

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL122123\
 Data File : VL040934.D
 Acq On : 21 Dec 2023 17:50
 Operator : SY/MD
 Sample : 05813-05DL 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 10323DL

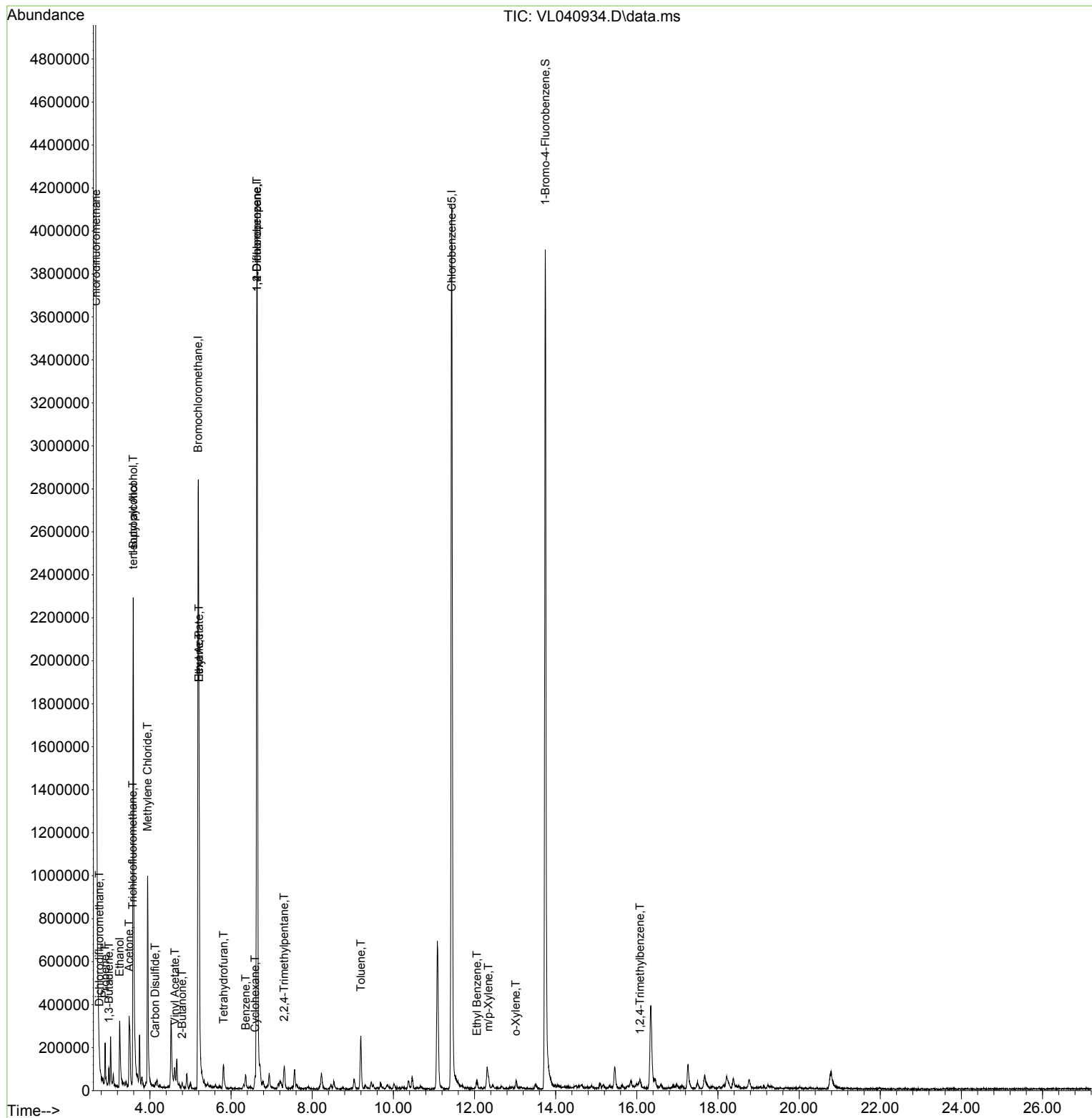
Quant Time: Dec 22 00:09:18 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL122023AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Dec 21 07:32:42 2023
 Response via : Initial Calibration

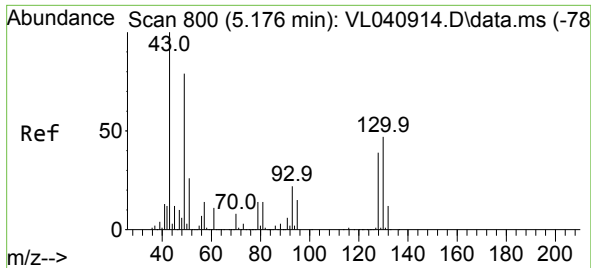
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.188	49	1221943	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	6.639	114	3039457	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.436	117	2663511	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.744	95	1993831	10.163	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.754	85	26829	0.115	ppbv #	82
3) Chlorodifluoromethane	2.674	51	44902	0.244	ppbv #	59
9) Propene	2.896	41	43332	0.714	ppbv	86
11) Trichlorofluoromethane	3.574	101	6995	0.038	ppbv	93
13) Ethanol	3.256	45	310602	20.292	ppbv	97
15) Acetone	3.488	43	345400	2.357	ppbv	93
16) 1,3-Butadiene	2.986	39	20607	0.327	ppbv #	20
17) tert-Butyl alcohol	3.590	59	78534	0.724	ppbv	97
19) Isopropyl Alcohol	3.587	45	2354693	30.792	ppbv #	99
20) Methylene Chloride	3.944	84	302020	5.782	ppbv	97
23) Vinyl Acetate	4.616	43	26244	0.162	ppbv #	1
25) Ethyl Acetate	5.211	43	307731	1.212	ppbv #	81
26) Hexane	5.211	57	399045	3.546	ppbv #	43
27) Carbon Disulfide	4.131	76	15474	0.102	ppbv #	76
30) Cyclohexane	6.594	84	4853	0.052	ppbv #	1
34) 2-Butanone	4.793	43	15883	0.099	ppbv #	47
36) Benzene	6.359	78	44117	0.186	ppbv	96
39) 1,2-Dichloropropane	6.639	63	776153	8.313	ppbv #	24
41) Tetrahydrofuran	5.815	42	5058	0.052	ppbv #	41
44) 2,2,4-Trimethylpentane	7.311	57	81360	0.202	ppbv #	84
53) Toluene	9.198	91	153210	0.582	ppbv	97
58) Ethyl Benzene	12.060	91	32756	0.096	ppbv	90
59) m/p-Xylene	12.342	91	8887	0.031	ppbv #	100
60) o-Xylene	13.021	91	19936	0.073	ppbv	70
74) 1,2,4-Trimethylbenzene	16.075	105	16145	0.056	ppbv #	63

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

Quant Time: Dec 22 00:09:18 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL122023AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Dec 21 07:32:42 2023
Response via : Initial Calibration

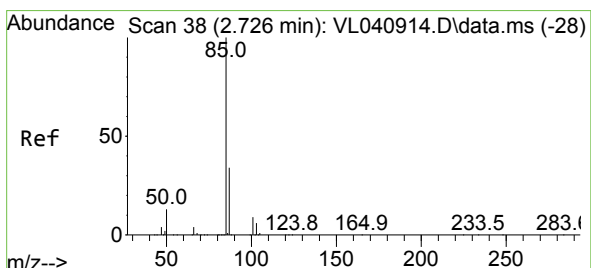
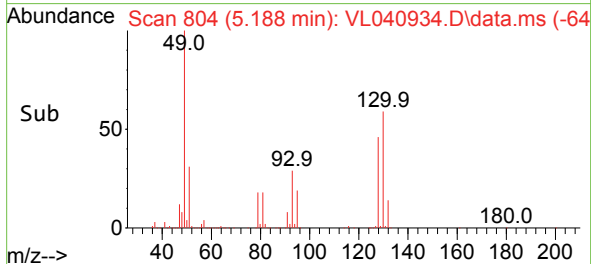
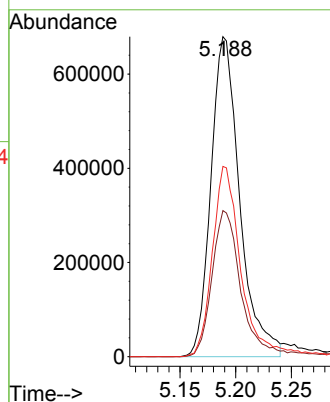
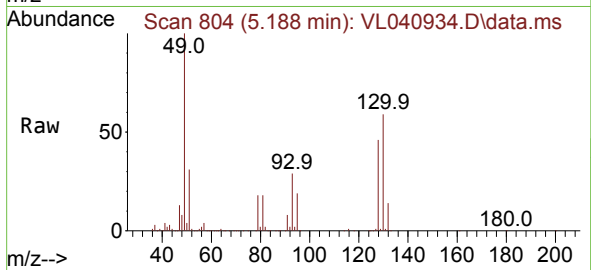




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.188 min Scan# 80
Delta R.T. 0.012 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

