

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN060619\
 Data File : VN056026.D
 Acq On : 6 Jun 2019 00:18
 Operator : JC/SP
 Sample : K3191-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 37 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 CULVER-CBTC-TP1-060419

Quant Time: Jun 06 04:13:25 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N060619W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Jun 06 04:02:53 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.20	128	52880	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.58	114	277368	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	214661	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	101644	30.95	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	103.17%
60) 4-Bromofluorobenzene	12.40	95	73979	23.25	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	77.50%
63) Toluene-d8	10.09	98	314530	32.30	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	107.67%

Target Compounds

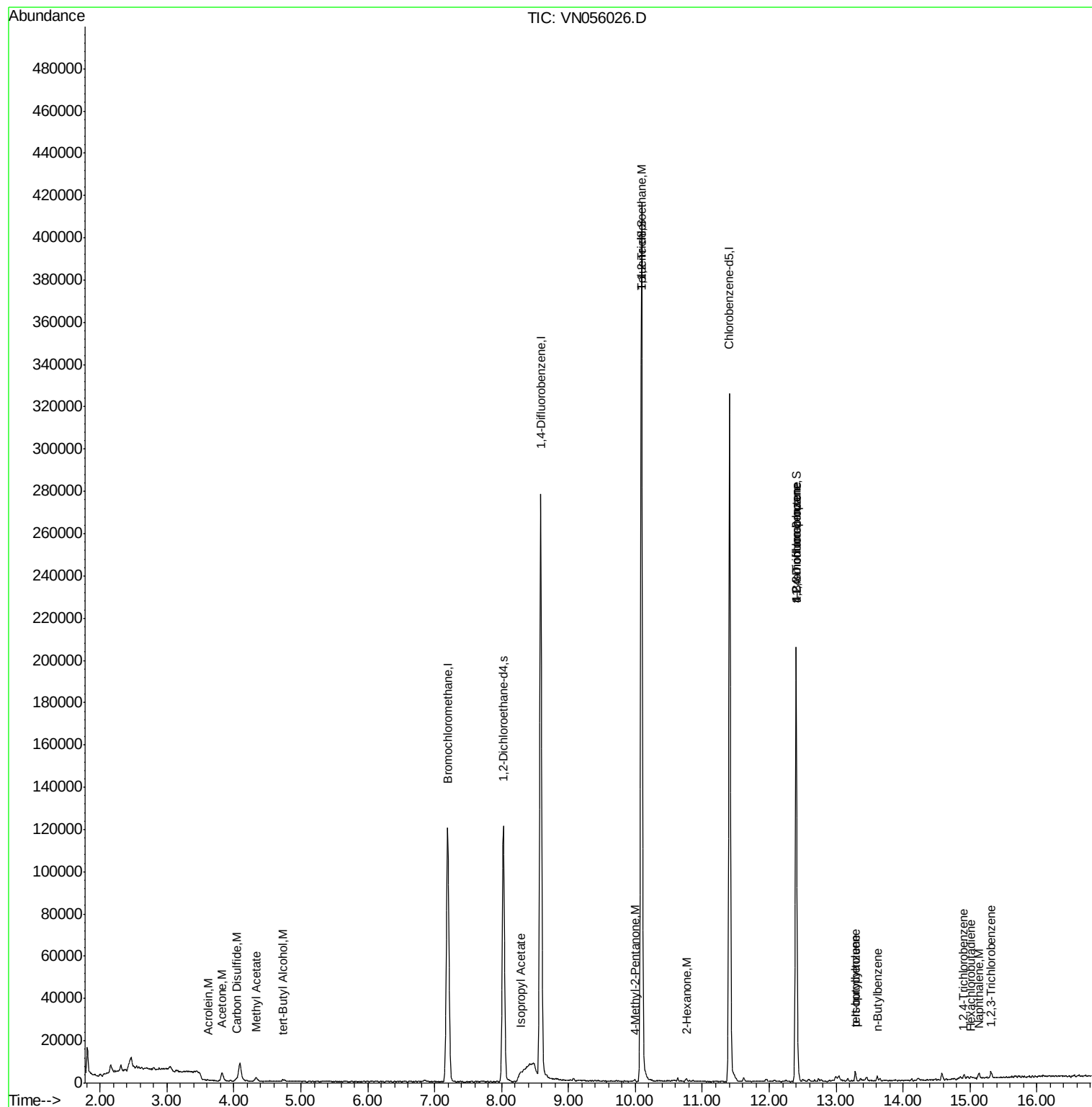
					Ovalue
12) Methyl Acetate	4.33	43	3873	1.168 ug/l	94
13) Acrolein	3.61	56	60	0.371 ug/l #	13
15) Acetone	3.82	58	2025	4.181 ug/l	80
16) Carbon Disulfide	4.04	76	2897	0.441 ug/l #	75
23) tert-Butyl Alcohol	4.72	59	337	0.585 ug/l #	100
44) Isopropyl Acetate	8.28	43	3855	0.657 ug/l #	55
50) 1,1,2-Trichloroethane	10.10	97	9428	3.127 ug/l #	1
58) 4-Methyl-2-Pentanone	9.98	43	1417	0.436 ug/l #	59
59) 2-Hexanone	10.76	43	1468	0.632 ug/l #	75
72) 1,2,3-Trichloropropane	12.40	75	33773	10.708 ug/l	1
77) t-1,4-Dichloro-2-butene	12.40	75	33773	37.528 ug/l #	11
79) tert-butylbenzene	13.29	119	2827	0.321 ug/l	62
82) p-Isopropyltoluene	13.29	119	2827	0.281 ug/l	93
85) n-Butylbenzene	13.61	91	1897	0.252 ug/l	86
89) 1,2,4-Trichlorobenzene	14.91	180	1168	8.878 ug/l	92
90) Hexachlorobutadiene	15.00	225	430	0.232 ug/l #	39
91) Naphthalene	15.14	128	3465	0.513 ug/l #	90
92) 1,2,3-Trichlorobenzene	15.31	180	1470	0.553 ug/l	98

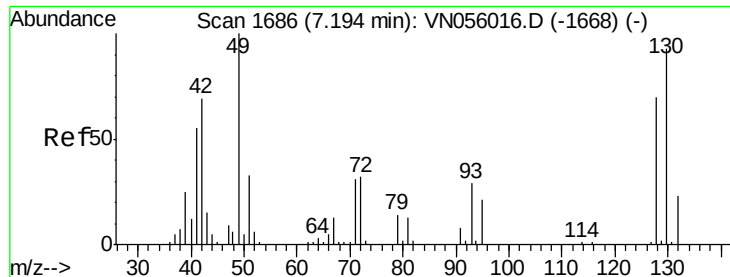
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Jun 06 04:02:53 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.20 min Scan# 1687

Delta R.T. 0.00 min

Lab File: VN056026.D

Acq: 6 Jun 2019 00:18

Instrument :

MSVOA_N

ClientSampleId :

CULVER-CBTC-TP1-060419

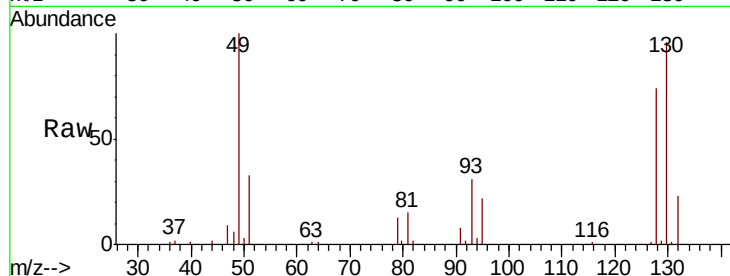
Tot Ion:128 Resp: 52880

Ion Ratio Lower Upper

128 100

49 139.8 0.0 355.8

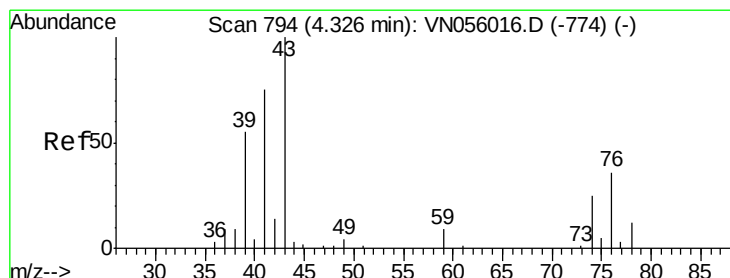
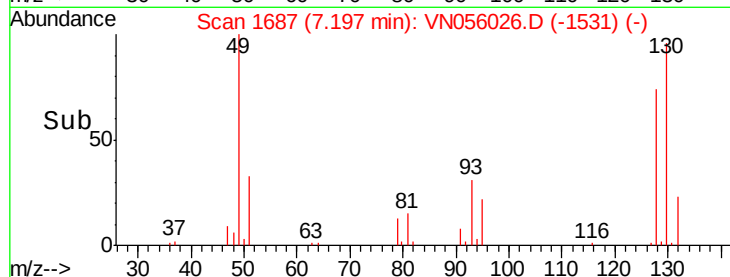
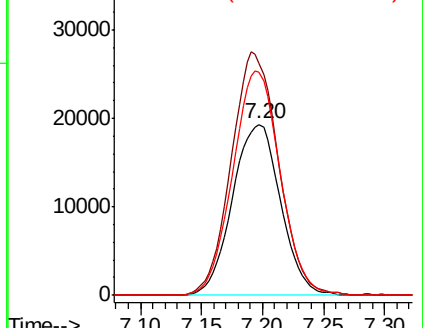
130 129.6 0.0 326.3



