

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101419\  
 Data File : VN058751.D  
 Acq On : 14 Oct 2019 15:49  
 Operator : JC/SP  
 Sample : K5358-03  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 20190891-FIELD-BLANK

Quant Time: Oct 15 03:11:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 388725   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 653355   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 583093   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 234664   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.01  | 65   | 304207   | 55.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 111.80% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 214445   | 53.14 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.28% |          |
| 50) Toluene-d8              | 10.08 | 98   | 791777   | 49.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.12%  |          |
| 62) 4-Bromofluorobenzene    | 12.41 | 95   | 263209   | 43.09 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 86.18%  |          |

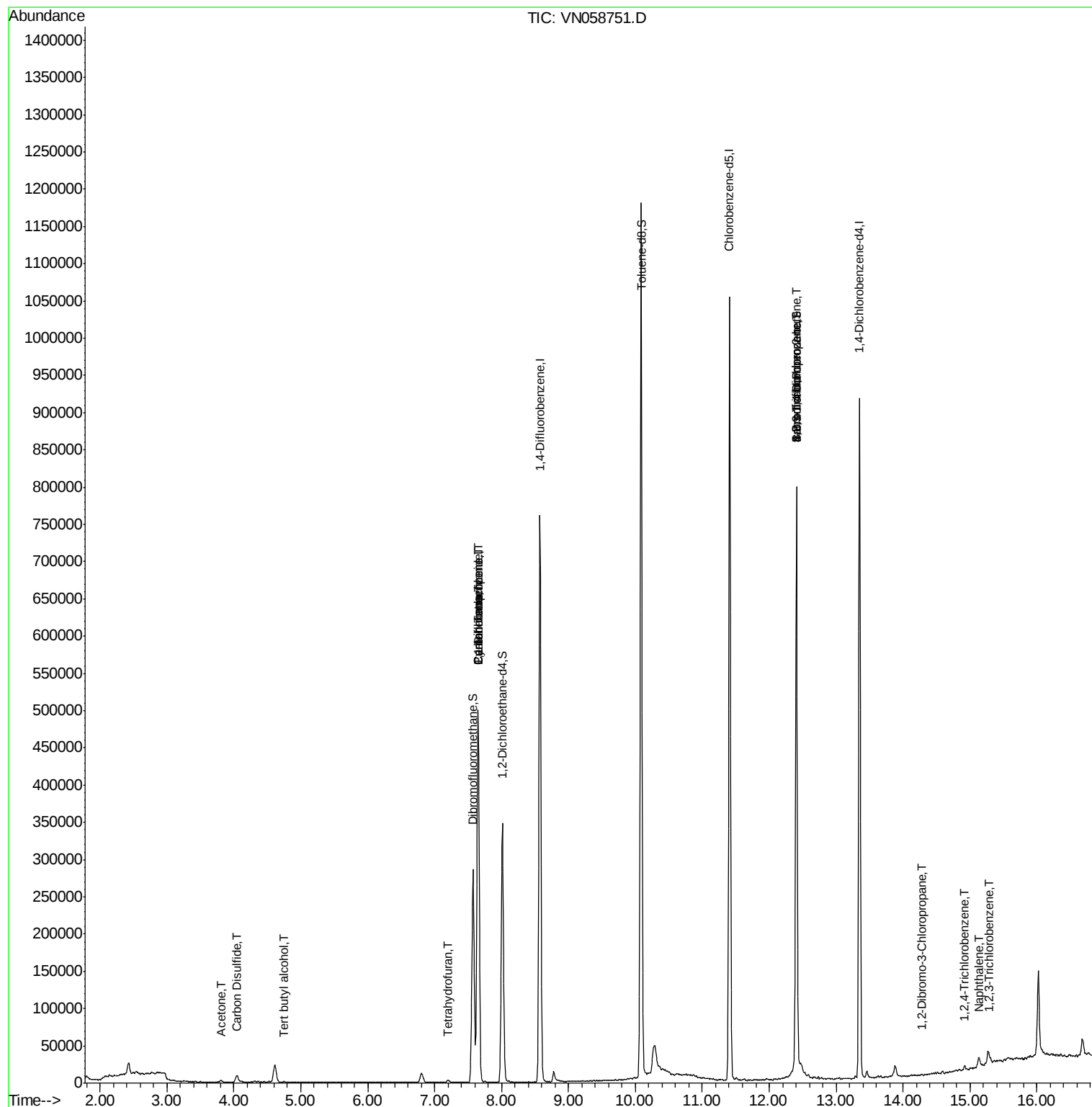
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.75  | 59   | 676      | 0.767  | ug/l # | 72     |
| 16) Acetone                    | 3.81  | 43   | 3373     | 1.497  | ug/l # | 88     |
| 17) Carbon Disulfide           | 4.03  | 76   | 3086     | 0.259  | ug/l # | 75     |
| 29) Tetrahydrofuran            | 7.19  | 42   | 2546     | 1.210  | ug/l # | 74     |
| 31) Cyclohexane                | 7.65  | 56   | 9230     | 1.156  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.65  | 75   | 32447    | 4.912  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.65  | 117  | 39686    | 6.164  | ug/l # | 16     |
| 71) Bromoform                  | 12.40 | 173  | 1322     | 0.412  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 141130   | 27.415 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 141130   | 73.435 | ug/l # | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 593      | 0.453  | ug/l # | 14     |
| 93) 1,2,4-Trichlorobenzene     | 14.92 | 180  | 1678     | 0.370  | ug/l   | 92     |
| 95) Naphthalene                | 15.14 | 128  | 7405     | 0.568  | ug/l   | 99     |
| 96) 1,2,3-Trichlorobenzene     | 15.30 | 180  | 1910     | 0.432  | ug/l   | 89     |

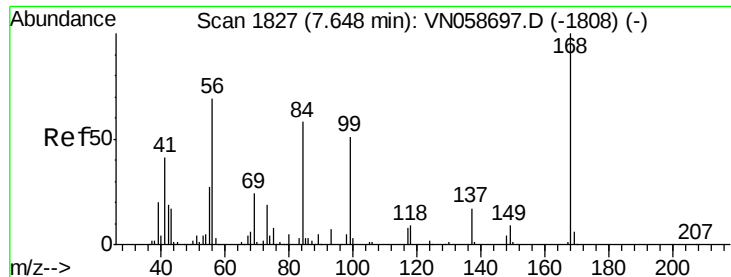
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 10 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
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Quant Time: Oct 15 03:11:25 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
Quant Title : SW846 8260  
QLast Update : Sat Oct 12 00:00:30 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. 0.00 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

MSVOA\_N

ClientSampleId :

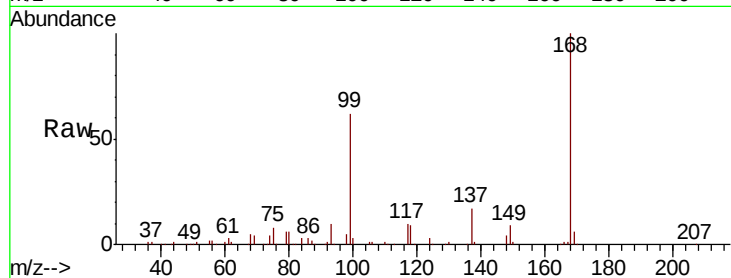
20190891-FIELD-BLANK

Tot Ion:168 Resp: 388725

Ion Ratio Lower Upper

168 100

99 61.6 47.5 71.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.65

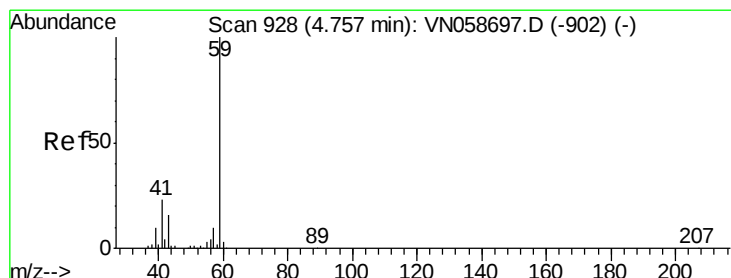
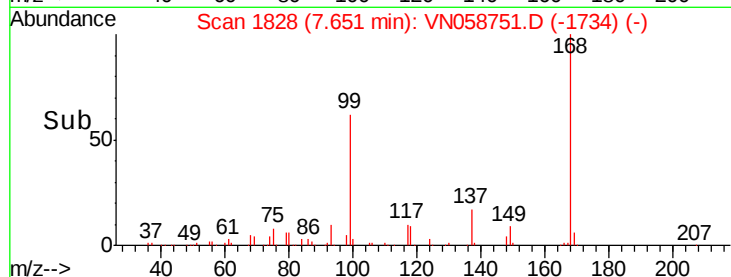
150000

