

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD061419\
 Data File : VD062716.D
 Acq On : 14 Jun 2019 17:33
 Operator : VA/AP
 Sample : K3393-01RE
 Misc : 4.09g/5ml/MSVOA D/SOIL
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 DRILLING-MUDRE

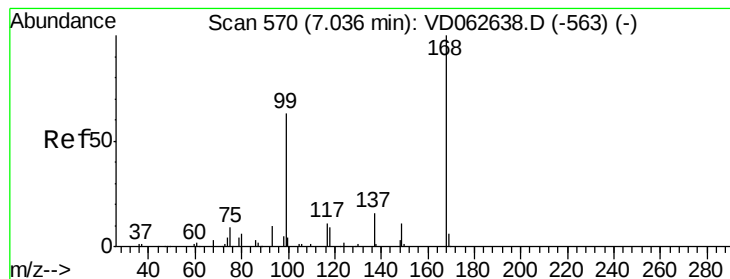
Quant Time: Jun 15 04:38:25 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D060719S.M
 Quant Title : SW846 8260
 QLast Update : Sat Jun 08 00:02:21 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.05	168	500546	50.00	ug/l	0.01
34) 1,4-Difluorobenzene	8.22	114	632473	50.00	ug/l	0.00
63) Chlorobenzene-d5	12.36	117	487121	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.52	152	162479	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.45	65	245164	33.94	ug/l	0.00
Spiked Amount			Recovery	=	67.88%	
35) Dibromofluoromethane	6.92	113	236560	35.46	ug/l	0.00
Spiked Amount			Recovery	=	70.92%	
50) Toluene-d8	10.41	98	394467	28.11	ug/l	0.00
Spiked Amount			Recovery	=	56.22%	
62) 4-Bromofluorobenzene	13.55	95	152541	23.30	ug/l	0.00
Spiked Amount			Recovery	=	46.60%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.16	94	2891	1.121	ug/l #	11
10) Methyl Iodide	3.31	142	427	4.053	ug/l #	24
13) Acrolein	3.03	56	382	4.000	ug/l #	70
16) Acetone	3.22	43	193896	146.600	ug/l	98
17) Carbon Disulfide	3.36	76	40807	3.130	ug/l #	92
18) Methyl Acetate	3.64	43	6121	2.816	ug/l	97
20) Methylene Chloride	3.81	84	23267	4.252	ug/l #	60
25) 2-Butanone	6.07	43	135143	104.736	ug/l	92
29) Tetrahydrofuran	6.46	42	1567	2.697	ug/l #	44
31) Cyclohexane	7.05	56	11807	2.071	ug/l #	16
36) 1,1-Dichloropropene	7.05	75	41546	5.739	ug/l #	50
37) Ethyl Acetate	6.07	43	135139	43.934	ug/l #	74
38) Carbon Tetrachloride	7.04	117	52170	4.560	ug/l #	16
51) 4-Methyl-2-Pentanone	10.30	43	3710	1.388	ug/l #	35
56) Ethyl methacrylate	10.90	69	183	3.982	ug/l #	12
73) Isopropylbenzene	13.39	105	15627	1.365	ug/l #	65
81) trans-1,4-Dichloro-2-buten	13.55	75	71386	104.648	ug/l #	1
82) 4-Chlorotoluene	13.98	91	33948	3.458	ug/l #	43
84) 1,2,4-Trimethylbenzene	14.23	105	10155	1.013	ug/l	75
86) p-Isopropyltoluene	14.49	119	14055	1.233	ug/l	93
93) 1,2,4-Trichlorobenzene	15.94	180	222	3.617	ug/l #	76
95) Naphthalene	16.12	128	2647	3.867	ug/l #	64

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 571

Delta R.T. 0.01 min

Lab File: VD062716.D

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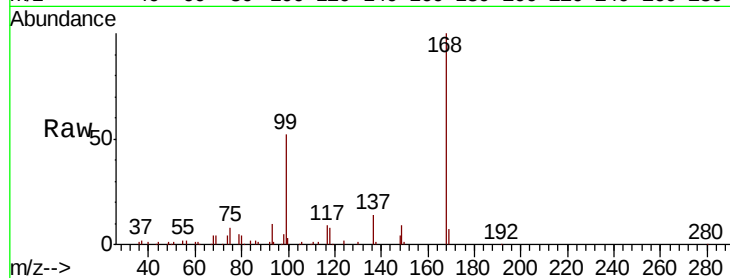
DRILLING-MUDRE

Tot Ion:168 Resp: 500546

Ion Ratio Lower Upper

168 100

99 52.5 51.4 77.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.05

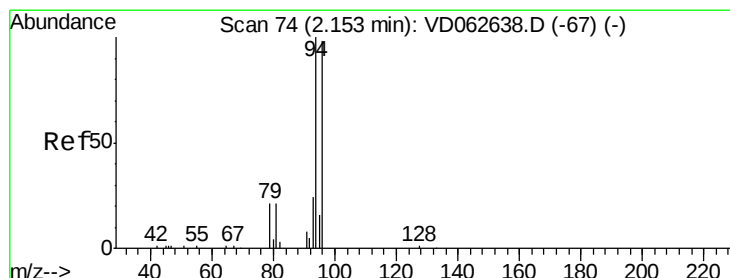
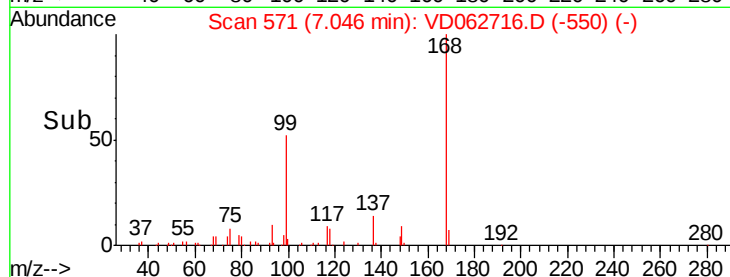
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: 1.121 ug/l

RT: 2.16 min Scan# 75

Delta R.T. 0.01 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

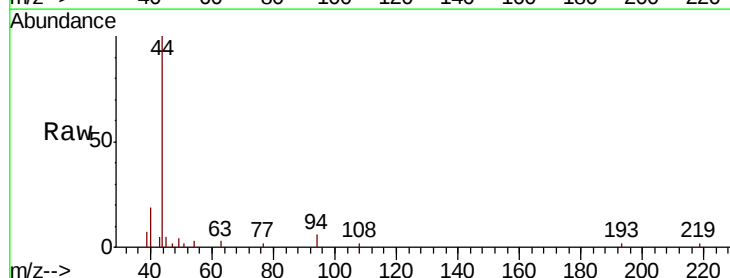
Tgt Ion: 94 Resp: 2891

Ion Ratio Lower Upper

94 100

96 0.0 78.1 117.1#

93 0.0 19.6 29.4#



Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC

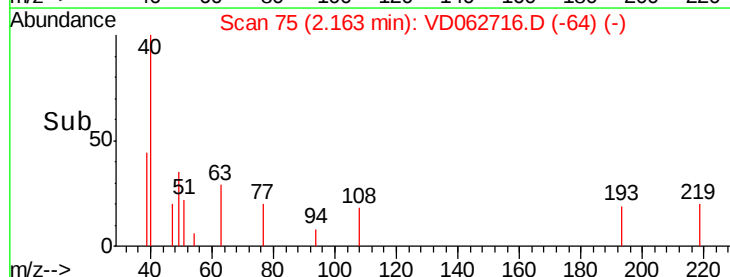
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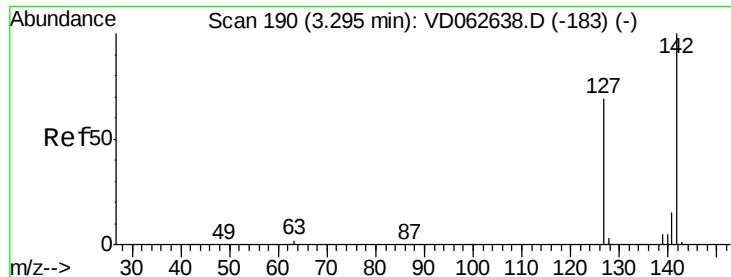
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500

0

Time-->

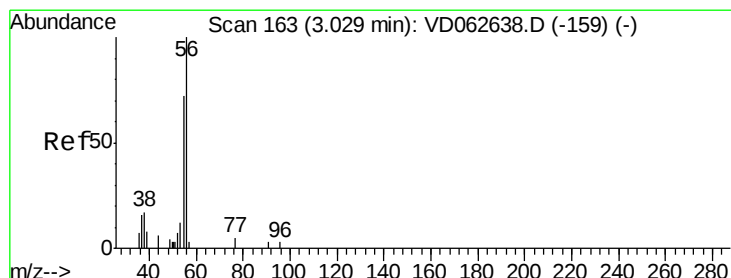
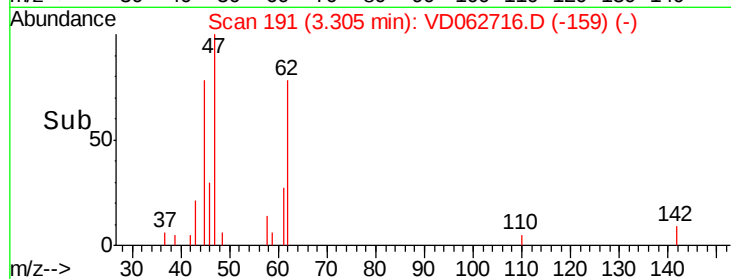
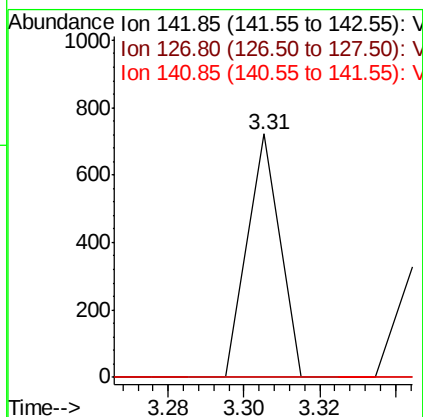
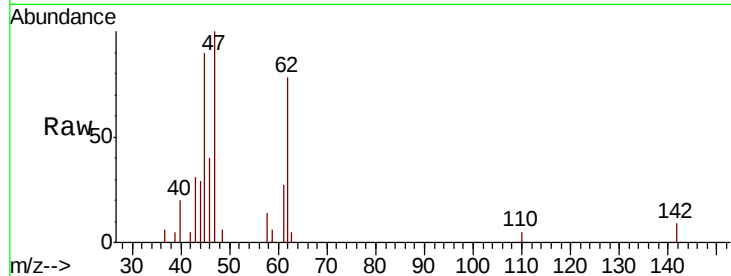




#10
Methvl Iodide
Concen: 4.053 ug/l
RT: 3.31 min Scan# 191
Delta R.T. 0.01 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

