

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW091818\  
 Data File : VW005507.D  
 Acq On : 19 Sep 2018 05:21  
 Operator : SY/AP  
 Sample : J4967-02RE  
 Misc : 5.16G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 SUP-UST-091718-02RE

Quant Time: Sep 19 06:04:47 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W091618S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 15 02:32:34 2018  
 Response via : Initial Calibration

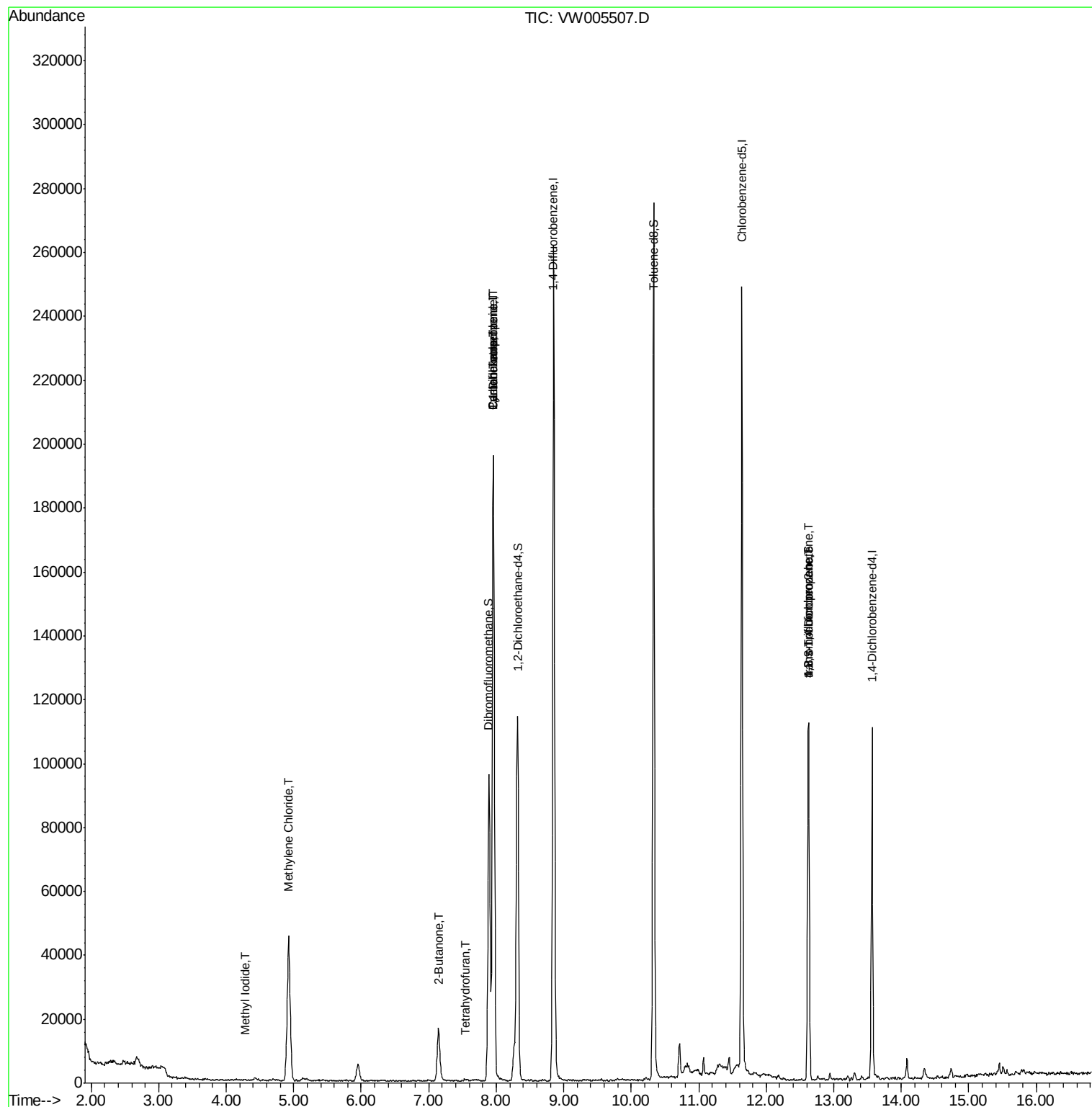
| Internal Standards             | R.T.  | QIon | Response | Conc         | Units   | Dev(Min) |
|--------------------------------|-------|------|----------|--------------|---------|----------|
| 1) Pentafluorobenzene          | 7.96  | 168  | 144084   | 50.00        | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 8.85  | 114  | 217827   | 50.00        | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 11.64 | 117  | 135299   | 50.00        | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 13.57 | 152  | 28086    | 50.00        | ug/l    | 0.00     |
| System Monitoring Compounds    |       |      |          |              |         |          |
| 33) 1,2-Dichloroethane-d4      | 8.32  | 65   | 93429    | 62.47        | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =            | 124.94% |          |
| 35) Dibromofluoromethane       | 7.89  | 113  | 68288    | 55.91        | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =            | 111.82% |          |
| 50) Toluene-d8                 | 10.33 | 98   | 183049   | 32.73        | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =            | 65.46%  |          |
| 62) 4-Bromofluorobenzene       | 12.63 | 95   | 34046    | 16.60        | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =            | 33.20%  |          |
| Target Compounds               |       |      |          |              |         |          |
|                                |       |      |          |              | Qvalue  |          |
| 2) Dichlorodifluoromethane     | 2.00  | 85   | 249      | Below Cal    | #       | 42       |
| 5) Bromomethane                | 2.78  | 94   | 328      | Below Cal    | #       | 71       |
| 10) Methyl Iodide              | 4.28  | 142  | 147      | 4.138 ug/l   | #       | 38       |
| 11) Tert butyl alcohol         | 5.20  | 59   | 464      | Below Cal    | #       | 71       |
| 16) Acetone                    | 4.15  | 43   | 736      | Below Cal    | #       | 46       |
| 20) Methylene Chloride         | 4.93  | 84   | 31726    | 17.670 ug/l  |         | 91       |
| 25) 2-Butanone                 | 7.15  | 43   | 1116     | 3.102 ug/l   | #       | 49       |
| 29) Tetrahydrofuran            | 7.55  | 42   | 378      | 1.649 ug/l   | #       | 50       |
| 31) Cyclohexane                | 7.96  | 56   | 3245     | 1.359 ug/l   | #       | 1        |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 11971    | 5.807 ug/l   | #       | 49       |
| 38) Carbon Tetrachloride       | 7.96  | 117  | 14408    | 6.707 ug/l   | #       | 18       |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 17592    | 76.156 ug/l  | #       | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 17592    | 197.552 ug/l | #       | 8        |

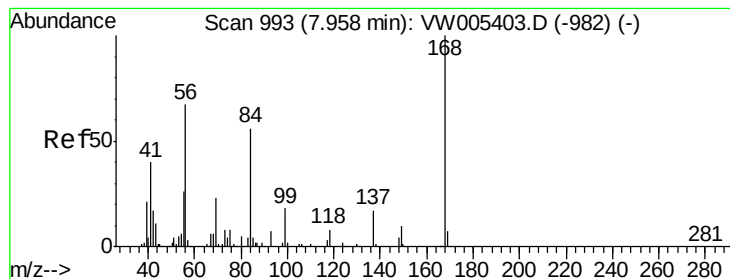
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Sat Sep 15 02:32:34 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.96 min Scan# 993

Delta R.T. 0.00 min

Lab File: VW005507.D

Acq: 19 Sep 2018 05:21

Instrument :

MSVOA\_W

ClientSampleId :

