

Data Path : W:\HPCHEM1\MSVOA D\DATA\VD092115\  
 Data File : VD046808.D  
 Acq On : 21 Sep 2015 15:43  
 Operator : FY/SY  
 Sample : G3747-06  
 Misc : 5.92µm/5mL/MSVOA D/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TRENCH-2-2

Quant Time: Sep 22 01:03:58 2015  
 Quant Method : W:\HPCHEM1\MSVOA\_D\METHOD\82D091815S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 18 15:47:18 2015  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.29  | 168  | 142687   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 7.42  | 114  | 186947   | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 11.57 | 117  | 158028   | 50.00 | ug/l  | -0.02    |
| 72) 1,4-Dichlorobenzene-d4 | 13.91 | 152  | 74644    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.71  | 65   | 81995    | 55.27 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 110.54% |          |
| 35) Dibromofluoromethane    | 6.19  | 113  | 83146    | 56.85 | ug/l    | -0.03    |
| Spiked Amount               |       |      | Recovery | =     | 113.70% |          |
| 50) Toluene-d8              | 9.60  | 98   | 227639   | 49.33 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 98.66%  |          |
| 62) 4-Bromofluorobenzene    | 12.84 | 95   | 80232    | 43.18 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 86.36%  |          |

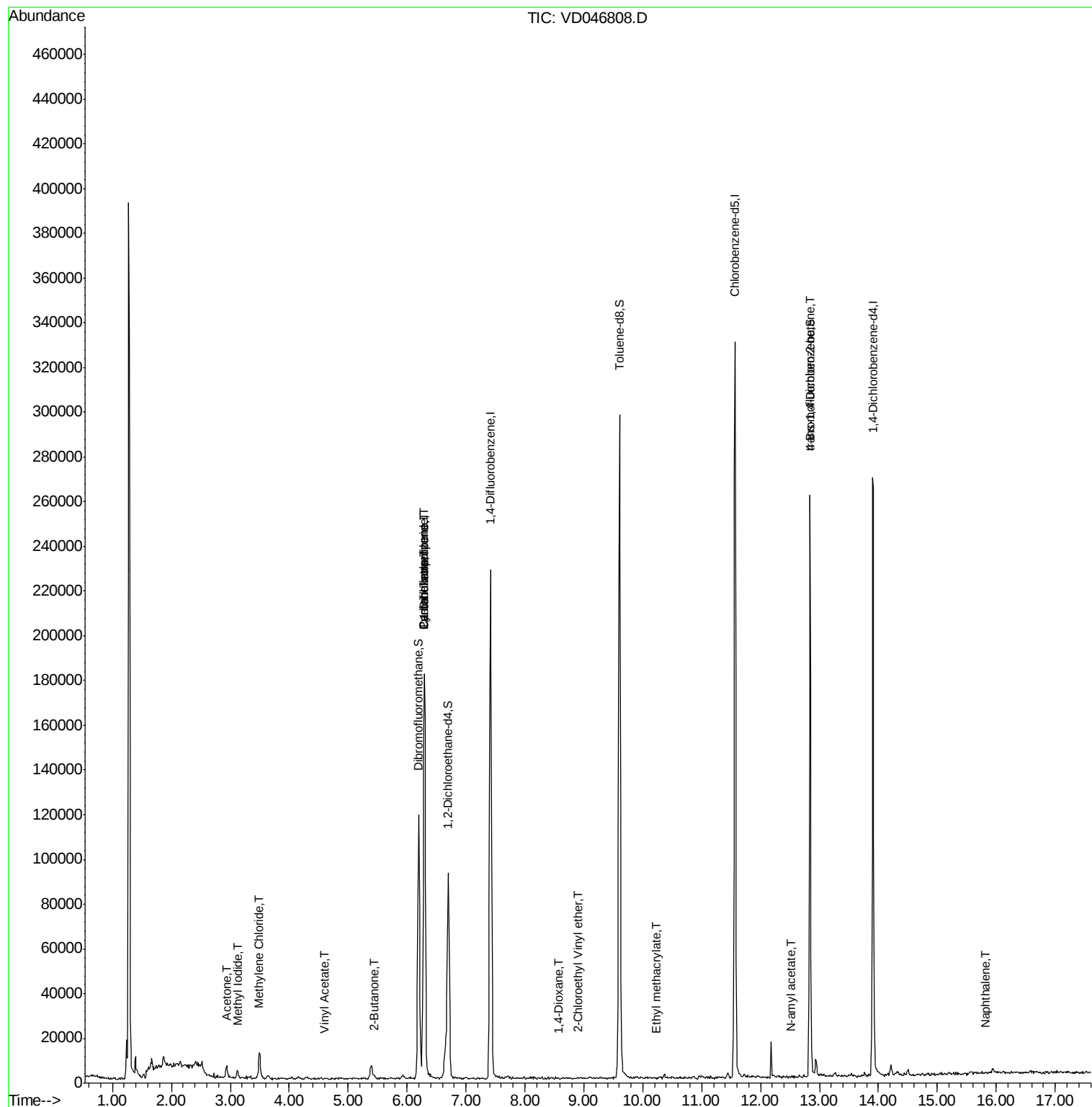
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.41  | 85   | 810      | Below Cal | #     | 42     |
| 3) Chlorodifluoromethane       | 1.43  | 51   | 534      | Below Cal | #     | 42     |
| 6) Bromomethane                | 1.96  | 94   | 425      | Below Cal | #     | 49     |
| 11) Methyl Iodide              | 3.13  | 142  | 49       | 1.76      | ug/l  | 35     |
| 12) Tert butyl alcohol         | 3.69  | 59   | 177      | Below Cal | #     | 74     |
| 17) Acetone                    | 2.94  | 43   | 8095     | 32.29     | ug/l  | 85     |
| 21) Methylene Chloride         | 3.49  | 84   | 5270     | 3.87      | ug/l  | 87     |
| 24) Vinyl Acetate              | 4.59  | 43   | 32       | 15.02     | ug/l  | 82     |
| 26) 2-Butanone                 | 5.44  | 43   | 1638     | 5.81      | ug/l  | 93     |
| 31) Cyclohexane                | 6.29  | 56   | 3757     | 1.69      | ug/l  | 1      |
| 36) 1,1-Dichloropropene        | 6.29  | 75   | 13316    | 6.09      | ug/l  | 54     |
| 38) Carbon Tetrachloride       | 6.29  | 117  | 13018    | 5.73      | ug/l  | 20     |
| 49) 1,4-Dioxane                | 8.57  | 88   | 30       | 5.73      | ug/l  | 10     |
| 56) Ethyl methacrylate         | 10.22 | 69   | 153      | 4.03      | ug/l  | 11     |
| 58) 2-Chloroethyl Vinyl ether  | 8.88  | 63   | 37       | 6.41      | ug/l  | 53     |
| 74) N-amyl acetate             | 12.52 | 43   | 59       | 4.75      | ug/l  | 54     |
| 81) trans-1,4-Dichloro-2-buten | 12.84 | 75   | 40058    | 151.93    | ug/l  | 9      |
| 95) Naphthalene                | 15.80 | 128  | 400      | 2.62      | ug/l  | 49     |

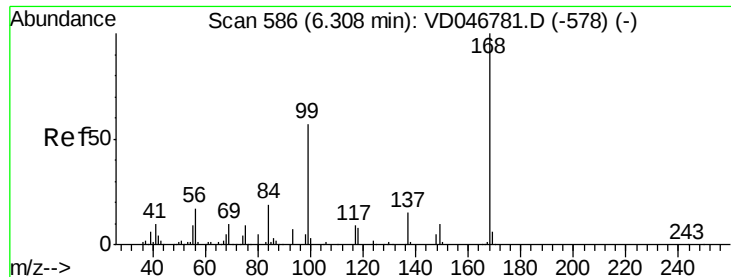
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : W:\HPCHEM1\MSVOA D\DATA\VD092115\  
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Instrument :  
MSVOA\_D  
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TRENCH-2-2

Quant Time: Sep 22 01:03:58 2015  
Quant Method : W:\HPCHEM1\MSVOA\_D\METHOD\82D091815S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 18 15:47:18 2015  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 6.29 min Scan# 585

Delta R.T. -0.02 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

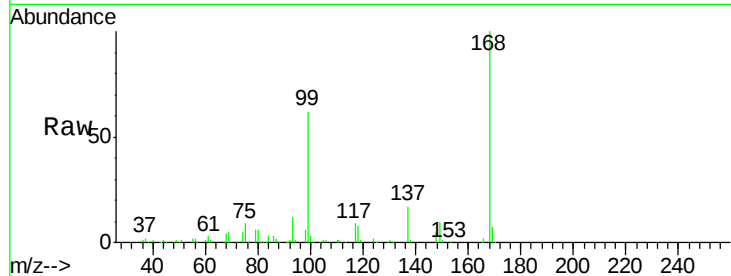
TRENCH-2-2

Tot Ion:168 Resp: 142687

Ion Ratio Lower Upper

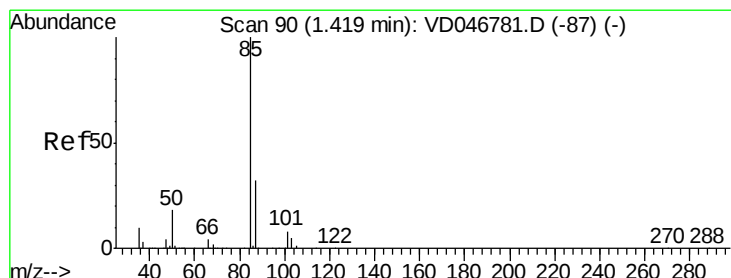
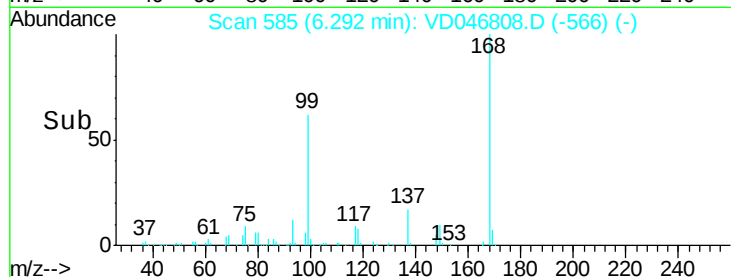
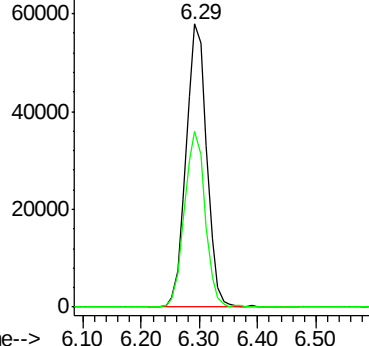
168 100

