

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX092520\  
 Data File : VX018592.D  
 Acq On : 25 Sep 2020 11:33  
 Operator : JC/SP  
 Sample : L4145-01  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 CTB-WEST-(MANHOLE-1)

Quant Time: Sep 25 13:48:04 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\624X090420W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 04 12:13:41 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.00  | 128  | 87081    | 30.00 | ug/l  | 0.02     |
| 28) 1,4-Difluorobenzene | 6.84  | 114  | 1445718  | 30.00 | ug/l  | 0.01     |
| 57) Chlorobenzene-d5    | 10.10 | 117  | 1375307  | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 27) 1,2-Dichloroethane-d4 | 6.04   | 65    | 623728   | 90.79    | ug/l | 0.01     |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 302.63%# |
| 60) 4-Bromofluorobenzene  | 11.12  | 95    | 667055   | 27.98    | ug/l | 0.00     |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 93.27%   |
| 63) Toluene-d8            | 8.70   | 98    | 1737258  | 28.66    | ug/l | 0.00     |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 95.53%   |

## Target Compounds

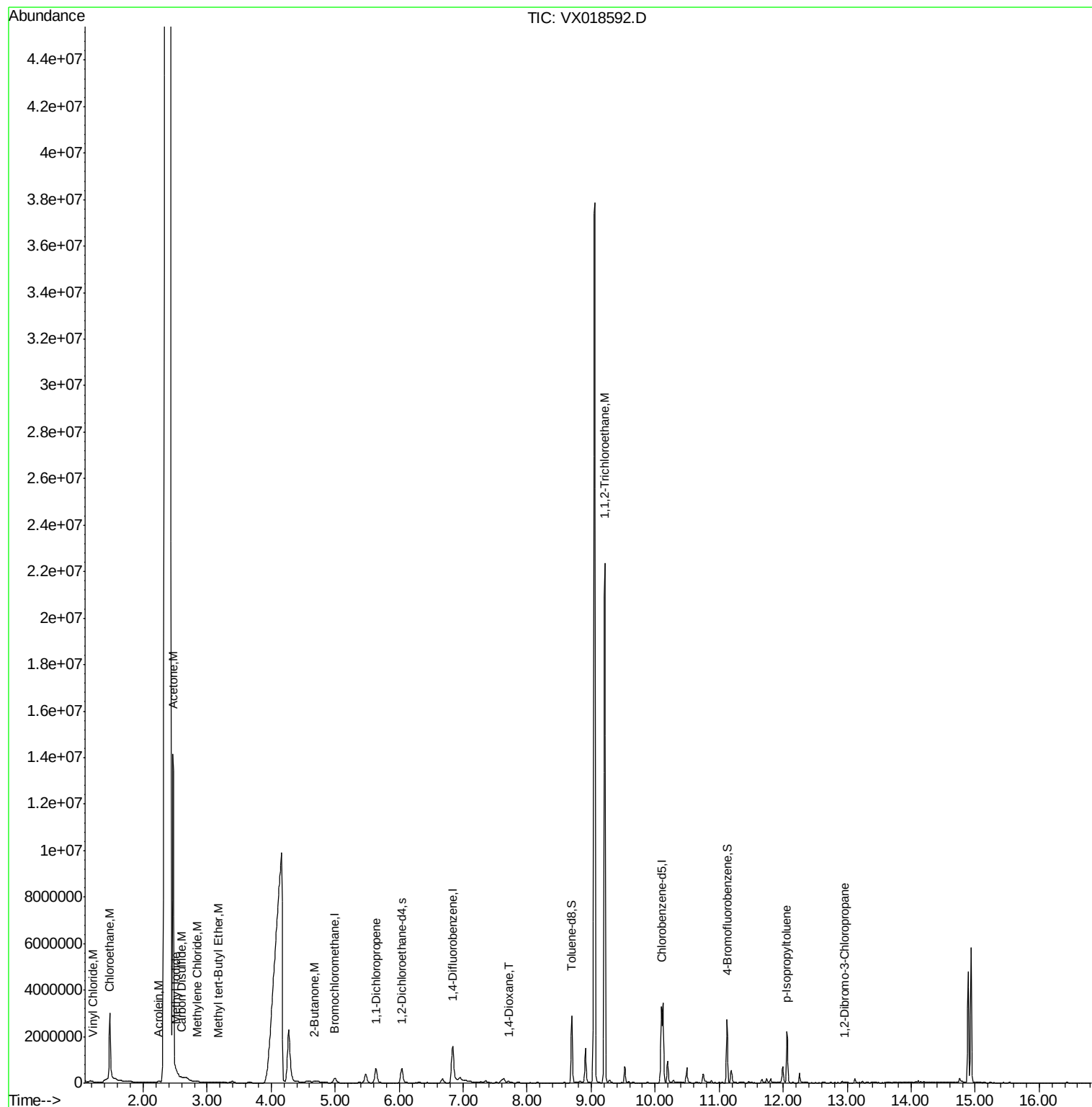
|                                |       |     |         |          | Qvalue    |
|--------------------------------|-------|-----|---------|----------|-----------|
| 4) Vinyl Chloride              | 1.22  | 62  | 1484    | 0.288    | ug/l 100  |
| 6) Chloroethane                | 1.47  | 64  | 460139  | 146.892  | ug/l # 49 |
| 11) Methyl Iodide              | 2.51  | 142 | 1544    | 7.788    | ug/l # 60 |
| 13) Acrolein                   | 2.24  | 56  | 524     | 1.126    | ug/l 95   |
| 15) Acetone                    | 2.46  | 58  | 5724661 | 8058.505 | ug/l 74   |
| 16) Carbon Disulfide           | 2.60  | 76  | 84652   | 6.637    | ug/l 97   |
| 18) Methylene Chloride         | 2.84  | 84  | 2434    | 0.473    | ug/l # 69 |
| 24) Methyl tert-Butyl Ether    | 3.17  | 73  | 3470    | 0.223    | ug/l # 73 |
| 29) 1,1-Dichloropropene        | 5.64  | 75  | 43375   | 1.965    | ug/l 47   |
| 30) 2-Butanone                 | 4.68  | 43  | 40747   | 3.372    | ug/l # 58 |
| 45) 1,4-Dioxane                | 7.71  | 88  | 195     | 0.603    | ug/l # 1  |
| 50) 1,1,2-Trichloroethane      | 9.21  | 97  | 8495    | 0.500    | ug/l # 1  |
| 82) p-Isopropyltoluene         | 12.05 | 119 | 69728   | 0.993    | ug/l 98   |
| 88) 1,2-Dibromo-3-Chloropropan | 12.96 | 75  | 2125    | 0.331    | ug/l # 7  |

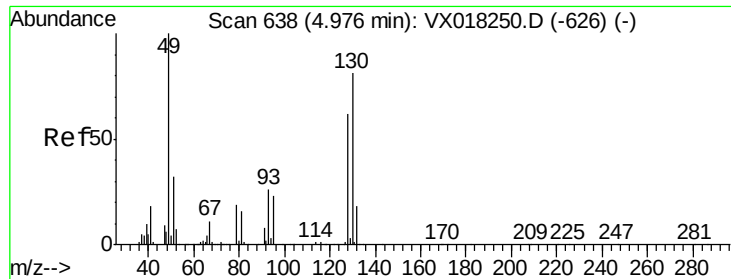
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_X  
ClientSampleId :  
CTB-WEST-(MANHOLE-1)

Quant Time: Sep 25 13:48:04 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\624X090420W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Fri Sep 04 12:13:41 2020  
Response via : Initial Calibration

