

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL042021\
 Data File : VL036828.D
 Acq On : 20 Apr 2021 19:16
 Operator : SY/AP
 Sample : M2096-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

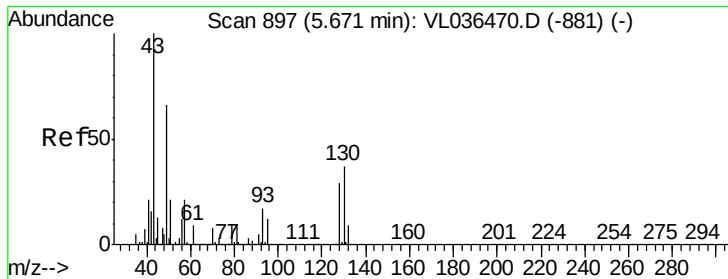
Quant Time: Apr 21 06:38:14 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 09:42:40 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1352393	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	3262331	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	2804621	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2129828	9.53	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.30%

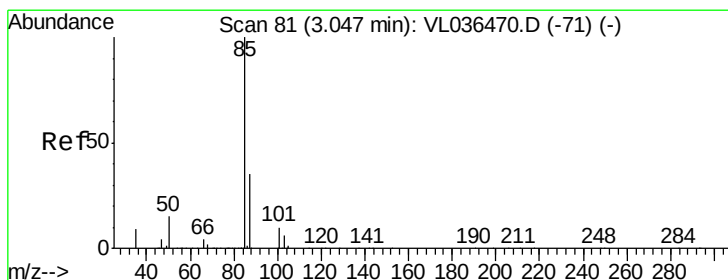
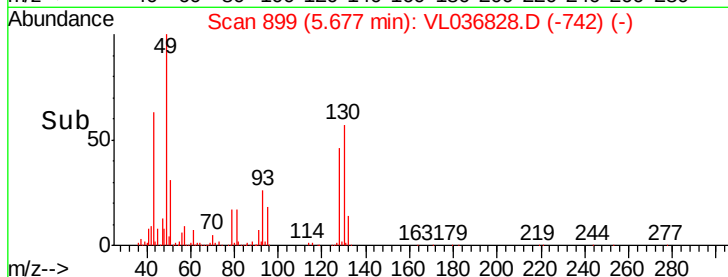
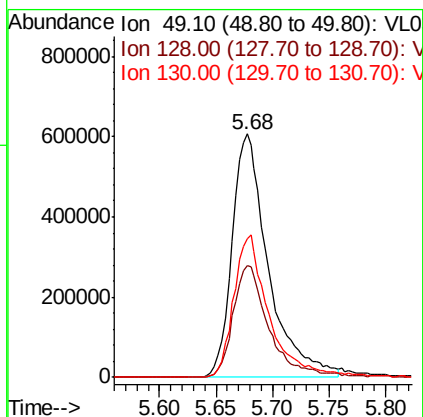
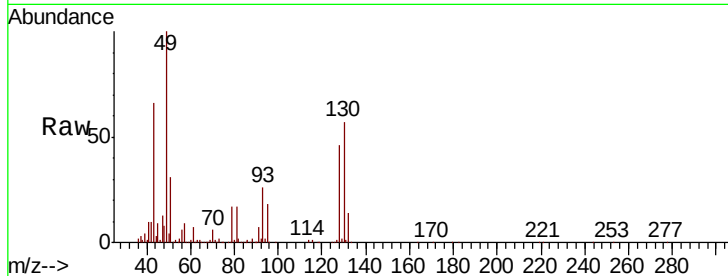
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	54894	0.249	ppbv #	84
3) Chlorodifluoromethane	2.99	51	101546	0.402	ppbv	95
4) Chloromethane	3.15	50	28225	0.316	ppbv #	85
9) Propene	3.02	41	191930	2.383	ppbv #	82
10) Heptane	8.13	43	6718	0.033	ppbv #	28
11) Trichlorofluoromethane	3.96	101	45838	0.204	ppbv	98
13) Ethanol	3.67	45	40633938	4236.039	ppbv	83
15) Acetone	3.86	43	1797560	13.505	ppbv	99
16) 1,3-Butadiene	3.31	39	41967	0.453	ppbv #	13
19) Isopropyl Alcohol	3.67	45	40633938	554.945	ppbv #	93
20) Methylene Chloride	4.35	84	347721	5.579	ppbv	94
21) Allyl Chloride	4.38	41	14986	0.141	ppbv #	1
23) Vinyl Acetate	5.07	43	162713	0.715	ppbv #	73
25) Ethyl Acetate	5.69	43	1283270	4.055	ppbv	98
26) Hexane	5.70	57	476058	3.242	ppbv #	77
31) cis-1,2-Dichloroethene	5.68	61	110681	0.779	ppbv #	27
34) 2-Butanone	5.26	43	330220	2.074	ppbv	99
36) Benzene	6.91	78	60414	0.201	ppbv	96
39) 1,2-Dichloropropane	7.19	63	860962	7.054	ppbv #	22
41) Tetrahydrofuran	6.06	42	514453	7.007	ppbv #	49
44) 2,2,4-Trimethylpentane	7.89	57	45652	0.086	ppbv #	7
50) 4-Methyl-2-Pentanone	8.77	43	13645	0.059	ppbv #	29
51) 2-Hexanone	10.31	43	4250	0.037	ppbv #	1
53) Toluene	9.82	91	339723	1.060	ppbv	98
58) Ethyl Benzene	12.73	91	33442	0.082	ppbv	97
59) m/p-Xylene	13.01	91	59695	0.168	ppbv #	32
60) o-Xylene	13.71	91	32446	0.094	ppbv #	8
72) 4-Ethyltoluene	15.86	105	13045	0.035	ppbv #	32
74) 1,2,4-Trimethylbenzene	16.78	105	84242	0.224	ppbv #	63

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



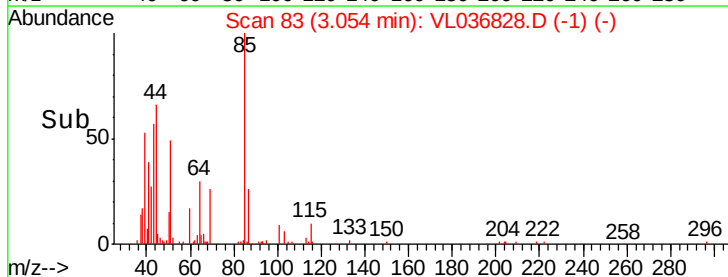
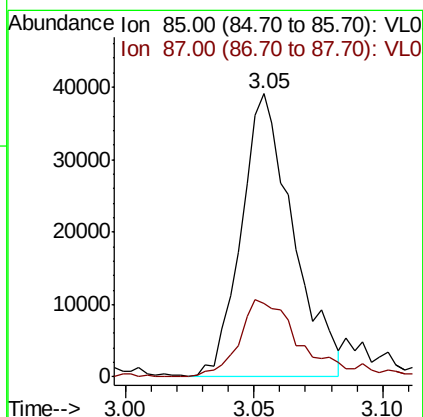
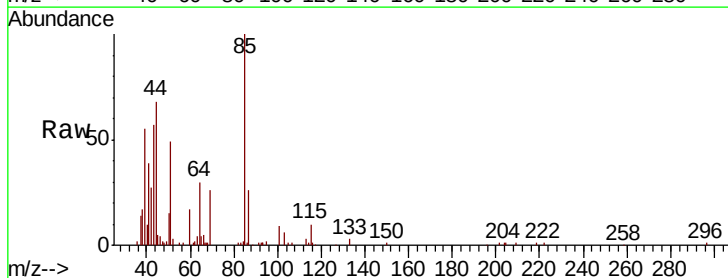
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.68
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 20 Apr 2021 19:16

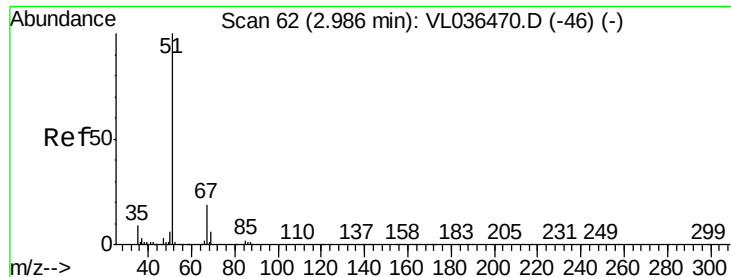
Tot Ion: 49 Resp: 1352393
 Ion Ratio Lower Upper
 49 100
 128 46.3 23.5 70.6
 130 58.1 29.1 87.4



#2
 Dichlorodifluoromethane
 Concen: 0.249 ppbv
 RT: 3.05 min Scan# 83
 Delta R.T. 0.01 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

Tgt Ion: 85 Resp: 54894
 Ion Ratio Lower Upper
 85 100
 87 25.8 27.8 41.8#





#3

Chlorodifluoromethane

Concen: 0.402 ppbv

RT: 2.99 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

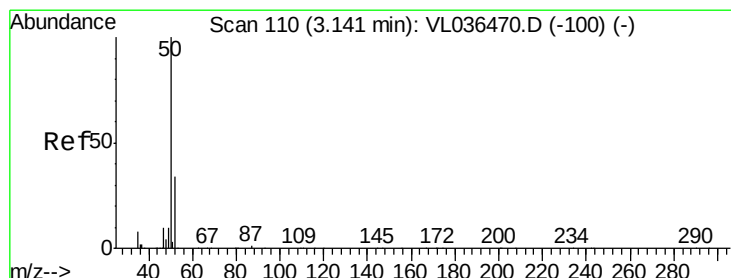
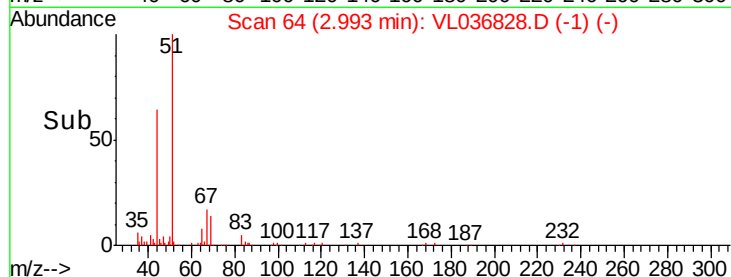
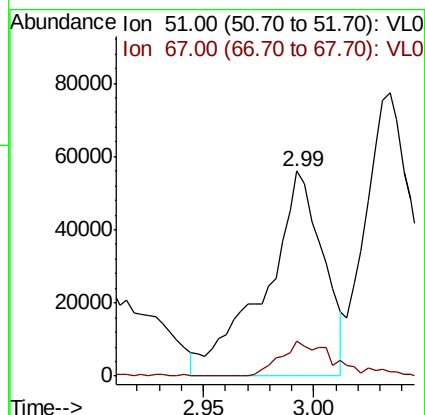
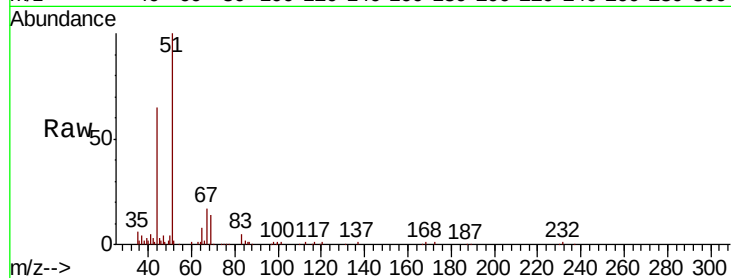
Acq: 20 Apr 2021 19:16

