

Data File : VU033948.D  
Acq On : 26 Aug 2019 11:30  
Operator : JC/SP  
Sample : VSTD00502  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00502

Quant Time: Aug 27 01:24:49 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR082619WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Aug 27 01:19:55 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 264434   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 275176   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.46 | 152  | 146548   | 5.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |        |       |      |      |
|--------------------------------|-------|-----|--------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.39  | 65  | 118071 | 5.19  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.67  | 69  | 99978  | 4.96  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.26  | 63  | 227278 | 5.04  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 4.17  | 46  | 295997 | 62.46 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.62  | 84  | 201866 | 5.32  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.29  | 65  | 108189 | 5.25  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.31  | 84  | 391708 | 5.57  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.31  | 67  | 125384 | 5.44  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.54  | 98  | 359437 | 5.53  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.83  | 79  | 47236  | 5.45  | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.30  | 63  | 211952 | 64.86 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41 | 84  | 104941 | 5.34  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.84 | 152 | 129933 | 5.09  | ug/L | 0.00 |

Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 157919 | 6.194 ug/L  | 100    |
| 3) Chloromethane               | 1.32 | 50  | 157237 | 6.323 ug/L  | 100    |
| 5) Vinyl chloride              | 1.39 | 62  | 163221 | 5.920 ug/L  | 100    |
| 6) Bromomethane                | 1.62 | 94  | 74169  | 4.385 ug/L  | 100    |
| 8) Chloroethane                | 1.69 | 64  | 100075 | 6.147 ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 186398 | 5.472 ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 106139 | 5.394 ug/L  | 100    |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 101153 | 5.408 ug/L  | 100    |
| 13) Acetone                    | 2.32 | 43  | 227723 | 62.444 ug/L | 100    |
| 14) Carbon disulfide           | 2.46 | 76  | 359780 | 5.557 ug/L  | 100    |
| 15) Methyl Acetate             | 2.60 | 43  | 62243  | 6.707 ug/L  | 100    |
| 16) Methylene chloride         | 2.68 | 84  | 115116 | 5.249 ug/L  | 100    |
| 17) Methyl tert-butyl Ether    | 2.98 | 73  | 272967 | 5.722 ug/L  | 100    |
| 18) trans-1,2-Dichloroethene   | 2.96 | 96  | 109501 | 5.325 ug/L  | 100    |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 216359 | 6.769 ug/L  | 100    |
| 21) 2-Butanone                 | 4.26 | 43  | 347019 | 81.122 ug/L | 100    |
| 22) cis-1,2-Dichloroethene     | 4.20 | 96  | 113129 | 6.607 ug/L  | 100    |
| 23) Bromochloromethane         | 4.52 | 128 | 53203  | 6.465 ug/L  | 100    |
| 25) Chloroform                 | 4.65 | 83  | 212441 | 6.009 ug/L  | 100    |
| 27) 1,2-Dichloroethane         | 5.38 | 62  | 139035 | 6.769 ug/L  | 100    |
| 29) 1,1,1-Trichloroethane      | 4.89 | 97  | 171983 | 6.396 ug/L  | 100    |
| 30) Cyclohexane                | 4.97 | 56  | 171658 | 7.197 ug/L  | 100    |
| 31) Carbon tetrachloride       | 5.11 | 117 | 153269 | 6.357 ug/L  | 100    |
| 33) Benzene                    | 5.36 | 78  | 452877 | 6.841 ug/L  | 100    |
| 34) Trichloroethene            | 6.16 | 95  | 109506 | 6.283 ug/L  | 100    |
| 35) Methylcyclohexane          | 6.39 | 83  | 169861 | 6.806 ug/L  | 100    |
| 37) 1,2-Dichloropropane        | 6.41 | 63  | 120563 | 6.871 ug/L  | 100    |
| 38) Bromodichloromethane       | 6.74 | 83  | 146595 | 6.552 ug/L  | 100    |
| 39) cis-1,3-Dichloropropene    | 7.25 | 75  | 158948 | 6.850 ug/L  | 100    |
| 40) 4-Methyl-2-pentanone       | 7.44 | 43  | 814719 | 81.917 ug/L | 100    |

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Aug 27 01:19:55 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) Toluene                    | 7.62  | 91   | 465534   | 6.941  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 136739   | 7.021  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 82307    | 6.655  | ug/L  | 100      |
| 47) Tetrachloroethene          | 8.21  | 164  | 89768    | 6.309  | ug/L  | 100      |
| 48) 2-Hexanone                 | 8.35  | 43   | 588497   | 81.610 | ug/L  | 100      |
| 49) Dibromochloromethane       | 8.46  | 129  | 97617    | 6.385  | ug/L  | 100      |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 79940    | 6.734  | ug/L  | 100      |
| 51) Chlorobenzene              | 9.10  | 112  | 288957   | 6.530  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.23  | 91   | 471260   | 6.927  | ug/L  | 100      |
| 53) m,p-Xylene                 | 9.36  | 106  | 180741   | 7.054  | ug/L  | 100      |
| 54) o-Xylene                   | 9.76  | 106  | 173051   | 7.034  | ug/L  | 100      |
| 55) Styrene                    | 9.77  | 104  | 306992   | 7.171  | ug/L  | 100      |
| 56) Isopropylbenzene           | 10.15 | 105  | 447850   | 7.056  | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 109661   | 6.942  | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 79613    | 6.911  | ug/L  | 100      |
| 61) Bromoform                  | 9.94  | 173  | 55779    | 6.390  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 229527   | 6.515  | ug/L  | 100      |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 234723   | 6.466  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 219563   | 6.456  | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 16593    | 6.780  | ug/L  | 100      |
| 67) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 173818   | 6.474  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 13.48 | 180  | 133603   | 6.769  | ug/L  | 100      |
| 69) Naphthalene                | 13.73 | 128  | 204627   | 6.978  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 131356   | 6.968  | ug/L  | 100      |

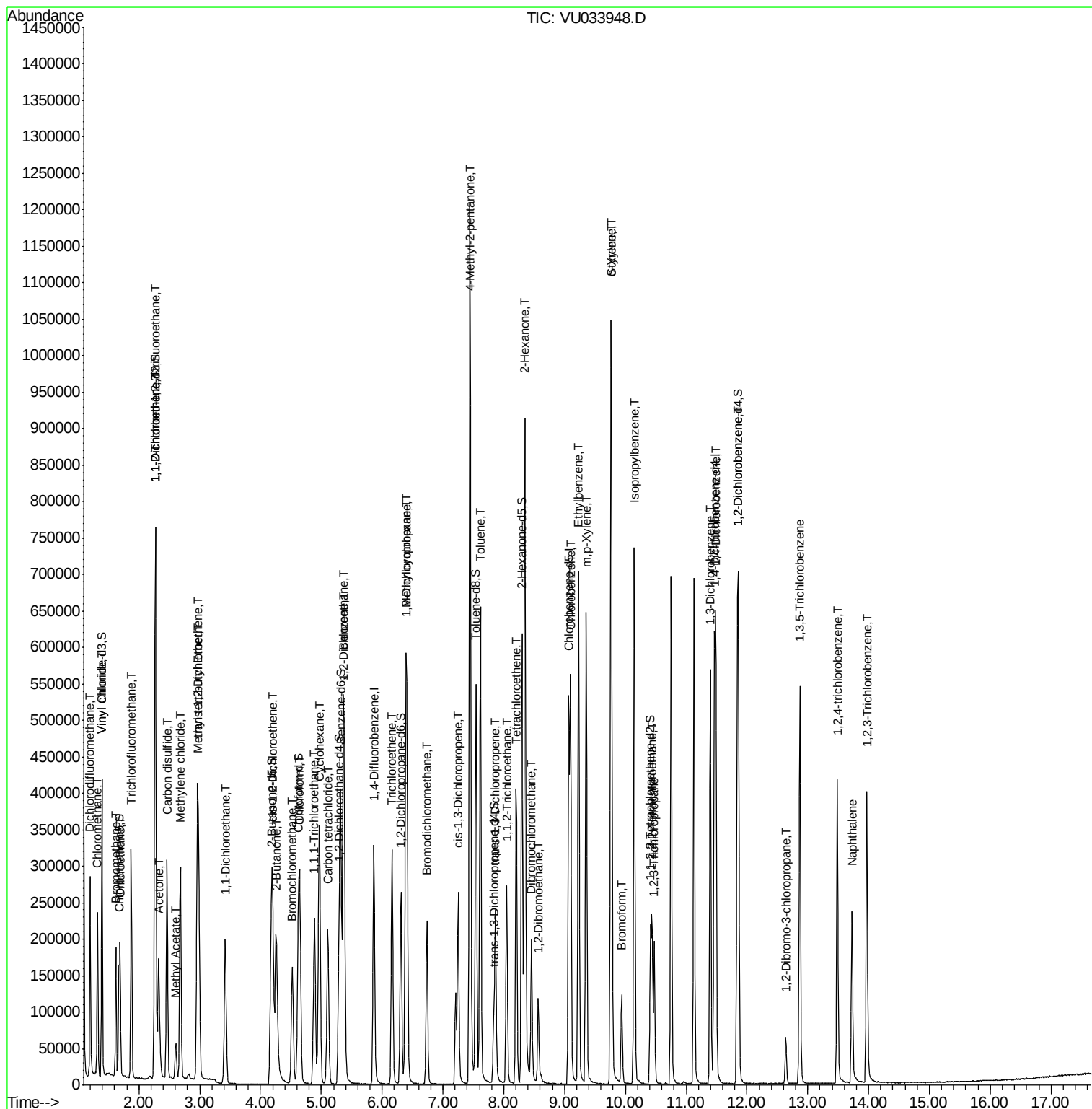
(#) = qualifier out of range (m) = manual integration (+) = signals summed

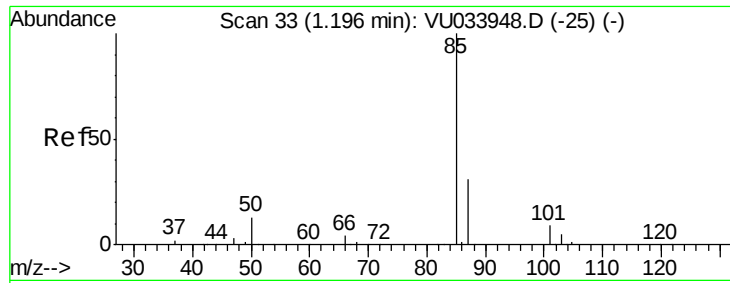
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```
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MSVOA\_U  
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VSTD00502

Quant Time: Aug 27 01:24:49 2019  
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#2

Dichlorodifluoromethane

Concen: 6.194 ug/L

RT: 1.20 min Scan# 33

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

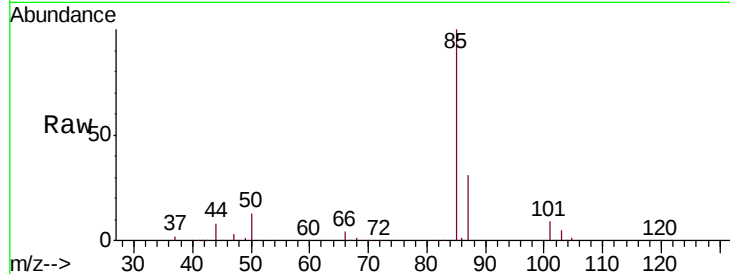
VSTD00502

Tgt Ion: 85 Resp: 157919

Ion Ratio Lower Upper

85 100

87 31.7 25.4 38.0



Abundance Ion 85.00 (84.70 to 85.70): VU033948.D (-25) (-)

Ion 87.00 (86.70 to 87.70): VU033948.D (-25) (-)

1.20

150000

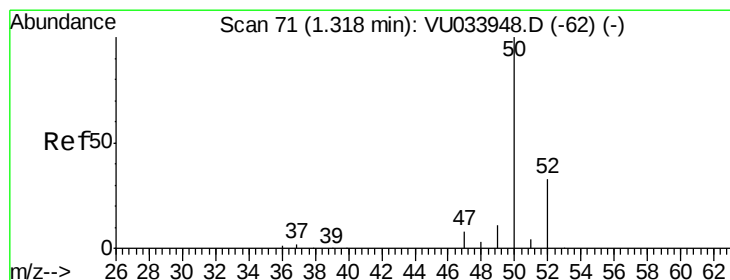
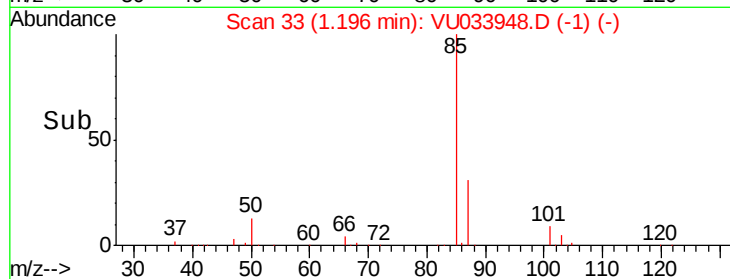
100000

50000

0

1.15 1.20 1.25 1.30

Time-->



#3

Chloromethane

Concen: 6.323 ug/L

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VU033948.D

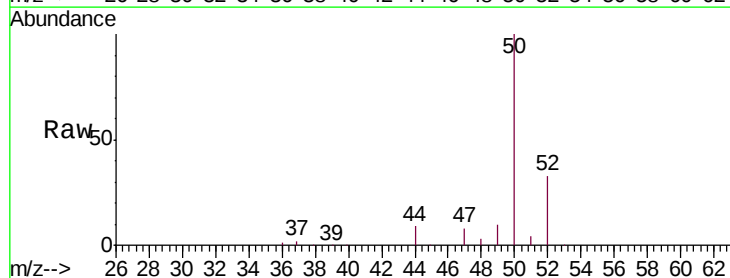
Acq: 26 Aug 2019 11:30

Tgt Ion: 50 Resp: 157237

Ion Ratio Lower Upper

50 100

52 32.9 23.0 42.8



Abundance Ion 50.05 (49.75 to 50.75): VU033948.D (-62) (-)

Ion 52.05 (51.75 to 52.75): VU033948.D (-62) (-)

1.32

150000

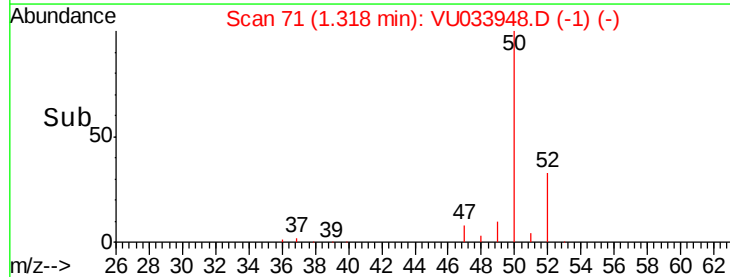
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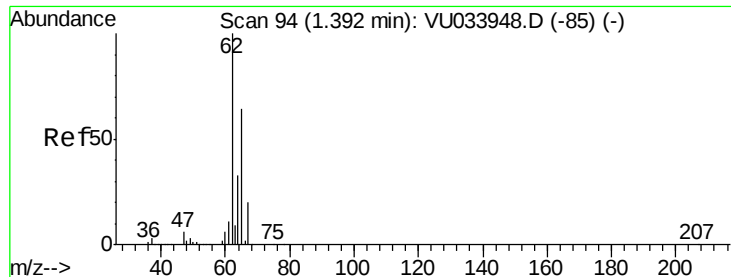
50000

0

1.25 1.30 1.35 1.40

Time-->





#5

Vinyl chloride

Concen: 5.920 ug/L

RT: 1.39 min Scan# 94

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

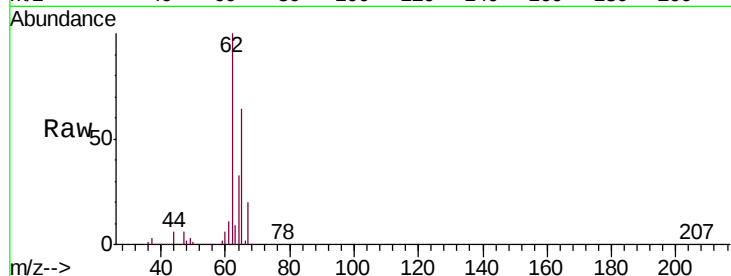
VSTD00502

Tgt Ion: 62 Resp: 163221

Ion Ratio Lower Upper

62 100

64 33.4 23.4 43.4



Abundance Ion 62.00 (61.70 to 62.70): VU033948.D (-85) (-)

Ion 64.10 (63.80 to 64.80): VU033948.D (-85) (-)

1.39

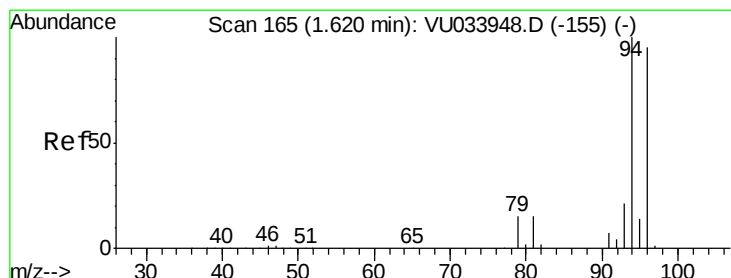
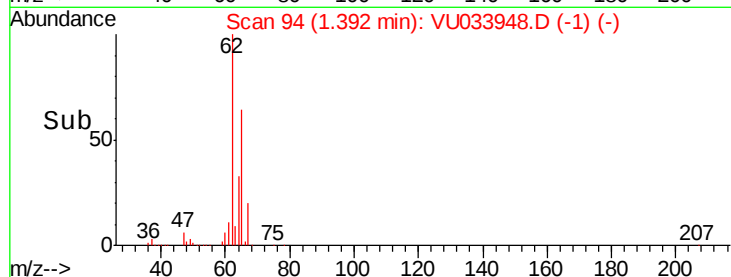
150000

100000

50000

0

Time-->



#6

Bromomethane

Concen: 4.385 ug/L

RT: 1.62 min Scan# 165

Delta R.T. 0.00 min

Lab File: VU033948.D

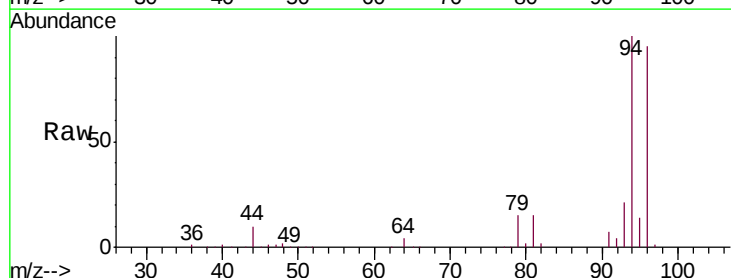
Acq: 26 Aug 2019 11:30

Tgt Ion: 94 Resp: 74169

Ion Ratio Lower Upper

94 100

96 94.5 66.1 122.8



Abundance Ion 94.00 (93.70 to 94.70): VU033948.D (-155) (-)

Ion 96.00 (95.70 to 96.70): VU033948.D (-155) (-)