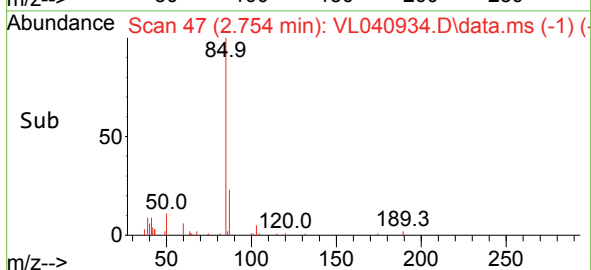
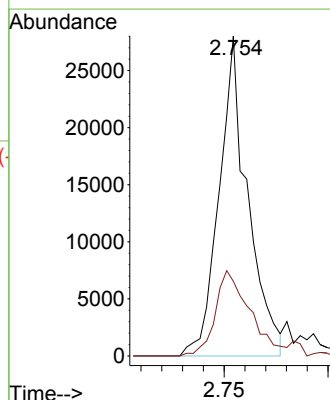
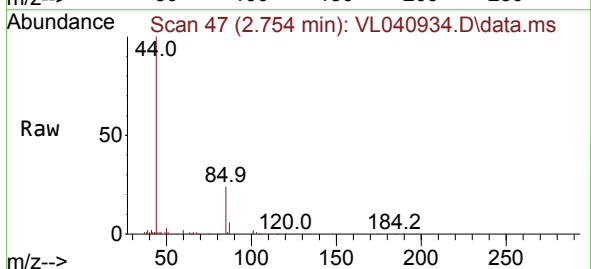
Instrument :
MSVOA_L
ClientSampleId :
10323DL

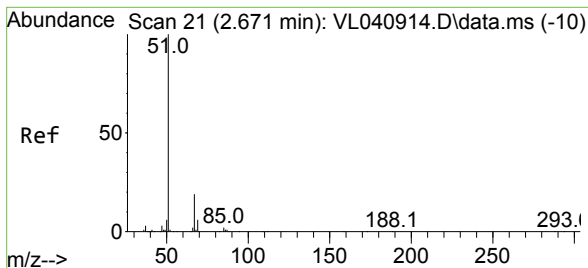
Tgt Ion: 49 Resp: 1221943
Ion Ratio Lower Upper
49 100
128 48.0 23.8 71.2
130 60.8 30.1 90.5



#2
Dichlorodifluoromethane
Concen: 0.115 ppbv
RT: 2.754 min Scan# 47
Delta R.T. 0.029 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 85 Resp: 26829
Ion Ratio Lower Upper
85 100
87 23.4 27.0 40.6#

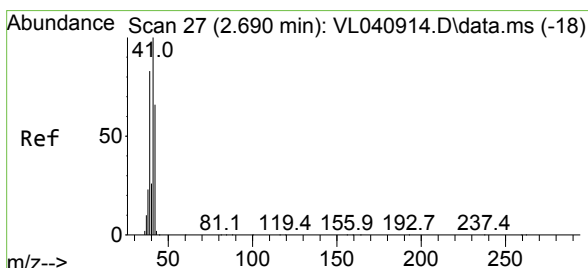
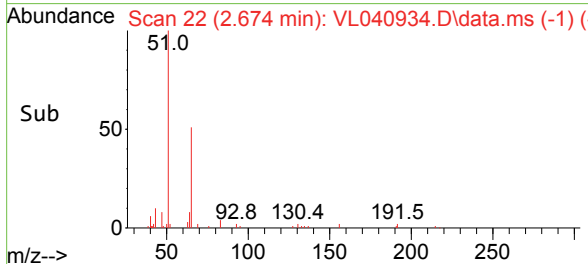
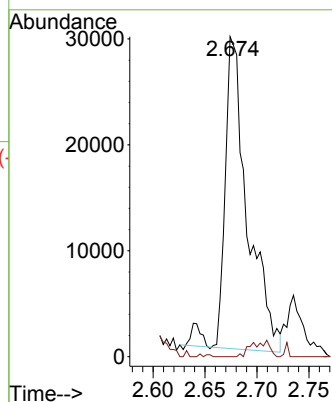
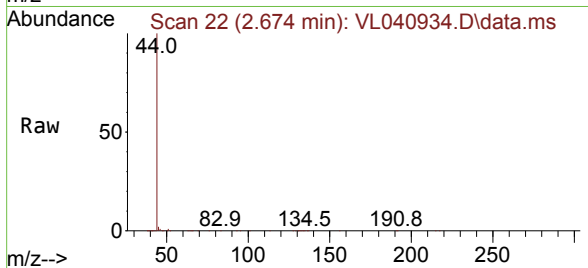




#3
Chlorodifluoromethane
Concen: 0.244 ppbv
RT: 2.674 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

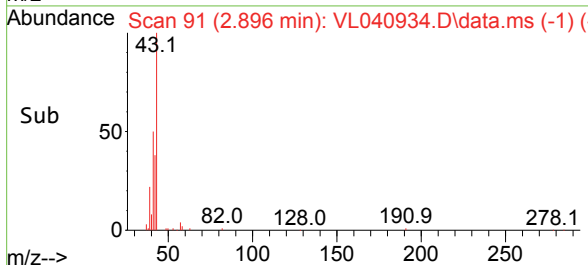
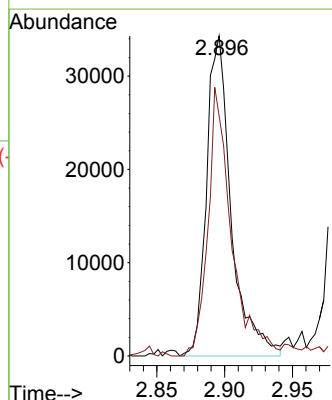
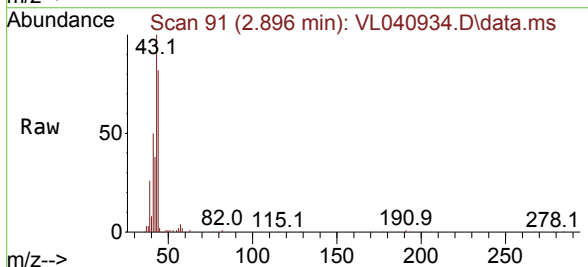
Instrument :
MSVOA_L
ClientSampleId :
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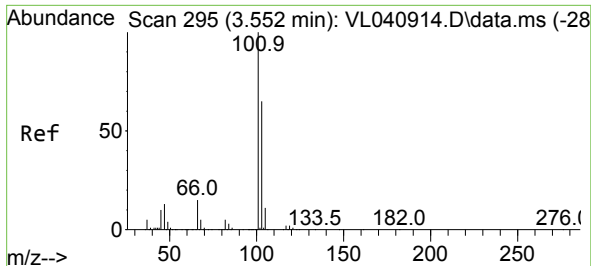
Tgt Ion: 51 Resp: 44902
Ion Ratio Lower Upper
51 100
67 0.3 14.7 22.1#



#9
Propene
Concen: 0.714 ppbv
RT: 2.896 min Scan# 91
Delta R.T. 0.206 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 41 Resp: 43332
Ion Ratio Lower Upper
41 100
42 81.2 55.8 83.6

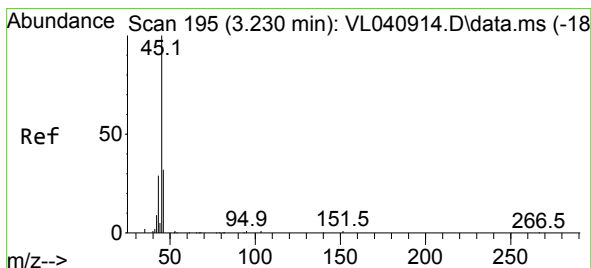
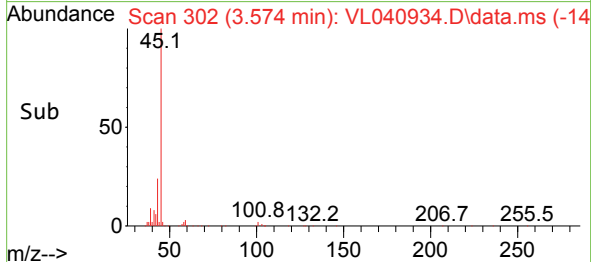
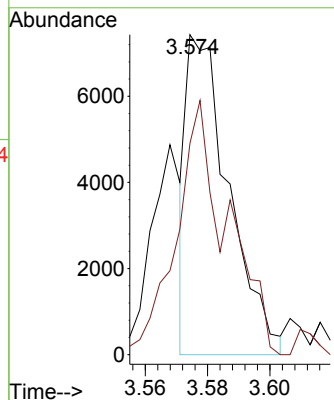
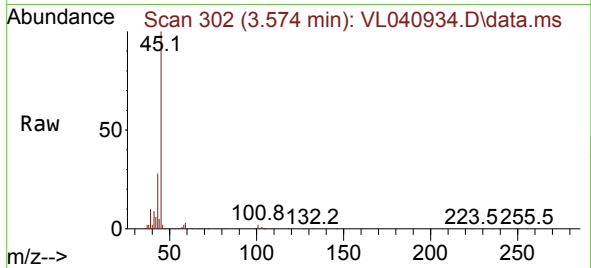




#11
 Trichlorofluoromethane
 Concen: 0.038 ppbv
 RT: 3.574 min Scan# 302
 Delta R.T. 0.022 min
 Lab File: VL040934.D
 Acq: 21 Dec 2023 17:50