Tot Ion: 51 Resp: 101546

Ion Ratio Lower Upper

51 100

67 16.2 14.7 22.1



#4

Chloromethane

Concen: 0.316 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.01 min

Lab File: VL036828.D

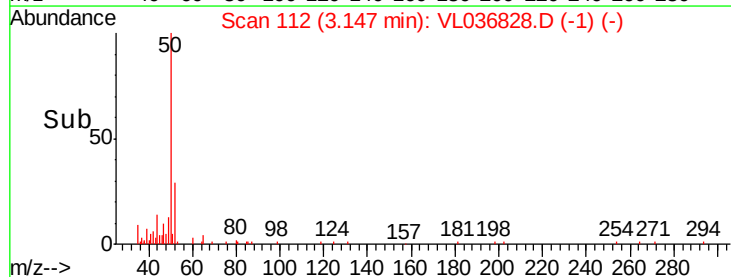
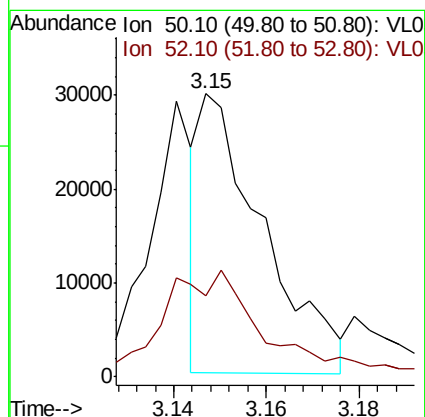
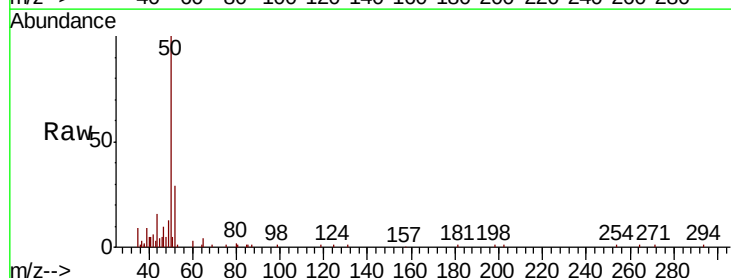
Acq: 20 Apr 2021 19:16

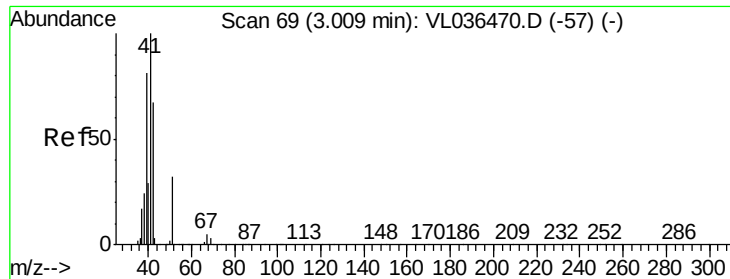
Tgt Ion: 50 Resp: 28225

Ion Ratio Lower Upper

50 100

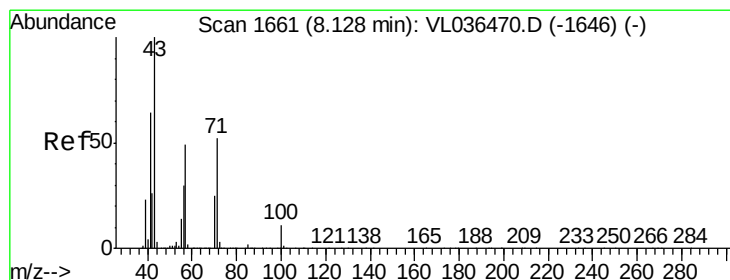
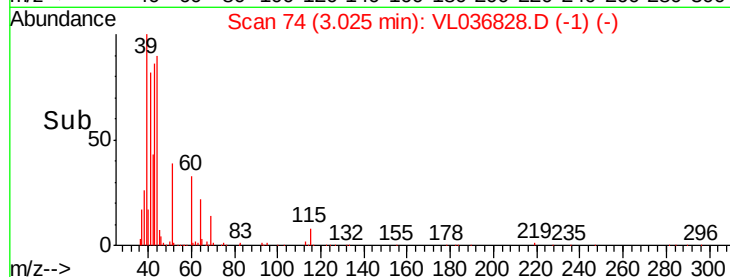
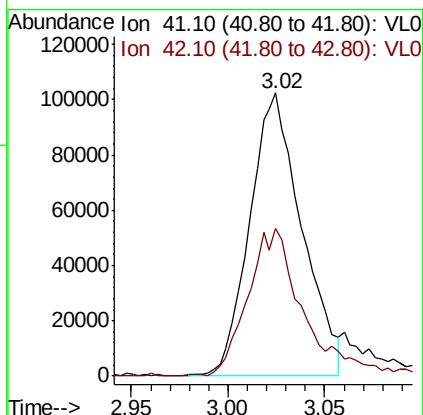
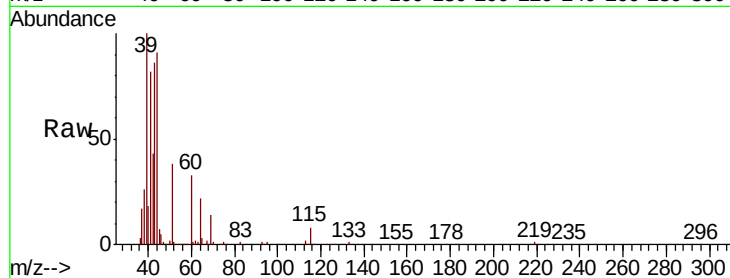
52 25.1 27.0 40.6#





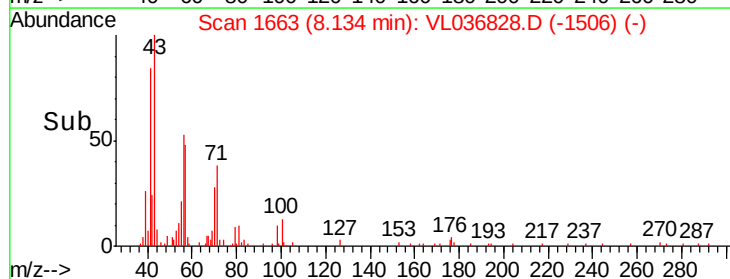
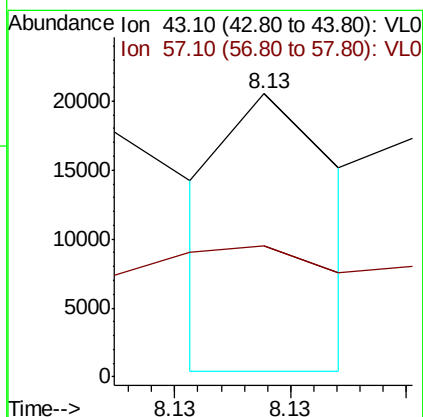
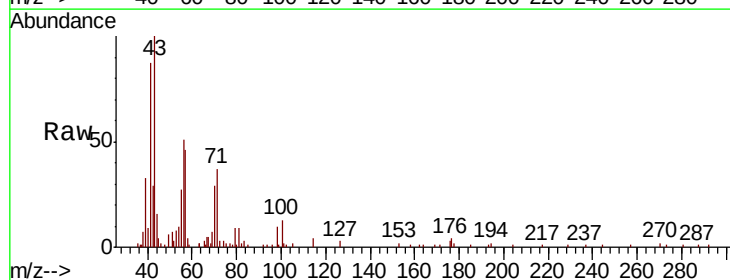
#9
 Propene
 Concen: 2.383 ppbv
 RT: 3.02
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 20 Apr 2021 19:16

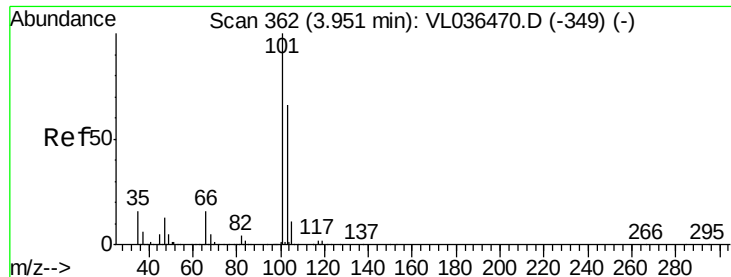
Tot Ion: 41 Resp: 191930
 Ion Ratio Lower Upper
 41 100
 42 56.1 57.0 85.4#



#10
 Heptane
 Concen: 0.033 ppbv
 RT: 8.13 min Scan# 1663
 Delta R.T. 0.01 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

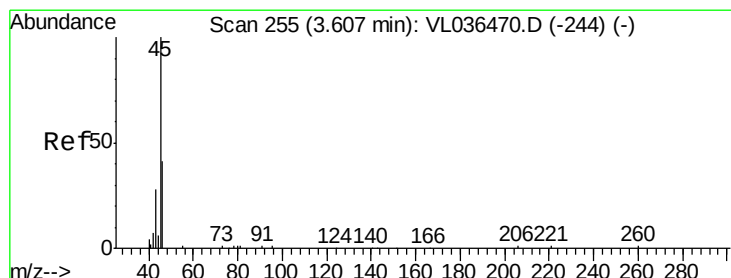
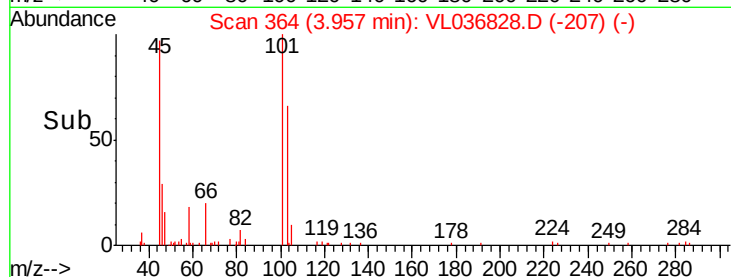
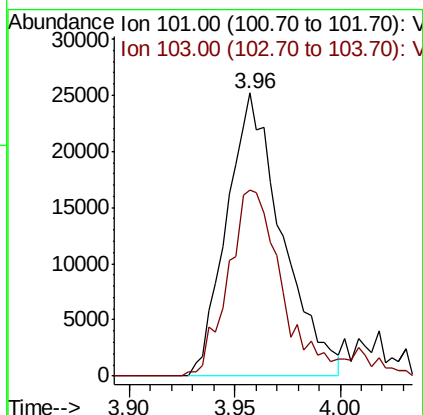
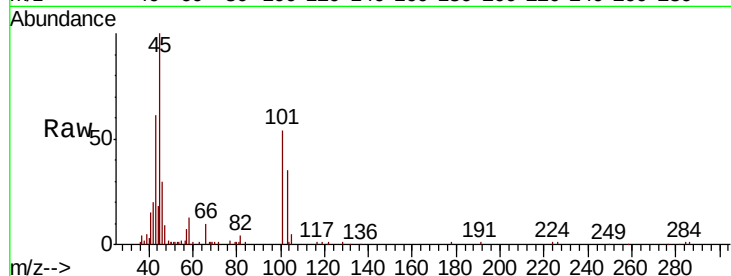
Tgt Ion: 43 Resp: 6718
 Ion Ratio Lower Upper
 43 100
 57 0.0 39.0 58.6#