1.62

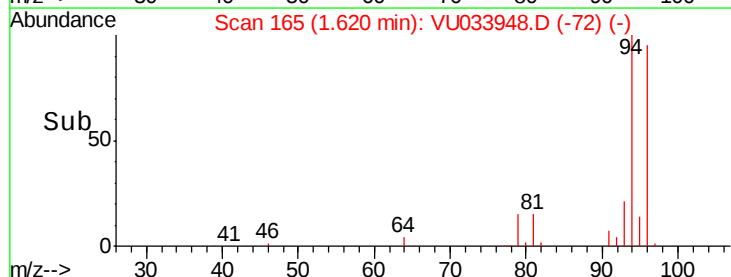
60000

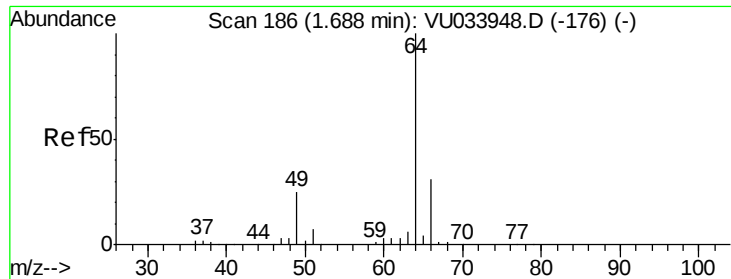
40000

20000

0

Time-->





#8

Chloroethane

Concen: 6.147 ug/L

RT: 1.69 min Scan# 186

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

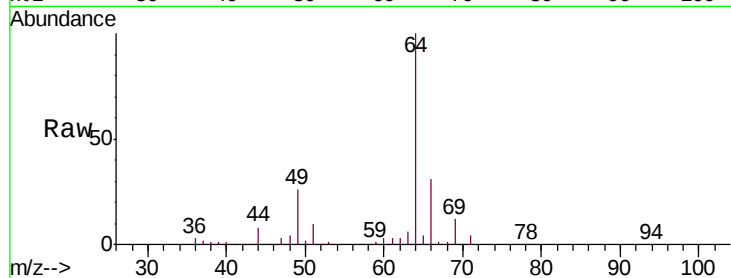
VSTD00502

Tgt Ion: 64 Resp: 100075

Ion Ratio Lower Upper

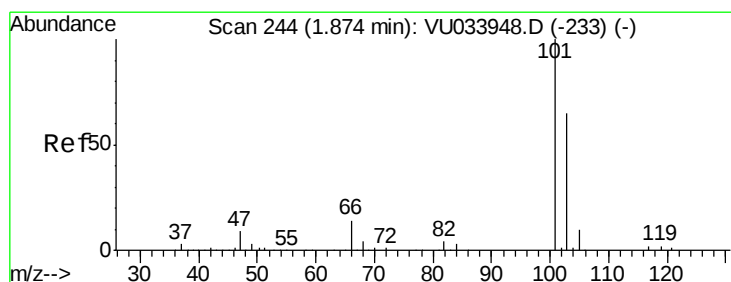
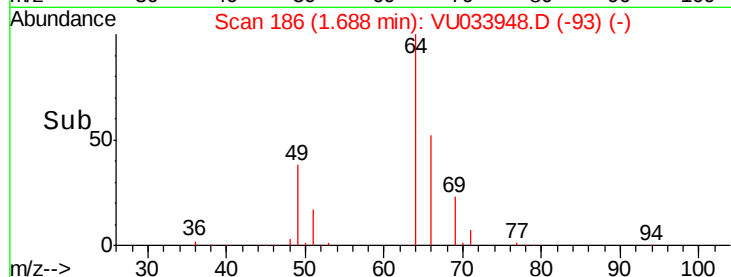
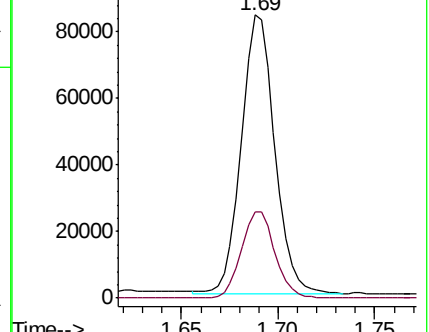
64 100

66 30.6 21.4 39.8



Abundance Ion 64.10 (63.80 to 64.80): VU033948.D (-176) (-)

Ion 66.05 (65.75 to 66.75): VU033948.D (-176) (-)



#9

Trichlorofluoromethane

Concen: 5.472 ug/L

RT: 1.87 min Scan# 244

Delta R.T. 0.00 min

Lab File: VU033948.D

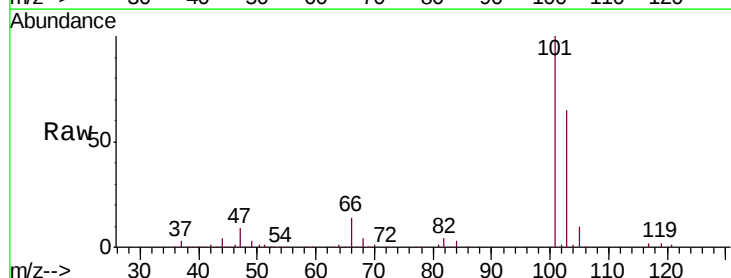
Acq: 26 Aug 2019 11:30

Tgt Ion: 101 Resp: 186398

Ion Ratio Lower Upper

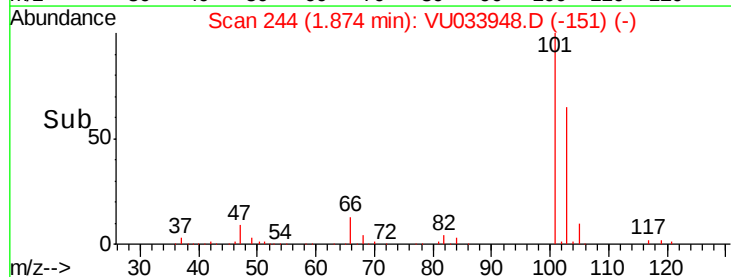
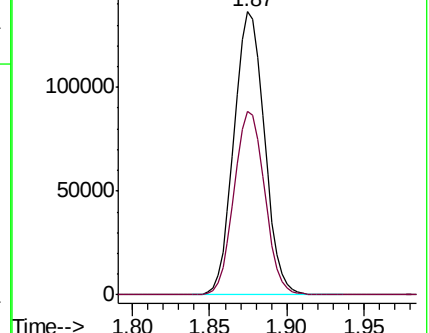
101 100

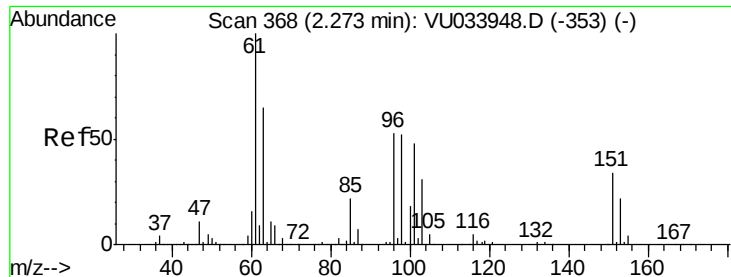
103 65.1 52.1 78.1



Abundance Ion 101.00 (100.70 to 101.70): VU033948.D (-233) (-)

Ion 103.00 (102.70 to 103.70): VU033948.D (-233) (-)





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 5.394 ug/L

RT: 2.27 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

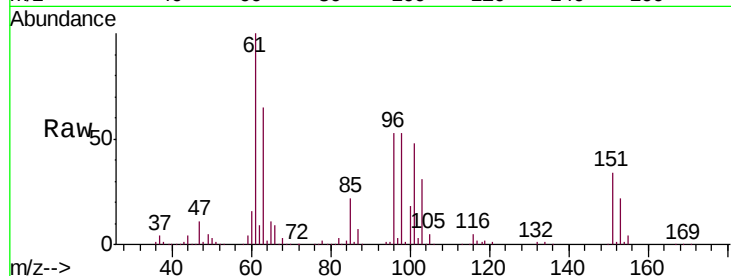
Tgt Ion: 101 Resp: 106139

Ion Ratio Lower Upper

101 100

85 45.2 36.2 54.2

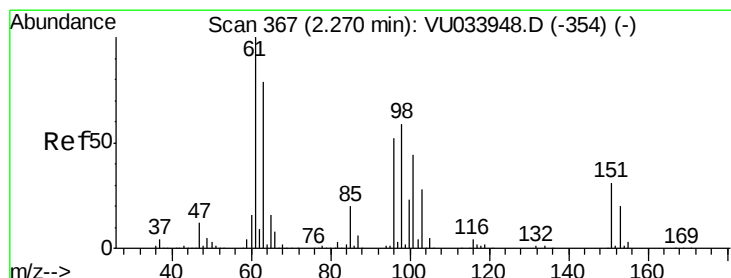
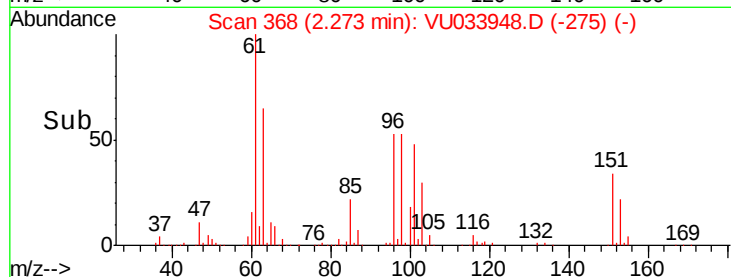
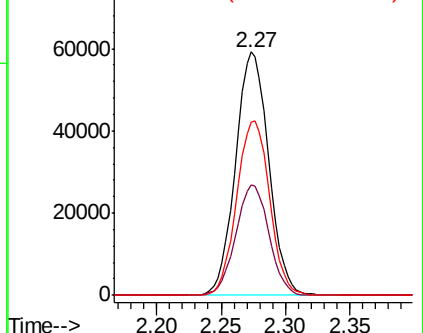
151 71.0 56.8 85.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 5.408 ug/L

RT: 2.27 min Scan# 367

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

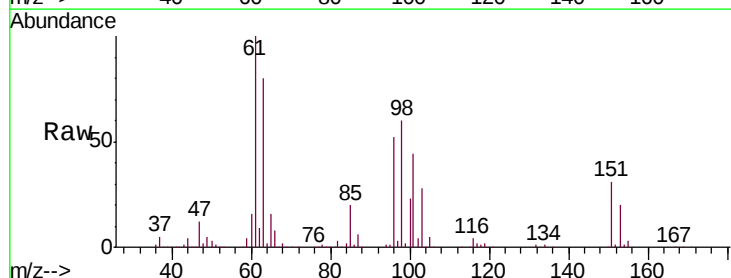
Tgt Ion: 96 Resp: 101153

Ion Ratio Lower Upper

96 100

61 193.7 135.6 251.8

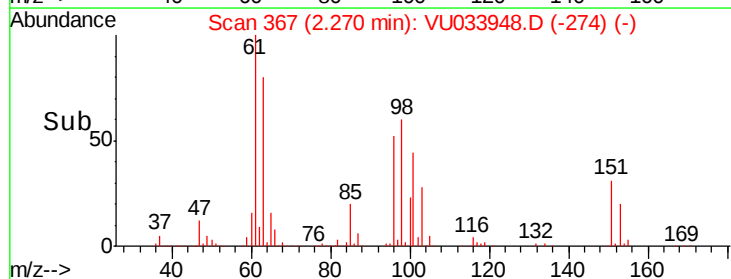
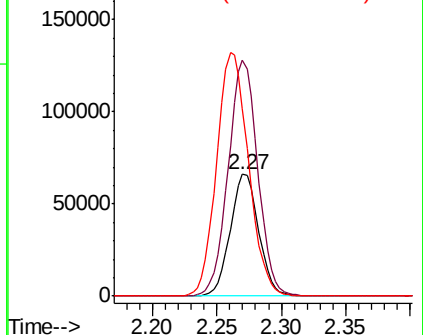
63 154.3 108.0 200.6

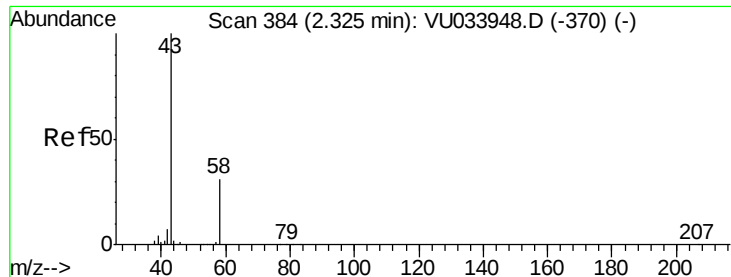


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 62.444 ug/L

RT: 2.32 min Scan# 384

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

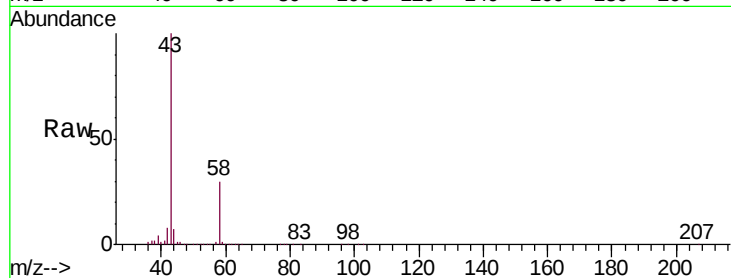
VSTD00502

Tgt Ion: 43 Resp: 227723

Ion Ratio Lower Upper

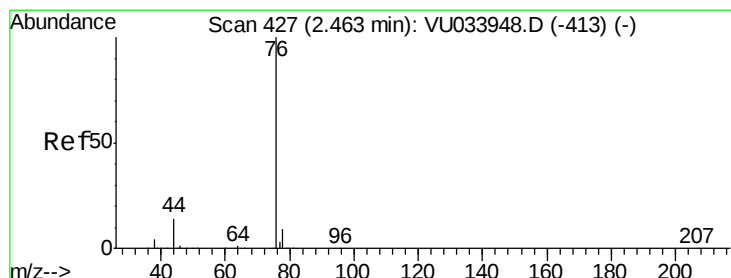
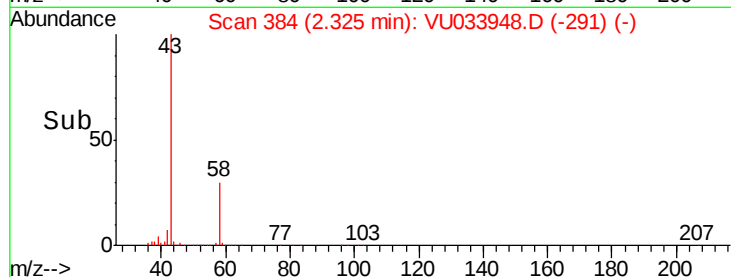
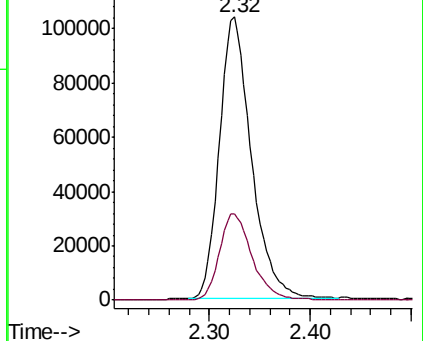
43 100

58 31.3 0.0 62.6



Abundance Ion 43.05 (42.75 to 43.75): VU033948.D (-370) (-)

Ion 58.05 (57.75 to 58.75): VU033948.D (-370) (-)



#14

Carbon disulfide

Concen: 5.557 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VU033948.D

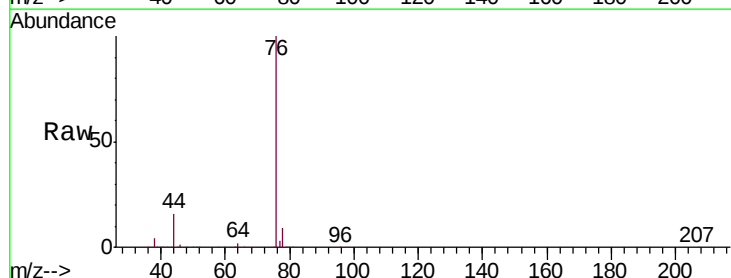
Acq: 26 Aug 2019 11:30

Tgt Ion: 76 Resp: 359780

Ion Ratio Lower Upper

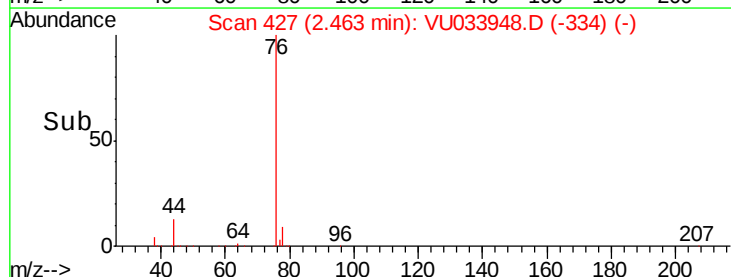
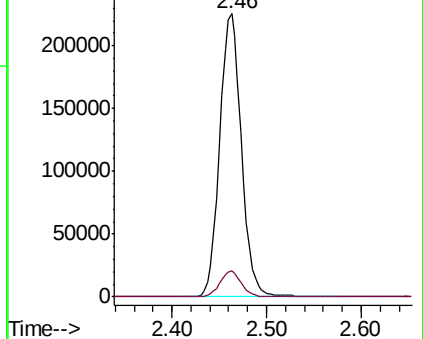
76 100

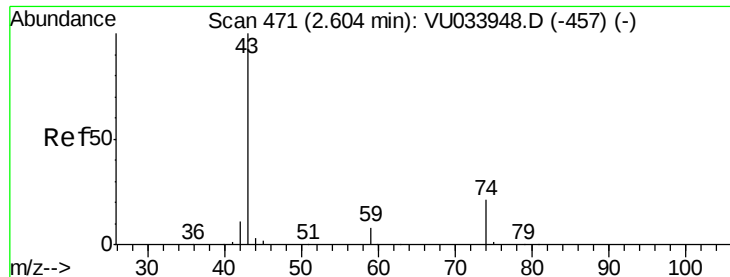
78 9.1 7.3 10.9



Abundance Ion 76.05 (75.75 to 76.75): VU033948.D (-413) (-)

Ion 78.00 (77.70 to 78.70): VU033948.D (-413) (-)





#15

Methyl Acetate

Concen: 6.707 ug/L

RT: 2.60 min Scan# 471

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

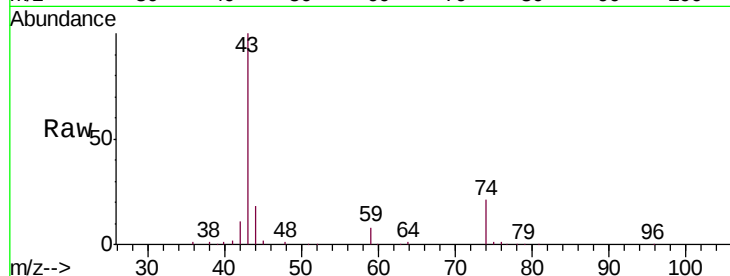
VSTD00502

Tgt Ion: 43 Resp: 62243

Ion Ratio Lower Upper

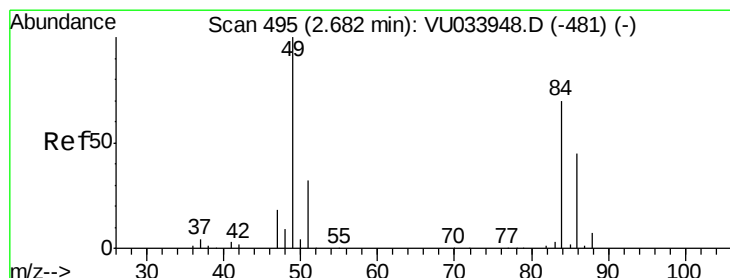
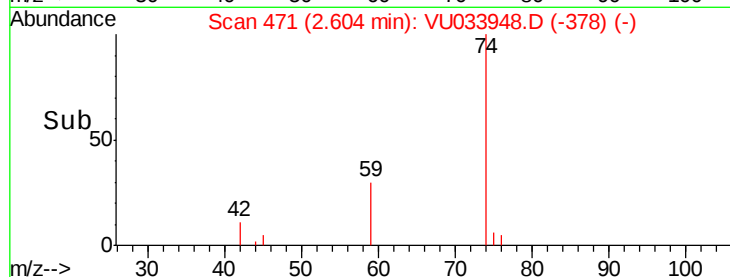
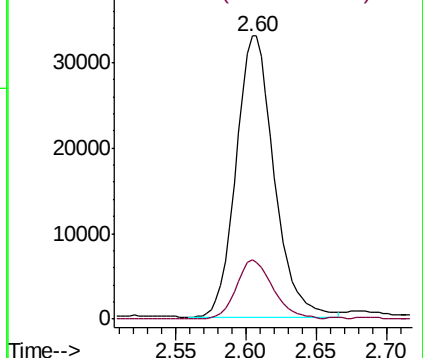
43 100

