

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091720\
 Data File : VN063430.D
 Acq On : 17 Sep 2020 19:36
 Operator : JC/MD
 Sample : L4015-21
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 REACTOR-5W-(C-4)

Quant Time: Sep 18 02:52:16 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091620W.M
 Quant Title : SW846 8260
 QLast Update : Wed Sep 16 13:05:20 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.63	168	233660	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.55	114	442660	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.38	117	444928	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.32	152	190829	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.99	65	198140	49.82	ug/l	0.00
Spiked Amount			Recovery	=	99.64%	
35) Dibromofluoromethane	7.55	113	145378	47.44	ug/l	0.00
Spiked Amount			Recovery	=	94.88%	
50) Toluene-d8	10.06	98	575798	49.97	ug/l	0.00
Spiked Amount			Recovery	=	99.94%	
62) 4-Bromofluorobenzene	12.38	95	226373	53.59	ug/l	0.00
Spiked Amount			Recovery	=	107.18%	

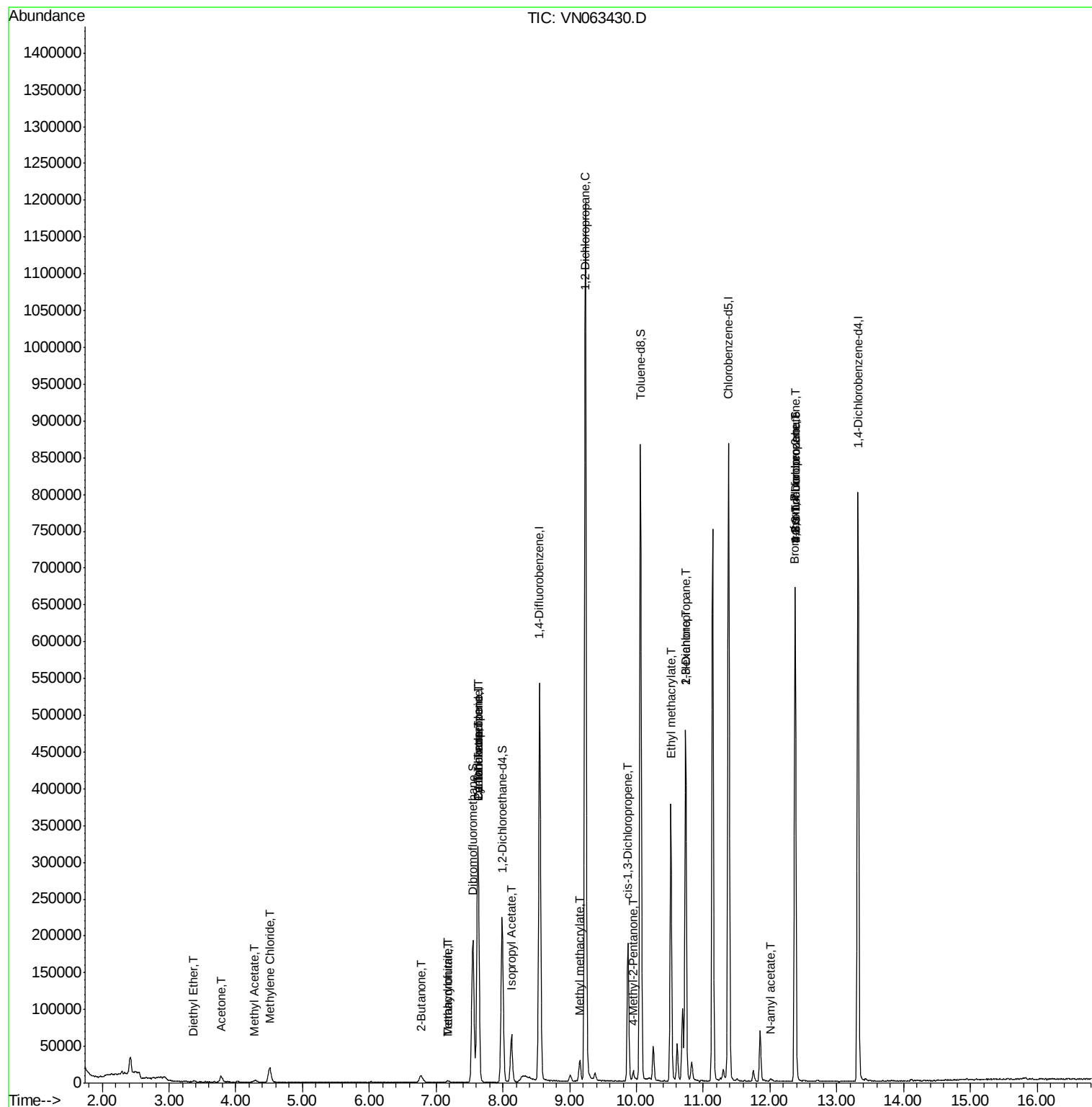
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Diethyl Ether	3.38	74	428	0.237	ug/l	67
16) Acetone	3.78	43	14655	11.464	ug/l	100
18) Methyl Acetate	4.28	43	2710	0.835	ug/l #	87
20) Methylene Chloride	4.51	84	13390	4.134	ug/l	88
25) 2-Butanone	6.79	43	2389	1.215	ug/l #	85
29) Tetrahydrofuran	7.17	42	1479	1.101	ug/l #	69
31) Cyclohexane	7.62	56	6772	1.233	ug/l #	10
36) 1,1-Dichloropropene	7.62	75	22817	4.838	ug/l #	46
38) Carbon Tetrachloride	7.62	117	26671	5.540	ug/l #	17
41) Methacrylonitrile	7.17	41	906	0.435	ug/l #	100
43) Isopropyl Acetate	8.13	43	78026	9.428	ug/l	100
45) 1,2-Dichloropropane	9.23	63	1100	0.300	ug/l #	43
48) Methyl methacrylate	9.15	41	4705	1.157	ug/l #	15
51) 4-Methyl-2-Pentanone	9.95	43	7218	1.558	ug/l #	82
54) cis-1,3-Dichloropropene	9.87	75	32190	5.460	ug/l #	62
56) Ethyl methacrylate	10.51	69	1039	0.207	ug/l #	1
57) 1,3-Dichloropropane	10.74	76	4789	0.826	ug/l #	42
59) 2-Hexanone	10.74	43	74688	22.250	ug/l #	55
71) Bromoform	12.36	173	578	0.224	ug/l #	1
74) N-amyl acetate	12.02	43	1547	0.214	ug/l #	52
76) 1,2,3-Trichloropropane	12.38	75	127590	27.013	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.38	75	127590	74.059	ug/l #	7

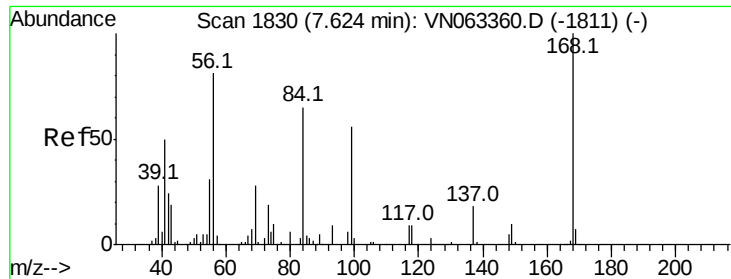
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Wed Sep 16 13:05:20 2020
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

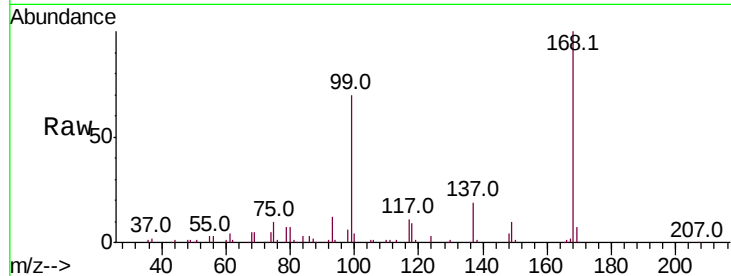
REACTOR-5W-(C-4)

Tot Ion:168 Resp: 233660

Ion Ratio Lower Upper

168 100

99 69.6 53.0 79.6



Abundance Ion 167.90 (167.60 to 168.60): VN063360.D (-1811) (-)

Ion 98.90 (98.60 to 99.60): VN063360.D (-1811) (-)

7.63

100000

80000

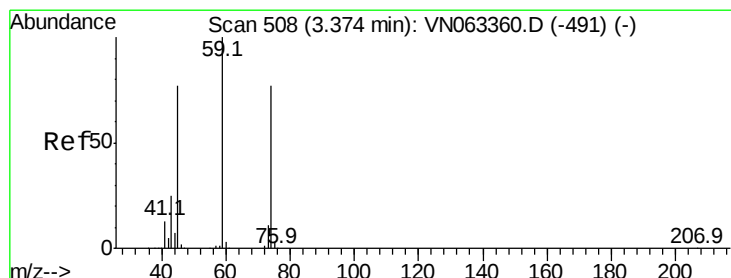
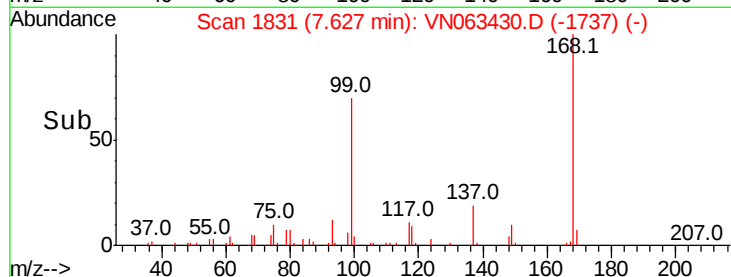
60000

40000

20000

0

Time--> 7.50 7.60 7.70



#8

Diethyl Ether

Concen: 0.237 ug/l

RT: 3.38 min Scan# 509

Delta R.T. 0.00 min

Lab File: VN063430.D

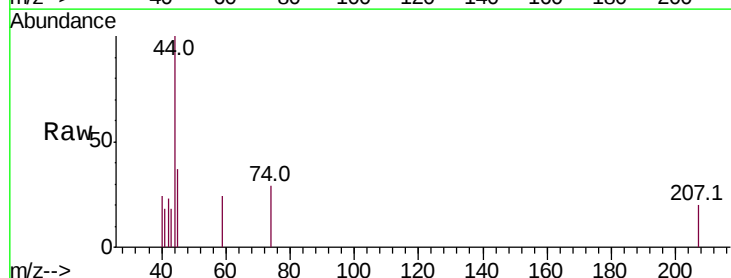
Acq: 17 Sep 2020 19:36

Tgt Ion: 74 Resp: 428

Ion Ratio Lower Upper

74 100

45 137.9 52.1 156.4



Abundance Ion 74.00 (73.70 to 74.70): VN063360.D (-491) (-)

Ion 45.00 (44.70 to 45.70): VN063360.D (-491) (-)