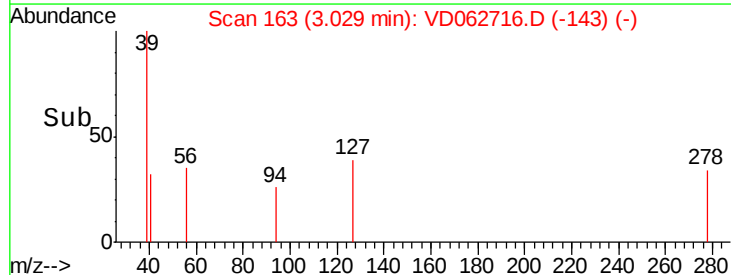
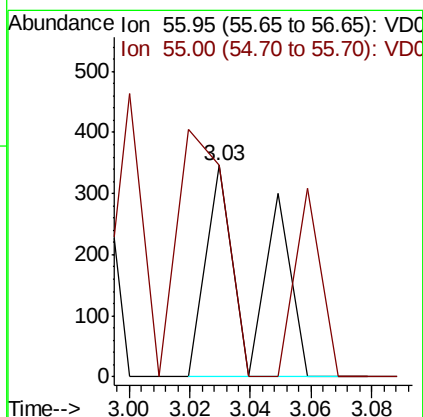
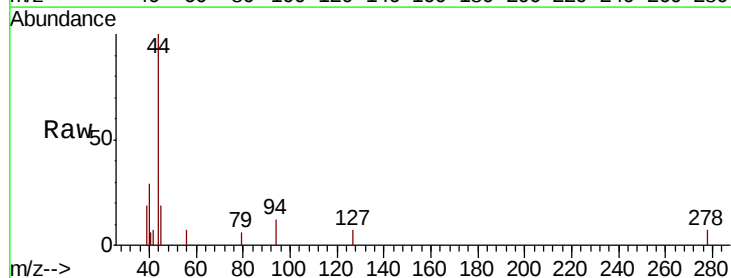
Instrument :
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ClientSampleId :
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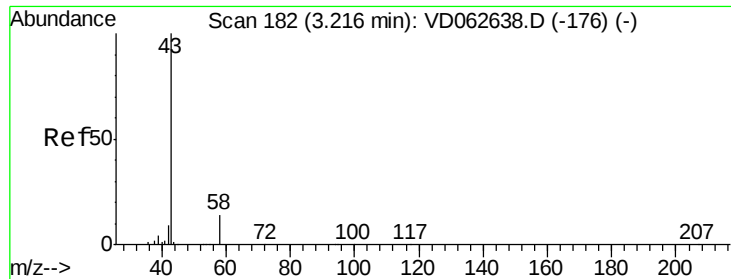
Tot Ion:142 Resp: 427
Ion Ratio Lower Upper
142 100
127 0.0 55.2 82.8#
141 0.0 12.1 18.1#



#13
Acrolein
Concen: 4.000 ug/l
RT: 3.03 min Scan# 163
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion: 56 Resp: 382
Ion Ratio Lower Upper
56 100
55 100.0 59.4 89.0#

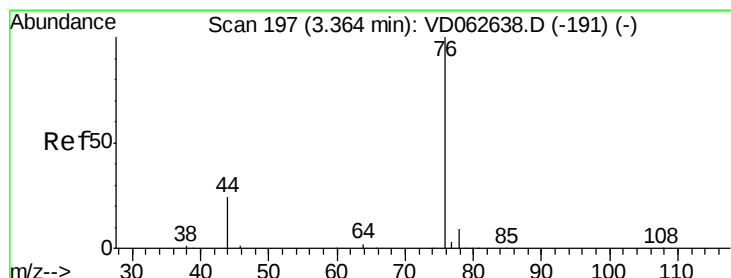
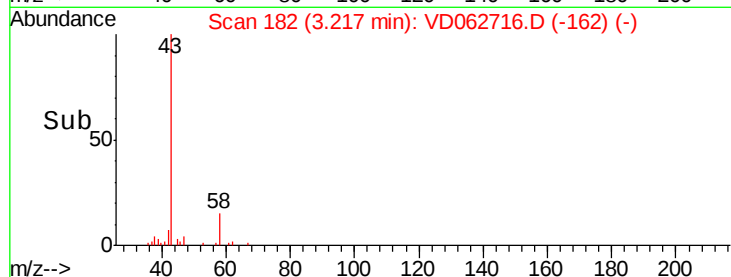
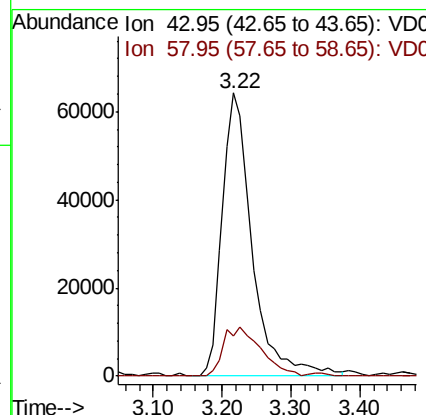
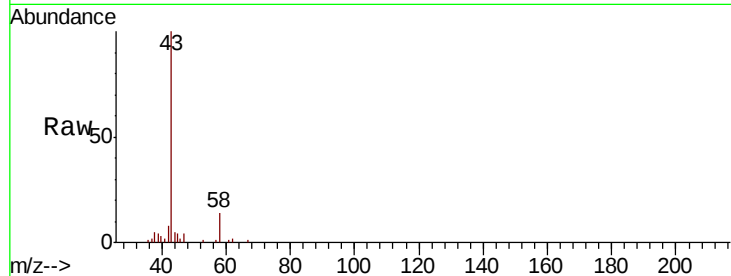




#16
Acetone
Concen: 146.600 ug/l
RT: 3.22 min Scan# 182
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

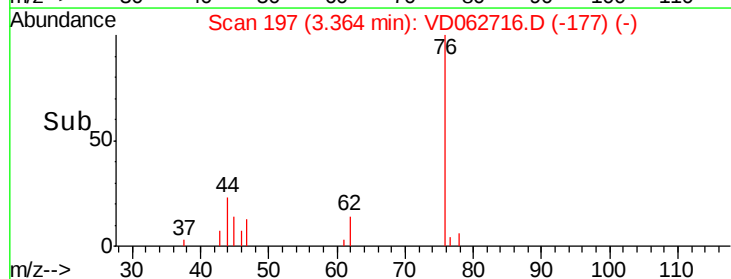
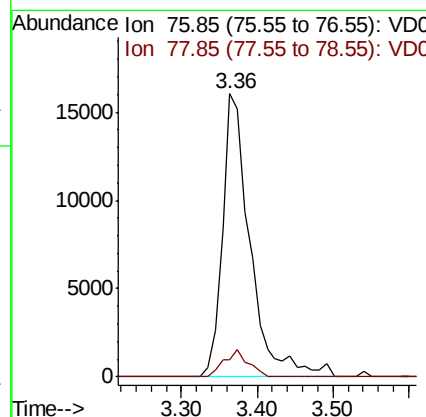
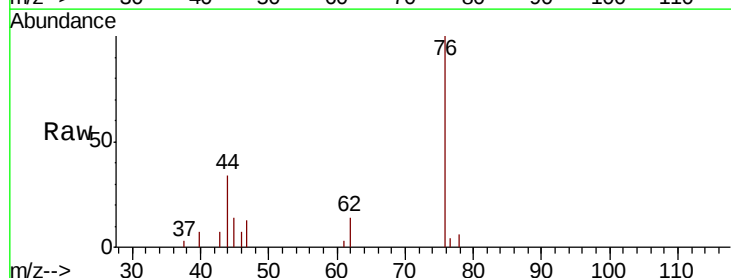
Instrument :
MSVOA_D
ClientSampleId :
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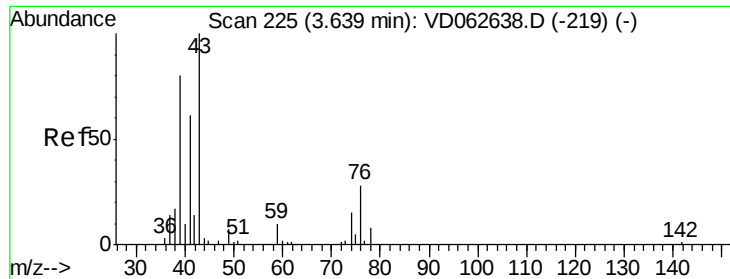
Tot Ion: 43 Resp: 193896
Ion Ratio Lower Upper
43 100
58 14.3 10.8 16.2



#17
Carbon Disulfide
Concen: 3.130 ug/l
RT: 3.36 min Scan# 197
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion: 76 Resp: 40807
Ion Ratio Lower Upper
76 100
78 5.9 7.0 10.4#

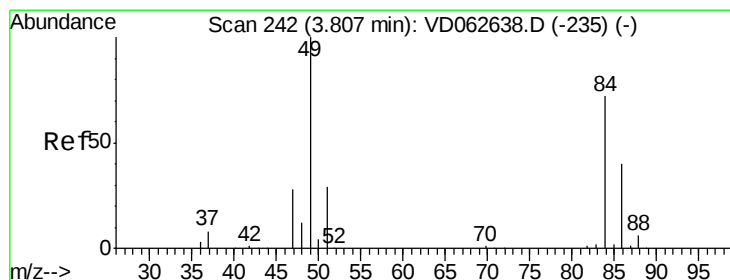
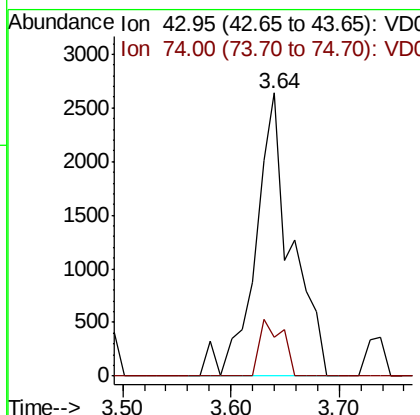
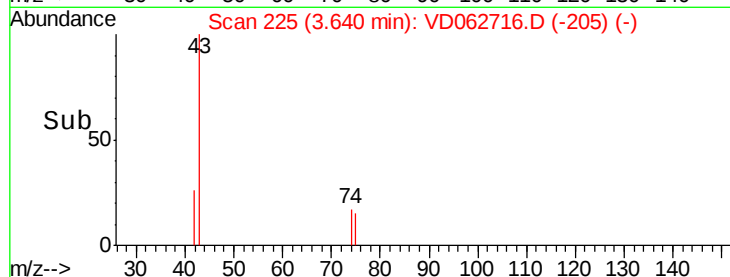
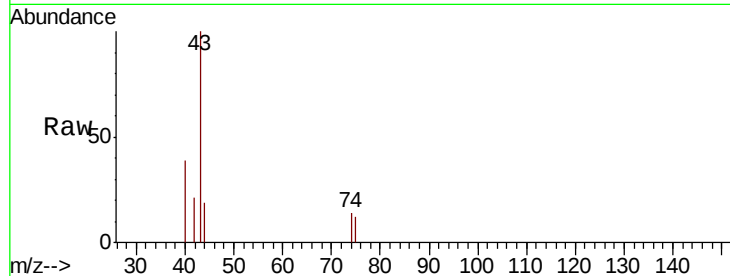