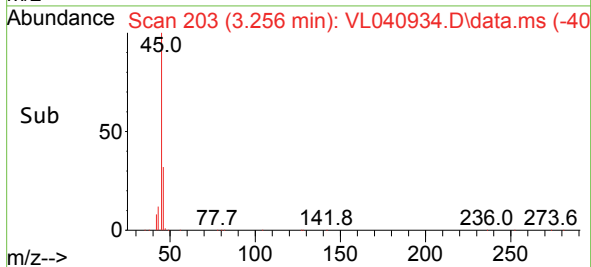
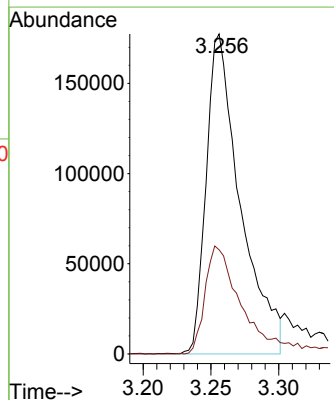
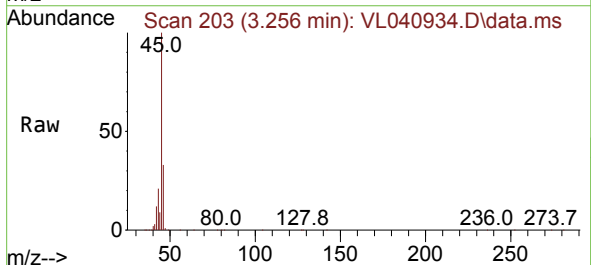
Instrument :
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 ClientSampleId :
 10323DL

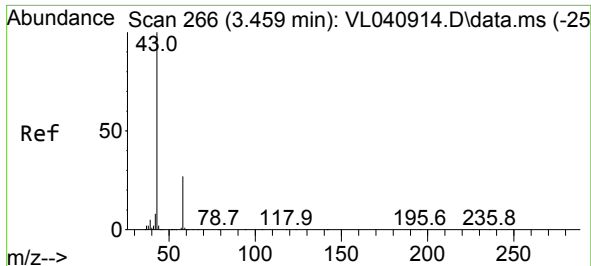
Tgt Ion:101 Resp: 6995
 Ion Ratio Lower Upper
 101 100
 103 70.1 51.9 77.9



#13
 Ethanol
 Concen: 20.292 ppbv
 RT: 3.256 min Scan# 203
 Delta R.T. 0.026 min
 Lab File: VL040934.D
 Acq: 21 Dec 2023 17:50

Tgt Ion: 45 Resp: 310602
 Ion Ratio Lower Upper
 45 100
 46 39.2 15.0 60.0





#15

Acetone

Concen: 2.357 ppbv

RT: 3.488 min Scan# 21

Delta R.T. 0.029 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

Instrument :

MSVOA_L

ClientSampleId :

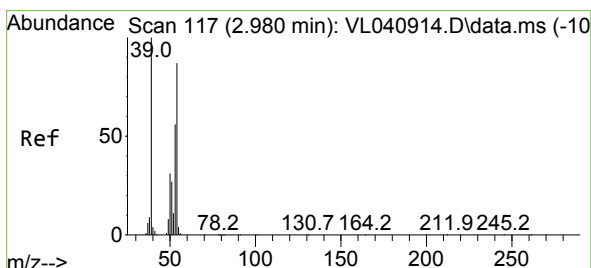
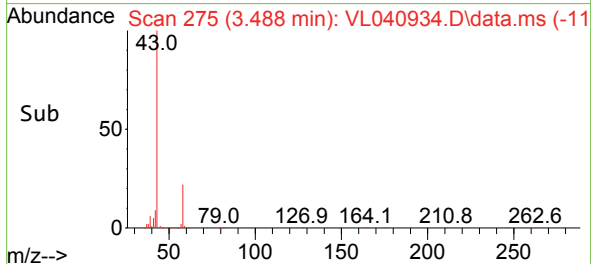
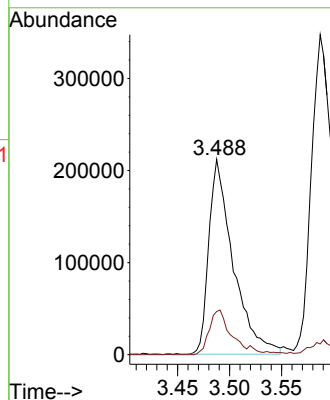
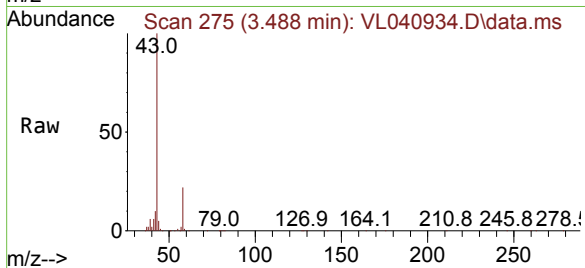
10323DL

Tgt Ion: 43 Resp: 345400

Ion Ratio Lower Upper

43 100

58 22.0 20.6 30.8



#16

1,3-Butadiene

Concen: 0.327 ppbv

RT: 2.986 min Scan# 119

Delta R.T. 0.006 min

Lab File: VL040934.D

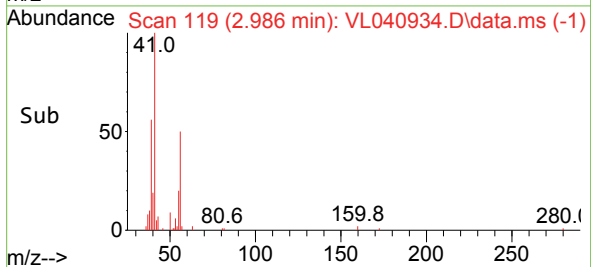
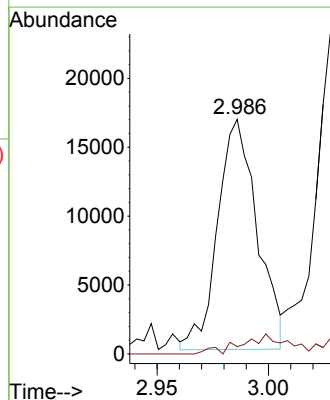
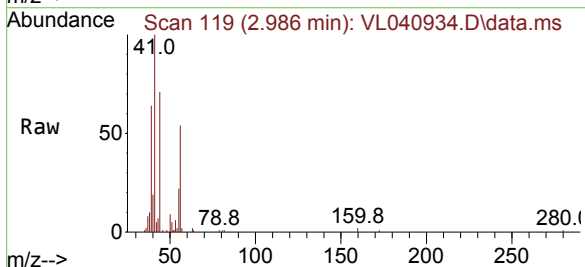
Acq: 21 Dec 2023 17:50

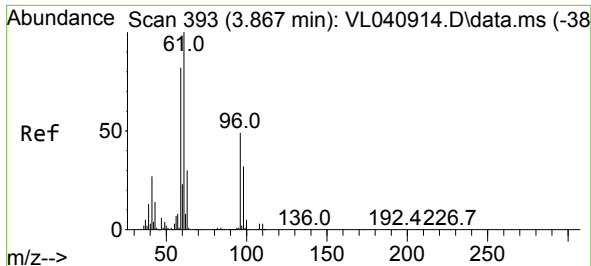
Tgt Ion: 39 Resp: 20607

Ion Ratio Lower Upper

39 100

54 9.1 63.8 95.6#





#17

tert-Butyl alcohol

Concen: 0.724 ppbv

RT: 3.590 min Scan# 307

Delta R.T. -0.277 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

Instrument :

MSVOA_L

ClientSampleId :

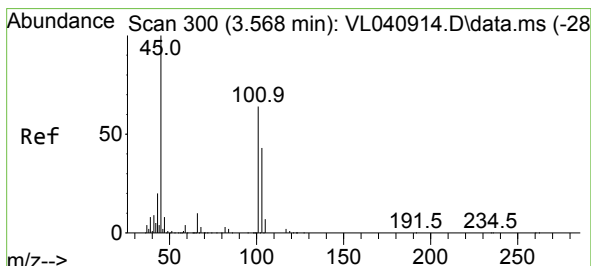
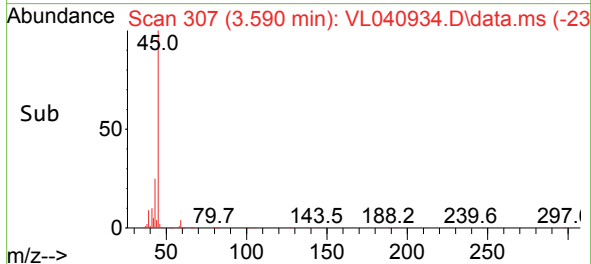
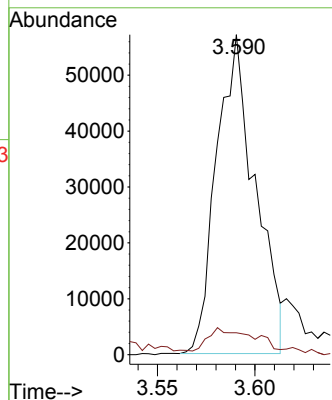
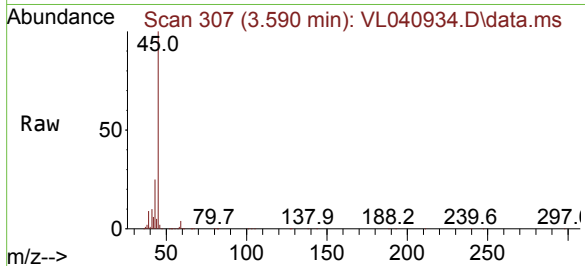
10323DL