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VN

Ion 130.00 (129.70 to 130.70): V



#12

Methyl Acetate

Concen: 1.168 ug/l

RT: 4.33 min Scan# 796

Delta R.T. 0.01 min

Lab File: VN056026.D

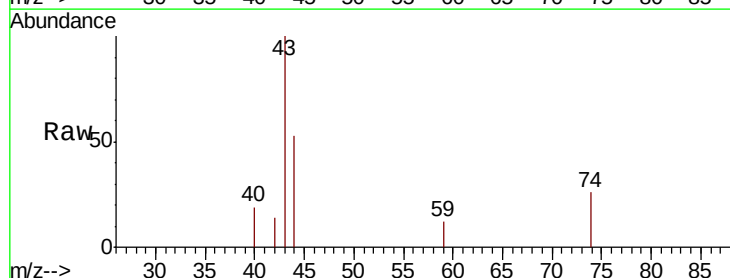
Acq: 6 Jun 2019 00:18

Tgt Ion: 43 Resp: 3873

Ion Ratio Lower Upper

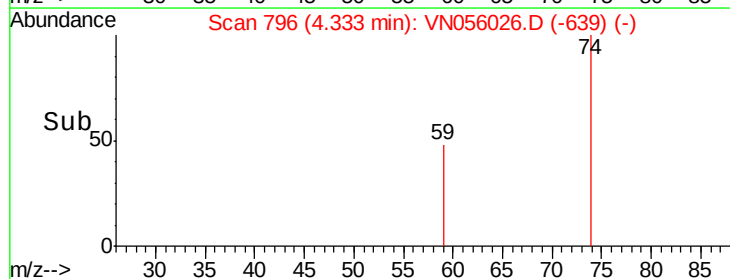
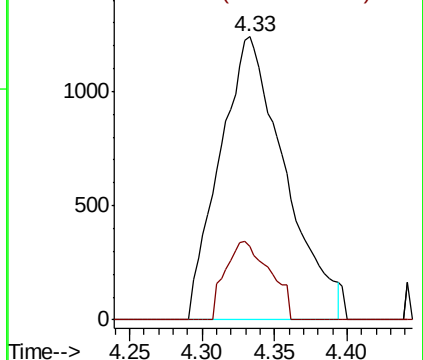
43 100

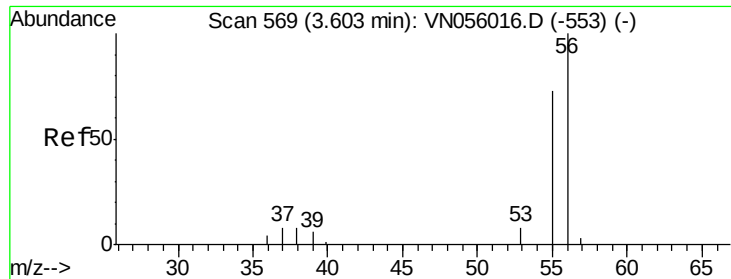
74 27.8 19.9 29.9



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 74.00 (73.70 to 74.70): VN

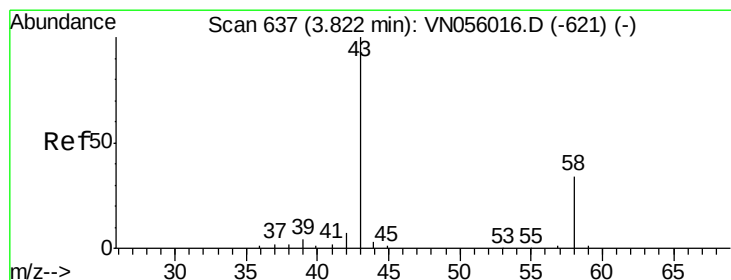
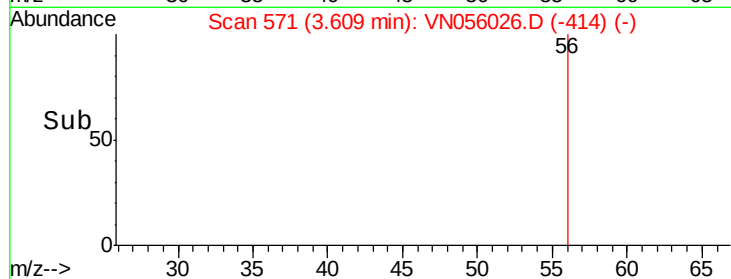
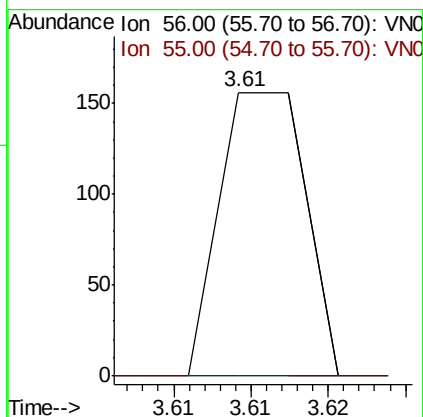
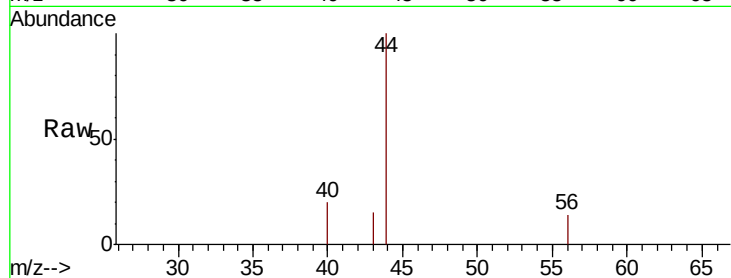




#13
Acrolein
Concen: 0.371 ug/l
RT: 3.61 min Scan# 571
Delta R.T. 0.01 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

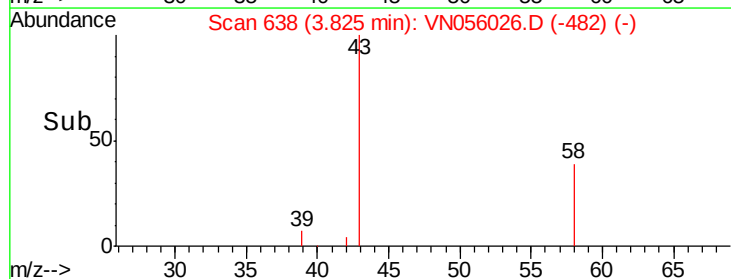
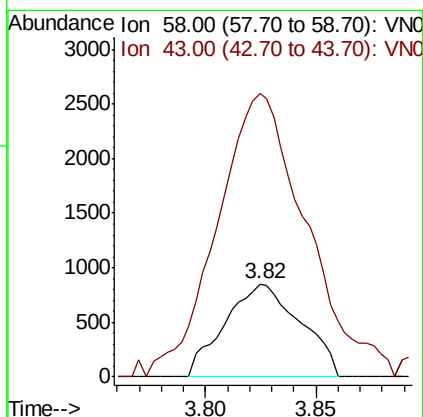
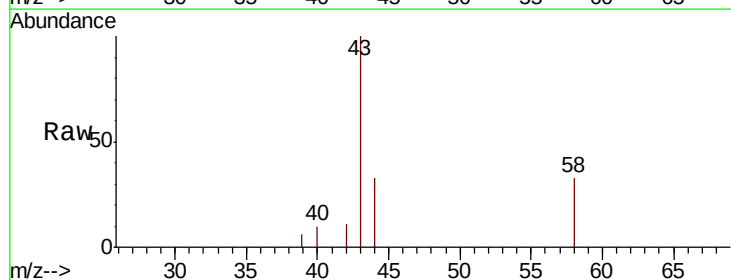
Instrument :
MSVOA_N
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CULVER-CBTC-TP1-060419

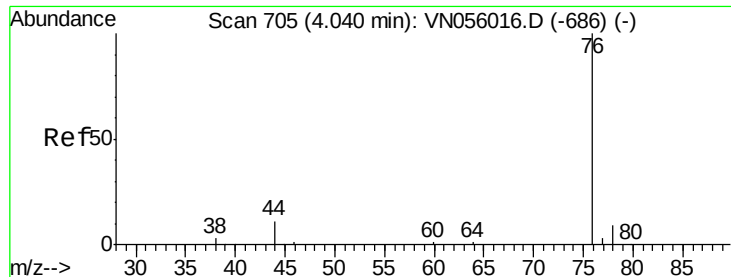
Tot Ion: 56 Resp: 60
Ion Ratio Lower Upper
56 100
55 0.0 57.9 86.9#



#15
Acetone
Concen: 4.181 ug/l
RT: 3.82 min Scan# 638
Delta R.T. 0.00 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