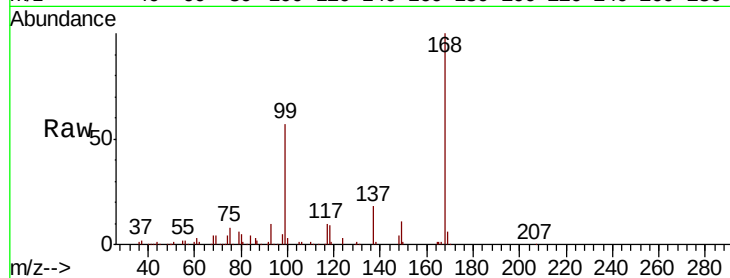
SUP-UST-091718-02RE

Tgt Ion:168 Resp: 144084

Ion Ratio Lower Upper

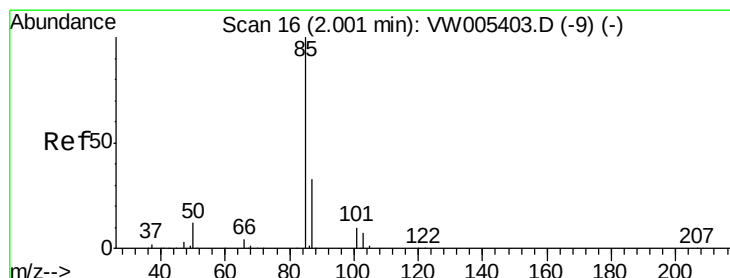
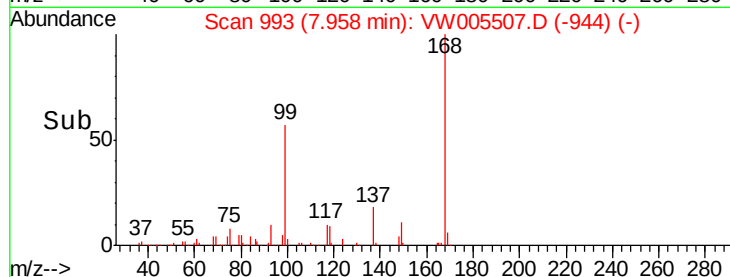
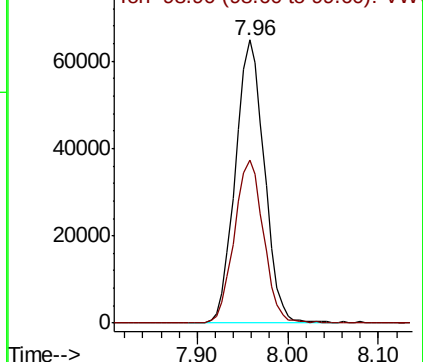
168 100

99 57.4 45.0 67.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 2.00 min Scan# 16

Delta R.T. 0.00 min

Lab File: VW005507.D

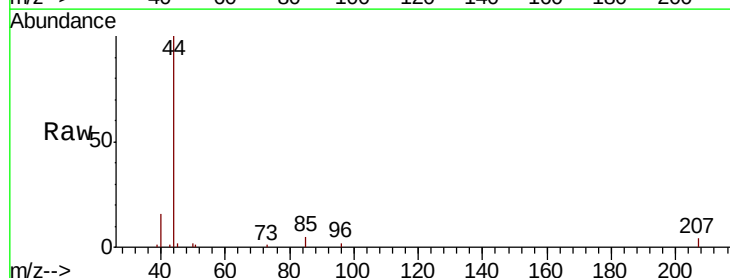
Acq: 19 Sep 2018 05:21

Tgt Ion: 85 Resp: 249

Ion Ratio Lower Upper

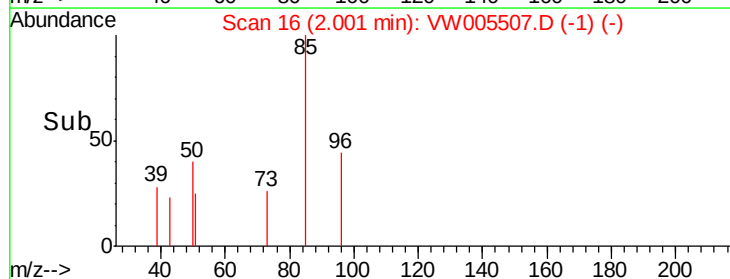
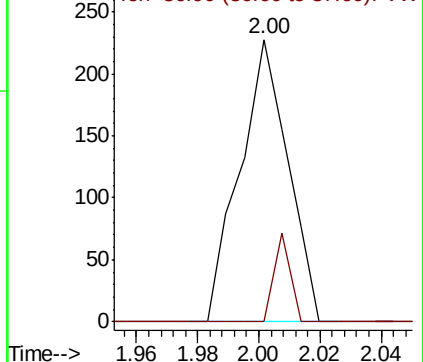
85 100

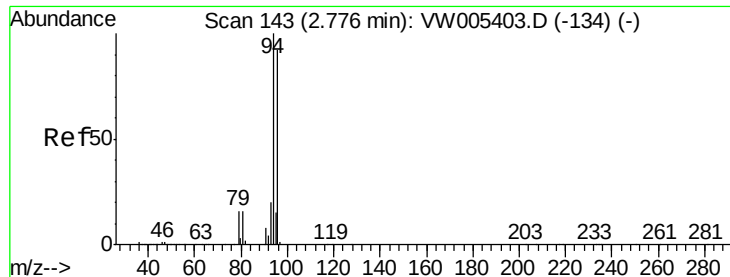
87 0.0 16.4 49.1#



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW





#5

Bromomethane

Concen: Below Cal

RT: 2.78 min Scan# 144

Delta R.T. 0.01 min

Lab File: VW005507.D

Acq: 19 Sep 2018 05:21

Instrument :

MSVOA\_W

ClientSampleId :

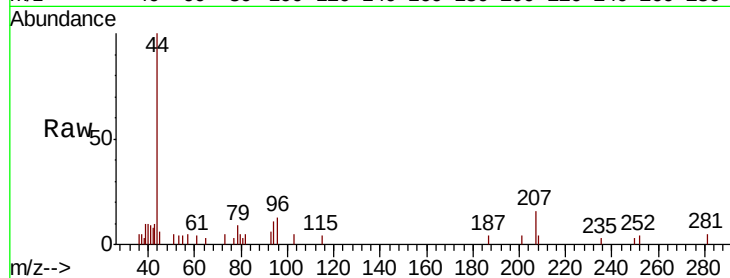
SUP-UST-091718-02RE

Tgt Ion: 94 Resp: 328

Ion Ratio Lower Upper

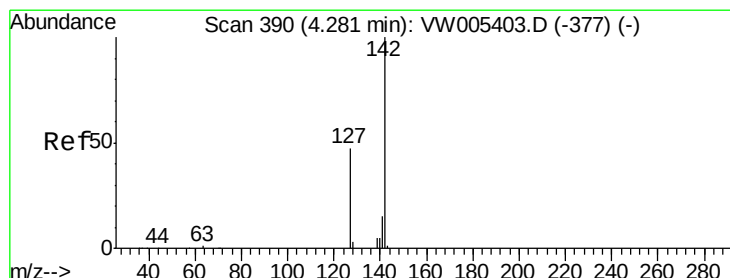
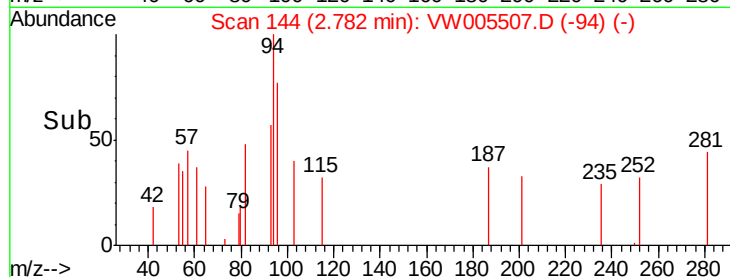
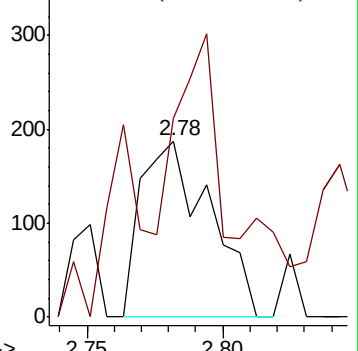
94 100

