

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040821\
 Data File : VL036760.D
 Acq On : 8 Apr 2021 21:14
 Operator : SY/AP
 Sample : M1981-01DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-3DL

Manual Integrations
 APPROVED

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 4/12/2021 11:47:29 AM

Quant Time: Apr 10 21:32:31 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1378613	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	3587740	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.08	117	2939630	10.00	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	1887755	8.06	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	80.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.25	62	102718	1.098	ppbv	93
9) Propene	3.01	41	184650	2.249	ppbv	93
10) Heptane	8.11	43	81378m	0.389	ppbv	
13) Ethanol	3.61	45	73172m	7.483	ppbv	
15) Acetone	3.84	43	542520	3.998	ppbv	100
19) Isopropyl Alcohol	3.99	45	30509m	0.409	ppbv	
20) Methylene Chloride	4.34	84	235658	3.709	ppbv	96
22) trans-1,2-Dichloroethene	4.88	96	27110m	0.449	ppbv	
26) Hexane	5.68	57	279433	1.867	ppbv #	48
27) Carbon Disulfide	4.54	76	63363m	0.430	ppbv	
30) Cyclohexane	7.13	84	34021m	0.280	ppbv	
31) cis-1,2-Dichloroethene	5.54	61	344498	2.379	ppbv	95
36) Benzene	6.88	78	202093	0.611	ppbv	97
38) Trichloroethene	7.83	130	434497	3.374	ppbv	96
44) 2,2,4-Trimethylpentane	7.86	57	744486	1.278	ppbv #	84
53) Toluene	9.80	91	149337	0.424	ppbv	99
58) Ethyl Benzene	12.71	91	180402	0.422	ppbv	100
59) m/p-Xylene	12.96	91	286150m	0.767	ppbv	
60) o-Xylene	13.69	91	202849	0.562	ppbv	100
72) 4-Ethyltoluene	15.84	105	65509m	0.166	ppbv	
73) 1,3,5-Trimethylbenzene	15.99	105	97314	0.264	ppbv	87
74) 1,2,4-Trimethylbenzene	16.76	105	127395m	0.323	ppbv	

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

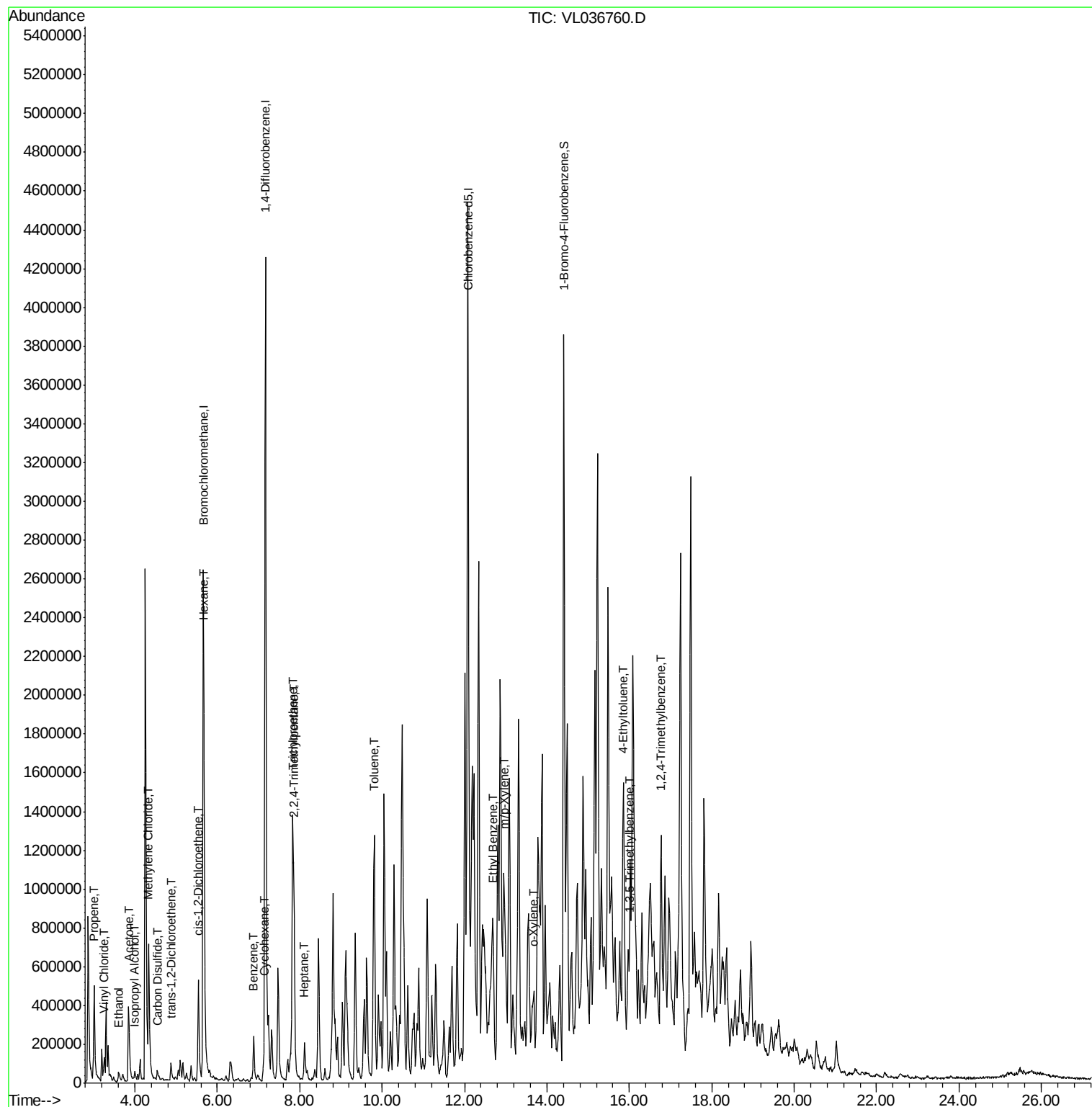
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040821\
Data File : VL036760.D
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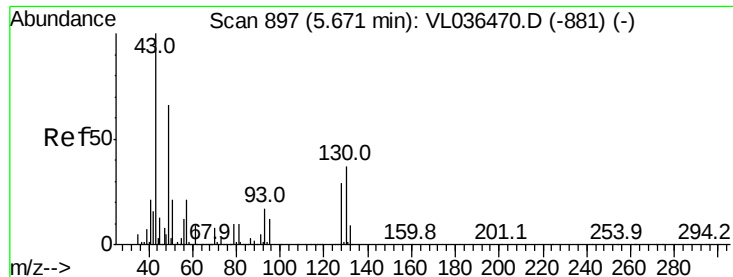
Instrument :
MSVOA_L
ClientSampleId :
SG-3DL

Quant Time: Apr 10 21:32:31 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Instrument :

MSVOA_L

ClientSampled :

SG-3DL

Tot Ion: 49 Resp: 1378613

Ion Ratio Lower Upper

49 100

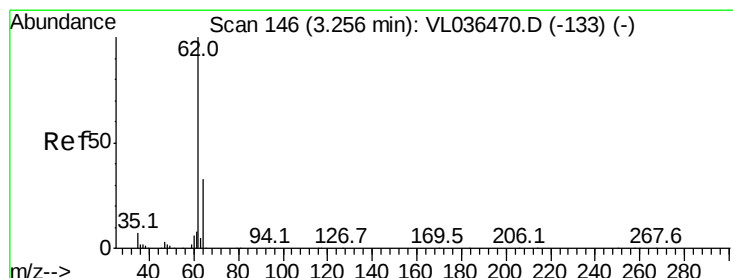
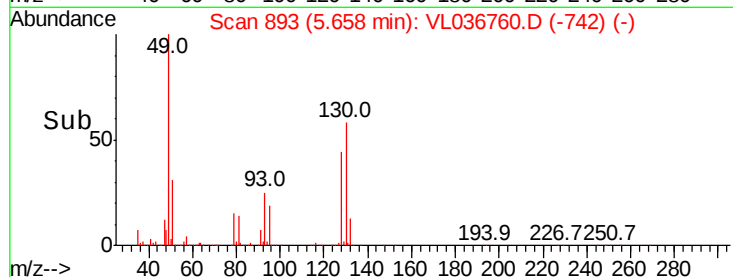
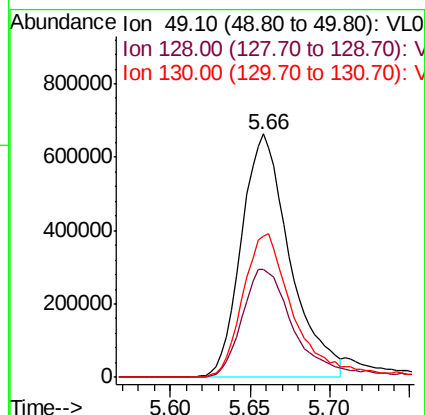
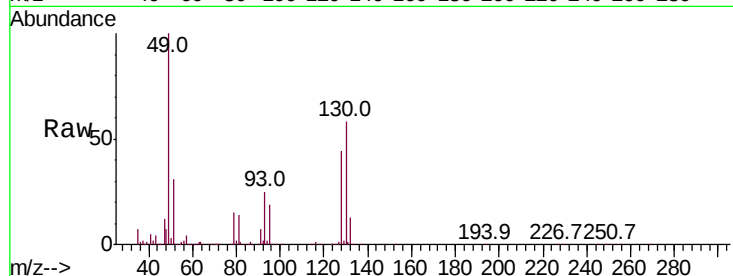
128 50.1 23.5 70.6

