

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD030519\
 Data File : VD060956.D
 Acq On : 5 Mar 2019 18:40
 Operator : VA/AP
 Sample : K1728-02
 Misc : 2.39g/5ml/MSVOA D/SOIL
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 RICH-REC-ROAD-STONE-11

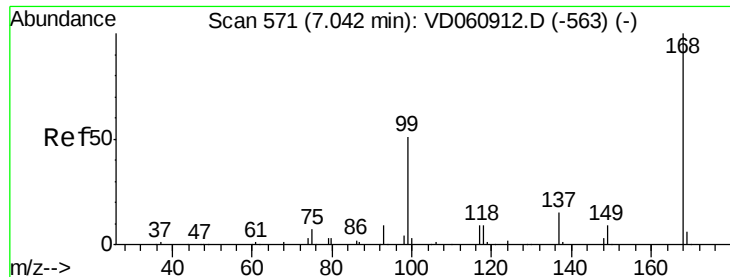
Quant Time: Mar 06 04:09:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D030119S.M
 Quant Title : SW846 8260
 QLast Update : Sat Mar 02 01:28:28 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.06	168	511168	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	8.23	114	922849	50.00	ug/l	0.02
63) Chlorobenzene-d5	12.37	117	777345	50.00	ug/l	0.02
72) 1,4-Dichlorobenzene-d4	14.52	152	302279	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.46	65	202011	47.81	ug/l	0.02
Spiked Amount			Recovery	=	95.62%	
35) Dibromofluoromethane	7.05	113	232	0.03	ug/l	0.13
Spiked Amount			Recovery	=	0.06%	
50) Toluene-d8	10.41	98	665688	36.16	ug/l	0.02
Spiked Amount			Recovery	=	72.32%	
62) 4-Bromofluorobenzene	13.55	95	252720	36.33	ug/l	0.00
Spiked Amount			Recovery	=	72.66%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
10) Methyl Iodide	3.32	142	582	4.796	ug/l #	40
11) Tert butyl alcohol	4.06	59	1359	4.315	ug/l #	77
16) Acetone	3.23	43	79451	56.311	ug/l	98
20) Methylene Chloride	3.83	84	31293	1.124	ug/l	94
25) 2-Butanone	6.09	43	7576	4.328	ug/l #	81
26) 2,2-Dichloropropane	6.15	77	10929	1.358	ug/l #	48
29) Tetrahydrofuran	6.48	42	2714	3.012	ug/l #	68
31) Cyclohexane	7.06	56	9877	1.059	ug/l #	1
36) 1,1-Dichloropropene	7.05	75	41680	4.912	ug/l #	45
37) Ethyl Acetate	6.14	43	10711	2.456	ug/l #	19
38) Carbon Tetrachloride	7.06	117	49910	5.475	ug/l #	16
48) Methyl methacrylate	9.07	41	3656	1.070	ug/l #	44
51) 4-Methyl-2-Pentanone	10.31	43	7384	1.994	ug/l #	87
58) 2-Chloroethyl Vinyl ether	9.86	63	3218	1.238	ug/l	95
59) 2-Hexanone	11.55	43	4258	1.641	ug/l	90
74) N-amyl acetate	13.31	43	14150	2.028	ug/l #	15
76) 1,2,3-Trichloropropane	13.55	75	82761	16.898	ug/l #	44
81) trans-1,4-Dichloro-2-buten	13.55	75	94561	65.237	ug/l #	20
89) n-Butylbenzene	14.80	91	2324	Below Cal		94
95) Naphthalene	16.12	128	11747	1.446	ug/l	99

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.06 min Scan# 572

Delta R.T. 0.02 min

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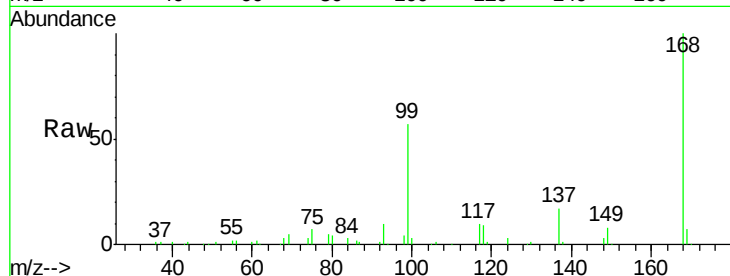
RICH-REC-ROAD-STONE-11

Tot Ion:168 Resp: 511168

Ion Ratio Lower Upper

168 100

99 57.1 41.5 62.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): V

7.06

200000

150000

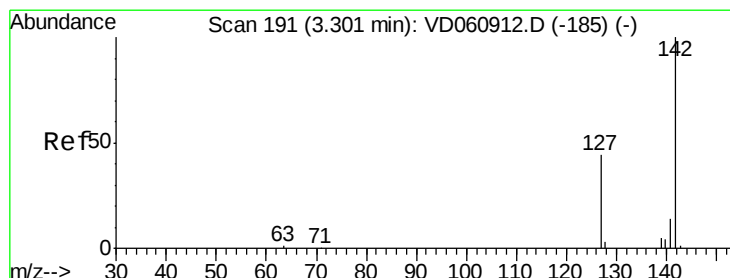
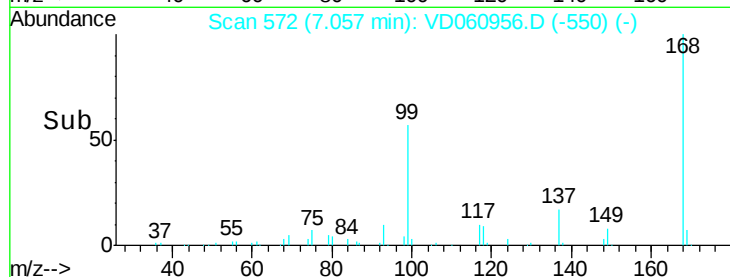
100000

50000

0

Time-->

6.90 7.00 7.10 7.20



#10

Methyl Iodide

Concen: 4.796 ug/l

RT: 3.32 min Scan# 192

Delta R.T. 0.02 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

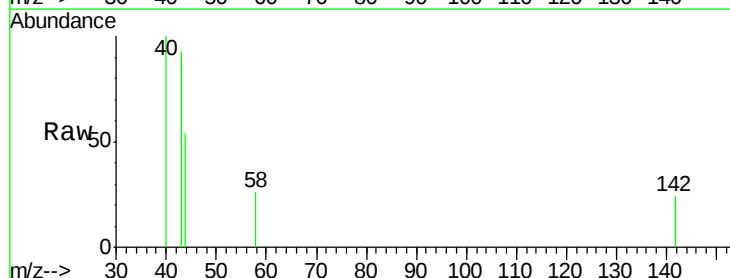
Tgt Ion:142 Resp: 582

Ion Ratio Lower Upper

142 100

127 0.0 35.0 52.6#

141 0.0 11.0 16.4#



Abundance Ion 141.85 (141.55 to 142.55): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.85 (140.55 to 141.55): V

3.32

400

300

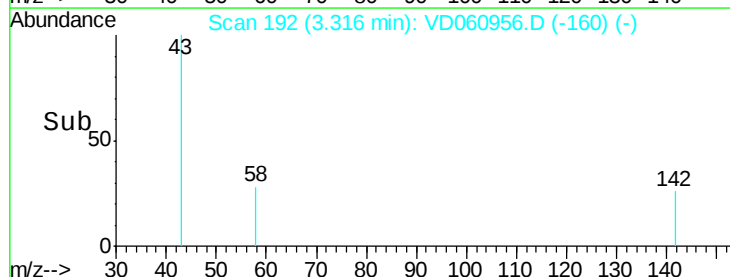
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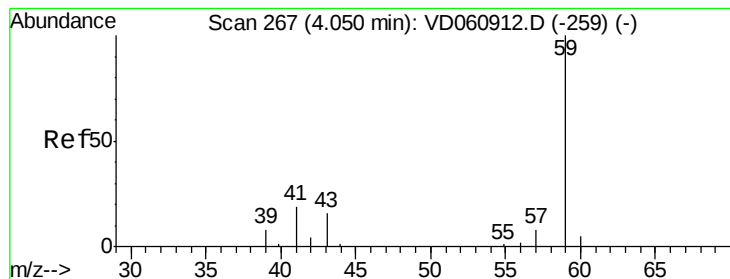
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0

Time-->

3.30 3.35



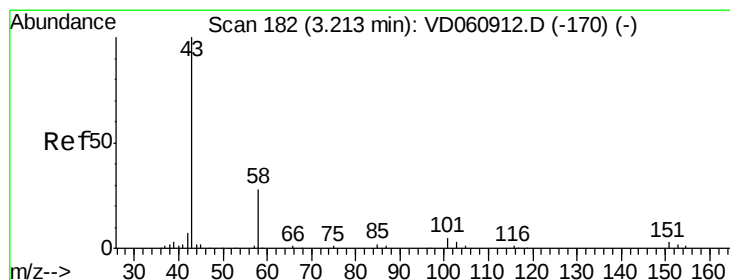
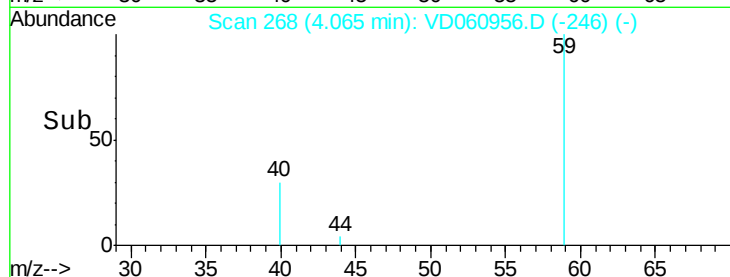
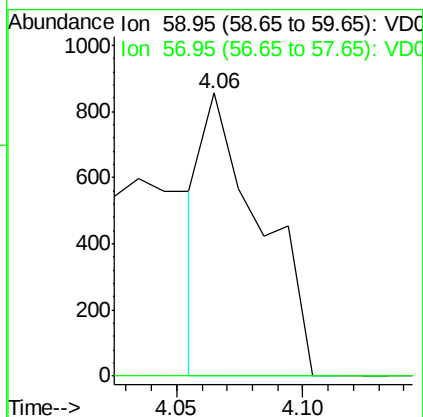
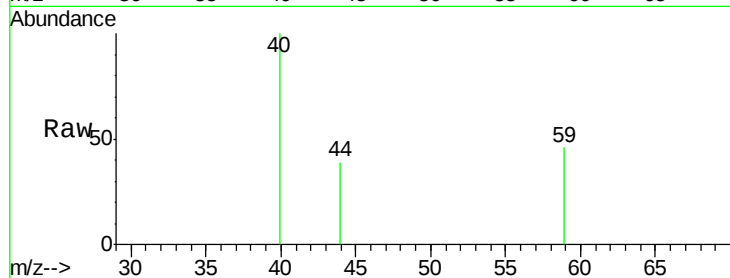


