

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121222\
 Data File : VL039995.D
 Acq On : 13 Dec 2022 3:35
 Operator : SY/MD
 Sample : N5969-01DL2 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1DL2

Quant Time: Dec 13 07:14:12 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111822AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Dec 02 23:21:36 2022
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.169	49	921754	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	6.632	114	2683096	10.000	ppbv	0.01
55) Chlorobenzene-d5	11.452	117	2460802	10.000	ppbv	0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.761	95	1932982	10.284	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.800%

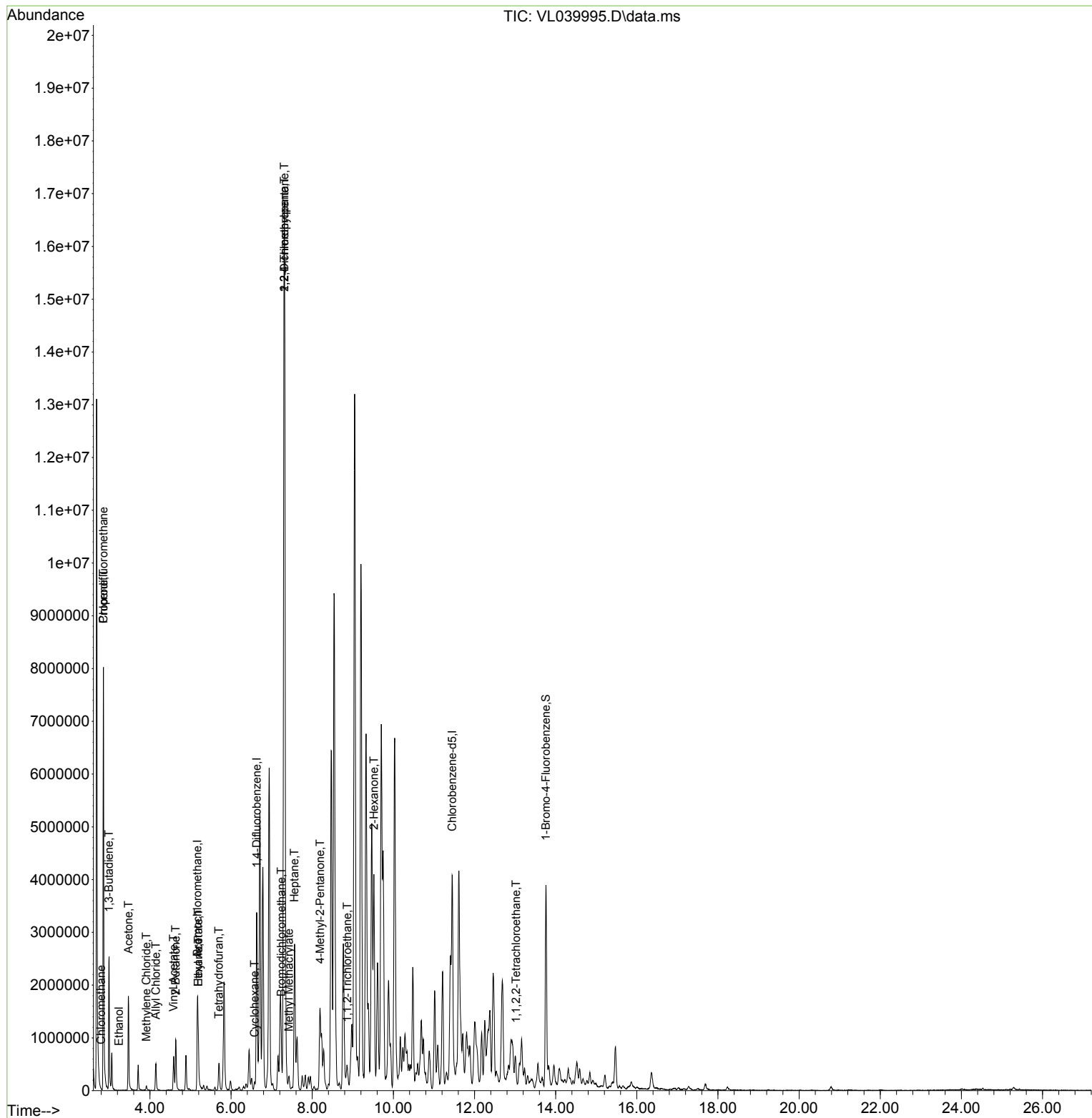
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.851	51	52196	0.410	ppbv #	60
4) Chloromethane	2.796	50	1816	0.022	ppbv #	83
9) Propene	2.851	41	2412890	40.272	ppbv	96
10) Heptane	7.562	43	1355033	9.373	ppbv	99
13) Ethanol	3.234	45	2849	0.623	ppbv #	38
15) Acetone	3.468	43	633675	5.183	ppbv #	58
16) 1,3-Butadiene	2.993	39	267861	4.396	ppbv #	10
20) Methylene Chloride	3.909	84	27293	0.461	ppbv	91
21) Allyl Chloride	4.147	41	128806	1.519	ppbv #	52
23) Vinyl Acetate	4.584	43	361287	7.193	ppbv #	1
25) Ethyl Acetate	5.192	43	176989	0.788	ppbv #	75
26) Hexane	5.192	57	265375	2.706	ppbv #	38
30) Cyclohexane	6.581	84	38450	0.400	ppbv #	24
34) 2-Butanone	4.636	43	526349	4.100	ppbv #	58
39) 1,2-Dichloropropane	7.314	63	35011	0.394	ppbv #	1
41) Tetrahydrofuran	5.700	42	5707	0.064	ppbv #	67
42) Bromodichloromethane	7.240	83	118276	0.698	ppbv #	24
43) Methyl Methacrylate	7.426	69	109336	1.223	ppbv #	1
44) 2,2,4-Trimethylpentane	7.314	57	17470606	45.887	ppbv #	84
47) 1,1,2-Trichloroethane	8.864	97	6802	0.074	ppbv #	1
50) 4-Methyl-2-Pentanone	8.195	43	165902	0.722	ppbv	91
51) 2-Hexanone	9.520	43	2527037	14.157	ppbv #	27
63) 1,1,2,2-Tetrachloroethane	13.024	83	2070	0.023	ppbv #	24

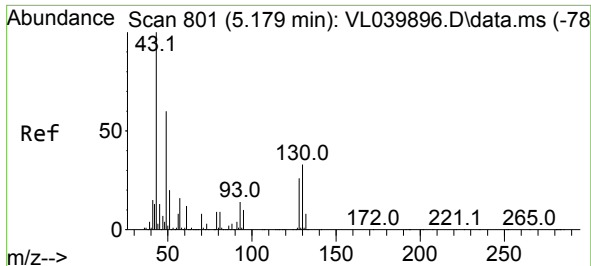
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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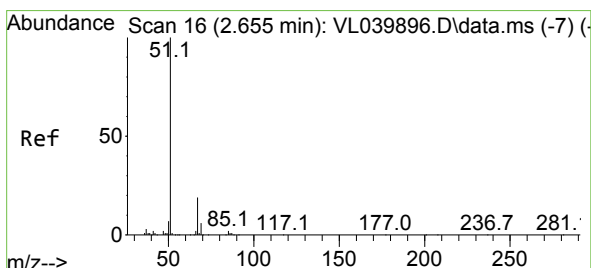
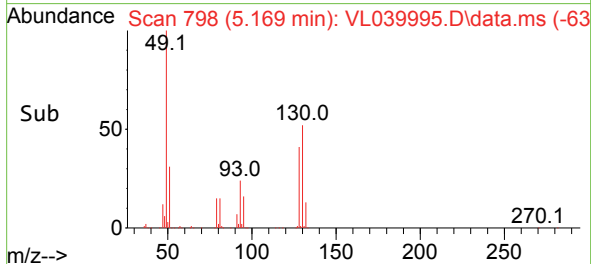
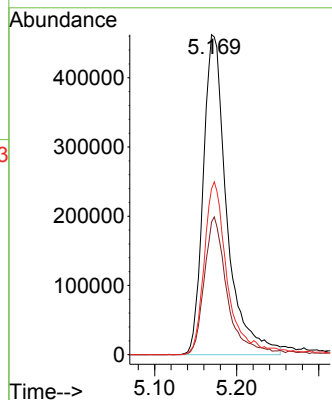
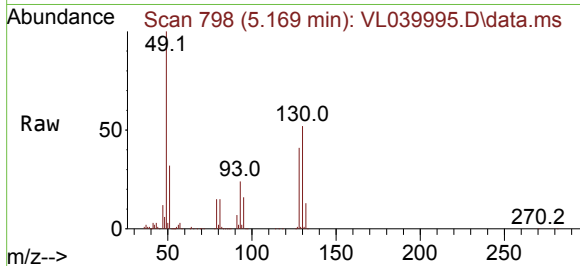




