

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD121218\  
 Data File : VD060543.D  
 Acq On : 12 Dec 2018 13:24  
 Operator : VA/AP  
 Sample : J6342-02RE  
 Misc : 4.06g/5ml/MSVOA D/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 RICH-REC-ROAD-STONE-8RE

Quant Time: Dec 13 00:19:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D120518S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 06 01:49:20 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.41  | 168  | 1551248  | 50.00 | ug/l  | -0.01    |
| 34) 1,4-Difluorobenzene    | 7.44  | 114  | 2221514  | 50.00 | ug/l  | -0.01    |
| 63) Chlorobenzene-d5       | 11.28 | 117  | 1763230  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.37 | 152  | 798538   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.78  | 65   | 502666   | 45.72 | ug/l   | -0.01    |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 91.44% |          |
| 35) Dibromofluoromethane    | 6.32  | 113  | 21792    | 1.34  | ug/l   | -0.01    |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 2.68%  |          |
| 50) Toluene-d8              | 9.45  | 98   | 1832552  | 38.81 | ug/l   | -0.01    |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 77.62% |          |
| 62) 4-Bromofluorobenzene    | 12.42 | 95   | 670713   | 39.70 | ug/l   | -0.01    |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 79.40% |          |

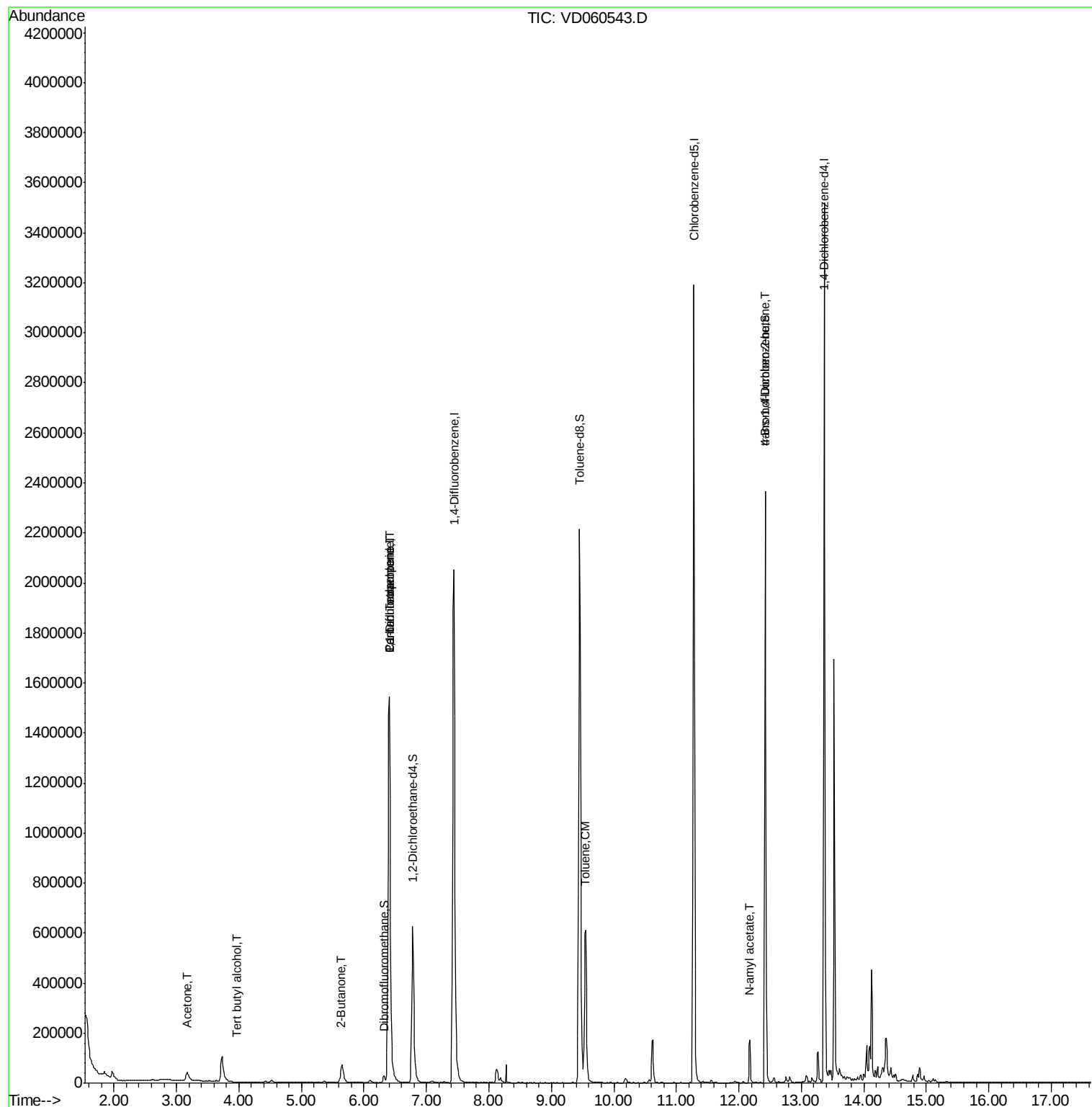
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.60  | 85   | 860      | Below Cal | #      | 41     |
| 11) Tert butyl alcohol         | 3.97  | 59   | 448      | 1.003     | ug/l # | 73     |
| 16) Acetone                    | 3.17  | 43   | 82645    | 46.892    | ug/l   | 99     |
| 20) Methylene Chloride         | 3.73  | 84   | 65849    | Below Cal | #      | 96     |
| 25) 2-Butanone                 | 5.62  | 43   | 17639    | 5.087     | ug/l   | 94     |
| 31) Cyclohexane                | 6.40  | 56   | 31154    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 6.40  | 75   | 113526   | 5.228     | ug/l # | 46     |
| 38) Carbon Tetrachloride       | 6.41  | 117  | 121677   | 6.242     | ug/l # | 15     |
| 52) Toluene                    | 9.55  | 92   | 326391   | 9.410     | ug/l   | 99     |
| 74) N-amyl acetate             | 12.18 | 43   | 28915    | 2.117     | ug/l # | 12     |
| 81) trans-1,4-Dichloro-2-buten | 12.42 | 75   | 269517   | 106.803   | ug/l # | 14     |
| 89) n-Butylbenzene             | 13.64 | 91   | 3984     | Below Cal |        | 93     |

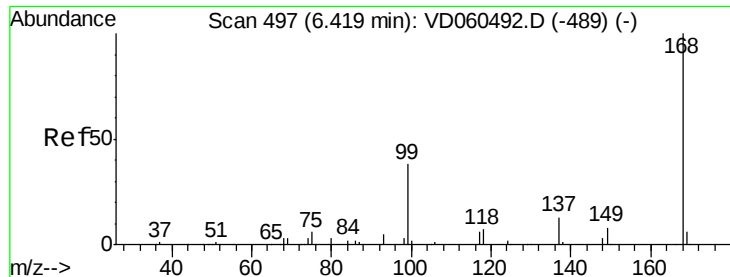
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD121218\  
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Sample : J6342-02RE  
Misc : 4.06g/5ml/MSVOA D/SOIL  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
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RICH-REC-ROAD-STONE-8RE