100000

50000

0

Time--> 7.50 7.60 7.70 7.80



#11

Tert butyl alcohol

Concen: 0.767 ug/l

RT: 4.75 min Scan# 927

Delta R.T. -0.00 min

Lab File: VN058751.D

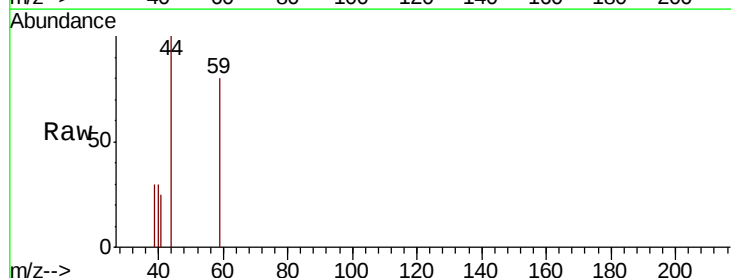
Acq: 14 Oct 2019 15:49

Tgt Ion: 59 Resp: 676

Ion Ratio Lower Upper

59 100

57 0.0 8.4 12.6#



Abundance Ion 59.00 (58.70 to 59.70): VN

Ion 57.00 (56.70 to 57.70): VN

4.75

600

500

400

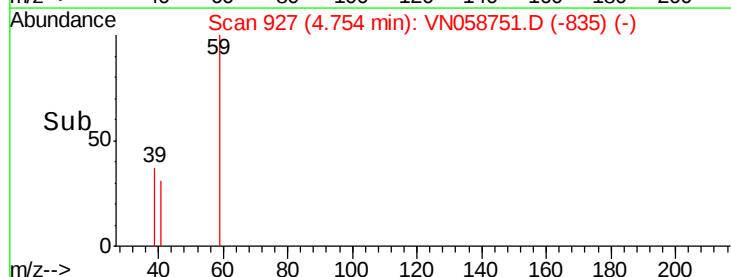
300

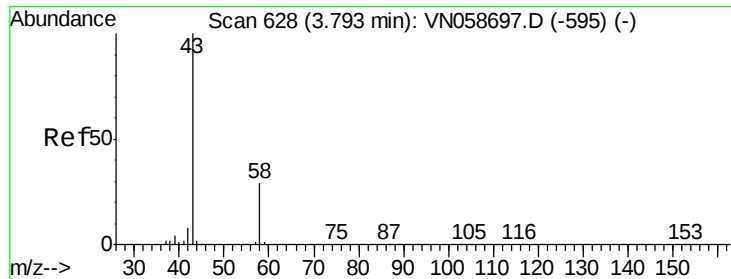
200

100

0

Time--> 4.70 4.72 4.74 4.76 4.78





#16

Acetone

Concen: 1.497 ug/l

RT: 3.81 min Scan# 632

Delta R.T. 0.01 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

MSVOA\_N

ClientSampleId :

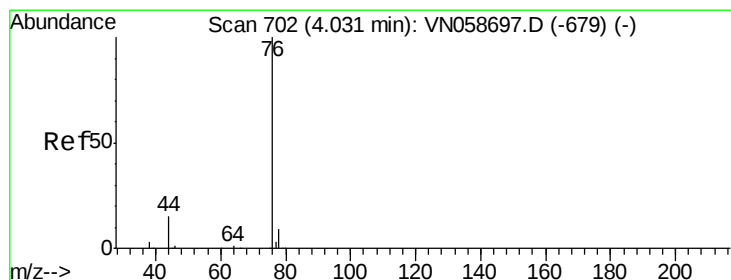
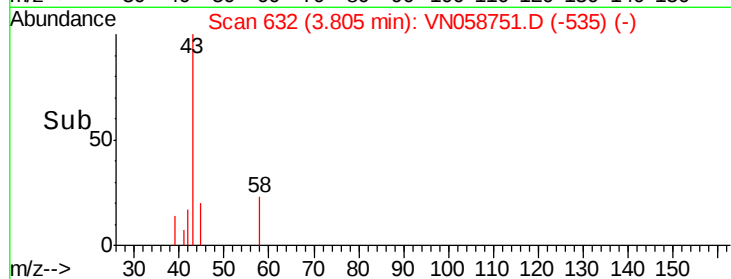
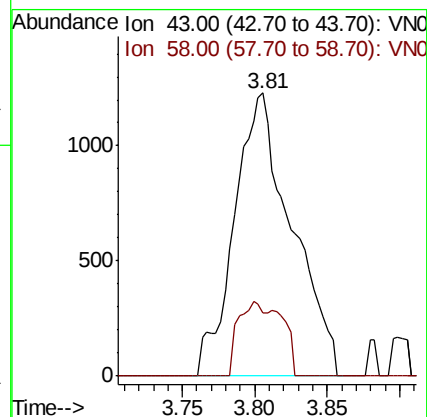
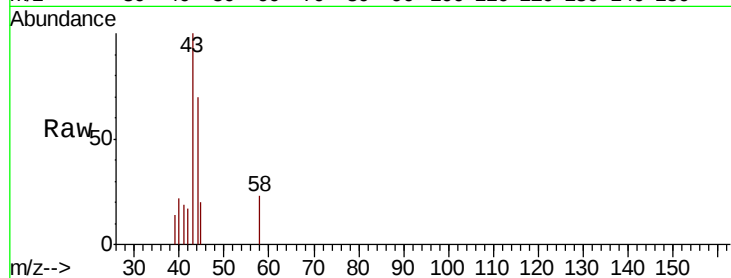
20190891-FIELD-BLANK

Tot Ion: 43 Resp: 3373

Ion Ratio Lower Upper

43 100

58 22.5 23.3 34.9#



#17

Carbon Disulfide

Concen: 0.259 ug/l

RT: 4.03 min Scan# 702

Delta R.T. -0.00 min

Lab File: VN058751.D

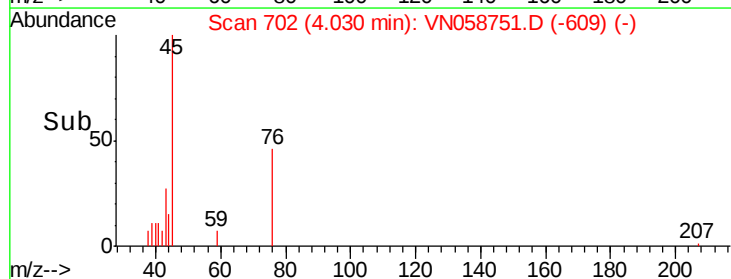
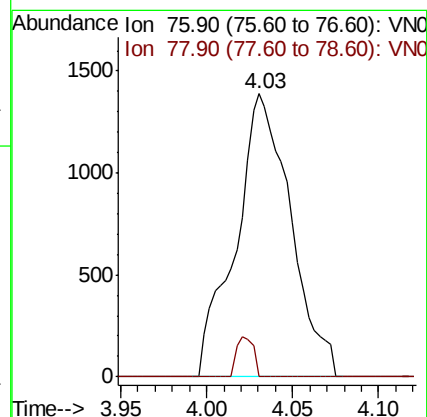
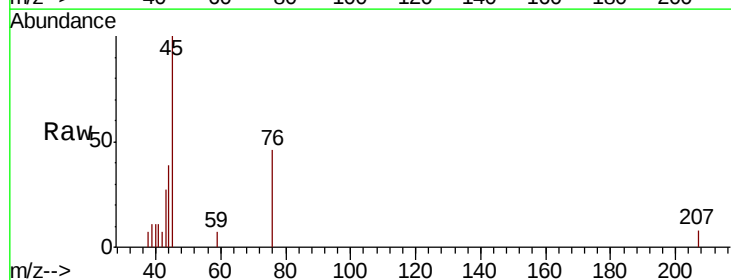
Acq: 14 Oct 2019 15:49