#18
Methyl Acetate
Concen: 2.816 ug/l
RT: 3.64 min Scan# 225
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

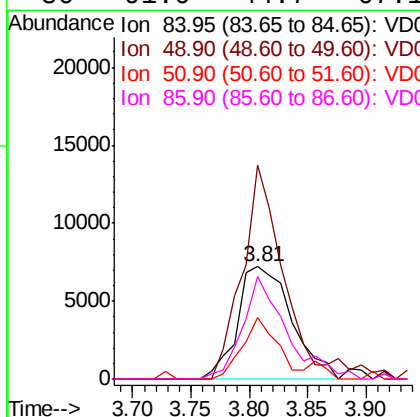
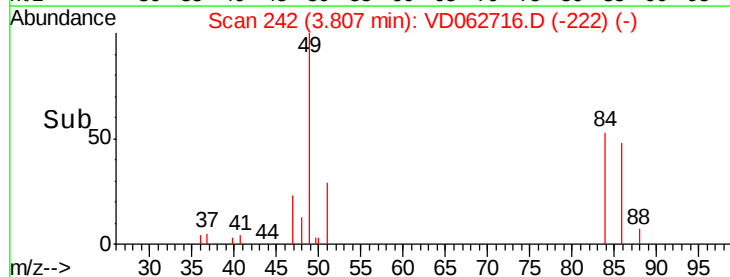
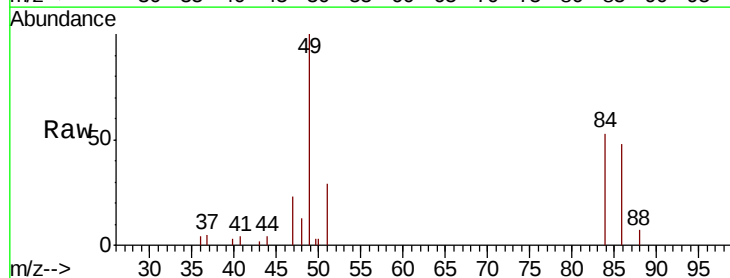
Instrument :
MSVOA_D
ClientSampleId :
DRILLING-MUDRE

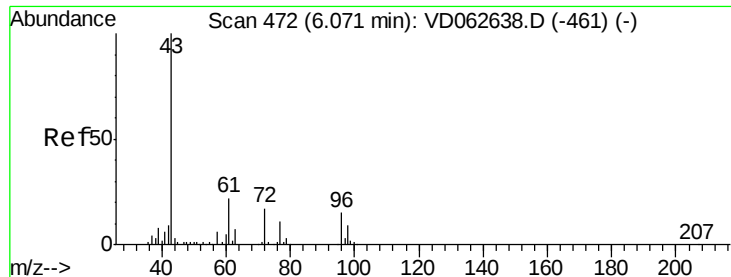
Tot Ion: 43 Resp: 6121
Ion Ratio Lower Upper
43 100
74 13.7 12.1 18.1



#20
Methylene Chloride
Concen: 4.252 ug/l
RT: 3.81 min Scan# 242
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion: 84 Resp: 23267
Ion Ratio Lower Upper
84 100
49 190.2 111.2 166.8#
51 54.2 31.9 47.9#
86 91.0 44.7 67.1#

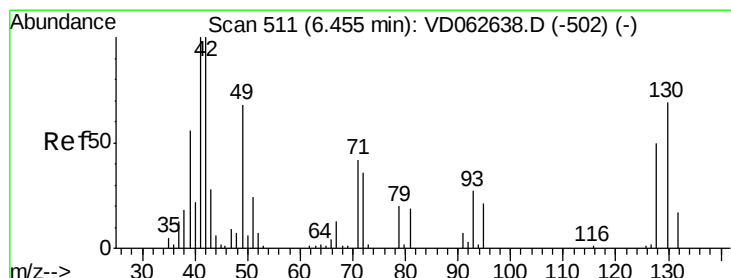
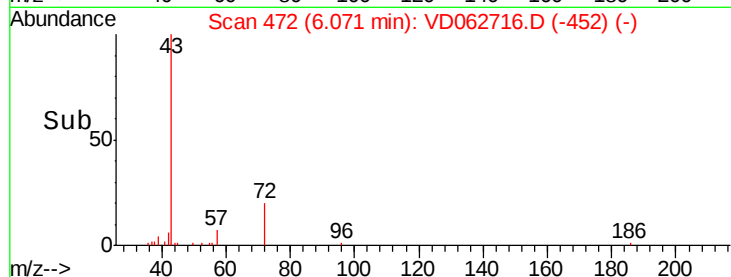
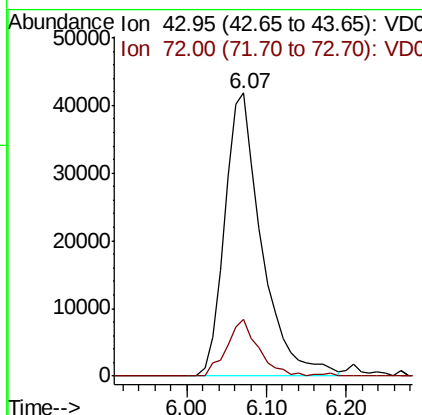
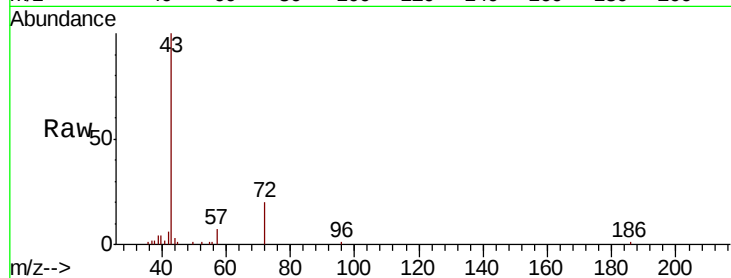




#25
2-Butanone
Concen: 104.736 ug/l
RT: 6.07 min Scan# 472
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

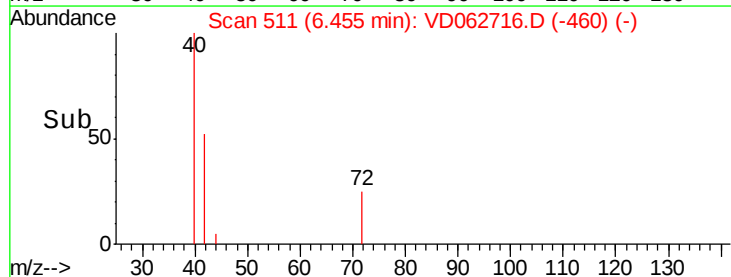
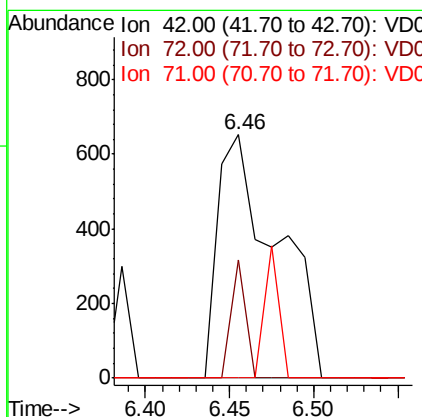
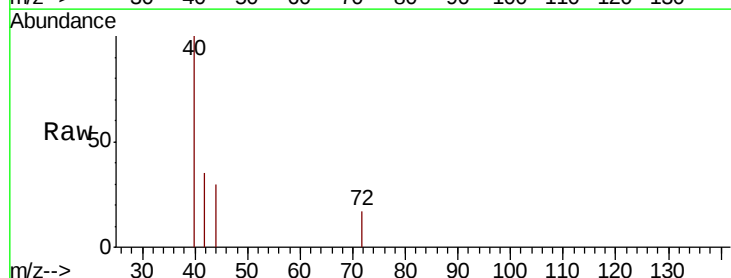
Instrument :
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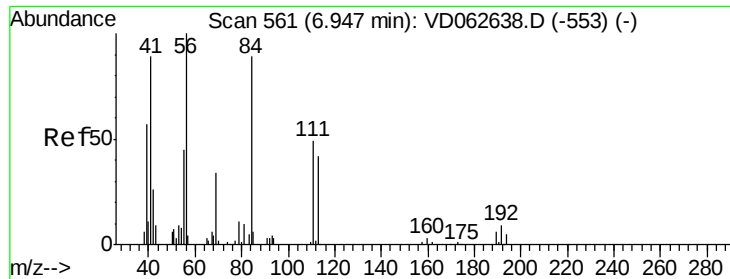
Tot Ion: 43 Resp: 135143
Ion Ratio Lower Upper
43 100
72 20.2 13.5 20.3



#29
Tetrahydrofuran
Concen: 2.697 ug/l
RT: 6.46 min Scan# 511
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion: 42 Resp: 1567
Ion Ratio Lower Upper
42 100
72 0.0 33.8 50.6#
71 13.4 34.2 51.4#

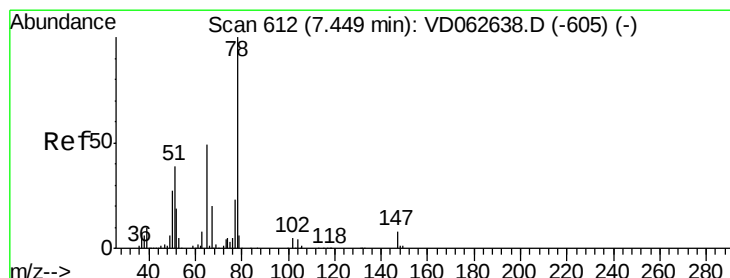
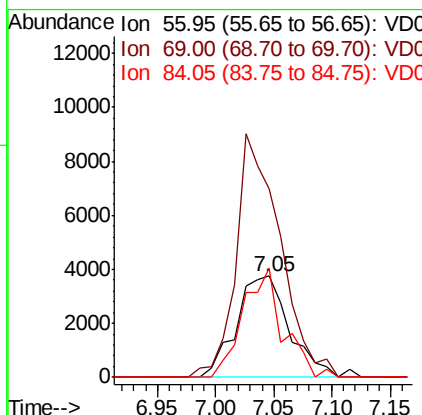
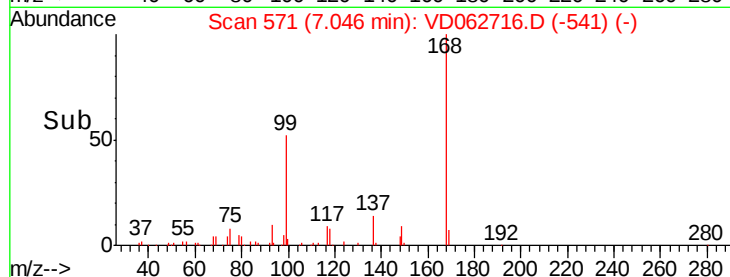
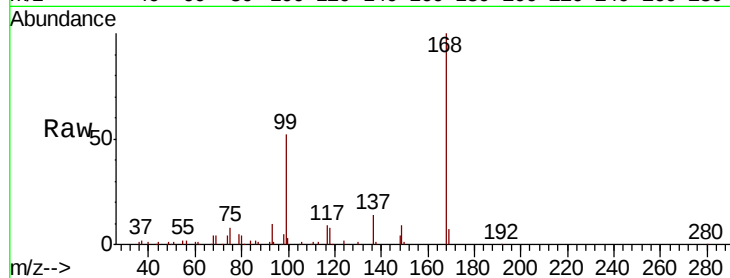