Quant Time: Dec 13 00:19:01 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D120518S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 06 01:49:20 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 6.41 min Scan# 496

Delta R.T. -0.01 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

Instrument :

MSVOA\_D

ClientSampleId :

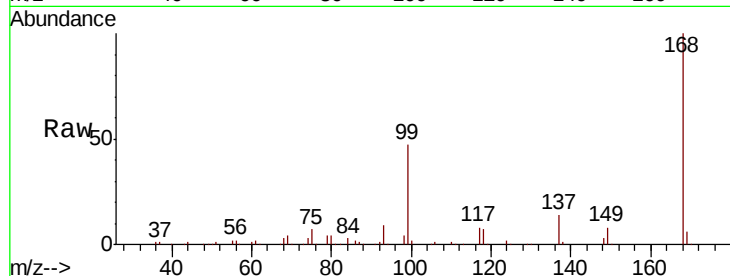
RICH-REC-ROAD-STONE-8RE

Tot Ion:168 Resp: 1551248

Ion Ratio Lower Upper

168 100

99 47.0 35.6 53.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

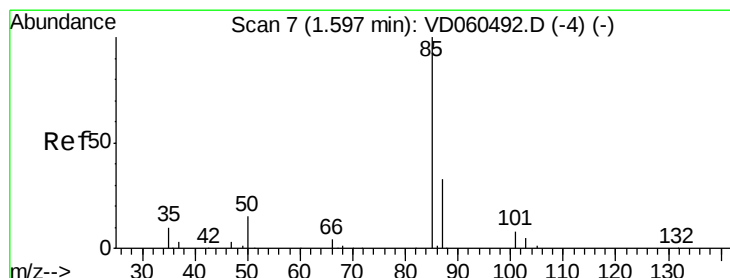
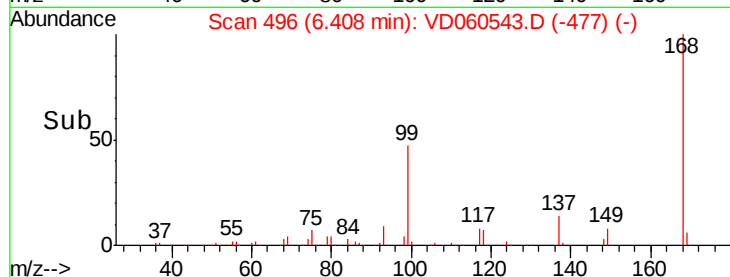
6.41

400000

200000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.60 min Scan# 7

Delta R.T. -0.00 min

Lab File: VD060543.D

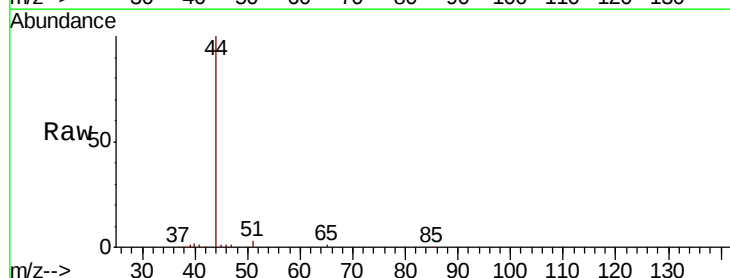
Acq: 12 Dec 2018 13:24

Tgt Ion: 85 Resp: 860

Ion Ratio Lower Upper

85 100

87 0.0 16.7 50.0#



Abundance Ion 84.95 (84.65 to 85.65): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.60

600

500

400

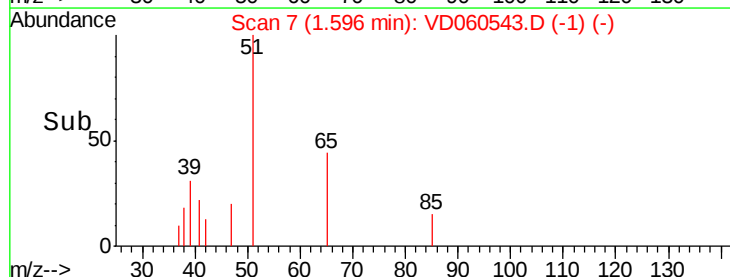
300

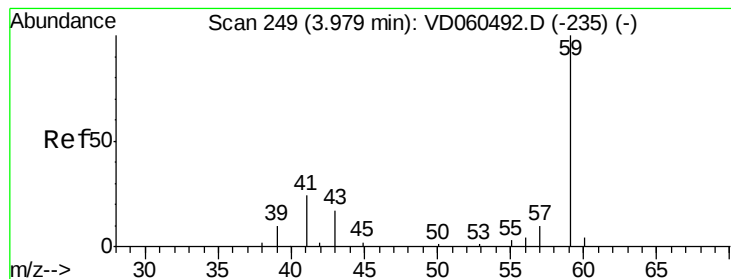
200

100

0

Time-->



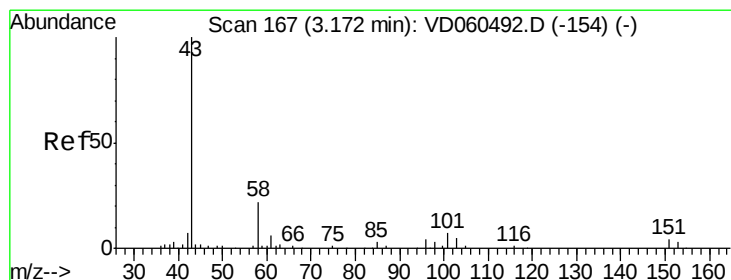
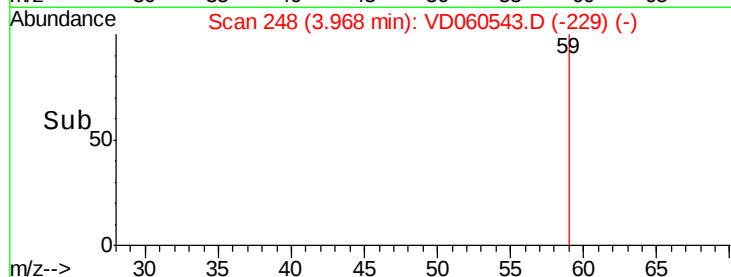
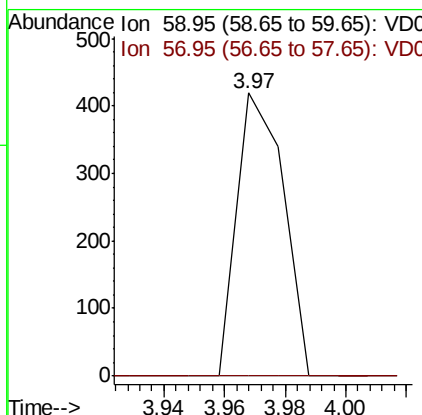
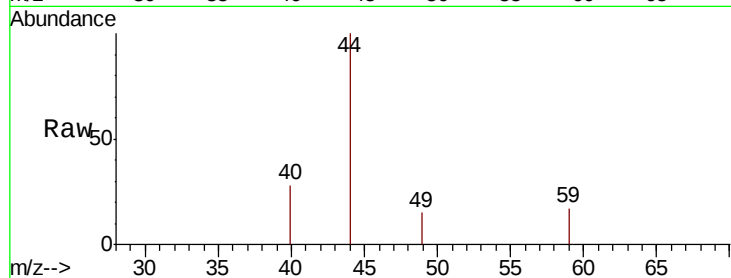


