

Data File : VL032246.D
Acq On : 13 Jul 2018 13:34
Operator : SY/AP
Sample : VSTDCCC010
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Jul 13 15:17:29 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL071218AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jul 13 04:25:14 2018
QLast Update : Fri Jul 13 04:25:14 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1661148	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.38	114	3949805	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.34	117	5412401	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.67	95	3448007	8.23	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	82.30%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.13	85	1777452	7.432	ppbv	98
3) Chlorodifluoromethane	3.06	51	1812671	8.880	ppbv	100
4) Chloromethane	3.22	50	968307	8.339	ppbv	98
5) Vinyl Chloride	3.34	62	927002	8.103	ppbv	98
6) Bromomethane	3.57	94	517692	8.128	ppbv	100
7) Chloroethane	3.66	64	328558	8.339	ppbv	94
8) Dichlorotetrafluoroethane	3.27	85	1983037	7.549	ppbv	99
9) Propene	3.09	41	802519	9.222	ppbv	99
10) Heptane	8.33	43	2429290	9.830	ppbv	100
11) Trichlorofluoromethane	4.07	101	1998565	8.735	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.62	101	1261658	8.634	ppbv	100
13) Ethanol	3.71	45	194492	7.743	ppbv	97
14) Bromoethene	3.85	108	612775	8.889	ppbv	100
15) Acetone	3.96	43	1505871	7.812	ppbv	100
16) 1,3-Butadiene	3.42	39	772295	7.929	ppbv	94
17) tert-Butyl alcohol	4.42	59	757039	8.411	ppbv	99
18) 1,1-Dichloroethene	4.42	96	612603	9.008	ppbv	94
19) Isopropyl Alcohol	4.09	45	1335075	10.548	ppbv	99
20) Methylene Chloride	4.48	84	548187	8.392	ppbv	97
21) Allyl Chloride	4.55	41	1089760	9.656	ppbv	100
22) trans-1,2-Dichloroethene	5.04	96	655354	10.124	ppbv	96
23) Vinyl Acetate	5.23	43	3127160	9.755	ppbv	99
24) 1,1-Dichloroethane	5.17	63	2077430	9.229	ppbv	99
25) Ethyl Acetate	5.85	43	3612514	9.470	ppbv	100
26) Hexane	5.86	57	1651012	9.488	ppbv	99
27) Carbon Disulfide	4.69	76	1542426	9.907	ppbv	100
28) Methyl tert-Butyl Ether	5.19	73	2713267	9.907	ppbv	99
29) Chloroform	5.93	83	2463827	9.171	ppbv	97
30) Cyclohexane	7.33	84	1537946	10.016	ppbv	100
31) cis-1,2-Dichloroethene	5.72	61	1751052	10.084	ppbv	98
32) 1,1,1-Trichloroethane	6.70	97	2543527	9.758	ppbv	100
34) 2-Butanone	5.40	43	2602113	9.669	ppbv	100
35) Carbon Tetrachloride	7.22	117	2620968	9.805	ppbv	100
36) Benzene	7.09	78	3739454	9.526	ppbv	99
37) 1,2-Dichloroethane	6.49	62	2124729	9.887	ppbv	100
38) Trichloroethene	8.05	130	1215158	9.025	ppbv	99
39) 1,2-Dichloropropane	7.83	63	1511314	9.688	ppbv	98
40) 1,4-Dioxane	8.04	88	520387	9.728	ppbv #	94
41) Tetrahydrofuran	6.23	42	1517026	10.073	ppbv	99
42) Bromodichloromethane	8.01	83	2931648	9.580	ppbv	98
43) Methyl Methacrylate	8.22	69	1540985	10.159	ppbv	99

