Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040725\
Data File : VL042232.D
Acq On : 07 Apr 2025 13:00
Operator : SY/MD
Sample : Q1725-04DUP
Misc : 400mL/MSVOA_L
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Quant Time: Apr 08 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	201241	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.981	114	543996	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	475092	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.396	95	378319	9.697	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery =	97.000%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	11976	0.403	ppbv	94
3) Chlorodifluoromethane	1.482	51	12242	0.403	ppbv #	87
4) Chloromethane	1.541	50	6769	0.557	ppbv	96
7) Chloroethane	1.712	64	184	0.038	ppbv #	1
9) Propene	1.492	41	5803	0.417	ppbv	100
10) Heptane	5.010	43	2369	0.064	ppbv	93
11) Trichlorofluoromethane	1.887	101	6183	0.214	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.152	101	1377	0.058	ppbv	100
13) Ethanol	1.728	45	17233	13.103	ppbv	80
15) Acetone	1.845	43	145846	5.182	ppbv	95
16) 1,3-Butadiene	1.609	39	1286	0.094	ppbv #	72
17) tert-Butyl alcohol	2.052	59	2032	0.058	ppbv #	60
19) Isopropyl Alcohol	1.897	45	16701	1.052	ppbv #	1
20) Methylene Chloride	2.072	84	4976	0.475	ppbv	95
23) Vinyl Acetate	2.470	43	7240	0.594	ppbv #	45
25) Ethyl Acetate	2.842	43	8562	0.117	ppbv #	1
26) Hexane	2.842	57	9327	0.331	ppbv #	36
29) Chloroform	2.861	83	1512	0.037	ppbv	84
34) 2-Butanone	2.576	43	19408	0.492	ppbv	96
35) Carbon Tetrachloride	3.790	117	2497	0.059	ppbv #	95
36) Benzene	3.677	78	6934	0.129	ppbv #	95
39) 1,2-Dichloropropane	3.984	63	140099	7.133	ppbv #	21
40) 1,4-Dioxane	4.641	88	569	0.055	ppbv #	1
44) 2,2,4-Trimethylpentane	4.671	57	4007	0.044	ppbv #	33
50) 4-Methyl-2-Pentanone	5.803	43	3269	0.052	ppbv #	42
53) Toluene	6.962	91	37601	0.588	ppbv	99
58) Ethyl Benzene	9.551	91	10646	0.126	ppbv	91
59) m/p-Xylene	9.568	91	3947	0.059	ppbv #	31
74) 1,2,4-Trimethylbenzene	11.555	105	8275	0.098	ppbv #	61

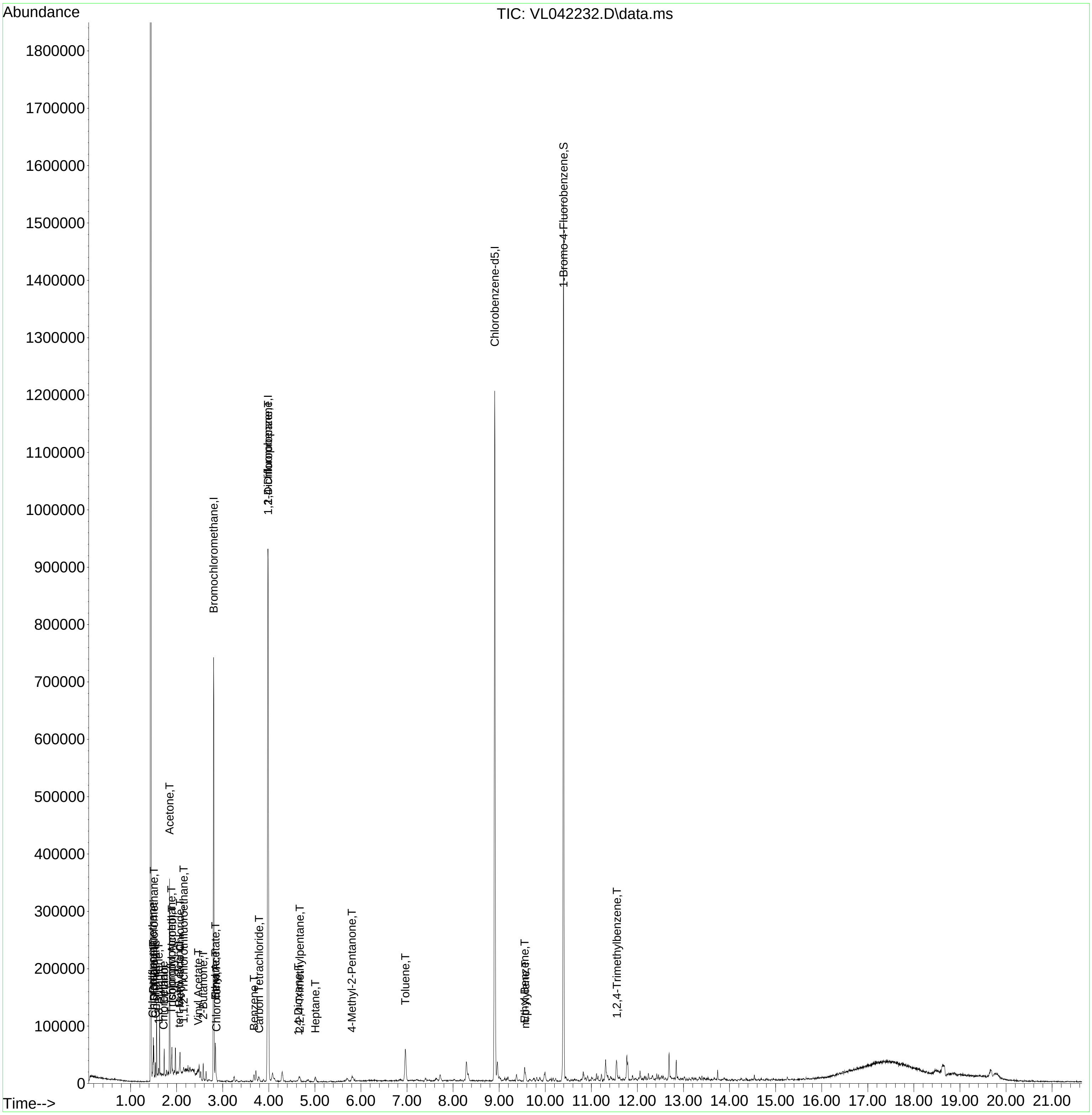
(#) = qualifier out of range (m) = manual integration (+) = signals summed

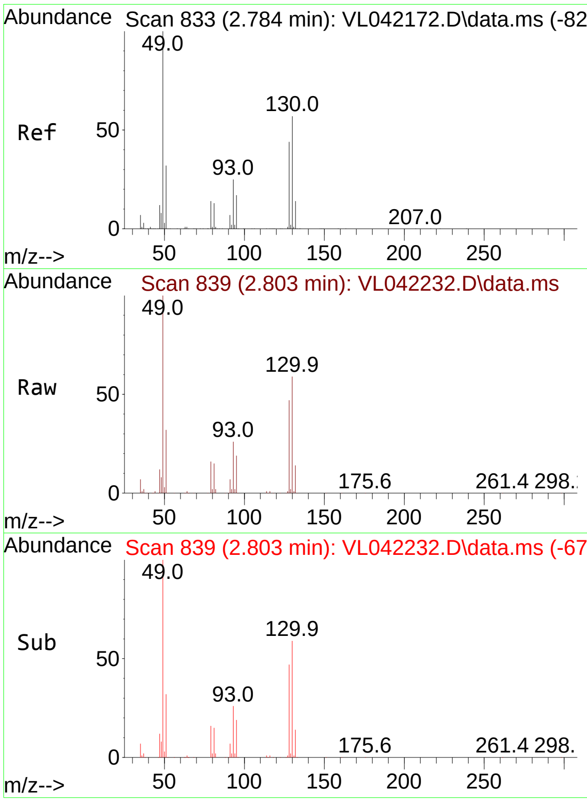
Quantitation Report   (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040725\
Data File : VL042232.D
Acq On   : 07 Apr 2025 13:00
Operator : SY/MD
Sample   : Q1725-04DUP
Misc   : 400mL/MSVOA_L
ALS Vial : 5   Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Quant Time: Apr 08 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15   Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



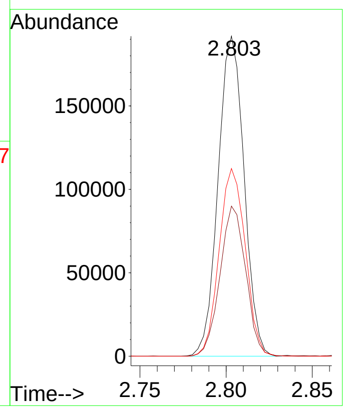


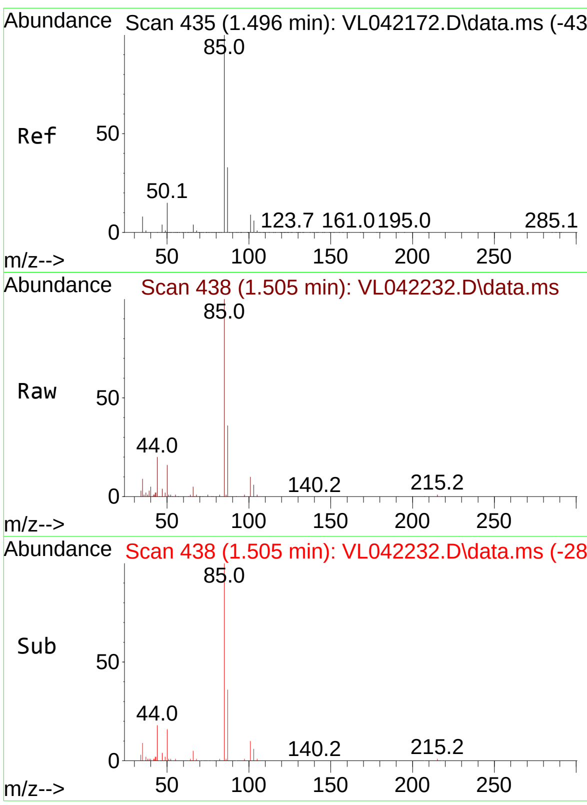
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.803 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 49 Resp: 201241