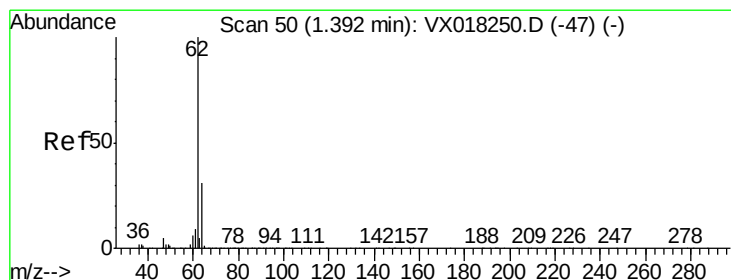
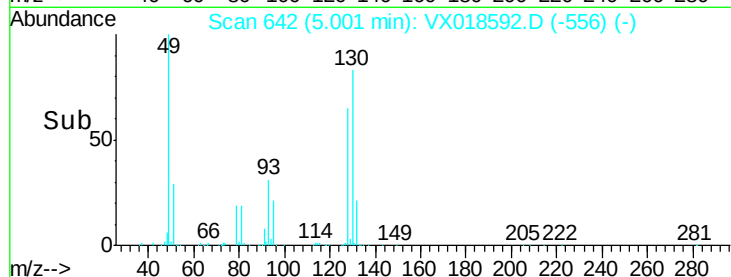
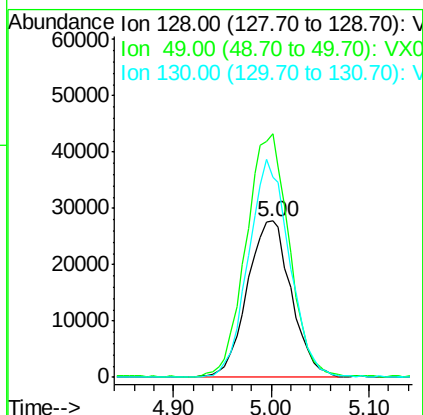
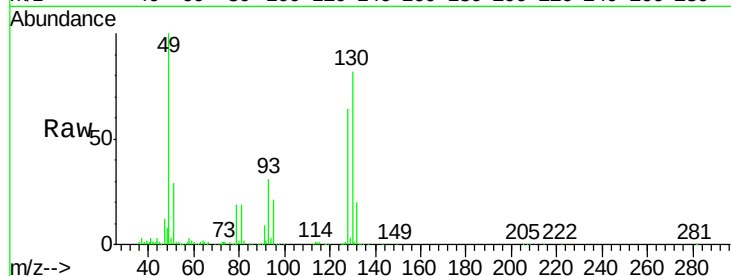




#1  
 Bromochloromethane  
 Concen: 30.000 ug/l  
 RT: 5.00 min Scan# 642  
 Delta R.T. 0.02 min  
 Lab File: VX018592.D  
 Acq: 25 Sep 2020 11:33

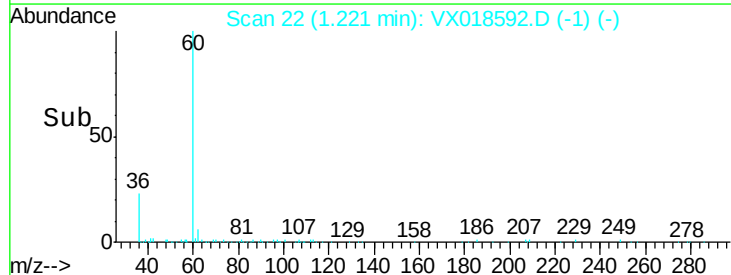
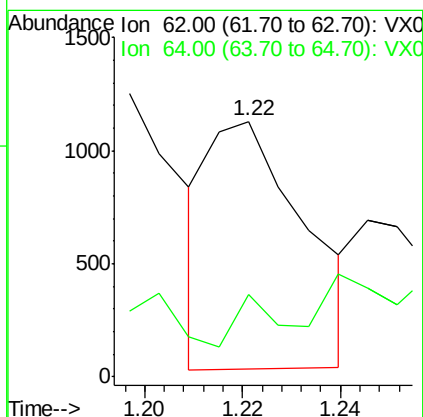
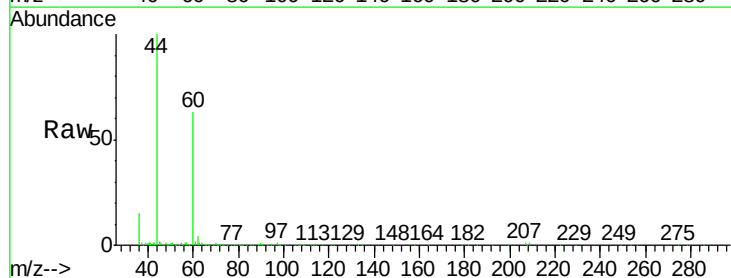
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 CTB-WEST-(MANHOLE-1)

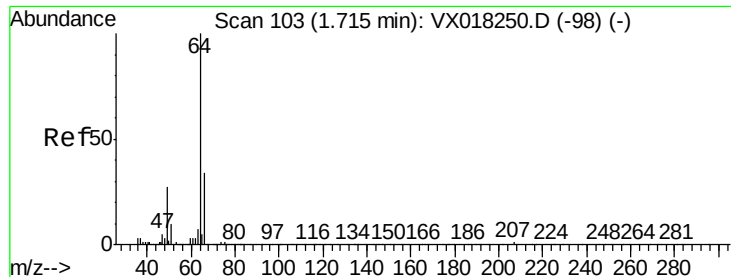
Tgt Ion: 128 Resp: 87081  
 Ion Ratio Lower Upper  
 128 100  
 49 151.8 0.0 392.0  
 130 130.1 0.0 320.2



#4  
 Vinyl Chloride  
 Concen: 0.288 ug/l  
 RT: 1.22 min Scan# 22  
 Delta R.T. -0.17 min  
 Lab File: VX018592.D  
 Acq: 25 Sep 2020 11:33

Tgt Ion: 62 Resp: 1484  
 Ion Ratio Lower Upper  
 62 100  
 64 31.4 25.2 37.8





#6

Chloroethane

Concen: 146.892 ug/l

RT: 1.47 min Scan# 62

Delta R.T. -0.25 min

Lab File: VX018592.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_X

ClientSampleId :

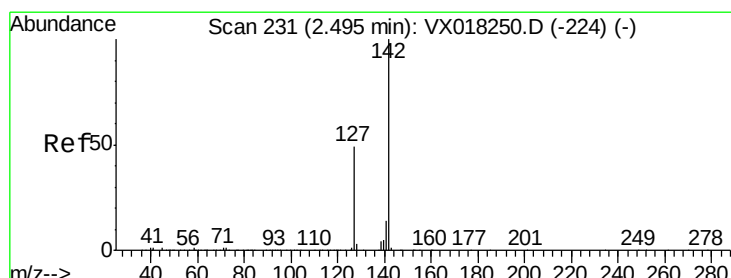
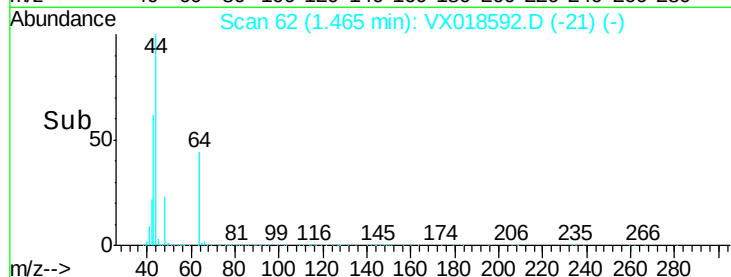
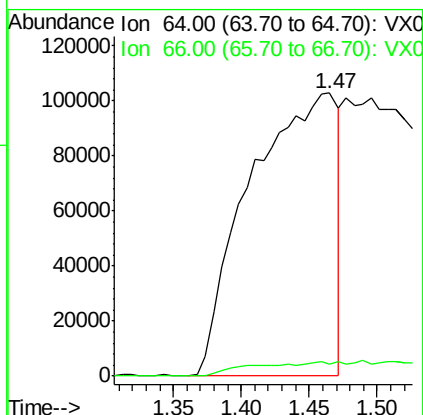
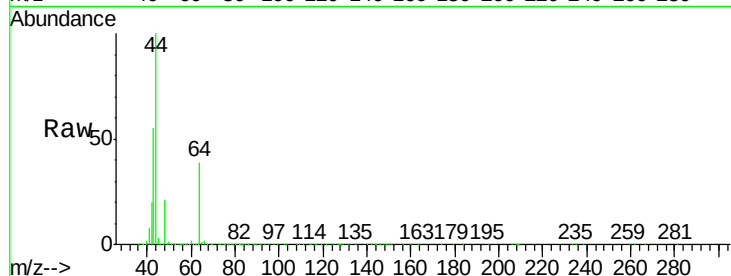
CTB-WEST-(MANHOLE-1)