#11

Tert butyl alcohol  
 Concen: 1.003 ug/l  
 RT: 3.97 min Scan# 248  
 Delta R.T. -0.01 min  
 Lab File: VD060543.D  
 Acq: 12 Dec 2018 13:24

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 RICH-REC-ROAD-STONE-8RE

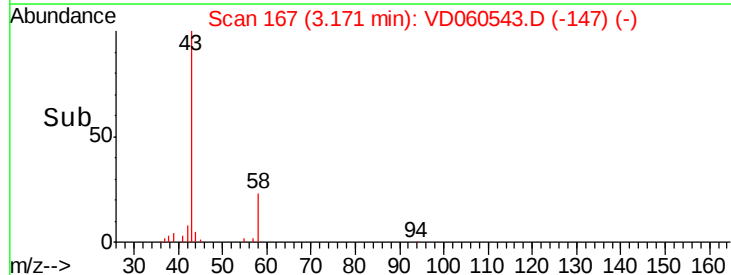
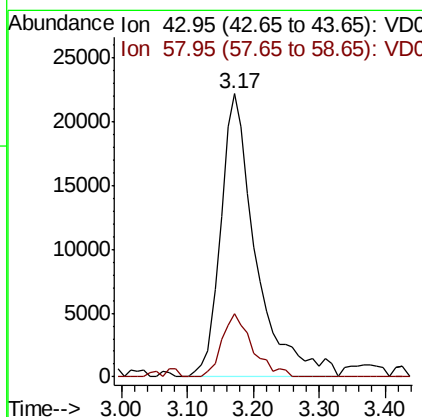
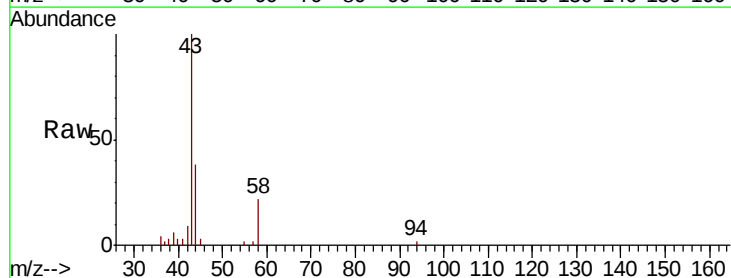
Tot Ion: 59 Resp: 448  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.1 12.1#

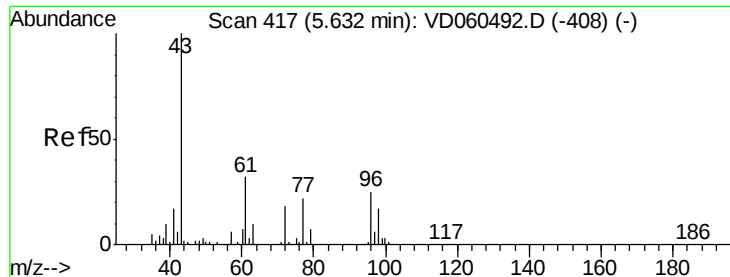


#16

Acetone  
 Concen: 46.892 ug/l  
 RT: 3.17 min Scan# 167  
 Delta R.T. -0.00 min  
 Lab File: VD060543.D  
 Acq: 12 Dec 2018 13:24

Tgt Ion: 43 Resp: 82645  
 Ion Ratio Lower Upper  
 43 100  
 58 22.2 17.3 25.9





#25

2-Butanone

Concen: 5.087 ug/l

RT: 5.62 min Scan# 416

Delta R.T. -0.01 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

Instrument :

MSVOA\_D

ClientSampleId :

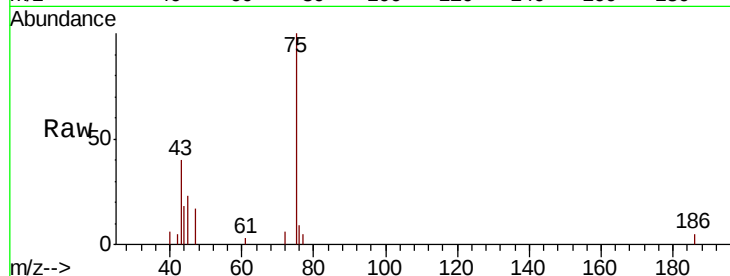
RICH-REC-ROAD-STONE-8RE

Tot Ion: 43 Resp: 17639

Ion Ratio Lower Upper

43 100

72 15.8 14.6 21.8



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC

5.62

4000

3000

2000

1000

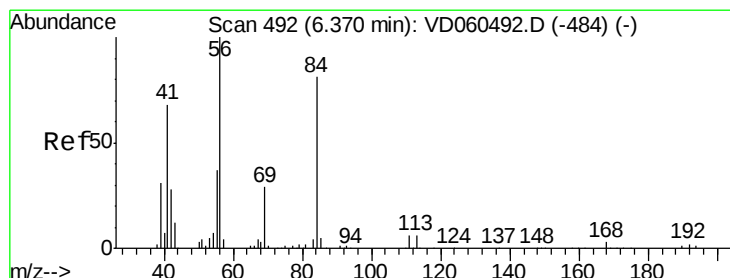
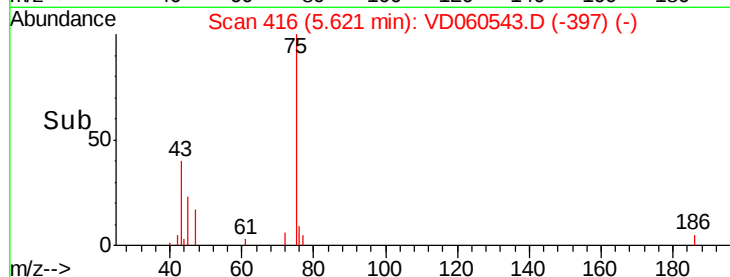
0

