

Data File : VU035034.D
Acq On : 10 Oct 2019 08:52
Operator : JC/SP
Sample : VSTDCCC005
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTD00511

Quant Time: Oct 11 02:01:43 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR100719WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Thu Oct 10 03:36:45 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.86	114	212387	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.07	117	216933	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.46	152	110173	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.39	65	61965	4.94	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	98.80%
7) Chloroethane-d5	1.68	69	54516	4.65	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	93.00%
11) 1,1-Dichloroethene-d2	2.26	63	124733	4.71	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	94.20%
20) 2-Butanone-d5	4.18	46	178683	48.33	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	96.66%
24) Chloroform-d	4.62	84	112480	4.79	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	95.80%
26) 1,2-Dichloroethane-d4	5.29	65	62949	4.48	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	89.60%
32) Benzene-d6	5.32	84	219727	4.32	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	86.40%
36) 1,2-Dichloropropane-d6	6.31	67	74657	4.39	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	87.80%
41) Toluene-d8	7.54	98	212448	4.32	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	86.40%
43) trans-1,3-Dichloropropene-	7.83	79	26779	4.38	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	87.60%
46) 2-Hexanone-d5	8.30	63	135763	46.64	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	93.28%
57) 1,1,2,2-Tetrachloroethane-	10.41	84	65088	4.54	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	90.80%
64) 1,2-Dichlorobenzene-d4	11.84	152	77393	4.16	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	83.20%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.20	85	95521	4.921 ug/L	98
3) Chloromethane	1.32	50	103464	4.859 ug/L	100
5) Vinyl chloride	1.40	62	102007	4.877 ug/L	98
6) Bromomethane	1.62	94	57897	4.980 ug/L	95
8) Chloroethane	1.69	64	62231	4.961 ug/L	96
9) Trichlorofluoromethane	1.88	101	127651	5.047 ug/L	100
10) 1,1,2-Trichloro-1,2,2-trif	2.28	101	72361	4.982 ug/L	98
12) 1,1-Dichloroethene	2.27	96	66880	4.903 ug/L	83
13) Acetone	2.33	43	159288	52.604 ug/L	94
14) Carbon disulfide	2.46	76	204373	4.502 ug/L	99
15) Methyl Acetate	2.61	43	39370	4.884 ug/L	99
16) Methylene chloride	2.68	84	78421	4.643 ug/L	85
17) Methyl tert-butyl Ether	2.99	73	188428	5.063 ug/L	98
18) trans-1,2-Dichloroethene	2.96	96	70777	4.845 ug/L	94
19) 1,1-Dichloroethane	3.42	63	145914	5.026 ug/L	98
21) 2-Butanone	4.27	43	229589	53.242 ug/L	96
22) cis-1,2-Dichloroethene	4.20	96	77435	4.752 ug/L	88

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Instrument :
MSVOA_U
ClientSampleId :
VSTD00511

Quant Time: Oct 11 02:01:43 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMUTR100719WMA.M
Quant Title : TRACE VOA SOM01.0
QLast Update : Thu Oct 10 03:36:45 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Bromochloromethane	4.52	128	34427	5.041	ug/L	93
25) Chloroform	4.65	83	149428	4.581	ug/L	100
27) 1,2-Dichloroethane	5.38	62	95488	5.012	ug/L	100
29) 1,1,1-Trichloroethane	4.89	97	115864	4.755	ug/L	97
30) Cyclohexane	4.97	56	127672	4.766	ug/L	93
31) Carbon tetrachloride	5.11	117	101038	4.783	ug/L	99
33) Benzene	5.36	78	315663	4.831	ug/L	100
34) Trichloroethene	6.16	95	79747	4.732	ug/L	98
35) Methylcyclohexane	6.39	83	127149	4.658	ug/L	98
37) 1,2-Dichloropropane	6.41	63	87307	4.953	ug/L	99
38) Bromodichloromethane	6.74	83	98280	4.756	ug/L	100
39) cis-1,3-Dichloropropene	7.25	75	115098	4.820	ug/L	100
40) 4-Methyl-2-pentanone	7.45	43	572011	51.561	ug/L	95
42) Toluene	7.61	91	339701	4.980	ug/L	100
44) trans-1,3-Dichloropropene	7.86	75	90477	4.892	ug/L	98
45) 1,1,2-Trichloroethane	8.05	97	58467	4.996	ug/L	94
47) Tetrachloroethene	8.21	164	64114	4.700	ug/L	93
48) 2-Hexanone	8.35	43	405159	53.265	ug/L	96
49) Dibromochloromethane	8.46	129	67039	4.956	ug/L	99
50) 1,2-Dibromoethane	8.57	107	56362	5.039	ug/L	98
51) Chlorobenzene	9.10	112	214997	4.864	ug/L	99
52) Ethylbenzene	9.23	91	368667	4.894	ug/L	100
53) m,p-Xylene	9.35	106	137964	4.958	ug/L	97
54) o-Xylene	9.76	106	136815	5.027	ug/L	99
55) Styrene	9.77	104	230850	5.238	ug/L	97
56) Isopropylbenzene	10.14	105	362284	4.997	ug/L	99
58) 1,1,2,2-Tetrachloroethane	10.44	83	80125	5.034	ug/L	99
59) 1,2,3-Trichloropropane	10.47	75	56186	4.924	ug/L	99
61) Bromoform	9.94	173	35643	4.717	ug/L	97
62) 1,3-Dichlorobenzene	11.40	146	167074	4.923	ug/L	97
63) 1,4-Dichlorobenzene	11.49	146	166043	4.847	ug/L	97
65) 1,2-Dichlorobenzene	11.86	146	157994	4.824	ug/L	98
66) 1,2-Dibromo-3-chloropropan	12.63	75	9904	4.759	ug/L	91
67) 1,3,5-Trichlorobenzene	12.86	180	111710	4.861	ug/L	98
68) 1,2,4-trichlorobenzene	13.48	180	77669	4.525	ug/L	98
69) Naphthalene	13.72	128	106483	3.990	ug/L	99
70) 1,2,3-Trichlorobenzene	13.96	180	77432	4.639	ug/L	99

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

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ALS Vial      : 2      Sample Multiplier: 1
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Instrument :
MSVOA_U
ClientSampleId :
VSTD00511