500

400

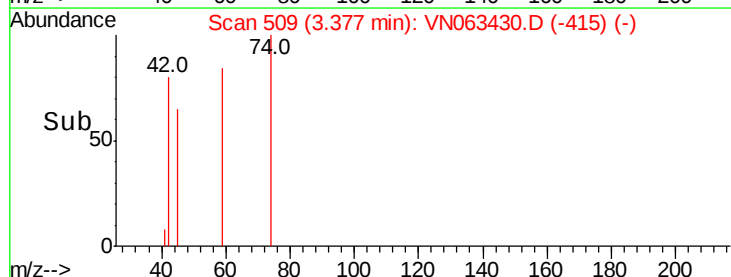
300

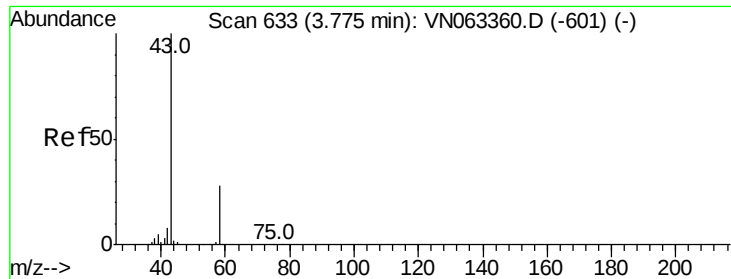
200

100

0

Time--> 3.34 3.36 3.38 3.40





#16

Acetone

Concen: 11.464 ug/l

RT: 3.78 min Scan# 634

Delta R.T. 0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

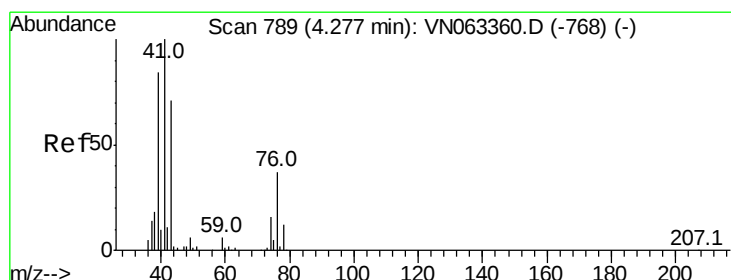
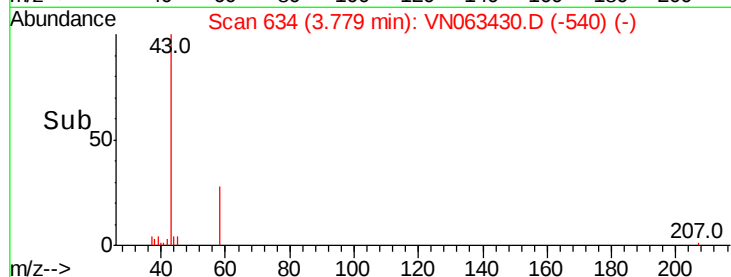
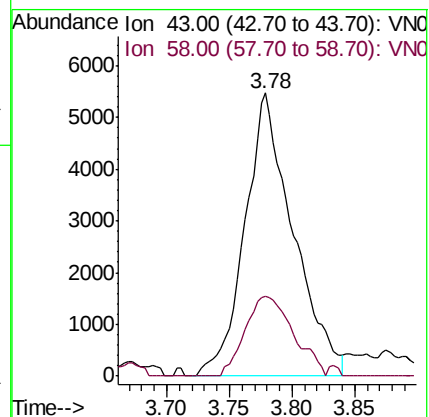
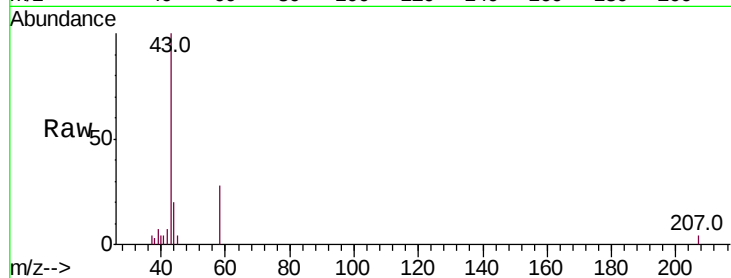
REACTOR-5W-(C-4)

Tot Ion: 43 Resp: 14655

Ion Ratio Lower Upper

43 100

58 28.0 22.3 33.5



#18

Methyl Acetate

Concen: 0.835 ug/l

RT: 4.28 min Scan# 790

Delta R.T. 0.00 min

Lab File: VN063430.D

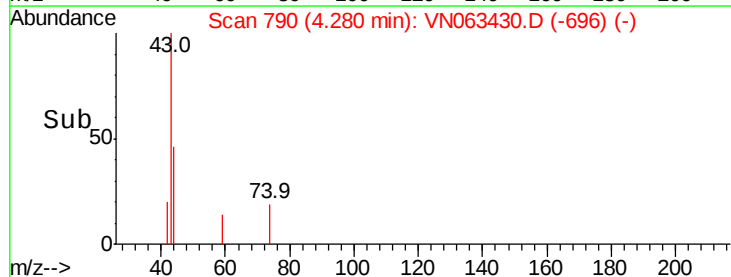
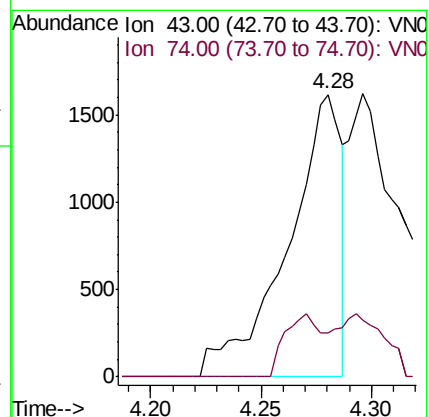
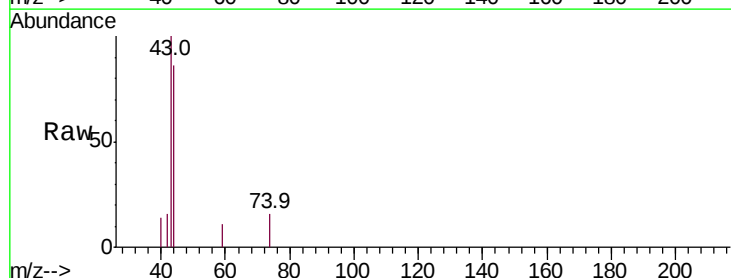
Acq: 17 Sep 2020 19:36

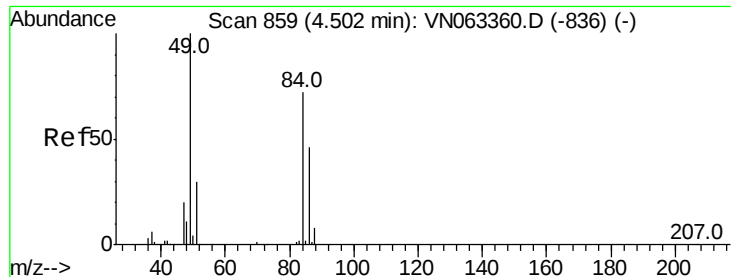
Tgt Ion: 43 Resp: 2710

Ion Ratio Lower Upper

43 100

74 15.8 17.4 26.2#





#20

Methylene Chloride

Concen: 4.134 ug/l

RT: 4.51 min Scan# 861

Delta R.T. 0.01 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

REACTOR-5W-(C-4)

Tot Ion: 84 Resp: 13390

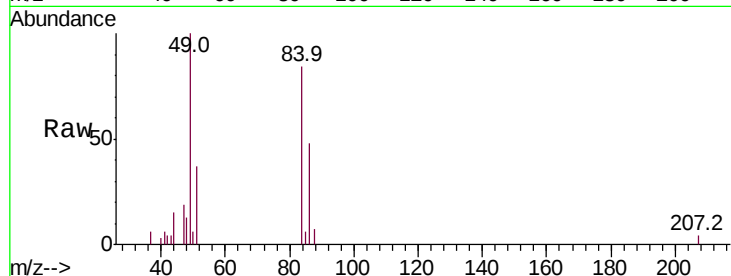
Ion Ratio Lower Upper

84 100

49 118.9 110.7 166.1

51 43.9 32.9 49.3

86 57.6 51.1 76.7

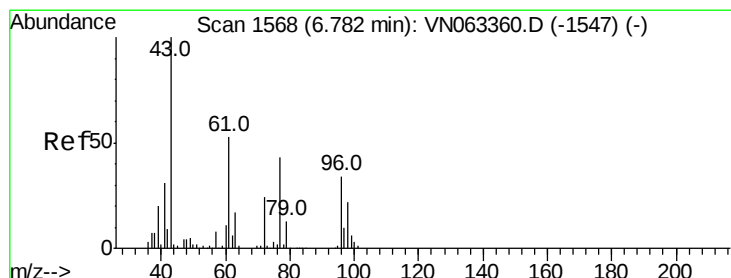
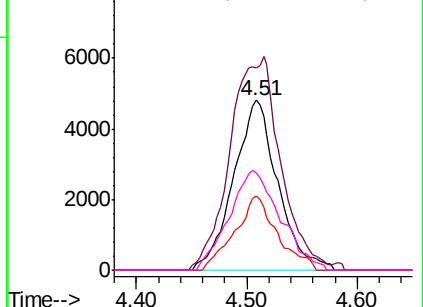
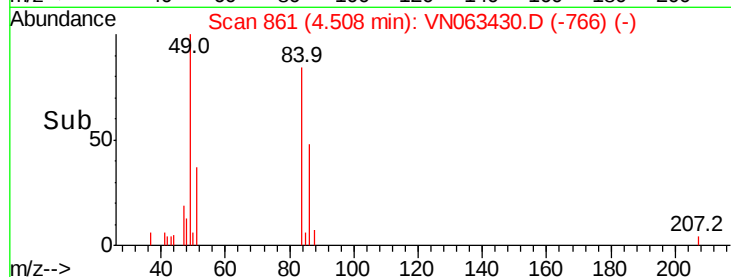


Abundance Ion 83.90 (83.60 to 84.60): VN0

Ion 48.90 (48.60 to 49.60): VN0

Ion 50.90 (50.60 to 51.60): VN0

Ion 85.90 (85.60 to 86.60): VN0



#25

2-Butanone

Concen: 1.215 ug/l

RT: 6.79 min Scan# 1571

Delta R.T. 0.01 min

Lab File: VN063430.D

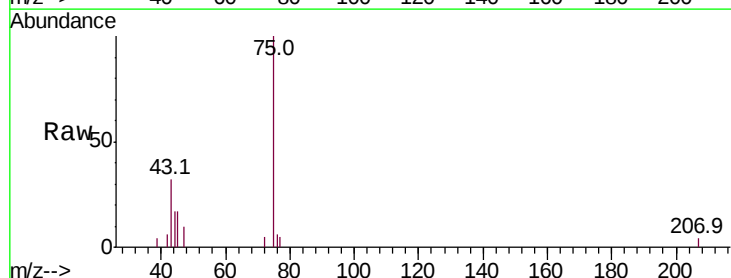
Acq: 17 Sep 2020 19:36

Tgt Ion: 43 Resp: 2389

Ion Ratio Lower Upper

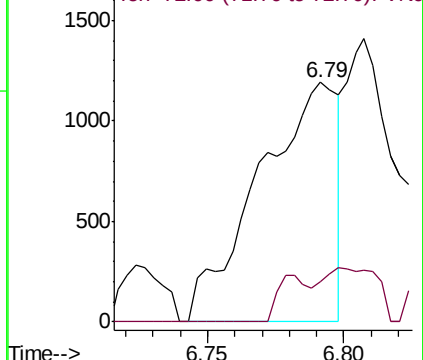
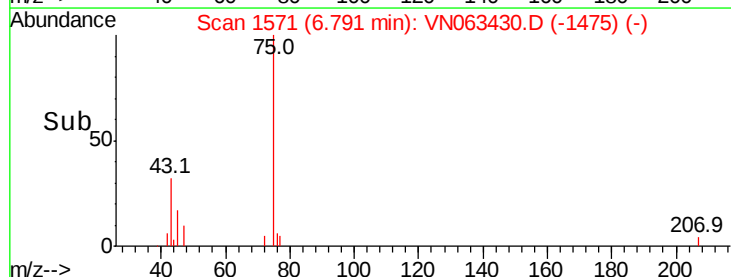
43 100