Ion	Ratio	Lower	Upper
49	100		
128	46.4	22.9	68.5
130	59.2	28.8	86.4

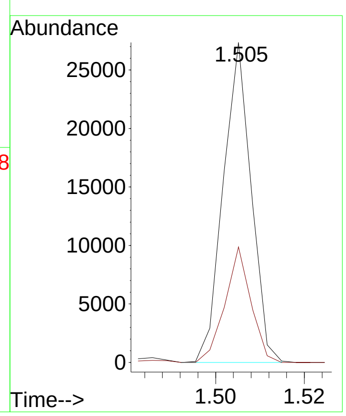


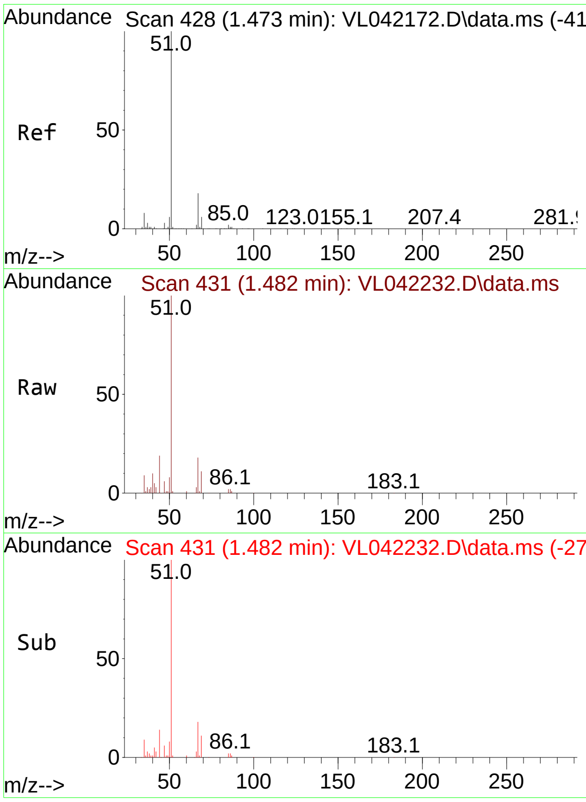


#2
Dichlorodifluoromethane
Concen: 0.403 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 85 Resp: 11976

Ion	Ratio	Lower	Upper
85	100		
87	36.1	26.1	39.1



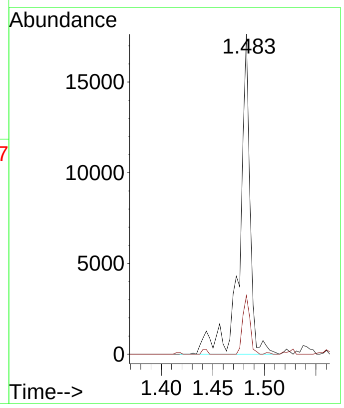


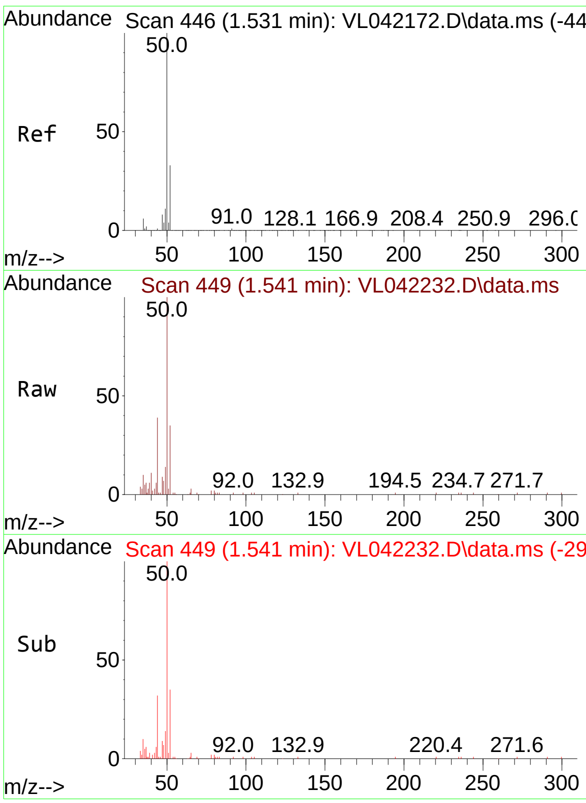
#3
Chlorodifluoromethane
Concen: 0.403 ppbv
RT: 1.482 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 51 Resp: 12242

Ion	Ratio	Lower	Upper
51	100		
67	13.2	15.0	22.6#

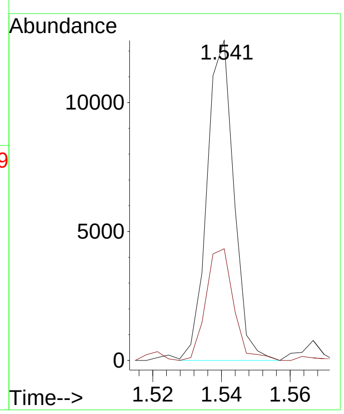


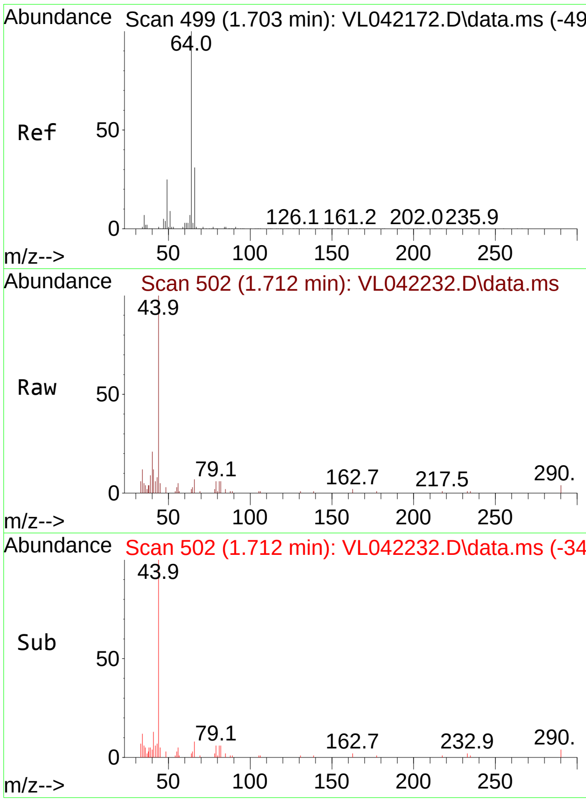


#4
Chloromethane
Concen: 0.557 ppbv
RT: 1.541 min Scan# 449
Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 50 Resp: 6769

Ion	Ratio	Lower	Upper
50	100		
52	34.9	26.1	39.1



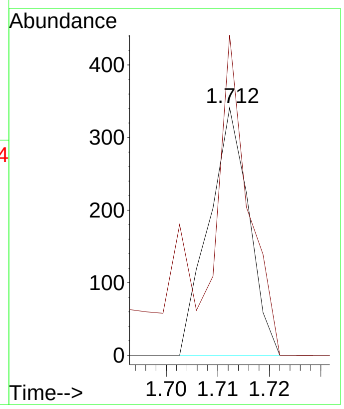


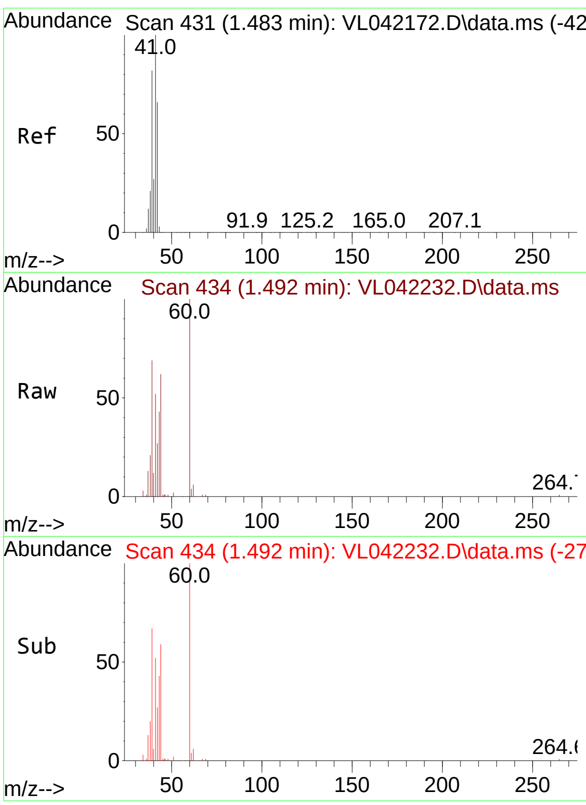
#7
Chloroethane
Concen: 0.038 ppbv
RT: 1.712 min Scan# 5(
Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 64 Resp: 184