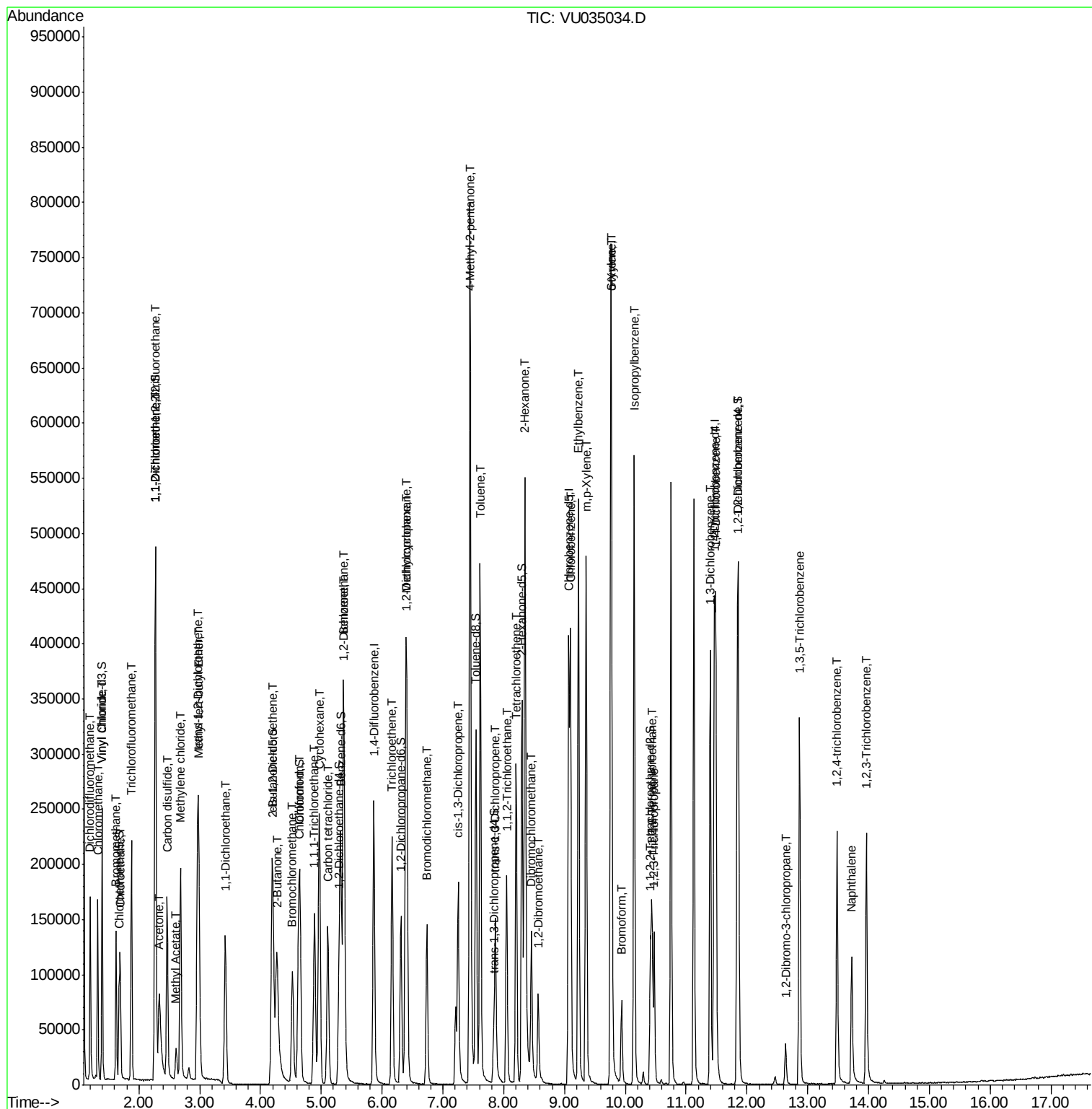
Quant Time: Oct 11 02:01:43 2019

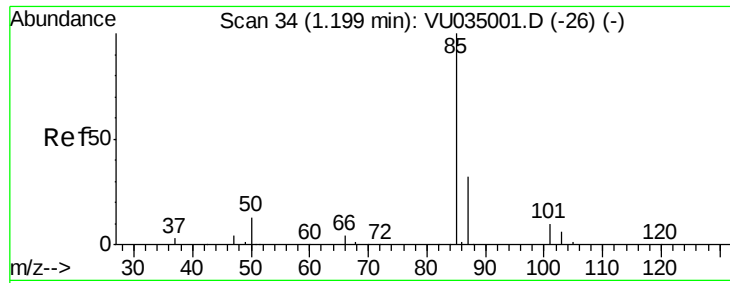
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_U\METHOD\SOMUTR100719WMA.M

Quant Title : TRACE VOA SOM01.0

QLast Update : Thu Oct 10 03:36:45 2019

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 4.921 ug/L

RT: 1.20 min Scan# 34

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

Instrument :

MSVOA_U

ClientSampleId :

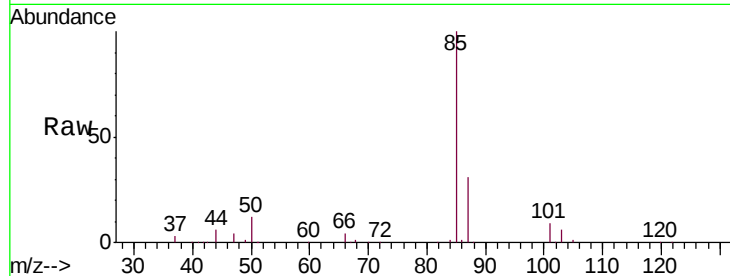
VSTD00511

Tgt Ion: 85 Resp: 95521

Ion Ratio Lower Upper

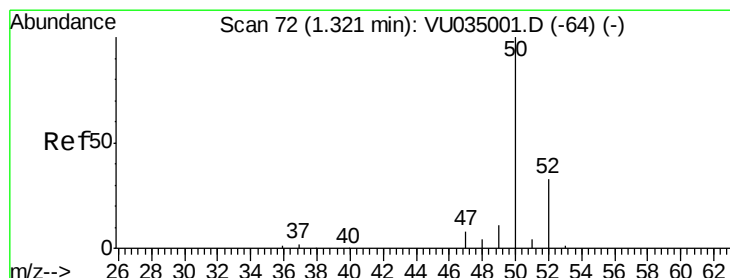
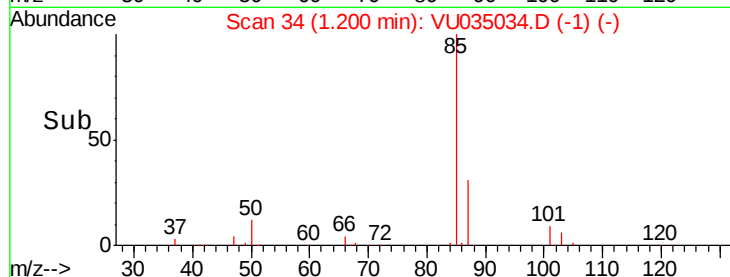
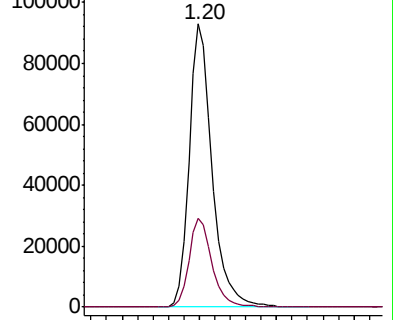
85 100

87 31.5 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VU035001.D (-26) (-)

Ion 87.00 (86.70 to 87.70): VU035001.D (-26) (-)



#3

Chloromethane

Concen: 4.859 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VU035034.D

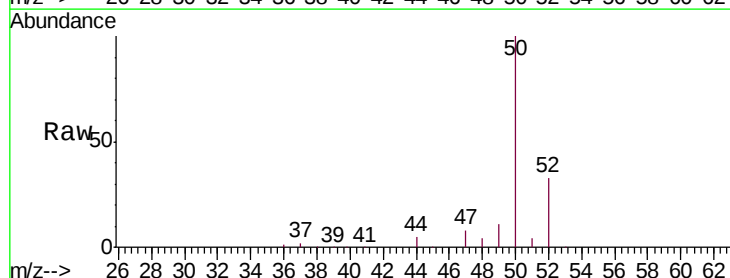
Acq: 10 Oct 2019 08:52

Tgt Ion: 50 Resp: 103464

Ion Ratio Lower Upper

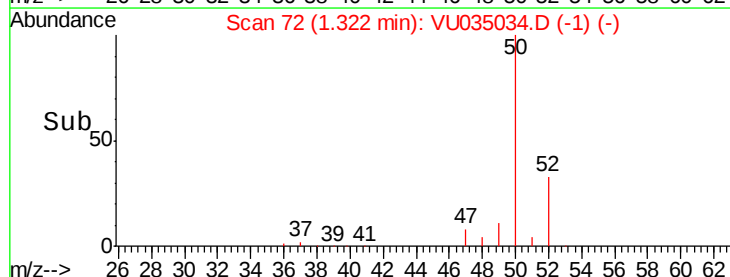
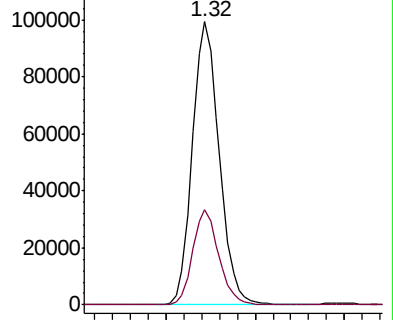
50 100

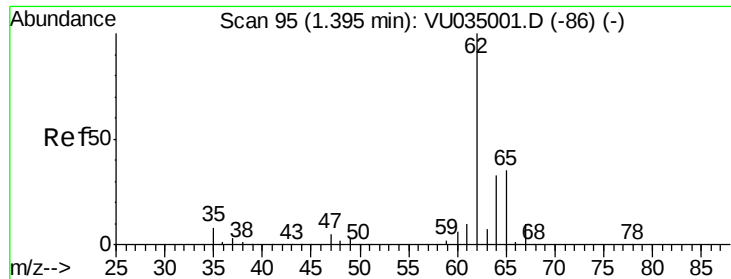
52 33.5 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VU035001.D (-64) (-)