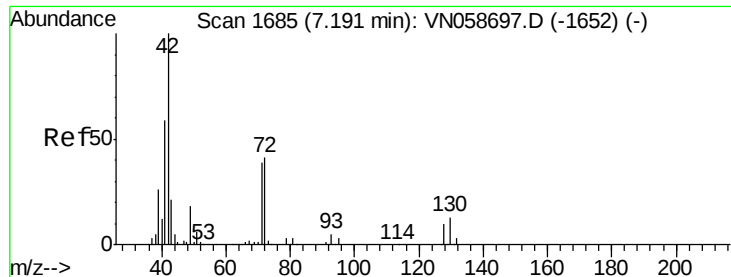
Tgt Ion: 76 Resp: 3086

Ion Ratio Lower Upper

76 100

78 0.0 7.1 10.7#

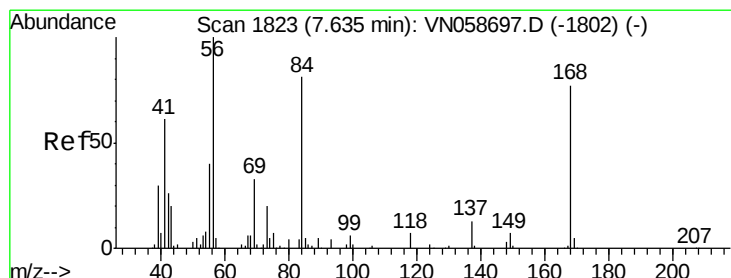
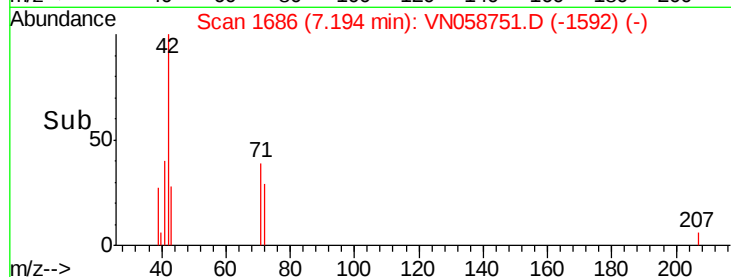
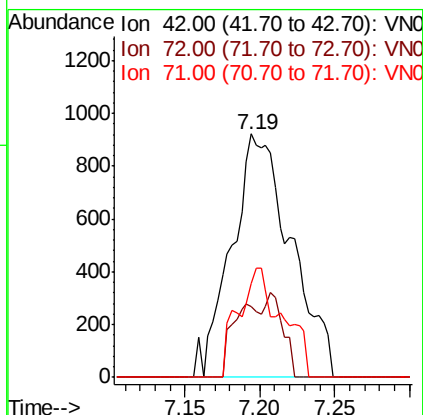
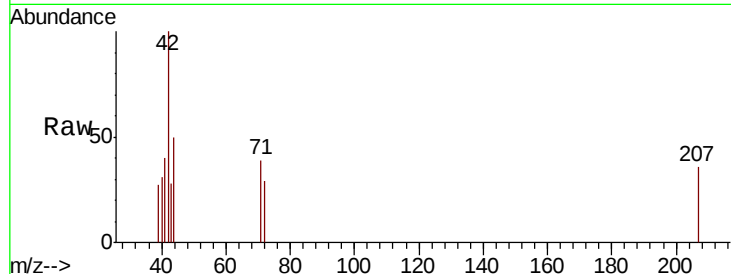




#29  
Tetrahydrofuran  
Concen: 1.210 ug/l  
RT: 7.19 min Scan# 1686  
Delta R.T. 0.00 min  
Lab File: VN058751.D  
Acq: 14 Oct 2019 15:49

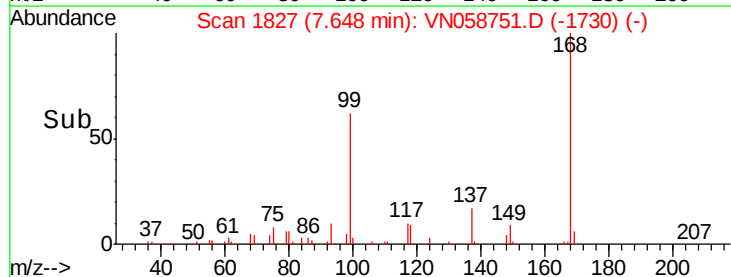
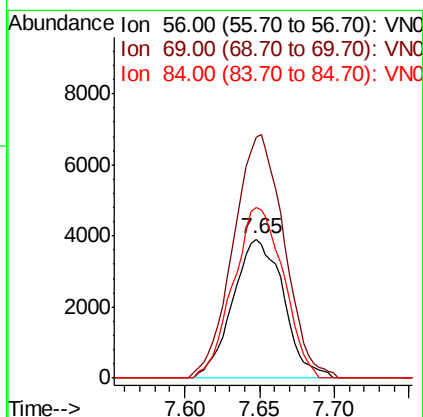
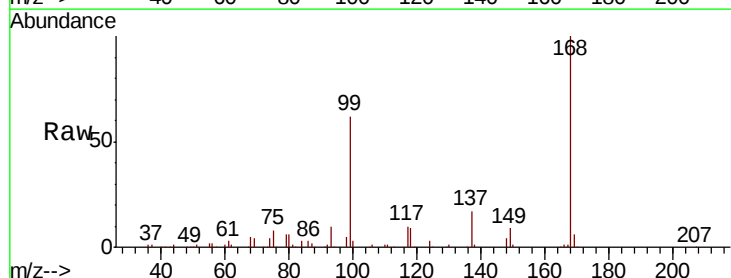
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ClientSampleId :  
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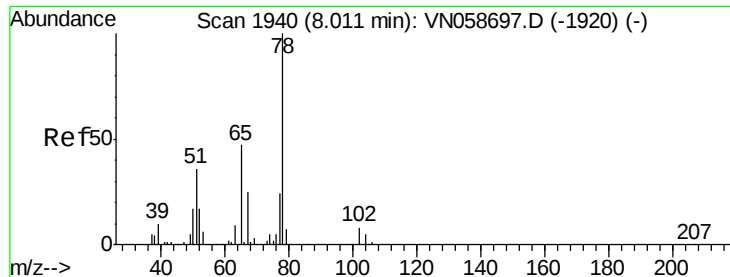
Tot Ion: 42 Resp: 2546  
Ion Ratio Lower Upper  
42 100  
72 14.3 32.8 49.2#  
71 33.4 31.1 46.7



#31  
Cyclohexane  
Concen: 1.156 ug/l  
RT: 7.65 min Scan# 1827  
Delta R.T. 0.01 min  
Lab File: VN058751.D  
Acq: 14 Oct 2019 15:49

Tgt Ion: 56 Resp: 9230  
Ion Ratio Lower Upper  
56 100  
69 172.9 26.2 39.4#  
84 122.6 64.9 97.3#

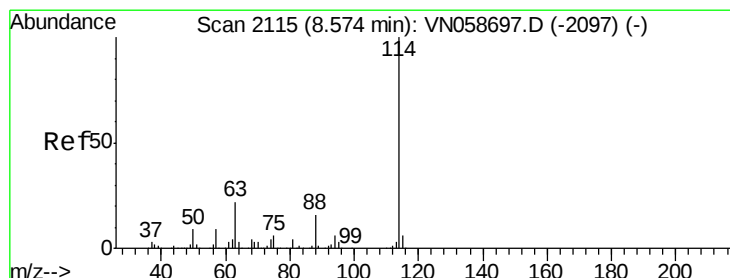
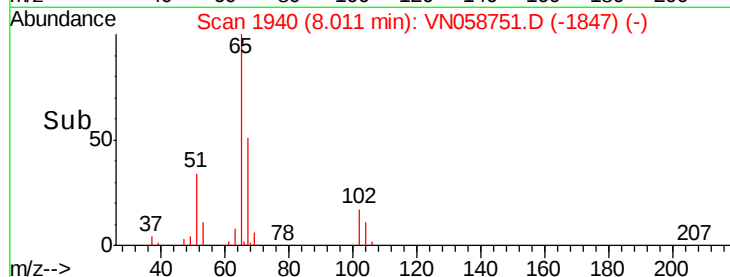
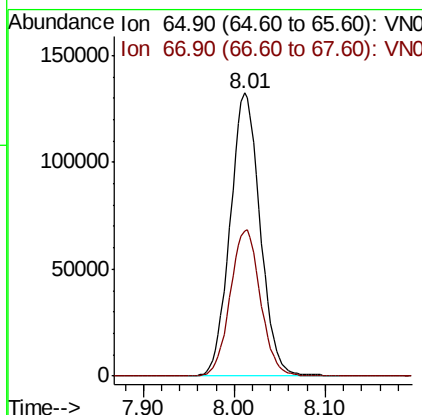
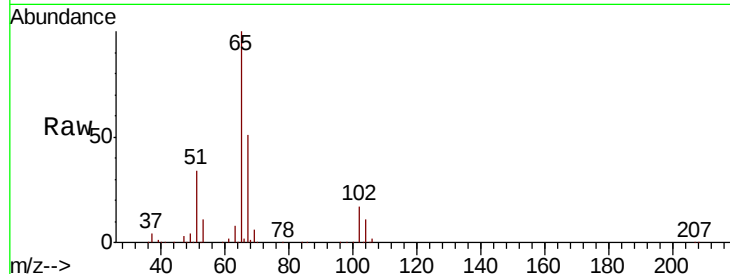