130 64.3 29.1 87.4

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#5

Vinyl Chloride

Concen: 1.098 ppbv

RT: 3.25 min Scan# 144

Delta R.T. -0.01 min

Lab File: VL036760.D

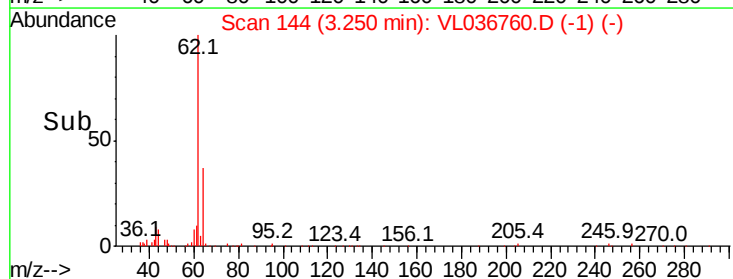
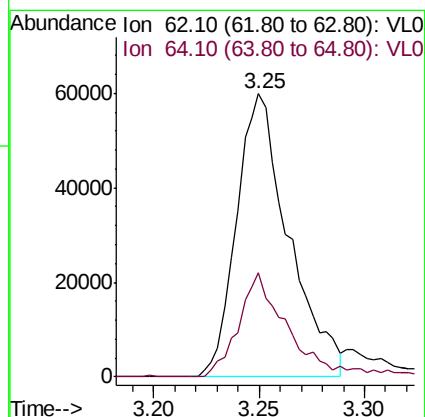
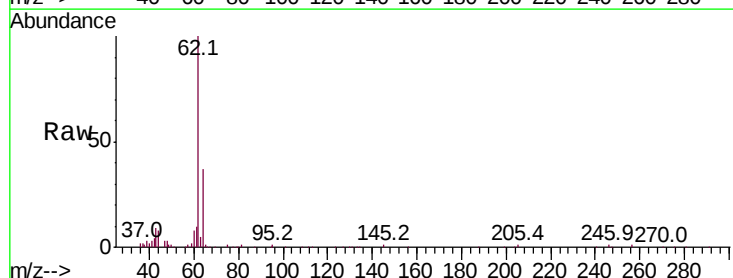
Acq: 8 Apr 2021 21:14

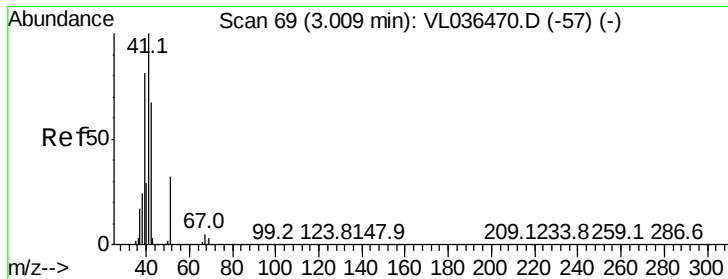
Tgt Ion: 62 Resp: 102718

Ion Ratio Lower Upper

62 100

64 36.7 26.4 39.6





#9

Propene

Concen: 2.249 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.00 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Instrument :

MSVOA_L

ClientSampled :

SG-3DL

Tot Ion: 41 Resp: 184650

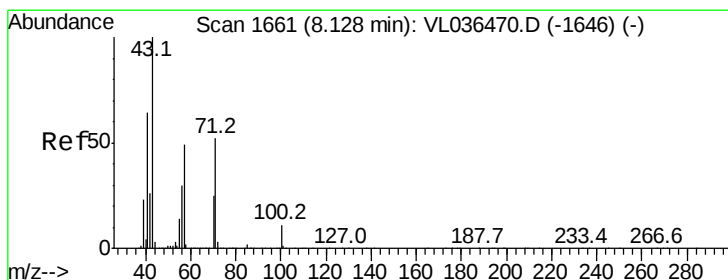
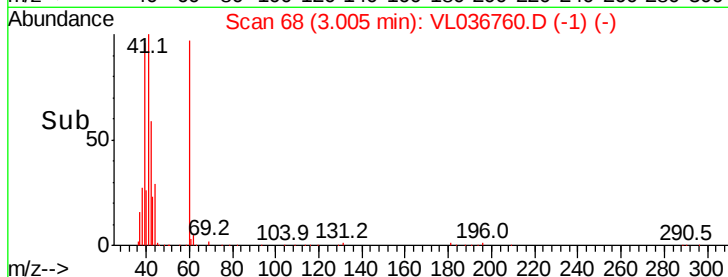
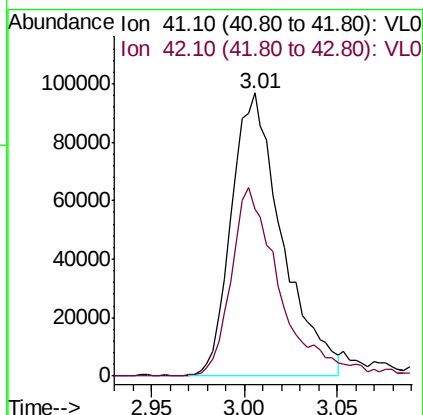
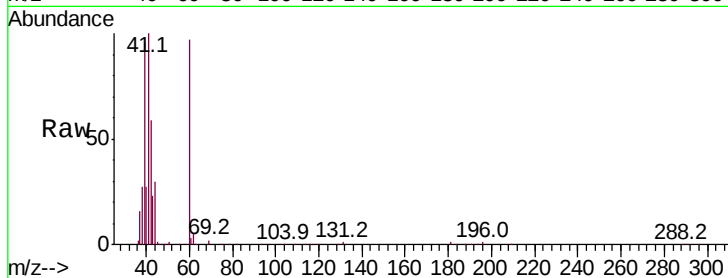
Ion Ratio Lower Upper

41 100

42 65.4 57.0 85.4

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#10

Heptane

Concen: 0.389 ppbv m

RT: 8.11 min Scan# 1657

Delta R.T. -0.01 min

Lab File: VL036760.D

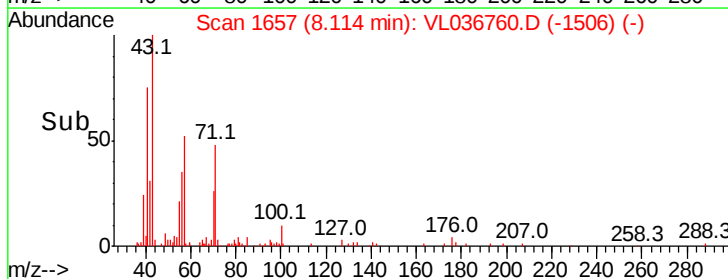
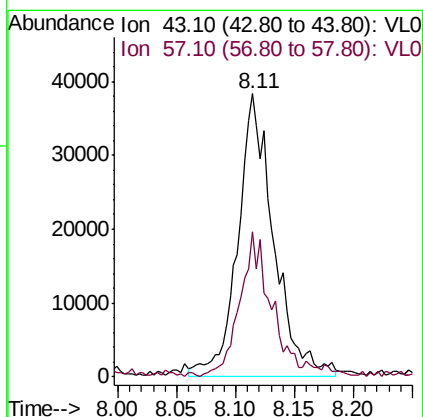
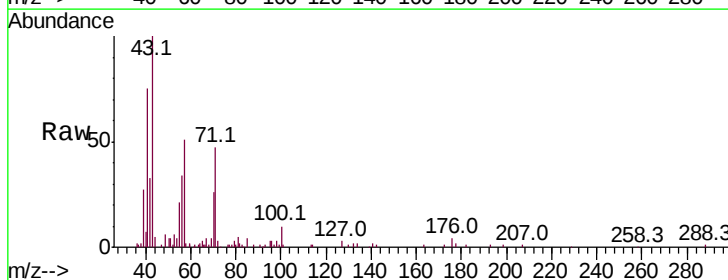
Acq: 8 Apr 2021 21:14