74 20.4 16.3 24.5



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 74.05 (73.75 to 74.75): VU0



#16

Methylene chloride

Concen: 5.249 ug/L

RT: 2.68 min Scan# 495

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

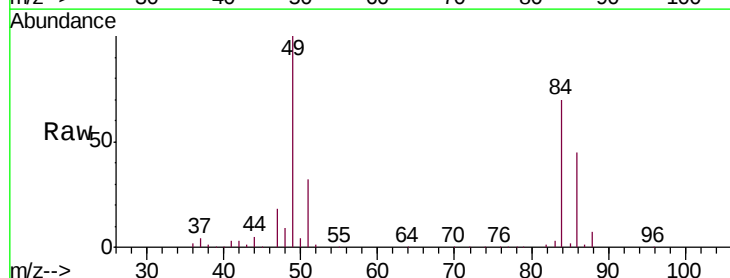
Tgt Ion: 84 Resp: 115116

Ion Ratio Lower Upper

84 100

86 63.9 44.7 83.1

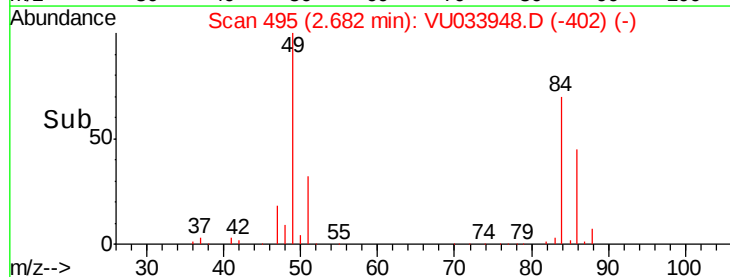
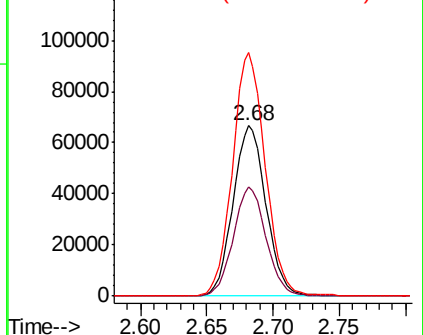
49 143.0 100.1 185.9

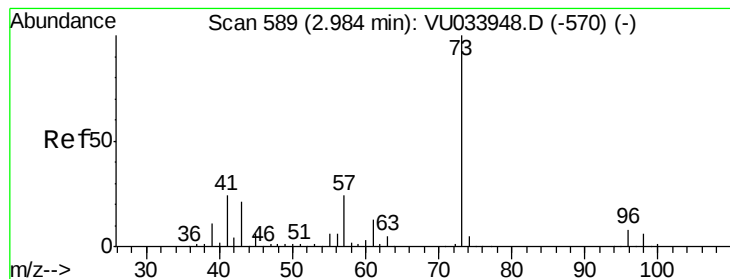


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0





#17

Methyl tert-butyl Ether

Concen: 5.722 ug/L

RT: 2.98 min Scan# 589

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

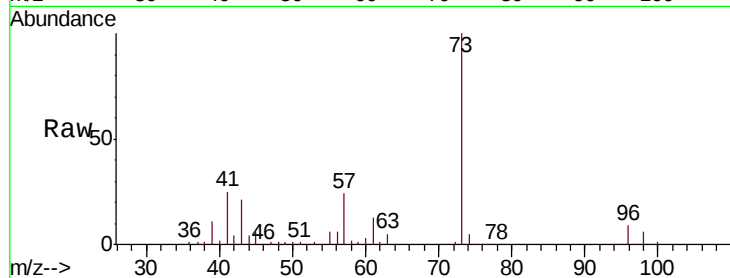
Tgt Ion: 73 Resp: 272967

Ion Ratio Lower Upper

73 100

43 20.7 16.6 24.8

57 23.9 19.1 28.7



Abundance Ion 73.10 (72.80 to 73.80): VU033948.D (-570) (-)

Ion 43.05 (42.75 to 43.75): VU033948.D (-570) (-)

Ion 57.10 (56.80 to 57.80): VU033948.D (-570) (-)

2.98

150000

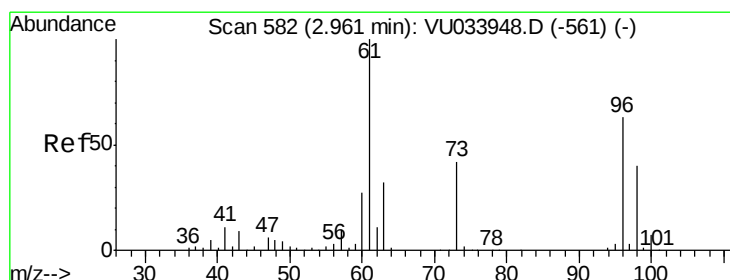
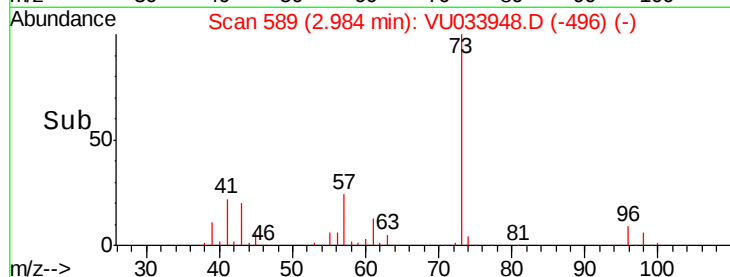
100000

50000

0

Time-->

2.90 3.00 3.10



#18

trans-1,2-Dichloroethene

Concen: 5.325 ug/L

RT: 2.96 min Scan# 582

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

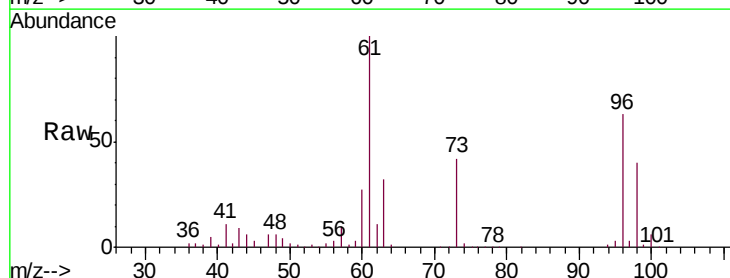
Tgt Ion: 96 Resp: 109501

Ion Ratio Lower Upper

96 100

61 157.6 110.3 204.9

98 63.1 44.2 82.0



Abundance Ion 96.00 (95.70 to 96.70): VU033948.D (-561) (-)

Ion 61.05 (60.75 to 61.75): VU033948.D (-561) (-)

Ion 97.95 (97.65 to 98.65): VU033948.D (-561) (-)

2.96

120000

100000

80000

60000

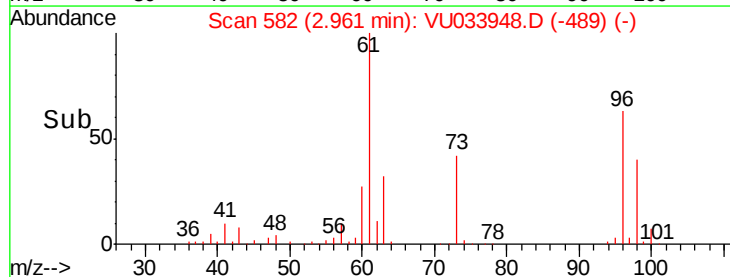
40000

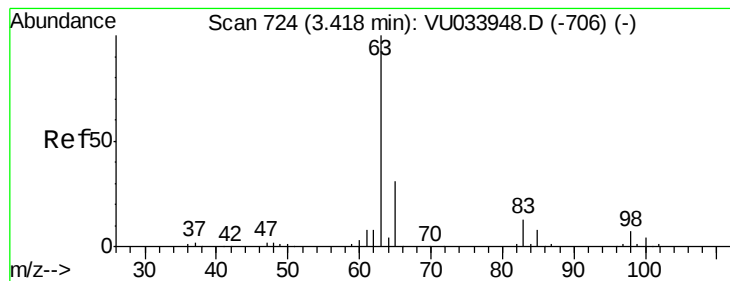
20000

0

Time-->

2.85 2.90 2.95 3.00 3.05





#19

1,1-Dichloroethane

Concen: 6.769 ug/L

RT: 3.42 min Scan# 724

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

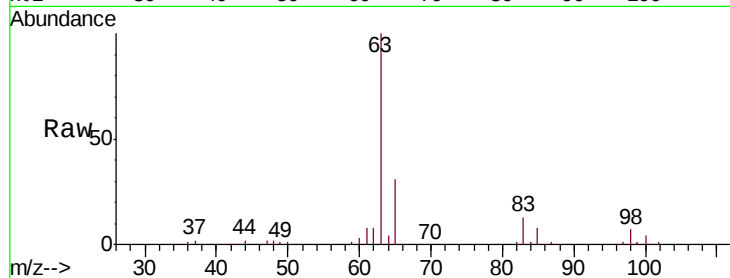
Tgt Ion: 63 Resp: 216359

Ion Ratio Lower Upper

63 100

65 31.0 21.7 40.3

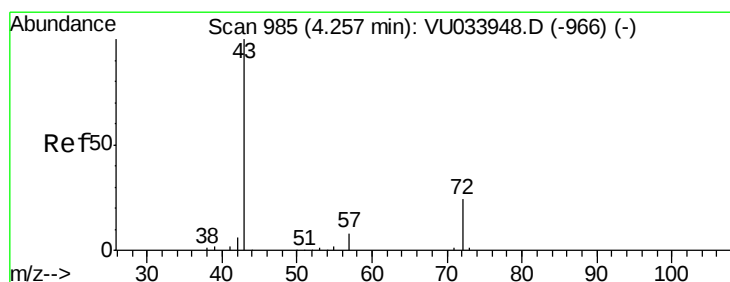
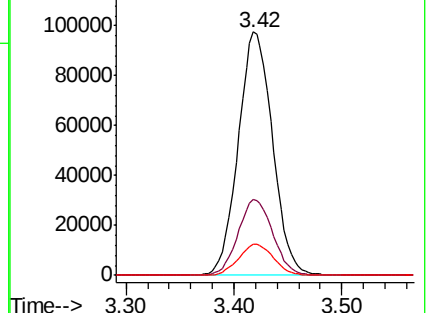
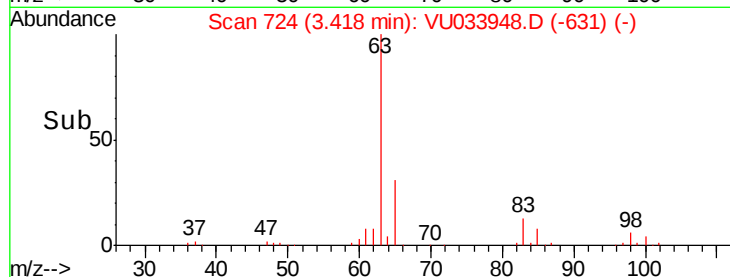
83 12.7 8.9 16.5



Abundance Ion 63.10 (62.80 to 63.80): VU033948.D (-706) (-)

Ion 65.10 (64.80 to 65.80): VU033948.D (-706) (-)

Ion 83.05 (82.75 to 83.75): VU033948.D (-706) (-)



#21

2-Butanone

Concen: 81.122 ug/L

RT: 4.26 min Scan# 985

Delta R.T. 0.00 min

Lab File: VU033948.D

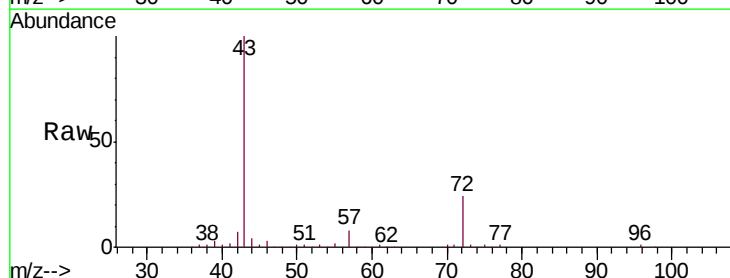
Acq: 26 Aug 2019 11:30

Tgt Ion: 43 Resp: 347019

Ion Ratio Lower Upper

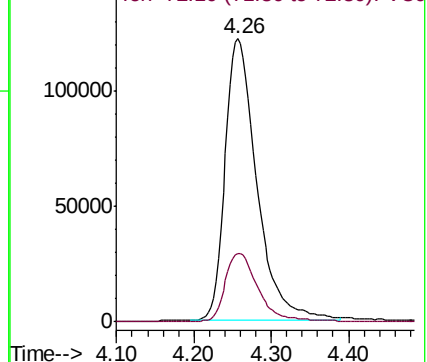
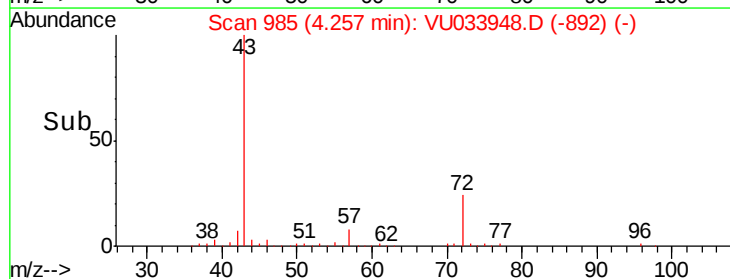
43 100

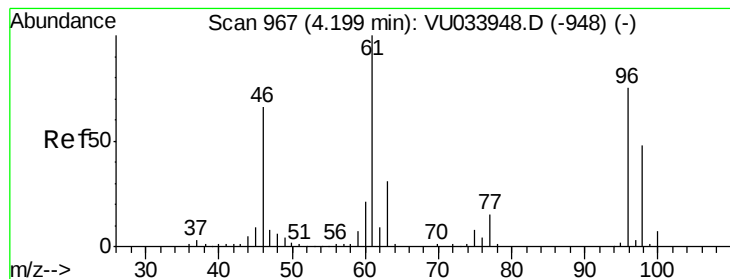
72 24.5 12.3 36.8



Abundance Ion 43.05 (42.75 to 43.75): VU033948.D (-966) (-)

Ion 72.10 (71.80 to 72.80): VU033948.D (-966) (-)



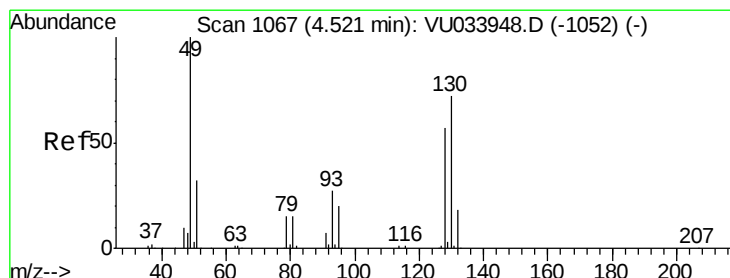
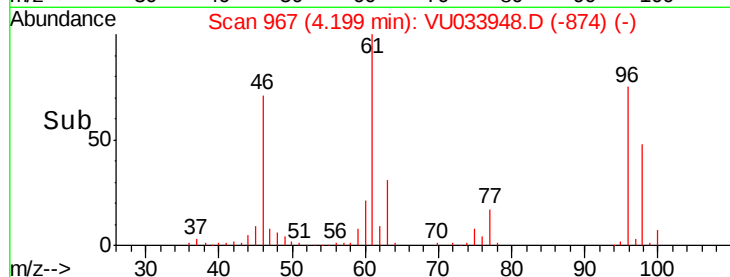
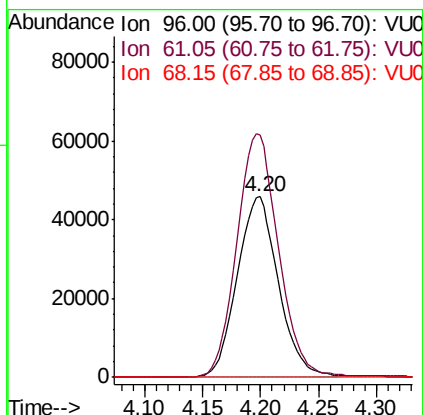
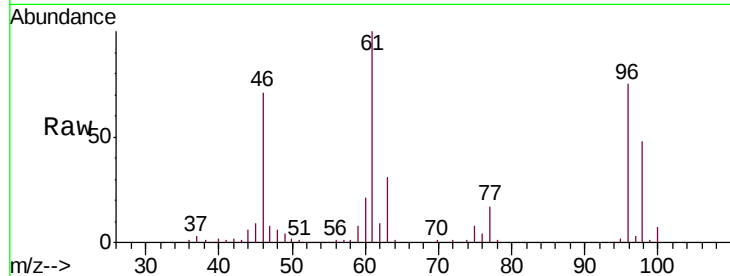


#22

cis-1,2-Dichloroethene  
 Concen: 6.607 ug/L  
 RT: 4.20 min Scan# 967  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00502

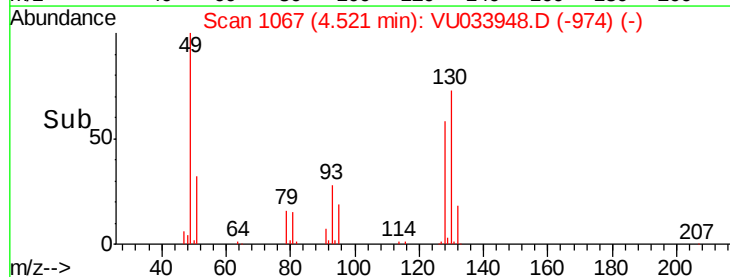
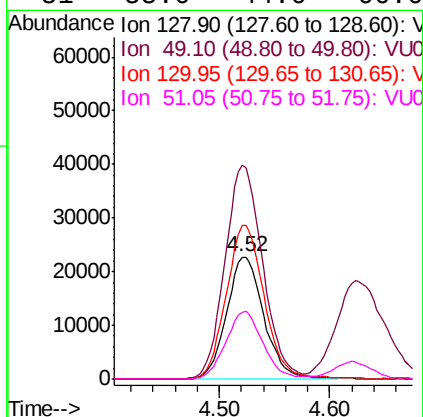
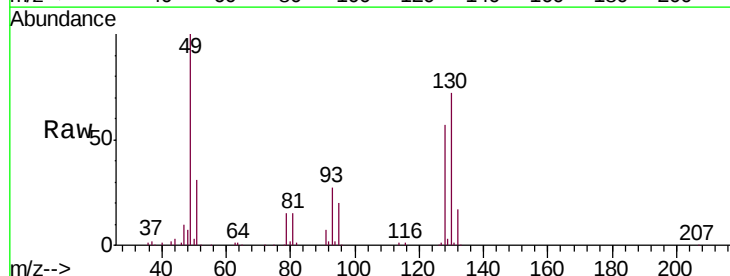
Tgt Ion: 96 Resp: 113129  
 Ion Ratio Lower Upper  
 96 100  
 61 134.0 93.8 174.2  
 68 0.0 0.0 0.0

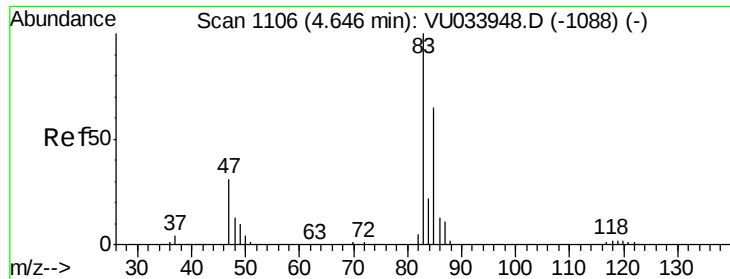


#23

Bromochloromethane  
 Concen: 6.465 ug/L  
 RT: 4.52 min Scan# 1067  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Tgt Ion: 128 Resp: 53203  
 Ion Ratio Lower Upper  
 128 100  
 49 174.8 122.4 227.2  
 130 125.4 87.8 163.0  
 51 55.0 44.0 66.0