96 64.9 73.7 110.5#



Abundance Ion 93.90 (93.60 to 94.60): VW

Ion 95.90 (95.60 to 96.60): VW



#10

Methyl Iodide

Concen: 4.138 ug/l

RT: 4.28 min Scan# 389

Delta R.T. -0.01 min

Lab File: VW005507.D

Acq: 19 Sep 2018 05:21

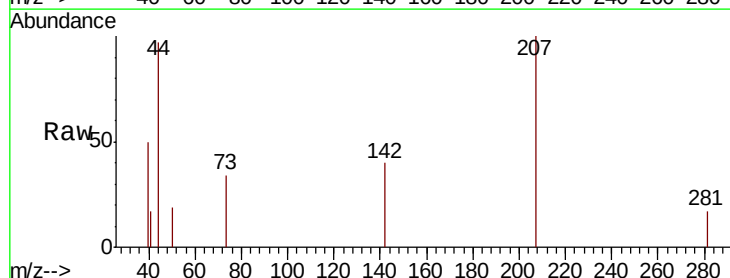
Tgt Ion:142 Resp: 147

Ion Ratio Lower Upper

142 100

127 0.0 37.5 56.3#

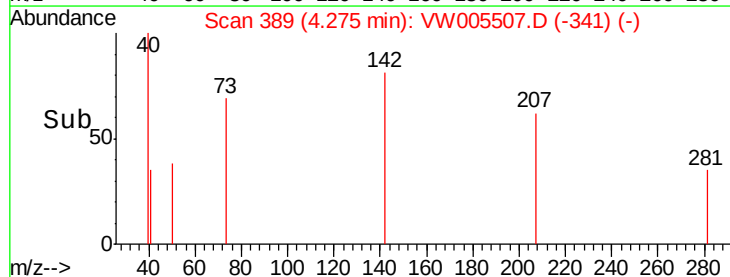
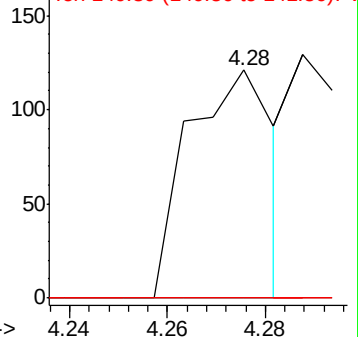
141 0.0 12.4 18.6#

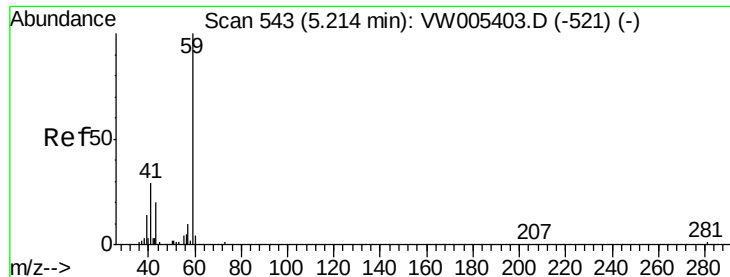


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

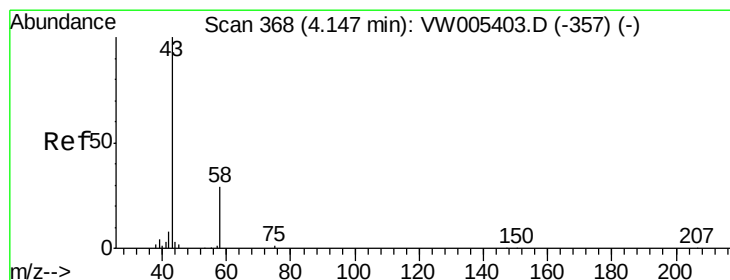
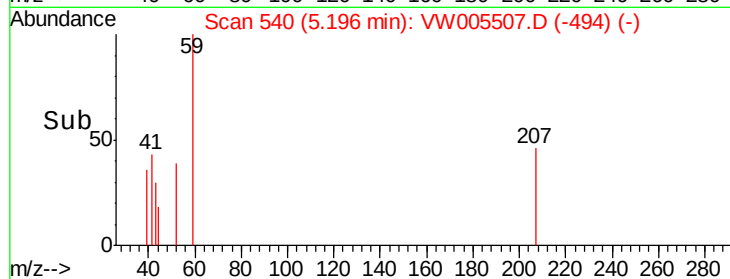
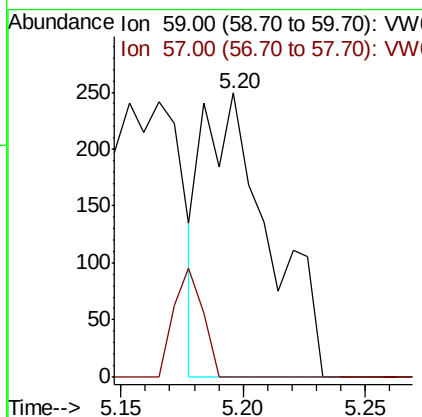
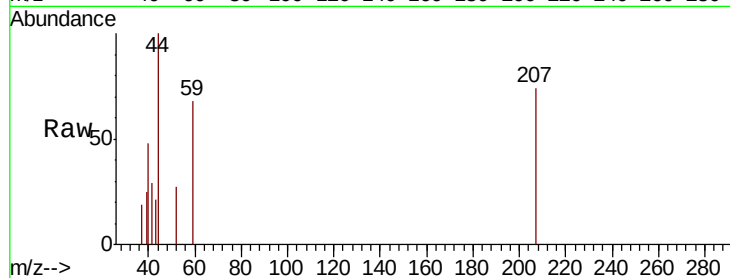




#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 5.20 min Scan# 540  
Delta R.T. -0.02 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

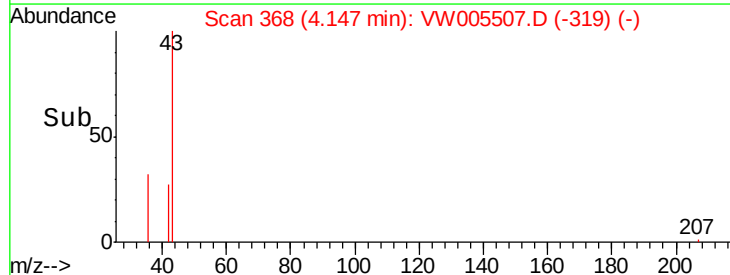
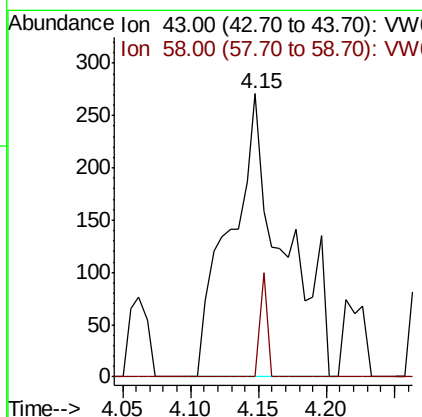
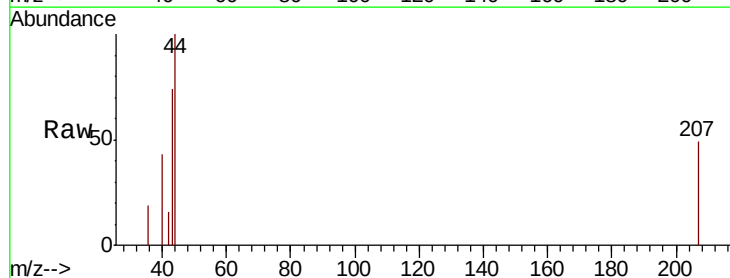
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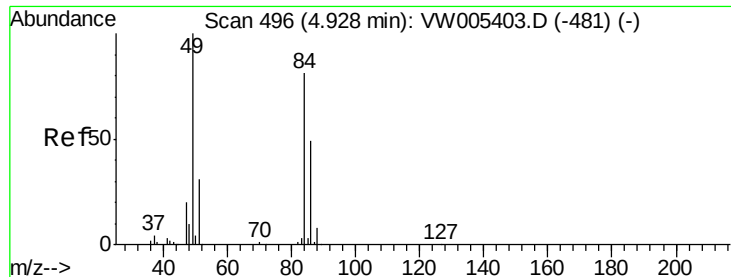
Tgt Ion: 59 Resp: 464  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.6 13.0#



#16  
Acetone  
Concen: Below Cal  
RT: 4.15 min Scan# 368  
Delta R.T. 0.00 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