#33  
 1,2-Dichloroethane-d4  
 Concen: 55.899 ug/l  
 RT: 8.01 min Scan# 1940  
 Delta R.T. -0.00 min  
 Lab File: VN058751.D  
 Acq: 14 Oct 2019 15:49

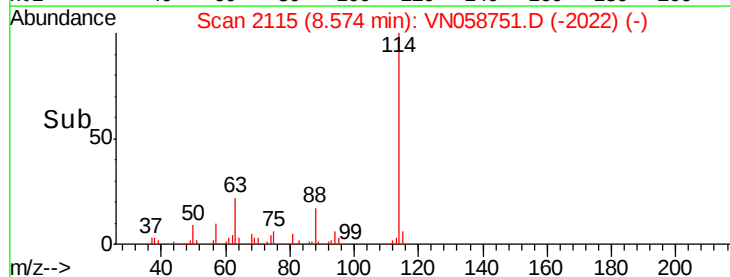
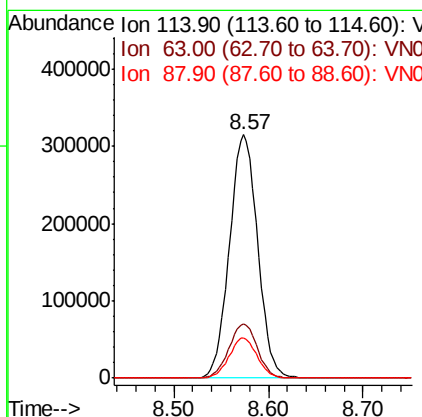
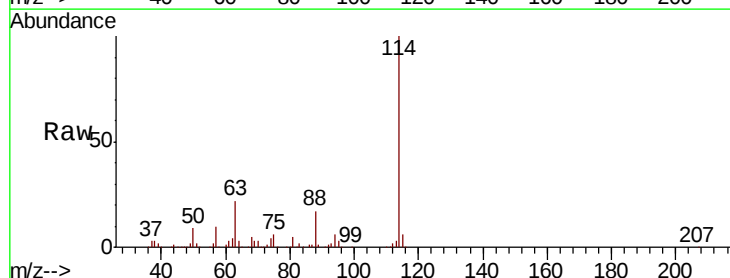
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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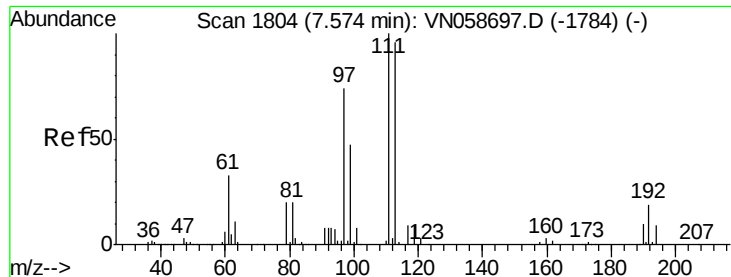
Tot Ion: 65 Resp: 304207  
 Ion Ratio Lower Upper  
 65 100  
 67 51.9 0.0 103.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2115  
 Delta R.T. -0.00 min  
 Lab File: VN058751.D  
 Acq: 14 Oct 2019 15:49

Tgt Ion: 114 Resp: 653355  
 Ion Ratio Lower Upper  
 114 100  
 63 22.2 0.0 43.8  
 88 16.5 0.0 32.0

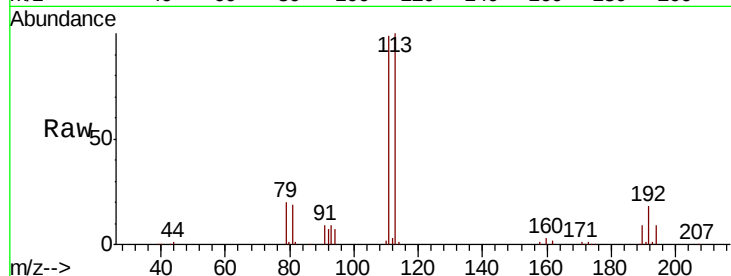




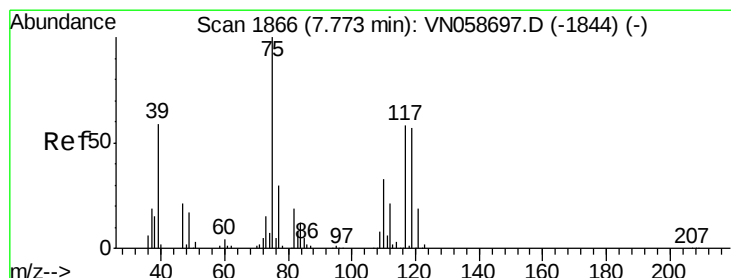
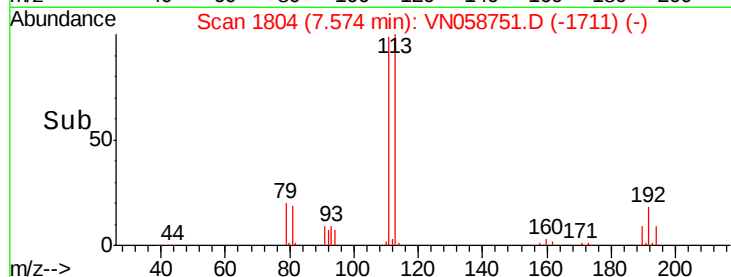
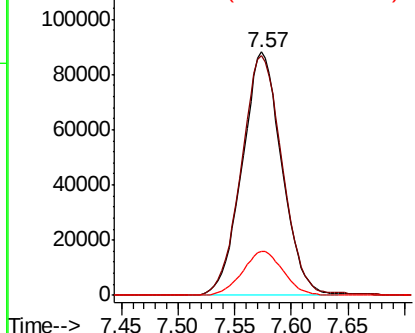
#35  
 Dibromofluoromethane  
 Concen: 53.138 ug/l  
 RT: 7.57 min Scan# 1804  
 Delta R.T. -0.00 min  
 Lab File: VN058751.D  
 Acq: 14 Oct 2019 15:49

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 20190891-FIELD-BLANK

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.3 | 82.3  | 123.5 |
| 192     | 18.6  | 15.0  | 22.6  |

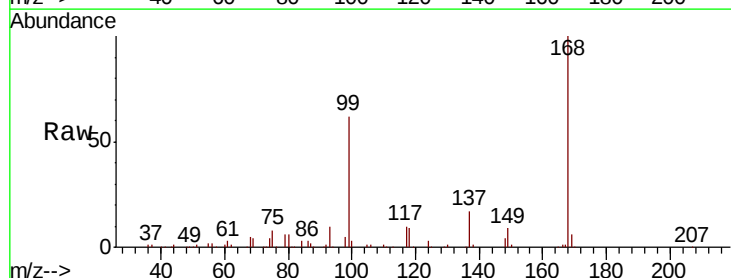


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

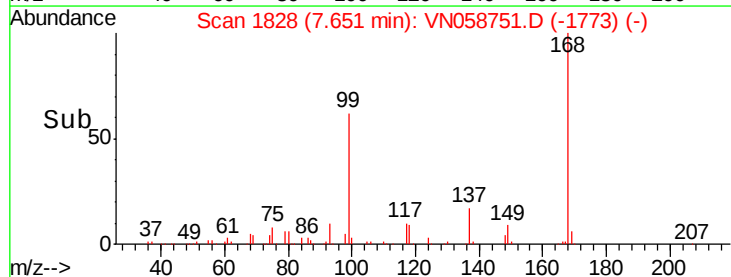
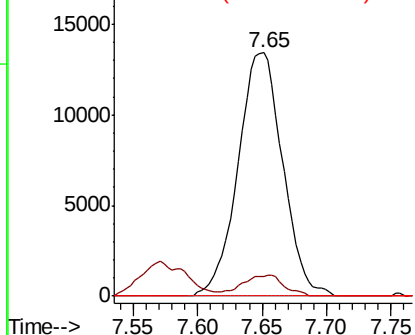