#31
Cvclohexane
Concen: 2.071 ug/l
RT: 7.05 min Scan# 571
Delta R.T. 0.10 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

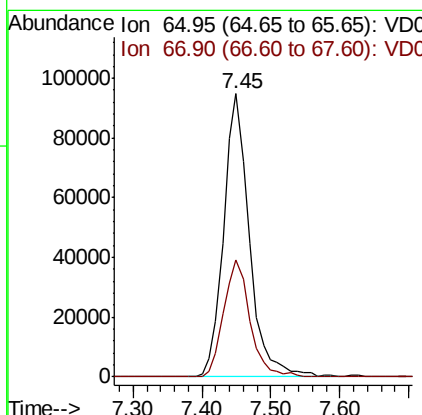
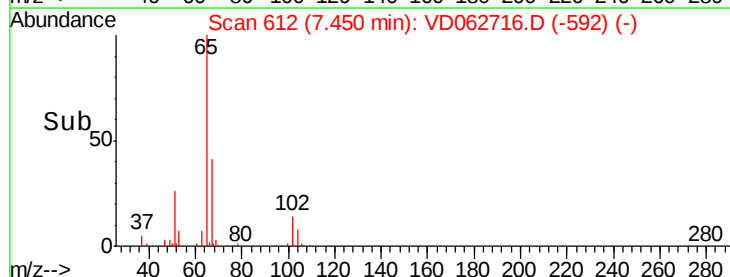
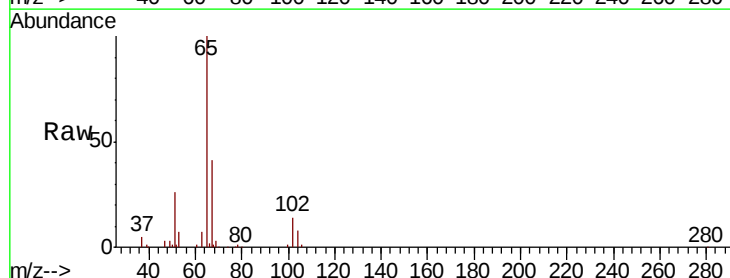
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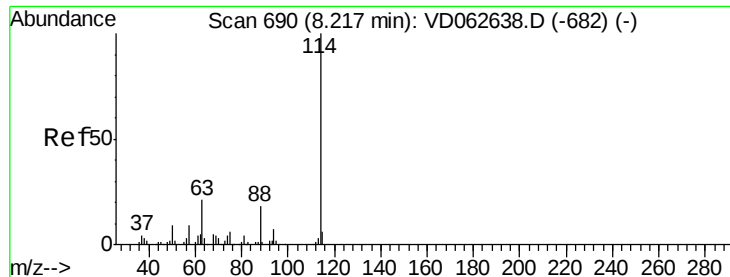
Tot Ion: 56 Resp: 11807
Ion Ratio Lower Upper
56 100
69 186.5 26.8 40.2#
84 108.6 73.9 110.9



#33
1,2-Dichloroethane-d4
Concen: 33.943 ug/l
RT: 7.45 min Scan# 612
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion: 65 Resp: 245164
Ion Ratio Lower Upper
65 100
67 41.4 0.0 81.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.22 min Scan# 690

Delta R.T. 0.00 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

Instrument :

MSVOA_D

ClientSampleId :

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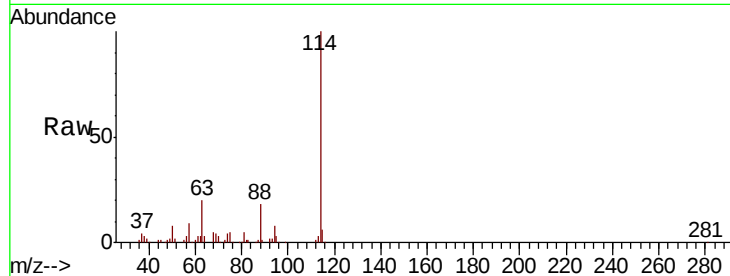
Tot Ion:114 Resp: 632473

Ion Ratio Lower Upper

114 100

63 19.7 0.0 42.4

88 18.1 0.0 36.8



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

300000

200000

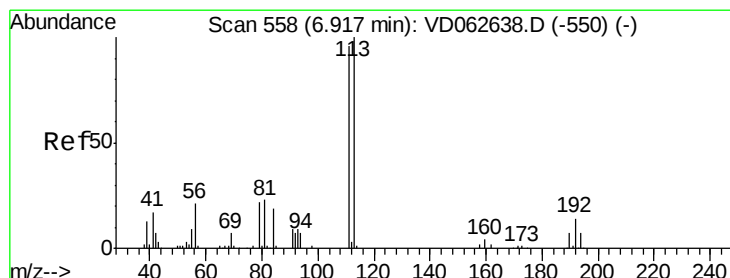
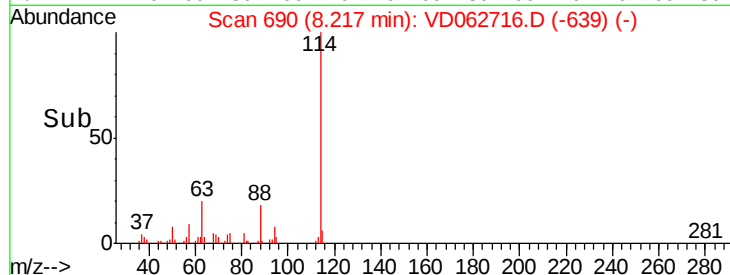
100000

0

8.22

8.10 8.20 8.30 8.40

Time-->



#35

Dibromofluoromethane

Concen: 35.465 ug/l

RT: 6.92 min Scan# 558

Delta R.T. 0.00 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

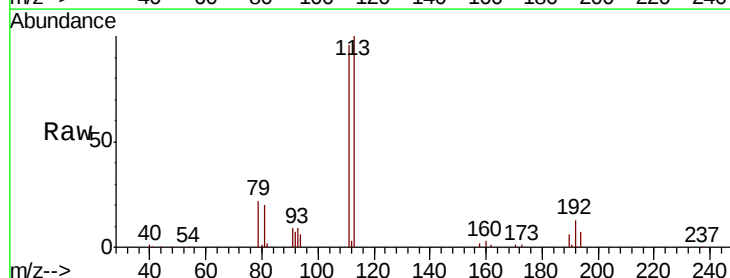
Tgt Ion:113 Resp: 236560

Ion Ratio Lower Upper

113 100

111 95.9 76.4 114.6

192 13.5 11.4 17.0



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

100000

80000

60000

40000

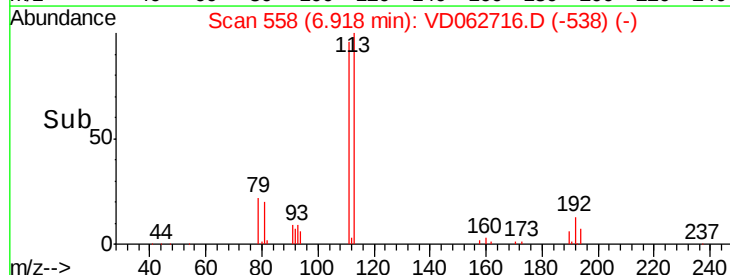
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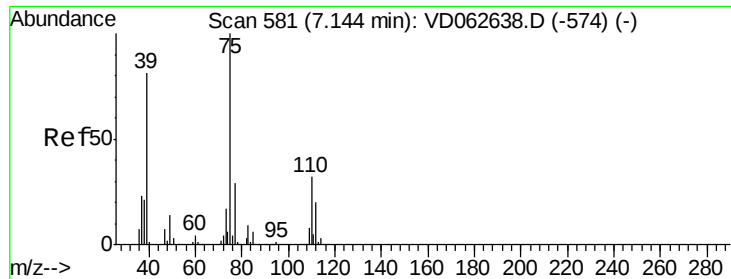
0

6.92

6.80 6.90 7.00 7.10

Time-->





#36

1,1-Dichloropropene

Concen: 5.739 ug/l

RT: 7.05 min Scan# 571

Delta R.T. -0.10 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

Instrument :

MSVOA_D

ClientSampleId :

DRILLING-MUDRE

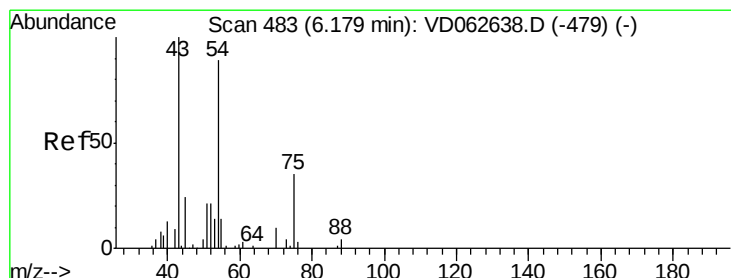
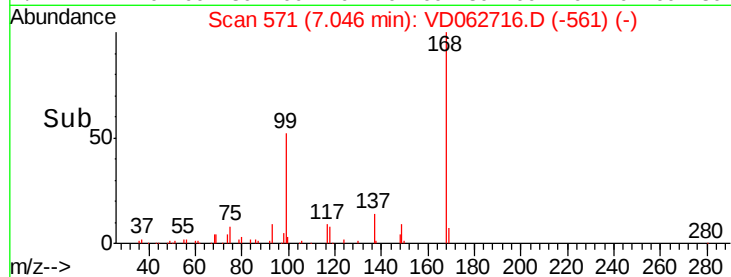
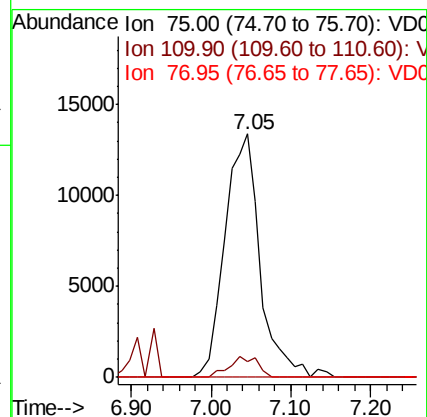
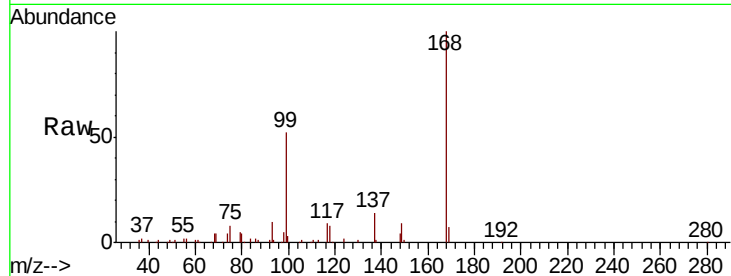
Tot Ion: 75 Resp: 41546

