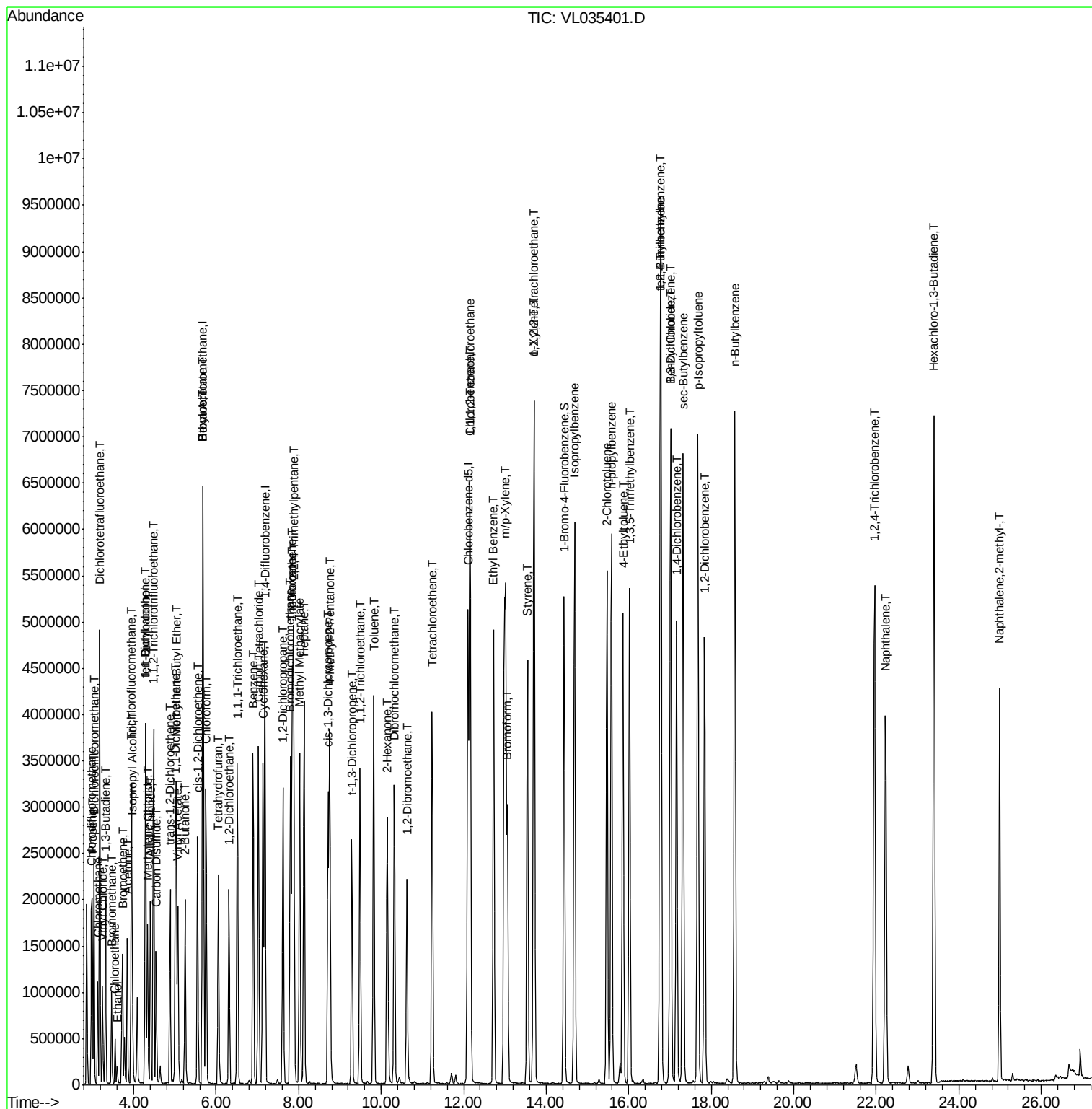
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.88	57	4812378	8.754	ppbv	99
45) t-1,3-Dichloropropene	9.29	75	1565323	9.516	ppbv	96
46) cis-1,3-Dichloropropene	8.71	75	1779678	9.264	ppbv	97
47) 1,1,2-Trichloroethane	9.48	97	1195878	9.318	ppbv	95
48) Dibromochloromethane	10.32	129	1925909	9.389	ppbv	100
49) Bromoform	13.06	173	1590378	9.457	ppbv	100
50) 4-Methyl-2-Pentanone	8.75	43	3191128	8.916	ppbv	100
51) 2-Hexanone	10.14	43	2739630	9.092	ppbv	99
52) Tetrachloroethene	11.24	164	920456	8.123	ppbv	93
53) Toluene	9.82	91	3377102	8.903	ppbv	100
54) 1,2-Dibromoethane	10.63	107	1859446	9.148	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.14	131	1414724	7.232	ppbv	96
57) Chlorobenzene	12.16	112	2432989	7.089	ppbv	98
58) Ethyl Benzene	12.73	91	4606518	7.240	ppbv	99
59) m/p-Xylene	13.01	91	3739564	7.048	ppbv #	33
60) o-Xylene	13.71	91	3634692	7.074	ppbv	99
61) Styrene	13.55	104	2734882	7.210	ppbv	97
62) Isopropylbenzene	14.69	105	5417000	7.029	ppbv	98
63) 1,1,2,2-Tetrachloroethane	13.70	83	2606681	6.955	ppbv	100
64) n-propylbenzene	15.58	120	1451286	7.138	ppbv	94
65) tert-Butylbenzene	16.77	119	4586998	6.761	ppbv	96
66) Benzyl Chloride	17.01	91	2100926	6.856	ppbv	98
67) sec-Butylbenzene	17.32	105	6766346	6.918	ppbv	99
69) p-Isopropyltoluene	17.68	119	5586996	6.853	ppbv	98
70) n-Butylbenzene	18.57	91	6301190	6.981	ppbv	99
71) 2-Chlorotoluene	15.47	91	4461042	7.191	ppbv	98
72) 4-Ethyltoluene	15.86	105	4511603	7.194	ppbv	98
73) 1,3,5-Trimethylbenzene	16.02	105	4202569	7.147	ppbv	97
74) 1,2,4-Trimethylbenzene	16.79	105	4226468	6.834	ppbv	96
75) 1,3-Dichlorobenzene	17.02	146	2320137	6.874	ppbv	98
76) 1,4-Dichlorobenzene	17.16	146	2423350	6.990	ppbv	98
77) 1,2-Dichlorobenzene	17.84	146	2374076	6.977	ppbv	99
78) Hexachloro-1,3-Butadiene	23.40	225	1806423	6.438	ppbv	100
79) Naphthalene	22.23	128	5086065	6.603	ppbv	99
80) Naphthalene,2-methyl-	24.99	142	2282076	6.362	ppbv	99
81) 1,2,4-Trichlorobenzene	21.96	180	2382554	6.535	ppbv	99