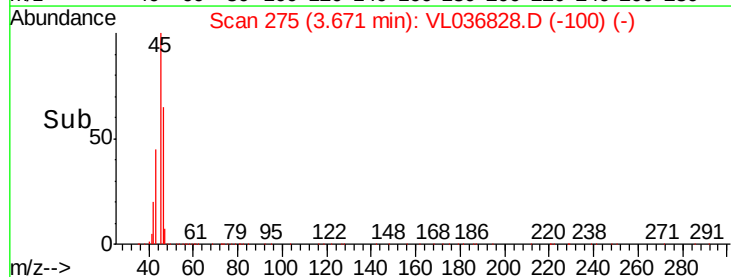
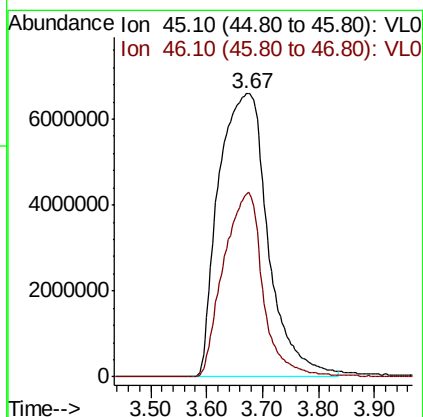
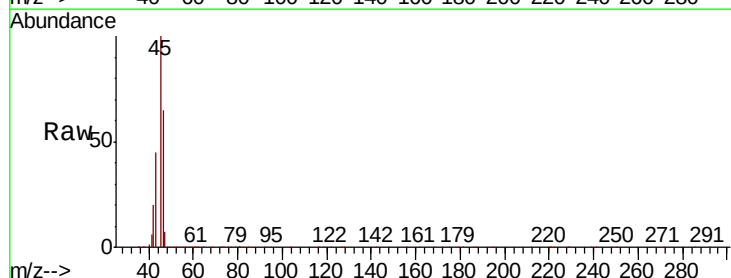
#11
 Trichlorofluoromethane
 Concen: 0.204 ppbv
 RT: 3.96 Instrument :
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 20 Apr 2021 19:16

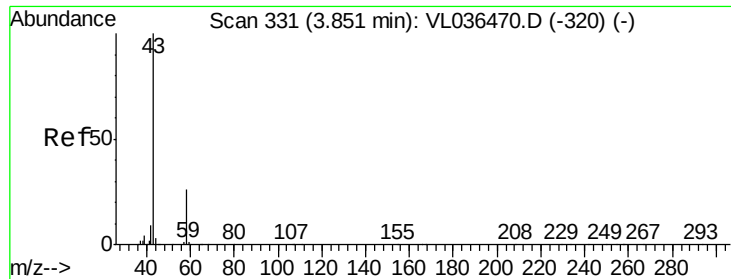
Tot Ion:101 Resp: 45838
 Ion Ratio Lower Upper
 101 100
 103 64.3 52.5 78.7



#13
 Ethanol
 Concen: 4236.039 ppbv
 RT: 3.67 min Scan# 275
 Delta R.T. 0.06 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

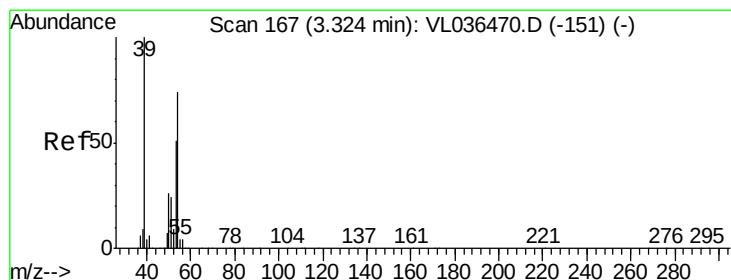
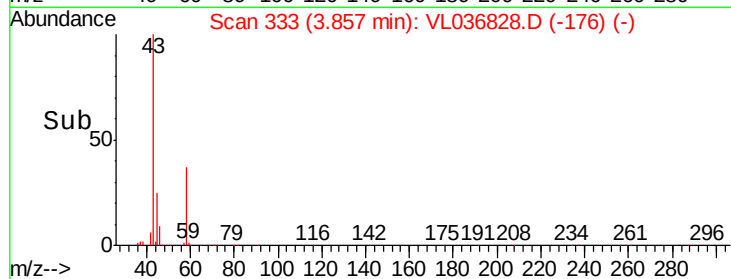
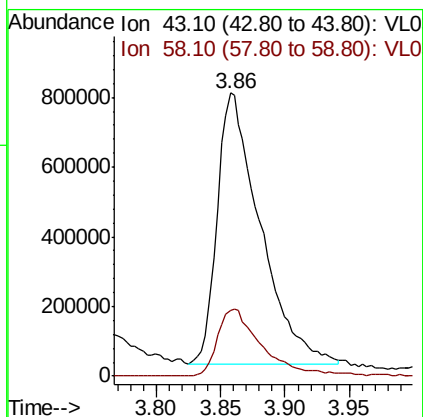
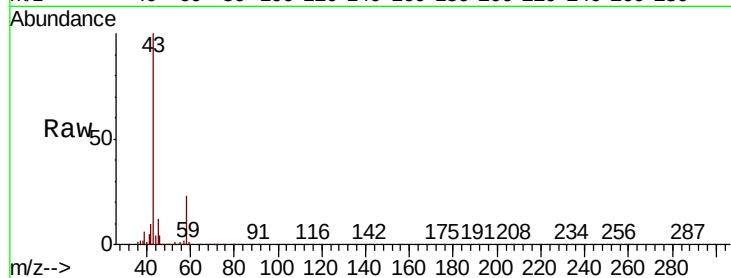
Tgt Ion: 45 Resp:40633938
 Ion Ratio Lower Upper
 45 100
 46 52.1 16.6 66.2





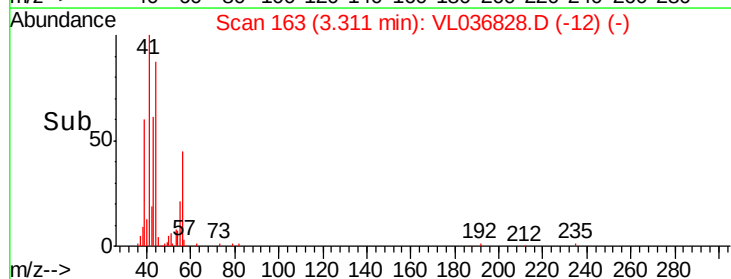
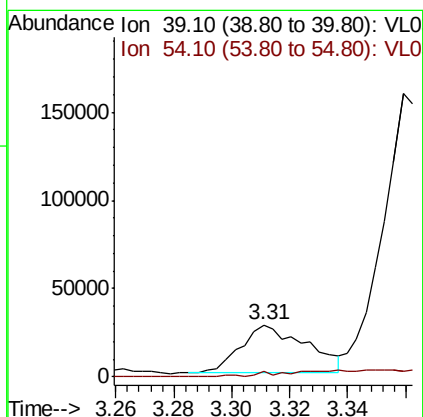
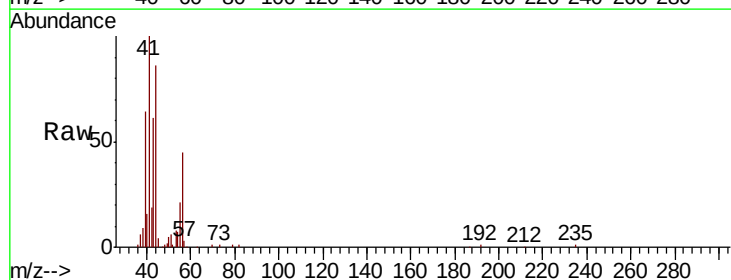
#15
Acetone
Concen: 13.505 ppbv
RT: 3.86
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 20 Apr 2021 19:16

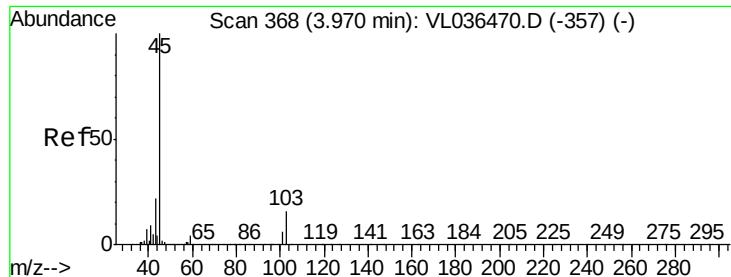
Tot Ion: 43 Resp: 1797560
Ion Ratio Lower Upper
43 100
58 26.2 21.2 31.8



#16
1,3-Butadiene
Concen: 0.453 ppbv
RT: 3.31 min Scan# 163
Delta R.T. -0.01 min
Lab File: VL036828.D
Acq: 20 Apr 2021 19:16

Tgt Ion: 39 Resp: 41967
Ion Ratio Lower Upper
39 100
54 0.0 58.8 88.2#





#19

Isopropyl Alcohol

Concen: 554.945 ppbv

RT: 3.67

Delta R.T. MSVOA_L

Lab File:

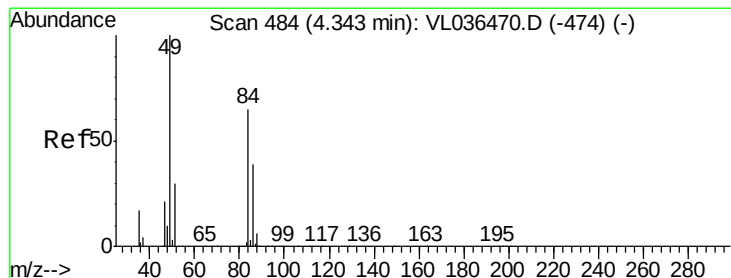
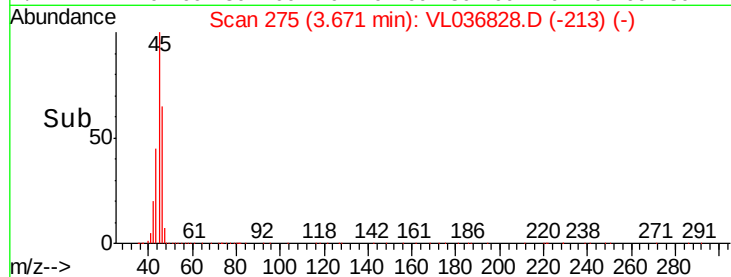
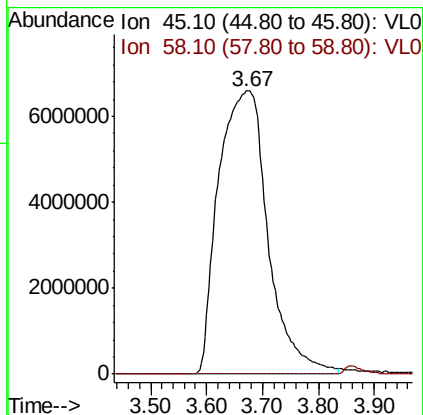
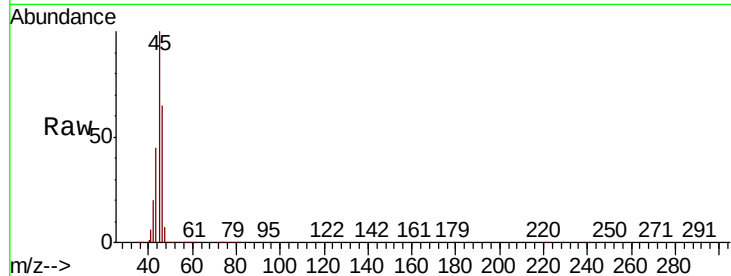
Acq: 20 Apr 2021 19:16

Tot Ion: 45 Resp: 40633938

Ion Ratio Lower Upper

45 100

58 1.2 2.9 4.3#



#20

Methylene Chloride

Concen: 5.579 ppbv

RT: 4.35 min Scan# 487

Delta R.T. 0.01 min

Lab File: VL036828.D

Acq: 20 Apr 2021 19:16

Tgt Ion: 84 Resp: 347721

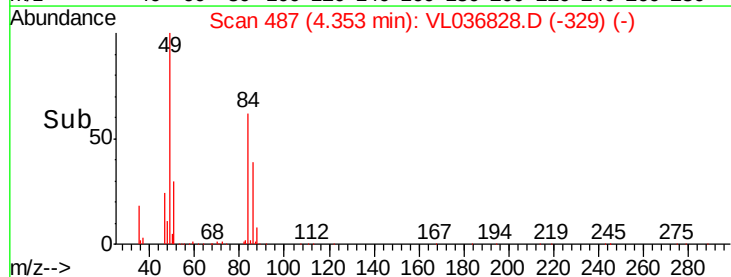
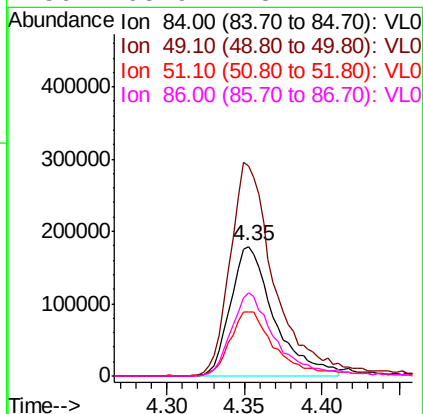
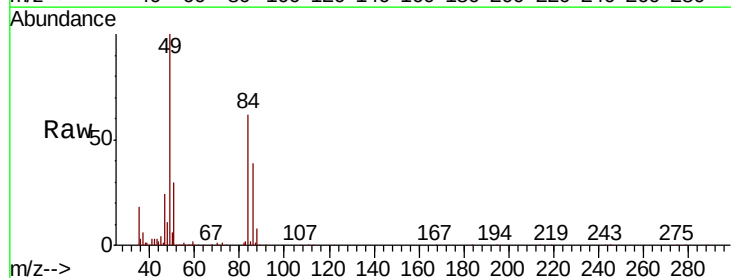
Ion Ratio Lower Upper

