

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062718\
 Data File : VX002960.D
 Acq On : 28 Jun 2018 02:39
 Operator : JC/MD
 Sample : J3718-02
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 36 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 GUN-HILL-FIELD-BLANK-2-6-22-18

Quant Time: Jun 28 06:50:56 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X062518W.M
 Quant Title : SW846 8260
 QLast Update : Mon Jun 25 14:38:05 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	269107	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.87	114	375052	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	346571	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	195523	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.07	65	178748	48.06	ug/l	0.00
Spiked Amount			Recovery	=	96.12%	
35) Dibromofluoromethane	5.51	113	141193	47.54	ug/l	0.00
Spiked Amount			Recovery	=	95.08%	
50) Toluene-d8	8.72	98	525833	48.48	ug/l	0.00
Spiked Amount			Recovery	=	96.96%	
62) 4-Bromofluorobenzene	11.14	95	187562	44.84	ug/l	0.00
Spiked Amount			Recovery	=	89.68%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.20	85	32	Below Cal	#	43
3) Chloromethane	1.32	50	973	Below Cal		99
5) Bromomethane	1.61	94	219	Below Cal	#	3
6) Chloroethane	1.73	64	252	Below Cal	#	43
8) Diethyl Ether	2.18	74	374	0.20	ug/l	73
10) Methyl Iodide	2.53	142	1891	6.77	ug/l	# 97
11) Tert butyl alcohol	3.07	59	1602	2.16	ug/l	# 92
13) Acrolein	2.29	56	102	4.47	ug/l	92
16) Acetone	2.45	43	6917	4.49	ug/l	92
17) Carbon Disulfide	2.57	76	5038	0.71	ug/l	98
20) Methylene Chloride	2.86	84	42412	14.15	ug/l	93
25) 2-Butanone	4.71	43	1393	0.61	ug/l	97
29) Tetrahydrofuran	5.18	42	915	0.62	ug/l	# 85
36) 1,1-Dichloropropene	5.66	75	18163	4.42	ug/l	# 41
38) Carbon Tetrachloride	5.67	117	24534	5.44	ug/l	# 16
67) Ethyl Benzene	10.26	91	3647	0.25	ug/l	98
68) m/p-Xylenes	10.37	106	2334	0.42	ug/l	95
76) 1,2,3-Trichloropropane	11.14	75	96142	27.15	ug/l	# 33
81) trans-1,4-Dichloro-2-buten	11.14	75	96142	76.83	ug/l	# 7
84) 1,2,4-Trimethylbenzene	11.81	105	2891	0.25	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

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MSVOA_X

ClientSampleId :

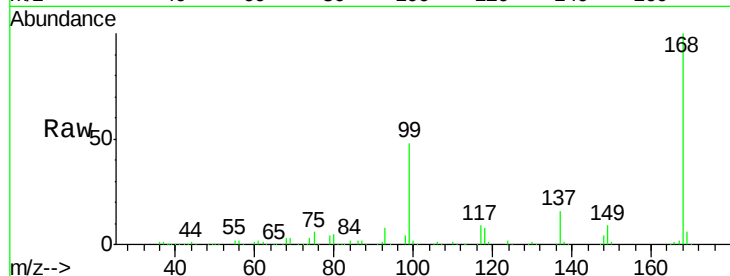
GUN-HILL-FIELD-BLANK-2-6-22-18

Tot Ion:168 Resp: 269107

Ion Ratio Lower Upper

168 100

99 48.3 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

100000

80000

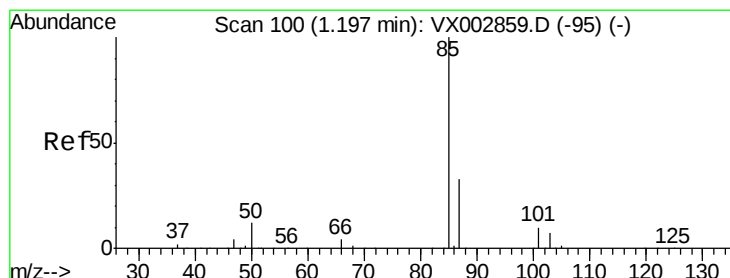
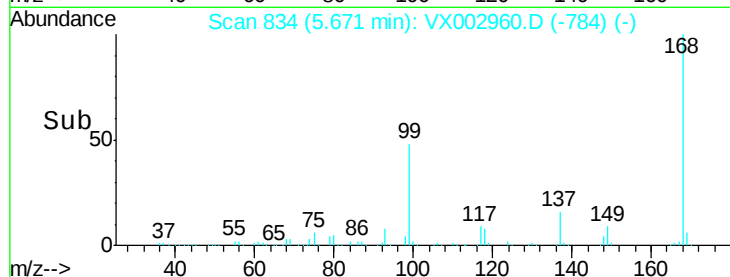
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.20 min Scan# 101

Delta R.T. 0.01 min

Lab File: VX002960.D

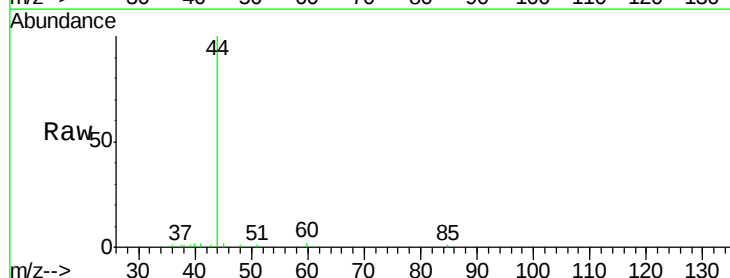
Acq: 28 Jun 2018 02:39

Tgt Ion: 85 Resp: 32

Ion Ratio Lower Upper

85 100

87 0.0 16.0 47.9#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.20

100

80

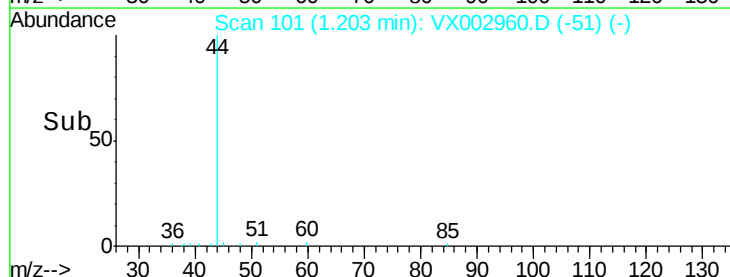
60

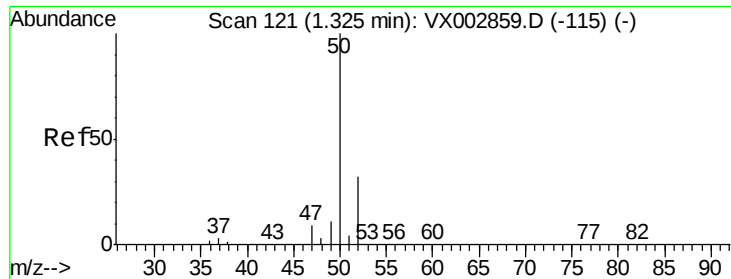
40

20

0

Time--> 1.18 1.19 1.20 1.21 1.22





#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

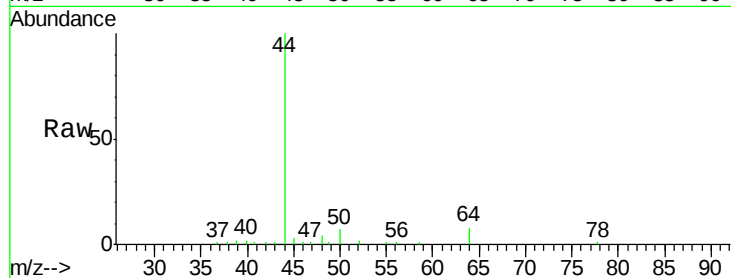
GUN-HILL-FIELD-BLANK-2-6-22-18

Tot Ion: 50 Resp: 973

Ion Ratio Lower Upper

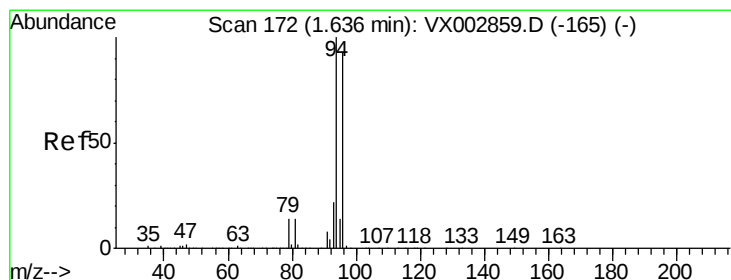
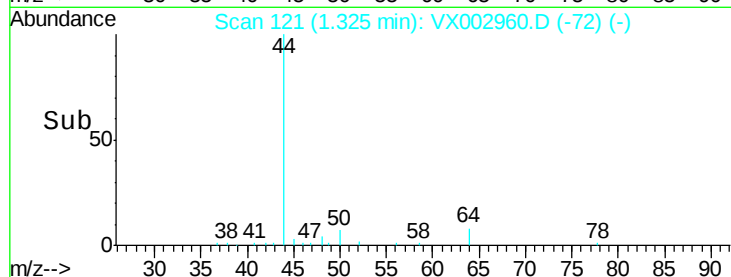
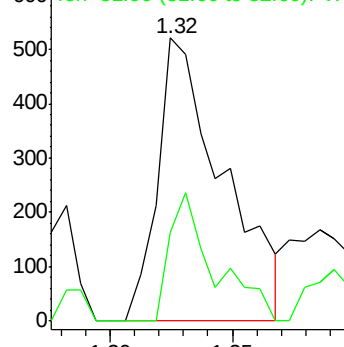
50 100