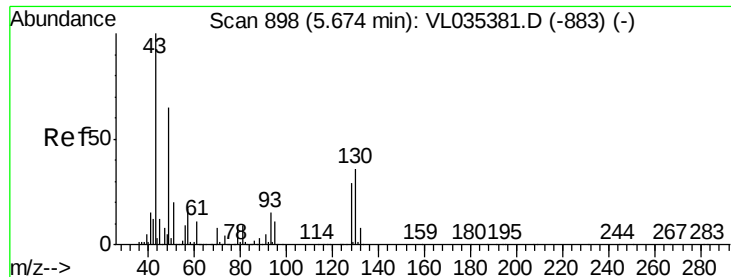
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALS Vial : 1 Sample Multiplier: 1

ClientSampleId :

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

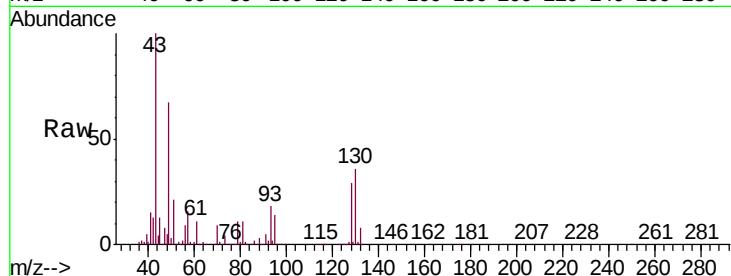
Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

Instrument :
MSVOA_L
ClientSampleId :

Tgt Ion: 49 Resp: 1410480

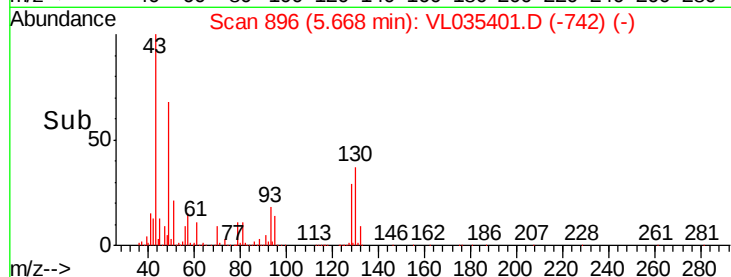
Ion	Ratio	Lower	Upper
49	100		
128	42.8	21.8	65.3
130	54.2	27.9	83.6



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: 9.648 ppbv

RT: 3.04 min Scan# 78

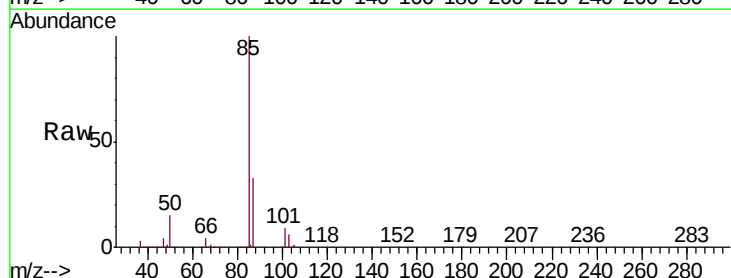
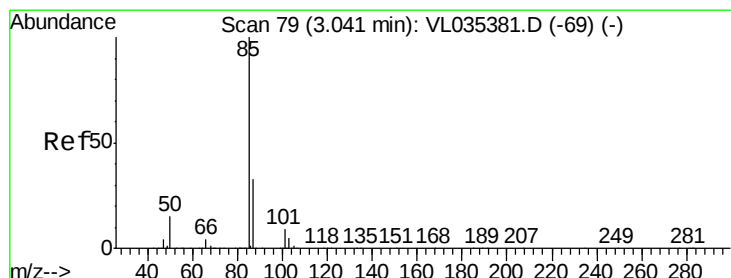
Delta R.T. -0.00 min

Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

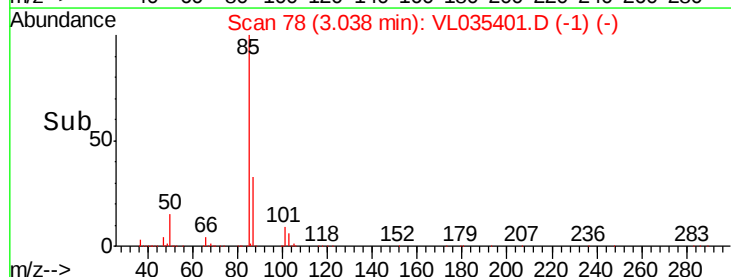
Tgt Ion: 85 Resp: 1638860

Ion	Ratio	Lower	Upper
85	100		
87	32.7	26.1	39.1

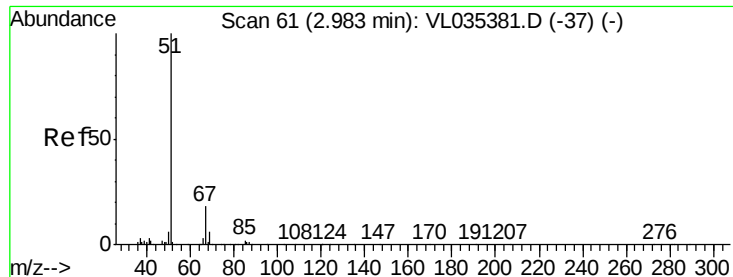


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



Time-->



#3

Chlorodifluoromethane

Concen: 9.577 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.00 min

Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

Instrument :

MSVOA_L

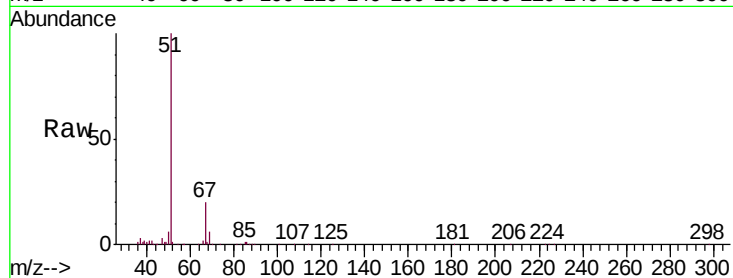
ClientSampleId :