Tgt Ion: 59 Resp: 78534

Ion Ratio Lower Upper

59 100

57 11.7 8.3 12.5



#19

Isopropyl Alcohol

Concen: 30.792 ppbv

RT: 3.587 min Scan# 306

Delta R.T. 0.019 min

Lab File: VL040934.D

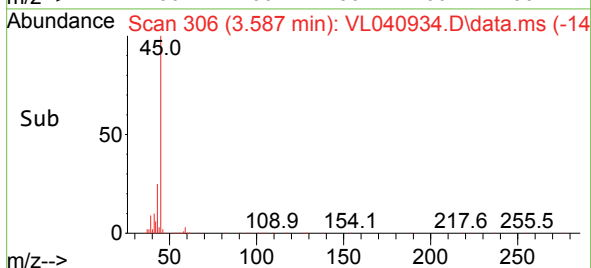
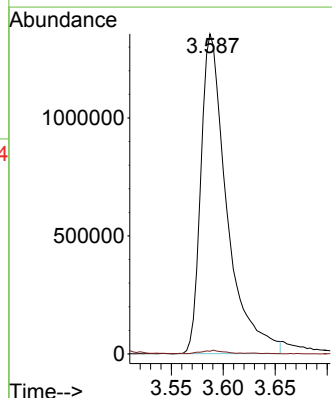
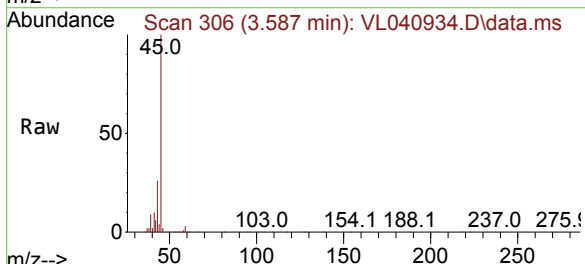
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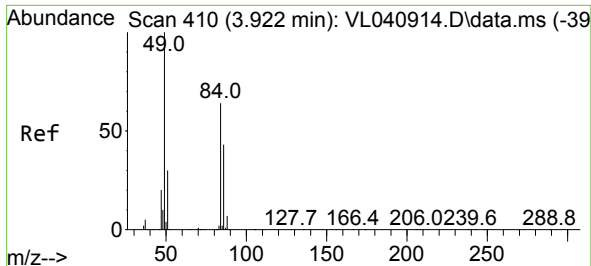
Tgt Ion: 45 Resp: 2354693

Ion Ratio Lower Upper

45 100

58 1.4 1.5 2.3#

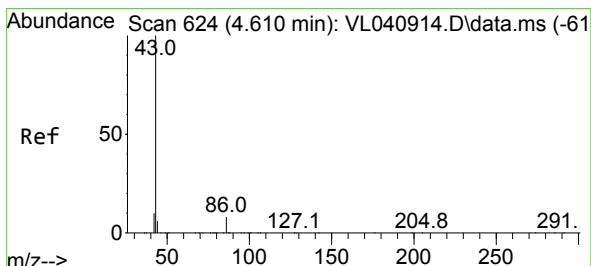
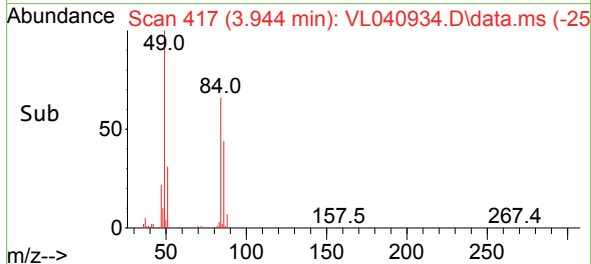
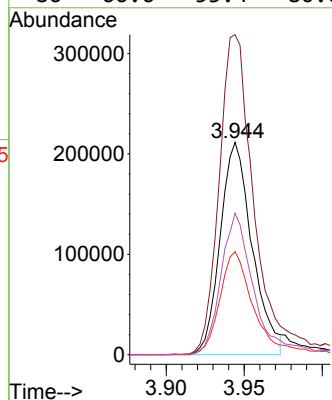
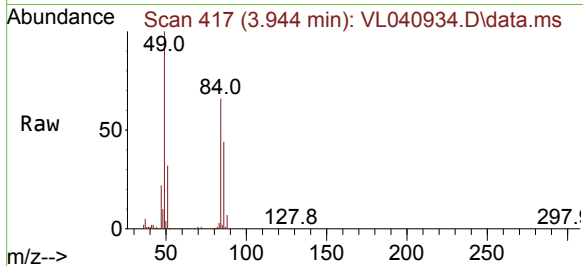




#20
Methylene Chloride
Concen: 5.782 ppbv
RT: 3.944 min Scan# 41
Delta R.T. 0.022 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

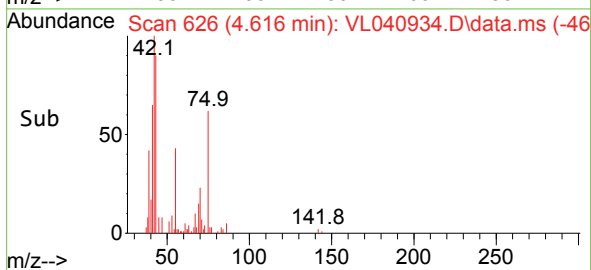
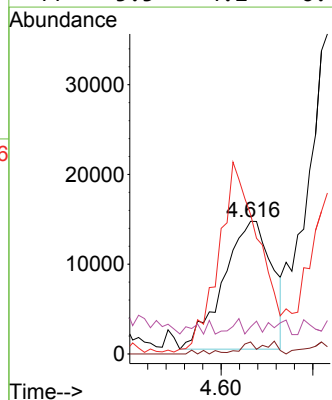
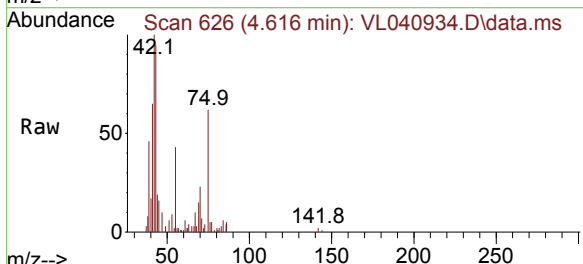
Instrument :
MSVOA_L
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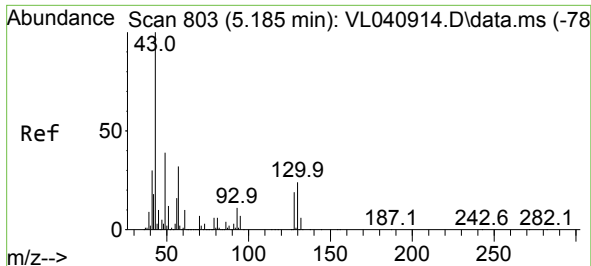
Tgt Ion: 84 Resp: 302020
Ion Ratio Lower Upper
84 100
49 150.6 124.6 187.0
51 48.4 37.2 55.8
86 66.6 53.4 80.0



#23
Vinyl Acetate
Concen: 0.162 ppbv
RT: 4.616 min Scan# 626
Delta R.T. 0.006 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 43 Resp: 26244
Ion Ratio Lower Upper
43 100
86 9.4 5.5 8.3#
42 105.3 8.4 12.6#
44 5.5 4.2 6.4



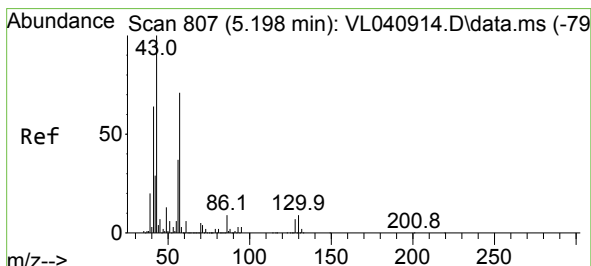
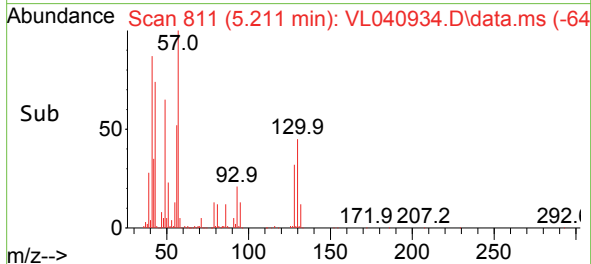
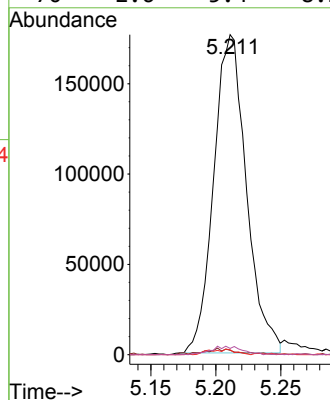
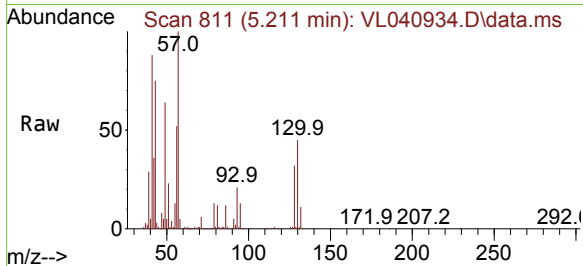