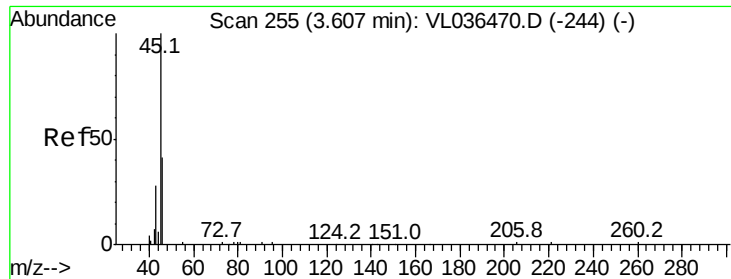
Tgt Ion: 43 Resp: 81378

Ion Ratio Lower Upper

43 100

57 44.9 39.0 58.6





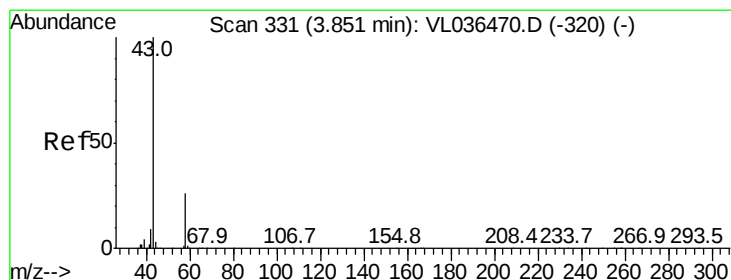
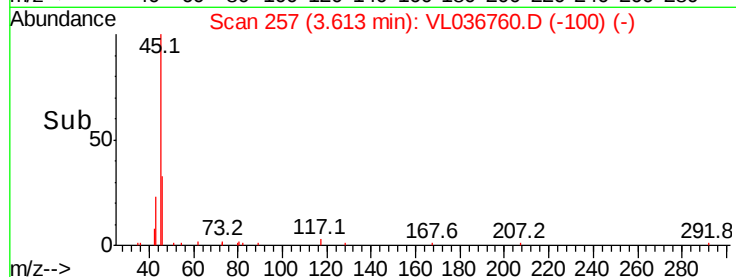
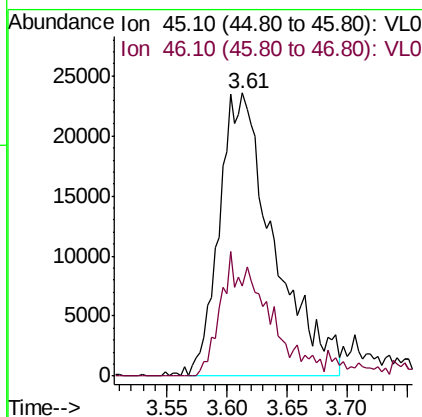
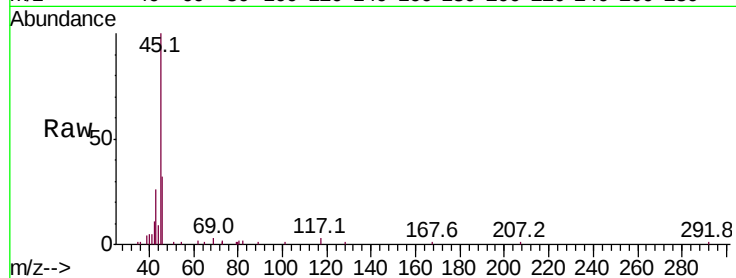
#13
Ethanol
Concen: 7.483 ppbv m
RT: 3.61 min Scan# 257
Delta R.T. 0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Instrument :
MSVOA_L
ClientSampleId :
SG-3DL

Tot Ion: 45 Resp: 73172
Ion Ratio Lower Upper
45 100
46 40.9 16.6 66.2

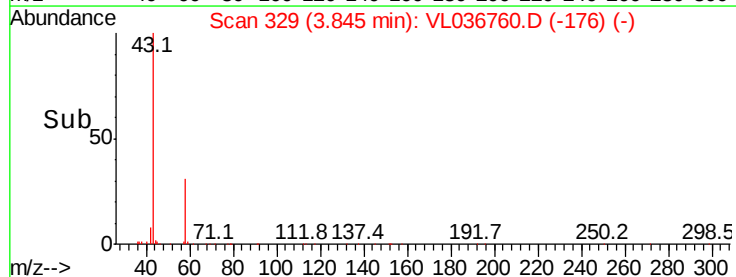
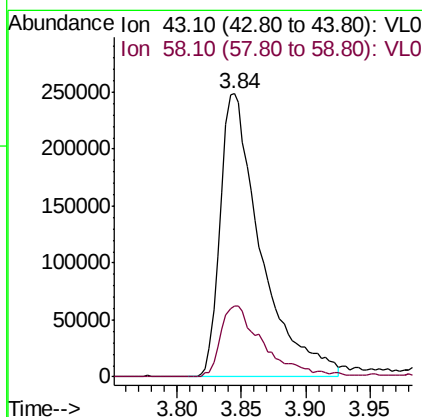
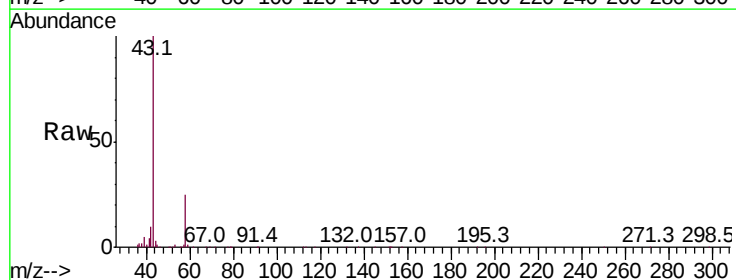
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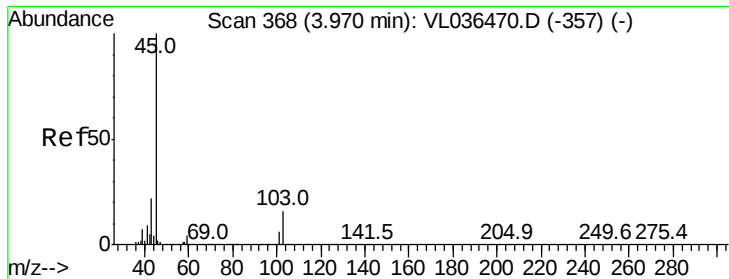
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#15
Acetone
Concen: 3.998 ppbv
RT: 3.84 min Scan# 329
Delta R.T. -0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Tgt Ion: 43 Resp: 542520
Ion Ratio Lower Upper
43 100
58 26.7 21.2 31.8





#19

Isopropyl Alcohol

Concen: 0.409 ppbv m

RT: 3.99 min Scan# 375

Delta R.T. 0.02 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Instrument :

MSVOA_L

ClientSampled :

SG-3DL

Tot Ion: 45 Resp: 30509

Ion Ratio Lower Upper

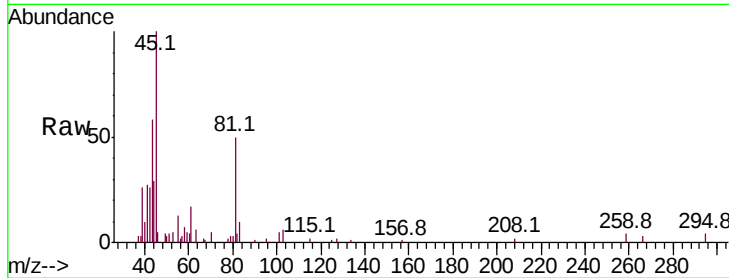
45 100

58 500.6 2.9 4.3#

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

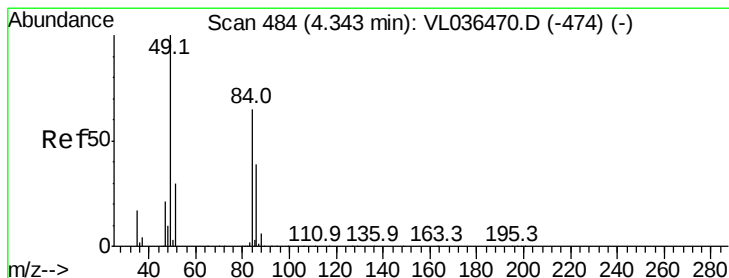
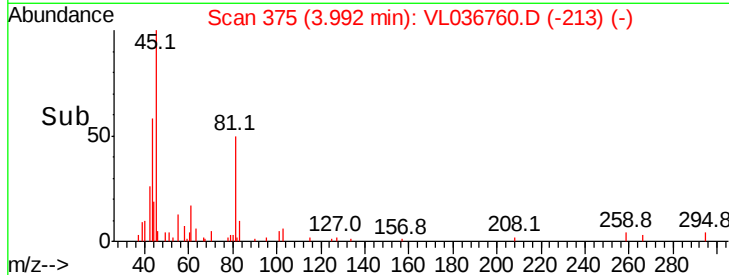
3.99

10000

5000

0

Time--> 3.90 3.95 4.00 4.05



#20

Methylene Chloride

Concen: 3.709 ppbv

RT: 4.34 min Scan# 482

Delta R.T. -0.01 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Tgt Ion: 84 Resp: 235658

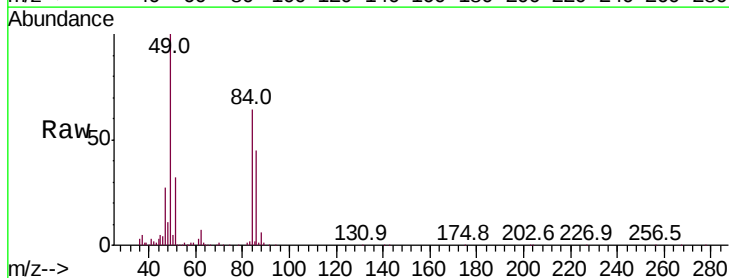
Ion Ratio Lower Upper

84 100

49 153.0 122.9 184.3

51 50.2 36.9 55.3

86 69.7 48.2 72.4



Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

300000

250000

200000

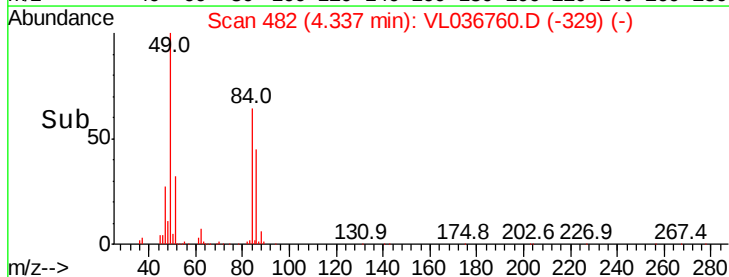
150000

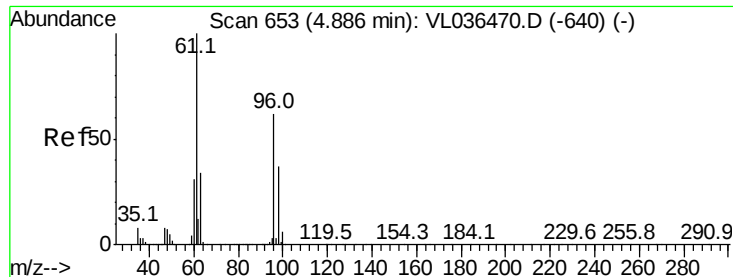
100000

50000

0

Time--> 4.30 4.35 4.40





#22

trans-1,2-Dichloroethene

Concen: 0.449 ppbv m

RT: 4.88 min Scan# 650

Delta R.T. -0.01 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Instrument :