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.169 min Scan# 79
Delta R.T. 0.013 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

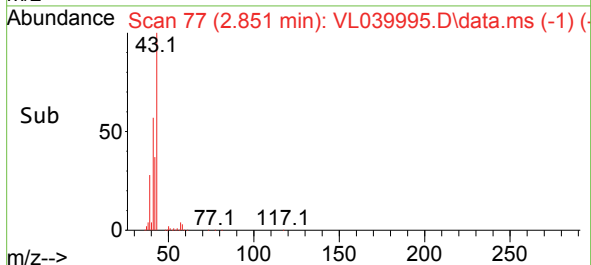
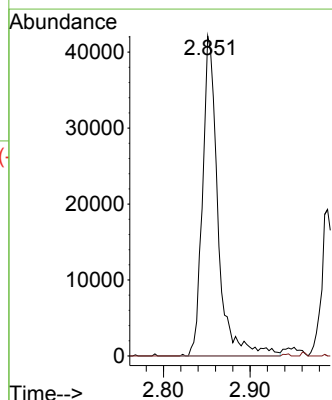
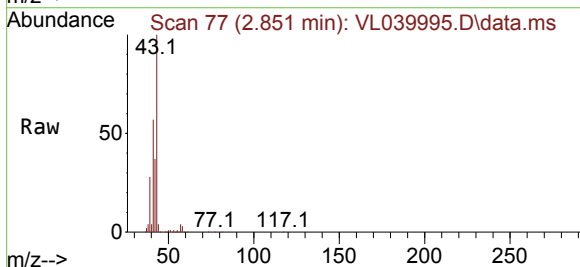
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

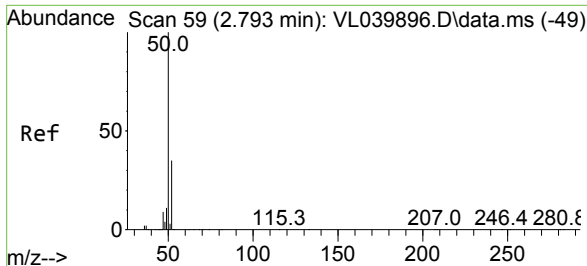
Tgt Ion: 49 Resp: 921754
Ion Ratio Lower Upper
49 100
128 43.5 22.1 66.3
130 54.2 27.7 83.1



#3
Chlorodifluoromethane
Concen: 0.410 ppbv
RT: 2.851 min Scan# 77
Delta R.T. 0.209 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 51 Resp: 52196
Ion Ratio Lower Upper
51 100
67 0.2 14.2 21.4#

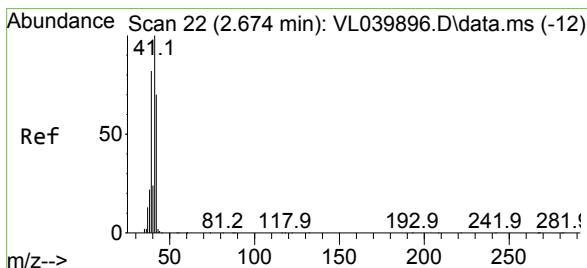
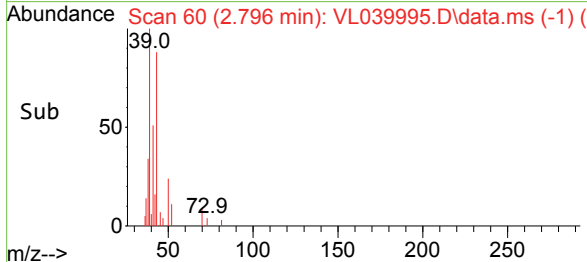
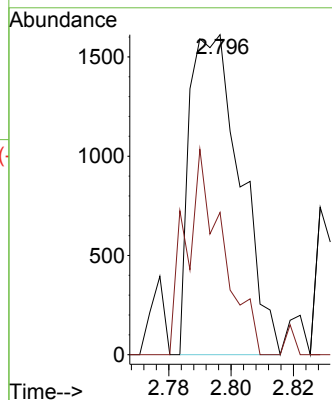
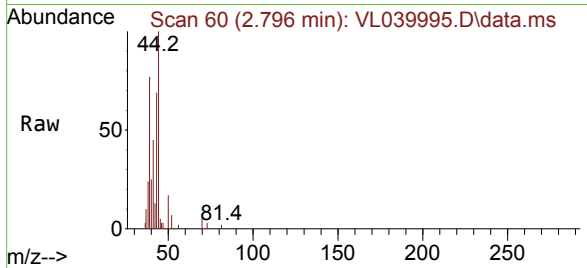




#4
Chloromethane
Concen: 0.022 ppbv
RT: 2.796 min Scan# 60
Delta R.T. 0.016 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

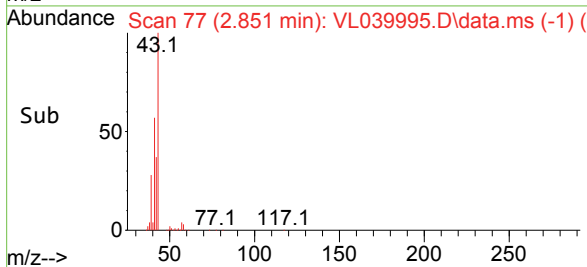
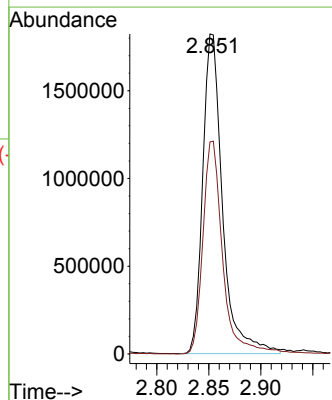
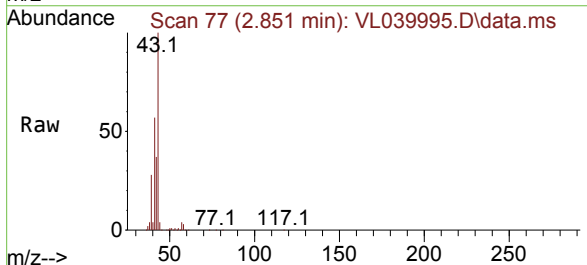
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

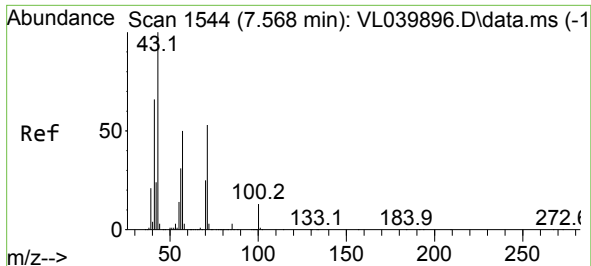
Tgt Ion: 50 Resp: 1816
Ion Ratio Lower Upper
50 100
52 44.5 27.8 41.8#



#9
Propene
Concen: 40.272 ppbv
RT: 2.851 min Scan# 77
Delta R.T. 0.190 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 41 Resp: 2412890
Ion Ratio Lower Upper
41 100
42 66.8 55.8 83.6

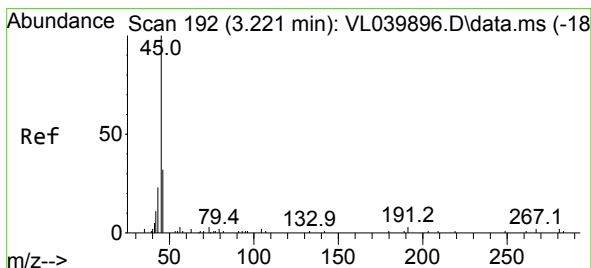
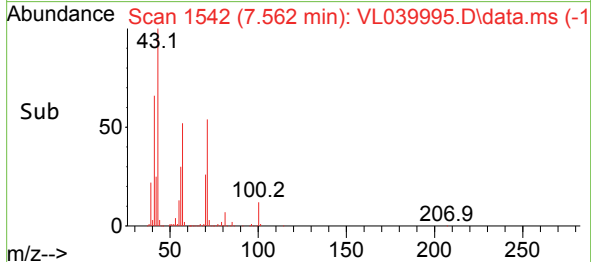
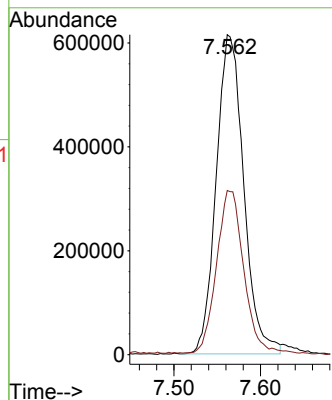
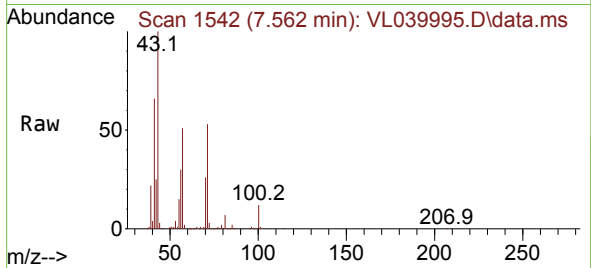