Ion Ratio Lower Upper

75 100

110 6.4 15.9 47.7#

77 0.0 23.3 34.9#



#37

Ethyl Acetate

Concen: 43.934 ug/l

RT: 6.07 min Scan# 472

Delta R.T. -0.11 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

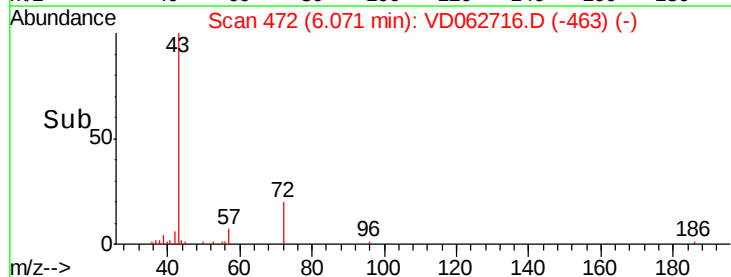
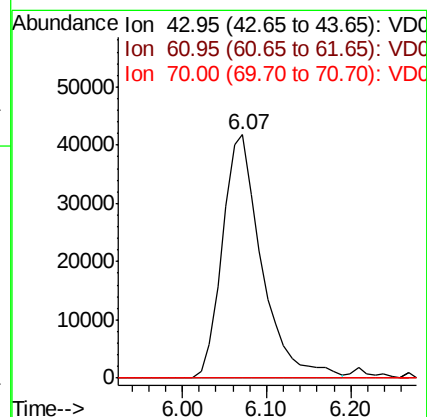
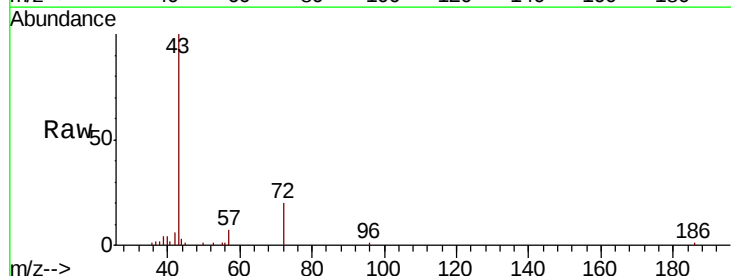
Tgt Ion: 43 Resp: 135139

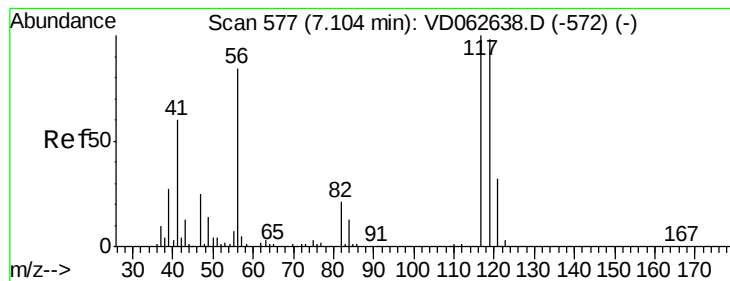
Ion Ratio Lower Upper

43 100

61 0.0 8.7 13.1#

70 0.0 6.5 9.7#





#38

Carbon Tetrachloride

Concen: 4.560 ug/l

RT: 7.04 min Scan# 570

Delta R.T. -0.07 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

Instrument :

MSVOA_D

ClientSampleId :

DRILLING-MUDRE

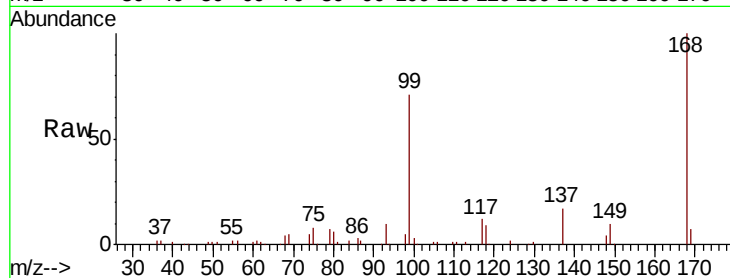
Tot Ion:117 Resp: 52170

Ion Ratio Lower Upper

117 100

119 3.4 73.5 110.3#

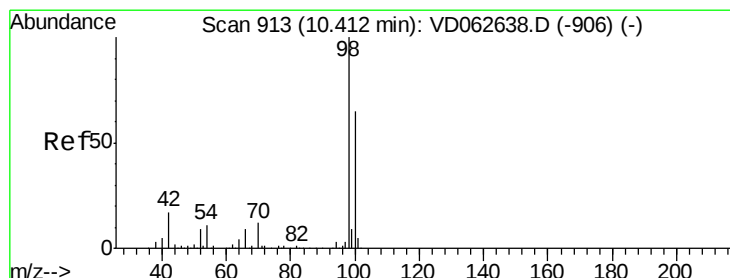
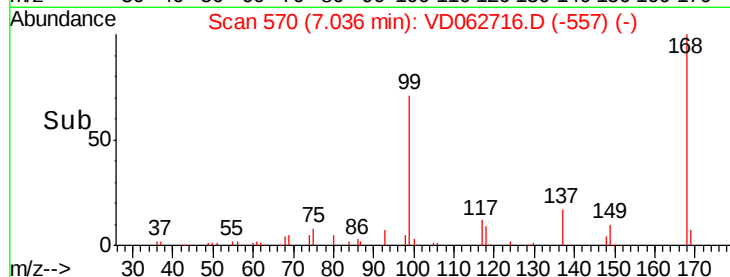
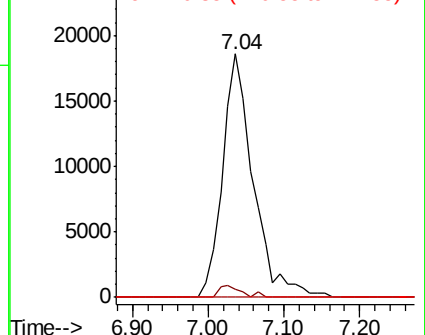
121 0.0 24.2 36.4#



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: 28.112 ug/l

RT: 10.41 min Scan# 913

Delta R.T. 0.00 min

Lab File: VD062716.D

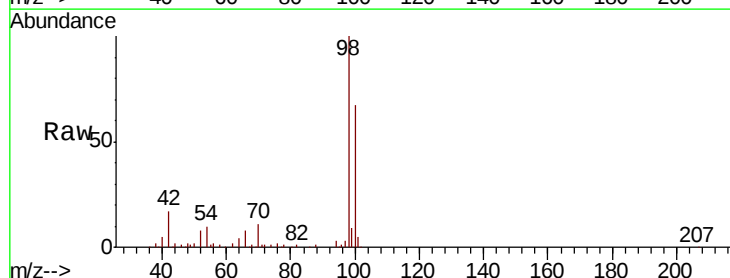
Acq: 14 Jun 2019 17:33

Tgt Ion: 98 Resp: 394467

Ion Ratio Lower Upper

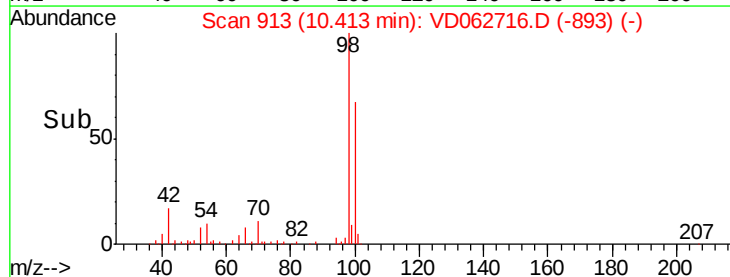
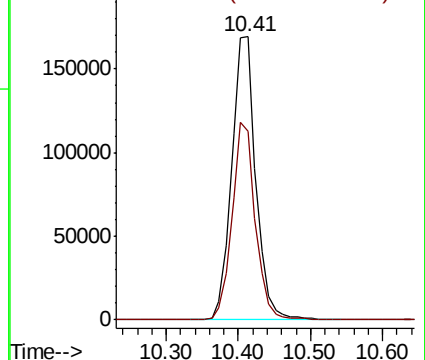
98 100

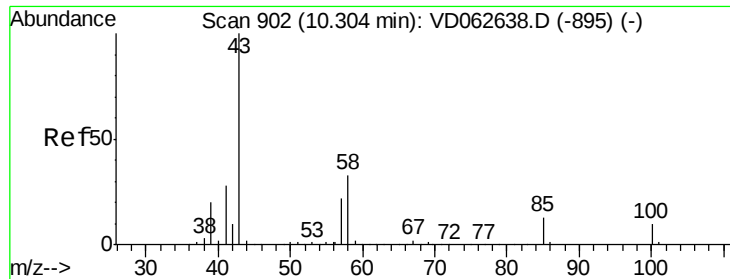
100 66.8 52.1 78.1



Abundance Ion 98.05 (97.75 to 98.75): V

Ion 100.05 (99.75 to 100.75): V





#51

4-Methyl-2-Pentanone

Concen: 1.388 ug/l

RT: 10.30 min Scan# 902

Delta R.T. 0.00 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

Instrument :

MSVOA_D

ClientSampleId :