Ion	Ratio	Lower	Upper
64	100		
66	129.3	25.2	37.8#

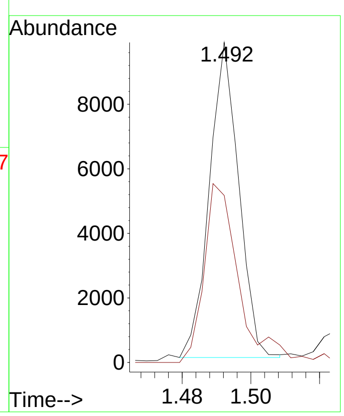


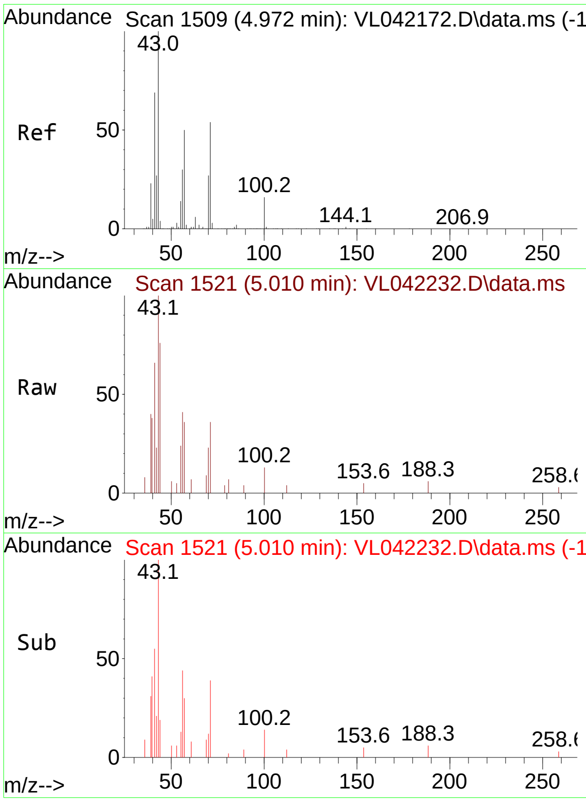


#9
Propene
Concen: 0.417 ppbv
RT: 1.492 min Scan# 434
Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 41 Resp: 5803

Ion	Ratio	Lower	Upper
41	100		
42	69.5	55.4	83.2



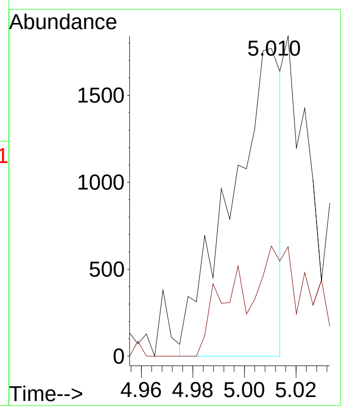


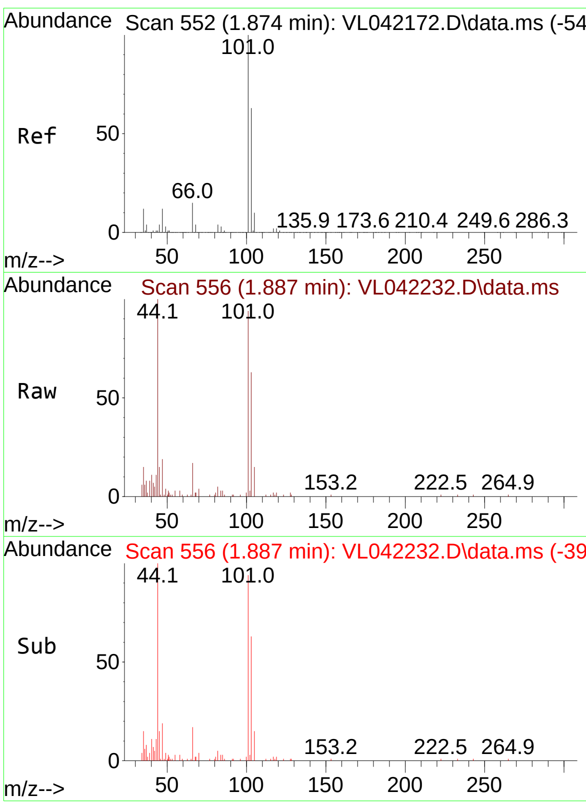
#10
Heptane
Concen: 0.064 ppbv
RT: 5.010 min   Scan# 1
Delta R.T.   0.039 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 43 Resp: 2369

Ion	Ratio	Lower	Upper
43	100		
57	54.0	39.4	59.2

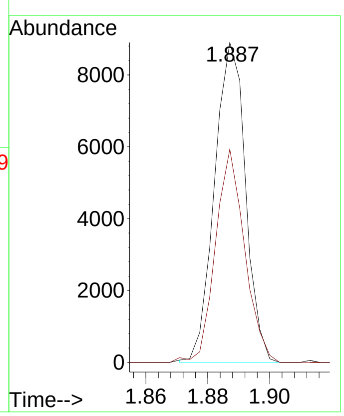


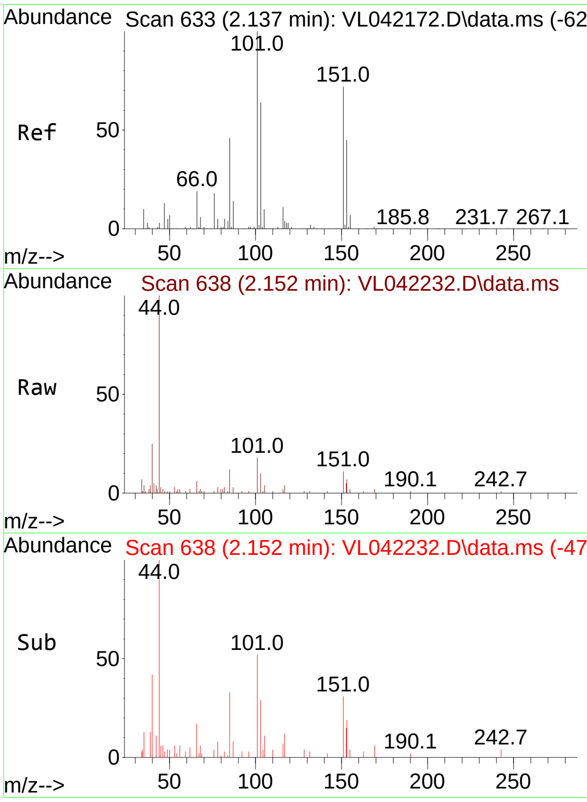


#11
Trichlorofluoromethane
Concen: 0.214 ppbv
RT: 1.887 min   Scan# 556
Delta R.T.   0.013 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Tgt Ion:101 Resp: 6183

Ion	Ratio	Lower	Upper
101	100		
103	66.7	50.2	75.2



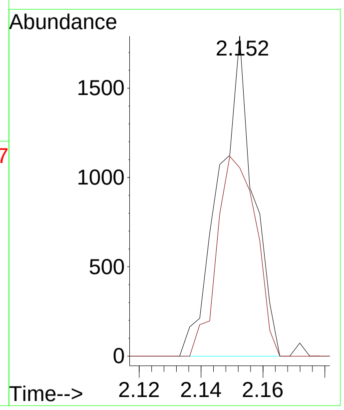


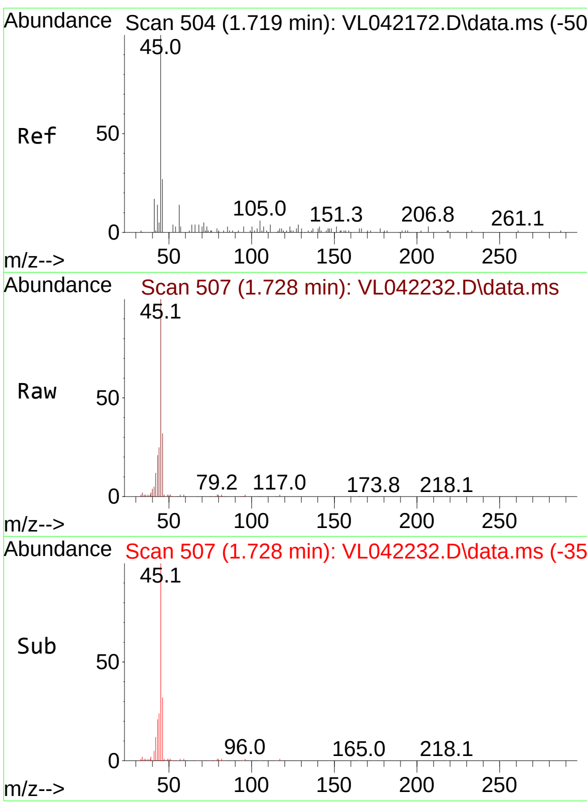
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.058 ppbv
RT: 2.152 min   Scan# 6
Delta R.T.   0.016 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion:101 Resp: 1377

Ion	Ratio	Lower	Upper
101	100		
151	71.3	57.1	85.7

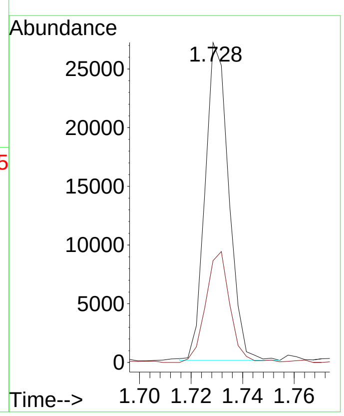


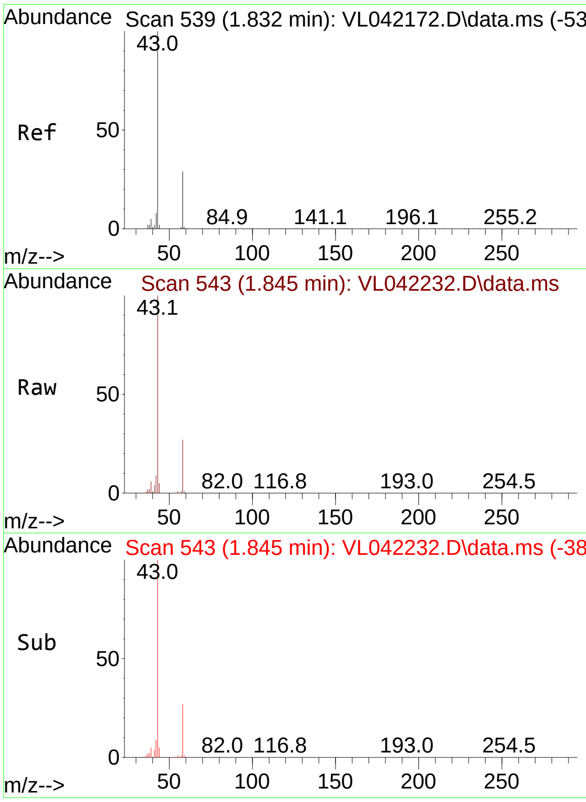


#13
Ethanol
Concen: 13.103 ppbv
RT: 1.728 min   Scan# 507
Delta R.T.   0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Tgt Ion: 45 Resp: 17233