#11

Tert butyl alcohol
 Concen: 4.315 ug/l
 RT: 4.06 min Scan# 268
 Delta R.T. 0.02 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

Instrument :
 MSVOA_D
 ClientSampleId :
 RICH-REC-ROAD-STONE-11

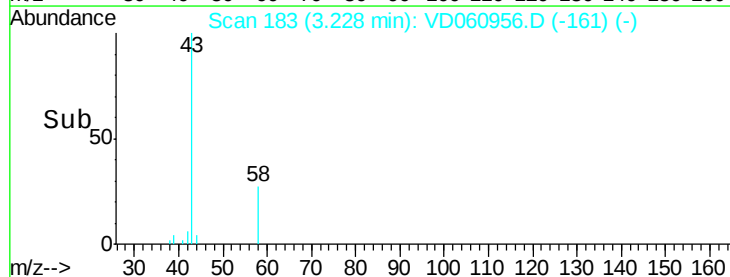
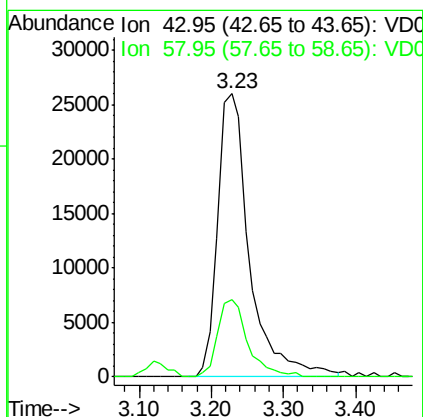
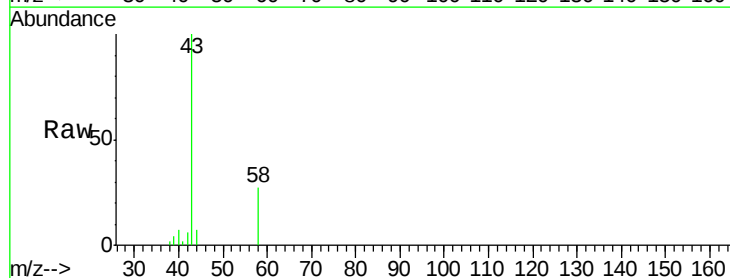
Tot Ion: 59 Resp: 1359
 Ion Ratio Lower Upper
 59 100
 57 0.0 6.5 9.7#

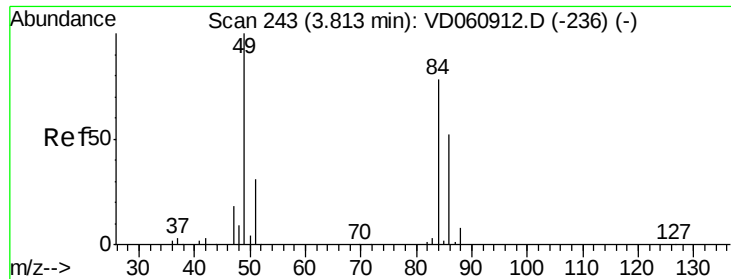


#16

Acetone
 Concen: 56.311 ug/l
 RT: 3.23 min Scan# 183
 Delta R.T. 0.02 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

Tgt Ion: 43 Resp: 79451
 Ion Ratio Lower Upper
 43 100
 58 27.2 22.8 34.2

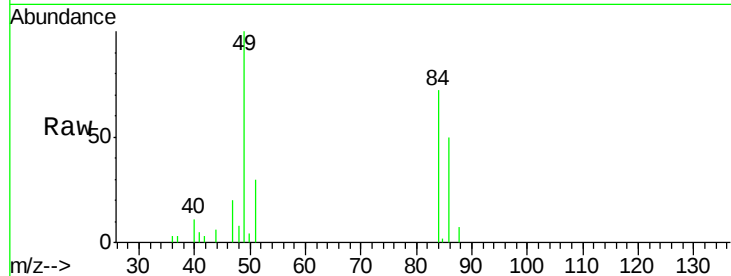




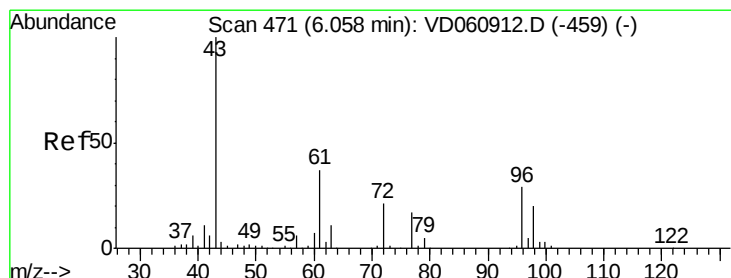
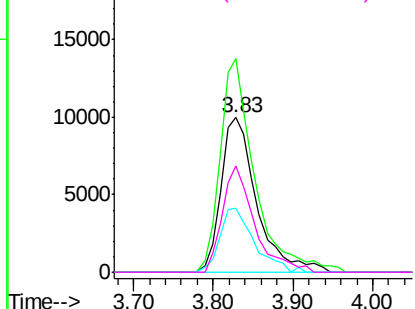
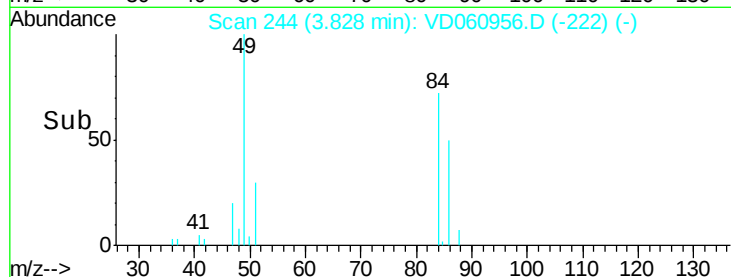
#20
Methvlene Chloride
Concen: 1.124 ug/l
RT: 3.83 min Scan# 244
Delta R.T. 0.02 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

Instrument :
MSVOA_D
ClientSampleId :
RICH-REC-ROAD-STONE-11

Tot Ion: 84 Resp: 31293
Ion Ratio Lower Upper
84 100
49 138.3 102.4 153.6
51 41.2 31.9 47.9
86 68.6 53.1 79.7

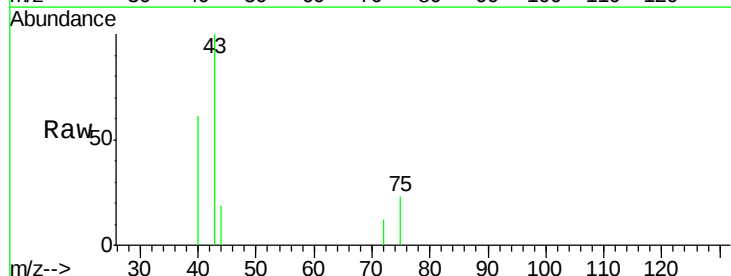


Abundance Ion 83.95 (83.65 to 84.65): VDC
Ion 48.90 (48.60 to 49.60): VDC
Ion 50.90 (50.60 to 51.60): VDC
Ion 85.90 (85.60 to 86.60): VDC

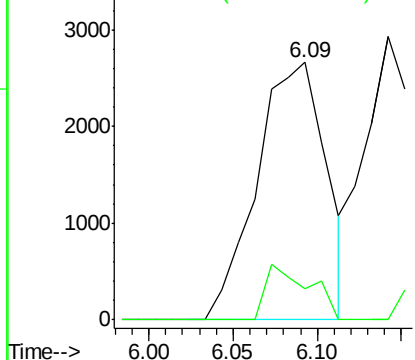
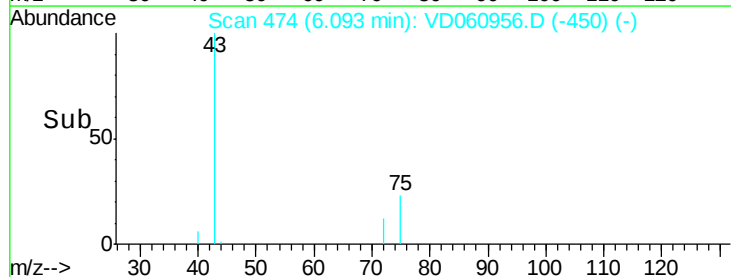


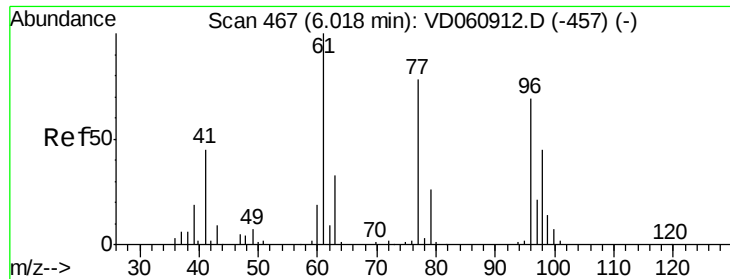
#25
2-Butanone
Concen: 4.328 ug/l
RT: 6.09 min Scan# 474
Delta R.T. 0.03 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

Tgt Ion: 43 Resp: 7576
Ion Ratio Lower Upper
43 100
72 12.3 17.0 25.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 72.00 (71.70 to 72.70): VDC