Ion 52.05 (51.75 to 52.75): VU035001.D (-64) (-)





#5

Vinyl chloride

Concen: 4.877 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

Instrument :

MSVOA_U

ClientSampleId :

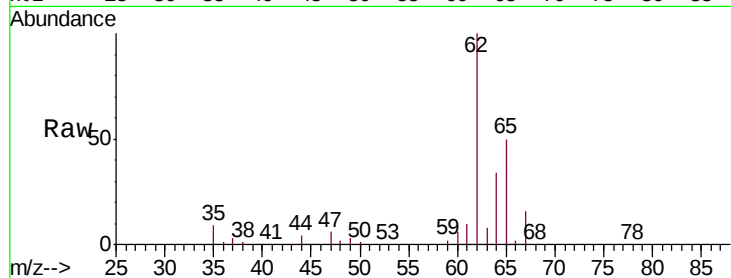
VSTD00511

Tgt Ion: 62 Resp: 102007

Ion Ratio Lower Upper

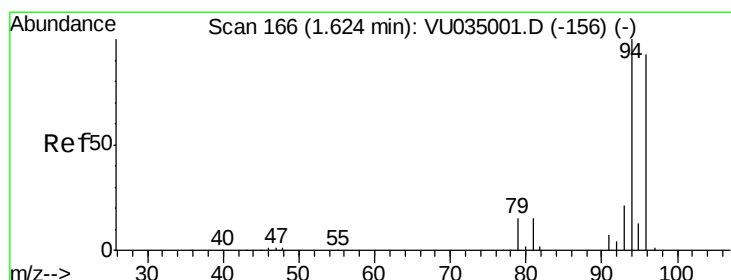
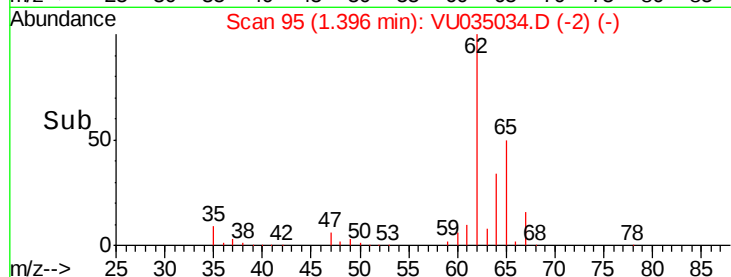
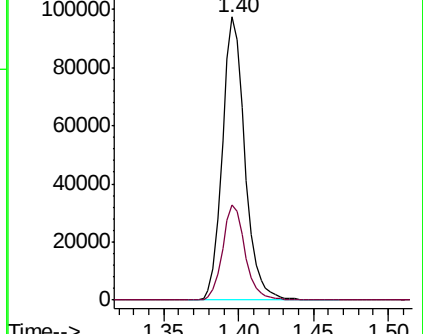
62 100

64 33.6 22.8 42.4



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#6

Bromomethane

Concen: 4.980 ug/L

RT: 1.62 min Scan# 166

Delta R.T. 0.00 min

Lab File: VU035034.D

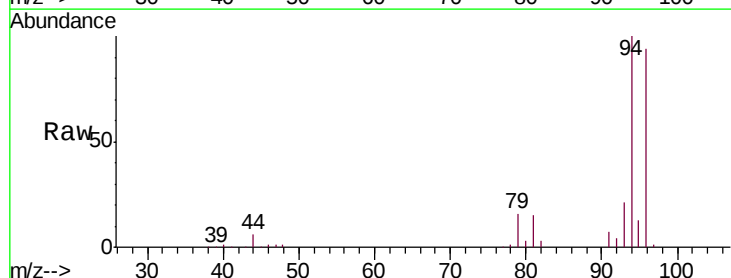
Acq: 10 Oct 2019 08:52

Tgt Ion: 94 Resp: 57897

Ion Ratio Lower Upper

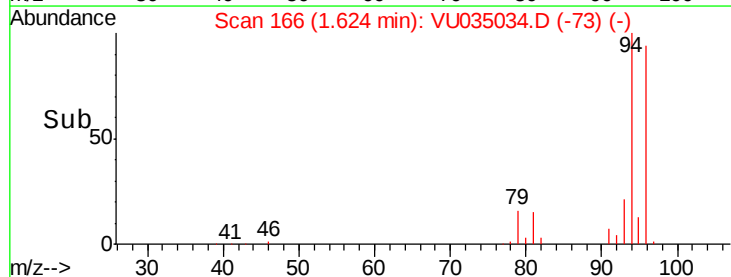
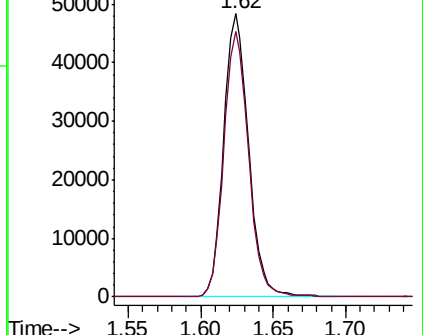
94 100

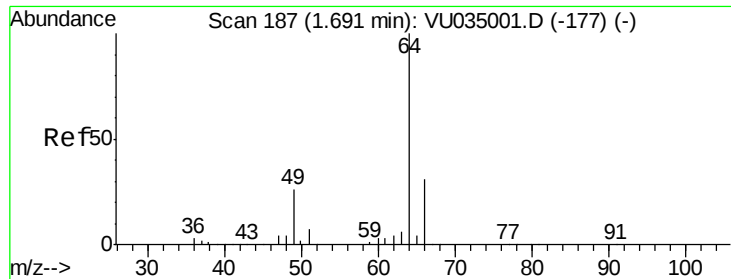
96 93.6 62.4 116.0



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 4.961 ug/L

RT: 1.69 min Scan# 187

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

Instrument :

MSVOA_U

ClientSampleId :

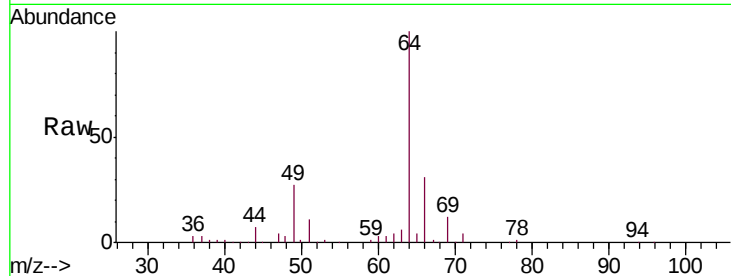
VSTD00511

Tgt Ion: 64 Resp: 62231

Ion Ratio Lower Upper

64 100

66 31.0 23.2 43.2



Abundance Ion 64.10 (63.80 to 64.80): VU035001.D (-177) (-)

Ion 66.05 (65.75 to 66.75): VU035001.D (-177) (-)

1.69

60000

50000

40000

30000

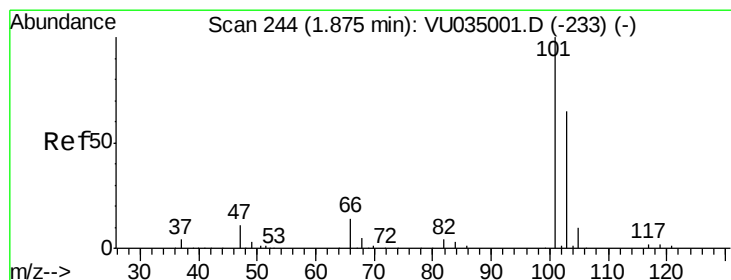
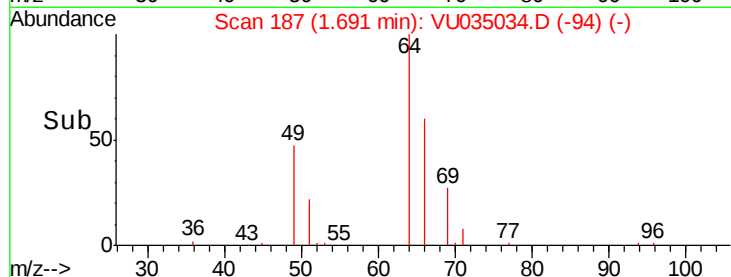
20000