99 62.3 42.4 63.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.41 min Scan# 90

Delta R.T. -0.01 min

Lab File: VD046808.D

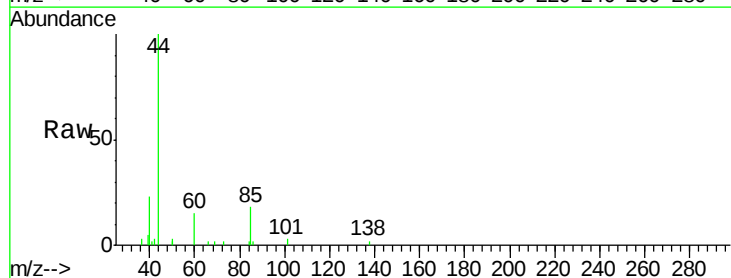
Acq: 21 Sep 2015 15:43

Tgt Ion: 85 Resp: 810

Ion Ratio Lower Upper

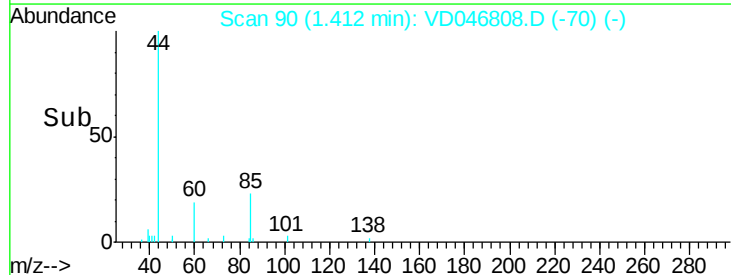
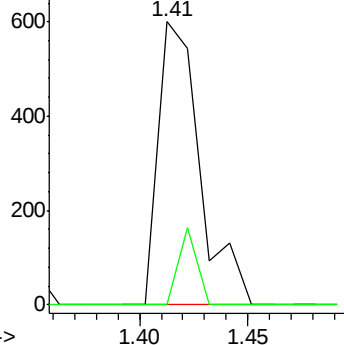
85 100

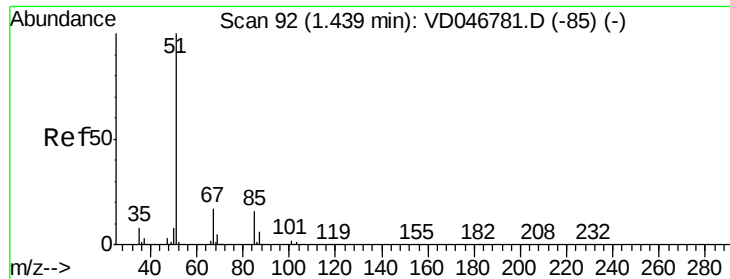
87 0.0 16.2 48.5#



Abundance Ion 84.95 (84.65 to 85.65): VDC

Ion 86.90 (86.60 to 87.60): VDC





#3

Chlorodifluoromethane

Concen: Below Cal

RT: 1.43 min Scan# 92

Delta R.T. -0.01 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

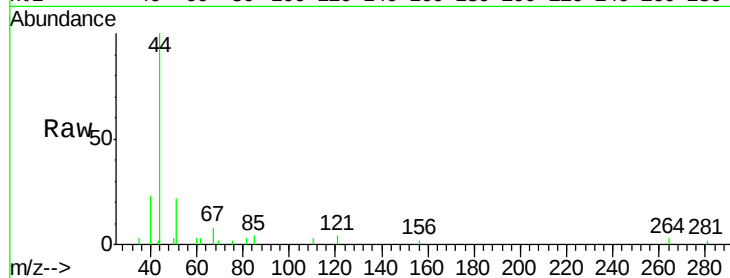
TRENCH-2-2

Tot Ion: 51 Resp: 534

Ion Ratio Lower Upper

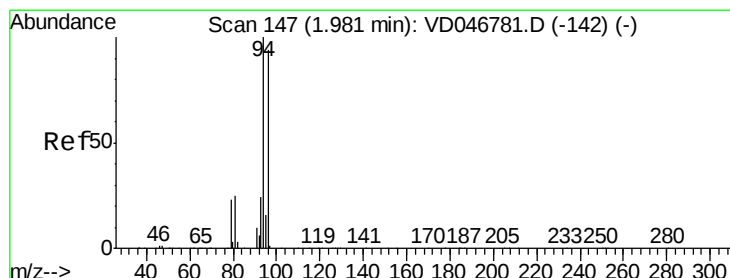
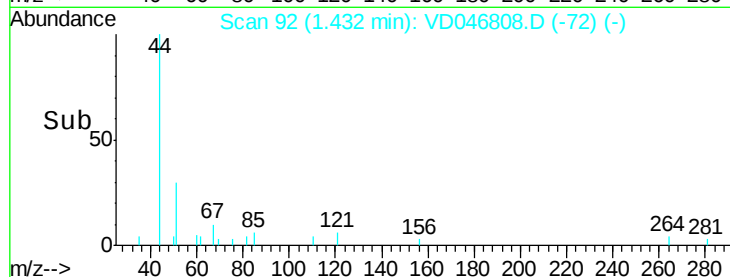
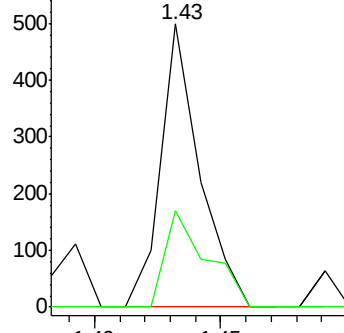
51 100

67 36.9 10.9 16.3#



Abundance Ion 51.00 (50.70 to 51.70): VDC

Ion 67.00 (66.70 to 67.70): VDC



#6

Bromomethane

Concen: Below Cal

RT: 1.96 min Scan# 146

Delta R.T. -0.02 min

Lab File: VD046808.D

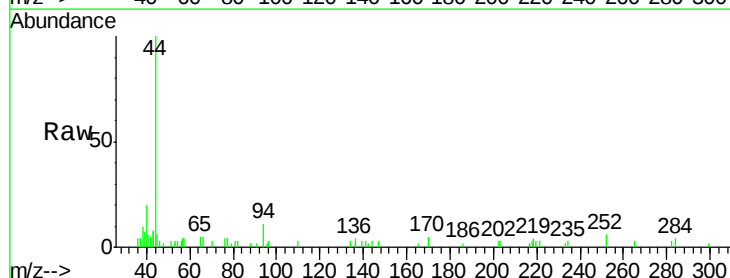
Acq: 21 Sep 2015 15:43

Tgt Ion: 94 Resp: 425

Ion Ratio Lower Upper

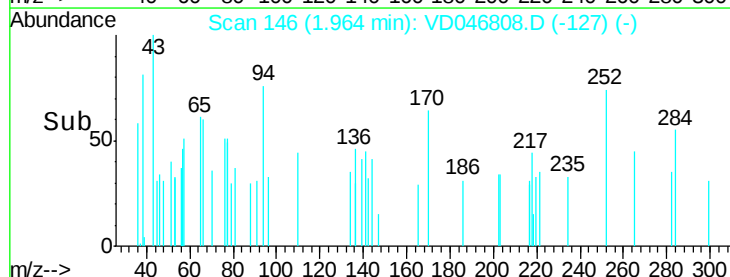
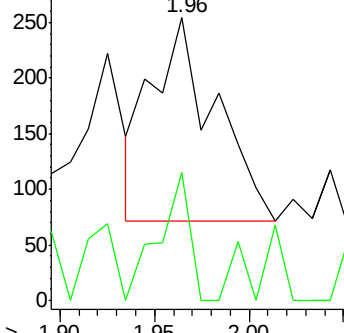
94 100

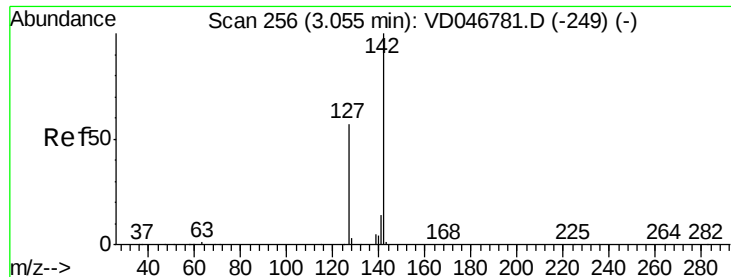
96 45.3 76.0 114.0#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC

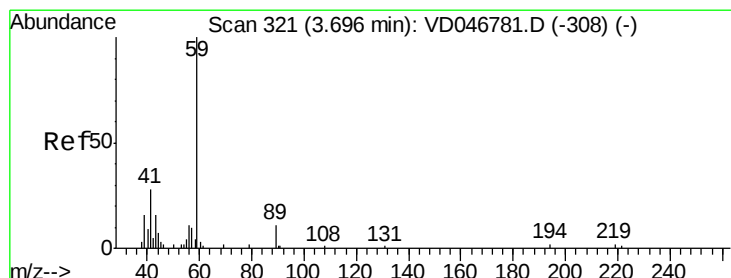
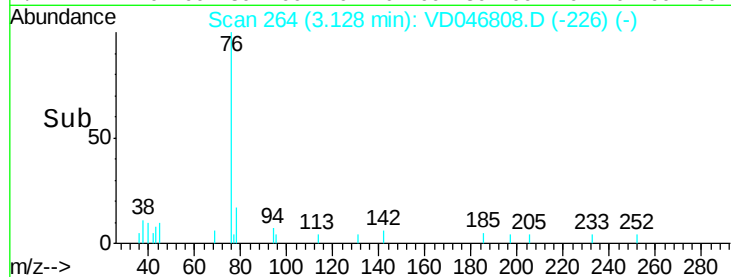
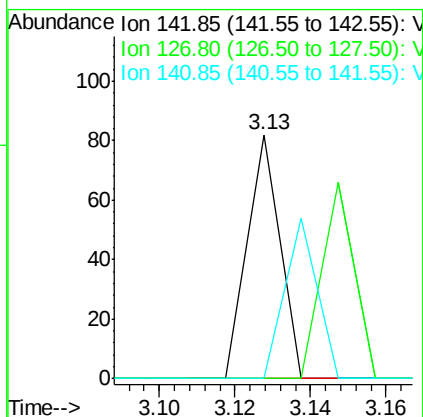
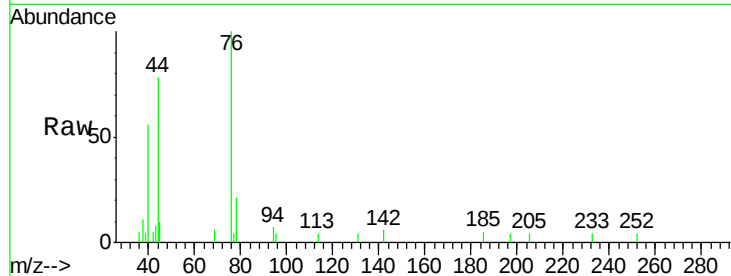




#11  
Methvl Iodide  
Concen: 1.76 ug/l  
RT: 3.13 min Scan# 264  
Delta R.T. 0.07 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

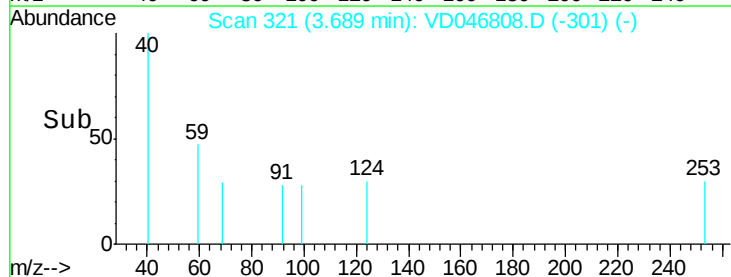
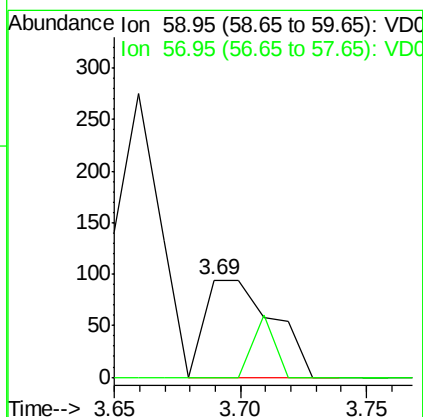
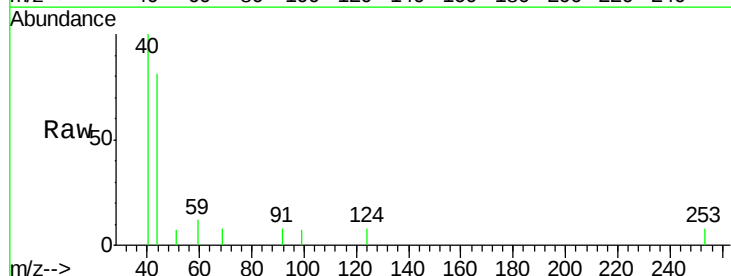
Instrument :  
MSVOA\_D  
ClientSampleId :  
TRENCH-2-2

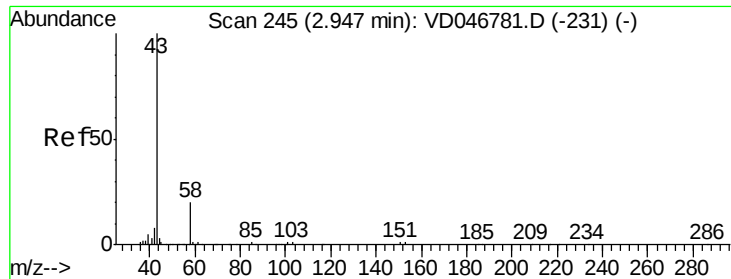
Tot Ion:142 Resp: 49  
Ion Ratio Lower Upper  
142 100  
127 0.0 41.2 61.8#  
141 0.0 11.6 17.4#



#12  
Tert butyl alcohol  
Concen: Below Cal  
RT: 3.69 min Scan# 321  
Delta R.T. -0.01 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

Tgt Ion: 59 Resp: 177  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.8 11.6#





#17

Acetone

Concen: 32.29 ug/l

RT: 2.94 min Scan# 245

Delta R.T. -0.01 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

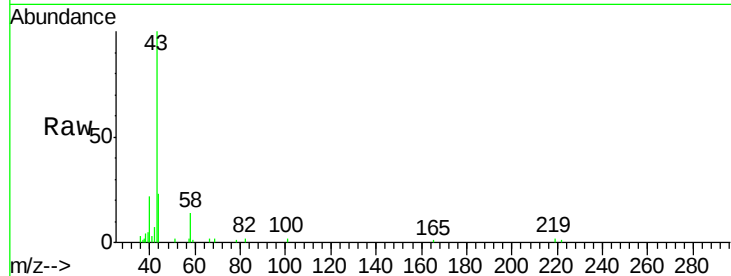
TRENCH-2-2

Tot Ion: 43 Resp: 8095

Ion Ratio Lower Upper

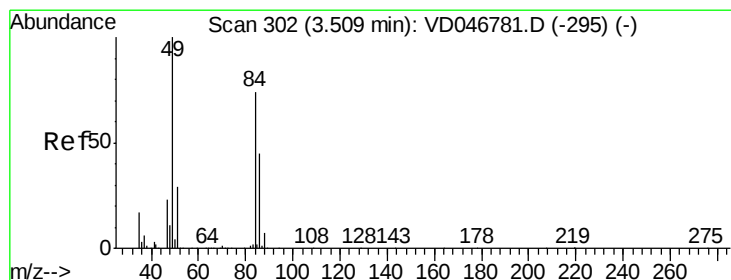
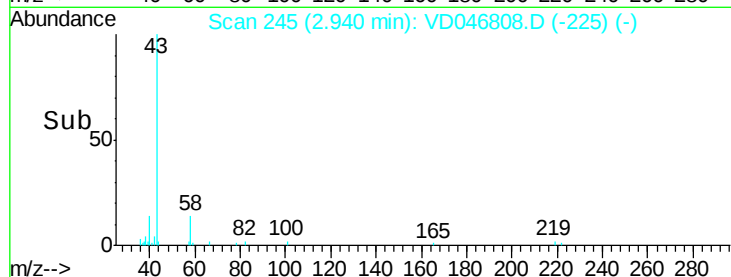
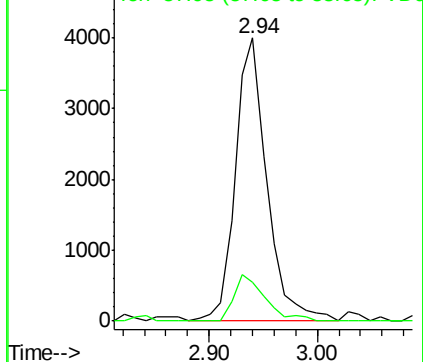
43 100

58 13.7 16.6 24.8#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#21

Methylene Chloride

Concen: 3.87 ug/l

RT: 3.49 min Scan# 301

Delta R.T. -0.02 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Tgt Ion: 84 Resp: 5270

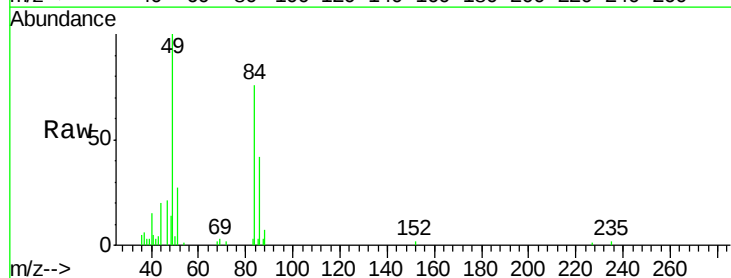
Ion Ratio Lower Upper

84 100

49 131.1 122.1 183.1

51 35.3 33.6 50.4

86 55.1 48.3 72.5

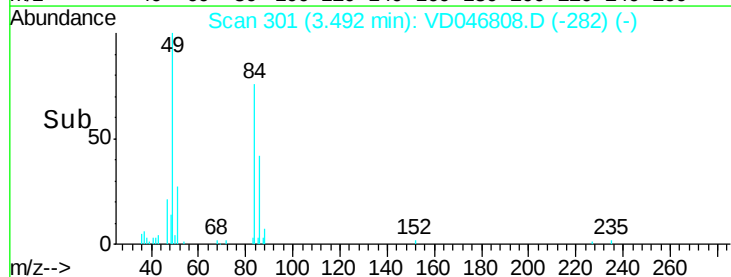
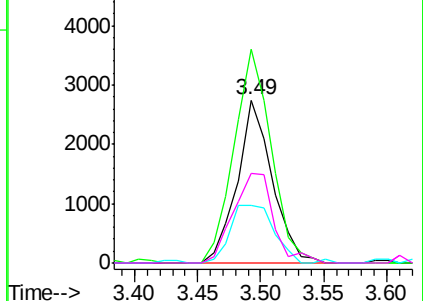


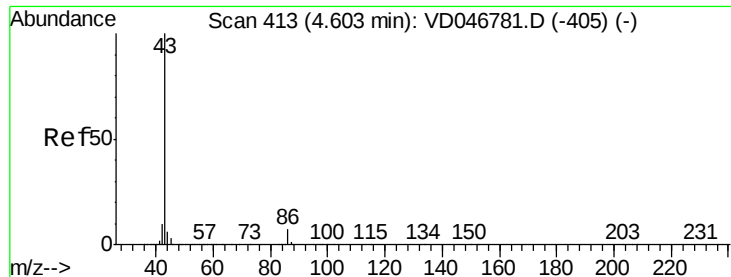
Abundance Ion 83.95 (83.65 to 84.65): VDC