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jul 13 04:25:14 2018
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.08	57	6380467	9.451	ppbv	100
45) t-1,3-Dichloropropene	9.50	75	2301701	12.741	ppbv	97
46) cis-1,3-Dichloropropene	8.93	75	2597351	10.540	ppbv	98
47) 1,1,2-Trichloroethane	9.71	97	1383244	7.939	ppbv	96
48) Dibromochloromethane	10.55	129	2535121	9.780	ppbv	99
49) Bromoform	13.30	173	2044108	9.837	ppbv	100
50) 4-Methyl-2-Pentanone	8.96	43	4519345	9.707	ppbv	99
51) 2-Hexanone	10.36	43	3807096	9.791	ppbv	100
52) Tetrachloroethene	11.47	164	1203619	8.298	ppbv	99
53) Toluene	10.04	91	4108538	8.853	ppbv	99
54) 1,2-Dibromoethane	10.85	107	2345517	9.118	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.38	131	1764882	7.507	ppbv	100
57) Chlorobenzene	12.40	112	3277895	7.166	ppbv	98
58) Ethyl Benzene	12.96	91	6223751	7.897	ppbv	100
59) m/p-Xylene	13.25	91	5086256	7.843	ppbv #	36
60) o-Xylene	13.95	91	4783477	7.475	ppbv	100
61) Styrene	13.78	104	3955243	8.249	ppbv	99
62) Isopropylbenzene	14.92	105	6728789	7.500	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.94	83	3564309	6.847	ppbv	99
64) n-propylbenzene	15.82	120	1734154	7.635	ppbv	96
65) tert-Butylbenzene	17.00	119	5516285	7.339	ppbv	100
66) Benzyl Chloride	17.25	91	3773393	9.921	ppbv	99
67) sec-Butylbenzene	17.55	105	8246469	7.510	ppbv	100
69) p-Isopropyltoluene	17.91	119	6620641	7.743	ppbv	100
70) n-Butylbenzene	18.81	91	7405212	7.840	ppbv	100
71) 2-Chlorotoluene	15.72	91	5463965	7.738	ppbv	99
72) 4-Ethyltoluene	16.10	105	5754753	8.015	ppbv	100
73) 1,3,5-Trimethylbenzene	16.25	105	5449388	8.162	ppbv	100
74) 1,2,4-Trimethylbenzene	17.03	105	5285714	7.743	ppbv	98
75) 1,3-Dichlorobenzene	17.27	146	2894705	7.108	ppbv	100
76) 1,4-Dichlorobenzene	17.41	146	2989006	7.494	ppbv	99
77) 1,2-Dichlorobenzene	18.09	146	2923216	7.222	ppbv	99
78) Hexachloro-1,3-Butadiene	23.63	225	894749	7.093	ppbv	99
79) Naphthalene	22.53	128	5156859	11.252	ppbv	99
80) Naphthalene,2-methyl-	25.19	142	2651742	18.111	ppbv	100
81) 1,2,4-Trichlorobenzene	22.25	180	2340938	10.208	ppbv	100