Tgt Ion: 58 Resp: 2025
Ion Ratio Lower Upper
58 100
43 251.5 232.5 348.7

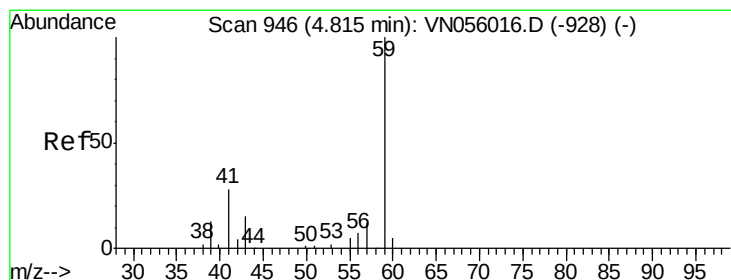
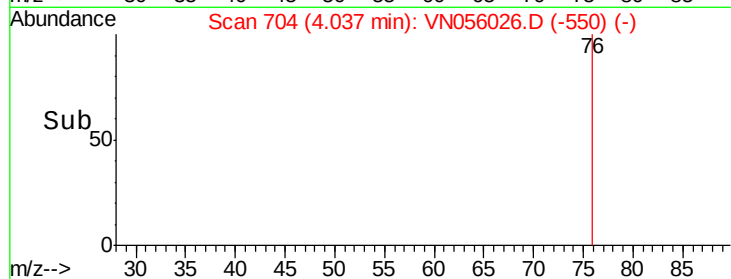
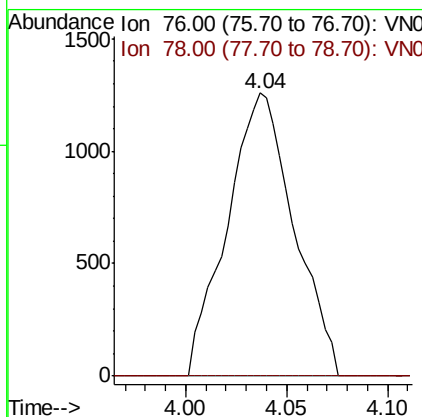
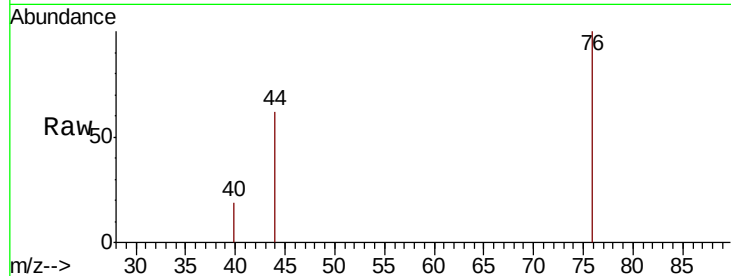




#16
Carbon Disulfide
Concen: 0.441 ug/l
RT: 4.04 min Scan# 704
Delta R.T. -0.00 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

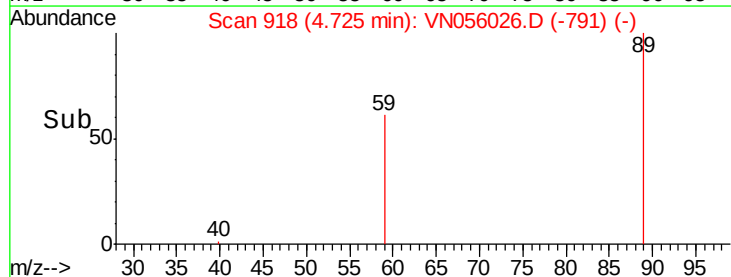
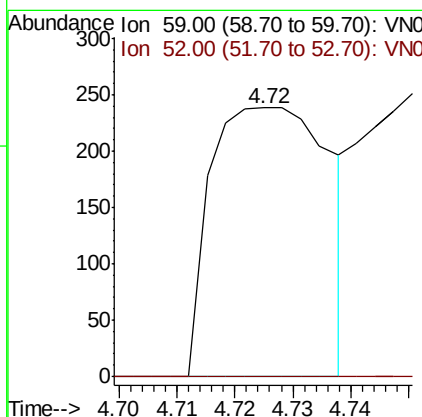
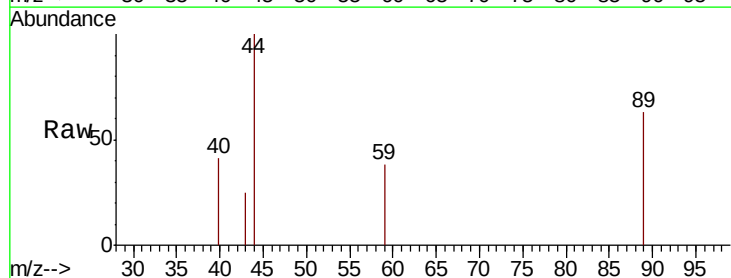
Instrument :
MSVOA_N
ClientSampleId :
CULVER-CBTC-TP1-060419

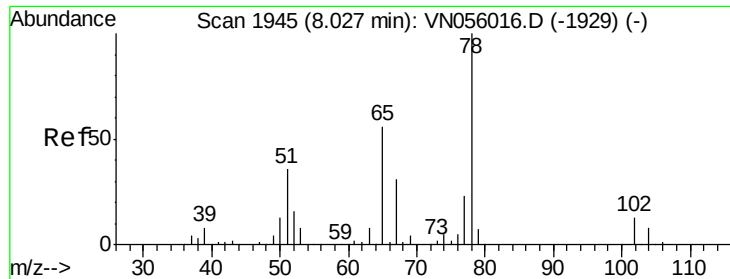
Tot Ion: 76 Resp: 2897
Ion Ratio Lower Upper
76 100
78 0.0 7.3 10.9#



#23
tert-Butyl Alcohol
Concen: 0.585 ug/l
RT: 4.72 min Scan# 918
Delta R.T. -0.09 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

Tgt Ion: 59 Resp: 337
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0

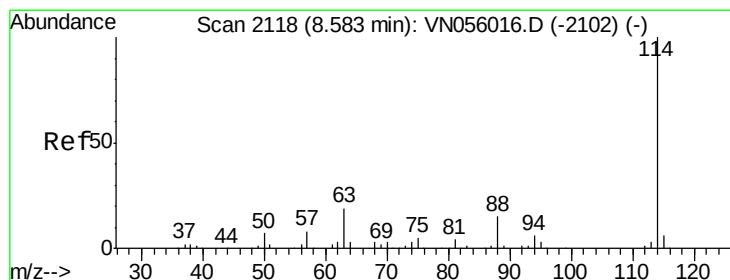
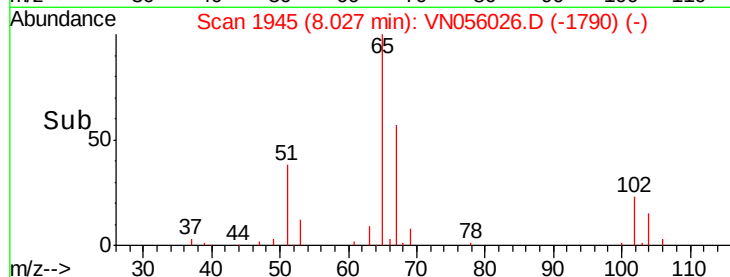
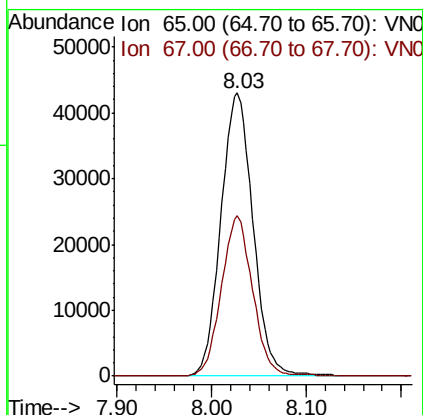
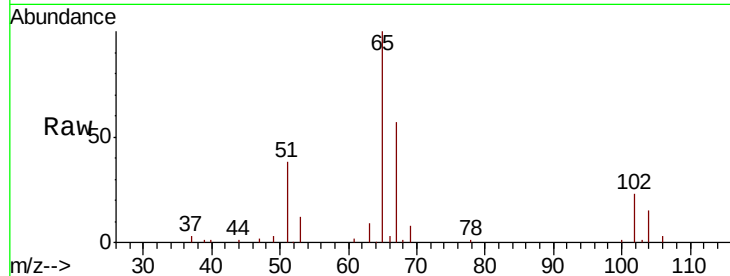




#27
 1,2-Dichloroethane-d4
 Concen: 30.953 ug/l
 RT: 8.03 min Scan# 1945
 Delta R.T. -0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

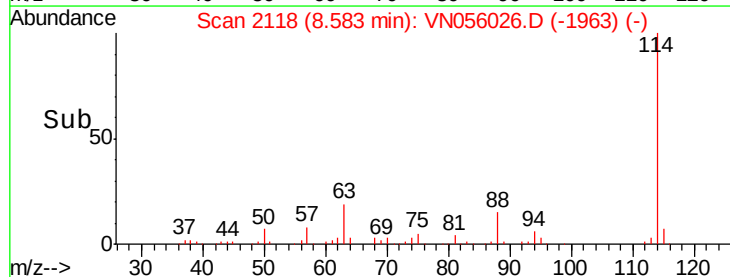
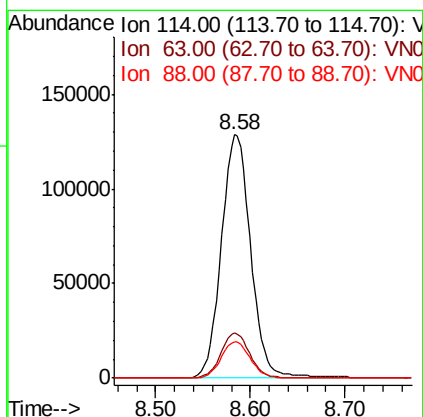
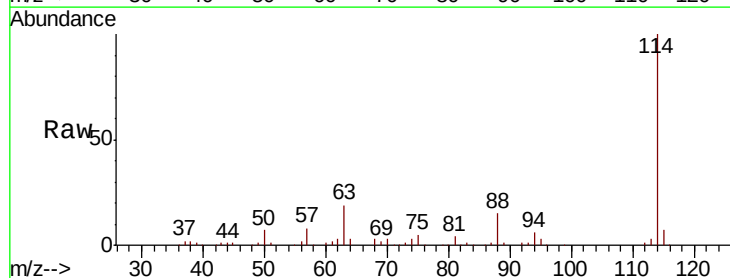
Instrument :
 MSVOA_N
 ClientSampleId :
 CULVER-CBTC-TP1-060419