5.50

5.60

5.70

Time-->



#31

Cyclohexane

Concen: Below Cal

RT: 6.40 min Scan# 495

Delta R.T. 0.03 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

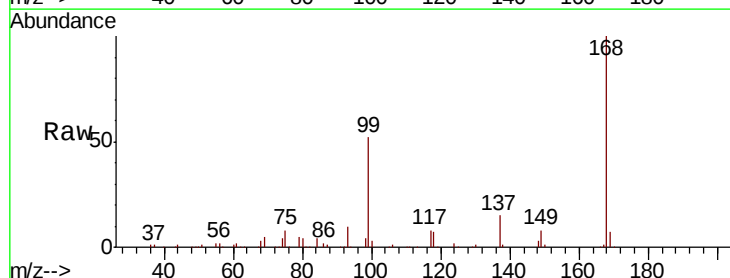
Tgt Ion: 56 Resp: 31154

Ion Ratio Lower Upper

56 100

69 219.6 22.8 34.2#

84 178.7 65.1 97.7#



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

30000

20000

10000

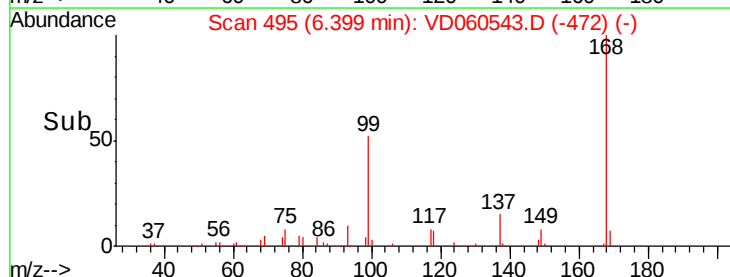
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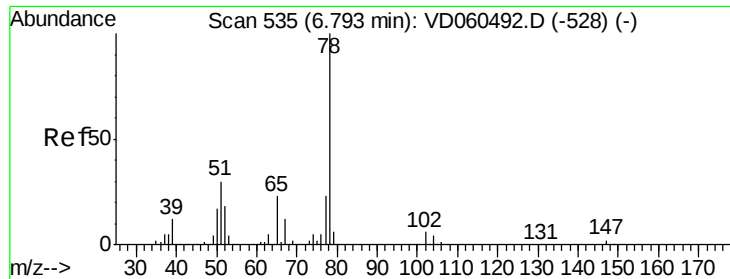
6.30

6.40

6.50

Time-->





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 6.78 min Scan# 534

Delta R.T. -0.01 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

Instrument :

MSVOA\_D

ClientSampleId :

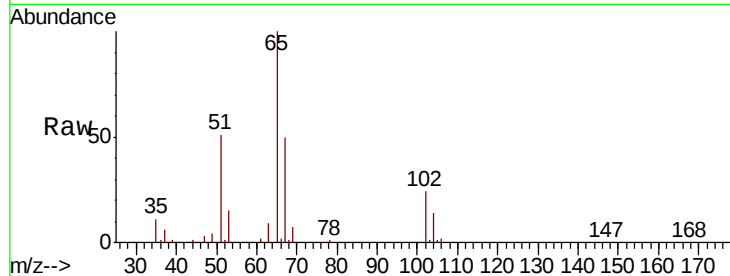
RICH-REC-ROAD-STONE-8RE

Tot Ion: 65 Resp: 502666

Ion Ratio Lower Upper

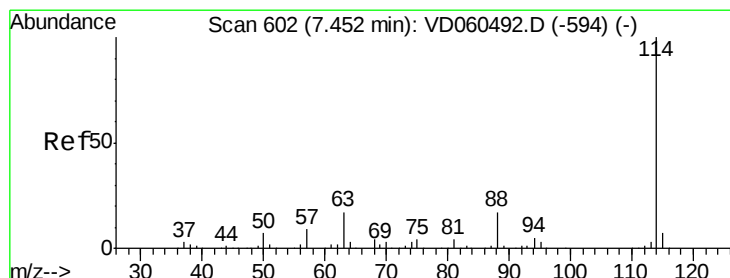
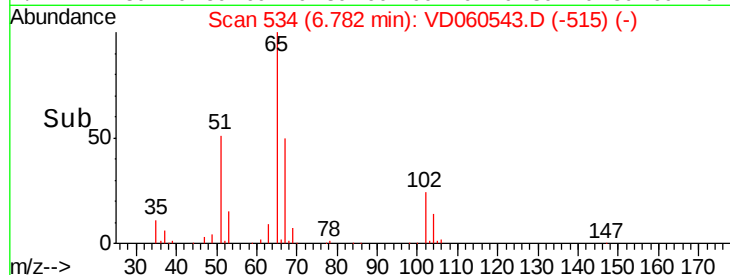
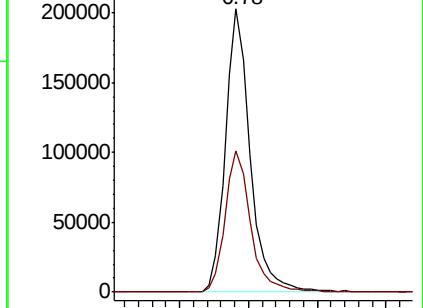
65 100

67 49.9 0.0 106.8



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 7.44 min Scan# 601

Delta R.T. -0.01 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

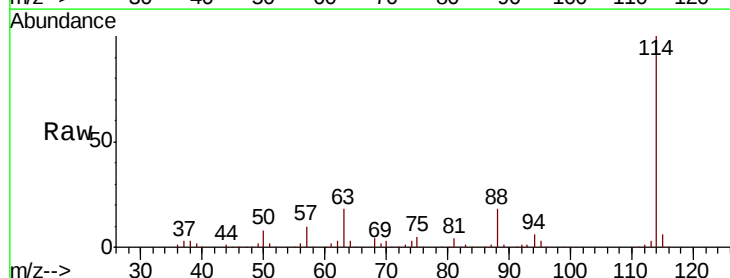
Tgt Ion: 114 Resp: 2221514

Ion Ratio Lower Upper

114 100

63 17.9 0.0 34.2

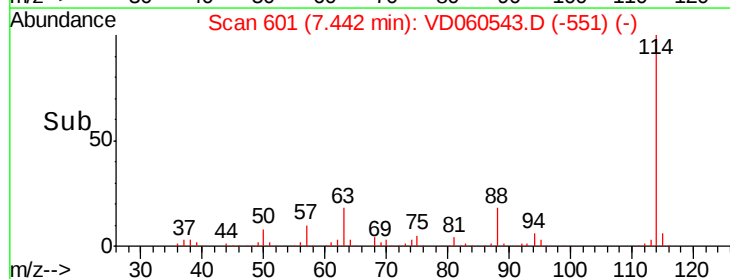
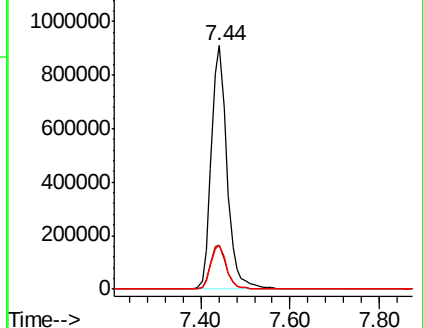
88 18.2 0.0 35.0