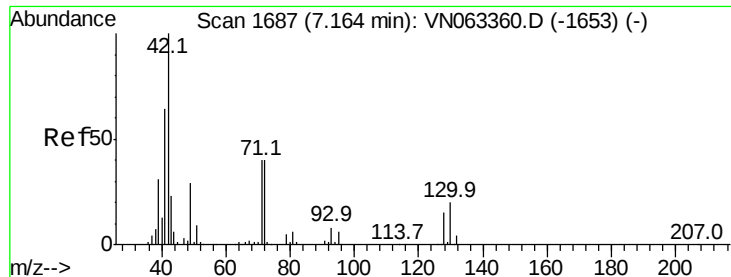
72 16.8 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0





#29

Tetrahydrofuran

Concen: 1.101 ug/l

RT: 7.17 min Scan# 1690

Delta R.T. 0.01 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

REACTOR-5W-(C-4)

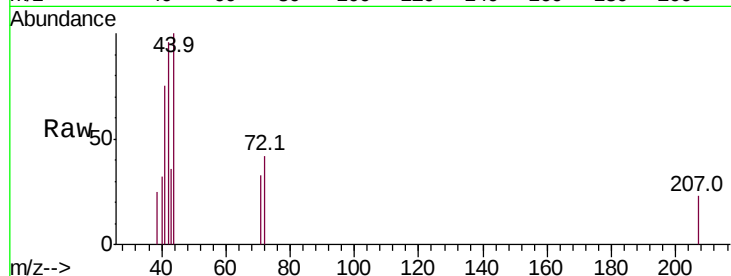
Tot Ion: 42 Resp: 1479

Ion Ratio Lower Upper

42 100

72 22.4 32.1 48.1#

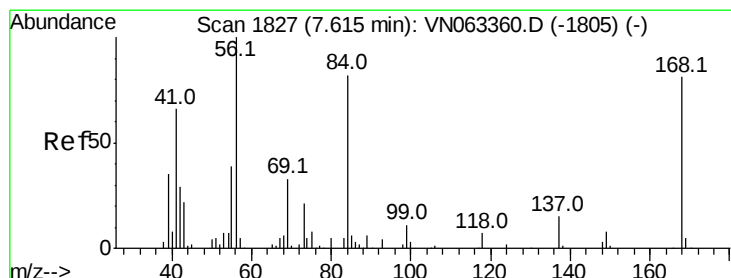
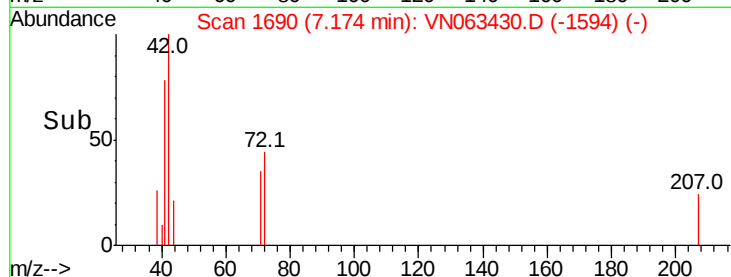
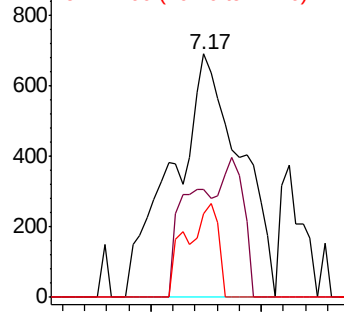
71 18.1 31.2 46.8#



Abundance Ion 42.00 (41.70 to 42.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

Ion 71.00 (70.70 to 71.70): VN0



#31

Cyclohexane

Concen: 1.233 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. 0.01 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

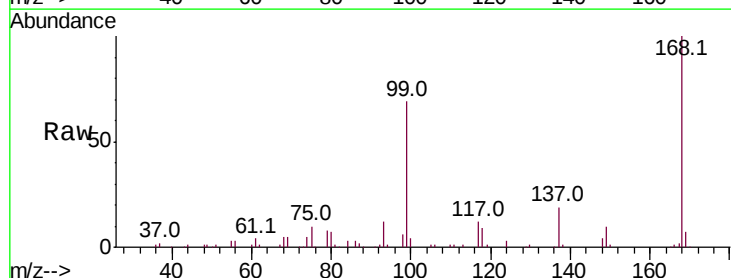
Tgt Ion: 56 Resp: 6772

Ion Ratio Lower Upper

56 100

69 155.6 26.1 39.1#

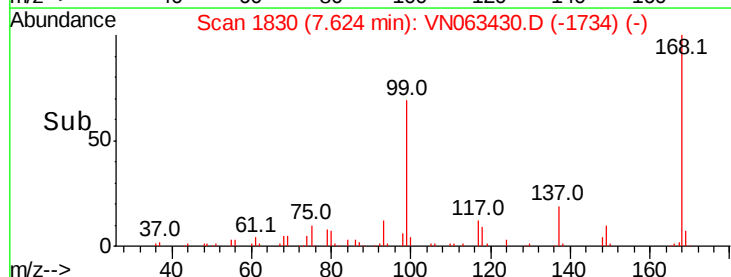
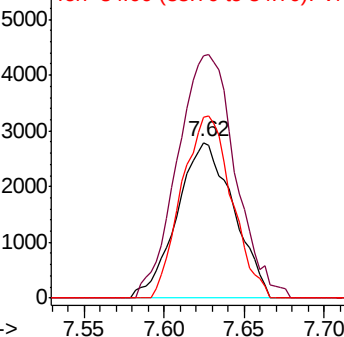
84 116.6 65.4 98.2#

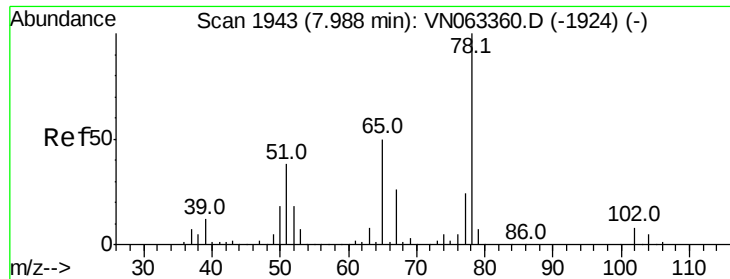


Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0

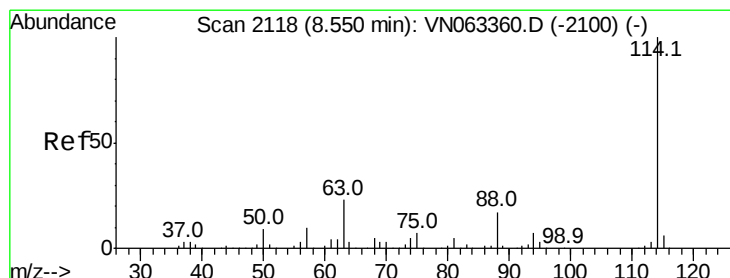
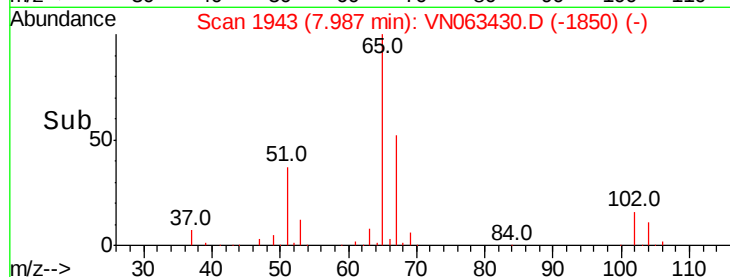
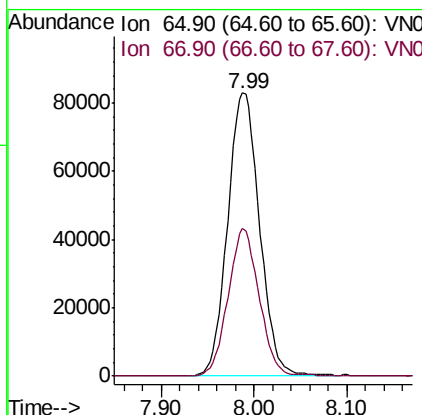
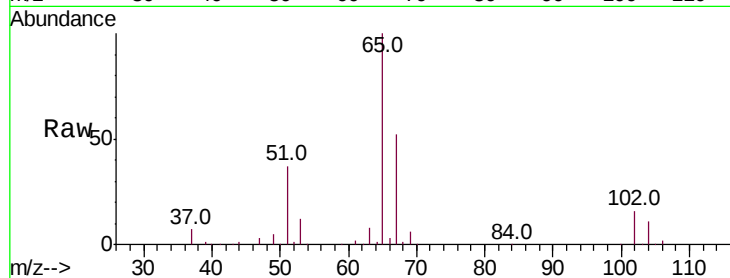




#33
 1,2-Dichloroethane-d4
 Concen: 49.815 ug/l
 RT: 7.99 min Scan# 1943
 Delta R.T. -0.00 min
 Lab File: VN063430.D
 Acq: 17 Sep 2020 19:36

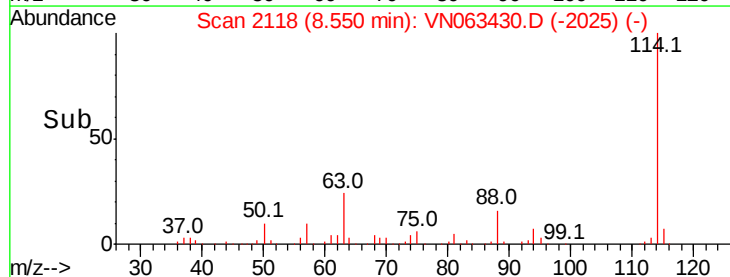
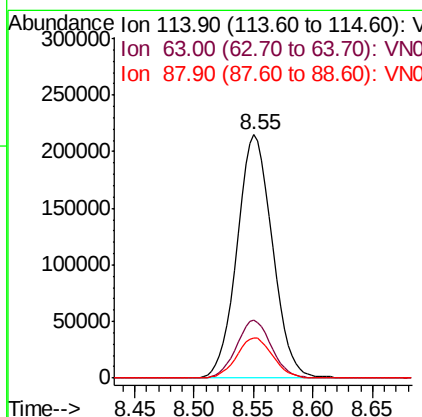
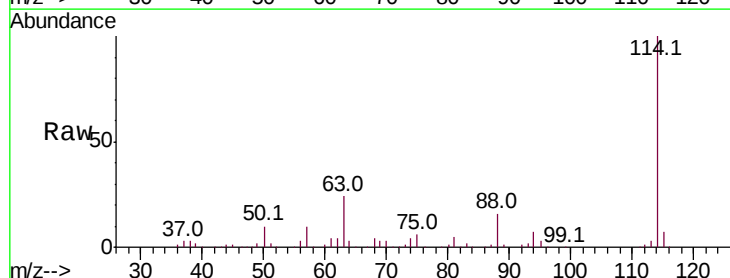
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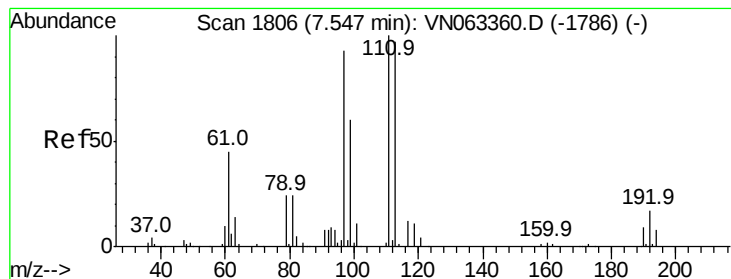
Tot Ion: 65 Resp: 198140
 Ion Ratio Lower Upper
 65 100
 67 50.8 0.0 104.2