#26

2,2-Dichloropropane

Concen: 1.358 ug/l

RT: 6.15 min Scan# 480

Delta R.T. 0.13 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

Instrument :

MSVOA_D

ClientSampleId :

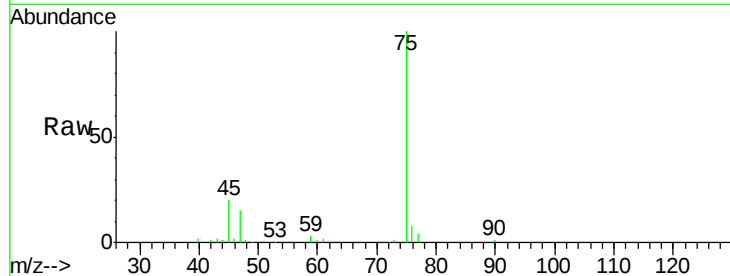
RICH-REC-ROAD-STONE-11

Tot Ion: 77 Resp: 10929

Ion Ratio Lower Upper

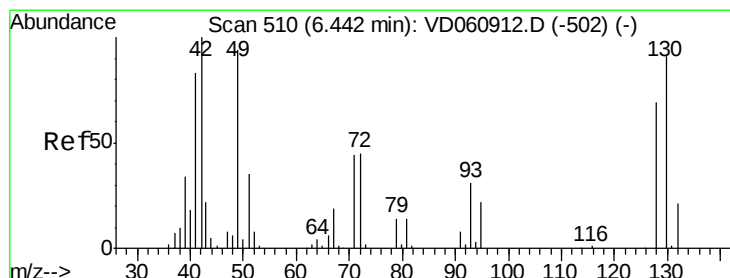
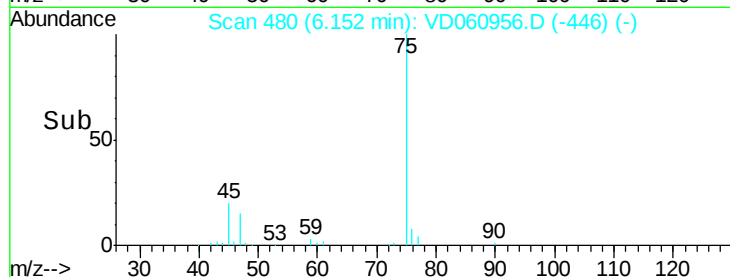
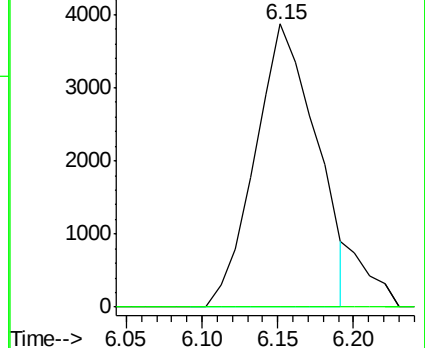
77 100

97 0.0 13.5 40.4#



Abundance Ion 76.95 (76.65 to 77.65): VDC

Ion 96.85 (96.55 to 97.55): VDC



#29

Tetrahydrofuran

Concen: 3.012 ug/l

RT: 6.48 min Scan# 513

Delta R.T. 0.03 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

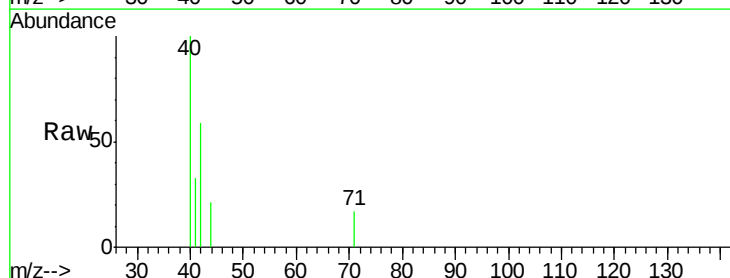
Tgt Ion: 42 Resp: 2714

Ion Ratio Lower Upper

42 100

72 20.6 33.8 50.6#

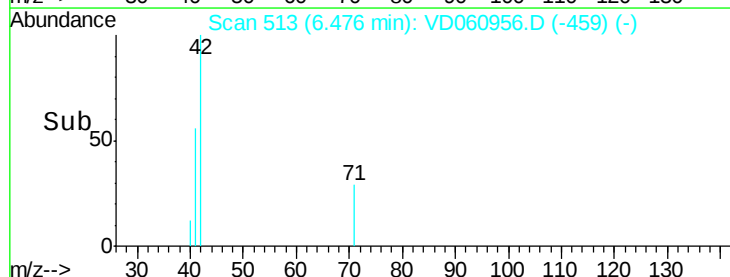
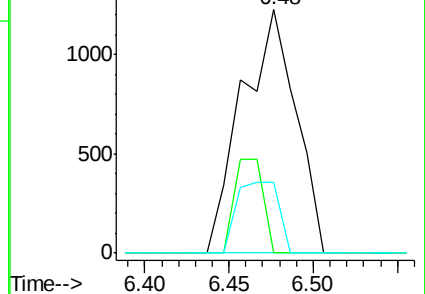
71 22.6 33.5 50.3#

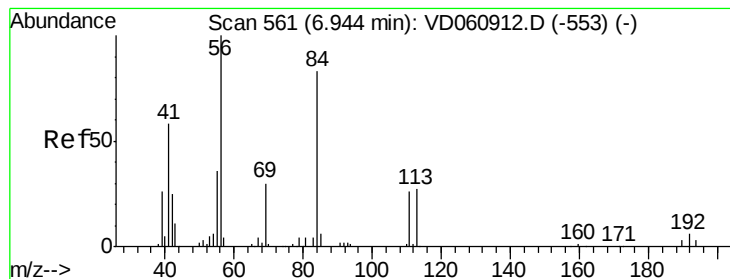


Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC





#31

Cyclohexane

Concen: 1.059 ug/l

RT: 7.06 min Scan# 572

Delta R.T. 0.11 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

Instrument :

MSVOA_D

ClientSampleId :

RICH-REC-ROAD-STONE-11

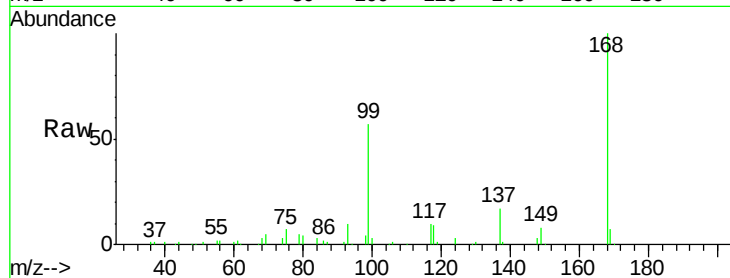
Tot Ion: 56 Resp: 9877

Ion Ratio Lower Upper

56 100

69 272.7 23.6 35.4#

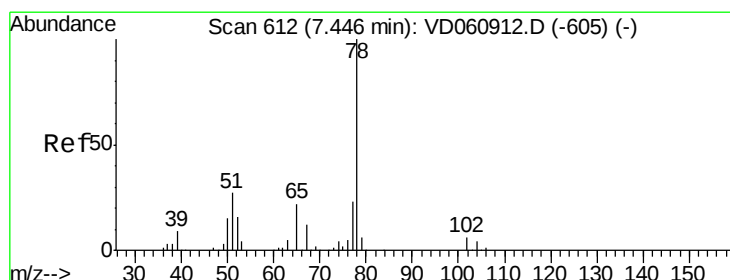
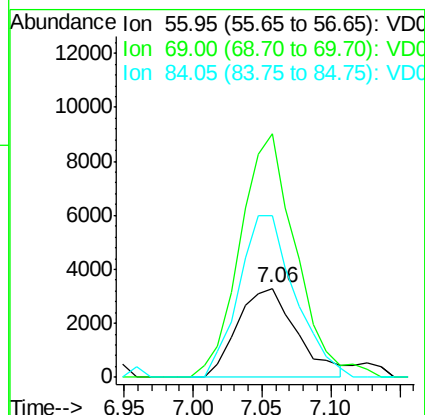
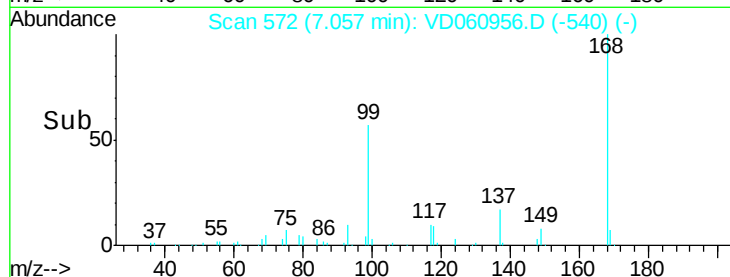
84 181.3 66.5 99.7#



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



#33

1,2-Dichloroethane-d4

Concen: Below ug/l

RT: 7.46 min Scan# 613

Delta R.T. 0.02 min

Lab File: VD060956.D

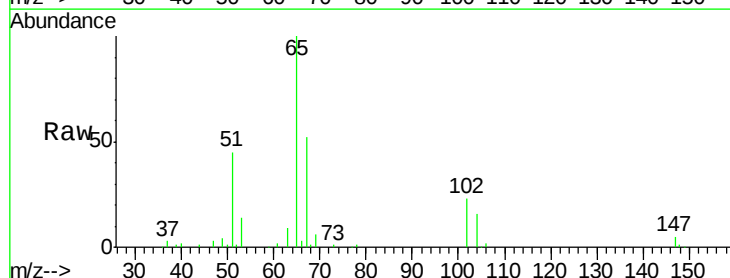
Acq: 5 Mar 2019 18:40

Tgt Ion: 65 Resp: 202011

Ion Ratio Lower Upper

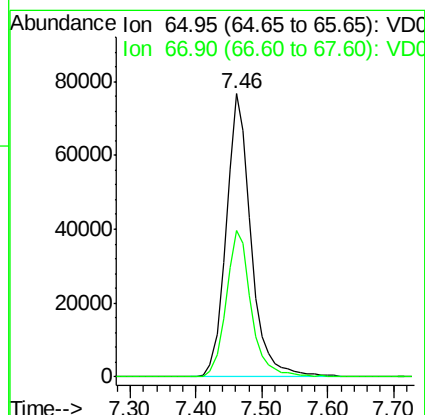
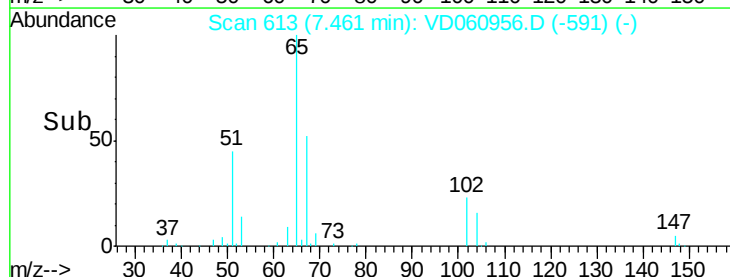
65 100