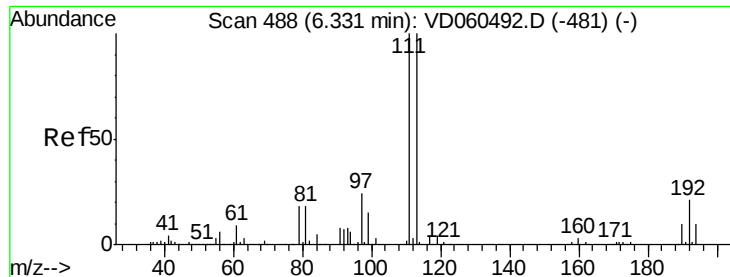


Abundance Ion 114.00 (113.70 to 114.70): VDC

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC





#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 6.32 min Scan# 487

Delta R.T. -0.01 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

Instrument :

MSVOA\_D

ClientSampleId :

RICH-REC-ROAD-STONE-8RE

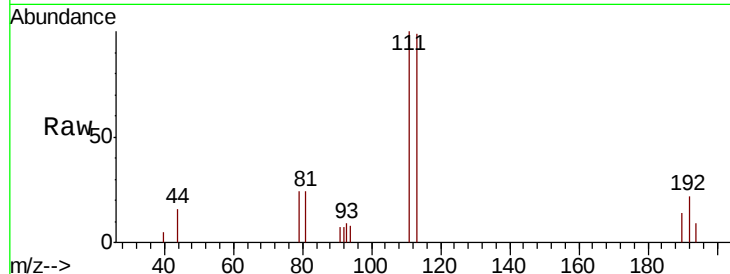
Tot Ion:113 Resp: 21792

Ion Ratio Lower Upper

113 100

111 101.0 80.2 120.4

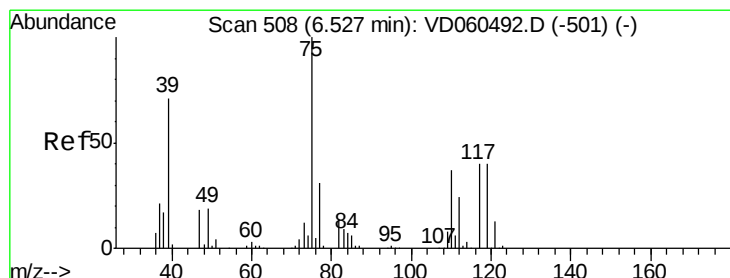
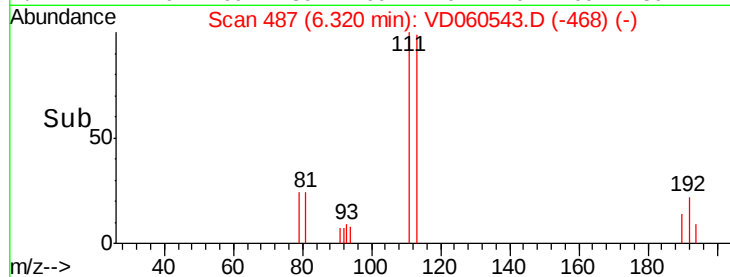
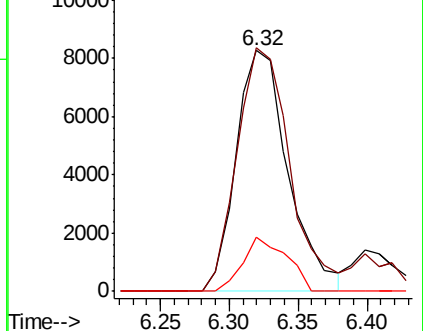
192 22.7 16.6 24.8



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: 5.228 ug/l

RT: 6.40 min Scan# 495

Delta R.T. -0.13 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

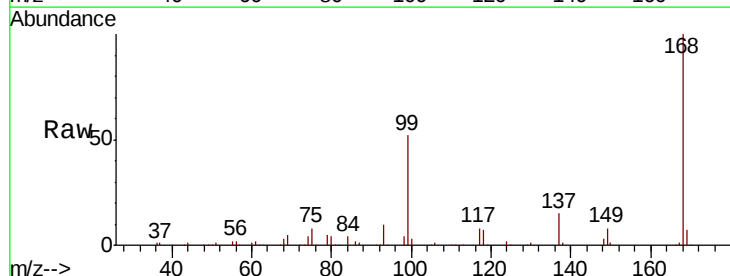
Tgt Ion: 75 Resp: 113526

Ion Ratio Lower Upper

75 100

110 5.7 18.3 54.8#

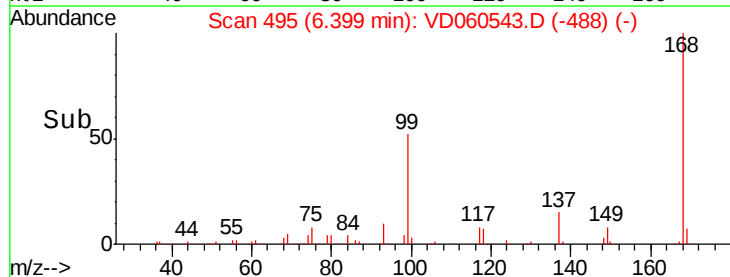
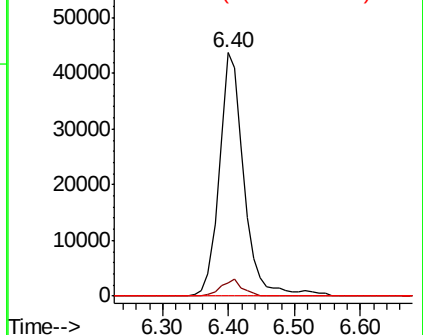
77 0.0 24.6 37.0#