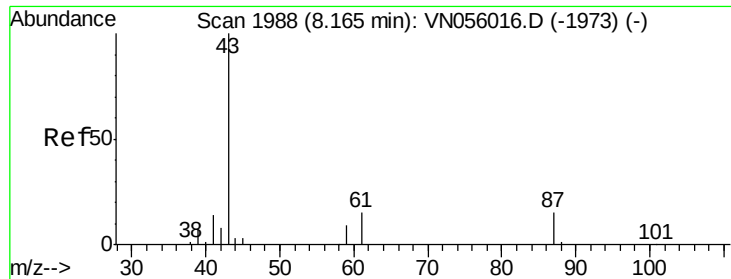
Tot Ion: 65 Resp: 101644
 Ion Ratio Lower Upper
 65 100
 67 54.7 43.4 65.2



#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 8.58 min Scan# 2118
 Delta R.T. -0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

Tgt Ion: 114 Resp: 277368
 Ion Ratio Lower Upper
 114 100
 63 18.3 14.7 22.1
 88 14.8 11.9 17.9





#44

Isopropyl Acetate

Concen: 0.657 ug/l

RT: 8.28 min Scan# 2024

Delta R.T. 0.12 min

Lab File: VN056026.D

Acq: 6 Jun 2019 00:18

Instrument :

MSVOA_N

ClientSampleId :

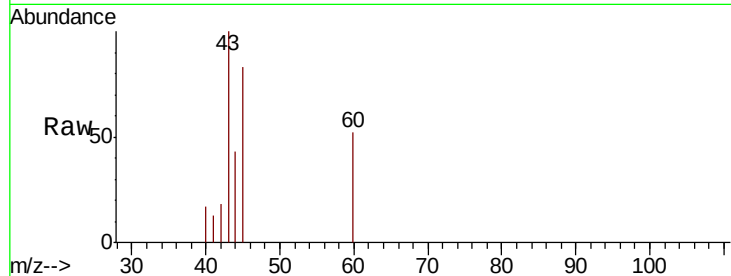
CULVER-CBTC-TP1-060419

Tot Ion: 43 Resp: 3855

Ion Ratio Lower Upper

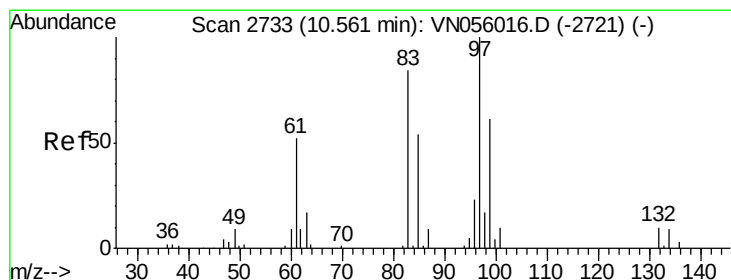
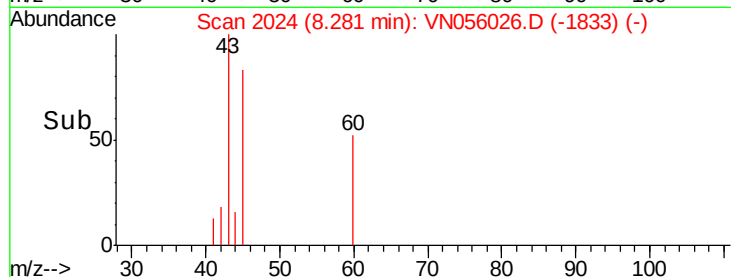
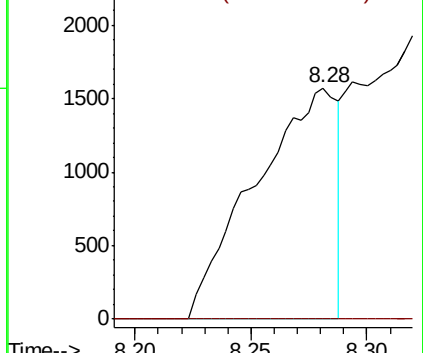
43 100

61 0.0 16.9 25.3#



Abundance Ion 43.00 (42.70 to 43.70): VN056016.D (-1973) (-)

Ion 61.00 (60.70 to 61.70): VN056016.D (-1973) (-)



#50

1,1,2-Trichloroethane

Concen: 3.127 ug/l

RT: 10.10 min Scan# 2589

Delta R.T. -0.46 min

Lab File: VN056026.D

Acq: 6 Jun 2019 00:18

Tgt Ion: 97 Resp: 9428

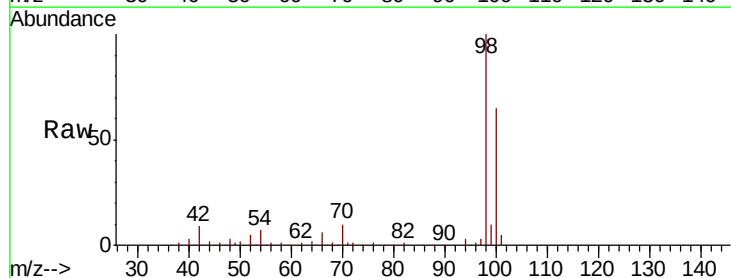
Ion Ratio Lower Upper

97 100

83 0.0 66.9 100.3#

85 0.0 43.3 64.9#

99 286.1 48.6 73.0#

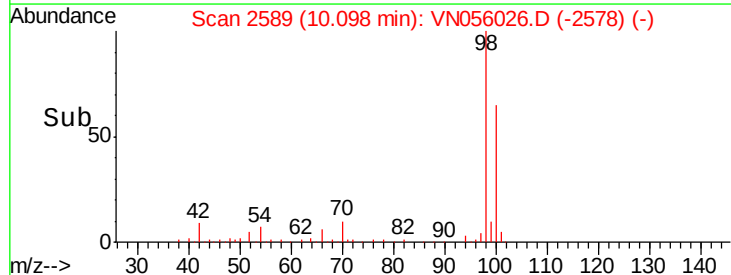
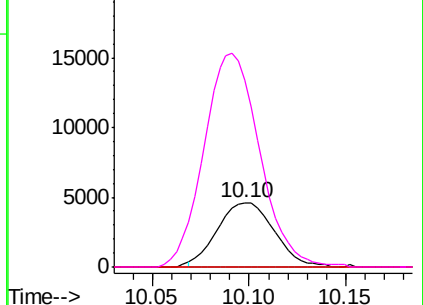


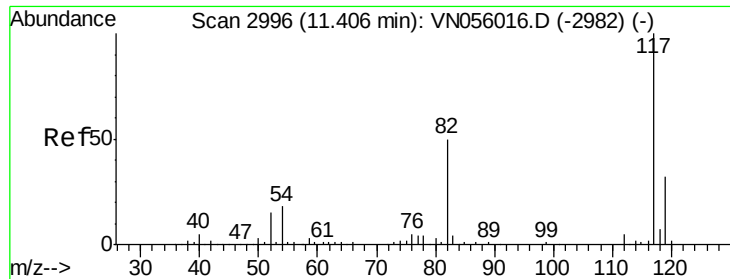
Abundance Ion 97.00 (96.70 to 97.70): VN056016.D (-2721) (-)

Ion 82.95 (82.65 to 83.65): VN056016.D (-2721) (-)

Ion 84.95 (84.65 to 85.65): VN056016.D (-2721) (-)

Ion 98.95 (98.65 to 99.65): VN056016.D (-2721) (-)