MSVOA_L

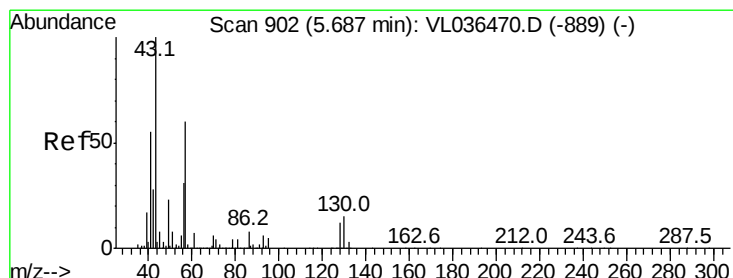
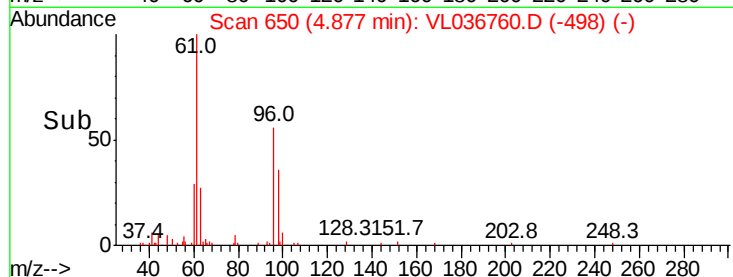
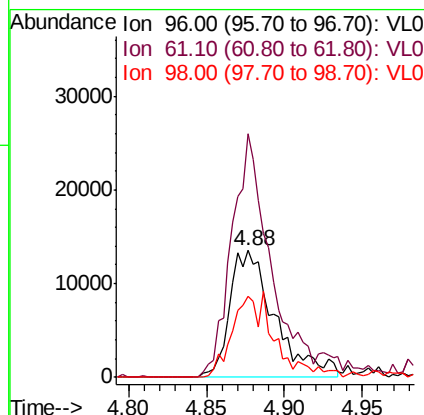
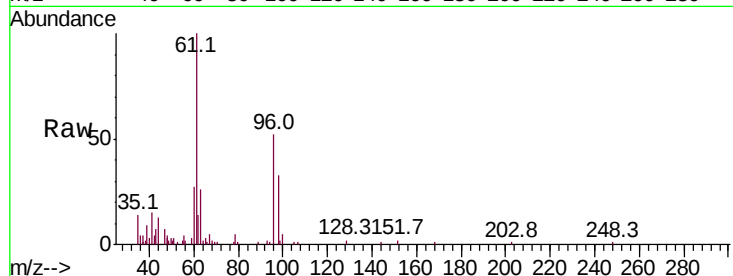
ClientSampleId :

SG-3DL

Tot Ion:	96	Resp:	27110
Ion Ratio	Lower	Upper	
96	100		
61	191.7	129.4	194.0
98	64.1	48.2	72.4

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#26

Hexane

Concen: 1.867 ppbv

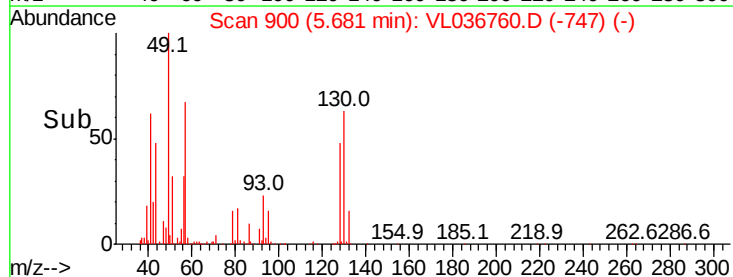
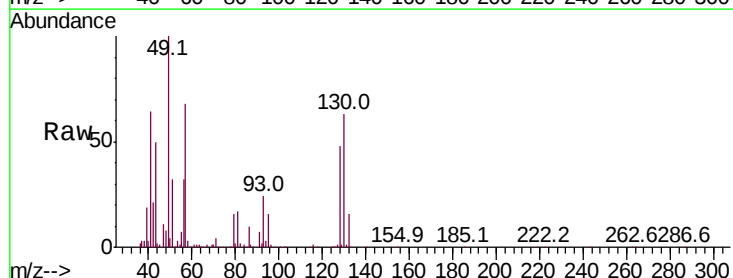
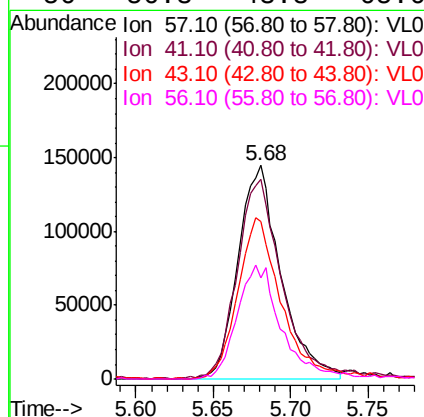
RT: 5.68 min Scan# 900

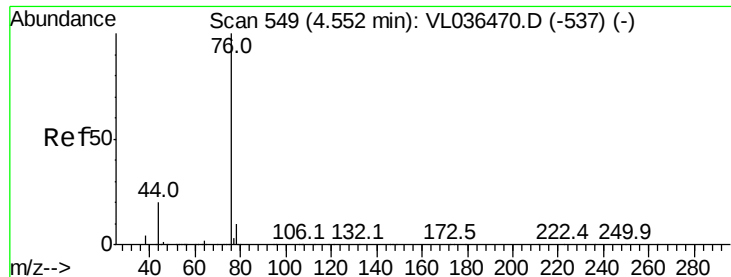
Delta R.T. -0.01 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Tgt Ion:	57	Resp:	279433
Ion Ratio	Lower	Upper	
57	100		
41	99.0	77.2	115.8
43	78.3	173.8	260.6#
56	56.3	43.8	65.6





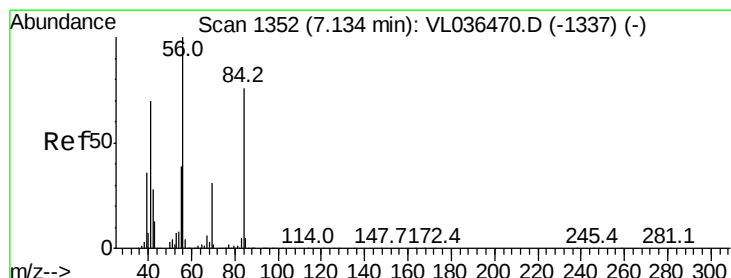
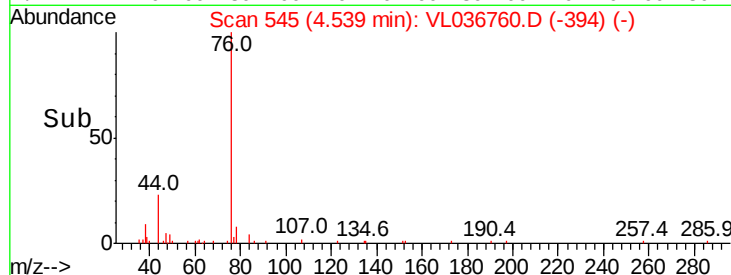
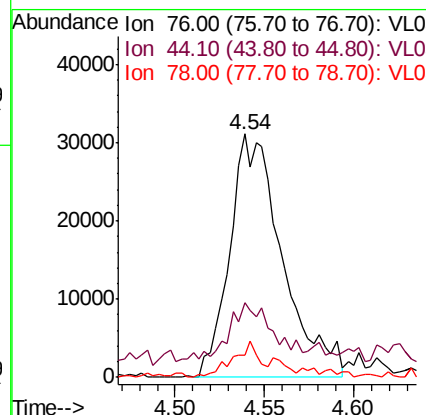
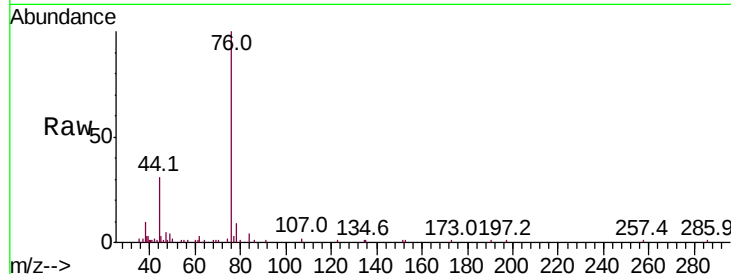
#27
Carbon Disulfide
Concen: 0.430 ppbv m
RT: 4.54 min Scan# 545
Delta R.T. -0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Instrument :
MSVOA_L
ClientSampled :
SG-3DL