Tgt Ion: 64 Resp: 460139

Ion Ratio Lower Upper

64 100

66 4.5 27.0 40.4#



#11

Methyl Iodide

Concen: 7.788 ug/l

RT: 2.51 min Scan# 234

Delta R.T. 0.02 min

Lab File: VX018592.D

Acq: 25 Sep 2020 11:33

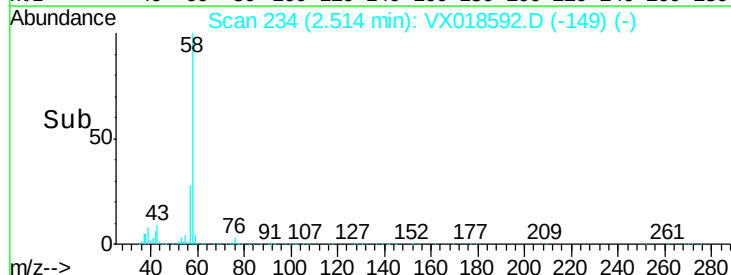
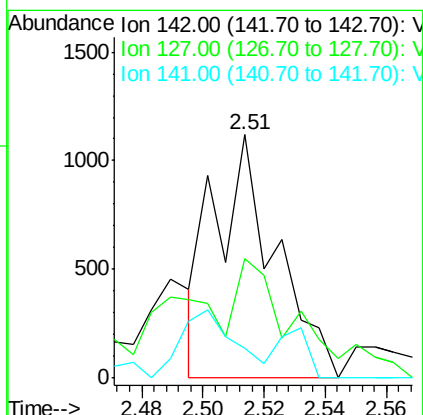
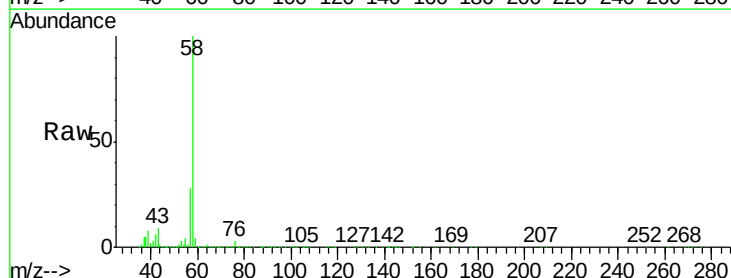
Tgt Ion: 142 Resp: 1544

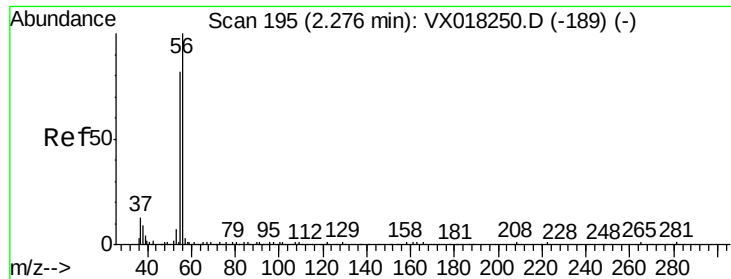
Ion Ratio Lower Upper

142 100

127 35.3 24.6 74.0

141 58.2 7.0 21.0#

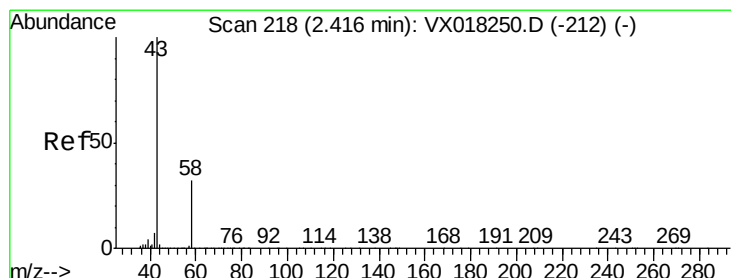
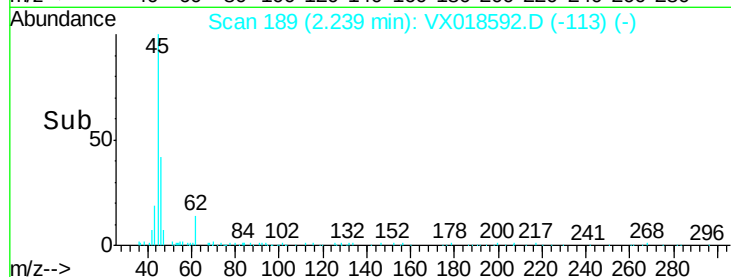
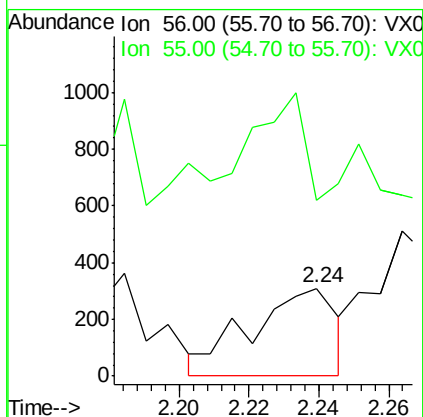
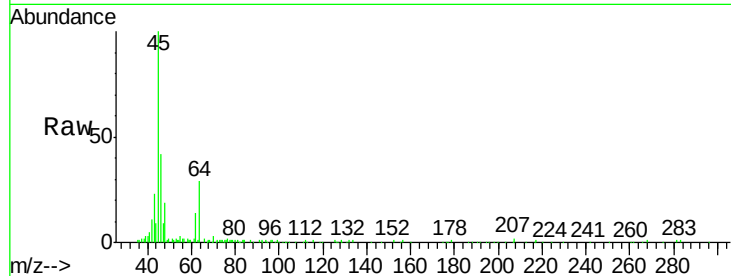




#13  
Acrolein  
Concen: 1.126 ug/l  
RT: 2.24 min Scan# 189  
Delta R.T. -0.04 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

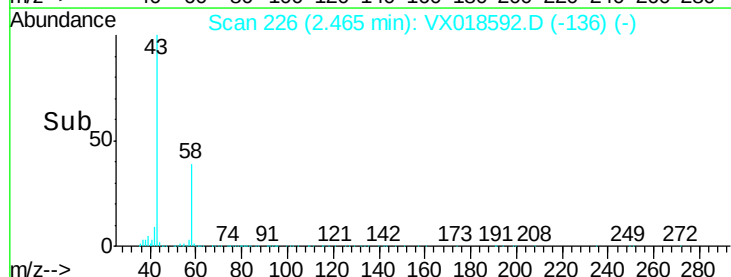
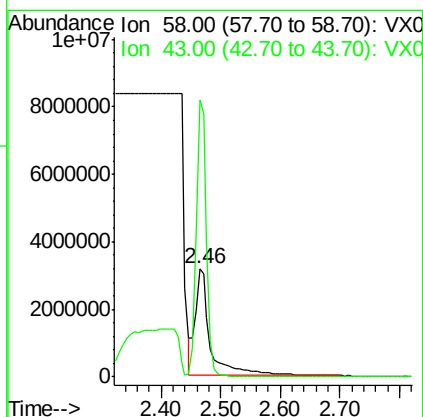
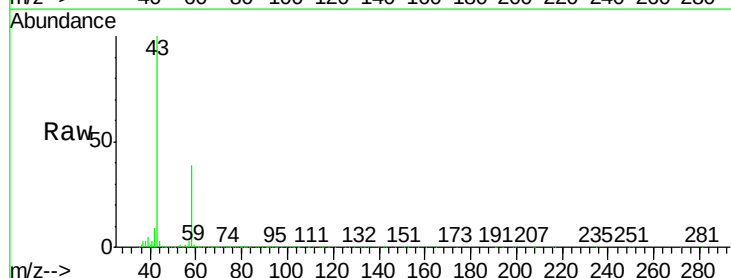
Instrument :  
MSVOA\_X  
ClientSampleId :  
CTB-WEST-(MANHOLE-1)