Ion	Ratio	Lower	Upper
45	100		
46	36.8	20.2	80.8



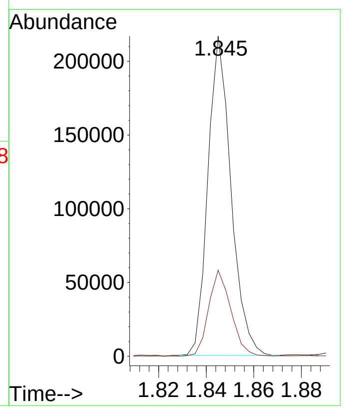


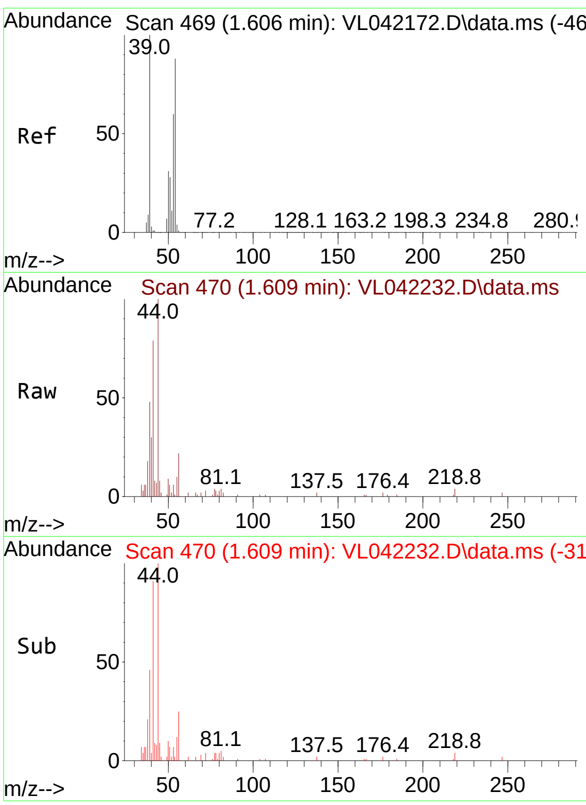
#15
Acetone
Concen: 5.182 ppbv
RT: 1.845 min   Scan# 54
Delta R.T.   0.013 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 43 Resp: 145846

Ion	Ratio	Lower	Upper
43	100		
58	26.2	23.2	34.8

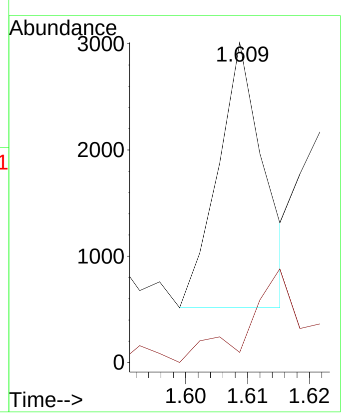


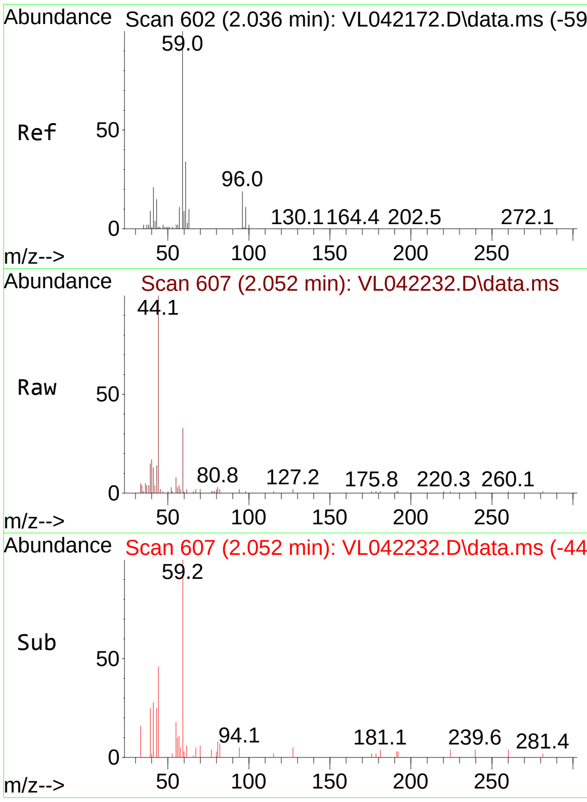


#16
1,3-Butadiene
Concen: 0.094 ppbv
RT: 1.609 min   Scan# 470
Delta R.T.   0.003 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Tgt Ion: 39 Resp: 1286

Ion	Ratio	Lower	Upper
39	100		
54	51.9	60.7	91.1#



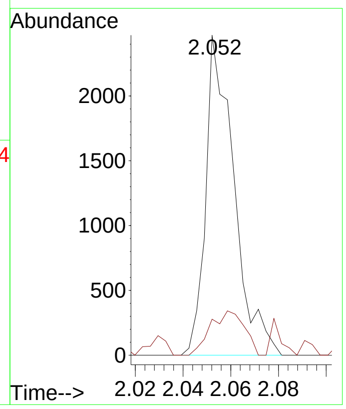


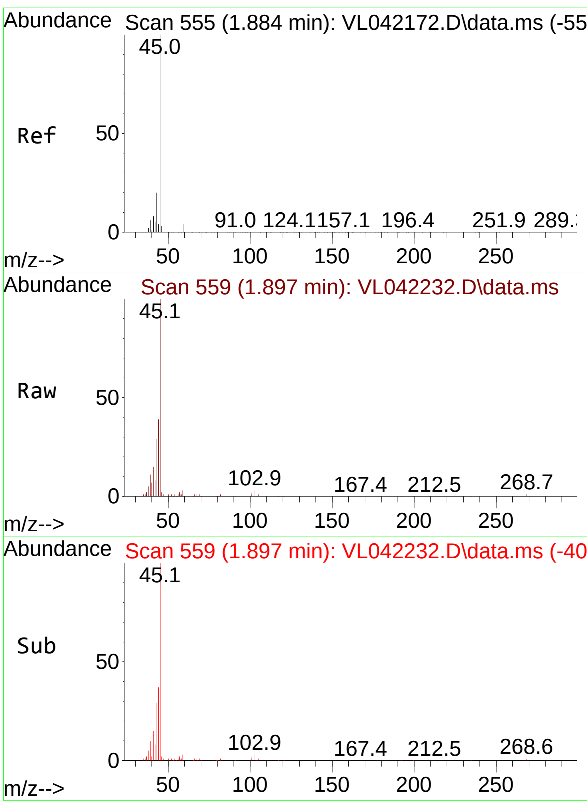
#17
tert-Butyl alcohol
Concen: 0.058 ppbv
RT: 2.052 min   Scan# 6
Delta R.T.   0.016 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 59 Resp: 2032

Ion	Ratio	Lower	Upper
59	100		
57	26.3	8.9	13.3#

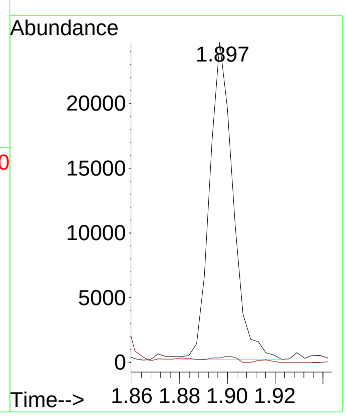


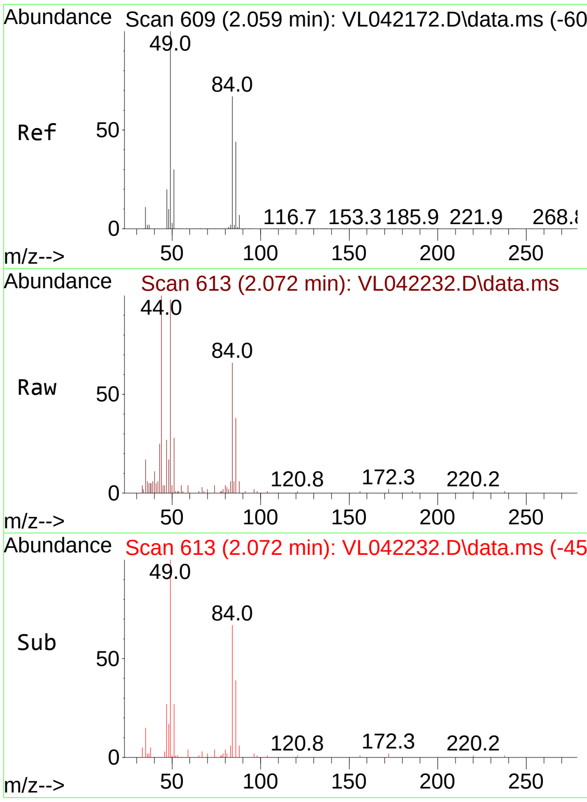


#19
Isopropyl Alcohol
Concen: 1.052 ppbv
RT: 1.897 min   Scan# 559
Delta R.T.   0.013 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Tgt Ion: 45 Resp: 16701