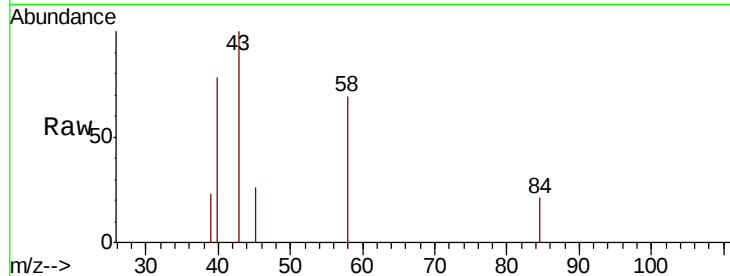
DRILLING-MUDRE

Tot Ion: 43 Resp: 3710

Ion Ratio Lower Upper

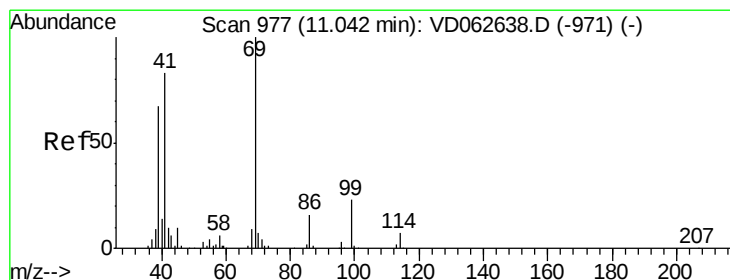
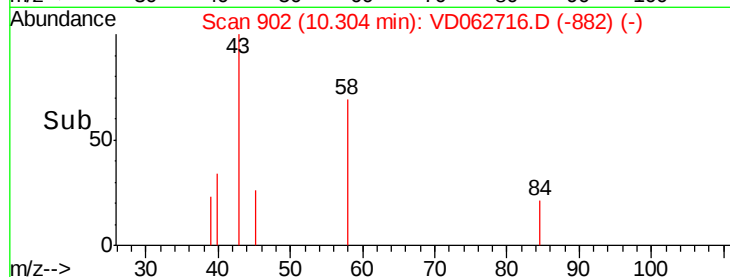
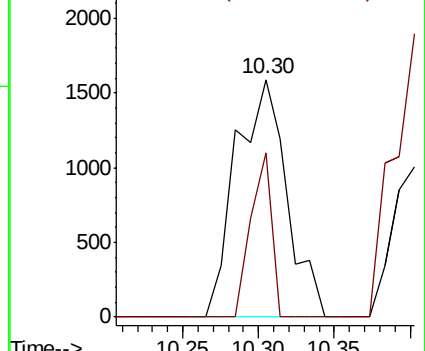
43 100

58 69.2 26.1 39.1#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#56

Ethyl methacrylate

Concen: 3.982 ug/l

RT: 10.90 min Scan# 962

Delta R.T. -0.15 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

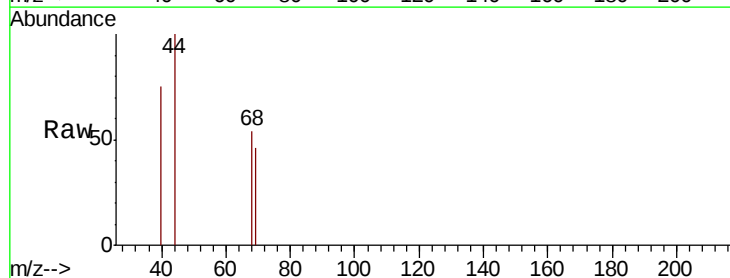
Tgt Ion: 69 Resp: 183

Ion Ratio Lower Upper

69 100

41 0.0 66.2 99.4#

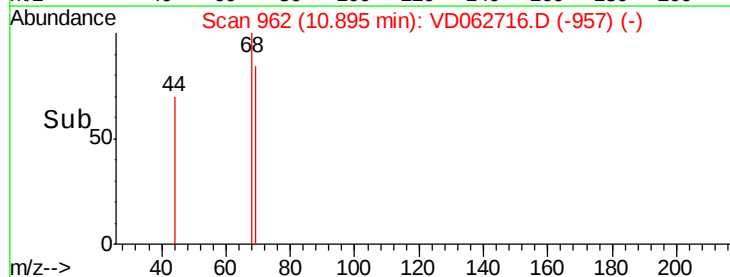
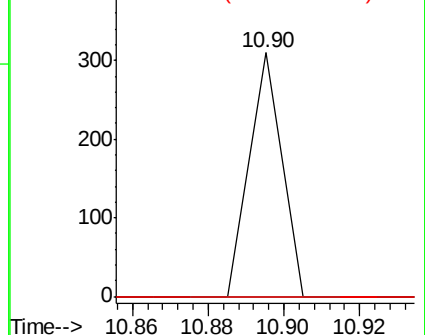
39 0.0 53.8 80.8#

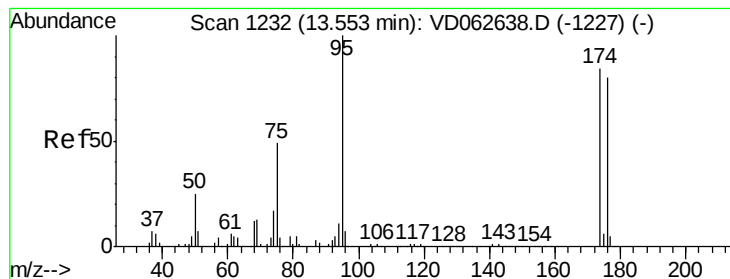


Abundance Ion 69.00 (68.70 to 69.70): VDC

Ion 41.05 (40.75 to 41.75): VDC

Ion 38.95 (38.65 to 39.65): VDC





#62

4-Bromofluorobenzene

Concen: 23.302 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.00 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

Instrument :

MSVOA_D

ClientSampleId :

DRILLING-MUDRE

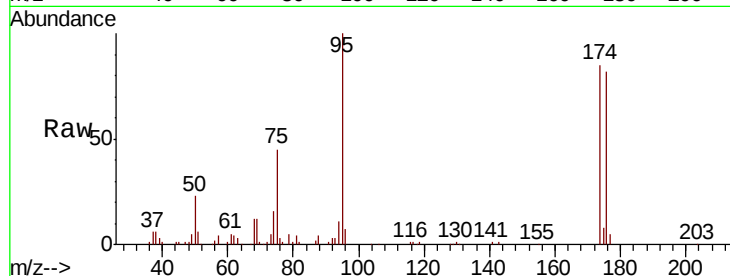
Tot Ion: 95 Resp: 152541

Ion Ratio Lower Upper

95 100

174 84.7 0.0 167.0

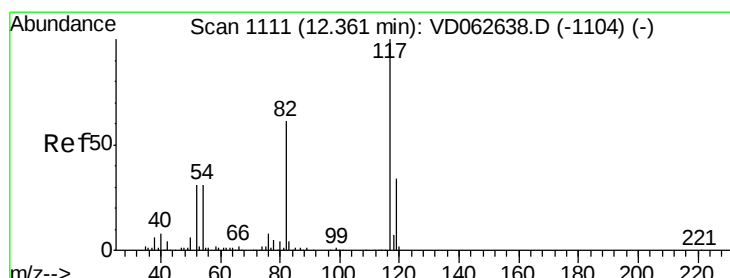
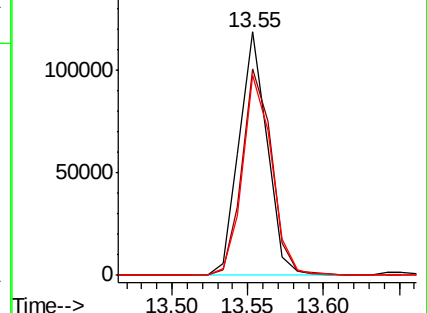
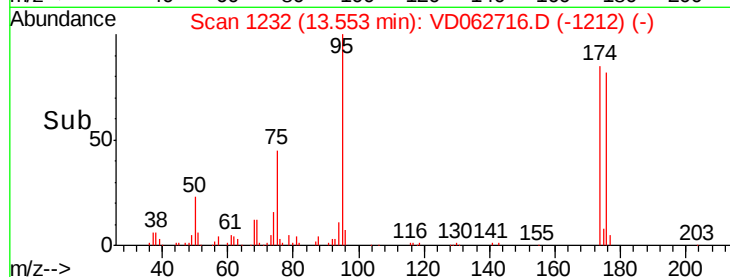
176 82.1 0.0 159.2



Abundance Ion 95.00 (94.70 to 95.70): V

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: 12.36 min Scan# 1111

Delta R.T. 0.00 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

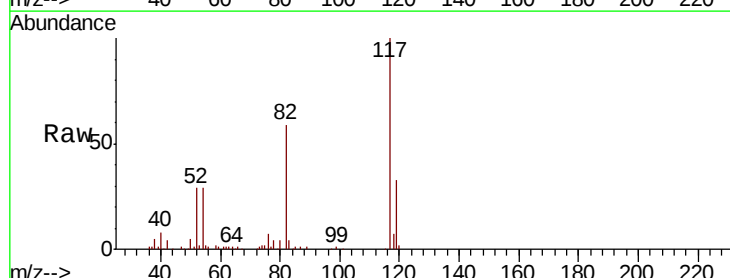
Tgt Ion: 117 Resp: 487121

Ion Ratio Lower Upper

117 100

82 58.5 48.7 73.1

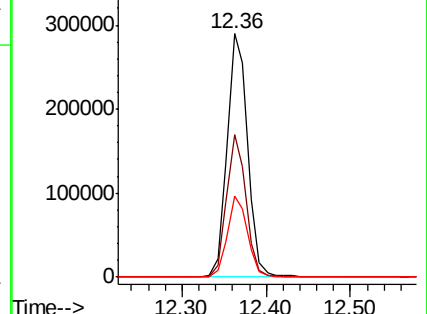
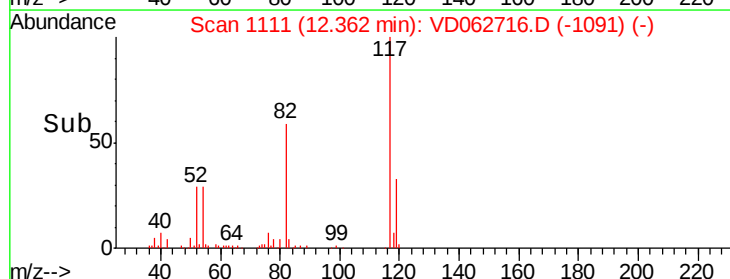
119 33.2 27.0 40.6