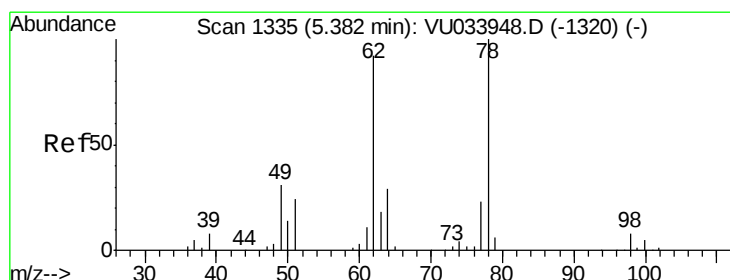
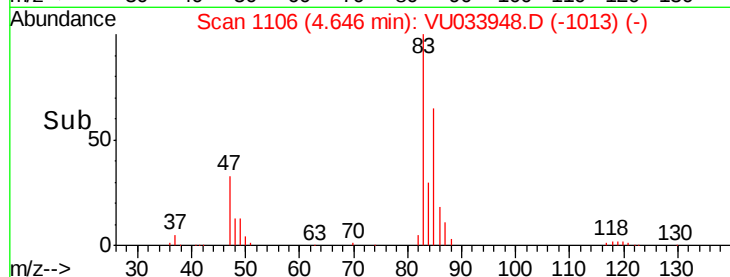
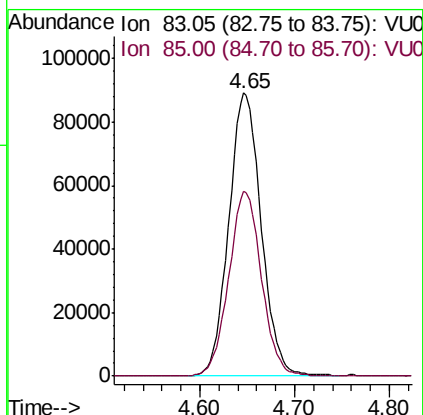
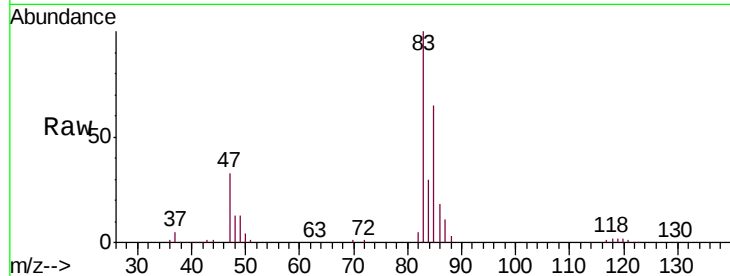




#25  
Chloroform  
Concen: 6.009 ug/L  
RT: 4.65 min Scan# 1106  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

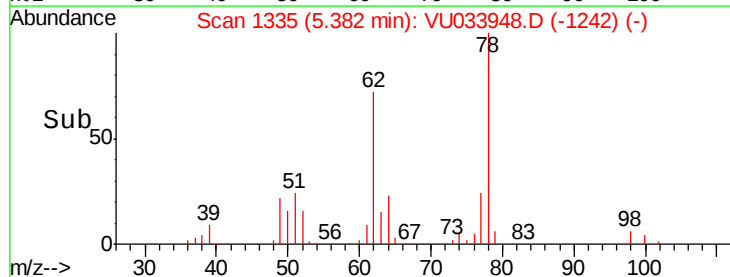
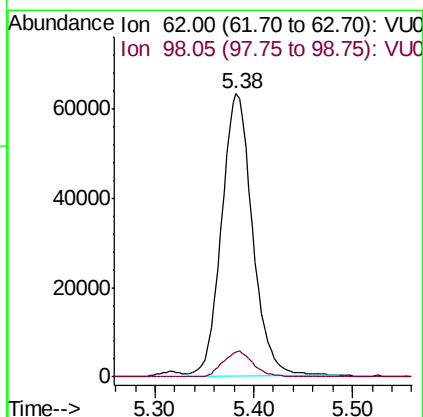
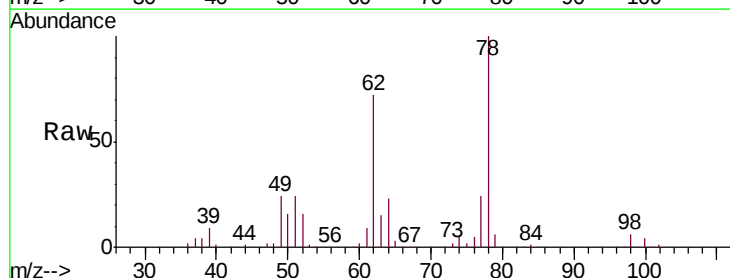
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00502

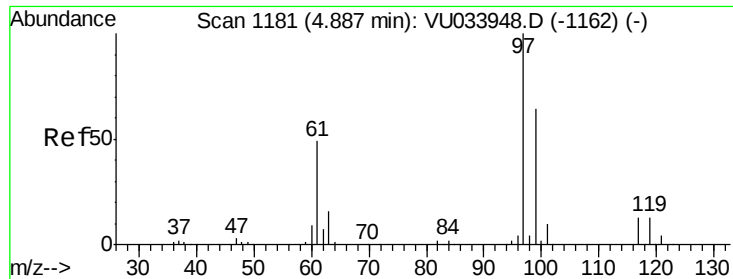
Tgt Ion: 83 Resp: 212441  
Ion Ratio Lower Upper  
83 100  
85 65.3 45.7 84.9



#27  
1,2-Dichloroethane  
Concen: 6.769 ug/L  
RT: 5.38 min Scan# 1335  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

Tgt Ion: 62 Resp: 139035  
Ion Ratio Lower Upper  
62 100  
98 9.0 7.2 10.8

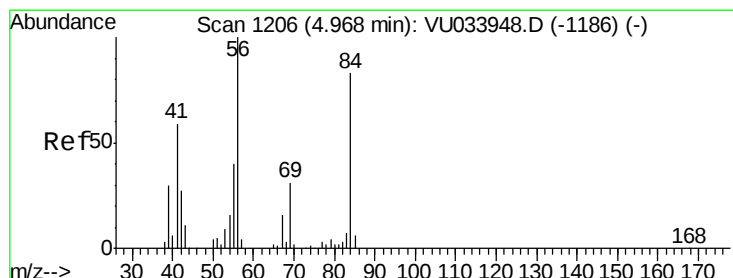
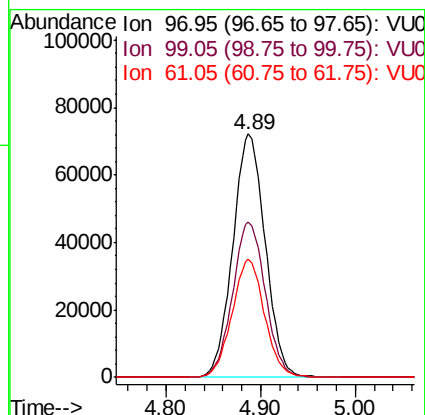
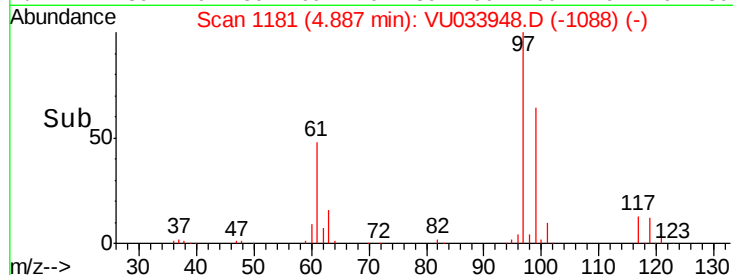
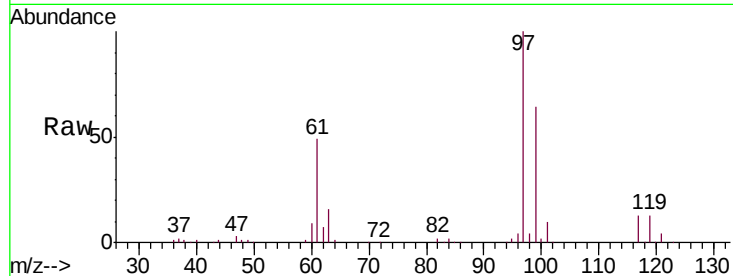




#29  
 1,1,1-Trichloroethane  
 Concen: 6.396 ug/L  
 RT: 4.89 min Scan# 1181  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

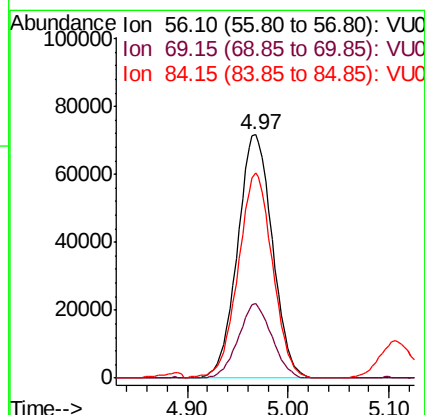
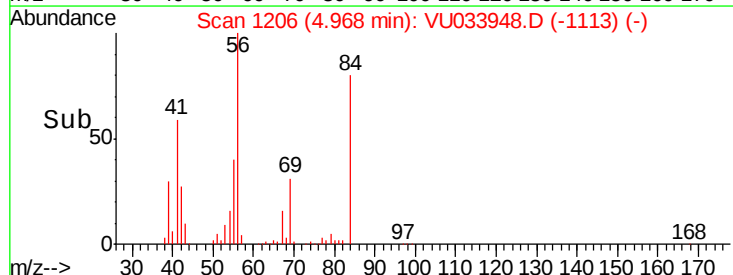
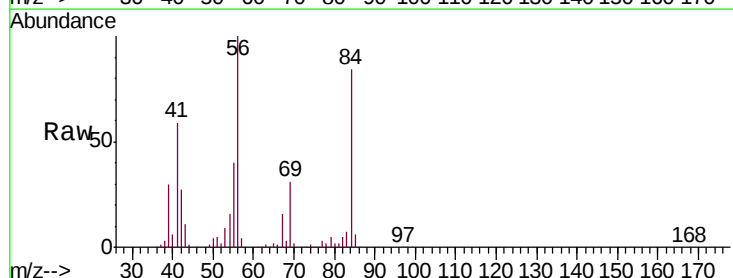
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00502

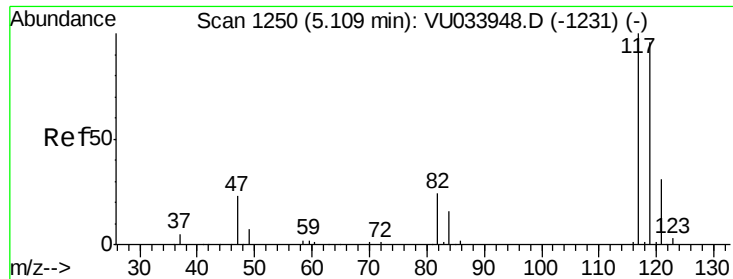
Tgt Ion: 97 Resp: 171983  
 Ion Ratio Lower Upper  
 97 100  
 99 64.4 51.5 77.3  
 61 48.9 39.1 58.7



#30  
 Cyclohexane  
 Concen: 7.197 ug/L  
 RT: 4.97 min Scan# 1206  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Tgt Ion: 56 Resp: 171658  
 Ion Ratio Lower Upper  
 56 100  
 69 29.4 23.5 35.3  
 84 82.9 66.3 99.5

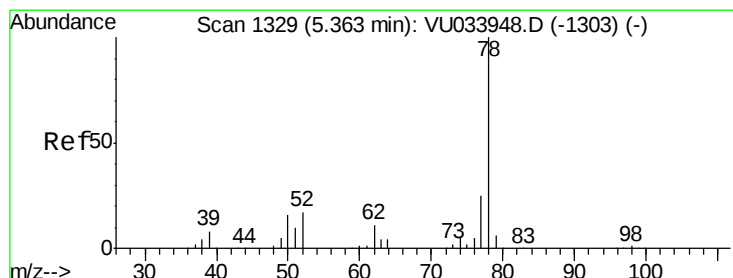
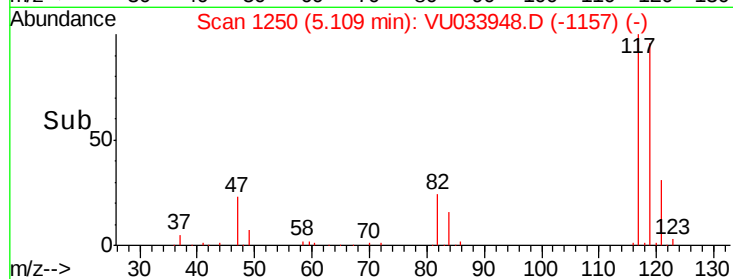
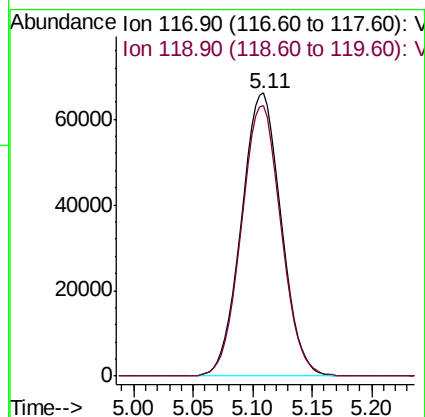
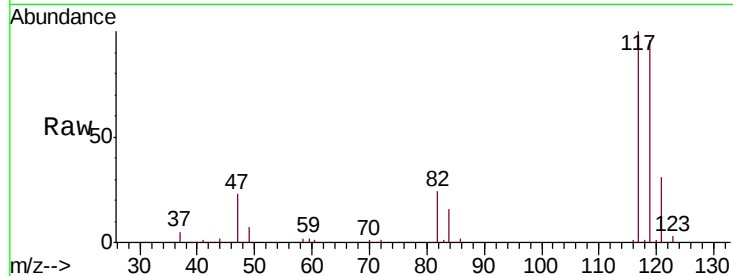




#31  
Carbon tetrachloride  
Concen: 6.357 ug/L  
RT: 5.11 min Scan# 1250  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

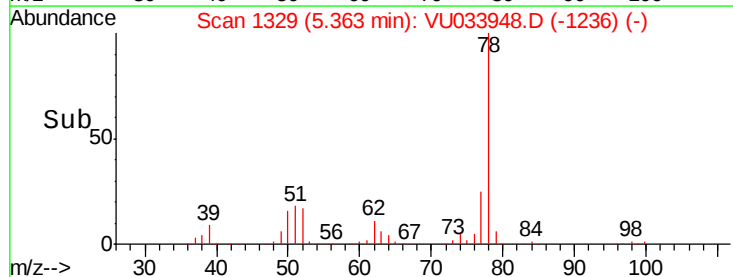
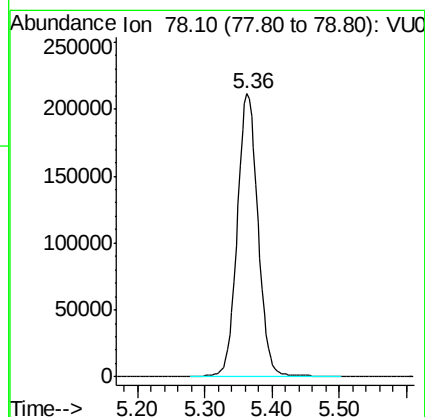
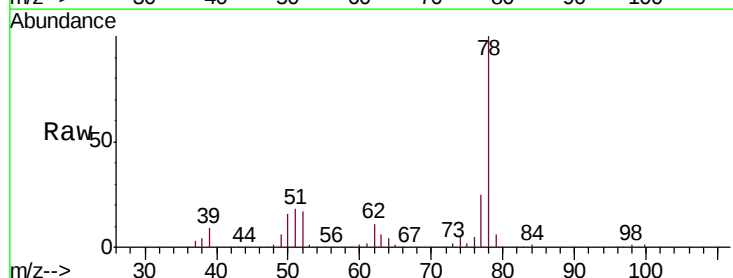
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00502

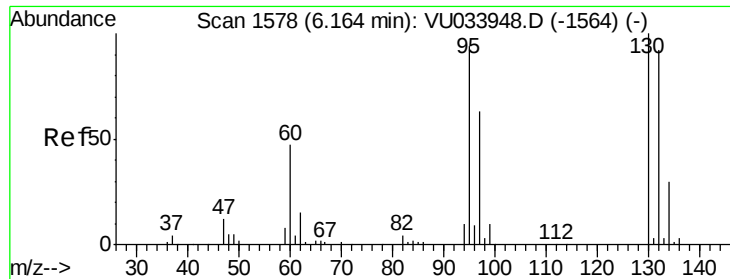
Tgt Ion:117 Resp: 153269  
Ion Ratio Lower Upper  
117 100  
119 95.5 76.4 114.6



#33  
Benzene  
Concen: 6.841 ug/L  
RT: 5.36 min Scan# 1329  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

Tgt Ion: 78 Resp: 452877





#34

Trichloroethene

Concen: 6.283 ug/L

RT: 6.16 min Scan# 1578

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

Tgt Ion: 95 Resp: 109506

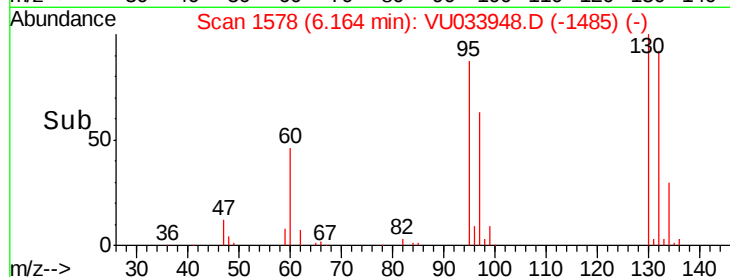
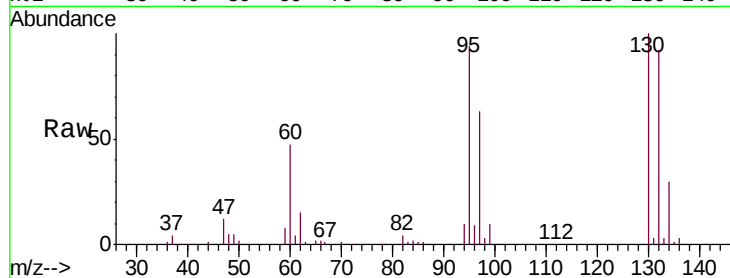
Ion Ratio Lower Upper

95 100

97 67.0 46.9 87.1

132 97.0 67.9 126.1

130 105.9 74.1 137.7

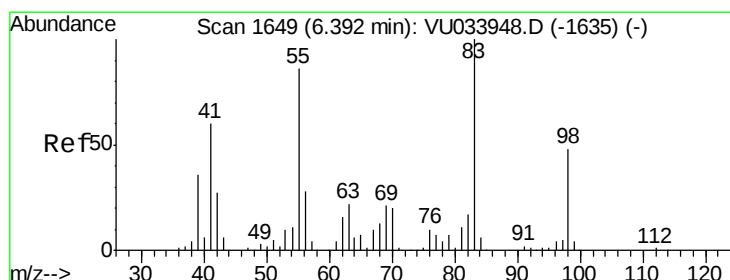
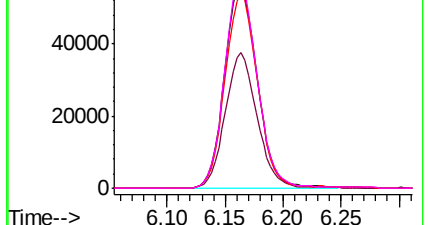


Abundance Ion 95.00 (94.70 to 95.70): VU033948.D (-1485) (-)

Ion 96.95 (96.65 to 97.65): VU033948.D (-1485) (-)

Ion 131.95 (131.65 to 132.65): VU033948.D (-1485) (-)

Ion 129.95 (129.65 to 130.65): VU033948.D (-1485) (-)