Tgt Ion: 51 Resp: 1570463

Ion Ratio Lower Upper

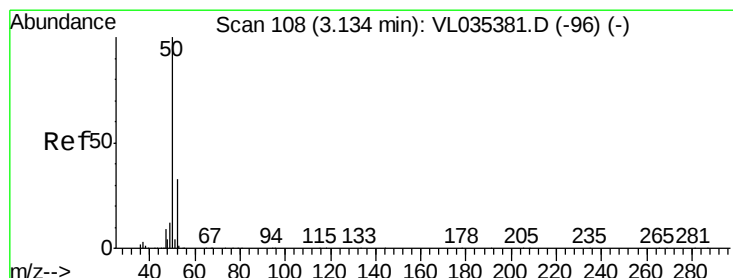
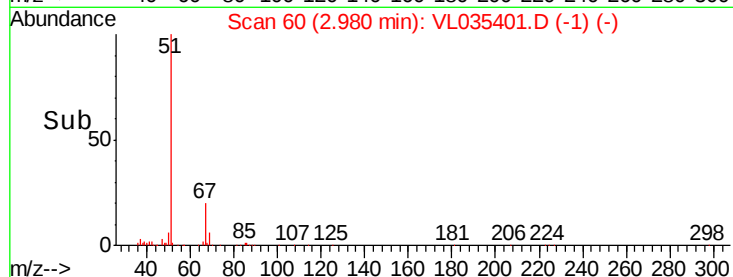
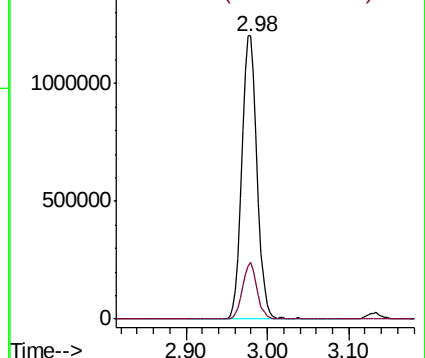
51 100

67 18.8 14.1 21.1



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 9.251 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.00 min

Lab File: VL035401.D

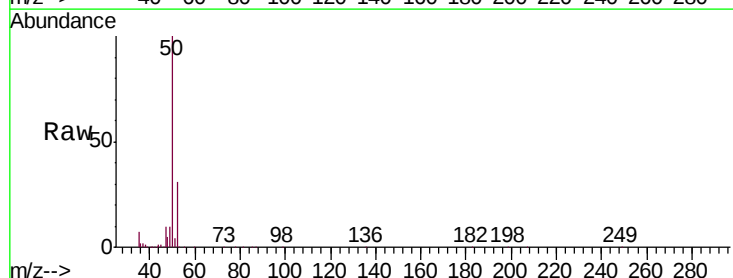
Acq: 13 Aug 2020 11:34

Tgt Ion: 50 Resp: 847786

Ion Ratio Lower Upper

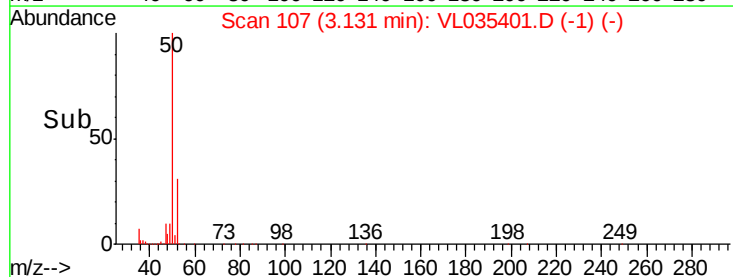
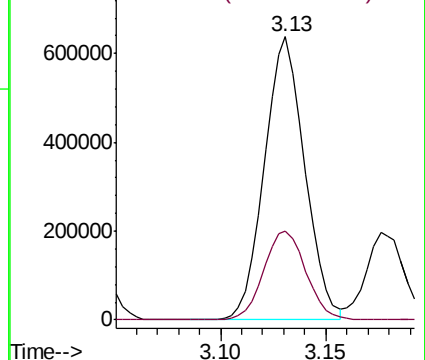
50 100

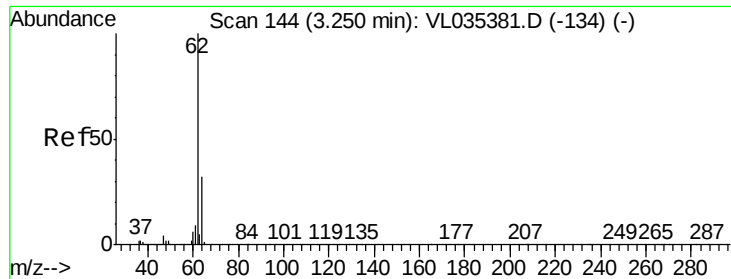
52 31.5 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 8.912 ppbv

RT: 3.25 min Scan# 143

Delta R.T. -0.00 min

Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

Instrument :

MSVOA_L

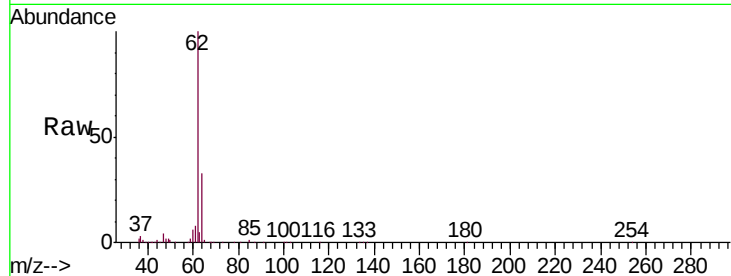
ClientSampleId :

Tgt Ion: 62 Resp: 807187

Ion Ratio Lower Upper

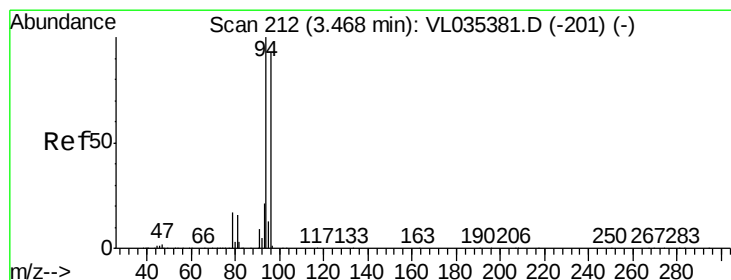
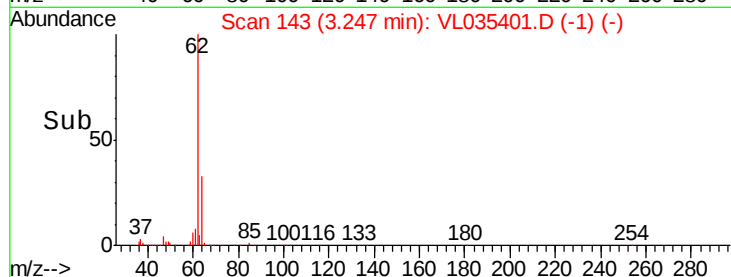
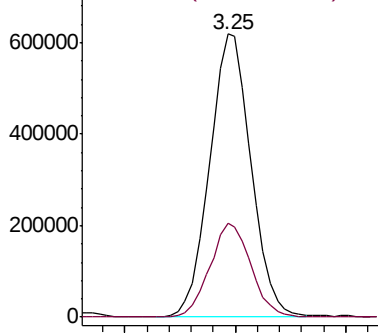
62 100