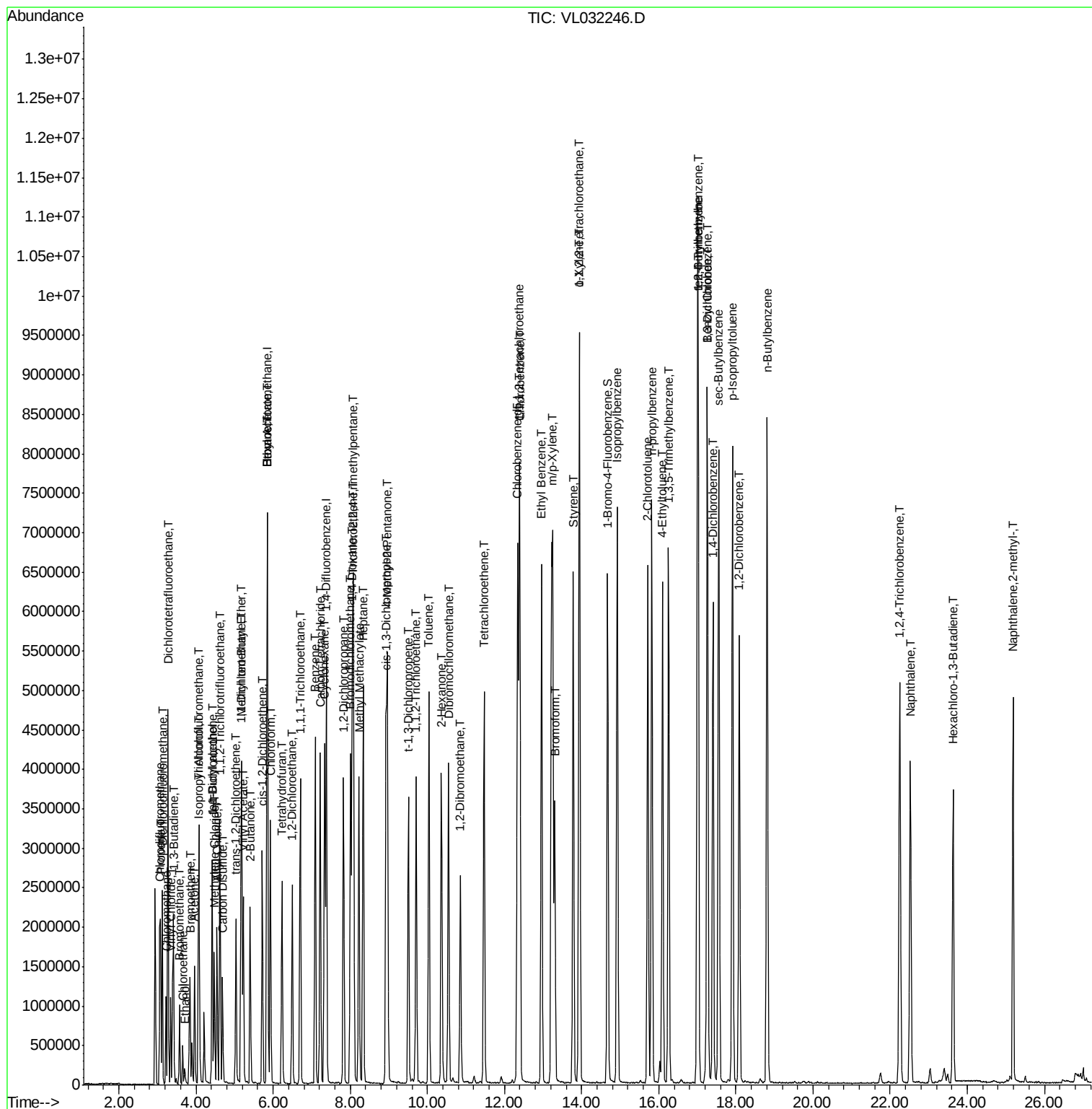
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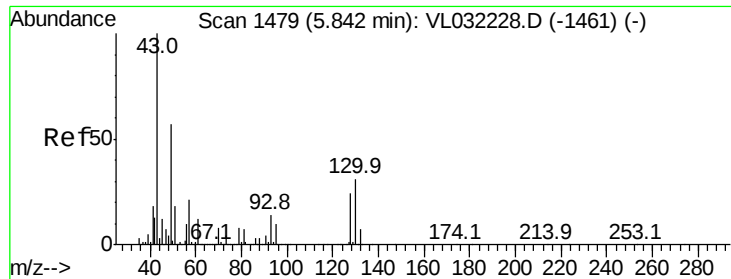
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.84 min Scan# 1479

Delta R.T. -0.00 min

Lab File: VL032246.D

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Instrument :

MSVOA_L

ClientSampleId :