10000

0

1.65 1.70 1.75 1.80

Time-->



#9

Trichlorofluoromethane

Concen: 5.047 ug/L

RT: 1.88 min Scan# 245

Delta R.T. 0.00 min

Lab File: VU035034.D

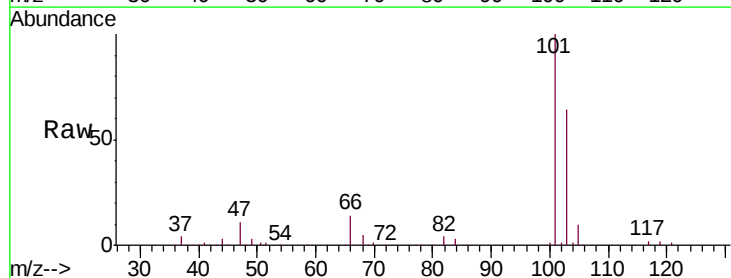
Acq: 10 Oct 2019 08:52

Tgt Ion: 101 Resp: 127651

Ion Ratio Lower Upper

101 100

103 65.4 52.2 78.4



Abundance Ion 101.00 (100.70 to 101.70): VU035001.D (-233) (-)

Ion 103.00 (102.70 to 103.70): VU035001.D (-233) (-)

1.88

100000

80000

60000

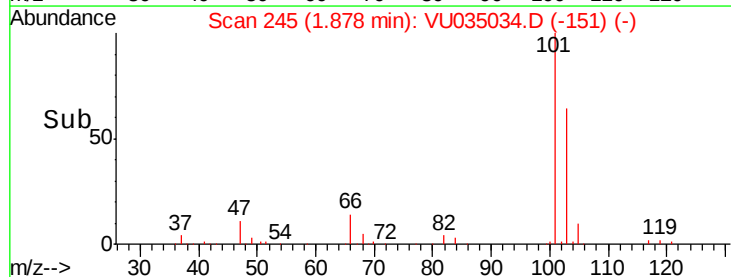
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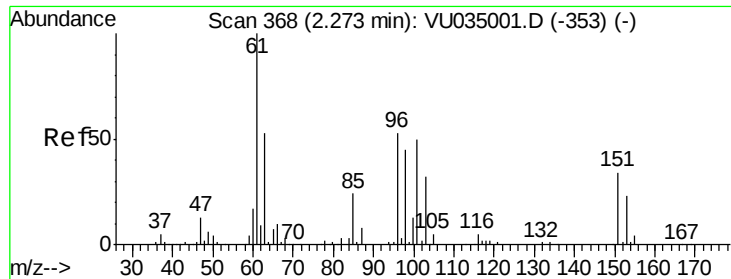
20000

0

1.80 1.85 1.90 1.95

Time-->





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 4.982 ug/L

RT: 2.28 min Scan# 369

Delta R.T. 0.00 min

Lab File: VU035034.D

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Instrument :

MSVOA_U

ClientSampleId :

VSTD00511

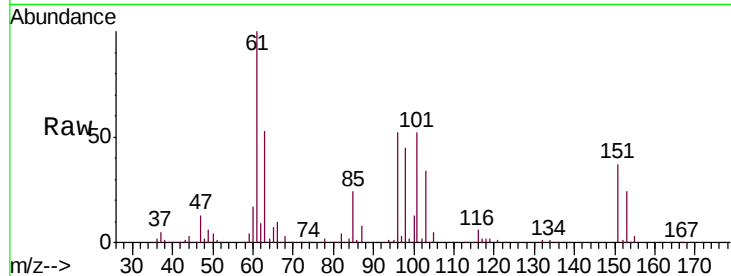
Tgt Ion:101 Resp: 72361

Ion Ratio Lower Upper

101 100

85 46.4 37.4 56.0

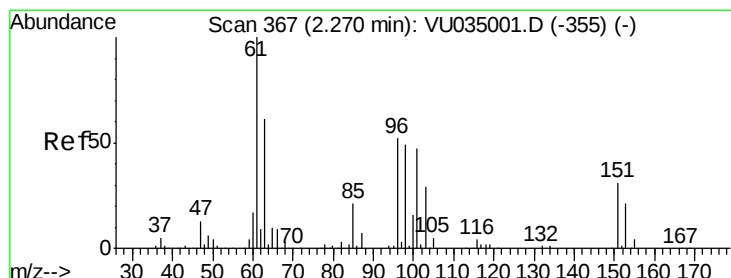
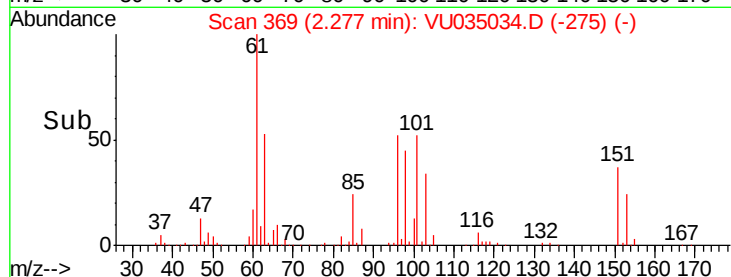
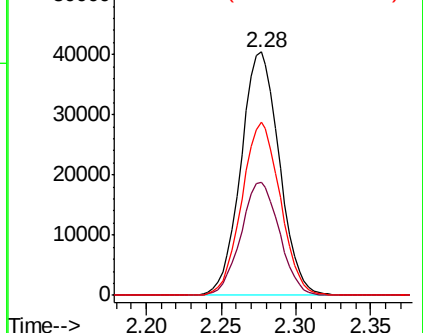
151 71.0 58.6 87.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 4.903 ug/L

RT: 2.27 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

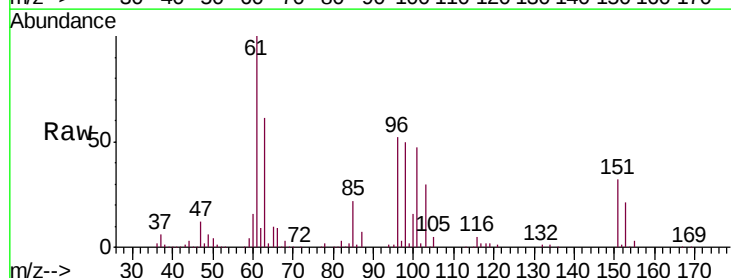
Tgt Ion: 96 Resp: 66880

Ion Ratio Lower Upper

96 100

61 193.9 129.3 240.1

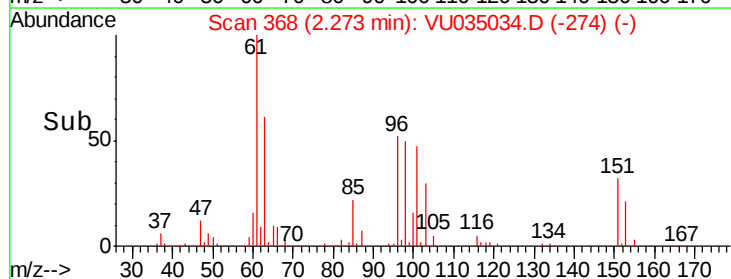
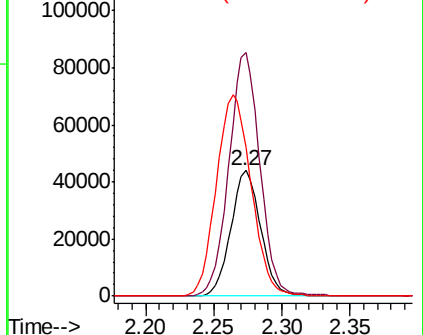
63 118.4 108.9 202.3

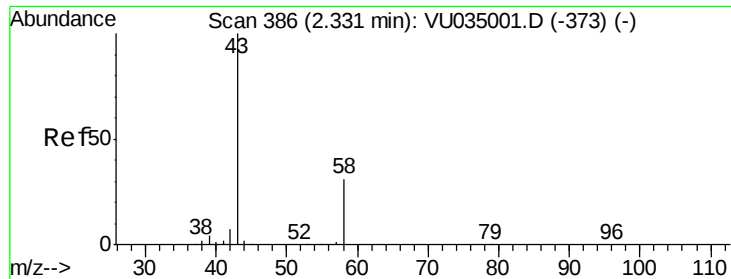


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 52.604 ug/L

RT: 2.33 min Scan# 387

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

Instrument :

