

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
 Data File : VL042319.D
 Acq On : 11 Apr 2025 14:27
 Operator : SY/MD
 Sample : Q1665-10
 Misc : 400mL/MSVOA_L
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B10-4-3242025

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
 Supervised By :Mahesh Dadoda 04/17/2025

Quant Time: Apr 11 23:00:29 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Fri Mar 28 02:00:52 2025

Response via : Initial Calibration

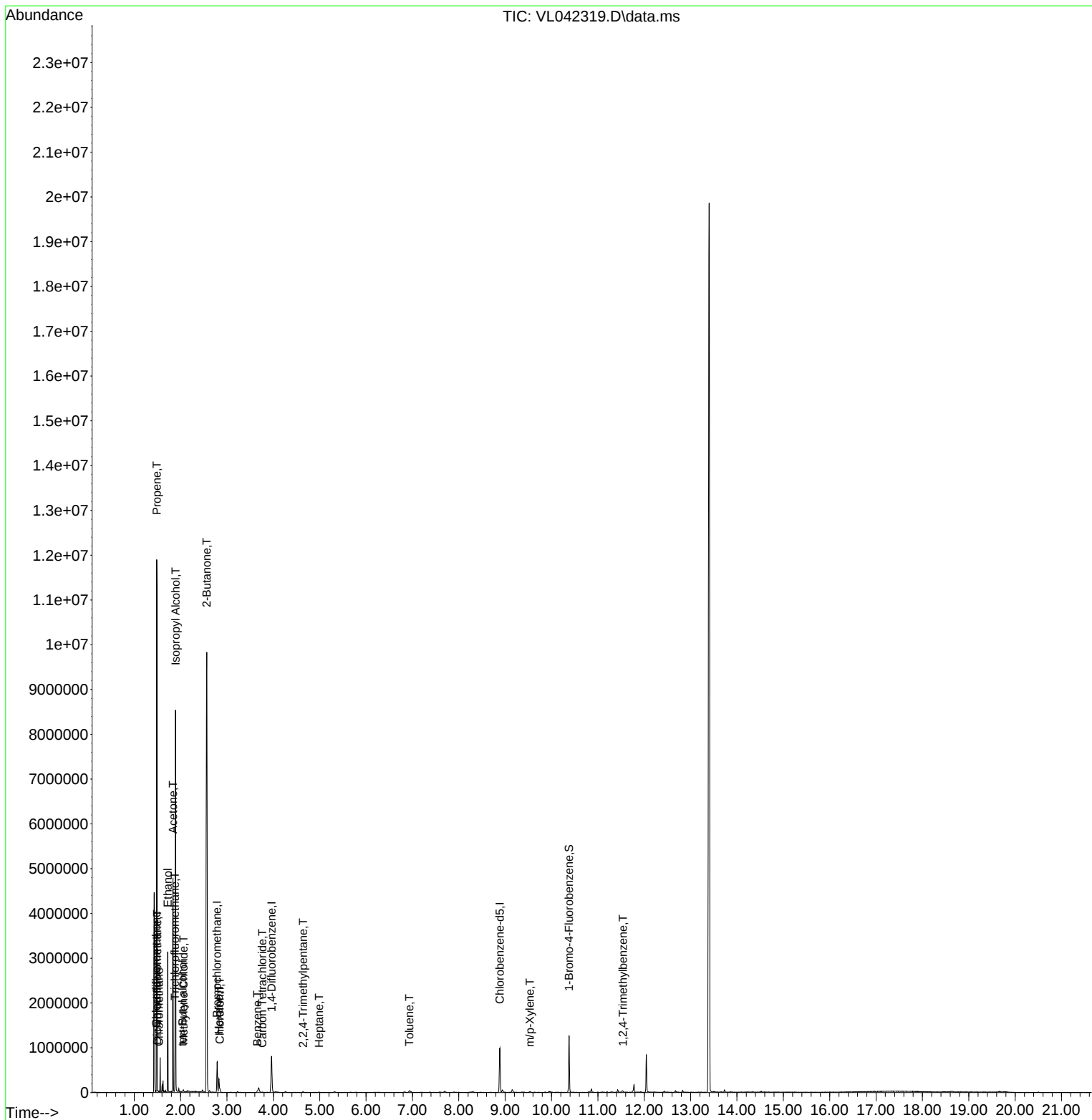
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

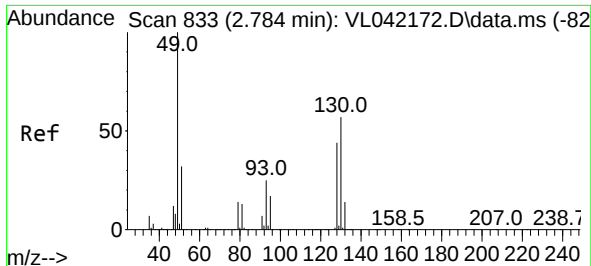
Internal Standards						
1) Bromochloromethane	2.787	49	190778	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	461210	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	383940	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	301822	9.573	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.700%
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.499	85	10940	0.388	ppbv	100
3) Chlorodifluoromethane	1.476	51	8870m	0.308	ppbv	
4) Chloromethane	1.531	50	6976	0.606	ppbv	98
9) Propene	1.486	41	1470651m	111.500	ppbv	
10) Heptane	4.985	43	4922m	0.140	ppbv	
11) Trichlorofluoromethane	1.878	101	5102	0.186	ppbv	87
13) Ethanol	1.722	45	1088476	872.986	ppbv	86
15) Acetone	1.836	43	2047600	76.743	ppbv #	79
17) tert-Butyl alcohol	2.046	59	6995	0.210	ppbv #	37
19) Isopropyl Alcohol	1.891	45	3151010	209.311	ppbv #	32
20) Methylene Chloride	2.062	84	5890	0.593	ppbv	86
26) Hexane	2.826	57	60038	2.245	ppbv #	4
29) Chloroform	2.849	83	22740	0.581	ppbv	100
34) 2-Butanone	2.564	43	5516146	164.939	ppbv #	36
35) Carbon Tetrachloride	3.761	117	2766m	0.077	ppbv	
36) Benzene	3.655	78	21386	0.468	ppbv #	93
44) 2,2,4-Trimethylpentane	4.645	57	7908m	0.102	ppbv	
53) Toluene	6.937	91	22633m	0.418	ppbv	
59) m/p-Xylene	9.532	91	10027m	0.184	ppbv	
74) 1,2,4-Trimethylbenzene	11.539	105	7147	0.105	ppbv #	67

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

Manual Integrations

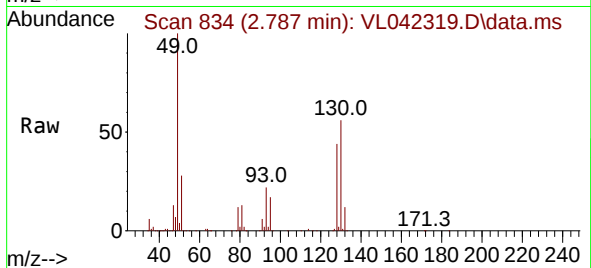
Quant Time: Apr 11 23:00:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