VSTDCCC010

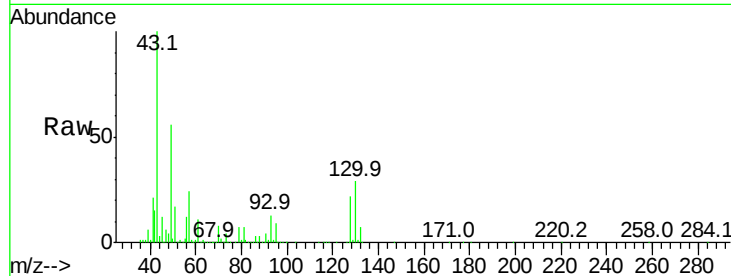
Tgt Ion: 49 Resp: 1661148

Ion Ratio Lower Upper

49 100

128 40.6 20.9 62.8

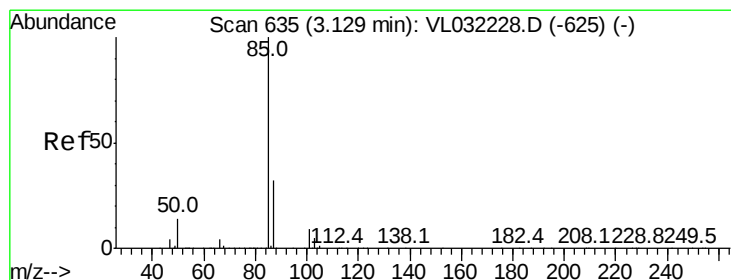
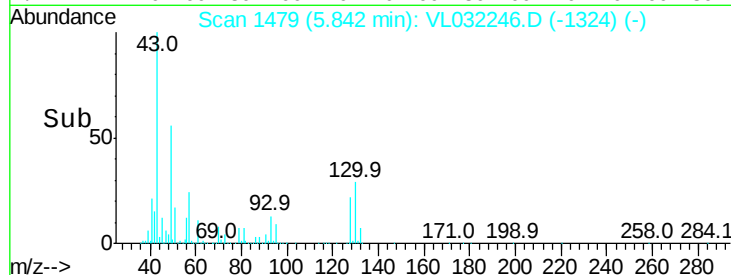
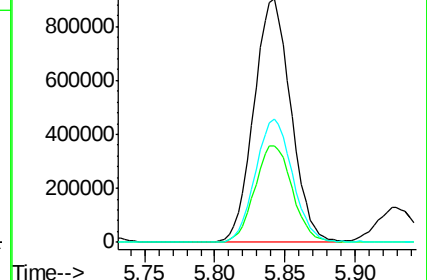
130 51.1 27.0 81.0



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 7.432 ppbv

RT: 3.13 min Scan# 635

Delta R.T. -0.00 min

Lab File: VL032246.D

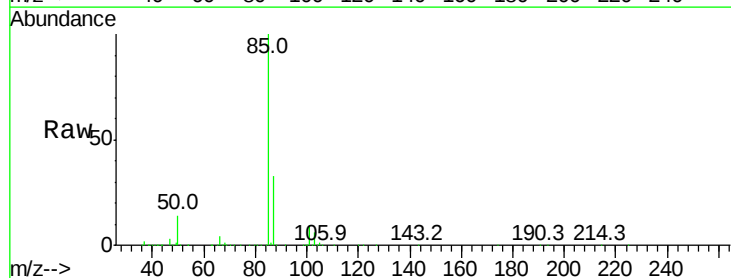
Acq: 13 Jul 2018 13:34

Tgt Ion: 85 Resp: 1777452

Ion Ratio Lower Upper

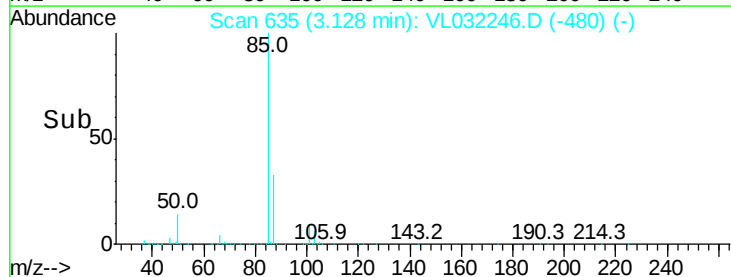
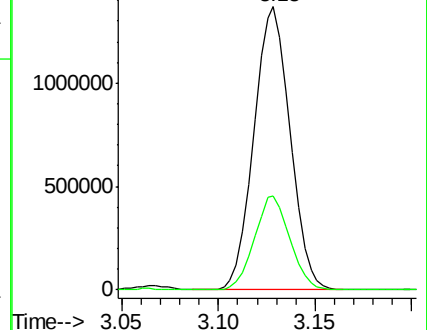
85 100