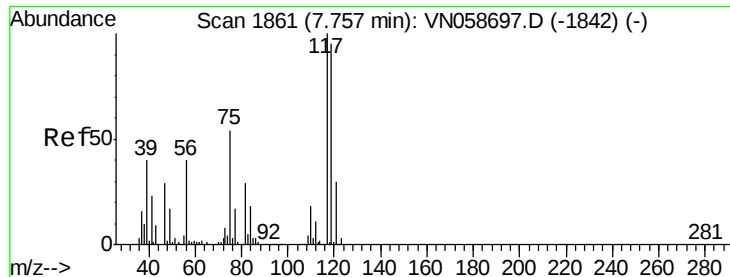
#36  
 1,1-Dichloropropene  
 Concen: 4.912 ug/l  
 RT: 7.65 min Scan# 1828  
 Delta R.T. -0.12 min  
 Lab File: VN058751.D  
 Acq: 14 Oct 2019 15:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.1   | 16.6  | 49.8# |
| 77      | 0.0   | 24.6  | 37.0# |



Abundance Ion 74.90 (74.60 to 75.60): VNO  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VNO





#38

Carbon Tetrachloride

Concen: 6.164 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. -0.11 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

MSVOA\_N

ClientSampleId :

20190891-FIELD-BLANK

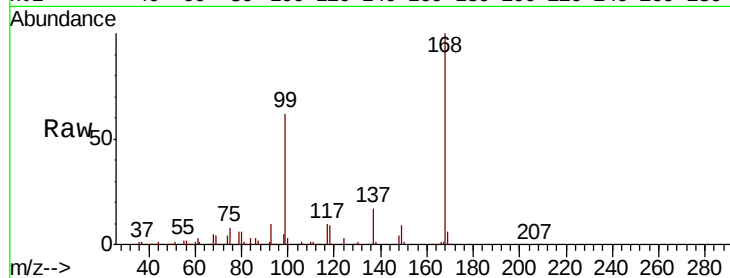
Tot Ion:117 Resp: 39686

Ion Ratio Lower Upper

117 100

119 4.3 75.7 113.5#

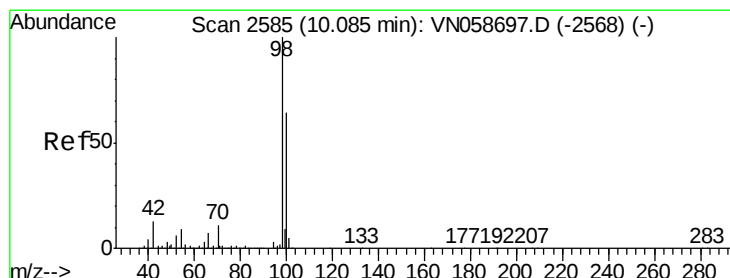
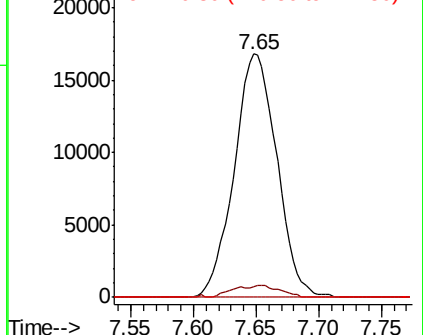
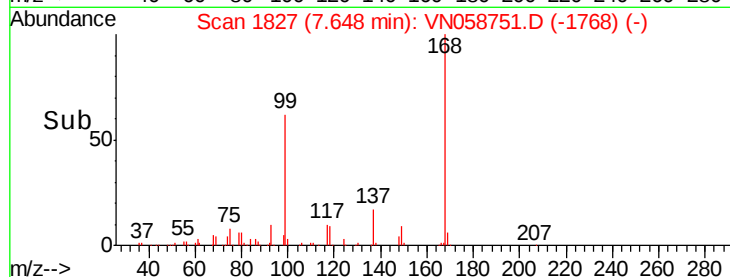
121 0.0 23.9 35.9#



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



#50

Toluene-d8

Concen: 49.063 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058751.D

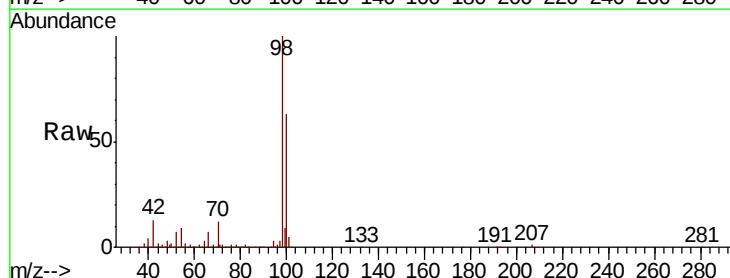
Acq: 14 Oct 2019 15:49

Tgt Ion: 98 Resp: 791777

Ion Ratio Lower Upper

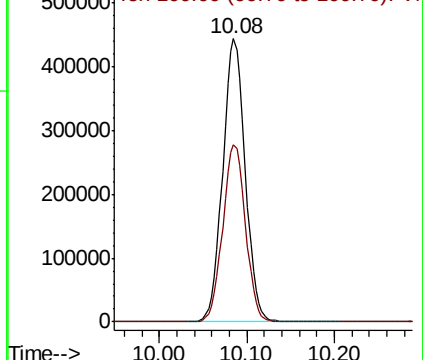
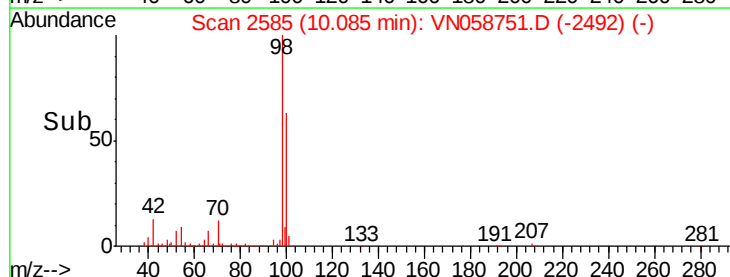
98 100

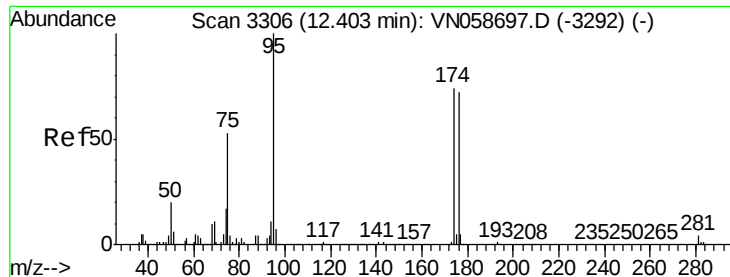
100 63.5 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN

Ion 100.00 (99.70 to 100.70): VN





#62

4-Bromofluorobenzene

Concen: 43.088 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

MSVOA\_N

ClientSampleId :

20190891-FIELD-BLANK

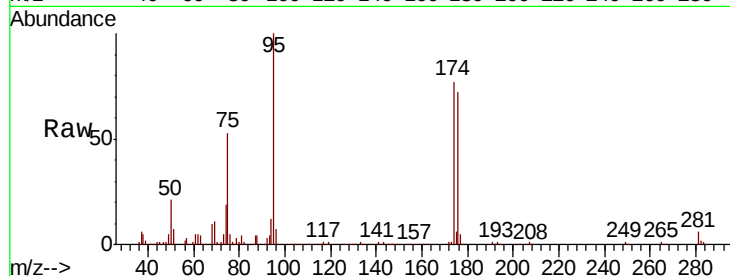
Tot Ion: 95 Resp: 263209

Ion Ratio Lower Upper

95 100

174 76.3 0.0 150.4

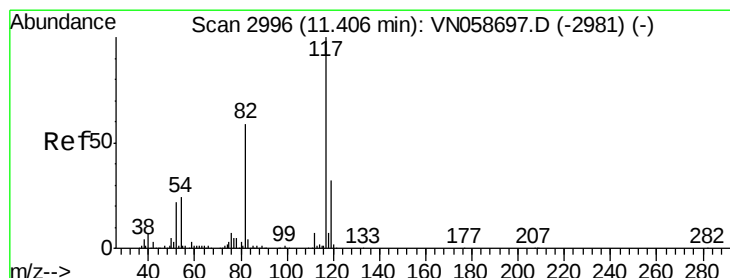
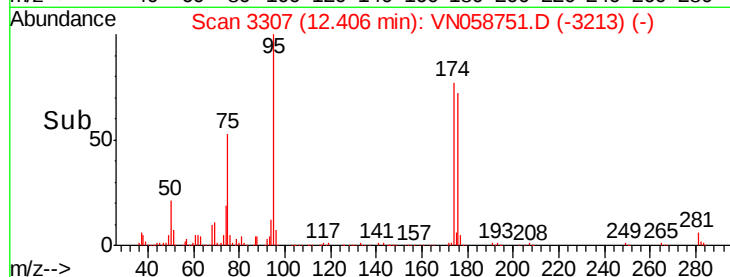
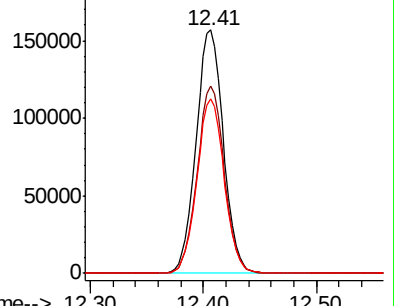
176 72.0 0.0 146.8