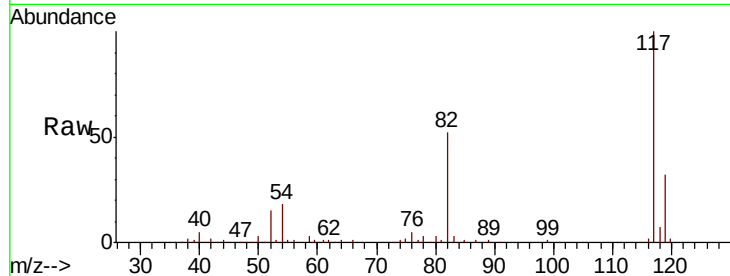




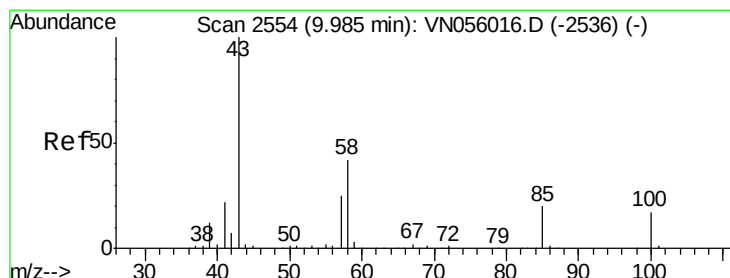
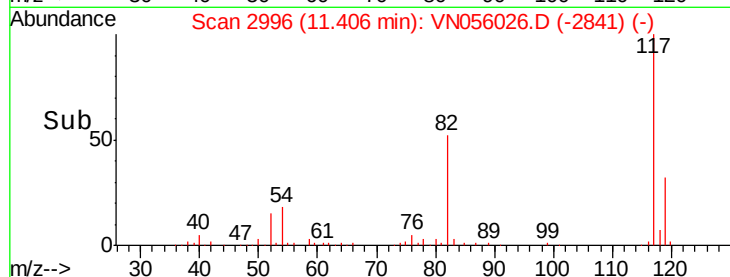
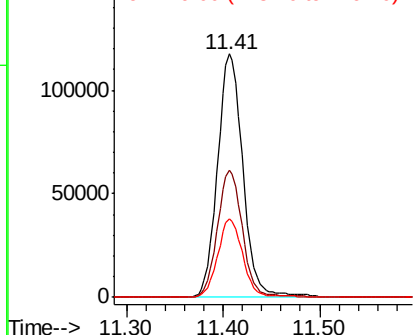
#57
 Chlorobenzene-d5
 Concen: 30.000 ug/l
 RT: 11.41 min Scan# 2996
 Delta R.T. -0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

Instrument :
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 CULVER-CBTC-TP1-060419

Tot Ion:117 Resp: 214661
 Ion Ratio Lower Upper
 117 100
 82 51.7 41.2 61.8
 119 31.5 26.2 39.2

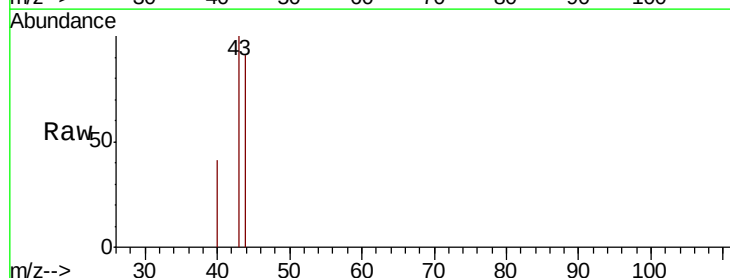


Abundance Ion 117.00 (116.70 to 117.70): V
 Ion 82.00 (81.70 to 82.70): VN
 Ion 119.00 (118.70 to 119.70): V

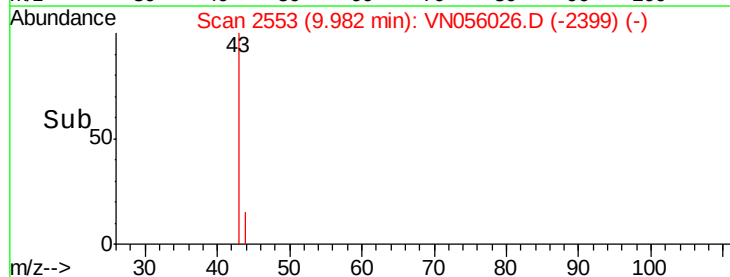
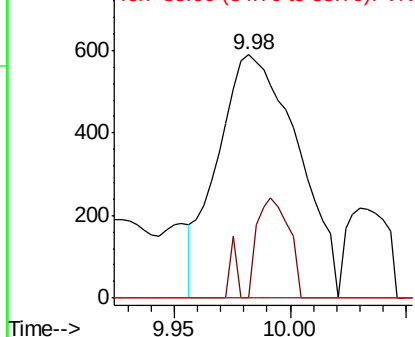


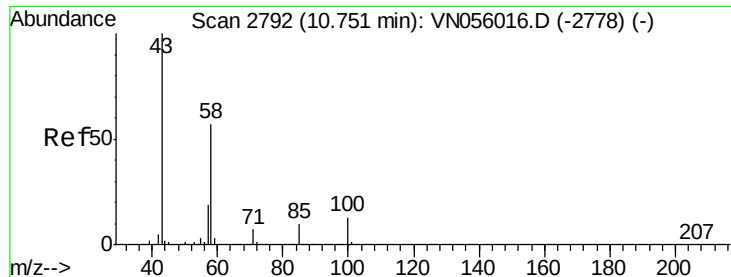
#58
 4-Methyl-2-Pentanone
 Concen: 0.436 ug/l
 RT: 9.98 min Scan# 2553
 Delta R.T. -0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

Tgt Ion: 43 Resp: 1417
 Ion Ratio Lower Upper
 43 100
 58 16.3 33.1 49.7#
 85 0.0 15.5 23.3#



Abundance Ion 43.00 (42.70 to 43.70): VN
 Ion 58.00 (57.70 to 58.70): VN
 Ion 85.00 (84.70 to 85.70): VN

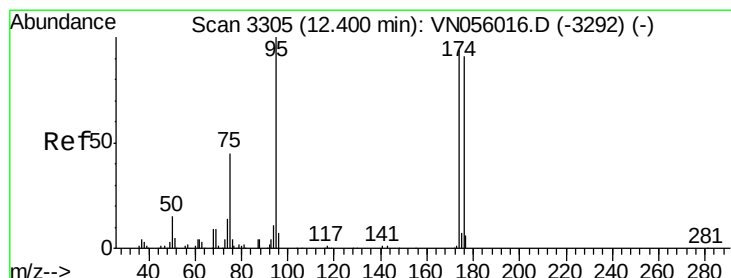
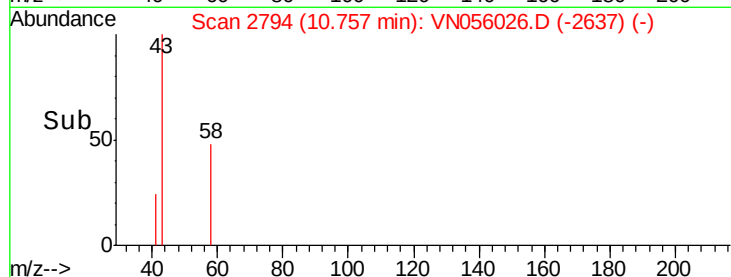
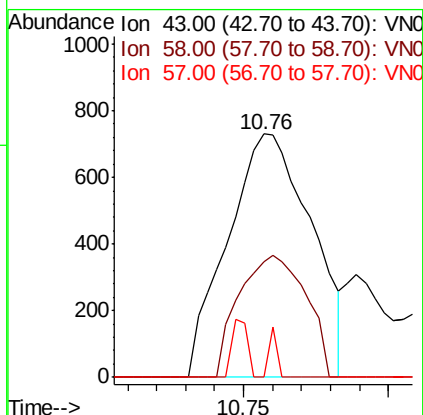
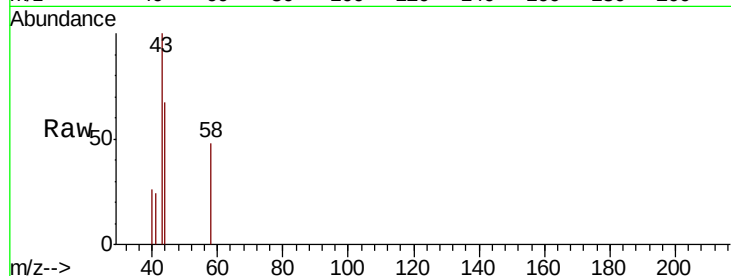




#59
2-Hexanone
Concen: 0.632 ug/l
RT: 10.76 min Scan# 2794
Delta R.T. 0.01 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

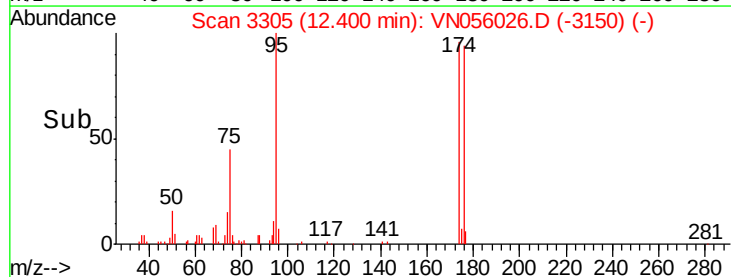
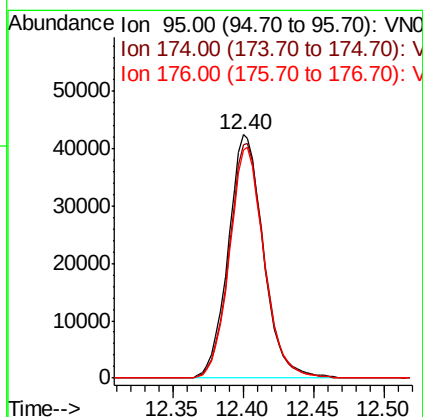
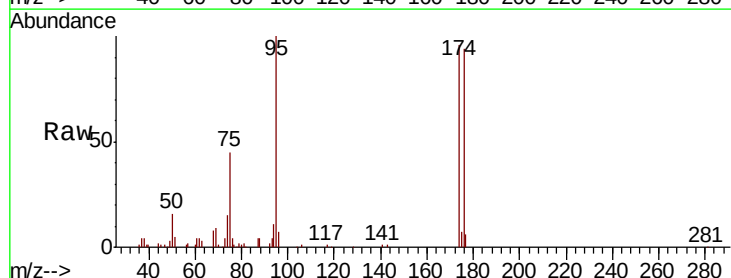
Instrument :
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CULVER-CBTC-TP1-060419