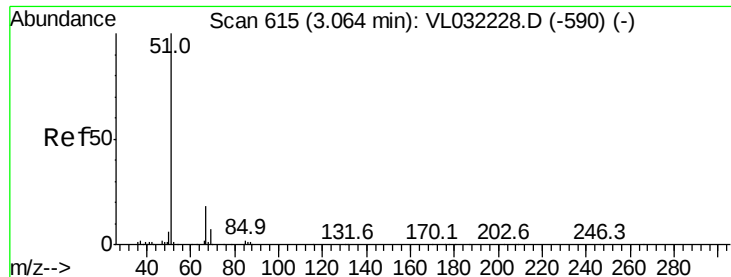
87 33.1 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 8.880 ppbv

RT: 3.06 min Scan# 615

Delta R.T. -0.00 min

Lab File: VL032246.D

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MSVOA_L

ClientSampleId :

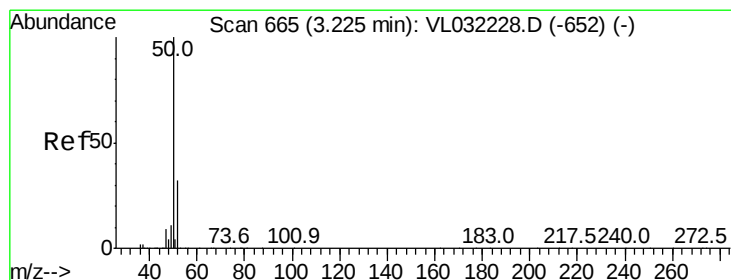
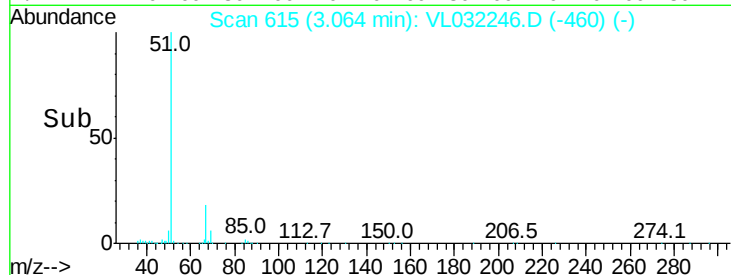
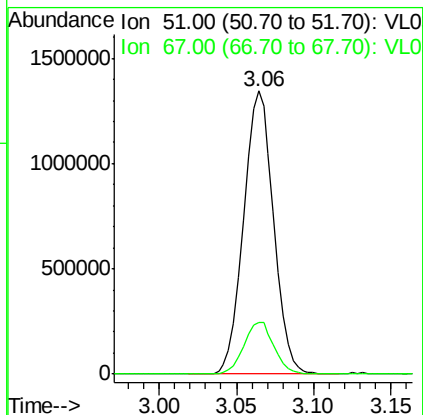
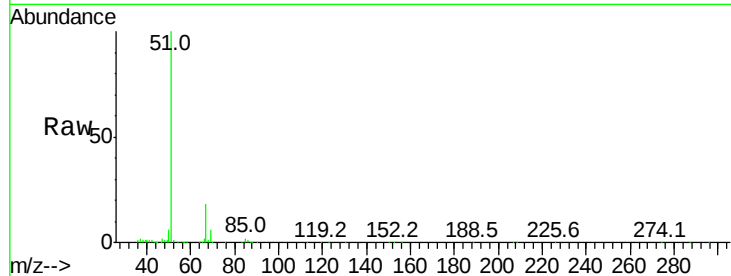
VSTDCCC010