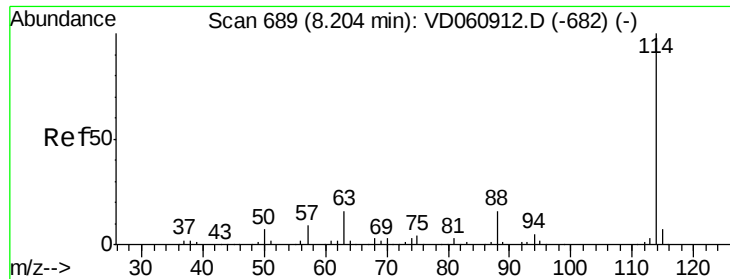
67 51.8 0.0 109.4



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

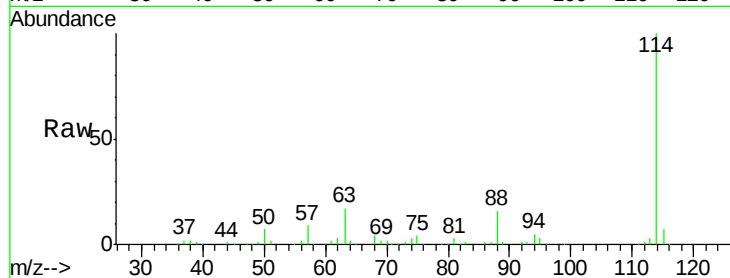




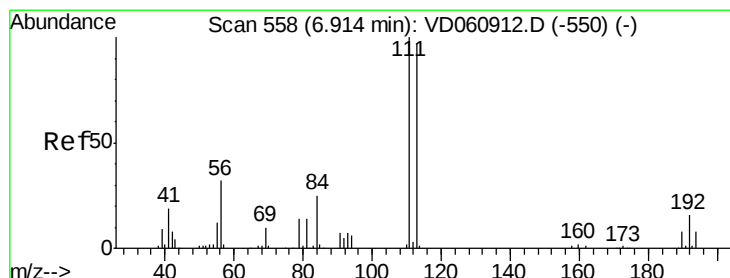
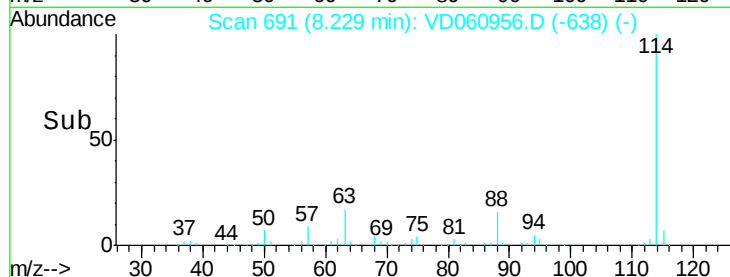
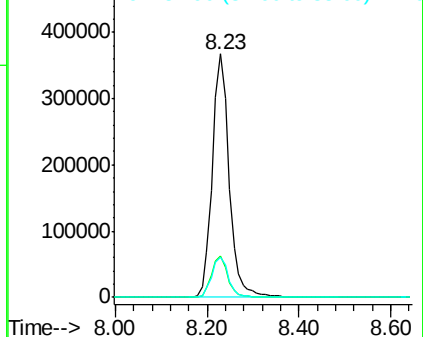
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.23 min Scan# 691
 Delta R.T. 0.02 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

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 MSVOA_D
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Tot Ion:114 Resp: 922849
 Ion Ratio Lower Upper
 114 100
 63 16.8 0.0 32.0
 88 16.3 0.0 32.8

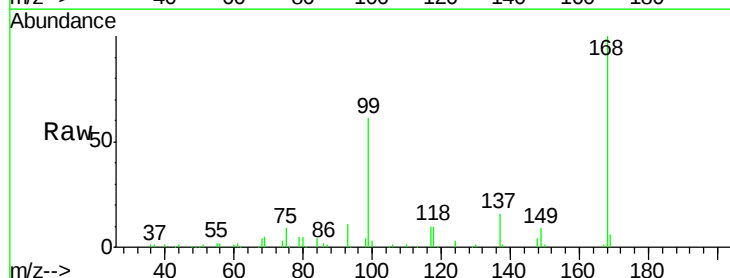


Abundance Ion 114.00 (113.70 to 114.70): V
 Ion 62.95 (62.65 to 63.65): V
 Ion 87.90 (87.60 to 88.60): V

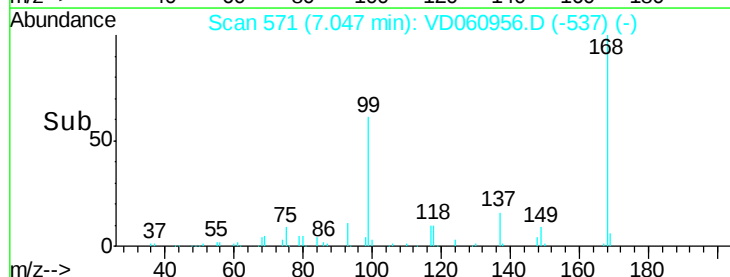
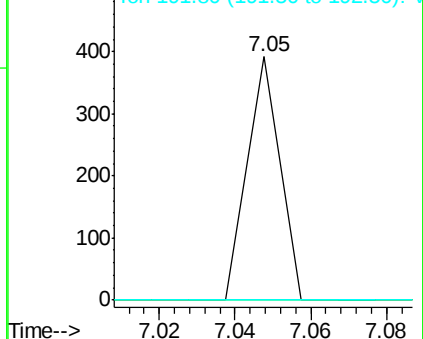


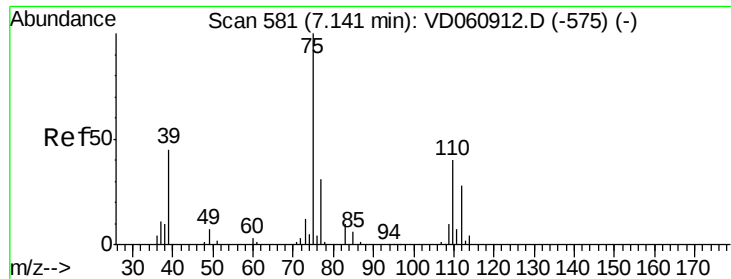
#35
 Dibromofluoromethane
 Concen: 50.000 ug/l
 RT: 7.05 min Scan# 571
 Delta R.T. 0.13 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

Tgt Ion:113 Resp: 232
 Ion Ratio Lower Upper
 113 100
 111 0.0 82.6 124.0#
 192 0.0 13.4 20.2#



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

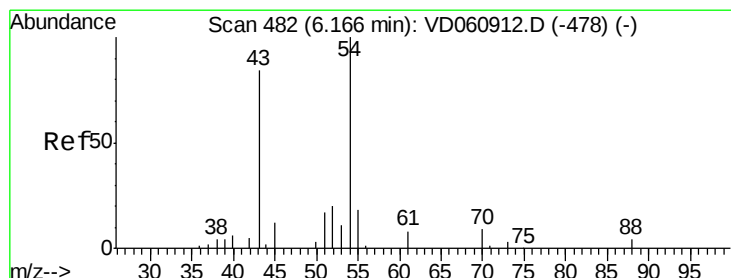
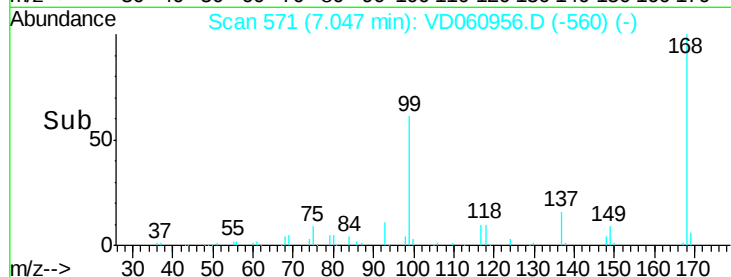
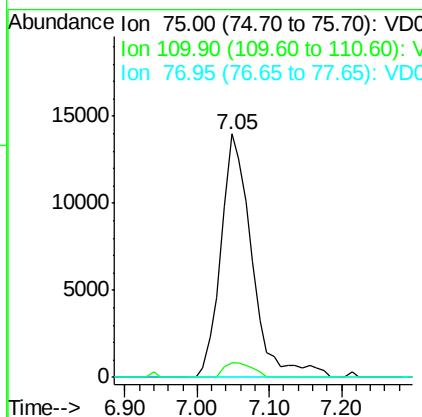
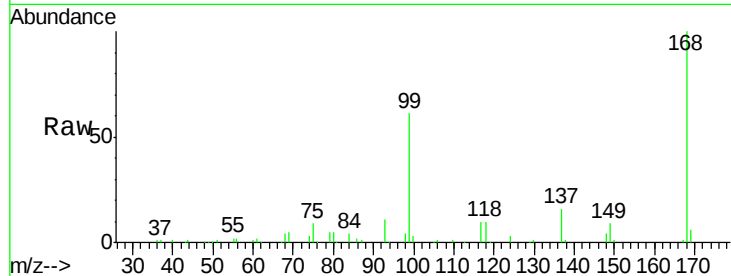