Ion 48.90 (48.60 to 49.60): VDC

Ion 50.90 (50.60 to 51.60): VDC

Ion 85.90 (85.60 to 86.60): VDC





#24

Vinyl Acetate

Concen: 15.02 ug/l

RT: 4.59 min Scan# 412

Delta R.T. -0.02 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

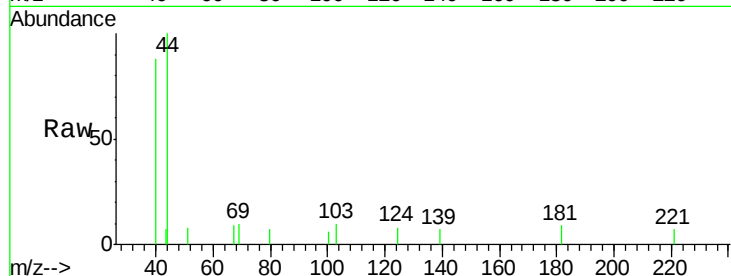
TRENCH-2-2

Tot Ion: 43 Resp: 32

Ion Ratio Lower Upper

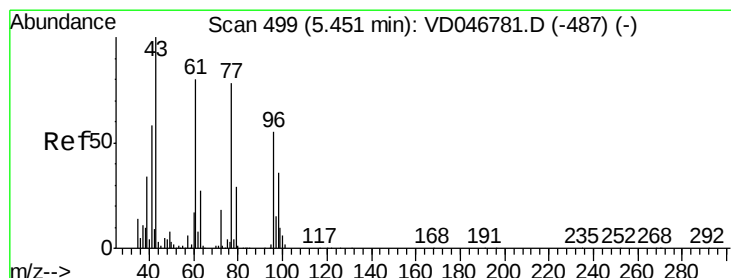
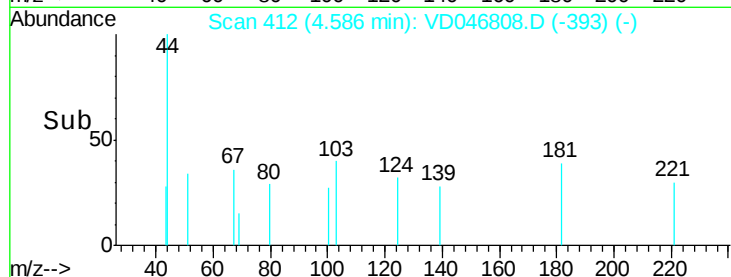
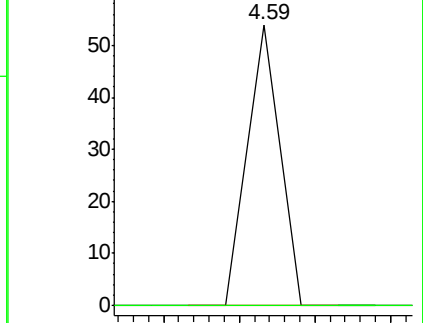
43 100

86 0.0 4.9 7.3#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 86.00 (85.70 to 86.70): VDC



#26

2-Butanone

Concen: 5.81 ug/l

RT: 5.44 min Scan# 499

Delta R.T. -0.01 min

Lab File: VD046808.D

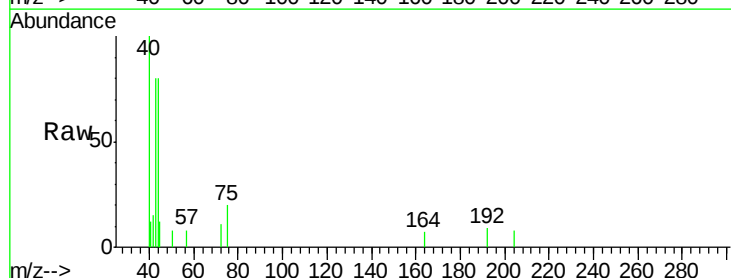
Acq: 21 Sep 2015 15:43

Tgt Ion: 43 Resp: 1638

Ion Ratio Lower Upper

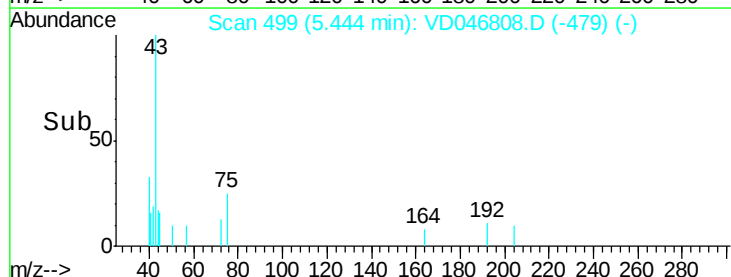
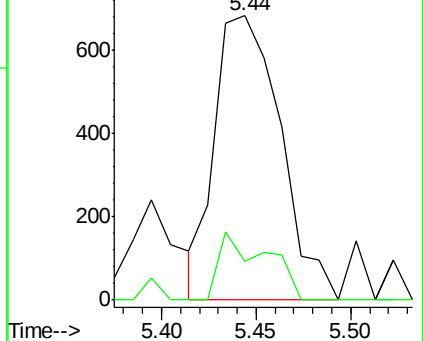
43 100

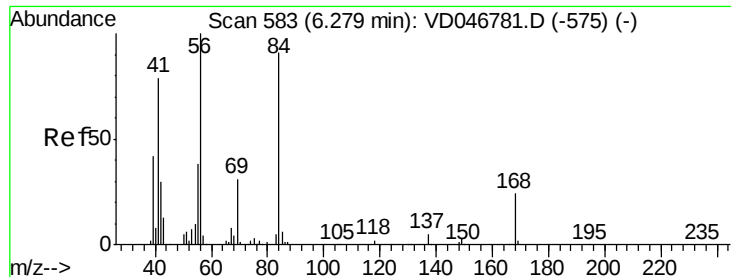
72 13.5 13.4 20.0



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC

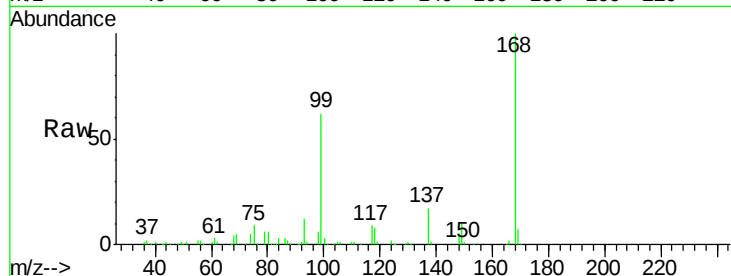




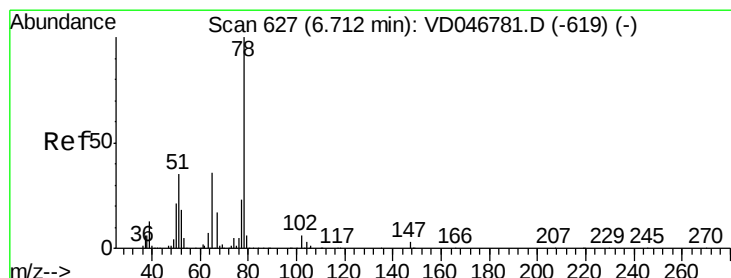
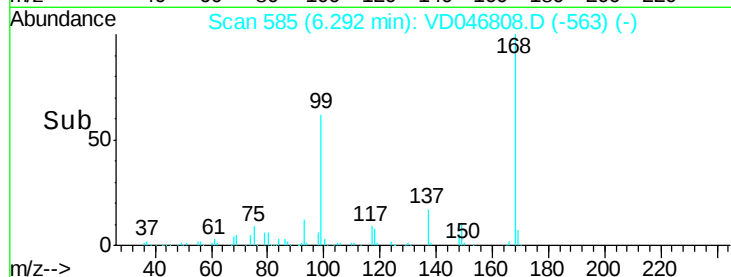
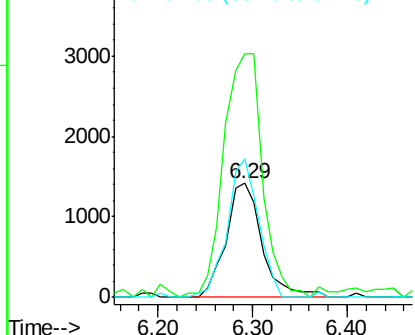
#31  
Cyclohexane  
Concen: 1.69 ug/l  
RT: 6.29 min Scan# 585  
Delta R.T. 0.01 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

Instrument :  
MSVOA\_D  
ClientSampleId :  
TRENCH-2-2

Tot Ion: 56 Resp: 3757  
Ion Ratio Lower Upper  
56 100  
69 214.1 23.4 35.0#  
84 122.4 63.8 95.8#

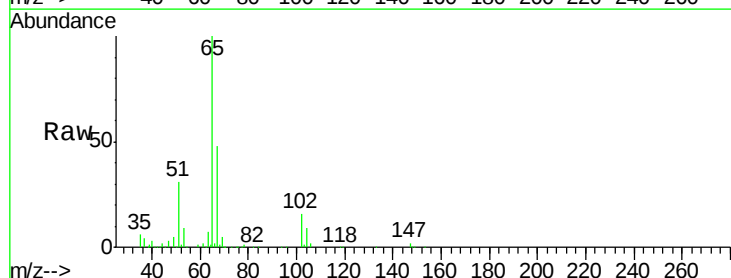


Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.05 (83.75 to 84.75): VDC

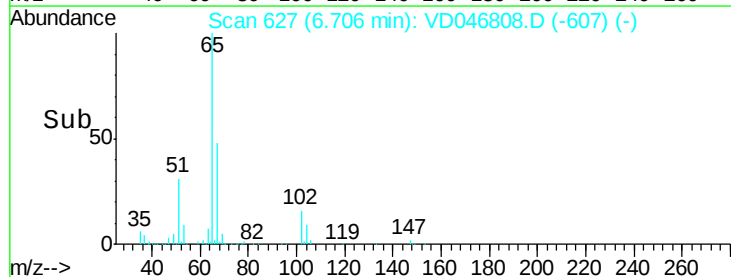
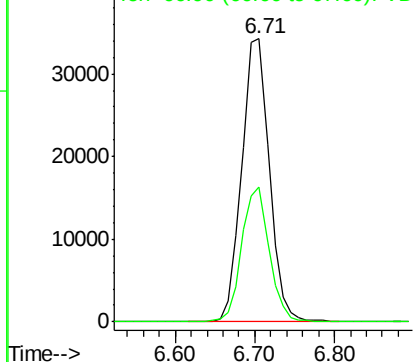