64 33.3 25.7 38.5



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 9.730 ppbv

RT: 3.47 min Scan# 211

Delta R.T. -0.00 min

Lab File: VL035401.D

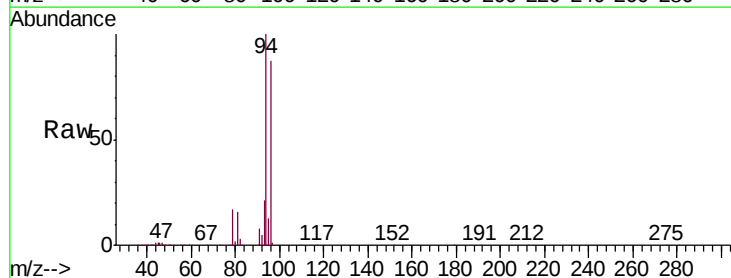
Acq: 13 Aug 2020 11:34

Tgt Ion: 94 Resp: 488694

Ion Ratio Lower Upper

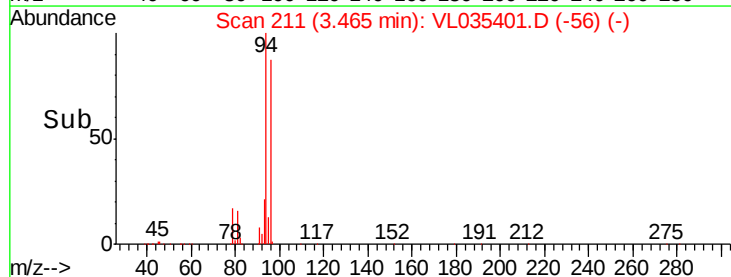
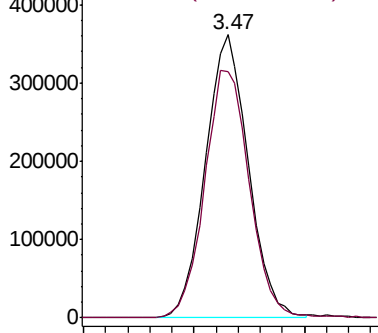
94 100

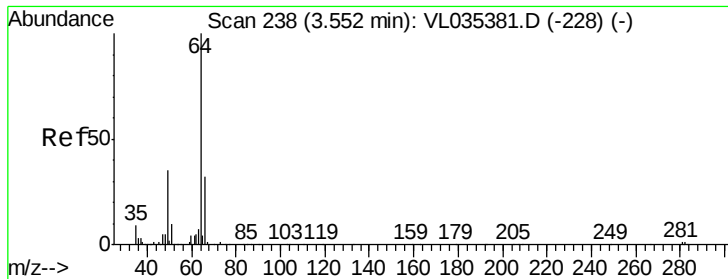
96 86.7 74.4 111.6



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 9.313 ppbv

RT: 3.55 min Scan# 237

Delta R.T. -0.00 min

Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

Instrument :

MSVOA_L

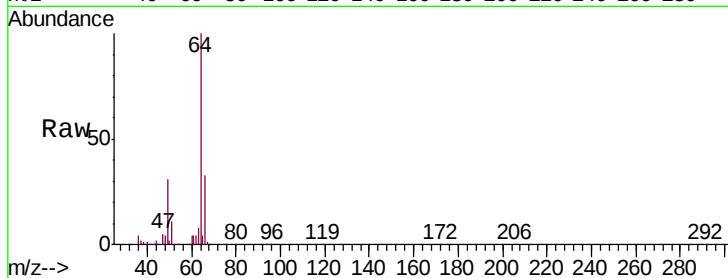
ClientSampleId :

Tgt Ion: 64 Resp: 297540

Ion Ratio Lower Upper

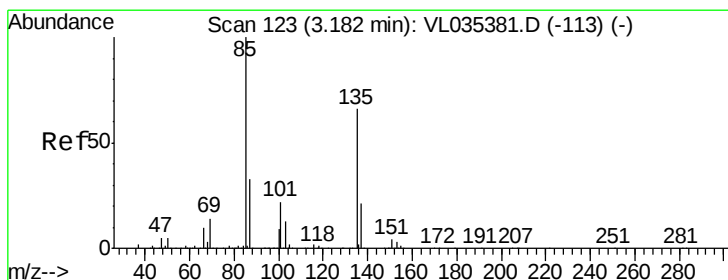
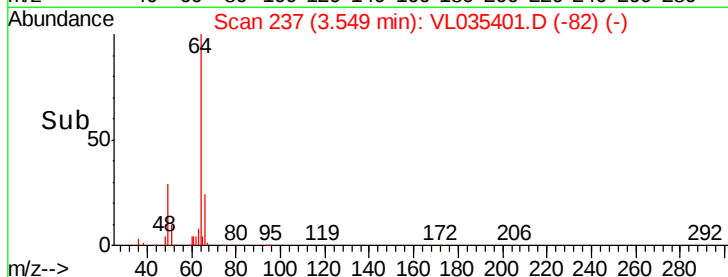
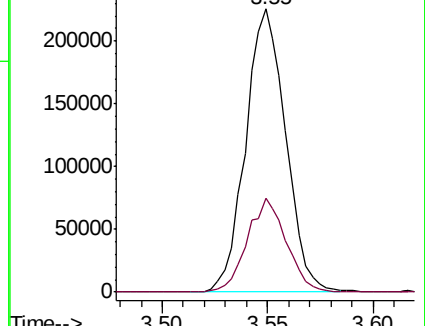
64 100

66 33.3 25.7 38.5



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 9.278 ppbv

RT: 3.18 min Scan# 122

Delta R.T. -0.00 min

Lab File: VL035401.D

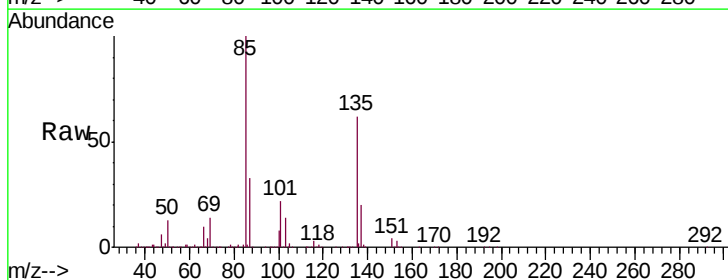
Acq: 13 Aug 2020 11:34

Tgt Ion: 85 Resp: 1829364

Ion Ratio Lower Upper

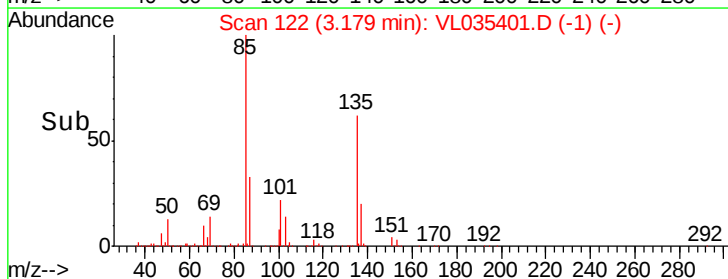
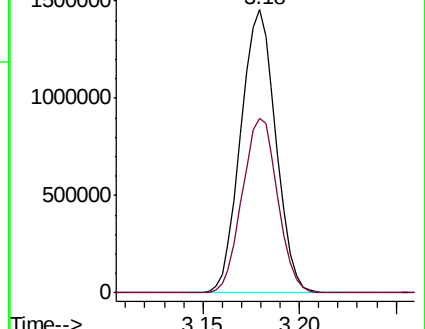
85 100