52 31.5 25.7 38.5



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.61 min Scan# 168

Delta R.T. -0.02 min

Lab File: VX002960.D

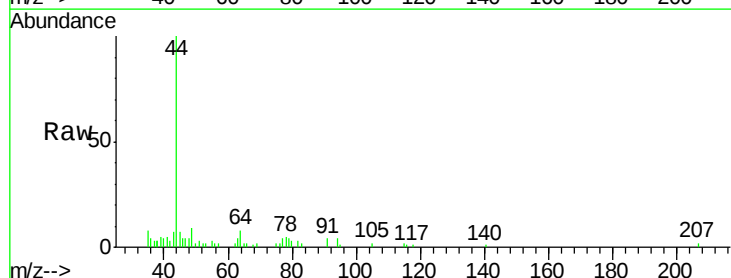
Acq: 28 Jun 2018 02:39

Tgt Ion: 94 Resp: 219

Ion Ratio Lower Upper

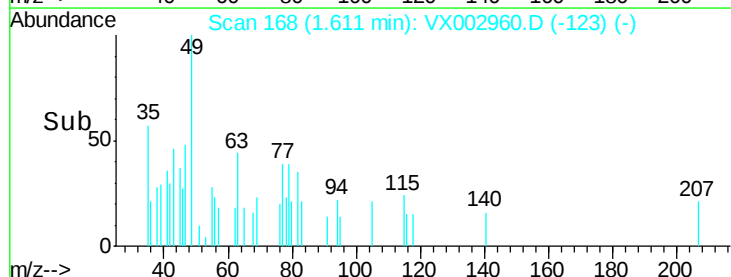
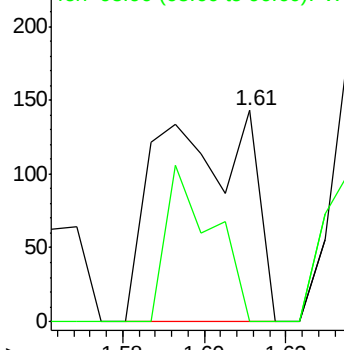
94 100

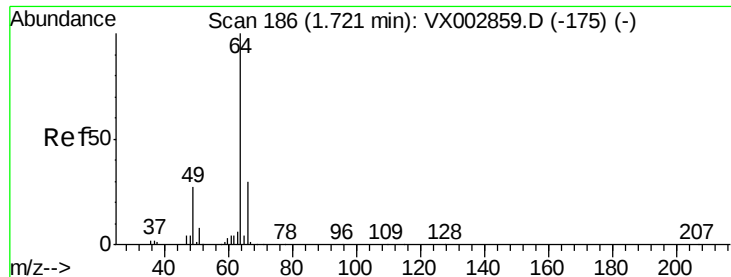
96 0.0 74.9 112.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: Below Cal

RT: 1.73 min Scan# 188

Delta R.T. 0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

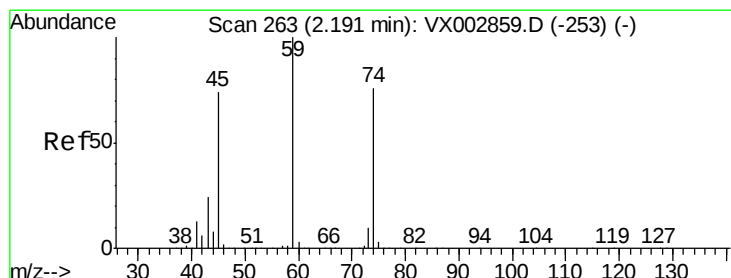
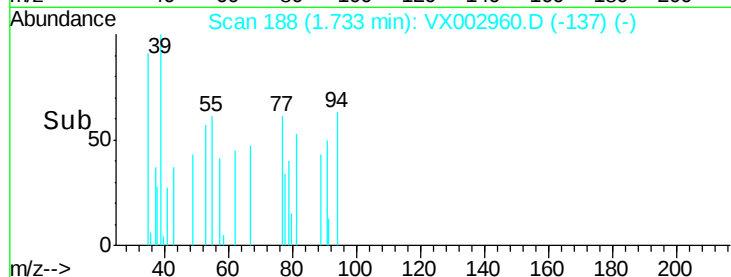
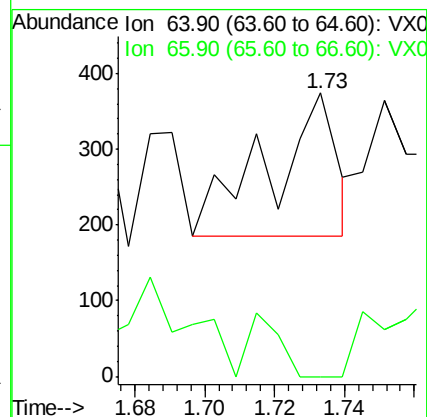
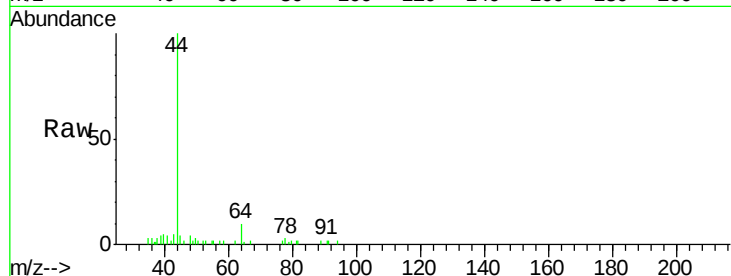
GUN-HILL-FIELD-BLANK-2-6-22-18

Tot Ion: 64 Resp: 252

Ion Ratio Lower Upper

64 100

66 0.0 25.5 38.3#



#8

Diethyl Ether

Concen: 0.20 ug/l

RT: 2.18 min Scan# 262

Delta R.T. -0.01 min

Lab File: VX002960.D

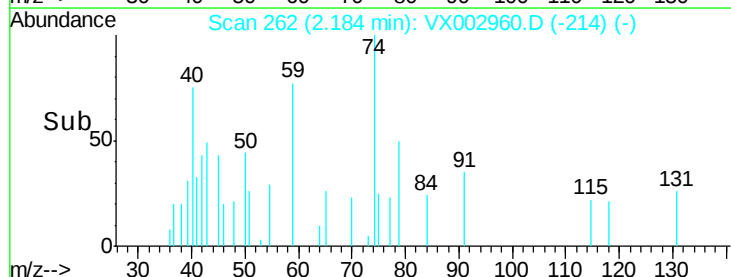
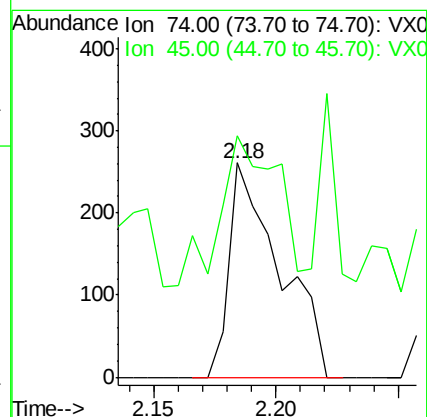
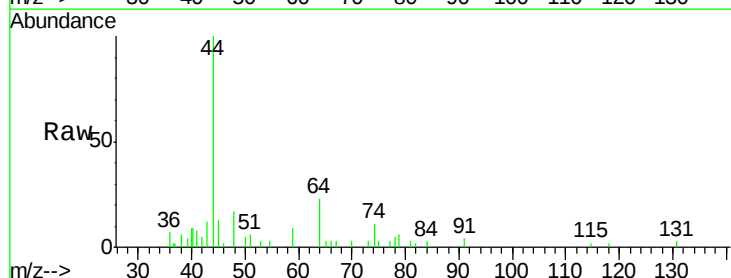
Acq: 28 Jun 2018 02:39

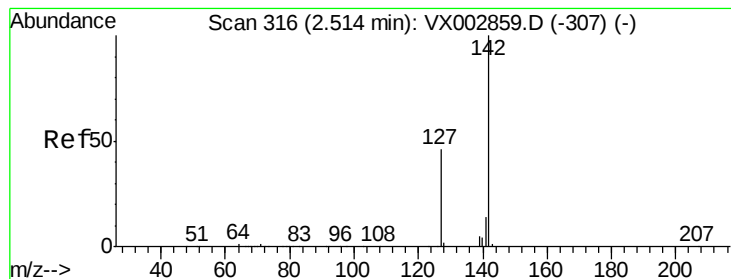
Tgt Ion: 74 Resp: 374

Ion Ratio Lower Upper

74 100

45 78.6 53.1 159.4





#10

Methyl Iodide

Concen: 6.77 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampled :

GUN-HILL-FIELD-BLANK-2-6-22-18

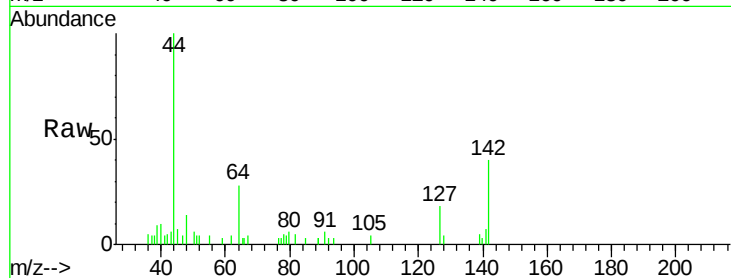
Tot Ion:142 Resp: 1891

Ion Ratio Lower Upper

142 100

127 45.9 36.6 55.0

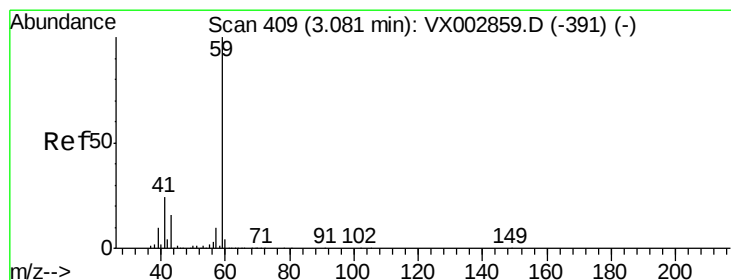
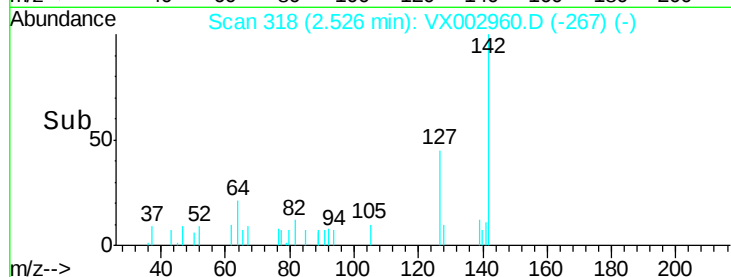
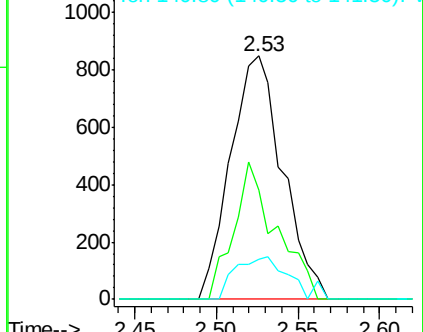
141 18.2 11.3 16.9#