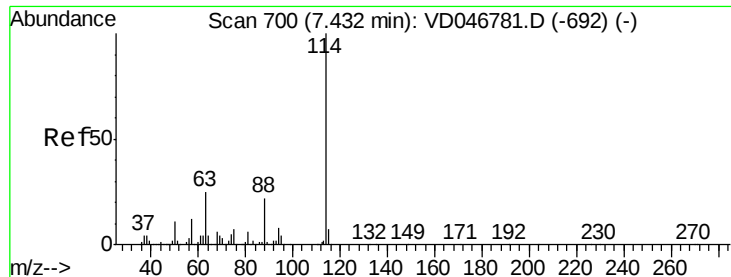
#33  
1,2-Dichloroethane-d4  
Concen: N.D. ug/l  
RT: 6.71 min Scan# 627  
Delta R.T. -0.01 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

Tgt Ion: 65 Resp: 81995  
Ion Ratio Lower Upper  
65 100  
67 47.5 0.0 105.4



Abundance Ion 64.95 (64.65 to 65.65): VDC  
Ion 66.90 (66.60 to 67.60): VDC





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 7.42 min Scan# 699

Delta R.T. -0.02 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

TRENCH-2-2

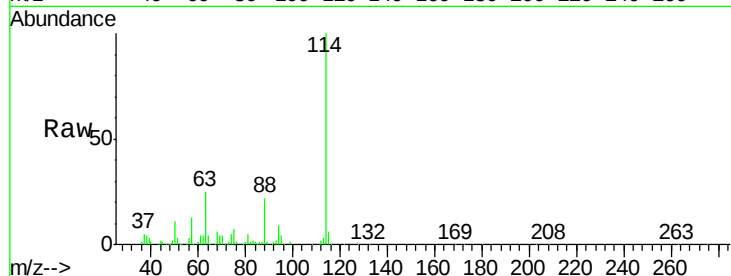
Tot Ion:114 Resp: 186947

Ion Ratio Lower Upper

114 100

63 24.9 0.0 49.8

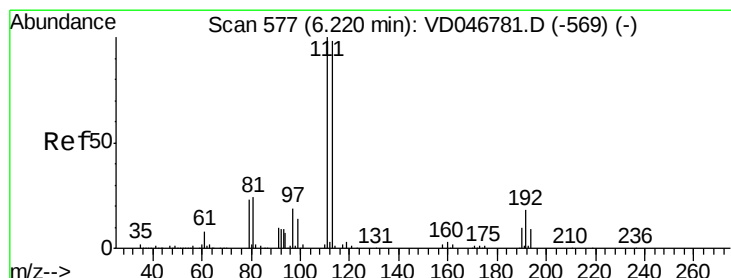
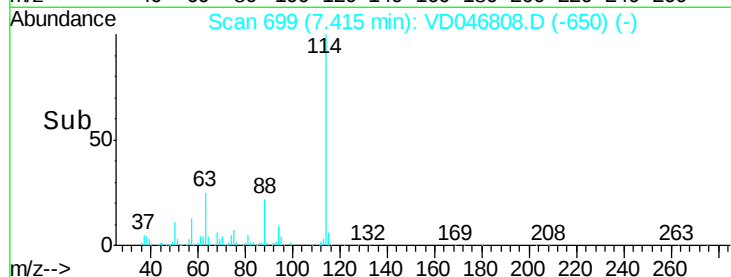
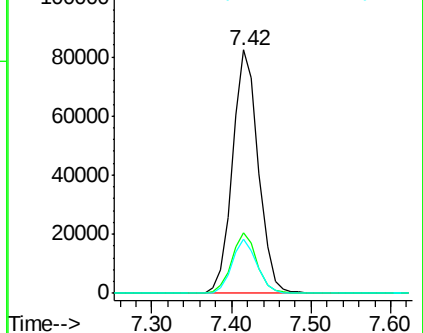
88 22.2 0.0 43.6



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 50.00 ug/l

RT: 6.19 min Scan# 575

Delta R.T. -0.03 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

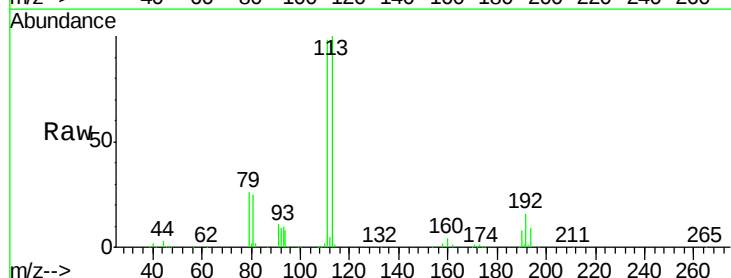
Tgt Ion:113 Resp: 83146

Ion Ratio Lower Upper

113 100

111 98.0 79.4 119.0

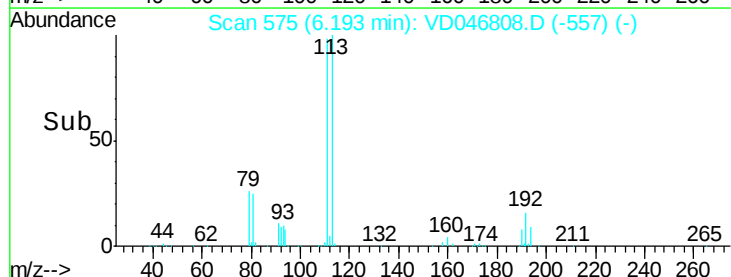
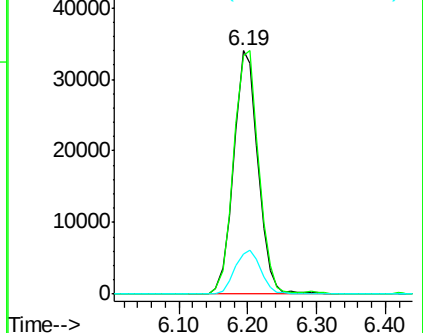
192 16.2 14.6 22.0

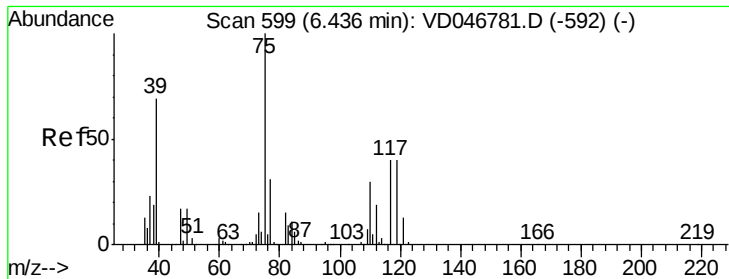


Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V

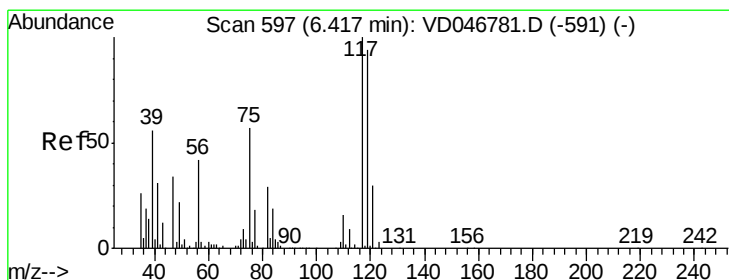
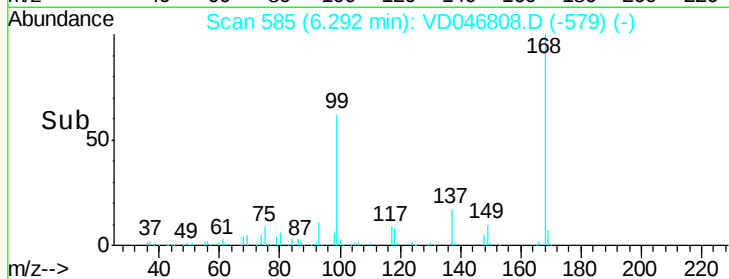
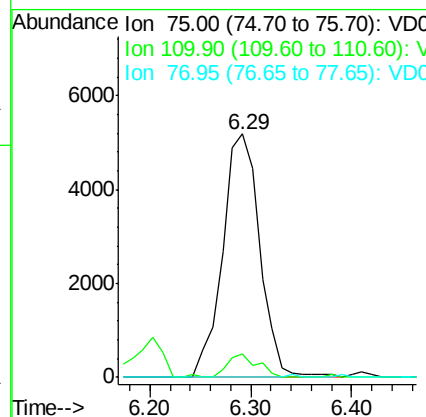
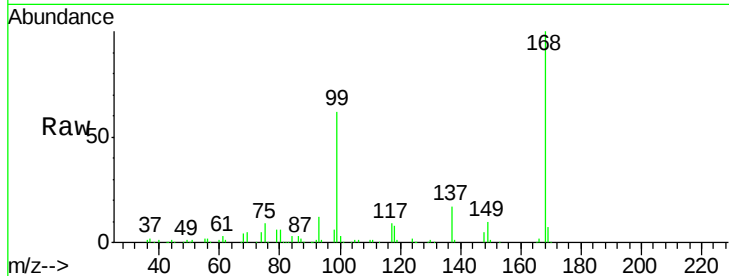




#36  
 1,1-Dichloropropene  
 Concen: 6.09 ug/l  
 RT: 6.29 min Scan# 585  
 Delta R.T. -0.14 min  
 Lab File: VD046808.D  
 Acq: 21 Sep 2015 15:43