Ion	Ratio	Lower	Upper
45	100		
58	231.5	36.9	55.3#



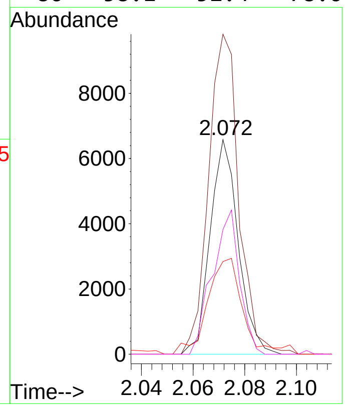


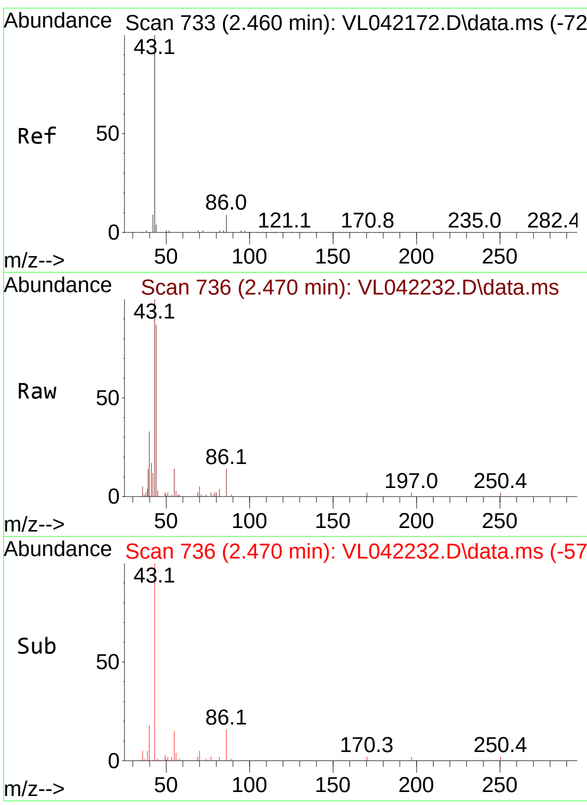
#20
Methylene Chloride
Concen: 0.475 ppbv
RT: 2.072 min Scan# 61
Delta R.T. 0.013 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 84 Resp: 4976

Ion	Ratio	Lower	Upper
84	100		
49	149.2	120.2	180.4
51	40.2	37.4	56.0
86	58.1	52.4	78.6

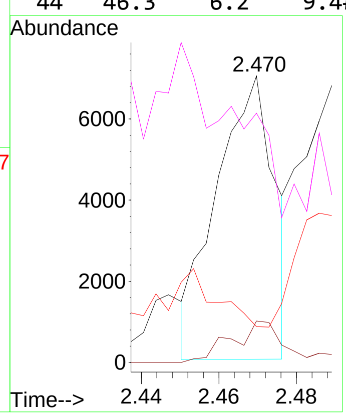


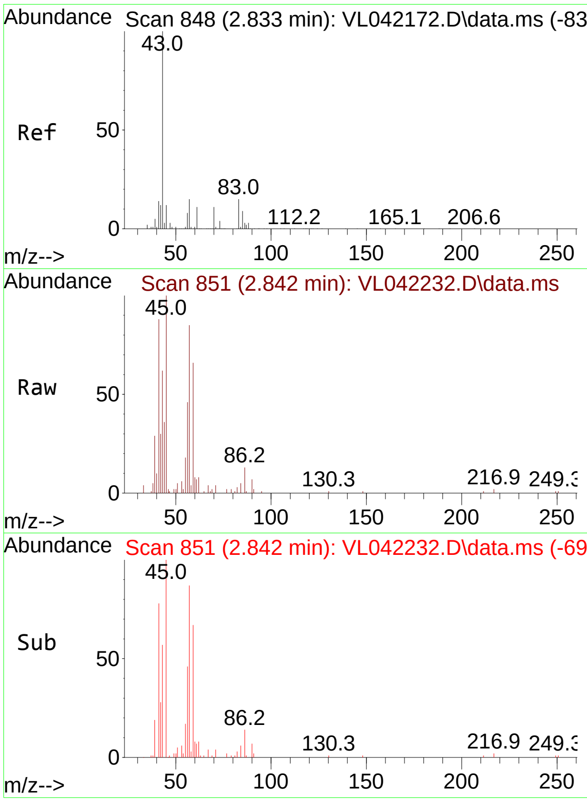


#23
Vinyl Acetate
Concen: 0.594 ppbv
RT: 2.470 min Scan# 736
Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 43 Resp: 7240

Ion	Ratio	Lower	Upper
43	100		
86	18.4	5.5	8.3#
42	0.0	8.6	13.0#
44	46.3	6.2	9.4#





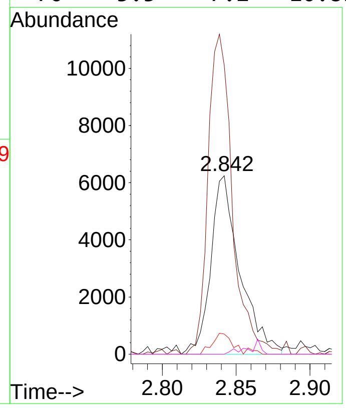
#25
Ethyl Acetate
Concen: 0.117 ppbv
RT: 2.842 min Scan# 8

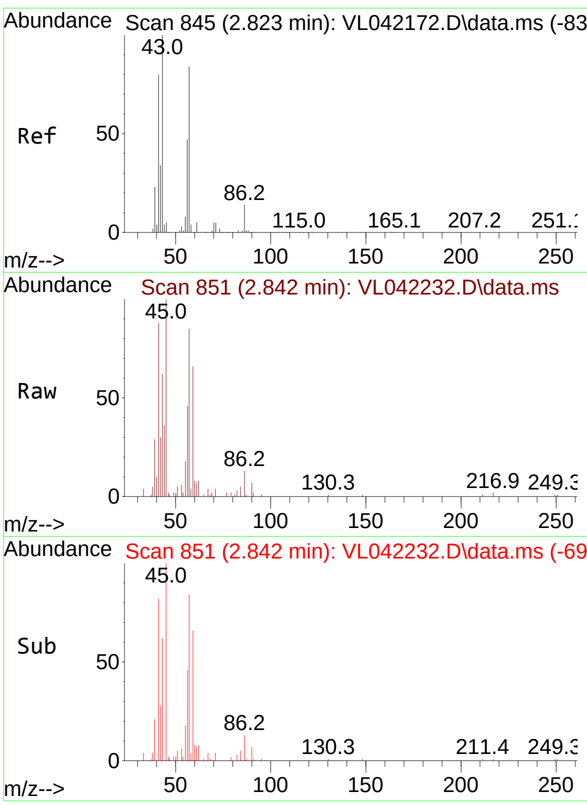
Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Delta R.T. 0.009 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 43 Resp: 8562

Ion	Ratio	Lower	Upper
43	100		
45	154.1	8.2	12.2#
61	8.9	7.3	10.9
70	3.3	7.2	10.8#

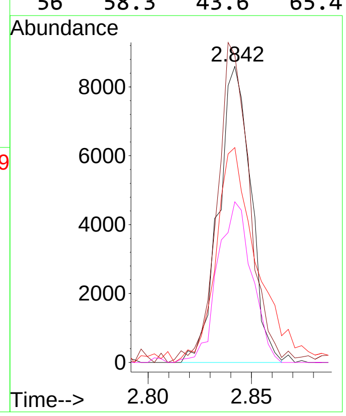


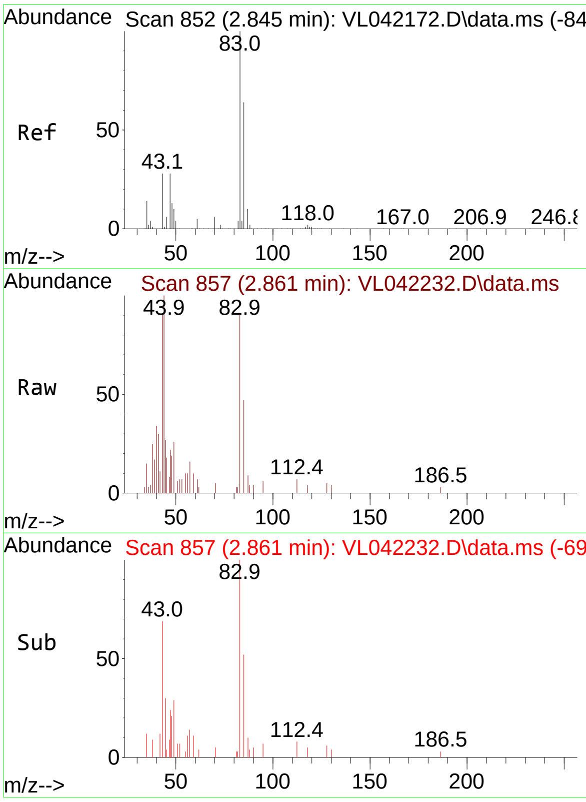


#26
Hexane
Concen: 0.331 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.019 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 57 Resp: 9327

Ion	Ratio	Lower	Upper
57	100		
41	111.0	76.6	114.8
43	92.0	207.8	311.8#
56	58.3	43.6	65.4



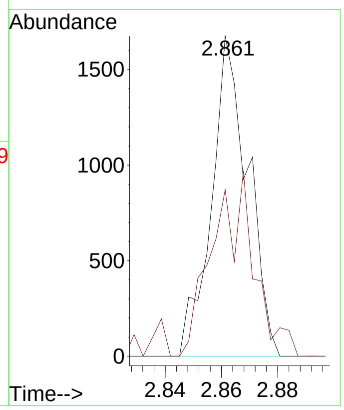


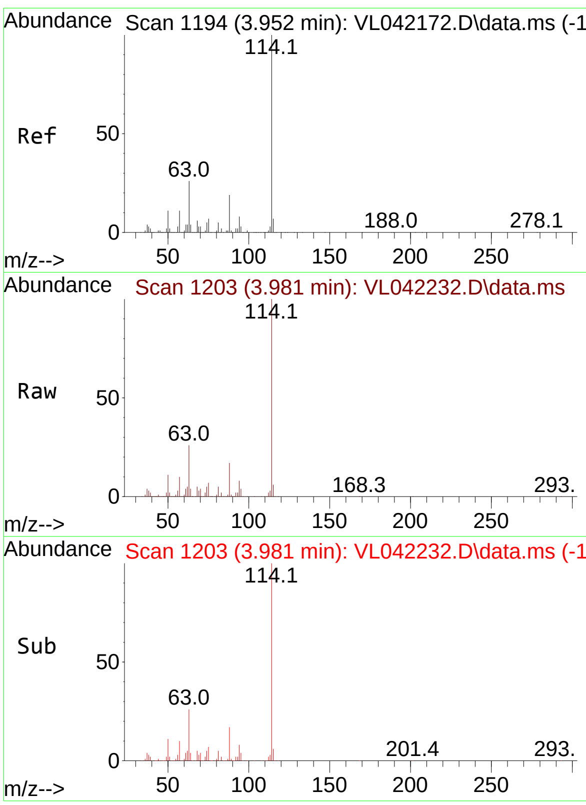
#29
Chloroform
Concen: 0.037 ppbv
RT: 2.861 min Scan# 8
Delta R.T. 0.016 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 83 Resp: 1512