Tgt Ion: 43 Resp: 736  
Ion Ratio Lower Upper  
43 100  
58 0.0 22.8 34.2#

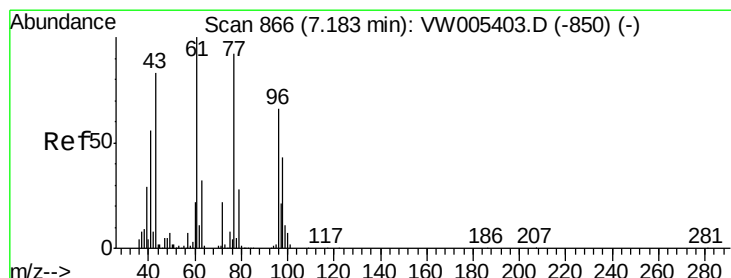
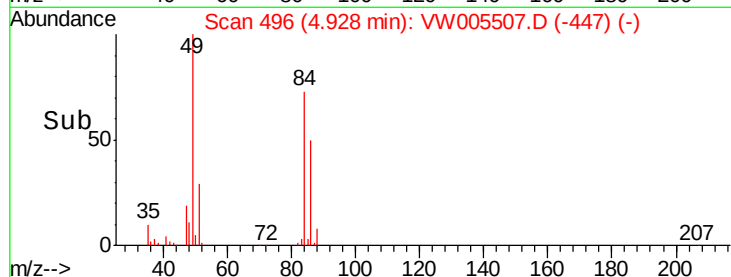
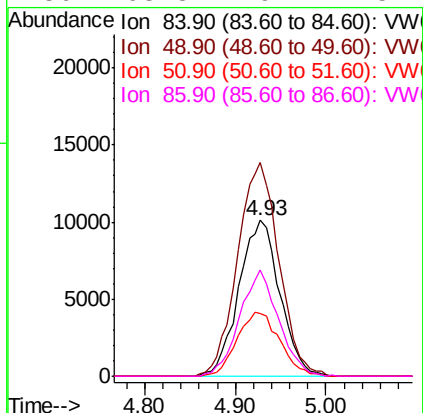
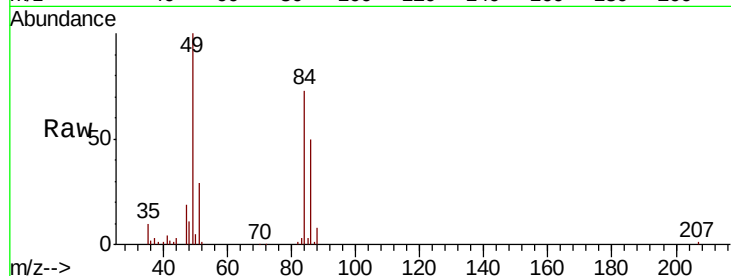




#20  
Methylene Chloride  
Concen: 17.670 ug/l  
RT: 4.93 min Scan# 496  
Delta R.T. 0.00 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

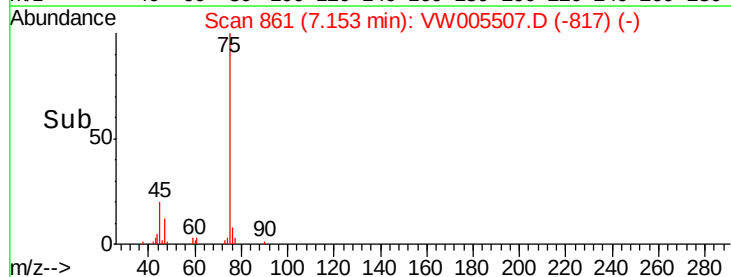
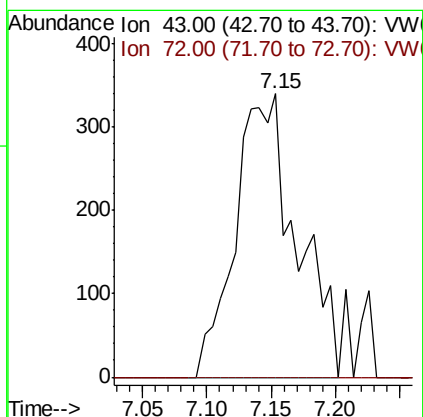
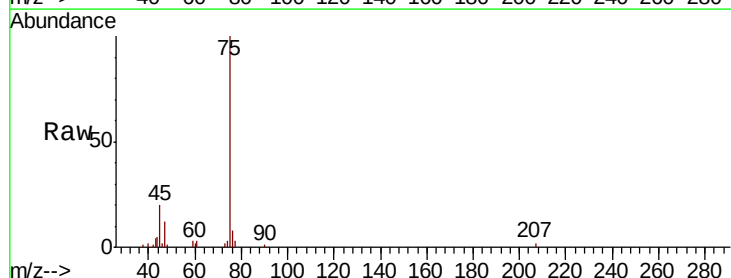
Instrument :  
MSVOA\_W  
ClientSampleId :  
SUP-UST-091718-02RE

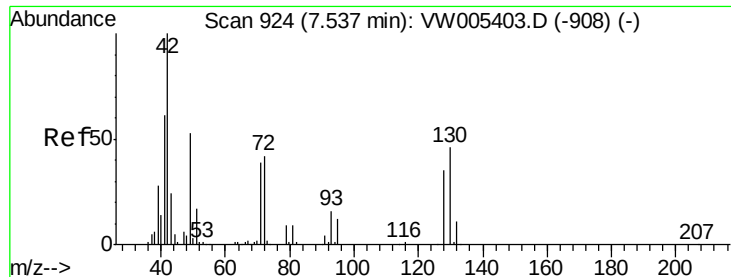
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 31726 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 136.9 | 99.3  | 148.9 |
| 51       | 39.8  | 31.1  | 46.7  |
| 86       | 68.3  | 49.1  | 73.7  |



#25  
2-Butanone  
Concen: 3.102 ug/l  
RT: 7.15 min Scan# 861  
Delta R.T. -0.03 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 1116  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 0.0   | 21.1  | 31.7# |

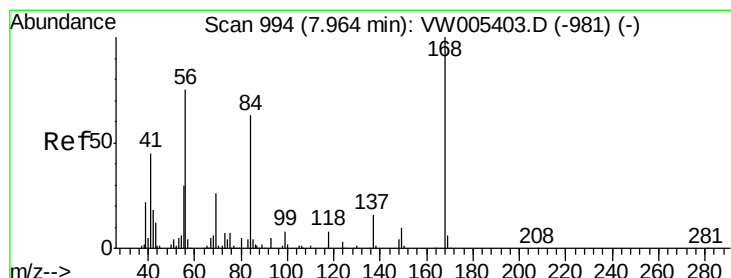
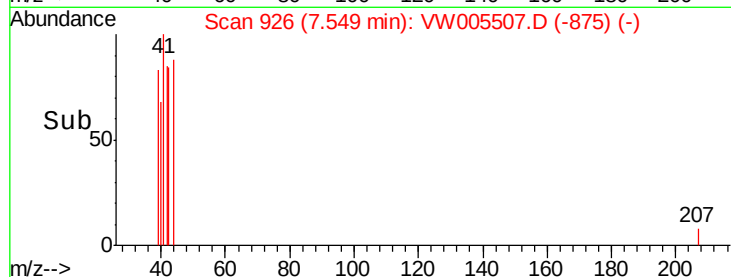
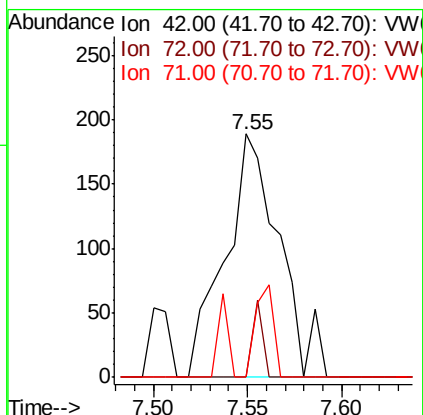
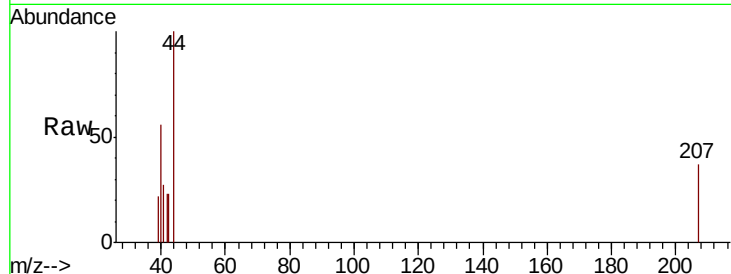




#29  
Tetrahydrofuran  
Concen: 1.649 ug/l  
RT: 7.55 min Scan# 926  
Delta R.T. 0.01 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