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.55 min Scan# 2118
 Delta R.T. -0.00 min
 Lab File: VN063430.D
 Acq: 17 Sep 2020 19:36

Tgt Ion: 114 Resp: 442660
 Ion Ratio Lower Upper
 114 100
 63 23.8 0.0 46.4
 88 16.5 0.0 33.2





#35

Dibromofluoromethane

Concen: 47.440 ug/l

RT: 7.55 min Scan# 1807

Delta R.T. 0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

REACTOR-5W-(C-4)

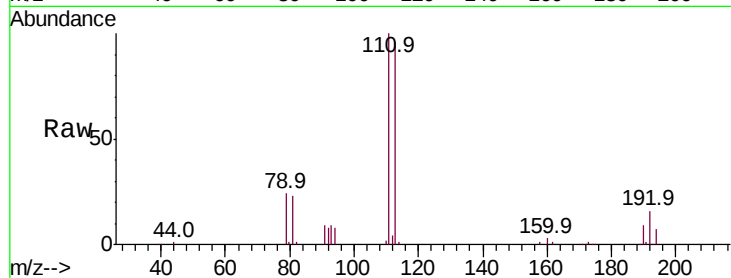
Tot Ion:113 Resp: 145378

Ion Ratio Lower Upper

113 100

111 101.5 82.9 124.3

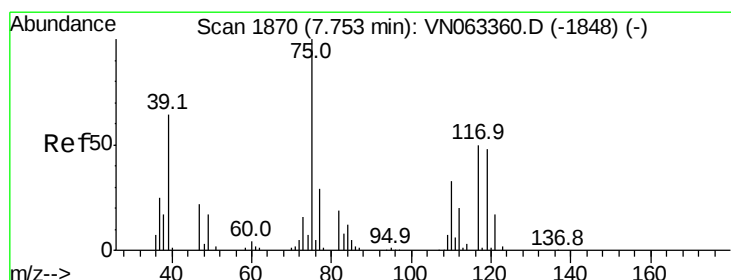
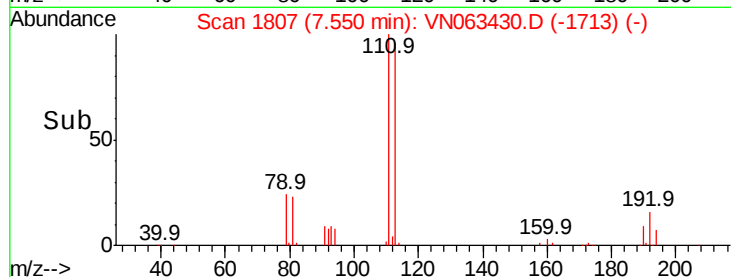
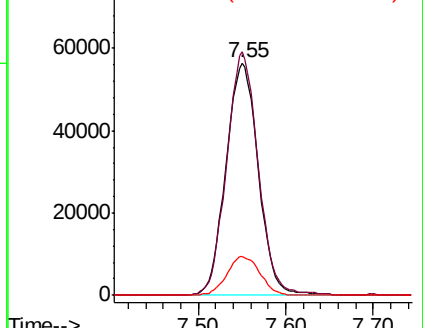
192 17.0 13.9 20.9



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.838 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.13 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

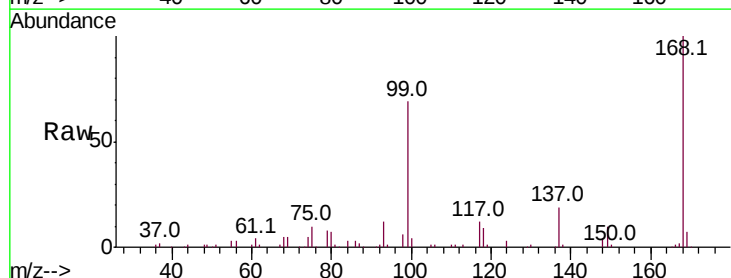
Tgt Ion: 75 Resp: 22817

Ion Ratio Lower Upper

75 100

110 3.2 16.5 49.5#

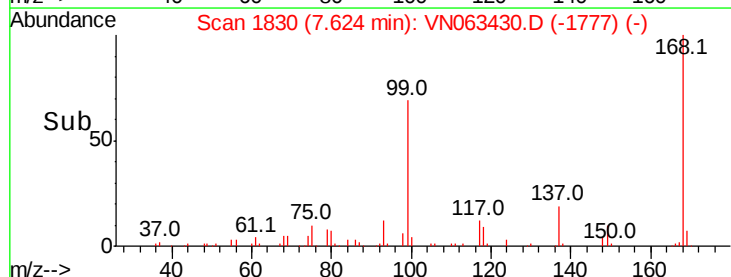
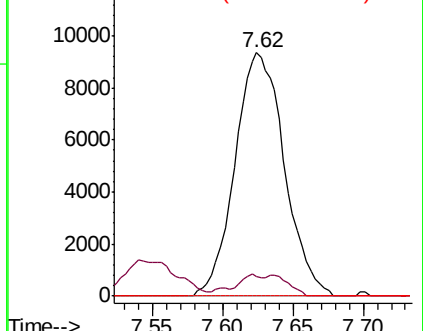
77 0.0 24.6 36.8#

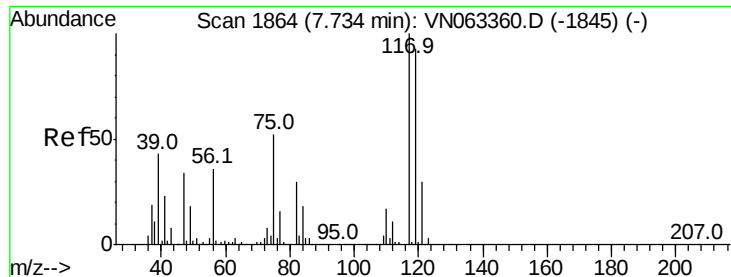


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 5.540 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.11 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

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ClientSampleId :

REACTOR-5W-(C-4)

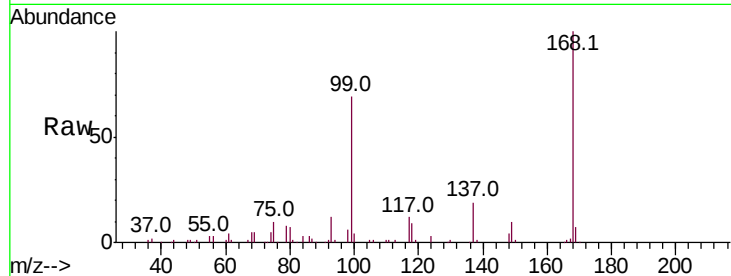
Tot Ion:117 Resp: 26671

Ion Ratio Lower Upper

117 100

119 4.9 74.5 111.7#

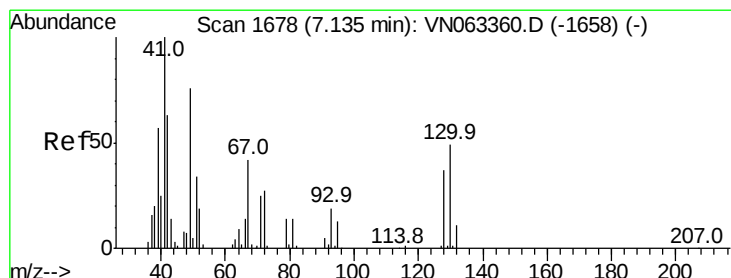
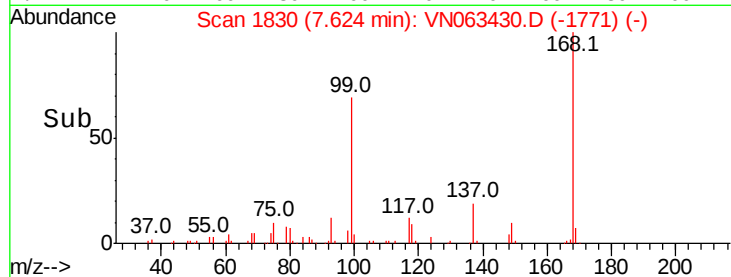
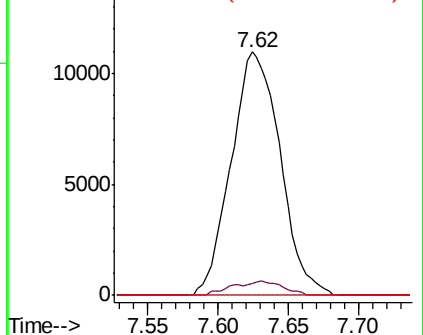
121 0.0 24.1 36.1#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 0.435 ug/l

RT: 7.17 min Scan# 1689

Delta R.T. 0.04 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Tgt Ion: 41 Resp: 906

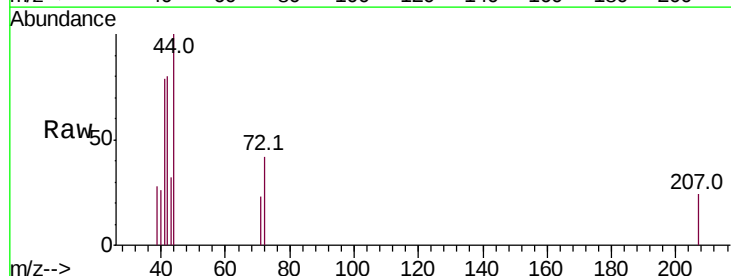
Ion Ratio Lower Upper

41 100

39 33.4 0.0 0.0#

67 0.0 0.0 0.0

52 0.0 0.0 0.0

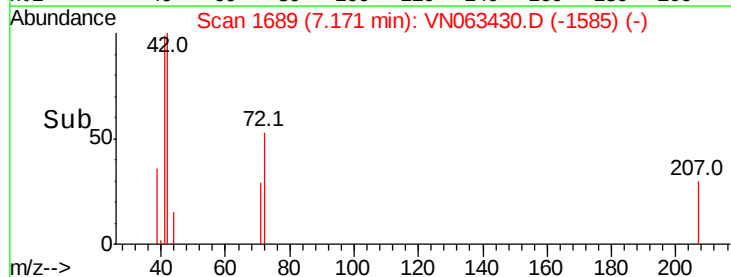
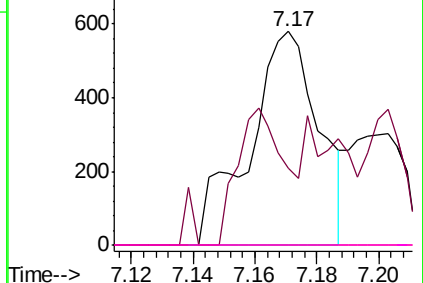