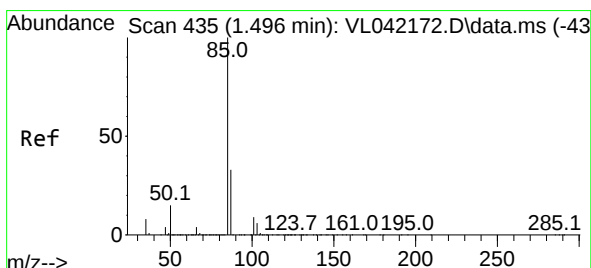
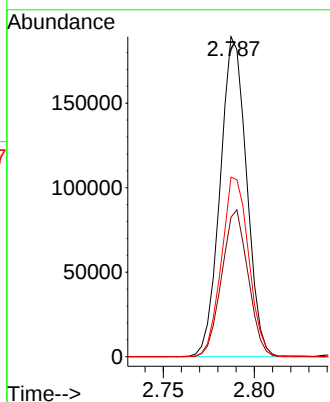
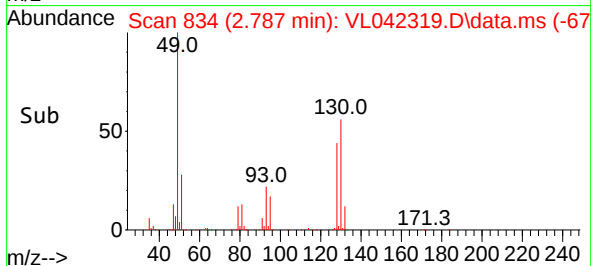
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



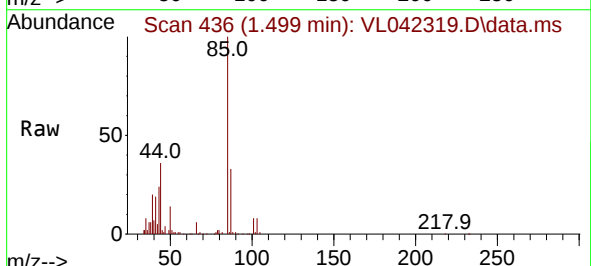
Tgt Ion: 49 Resp: 190778
Ion Ratio Lower Upper
49 100
128 45.7 22.9 68.5
130 57.8 28.8 86.4

Manual Integrations
APPROVED

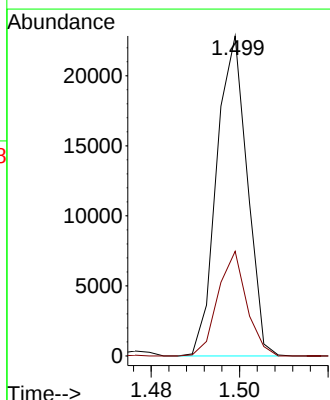
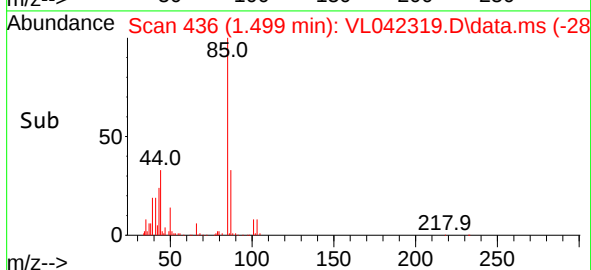
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#2
Dichlorodifluoromethane
Concen: 0.388 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27



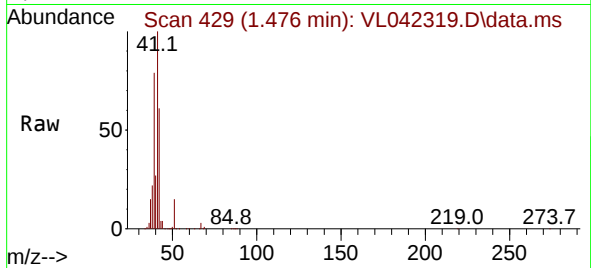
Tgt Ion: 85 Resp: 10940
Ion Ratio Lower Upper
85 100
87 32.7 26.1 39.1





#3
Chlorodifluoromethane
Concen: 0.308 ppbv m
RT: 1.476 min Scan# 428
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

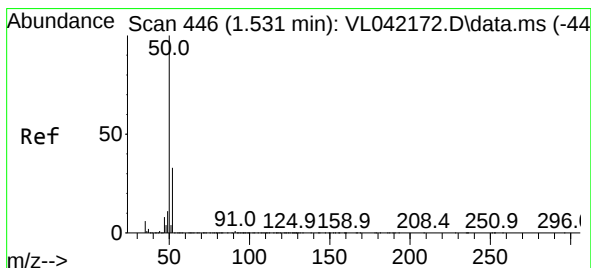
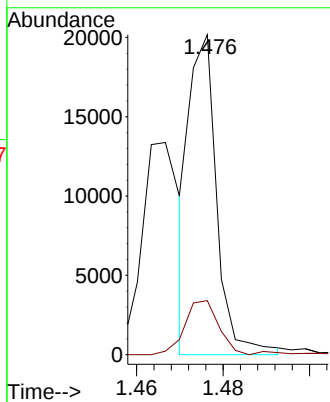
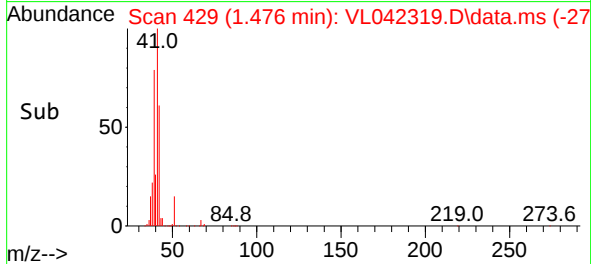
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



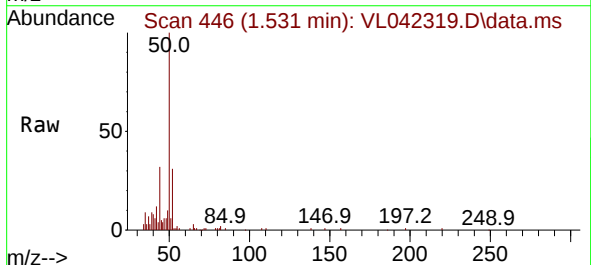
Tgt Ion: 51 Resp: 8870
Ion Ratio Lower Upper
51 100
67 24.1 15.0 22.6

Manual Integrations
APPROVED

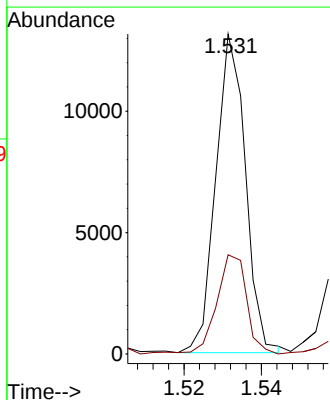
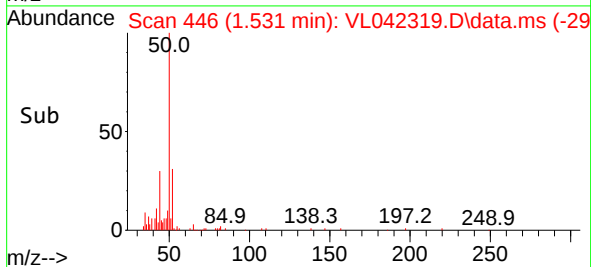
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

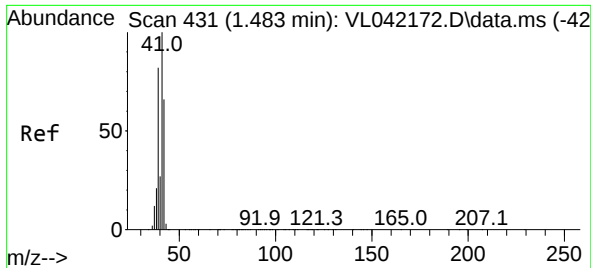


#4
Chloromethane
Concen: 0.606 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27