Tgt Ion: 51 Resp: 1812671

Ion Ratio Lower Upper

51 100

67 18.3 14.6 22.0



#4

Chloromethane

Concen: 8.339 ppbv

RT: 3.22 min Scan# 664

Delta R.T. -0.00 min

Lab File: VL032246.D

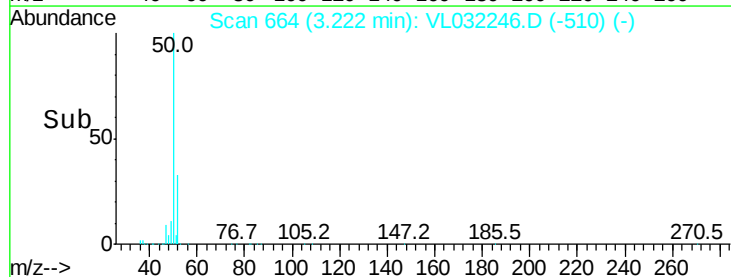
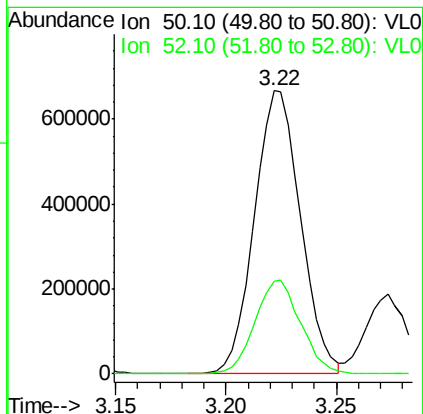
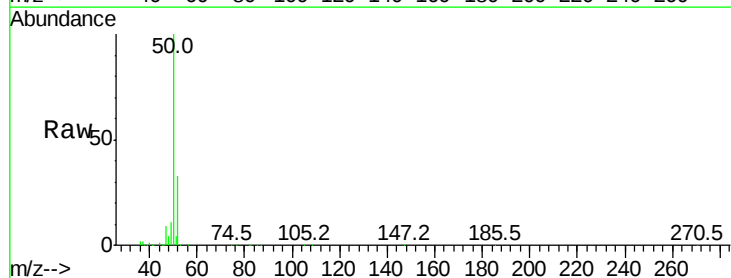
Acq: 13 Jul 2018 13:34

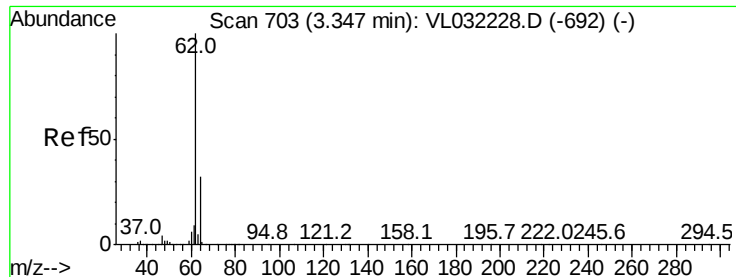
Tgt Ion: 50 Resp: 968307

Ion Ratio Lower Upper

50 100

52 33.0 25.7 38.5





#5

Vinyl Chloride

Concen: 8.103 ppbv

RT: 3.34 min Scan# 702

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Instrument :

MSVOA_L

ClientSampleId :