#35

Methylcyclohexane

Concen: 6.806 ug/L

RT: 6.39 min Scan# 1649

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

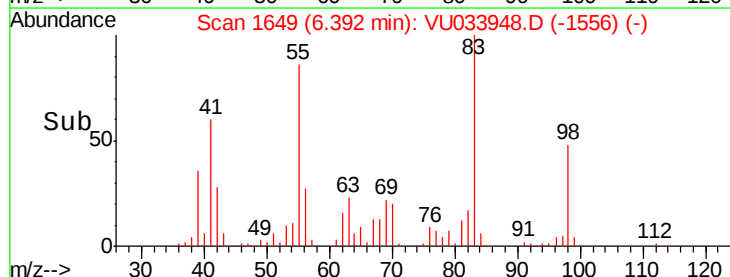
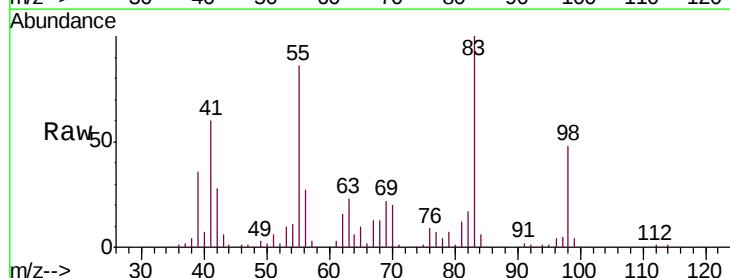
Tgt Ion: 83 Resp: 169861

Ion Ratio Lower Upper

83 100

55 85.8 68.6 103.0

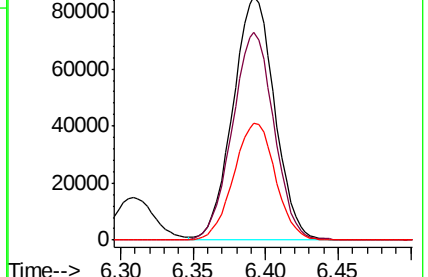
98 48.4 38.7 58.1

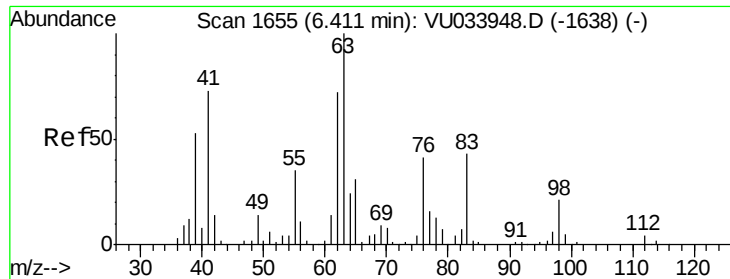


Abundance Ion 83.15 (82.85 to 83.85): VU033948.D (-1556) (-)

Ion 55.10 (54.80 to 55.80): VU033948.D (-1556) (-)

Ion 98.15 (97.85 to 98.85): VU033948.D (-1556) (-)

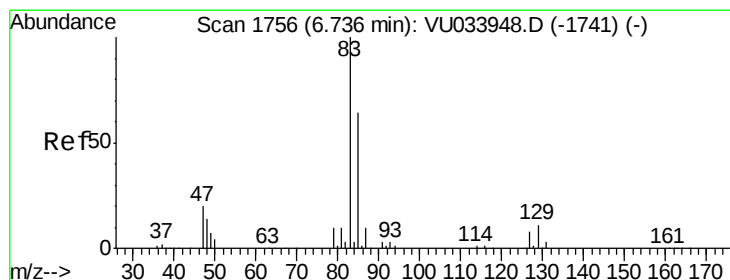
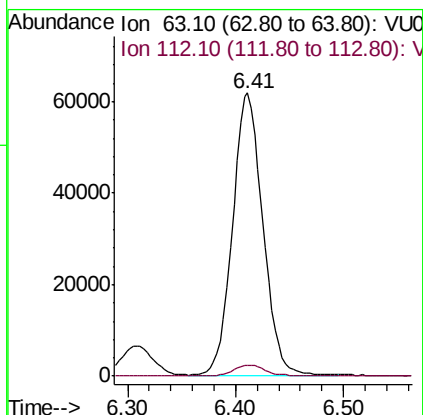
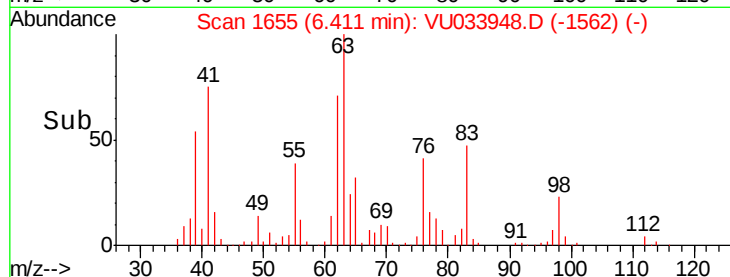
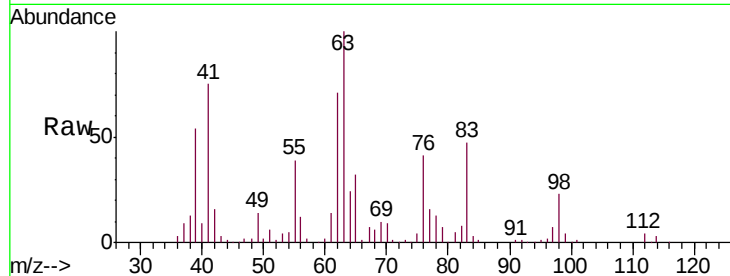




#37  
 1,2-Dichloropropane  
 Concen: 6.871 ug/L  
 RT: 6.41 min Scan# 1655  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

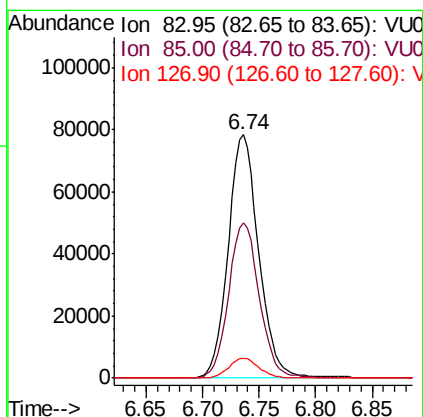
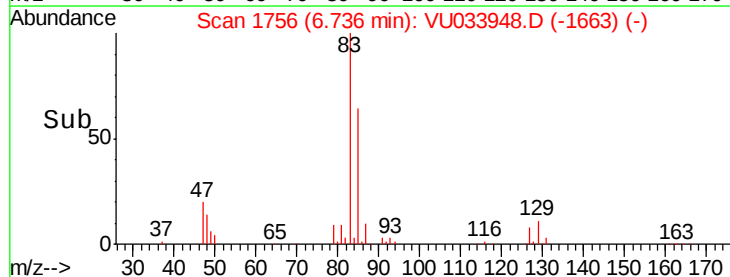
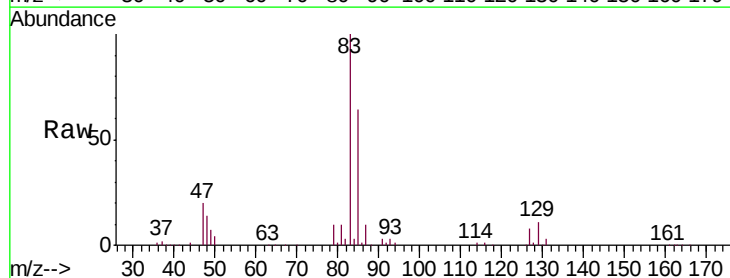
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00502

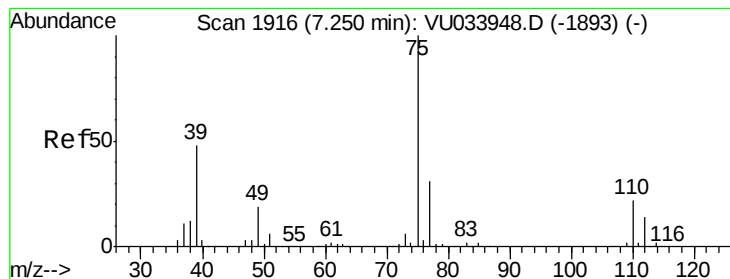
Tgt Ion: 63 Resp: 120563  
 Ion Ratio Lower Upper  
 63 100  
 112 4.2 3.4 5.0



#38  
 Bromodichloromethane  
 Concen: 6.552 ug/L  
 RT: 6.74 min Scan# 1756  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Tgt Ion: 83 Resp: 146595  
 Ion Ratio Lower Upper  
 83 100  
 85 63.6 44.5 82.7  
 127 8.2 6.6 9.8





#39

cis-1,3-Dichloropropene

Concen: 6.850 ug/L

RT: 7.25 min Scan# 1916

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

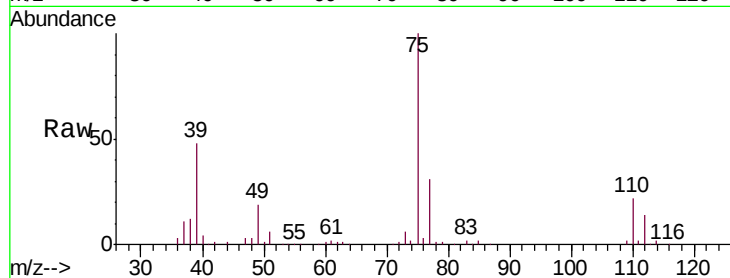
VSTD00502

Tgt Ion: 75 Resp: 158948

Ion Ratio Lower Upper

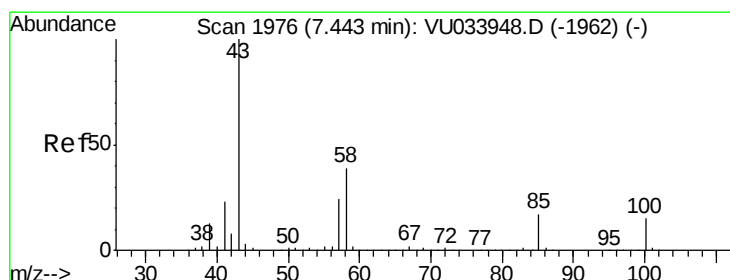
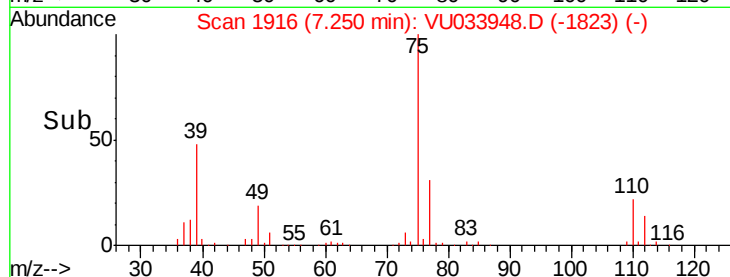
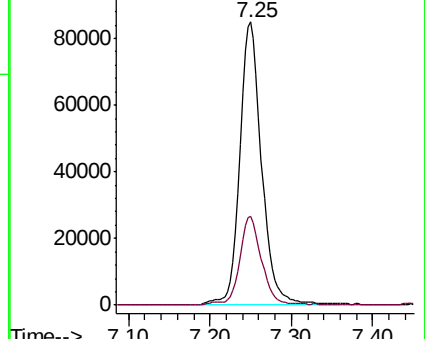
75 100

77 31.3 21.9 40.7



Abundance Ion 75.05 (74.75 to 75.75): VU033948.D (-1893) (-)

Ion 77.05 (76.75 to 77.75): VU033948.D (-1893) (-)



#40

4-Methyl-2-pentanone

Concen: 81.917 ug/L

RT: 7.44 min Scan# 1976

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

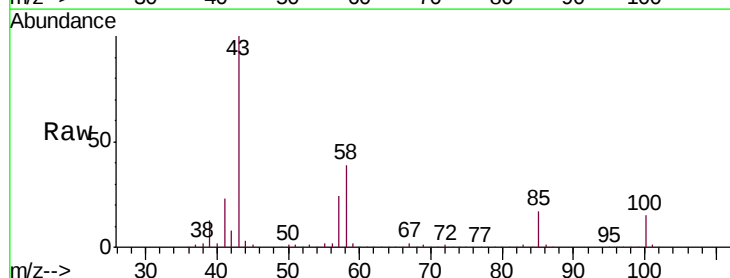
Tgt Ion: 43 Resp: 814719

Ion Ratio Lower Upper

43 100

58 37.9 30.3 45.5

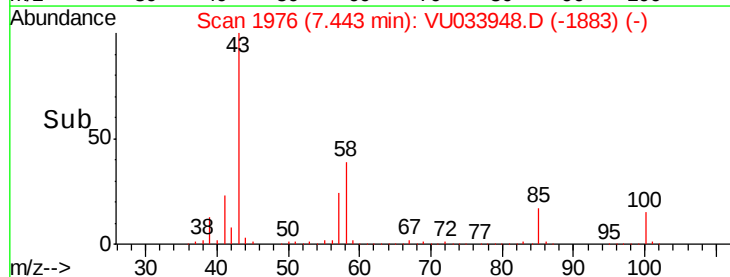
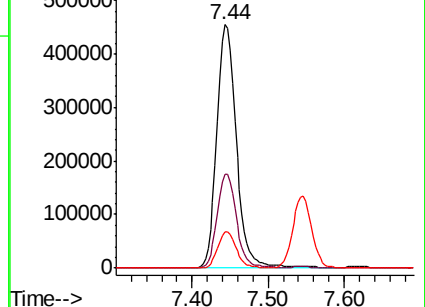
100 14.3 11.4 17.2

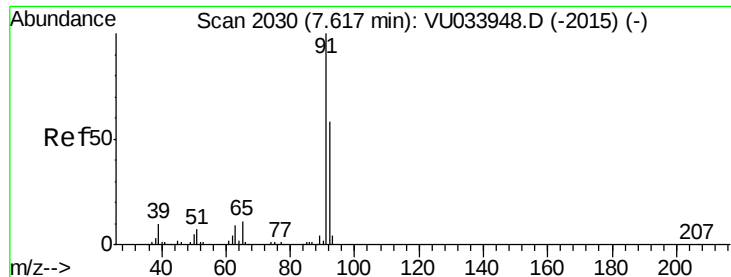


Abundance Ion 43.05 (42.75 to 43.75): VU033948.D (-1962) (-)

Ion 58.05 (57.75 to 58.75): VU033948.D (-1962) (-)

Ion 100.15 (99.85 to 100.85): VU033948.D (-1962) (-)





#42

Toluene

Concen: 6.941 ug/L

RT: 7.62 min Scan# 2030

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

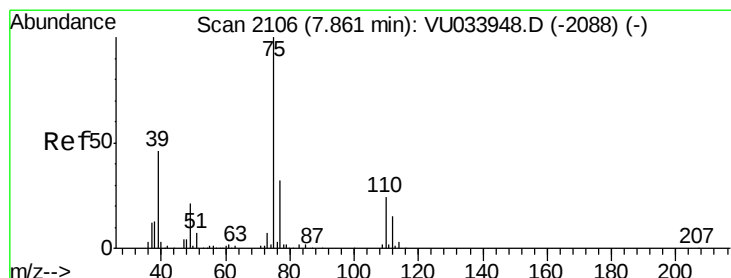
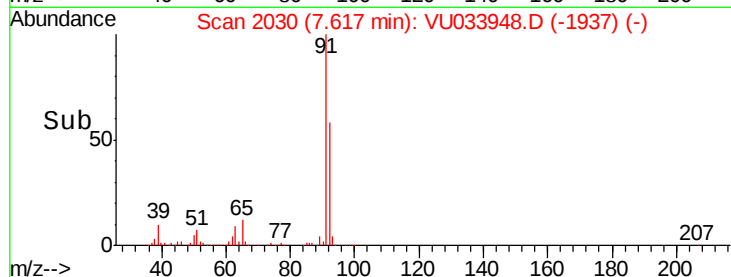
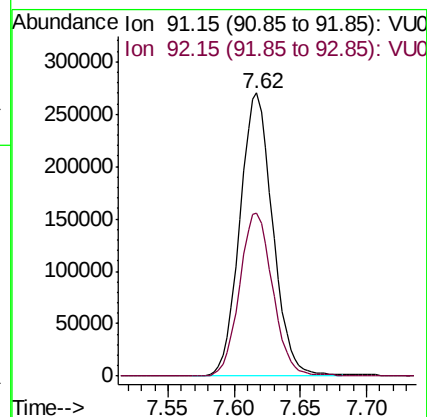
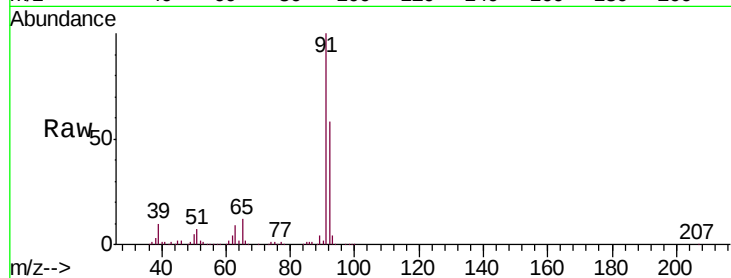
VSTD00502

Tgt Ion: 91 Resp: 465534

Ion Ratio Lower Upper

91 100

92 57.7 40.4 75.0



#44

trans-1,3-Dichloropropene

Concen: 7.021 ug/L

RT: 7.86 min Scan# 2106

Delta R.T. 0.00 min

Lab File: VU033948.D

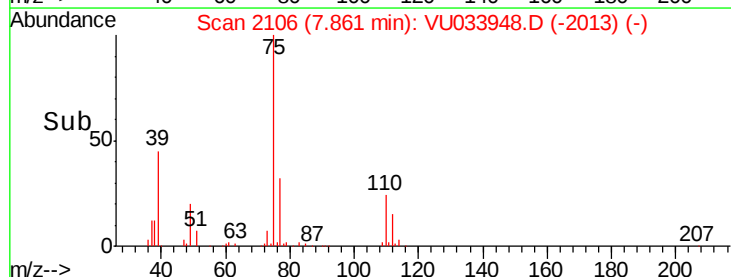
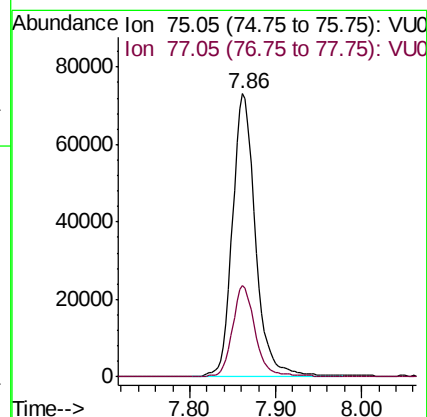
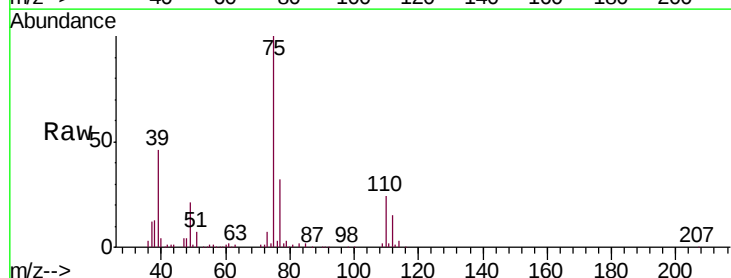
Acq: 26 Aug 2019 11:30