#36
 1,1-Dichloropropene
 Concen: 4.912 ug/l
 RT: 7.05 min Scan# 571
 Delta R.T. -0.09 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

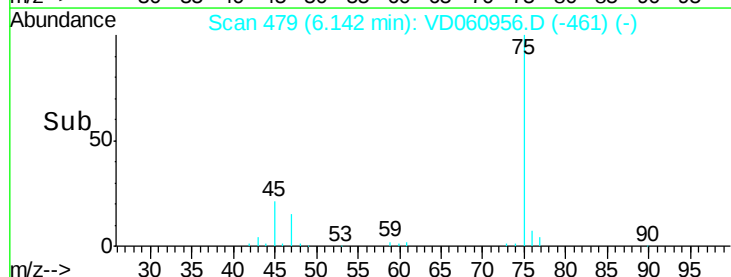
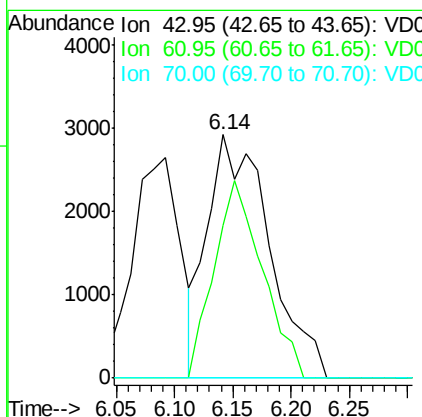
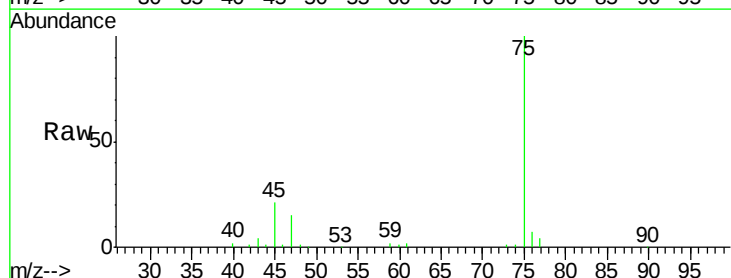
Instrument :
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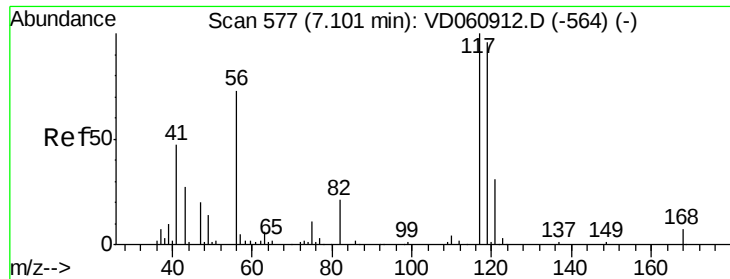
Tot Ion: 75 Resp: 41680
 Ion Ratio Lower Upper
 75 100
 110 6.2 19.9 59.7#
 77 0.0 25.0 37.6#



#37
 Ethyl Acetate
 Concen: 2.456 ug/l
 RT: 6.14 min Scan# 479
 Delta R.T. -0.02 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

Tgt Ion: 43 Resp: 10711
 Ion Ratio Lower Upper
 43 100
 61 62.7 12.1 18.1#
 70 0.0 7.3 10.9#

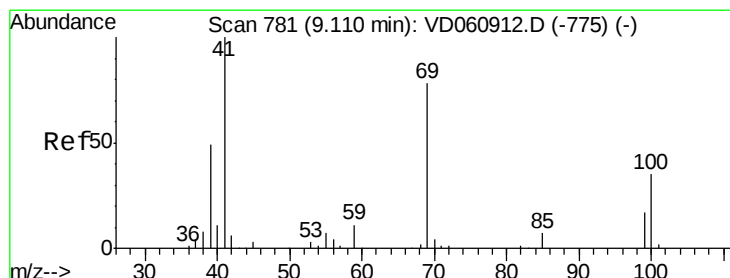
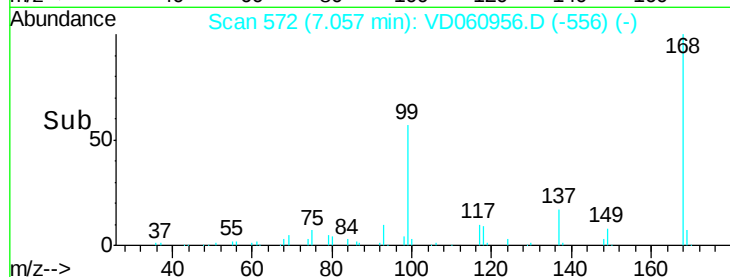
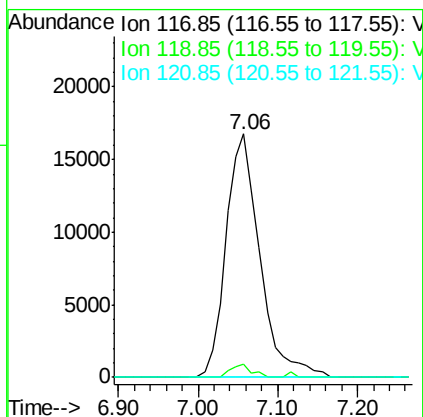
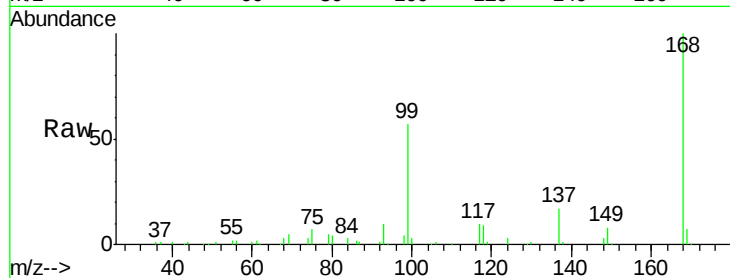




#38
Carbon Tetrachloride
Concen: 5.475 ug/l
RT: 7.06 min Scan# 572
Delta R.T. -0.04 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

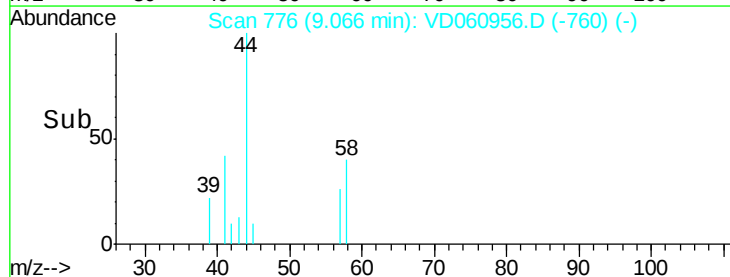
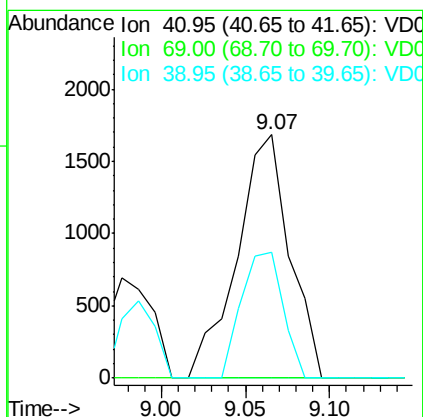
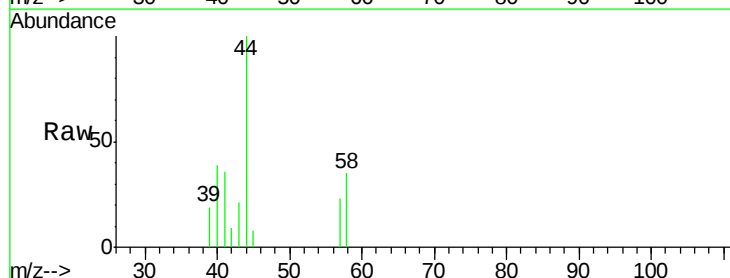
Instrument :
MSVOA_D
ClientSampleId :
RICH-REC-ROAD-STONE-11

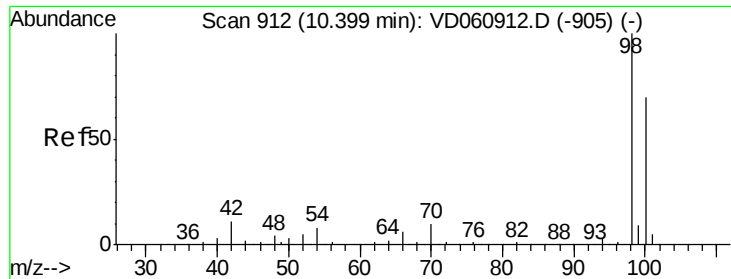
Tot Ion:117 Resp: 49910
Ion Ratio Lower Upper
117 100
119 5.3 76.9 115.3#
121 0.0 24.5 36.7#



#48
Methyl methacrylate
Concen: 1.070 ug/l
RT: 9.07 min Scan# 776
Delta R.T. -0.04 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

Tgt Ion: 41 Resp: 3656
Ion Ratio Lower Upper
41 100
69 0.0 62.1 93.1#
39 51.9 39.5 59.3