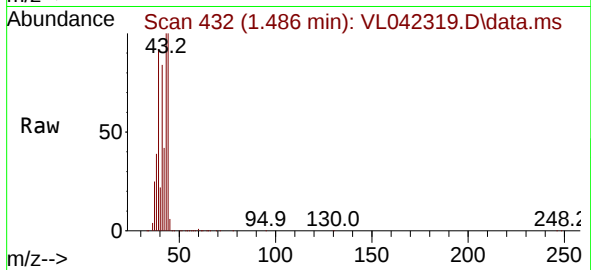
Tgt Ion: 50 Resp: 6976
Ion Ratio Lower Upper
50 100
52 31.5 26.1 39.1





#9
Propene
Concen: 111.500 ppbv m
RT: 1.486 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

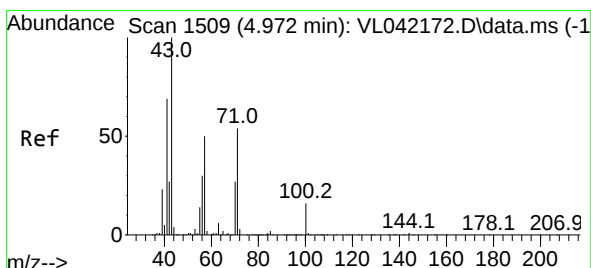
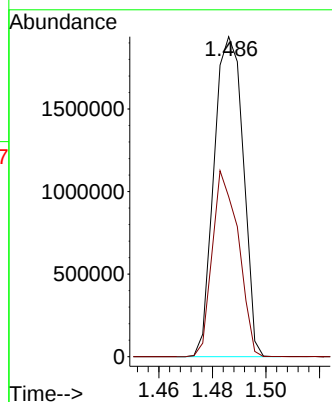
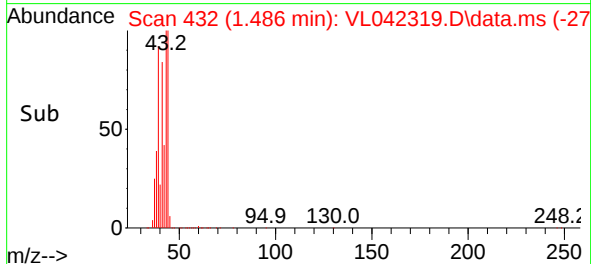
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



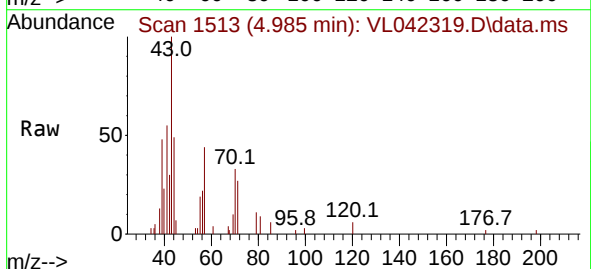
Tgt Ion: 41 Resp: 147065
Ion Ratio Lower Upper
41 100
42 4.1 55.4 83.2

Manual Integrations
APPROVED

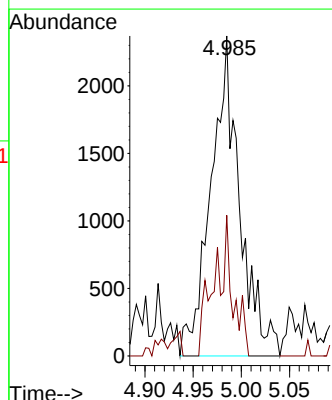
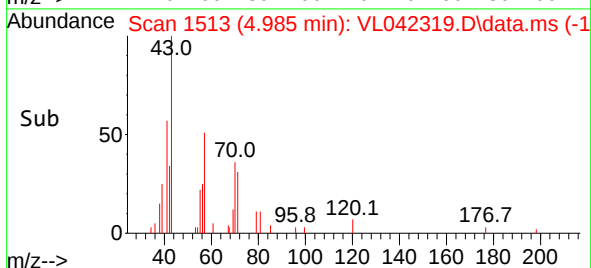
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

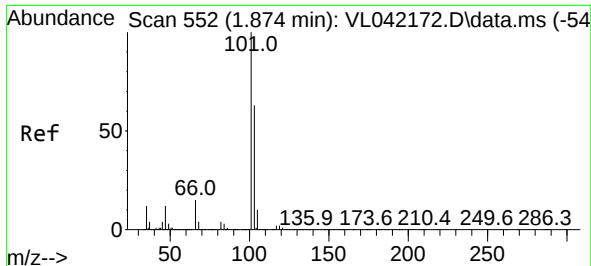


#10
Heptane
Concen: 0.140 ppbv m
RT: 4.985 min Scan# 1513
Delta R.T. 0.013 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27



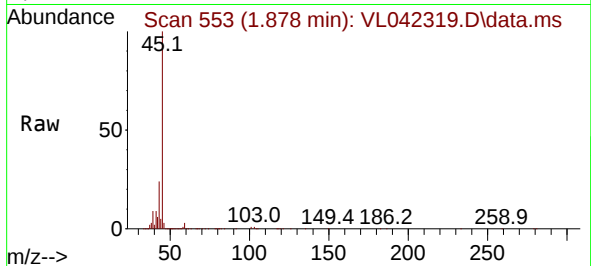
Tgt Ion: 43 Resp: 4922
Ion Ratio Lower Upper
43 100
57 27.8 39.4 59.2





#11
Trichlorofluoromethane
Concen: 0.186 ppbv
RT: 1.878 min Scan# 510
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

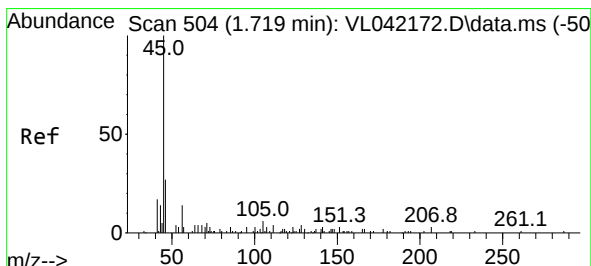
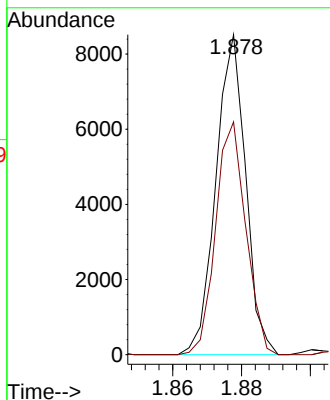
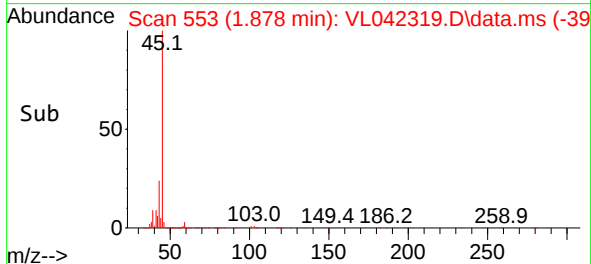
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



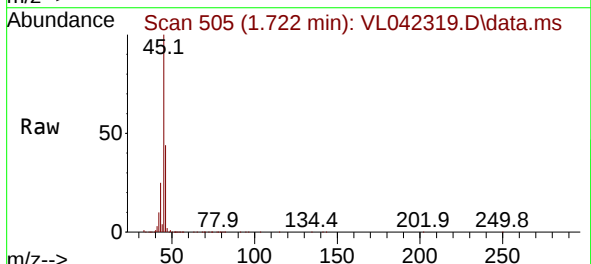
Tgt Ion:101 Resp: 510
Ion Ratio Lower Upper
101 100
103 72.7 50.2 75.2