#25
Ethyl Acetate
Concen: 1.212 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.026 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Instrument :
MSVOA_L
ClientSampleId :
10323DL

Tgt Ion: 43 Resp: 307731

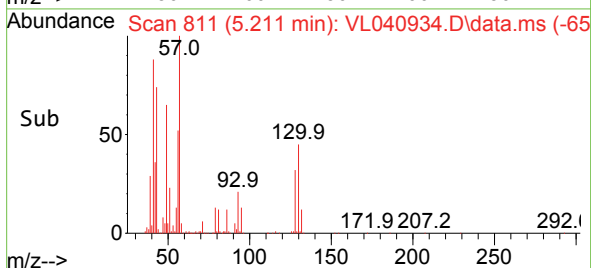
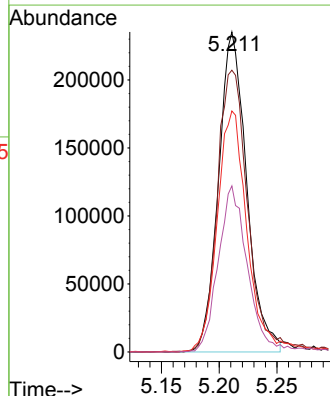
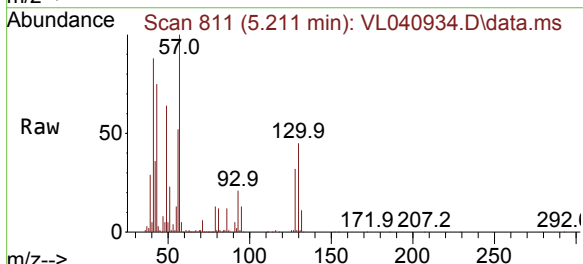
Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.2	12.2#
61	1.7	7.6	11.4#
70	2.6	5.4	8.2#

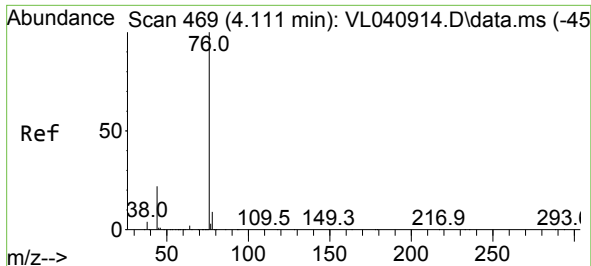


#26
Hexane
Concen: 3.546 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.013 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 57 Resp: 399045

Ion	Ratio	Lower	Upper
57	100		
41	97.3	75.2	112.8
43	82.1	188.0	282.0#
56	55.4	42.3	63.5

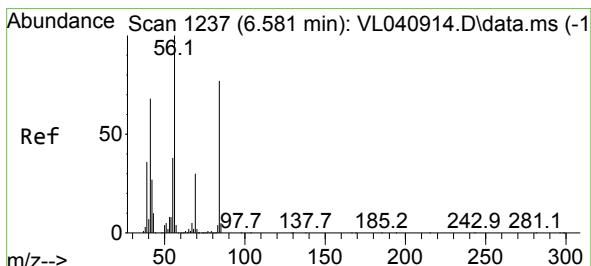
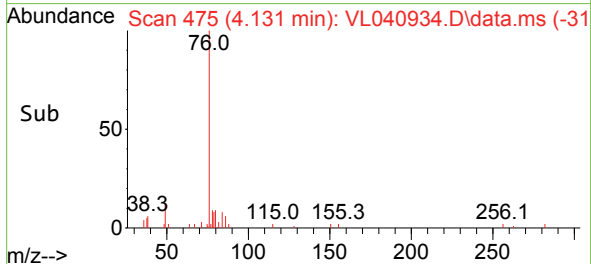
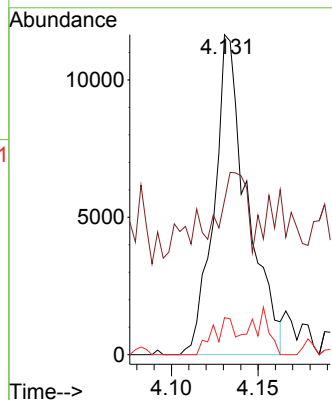
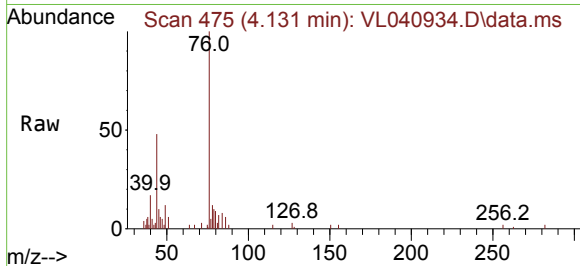




#27
Carbon Disulfide
Concen: 0.102 ppbv
RT: 4.131 min Scan# 41
Delta R.T. 0.019 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

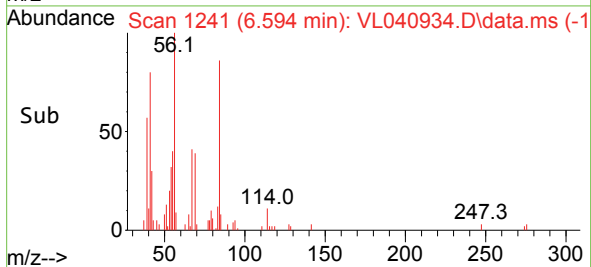
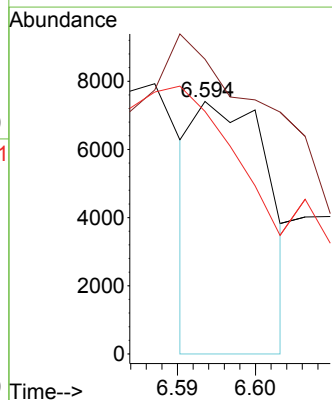
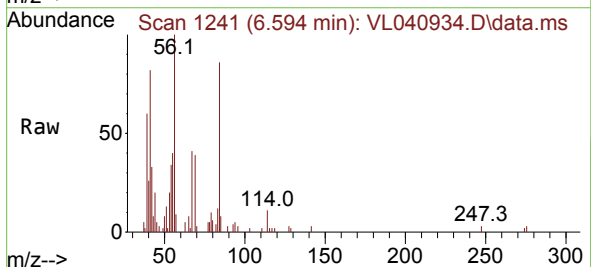
Instrument :
MSVOA_L
ClientSampleId :
10323DL

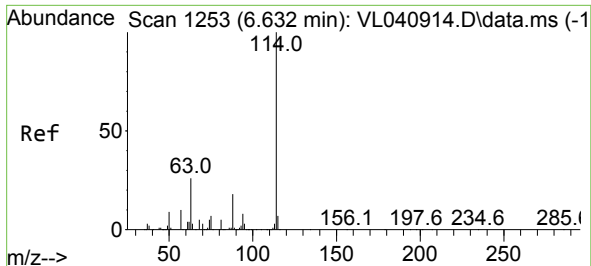
Tgt Ion: 76 Resp: 15474
Ion Ratio Lower Upper
76 100
44 33.8 18.4 27.6#
78 0.0 7.9 11.9#



#30
Cyclohexane
Concen: 0.052 ppbv
RT: 6.594 min Scan# 1241
Delta R.T. 0.013 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 84 Resp: 4853
Ion Ratio Lower Upper
84 100
56 0.0 111.4 167.2#
41 369.7 70.0 105.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.639 min Scan# 1

Delta R.T. 0.006 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

Instrument :

MSVOA_L

ClientSampleId :

10323DL

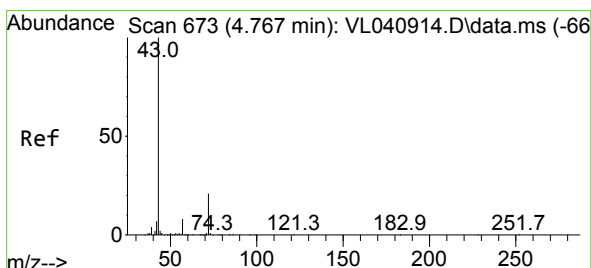
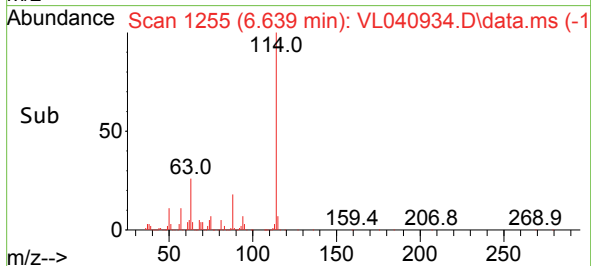
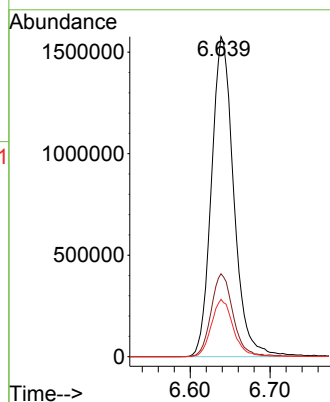
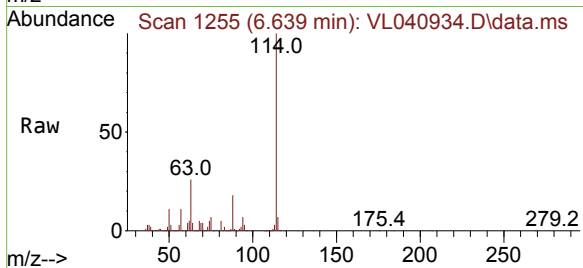
Tgt Ion:114 Resp: 3039457

