

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU073119\
 Data File : VU033504.D
 Acq On : 30 Jul 2019 19:57
 Operator : JC/SP
 Sample : MDL04
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL04

Manual Integrations
 APPROVED

MMDadoda
 7/31/2019 10:34:08 AM

Quant Time: Jul 31 08:28:44 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM073119WMA.M
 Quant Title : VOC Analysis
 QLast Update : Wed Jul 31 08:02:52 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.86	114	304676	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.07	117	301558	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.47	152	148400	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.39	65	106560	48.10	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	96.20%
7) Chloroethane-d5	1.67	69	91241	48.01	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	96.02%
11) 1,1-Dichloroethene-d2	2.26	63	147347	36.65	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	73.30%
21) 2-Butanone-d5	4.15	46	153711	104.77	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	104.77%
24) Chloroform-d	4.62	84	180445	48.60	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	97.20%
26) 1,2-Dichloroethane-d4	5.29	65	118793	50.52	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	101.04%
32) Benzene-d6	5.32	84	375901	50.29	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	100.58%
36) 1,2-Dichloropropane-d6	6.31	67	117162	50.00	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.00%
41) Toluene-d8	7.55	98	340590	48.62	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.24%
43) trans-1,3-Dichloropropene-	7.83	79	56279	48.41	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	96.82%
47) 2-Hexanone-d5	8.30	63	111113	99.87	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	99.87%
57) 1,1,2,2-Tetrachloroethane-	10.41	84	175561	48.59	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	97.18%
64) 1,2-Dichlorobenzene-d4	11.85	152	136742	50.32	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.64%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	1.20	85	6119	2.130 ug/L	99
3) Chloromethane	1.32	50	7319	2.529 ug/L	96
5) Vinyl chloride	1.40	62	7407	2.387 ug/L #	65
6) Bromomethane	1.62	94	4750	1.735 ug/L	95
8) Chloroethane	1.69	64	5703m	3.025 ug/L	
9) Trichlorofluoromethane	1.87	101	9677	2.384 ug/L	96
10) 1,1,2-Trichloro-1,2,2-trif	2.27	101	5882	2.859 ug/L #	62
12) 1,1-Dichloroethene	2.27	96	5408	2.741 ug/L #	1
13) Acetone	2.31	43	6353	4.232 ug/L	96
14) Carbon disulfide	2.46	76	14445	2.334 ug/L	98
15) Methyl Acetate	2.61	43	5301	2.218 ug/L	96
16) Methylene chloride	2.68	84	5580	2.476 ug/L	96
17) trans-1,2-Dichloroethene	2.97	96	4512	2.183 ug/L	99
18) Methyl tert-butyl Ether	2.98	73	13218	2.097 ug/L	96
19) 1,1-Dichloroethane	3.42	63	8941	2.304 ug/L	94
20) cis-1,2-Dichloroethene	4.20	96	5143	2.217 ug/L	96
22) 2-Butanone	4.25	43	7340m	4.096 ug/L	

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 APPROVED

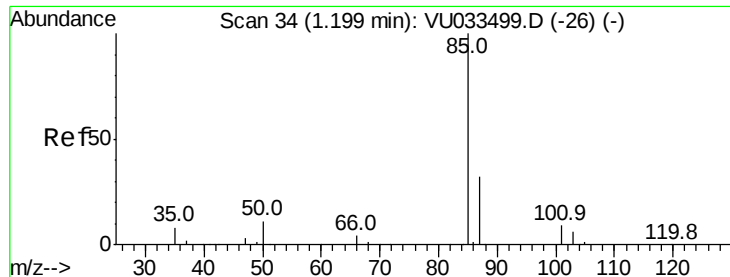
MMDadoda
 7/31/2019 10:34:08 AM

Quant Time: Jul 31 08:28:44 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM073119WMA.M
 Quant Title : VOC Analysis
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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

23) Bromochloromethane	4.52	128	2719	2.246	ug/L	94
25) Chloroform	4.65	83	13535	3.315	ug/L	98
27) 1,2-Dichloroethane	5.39	62	7309	2.325	ug/L	99
29) Cyclohexane	4.97	56	6882	2.092	ug/L	97
30) 1,1,1-Trichloroethane	4.89	97	7669	2.210	ug/L	97
31) Carbon tetrachloride	5.12	117	6624	2.192	ug/L #	55
33) Benzene	5.37	78	19122	2.198	ug/L	100
34) Trichloroethene	6.17	95	5095	2.220	ug/L	93
35) Methylcyclohexane	6.40	83	6854	1.914	ug/L	96
37) 1,2-Dichloropropane	6.41	63	4840	2.078	ug/L #	95
38) Bromodichloromethane	6.74	83	6666	2.214	ug/L	98
39) cis-1,3-Dichloropropene	7.25	75	7594	2.089	ug/L	95
40) 4-Methyl-2-pentanone	7.45	43	12906	4.014	ug/L	97
42) Toluene	7.62	91	20840	2.228	ug/L	100
44) trans-1,3-Dichloropropene	7.87	75	7012	2.135	ug/L	99
45) 1,1,2-Trichloroethane	8.05	97	5032	2.276	ug/L	90
46) Tetrachloroethene	8.21	164	3722	1.987	ug/L	92
48) 2-Hexanone	8.35	43	10854	4.177	ug/L #	96
49) Dibromochloromethane	8.46	129	5485	2.181	ug/L	93
50) 1,2-Dibromoethane	8.57	107	5169	2.111	ug/L #	89
51) Chlorobenzene	9.10	112	13783	2.251	ug/L	96
52) Ethylbenzene	9.24	91	19768	1.962	ug/L	97
53) m,p-Xylene	9.36	106	7655	1.980	ug/L	91
54) o-xylene	9.76	106	6906	1.841	ug/L	95
55) Styrene	9.78	104	11409	1.791	ug/L	99
56) Isopropylbenzene	10.15	105	17500	1.785	ug/L	99
58) 1,1,1,2,2-Tetrachloroethane	10.44	83	9686	2.429	ug/L	97
59) 1,2,3-Trichloropropane	10.48	75	6800	2.212	ug/L	100
61) Bromoform	9.94	173	3782	2.110	ug/L	95
62) 1,3-Dichlorobenzene	11.40	146	10134	2.224	ug/L	91
63) 1,4-Dichlorobenzene	11.49	146	11042	2.332	ug/L	98
65) 1,2-Dichlorobenzene	11.86	146	11045	2.397	ug/L	95
66) 1,2-Dibromo-3-chloropropan	12.64	75	1730	2.032	ug/L #	82
67) 1,3,5-Trichlorobenzene	12.88	180	7093	1.929	ug/L	95
68) 1,2,4-trichlorobenzene	13.50	180	5045	1.606	ug/L	96
69) Naphthalene	13.74	128	12293	1.364	ug/L	95
70) 1,2,3-Trichlorobenzene	13.98	180	5313	1.608	ug/L	98

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



#2

Dichlorodifluoromethane

Concen: 2.130 ug/L

RT: 1.20 min Scan# 34

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 85 Resp: 6119

Ion Ratio Lower Upper

85 100

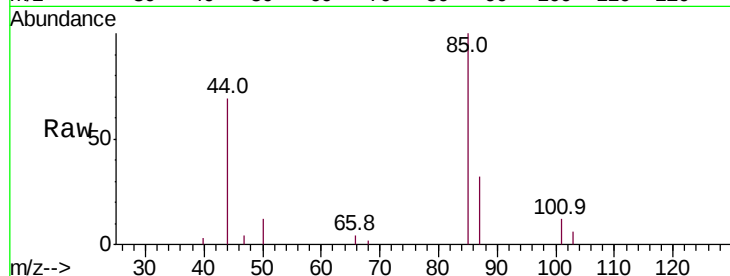
87 31.4 25.4 38.2

Manual Integrations

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Abundance Ion 85.00 (84.70 to 85.70): VU033504.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VU033504.D (-1) (-)

6000

4000

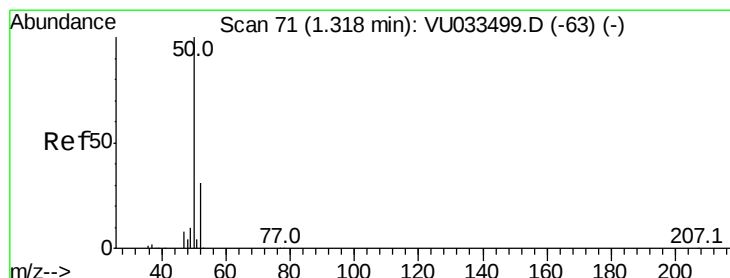
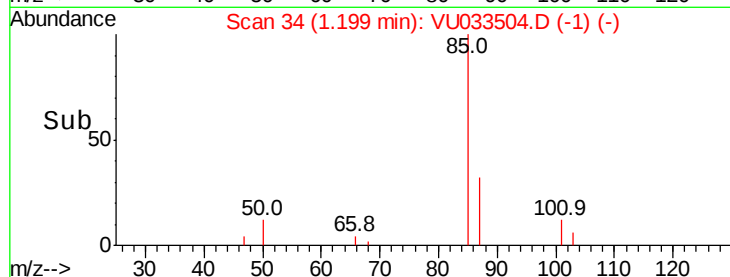
2000

0

1.20

1.25

Time-->



#3

Chloromethane

Concen: 2.529 ug/L

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VU033504.D

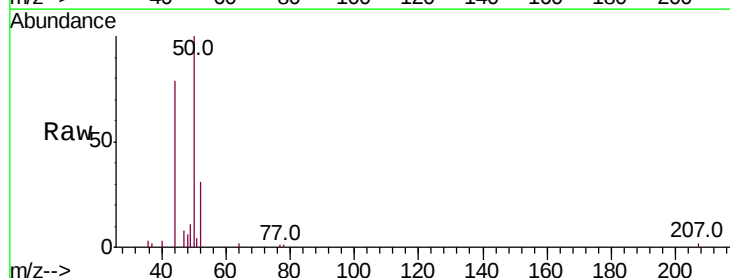
Acq: 30 Jul 2019 19:57

Tgt Ion: 50 Resp: 7319

Ion Ratio Lower Upper

50 100

52 30.6 23.1 42.9



Abundance Ion 50.00 (49.70 to 50.70): VU033504.D (-1) (-)

Ion 52.00 (51.70 to 52.70): VU033504.D (-1) (-)

8000

6000

4000

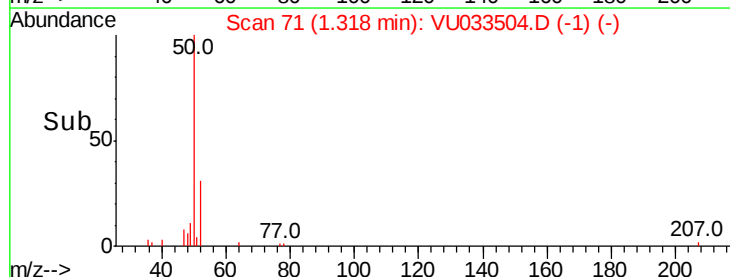
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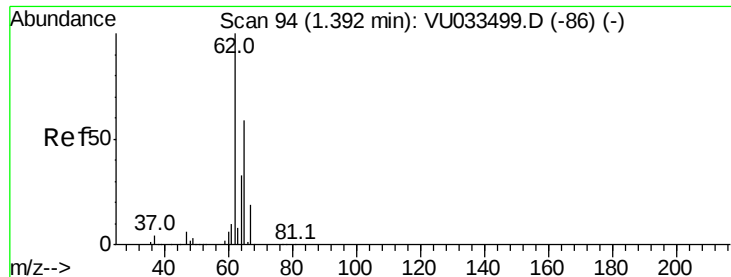
0

1.32

1.36

Time-->





#5

Vinyl chloride

Concen: 2.387 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 62 Resp: 7407

Ion Ratio Lower Upper

62 100

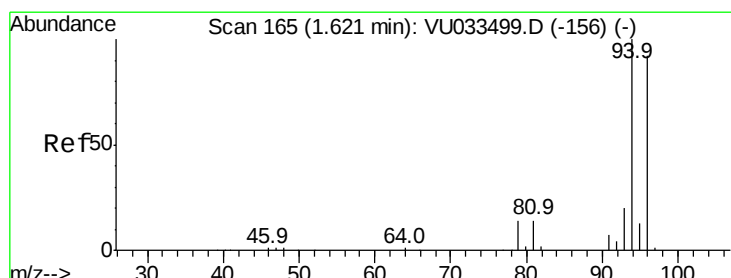
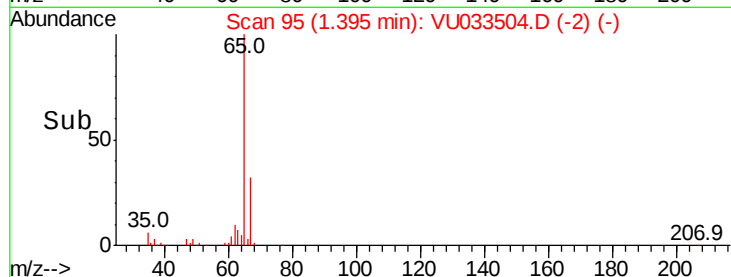
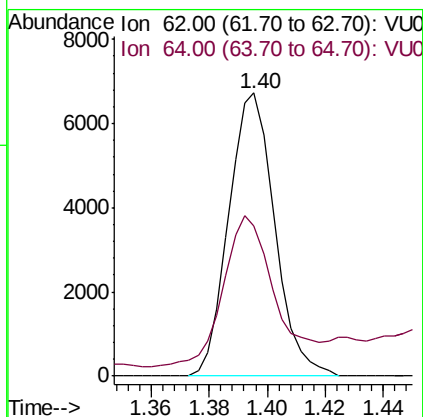
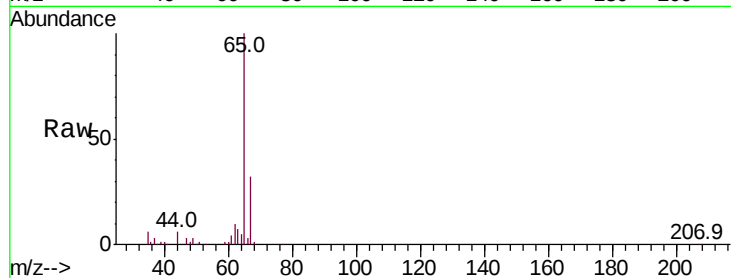
64 53.3 23.4 43.4#