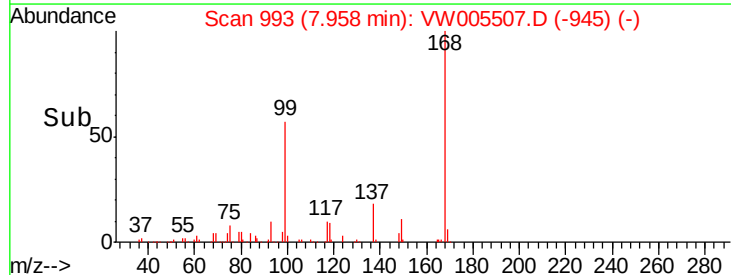
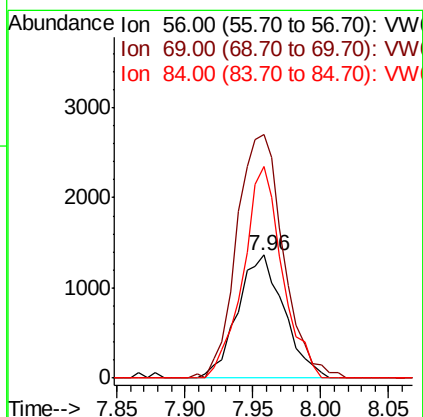
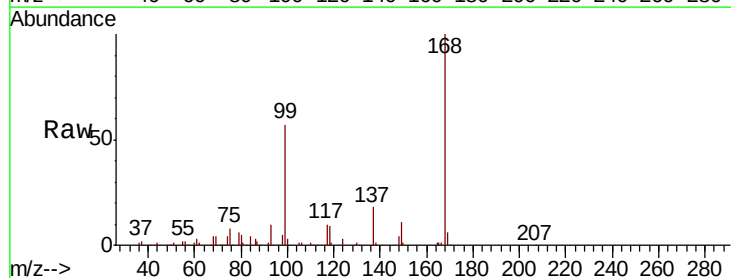
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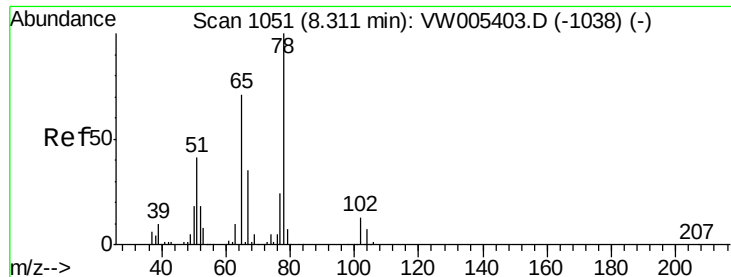
Tgt Ion: 42 Resp: 378  
Ion Ratio Lower Upper  
42 100  
72 5.8 33.2 49.8#  
71 12.7 31.0 46.6#



#31  
Cyclohexane  
Concen: 1.359 ug/l  
RT: 7.96 min Scan# 993  
Delta R.T. -0.01 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

Tgt Ion: 56 Resp: 3245  
Ion Ratio Lower Upper  
56 100  
69 198.3 27.2 40.8#  
84 171.9 66.7 100.1#

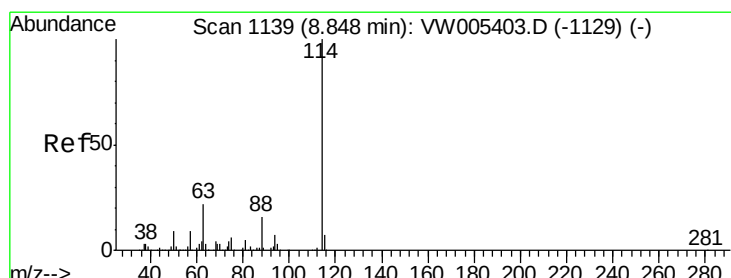
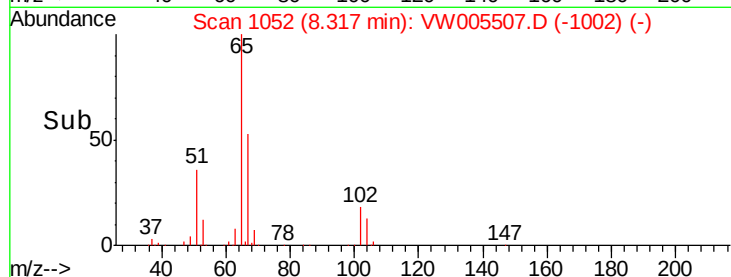
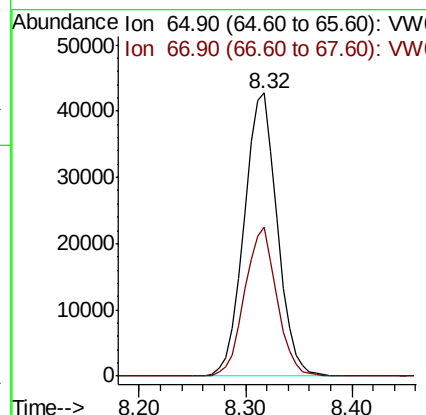
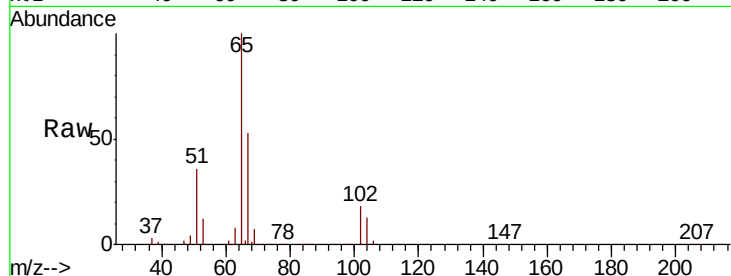




#33  
 1,2-Dichloroethane-d4  
 Concen: 62.469 ug/l  
 RT: 8.32 min Scan# 1052  
 Delta R.T. 0.01 min  
 Lab File: VW005507.D  
 Acq: 19 Sep 2018 05:21

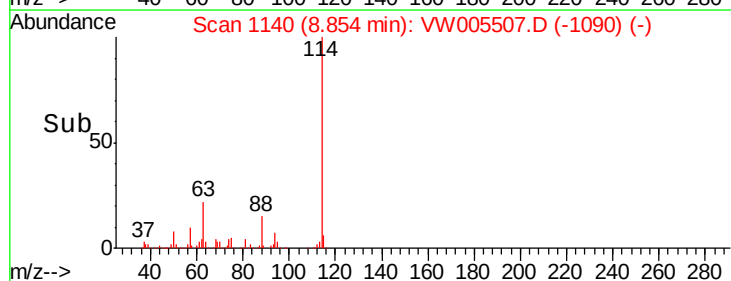
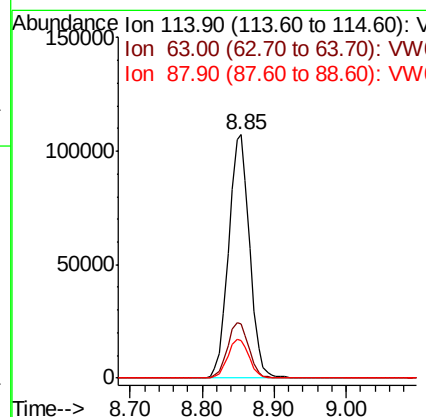
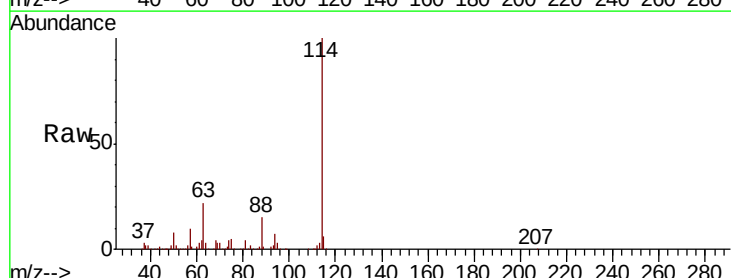
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 SUP-UST-091718-02RE

Tgt Ion: 65 Resp: 93429  
 Ion Ratio Lower Upper  
 65 100  
 67 51.1 0.0 100.6

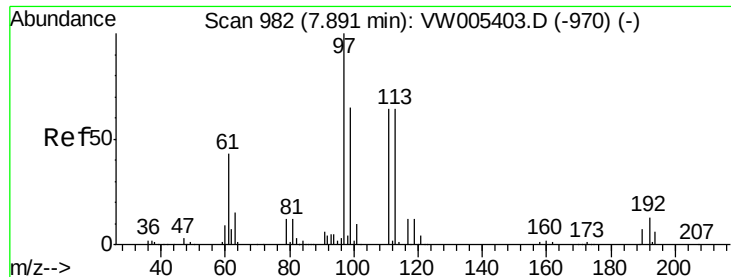


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.85 min Scan# 1140  
 Delta R.T. 0.01 min  
 Lab File: VW005507.D  
 Acq: 19 Sep 2018 05:21