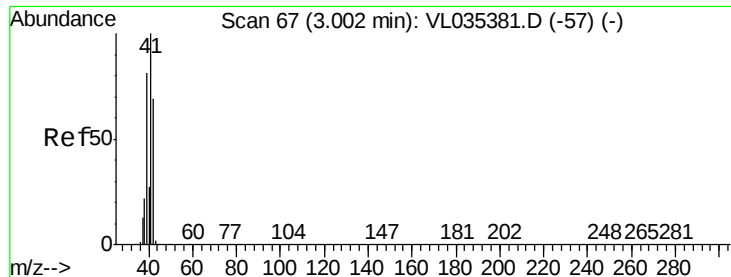
135 62.7 52.5 78.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 8.728 ppbv

RT: 3.00 min Scan# 66

Delta R.T. -0.00 min

Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

Instrument :

MSVOA_L

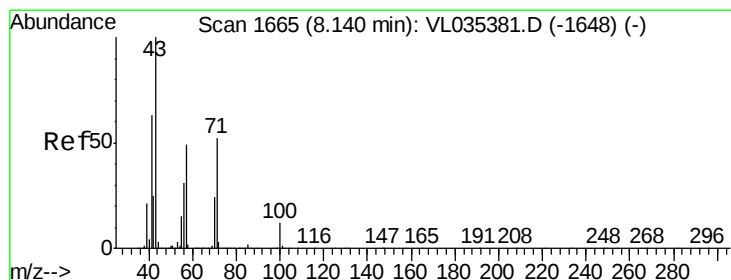
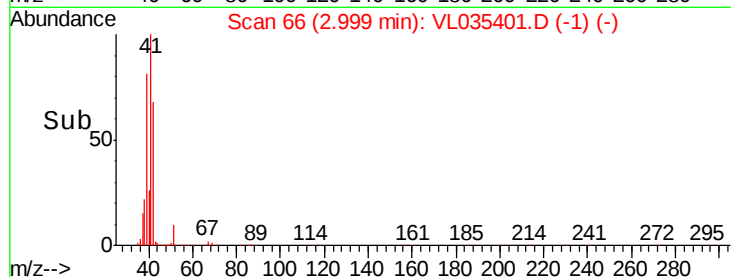
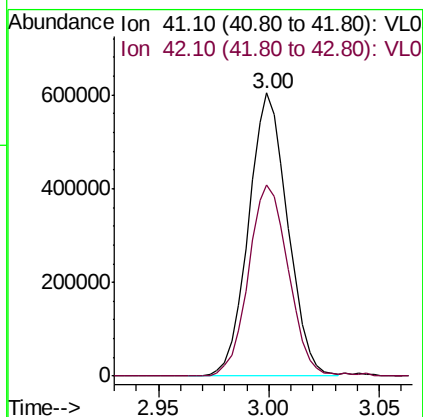
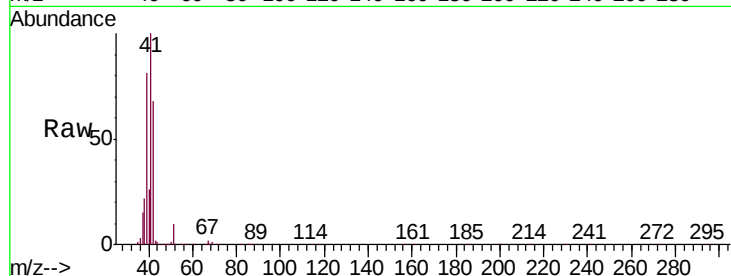
ClientSampleId :

Tgt Ion: 41 Resp: 741448

Ion Ratio Lower Upper

41 100

42 69.8 55.4 83.2



#10

Heptane

Concen: 8.840 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. -0.01 min

Lab File: VL035401.D

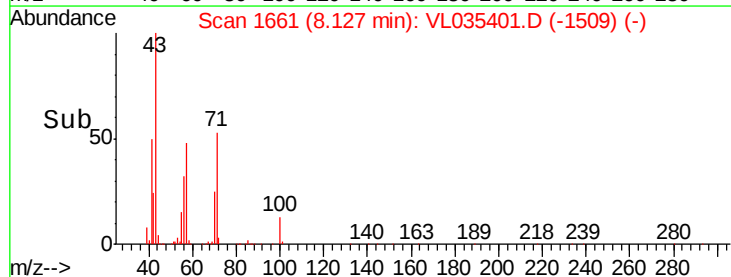
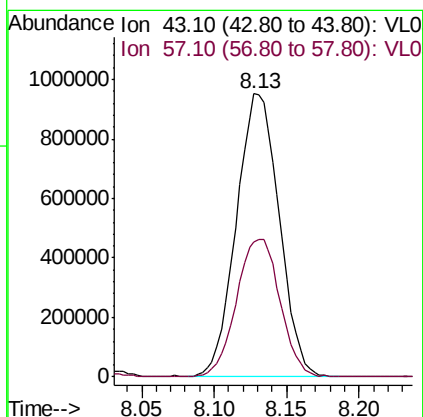
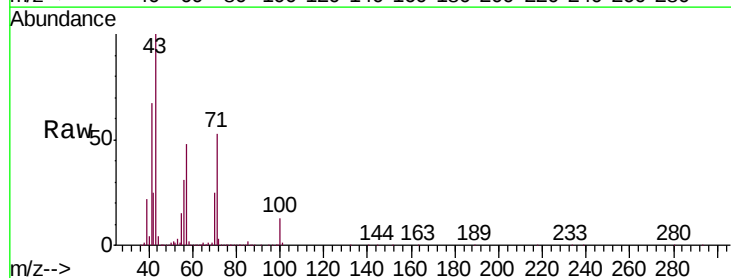
Acq: 13 Aug 2020 11:34

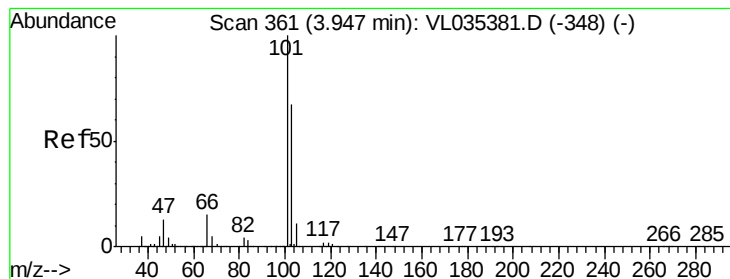
Tgt Ion: 43 Resp: 1945076

Ion Ratio Lower Upper

43 100

57 49.7 39.4 59.2





#11

Trichlorofluoromethane

Concen: 9.452 ppbv

RT: 3.94 min Scan# 360

Delta R.T. -0.00 min

Lab File: VL035401.D

Acq: 13 Aug 2020 11:34

Instrument :