MSVOA_U

ClientSampleId :

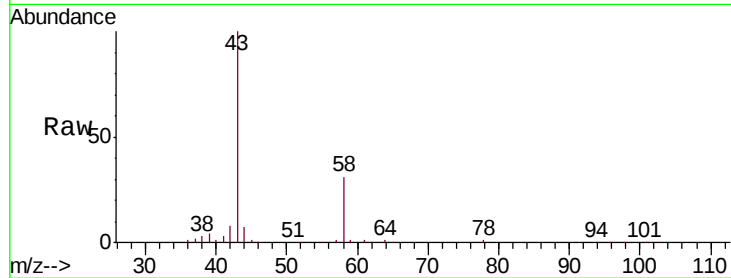
VSTD00511

Tgt Ion: 43 Resp: 159288

Ion Ratio Lower Upper

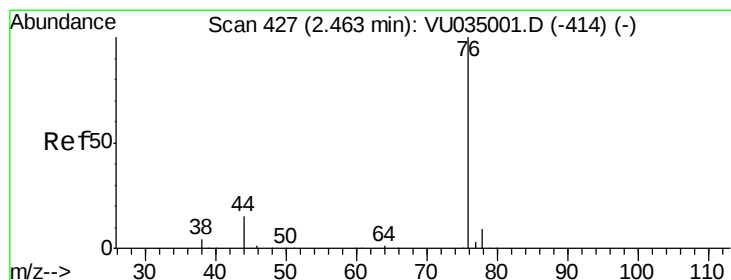
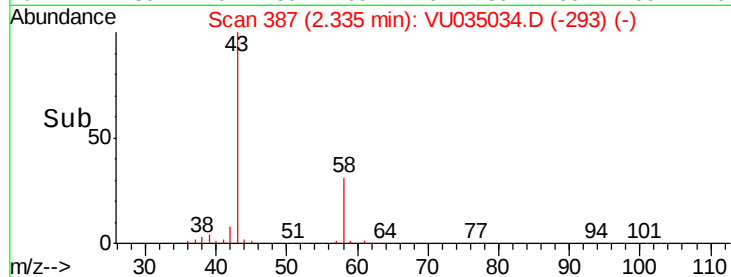
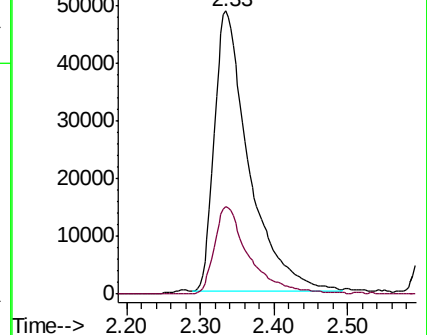
43 100

58 30.1 0.0 66.6



Abundance Ion 43.05 (42.75 to 43.75): VU035001.D (-373) (-)

Ion 58.05 (57.75 to 58.75): VU035001.D (-373) (-)



#14

Carbon disulfide

Concen: 4.502 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VU035034.D

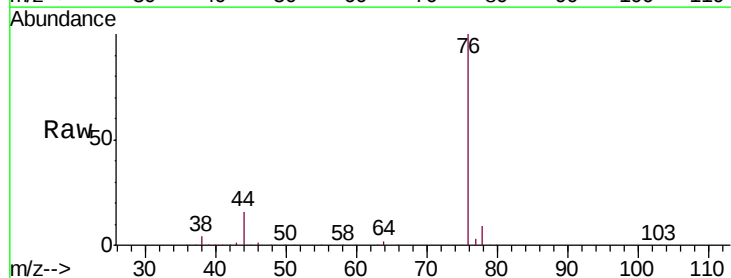
Acq: 10 Oct 2019 08:52

Tgt Ion: 76 Resp: 204373

Ion Ratio Lower Upper

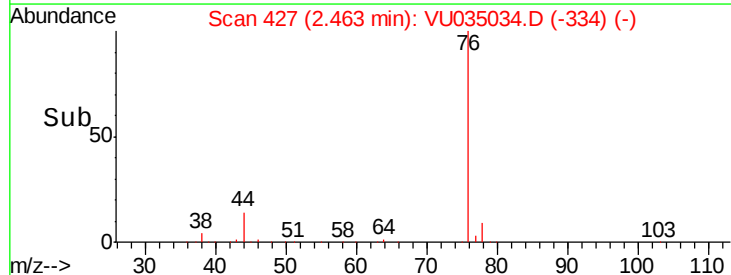
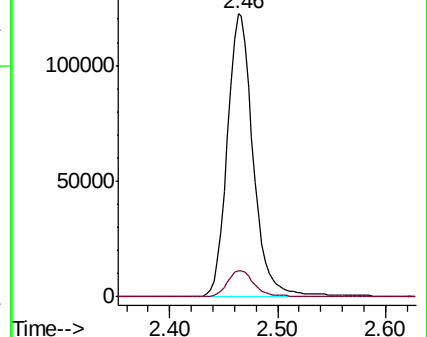
76 100

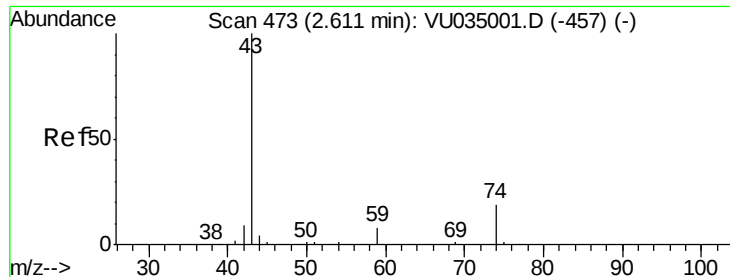
78 9.3 7.1 10.7



Abundance Ion 76.05 (75.75 to 76.75): VU035001.D (-414) (-)

Ion 78.00 (77.70 to 78.70): VU035001.D (-414) (-)





#15

Methyl Acetate

Concen: 4.884 ug/L

RT: 2.61 min Scan# 473

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

Instrument :

MSVOA_U

ClientSampleId :

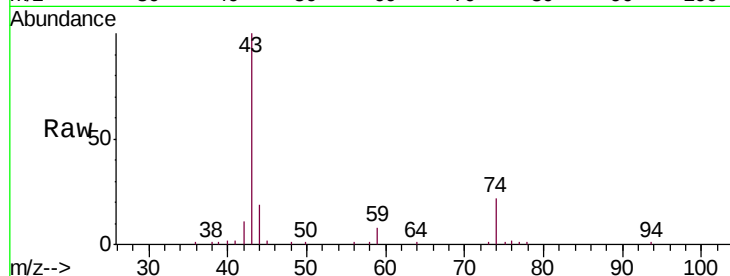
VSTD00511

Tgt Ion: 43 Resp: 39370

Ion Ratio Lower Upper

43 100

74 21.9 17.8 26.8



Abundance Ion 43.05 (42.75 to 43.75): VU035034.D (-457) (-)

Ion 74.05 (73.75 to 74.75): VU035034.D (-457) (-)

2.61

20000

15000

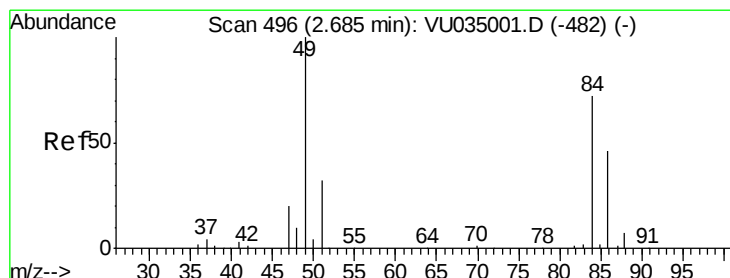
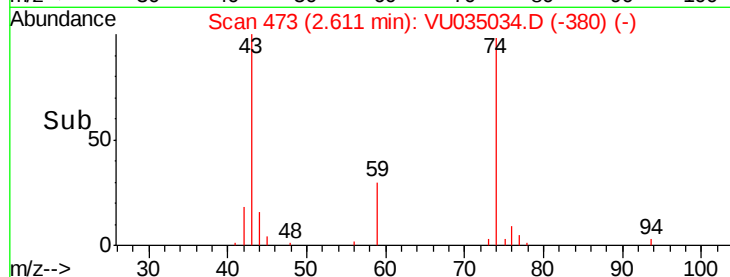
10000