#10
Heptane
Concen: 9.373 ppbv
RT: 7.562 min Scan# 11
Delta R.T. 0.016 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

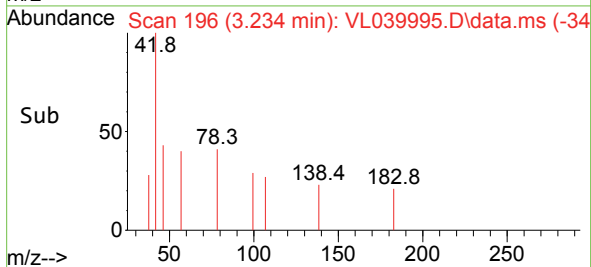
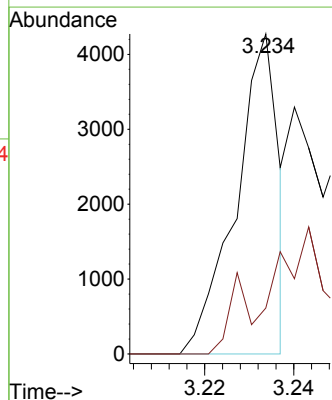
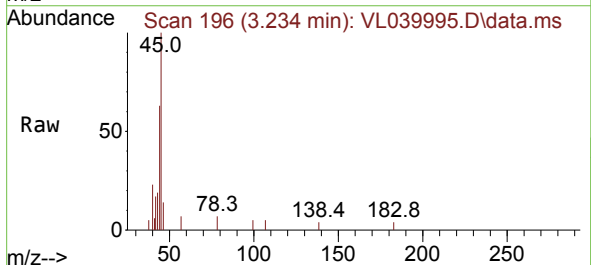
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

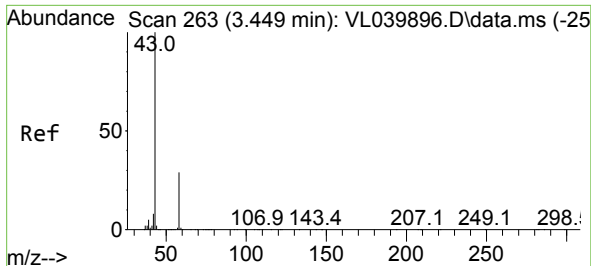
Tgt Ion: 43 Resp: 1355033
Ion Ratio Lower Upper
43 100
57 51.9 40.7 61.1



#13
Ethanol
Concen: 0.623 ppbv
RT: 3.234 min Scan# 196
Delta R.T. 0.019 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 45 Resp: 2849
Ion Ratio Lower Upper
45 100
46 0.0 14.6 58.2#

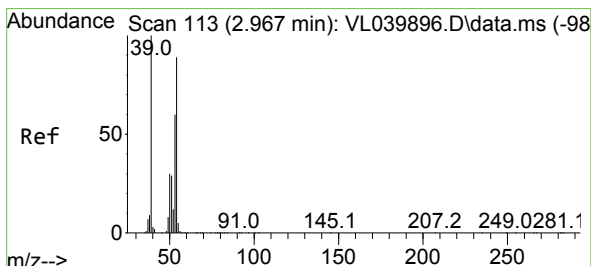
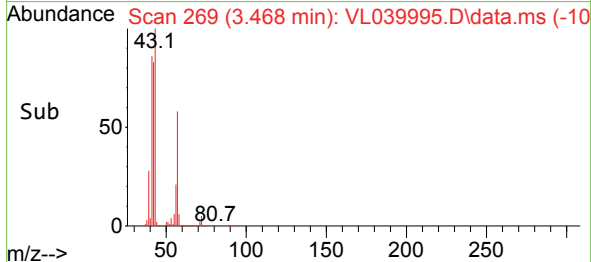
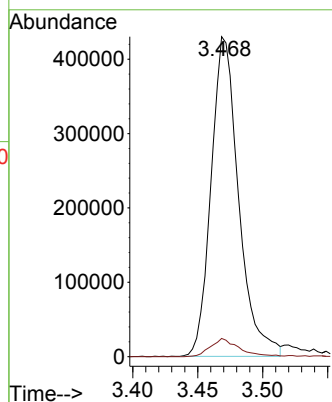
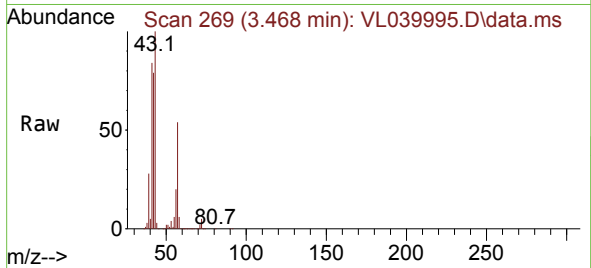




#15
Acetone
Concen: 5.183 ppbv
RT: 3.468 min Scan# 21
Delta R.T. 0.036 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

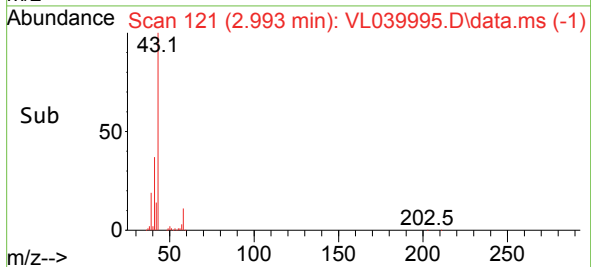
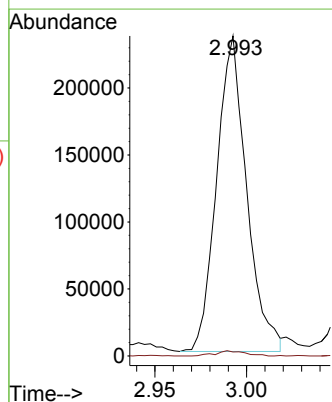
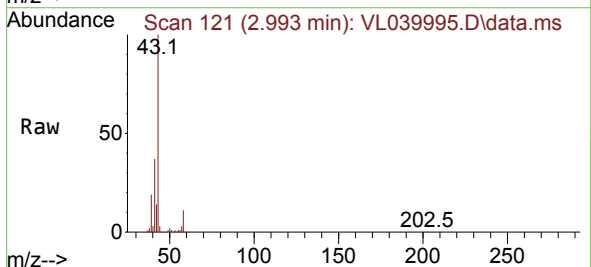
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

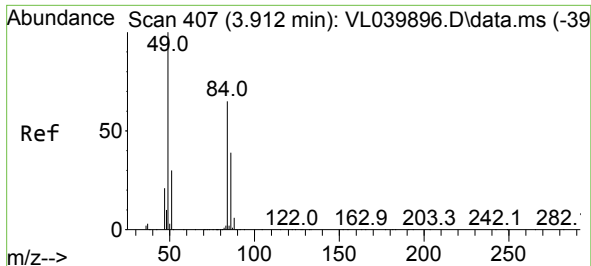
Tgt Ion: 43 Resp: 633675
Ion Ratio Lower Upper
43 100
58 6.3 22.9 34.3#



#16
1,3-Butadiene
Concen: 4.396 ppbv
RT: 2.993 min Scan# 121
Delta R.T. 0.042 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 39 Resp: 267861
Ion Ratio Lower Upper
39 100
54 1.6 66.6 99.8#