Manual Integrations

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7/31/2019 10:34:08 AM



#6

Bromomethane

Concen: 1.735 ug/L

RT: 1.62 min Scan# 164

Delta R.T. -0.00 min

Lab File: VU033504.D

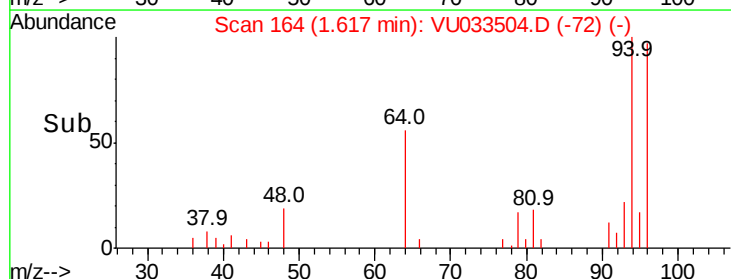
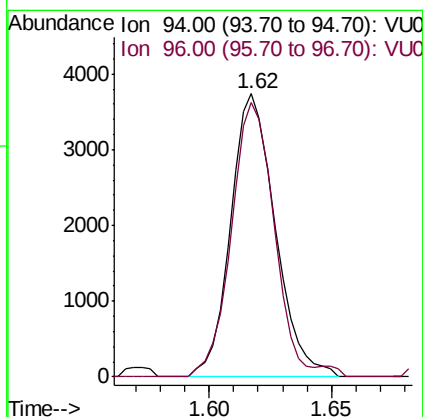
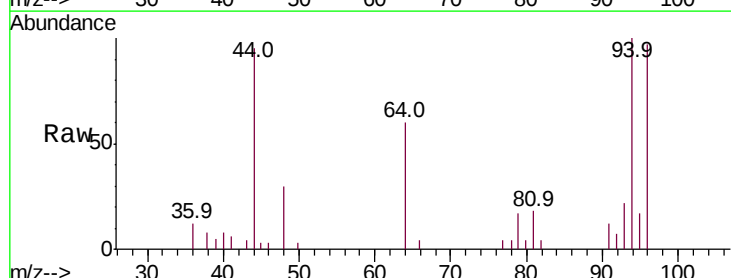
Acq: 30 Jul 2019 19:57

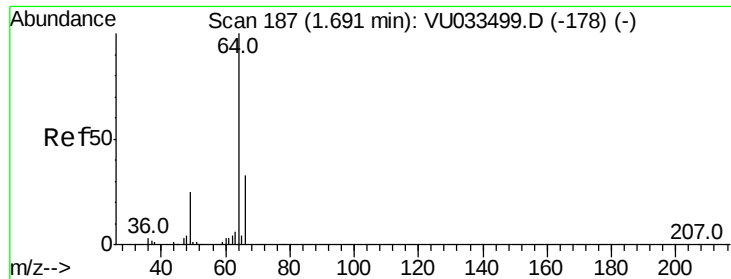
Tgt Ion: 94 Resp: 4750

Ion Ratio Lower Upper

94 100

96 96.8 64.4 119.6





#8

Chloroethane

Concen: 3.025 ug/L m

RT: 1.69 min Scan# 186

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

MDL04

Tot Ion: 64 Resp: 5703

Ion Ratio Lower Upper

64 100

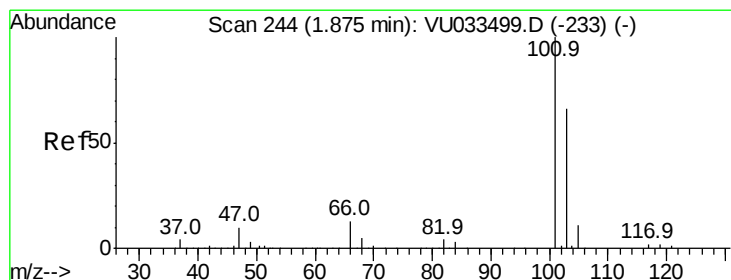
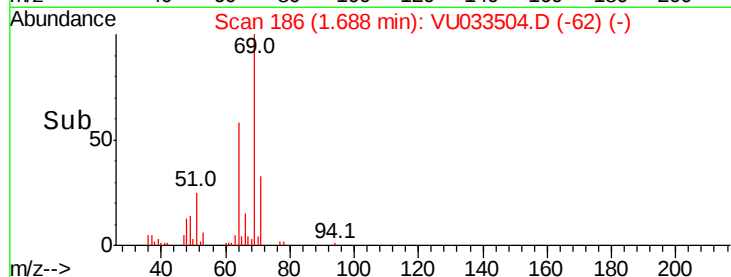
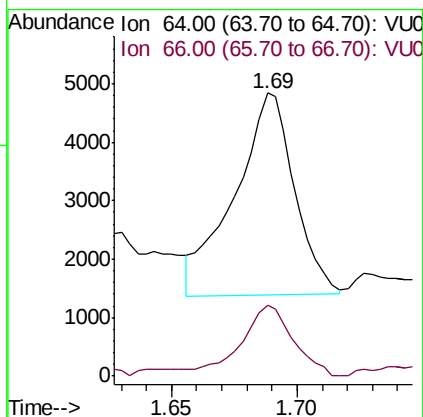
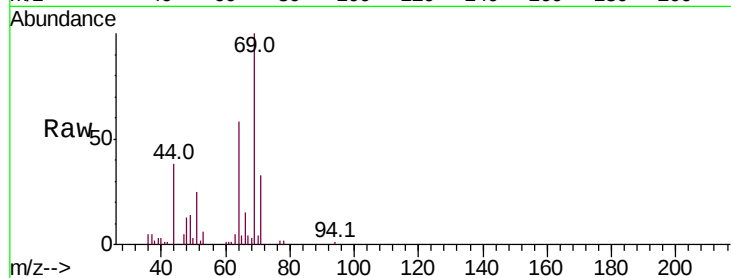
66 25.0 21.1 39.3

Manual Integrations

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#9

Trichlorofluoromethane

Concen: 2.384 ug/L

RT: 1.87 min Scan# 244

Delta R.T. 0.00 min

Lab File: VU033504.D

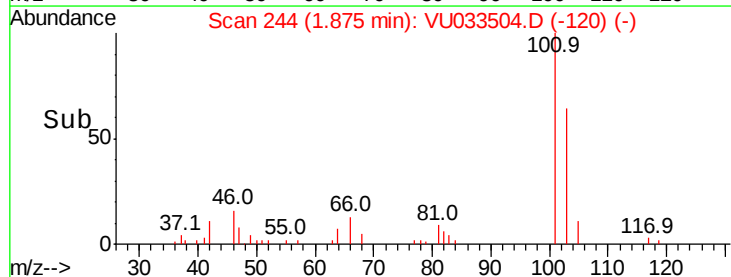
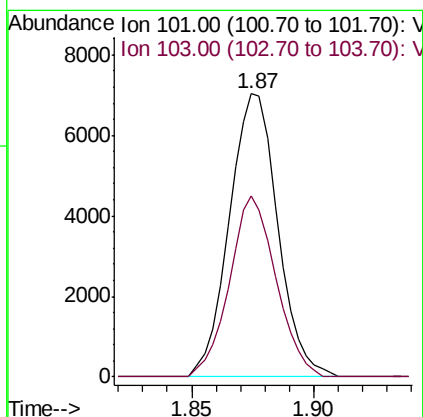
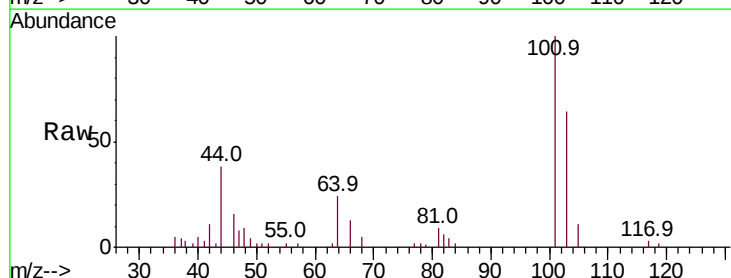
Acq: 30 Jul 2019 19:57

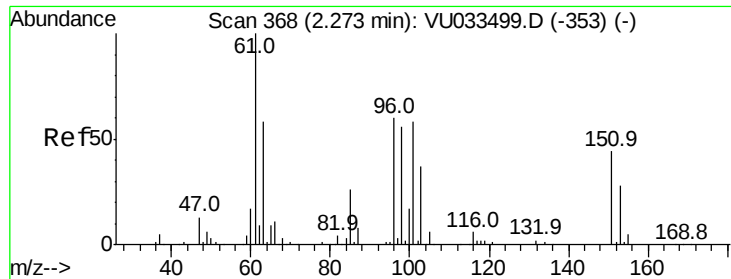
Tgt Ion: 101 Resp: 9677

Ion Ratio Lower Upper

101 100

103 61.4 51.6 77.4





#10

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

Concen: 2.859 ug/L

RT: 2.27 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

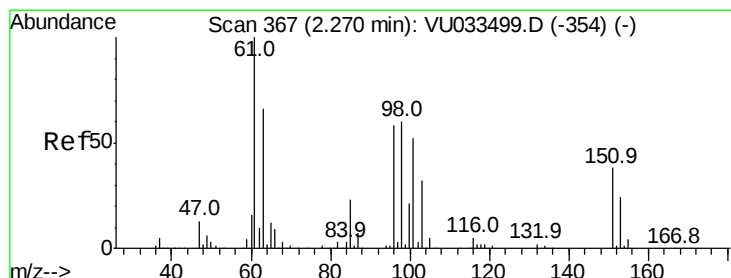
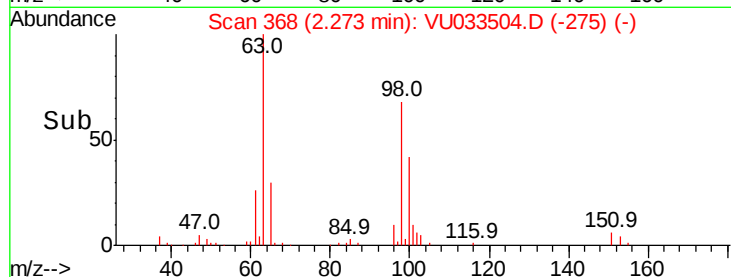
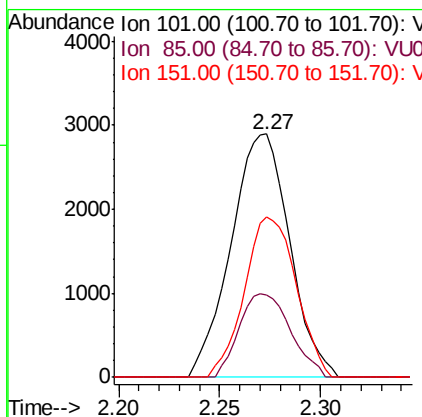
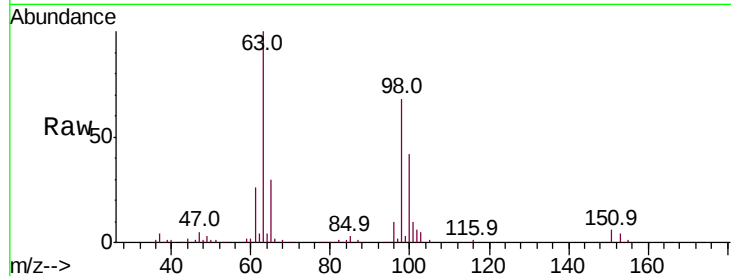
ClientSampled :

MDL04

Tot Ion:	101	Resp:	5882
Ion Ratio	Lower	Upper	
101	100		
85	0.0	35.8	53.8#
151	58.1	60.1	90.1#

Manual Integrations
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7/31/2019 10:34:08 AM



#12

1,1-Dichloroethene

Concen: 2.741 ug/L

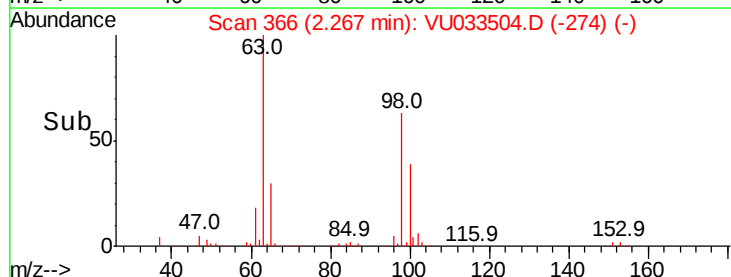
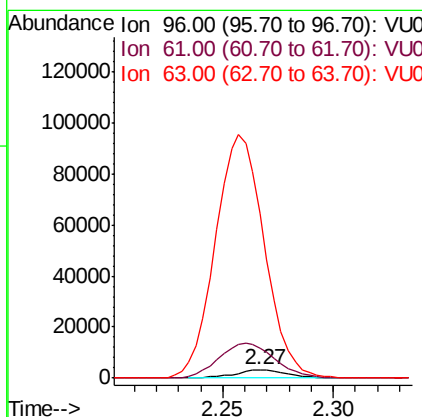
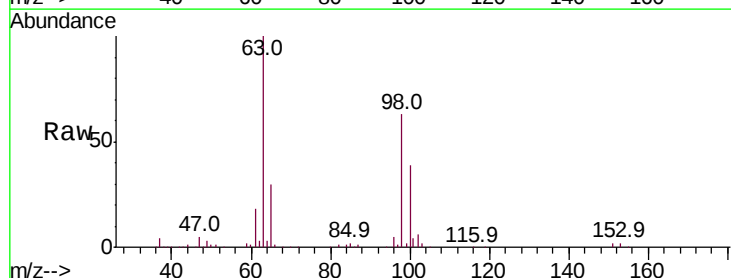
RT: 2.27 min Scan# 366