Abundance Ion 94.90 (94.60 to 95.60): VN058751.D (-3213) (-)

Ion 173.80 (173.50 to 174.50): VN058751.D (-3213) (-)

Ion 175.80 (175.50 to 176.50): VN058751.D (-3213) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

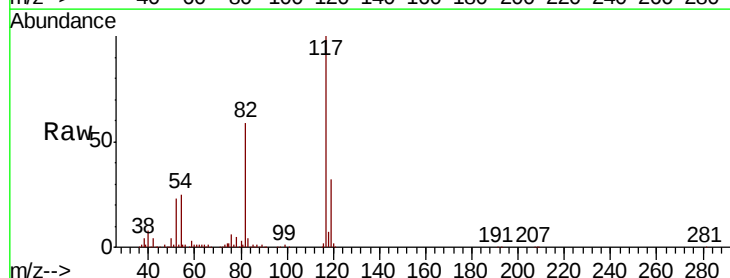
Tgt Ion: 117 Resp: 583093

Ion Ratio Lower Upper

117 100

82 58.6 47.0 70.4

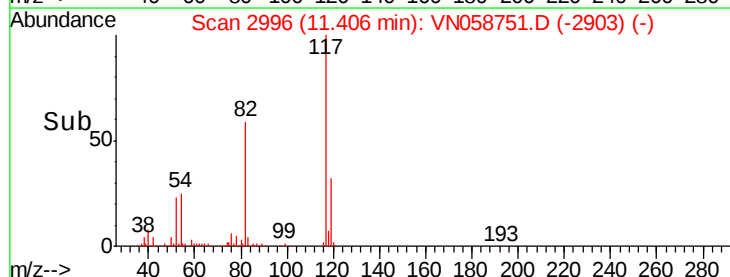
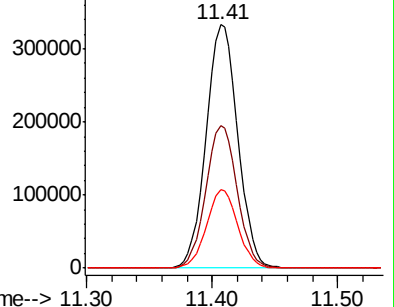
119 32.0 25.4 38.2

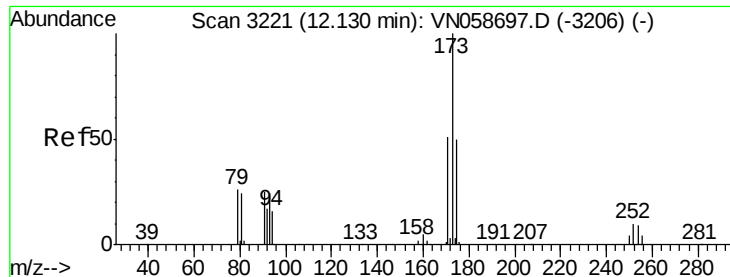


Abundance Ion 116.90 (116.60 to 117.60): VN058751.D (-2903) (-)

Ion 82.00 (81.70 to 82.70): VN058751.D (-2903) (-)

Ion 118.90 (118.60 to 119.60): VN058751.D (-2903) (-)





#71

Bromoform

Concen: 0.412 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.27 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

MSVOA\_N

ClientSampleId :

20190891-FIELD-BLANK

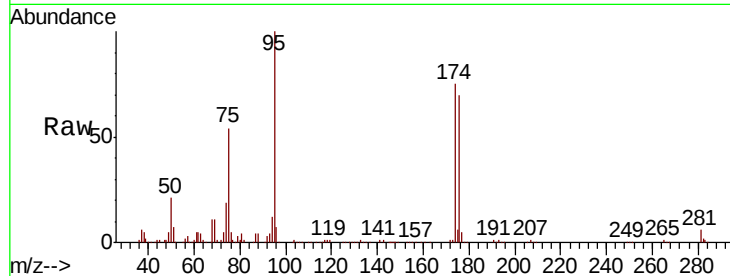
Tot Ion:173 Resp: 1322

Ion Ratio Lower Upper

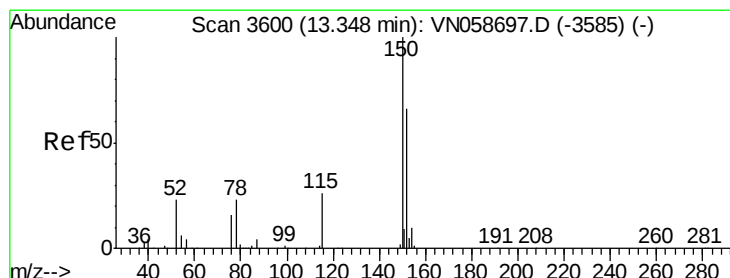
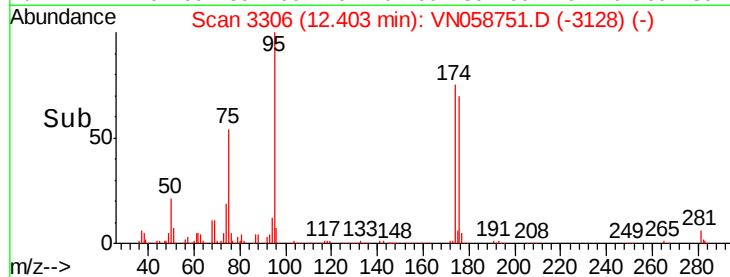
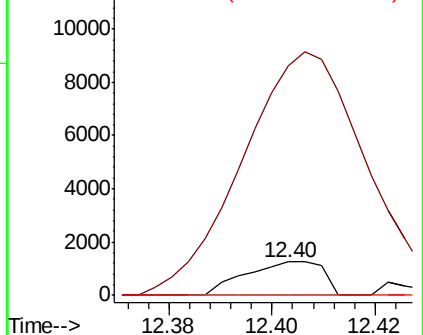
173 100

175 971.5 24.6 73.8#

254 0.0 0.1 0.1#



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: 13.35 min Scan# 3600

Delta R.T. -0.00 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

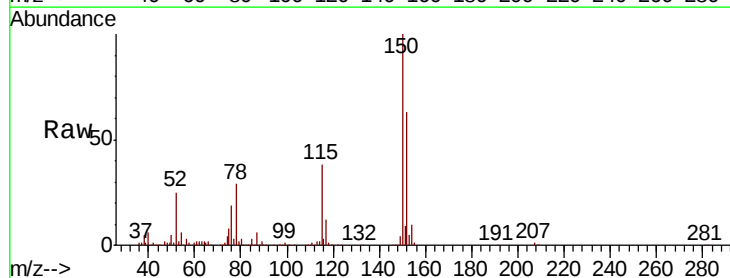
Tgt Ion:152 Resp: 234664

Ion Ratio Lower Upper

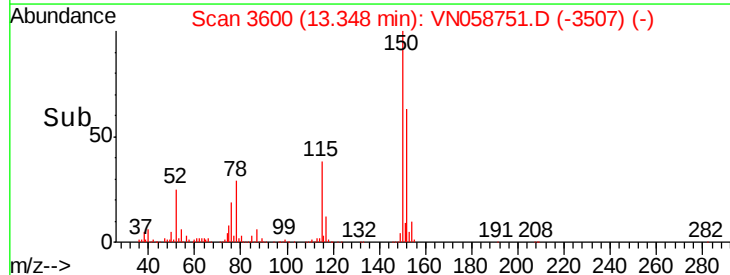
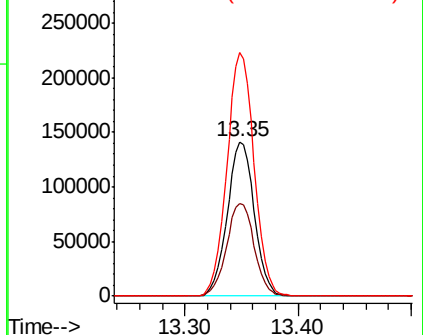
152 100