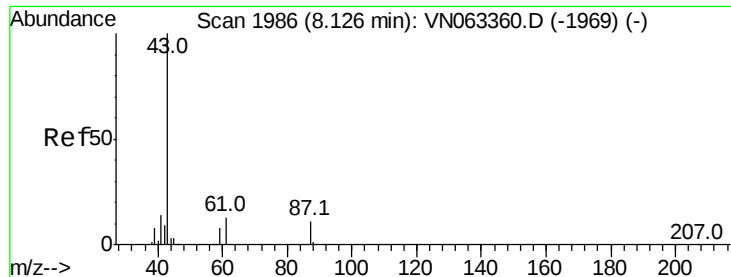
Abundance Ion 41.00 (40.70 to 41.70): V

Ion 39.00 (38.70 to 39.70): V

Ion 67.00 (66.70 to 67.70): V

Ion 52.00 (51.70 to 52.70): V





#43

Isopropyl Acetate

Concen: 9.428 ug/l

RT: 8.13 min Scan# 1987

Delta R.T. 0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

REACTOR-5W-(C-4)

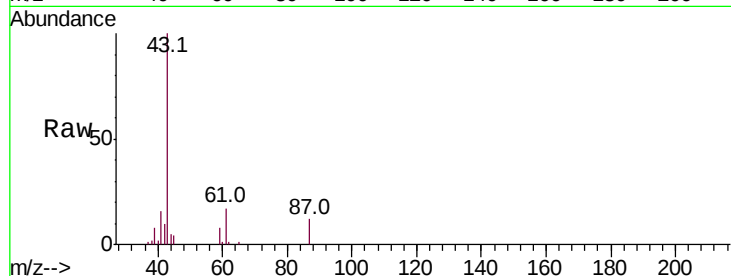
Tot Ion: 43 Resp: 78026

Ion Ratio Lower Upper

43 100

61 18.1 14.2 21.2

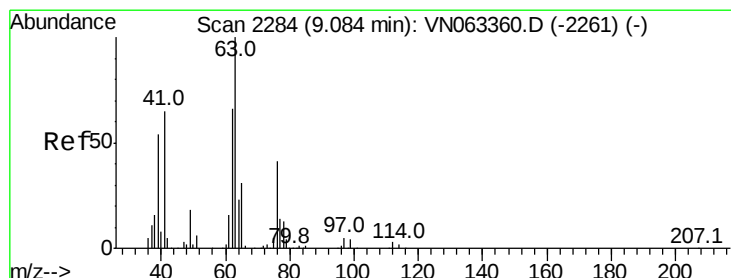
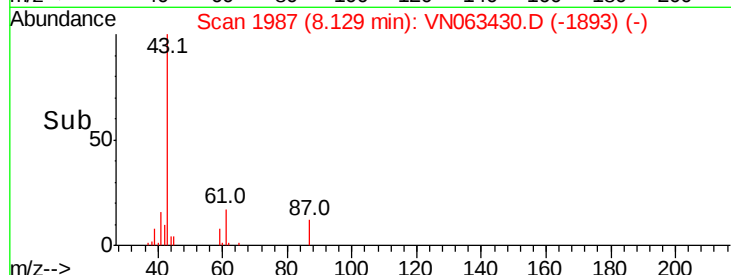
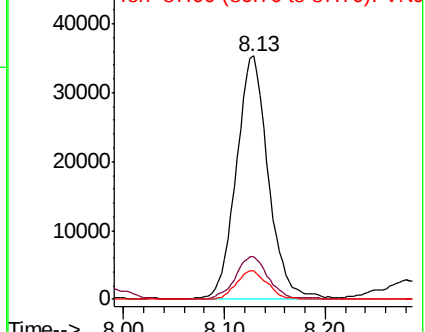
87 11.3 9.0 13.6



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#45

1,2-Dichloropropane

Concen: 0.300 ug/l

RT: 9.23 min Scan# 2331

Delta R.T. 0.15 min

Lab File: VN063430.D

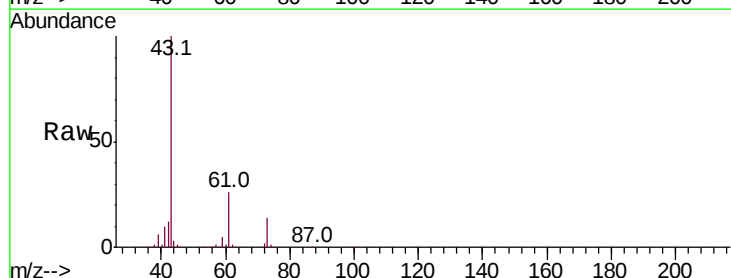
Acq: 17 Sep 2020 19:36

Tgt Ion: 63 Resp: 1100

Ion Ratio Lower Upper

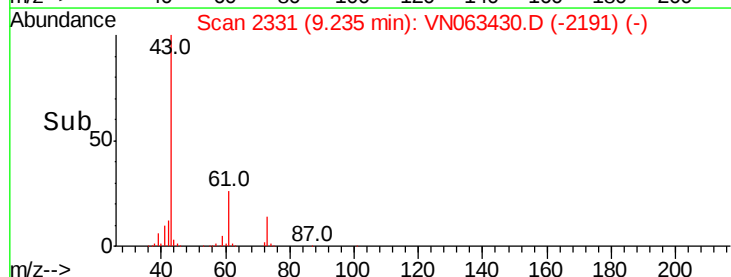
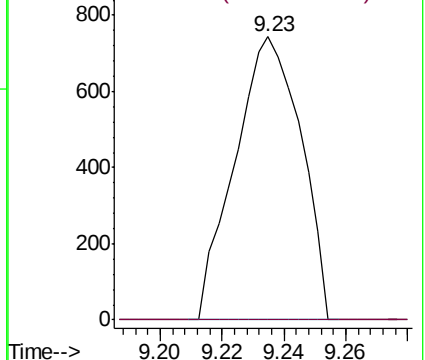
63 100

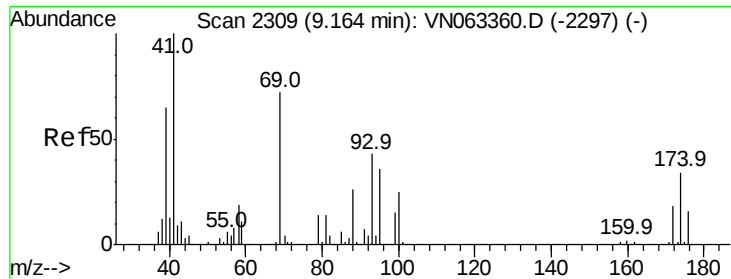
65 0.0 25.0 37.6#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 64.90 (64.60 to 65.60): VN0

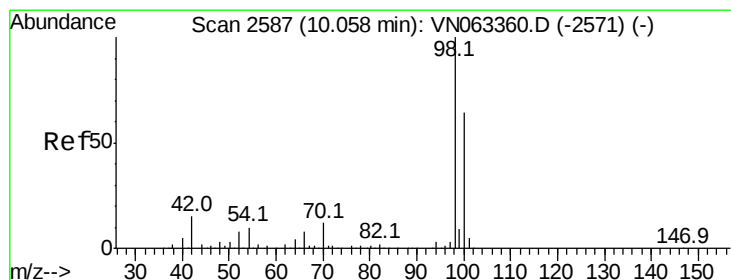
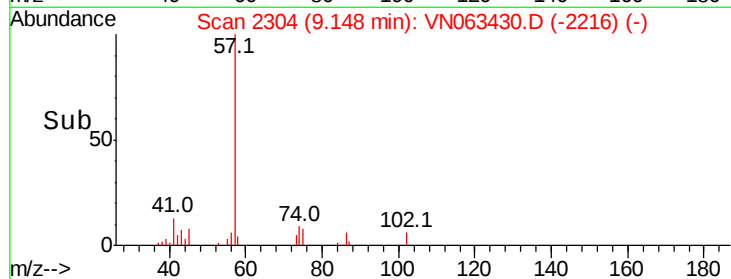
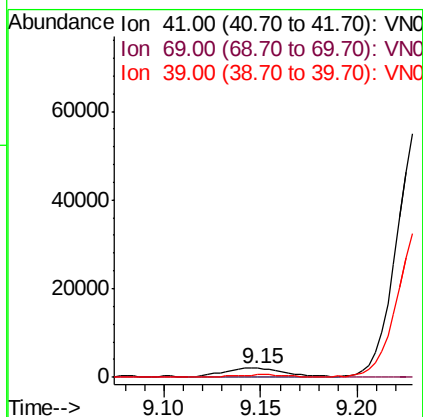
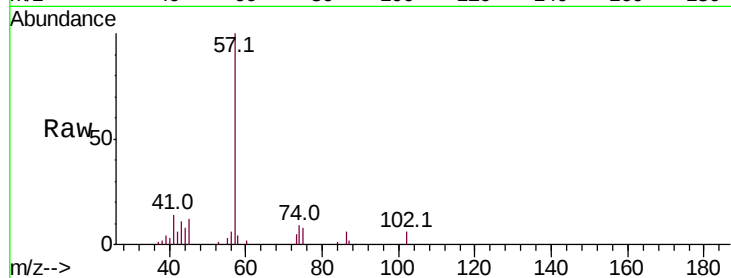




#48
Methvl methacrylate
Concen: 1.157 ug/l
RT: 9.15 min Scan# 2304
Delta R.T. -0.02 min
Lab File: VN063430.D
Acq: 17 Sep 2020 19:36

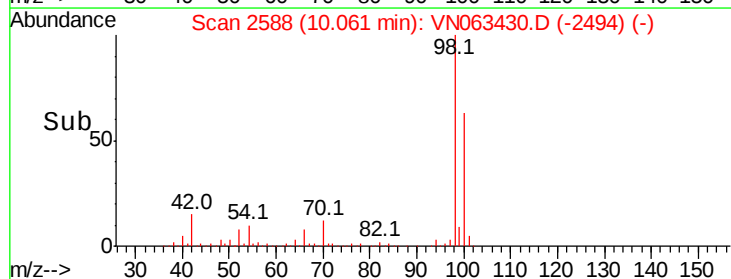
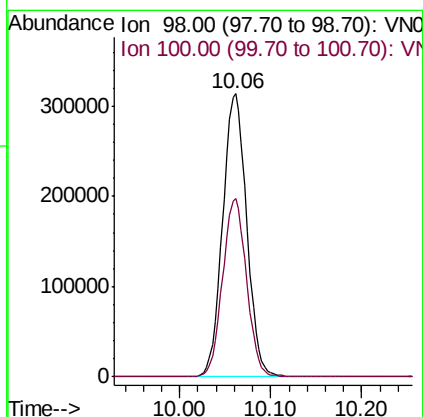
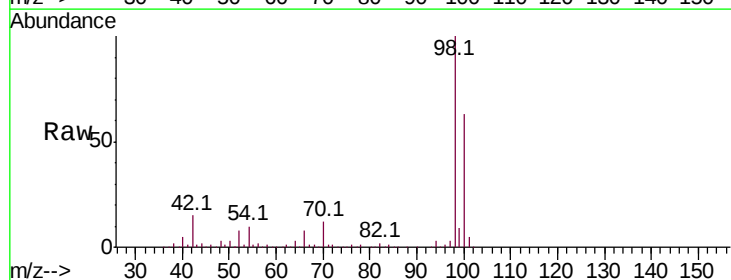
Instrument :
MSVOA_N
ClientSampleId :
REACTOR-5W-(C-4)