Tot Ion	Ratio	Lower	Upper
76	100		
44	0.0	17.5	26.3#
78	12.0	8.6	13.0

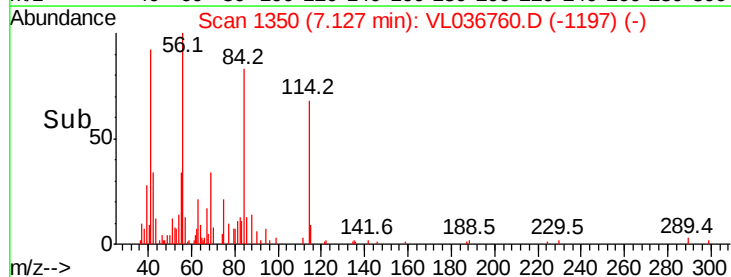
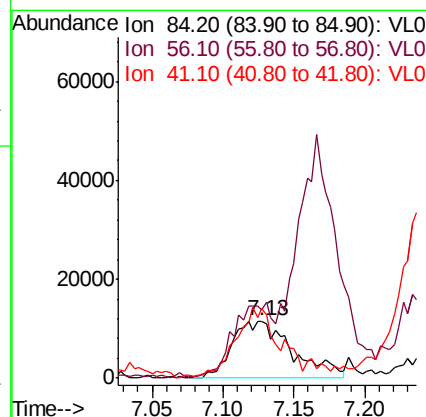
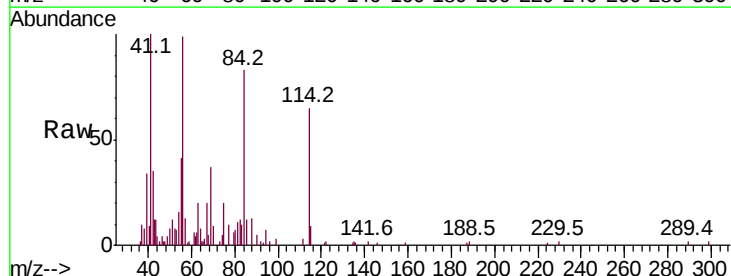
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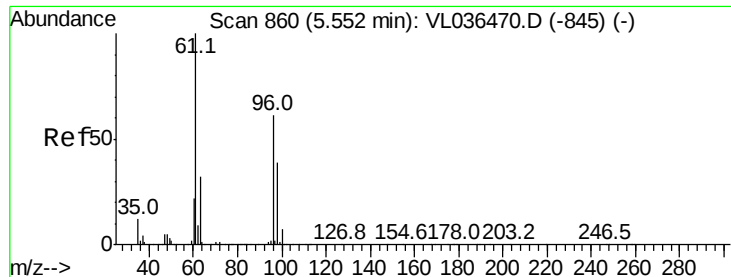
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#30
Cyclohexane
Concen: 0.280 ppbv m
RT: 7.13 min Scan# 1350
Delta R.T. -0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.6	171.8#
41	93.4	75.3	112.9





#31

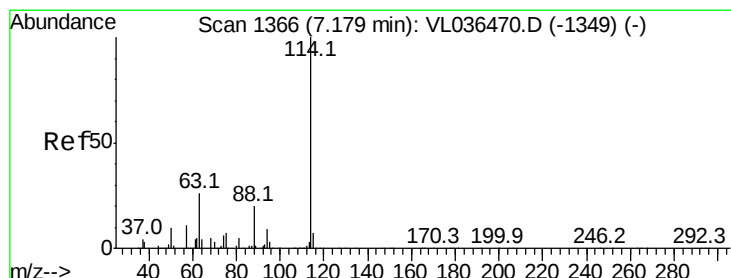
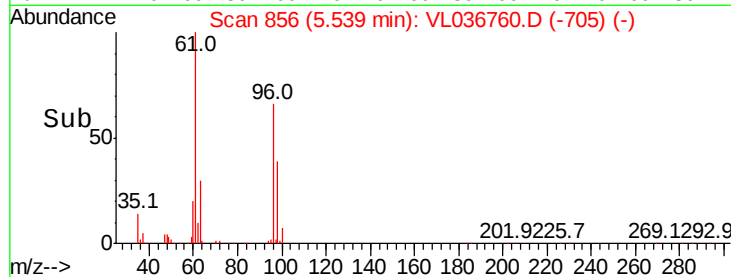
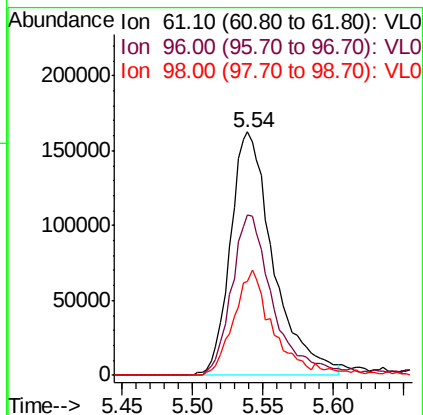
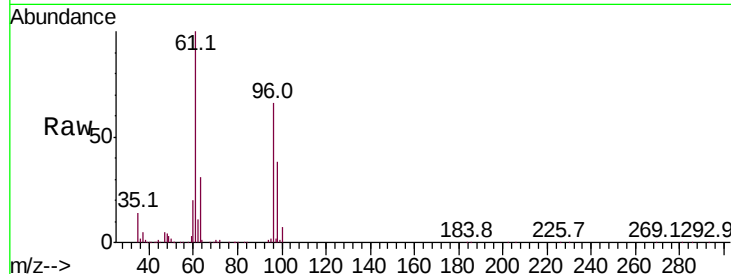
cis-1,2-Dichloroethene
Concen: 2.379 ppbv
RT: 5.54 min Scan# 856
Delta R.T. -0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Instrument :
MSVOA_L
ClientSampleId :
SG-3DL

Tot Ion	Ratio	Lower	Upper
61	100		
96	66.2	48.7	73.1
98	38.3	31.4	47.0

Manual Integrations
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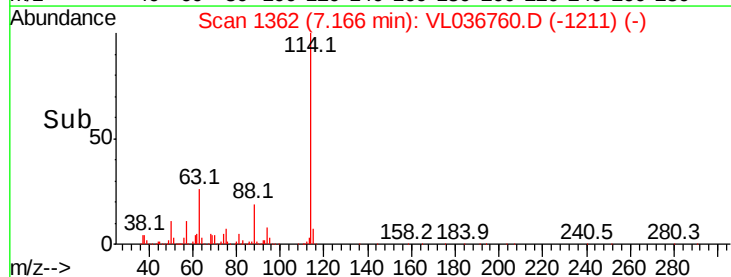
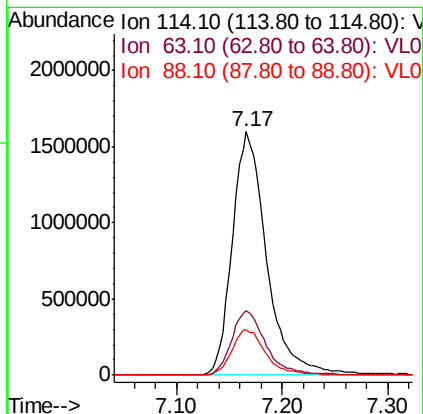
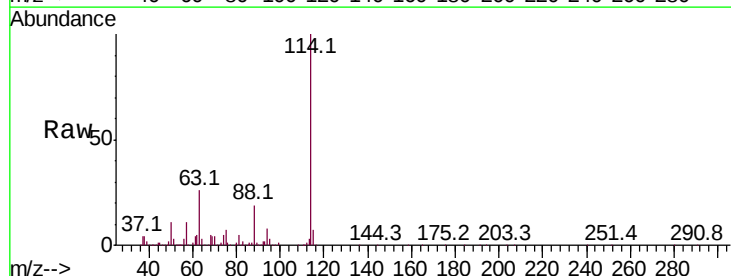
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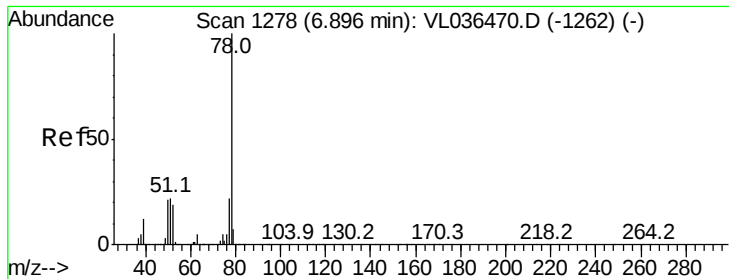


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. -0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.6	22.4	33.6
88	18.9	15.4	23.0





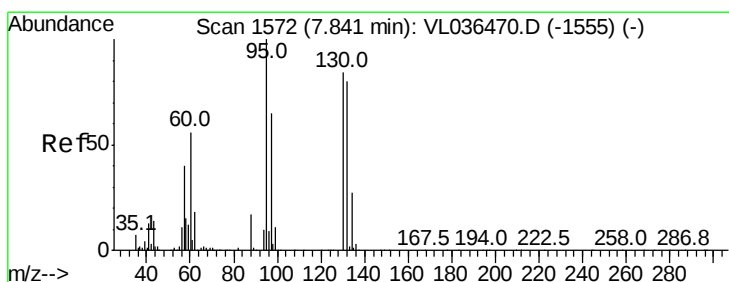
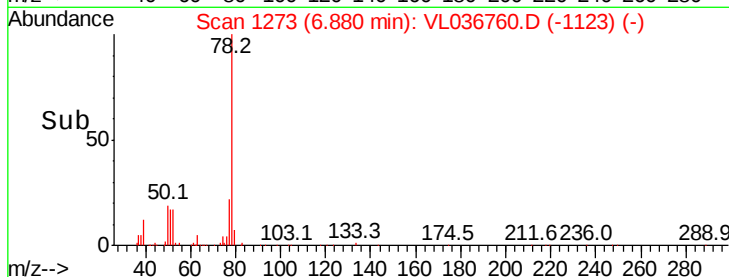
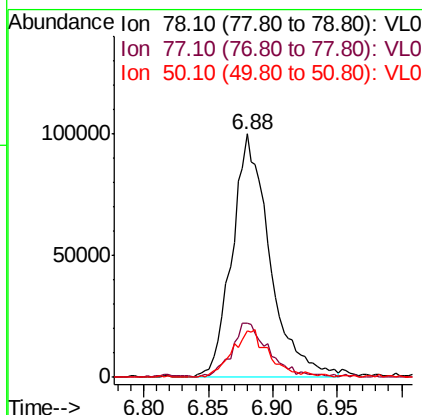
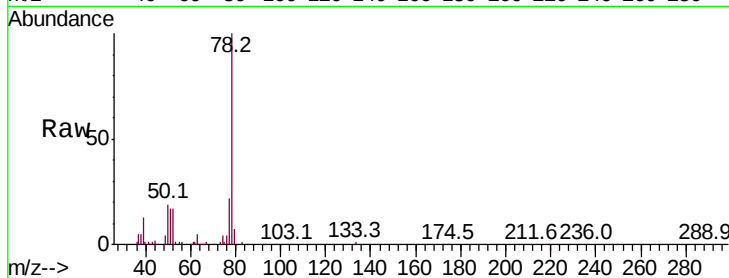
#36
Benzene
Concen: 0.611 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. -0.02 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Instrument :
MSVOA_L
ClientSampleID :
SG-3DL