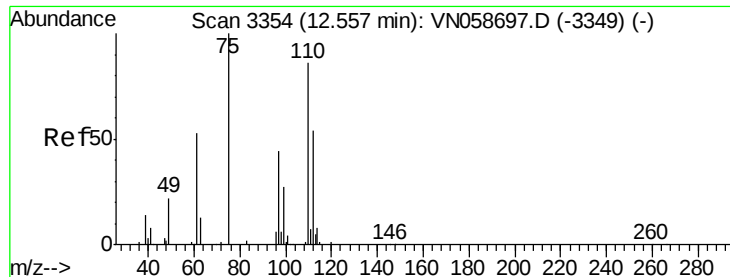
115 61.3 30.4 91.2

150 157.9 0.0 345.4



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





#76

1,2,3-Trichloropropane

Concen: 27.415 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

MSVOA\_N

ClientSampleId :

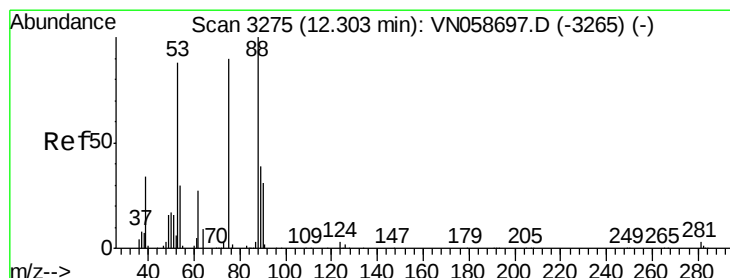
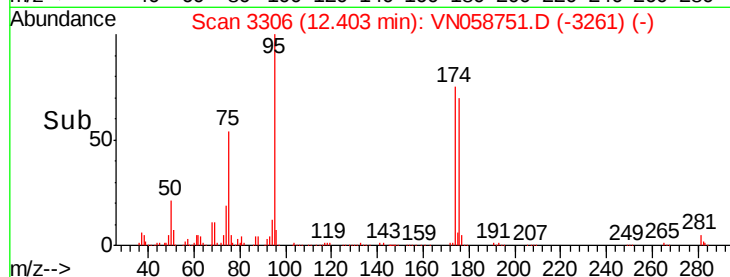
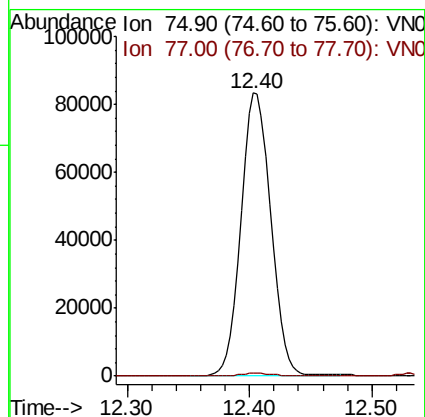
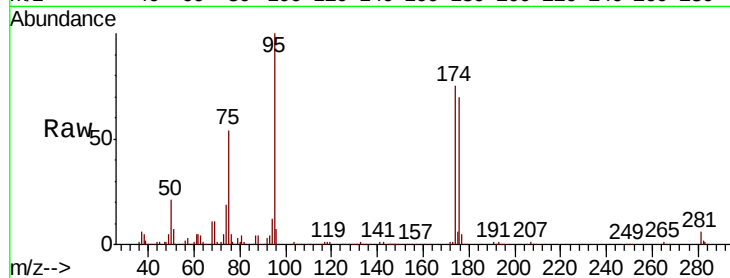
20190891-FIELD-BLANK

Tot Ion: 75 Resp: 141130

Ion Ratio Lower Upper

75 100

77 1.3 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 73.435 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

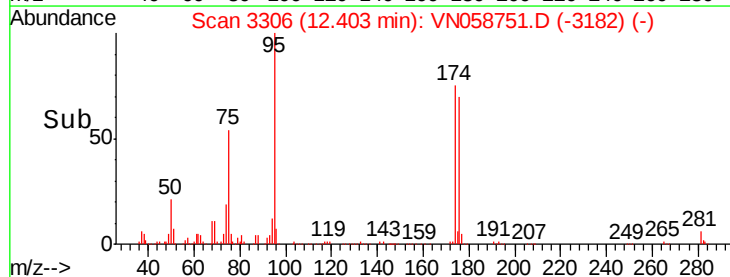
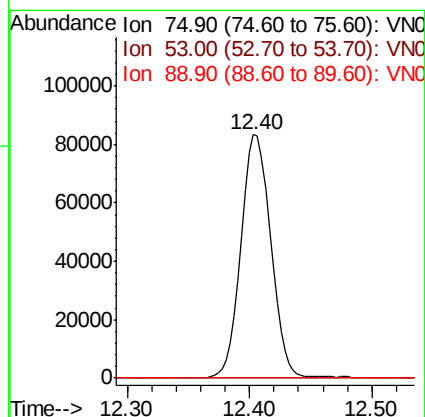
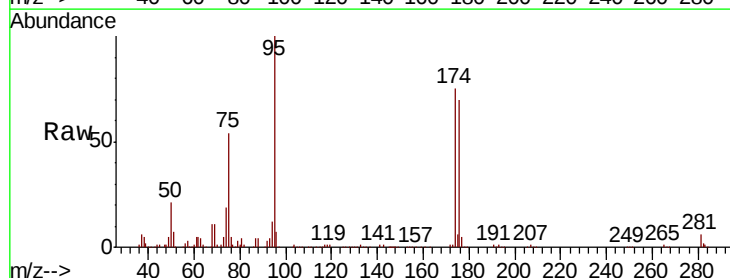
Tgt Ion: 75 Resp: 141130

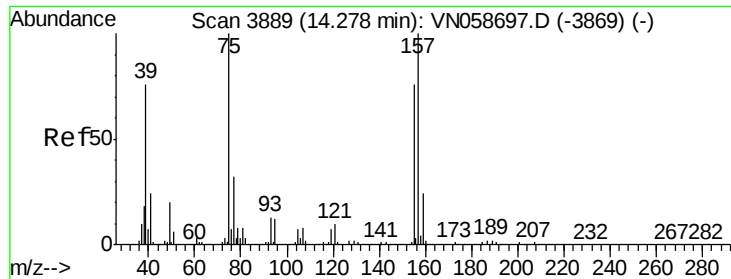
Ion Ratio Lower Upper

75 100

53 0.0 78.4 117.6#

89 0.0 34.9 52.3#

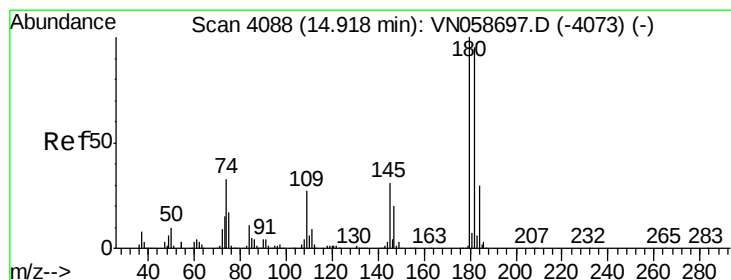
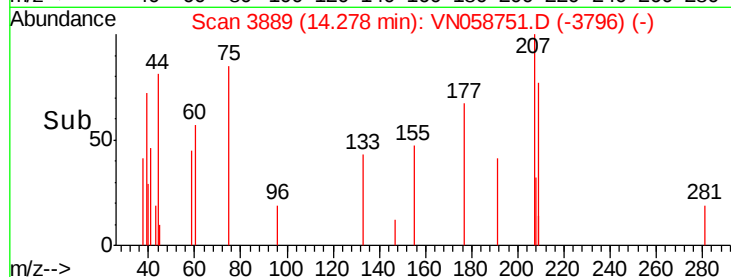
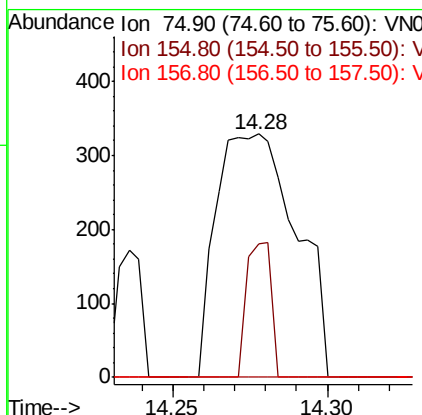
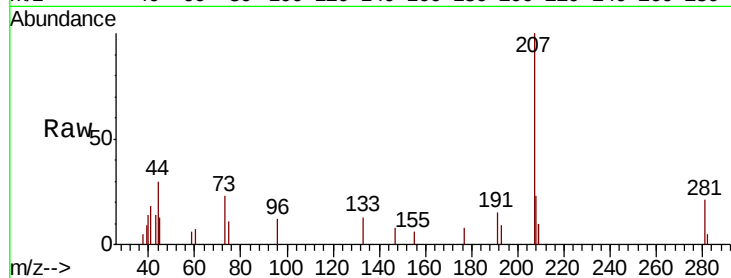