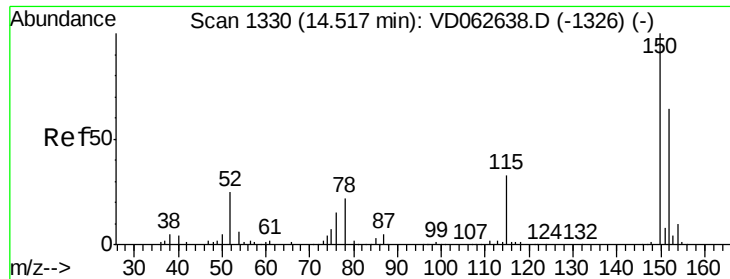


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V



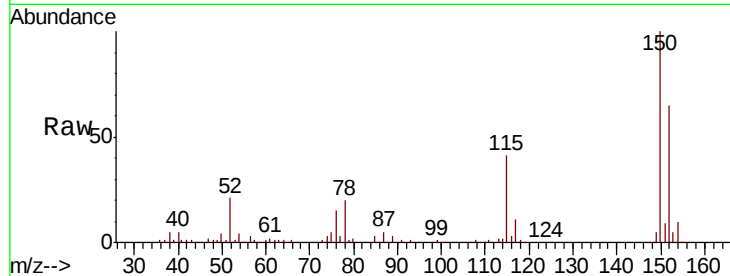


#72

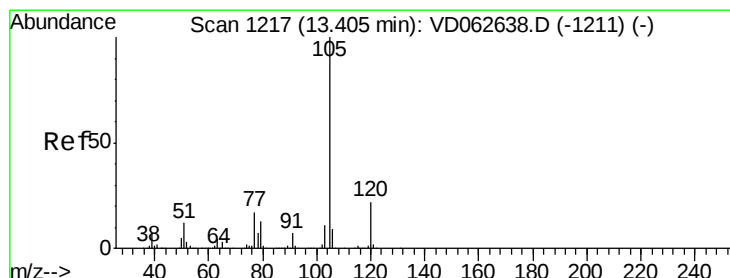
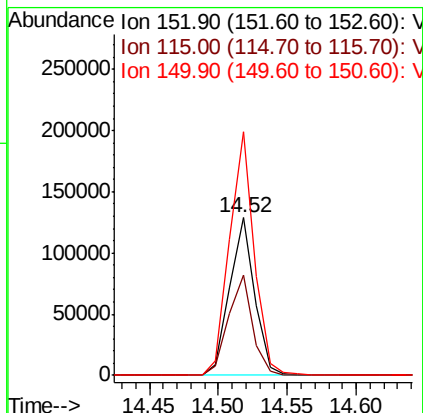
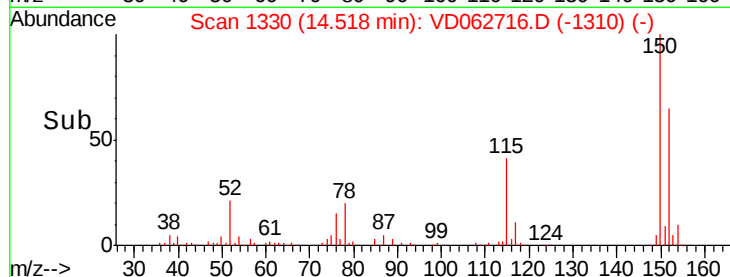
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 14.52 min Scan# 1330
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Instrument :
MSVOA_D
ClientSampleId :
DRILLING-MUDRE

Tot Ion:152 Resp: 162479
Ion Ratio Lower Upper
152 100
115 63.5 30.1 90.5
150 154.3 0.0 314.0



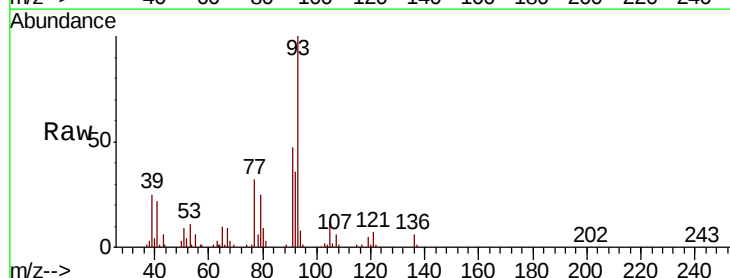
Abundance Ion 151.90 (151.60 to 152.60): V
Ion 115.00 (114.70 to 115.70): V
Ion 149.90 (149.60 to 150.60): V



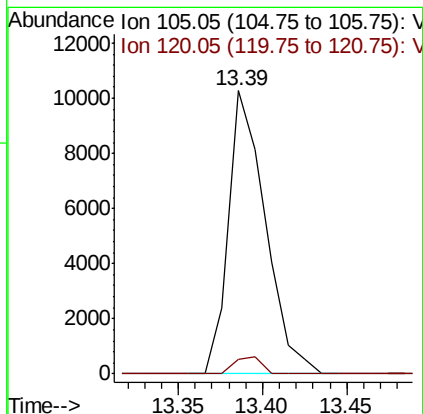
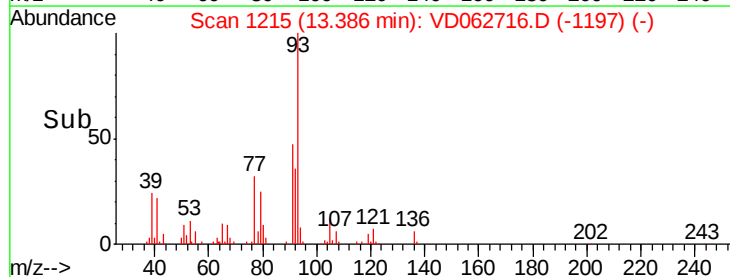
#73

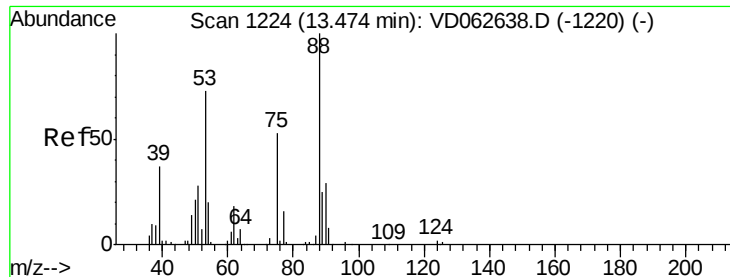
Isopropylbenzene
Concen: 1.365 ug/l
RT: 13.39 min Scan# 1215
Delta R.T. -0.02 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion:105 Resp: 15627
Ion Ratio Lower Upper
105 100
120 5.0 10.9 32.7#



Abundance Ion 105.05 (104.75 to 105.75): V
Ion 120.05 (119.75 to 120.75): V





#81

trans-1,4-Dichloro-2-butene

Concen: 104.648 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.08 min

Lab File: VD062716.D

Acq: 14 Jun 2019 17:33

Instrument :

MSVOA_D

ClientSampleId :

DRILLING-MUDRE

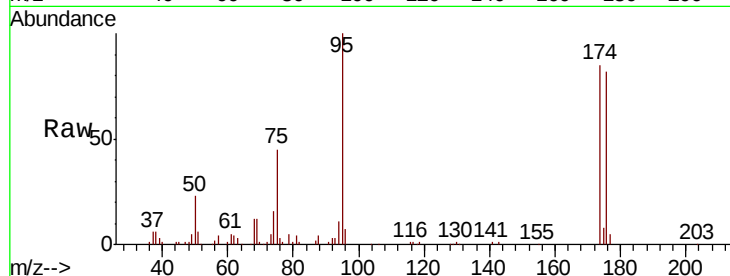
Tot Ion: 75 Resp: 71386

Ion Ratio Lower Upper

75 100

53 0.0 109.4 164.2#

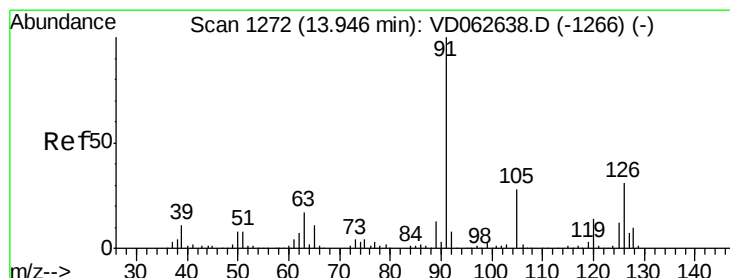
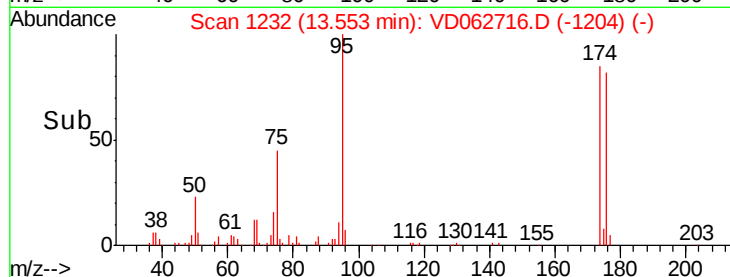
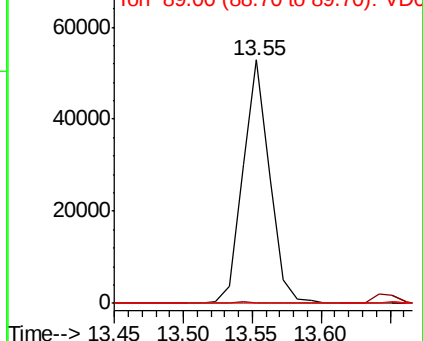
89 0.0 37.0 55.6#



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



#82

4-Chlorotoluene

Concen: 3.458 ug/l

RT: 13.98 min Scan# 1275

Delta R.T. 0.03 min

Lab File: VD062716.D

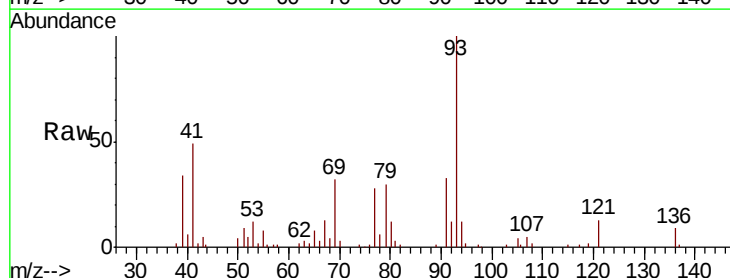
Acq: 14 Jun 2019 17:33

Tgt Ion: 91 Resp: 33948

Ion Ratio Lower Upper

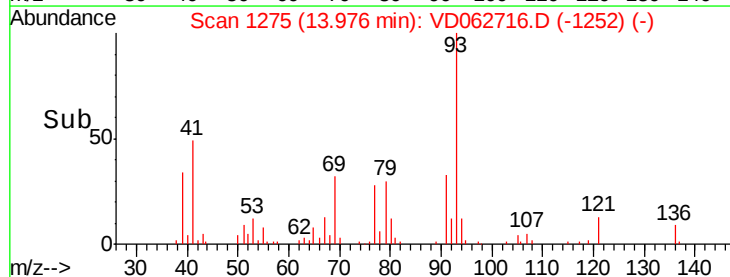
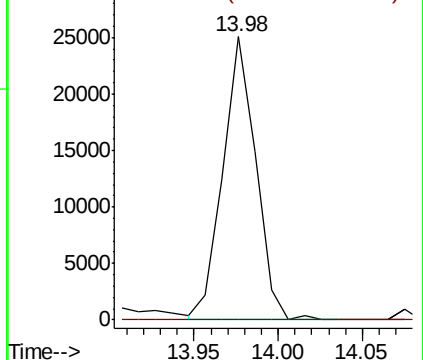
91 100