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.7	18.0	27.0
50	18.8	16.5	24.7

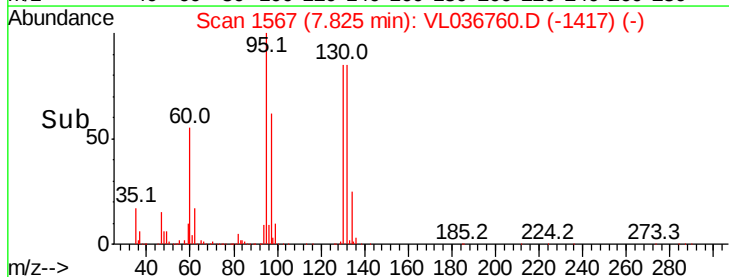
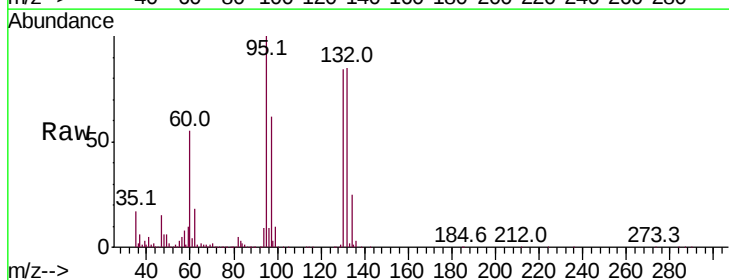
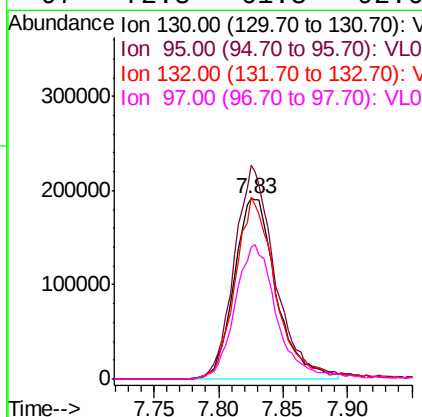
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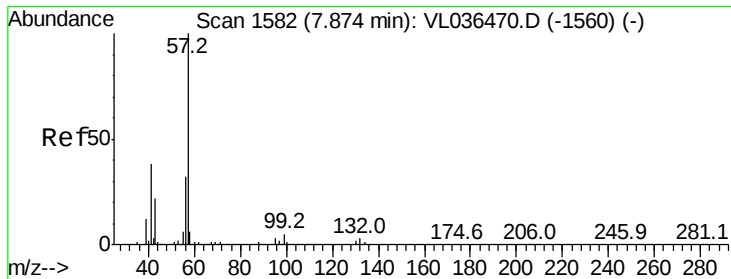
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#38
Trichloroethene
Concen: 3.374 ppbv
RT: 7.83 min Scan# 1567
Delta R.T. -0.02 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Tgt Ion	Ratio	Lower	Upper
130	100		
95	118.3	95.7	143.5
132	100.8	76.2	114.4
97	72.8	61.8	92.6





#44

2,2,4-Trimethylpentane

Concen: 1.278 ppbv

RT: 7.86 min Scan# 1578

Delta R.T. -0.01 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Instrument :

MSVOA_L

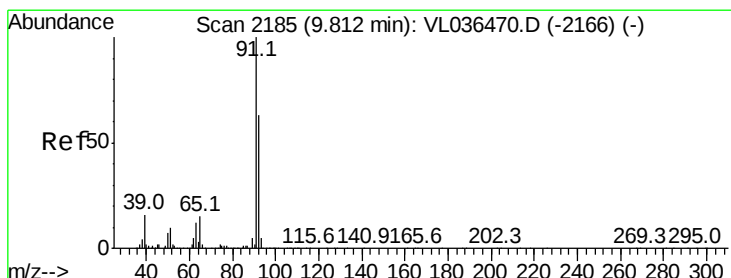
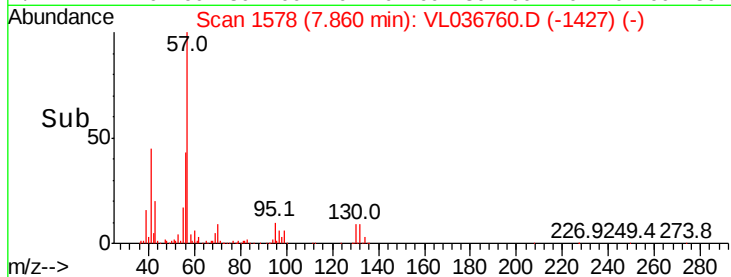
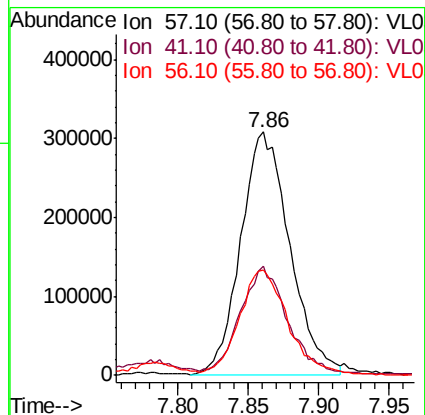
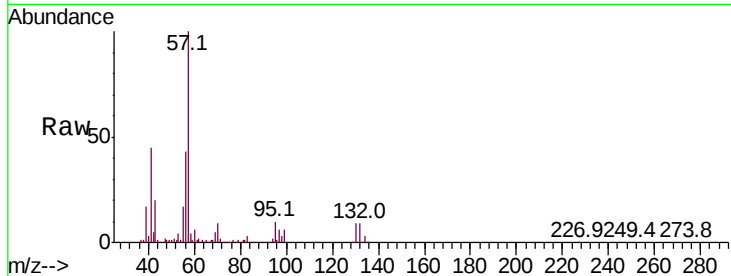
ClientSampleId :

SG-3DL

Tot Ion	57	Resp	744486
Ion	Ratio	Lower	Upper
57	100		
41	43.3	28.8	43.2#
56	44.0	26.1	39.1#

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#53

Toluene

Concen: 0.424 ppbv

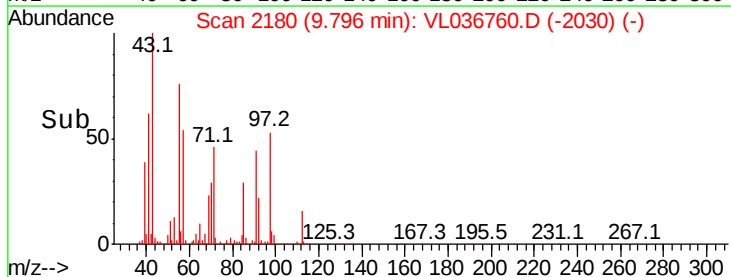
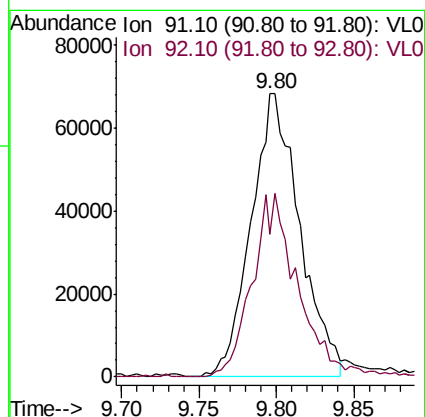
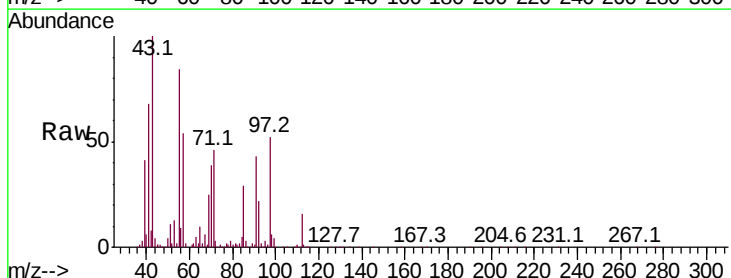
RT: 9.80 min Scan# 2180

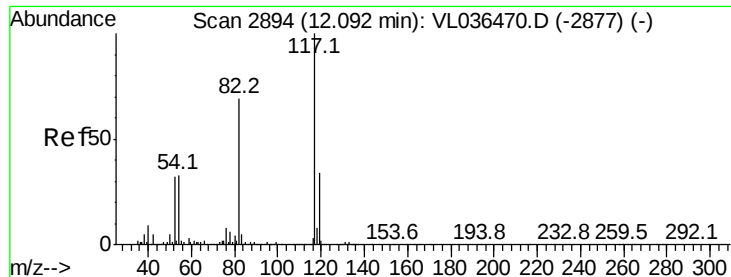
Delta R.T. -0.02 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Tgt Ion	91	Resp	149337
Ion	Ratio	Lower	Upper
91	100		
92	61.5	48.8	73.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2890

Delta R.T. -0.01 min

Lab File: VL036760.D

Acq: 8 Apr 2021 21:14

Instrument :

MSVOA_L

ClientSampled :

SG-3DL

Tot Ion: 117 Resp: 2939630

Ion Ratio Lower Upper

117 100

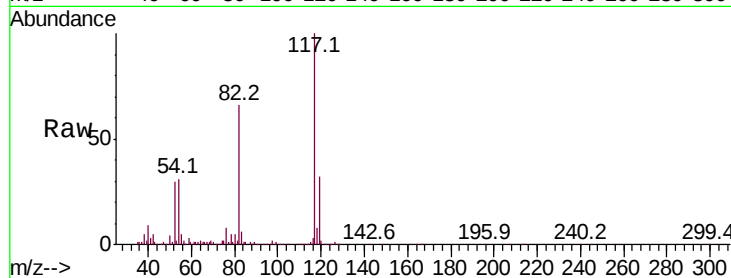
82 64.8 57.4 86.0

119 33.4 47.4 71.0#

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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