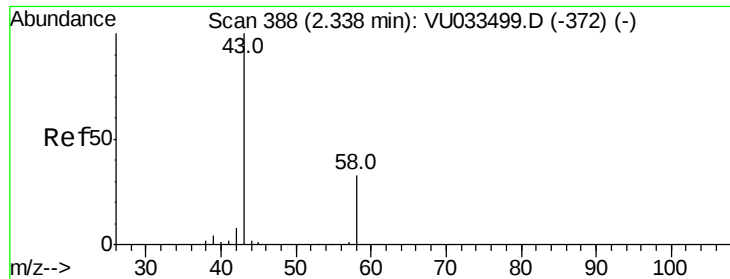
Delta R.T. -0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Tgt Ion:	96	Resp:	5408
Ion Ratio	Lower	Upper	
96	100		
61	352.2	119.3	221.5#
63	1914.9	86.6	160.8#





#13

Acetone

Concen: 4.232 ug/L

RT: 2.31 min Scan# 379

Delta R.T. -0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 43 Resp: 6353

Ion Ratio Lower Upper

43 100

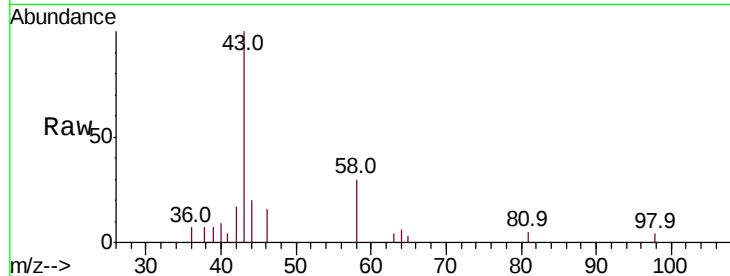
58 31.0 0.0 66.2

Manual Integrations

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MMDadoda

7/31/2019 10:34:08 AM



Abundance Ion 43.00 (42.70 to 43.70): VU033504.D (-372) (-)

Ion 58.00 (57.70 to 58.70): VU033504.D (-372) (-)

2.31

4000

3000

2000

1000

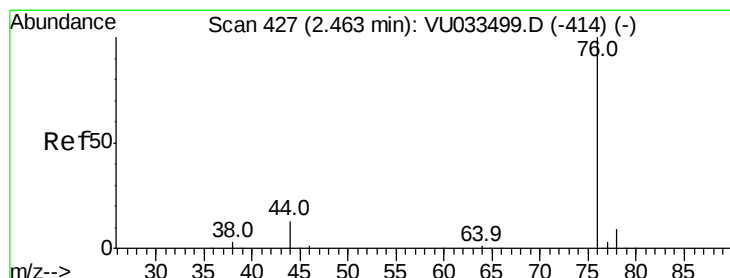
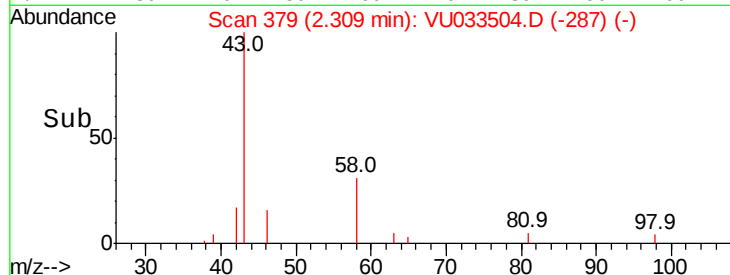
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Time-->

2.25

2.30

2.35



#14

Carbon disulfide

Concen: 2.334 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VU033504.D

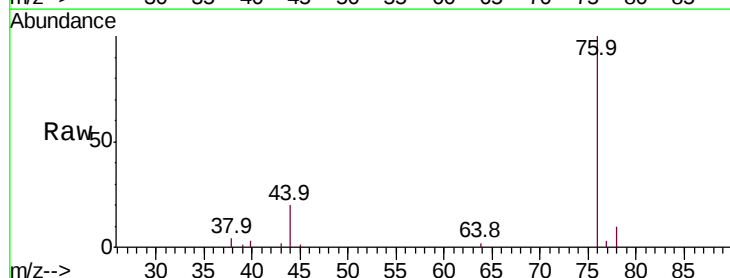
Acq: 30 Jul 2019 19:57

Tgt Ion: 76 Resp: 14445

Ion Ratio Lower Upper

76 100

78 9.9 7.4 11.0



Abundance Ion 76.00 (75.70 to 76.70): VU033504.D (-334) (-)

Ion 78.00 (77.70 to 78.70): VU033504.D (-334) (-)

2.46

10000

8000

6000

4000

2000

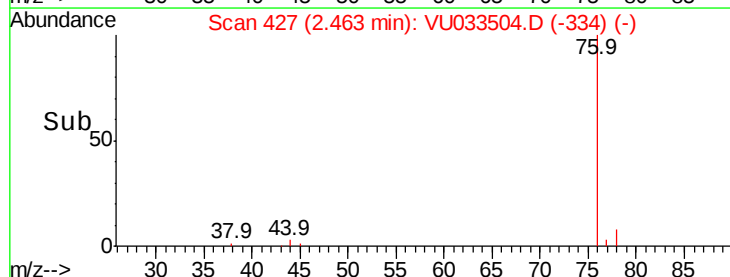
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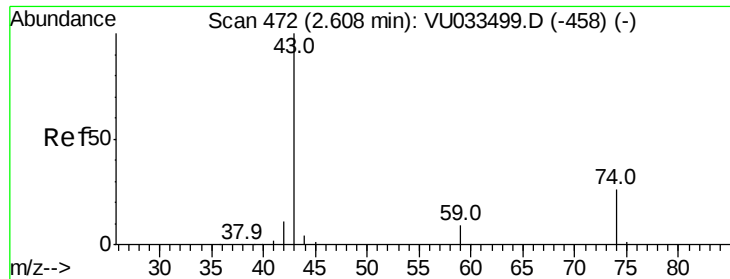
Time-->

2.40

2.45

2.50





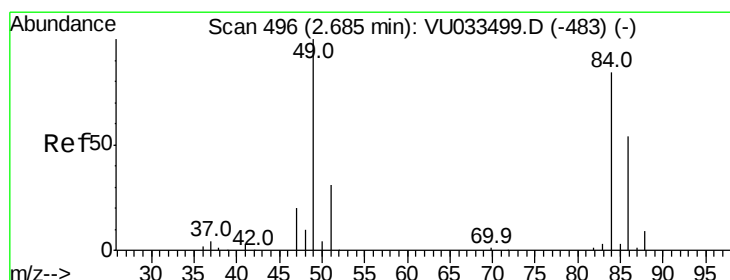
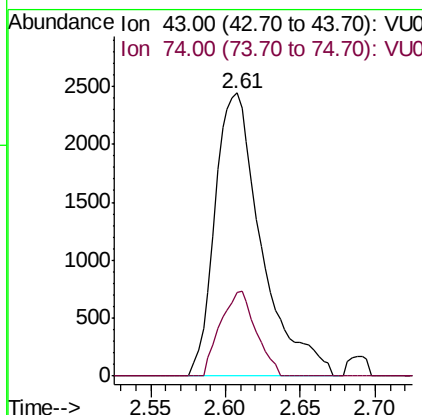
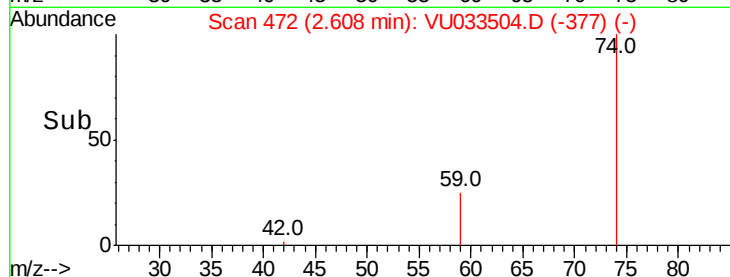
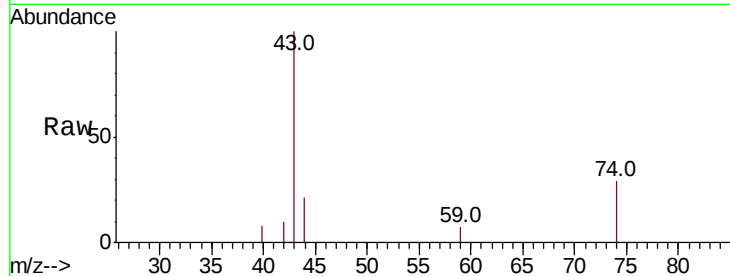
#15
Methyl Acetate
Concen: 2.218 ug/L
RT: 2.61 min Scan# 472
Delta R.T. 0.01 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Instrument :
MSVOA_U
ClientSampled :
MDL04

Tot Ion: 43 Resp: 5301
Ion Ratio Lower Upper
43 100
74 22.9 20.1 30.1

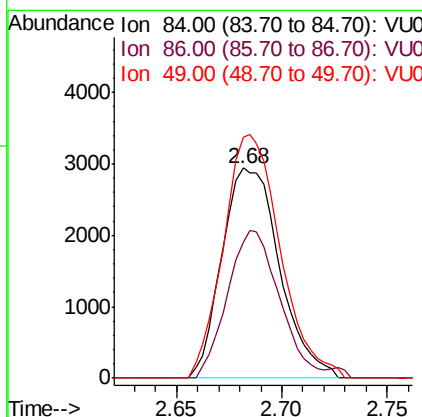
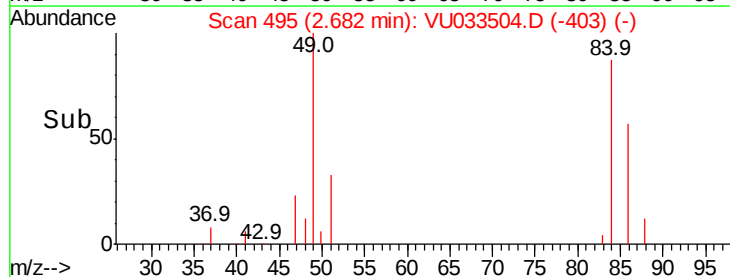
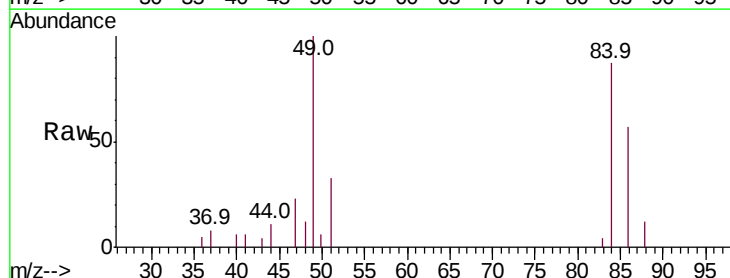
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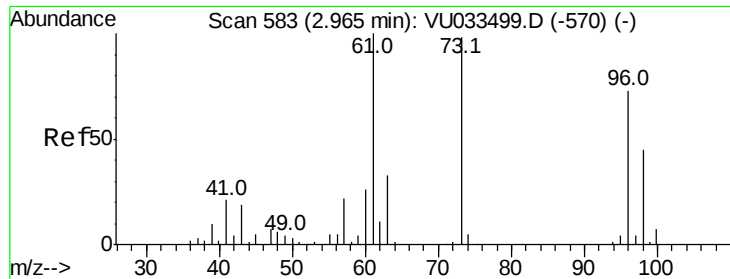
MMDadoda
7/31/2019 10:34:08 AM



#16
Methylene chloride
Concen: 2.476 ug/L
RT: 2.68 min Scan# 495
Delta R.T. -0.00 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Tgt Ion: 84 Resp: 5580
Ion Ratio Lower Upper
84 100
86 64.9 45.7 84.9
49 114.6 85.0 158.0





#17

trans-1,2-Dichloroethene

Concen: 2.183 ug/L

RT: 2.97 min Scan# 584

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 96 Resp: 4512

Ion Ratio Lower Upper

96 100

61 140.5 98.3 182.5

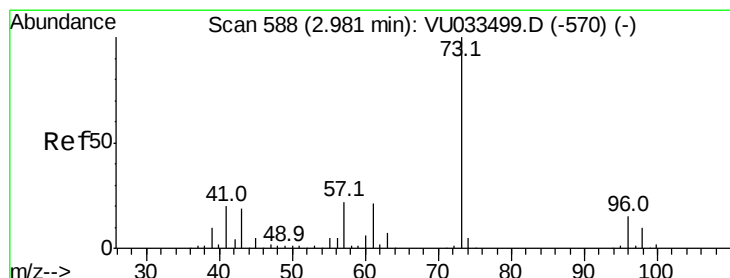
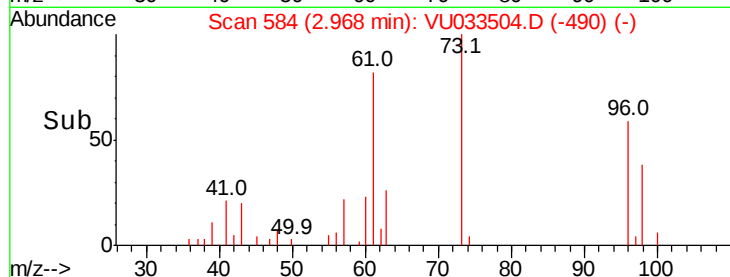
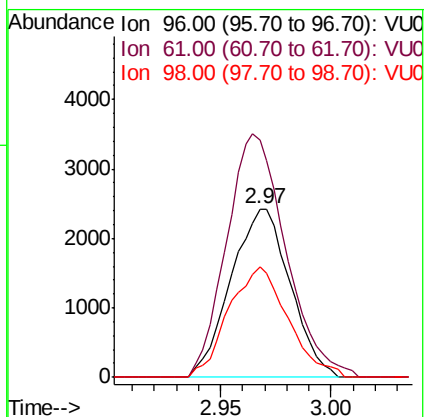
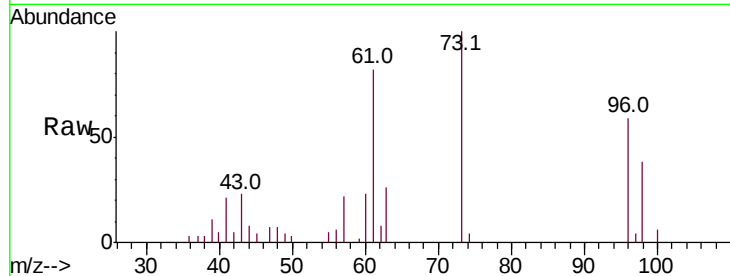
98 65.4 44.3 82.3