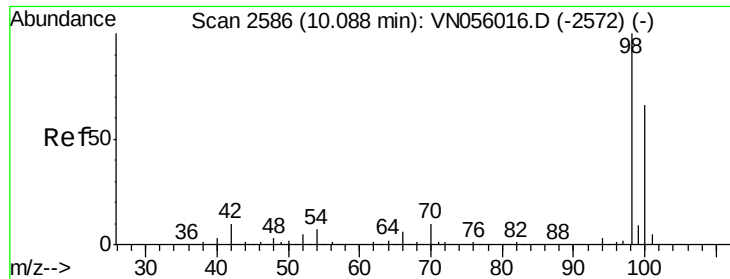
Tot Ion: 43 Resp: 1468
Ion Ratio Lower Upper
43 100
58 39.9 45.3 67.9#
57 4.4 15.6 23.4#



#60
4-Bromofluorobenzene
Concen: 23.251 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. -0.00 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

Tgt Ion: 95 Resp: 73979
Ion Ratio Lower Upper
95 100
174 96.0 75.4 113.0
176 93.0 73.9 110.9





#63

Toluene-d8

Concen: 32.300 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN056026.D

Acq: 6 Jun 2019 00:18

Instrument :

MSVOA_N

ClientSampleId :

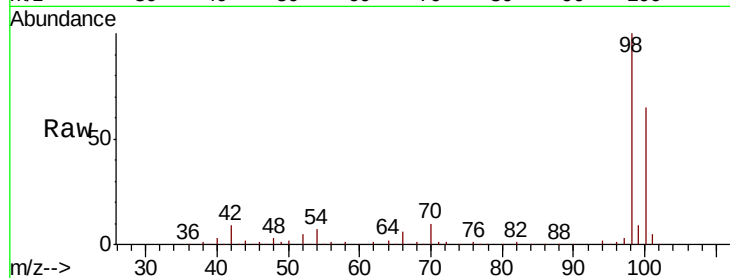
CULVER-CBTC-TP1-060419

Tot Ion: 98 Resp: 314530

Ion Ratio Lower Upper

98 100

100 65.1 52.2 78.4



Abundance Ion 98.00 (97.70 to 98.70): VN056016.D (-2572) (-)

Ion 100.00 (99.70 to 100.70): VN056016.D (-2572) (-)

10.09

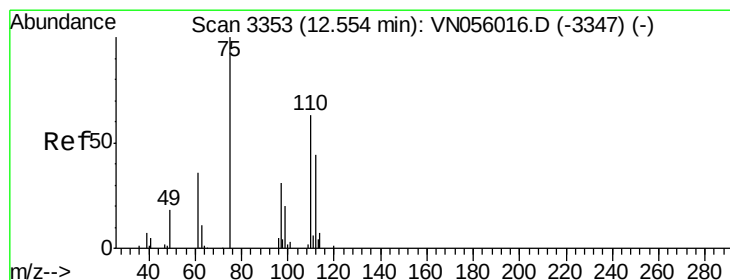
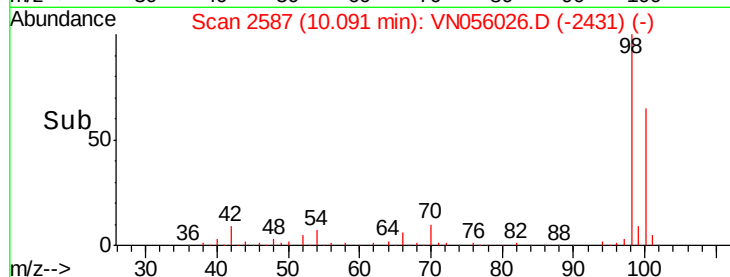
150000

100000

50000

0

Time-->



#72

1,2,3-Trichloropropane

Concen: 10.708 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN056026.D

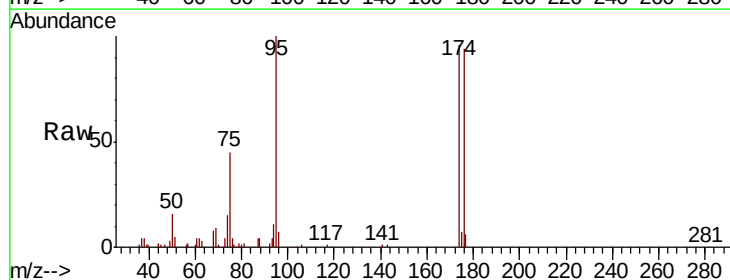
Acq: 6 Jun 2019 00:18

Tgt Ion: 75 Resp: 33773

Ion Ratio Lower Upper

75 100

77 0.7 0.0 350.0



Abundance Ion 75.00 (74.70 to 75.70): VN056016.D (-3347) (-)

Ion 77.00 (76.70 to 77.70): VN056016.D (-3347) (-)

12.40

20000

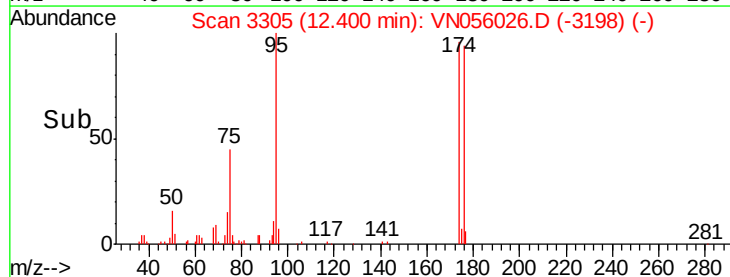
15000

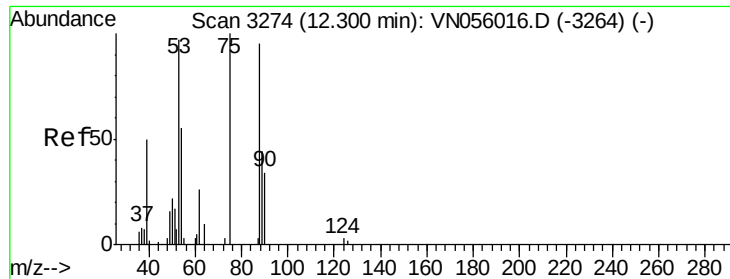
10000

5000

0

Time-->

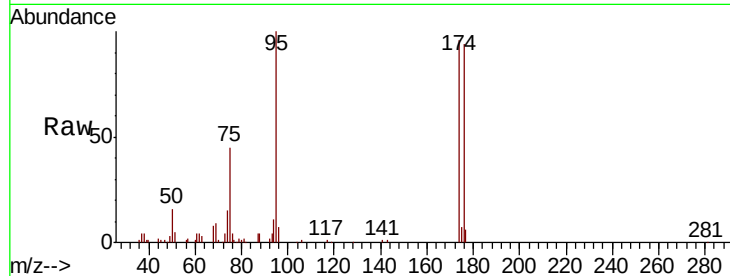




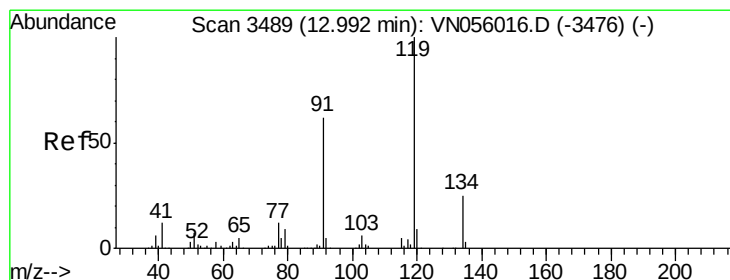
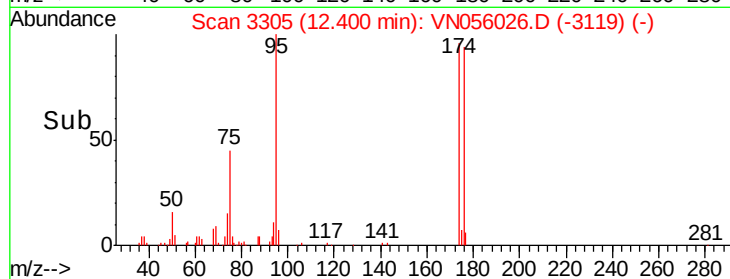
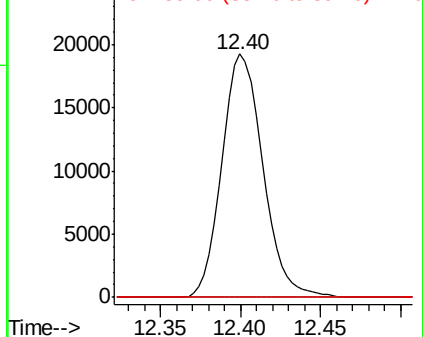
#77
t-1,4-Dichloro-2-butene
Concen: 37.528 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.10 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

Instrument :
MSVOA_N
ClientSampleId :
CULVER-CBTC-TP1-060419

Tot Ion: 75 Resp: 33773
Ion Ratio Lower Upper
75 100
53 0.0 48.0 144.0#
89 0.0 22.5 67.5#