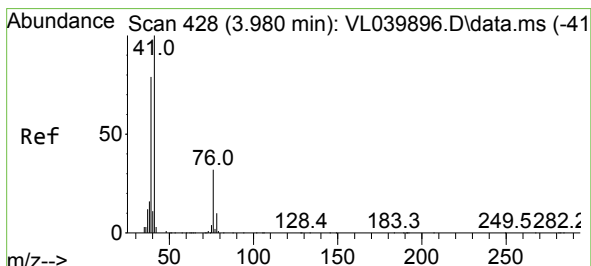
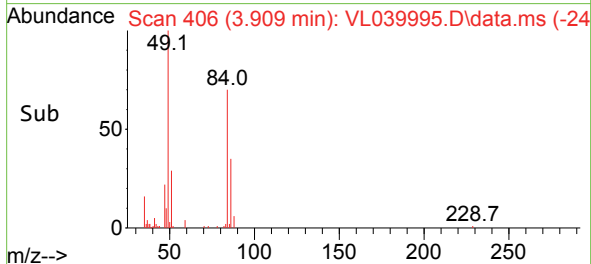
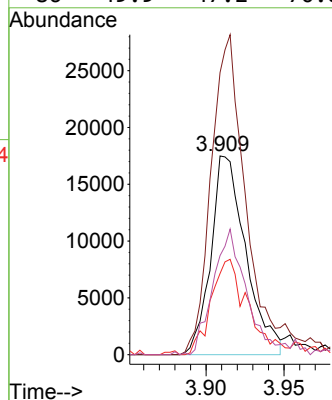
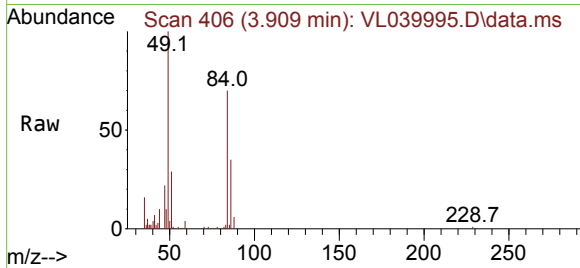




#20
Methylene Chloride
Concen: 0.461 ppbv
RT: 3.909 min Scan# 407
Delta R.T. 0.013 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

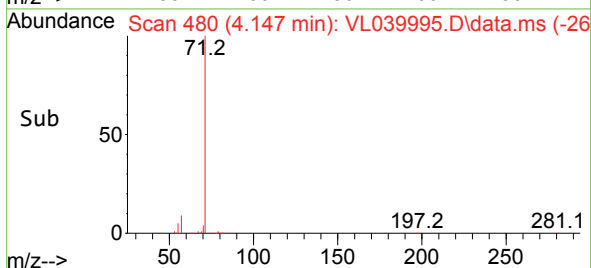
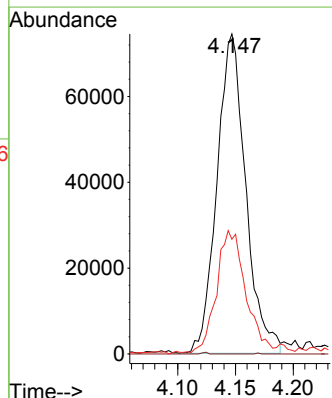
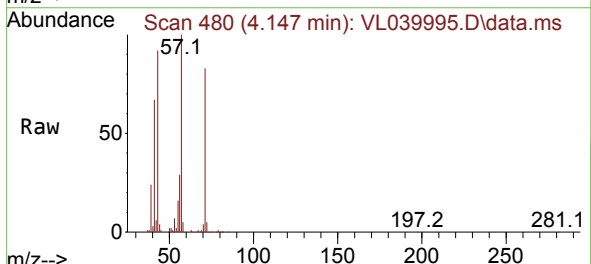
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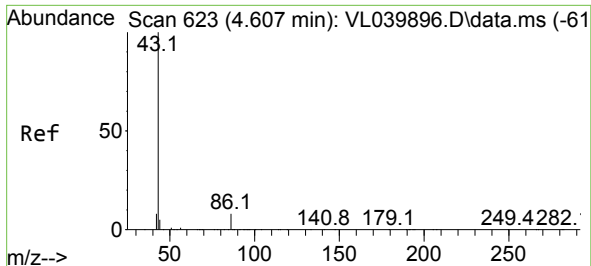
Tgt Ion: 84 Resp: 27293
Ion Ratio Lower Upper
84 100
49 141.9 122.2 183.4
51 40.8 36.3 54.5
86 49.9 47.2 70.8



#21
Allyl Chloride
Concen: 1.519 ppbv
RT: 4.147 min Scan# 480
Delta R.T. 0.187 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 41 Resp: 128806
Ion Ratio Lower Upper
41 100
76 0.1 25.6 38.4#
39 42.2 65.2 97.8#

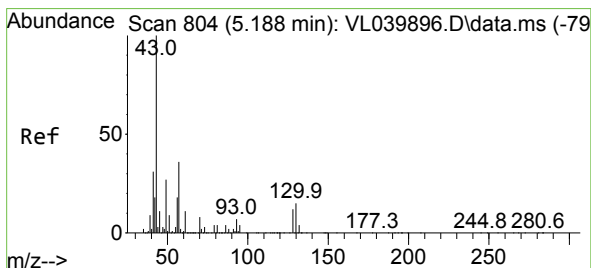
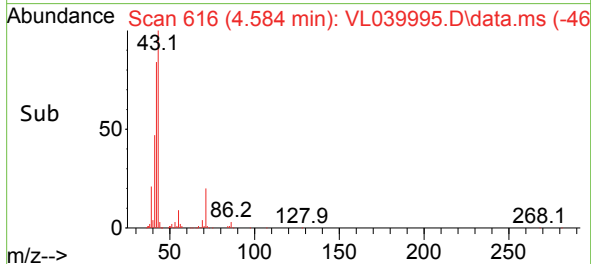
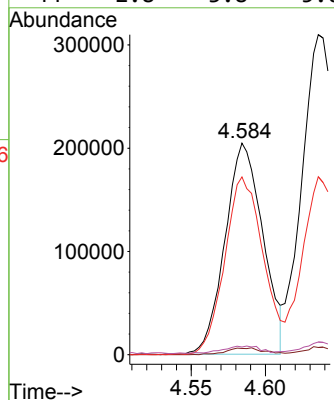
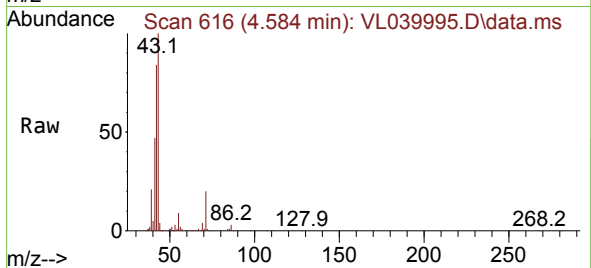




#23
Vinyl Acetate
Concen: 7.193 ppbv
RT: 4.584 min Scan# 61
Delta R.T. -0.009 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

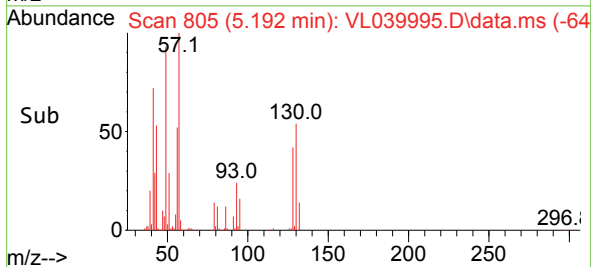
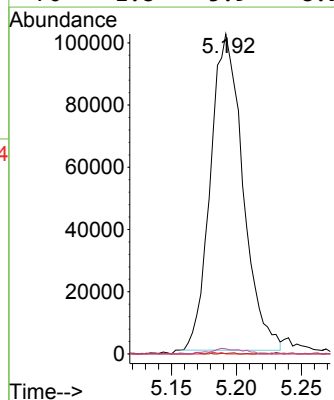
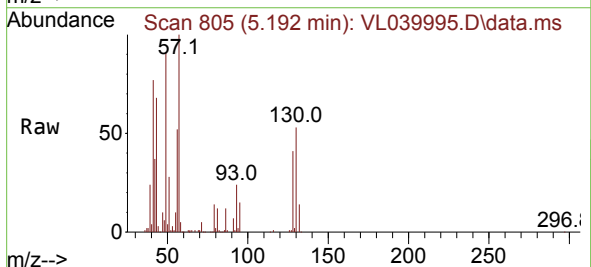
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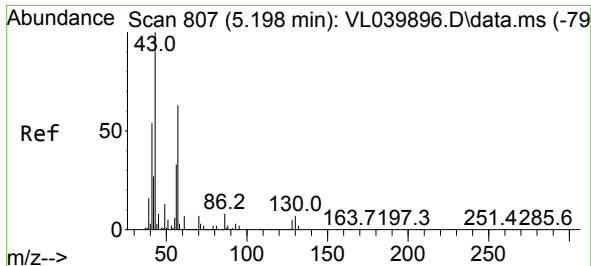
Tgt Ion: 43 Resp: 361287
Ion Ratio Lower Upper
43 100
86 2.9 5.0 7.4#
42 83.6 7.6 11.4#
44 2.8 3.8 5.6#