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#18

Methyl tert-butyl Ether

Concen: 2.097 ug/L

RT: 2.98 min Scan# 587

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

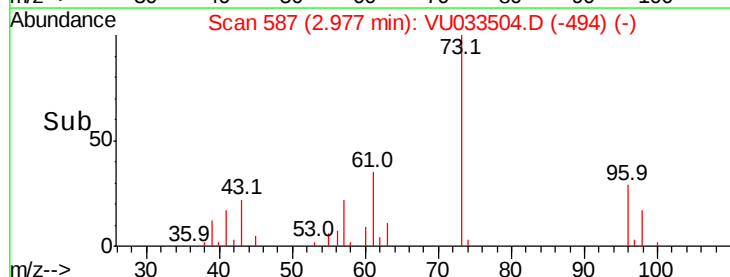
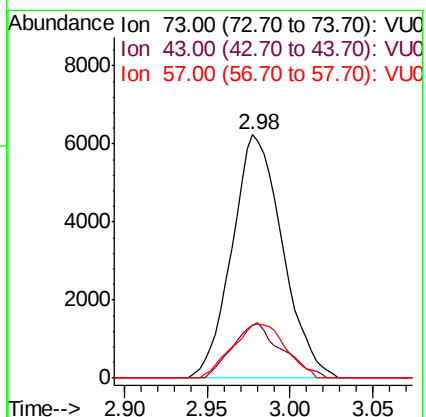
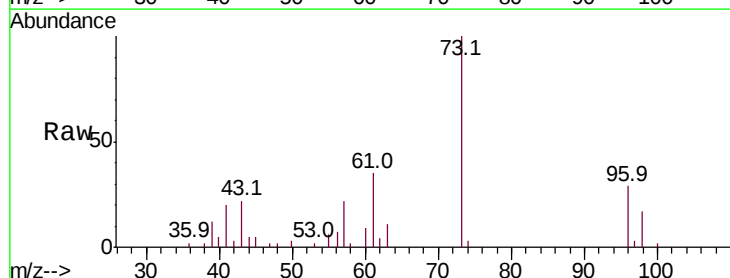
Tgt Ion: 73 Resp: 13218

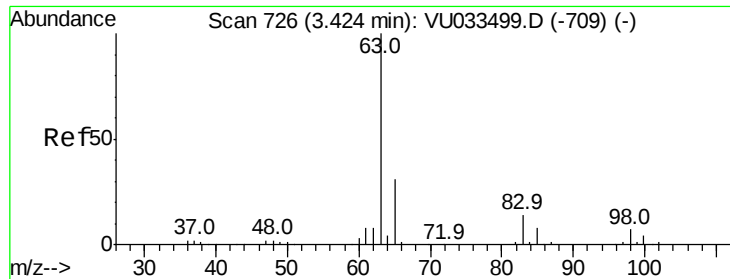
Ion Ratio Lower Upper

73 100

43 21.9 15.4 23.2

57 23.4 17.4 26.2





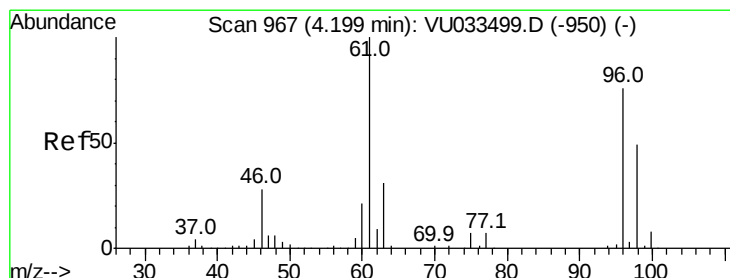
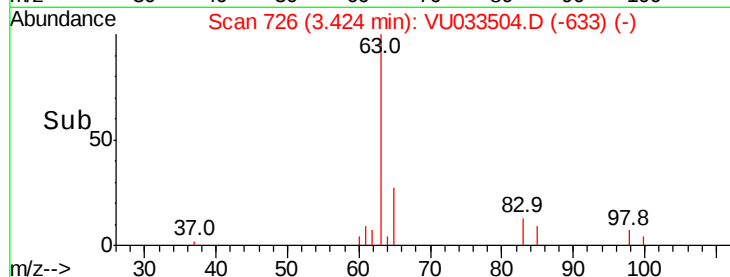
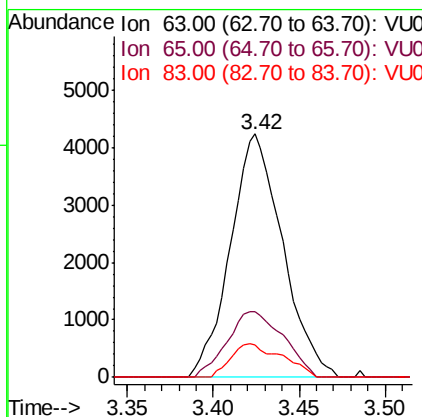
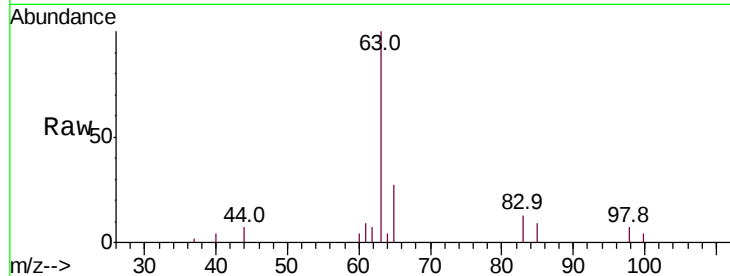
#19
 1,1-Dichloroethane
 Concen: 2.304 ug/L
 RT: 3.42 min Scan# 726
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL04

Tot Ion	Ratio	Lower	Upper
63	100		
65	26.8	22.0	40.8
83	13.1	9.5	17.7

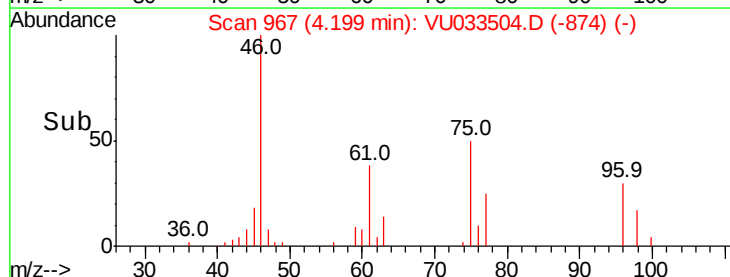
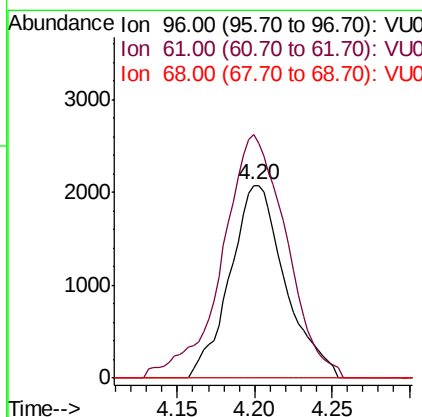
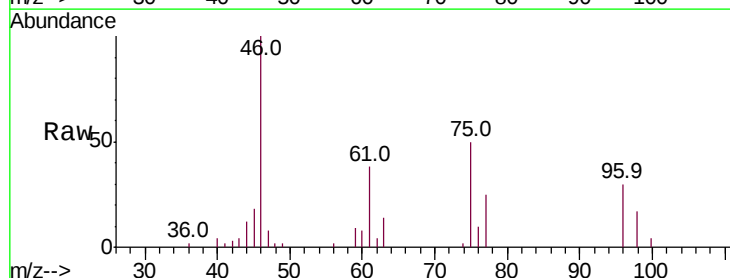
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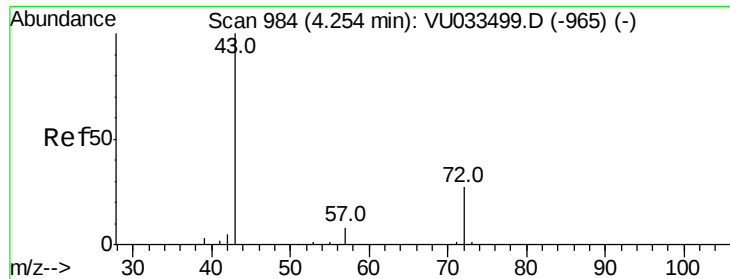
MMDadoda
 7/31/2019 10:34:08 AM



#20
 cis-1,2-Dichloroethene
 Concen: 2.217 ug/L
 RT: 4.20 min Scan# 967
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Tgt Ion	Ratio	Lower	Upper
96	100		
61	126.2	91.3	169.6
68	0.0	0.0	0.0





#22

2-Butanone

Concen: 4.096 ug/L m

RT: 4.25 min Scan# 983

Delta R.T. 0.01 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

MDL04

Tot Ion: 43 Resp: 7340

Ion Ratio Lower Upper

43 100

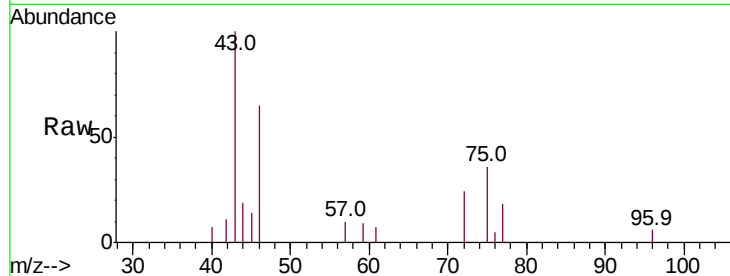
72 12.9 14.2 42.6#

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Abundance Ion 43.00 (42.70 to 43.70): VU033499.D (-965) (-)

Ion 72.00 (71.70 to 72.70): VU033499.D (-965) (-)

2500

2000

1500

1000

500

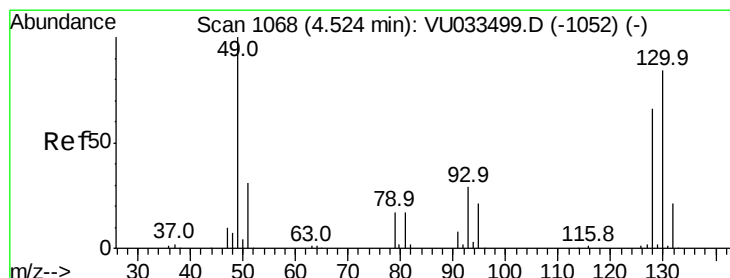
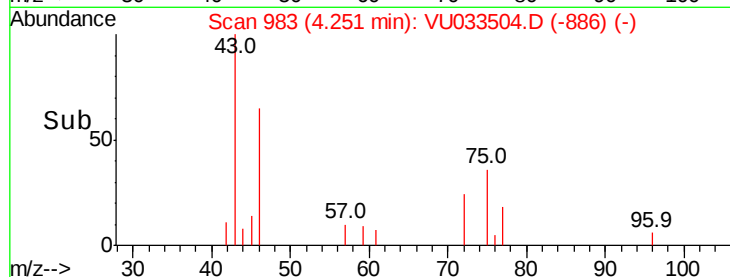
0

4.20

4.25

4.30

Time-->



#23

Bromochloromethane

Concen: 2.246 ug/L

RT: 4.52 min Scan# 1068

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Tgt Ion: 128 Resp: 2719

Ion Ratio Lower Upper

128 100

49 155.5 108.4 201.2

130 113.1 89.7 166.5

51 43.7 38.9 58.3

Abundance Ion 128.00 (127.70 to 128.70): VU033499.D (-1052) (-)

Ion 49.00 (48.70 to 49.70): VU033499.D (-1052) (-)

Ion 130.00 (129.70 to 130.70): VU033499.D (-1052) (-)

Ion 51.00 (50.70 to 51.70): VU033499.D (-1052) (-)

10000

5000

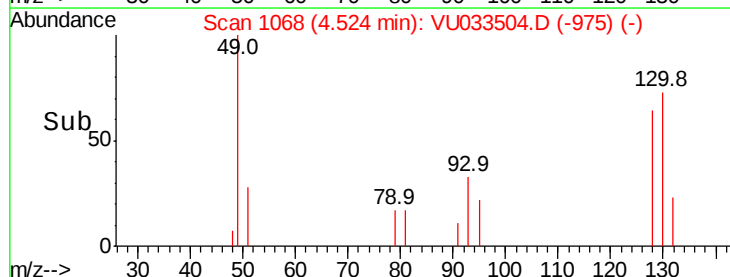
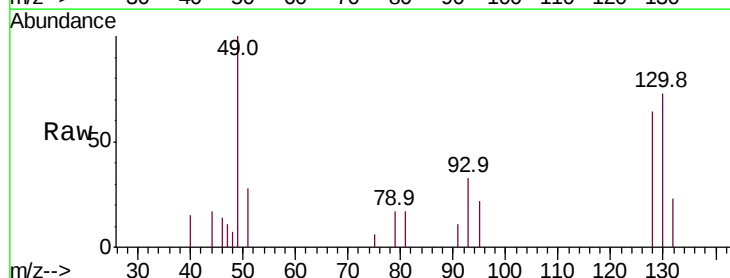
0