Tgt Ion: 114 Resp: 217827  
 Ion Ratio Lower Upper  
 114 100  
 63 22.1 0.0 43.4  
 88 15.5 0.0 31.8



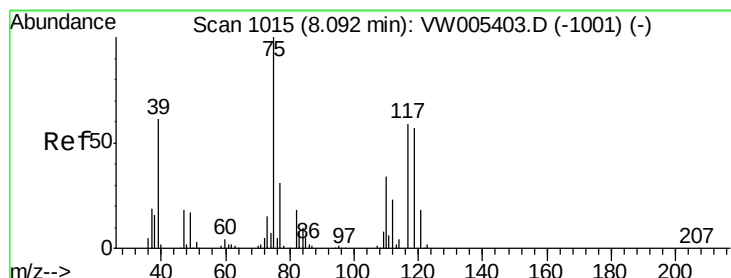
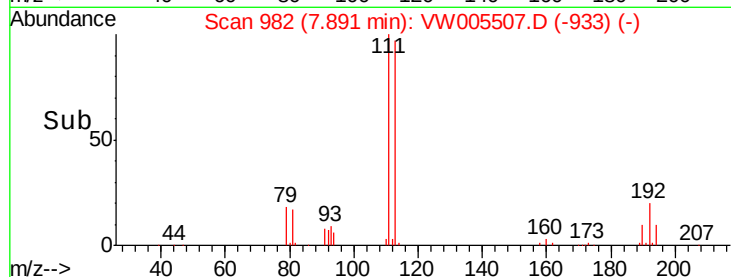
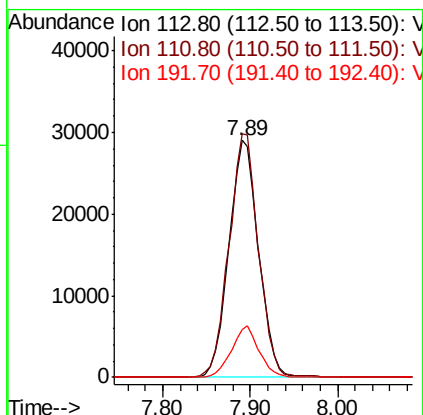
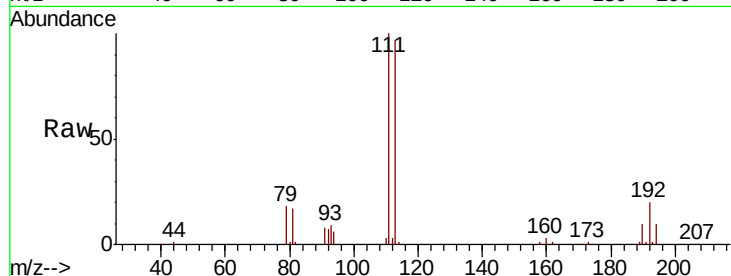




#35  
 Dibromofluoromethane  
 Concen: 55.913 ug/l  
 RT: 7.89 min Scan# 982  
 Delta R.T. 0.00 min  
 Lab File: VW005507.D  
 Acq: 19 Sep 2018 05:21

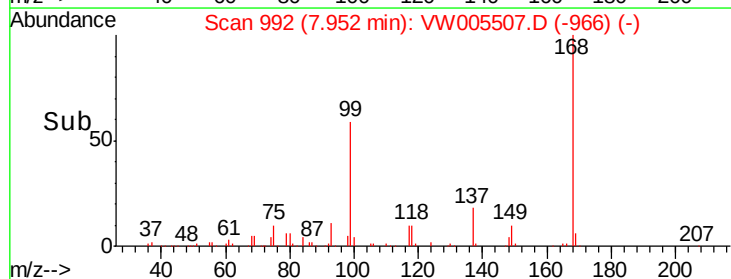
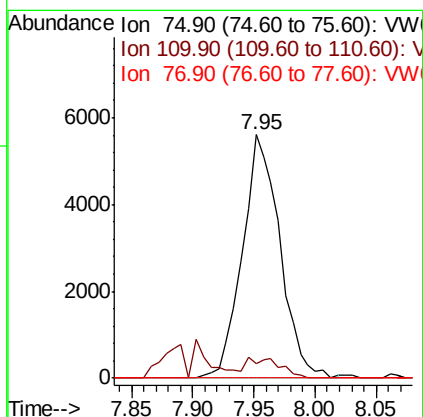
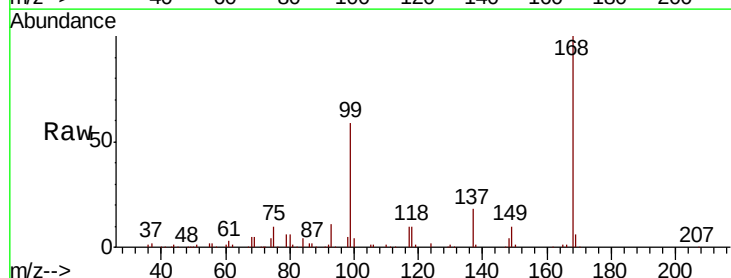
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 SUP-UST-091718-02RE

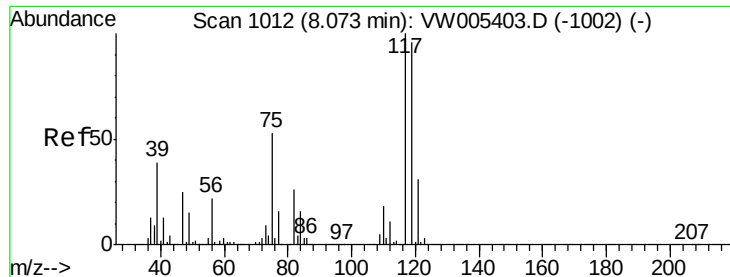
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.3 | 82.3  | 123.5 |
| 192     | 20.1  | 16.5  | 24.7  |



#36  
 1,1-Dichloropropene  
 Concen: 5.807 ug/l  
 RT: 7.95 min Scan# 992  
 Delta R.T. -0.14 min  
 Lab File: VW005507.D  
 Acq: 19 Sep 2018 05:21

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.3   | 16.8  | 50.4# |
| 77      | 0.0   | 24.2  | 36.4# |





#38

Carbon Tetrachloride

Concen: 6.707 ug/l

RT: 7.96 min Scan# 993

Delta R.T. -0.12 min

Lab File: VW005507.D

Acq: 19 Sep 2018 05:21

Instrument :

MSVOA\_W

ClientSampleId :

SUP-UST-091718-02RE

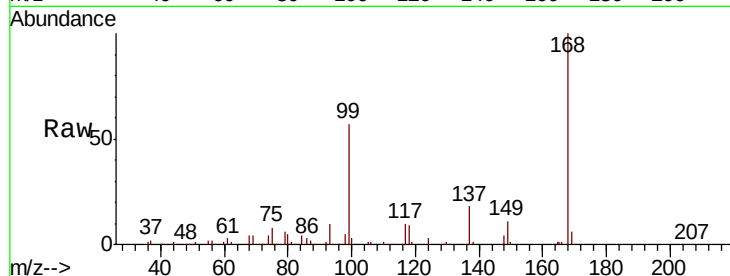
Tgt Ion:117 Resp: 14408

Ion Ratio Lower Upper

117 100

119 7.6 76.8 115.2#

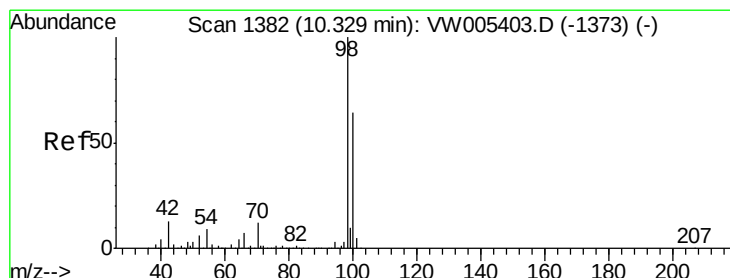
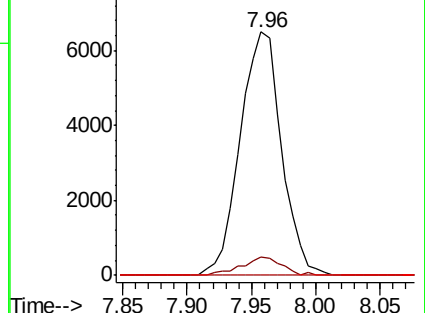
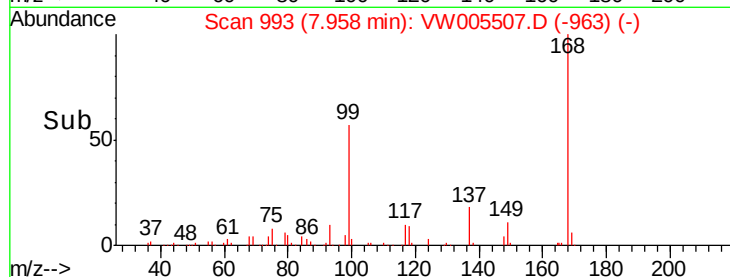
121 0.0 24.7 37.1#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#50