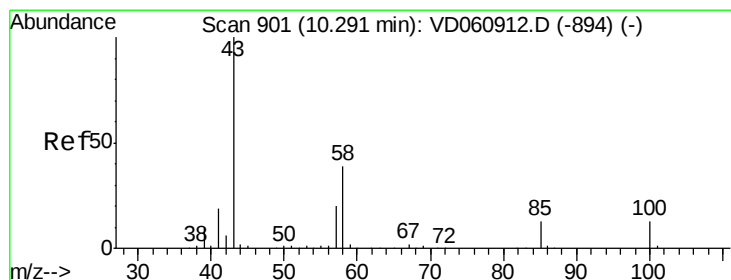
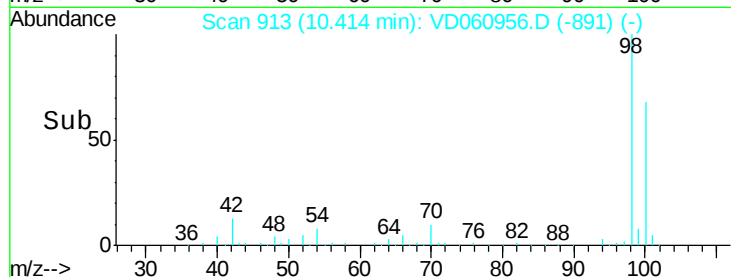
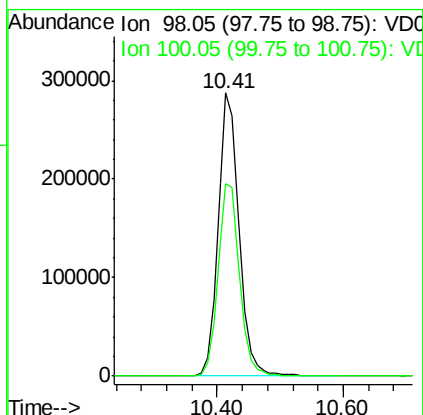
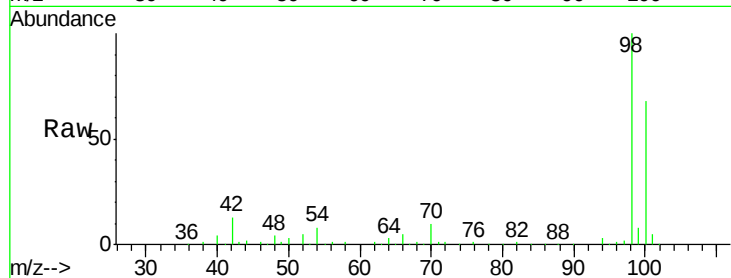




#50
Toluene-d8
Concen: N.D. ug/l
RT: 10.41 min Scan# 913
Delta R.T. 0.02 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

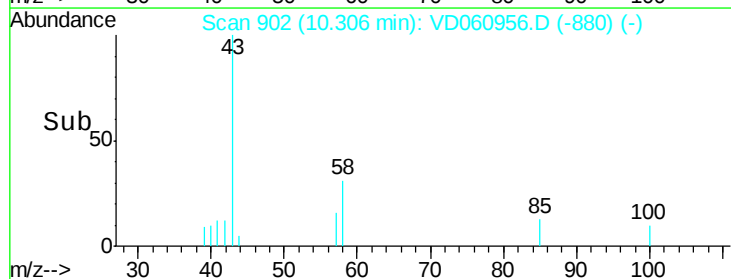
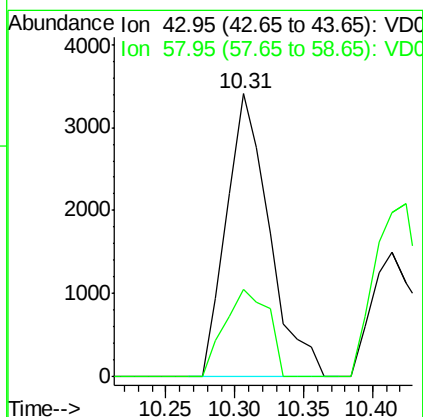
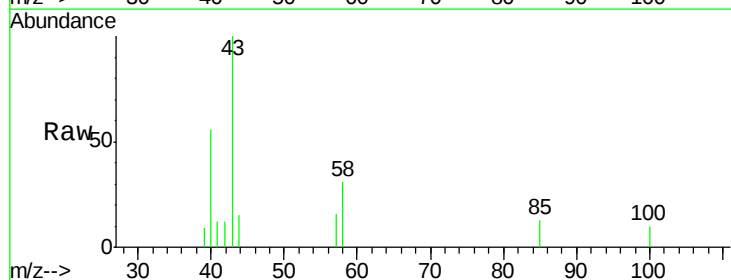
Instrument :
MSVOA_D
ClientSampleId :
RICH-REC-ROAD-STONE-11

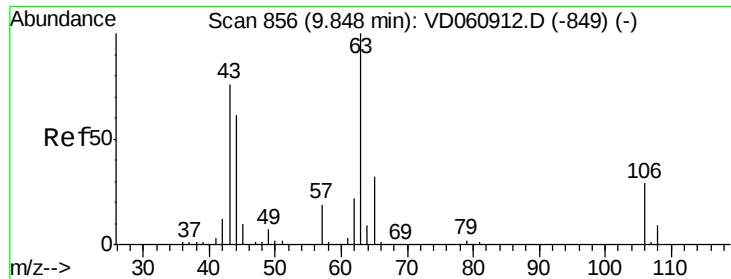
Tot Ion: 98 Resp: 665688
Ion Ratio Lower Upper
98 100
100 68.2 57.0 85.4



#51
4-Methyl-2-Pentanone
Concen: 1.994 ug/l
RT: 10.31 min Scan# 902
Delta R.T. 0.02 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

Tgt Ion: 43 Resp: 7384
Ion Ratio Lower Upper
43 100
58 30.9 31.0 46.6#

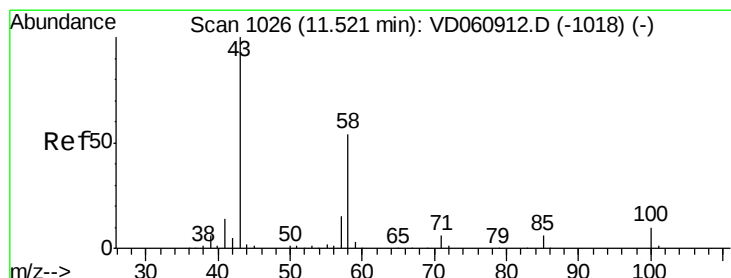
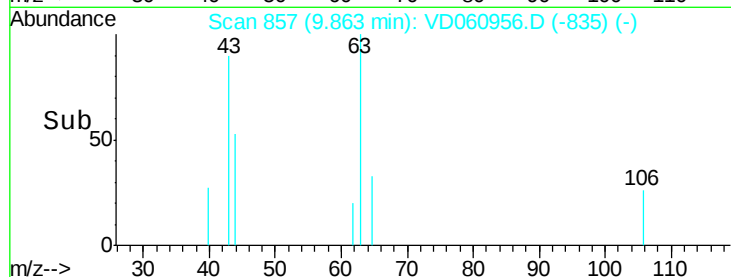
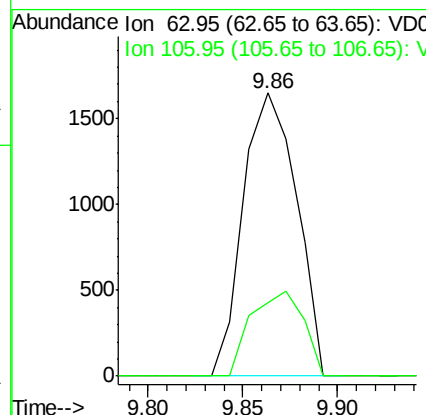
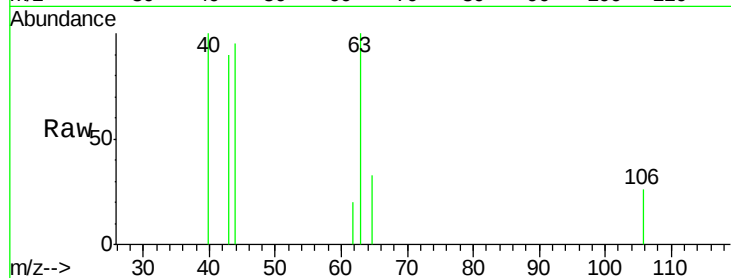




#58
 2-Chloroethyl Vinyl ether
 Concen: 1.238 ug/l
 RT: 9.86 min Scan# 857
 Delta R.T. 0.02 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

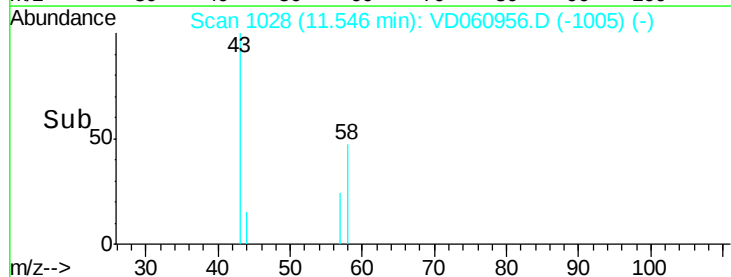
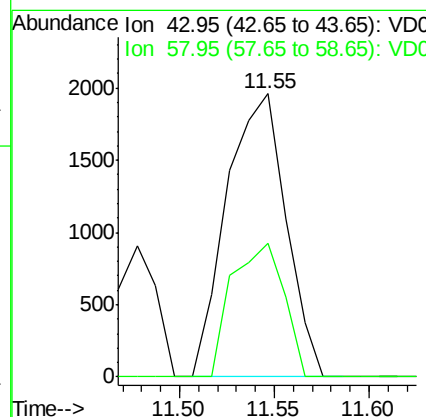
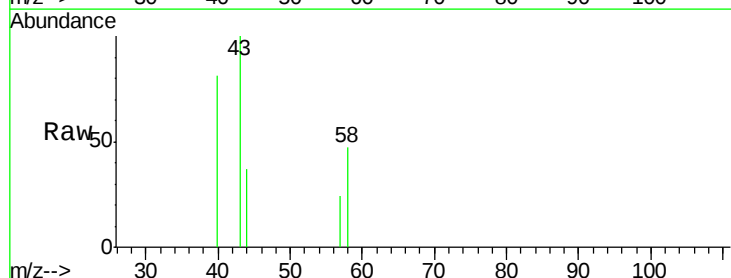
Instrument :
 MSVOA_D
 ClientSampleId :
 RICH-REC-ROAD-STONE-11