Manual Integrations
APPROVED

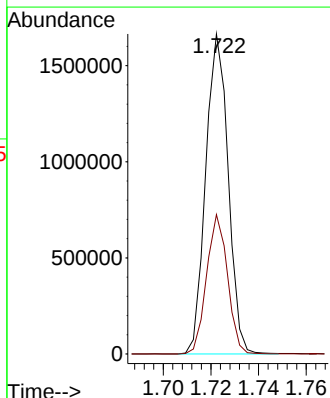
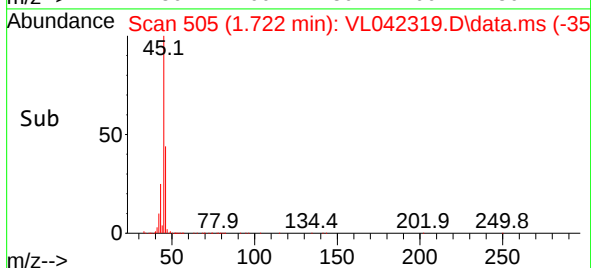
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

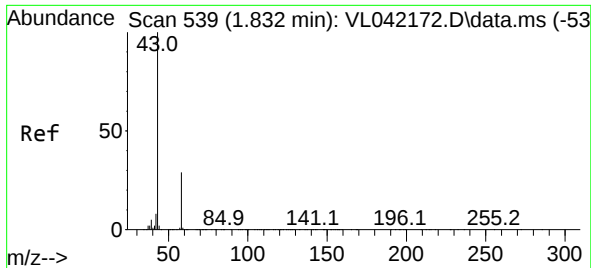


#13
Ethanol
Concen: 872.986 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27



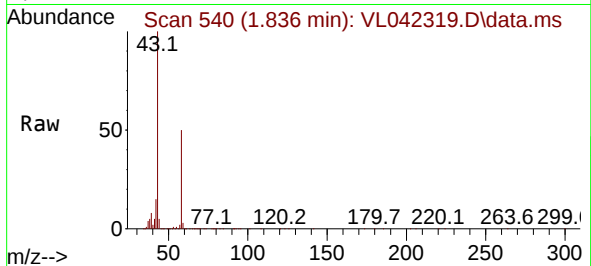
Tgt Ion: 45 Resp: 1088476
Ion Ratio Lower Upper
45 100
46 40.7 20.2 80.8





#15
Acetone
Concen: 76.743 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

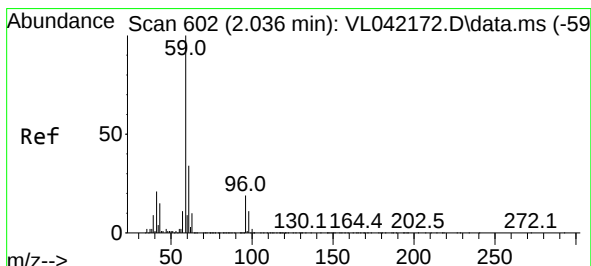
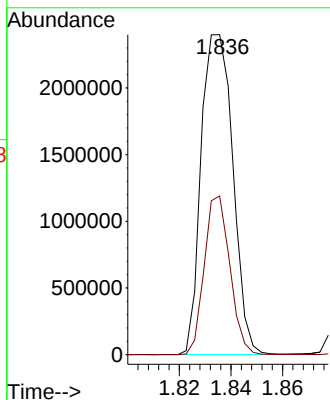
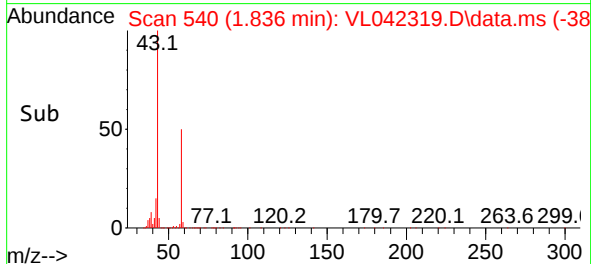
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



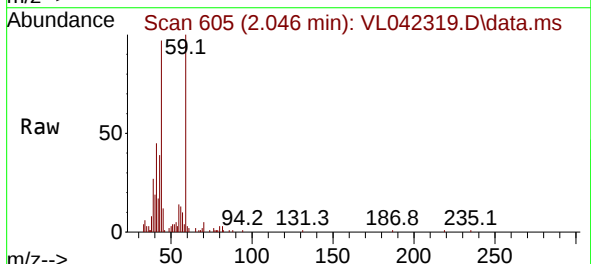
Tgt Ion: 43 Resp: 2047600
Ion Ratio Lower Upper
43 100
58 40.0 23.2 34.8

Manual Integrations
APPROVED

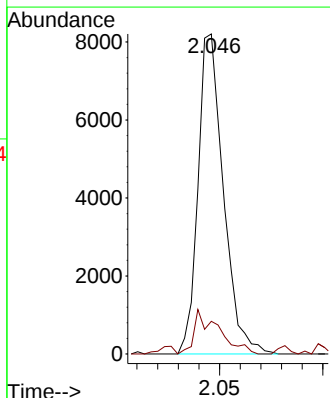
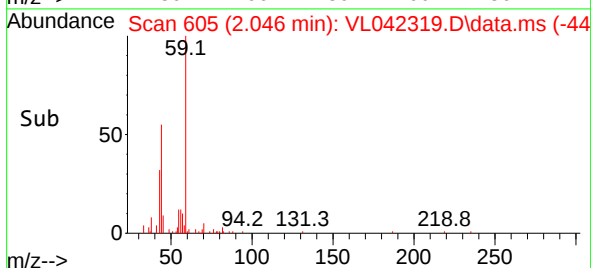
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

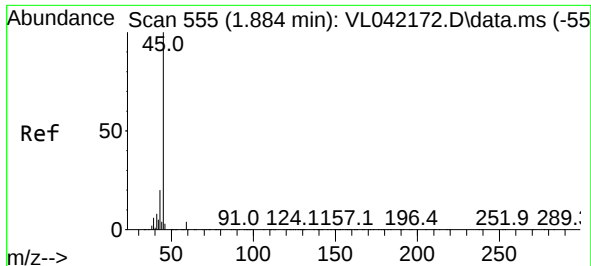


#17
tert-Butyl alcohol
Concen: 0.210 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27