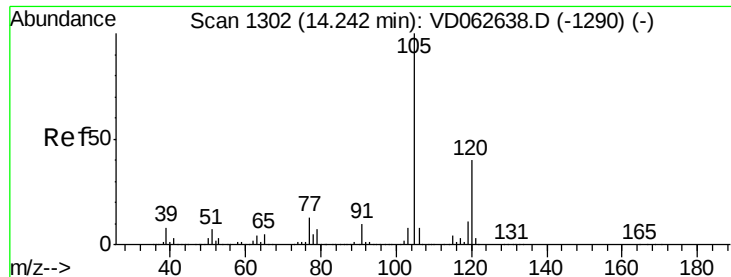
126 0.0 15.6 46.8#



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 125.95 (125.65 to 126.65): V

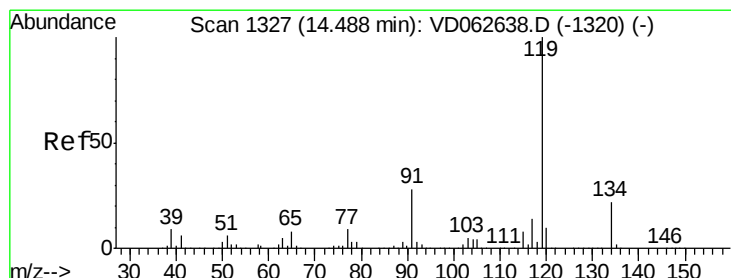
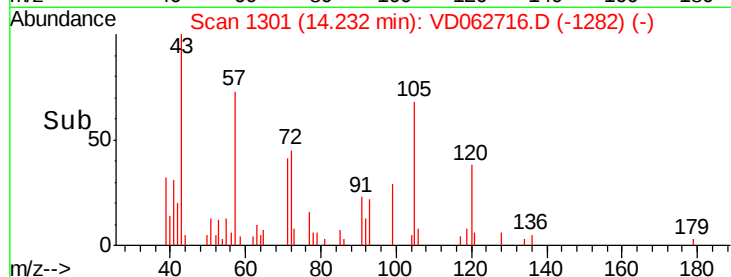
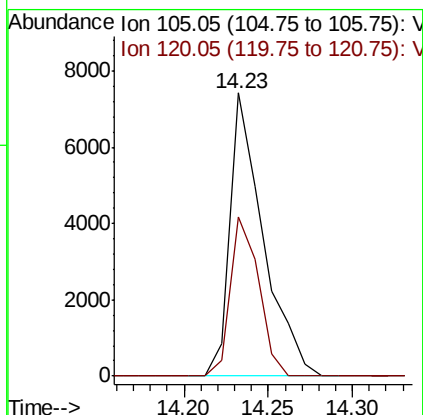
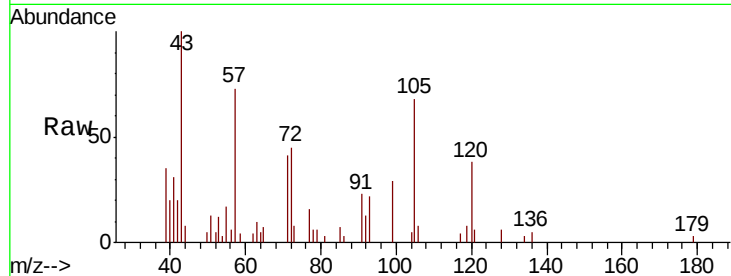




#84
1,2,4-Trimethylbenzene
Concen: 1.013 ug/l
RT: 14.23 min Scan# 1301
Delta R.T. -0.01 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

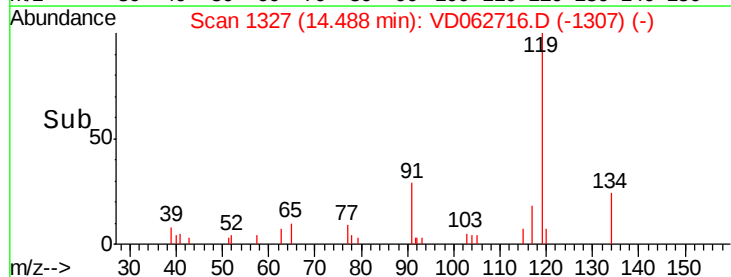
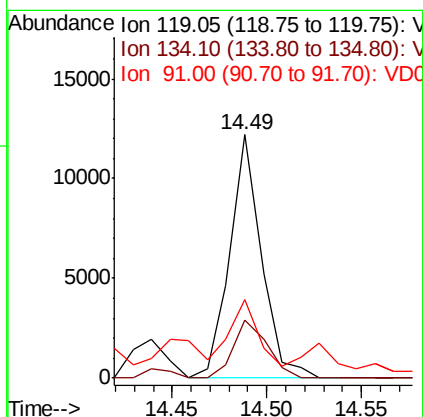
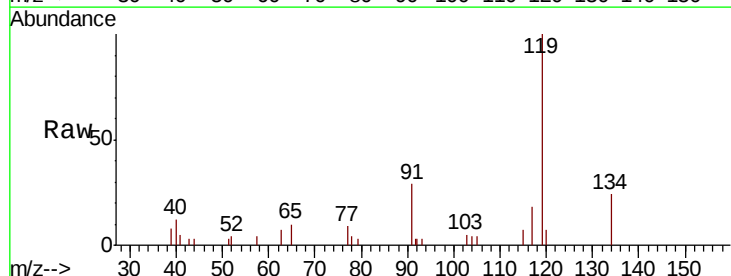
Instrument :
MSVOA_D
ClientSampleId :
DRILLING-MUDRE

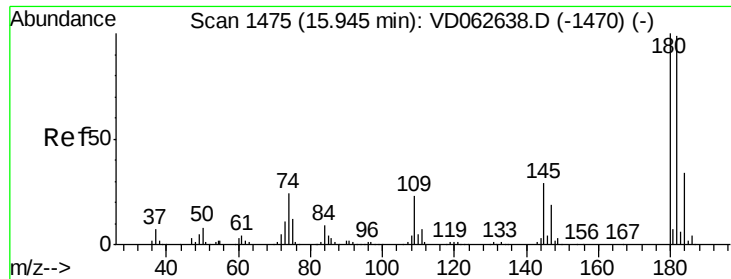
Tot Ion:105 Resp: 10155
Ion Ratio Lower Upper
105 100
120 56.2 20.3 60.8



#86
p-Isopropyltoluene
Concen: 1.233 ug/l
RT: 14.49 min Scan# 1327
Delta R.T. 0.00 min
Lab File: VD062716.D
Acq: 14 Jun 2019 17:33

Tgt Ion:119 Resp: 14055
Ion Ratio Lower Upper
119 100
134 24.0 10.9 32.6
91 32.4 13.9 41.6

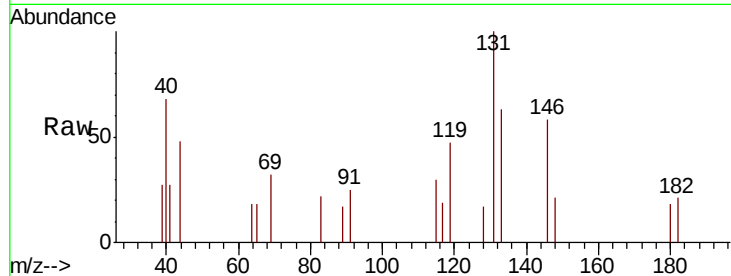




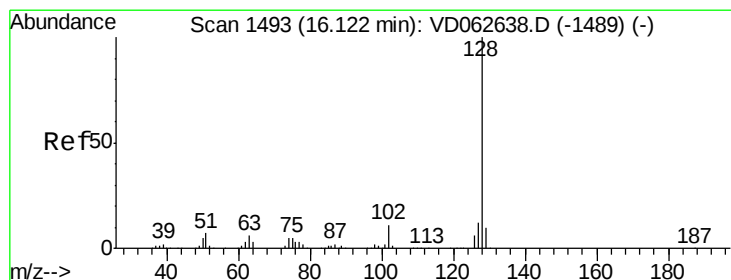
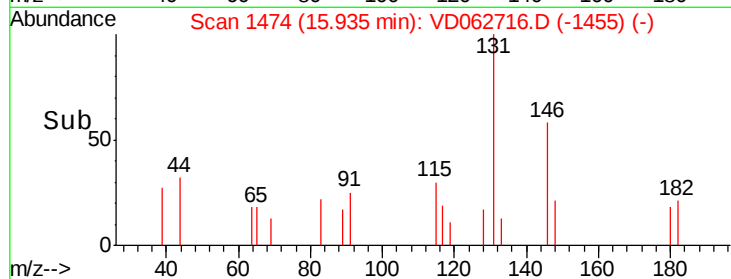
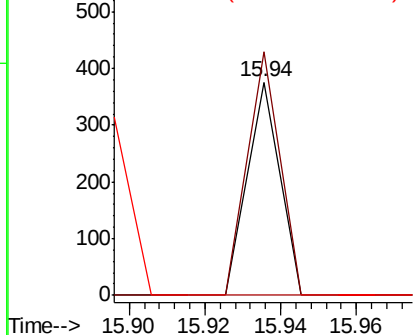
#93
 1,2,4-Trichlorobenzene
 Concen: 3.617 ug/l
 RT: 15.94 min Scan# 1474
 Delta R.T. -0.01 min
 Lab File: VD062716.D
 Acq: 14 Jun 2019 17:33

Instrument :
 MSVOA_D
 ClientSampleId :
 DRILLING-MUDRE

Tot Ion:180 Resp: 222
 Ion Ratio Lower Upper
 180 100
 182 114.1 49.4 148.2
 145 0.0 14.5 43.6#

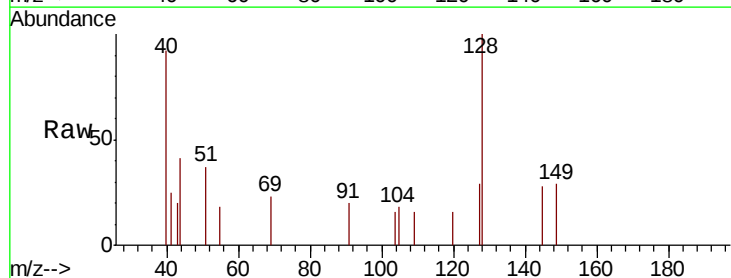


Abundance Ion 179.85 (179.55 to 180.55): V
 Ion 181.85 (181.55 to 182.55): V
 Ion 144.95 (144.65 to 145.65): V



#95
 Naphthalene
 Concen: 3.867 ug/l
 RT: 16.12 min Scan# 1493
 Delta R.T. 0.00 min
 Lab File: VD062716.D
 Acq: 14 Jun 2019 17:33

Tgt Ion:128 Resp: 2647
 Ion Ratio Lower Upper
 128 100
 127 29.0 9.7 14.5#
 129 0.0 8.1 12.1#



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