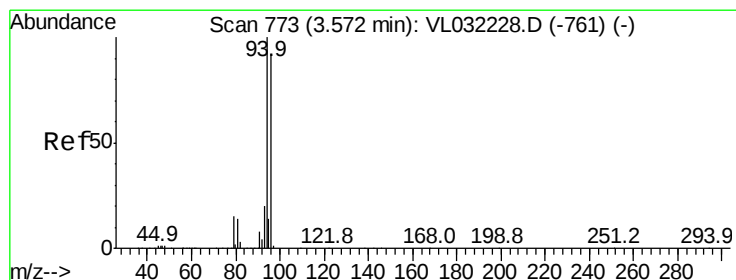
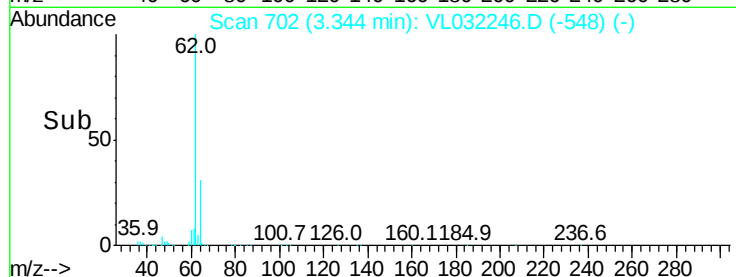
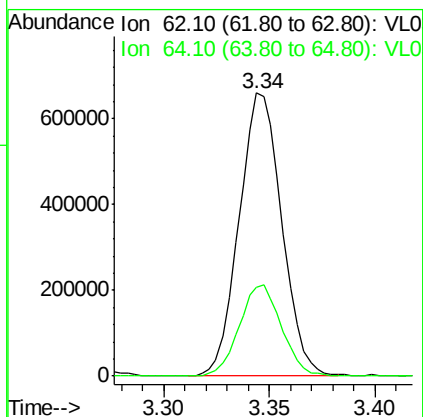
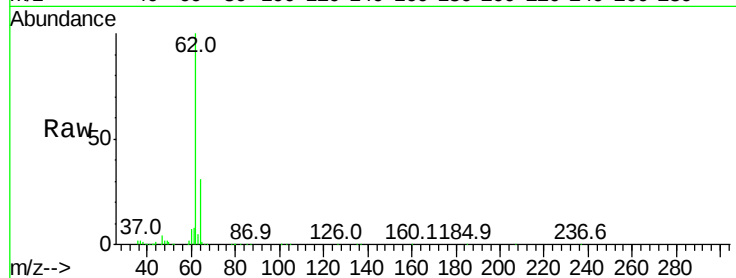
VSTDCCC010

Tgt Ion: 62 Resp: 927002

Ion Ratio Lower Upper

62 100

64 31.2 25.8 38.6



#6

Bromomethane

Concen: 8.128 ppbv

RT: 3.57 min Scan# 773

Delta R.T. -0.00 min

Lab File: VL032246.D

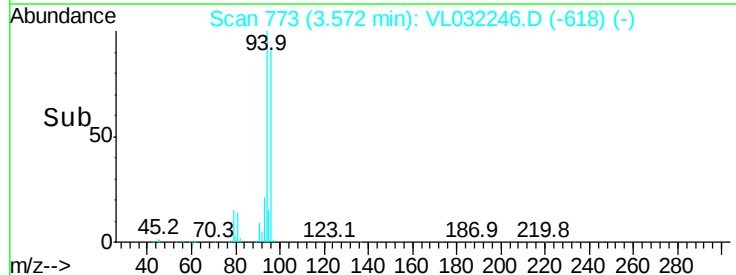
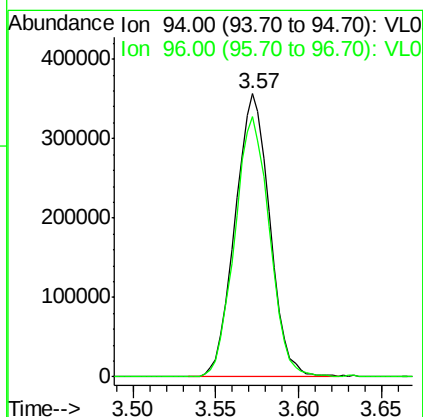
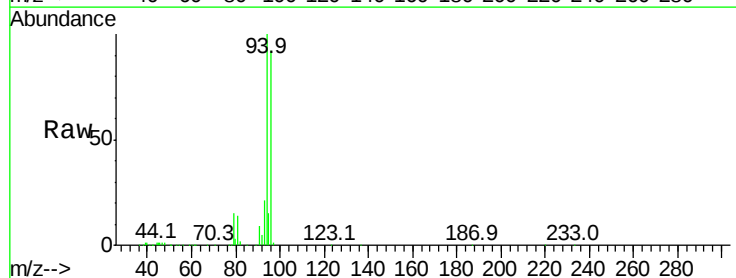
Acq: 13 Jul 2018 13:34