Ion	Ratio	Lower	Upper
83	100		
85	52.0	51.4	77.2

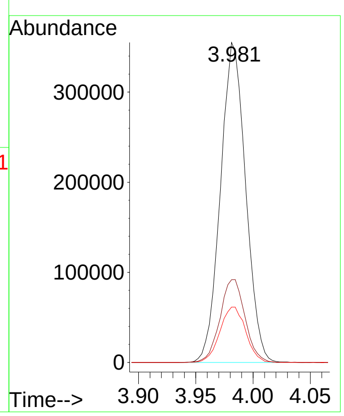


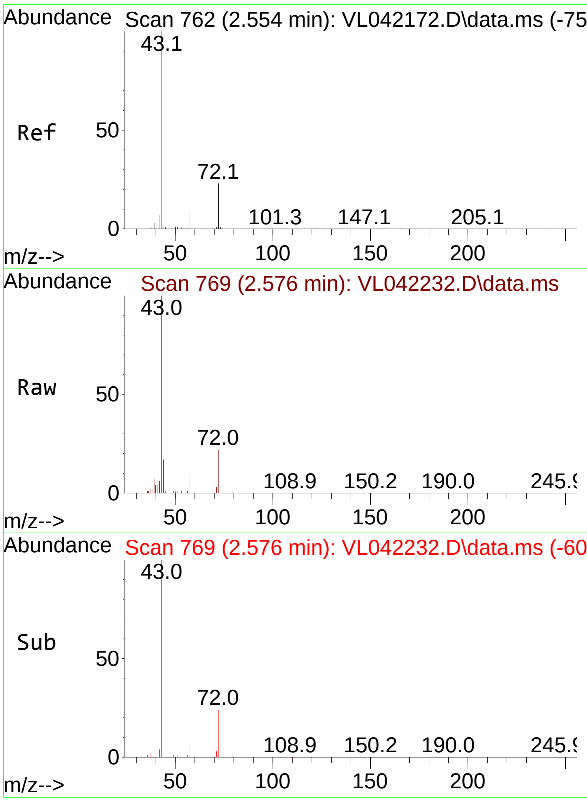


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.981 min Scan# 1203
Delta R.T. 0.029 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion:114 Resp: 543996

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	17.7	15.0	22.4



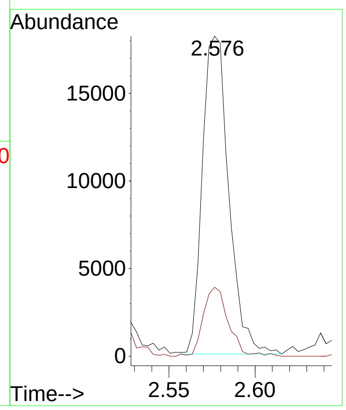


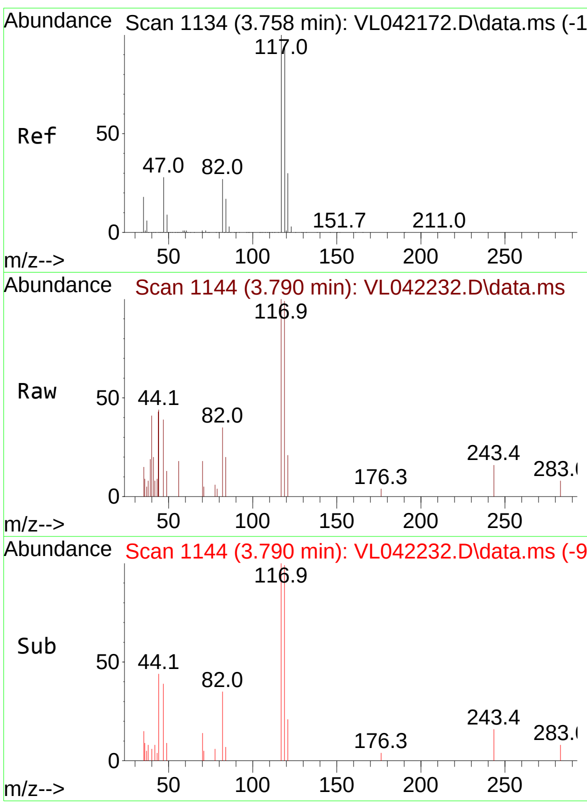
#34
2-Butanone
Concen: 0.492 ppbv
RT: 2.576 min Scan# 7(
Delta R.T. 0.022 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 43 Resp: 19408

Ion	Ratio	Lower	Upper
43	100		
72	20.7	18.2	27.2

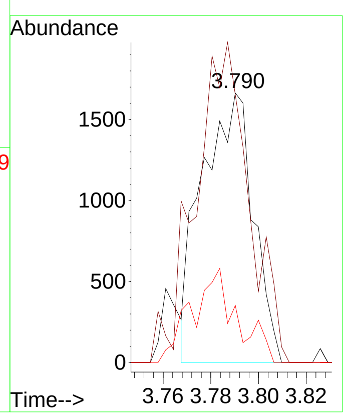


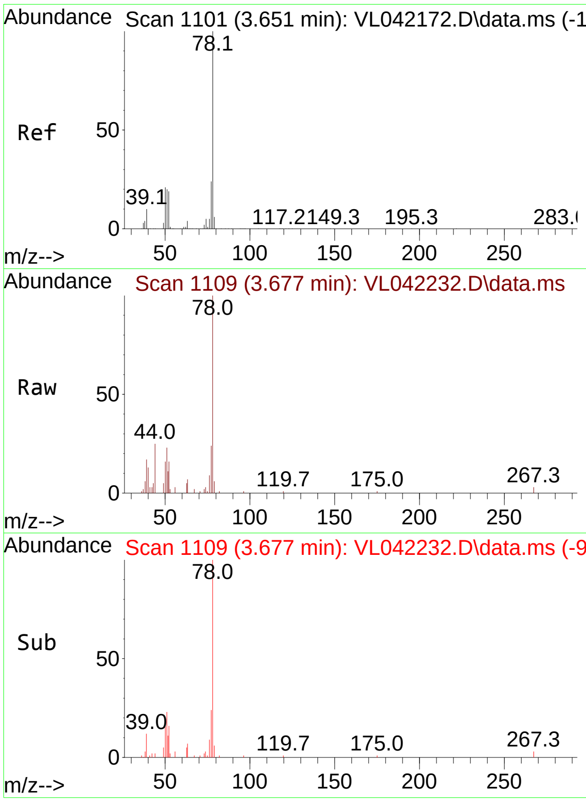


#35
Carbon Tetrachloride
Concen: 0.059 ppbv
RT: 3.790 min Scan# 1144
Delta R.T. 0.032 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion:117 Resp: 2497

Ion	Ratio	Lower	Upper
117	100		
119	93.6	76.2	114.2
121	21.2	24.2	36.4#



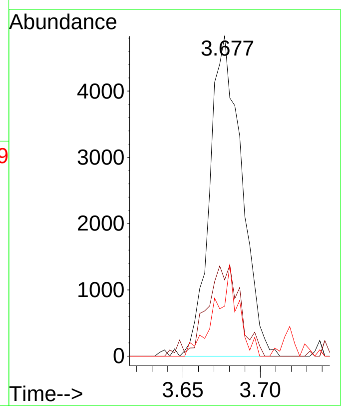


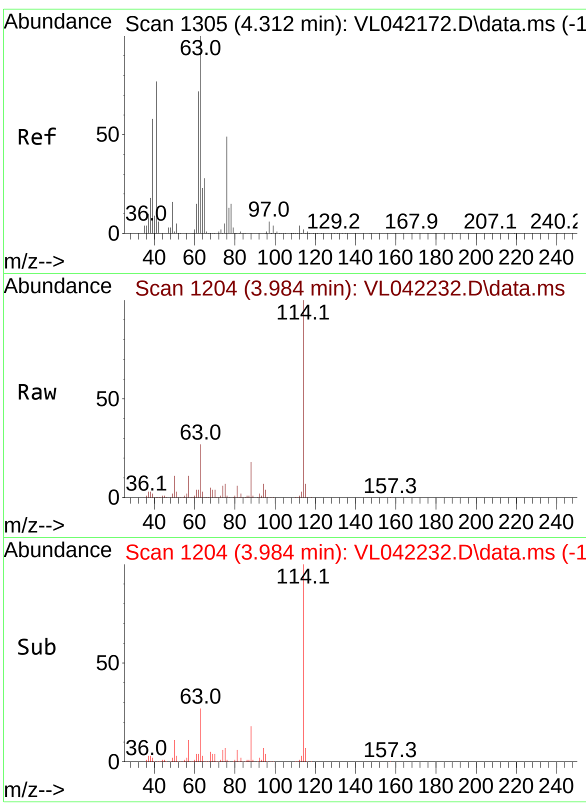
#36
Benzene
Concen: 0.129 ppbv
RT: 3.677 min Scan# 1
Delta R.T. 0.026 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 78 Resp: 6934