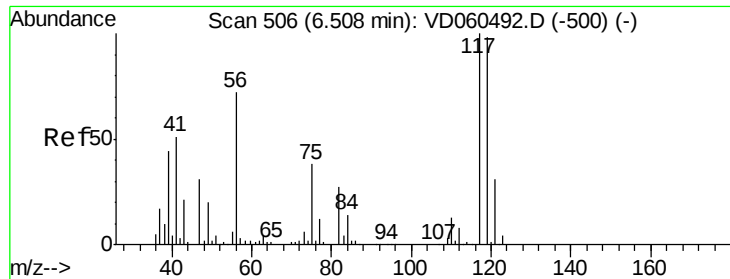


Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V

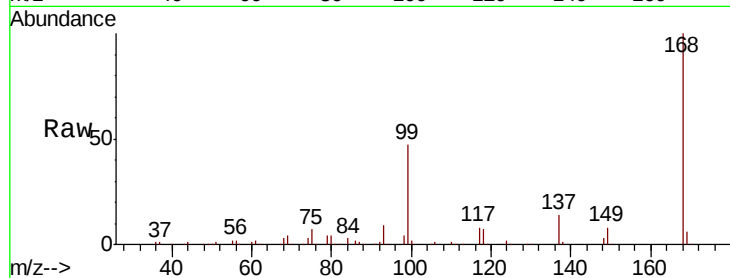




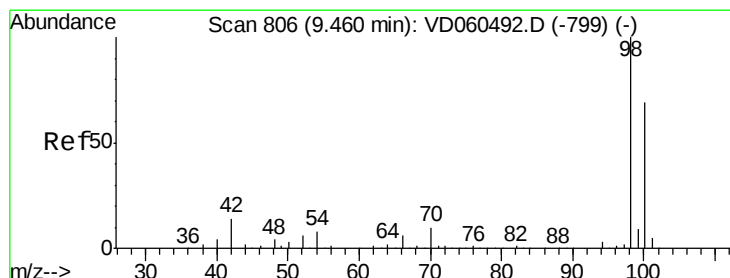
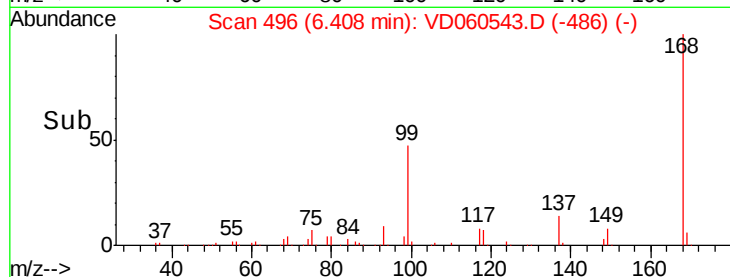
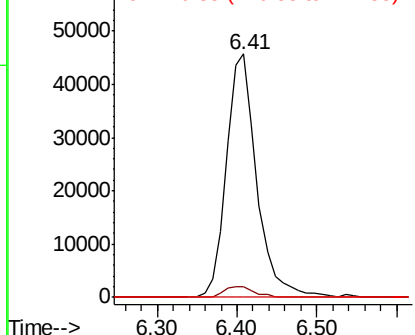
#38  
Carbon Tetrachloride  
Concen: 6.242 ug/l  
RT: 6.41 min Scan# 496  
Delta R.T. -0.10 min  
Lab File: VD060543.D  
Acq: 12 Dec 2018 13:24

Instrument :  
MSVOA\_D  
ClientSampleId :  
RICH-REC-ROAD-STONE-8RE

Tot Ion:117 Resp: 121677  
Ion Ratio Lower Upper  
117 100  
119 4.3 76.8 115.2#  
121 0.0 24.4 36.6#

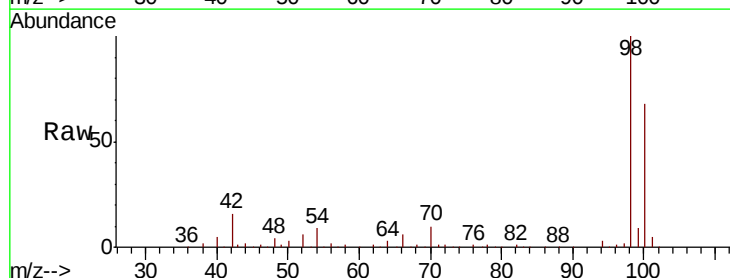


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

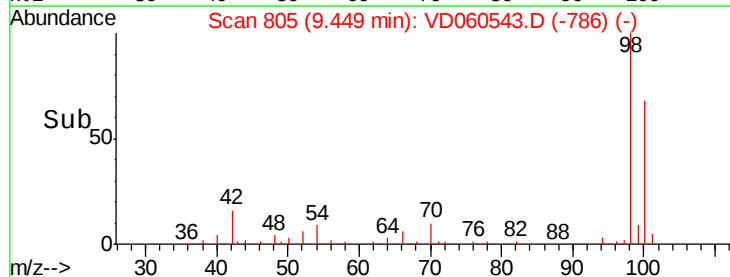
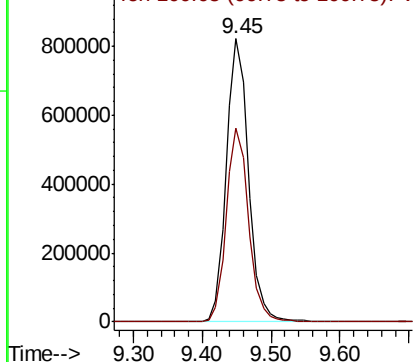


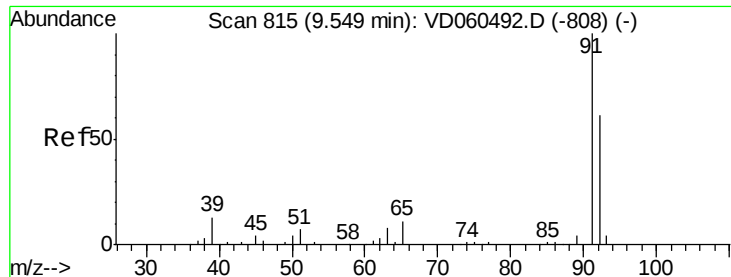
#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 9.45 min Scan# 805  
Delta R.T. -0.01 min  
Lab File: VD060543.D  
Acq: 12 Dec 2018 13:24

Tgt Ion: 98 Resp: 1832552  
Ion Ratio Lower Upper  
98 100  
100 68.4 55.7 83.5



Abundance Ion 98.05 (97.75 to 98.75): V  
Ion 100.05 (99.75 to 100.75): V





#52

Toluene

Concen: 9.410 ug/l

RT: 9.55 min Scan# 815

Delta R.T. -0.00 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

Instrument :

MSVOA\_D

ClientSampleId :