#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 0.453 ug/l  
 RT: 14.28 min Scan# 3889  
 Delta R.T. -0.00 min  
 Lab File: VN058751.D  
 Acq: 14 Oct 2019 15:49

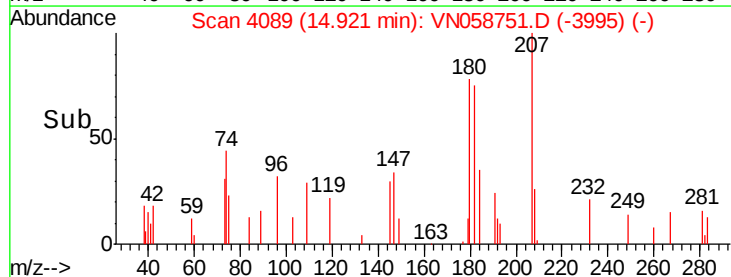
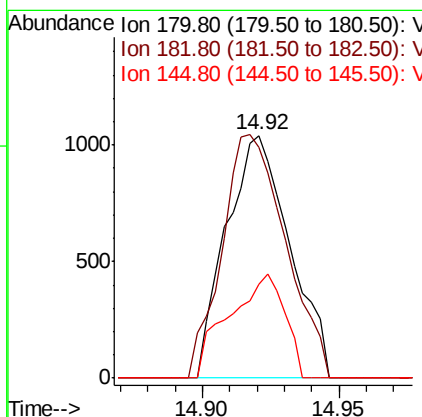
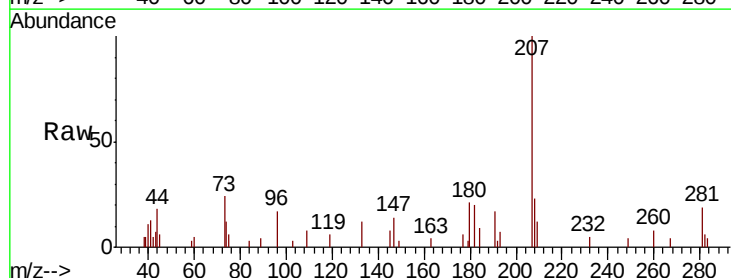
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 20190891-FIELD-BLANK

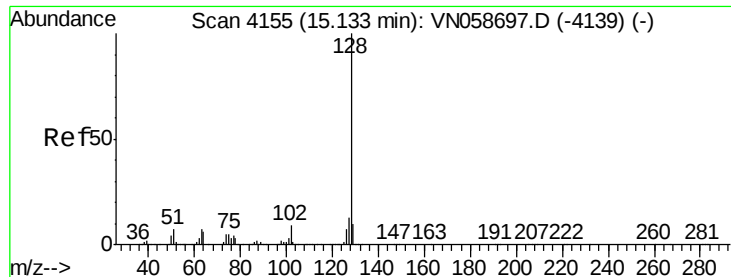
Tot Ion: 75 Resp: 593  
 Ion Ratio Lower Upper  
 75 100  
 155 17.0 37.9 113.6#  
 157 0.0 49.4 148.2#



#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.370 ug/l  
 RT: 14.92 min Scan# 4089  
 Delta R.T. 0.00 min  
 Lab File: VN058751.D  
 Acq: 14 Oct 2019 15:49

Tgt Ion:180 Resp: 1678  
 Ion Ratio Lower Upper  
 180 100  
 182 100.8 47.4 142.2  
 145 37.5 15.4 46.2





#95

Naphthalene

Concen: 0.568 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.00 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Instrument :

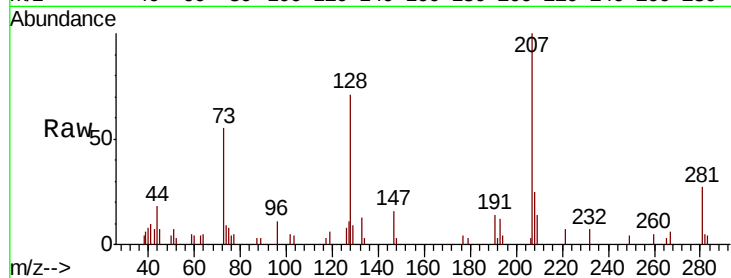
MSVOA\_N

ClientSampleId :

20190891-FIELD-BLANK

Tot Ion:128 Resp: 7405

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 128 | 100   |       |       |
| 127 | 13.4  | 10.2  | 15.4  |
| 129 | 10.6  | 8.5   | 12.7  |

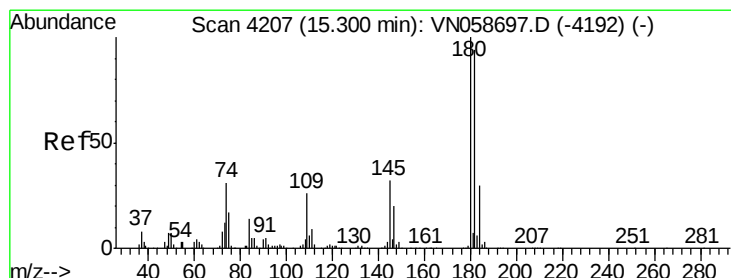
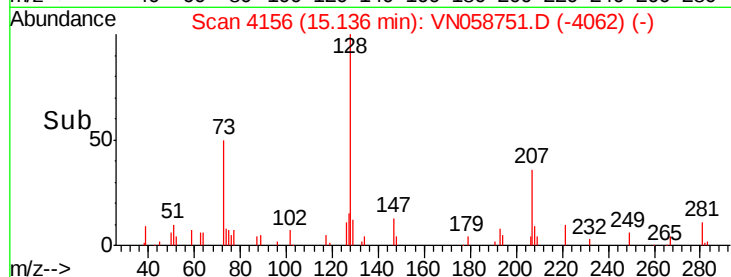
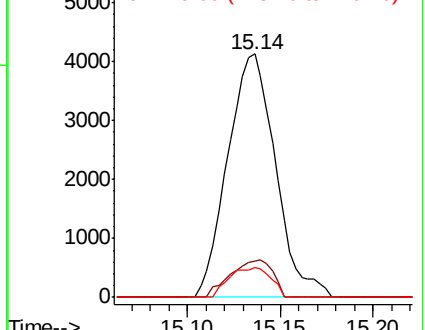


Abundance

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



#96

1,2,3-Trichlorobenzene

Concen: 0.432 ug/l

RT: 15.30 min Scan# 4207

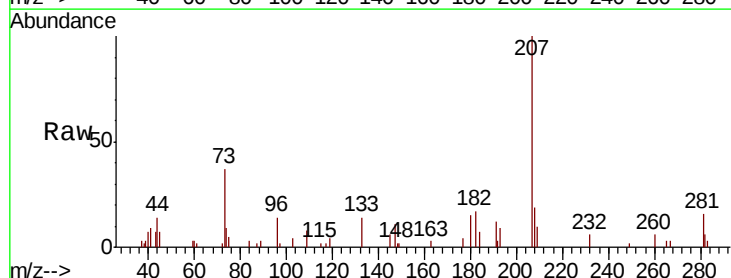
Delta R.T. -0.00 min

Lab File: VN058751.D

Acq: 14 Oct 2019 15:49

Tgt Ion:180 Resp: 1910

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 180 | 100   |       |       |
| 182 | 108.4 | 47.3  | 142.0 |
| 145 | 32.7  | 16.2  | 48.6  |



Abundance

Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