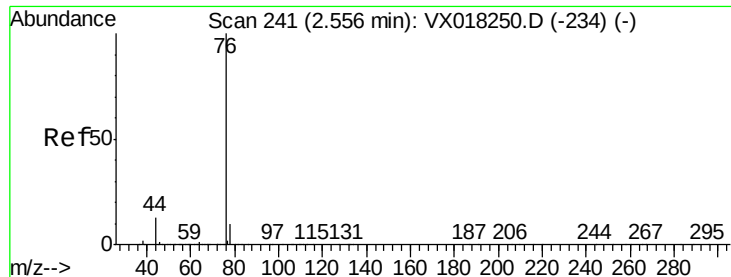
Tgt Ion: 56 Resp: 524  
Ion Ratio Lower Upper  
56 100  
55 70.2 59.7 89.5



#15  
Acetone  
Concen: 8058.505 ug/l  
RT: 2.46 min Scan# 226  
Delta R.T. 0.05 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 58 Resp: 5724661  
Ion Ratio Lower Upper  
58 100  
43 258.2 248.2 372.2





#16

Carbon Disulfide

Concen: 6.637 ug/l

RT: 2.60 min Scan# 248

Delta R.T. 0.04 min

Lab File: VX018592.D

Acq: 25 Sep 2020 11:33

Instrument :

MSVOA\_X

ClientSampleId :

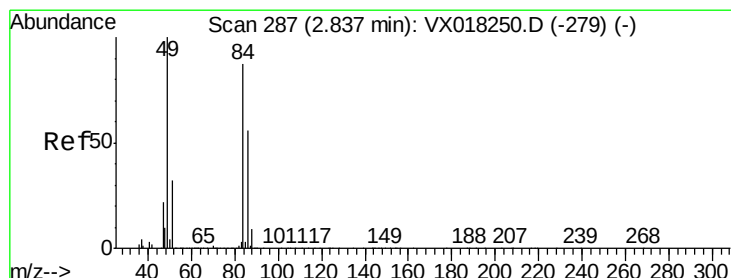
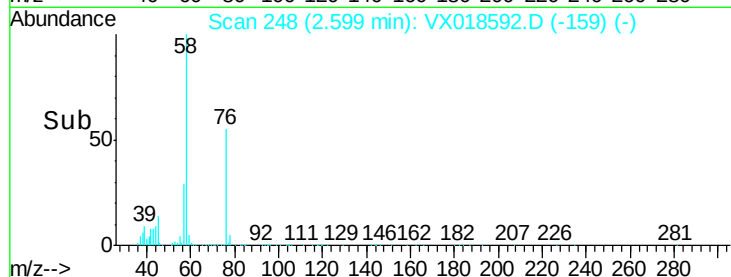
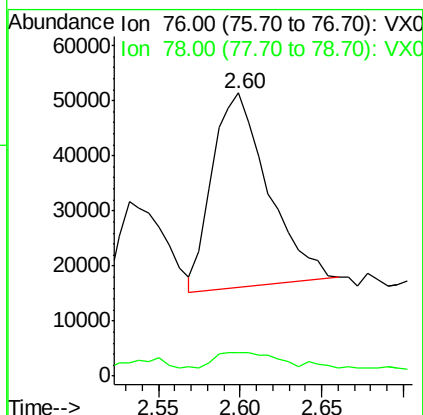
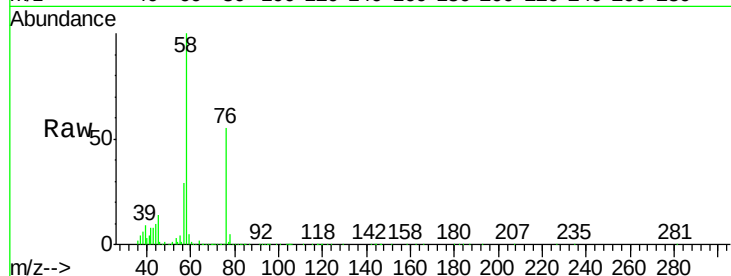
CTB-WEST-(MANHOLE-1)

Tgt Ion: 76 Resp: 84652

Ion Ratio Lower Upper

76 100

78 8.4 7.8 11.6



#18

Methylene Chloride

Concen: 0.473 ug/l

RT: 2.84 min Scan# 288

Delta R.T. 0.01 min

Lab File: VX018592.D

Acq: 25 Sep 2020 11:33

Tgt Ion: 84 Resp: 2434

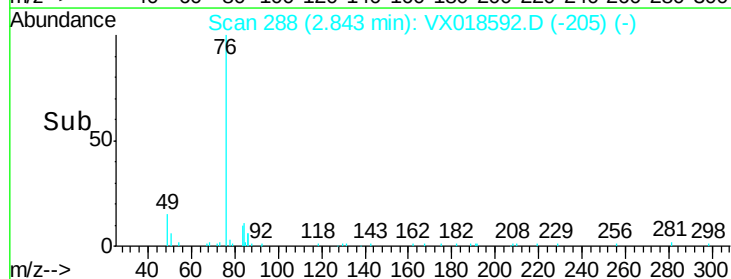
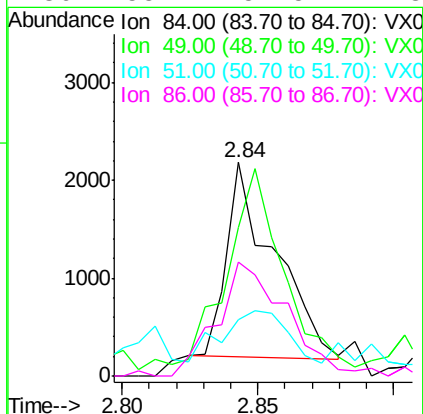
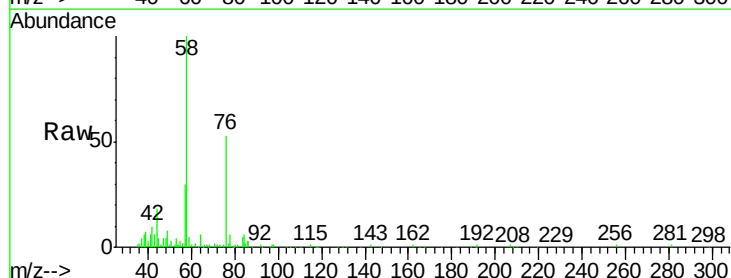
Ion Ratio Lower Upper