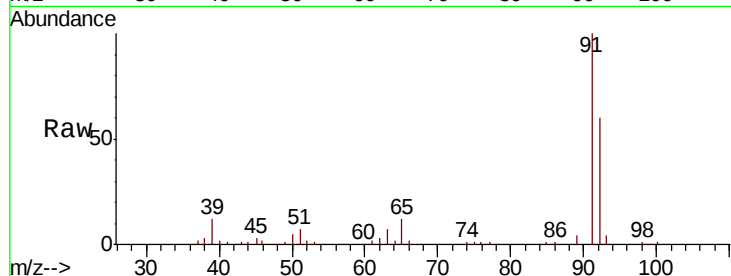
RICH-REC-ROAD-STONE-8RE

Tot Ion: 92 Resp: 326391

Ion Ratio Lower Upper

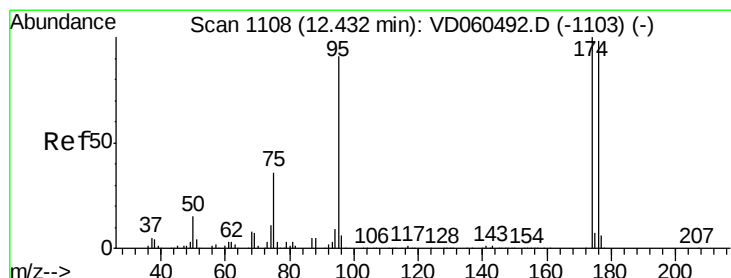
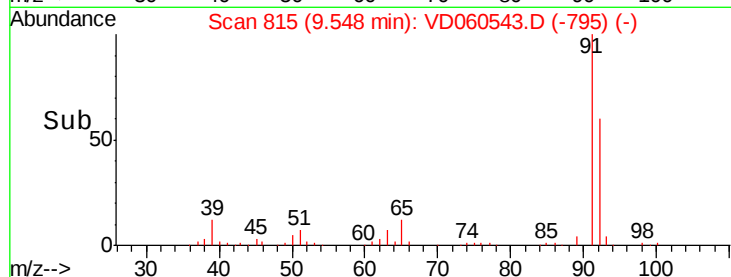
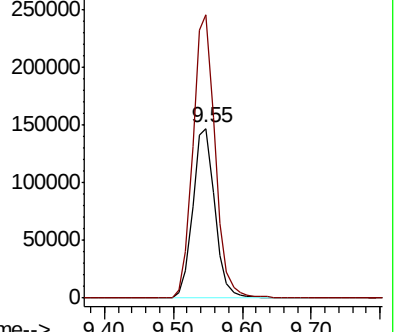
92 100

91 166.6 131.7 197.5



Abundance Ion 92.00 (91.70 to 92.70): VDC

Ion 91.00 (90.70 to 91.70): VDC



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 12.42 min Scan# 1107

Delta R.T. -0.01 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

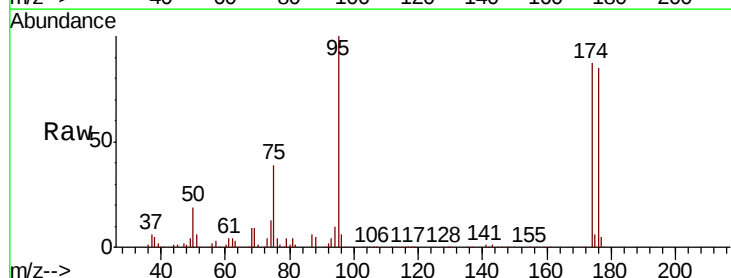
Tgt Ion: 95 Resp: 670713

Ion Ratio Lower Upper

95 100

174 86.9 0.0 219.4

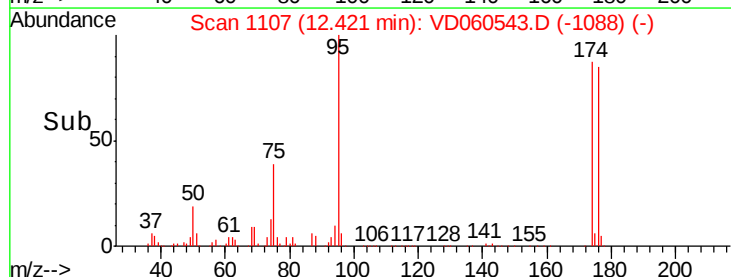
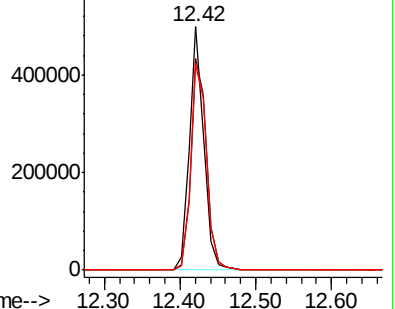
176 84.5 0.0 214.6

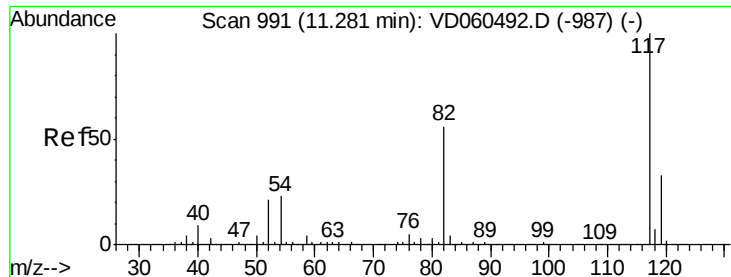


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V

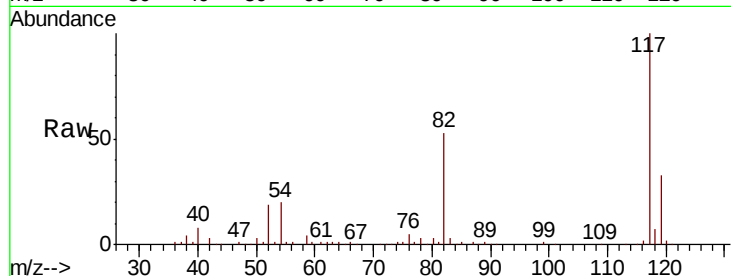




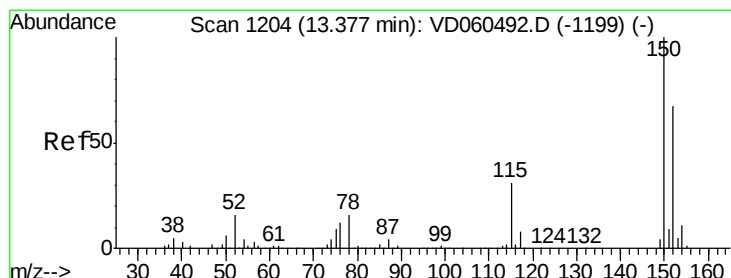
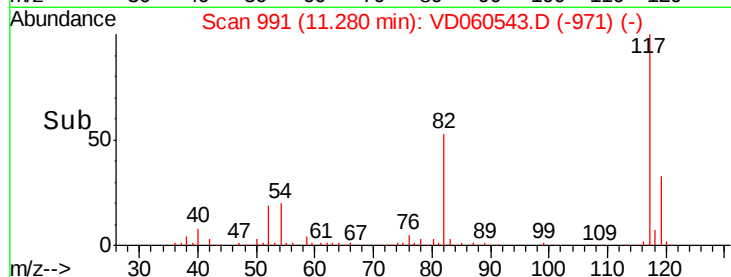
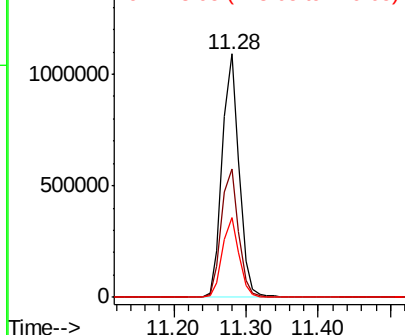
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.28 min Scan# 991  
Delta R.T. -0.00 min  
Lab File: VD060543.D  
Acq: 12 Dec 2018 13:24

Instrument :  
MSVOA\_D  
ClientSampleId :  
RICH-REC-ROAD-STONE-8RE

Tot Ion:117 Resp: 1763230  
Ion Ratio Lower Upper  
117 100  
82 52.8 45.2 67.8  
119 33.0 26.1 39.1