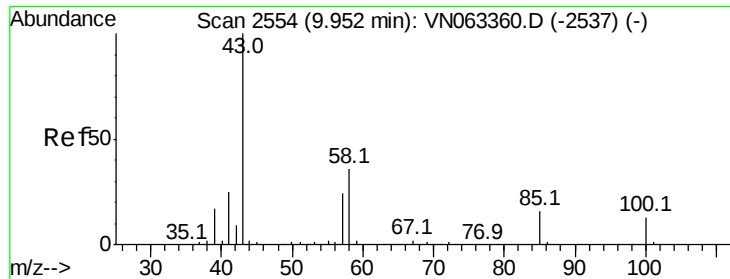
Tot Ion: 41 Resp: 4705
Ion Ratio Lower Upper
41 100
69 0.0 59.3 88.9#
39 0.0 52.9 79.3#



#50
Toluene-d8
Concen: 49.970 ug/l
RT: 10.06 min Scan# 2588
Delta R.T. 0.00 min
Lab File: VN063430.D
Acq: 17 Sep 2020 19:36

Tgt Ion: 98 Resp: 575798
Ion Ratio Lower Upper
98 100
100 62.7 50.7 76.1





#51

4-Methyl-2-Pentanone

Concen: 1.558 ug/l

RT: 9.95 min Scan# 2554

Delta R.T. -0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

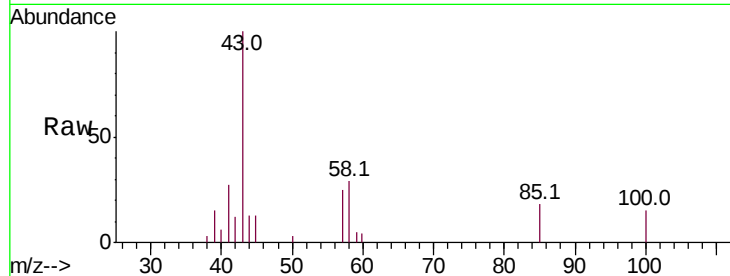
REACTOR-5W-(C-4)

Tot Ion: 43 Resp: 7218

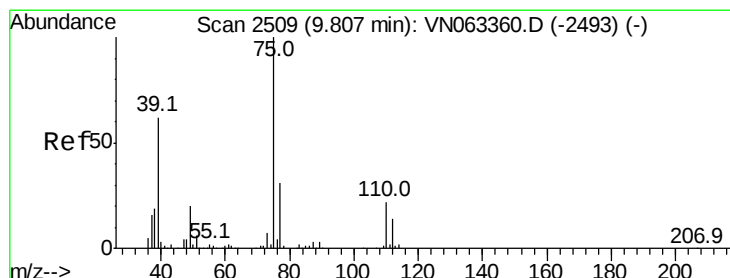
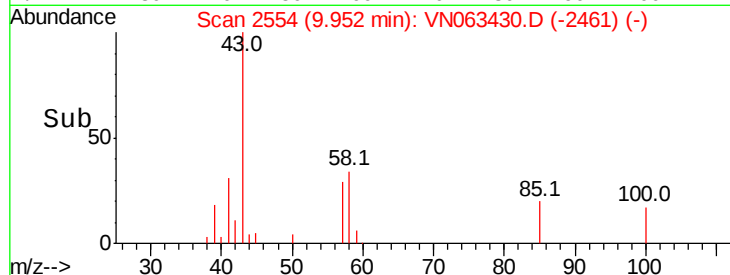
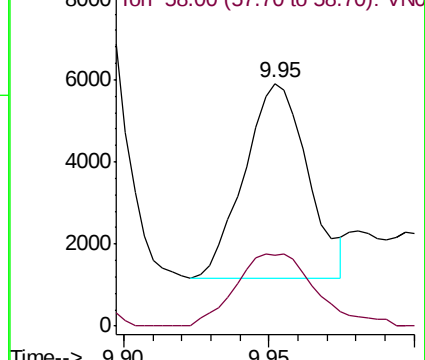
Ion Ratio Lower Upper

43 100

58 47.1 29.0 43.6#



Abundance Ion 43.00 (42.70 to 43.70): VN063430.D (-2537) (-)



#54

cis-1,3-Dichloropropene

Concen: 5.460 ug/l

RT: 9.87 min Scan# 2529

Delta R.T. 0.06 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

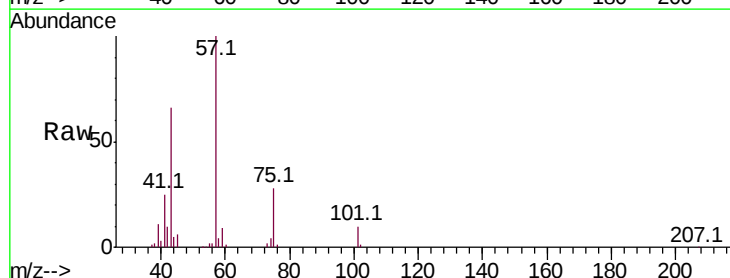
Tgt Ion: 75 Resp: 32190

Ion Ratio Lower Upper

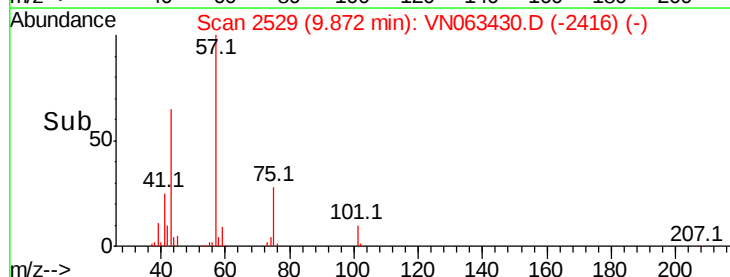
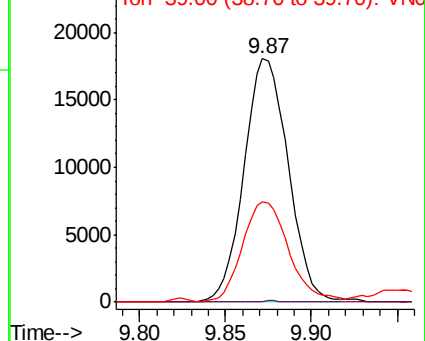
75 100

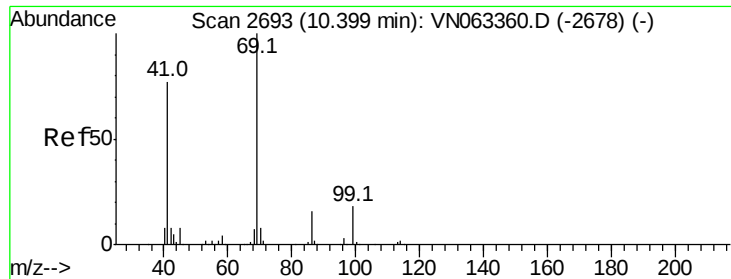
77 0.0 24.6 37.0#

39 40.1 49.8 74.8#



Abundance Ion 74.90 (74.60 to 75.60): VN063430.D (-2529) (-)





#56

Ethyl methacrylate

Concen: 0.207 ug/l

RT: 10.51 min Scan# 2729

Delta R.T. 0.12 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

REACTOR-5W-(C-4)

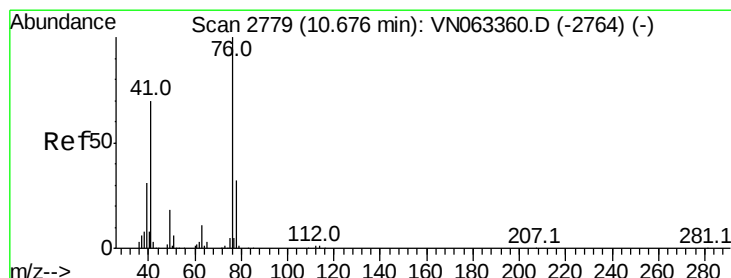
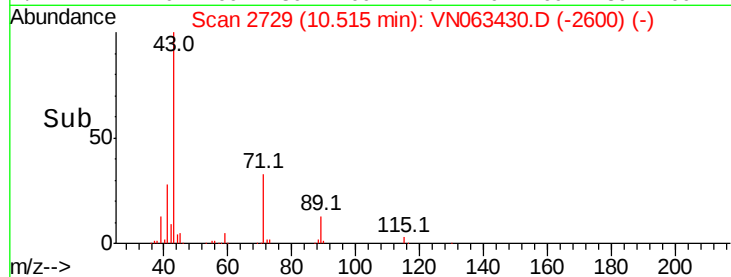
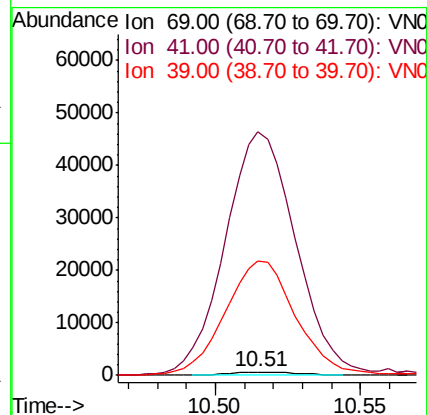
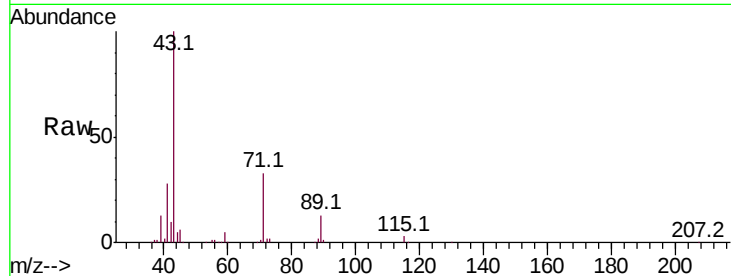
Tot Ion: 69 Resp: 1039

Ion Ratio Lower Upper

69 100

41 7607.7 61.0 91.6#

39 3567.1 39.2 58.8#



#57

1,3-Dichloropropane

Concen: 0.826 ug/l

RT: 10.74 min Scan# 2798

Delta R.T. 0.06 min

Lab File: VN063430.D

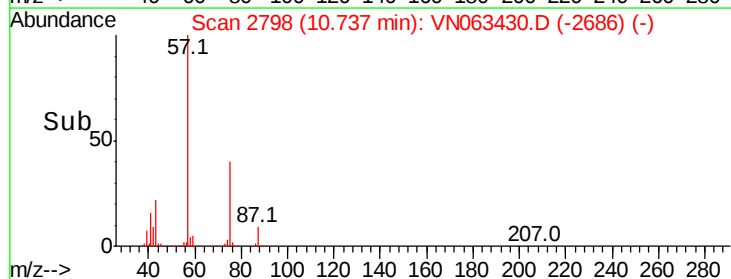
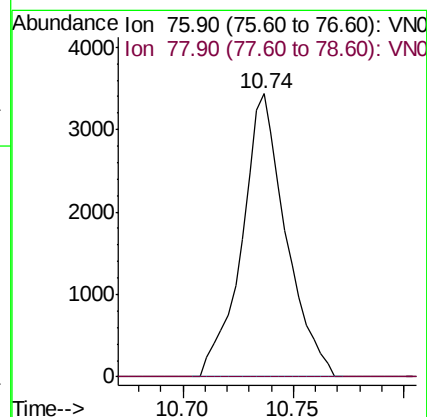
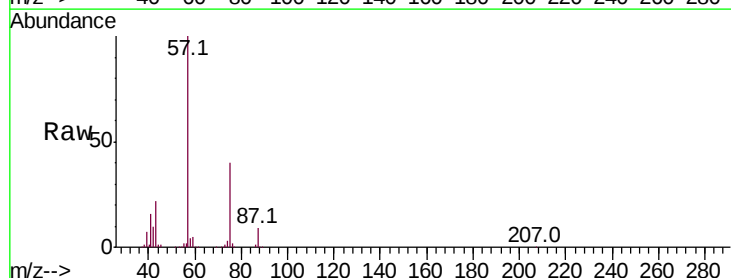
Acq: 17 Sep 2020 19:36