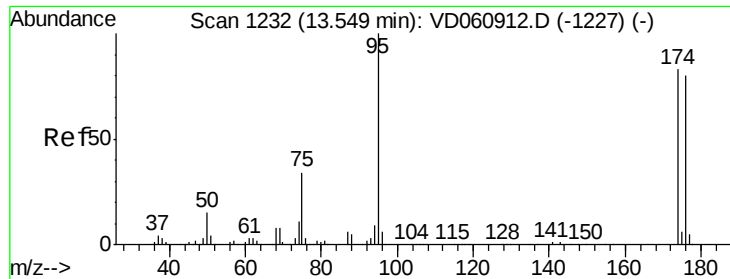
Tot Ion: 63 Resp: 3218
 Ion Ratio Lower Upper
 63 100
 106 26.0 23.0 34.6



#59
 2-Hexanone
 Concen: 1.641 ug/l
 RT: 11.55 min Scan# 1028
 Delta R.T. 0.02 min
 Lab File: VD060956.D
 Acq: 5 Mar 2019 18:40

Tgt Ion: 43 Resp: 4258
 Ion Ratio Lower Upper
 43 100
 58 47.2 27.2 81.5

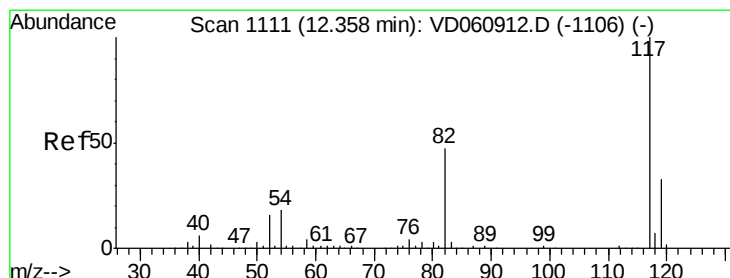
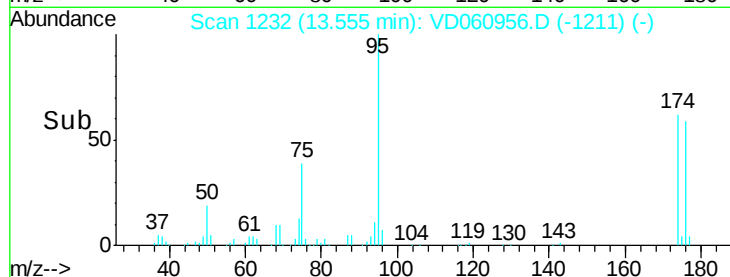
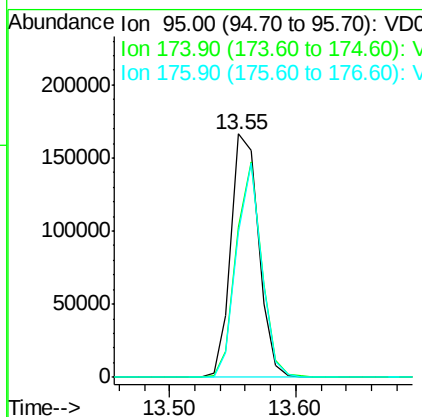
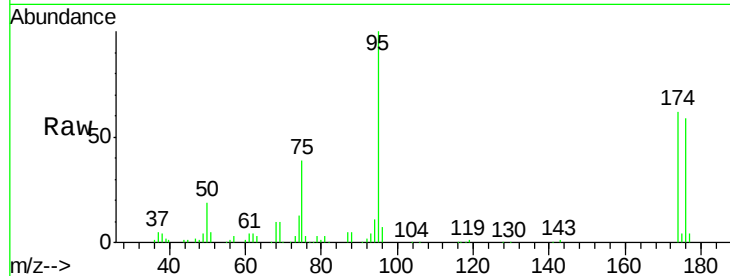




#62
4-Bromofluorobenzene
Concen: Below ug/l
RT: 13.55 min Scan# 1232
Delta R.T. 0.01 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

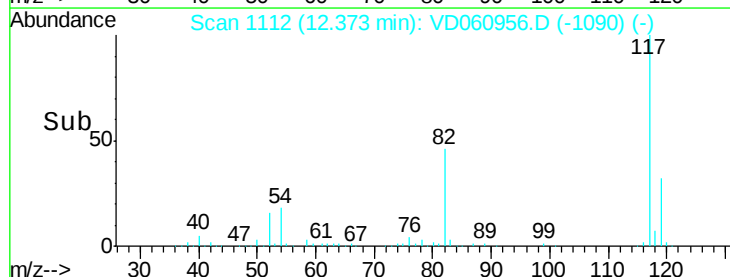
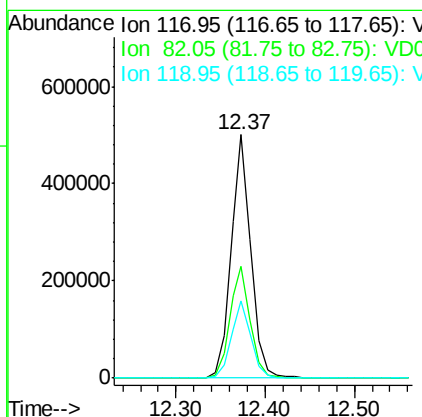
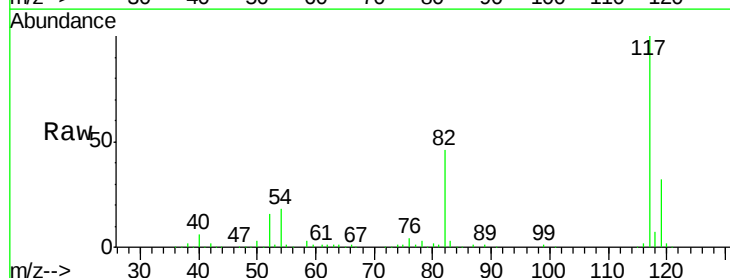
Instrument :
MSVOA_D
ClientSampleId :
RICH-REC-ROAD-STONE-11

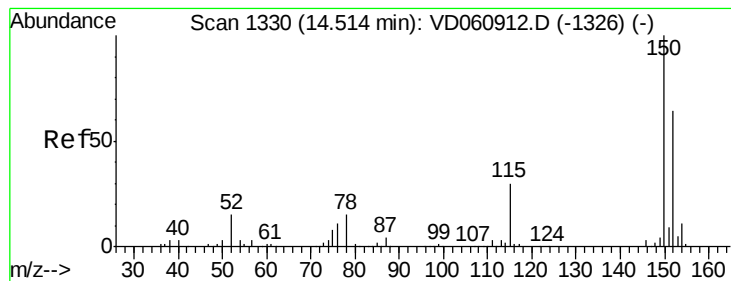
Tot Ion: 95 Resp: 252720
Ion Ratio Lower Upper
95 100
174 61.7 0.0 165.6
176 59.3 0.0 160.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.37 min Scan# 1112
Delta R.T. 0.02 min
Lab File: VD060956.D
Acq: 5 Mar 2019 18:40

Tgt Ion: 117 Resp: 777345
Ion Ratio Lower Upper
117 100
82 45.8 37.5 56.3
119 31.9 26.2 39.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.52 min Scan# 1330

Delta R.T. 0.01 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

Instrument :

MSVOA_D

ClientSampleId :

RICH-REC-ROAD-STONE-11

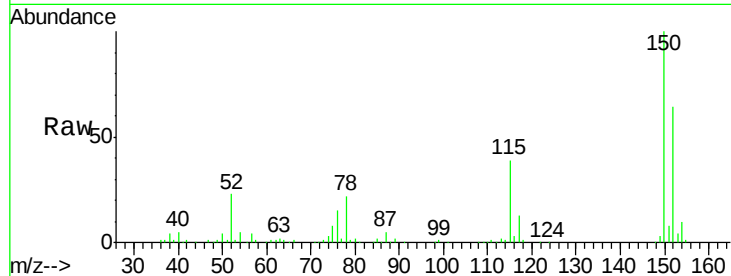
Tot Ion:152 Resp: 302279

Ion Ratio Lower Upper

152 100

115 61.5 27.6 82.8

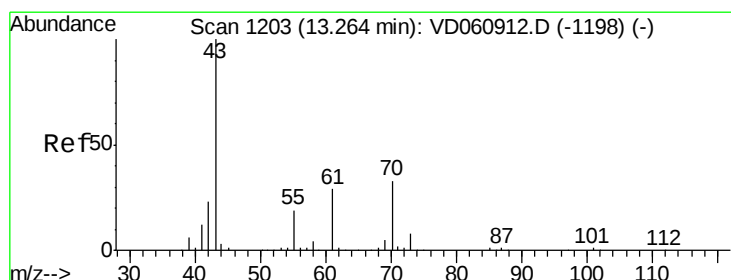
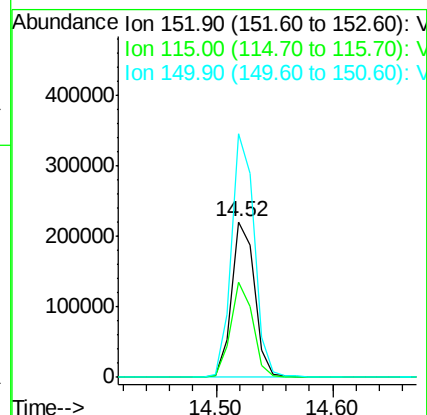
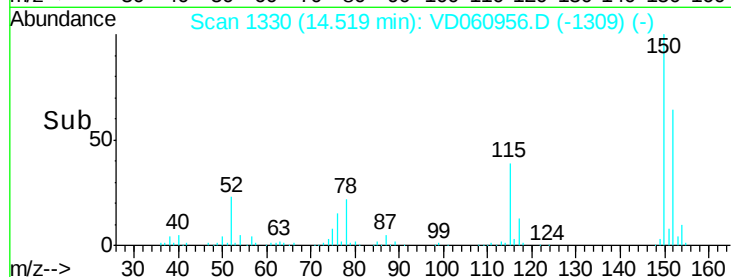
150 156.6 0.0 312.8