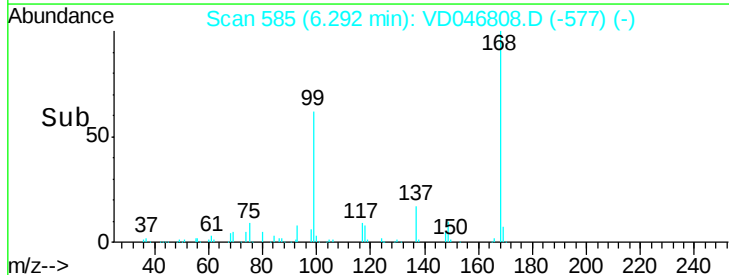
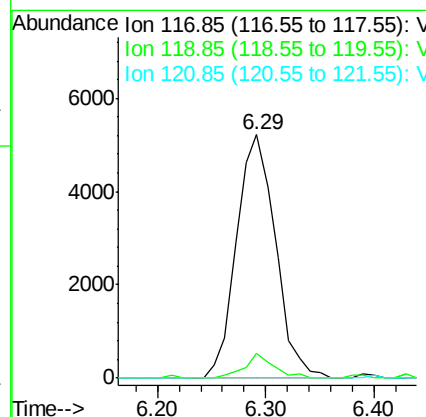
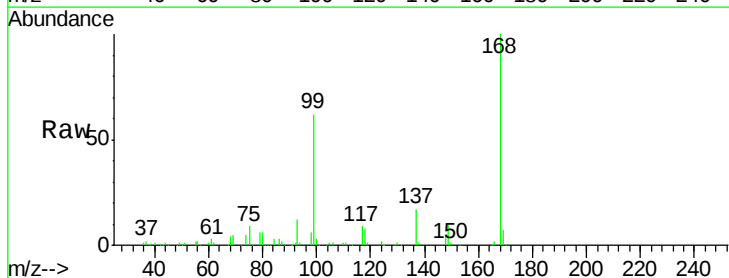
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TRENCH-2-2

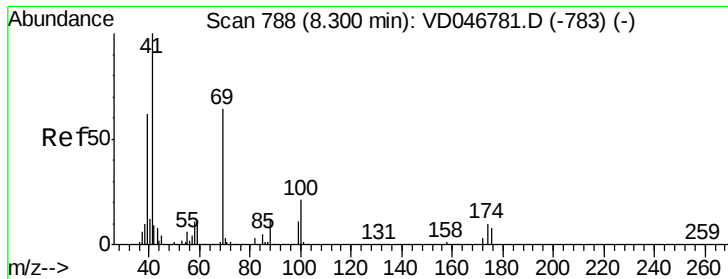
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.7   | 13.7  | 41.0# |
| 77      | 0.0   | 24.7  | 37.1# |



#38  
 Carbon Tetrachloride  
 Concen: 5.73 ug/l  
 RT: 6.29 min Scan# 585  
 Delta R.T. -0.13 min  
 Lab File: VD046808.D  
 Acq: 21 Sep 2015 15:43

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 10.1  | 76.2  | 114.4# |
| 121     | 0.0   | 24.5  | 36.7#  |





#49

1,4-Dioxane

Concen: 5.73 ug/l

RT: 8.57 min Scan# 816

Delta R.T. 0.27 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

TRENCH-2-2

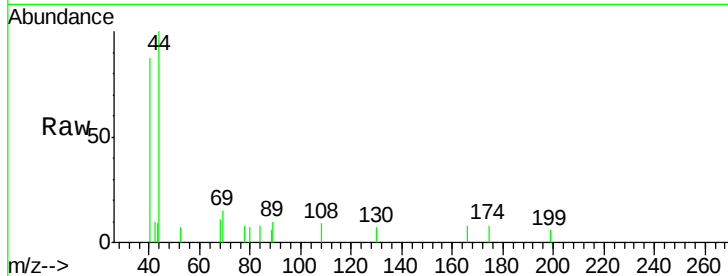
Tot Ion: 88 Resp: 30

Ion Ratio Lower Upper

88 100

43 139.2 50.0 75.0#

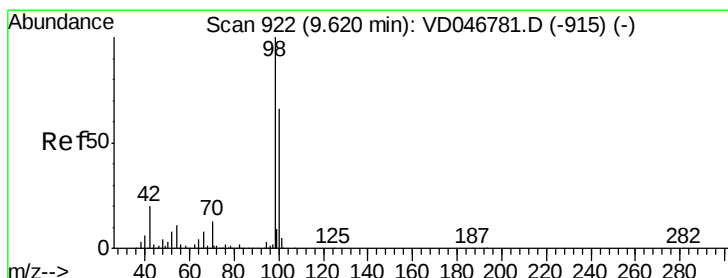
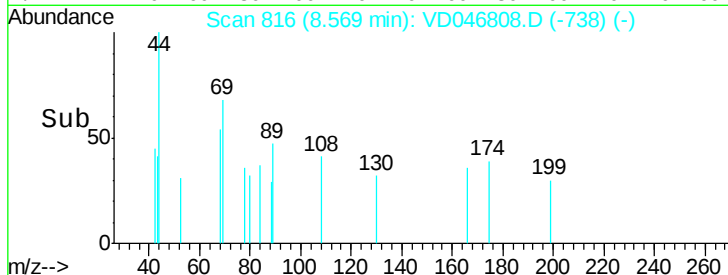
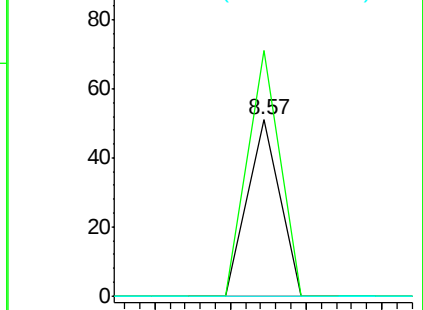
58 0.0 48.3 72.5#



Abundance Ion 88.00 (87.70 to 88.70): VDC

Ion 43.05 (42.75 to 43.75): VDC

Ion 57.95 (57.65 to 58.65): VDC



#50

Toluene-d8

Concen: 5.73 ug/l

RT: 9.60 min Scan# 921

Delta R.T. -0.02 min

Lab File: VD046808.D

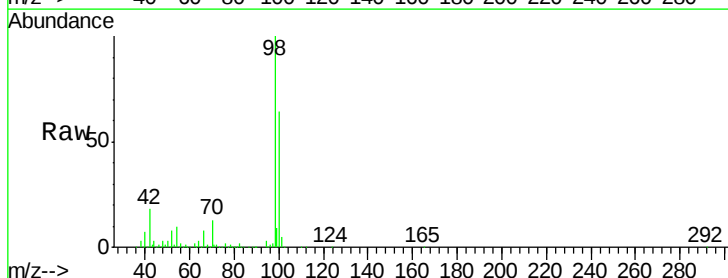
Acq: 21 Sep 2015 15:43

Tgt Ion: 98 Resp: 227639

Ion Ratio Lower Upper

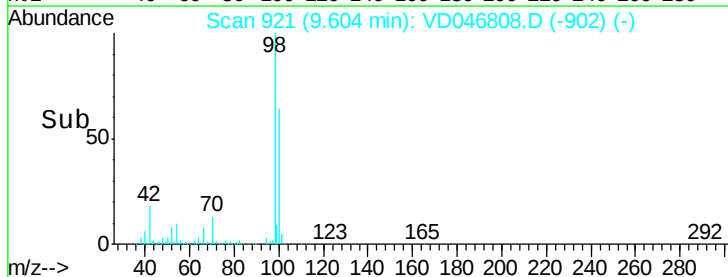
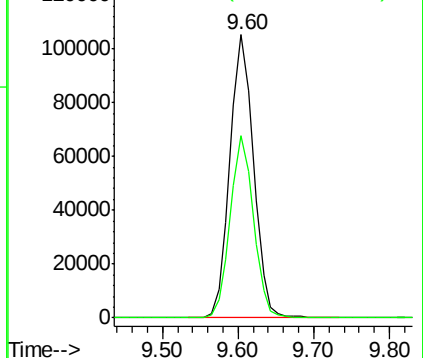
98 100

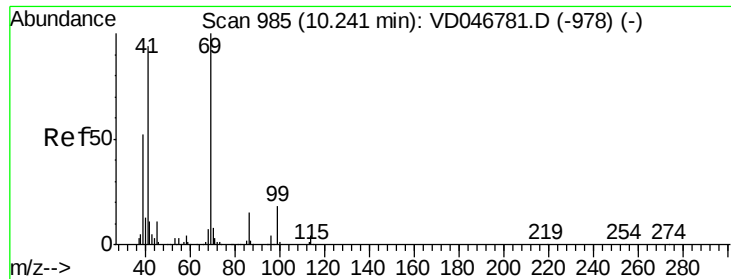
100 64.3 49.9 74.9



Abundance Ion 98.05 (97.75 to 98.75): VDC

Ion 100.05 (99.75 to 100.75): VDC

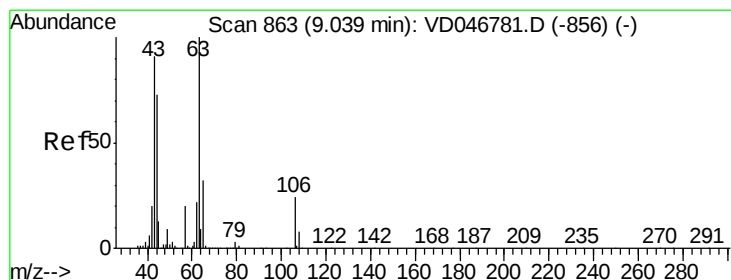
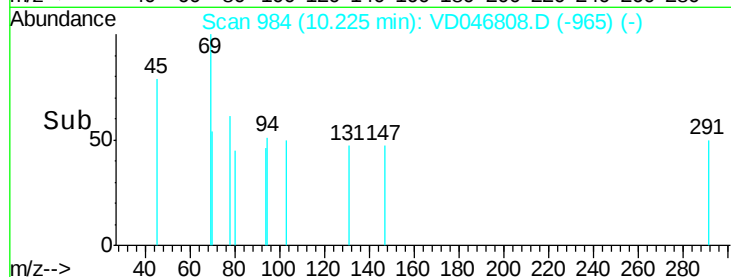
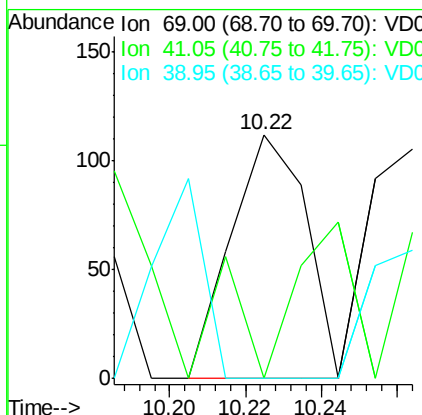
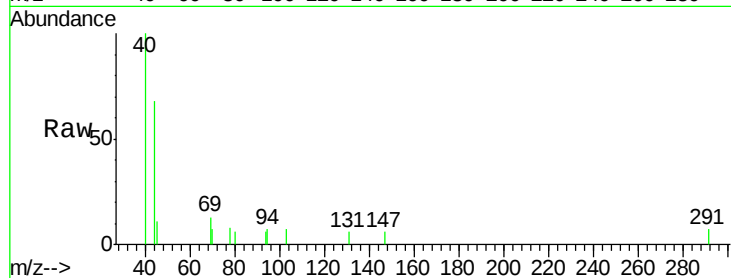