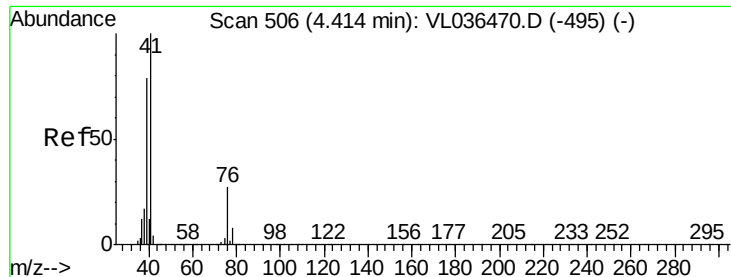
84 100

49 161.9 122.9 184.3

51 48.9 36.9 55.3

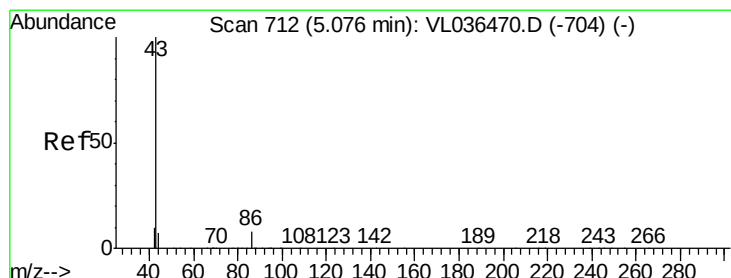
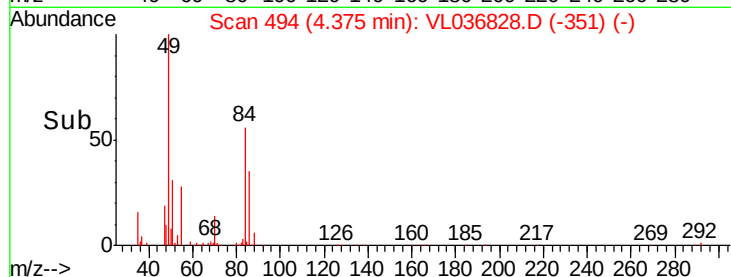
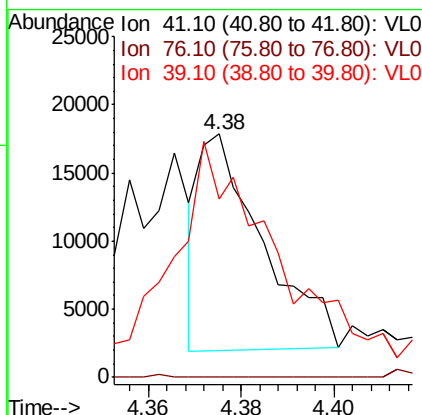
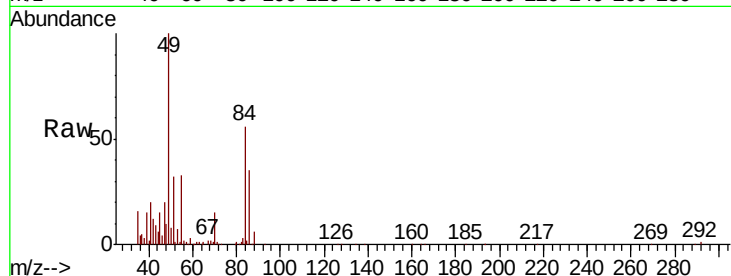
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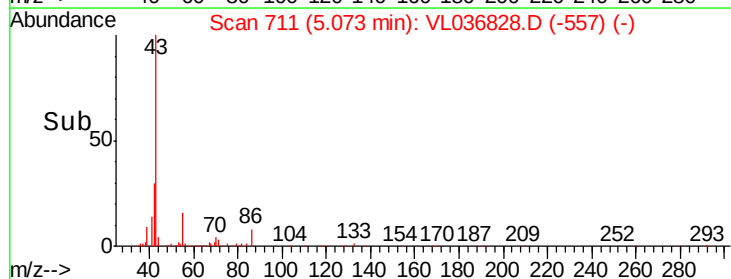
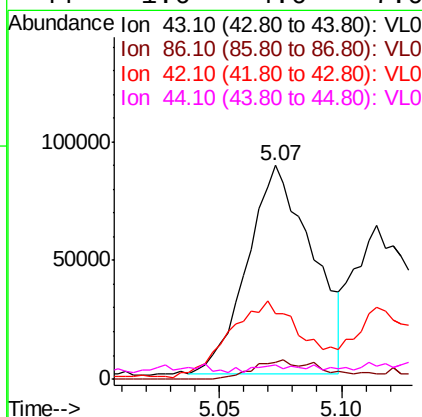
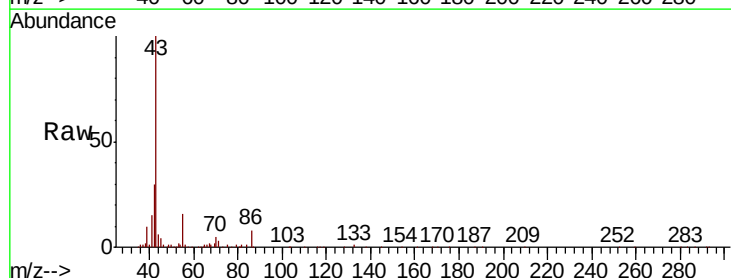
#21
 Allvl Chloride
 Concen: 0.141 ppbv
 RT: 4.38
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 20 Apr 2021 19:16

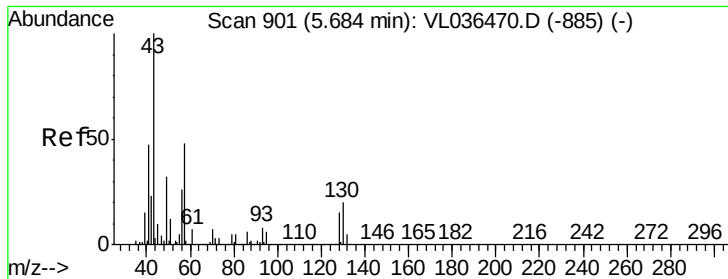
Tot Ion	Ratio	Lower	Upper
41	100		
76	0.0	22.9	34.3#
39	238.2	67.3	100.9#



#23
 Vinyl Acetate
 Concen: 0.715 ppbv
 RT: 5.07 min Scan# 711
 Delta R.T. -0.00 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

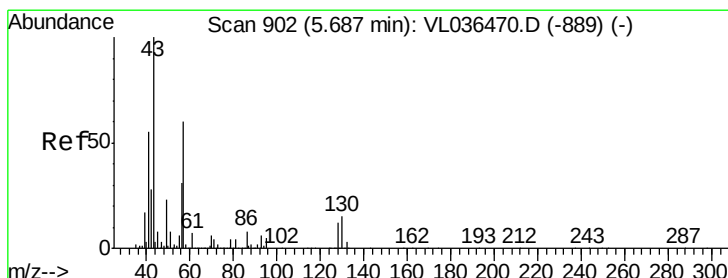
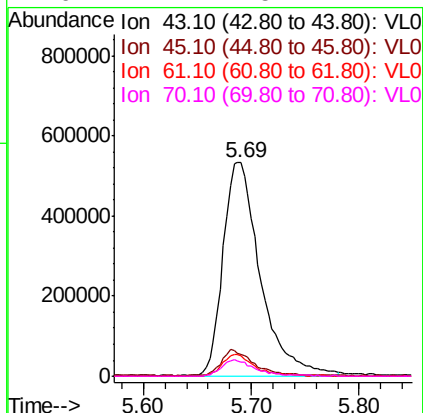
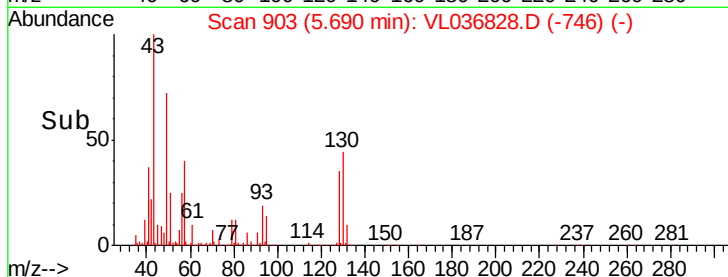
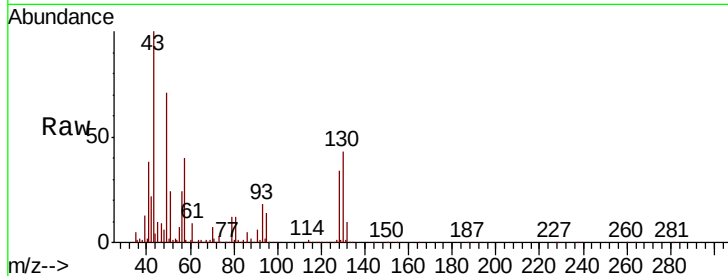
Tgt Ion	Ratio	Lower	Upper
43	100		
86	8.2	5.4	8.0#
42	28.9	8.5	12.7#
44	1.6	4.6	7.0#





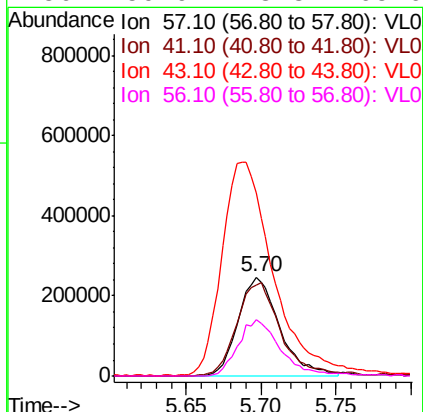
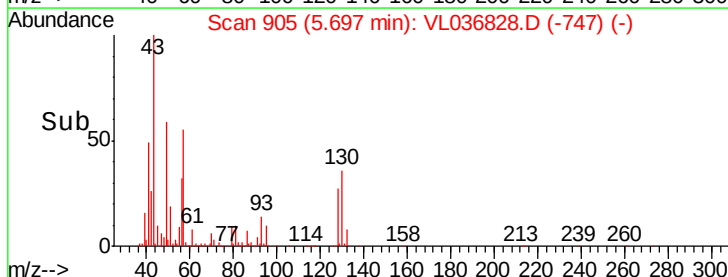
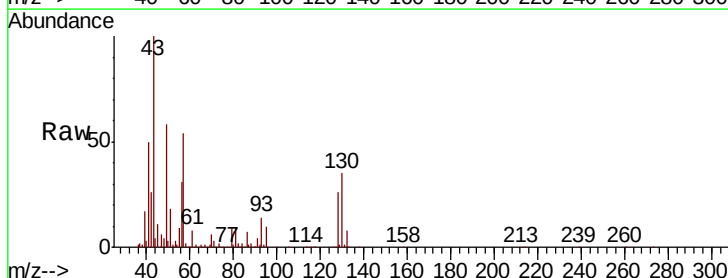
#25
Ethyl Acetate
Concen: 4.055 ppbv
RT: 5.69 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 20 Apr 2021 19:16