Tgt Ion: 59 Resp: 6995
Ion Ratio Lower Upper
59 100
57 35.0 8.9 13.3





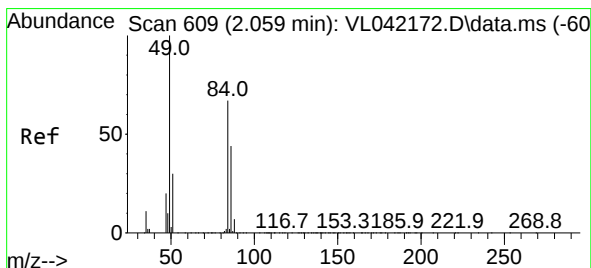
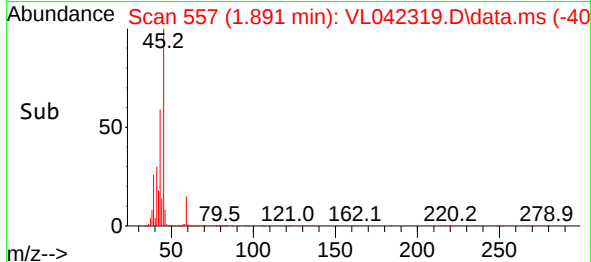
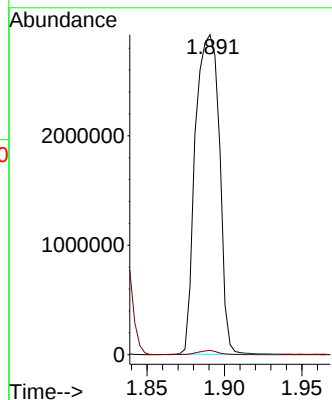
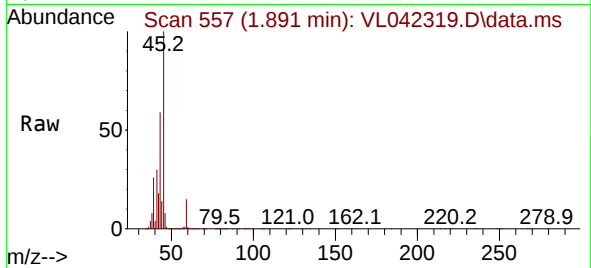
#19
Isopropyl Alcohol
Concen: 209.311 ppbv
RT: 1.891 min Scan# 510
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 45 Resp: 3151010
Ion Ratio Lower Upper
45 100
58 1.1 36.9 55.3

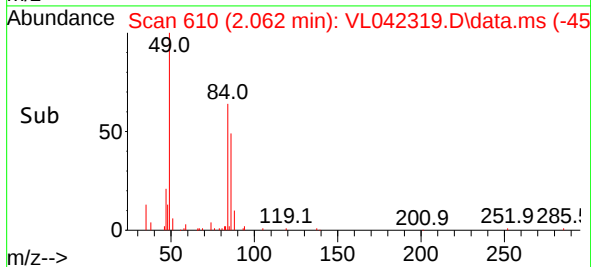
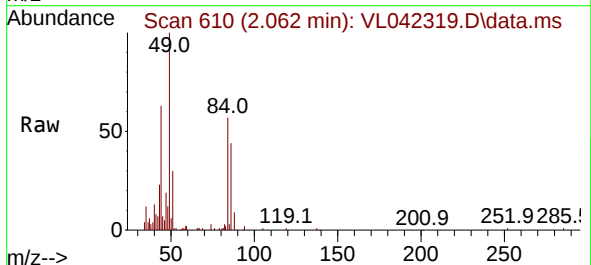
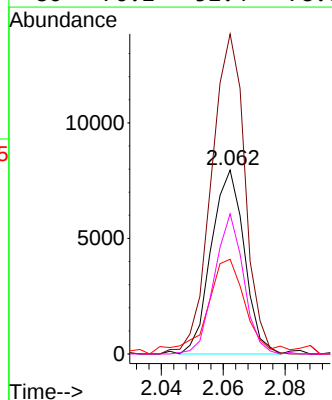
Manual Integrations
APPROVED

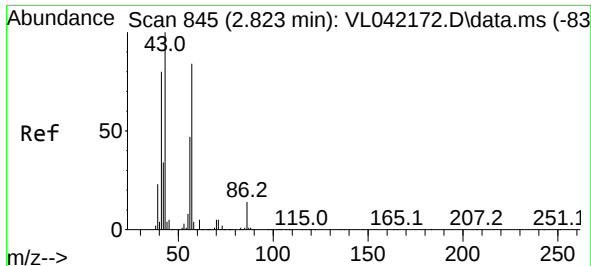
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#20
Methylene Chloride
Concen: 0.593 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

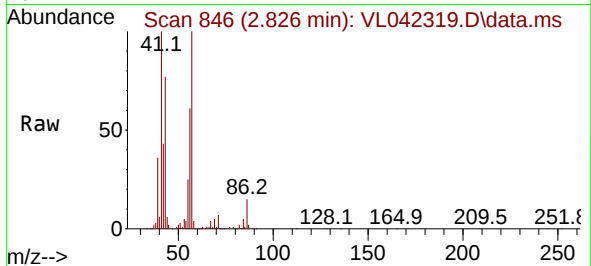
Tgt Ion: 84 Resp: 5890
Ion Ratio Lower Upper
84 100
49 173.3 120.2 180.4
51 47.2 37.4 56.0
86 76.2 52.4 78.6





#26
Hexane
Concen: 2.245 ppbv
RT: 2.826 min Scan# 845
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

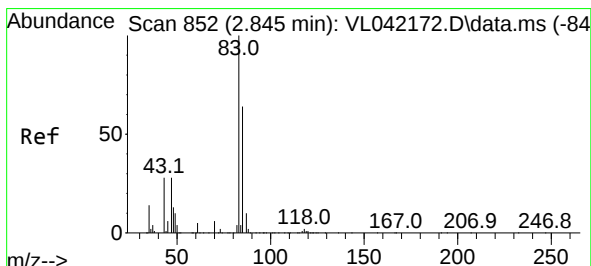
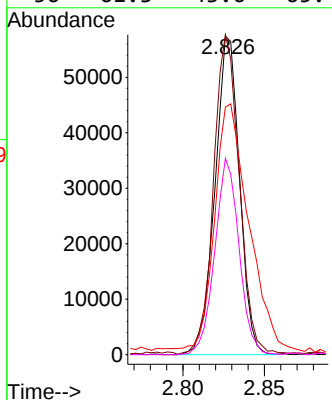
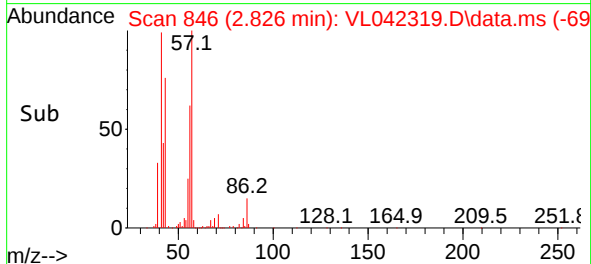
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



Tgt Ion: 57 Resp: 60038
Ion Ratio Lower Upper
57 100
41 106.2 76.6 114.8
43 0.0 207.8 311.8
56 61.3 43.6 65.4

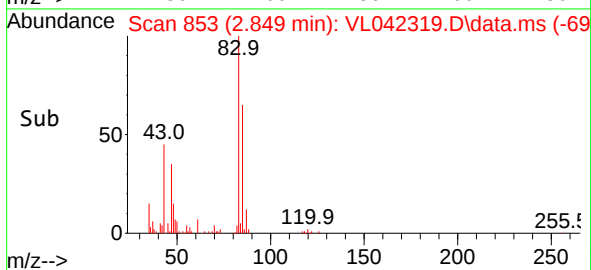
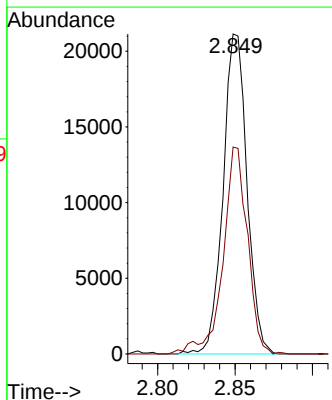
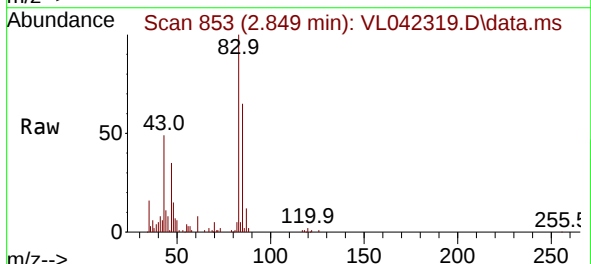
Manual Integrations
APPROVED