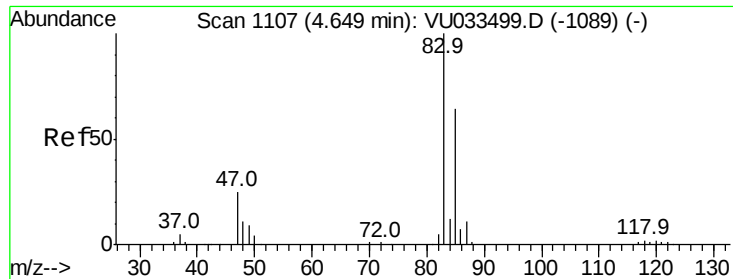
4.50

4.52

4.55

Time-->





#25

Chloroform

Concen: 3.315 ug/L

RT: 4.65 min Scan# 1107

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 83 Resp: 13535

Ion Ratio Lower Upper

83 100

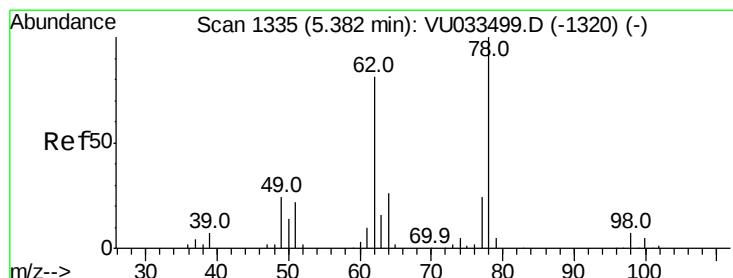
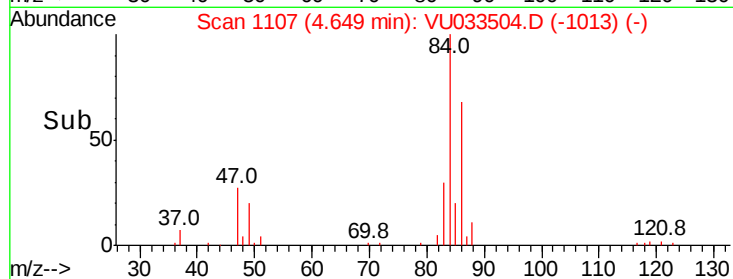
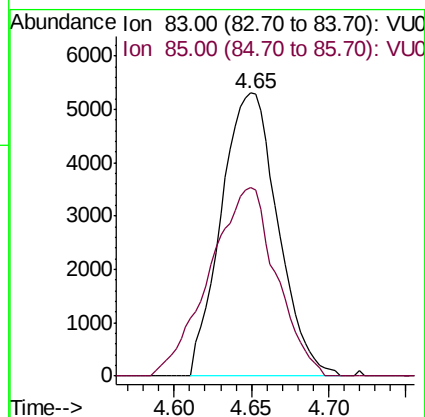
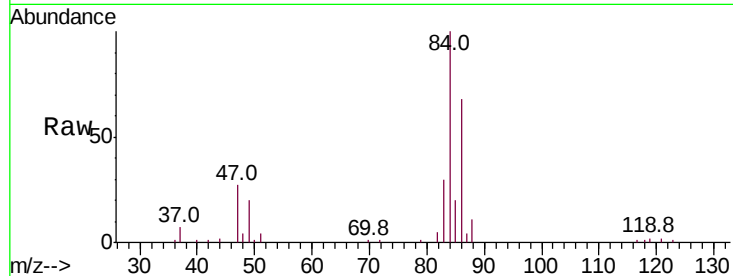
85 66.6 45.6 84.8

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#27

1,2-Dichloroethane

Concen: 2.325 ug/L

RT: 5.39 min Scan# 1337

Delta R.T. 0.01 min

Lab File: VU033504.D

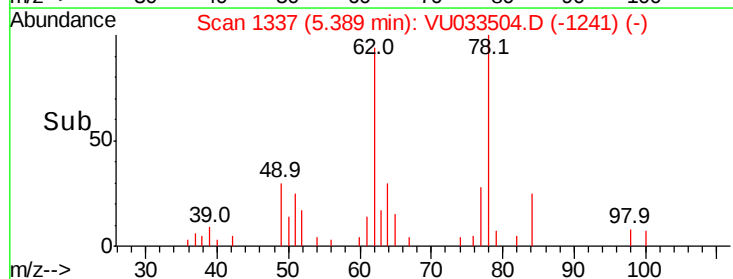
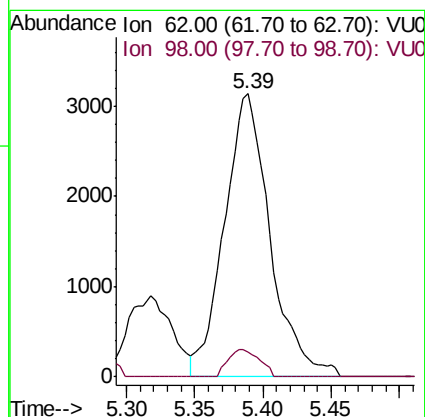
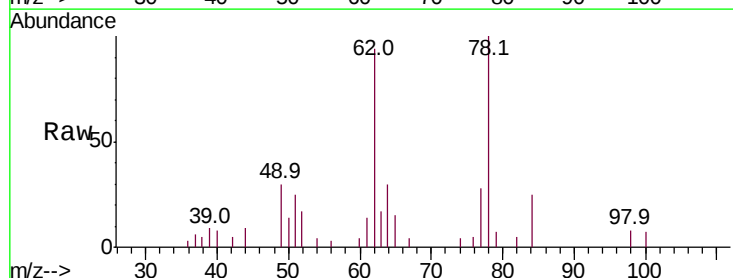
Acq: 30 Jul 2019 19:57

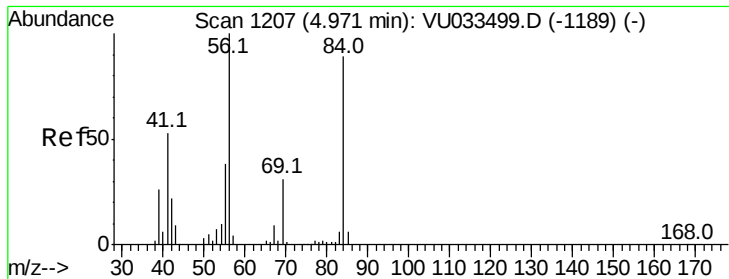
Tgt Ion: 62 Resp: 7309

Ion Ratio Lower Upper

62 100

98 8.6 7.2 10.8





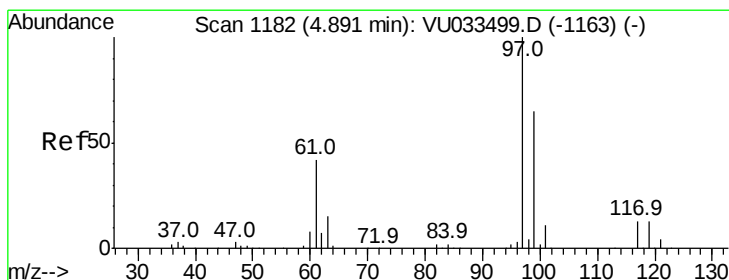
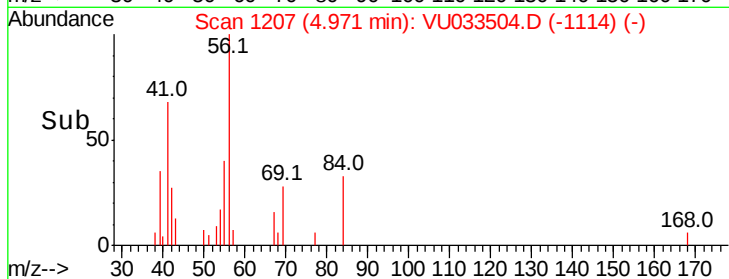
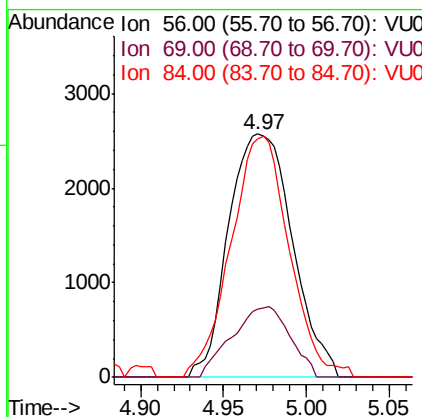
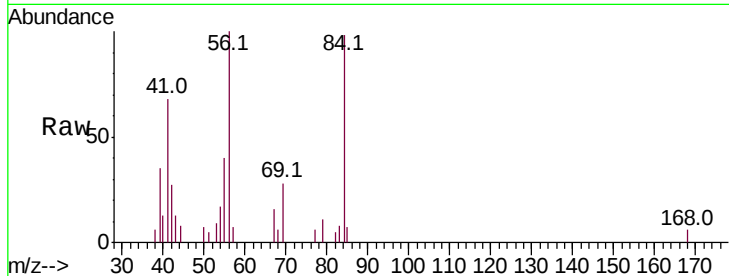
#29
Cyclohexane
Concen: 2.092 ug/L
RT: 4.97 min Scan# 1207
Delta R.T. 0.00 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Instrument :
MSVOA_U
ClientSampleId :
MDL04

Tot Ion	Ratio	Lower	Upper
56	100		
69	26.5	25.0	37.6
84	90.4	71.6	107.4

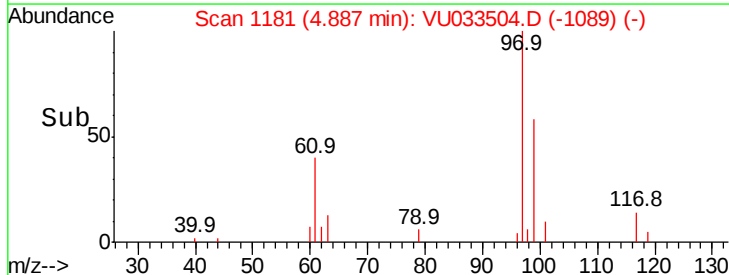
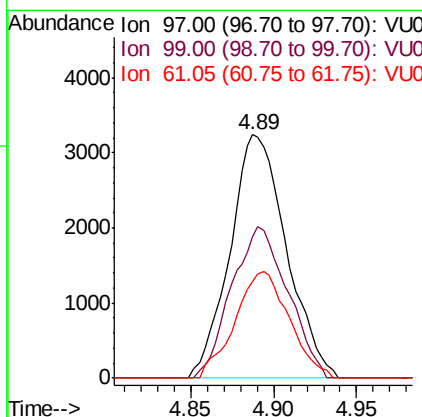
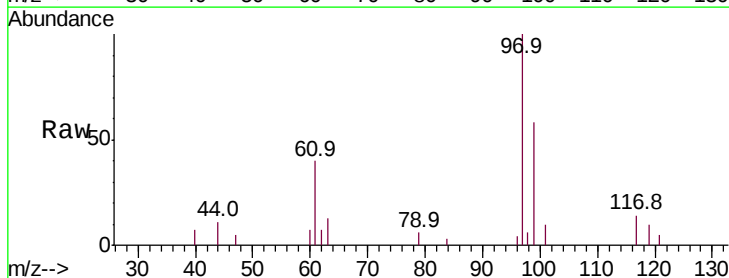
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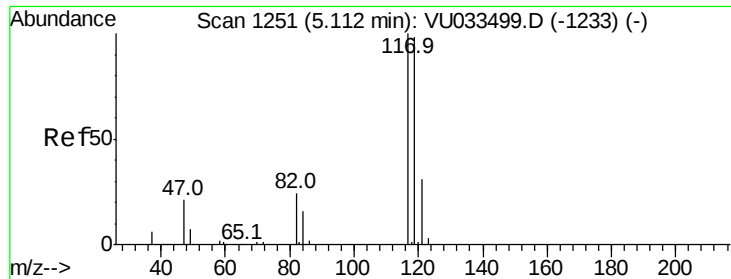
MMDadoda
7/31/2019 10:34:08 AM



#30
1,1,1-Trichloroethane
Concen: 2.210 ug/L
RT: 4.89 min Scan# 1181
Delta R.T. -0.00 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Tgt Ion	Ratio	Lower	Upper
97	100		
99	61.8	51.1	76.7
61	42.0	35.5	53.3





#31

Carbon tetrachloride

Concen: 2.192 ug/L

RT: 5.12 min Scan# 1252

Delta R.T. 0.01 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion:117 Resp: 6624

Ion Ratio Lower Upper

117 100

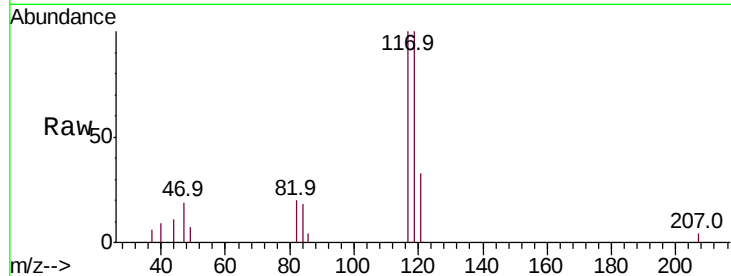
119 52.0 77.0 115.4#

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Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