MSVOA_L

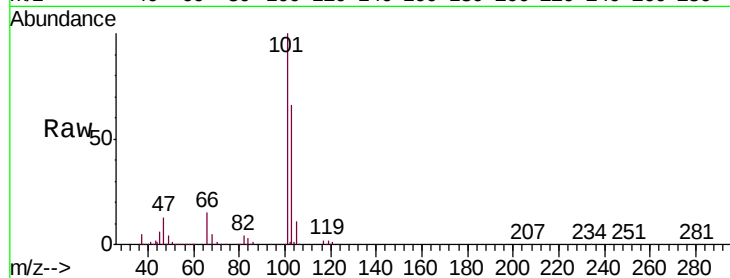
ClientSampleId :

Tgt Ion:101 Resp: 1947003

Ion Ratio Lower Upper

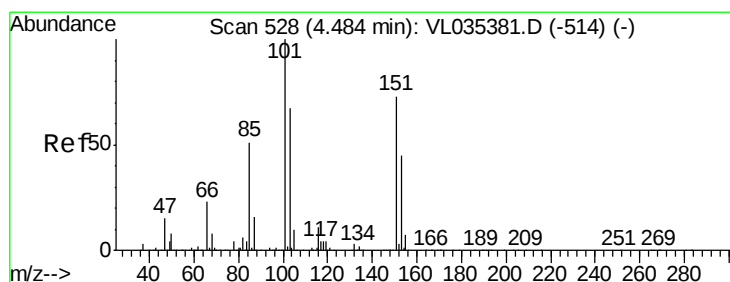
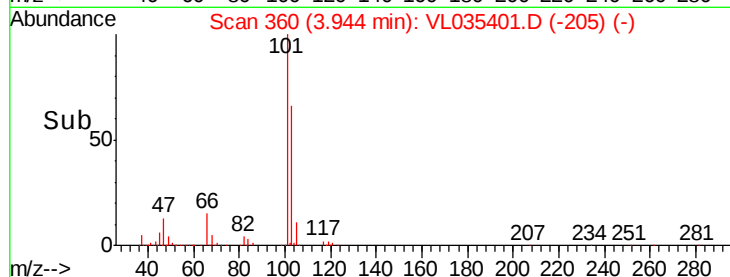
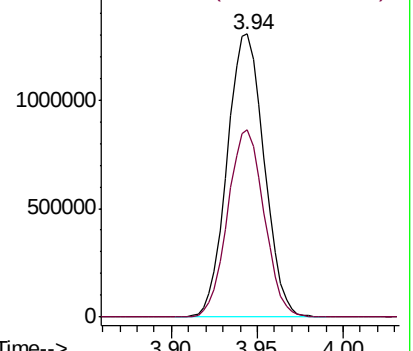
101 100

103 66.3 53.3 79.9



Abundance Ion 101.00 (100.70 to 101.70): V

1500000 Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 9.161 ppbv

RT: 4.48 min Scan# 527

Delta R.T. -0.00 min

Lab File: VL035401.D

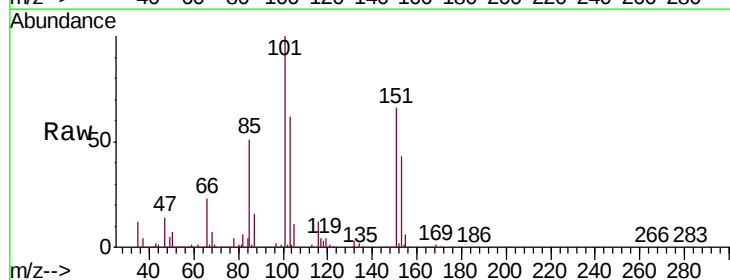
Acq: 13 Aug 2020 11:34

Tgt Ion:101 Resp: 1284237

Ion Ratio Lower Upper

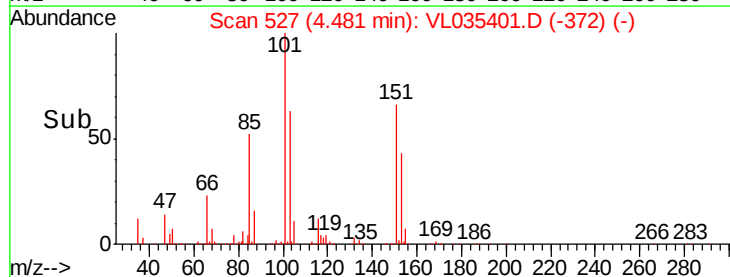
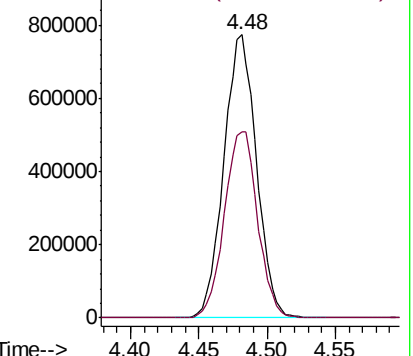
101 100

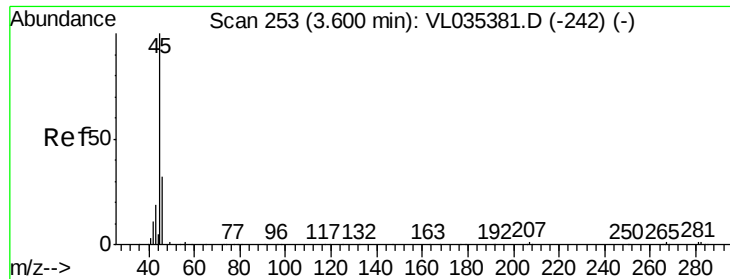
151 67.0 57.0 85.6



Abundance Ion 101.00 (100.70 to 101.70): V

800000 Ion 151.00 (150.70 to 151.70): V

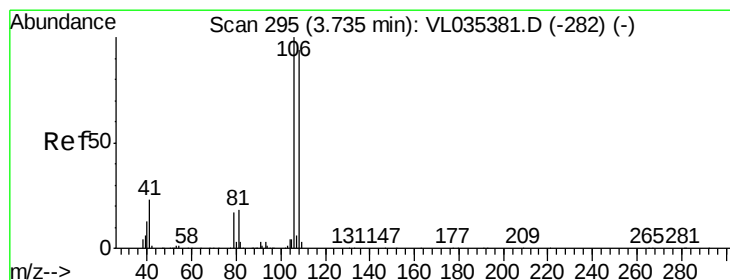
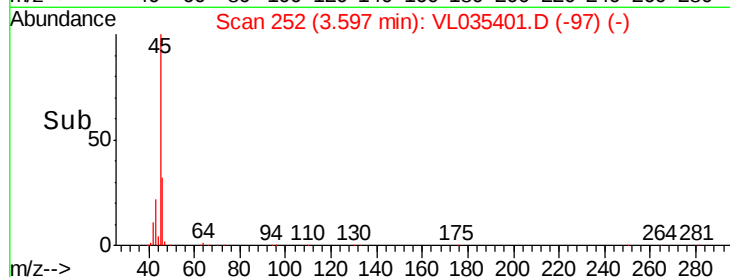
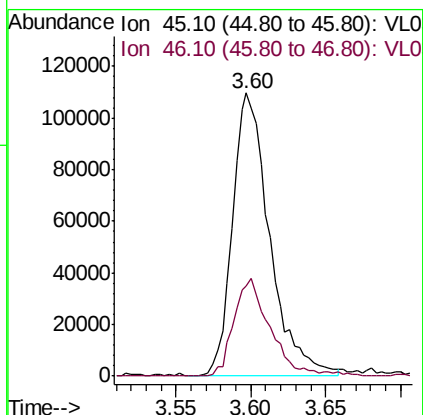
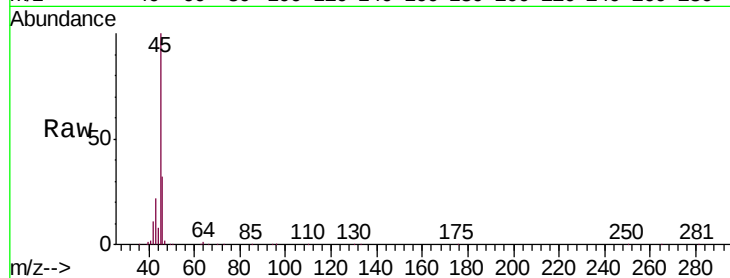