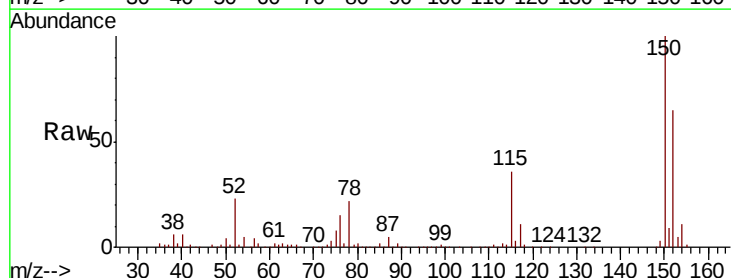


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

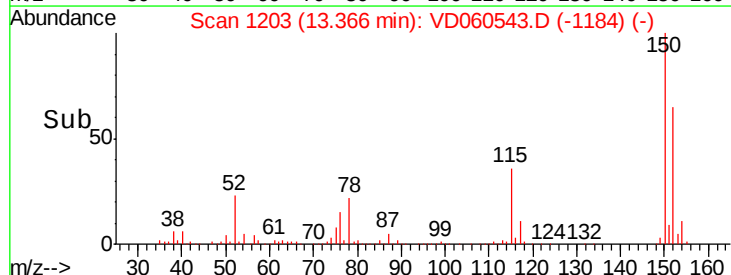
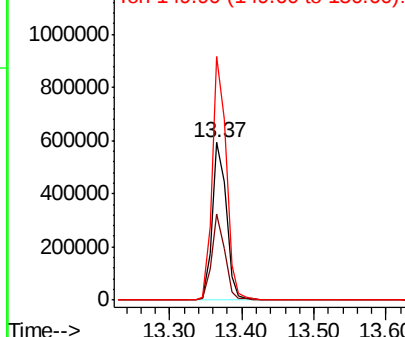


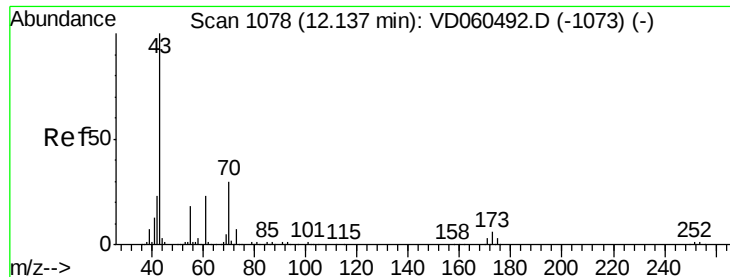
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.37 min Scan# 1203  
Delta R.T. -0.01 min  
Lab File: VD060543.D  
Acq: 12 Dec 2018 13:24

Tgt Ion:152 Resp: 798538  
Ion Ratio Lower Upper  
152 100  
115 55.1 24.6 74.0  
150 154.4 0.0 309.0



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-amvl acetate

Concen: 2.117 ug/l

RT: 12.18 min Scan# 1082

Delta R.T. 0.04 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

Instrument :

MSVOA\_D

ClientSampleId :

RICH-REC-ROAD-STONE-8RE

Tot Ion: 43 Resp: 28915

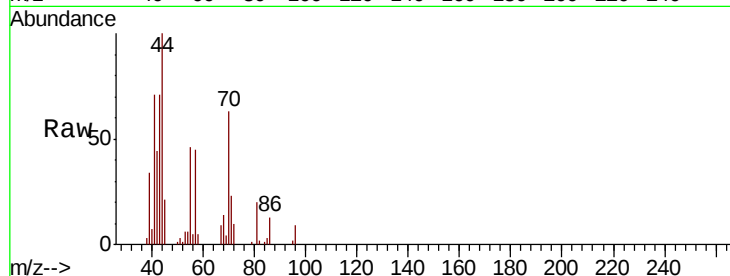
Ion Ratio Lower Upper

43 100

70 88.8 23.8 35.8#

55 64.5 14.2 21.2#

61 0.0 18.1 27.1#

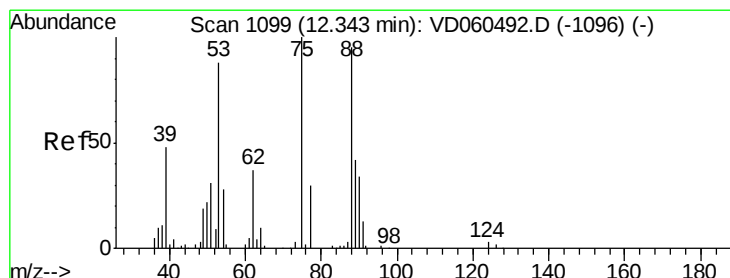
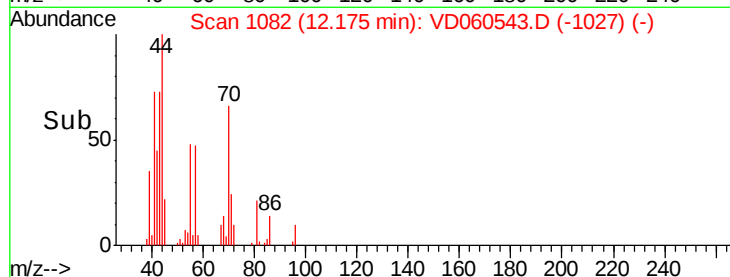
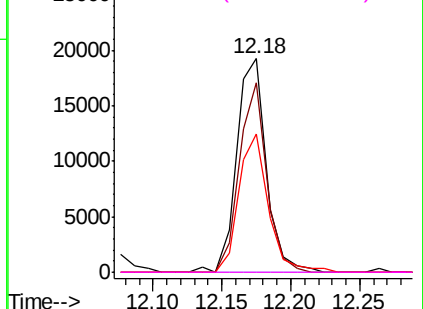


Abundance Ion 42.95 (42.65 to 43.65): VDC

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: 106.803 ug/l

RT: 12.42 min Scan# 1107

Delta R.T. 0.08 min

Lab File: VD060543.D

Acq: 12 Dec 2018 13:24

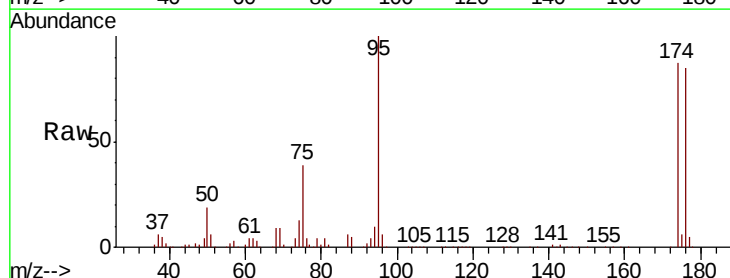
Tgt Ion: 75 Resp: 269517

Ion Ratio Lower Upper

75 100

53 0.0 70.5 105.7#

89 0.0 33.6 50.4#



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