#25
Ethyl Acetate
Concen: 0.788 ppbv
RT: 5.192 min Scan# 805
Delta R.T. 0.023 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 43 Resp: 176989
Ion Ratio Lower Upper
43 100
45 0.2 8.4 12.6#
61 0.1 8.5 12.7#
70 1.8 5.9 8.9#

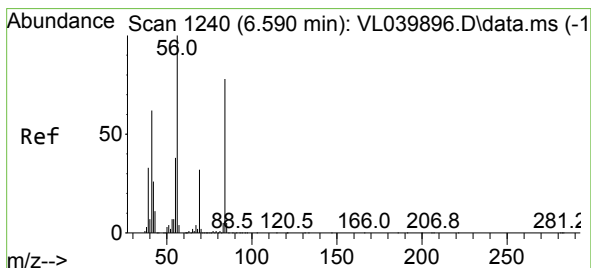
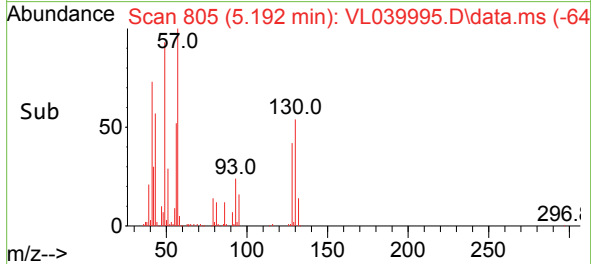
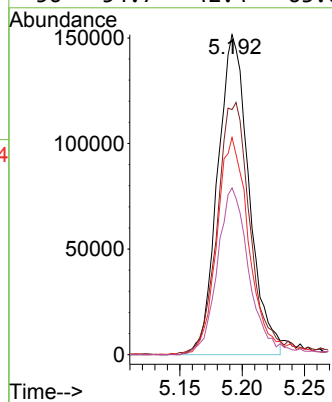
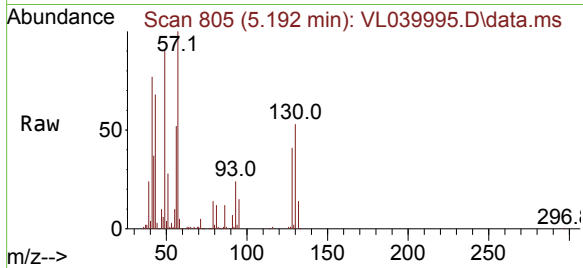




#26
Hexane
Concen: 2.706 ppbv
RT: 5.192 min Scan# 807
Delta R.T. 0.016 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

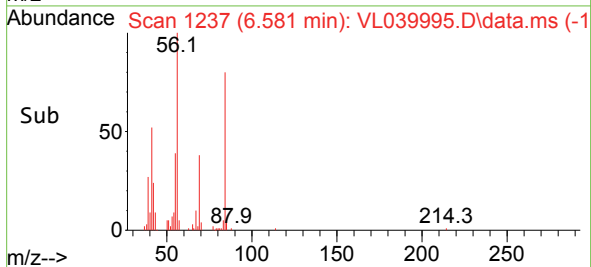
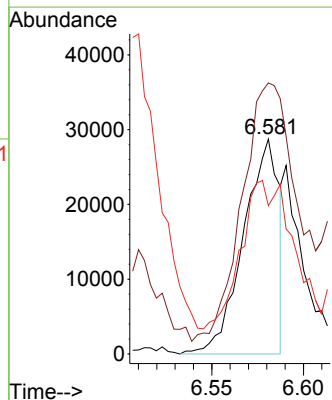
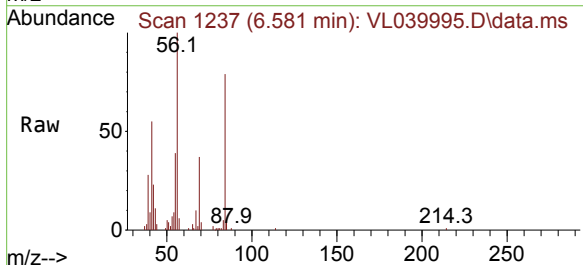
Instrument :
MSVOA_L
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SG-1DL2

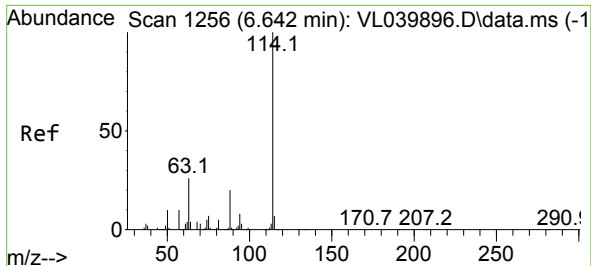
Tgt Ion: 57 Resp: 265375
Ion Ratio Lower Upper
57 100
41 85.7 72.3 108.5
43 71.8 188.7 283.1#
56 54.7 42.4 63.6



#30
Cyclohexane
Concen: 0.400 ppbv
RT: 6.581 min Scan# 1237
Delta R.T. 0.016 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 84 Resp: 38450
Ion Ratio Lower Upper
84 100
56 181.4 112.5 168.7#
41 218.2 67.8 101.8#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.632 min Scan# 114

Delta R.T. 0.013 min

Lab File: VL039995.D

Acq: 13 Dec 2022 3:35

Instrument :

MSVOA_L

ClientSampleId :

SG-1DL2

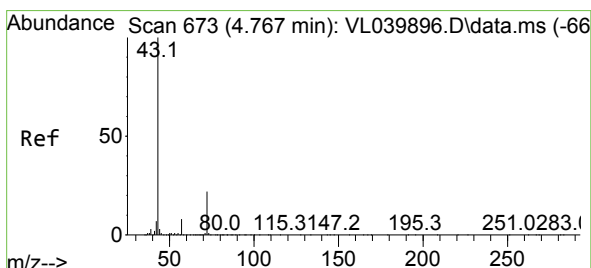
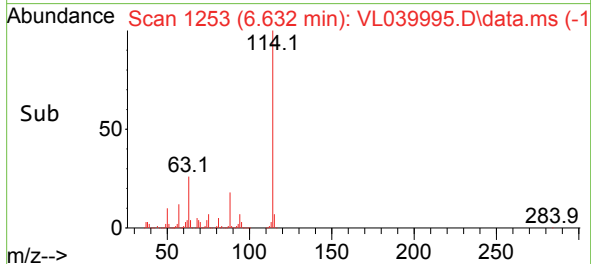
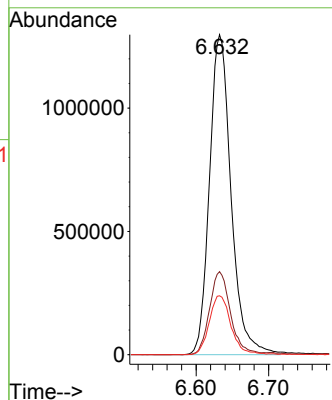
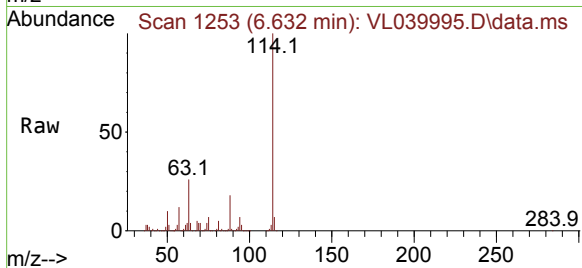
Tgt Ion:114 Resp: 2683096