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: 2.028 ug/l

RT: 13.31 min Scan# 1207

Delta R.T. 0.04 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

Tgt Ion: 43 Resp: 14150

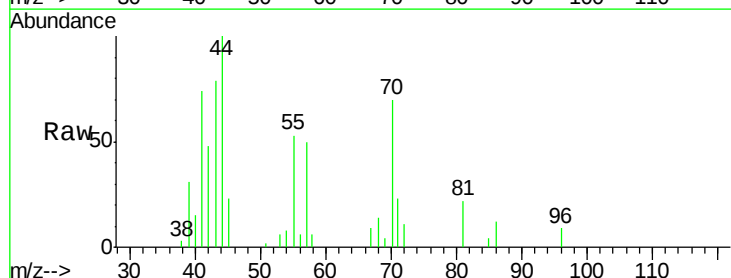
Ion Ratio Lower Upper

43 100

70 89.2 26.3 39.5#

55 67.6 15.4 23.2#

61 0.0 23.4 35.0#

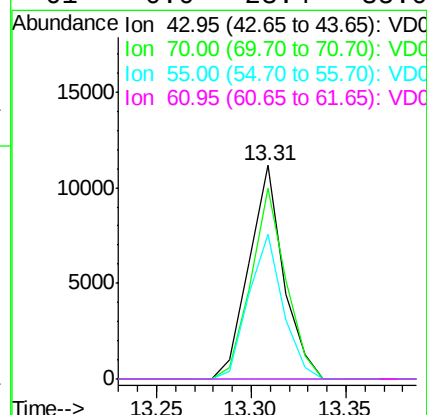
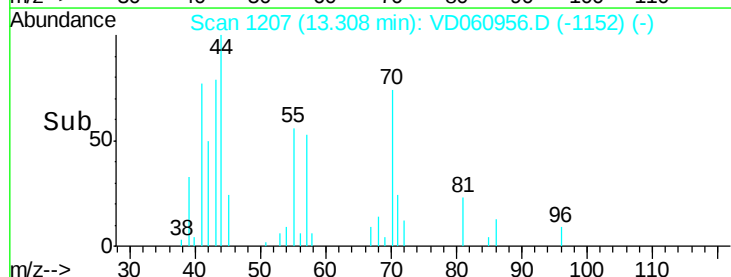


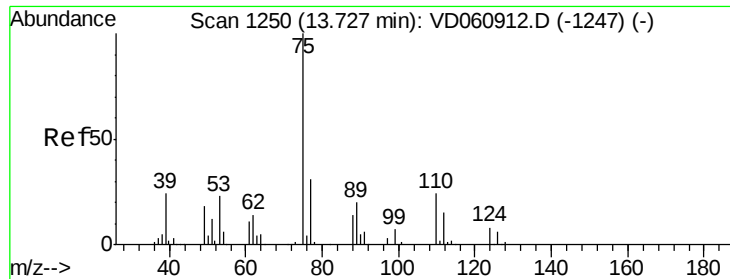
Abundance Ion 42.95 (42.65 to 43.65): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 60.95 (60.65 to 61.65): V





#76

1,2,3-Trichloropropane

Concen: 16.898 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. -0.17 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

Instrument :

MSVOA_D

ClientSampleId :

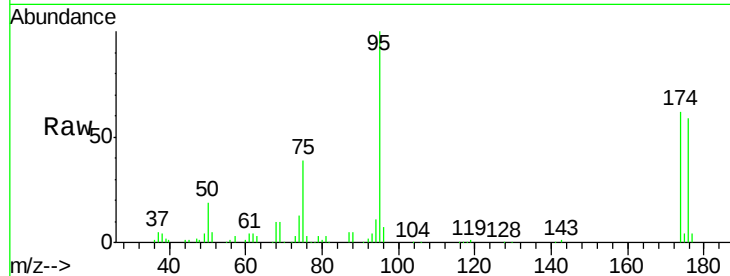
RICH-REC-ROAD-STONE-11

Tot Ion: 75 Resp: 82761

Ion Ratio Lower Upper

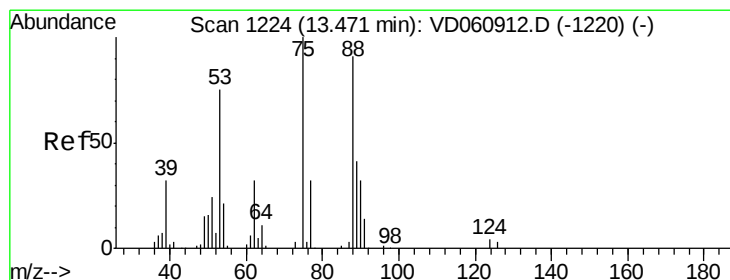
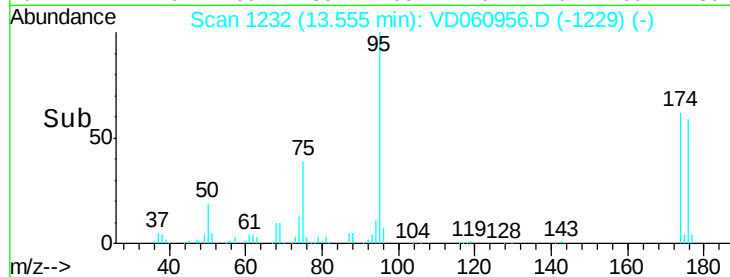
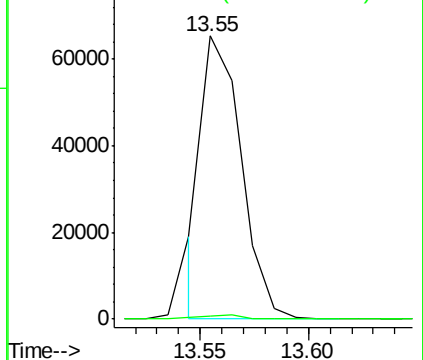
75 100

77 1.2 16.2 48.6#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 76.95 (76.65 to 77.65): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 65.237 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.08 min

Lab File: VD060956.D

Acq: 5 Mar 2019 18:40

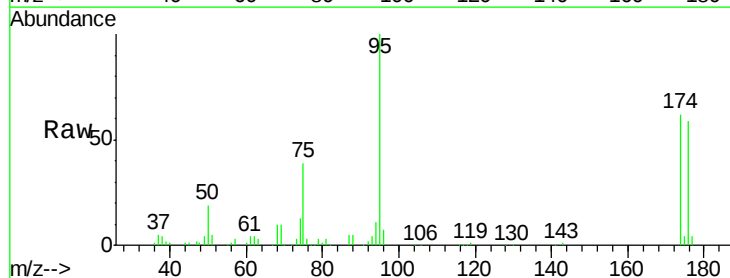
Tgt Ion: 75 Resp: 94561

Ion Ratio Lower Upper

75 100

53 0.0 59.8 89.6#

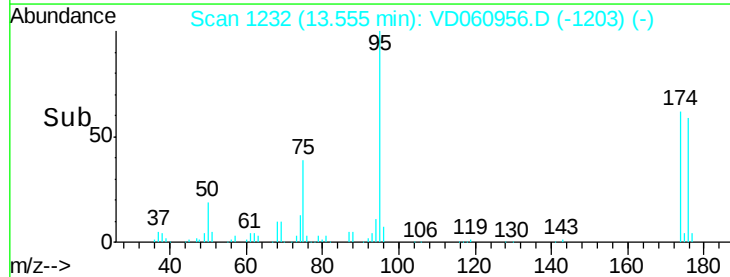
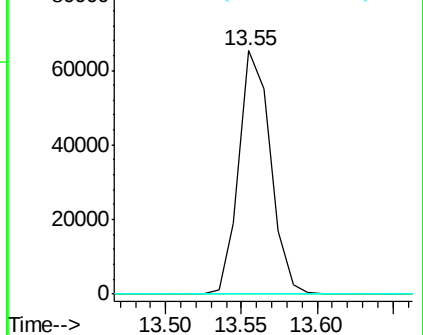
89 0.0 33.0 49.6#

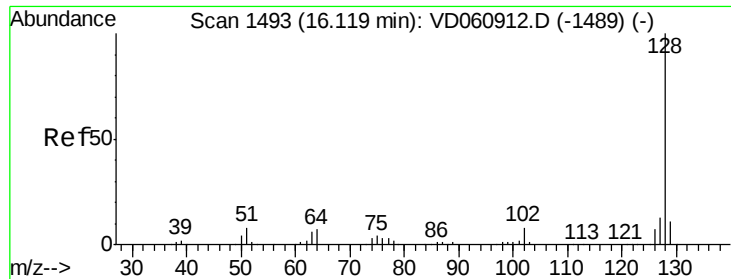


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC





#95

Naphthalene

Concen: 1.446 ug/l

RT: 16.12 min Scan# 1493

Delta R.T. 0.01 min

Lab File: VD060956.D

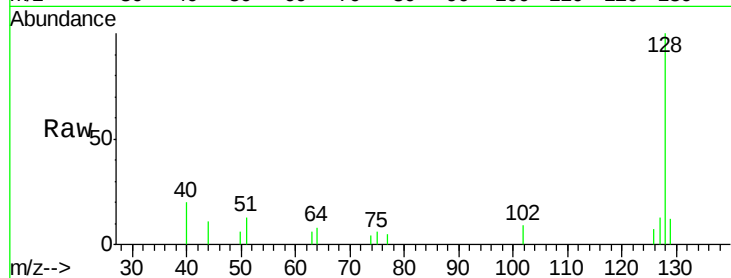
Acq: 5 Mar 2019 18:40

Instrument :

MSVOA_D

ClientSampleId :

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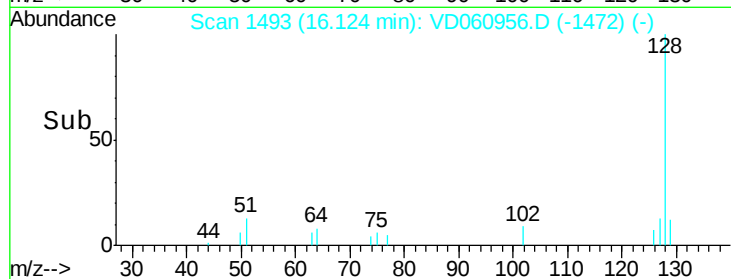
Tot Ion:128 Resp: 11747

Ion Ratio Lower Upper

128 100

127 12.6 10.1 15.1

129 12.1 8.7 13.1



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