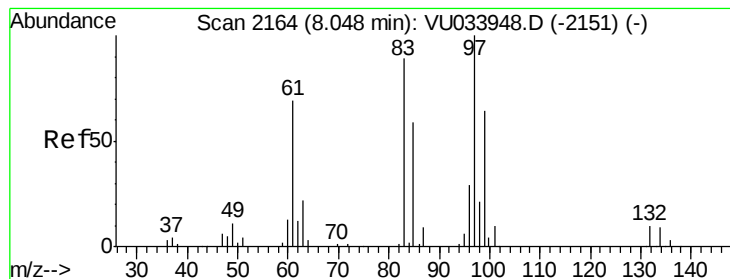
Tgt Ion: 75 Resp: 136739

Ion Ratio Lower Upper

75 100

77 32.4 22.7 42.1





#45

1,1,2-Trichloroethane

Concen: 6.655 ug/L

RT: 8.05 min Scan# 2164

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

Tgt Ion: 97 Resp: 82307

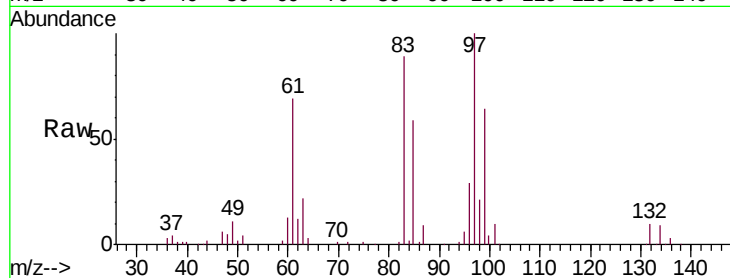
Ion Ratio Lower Upper

97 100

99 64.1 44.9 83.3

83 89.5 62.6 116.3

85 58.6 41.0 76.2

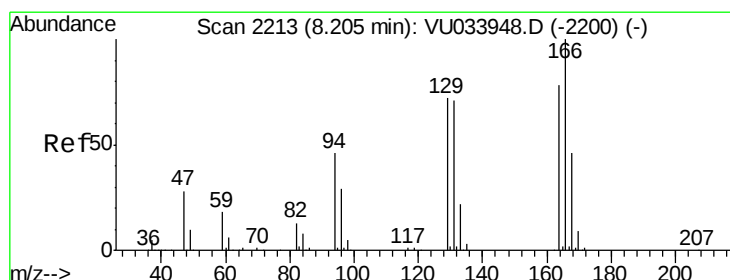
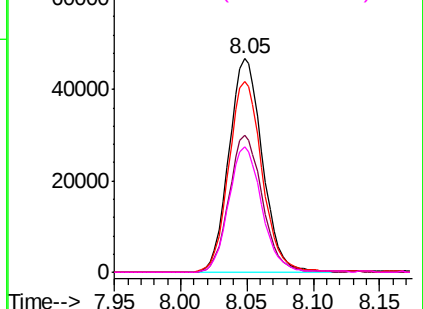
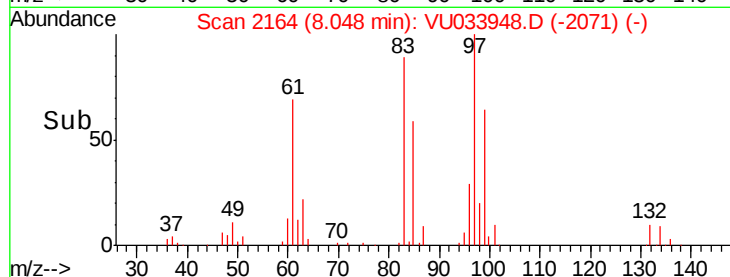


Abundance Ion 96.95 (96.65 to 97.65): VU0

Ion 99.05 (98.75 to 99.75): VU0

Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0



#47

Tetrachloroethene

Concen: 6.309 ug/L

RT: 8.21 min Scan# 2213

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Tgt Ion: 164 Resp: 89768

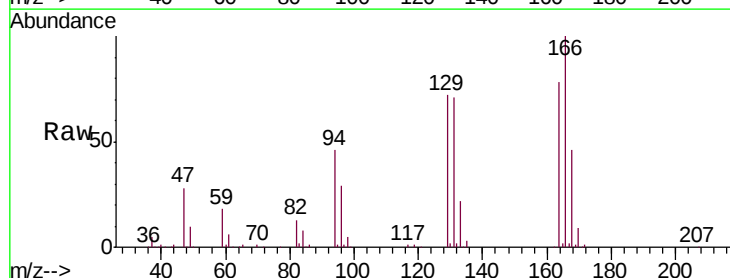
Ion Ratio Lower Upper

164 100

129 92.7 64.9 120.5

131 91.0 63.7 118.3

166 128.5 89.9 167.0

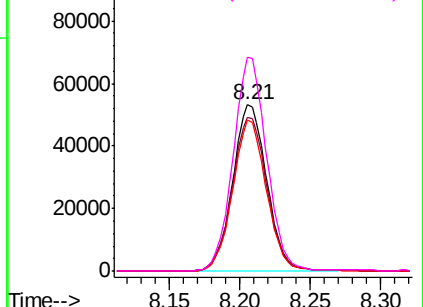
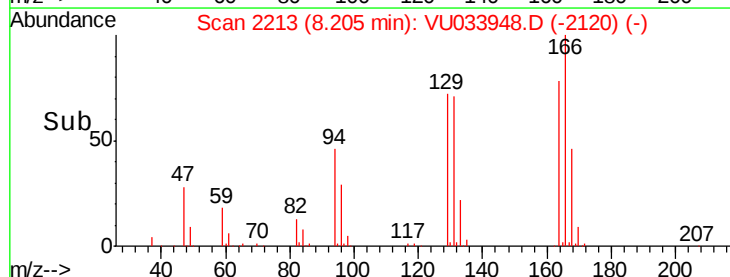


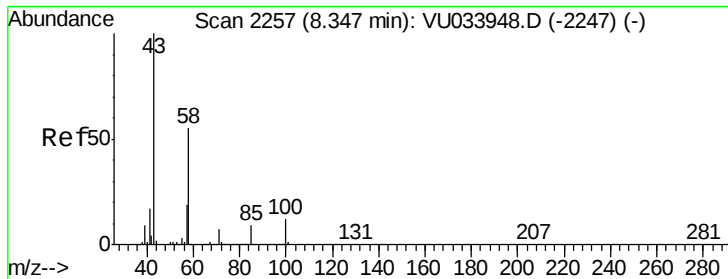
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

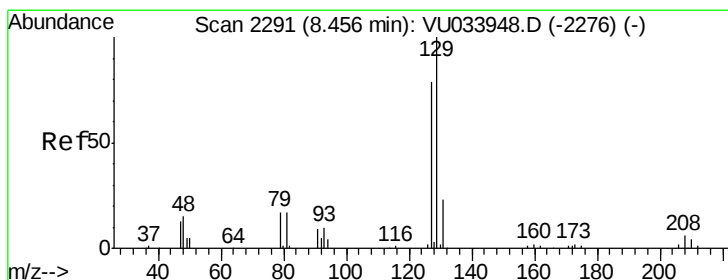
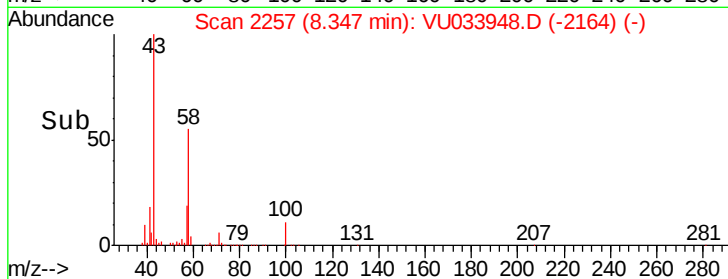
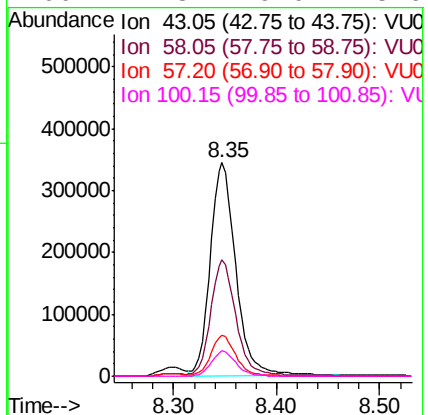
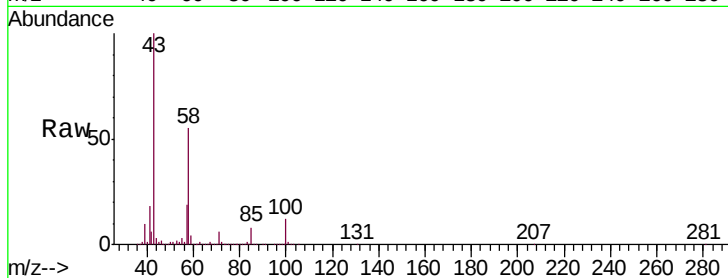




#48  
2-Hexanone  
Concen: 81.610 ug/L  
RT: 8.35 min Scan# 2257  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

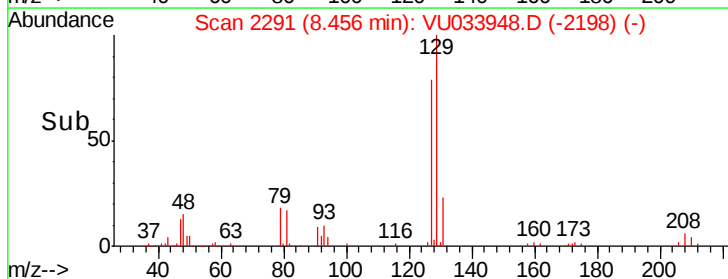
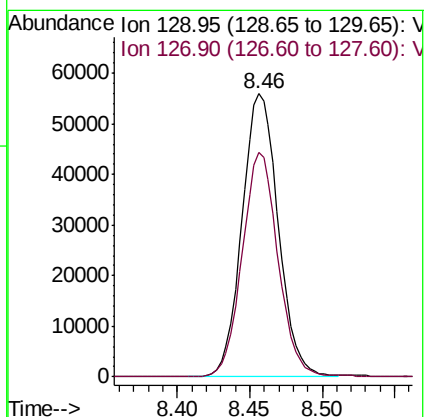
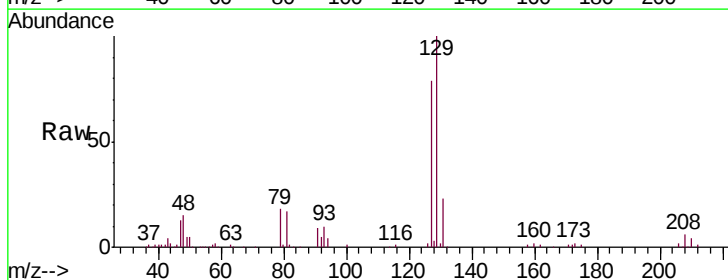
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00502

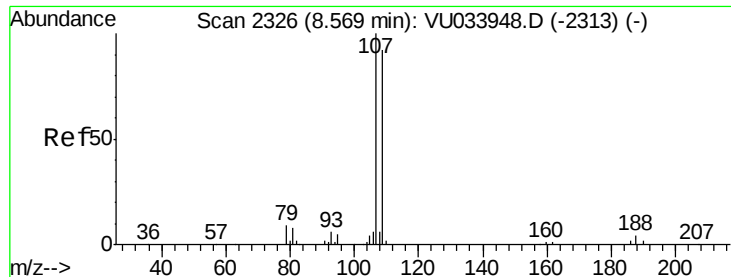
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 588497 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 53.6  | 42.9  | 64.3   |
| 57       | 18.5  | 14.8  | 22.2   |
| 100      | 11.3  | 9.0   | 13.6   |



#49  
Dibromochloromethane  
Concen: 6.385 ug/L  
RT: 8.46 min Scan# 2291  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 97617 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 79.4  | 55.6  | 103.2 |





#50

1,2-Dibromoethane

Concen: 6.734 ug/L

RT: 8.57 min Scan# 2326

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

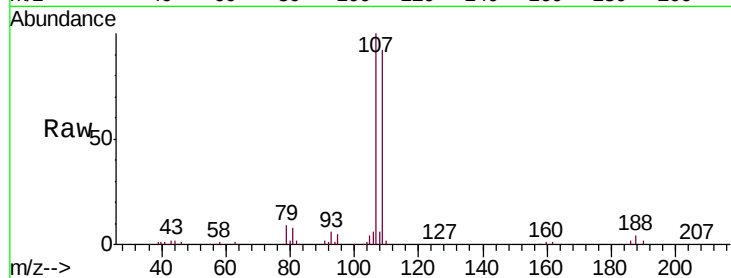
Tgt Ion:107 Resp: 79940

Ion Ratio Lower Upper

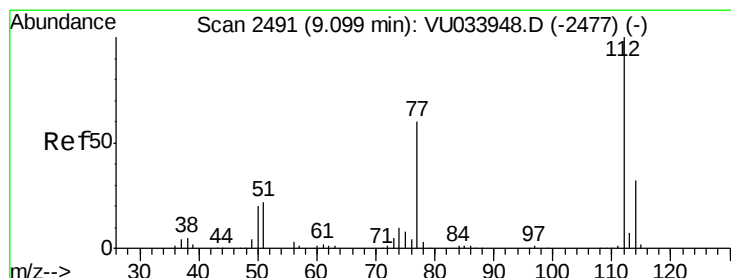
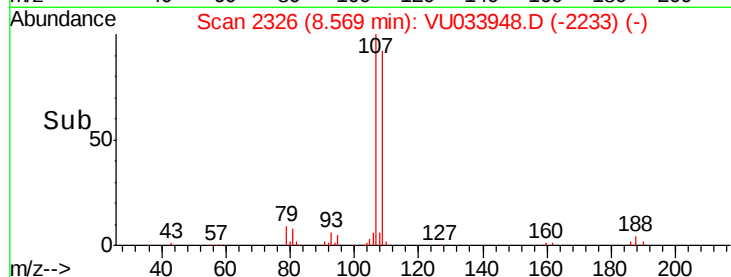
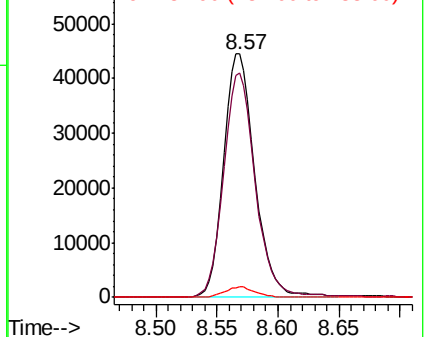
107 100

109 92.4 64.7 120.1

188 4.3 3.4 5.2



Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V



#51

Chlorobenzene

Concen: 6.530 ug/L

RT: 9.10 min Scan# 2491

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

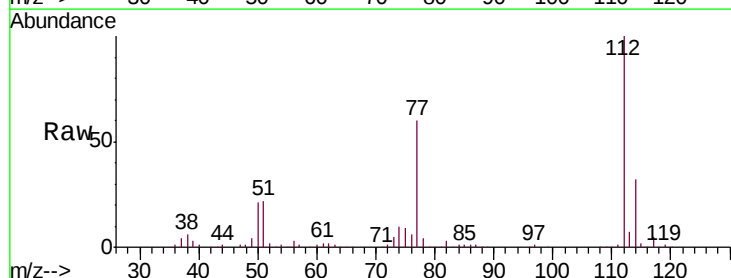
Tgt Ion:112 Resp: 288957

Ion Ratio Lower Upper

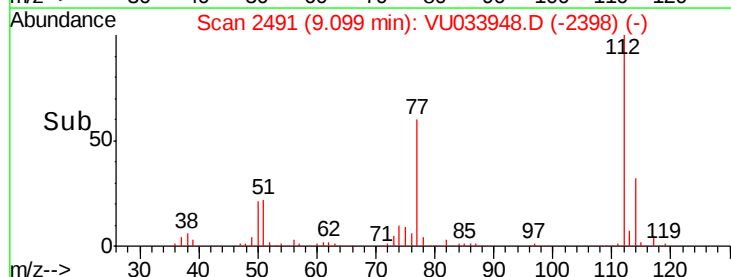
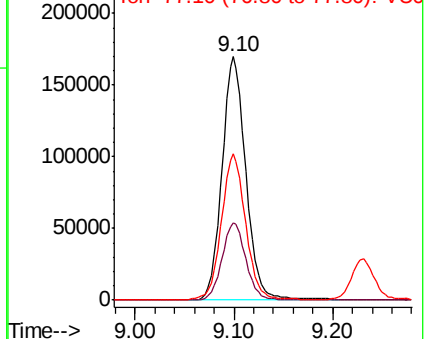
112 100

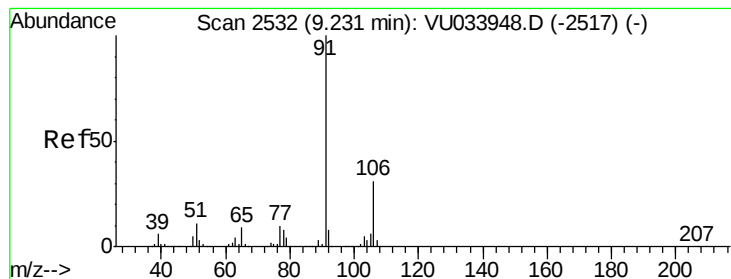
114 31.9 22.3 41.5

77 60.0 48.0 72.0



Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V





#52

Ethylbenzene

Concen: 6.927 ug/L

RT: 9.23 min Scan# 2532

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

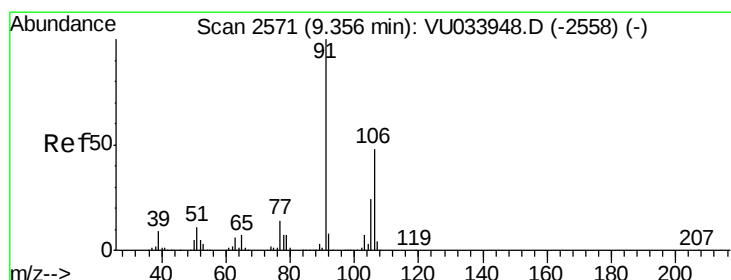
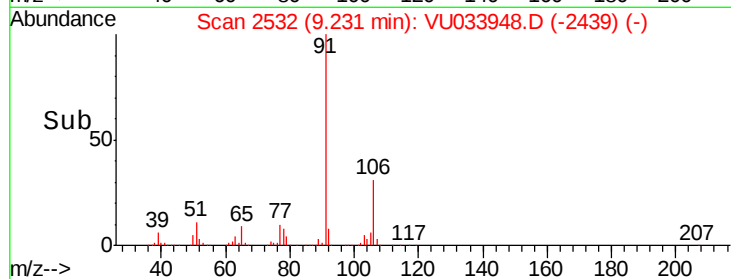
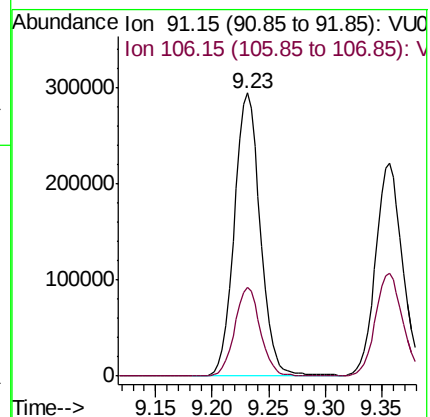
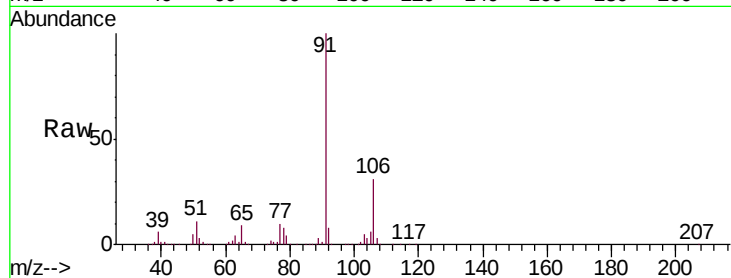
VSTD00502