Ion Ratio Lower Upper

114 100

63 25.9 21.4 32.0

88 18.8 15.3 22.9



#34

2-Butanone

Concen: 4.100 ppbv

RT: 4.636 min Scan# 632

Delta R.T. -0.116 min

Lab File: VL039995.D

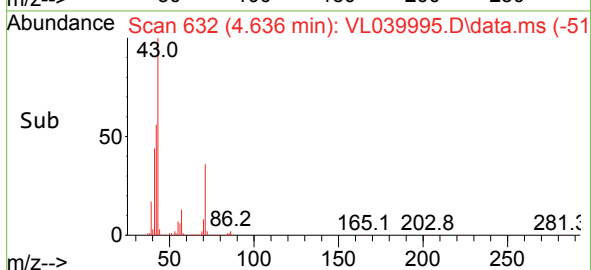
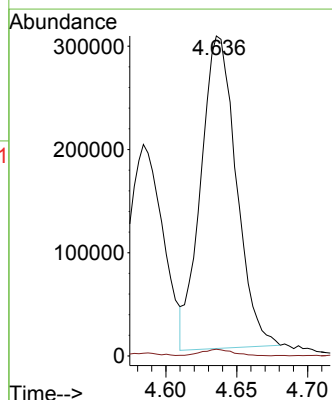
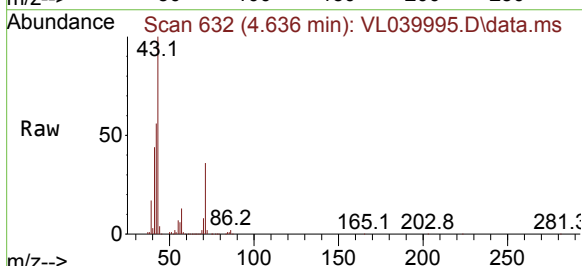
Acq: 13 Dec 2022 3:35

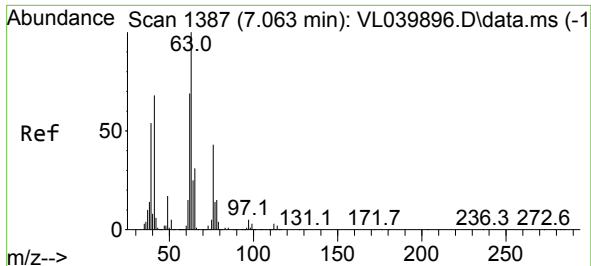
Tgt Ion: 43 Resp: 526349

Ion Ratio Lower Upper

43 100

72 2.0 17.4 26.2#





#39

1,2-Dichloropropane

Concen: 0.394 ppbv

RT: 7.314 min Scan# 1465

Delta R.T. 0.280 min

Lab File: VL039995.D

Acq: 13 Dec 2022 3:35

Instrument :

MSVOA_L

ClientSampleId :

SG-1DL2

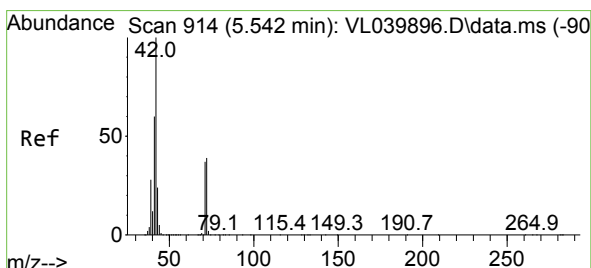
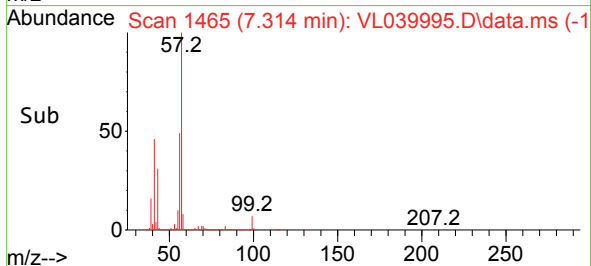
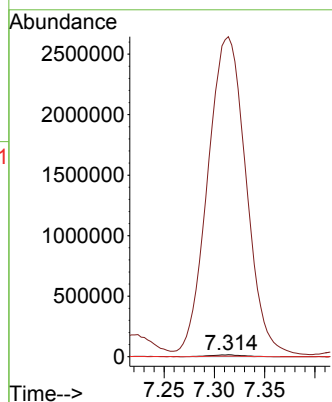
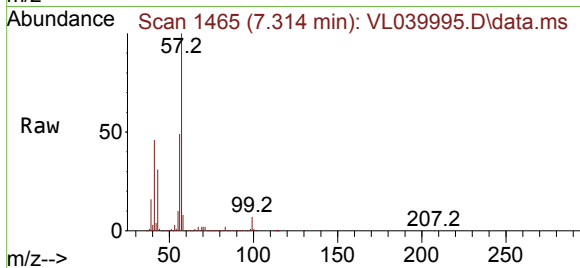
Tgt Ion: 63 Resp: 35011

Ion Ratio Lower Upper

63 100

41 16856.5 54.7 82.1#

62 22.8 55.0 82.6#



#41

Tetrahydrofuran

Concen: 0.064 ppbv

RT: 5.700 min Scan# 963

Delta R.T. 0.180 min

Lab File: VL039995.D

Acq: 13 Dec 2022 3:35

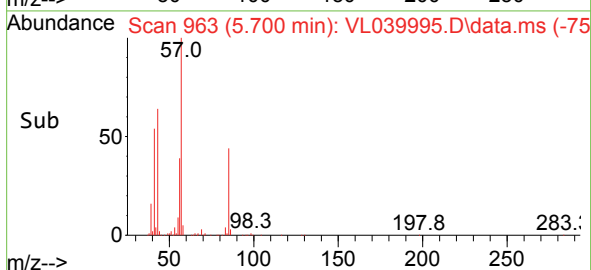
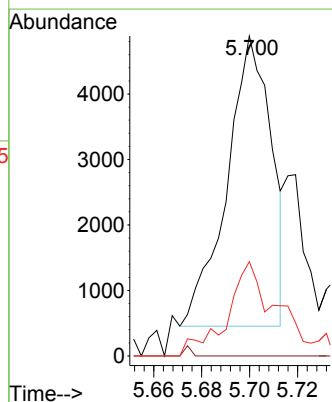
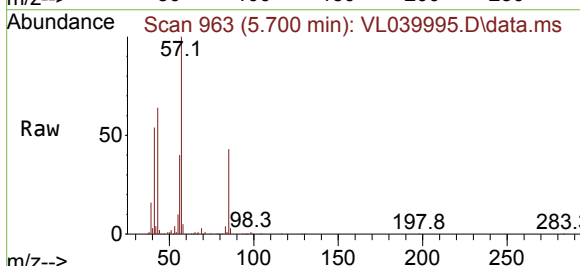
Tgt Ion: 42 Resp: 5707

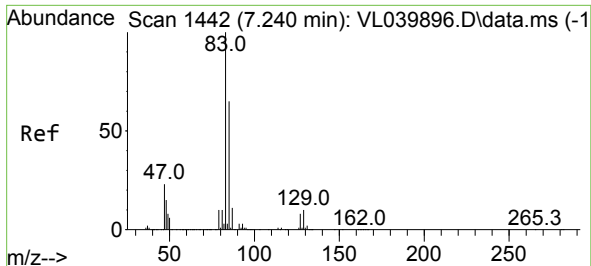
Ion Ratio Lower Upper

42 100

72 0.0 31.6 47.4#

71 37.8 31.2 46.8

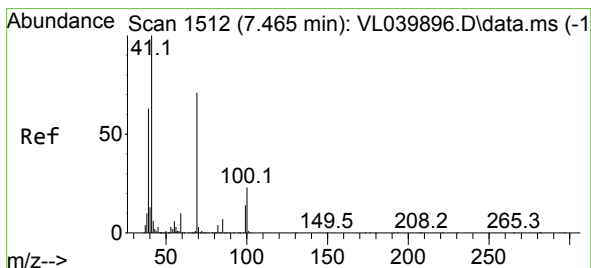
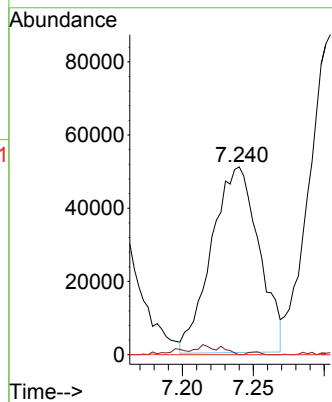
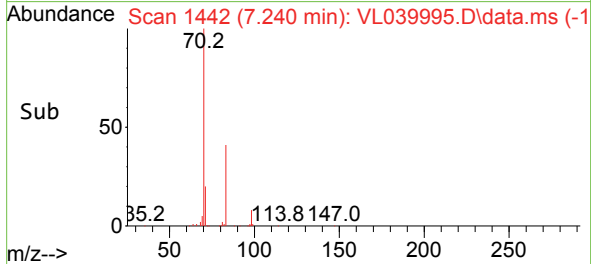
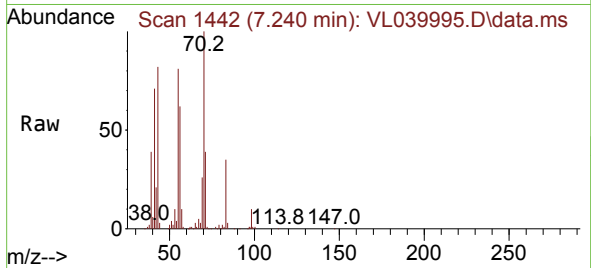