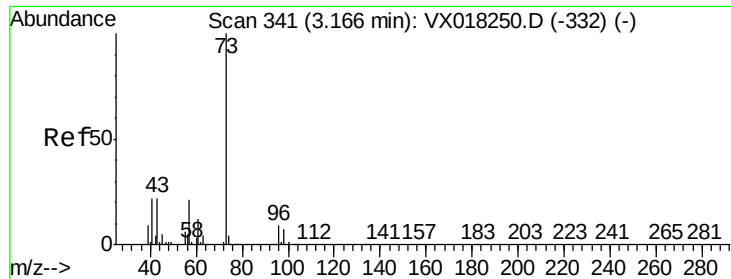
84 100

49 67.0 91.6 137.4#

51 21.7 29.4 44.0#

86 55.1 51.5 77.3

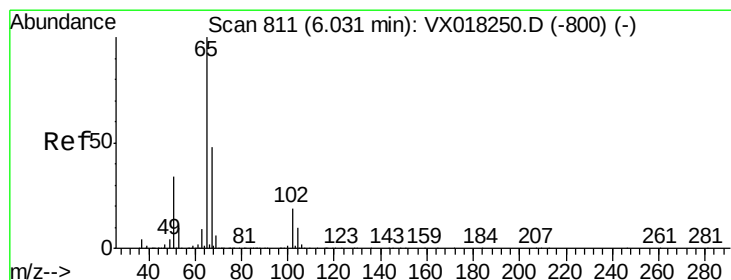
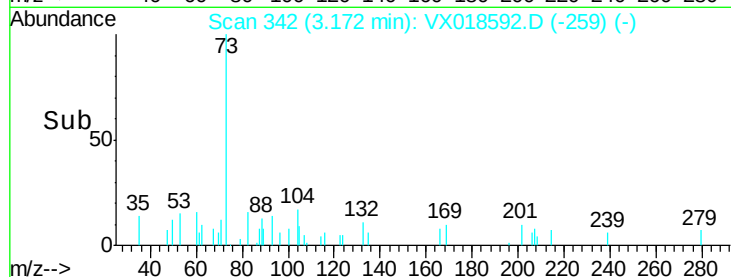
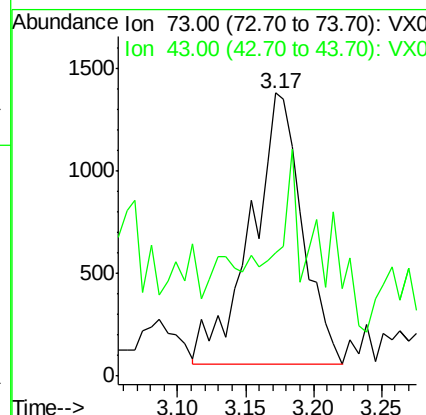
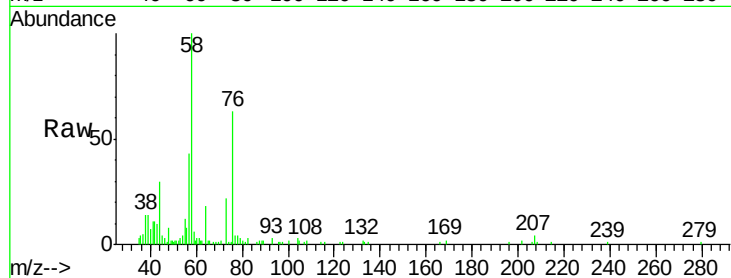




#24  
Methyl tert-Butyl Ether  
Concen: 0.223 ug/l  
RT: 3.17 min Scan# 342  
Delta R.T. 0.01 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

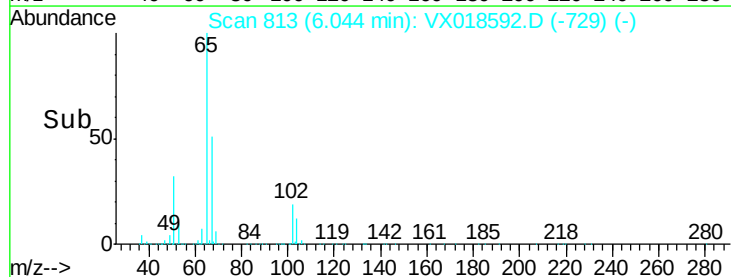
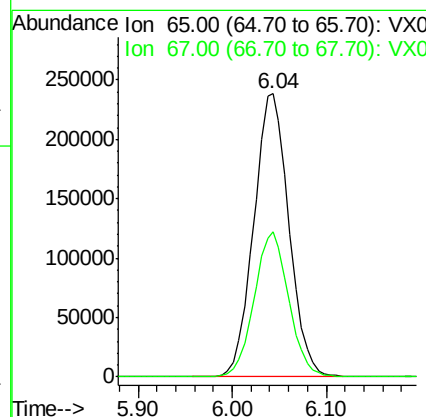
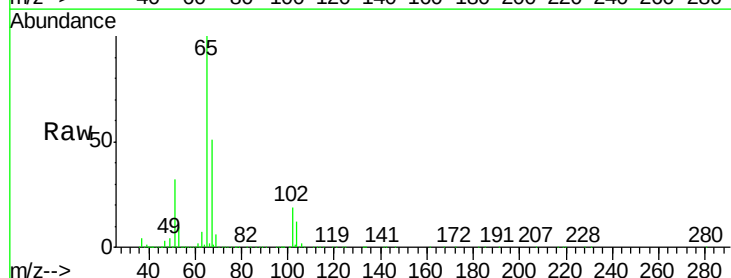
Instrument :  
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CTB-WEST-(MANHOLE-1)

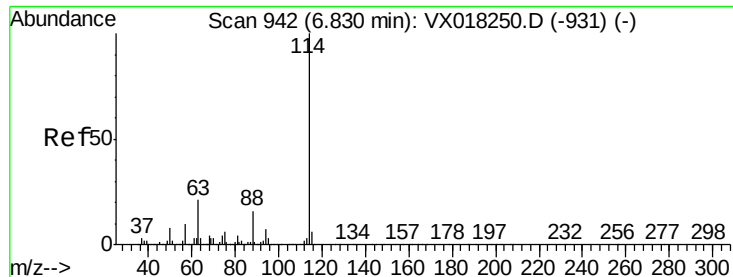
Tgt Ion: 73 Resp: 3470  
Ion Ratio Lower Upper  
73 100  
43 9.2 17.8 26.6#



#27  
1,2-Dichloroethane-d4  
Concen: 90.788 ug/l  
RT: 6.04 min Scan# 813  
Delta R.T. 0.01 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 65 Resp: 623728  
Ion Ratio Lower Upper  
65 100  
67 50.3 39.9 59.9

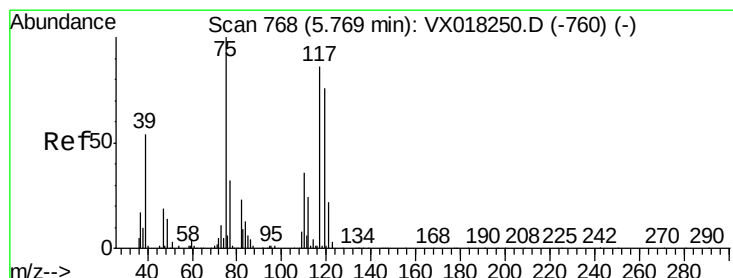
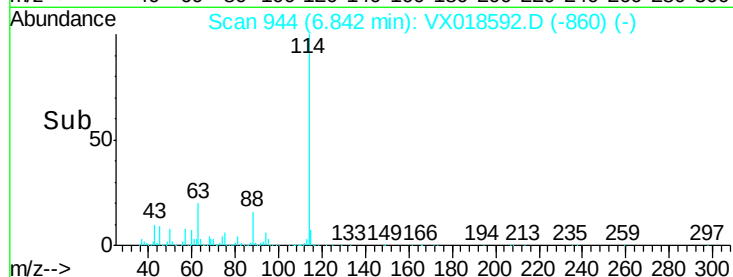
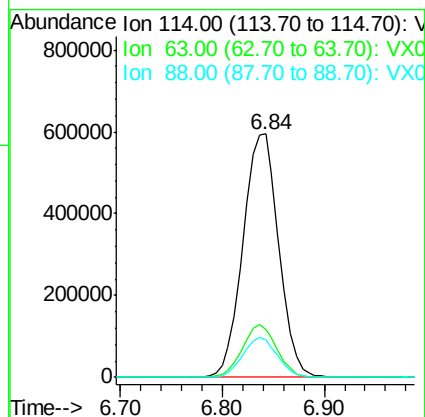
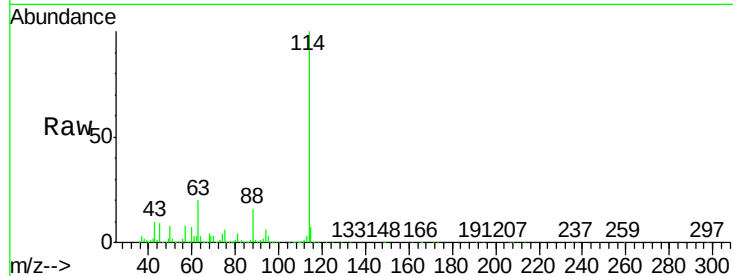




#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 6.84 min Scan# 944  
 Delta R.T. 0.01 min  
 Lab File: VX018592.D  
 Acq: 25 Sep 2020 11:33