Tgt Ion: 91 Resp: 471260

Ion Ratio Lower Upper

91 100

106 31.4 22.0 40.8



#53

m,p-Xylene

Concen: 7.054 ug/L

RT: 9.36 min Scan# 2571

Delta R.T. 0.00 min

Lab File: VU033948.D

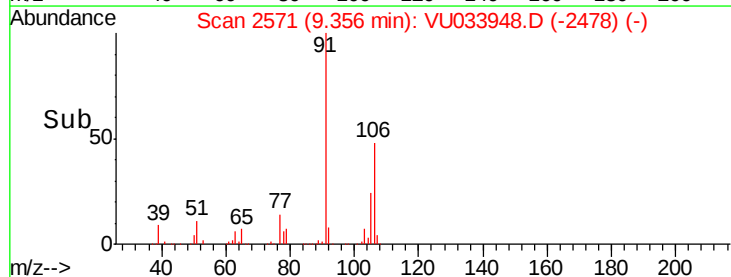
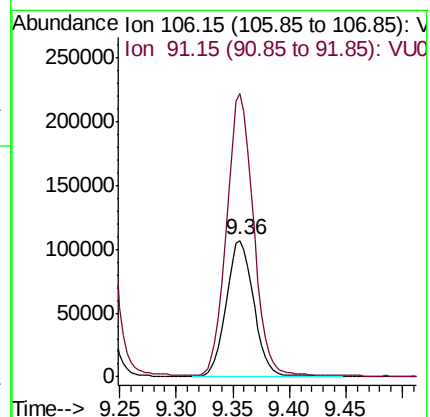
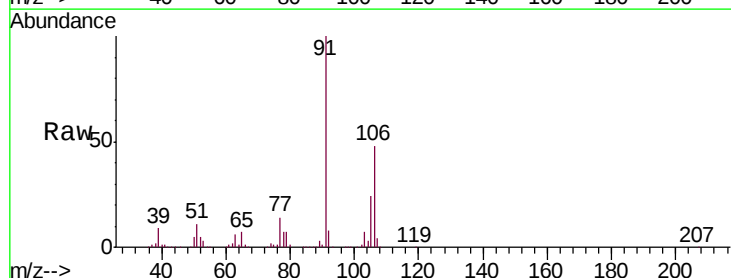
Acq: 26 Aug 2019 11:30

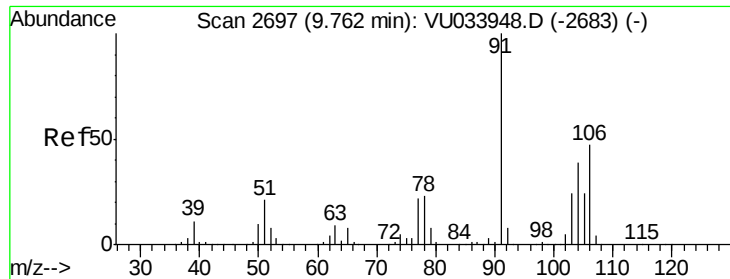
Tgt Ion: 106 Resp: 180741

Ion Ratio Lower Upper

106 100

91 207.3 145.1 269.5

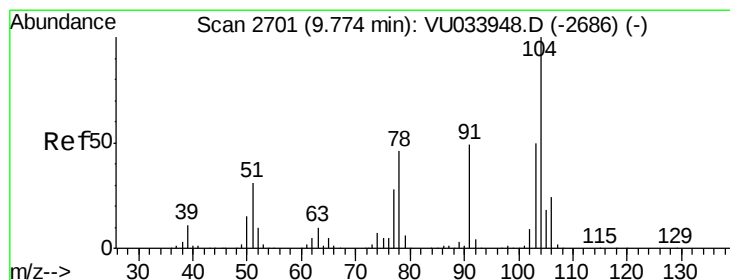
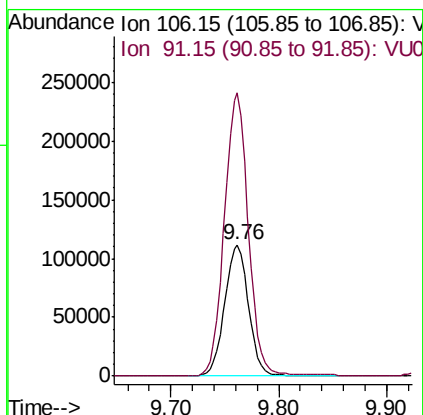
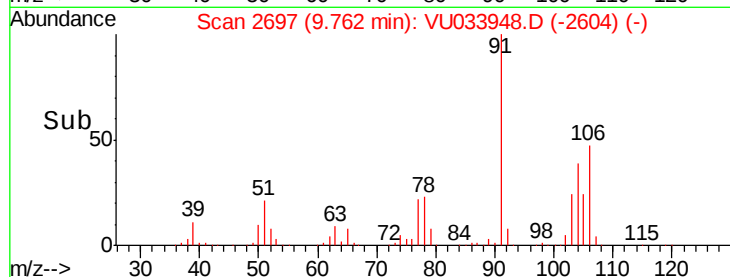
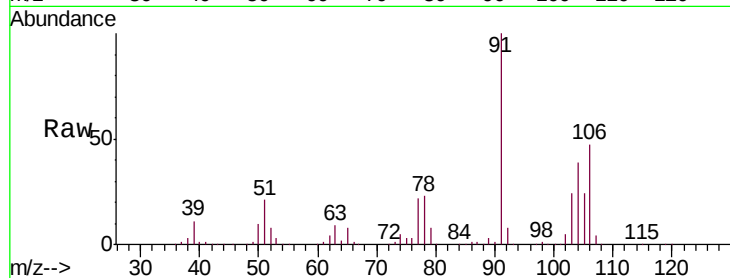




#54  
o-Xylene  
Concen: 7.034 ug/L  
RT: 9.76 min Scan# 2697  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

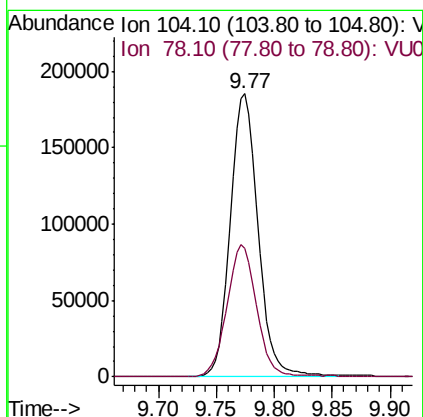
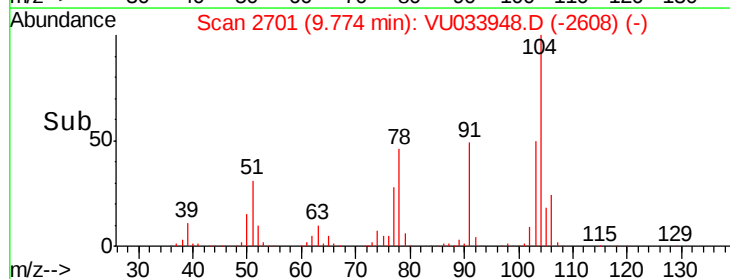
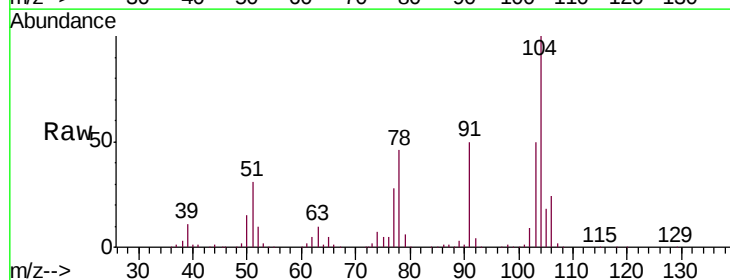
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00502

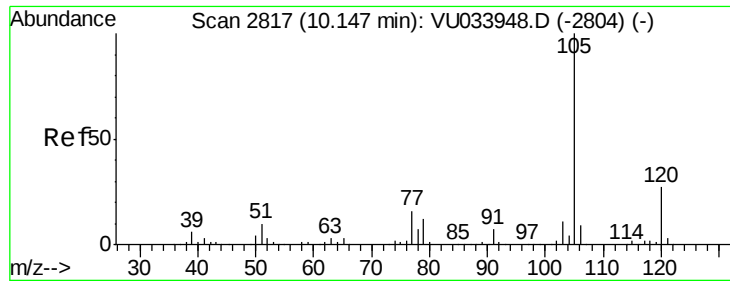
Tgt Ion:106 Resp: 173051  
Ion Ratio Lower Upper  
106 100  
91 215.1 150.6 279.6



#55  
Styrene  
Concen: 7.171 ug/L  
RT: 9.77 min Scan# 2701  
Delta R.T. 0.00 min  
Lab File: VU033948.D  
Acq: 26 Aug 2019 11:30

Tgt Ion:104 Resp: 306992  
Ion Ratio Lower Upper  
104 100  
78 45.6 31.9 59.3





#56

Isopropylbenzene

Concen: 7.056 ug/L

RT: 10.15 min Scan# 2817

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

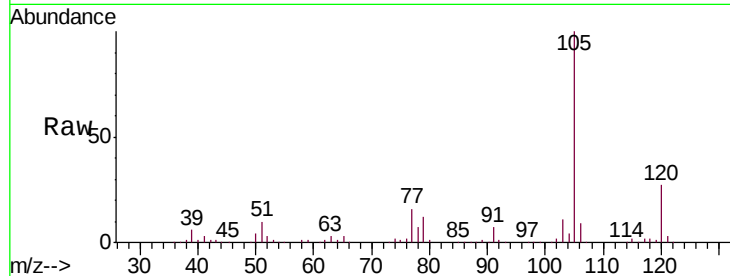
Tgt Ion: 105 Resp: 447850

Ion Ratio Lower Upper

105 100

120 26.8 21.4 32.2

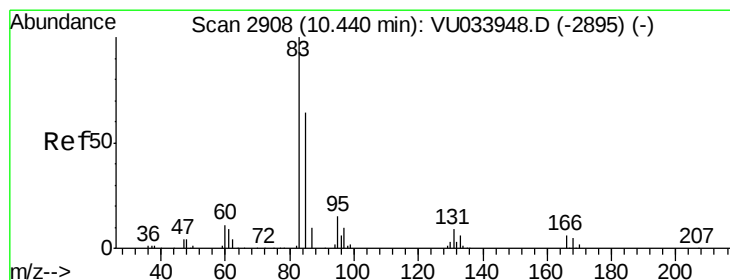
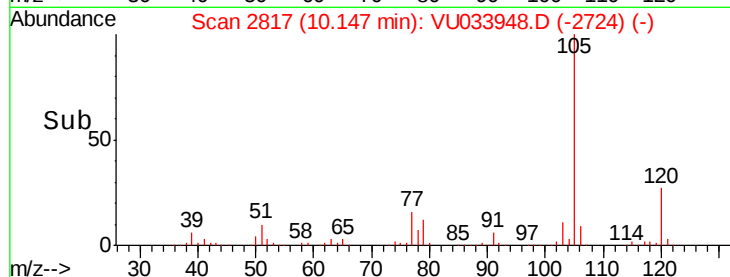
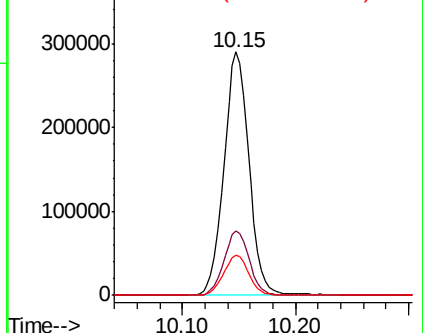
77 16.6 13.3 19.9



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 6.942 ug/L

RT: 10.44 min Scan# 2908

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

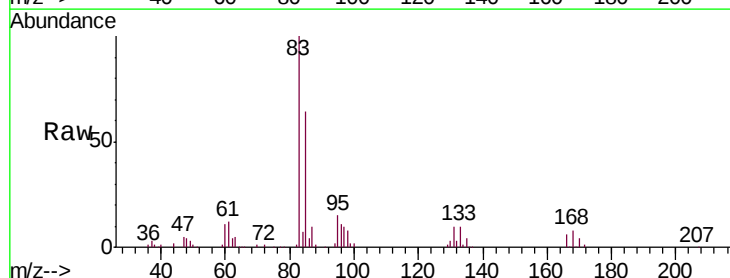
Tgt Ion: 83 Resp: 109661

Ion Ratio Lower Upper

83 100

85 64.5 45.1 83.9

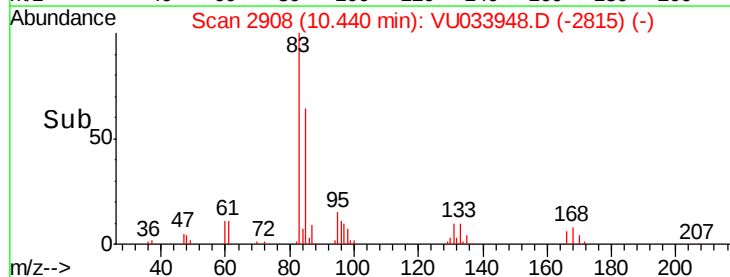
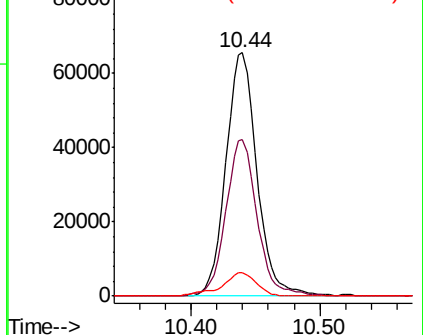
131 9.8 7.8 11.8

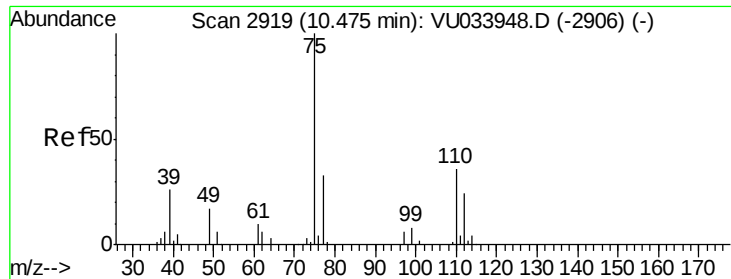


Abundance Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 130.95 (130.65 to 131.65): V

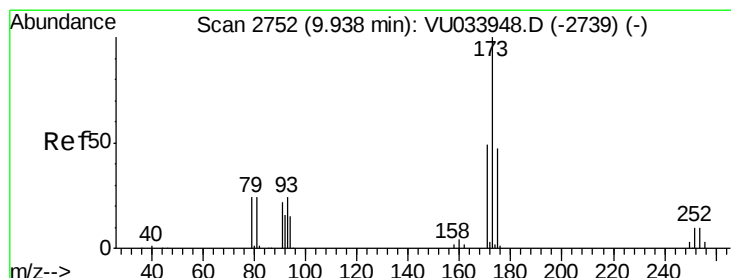
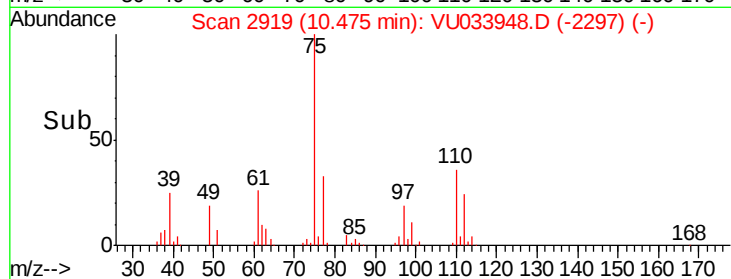
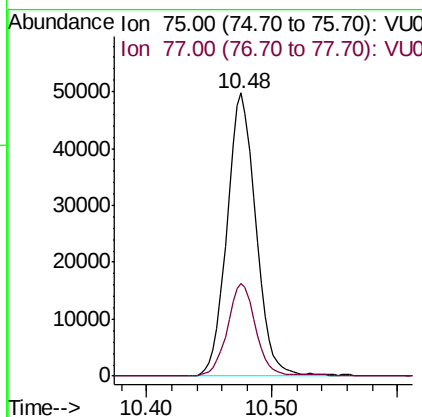
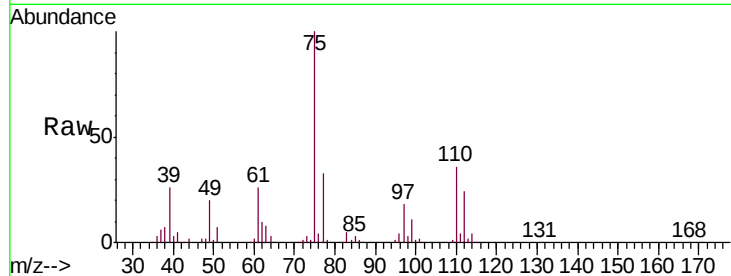




#59  
 1,2,3-Trichloropropane  
 Concen: 6.911 ug/L  
 RT: 10.48 min Scan# 2919  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

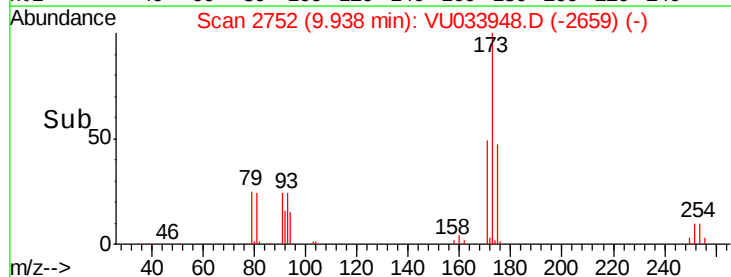
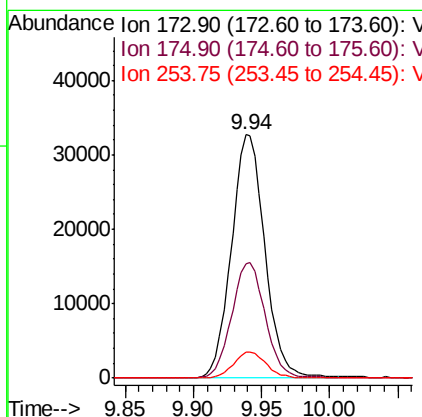
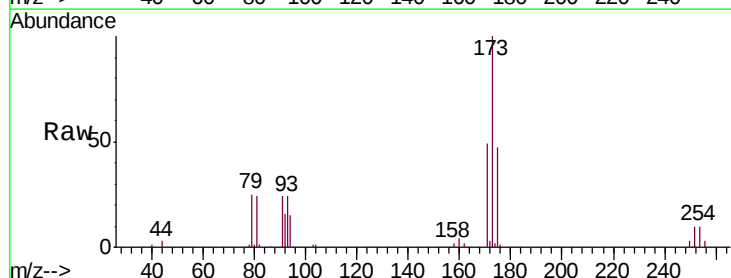
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00502

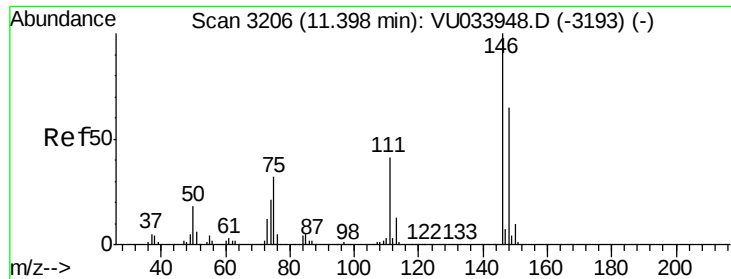
Tgt Ion: 75 Resp: 79613  
 Ion Ratio Lower Upper  
 75 100  
 77 31.1 24.9 37.3



#61  
 Bromoform  
 Concen: 6.390 ug/L  
 RT: 9.94 min Scan# 2752  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Tgt Ion: 173 Resp: 55779  
 Ion Ratio Lower Upper  
 173 100  
 175 47.7 38.2 57.2  
 254 10.5 8.4 12.6