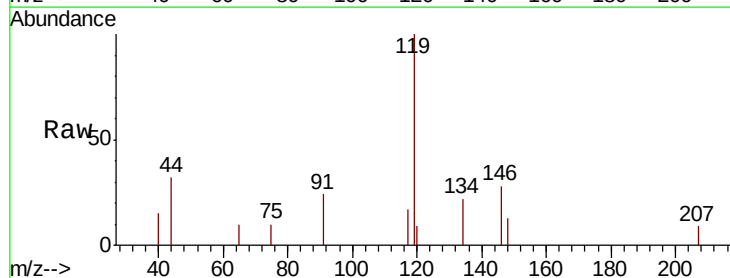


Abundance Ion 75.00 (74.70 to 75.70): VN0
Ion 53.00 (52.70 to 53.70): VN0
Ion 89.00 (88.70 to 89.70): VN0

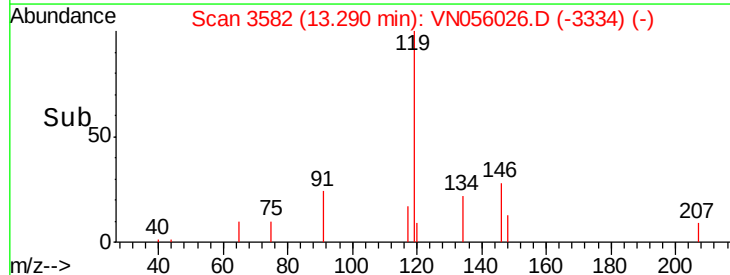
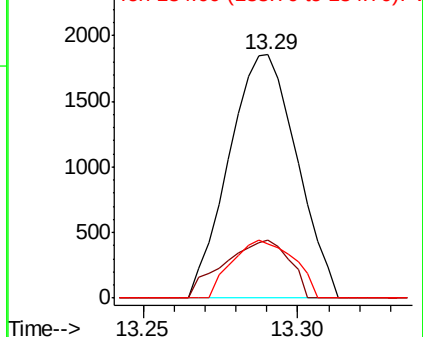


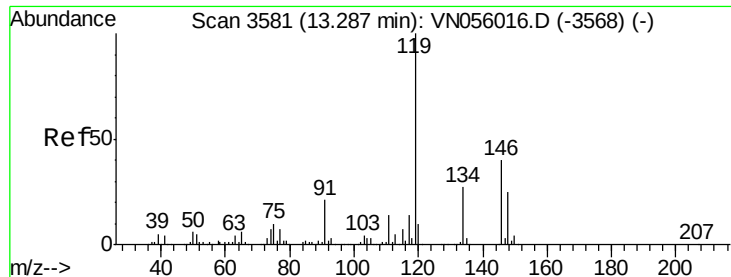
#79
tert-butylbenzene
Concen: 0.321 ug/l
RT: 13.29 min Scan# 3582
Delta R.T. 0.30 min
Lab File: VN056026.D
Acq: 6 Jun 2019 00:18

Tgt Ion: 119 Resp: 2827
Ion Ratio Lower Upper
119 100
91 22.9 0.0 122.8
134 21.7 0.0 50.2



Abundance Ion 119.00 (118.70 to 119.70): V
Ion 91.00 (90.70 to 91.70): VN0
Ion 134.00 (133.70 to 134.70): V

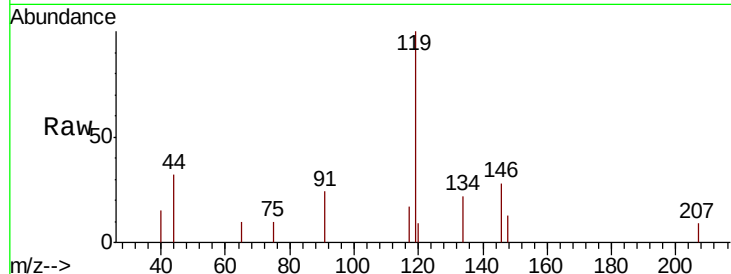




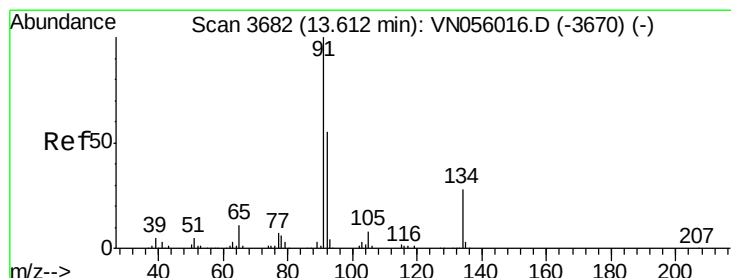
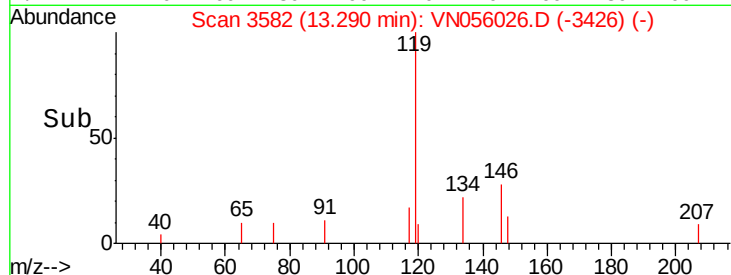
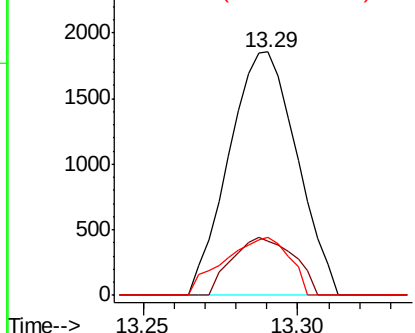
#82
 p-Isopropyltoluene
 Concen: 0.281 ug/l
 RT: 13.29 min Scan# 3582
 Delta R.T. 0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

Instrument :
 MSVOA_N
 ClientSampleId :
 CULVER-CBTC-TP1-060419

Tot Ion	Ratio	Lower	Upper
119	100		
134	21.7	0.0	53.4
91	22.9	0.0	43.0

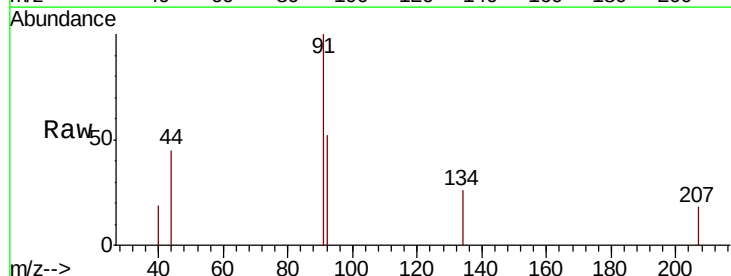


Abundance Ion 119.00 (118.70 to 119.70): V
 Ion 134.00 (133.70 to 134.70): V
 Ion 91.00 (90.70 to 91.70): V

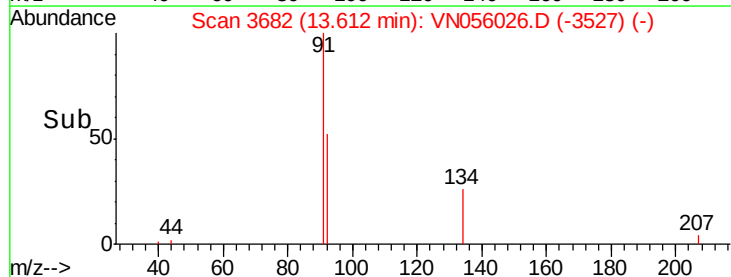
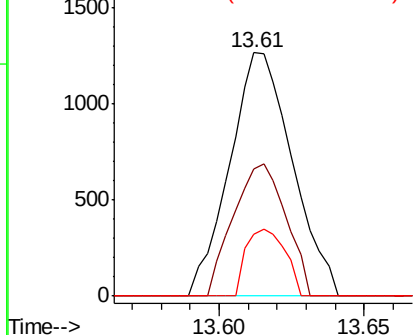


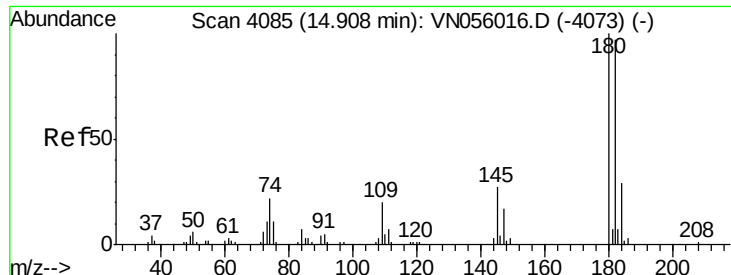
#85
 n-Butylbenzene
 Concen: 0.252 ug/l
 RT: 13.61 min Scan# 3682
 Delta R.T. -0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

Tgt Ion	Ratio	Lower	Upper
91	100		
92	45.7	0.0	107.2
134	17.2	0.0	55.8



Abundance Ion 91.00 (90.70 to 91.70): V
 Ion 92.00 (91.70 to 92.70): V
 Ion 134.00 (133.70 to 134.70): V