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: 2.16 ug/l

RT: 3.07 min Scan# 408

Delta R.T. -0.01 min

Lab File: VX002960.D

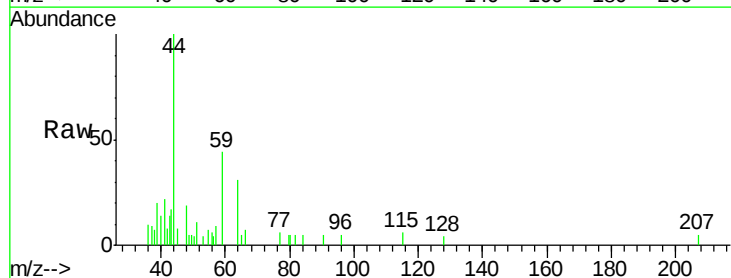
Acq: 28 Jun 2018 02:39

Tgt Ion: 59 Resp: 1602

Ion Ratio Lower Upper

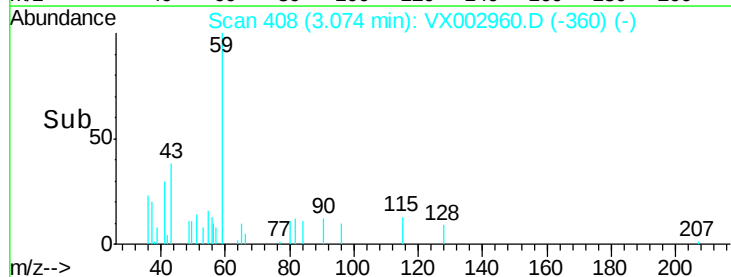
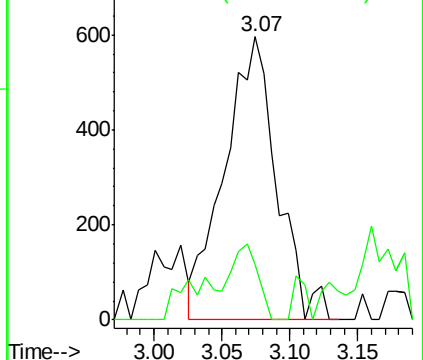
59 100

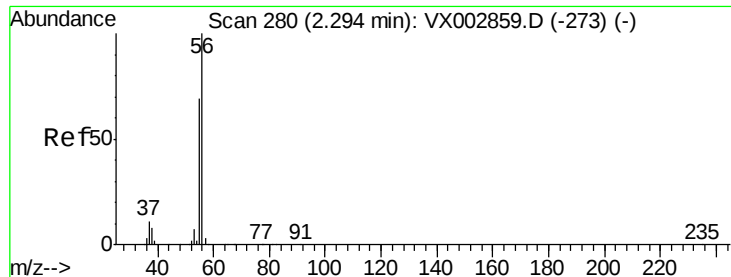
57 13.2 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 4.47 ug/l

RT: 2.29 min Scan# 280

Delta R.T. 0.00 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

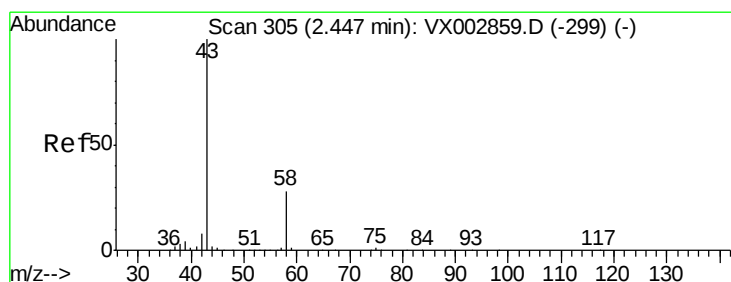
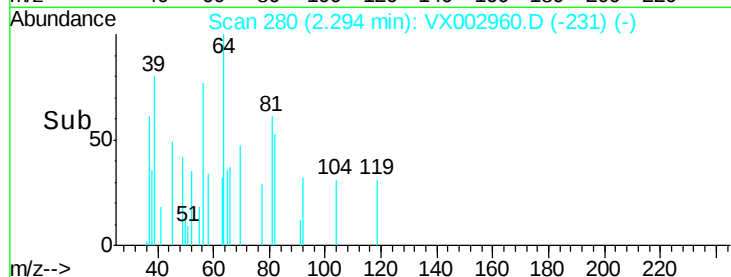
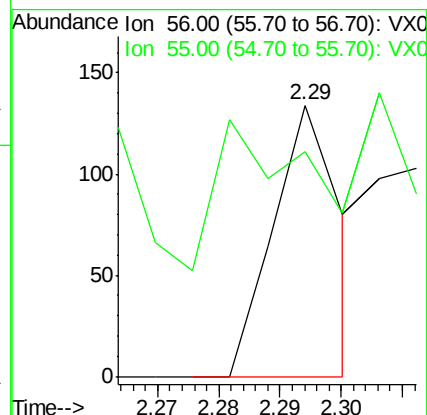
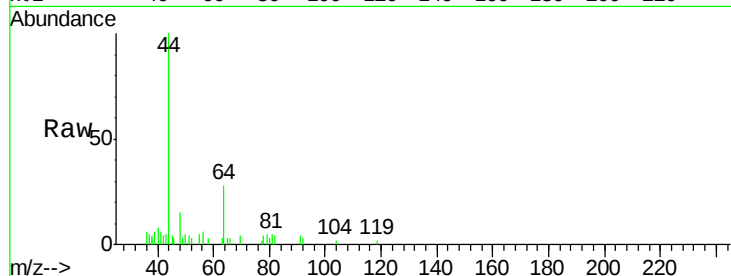
GUN-HILL-FIELD-BLANK-2-6-22-18

Tot Ion: 56 Resp: 102

Ion Ratio Lower Upper

56 100

55 77.5 57.0 85.4



#16

Acetone

Concen: 4.49 ug/l

RT: 2.45 min Scan# 305

Delta R.T. -0.00 min

Lab File: VX002960.D

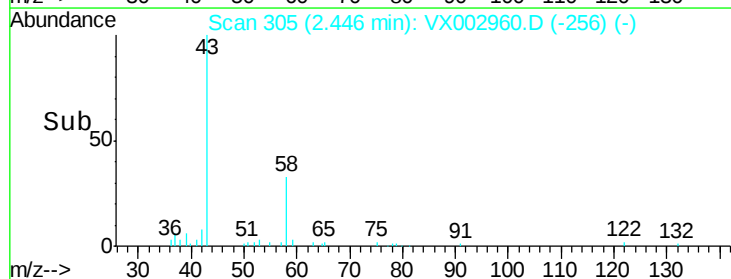
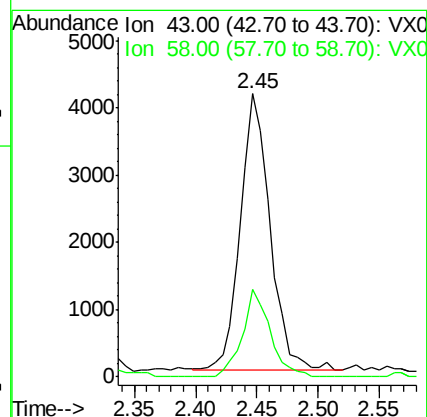
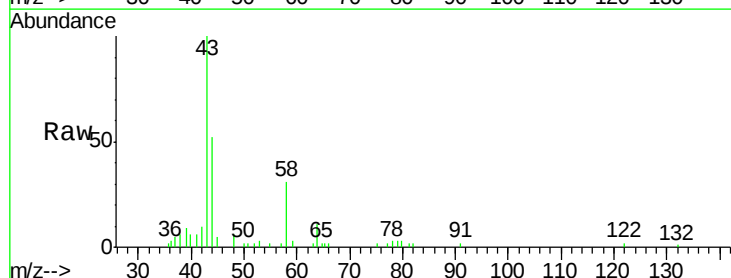
Acq: 28 Jun 2018 02:39