#62

1,3-Dichlorobenzene

Concen: 6.515 ug/L

RT: 11.40 min Scan# 3206

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

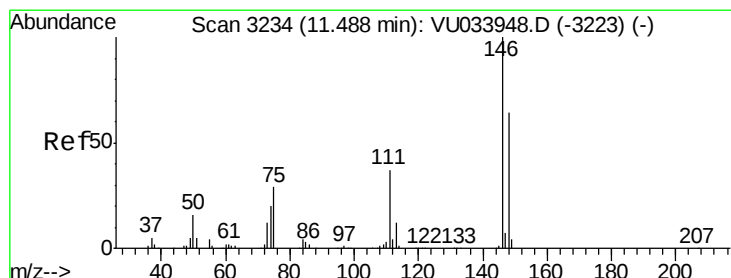
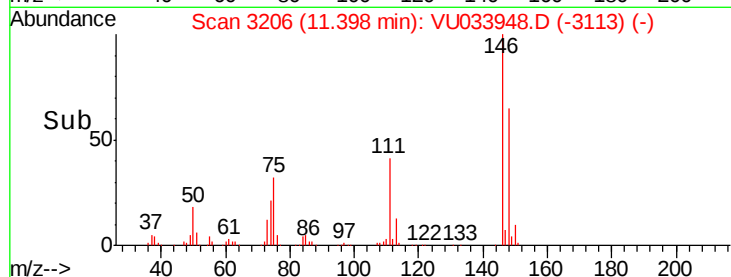
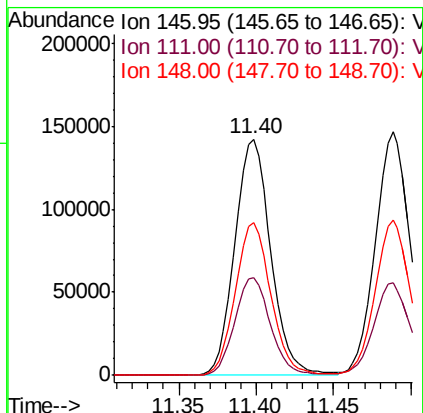
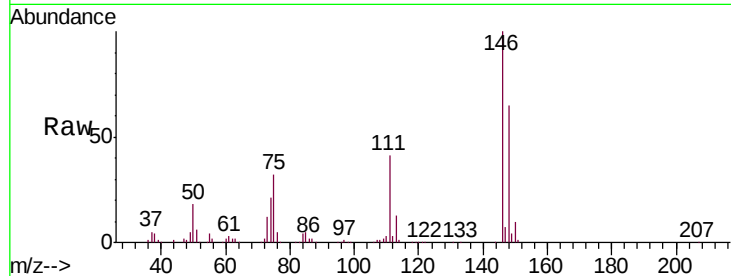
Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 229527 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 41.2  | 28.8  | 53.6   |
| 148      | 64.9  | 45.4  | 84.4   |



#63

1,4-Dichlorobenzene

Concen: 6.466 ug/L

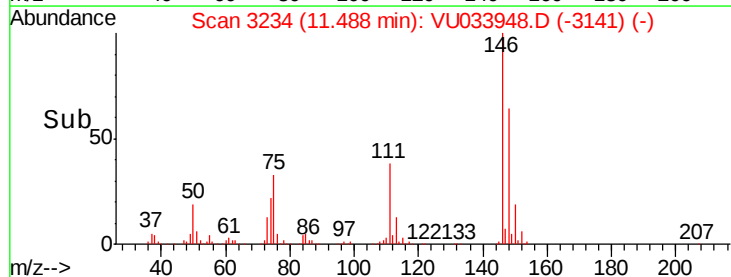
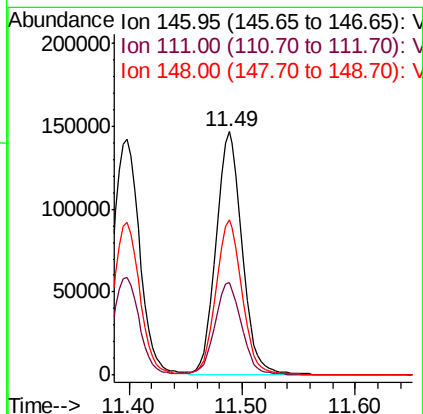
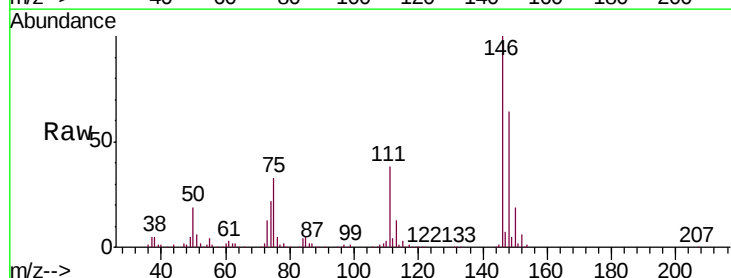
RT: 11.49 min Scan# 3234

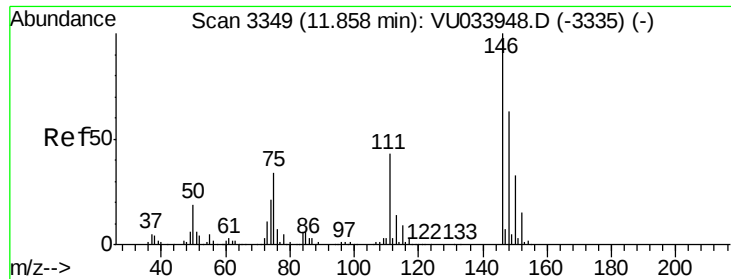
Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 234723 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 37.8  | 26.5  | 49.1   |
| 148      | 63.8  | 44.7  | 82.9   |

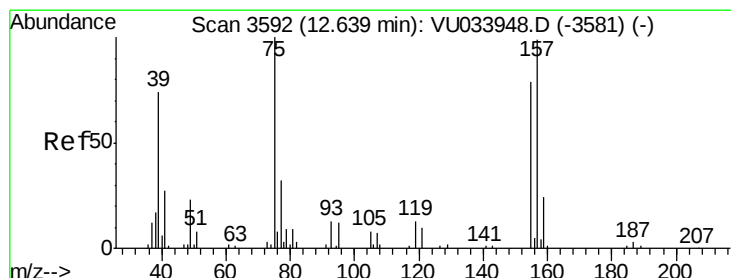
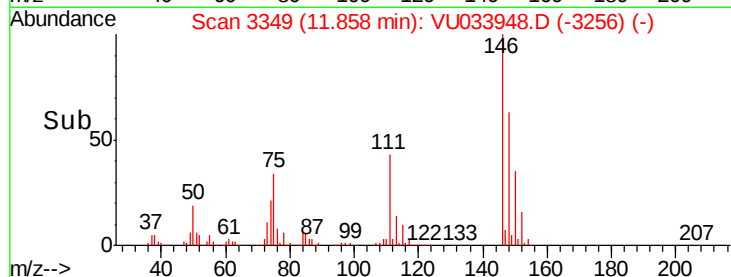
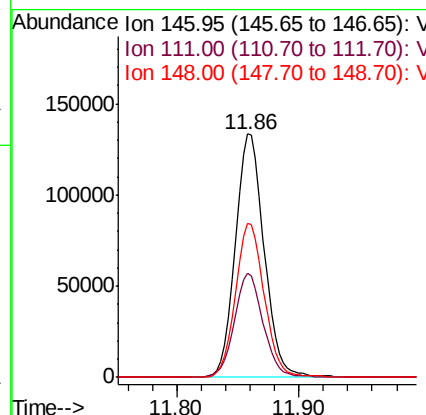
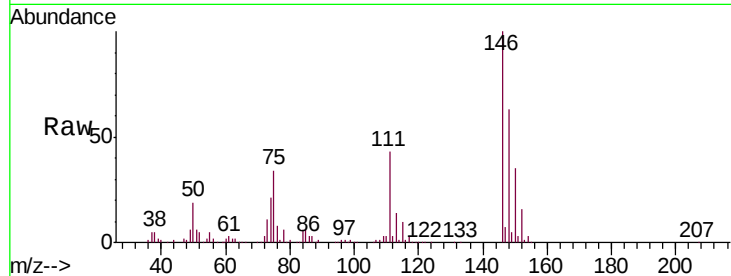




#65  
 1,2-Dichlorobenzene  
 Concen: 6.456 ug/L  
 RT: 11.86 min Scan# 3349  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

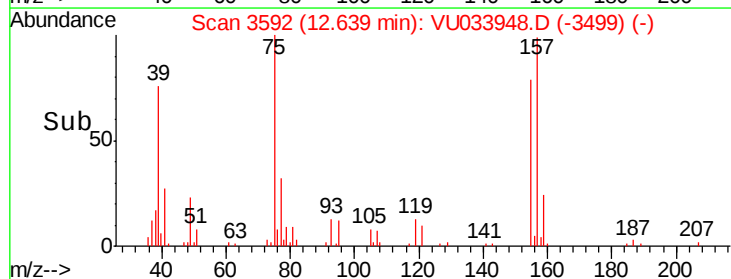
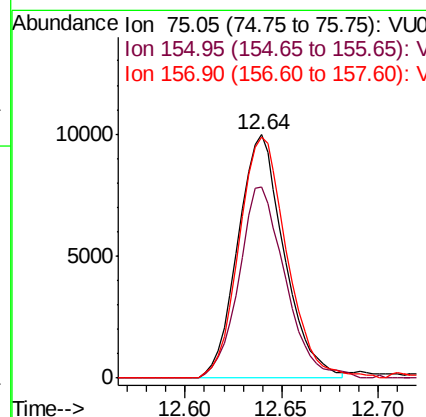
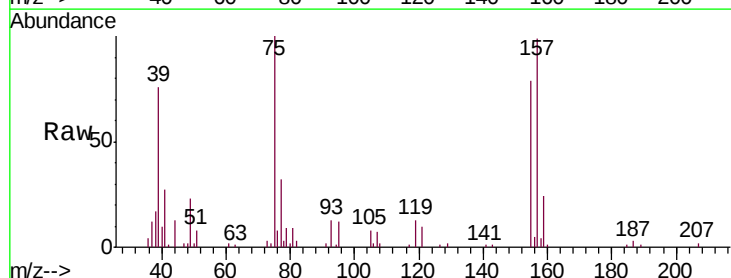
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00502

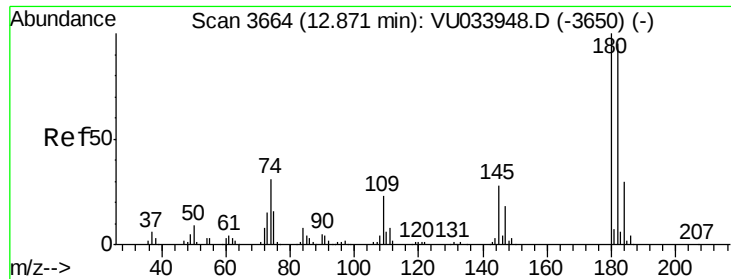
Tgt Ion: 146 Resp: 219563  
 Ion Ratio Lower Upper  
 146 100  
 111 42.9 34.3 51.5  
 148 63.1 50.5 75.7



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 6.780 ug/L  
 RT: 12.64 min Scan# 3592  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Tgt Ion: 75 Resp: 16593  
 Ion Ratio Lower Upper  
 75 100  
 155 78.7 63.0 94.4  
 157 99.2 79.4 119.0

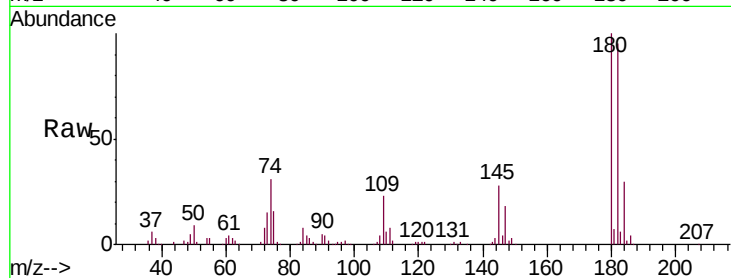




#67  
 1,3,5-Trichlorobenzene  
 Concen: 6.474 ug/L  
 RT: 12.87 min Scan# 3664  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00502

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.1  | 76.9  | 115.3 |
| 184     | 30.0  | 24.0  | 36.0  |
| 145     | 28.3  | 22.6  | 34.0  |



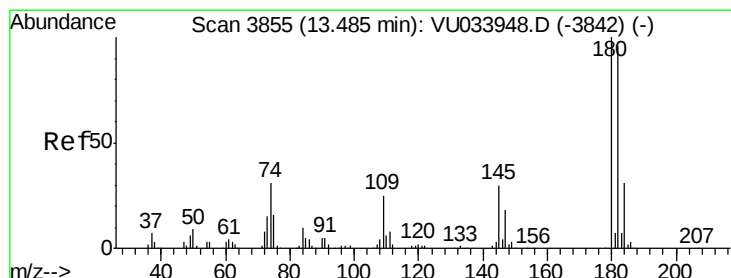
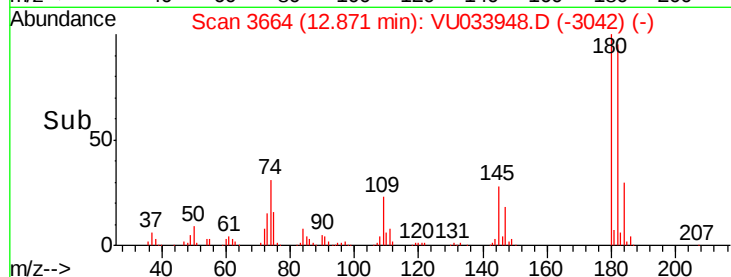
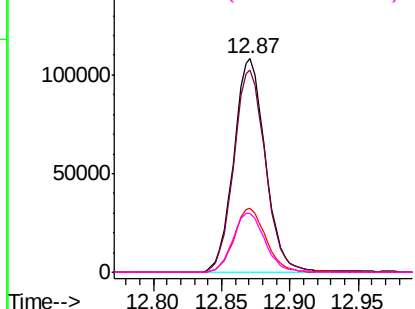
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

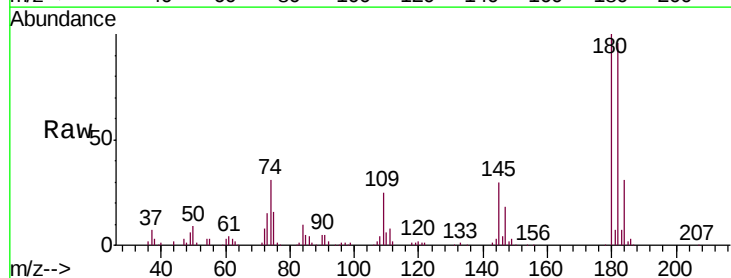
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 6.769 ug/L  
 RT: 13.48 min Scan# 3855  
 Delta R.T. 0.00 min  
 Lab File: VU033948.D  
 Acq: 26 Aug 2019 11:30

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.5  | 76.4  | 114.6 |
| 145     | 29.3  | 23.4  | 35.2  |

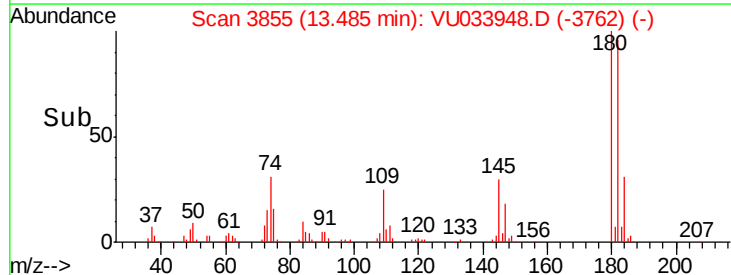
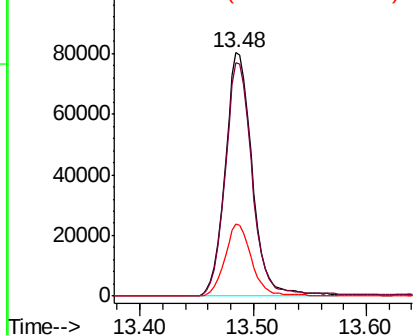


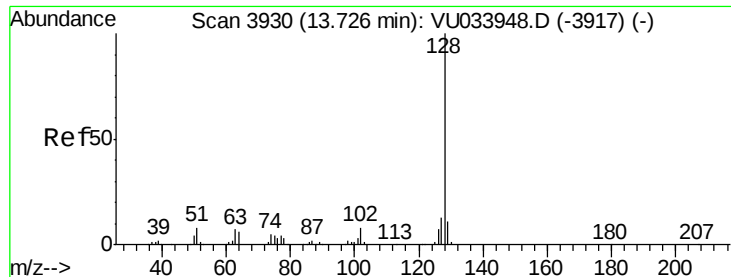
Abundance

Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 6.978 ug/L

RT: 13.73 min Scan# 3930

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00502

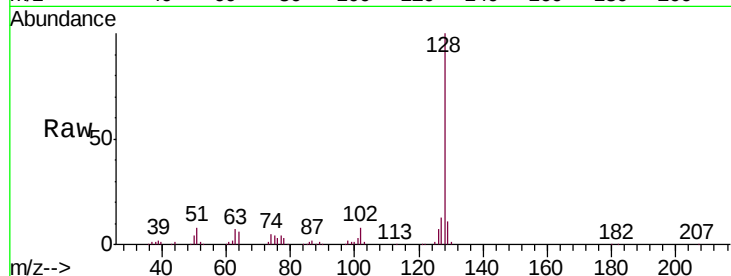
Tgt Ion:128 Resp: 204627

Ion Ratio Lower Upper

128 100

129 10.7 8.6 12.8

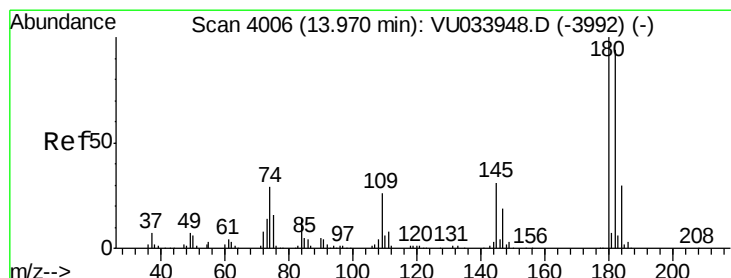
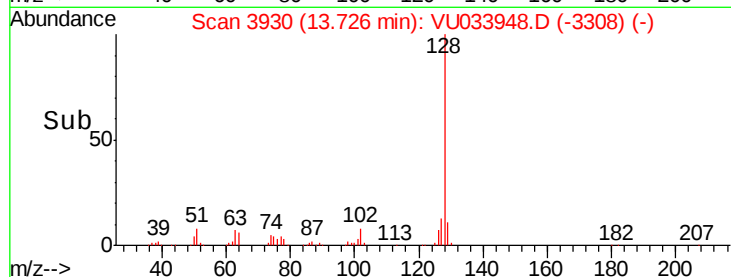
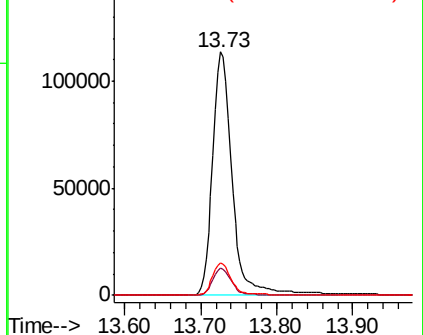
127 12.9 10.3 15.5



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 6.968 ug/L

RT: 13.97 min Scan# 4006

Delta R.T. 0.00 min

Lab File: VU033948.D

Acq: 26 Aug 2019 11:30

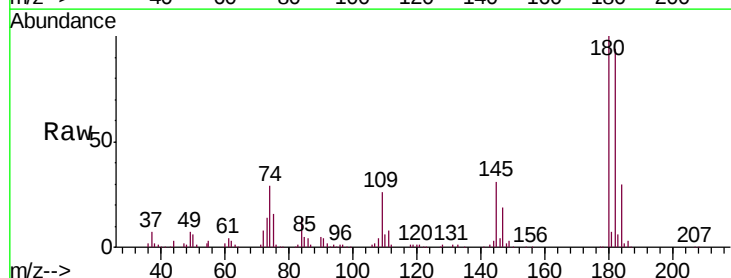
Tgt Ion:180 Resp: 131356

Ion Ratio Lower Upper

180 100

182 98.2 78.6 117.8

145 30.9 24.7 37.1



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