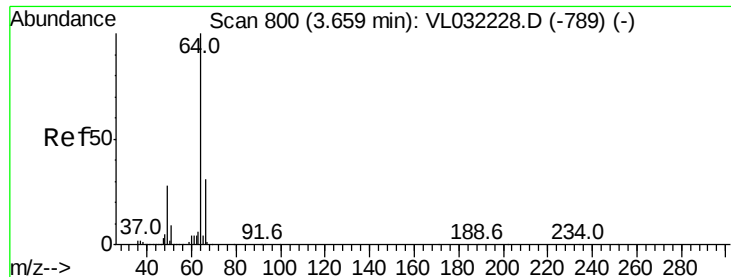
Tgt Ion: 94 Resp: 517692

Ion Ratio Lower Upper

94 100

96 92.0 73.5 110.3





#7

Chloroethane

Concen: 8.339 ppbv

RT: 3.66 min Scan# 800

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

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MSVOA_L

ClientSampleId :

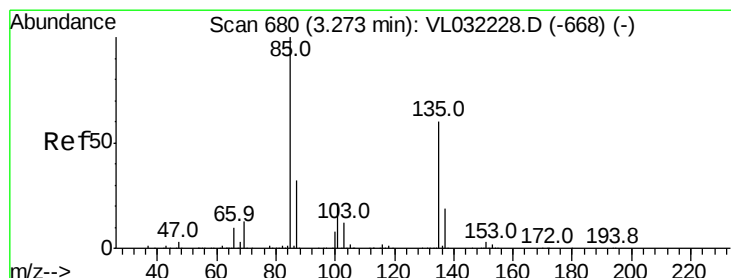
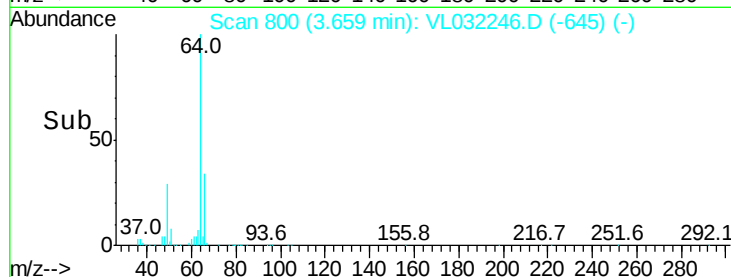
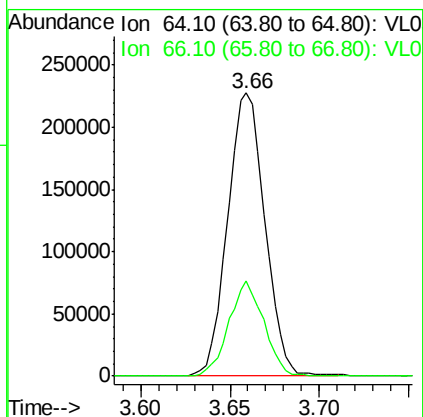
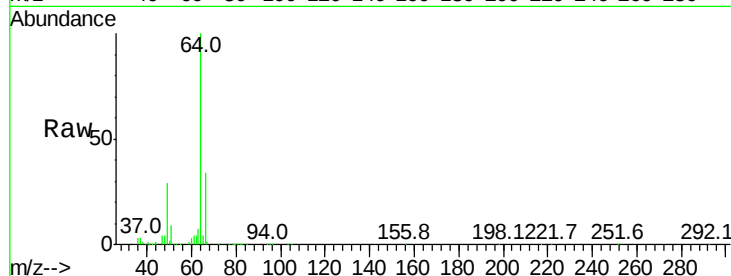
VSTDCCC010

Tgt Ion: 64 Resp: 328558

Ion Ratio Lower Upper

64 100

66 33.8 24.4 36.6



#8

Dichlorotetrafluoroethane

Concen: 7.549 ppbv

RT: 3.27 min Scan# 680

Delta R.T. -0.00 min

Lab File: VL032246.D

Acq: 13 Jul 2018 13:34

Tgt Ion: 85 Resp: 1983037

Ion Ratio Lower Upper

85 100

135 59.6 48.6 72.8