5000

0

Time-->

2.55 2.60 2.65 2.70



#16

Methylene chloride

Concen: 4.643 ug/L

RT: 2.68 min Scan# 496

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

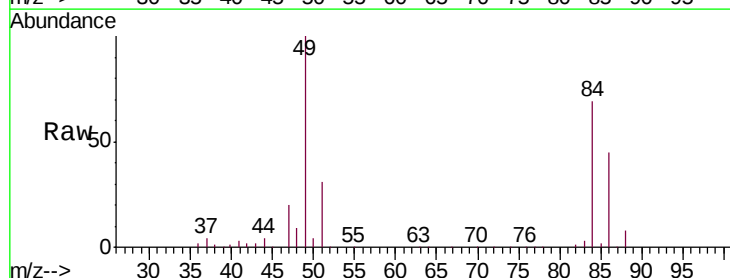
Tgt Ion: 84 Resp: 78421

Ion Ratio Lower Upper

84 100

86 65.5 42.5 78.9

49 145.5 86.9 161.3



Abundance Ion 84.05 (83.75 to 84.75): VU035034.D (-482) (-)

Ion 86.00 (85.70 to 86.70): VU035034.D (-482) (-)

Ion 49.10 (48.80 to 49.80): VU035034.D (-482) (-)

2.68

80000

60000

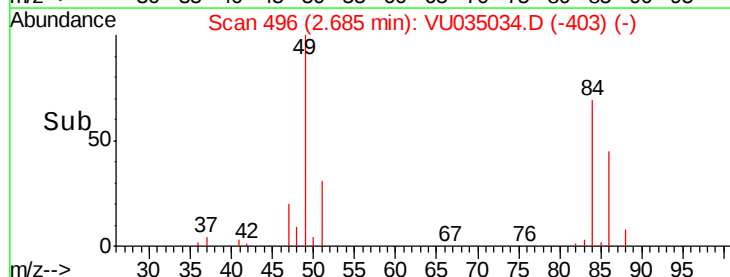
40000

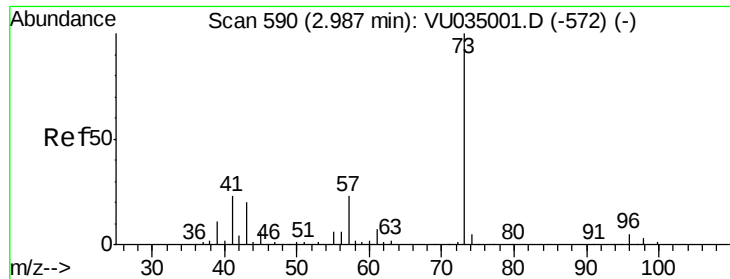
20000

0

Time-->

2.60 2.65 2.70 2.75 2.80

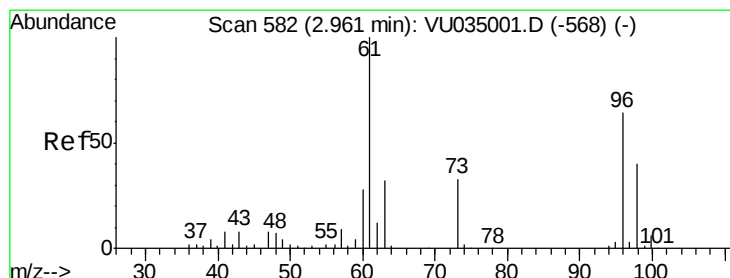
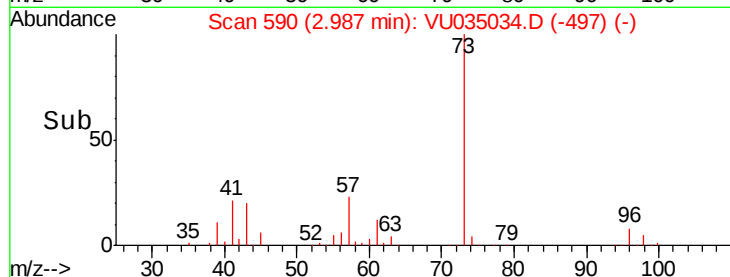
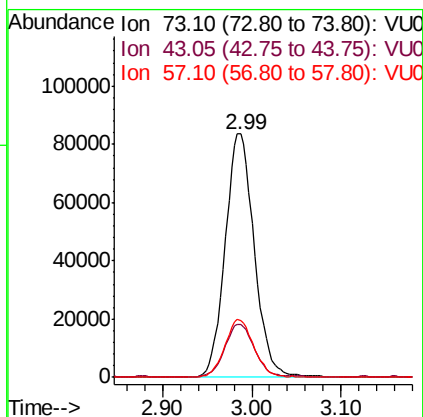
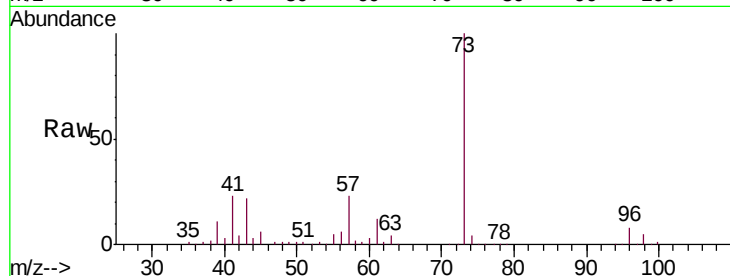




#17
Methyl tert-butyl Ether
Concen: 5.063 ug/L
RT: 2.99 min Scan# 590
Delta R.T. 0.00 min
Lab File: VU035034.D
Acq: 10 Oct 2019 08:52

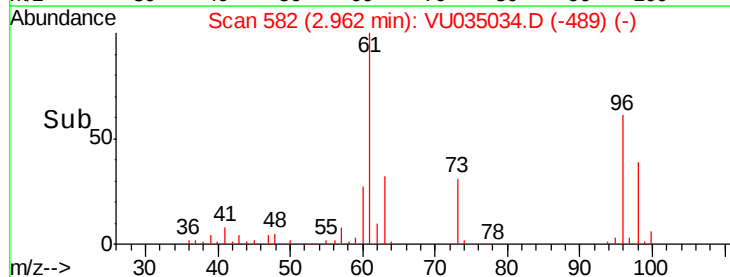
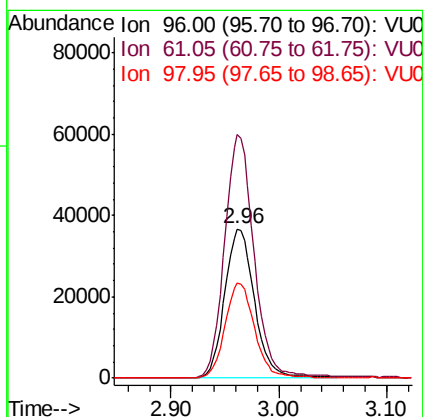
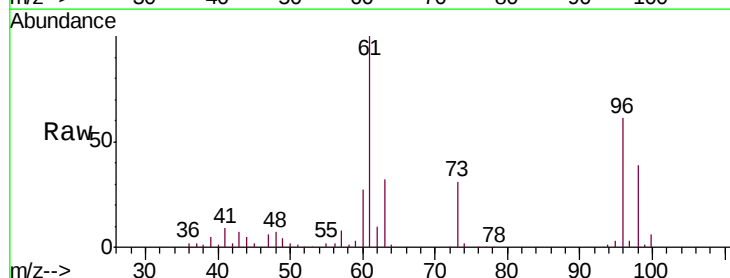
Instrument :
MSVOA_U
ClientSampled :
VSTD00511

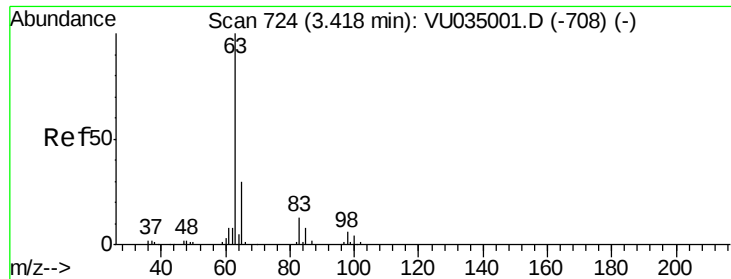
Tgt Ion: 73 Resp: 188428
Ion Ratio Lower Upper
73 100
43 21.9 16.3 24.5
57 23.5 18.6 28.0