5.12

3000

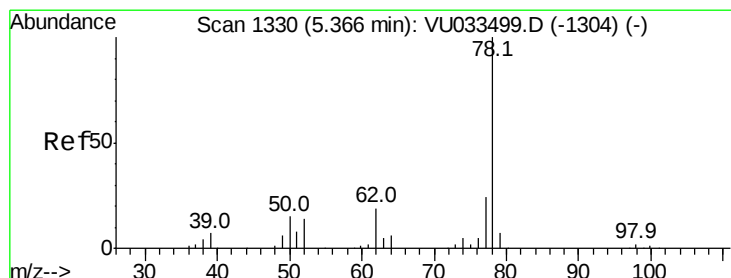
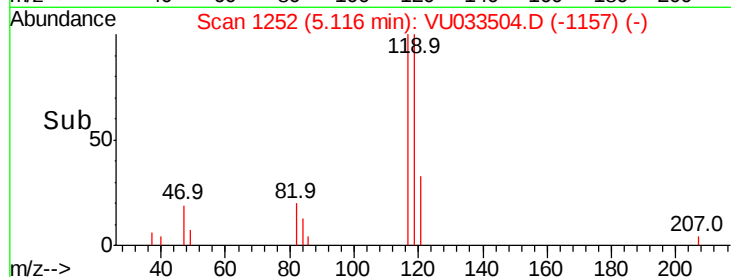
2000

1000

0

Time-->

5.05 5.10 5.15



#33

Benzene

Concen: 2.198 ug/L

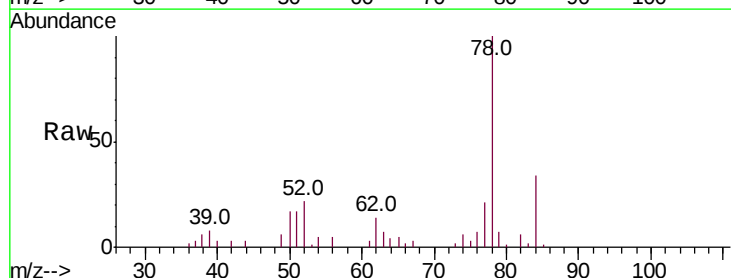
RT: 5.37 min Scan# 1330

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Tgt Ion: 78 Resp: 19122



Abundance Ion 78.00 (77.70 to 78.70): VU0

10000

8000

6000

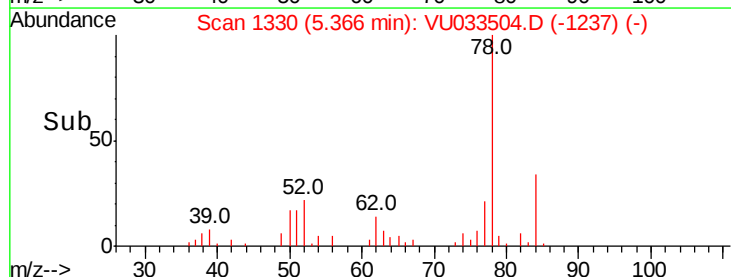
4000

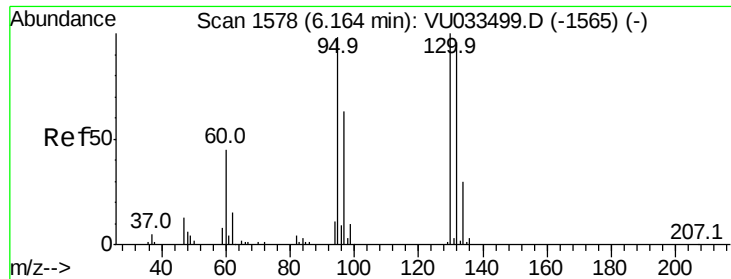
2000

0

Time-->

5.30 5.35 5.40 5.45





#34

Trichloroethene

Concen: 2.220 ug/L

RT: 6.17 min Scan# 1580

Delta R.T. 0.01 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 95 Resp: 5095

Ion Ratio Lower Upper

95 100

97 68.6 44.7 83.1

132 103.9 66.8 124.0

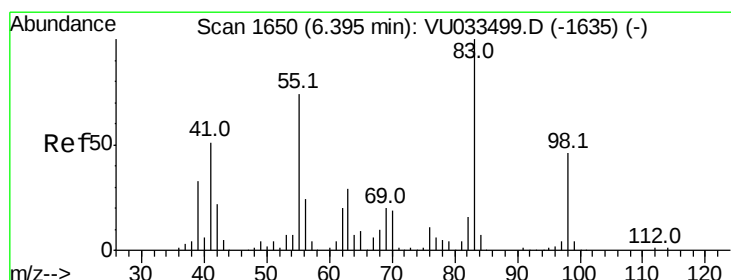
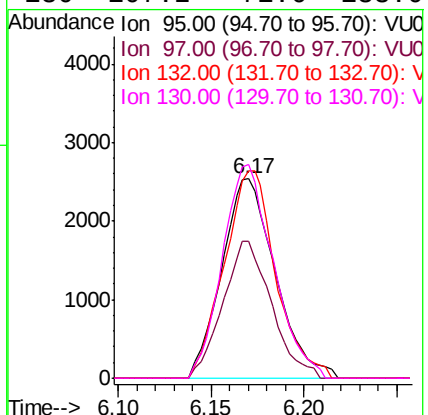
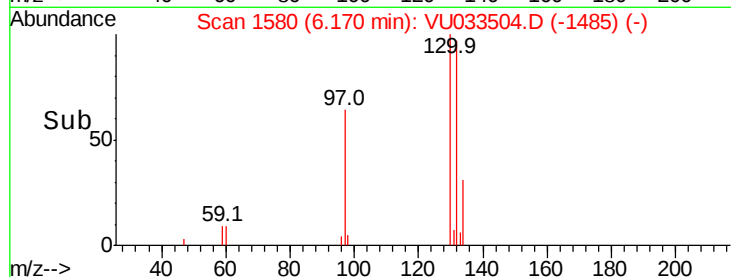
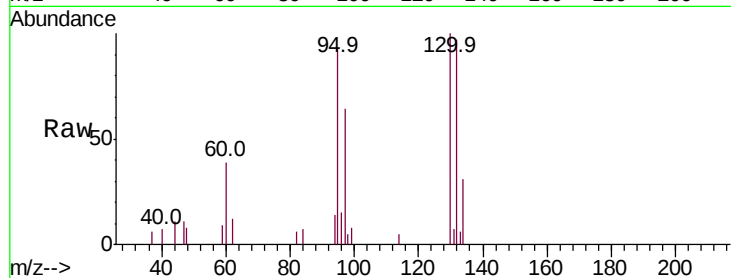
130 107.2 71.6 133.0

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#35

Methylcyclohexane

Concen: 1.914 ug/L

RT: 6.40 min Scan# 1650

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

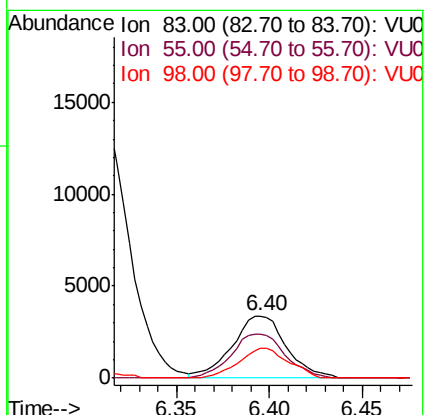
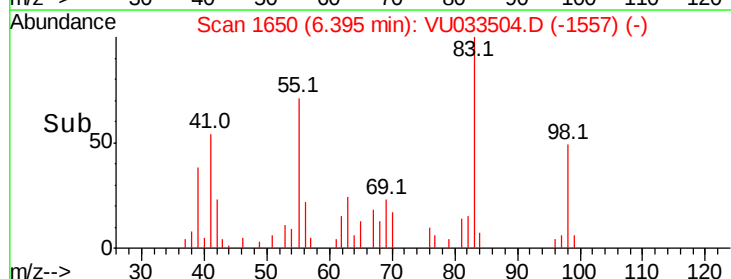
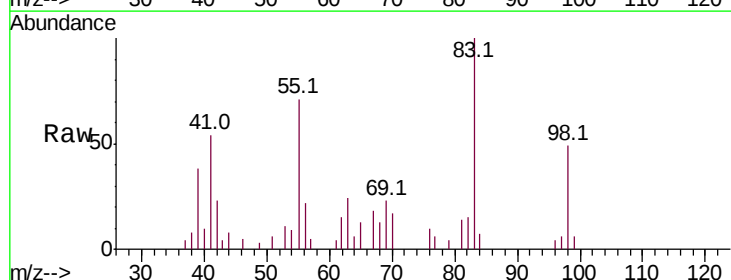
Tgt Ion: 83 Resp: 6854

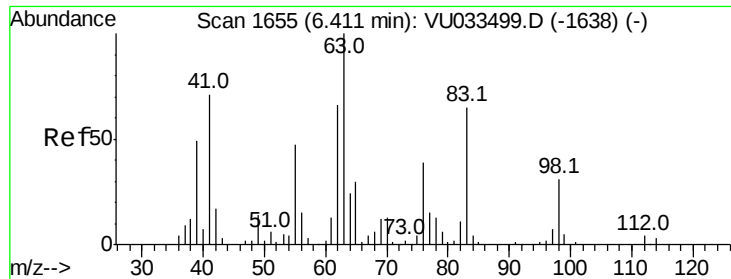
Ion Ratio Lower Upper

83 100

55 70.7 60.2 90.4

98 44.4 36.5 54.7





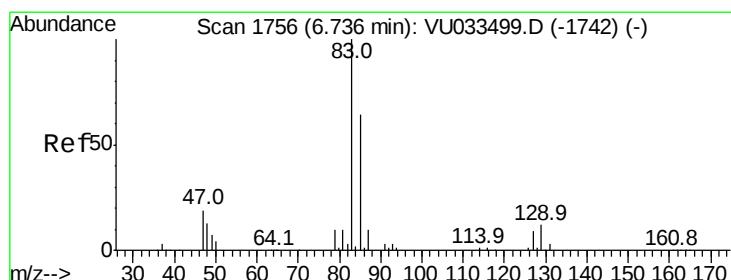
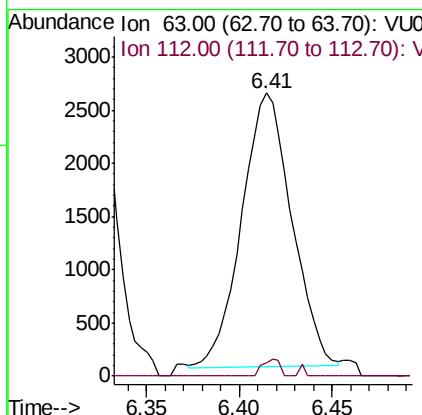
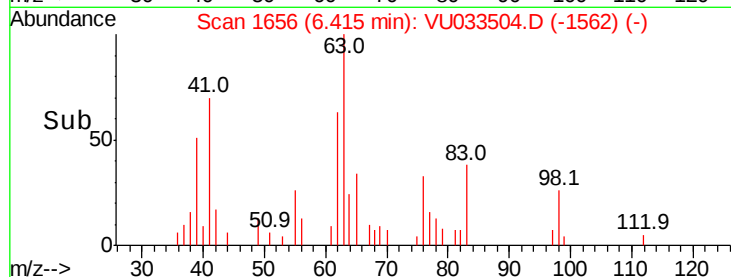
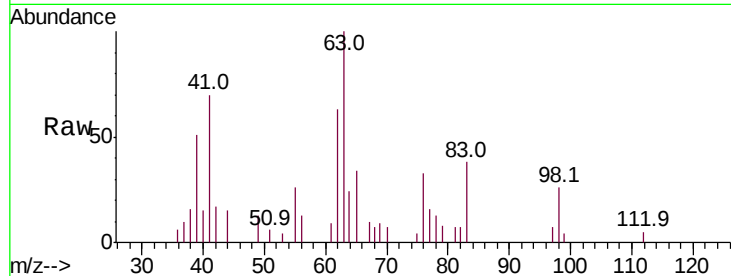
#37
 1,2-Dichloropropane
 Concen: 2.078 ug/L
 RT: 6.41 min Scan# 1656
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL04

Tot Ion: 63 Resp: 4840
 Ion Ratio Lower Upper
 63 100
 112 2.1 3.0 4.6#

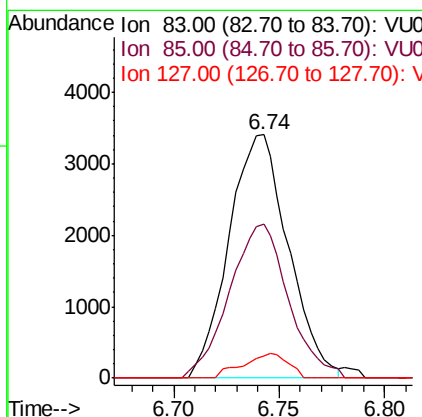
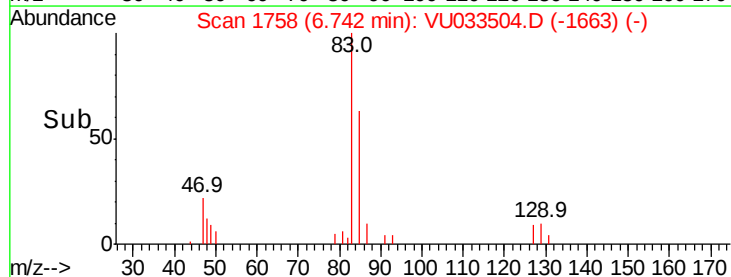
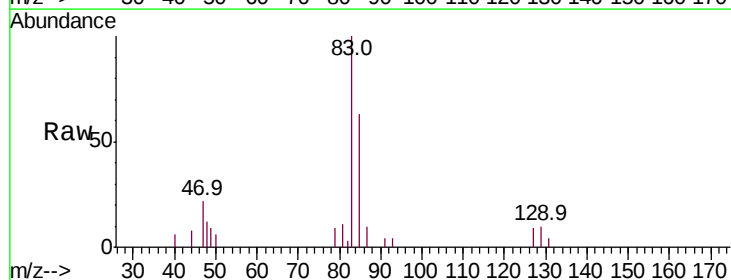
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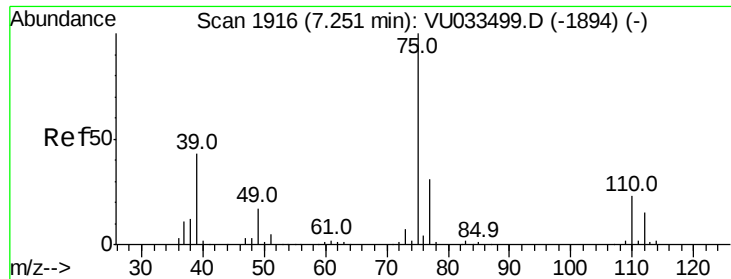
MMDadoda
 7/31/2019 10:34:08 AM