Toluene-d8

Concen: 32.728 ug/l

RT: 10.33 min Scan# 1382

Delta R.T. 0.00 min

Lab File: VW005507.D

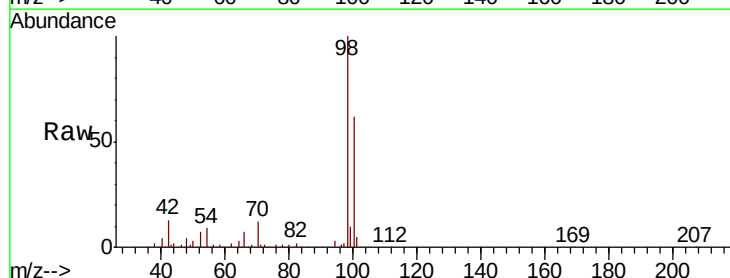
Acq: 19 Sep 2018 05:21

Tgt Ion: 98 Resp: 183049

Ion Ratio Lower Upper

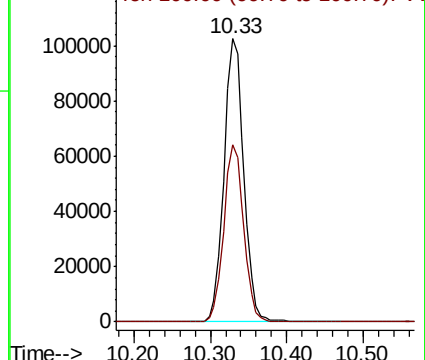
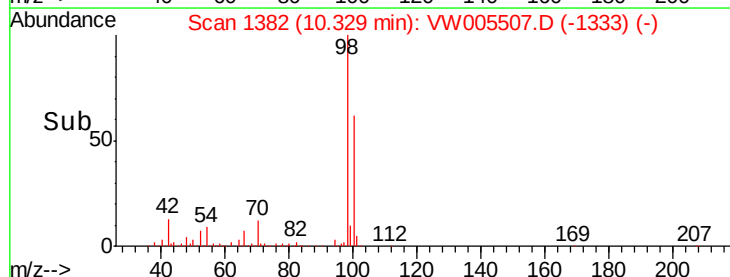
98 100

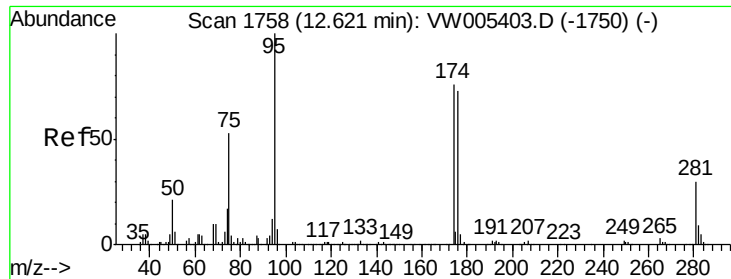
100 63.0 51.4 77.0



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW

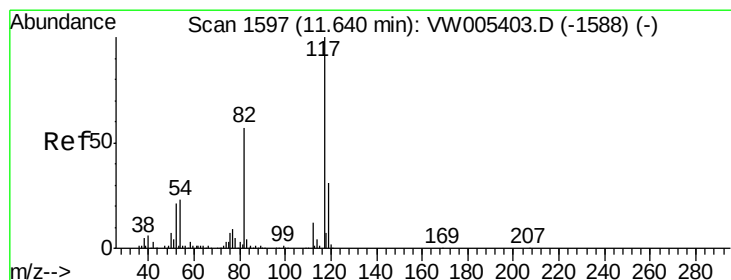
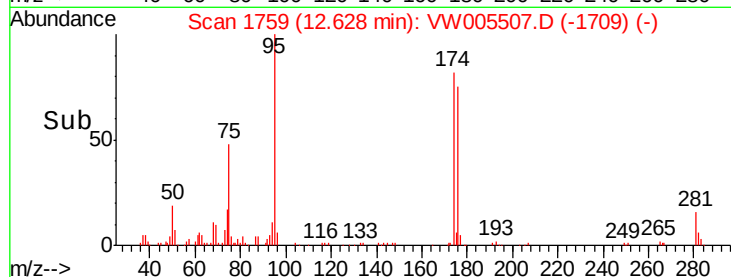
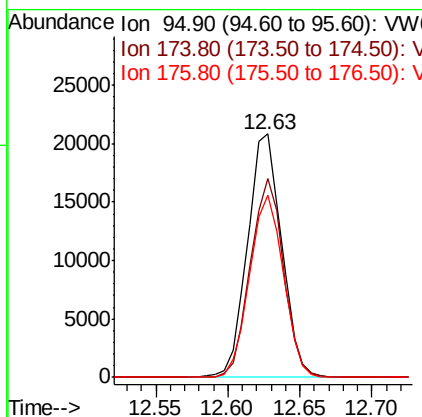
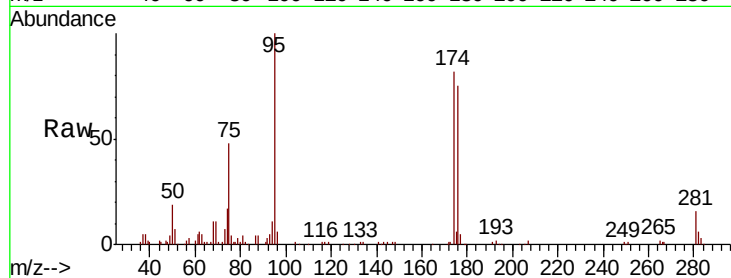




#62  
4-Bromofluorobenzene  
Concen: 16.601 ug/l  
RT: 12.63 min Scan# 1759  
Delta R.T. 0.01 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

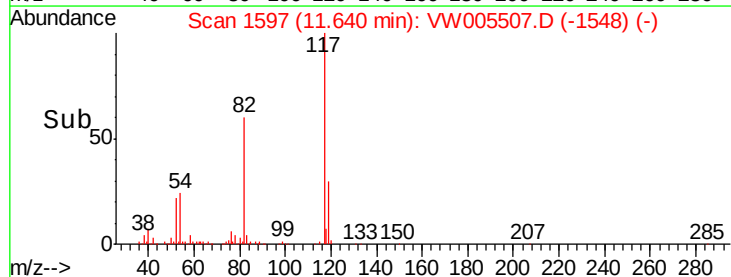
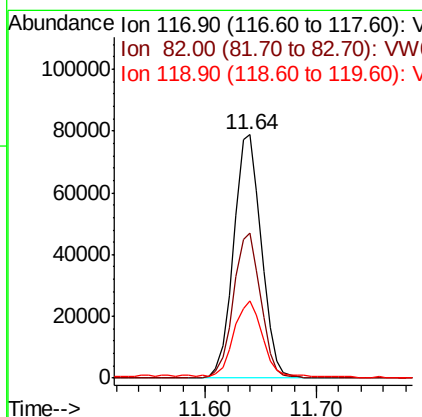
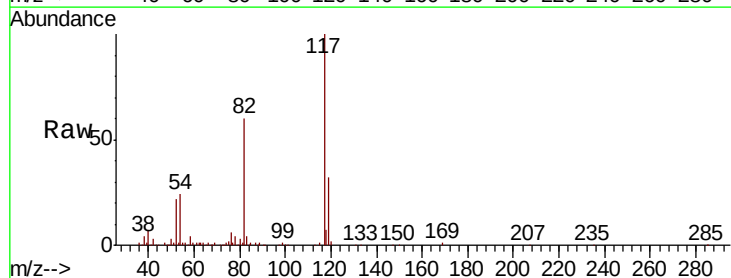
Instrument :  
MSVOA\_W  
ClientSampleId :  
SUP-UST-091718-02RE