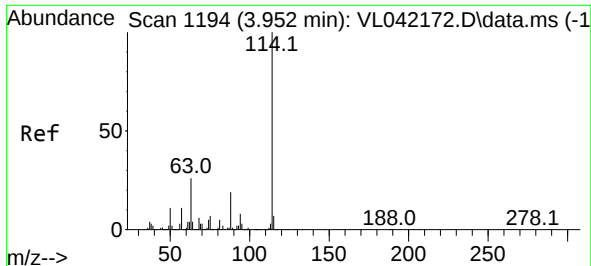
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#29
Chloroform
Concen: 0.581 ppbv
RT: 2.849 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

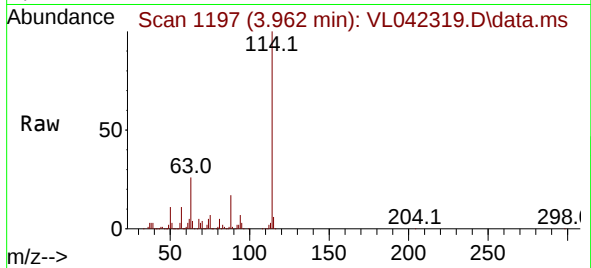
Tgt Ion: 83 Resp: 22740
Ion Ratio Lower Upper
83 100
85 64.2 51.4 77.2





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

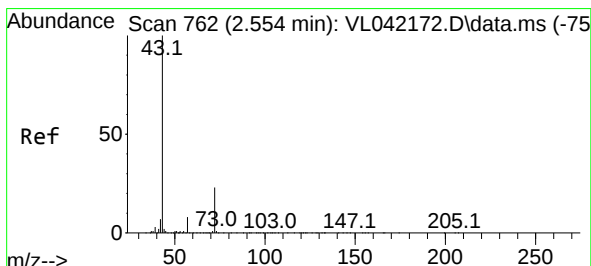
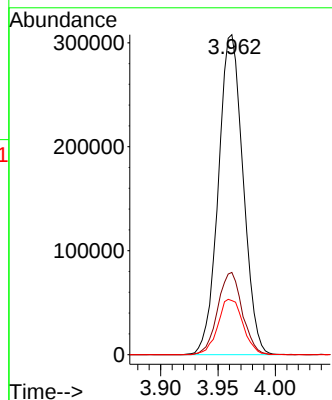
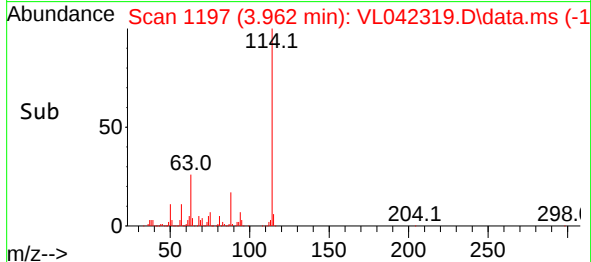
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



Tgt Ion:114 Resp: 461210
Ion Ratio Lower Upper
114 100
63 25.6 20.7 31.1
88 17.7 15.0 22.4

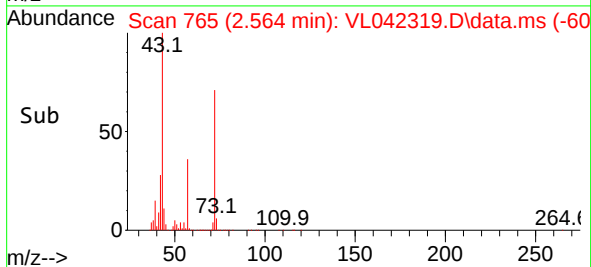
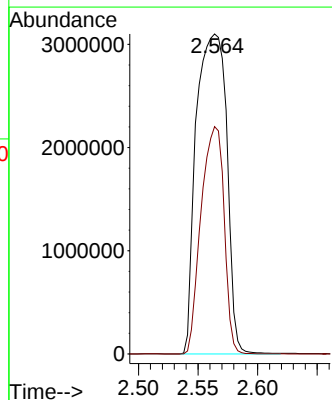
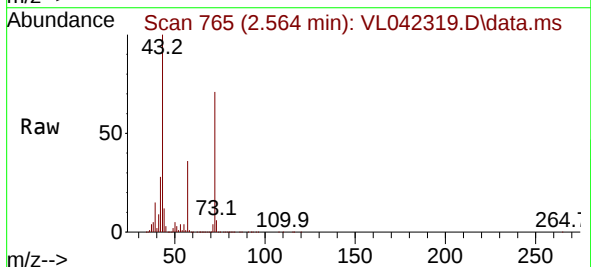
Manual Integrations
APPROVED

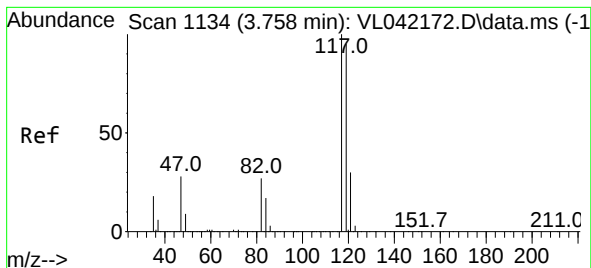
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#34
2-Butanone
Concen: 164.939 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 5516146
Ion Ratio Lower Upper
43 100
72 53.8 18.2 27.2#





#35

Carbon Tetrachloride

Concen: 0.077 ppbv

RT: 3.761 min Scan# 1135

Delta R.T. 0.003 min

Lab File: VL042319.D

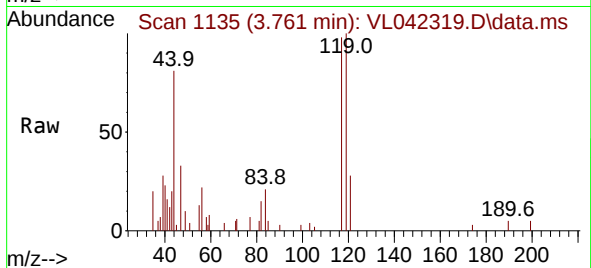
Acq: 11 Apr 2025 14:27

Instrument :

MSVOA_L

ClientSampleId :

LA-B10-4-3242025



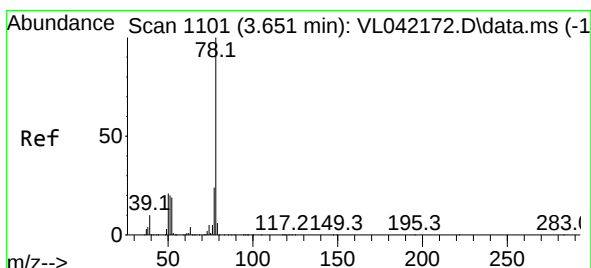
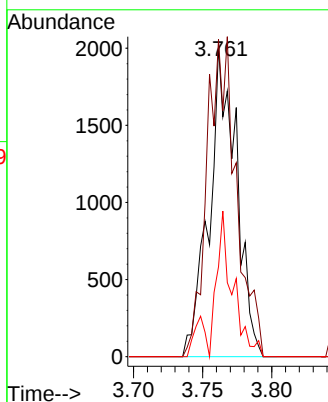
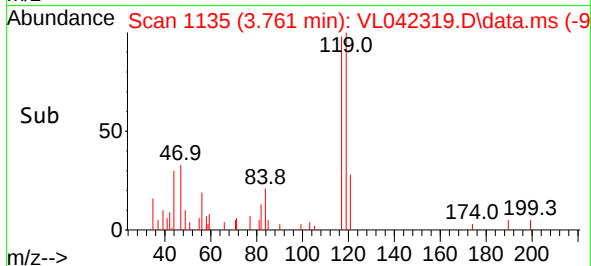
Tgt Ion:	117	Resp:	2760
Ion	Ratio	Lower	Upper
117	100		
119	102.3	76.2	114.2
121	29.0	24.2	36.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025