Ion Ratio Lower Upper

114 100

63 26.0 21.0 31.6

88 17.8 14.3 21.5



#34

2-Butanone

Concen: 0.099 ppbv

RT: 4.793 min Scan# 681

Delta R.T. 0.026 min

Lab File: VL040934.D

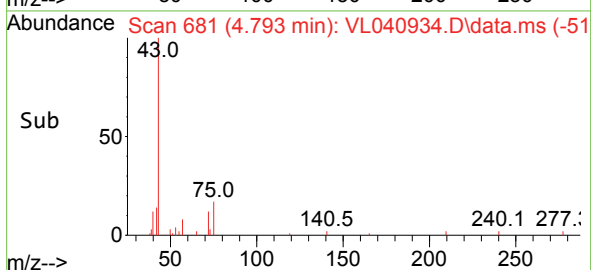
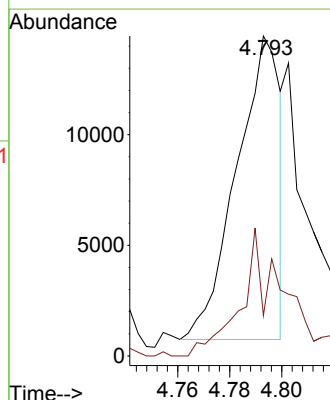
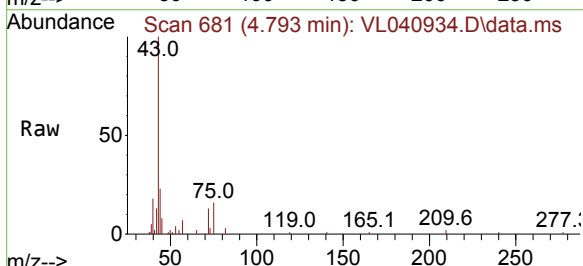
Acq: 21 Dec 2023 17:50

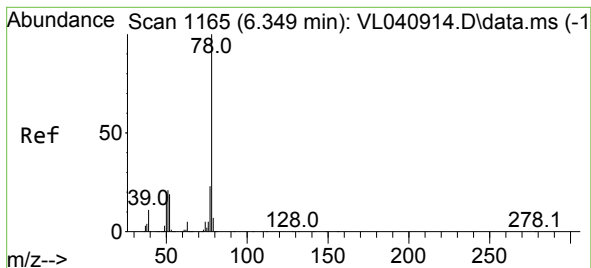
Tgt Ion: 43 Resp: 15883

Ion Ratio Lower Upper

43 100

72 46.7 17.2 25.8#





#36

Benzene

Concen: 0.186 ppbv

RT: 6.359 min Scan# 1165

Delta R.T. 0.010 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

Instrument :

MSVOA_L

ClientSampleId :

10323DL

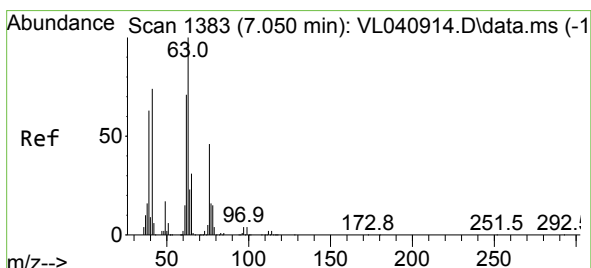
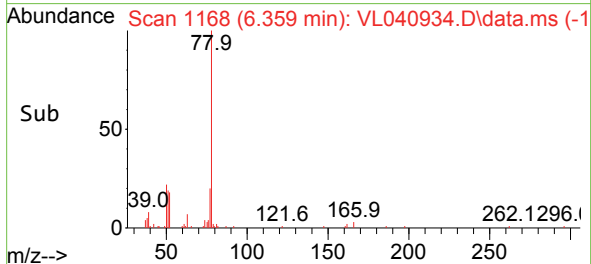
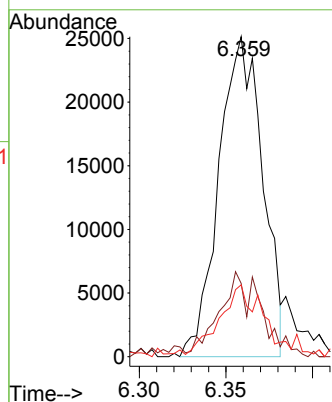
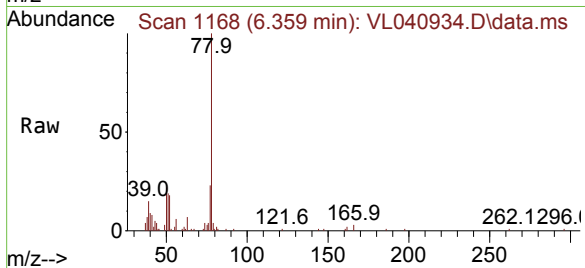
Tgt Ion: 78 Resp: 44117

Ion Ratio Lower Upper

78 100

77 19.8 18.4 27.6

50 20.3 16.0 24.0



#39

1,2-Dichloropropane

Concen: 8.313 ppbv

RT: 6.639 min Scan# 1255

Delta R.T. -0.412 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

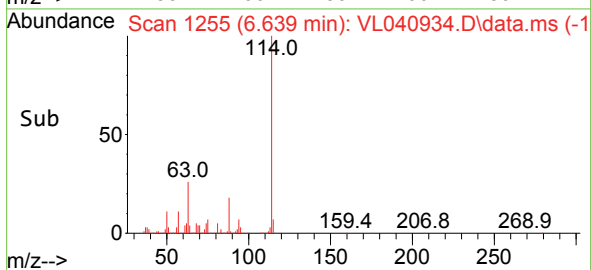
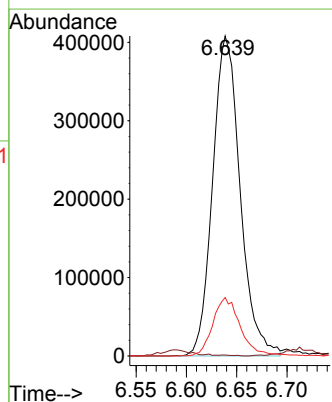
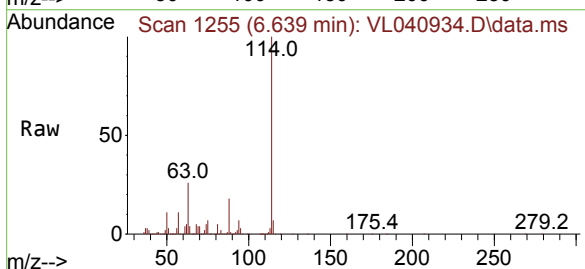
Tgt Ion: 63 Resp: 776153

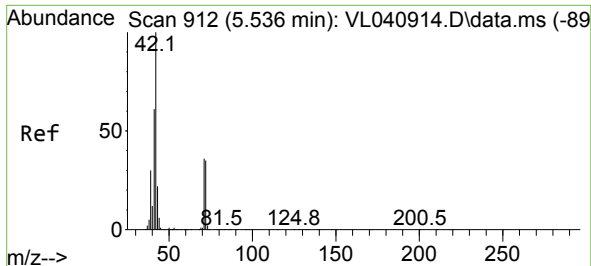
Ion Ratio Lower Upper

63 100

41 0.0 59.0 88.6#

62 18.2 56.6 85.0#





#41

Tetrahydrofuran

Concen: 0.052 ppbv

RT: 5.815 min Scan# 912

Delta R.T. 0.280 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

Instrument :

MSVOA_L

ClientSampleId :

10323DL

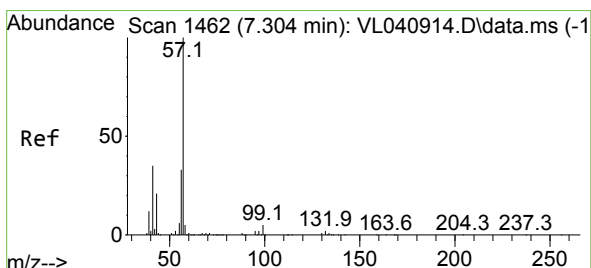
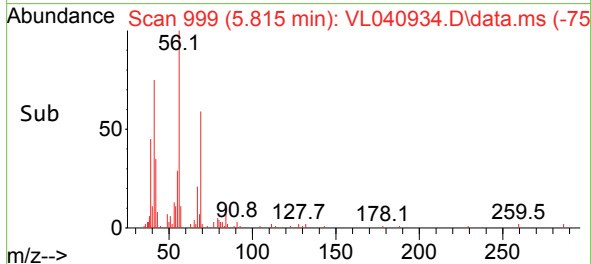
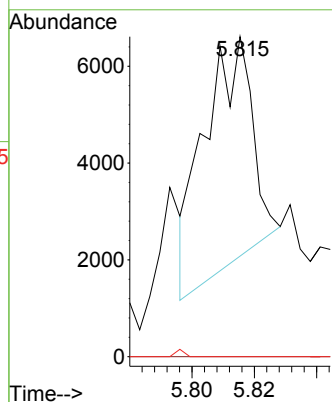
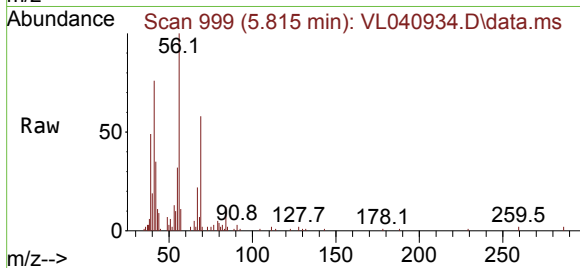
Tgt Ion: 42 Resp: 5058