#38
 Bromodichloromethane
 Concen: 2.214 ug/L
 RT: 6.74 min Scan# 1758
 Delta R.T. 0.01 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Tgt Ion: 83 Resp: 6666
 Ion Ratio Lower Upper
 83 100
 85 63.1 45.1 83.9
 127 9.3 7.2 10.8





#39

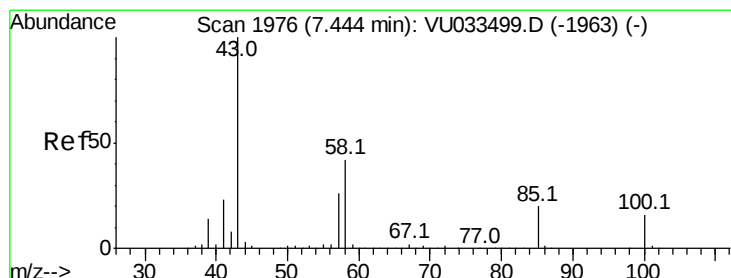
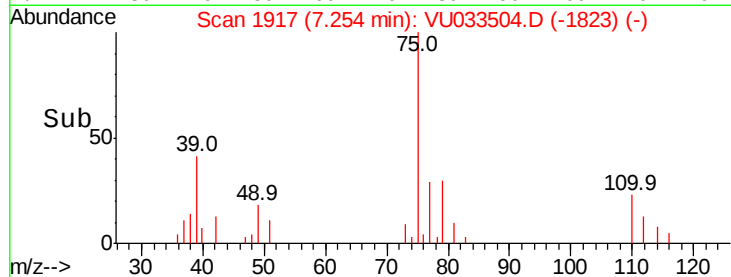
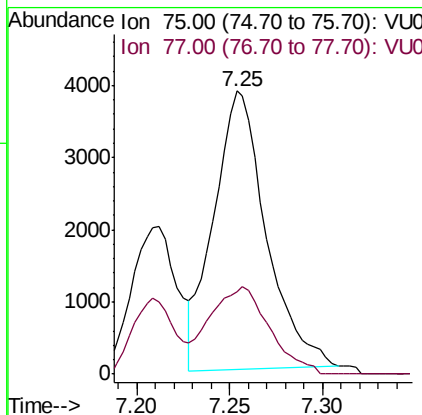
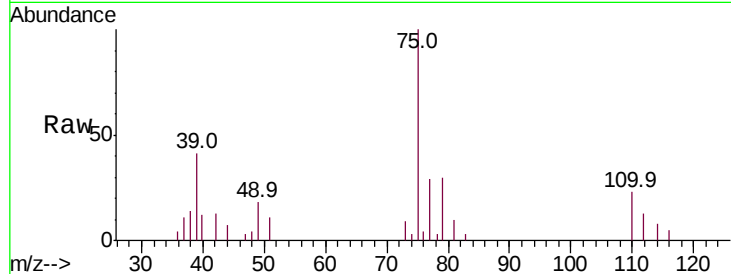
cis-1,3-Dichloropropene
 Concen: 2.089 ug/L
 RT: 7.25 min Scan# 1917
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Instrument :
 MSVOA_U
 ClientSampled :
 MDL04

Tot Ion: 75 Resp: 7594
 Ion Ratio Lower Upper
 75 100
 77 29.3 22.3 41.5

Manual Integrations
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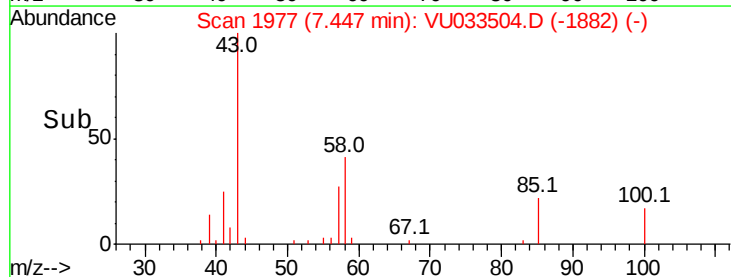
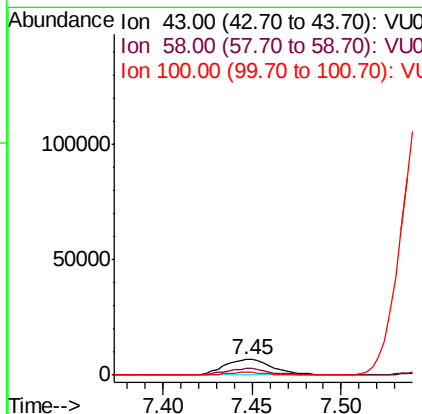
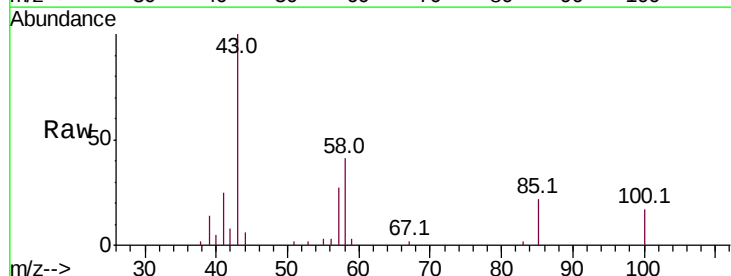
MMDadoda
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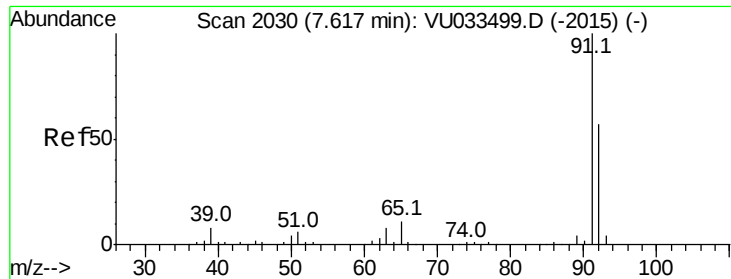


#40

4-Methyl-2-pentanone
 Concen: 4.014 ug/L
 RT: 7.45 min Scan# 1977
 Delta R.T. 0.01 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Tgt Ion: 43 Resp: 12906
 Ion Ratio Lower Upper
 43 100
 58 38.6 32.8 49.2
 100 15.3 12.9 19.3





#42

Toluene

Concen: 2.228 ug/L

RT: 7.62 min Scan# 2031

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

MDL04

Tot Ion: 91 Resp: 20840

Ion Ratio Lower Upper

91 100

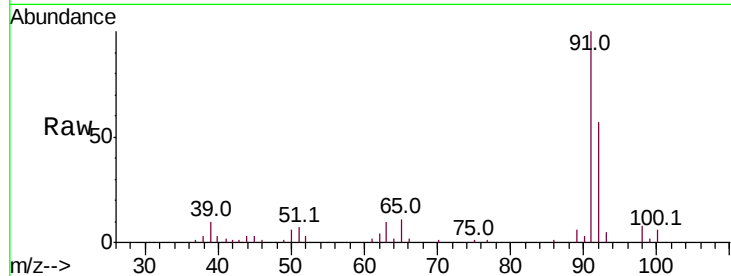
92 57.3 40.2 74.6

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Abundance Ion 91.00 (90.70 to 91.70): VU033504.D (-2015) (-)

Ion 92.00 (91.70 to 92.70): VU033504.D (-2015) (-)

7.62

12000

10000

8000

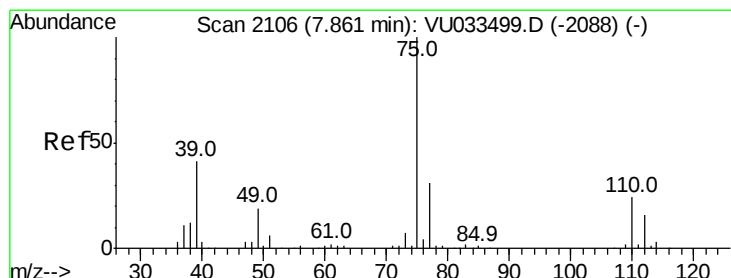
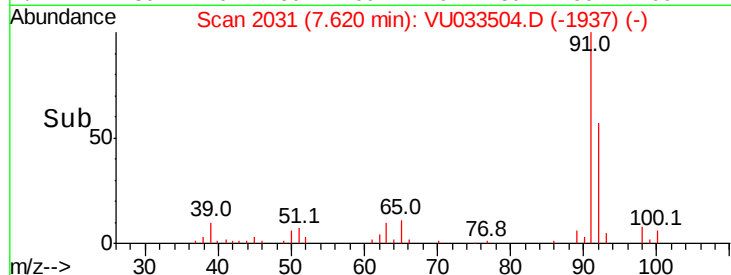
6000

4000

2000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 2.135 ug/L

RT: 7.87 min Scan# 2108

Delta R.T. 0.01 min

Lab File: VU033504.D

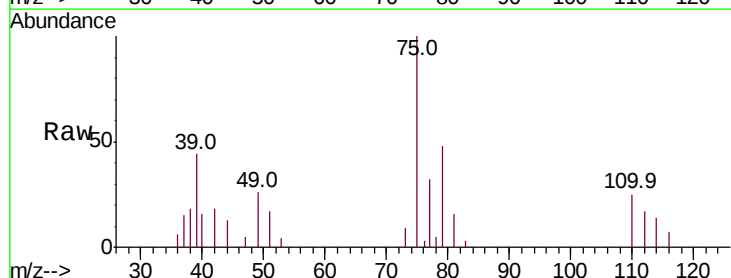
Acq: 30 Jul 2019 19:57

Tgt Ion: 75 Resp: 7012

Ion Ratio Lower Upper

75 100

77 31.8 22.7 42.1



Abundance Ion 75.00 (74.70 to 75.70): VU033504.D (-2088) (-)

Ion 77.00 (76.70 to 77.70): VU033504.D (-2088) (-)

7.87

4000

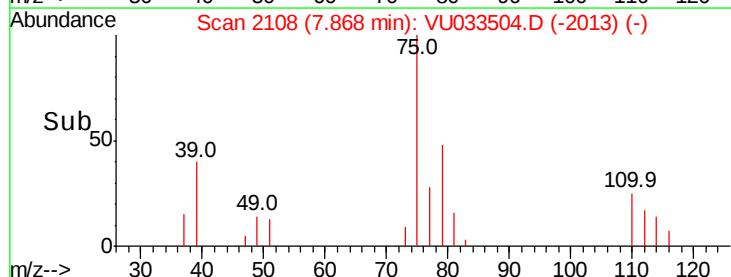
3000

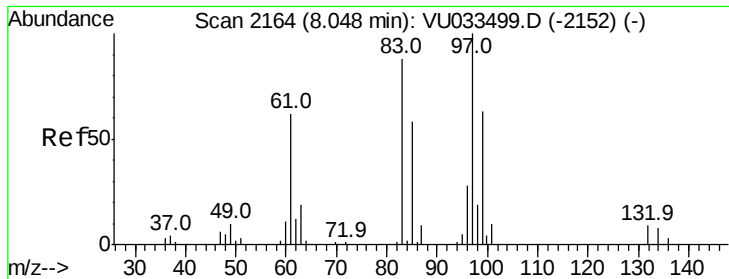
2000

1000

0

Time-->





#45

1,1,2-Trichloroethane

Concen: 2.276 ug/L

RT: 8.05 min Scan# 2165

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampleId :

MDL04

Tot Ion: 97 Resp: 5032

Ion Ratio Lower Upper

97 100

99 59.7 44.4 82.4

83 77.3 61.5 114.1

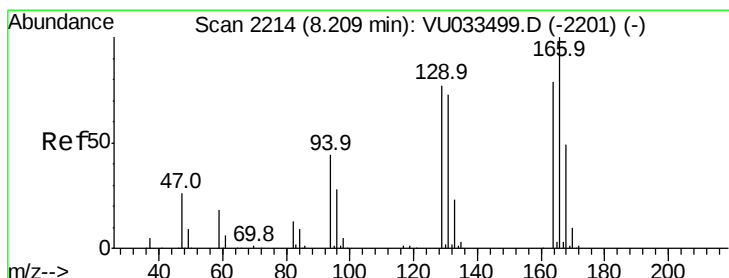
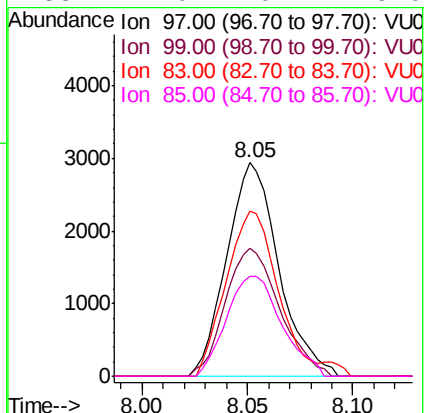
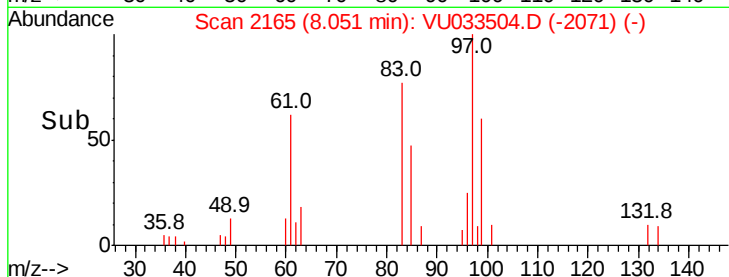
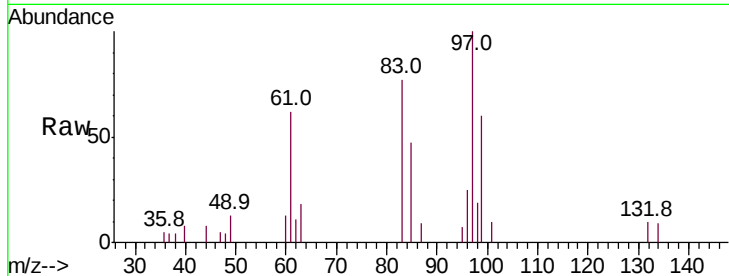
85 47.0 40.4 75.0