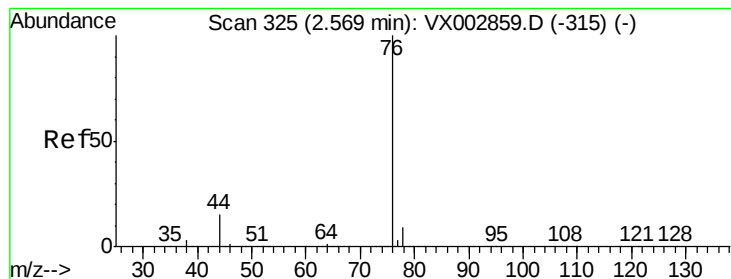
Tgt Ion: 43 Resp: 6917

Ion Ratio Lower Upper

43 100

58 31.7 22.1 33.1





#17

Carbon Disulfide

Concen: 0.71 ug/l

RT: 2.57 min Scan# 326

Delta R.T. 0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

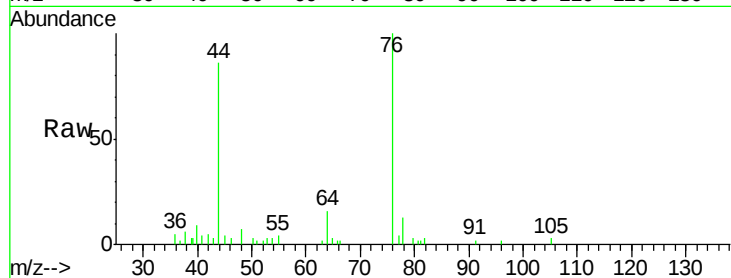
GUN-HILL-FIELD-BLANK-2-6-22-18

Tot Ion: 76 Resp: 5038

Ion Ratio Lower Upper

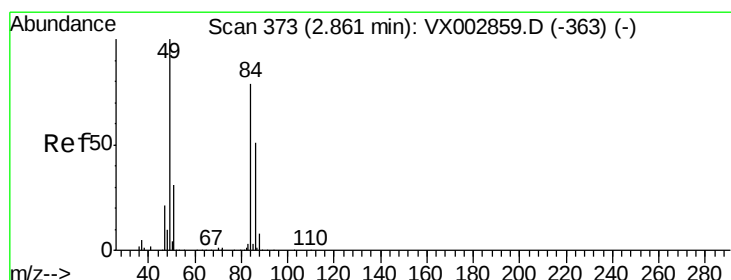
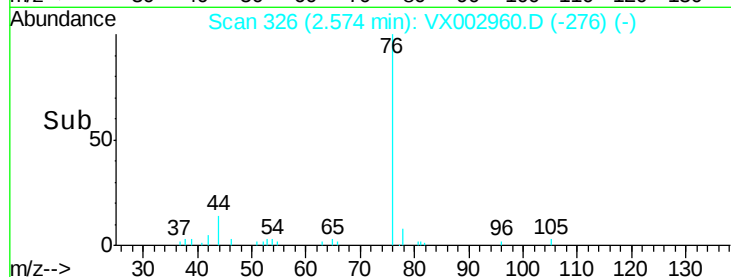
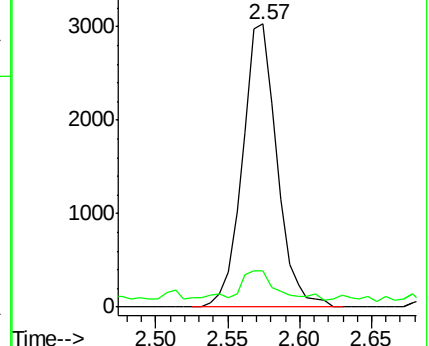
76 100

78 9.2 6.9 10.3



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



#20

Methylene Chloride

Concen: 14.15 ug/l

RT: 2.86 min Scan# 373

Delta R.T. -0.00 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Tgt Ion: 84 Resp: 42412

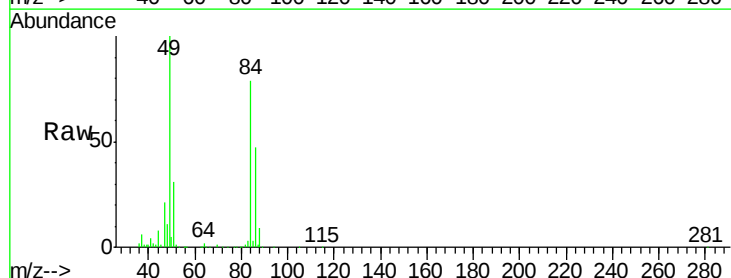
Ion Ratio Lower Upper

84 100

49 126.2 107.8 161.6

51 38.3 32.8 49.2

86 59.0 52.5 78.7

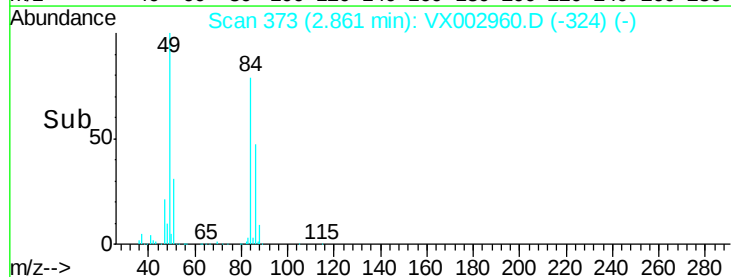
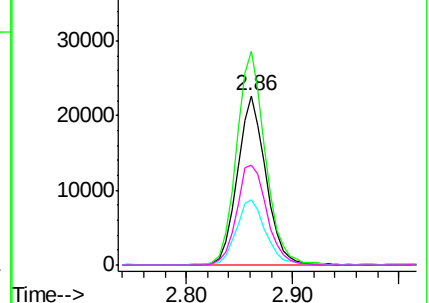


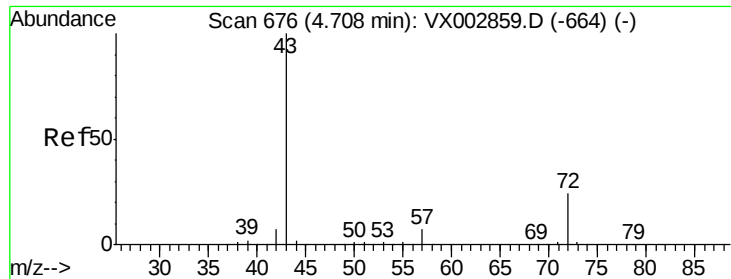
Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0





#25

2-Butanone

Concen: 0.61 ug/l

RT: 4.71 min Scan# 677

Delta R.T. 0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

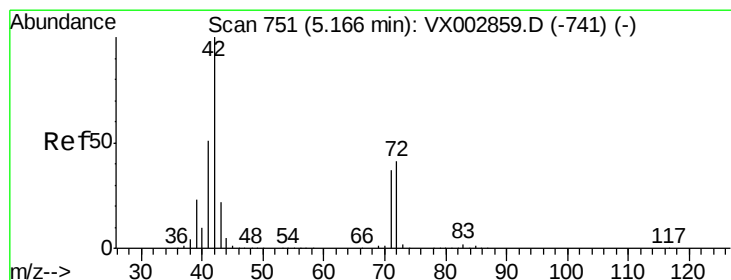
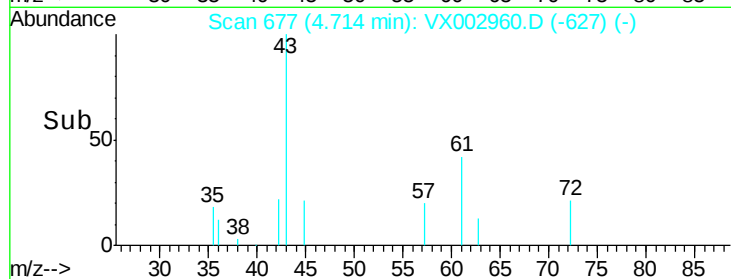
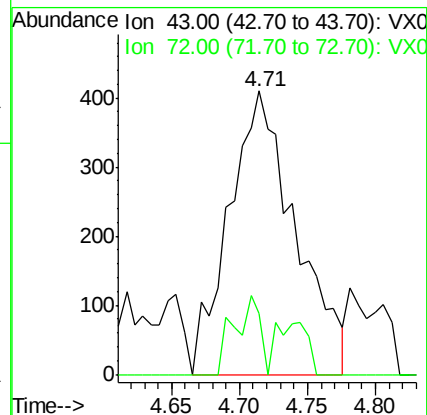
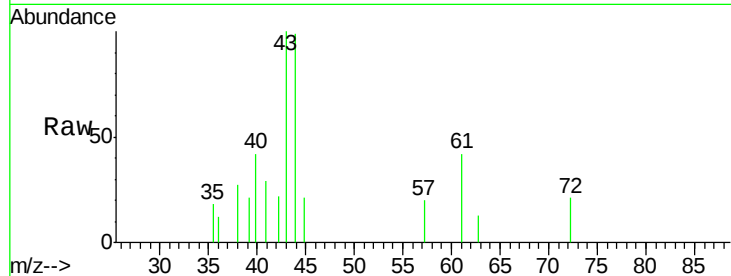
GUN-HILL-FIELD-BLANK-2-6-22-18

Tot Ion: 43 Resp: 1393

Ion Ratio Lower Upper

43 100

72 21.5 18.5 27.7



#29

Tetrahydrofuran

Concen: 0.62 ug/l

RT: 5.18 min Scan# 753

Delta R.T. 0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

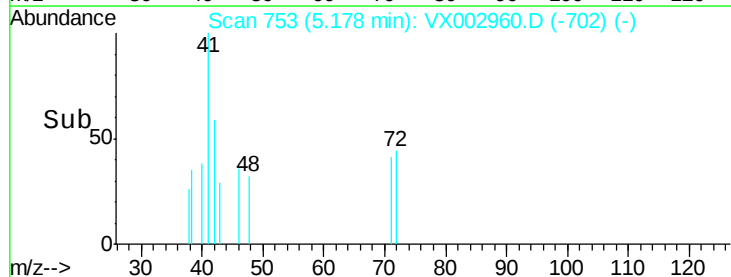
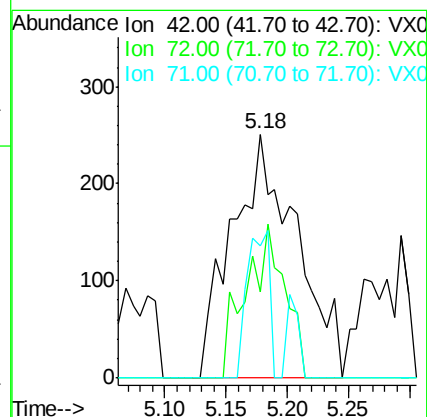
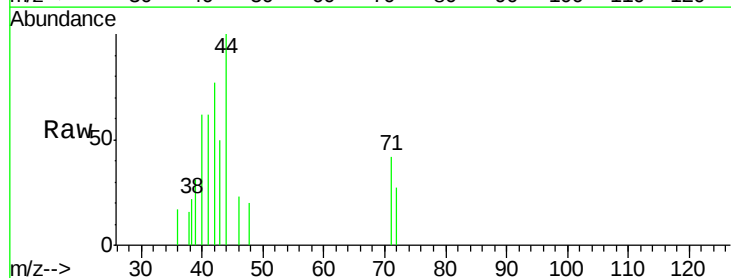
Tgt Ion: 42 Resp: 915