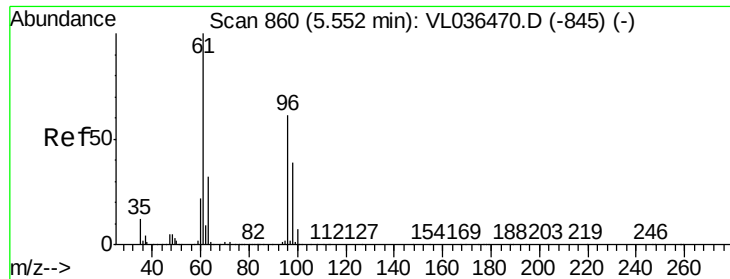
Tot Ion:	43	Resp:	1283270
Ion	Ratio	Lower	Upper
43	100		
45	11.5	7.9	11.9
61	9.3	7.4	11.2
70	7.1	5.1	7.7



#26
Hexane
Concen: 3.242 ppbv
RT: 5.70 min Scan# 905
Delta R.T.: 0.01 min
Lab File: VL036828.D
Acq: 20 Apr 2021 19:16

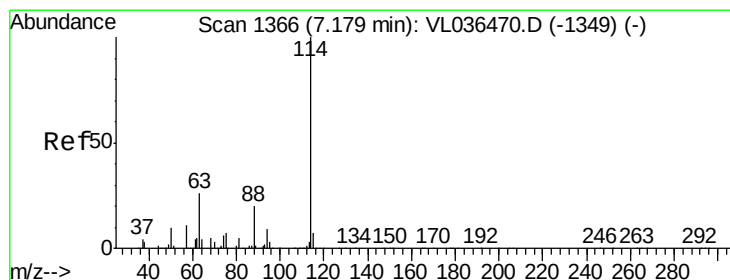
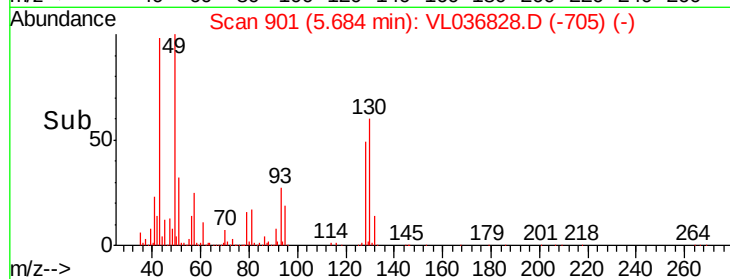
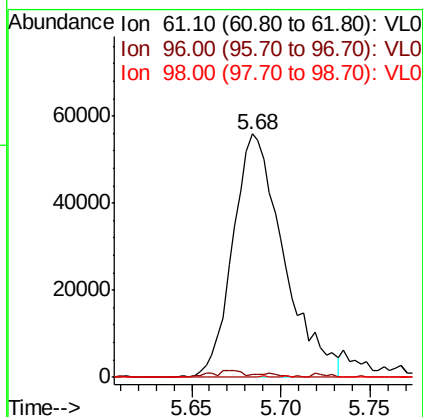
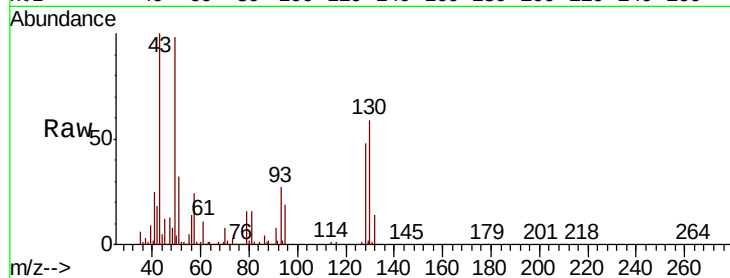
Tgt Ion:	57	Resp:	476058
Ion	Ratio	Lower	Upper
57	100		
41	102.9	77.2	115.8
43	272.6	173.8	260.6#
56	59.9	43.8	65.6





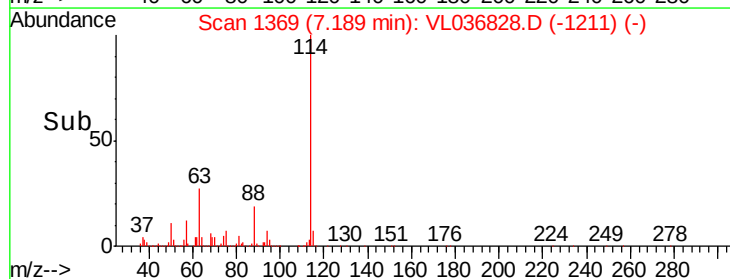
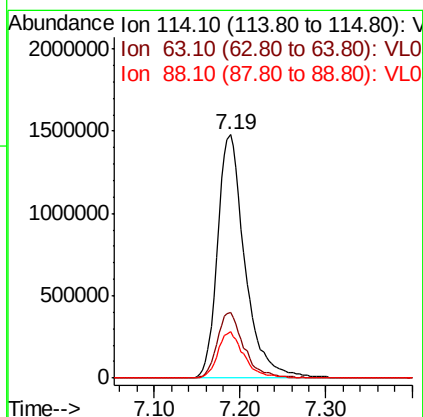
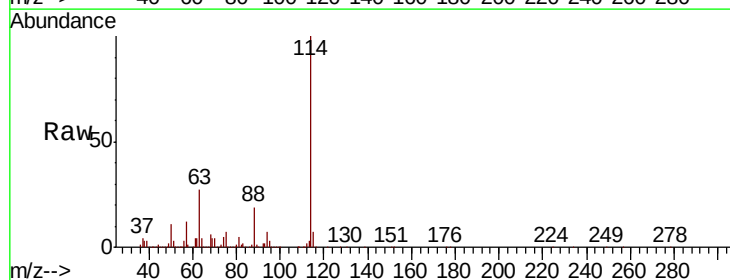
#31
 cis-1,2-Dichloroethene
 Concen: 0.779 ppbv
 RT: 5.68
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 20 Apr 2021 19:16

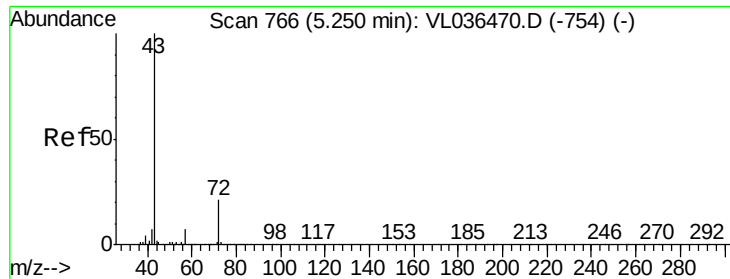
Tot Ion	Ratio	Lower	Upper
61	100		
96	1.0	48.7	73.1#
98	0.0	31.4	47.0#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T.: 0.01 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

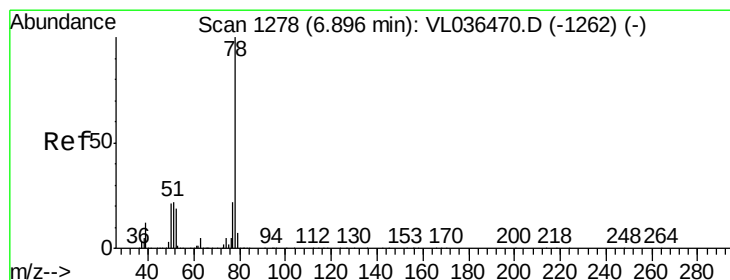
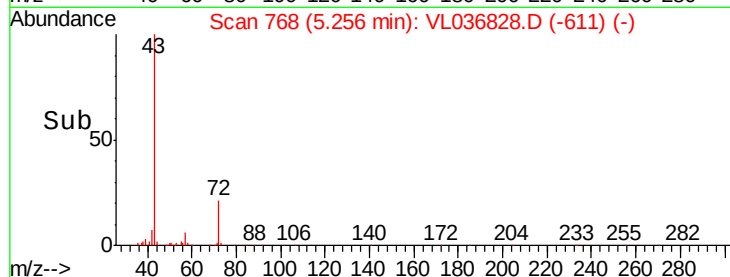
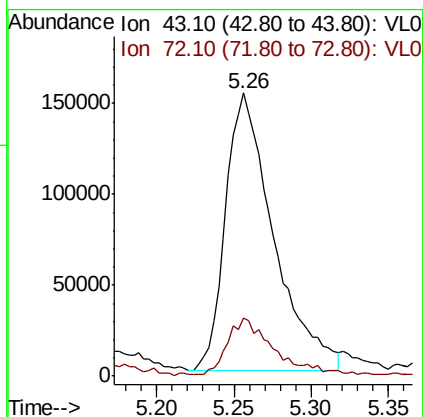
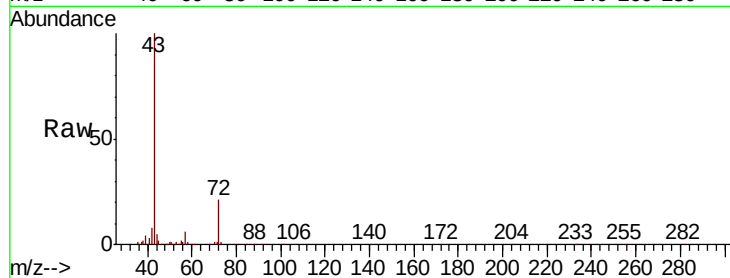
Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.9	22.4	33.6
88	18.3	15.4	23.0





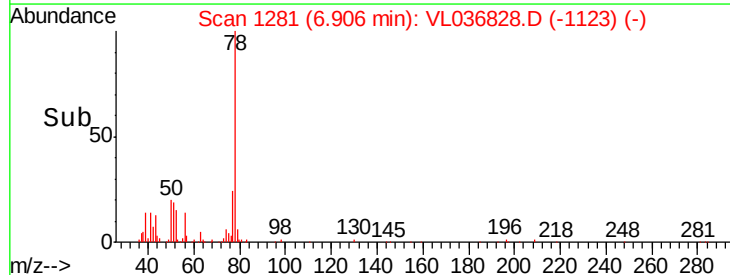
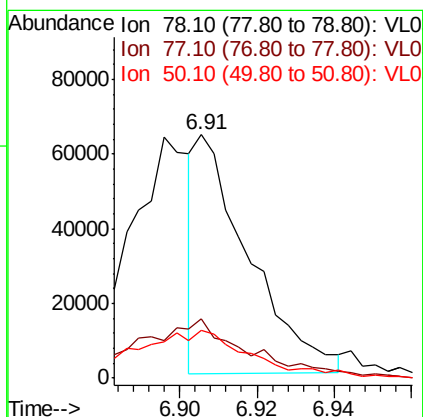
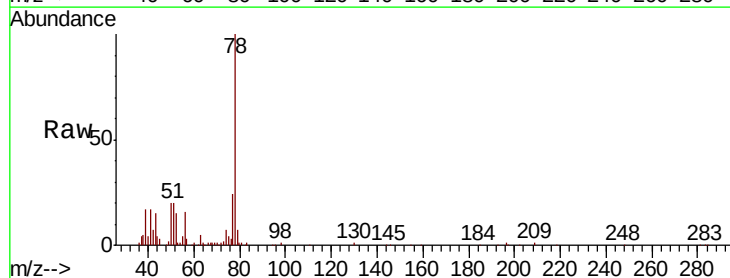
#34
 2-Butanone
 Concen: 2.074 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 20 Apr 2021 19:16