Supervised By :Mahesh Dadoda 04/17/2025



#36

Benzene

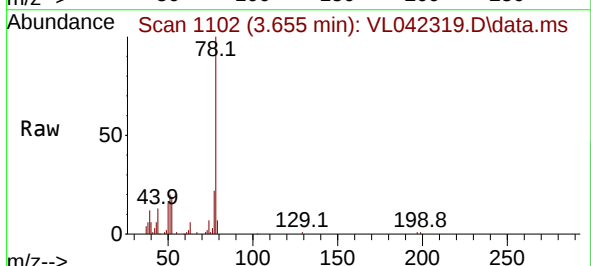
Concen: 0.468 ppbv

RT: 3.655 min Scan# 1102

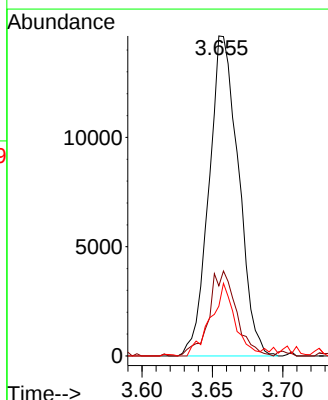
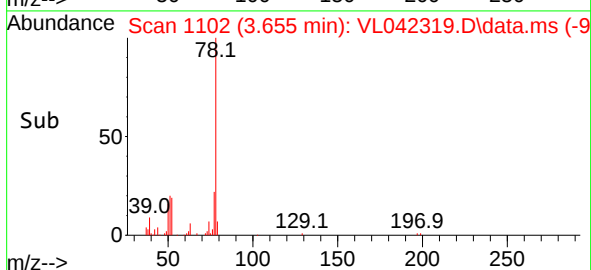
Delta R.T. 0.003 min

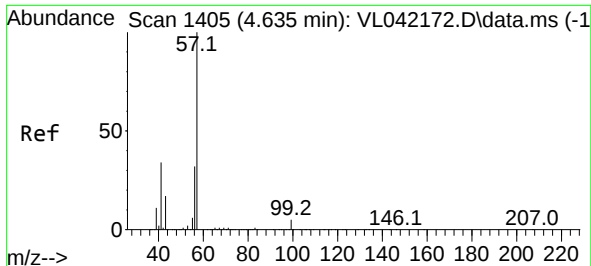
Lab File: VL042319.D

Acq: 11 Apr 2025 14:27



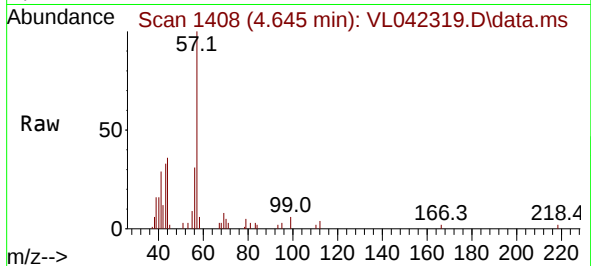
Tgt Ion:	78	Resp:	21386
Ion	Ratio	Lower	Upper
78	100		
77	21.9	19.1	28.7
50	15.6	16.6	24.8





#44
2,2,4-Trimethylpentane
Concen: 0.102 ppbv m
RT: 4.645 min Scan# 1405
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

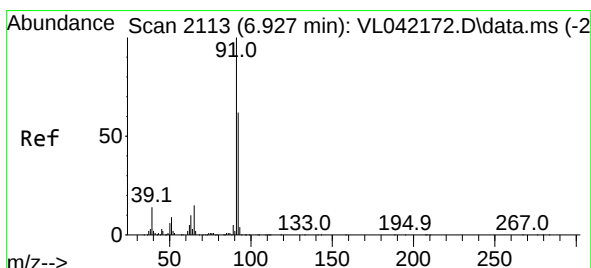
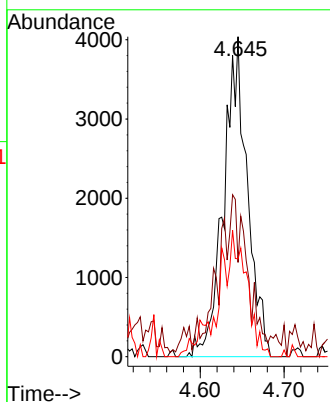
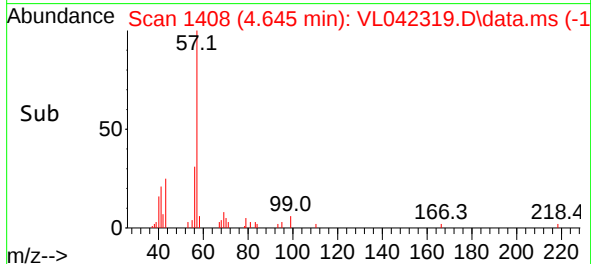
Instrument : MSVOA_L
ClientSampleId : IA-B10-4-3242025



Tgt Ion: 57 Resp: 7908
Ion Ratio Lower Upper
57 100
41 62.5 26.8 40.2
56 47.2 25.6 38.4

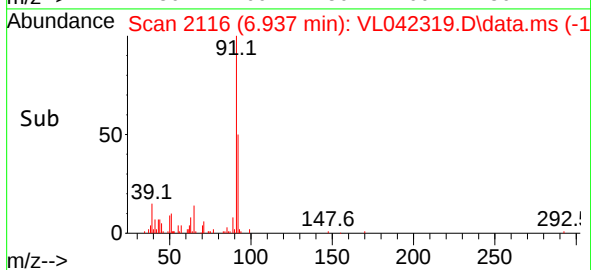
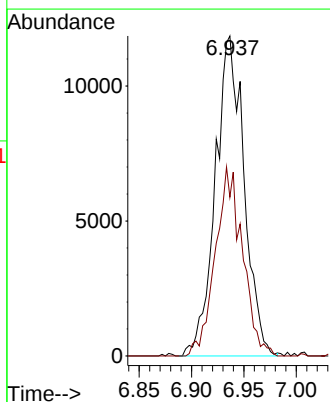
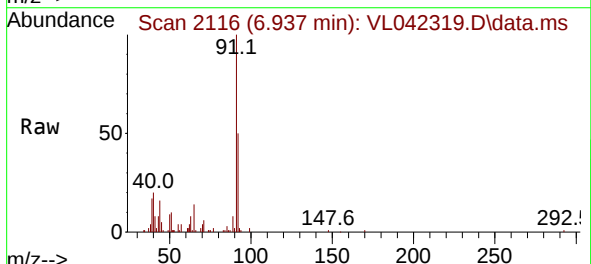
Manual Integrations
APPROVED

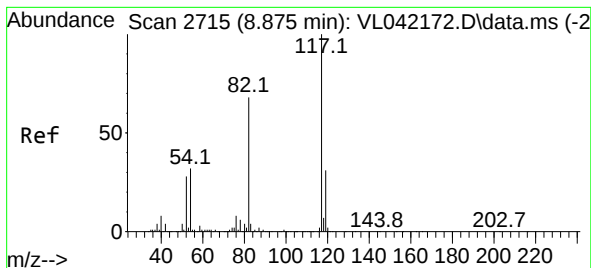
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#53
Toluene
Concen: 0.418 ppbv m
RT: 6.937 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 22633
Ion Ratio Lower Upper
91 100
92 0.0 48.4 72.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 21