Ion Ratio Lower Upper

42 100

72 38.6 32.0 48.0

71 20.9 30.1 45.1#

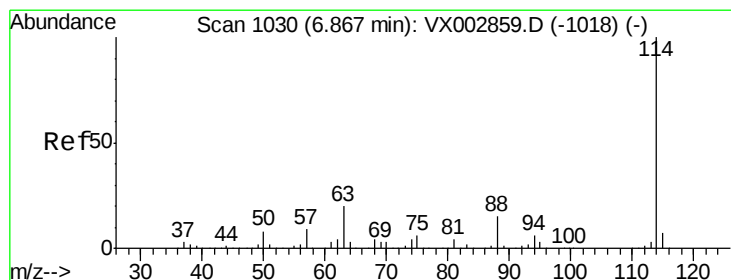
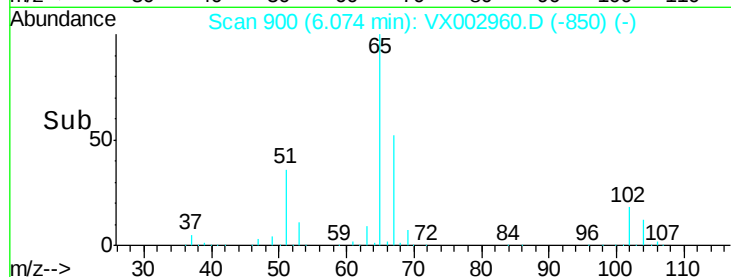
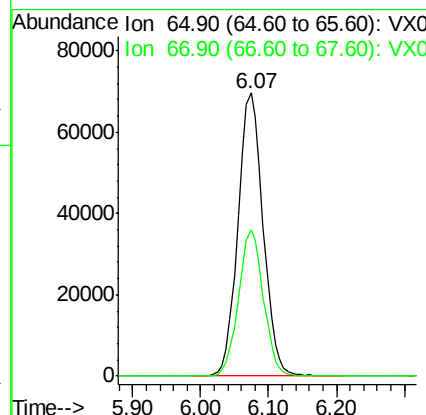
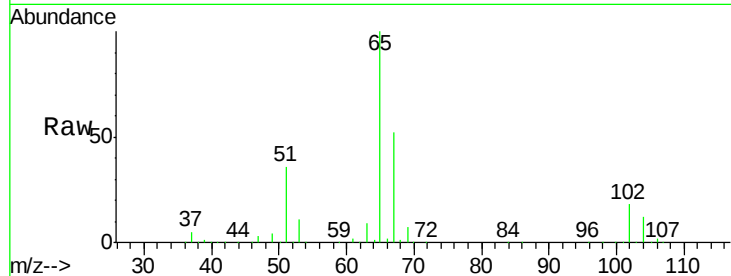




#33
 1,2-Dichloroethane-d4
 Concen: 48.06 ug/l
 RT: 6.07 min Scan# 900
 Delta R.T. 0.01 min
 Lab File: VX002960.D
 Acq: 28 Jun 2018 02:39

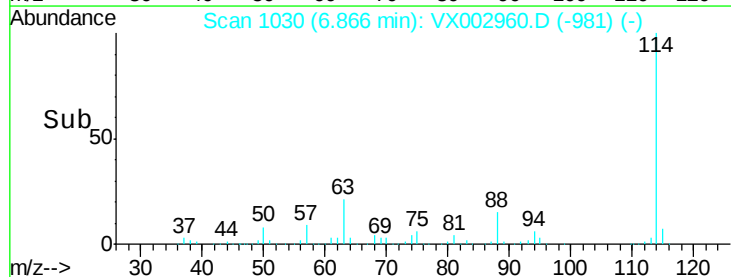
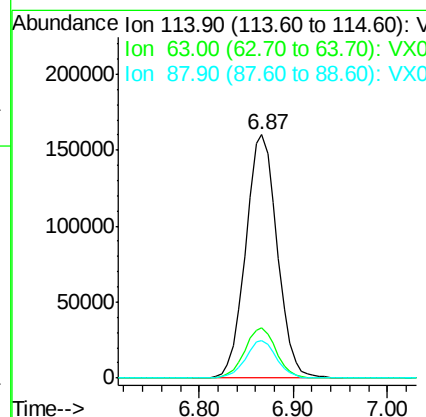
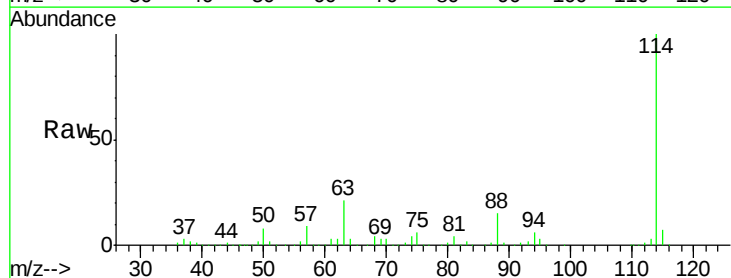
Instrument :
 MSVOA_X
 ClientSampleId :
 GUN-HILL-FIELD-BLANK-2-6-22-18

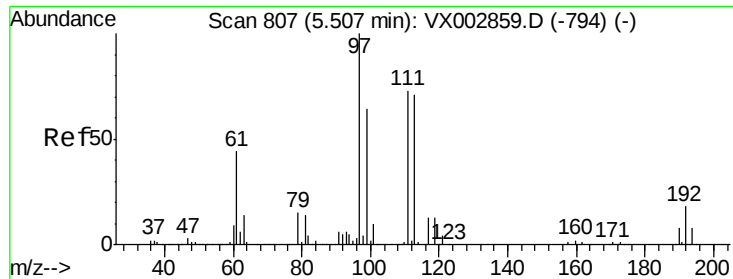
Tot Ion: 65 Resp: 178748
 Ion Ratio Lower Upper
 65 100
 67 51.2 0.0 102.6



#34
 1,4-Difluorobenzene
 Concen: 50.00 ug/l
 RT: 6.87 min Scan# 1030
 Delta R.T. -0.00 min
 Lab File: VX002960.D
 Acq: 28 Jun 2018 02:39

Tgt Ion: 114 Resp: 375052
 Ion Ratio Lower Upper
 114 100
 63 20.7 0.0 41.4
 88 15.4 0.0 30.0

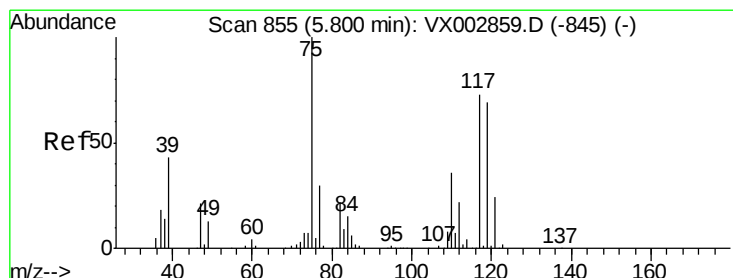
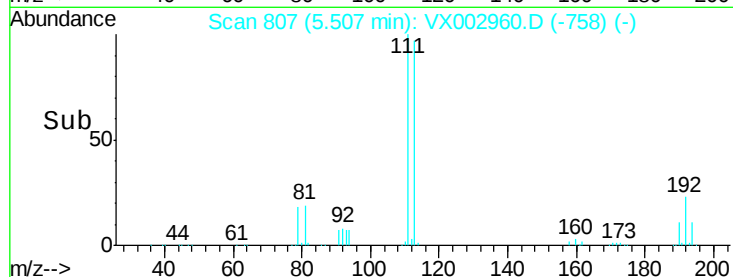
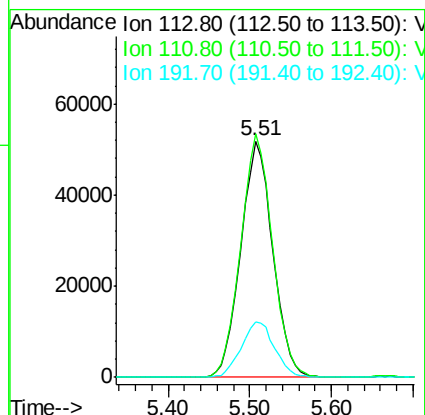
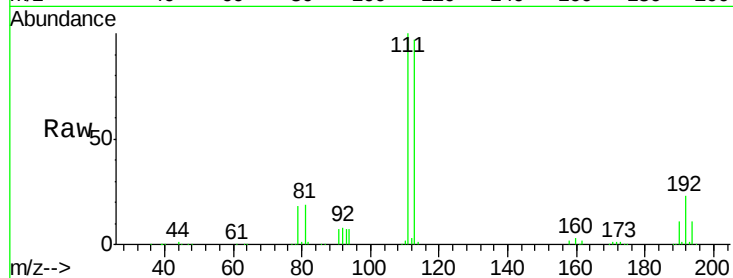




#35
Dibromofluoromethane
Concen: 47.54 ug/l
RT: 5.51 min Scan# 807
Delta R.T. -0.00 min
Lab File: VX002960.D
Acq: 28 Jun 2018 02:39