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.1	28.7
50	15.7	16.6	24.8#

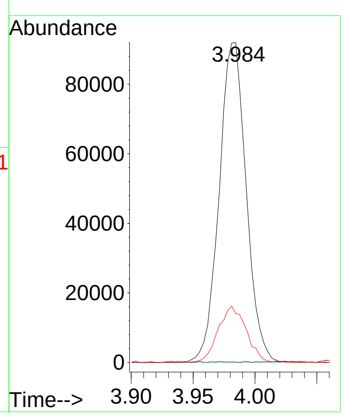




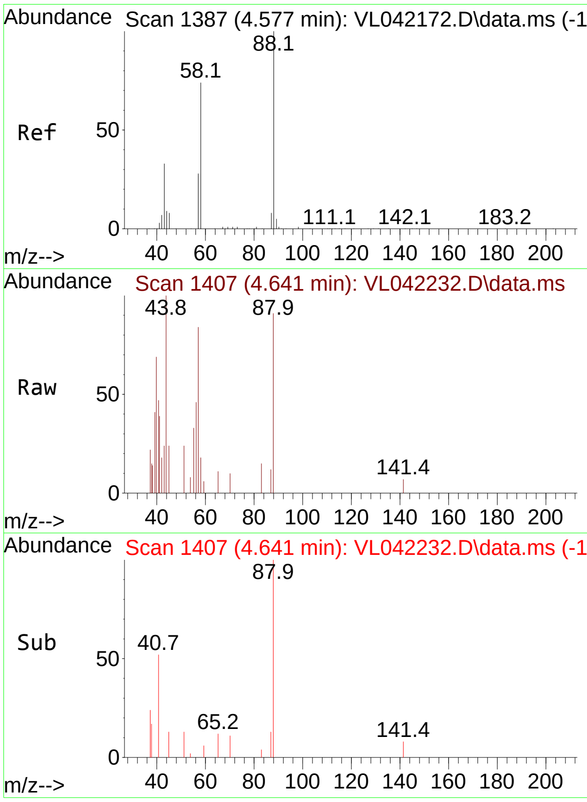
#39
1,2-Dichloropropane
Concen: 7.133 ppbv
RT: 3.984 min Scan# 1204
Delta R.T. -0.327 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 63 Resp: 140099

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	15.3	57.6	86.4#



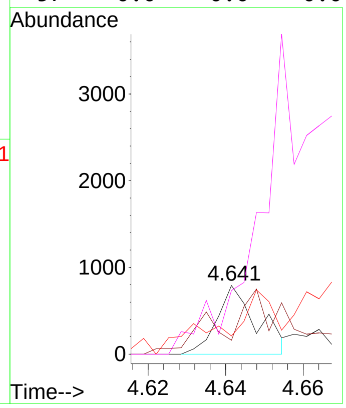
Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

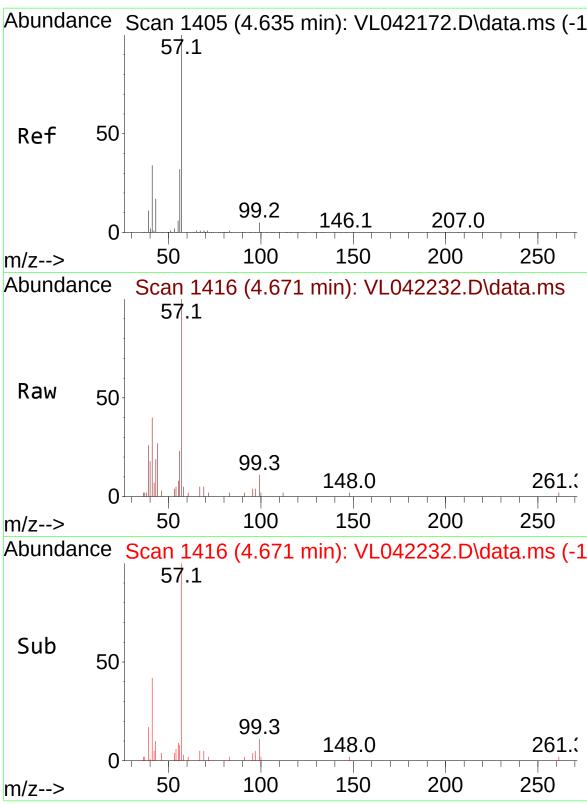


#40
1,4-Dioxane
Concen: 0.055 ppbv
RT: 4.641 min Scan# 14
Delta R.T. 0.064 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 88 Resp: 569

Ion	Ratio	Lower	Upper
88	100		
58	182.8	62.7	94.1#
43	171.2	23.0	34.4#
57	0.0	0.0	0.0

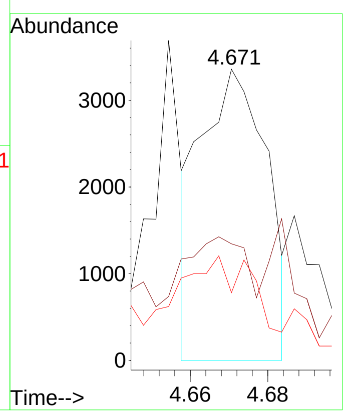


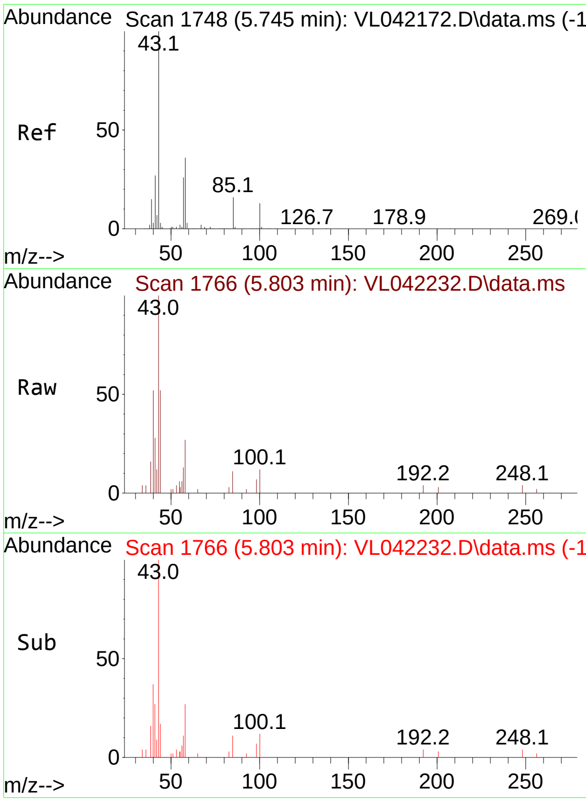


#44
2,2,4-Trimethylpentane
Concen: 0.044 ppbv
RT: 4.671 min Scan# 1416
Delta R.T. 0.035 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 57 Resp: 4007

Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.8	40.2#
56	74.6	25.6	38.4#



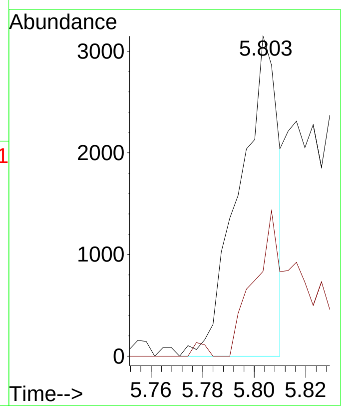


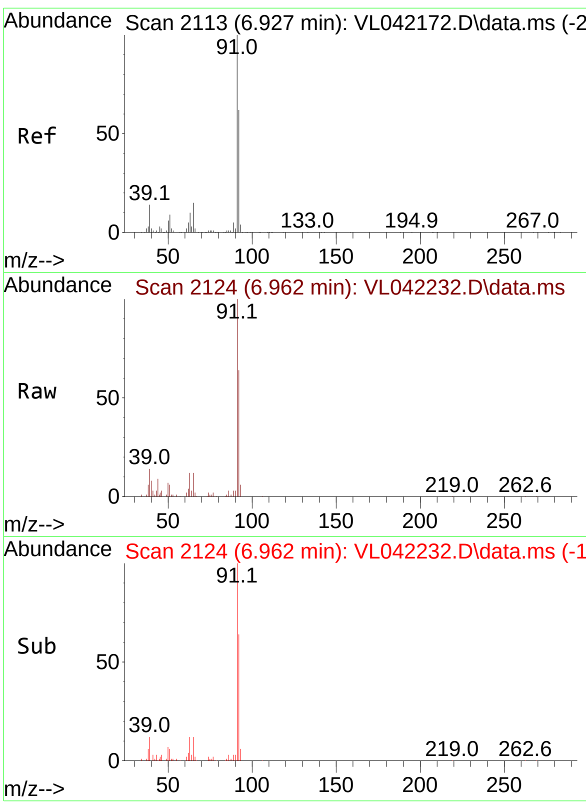
#50
4-Methyl-2-Pentanone
Concen: 0.052 ppbv
RT: 5.803 min   Scan# 1
Delta R.T.   0.058 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 43 Resp: 3269

Ion	Ratio	Lower	Upper
43	100		
58	70.3	29.0	43.6#

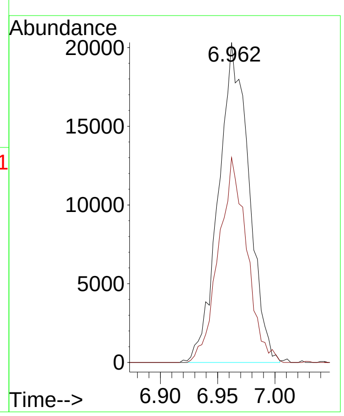


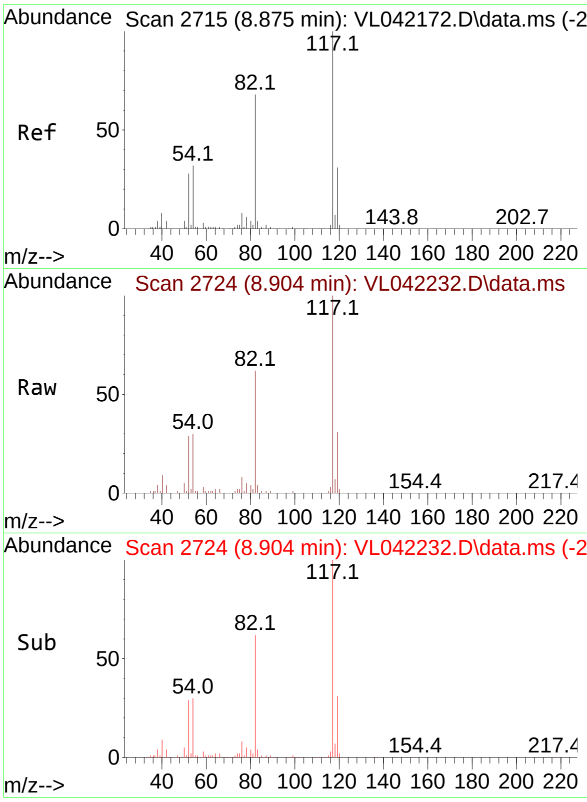


#53
Toluene
Concen: 0.588 ppbv
RT: 6.962 min   Scan# 2124
Delta R.T.   0.035 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Tgt Ion: 91 Resp: 37601