#18
trans-1,2-Dichloroethene
Concen: 4.845 ug/L
RT: 2.96 min Scan# 582
Delta R.T. 0.00 min
Lab File: VU035034.D
Acq: 10 Oct 2019 08:52

Tgt Ion: 96 Resp: 70777
Ion Ratio Lower Upper
96 100
61 163.3 107.1 198.9
98 63.6 45.4 84.4





#19

1,1-Dichloroethane

Concen: 5.026 ug/L

RT: 3.42 min Scan# 725

Delta R.T. 0.00 min

Lab File: VU035034.D

Acq: 10 Oct 2019 08:52

Instrument :

MSVOA_U

ClientSampleId :

VSTD00511

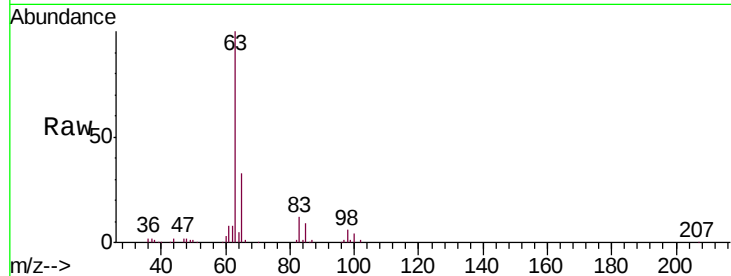
Tgt Ion: 63 Resp: 145914

Ion Ratio Lower Upper

63 100

65 32.6 21.7 40.3

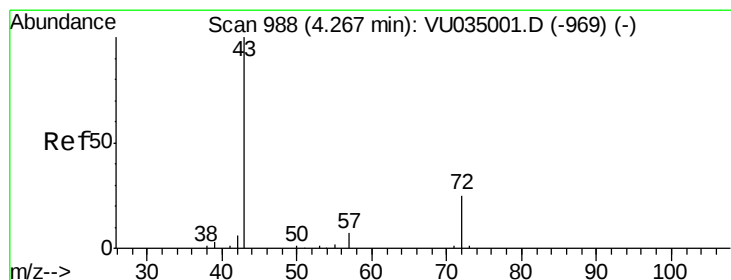
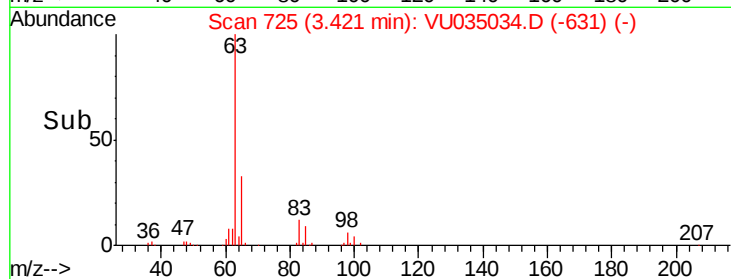
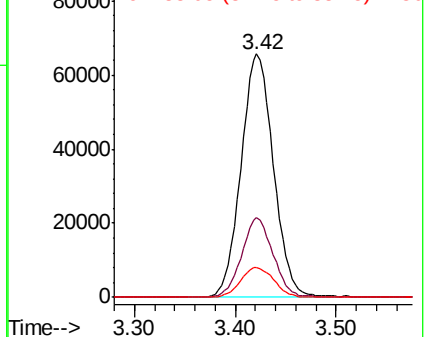
83 12.4 9.0 16.8



Abundance Ion 63.10 (62.80 to 63.80): VU035034.D (-631) (-)

Ion 65.10 (64.80 to 65.80): VU035034.D (-631) (-)

Ion 83.05 (82.75 to 83.75): VU035034.D (-631) (-)



#21

2-Butanone

Concen: 53.242 ug/L

RT: 4.27 min Scan# 989

Delta R.T. 0.00 min

Lab File: VU035034.D

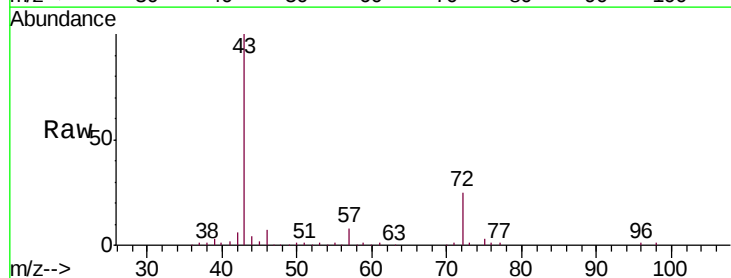
Acq: 10 Oct 2019 08:52

Tgt Ion: 43 Resp: 229589

Ion Ratio Lower Upper

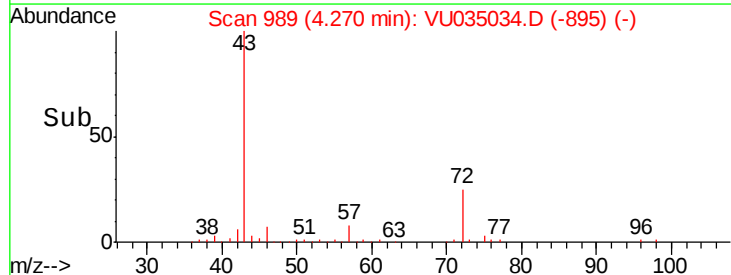
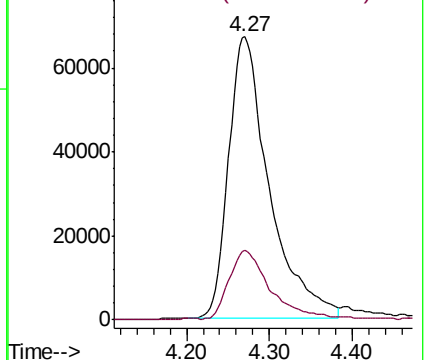
43 100

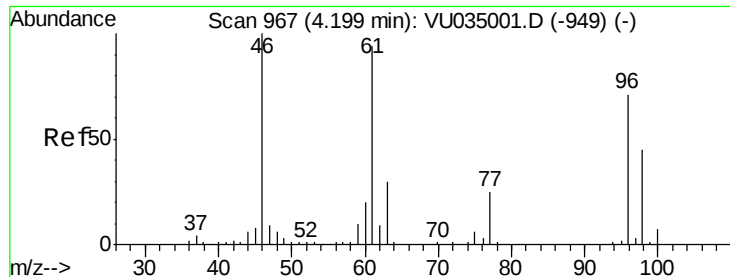
72 25.0 13.5 40.4



Abundance Ion 43.05 (42.75 to 43.75): VU035034.D (-895) (-)

Ion 72.10 (71.80 to 72.80): VU035034.D (-895) (-)