1500000

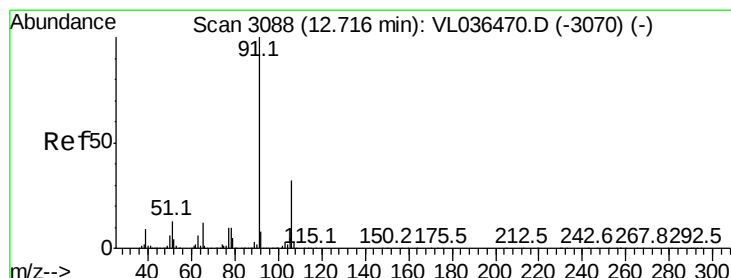
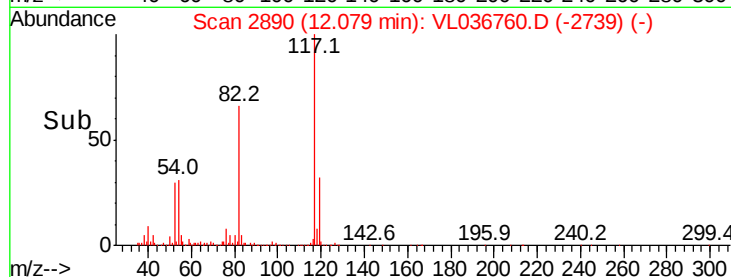
1000000

500000

0

12.08

Time-->



#58

Ethyl Benzene

Concen: 0.422 ppbv

RT: 12.71 min Scan# 3085

Delta R.T. -0.01 min

Lab File: VL036760.D

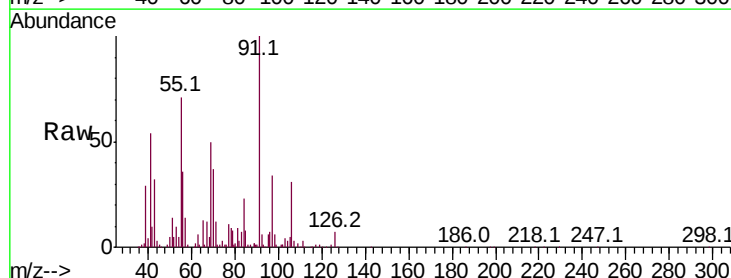
Acq: 8 Apr 2021 21:14

Tgt Ion: 91 Resp: 180402

Ion Ratio Lower Upper

91 100

106 31.5 25.3 37.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

100000

80000

60000

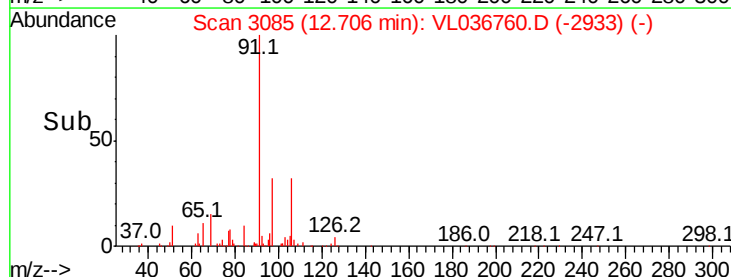
40000

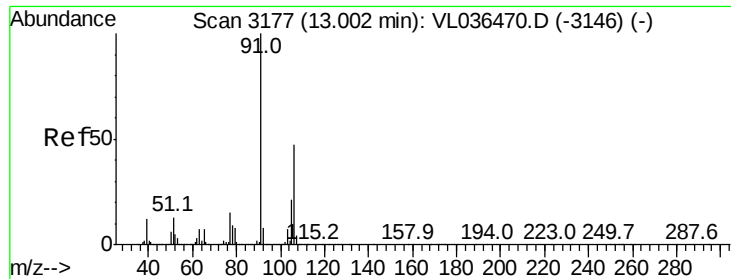
20000

0

12.71

Time-->





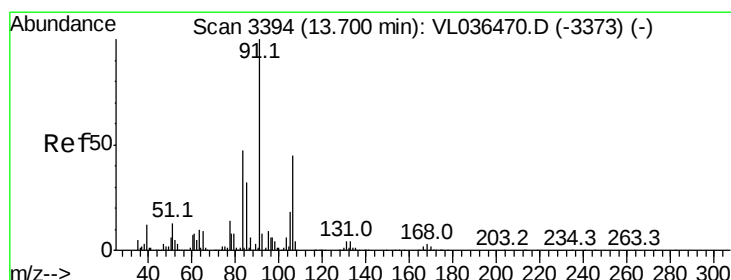
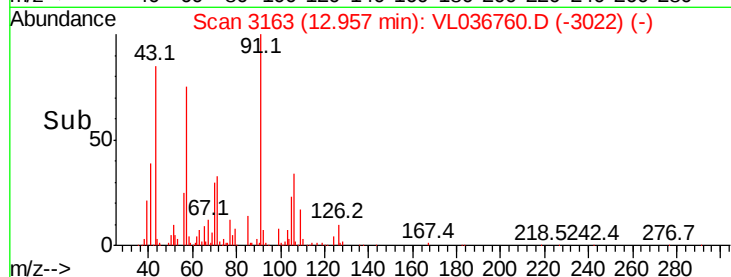
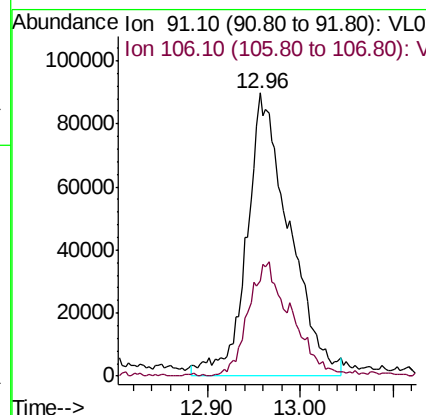
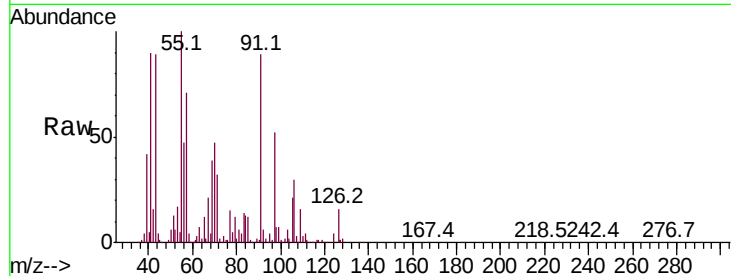
#59
m/p-Xylene
Concen: 0.767 ppbv m
RT: 12.96 min Scan# 3163
Delta R.T. -0.05 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Instrument :
MSVOA_L
ClientSampleId :
SG-3DL

Tot Ion	Ratio	Lower	Upper
91	100		
106	40.9	35.3	52.9

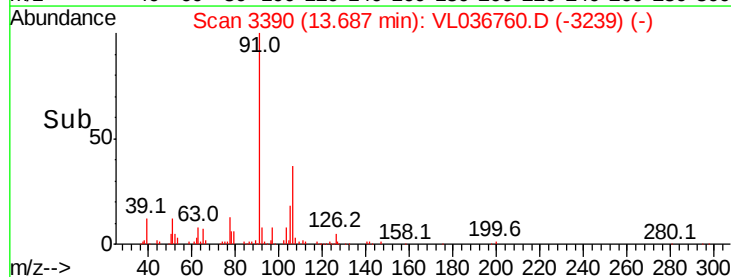
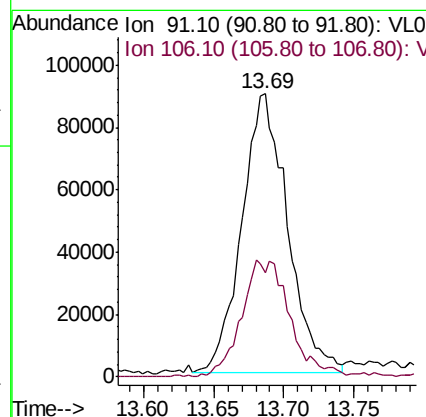
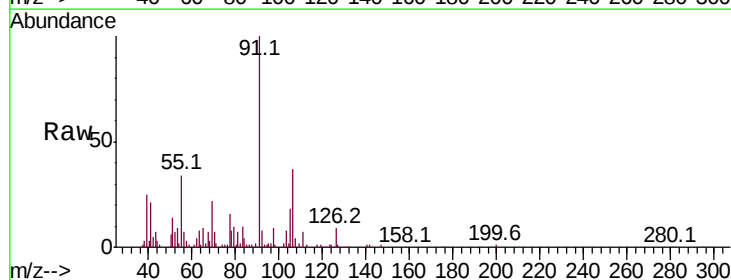
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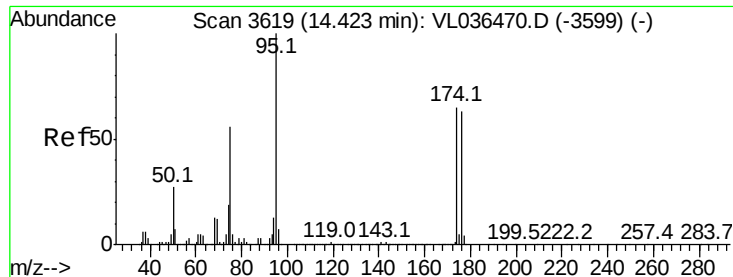
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#60
o-Xylene
Concen: 0.562 ppbv
RT: 13.69 min Scan# 3390
Delta R.T. -0.01 min
Lab File: VL036760.D
Acq: 8 Apr 2021 21:14