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6



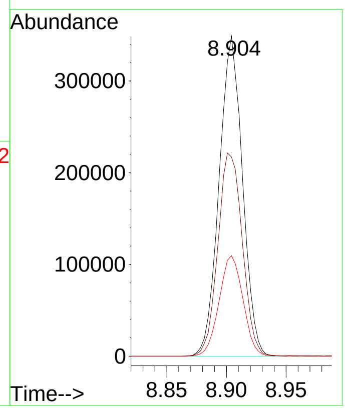


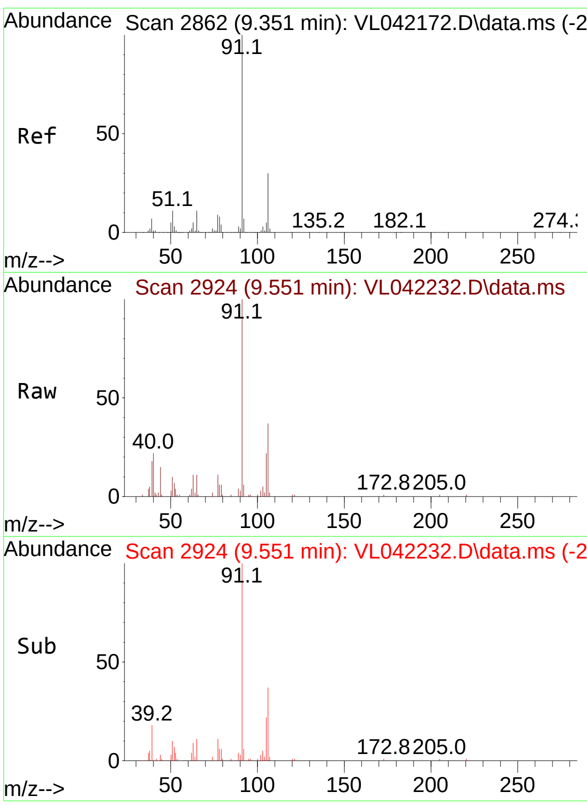
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.904 min Scan# 2724
Delta R.T. 0.029 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion:117 Resp: 475092

Ion	Ratio	Lower	Upper
117	100		
82	66.4	55.8	83.6
119	32.2	25.5	38.3

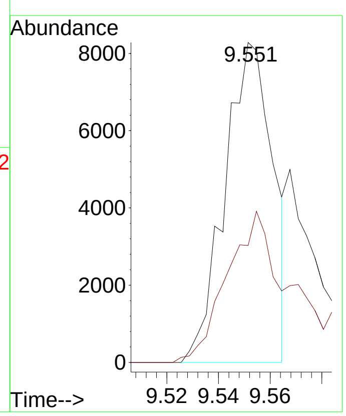


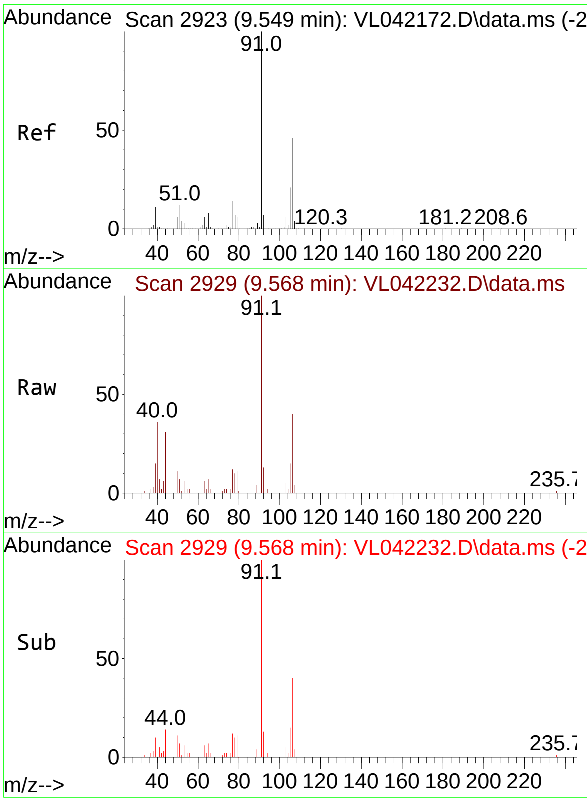


#58
Ethyl Benzene
Concen: 0.126 ppbv
RT: 9.551 min Scan# 2924
Delta R.T. 0.200 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Tgt Ion: 91 Resp: 10646

Ion	Ratio	Lower	Upper
91	100		
106	34.9	24.2	36.2



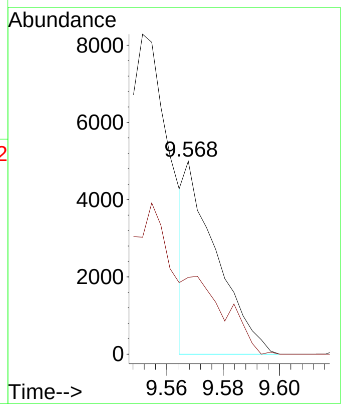


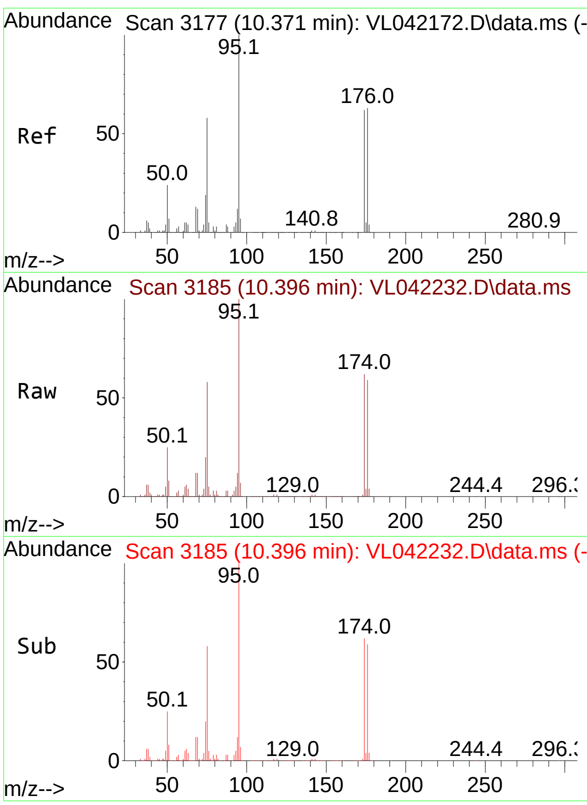
#59
m/p-Xylene
Concen: 0.059 ppbv
RT: 9.568 min   Scan# 2
Delta R.T.   0.019 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion: 91 Resp: 3947

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

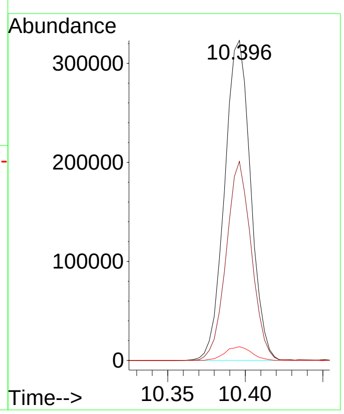


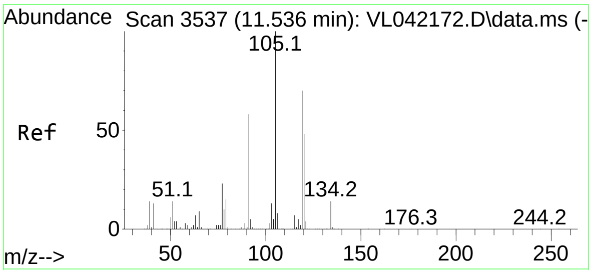


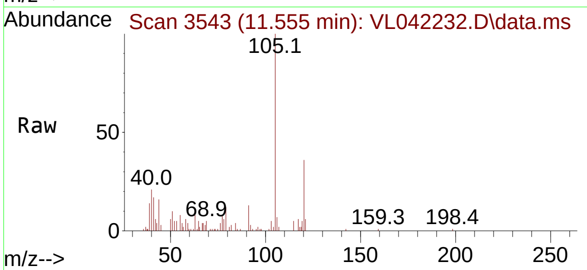
#68
1-Bromo-4-Fluorobenzene
Concen: 9.697 ppbv
RT: 10.396 min   Scan# 3185
Delta R.T.   0.026 min
Lab File: VL042232.D
Acq: 07 Apr 2025   13:00

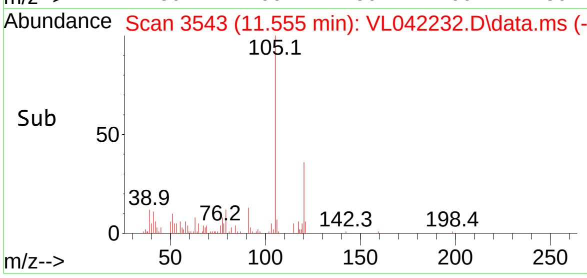
Tgt Ion: 95 Resp: 378319

Ion	Ratio	Lower	Upper
95	100		
174	60.2	50.6	76.0
175	4.5	3.8	5.6









#74
1,2,4-Trimethylbenzene
Concen: 0.098 ppbv
RT: 11.555 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042232.D
Acq: 07 Apr 2025 13:00

Instrument :
MSVOA_L
ClientSampleId :
AA-1-03312025DUP

Tgt Ion:105 Resp: 8275

Ion	Ratio	Lower	Upper
105	100		
120	36.5	38.6	58.0#
91	13.1	46.2	69.2#
77	7.3	18.6	27.8#