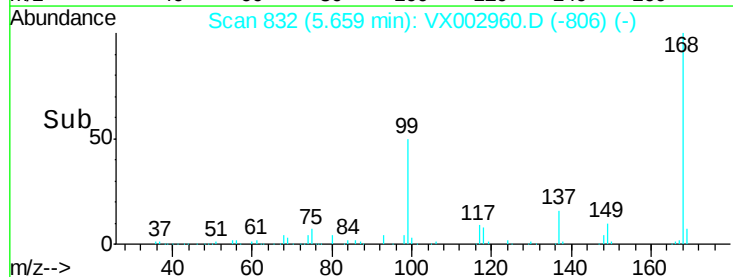
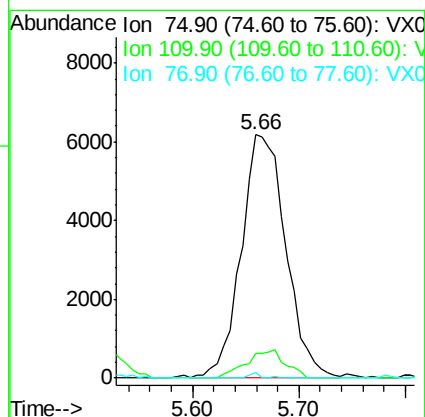
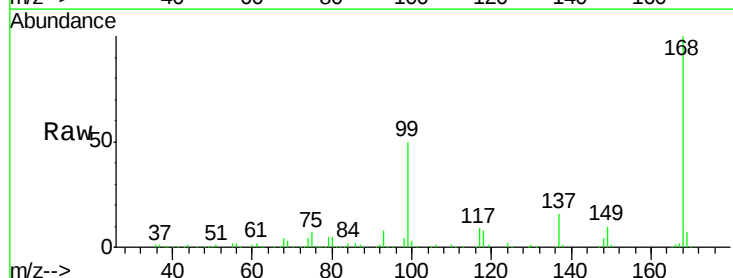
Instrument :
MSVOA_X
ClientSampleId :
GUN-HILL-FIELD-BLANK-2-6-22-18

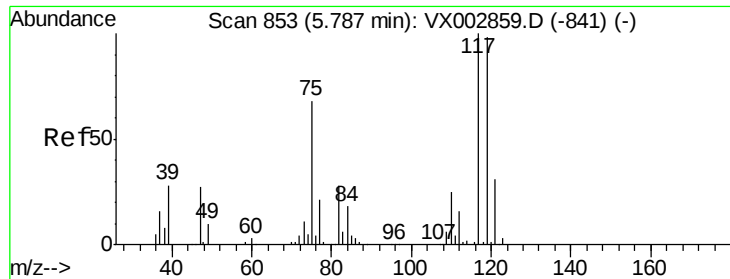
Tot Ion:113 Resp: 141193
Ion Ratio Lower Upper
113 100
111 102.4 81.4 122.0
192 24.4 19.1 28.7



#36
1,1-Dichloropropene
Concen: 4.42 ug/l
RT: 5.66 min Scan# 832
Delta R.T. -0.14 min
Lab File: VX002960.D
Acq: 28 Jun 2018 02:39

Tgt Ion: 75 Resp: 18163
Ion Ratio Lower Upper
75 100
110 0.0 18.1 54.4#
77 0.4 24.3 36.5#





#38

Carbon Tetrachloride

Concen: 5.44 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.12 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

GUN-HILL-FIELD-BLANK-2-6-22-18

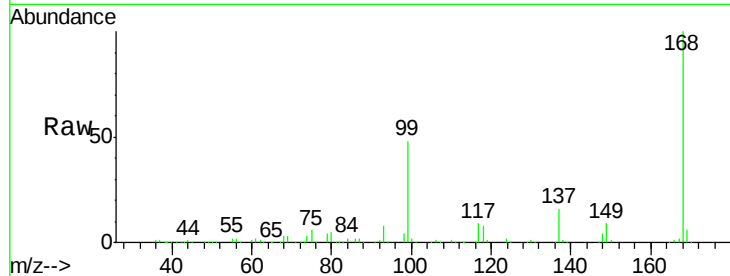
Tot Ion:117 Resp: 24534

Ion Ratio Lower Upper

117 100

119 5.8 77.4 116.0#

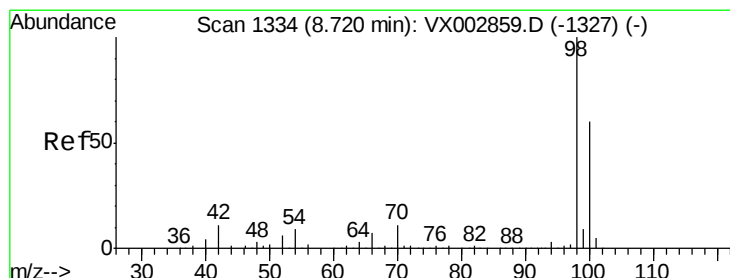
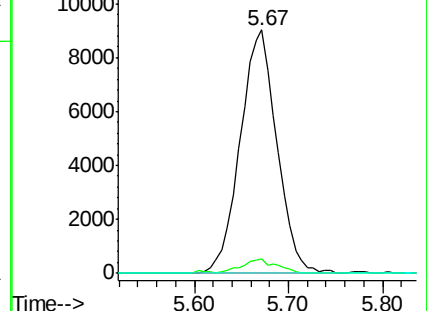
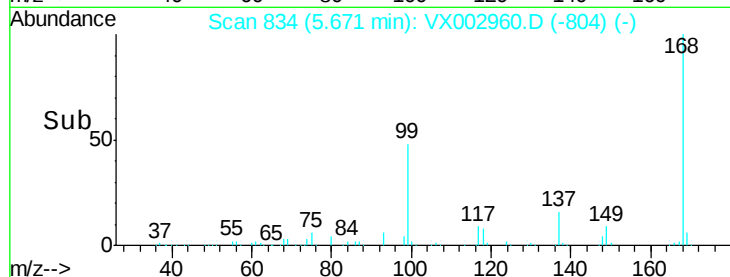
121 0.0 24.4 36.6#



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: 48.48 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX002960.D

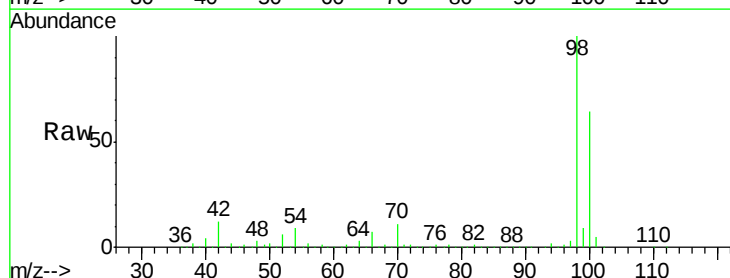
Acq: 28 Jun 2018 02:39

Tgt Ion: 98 Resp: 525833

Ion Ratio Lower Upper

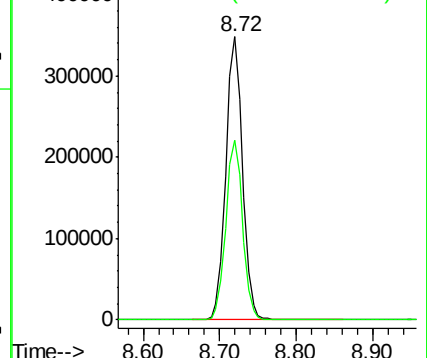
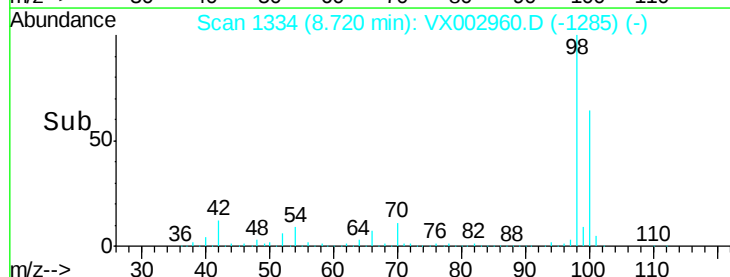
98 100

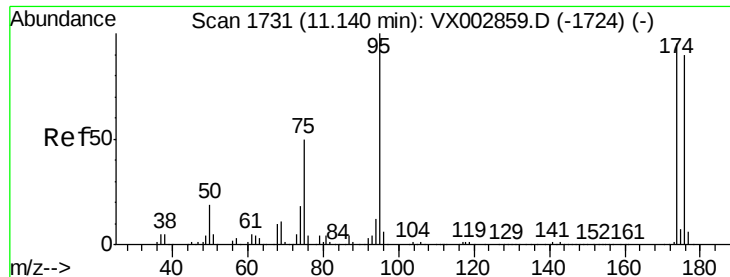
100 63.8 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#62

4-Bromofluorobenzene

Concen: 44.84 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.00 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