Tgt Ion	Ratio	Lower	Upper
91	100		
106	44.5	22.3	66.9





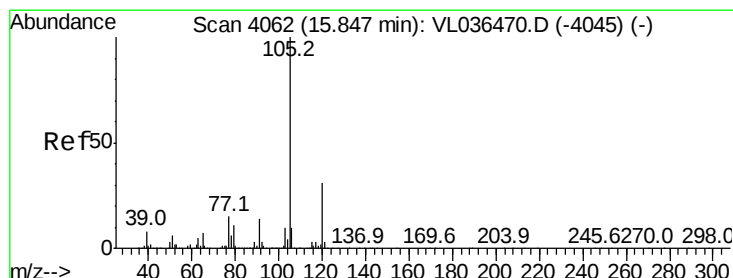
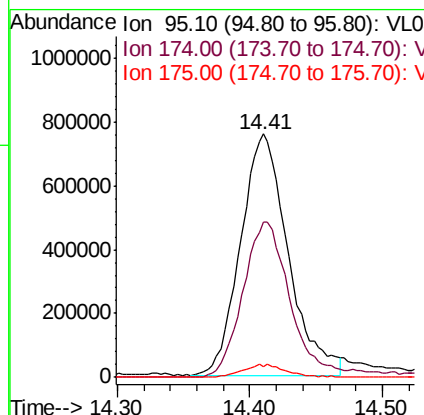
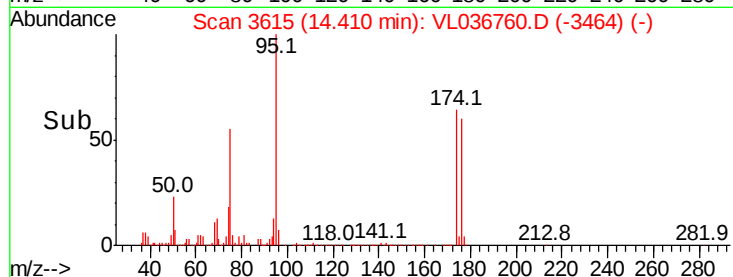
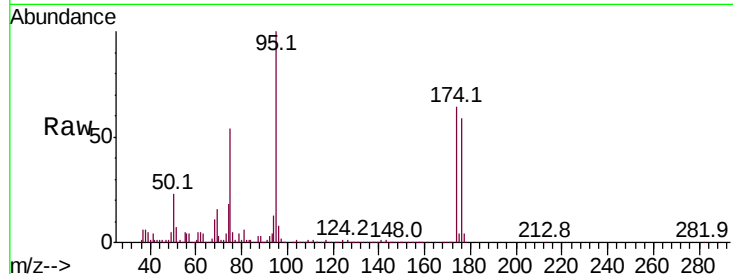
#68
 1-Bromo-4-Fluorobenzene
 Concen: 8.057 ppbv
 RT: 14.41 min Scan# 3615
 Delta R.T. -0.01 min
 Lab File: VL036760.D
 Acq: 8 Apr 2021 21:14

Instrument :
 MSVOA_L
 ClientSampled :
 SG-3DL

Tot Ion: 95 Resp: 1887755
 Ion Ratio Lower Upper
 95 100
 174 68.8 51.0 76.6
 175 4.8 3.9 5.9

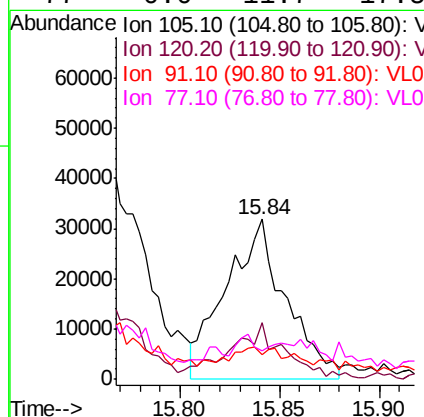
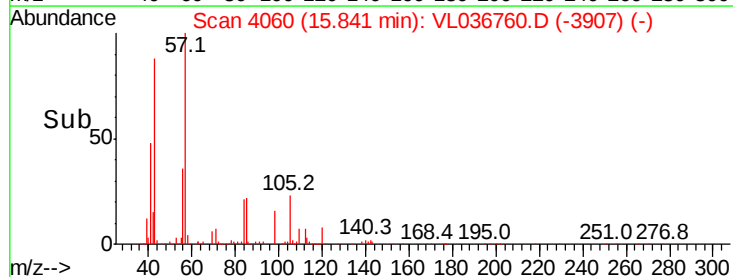
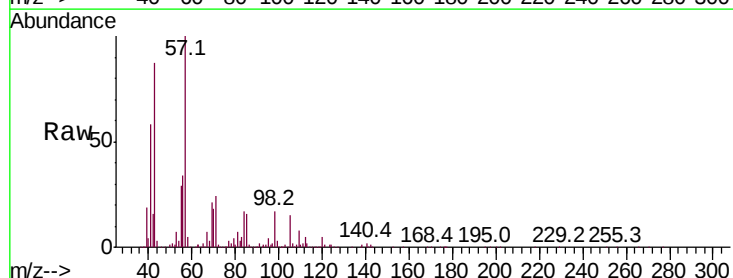
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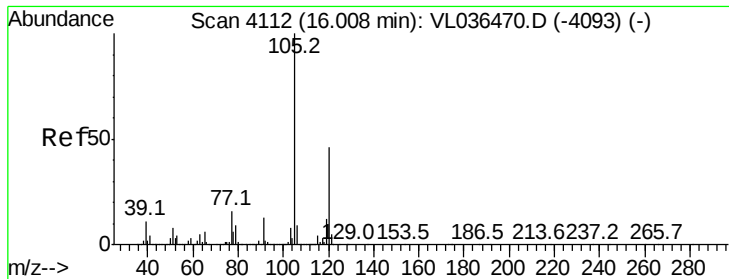
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#72
 4-Ethyltoluene
 Concen: 0.166 ppbv m
 RT: 15.84 min Scan# 4060
 Delta R.T. -0.01 min
 Lab File: VL036760.D
 Acq: 8 Apr 2021 21:14

Tgt Ion: 105 Resp: 65509
 Ion Ratio Lower Upper
 105 100
 120 0.0 24.0 36.0#
 91 0.0 11.0 16.4#
 77 0.0 11.7 17.5#





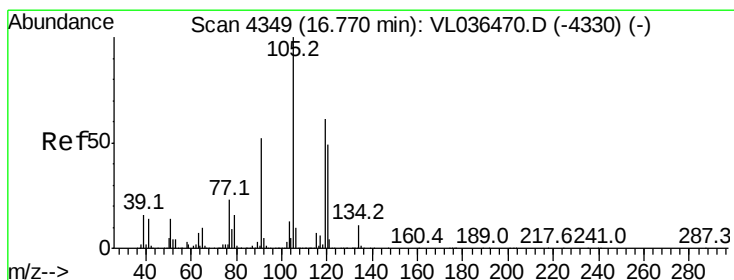
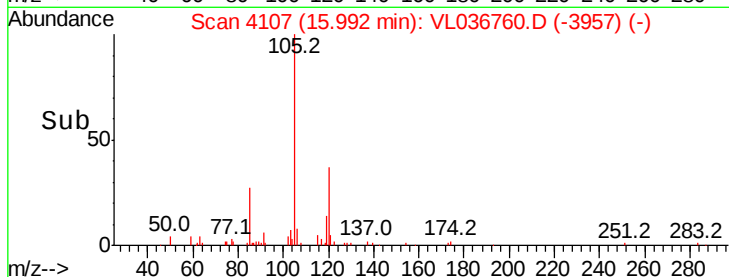
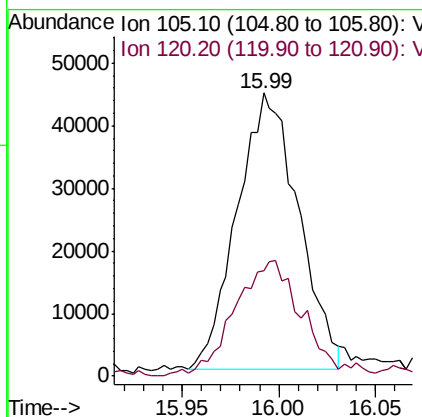
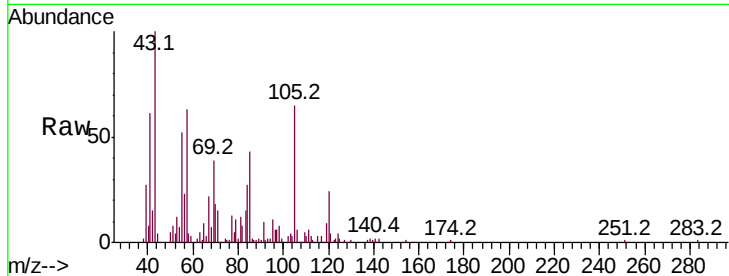
#73
 1,3,5-Trimethylbenzene
 Concen: 0.264 ppbv
 RT: 15.99 min Scan# 4107
 Delta R.T. -0.02 min
 Lab File: VL036760.D
 Acq: 8 Apr 2021 21:14

Instrument :
 MSVOA_L
 ClientSampled :
 SG-3DL

Tot Ion	Ratio	Lower	Upper
105	100		
120	36.9	36.6	54.8

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.323 ppbv m
 RT: 16.76 min Scan# 4345
 Delta R.T. -0.01 min
 Lab File: VL036760.D
 Acq: 8 Apr 2021 21:14

Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.9	39.2	58.8#
91	14.8	42.6	64.0#
77	22.0	18.6	28.0