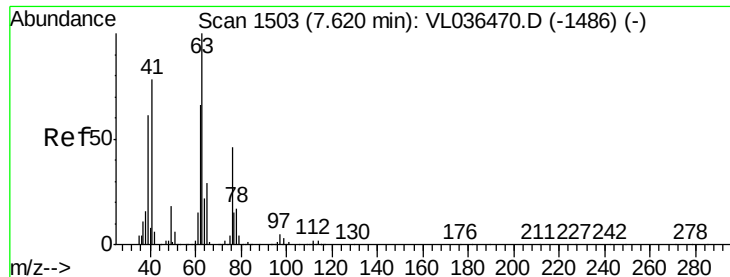
Tot Ion: 43 Resp: 330220
 Ion Ratio Lower Upper
 43 100
 72 21.6 17.0 25.6



#36
 Benzene
 Concen: 0.201 ppbv
 RT: 6.91 min Scan# 1281
 Delta R.T. 0.01 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

Tgt Ion: 78 Resp: 60414
 Ion Ratio Lower Upper
 78 100
 77 23.6 18.0 27.0
 50 17.9 16.5 24.7





#39

1,2-Dichloropropane

Concen: 7.054 ppbv

RT: 7.19 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 20 Apr 2021 19:16

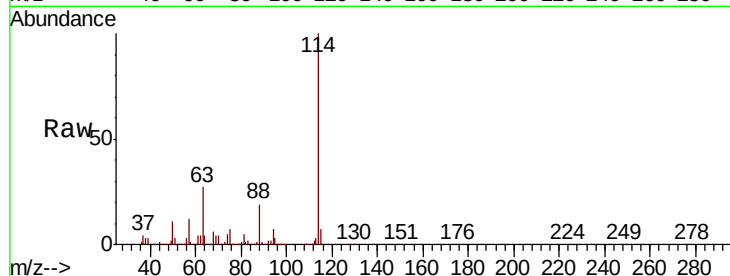
Tot Ion: 63 Resp: 860962

Ion Ratio Lower Upper

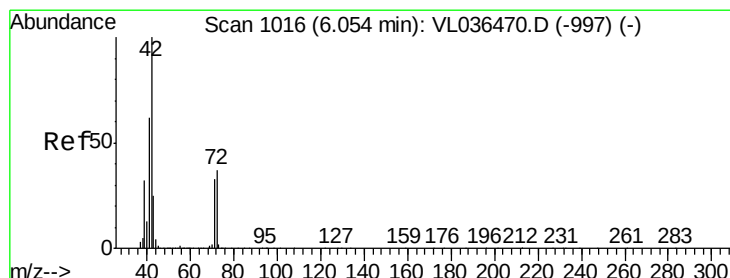
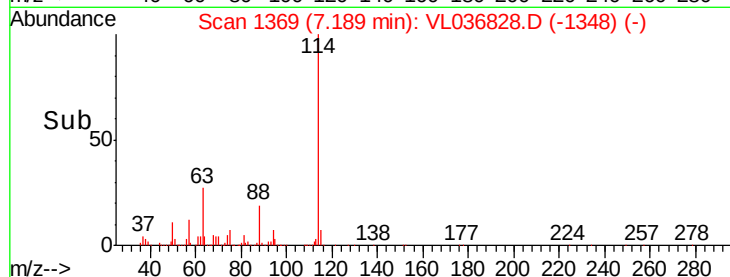
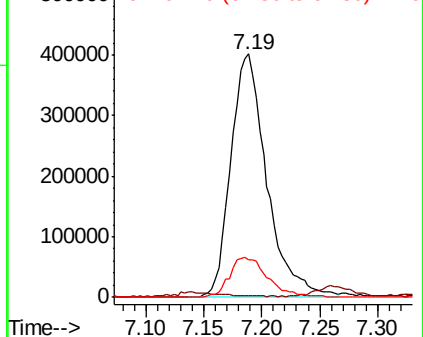
63 100

41 0.0 62.4 93.6#

62 15.3 52.8 79.2#



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: 7.007 ppbv

RT: 6.06 min Scan# 1017

Delta R.T. 0.00 min

Lab File: VL036828.D

Acq: 20 Apr 2021 19:16

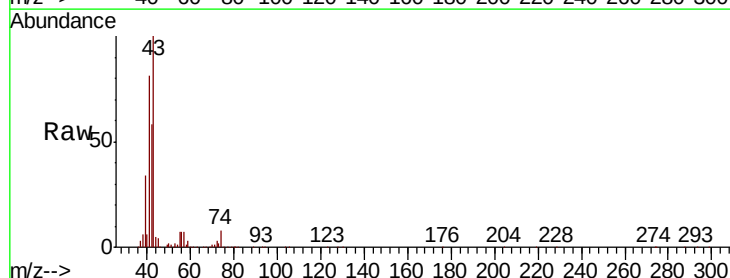
Tgt Ion: 42 Resp: 514453

Ion Ratio Lower Upper

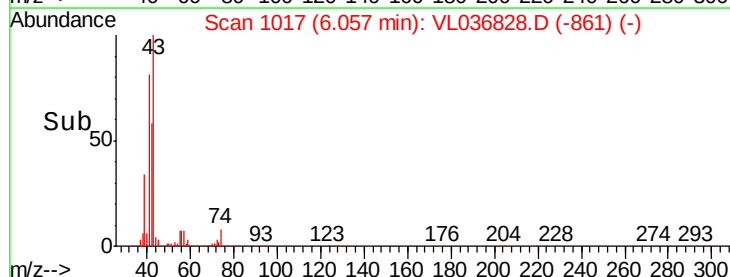
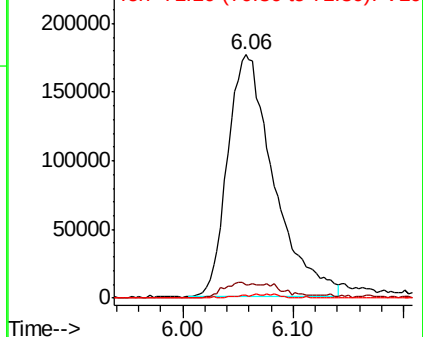
42 100

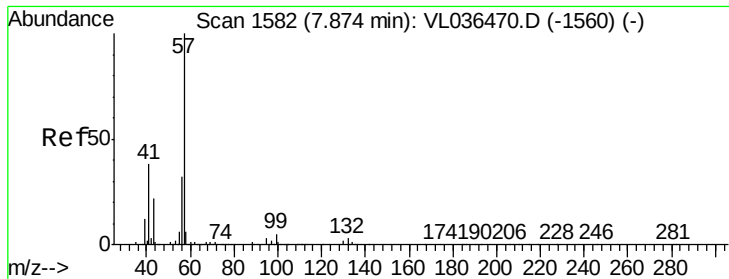
72 8.6 27.6 41.4#

71 1.3 27.0 40.4#



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





#44

2,2,4-Trimethylpentane

Concen: 0.086 ppbv

RT: 7.89 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 20 Apr 2021 19:16

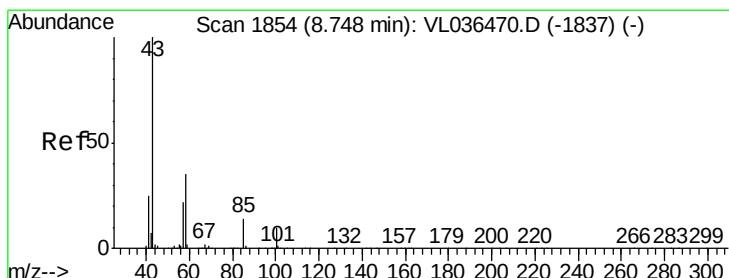
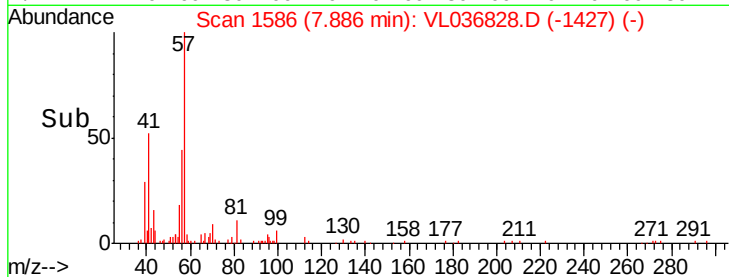
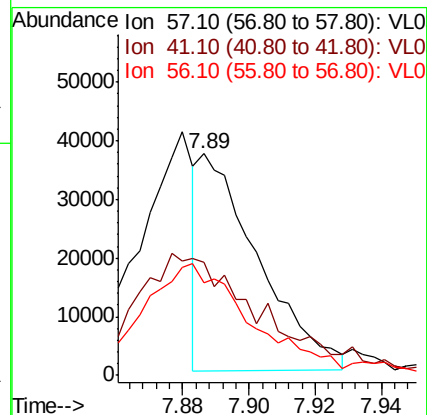
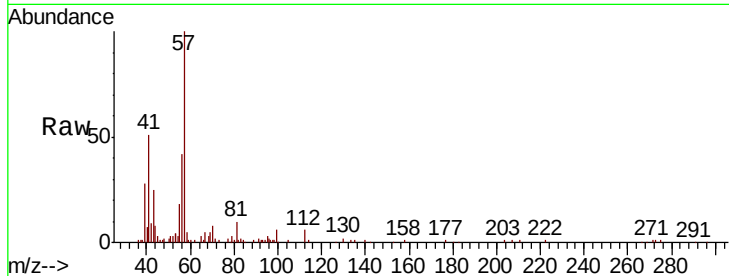
Tot Ion: 57 Resp: 45652

Ion Ratio Lower Upper

57 100

41 0.0 28.8 43.2#

56 104.8 26.1 39.1#



#50

4-Methyl-2-Pentanone

Concen: 0.059 ppbv

RT: 8.77 min Scan# 1860

Delta R.T. 0.02 min

Lab File: VL036828.D

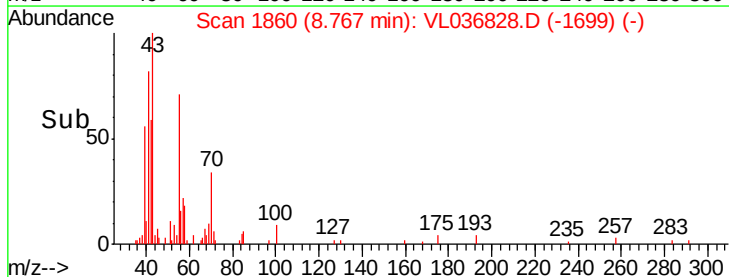
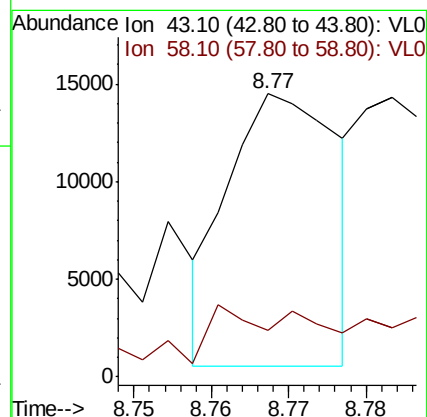
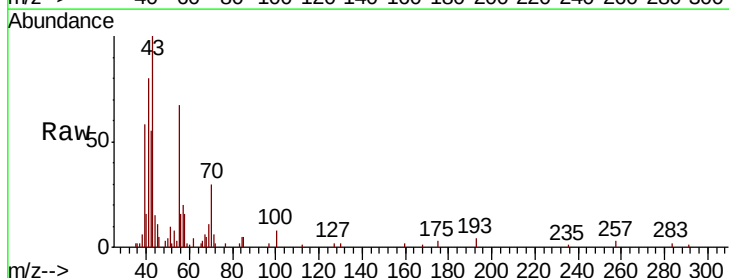
Acq: 20 Apr 2021 19:16