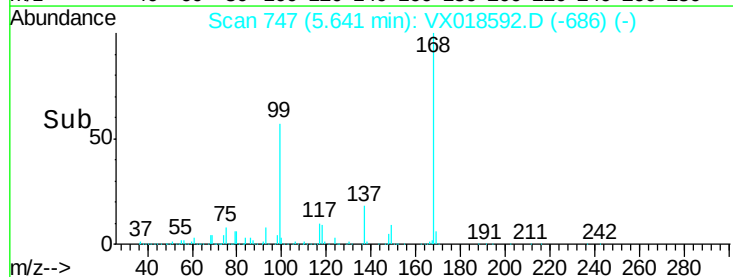
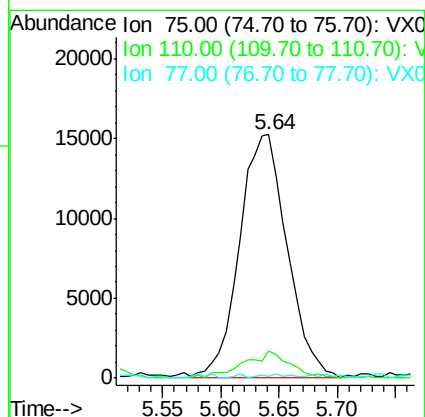
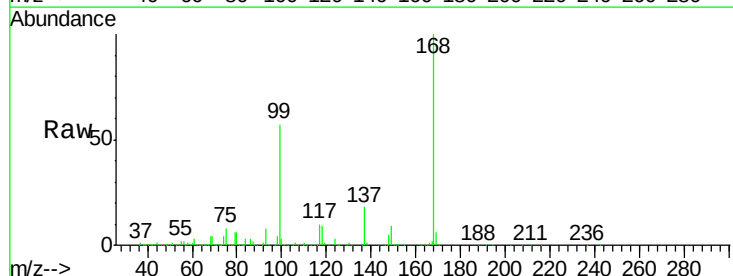
Instrument :  
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 CTB-WEST-(MANHOLE-1)

Tgt Ion:114 Resp: 1445718  
 Ion Ratio Lower Upper  
 114 100  
 63 20.8 16.7 25.1  
 88 15.9 12.6 18.8

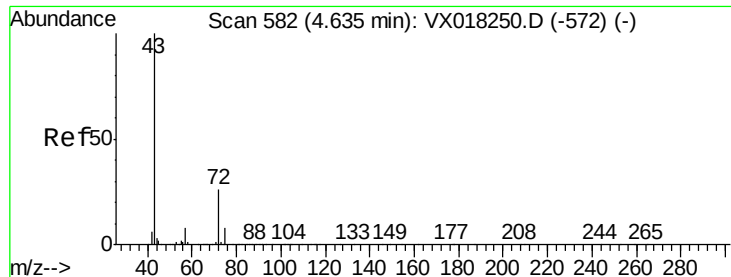


#29  
 1,1-Dichloropropene  
 Concen: 1.965 ug/l  
 RT: 5.64 min Scan# 747  
 Delta R.T. -0.13 min  
 Lab File: VX018592.D  
 Acq: 25 Sep 2020 11:33

Tgt Ion: 75 Resp: 43375  
 Ion Ratio Lower Upper  
 75 100  
 110 5.8 0.0 72.2  
 77 0.9 0.0 61.0



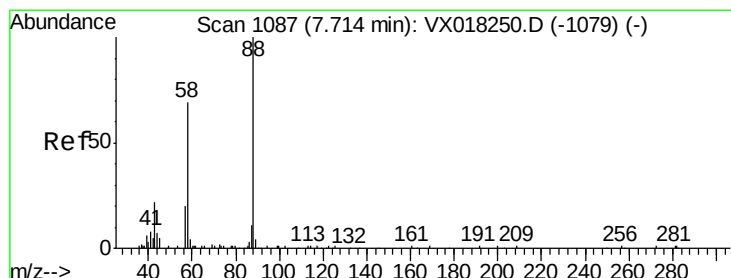
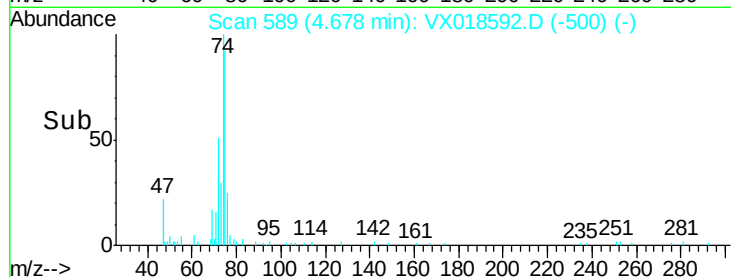
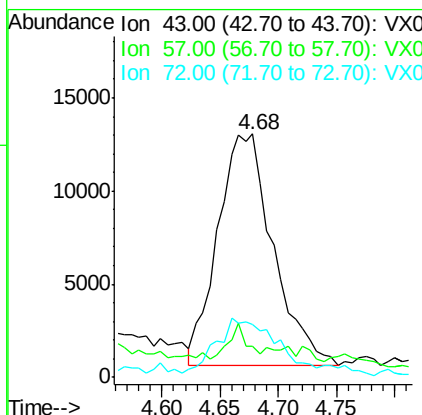
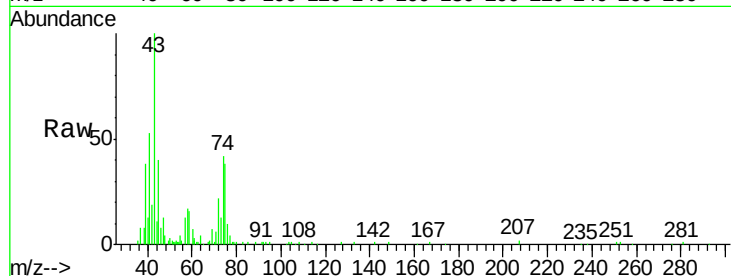




#30  
2-Butanone  
Concen: 3.372 ug/l  
RT: 4.68 min Scan# 589  
Delta R.T. 0.04 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

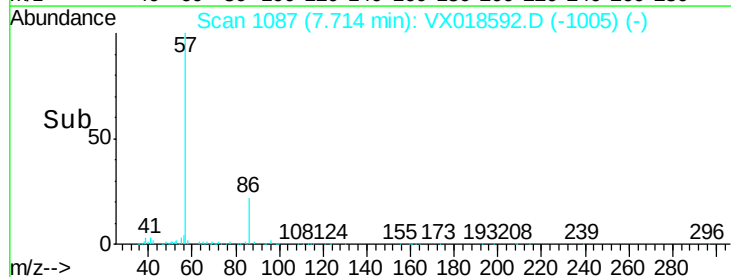
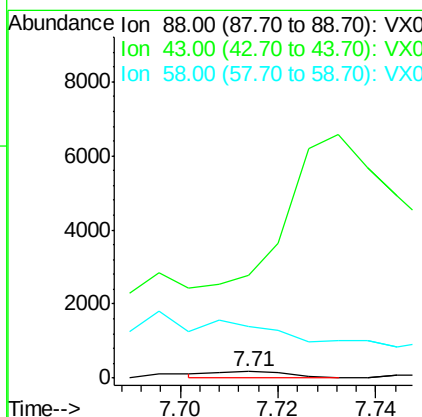
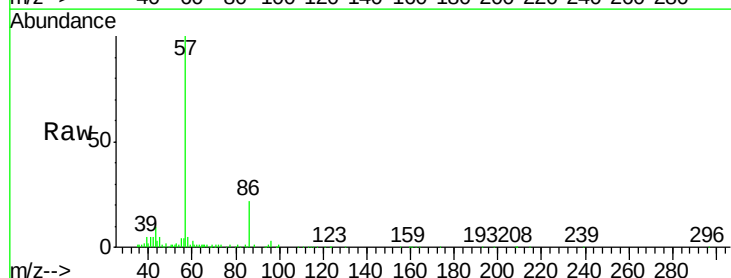
Instrument :  
MSVOA\_X  
ClientSampleId :  
CTB-WEST-(MANHOLE-1)