#42
Bromodichloromethane
Concen: 0.698 ppbv
RT: 7.240 min Scan# 1442
Delta R.T. 0.029 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

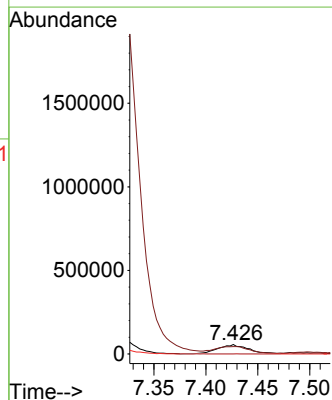
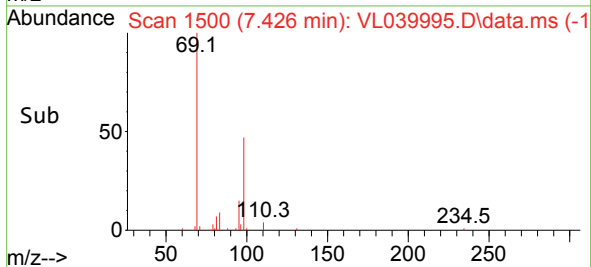
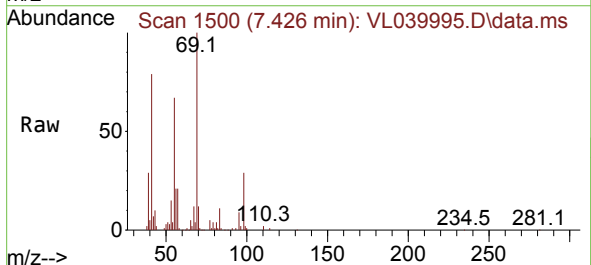
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

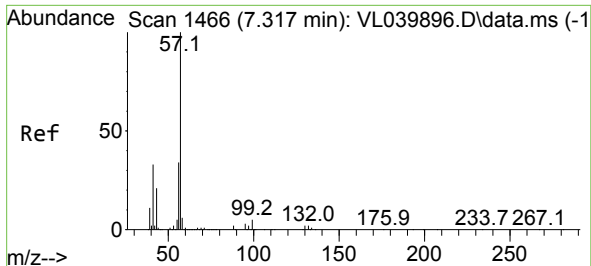
Tgt Ion: 83 Resp: 118276
Ion Ratio Lower Upper
83 100
85 0.0 52.0 78.0#
127 0.0 6.5 9.7#



#43
Methyl Methacrylate
Concen: 1.223 ppbv
RT: 7.426 min Scan# 1500
Delta R.T. -0.013 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 69 Resp: 109336
Ion Ratio Lower Upper
69 100
41 0.0 116.4 174.6#
100 0.0 26.8 40.2#

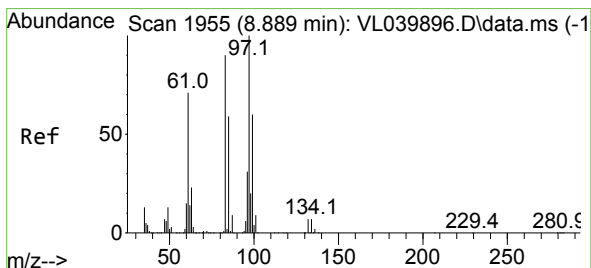
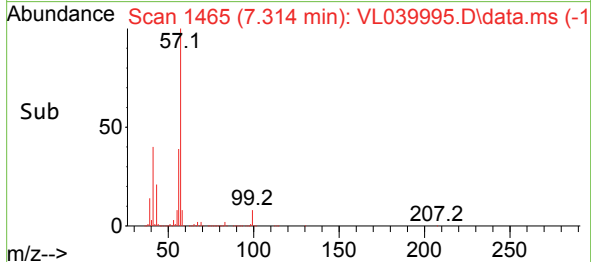
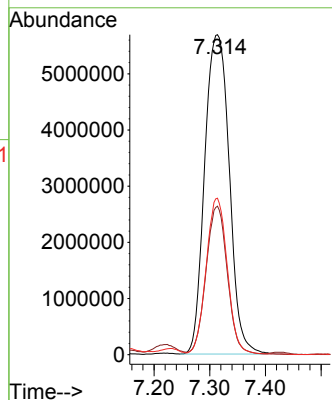
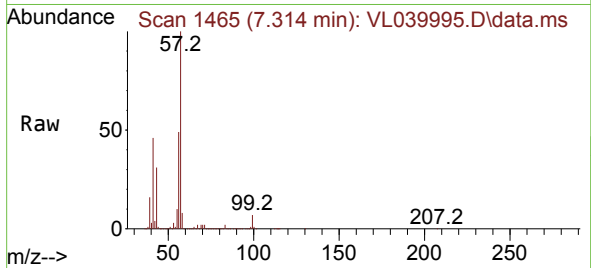




#44
2,2,4-Trimethylpentane
Concen: 45.887 ppbv
RT: 7.314 min Scan# 1466
Delta R.T. 0.023 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

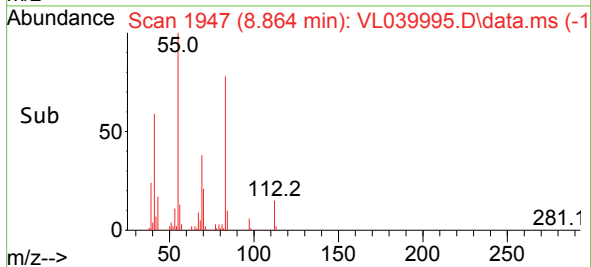
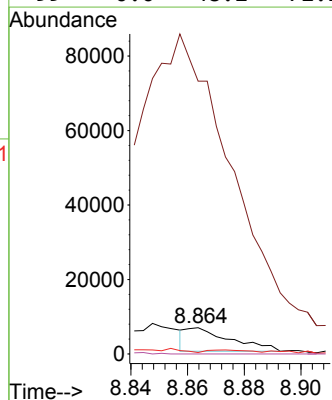
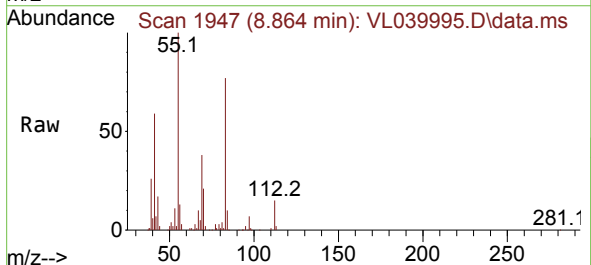
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

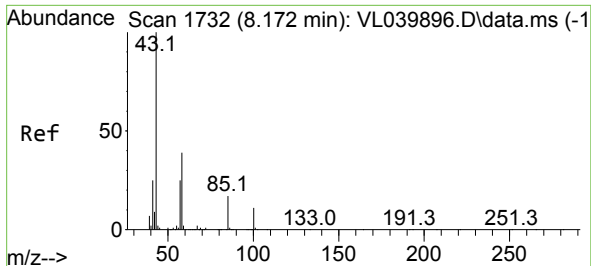
Tgt Ion: 57 Resp:17470606
Ion Ratio Lower Upper
57 100
41 40.4 26.2 39.2#
56 42.5 25.5 38.3#



#47
1,1,2-Trichloroethane
Concen: 0.074 ppbv
RT: 8.864 min Scan# 1947
Delta R.T. 0.000 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 97 Resp: 6802
Ion Ratio Lower Upper
97 100
83 903.9 72.1 108.1#
85 0.0 47.2 70.8#
99 0.0 48.2 72.2#