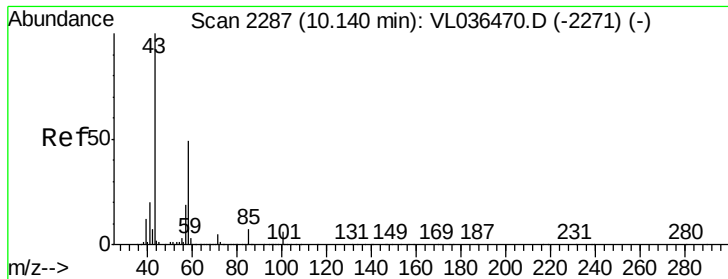
Tgt Ion: 43 Resp: 13645

Ion Ratio Lower Upper

43 100

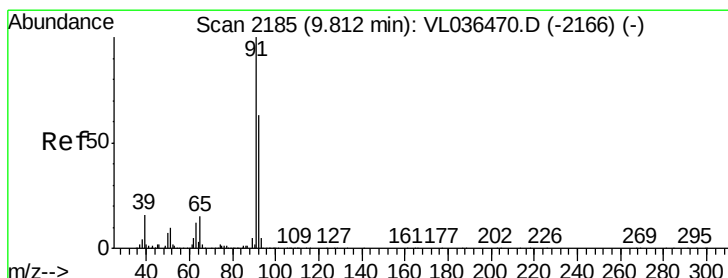
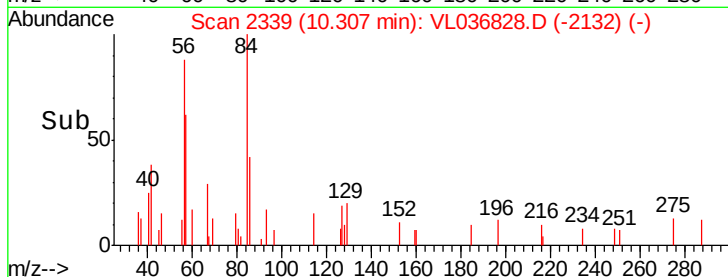
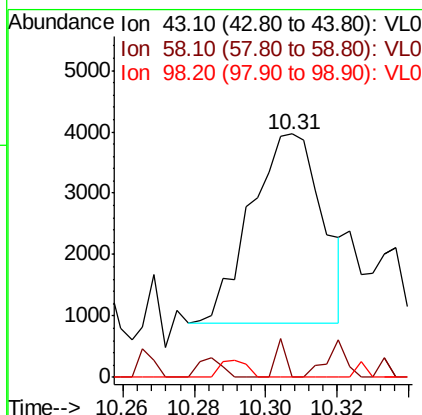
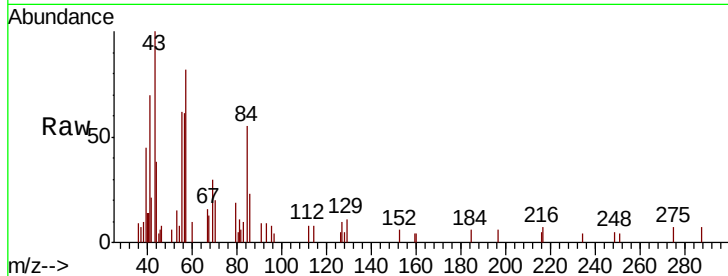
58 76.8 28.2 42.2#





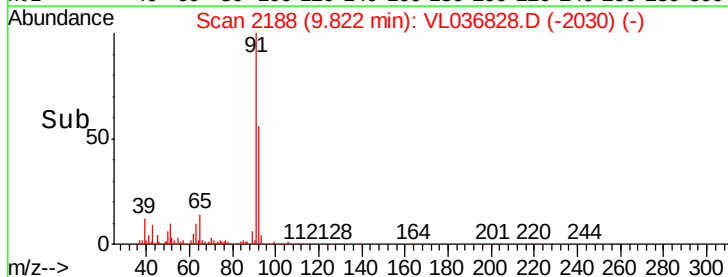
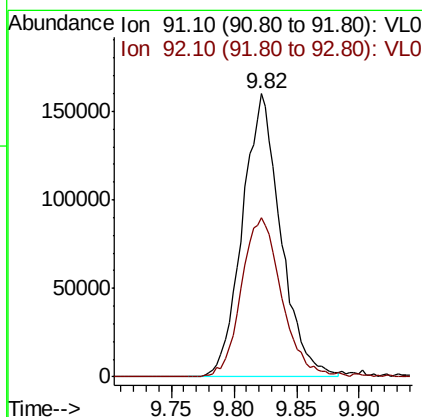
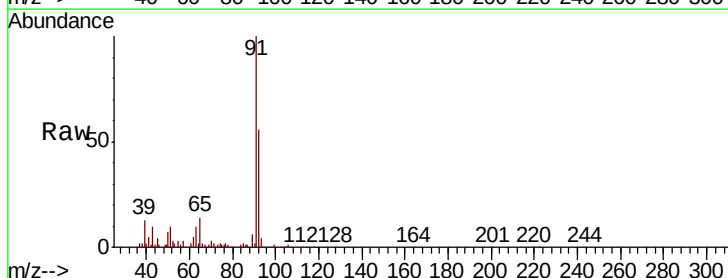
#51
2-Hexanone
Concen: 0.037 ppbv
RT: 10.31
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 20 Apr 2021 19:16

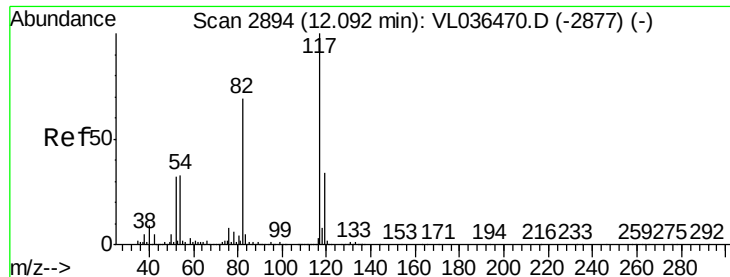
Tot Ion: 43 Resp: 4250
Ion Ratio Lower Upper
43 100
58 113.7 37.7 56.5#
98 10.2 0.2 0.2#



#53
Toluene
Concen: 1.060 ppbv
RT: 9.82 min Scan# 2188
Delta R.T. 0.01 min
Lab File: VL036828.D
Acq: 20 Apr 2021 19:16

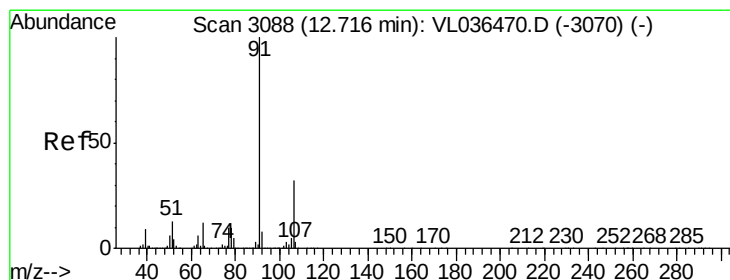
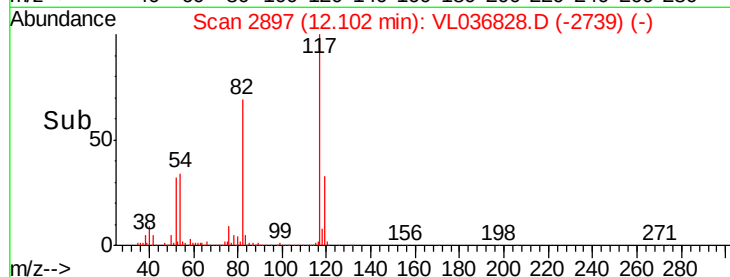
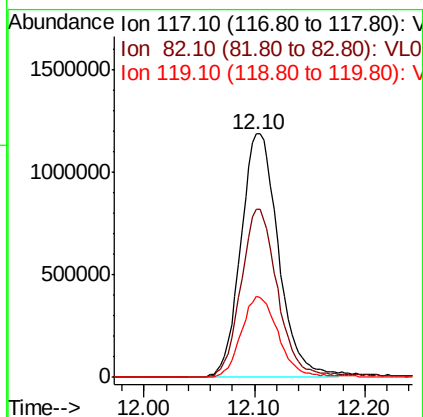
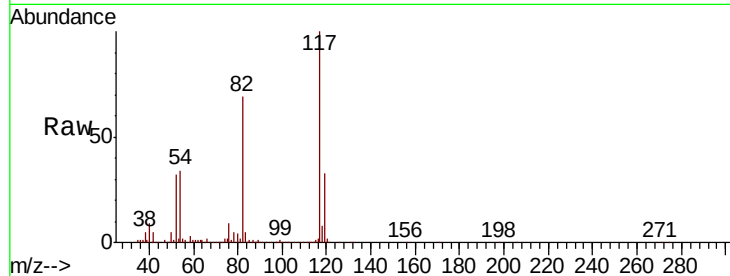
Tgt Ion: 91 Resp: 339723
Ion Ratio Lower Upper
91 100
92 59.3 48.8 73.2





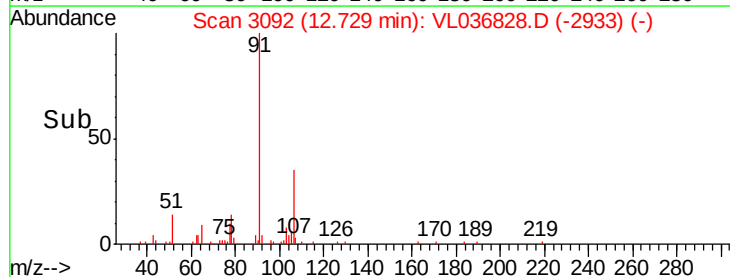
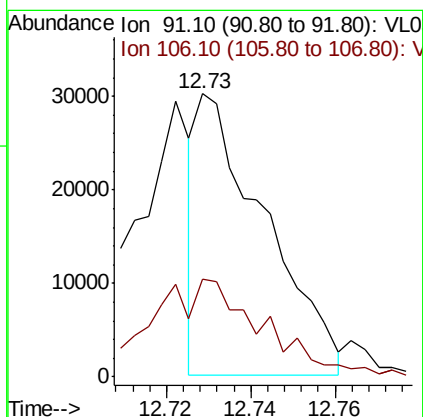
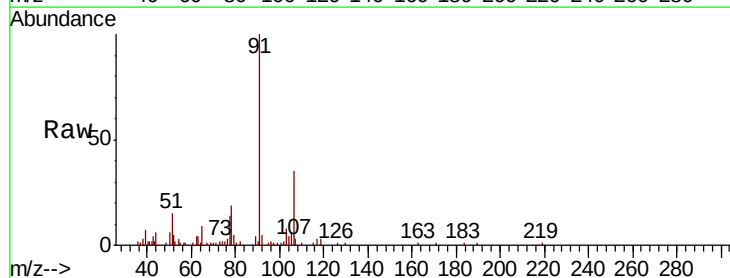
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 20 Apr 2021 19:16

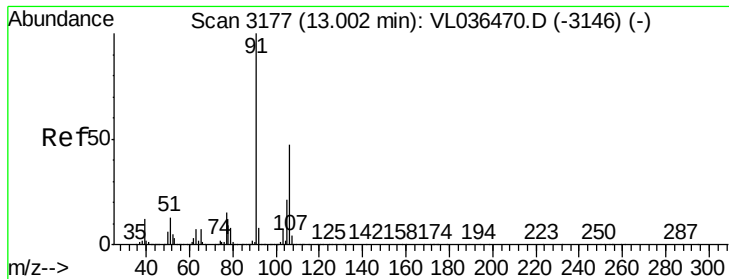
Tot Ion: 117 Resp: 2804621
Ion Ratio Lower Upper
117 100
82 68.9 57.4 86.0
119 33.2 47.4 71.0#



#58
Ethyl Benzene
Concen: 0.082 ppbv
RT: 12.73 min Scan# 3092
Delta R.T.: 0.01 min
Lab File: VL036828.D
Acq: 20 Apr 2021 19:16