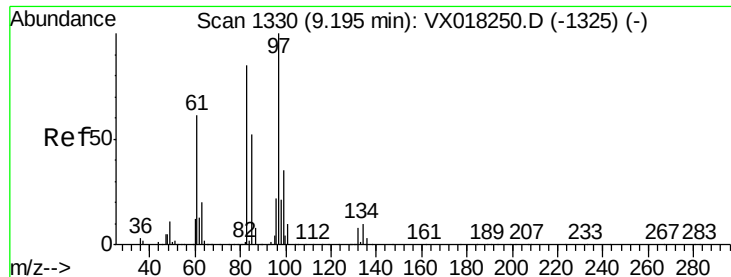
Tgt Ion: 43 Resp: 40747  
Ion Ratio Lower Upper  
43 100  
57 1.1 6.7 10.1#  
72 0.0 20.0 30.0#



#45  
1,4-Dioxane  
Concen: 0.603 ug/l  
RT: 7.71 min Scan# 1087  
Delta R.T. 0.00 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 88 Resp: 195  
Ion Ratio Lower Upper  
88 100  
43 126.7 13.6 20.4#  
58 279.5 58.2 87.4#

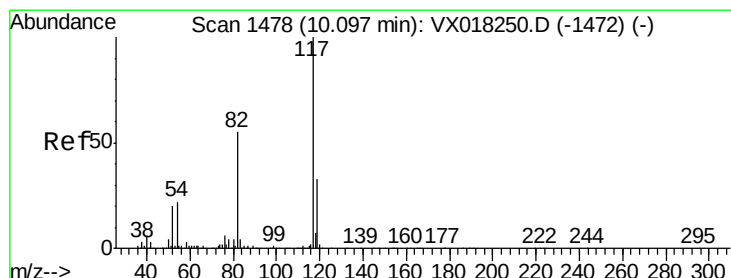
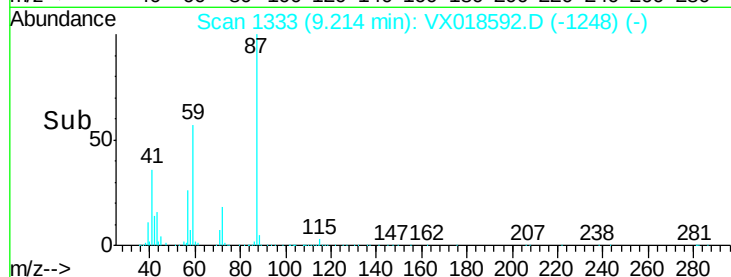
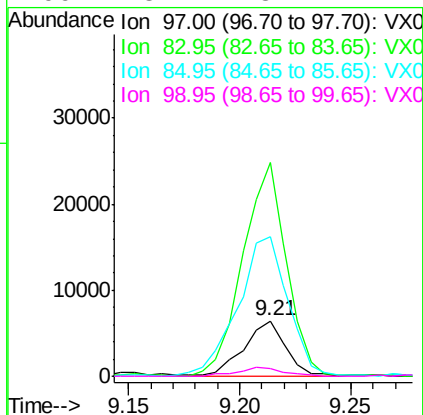
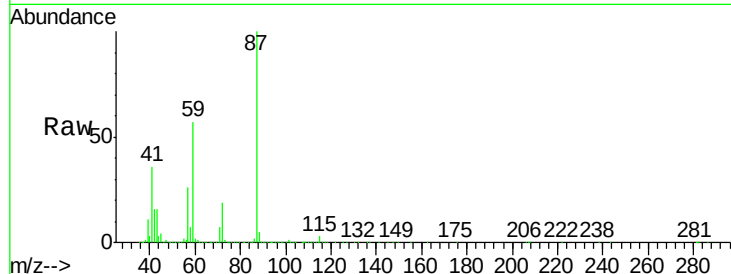




#50  
1,1,2-Trichloroethane  
Concen: 0.500 ug/l  
RT: 9.21 min Scan# 1333  
Delta R.T. 0.02 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

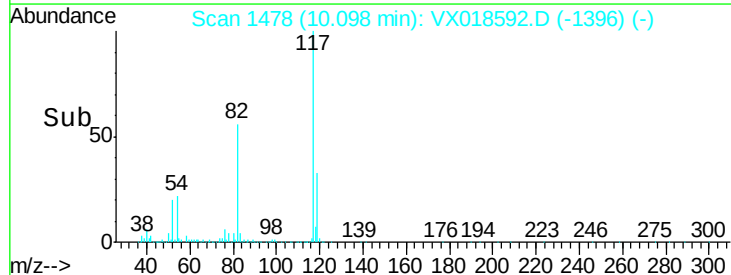
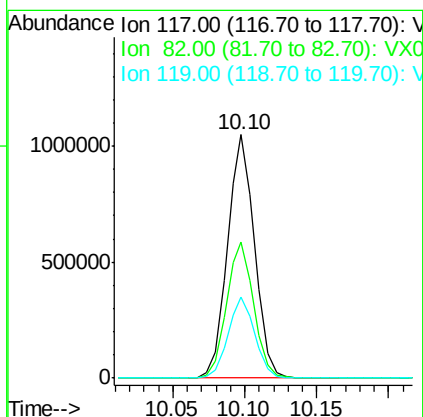
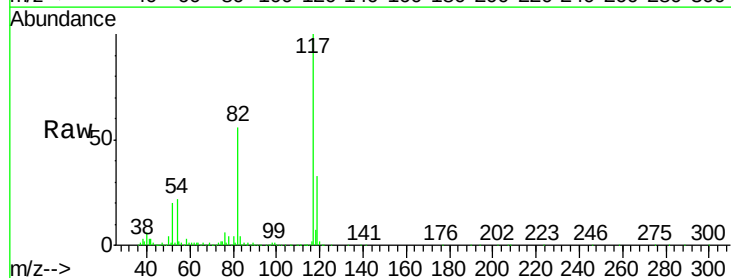
Instrument :  
MSVOA\_X  
ClientSampleId :  
CTB-WEST-(MANHOLE-1)

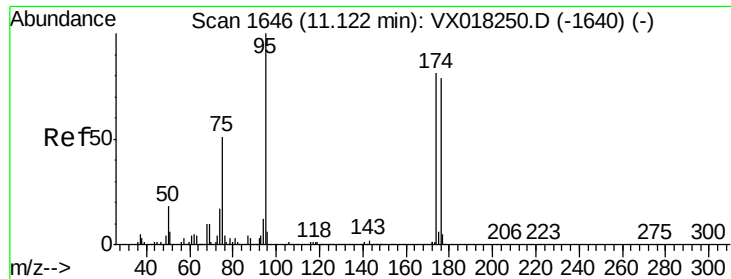
Tgt Ion: 97 Resp: 8495  
Ion Ratio Lower Upper  
97 100  
83 386.1 68.1 102.1#  
85 249.2 42.6 64.0#  
99 13.1 48.2 72.2#



#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. 0.00 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 117 Resp: 1375307  
Ion Ratio Lower Upper  
117 100  
82 56.7 44.2 66.4  
119 32.8 26.1 39.1