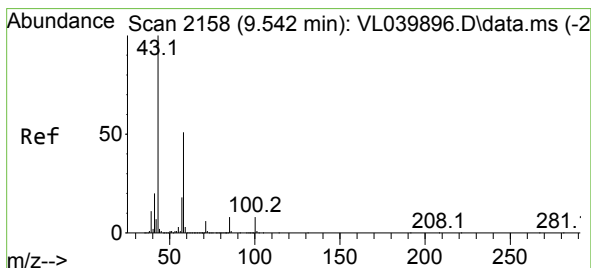
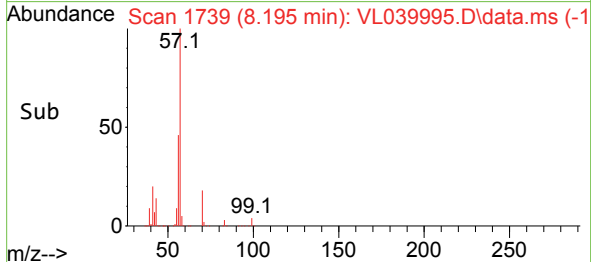
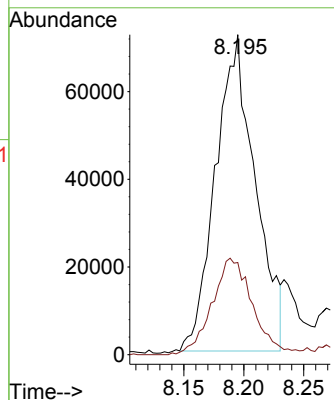
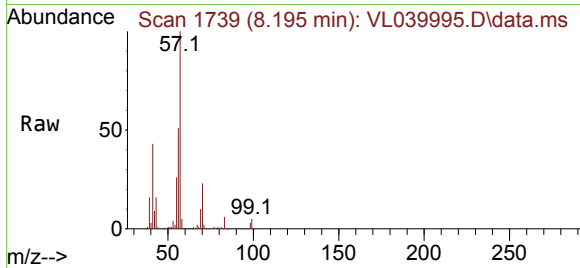




#50
4-Methyl-2-Pentanone
Concen: 0.722 ppbv
RT: 8.195 min Scan# 11
Delta R.T. 0.048 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

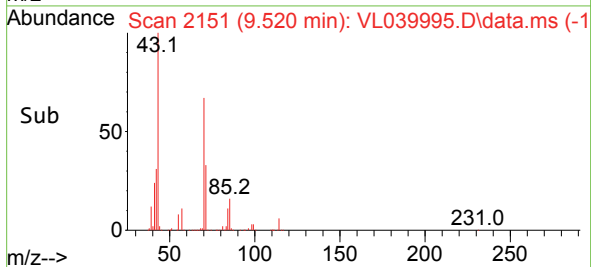
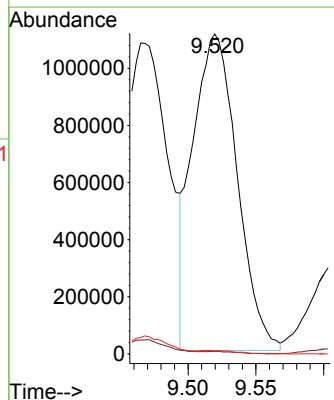
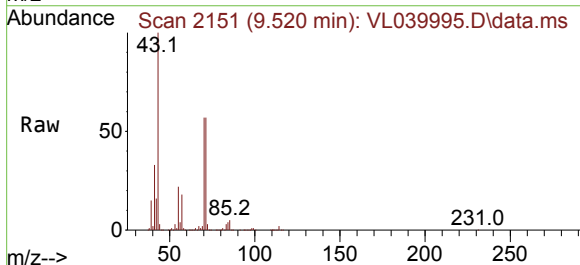
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

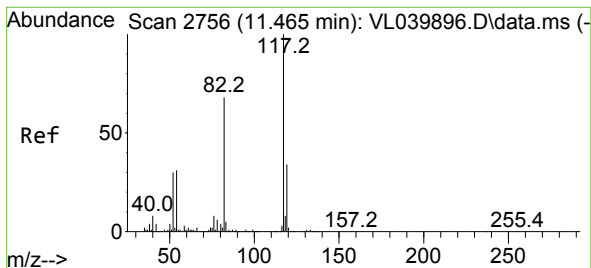
Tgt Ion: 43 Resp: 165902
Ion Ratio Lower Upper
43 100
58 31.6 29.8 44.6



#51
2-Hexanone
Concen: 14.157 ppbv
RT: 9.520 min Scan# 2151
Delta R.T. 0.003 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 43 Resp: 2527037
Ion Ratio Lower Upper
43 100
58 0.0 40.2 60.4#
98 0.0 0.1 0.1#

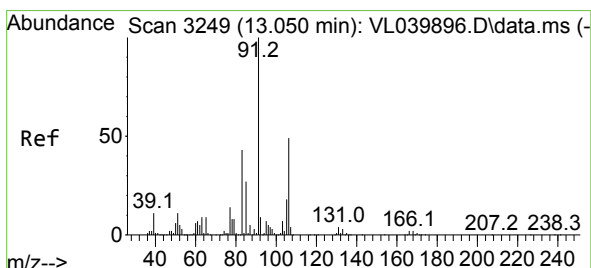
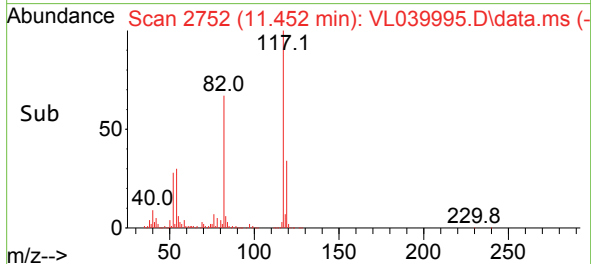
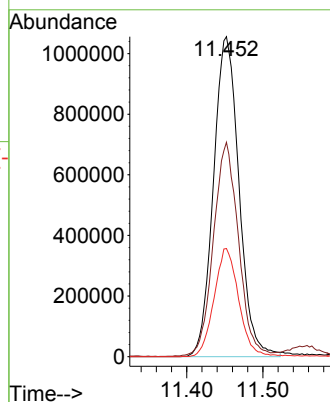
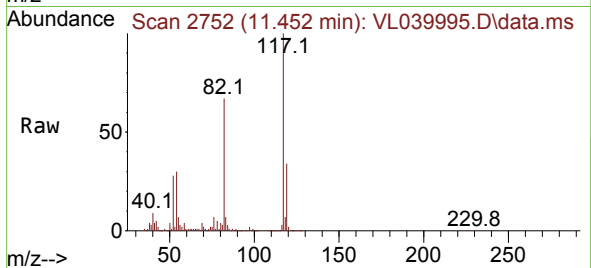




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.452 min Scan# 21
Delta R.T. 0.019 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

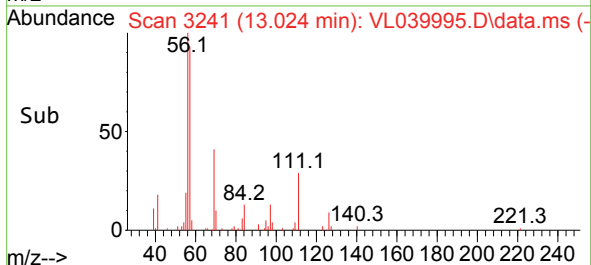
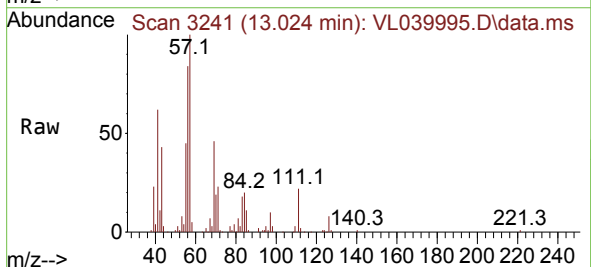
Instrument :
MSVOA_L
ClientSampleId :
SG-1DL2

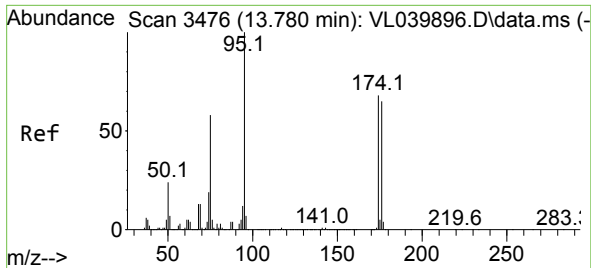
Tgt Ion:117 Resp: 2460802
Ion Ratio Lower Upper
117 100
82 65.7 52.3 78.5
119 33.0 25.7 38.5



#63
1,1,2,2-Tetrachloroethane
Concen: 0.023 ppbv
RT: 13.024 min Scan# 3241
Delta R.T. 0.013 min
Lab File: VL039995.D
Acq: 13 Dec 2022 3:35

Tgt Ion: 83 Resp: 2070
Ion Ratio Lower Upper
83 100
131 0.0 4.6 13.8#
85 0.0 33.0 99.0#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.284 ppbv
 RT: 13.761 min Scan# 34
 Delta R.T. 0.019 min
 Lab File: VL039995.D
 Acq: 13 Dec 2022 3:35

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1DL2

Tgt Ion: 95 Resp: 1932982
 Ion Ratio Lower Upper
 95 100
 174 68.0 53.7 80.5
 175 4.9 4.0 6.0