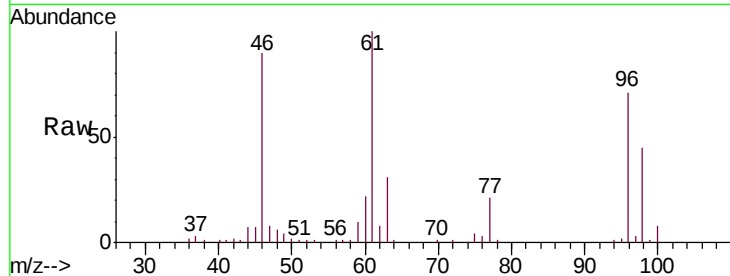


#22

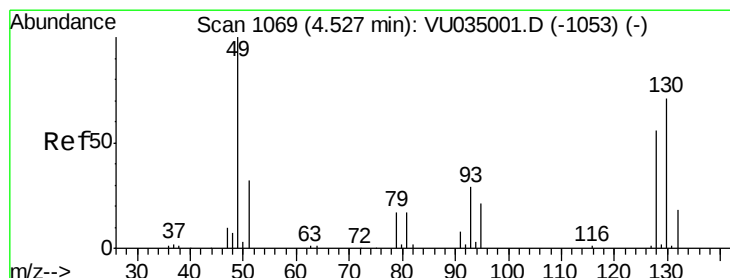
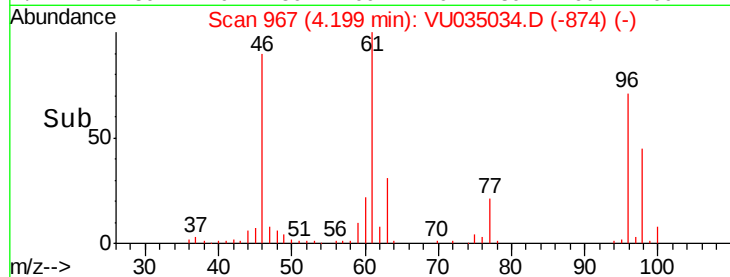
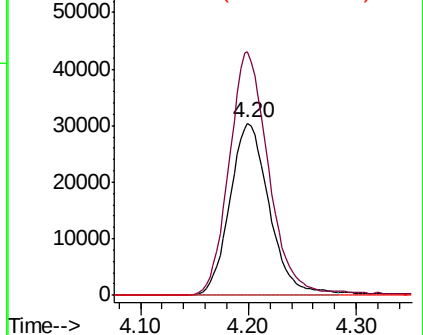
cis-1,2-Dichloroethene
 Concen: 4.752 ug/L
 RT: 4.20 min Scan# 967
 Delta R.T. 0.00 min
 Lab File: VU035034.D
 Acq: 10 Oct 2019 08:52

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD00511

Tgt Ion: 96 Resp: 77435
 Ion Ratio Lower Upper
 96 100
 61 141.6 89.2 165.6
 68 0.0 0.0 0.0



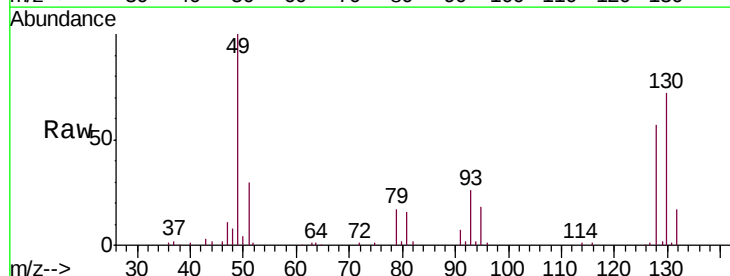
Abundance Ion 96.00 (95.70 to 96.70): VU0
 Ion 61.05 (60.75 to 61.75): VU0
 Ion 68.15 (67.85 to 68.85): VU0



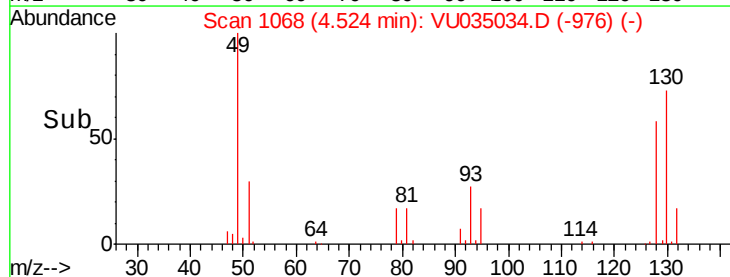
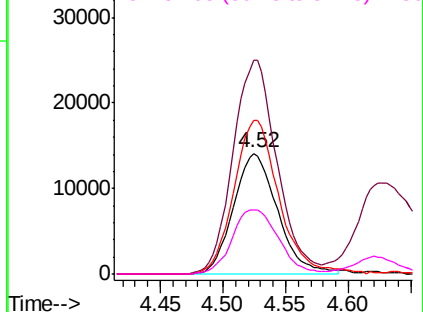
#23

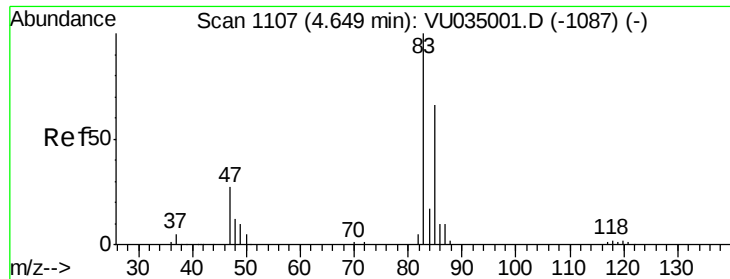
Bromochloromethane
 Concen: 5.041 ug/L
 RT: 4.52 min Scan# 1068
 Delta R.T. -0.00 min
 Lab File: VU035034.D
 Acq: 10 Oct 2019 08:52

Tgt Ion: 128 Resp: 34427
 Ion Ratio Lower Upper
 128 100
 49 176.6 110.5 205.3
 130 127.2 88.6 164.6
 51 53.3 43.2 64.8



Abundance Ion 127.90 (127.60 to 128.60): V
 Ion 49.10 (48.80 to 49.80): VU0
 Ion 129.95 (129.65 to 130.65): V
 Ion 51.05 (50.75 to 51.75): VU0

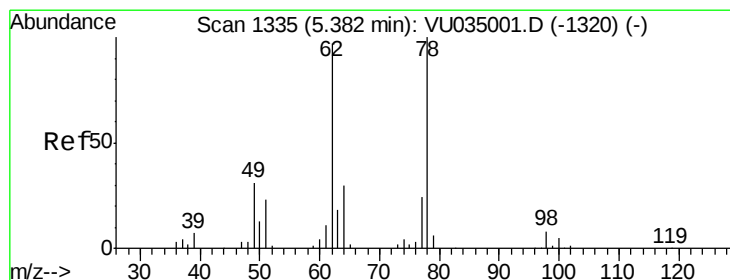
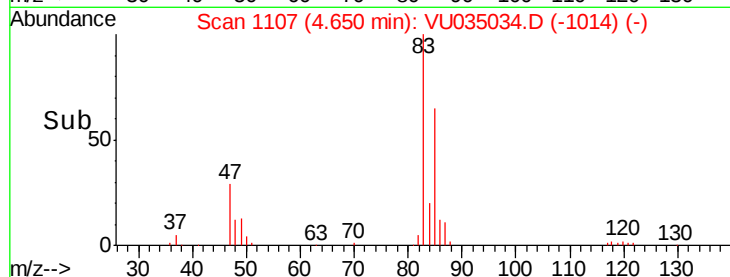
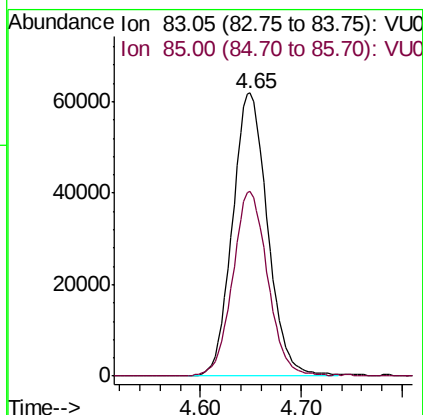
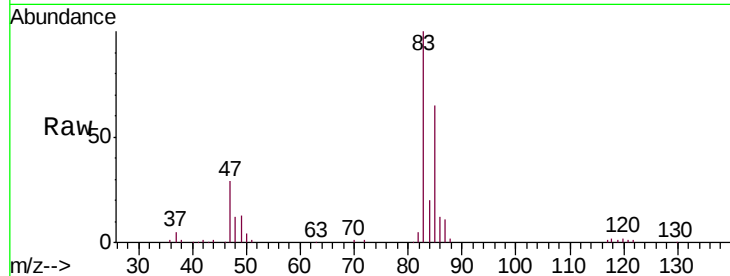




#25
Chloroform
Concen: 4.581 ug/L
RT: 4.65 min Scan# 1107
Delta R.T. 0.00 min
Lab File: VU035034.D
Acq: 10 Oct 2019 08:52

Instrument :
MSVOA_U
ClientSampleId :
VSTD00511

Tgt Ion: 83 Resp: 149428
Ion Ratio Lower Upper
83 100
85 65.1 45.4 84.4



#27
1,2-Dichloroethane
Concen: 5.012 ug/L
RT: 5.38 min Scan# 1335
Delta R.T. 0.00 min
Lab File: VU035034.D
Acq: 10 Oct 2019 08:52

Tgt Ion: 62 Resp: 95488
Ion Ratio Lower Upper
62 100
98 8.4 6.6 10.0