#13
Ethanol
Concen: 6.807 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.00 min
Lab File: VL035401.D
Acq: 13 Aug 2020 11:34

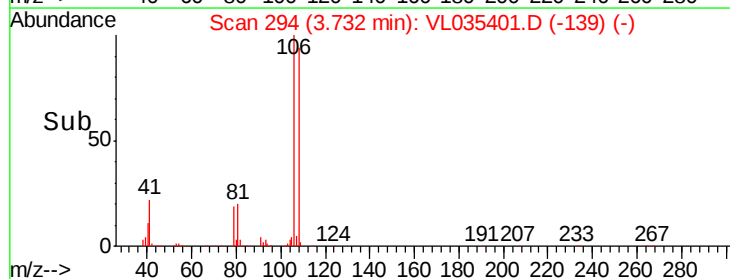
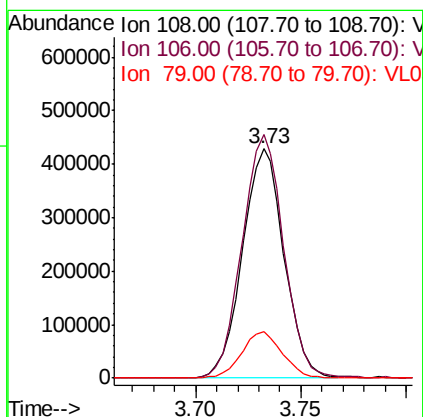
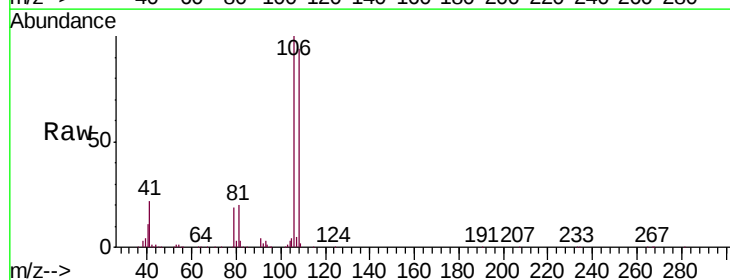
Instrument :
MSVOA_L
ClientSampleId :

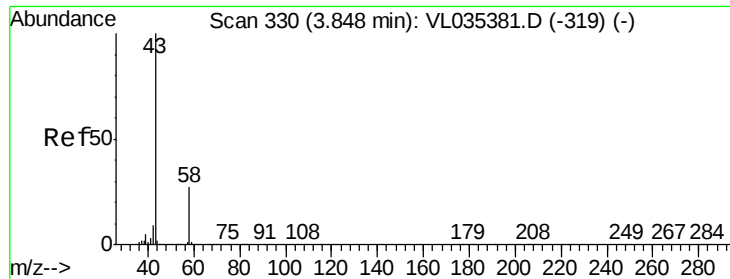
Tgt Ion: 45 Resp: 189632
Ion Ratio Lower Upper
45 100
46 34.1 14.1 56.3



#14
Bromoethene
Concen: 9.359 ppbv
RT: 3.73 min Scan# 294
Delta R.T. -0.00 min
Lab File: VL035401.D
Acq: 13 Aug 2020 11:34

Tgt Ion: 108 Resp: 586146
Ion Ratio Lower Upper
108 100
106 107.1 84.9 127.3
79 20.1 15.8 23.8

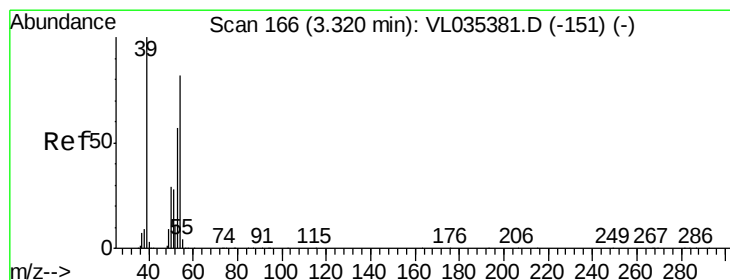
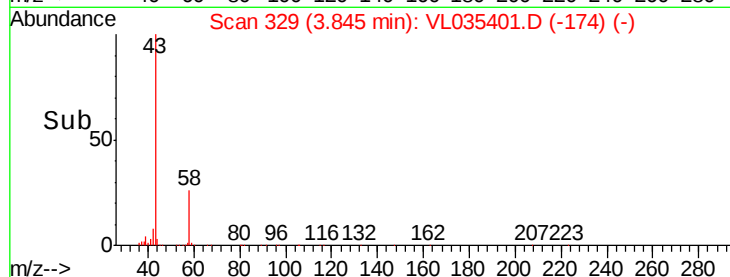
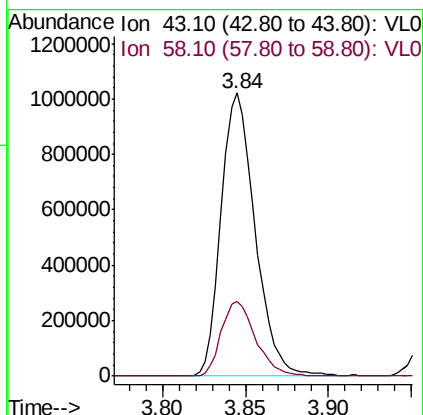
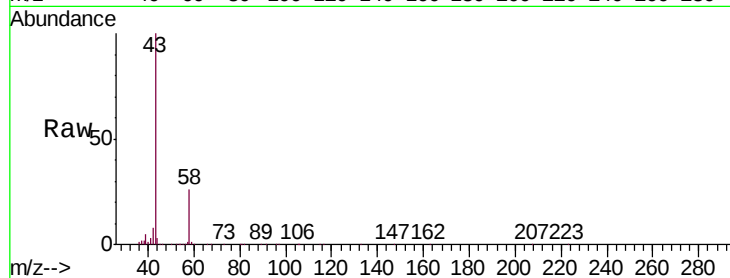