GUN-HILL-FIELD-BLANK-2-6-22-18

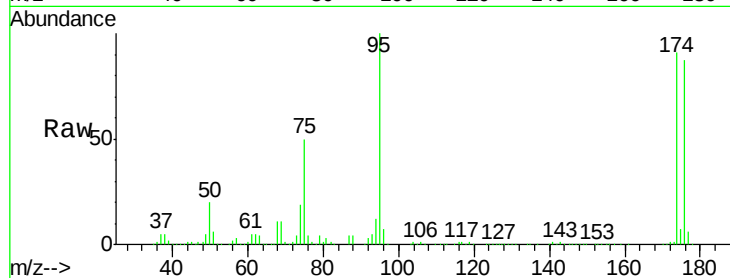
Tot Ion: 95 Resp: 187562

Ion Ratio Lower Upper

95 100

174 96.5 0.0 187.4

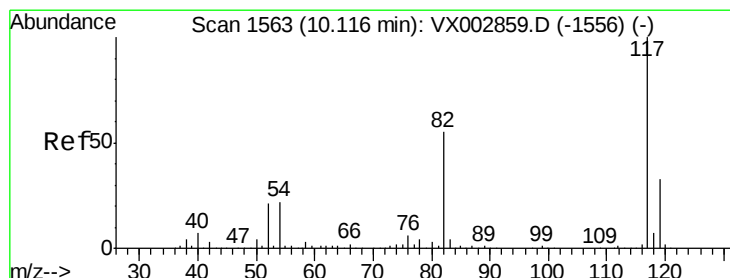
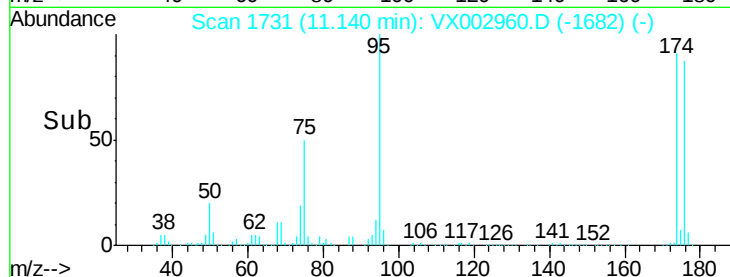
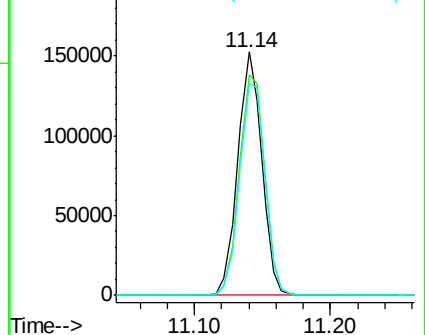
176 92.4 0.0 181.0



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.00 ug/l

RT: 10.12 min Scan# 1563

Delta R.T. -0.00 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

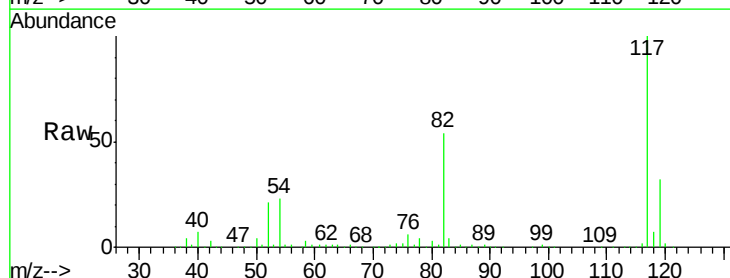
Tgt Ion: 117 Resp: 346571

Ion Ratio Lower Upper

117 100

82 54.2 45.0 67.4

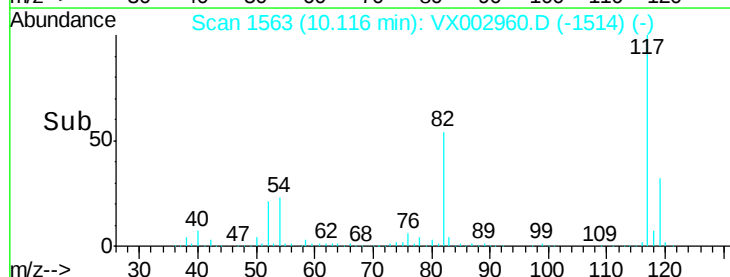
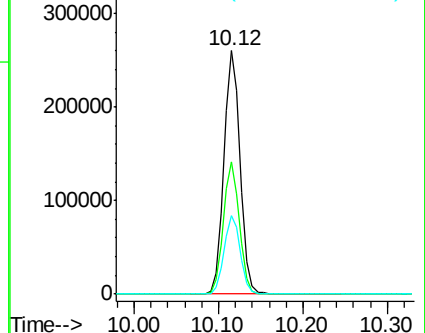
119 32.0 25.8 38.6

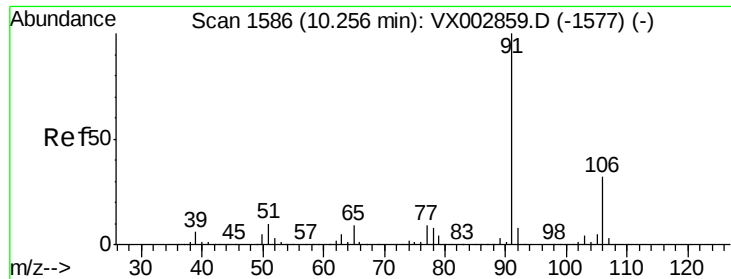


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V

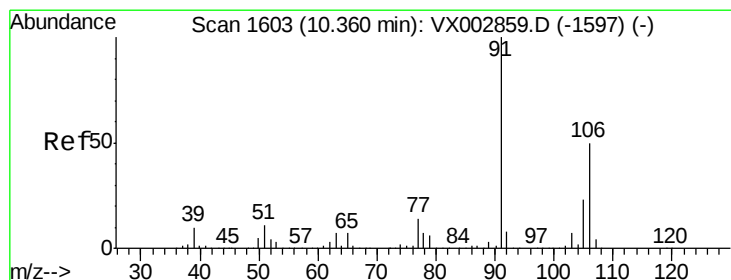
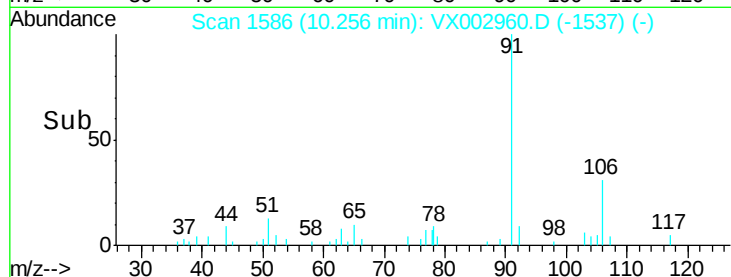
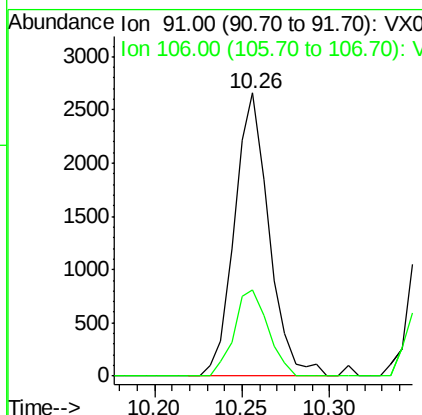
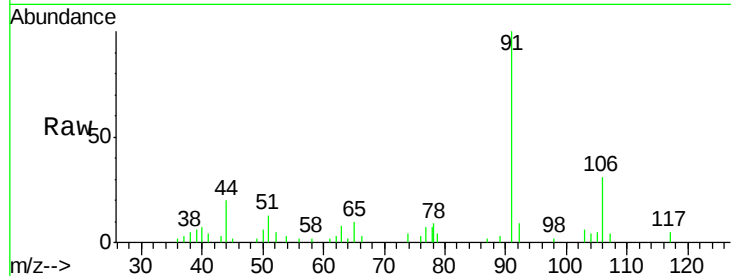




#67
Ethyl Benzene
Concen: 0.25 ug/l
RT: 10.26 min Scan# 1586
Delta R.T. -0.00 min
Lab File: VX002960.D
Acq: 28 Jun 2018 02:39

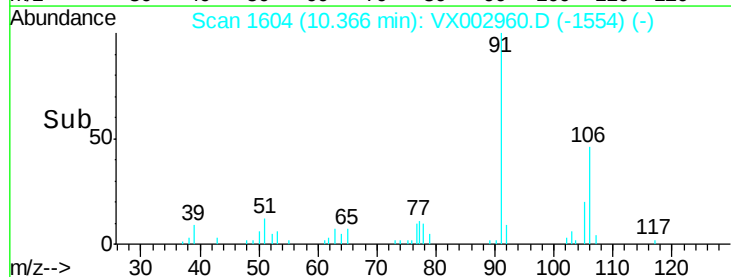
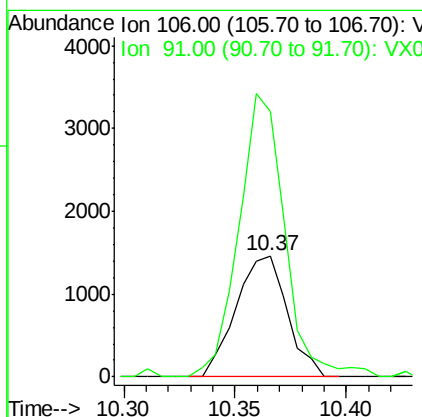
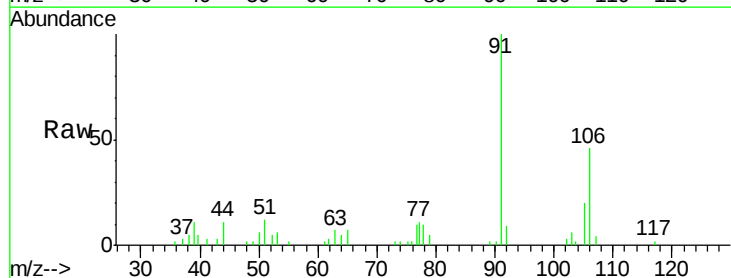
Instrument :
MSVOA_X
ClientSampleId :
GUN-HILL-FIELD-BLANK-2-6-22-18

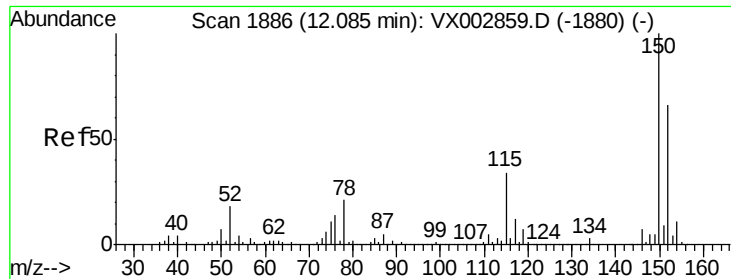
Tot Ion: 91 Resp: 3647
Ion Ratio Lower Upper
91 100
106 30.7 25.5 38.3