Delta R.T. 0.010 min

Lab File: VL042319.D

Acq: 11 Apr 2025 14:27

Instrument :

MSVOA_L

ClientSampleId :

IA-B10-4-3242025

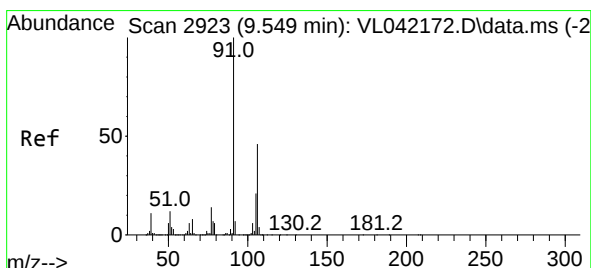
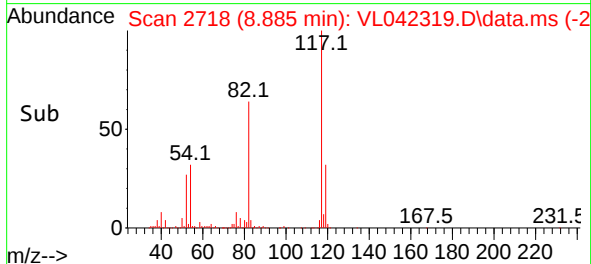
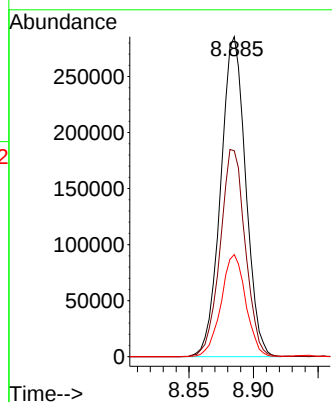
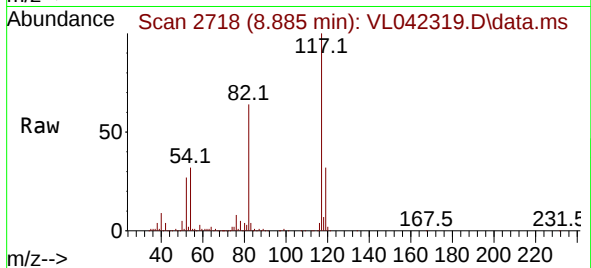
Tgt Ion: 117 Resp: 383940

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	31.7	25.5	38.3

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#59

m/p-Xylene

Concen: 0.184 ppbv m

RT: 9.532 min Scan# 2918

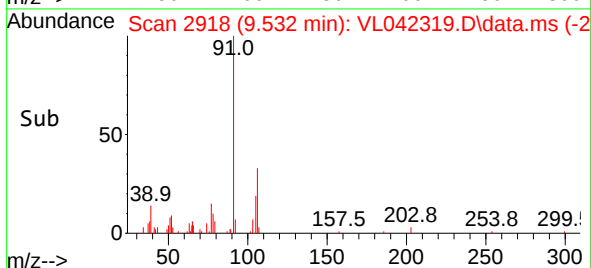
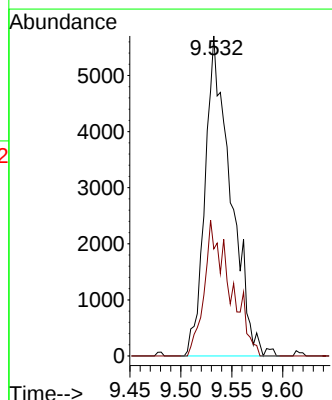
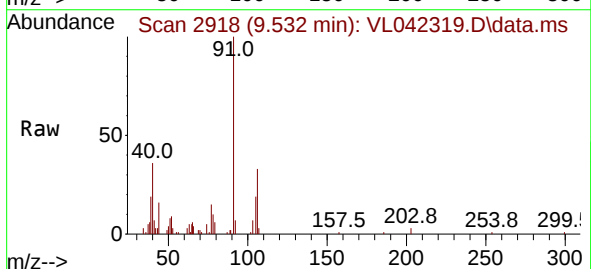
Delta R.T. -0.016 min

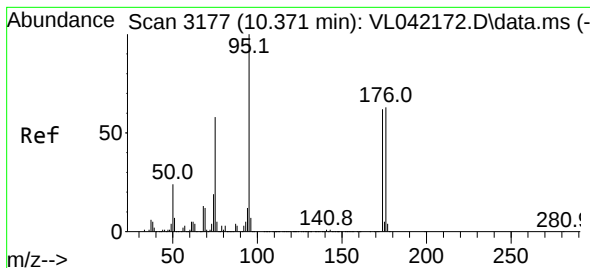
Lab File: VL042319.D

Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 10027

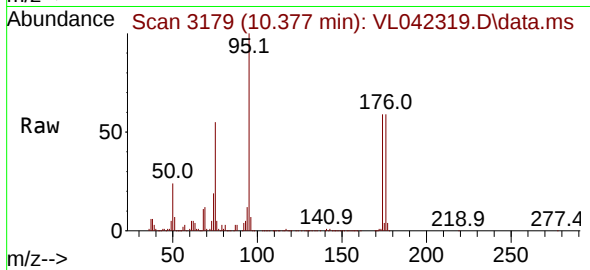
Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6





#68
1-Bromo-4-Fluorobenzene
Concen: 9.573 ppbv
RT: 10.377 min Scan# 3177
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

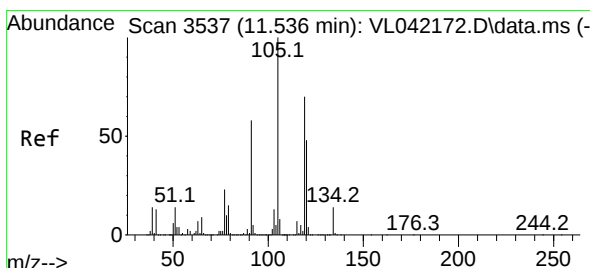
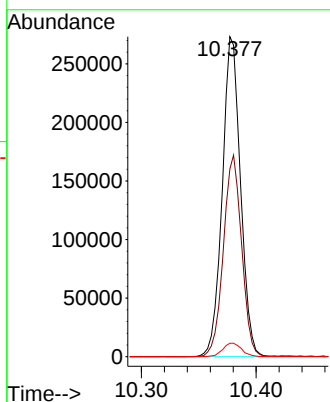
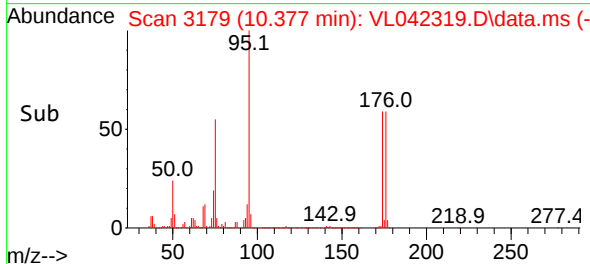
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025



Tgt Ion: 95 Resp: 30182
Ion Ratio Lower Upper
95 100
174 63.1 50.6 76.0
175 4.4 3.8 5.6

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.105 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:105 Resp: 7147
Ion Ratio Lower Upper
105 100
120 46.5 38.6 58.0
91 6.7 46.2 69.2#
77 20.8 18.6 27.8