#15
Acetone
Concen: 8.178 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.00 min
Lab File: VL035401.D
Acq: 13 Aug 2020 11:34

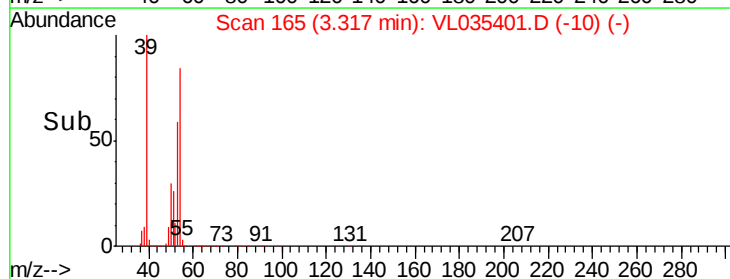
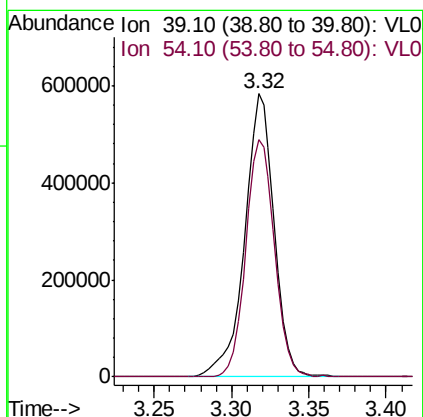
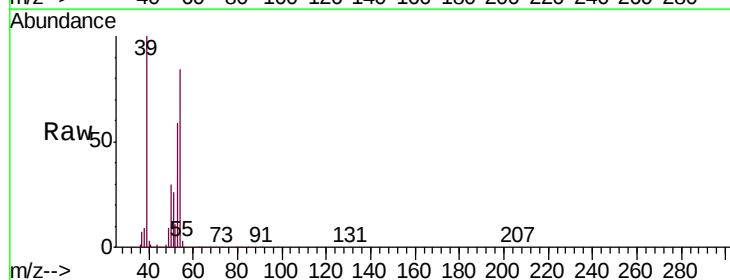
Instrument :
MSVOA_L
ClientSampleId :

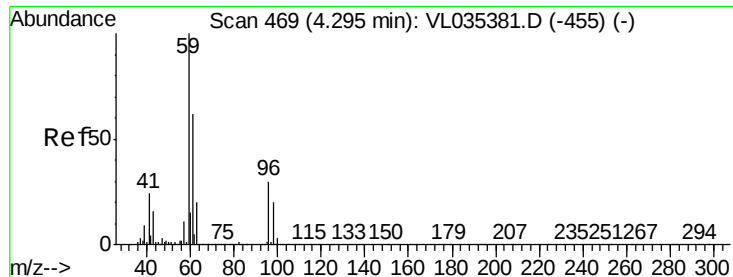
Tgt Ion: 43 Resp: 1452862
Ion Ratio Lower Upper
43 100
58 26.8 21.7 32.5



#16
1,3-Butadiene
Concen: 8.419 ppbv
RT: 3.32 min Scan# 165
Delta R.T. -0.00 min
Lab File: VL035401.D
Acq: 13 Aug 2020 11:34

Tgt Ion: 39 Resp: 767976
Ion Ratio Lower Upper
39 100
54 82.6 64.9 97.3

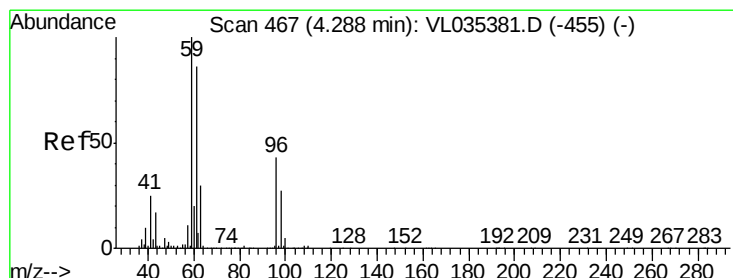
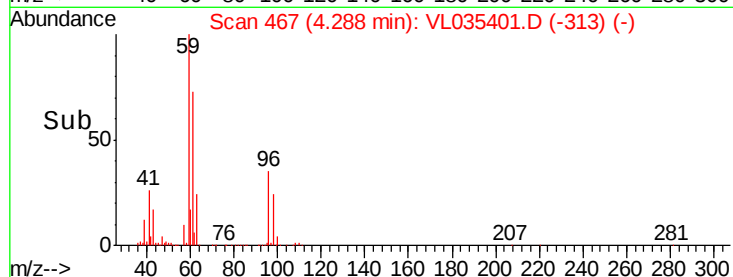
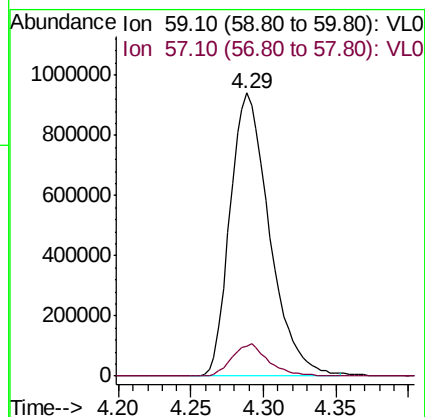
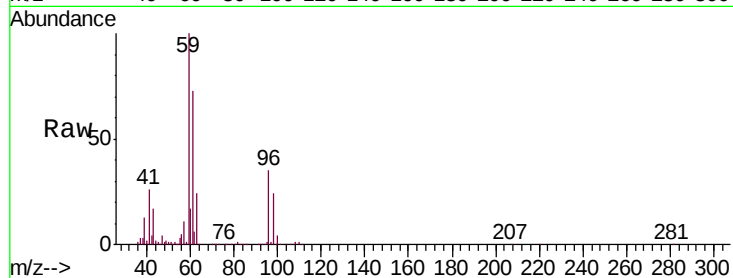




#17
 tert-Butyl alcohol
 Concen: 8.581 ppbv
 RT: 4.29 min Scan# 467
 Delta R.T. -0.01 min
 Lab File: VL035401.D
 Acq: 13 Aug 2020 11:34

Instrument :
 MSVOA_L
 ClientSampleId :

Tgt Ion: 59 Resp: 1778063
 Ion Ratio Lower Upper
 59 100
 57 10.7 8.6 13.0



#18
 1,1-Dichloroethene
 Concen: 9.181 ppbv
 RT: 4.29 min Scan# 466
 Delta R.T. -0.00 min
 Lab File: VL035401.D
 Acq: 13 Aug 2020 11:34

Tgt Ion: 96 Resp: 589631
 Ion Ratio Lower Upper
 96 100
 61 196.4 159.0 238.4
 98 60.9 50.3 75.5