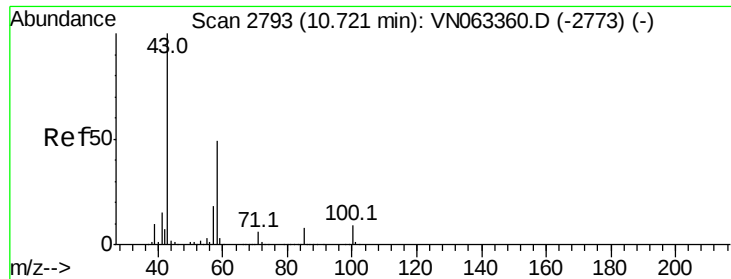
Tgt Ion: 76 Resp: 4789

Ion Ratio Lower Upper

76 100

78 0.0 25.8 38.8#





#59

2-Hexanone

Concen: 22.250 ug/l

RT: 10.74 min Scan# 2798

Delta R.T. 0.02 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

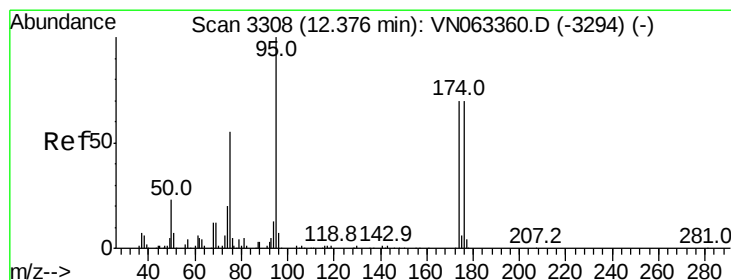
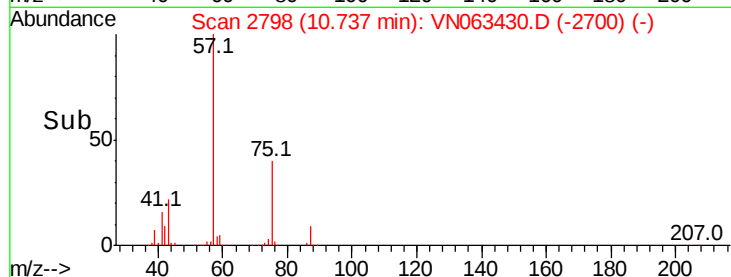
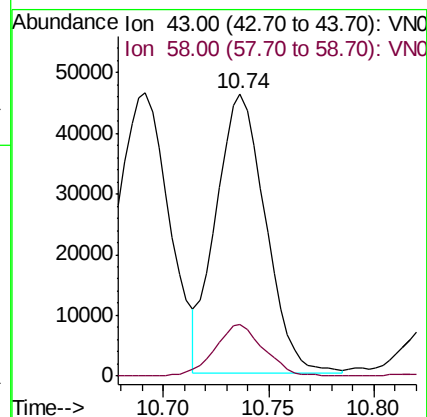
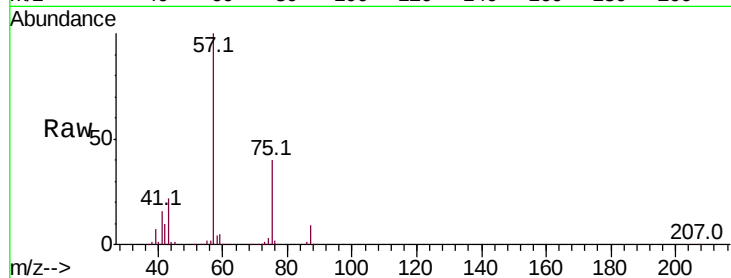
REACTOR-5W-(C-4)

Tot Ion: 43 Resp: 74688

Ion Ratio Lower Upper

43 100

58 18.4 24.7 74.1#



#62

4-Bromofluorobenzene

Concen: 53.591 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. -0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

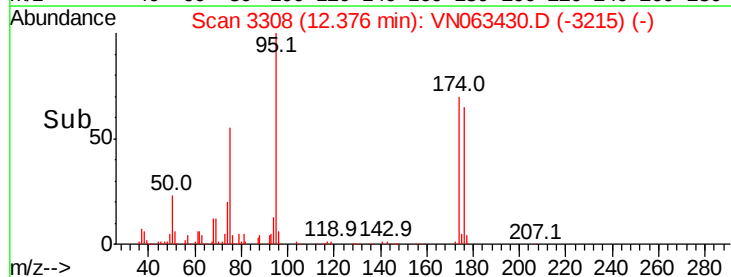
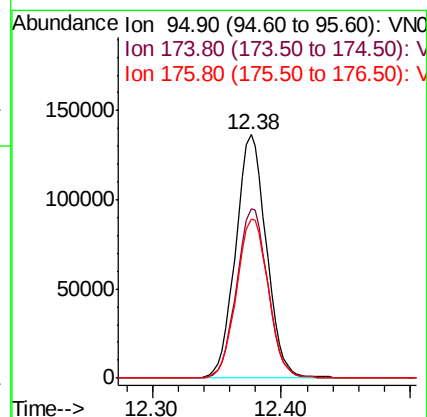
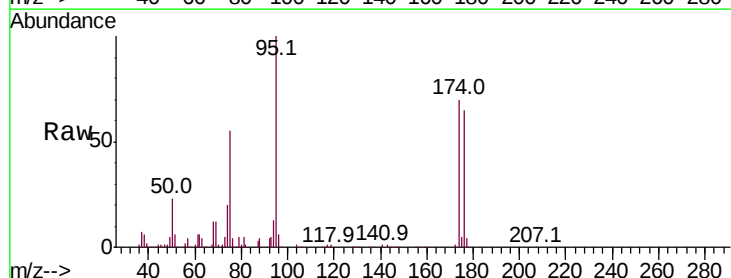
Tgt Ion: 95 Resp: 226373

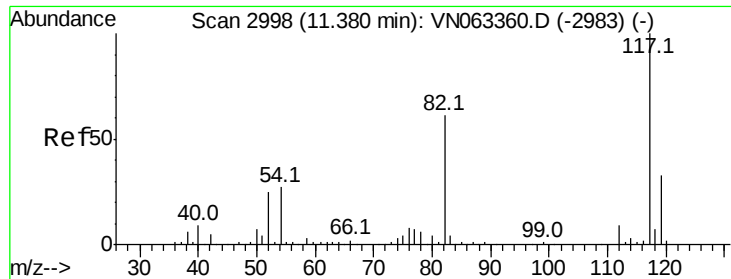
Ion Ratio Lower Upper

95 100

174 70.6 0.0 140.8

176 67.7 0.0 137.6

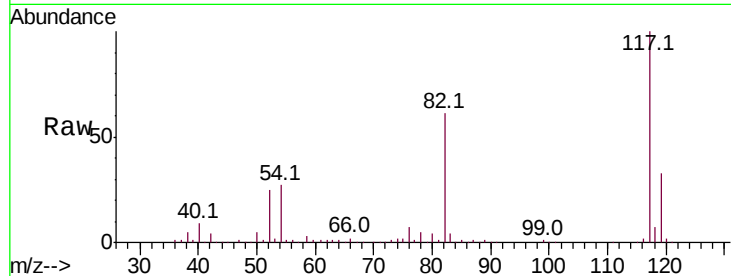




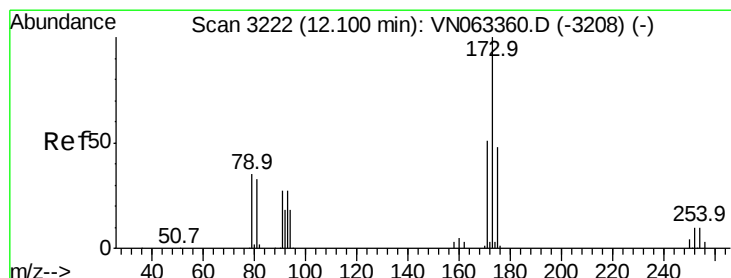
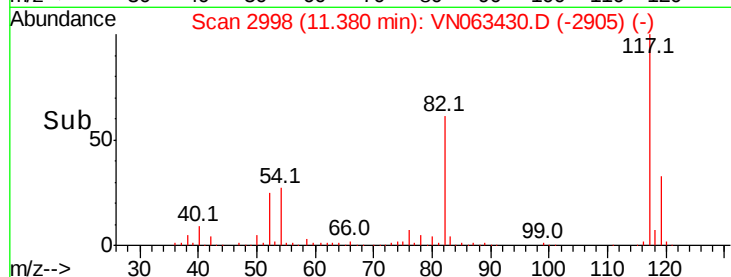
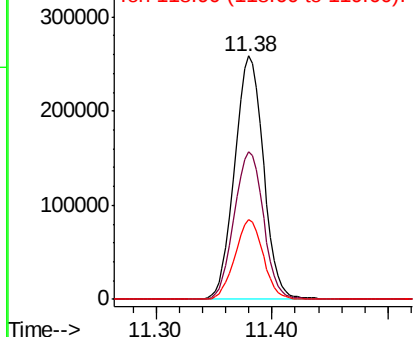
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.38 min Scan# 2998
Delta R.T. -0.00 min
Lab File: VN063430.D
Acq: 17 Sep 2020 19:36

Instrument :
MSVOA_N
ClientSampleId :
REACTOR-5W-(C-4)

Tot Ion:117 Resp: 444928
Ion Ratio Lower Upper
117 100
82 60.7 49.2 73.8
119 32.6 26.2 39.4

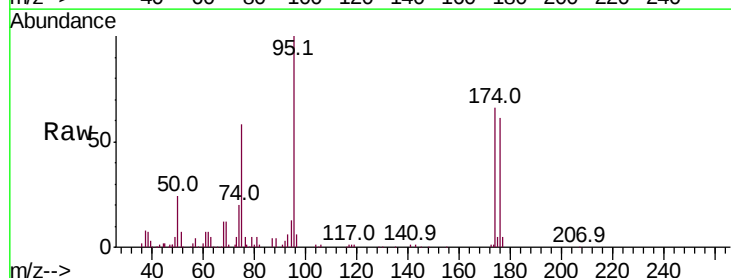


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

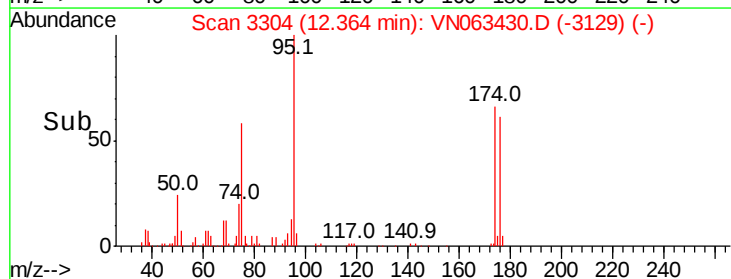
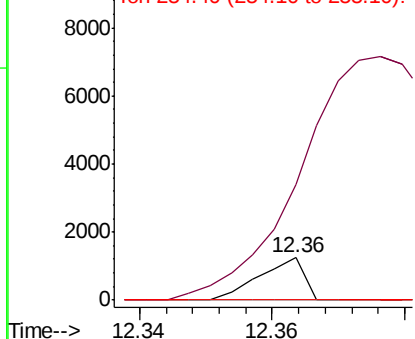