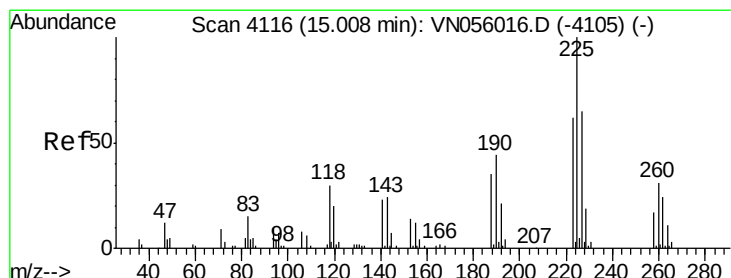
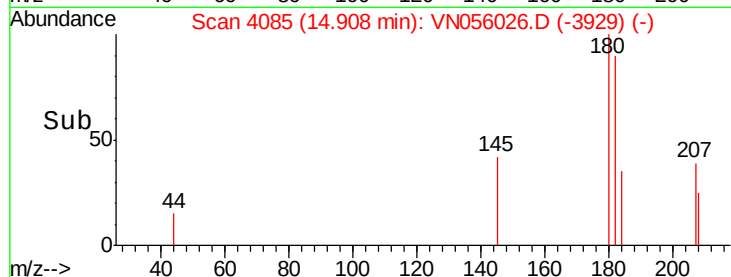
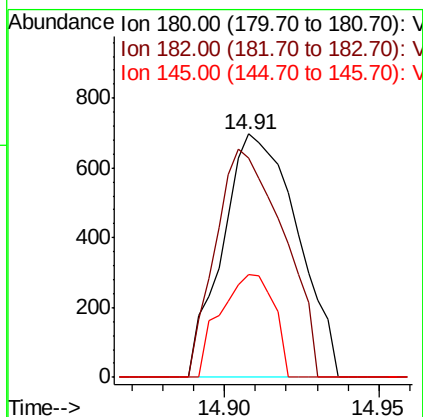
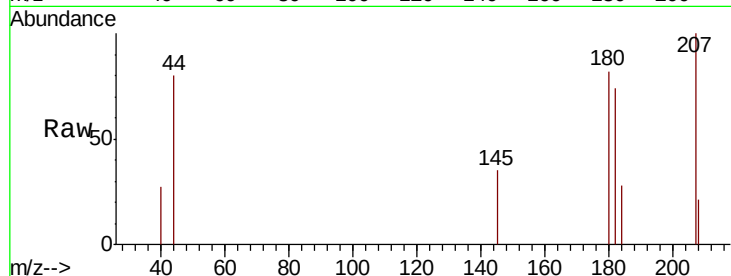




#89
 1,2,4-Trichlorobenzene
 Concen: 8.878 ug/l
 RT: 14.91 min Scan# 4085
 Delta R.T. 0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

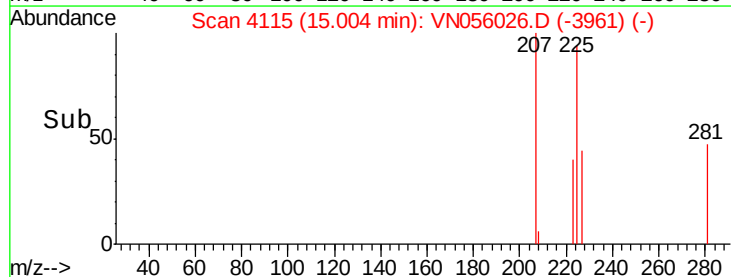
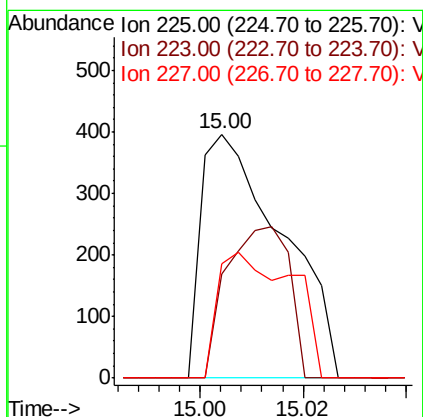
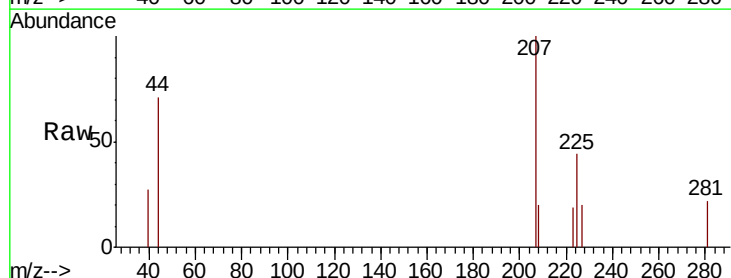
Instrument :
 MSVOA_N
 ClientSampleId :
 CULVER-CBTC-TP1-060419

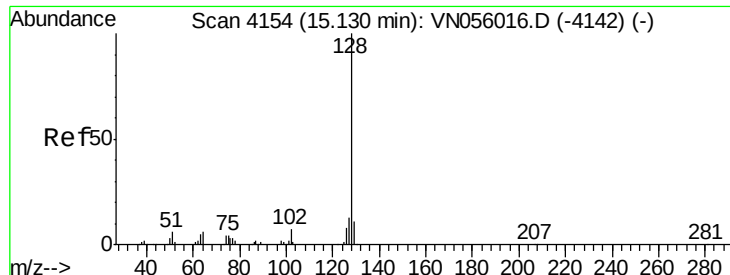
Tot Ion:180 Resp: 1168
 Ion Ratio Lower Upper
 180 100
 182 85.6 75.0 112.6
 145 30.5 22.1 33.1



#90
 Hexachlorobutadiene
 Concen: 0.232 ug/l
 RT: 15.00 min Scan# 4115
 Delta R.T. -0.00 min
 Lab File: VN056026.D
 Acq: 6 Jun 2019 00:18

Tgt Ion:225 Resp: 430
 Ion Ratio Lower Upper
 225 100
 223 0.0 0.0 125.6
 227 32.6 0.0 128.6





#91

Naphthalene

Concen: 0.513 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN056026.D

Acq: 6 Jun 2019 00:18

Instrument :

MSVOA_N

ClientSampleId :

CULVER-CBTC-TP1-060419

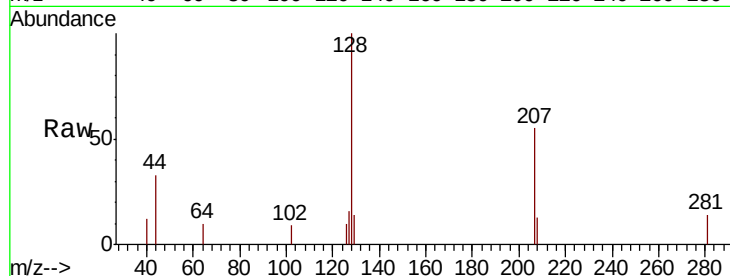
Tot Ion:128 Resp: 3465

Ion Ratio Lower Upper

128 100

127 9.3 10.4 15.6#

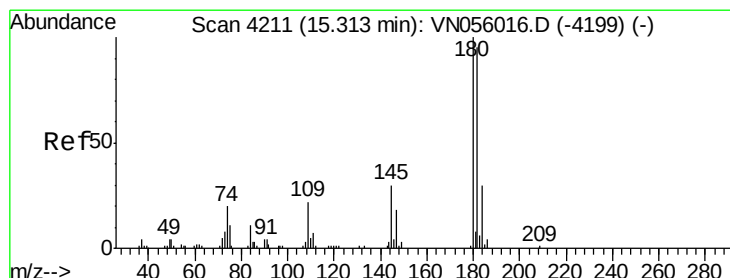
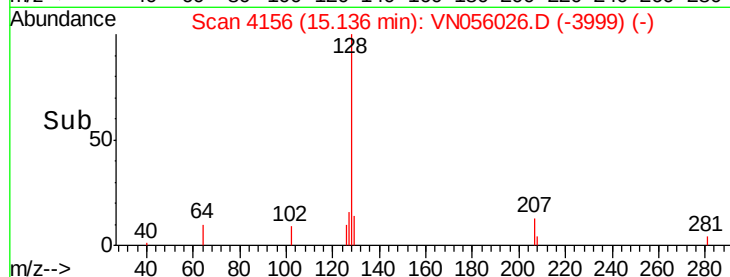
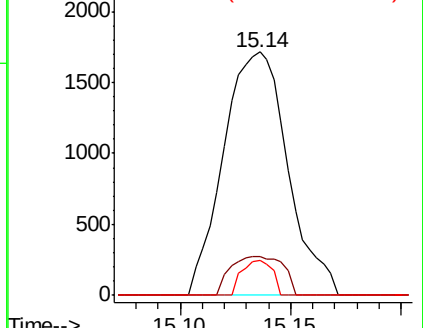
129 6.9 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#92

1,2,3-Trichlorobenzene

Concen: 0.553 ug/l

RT: 15.31 min Scan# 4211

Delta R.T. -0.00 min

Lab File: VN056026.D

Acq: 6 Jun 2019 00:18

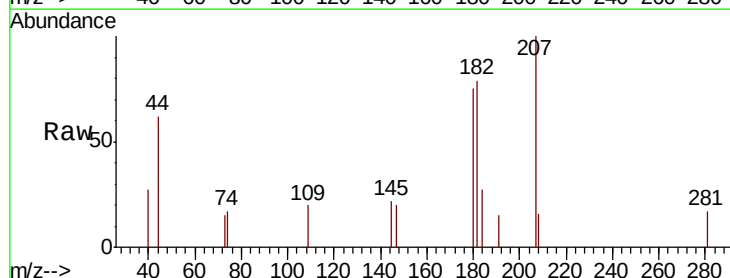
Tgt Ion:180 Resp: 1470

Ion Ratio Lower Upper

180 100

182 95.5 0.0 193.4

145 26.8 0.0 59.8



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