Ion Ratio Lower Upper

42 100

72 3.7 29.6 44.4#

71 0.0 29.1 43.7#



#44

2,2,4-Trimethylpentane

Concen: 0.202 ppbv

RT: 7.311 min Scan# 1464

Delta R.T. 0.006 min

Lab File: VL040934.D

Acq: 21 Dec 2023 17:50

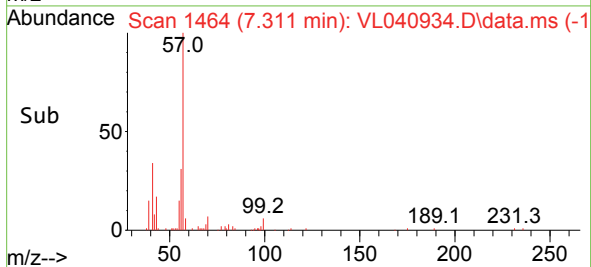
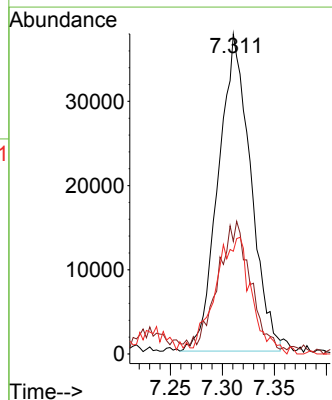
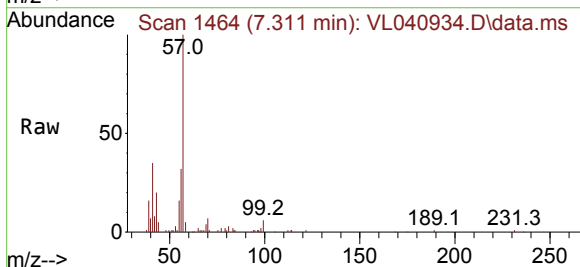
Tgt Ion: 57 Resp: 81360

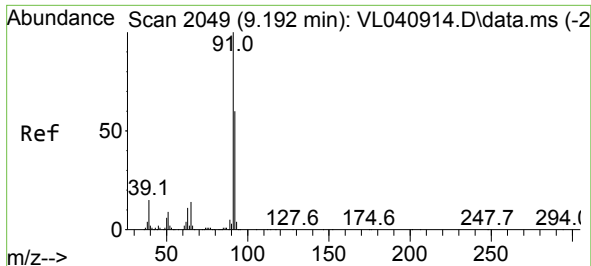
Ion Ratio Lower Upper

57 100

41 43.1 28.2 42.4#

56 42.5 25.3 37.9#

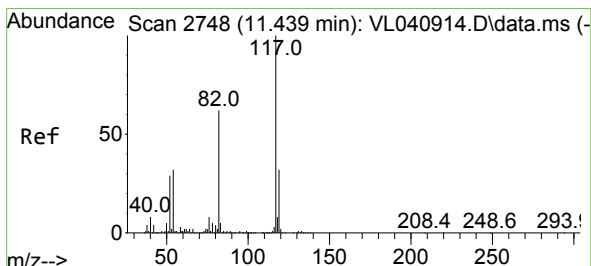
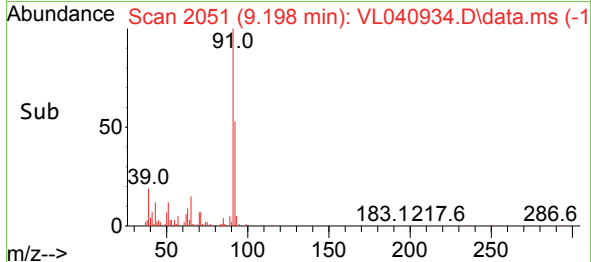
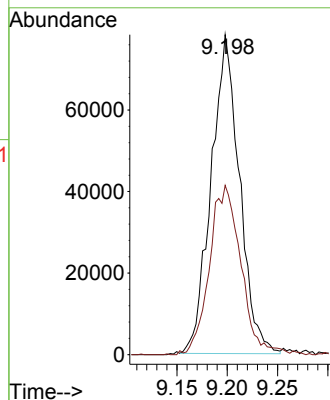
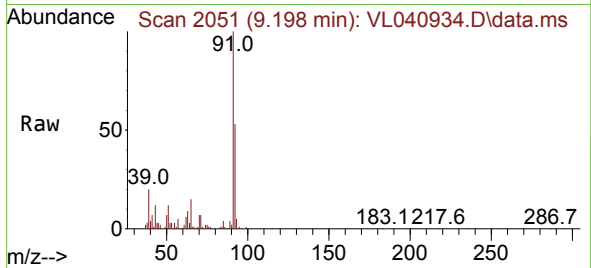




#53
Toluene
Concen: 0.582 ppbv
RT: 9.198 min Scan# 2049
Delta R.T. 0.006 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

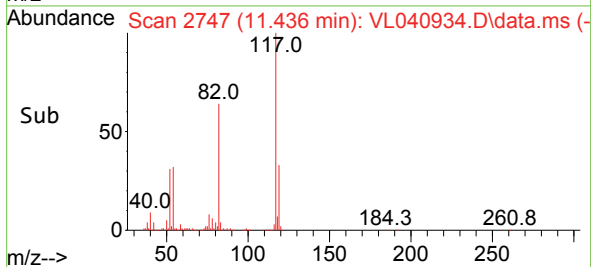
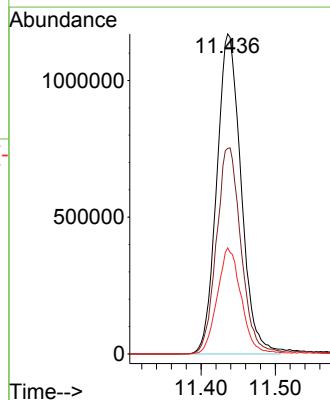
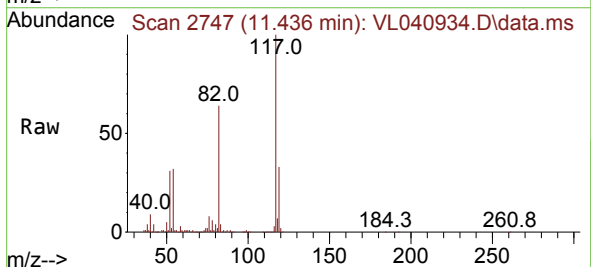
Instrument :
MSVOA_L
ClientSampleId :
10323DL

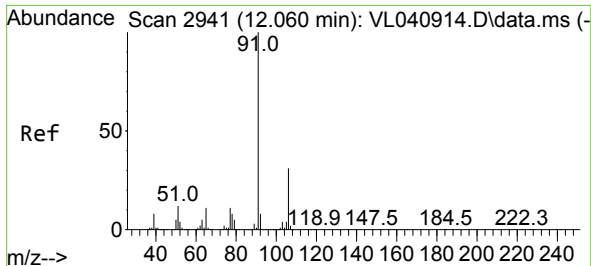
Tgt Ion: 91 Resp: 153210
Ion Ratio Lower Upper
91 100
92 59.1 49.2 73.8



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.436 min Scan# 2747
Delta R.T. -0.003 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 117 Resp: 2663511
Ion Ratio Lower Upper
117 100
82 66.4 49.6 74.4
119 33.4 23.4 35.0

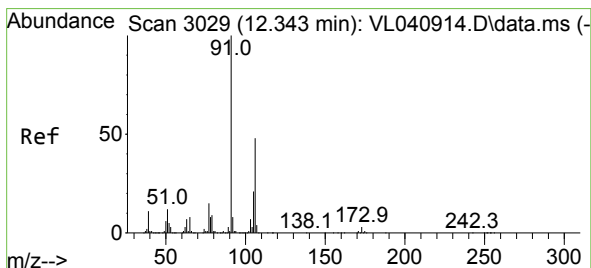
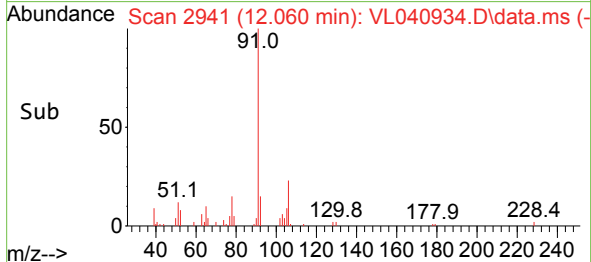
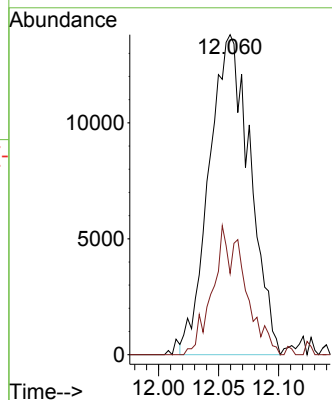
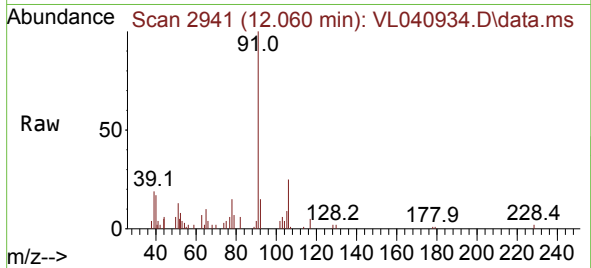