#56  
Ethyl methacrylate  
Concen: 4.03 ug/l  
RT: 10.22 min Scan# 984  
Delta R.T. -0.02 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

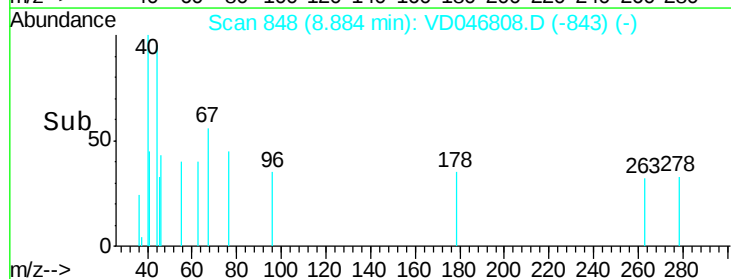
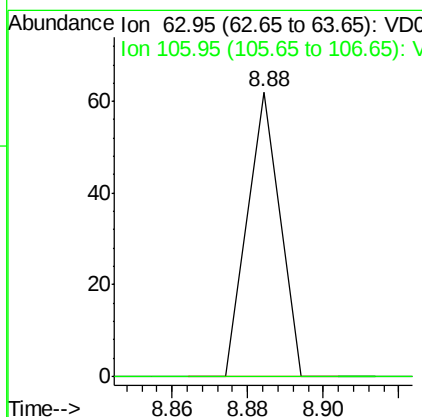
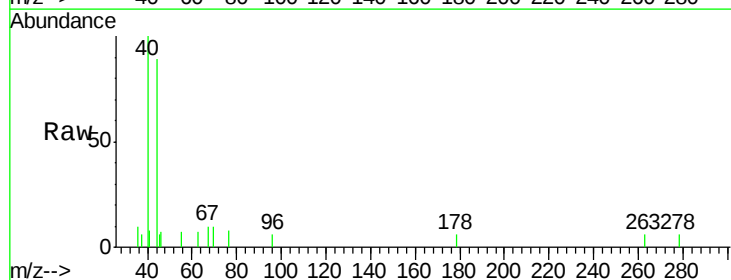
Instrument :  
MSVOA\_D  
ClientSampleID :  
TRENCH-2-2

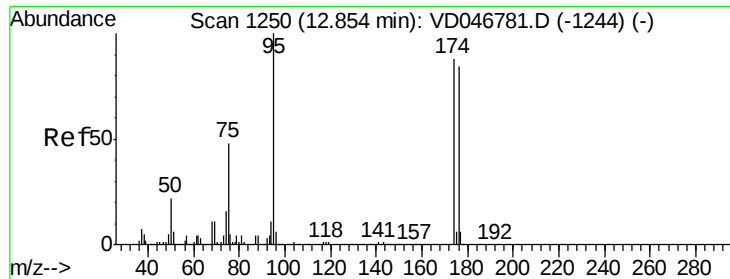
Tot Ion: 69 Resp: 153  
Ion Ratio Lower Upper  
69 100  
41 0.0 75.4 113.0#  
39 0.0 41.0 61.4#



#58  
2-Chloroethyl Vinyl ether  
Concen: 6.41 ug/l  
RT: 8.88 min Scan# 848  
Delta R.T. -0.15 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

Tgt Ion: 63 Resp: 37  
Ion Ratio Lower Upper  
63 100  
106 0.0 17.8 26.8#

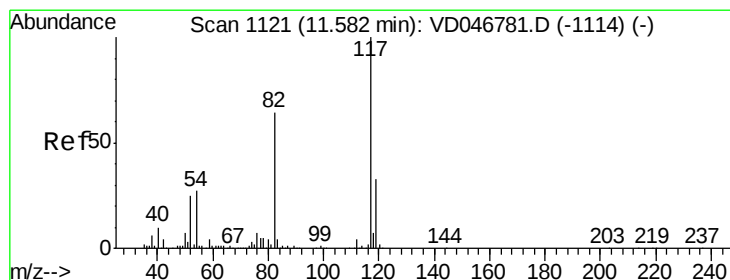
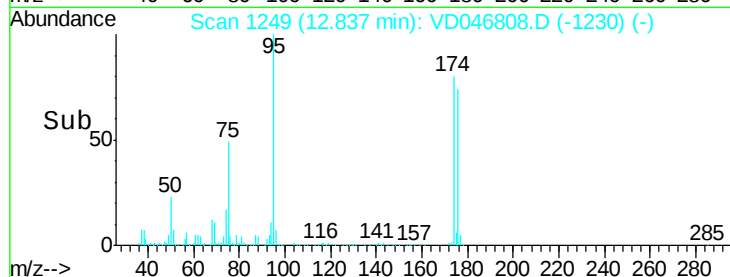
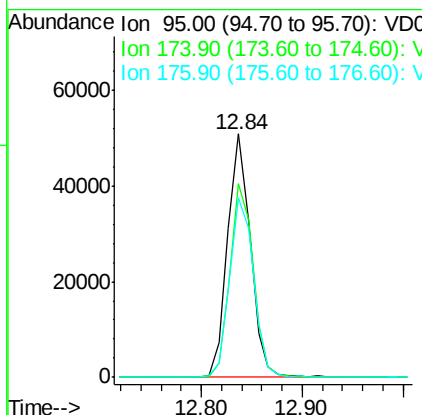
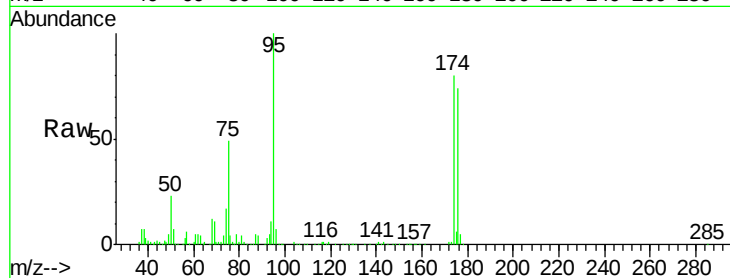




#62  
4-Bromofluorobenzene  
Concen: Below ug/l  
RT: 12.84 min Scan# 1249  
Delta R.T. -0.02 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

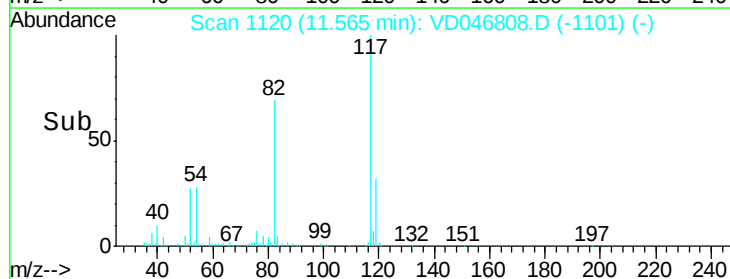
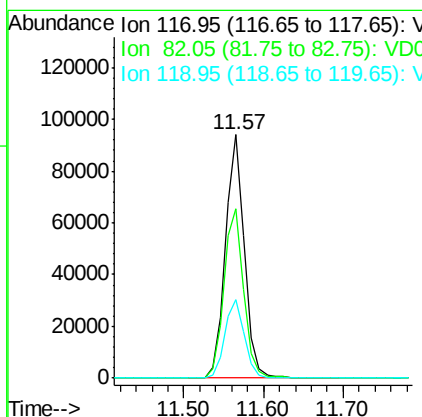
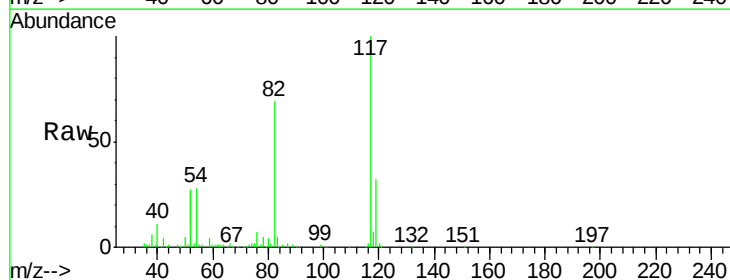
Instrument :  
MSVOA\_D  
ClientSampleId :  
TRENCH-2-2

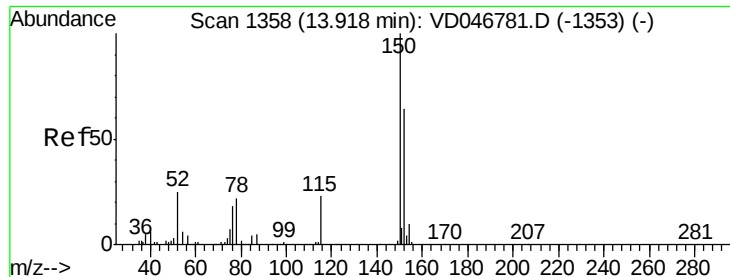
Tot Ion: 95 Resp: 80232  
Ion Ratio Lower Upper  
95 100  
174 79.8 0.0 149.8  
176 73.7 0.0 143.4