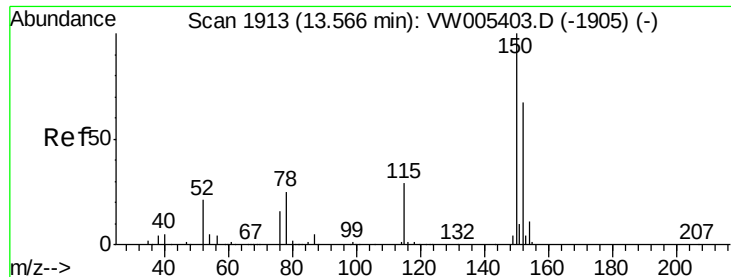
Tgt Ion: 95 Resp: 34046  
Ion Ratio Lower Upper  
95 100  
174 79.0 0.0 161.2  
176 74.4 0.0 156.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1597  
Delta R.T. 0.00 min  
Lab File: VW005507.D  
Acq: 19 Sep 2018 05:21

Tgt Ion: 117 Resp: 135299  
Ion Ratio Lower Upper  
117 100  
82 59.7 45.9 68.9  
119 31.2 24.8 37.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.57 min Scan# 1913

Delta R.T. 0.00 min

Lab File: VW005507.D

Acq: 19 Sep 2018 05:21

Instrument :

MSVOA\_W

ClientSampleId :

SUP-UST-091718-02RE

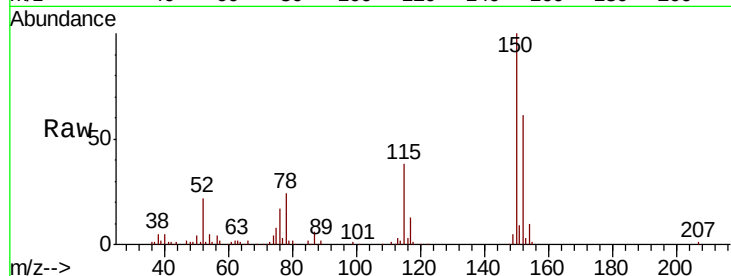
Tgt Ion: 152 Resp: 28086

Ion Ratio Lower Upper

152 100

115 58.6 29.5 88.5

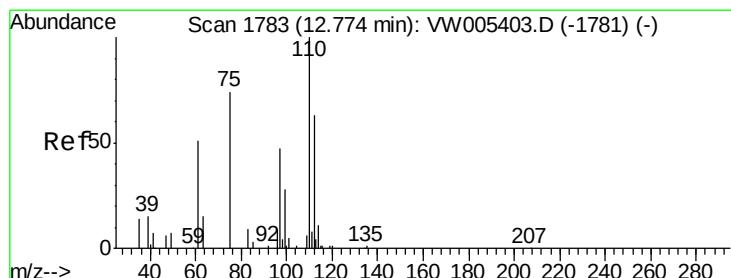
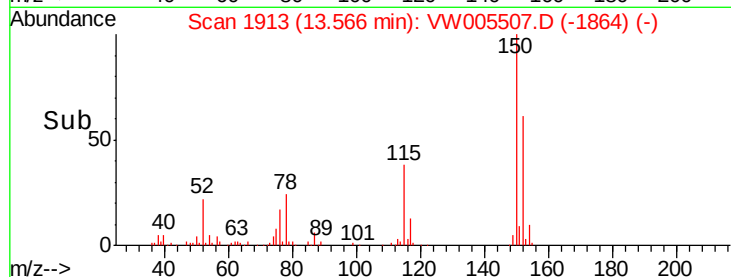
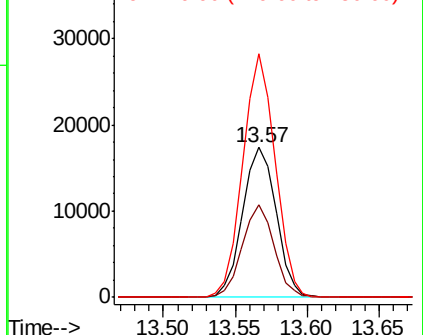
150 156.2 0.0 345.6



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 76.156 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW005507.D

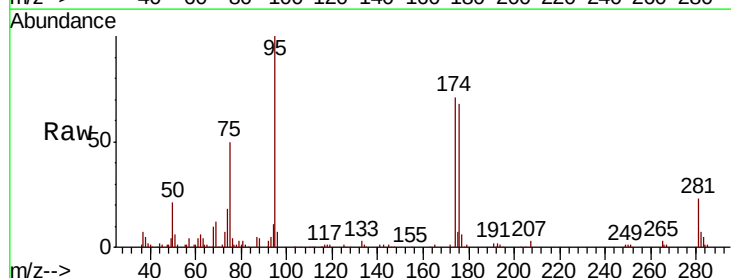
Acq: 19 Sep 2018 05:21

Tgt Ion: 75 Resp: 17592

Ion Ratio Lower Upper

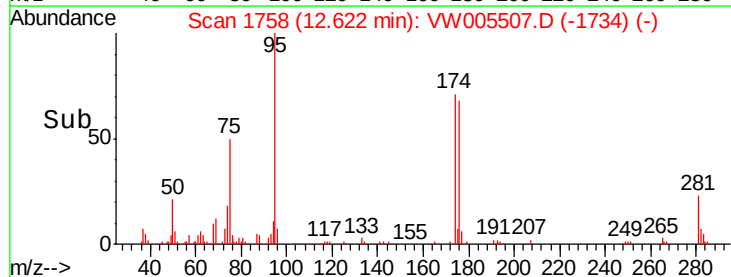
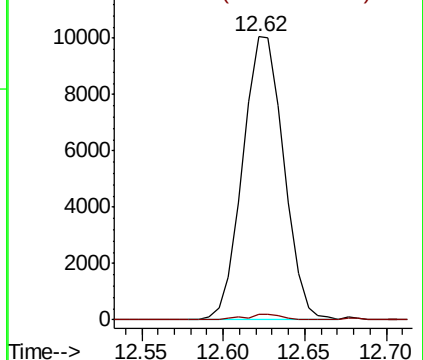
75 100

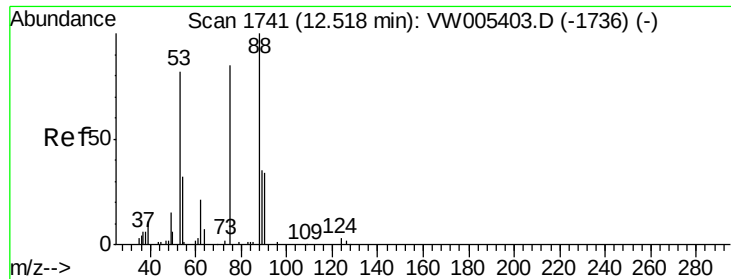
77 1.8 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW





#81

trans-1,4-Dichloro-2-butene

Concen: 197.552 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.10 min

Lab File: VW005507.D

Acq: 19 Sep 2018 05:21

Instrument :

MSVOA\_W

ClientSampleId :

SUP-UST-091718-02RE

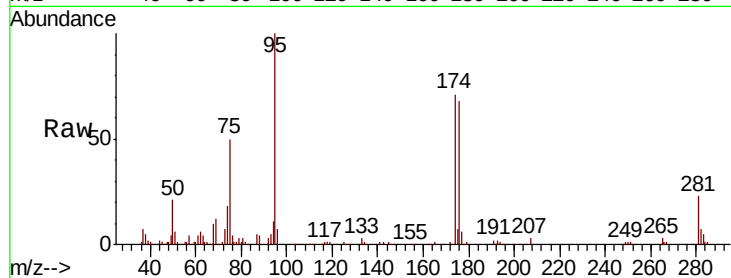
Tgt Ion: 75 Resp: 17592

Ion Ratio Lower Upper

75 100

53 0.0 83.2 124.8#

89 0.0 36.6 54.8#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