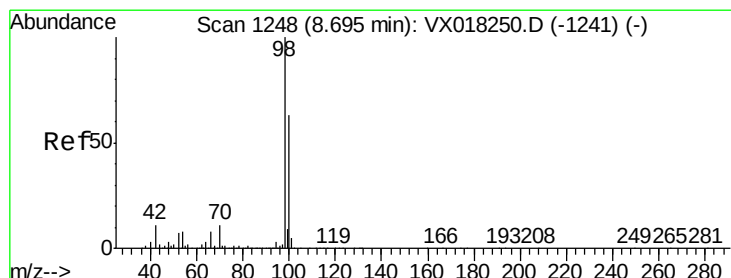
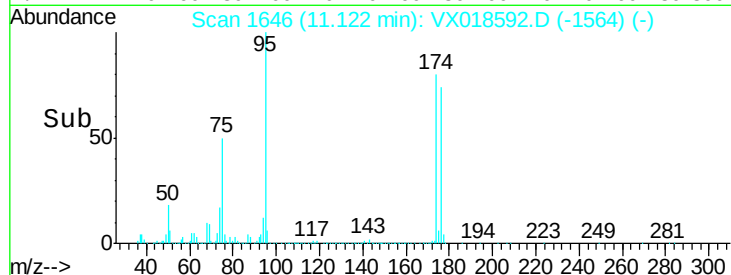
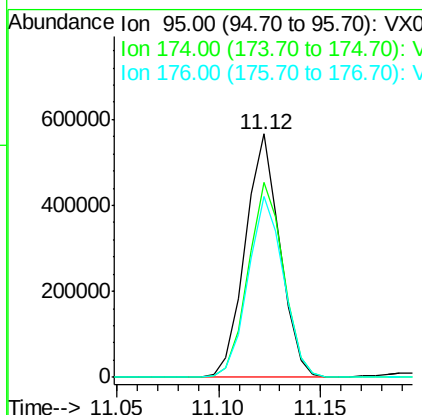
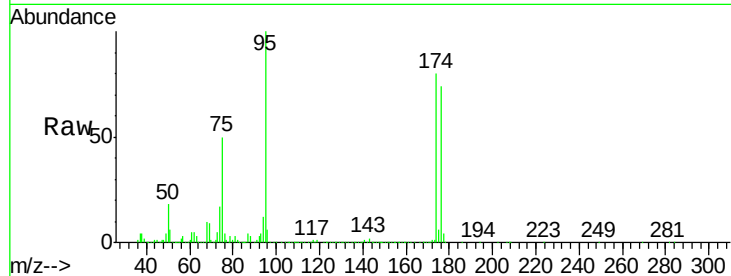




#60  
4-Bromofluorobenzene  
Concen: 27.983 ug/l  
RT: 11.12 min Scan# 1646  
Delta R.T. 0.00 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

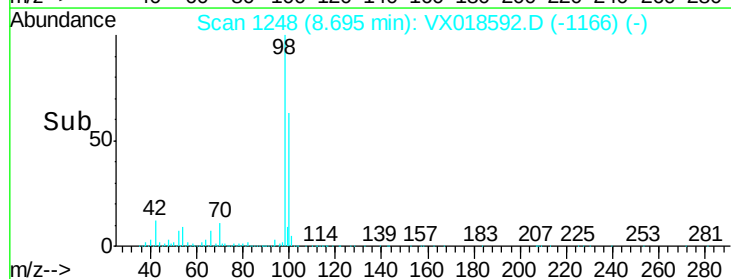
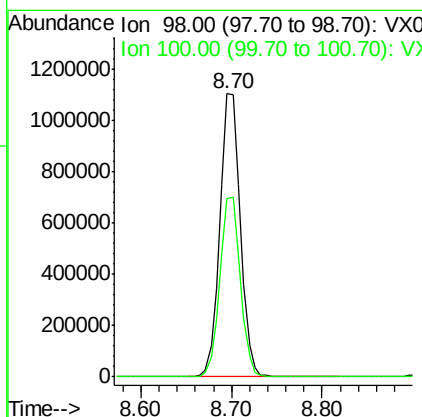
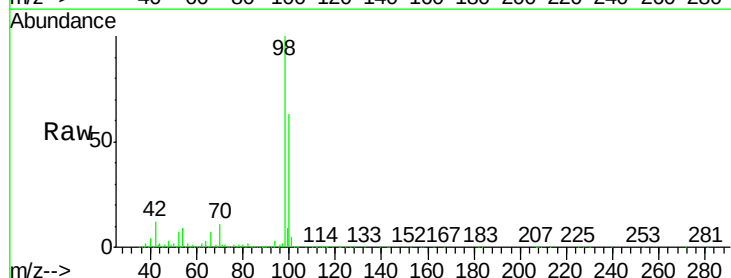
Instrument :  
MSVOA\_X  
ClientSampleId :  
CTB-WEST-(MANHOLE-1)

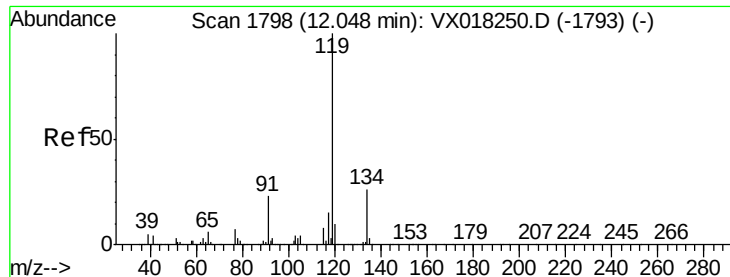
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 81.4  | 64.2  | 96.4  |
| 176     | 76.6  | 62.2  | 93.4  |



#63  
Toluene-d8  
Concen: 28.659 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. 0.00 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 98      | 100   |       |       |
| 100     | 63.4  | 51.4  | 77.0  |

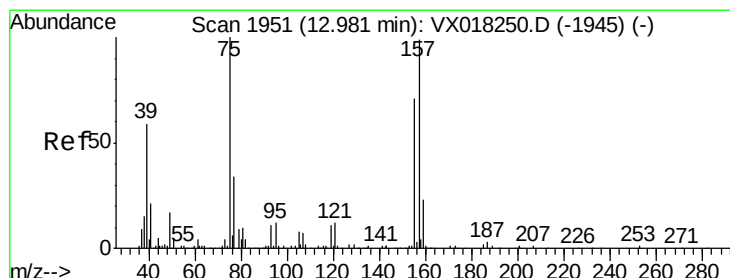
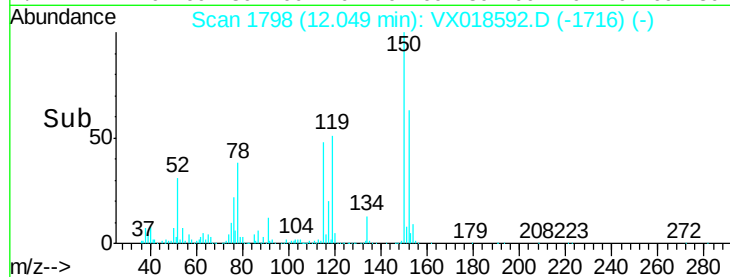
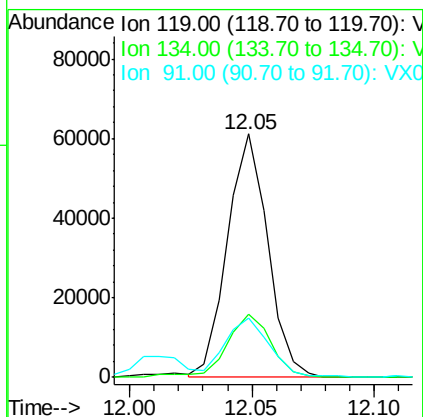
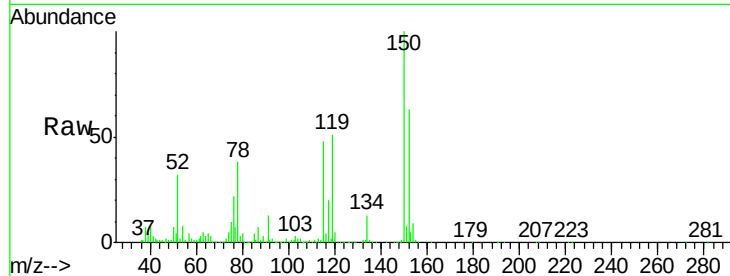




#82  
p-Isopropyltoluene  
Concen: 0.993 ug/l  
RT: 12.05 min Scan# 1798  
Delta R.T. 0.00 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

Instrument :  
MSVOA\_X  
ClientSampleId :  
CTB-WEST-(MANHOLE-1)

Tgt Ion: 119 Resp: 69728  
Ion Ratio Lower Upper  
119 100  
134 27.4 0.0 53.0  
91 26.5 0.0 49.8



#88  
1,2-Dibromo-3-Chloropropane  
Concen: 0.331 ug/l  
RT: 12.96 min Scan# 1948  
Delta R.T. -0.02 min  
Lab File: VX018592.D  
Acq: 25 Sep 2020 11:33

Tgt Ion: 75 Resp: 2125  
Ion Ratio Lower Upper  
75 100  
155 7.2 63.4 95.2#  
157 2.9 87.0 130.6#