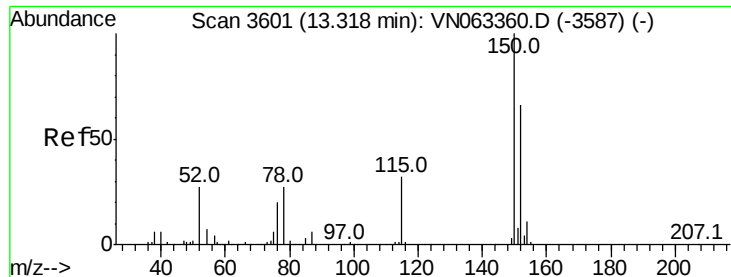
#71
Bromoform
Concen: 0.224 ug/l
RT: 12.36 min Scan# 3304
Delta R.T. 0.26 min
Lab File: VN063430.D
Acq: 17 Sep 2020 19:36

Tgt Ion:173 Resp: 578
Ion Ratio Lower Upper
173 100
175 1733.6 24.0 72.0#
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V
Ion 174.70 (174.40 to 175.40): V
Ion 254.40 (254.10 to 255.10): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3601

Delta R.T. -0.00 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

REACTOR-5W-(C-4)

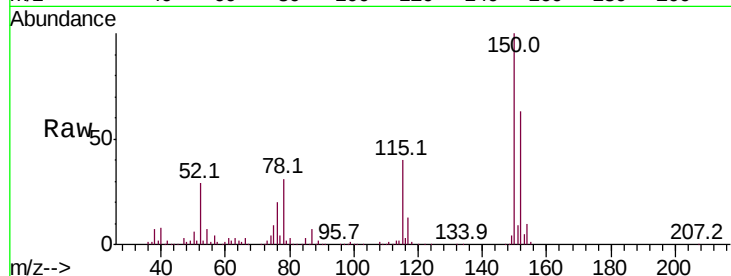
Tot Ion:152 Resp: 190829

Ion Ratio Lower Upper

152 100

115 62.7 32.2 96.6

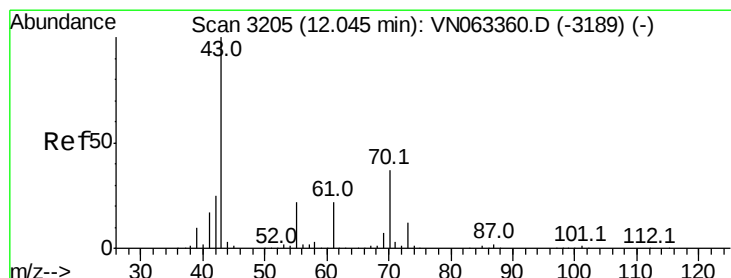
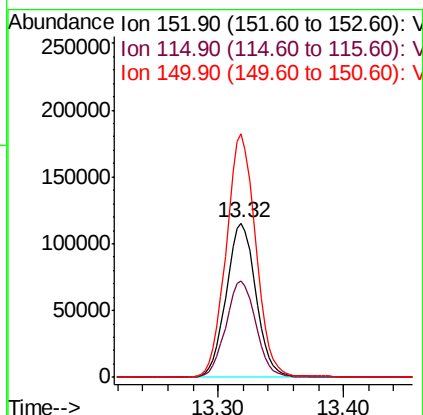
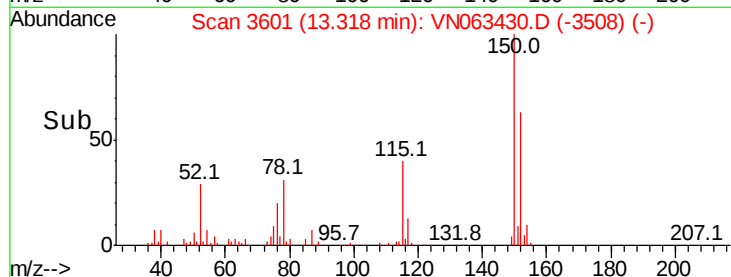
150 156.1 0.0 343.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 0.214 ug/l

RT: 12.02 min Scan# 3196

Delta R.T. -0.03 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Tgt Ion: 43 Resp: 1547

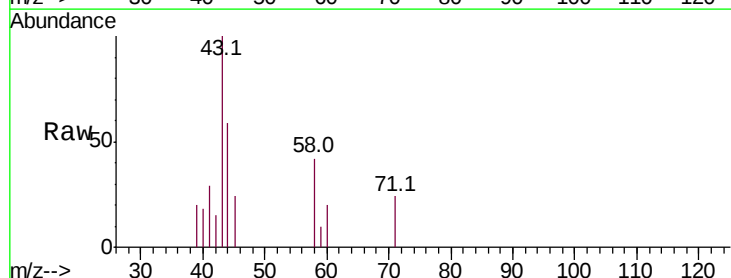
Ion Ratio Lower Upper

43 100

70 0.0 29.6 44.4#

55 8.7 17.7 26.5#

61 0.0 17.4 26.2#

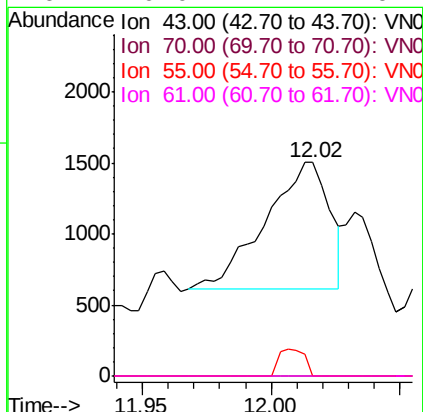
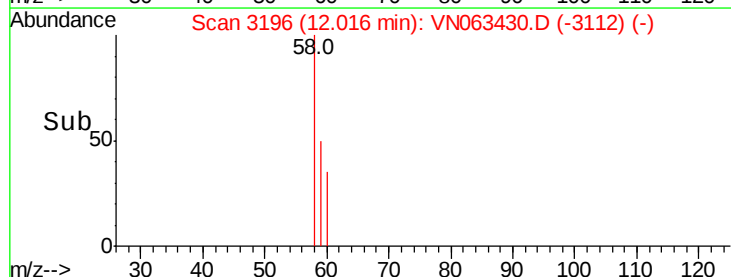


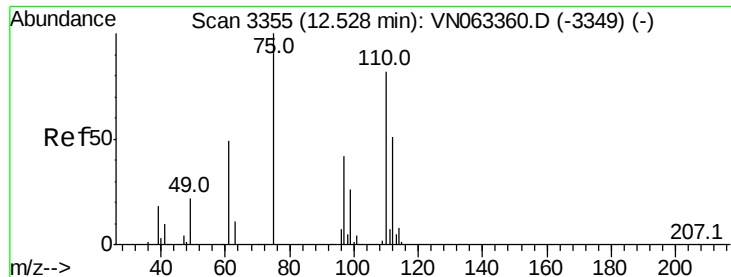
Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 70.00 (69.70 to 70.70): VN

Ion 55.00 (54.70 to 55.70): VN

Ion 61.00 (60.70 to 61.70): VN





#76

1,2,3-Trichloropropane

Concen: 27.013 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. -0.15 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

Instrument :

MSVOA_N

ClientSampleId :

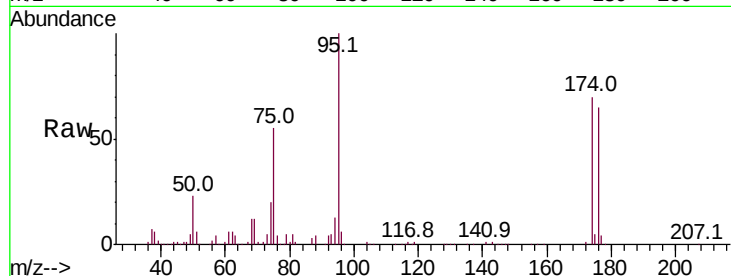
REACTOR-5W-(C-4)

Tot Ion: 75 Resp: 127590

Ion Ratio Lower Upper

75 100

77 1.0 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 77.00 (76.70 to 77.70): VNO

12.38

80000

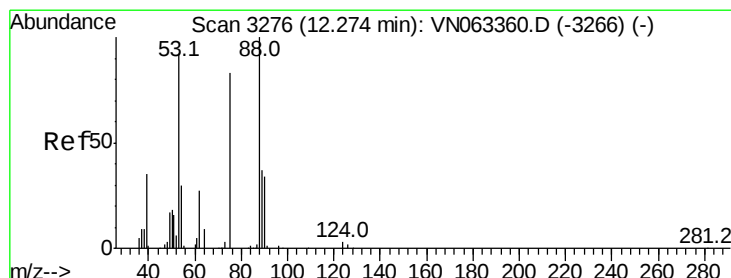
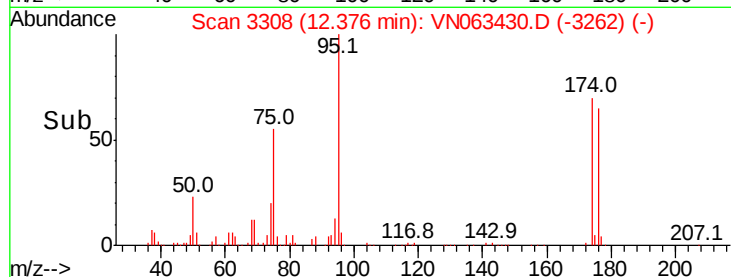
60000

40000

20000

0

Time--> 12.30 12.35 12.40 12.45



#81

trans-1,4-Dichloro-2-butene

Concen: 74.059 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.10 min

Lab File: VN063430.D

Acq: 17 Sep 2020 19:36

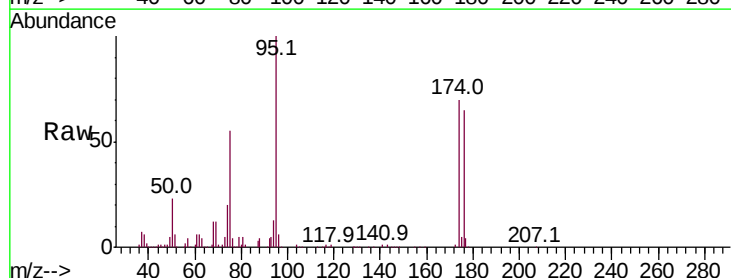
Tgt Ion: 75 Resp: 127590

Ion Ratio Lower Upper

75 100

53 0.0 85.7 128.5#

89 0.0 38.0 57.0#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

100000

80000

60000

40000

20000

0

Time--> 12.30 12.35 12.40 12.45