#68
m/p-Xylenes
Concen: 0.42 ug/l
RT: 10.37 min Scan# 1604
Delta R.T. 0.01 min
Lab File: VX002960.D
Acq: 28 Jun 2018 02:39

Tgt Ion: 106 Resp: 2334
Ion Ratio Lower Upper
106 100
91 211.4 163.4 245.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.08 min Scan# 1885

Delta R.T. -0.01 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

GUN-HILL-FIELD-BLANK-2-6-22-18

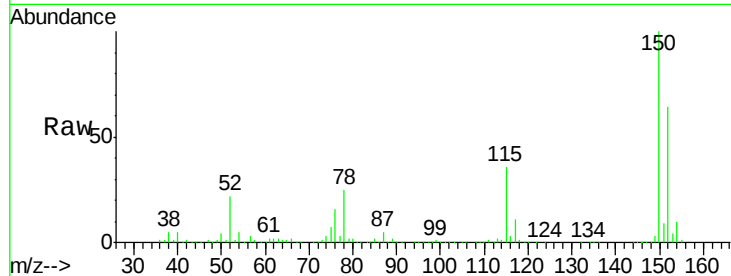
Tot Ion:152 Resp: 195523

Ion Ratio Lower Upper

152 100

115 54.5 40.1 120.2

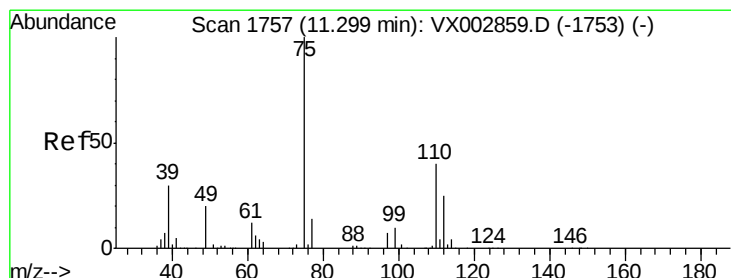
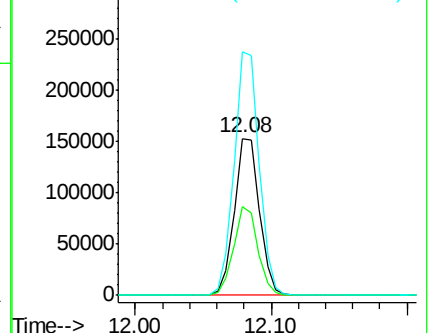
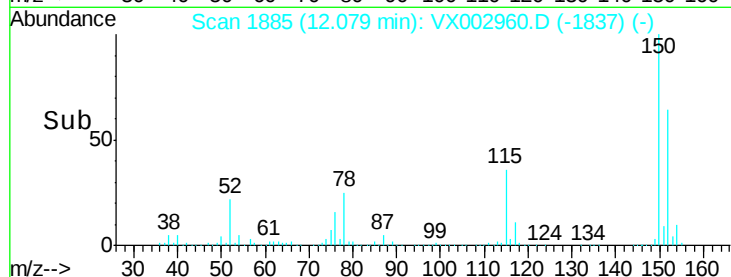
150 155.1 0.0 347.2



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: 27.15 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002960.D

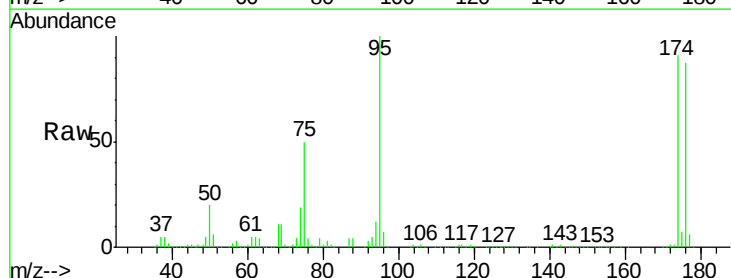
Acq: 28 Jun 2018 02:39

Tgt Ion: 75 Resp: 96142

Ion Ratio Lower Upper

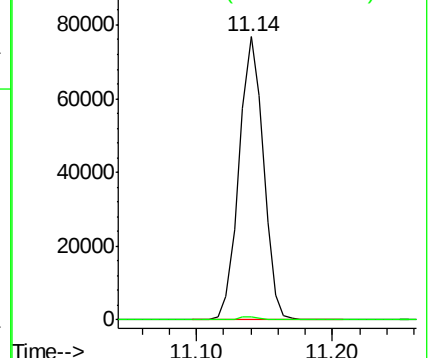
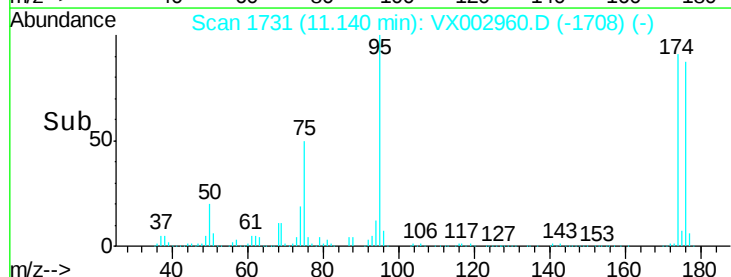
75 100

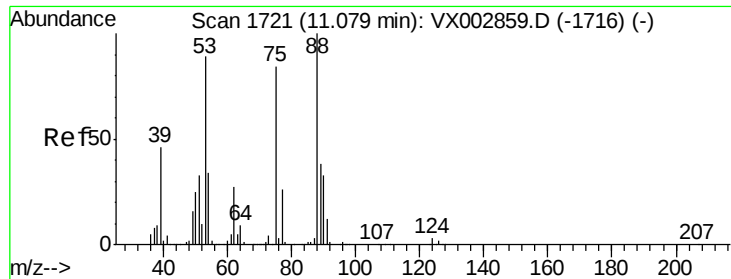
77 1.2 22.8 68.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 76.83 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002960.D

Acq: 28 Jun 2018 02:39

Instrument :

MSVOA_X

ClientSampleId :

GUN-HILL-FIELD-BLANK-2-6-22-18

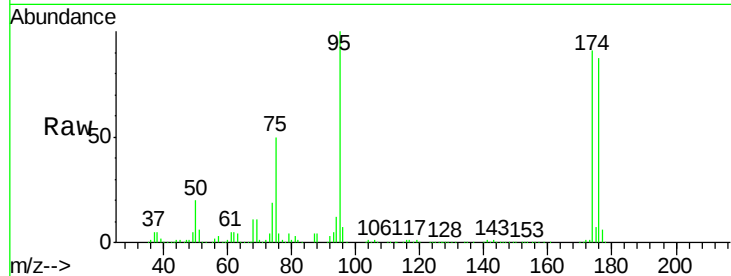
Tot Ion: 75 Resp: 96142

Ion Ratio Lower Upper

75 100

53 0.1 86.8 130.2#

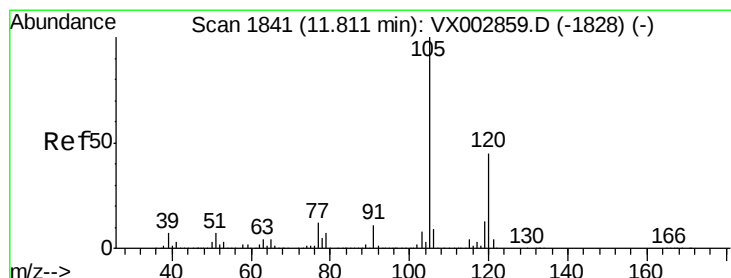
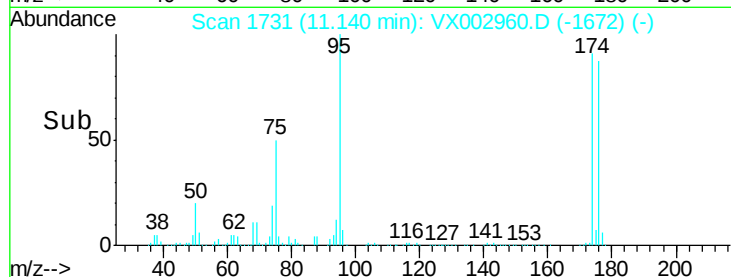
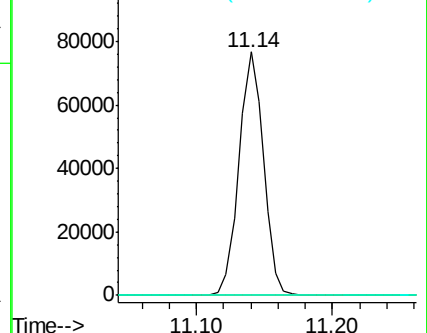
89 0.0 38.2 57.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0



#84

1,2,4-Trimethylbenzene

Concen: 0.25 ug/l

RT: 11.81 min Scan# 1841

Delta R.T. -0.00 min

Lab File: VX002960.D

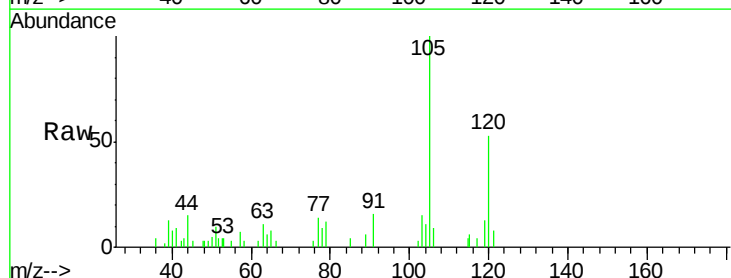
Acq: 28 Jun 2018 02:39

Tgt Ion: 105 Resp: 2891

Ion Ratio Lower Upper

105 100

120 46.7 22.3 66.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