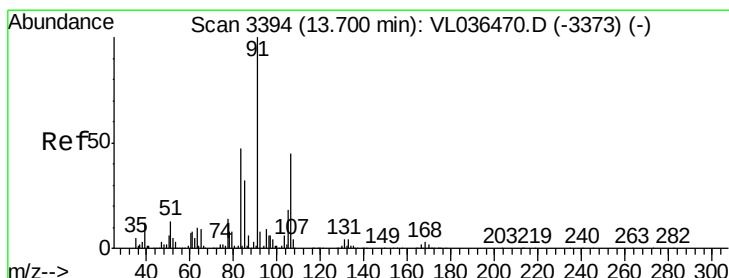
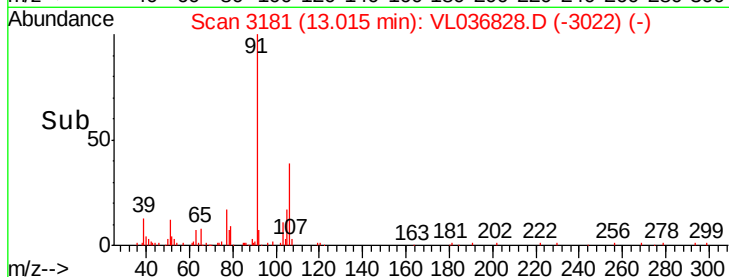
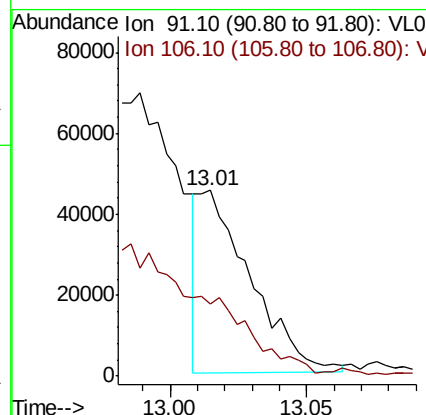
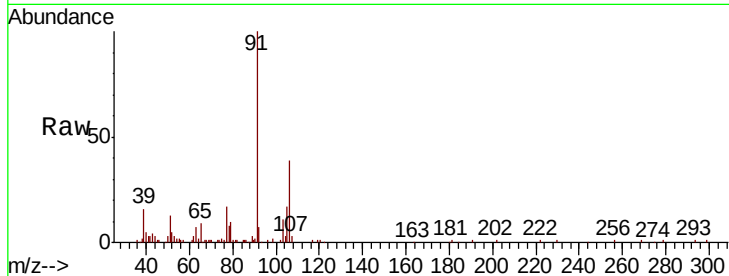
Tgt Ion: 91 Resp: 33442
Ion Ratio Lower Upper
91 100
106 33.1 25.3 37.9





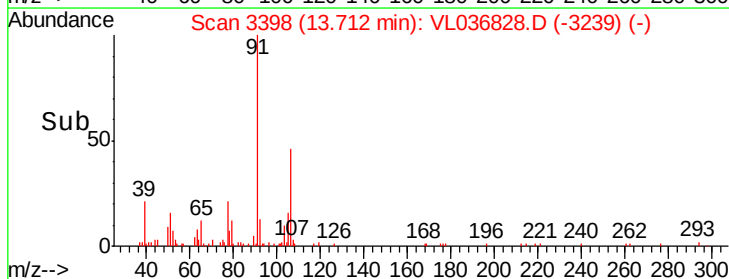
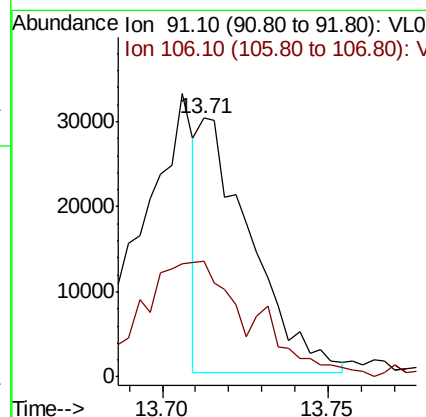
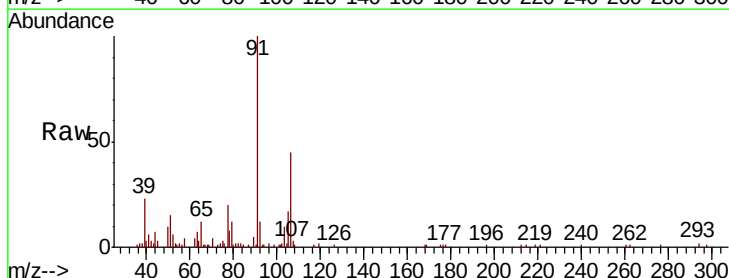
#59
m/p-Xylene
Concen: 0.168 ppbv
RT: 13.01 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 20 Apr 2021 19:16

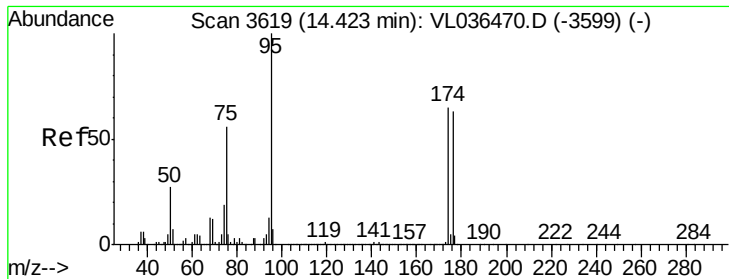
Tot Ion: 91 Resp: 59695
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#



#60
o-Xylene
Concen: 0.094 ppbv
RT: 13.71 min Scan# 3398
Delta R.T. 0.01 min
Lab File: VL036828.D
Acq: 20 Apr 2021 19:16

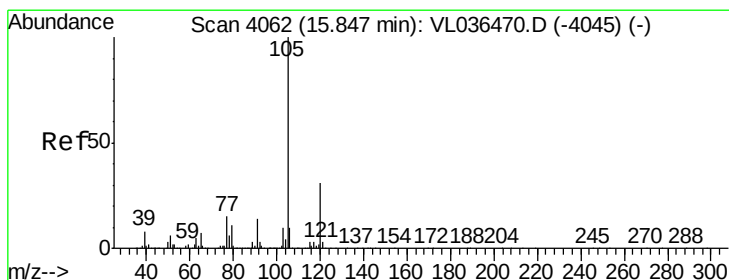
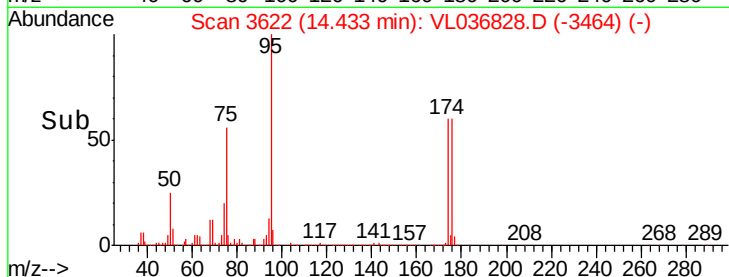
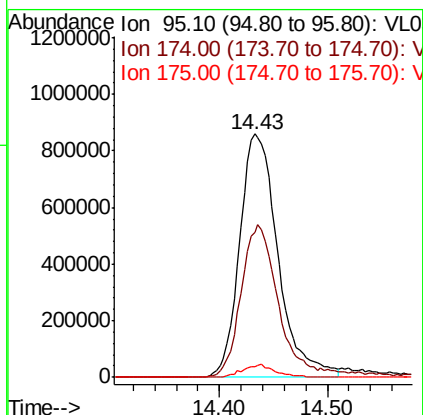
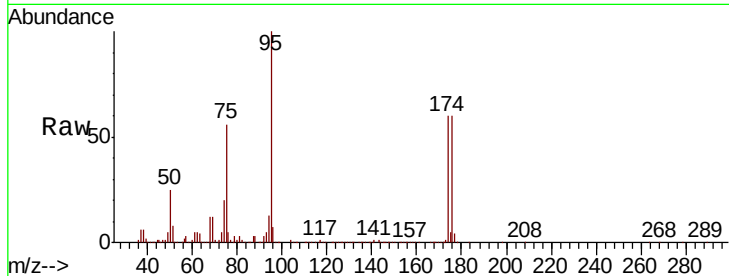
Tgt Ion: 91 Resp: 32446
Ion Ratio Lower Upper
91 100
106 104.2 22.3 66.9#





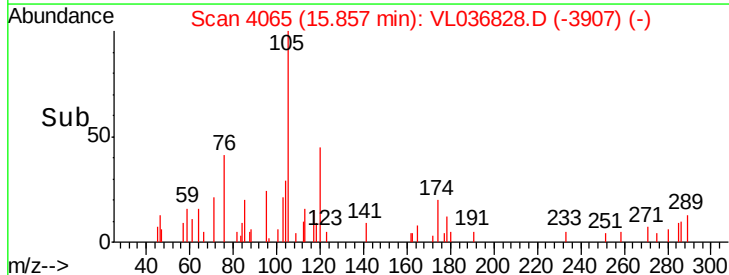
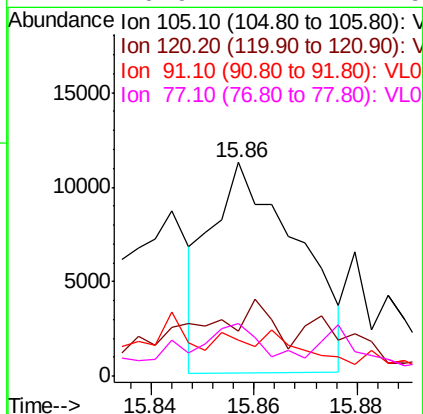
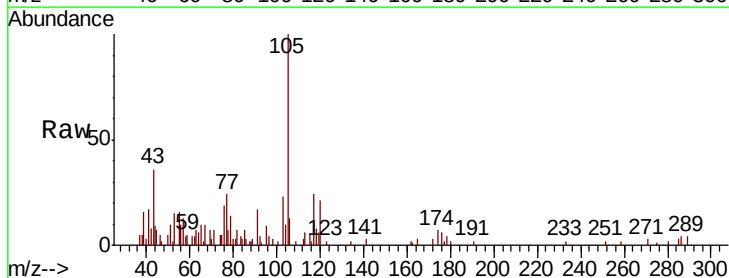
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.528 ppbv
 RT: 14.43 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 20 Apr 2021 19:16

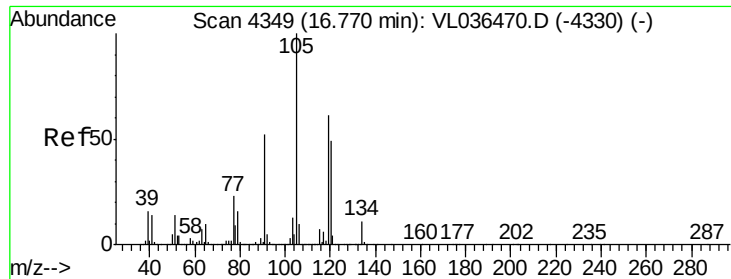
Tot Ion: 95 Resp: 2129828
 Ion Ratio Lower Upper
 95 100
 174 63.5 51.0 76.6
 175 4.6 3.9 5.9



#72
 4-Ethyltoluene
 Concen: 0.035 ppbv
 RT: 15.86 min Scan# 4065
 Delta R.T. 0.01 min
 Lab File: VL036828.D
 Acq: 20 Apr 2021 19:16

Tgt Ion:105 Resp: 13045
 Ion Ratio Lower Upper
 105 100
 120 76.2 24.0 36.0#
 91 0.0 11.0 16.4#
 77 40.9 11.7 17.5#





#74

1,2,4-Trimethylbenzene

Concen: 0.224 ppbv

RT: 16.78 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 20 Apr 2021 19:10

Tot Ion:	105	Resp:	84242
Ion	Ratio	Lower	Upper
105	100		
120	31.1	39.2	58.8#
91	14.7	42.6	64.0#
77	13.1	18.6	28.0#