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 11.57 min Scan# 1120  
Delta R.T. -0.02 min  
Lab File: VD046808.D  
Acq: 21 Sep 2015 15:43

Tgt Ion: 117 Resp: 158028  
Ion Ratio Lower Upper  
117 100  
82 69.4 50.6 75.8  
119 32.3 25.8 38.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 13.91 min Scan# 1358

Delta R.T. -0.01 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

TRENCH-2-2

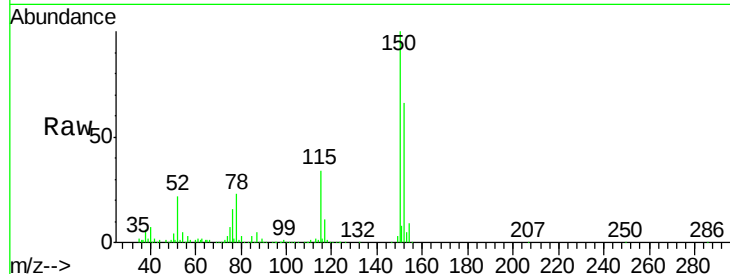
Tot Ion:152 Resp: 74644

Ion Ratio Lower Upper

152 100

115 51.5 26.2 78.6

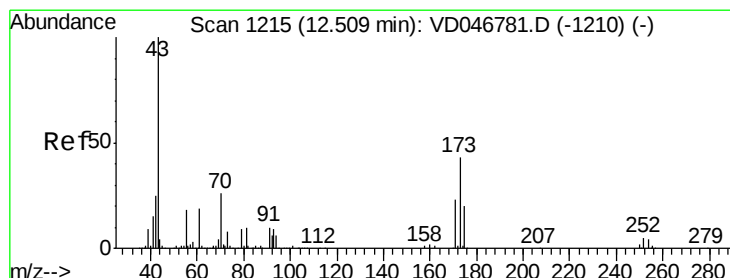
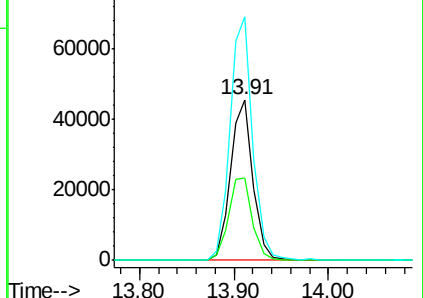
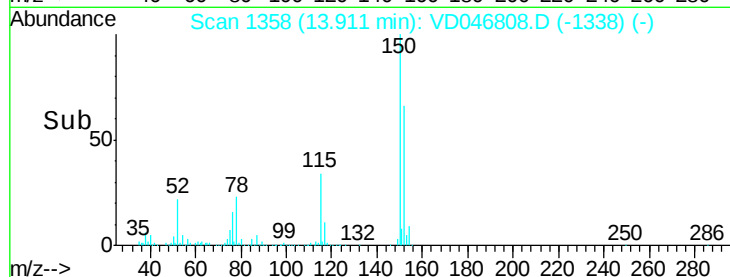
150 151.7 0.0 311.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 115.00 (114.70 to 115.70): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 4.75 ug/l

RT: 12.52 min Scan# 1217

Delta R.T. 0.01 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Tgt Ion: 43 Resp: 59

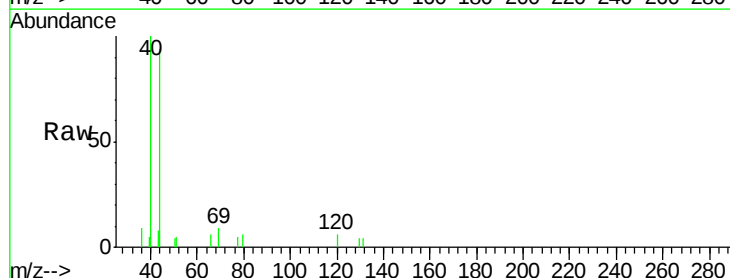
Ion Ratio Lower Upper

43 100

70 0.0 22.1 33.1#

55 0.0 14.5 21.7#

61 0.0 14.6 21.8#

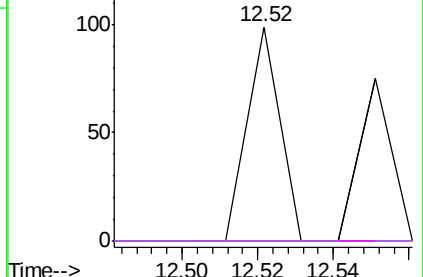
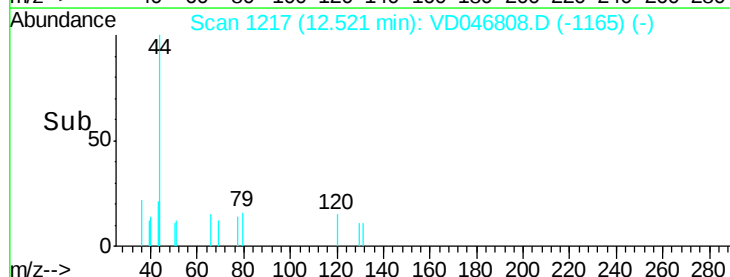


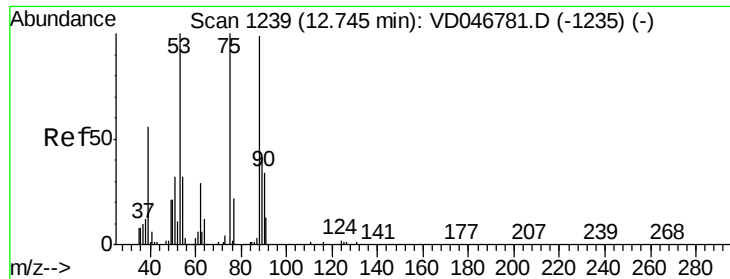
Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 60.95 (60.65 to 61.65): VDC





#81

trans-1,4-Dichloro-2-butene

Concen: 151.93 ug/l

RT: 12.84 min Scan# 1249

Delta R.T. 0.09 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

Instrument :

MSVOA\_D

ClientSampleId :

TRENCH-2-2

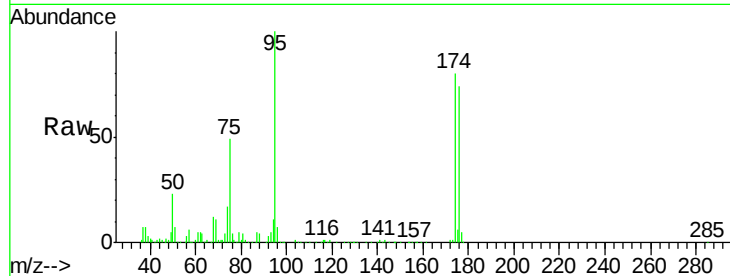
Tot Ion: 75 Resp: 40058

Ion Ratio Lower Upper

75 100

53 0.3 82.3 123.5#

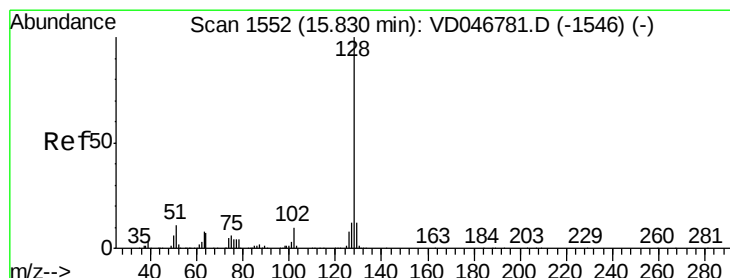
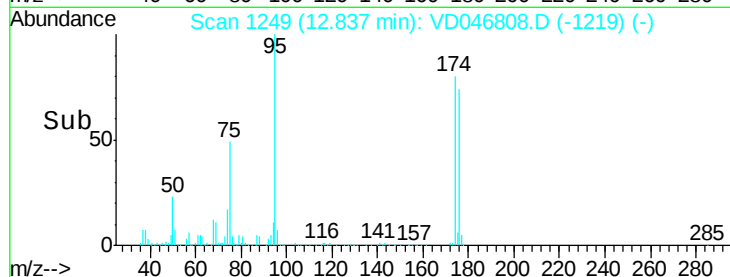
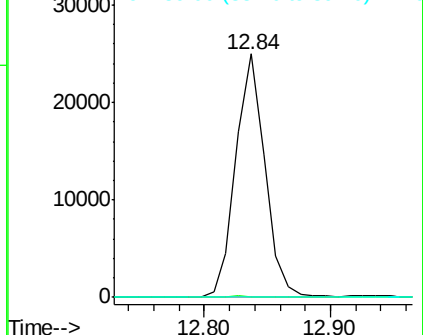
89 0.0 36.6 54.8#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC



#95

Naphthalene

Concen: 2.62 ug/l

RT: 15.80 min Scan# 1550

Delta R.T. -0.03 min

Lab File: VD046808.D

Acq: 21 Sep 2015 15:43

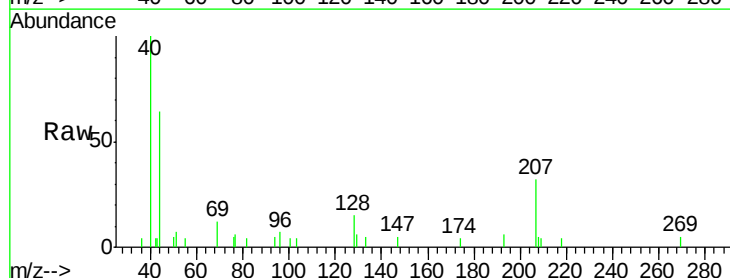
Tgt Ion: 128 Resp: 400

Ion Ratio Lower Upper

128 100

127 0.0 9.8 14.6#

129 38.6 8.6 12.8#



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