#58
Ethyl Benzene
Concen: 0.096 ppbv
RT: 12.060 min Scan# 2941
Delta R.T. -0.000 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

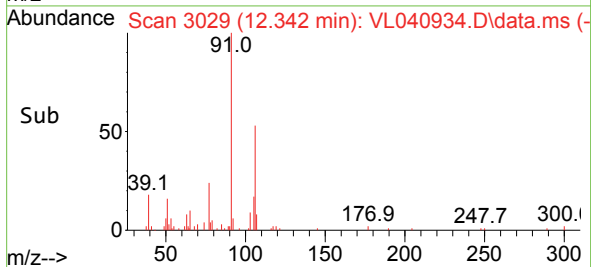
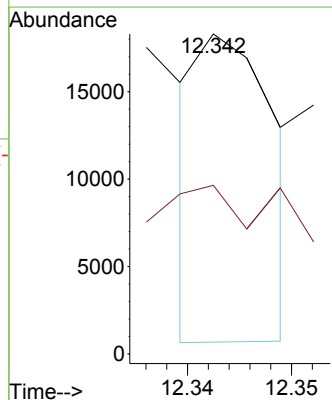
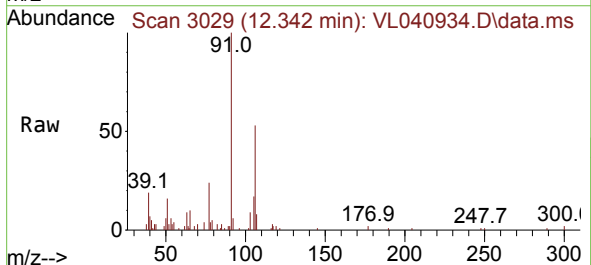
Instrument :
MSVOA_L
ClientSampleId :
10323DL

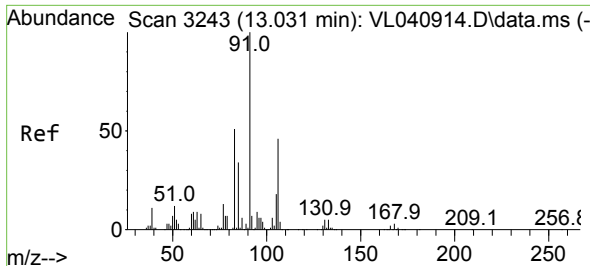
Tgt Ion: 91 Resp: 32756
Ion Ratio Lower Upper
91 100
106 25.4 24.9 37.3



#59
m/p-Xylene
Concen: 0.031 ppbv
RT: 12.342 min Scan# 3029
Delta R.T. -0.000 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 91 Resp: 8887
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0

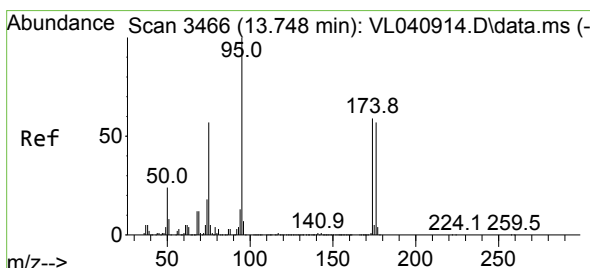
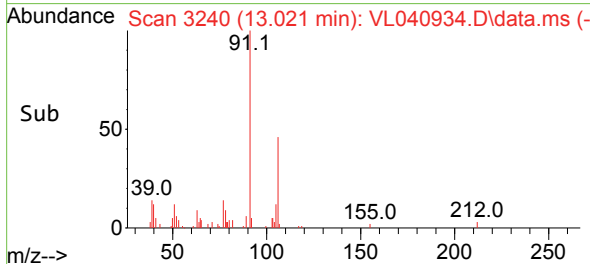
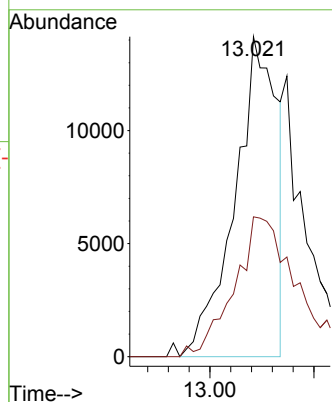
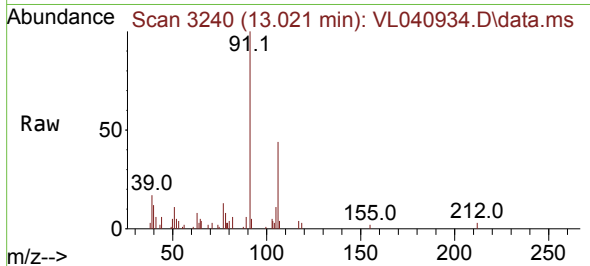




#60
o-Xylene
Concen: 0.073 ppbv
RT: 13.021 min Scan# 31
Delta R.T. -0.010 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

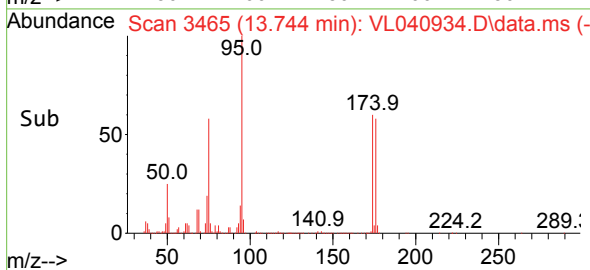
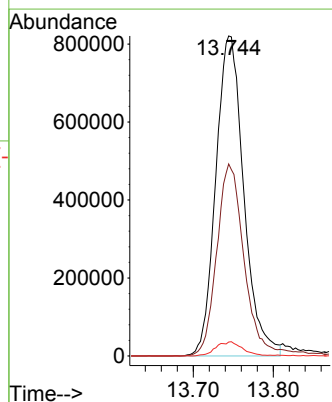
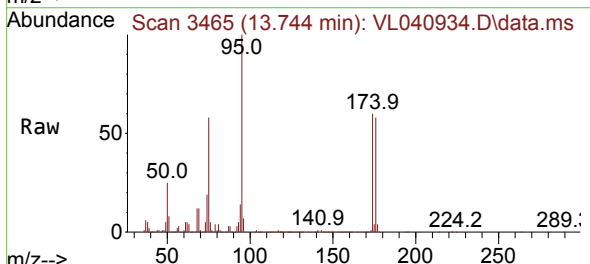
Instrument :
MSVOA_L
ClientSampleId :
10323DL

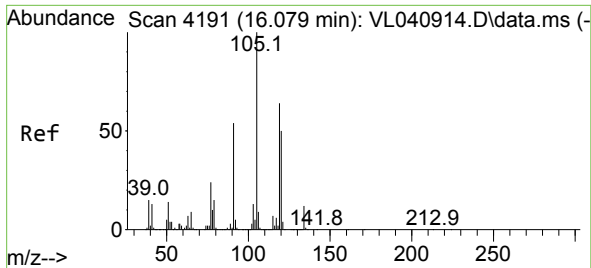
Tgt Ion: 91 Resp: 19936
Ion Ratio Lower Upper
91 100
106 65.0 22.6 67.7



#68
1-Bromo-4-Fluorobenzene
Concen: 10.163 ppbv
RT: 13.744 min Scan# 3465
Delta R.T. -0.003 min
Lab File: VL040934.D
Acq: 21 Dec 2023 17:50

Tgt Ion: 95 Resp: 1993831
Ion Ratio Lower Upper
95 100
174 60.2 48.0 72.0
175 4.4 3.7 5.5





#74

1,2,4-Trimethylbenzene

Concen: 0.056 ppbv

RT: 16.075 min Scan# 41

Delta R.T. -0.003 min

Lab File: VL040934.D

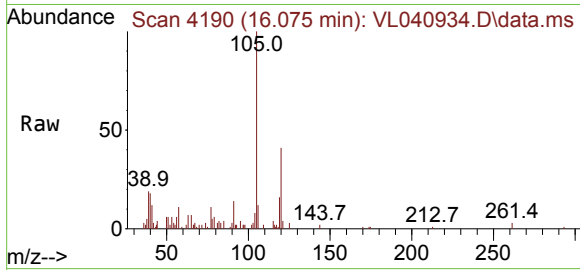
Acq: 21 Dec 2023 17:50

Instrument :

MSVOA_L

ClientSampleId :

10323DL



Tgt Ion:105 Resp: 16145

Ion Ratio Lower Upper

105 100

120 38.2 40.2 60.4#

91 8.9 43.0 64.6#

77 14.0 18.9 28.3#