Manual Integrations

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#46

Tetrachloroethene

Concen: 1.987 ug/L

RT: 8.21 min Scan# 2215

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Tgt Ion: 164 Resp: 3722

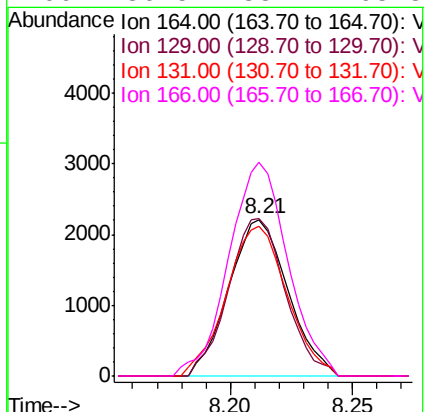
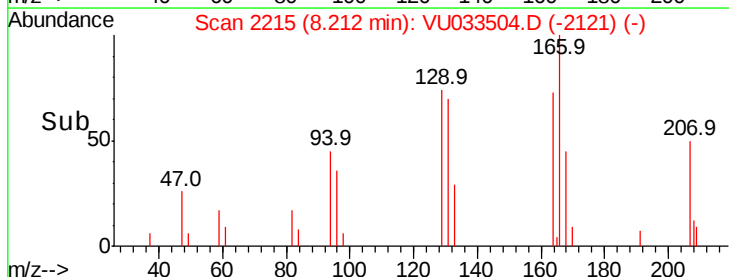
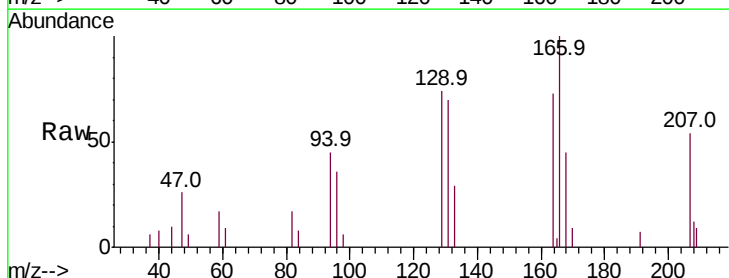
Ion Ratio Lower Upper

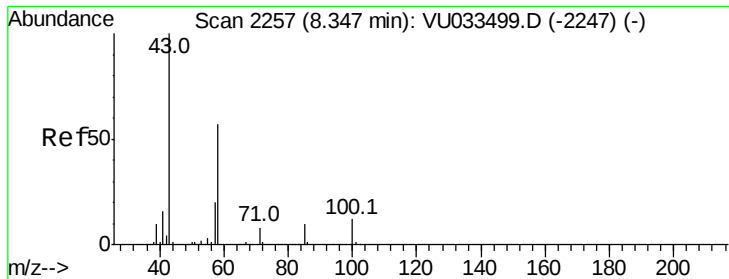
164 100

129 101.0 65.5 121.7

131 95.6 63.3 117.7

166 136.5 88.2 163.8





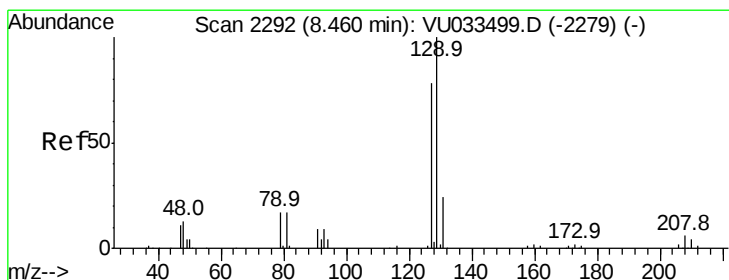
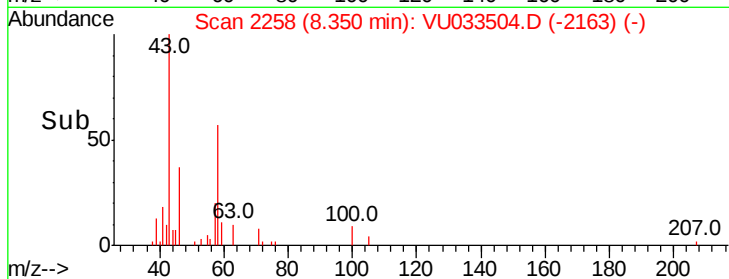
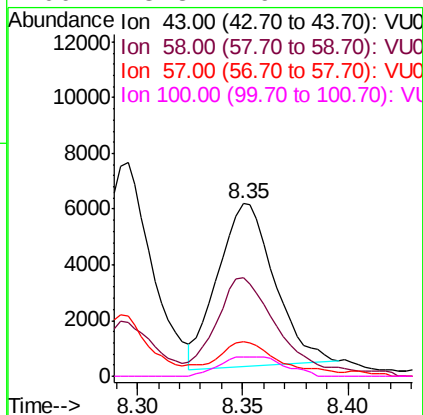
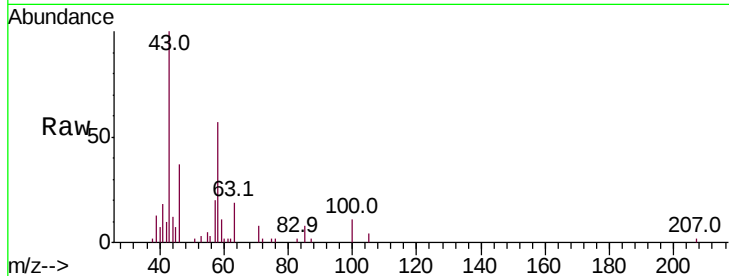
#48
2-Hexanone
Concen: 4.177 ug/L
RT: 8.35 min Scan# 2258
Delta R.T. 0.01 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Instrument :
MSVOA_U
ClientSampled :
MDL04

Tot Ion	Ion	Ratio	Lower	Upper
43	100			
58	56.3	45.8	68.6	
57	14.7	15.8	23.6	
100	8.3	9.4	14.2	

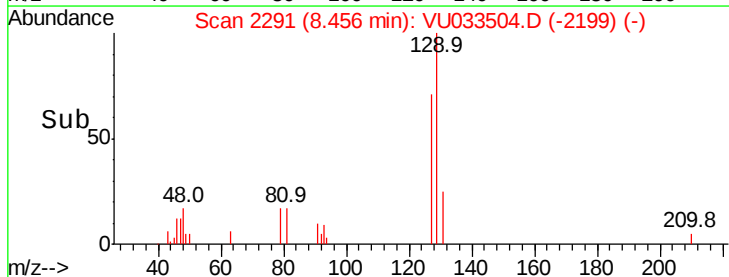
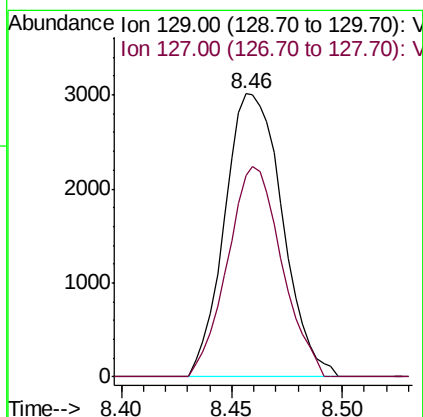
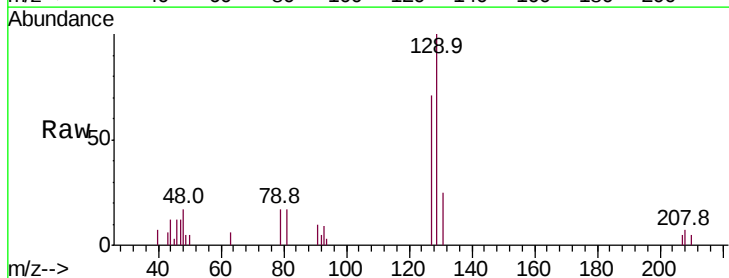
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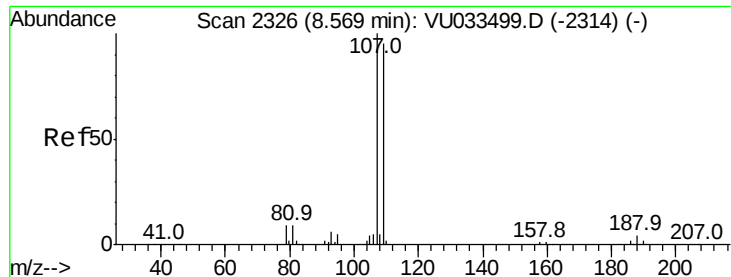
MMDadoda
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#49
Dibromochloromethane
Concen: 2.181 ug/L
RT: 8.46 min Scan# 2291
Delta R.T. -0.00 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Tgt Ion	Ion	Ratio	Lower	Upper
129	100			
127	71.1	53.8	99.8	





#50

1,2-Dibromoethane

Concen: 2.111 ug/L

RT: 8.57 min Scan# 2326

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

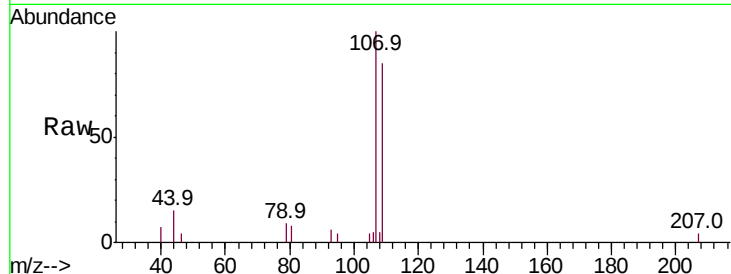
ClientSampleId :

MDL04

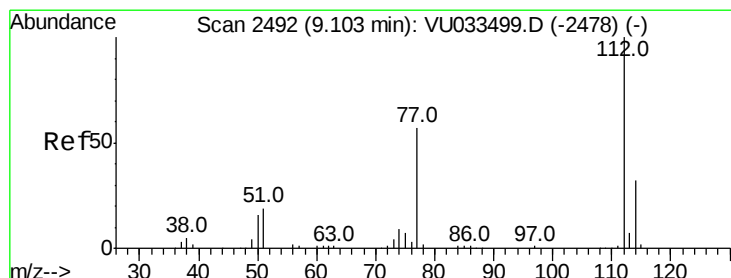
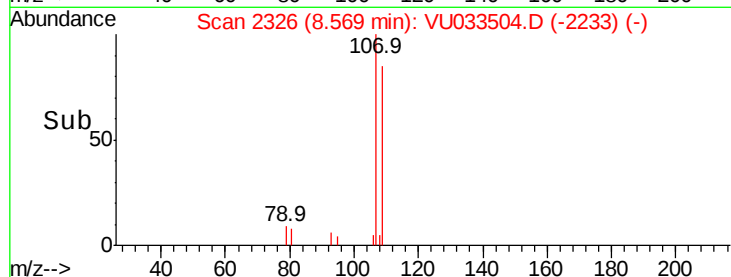
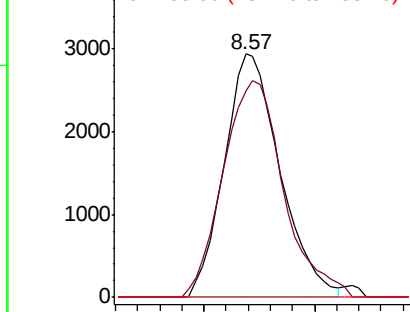
Tot Ion:	107	Resp:	5169
Ion Ratio	Lower	Upper	
107	100		
109	84.6	66.8	124.0
188	0.0	3.0	4.4#

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Abundance Ion 107.00 (106.70 to 107.70): V
Ion 109.00 (108.70 to 109.70): V
Ion 188.00 (187.70 to 188.70): V



#51

Chlorobenzene

Concen: 2.251 ug/L

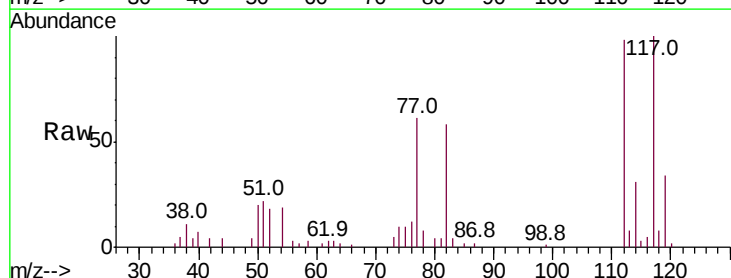
RT: 9.10 min Scan# 2492

Delta R.T. 0.00 min

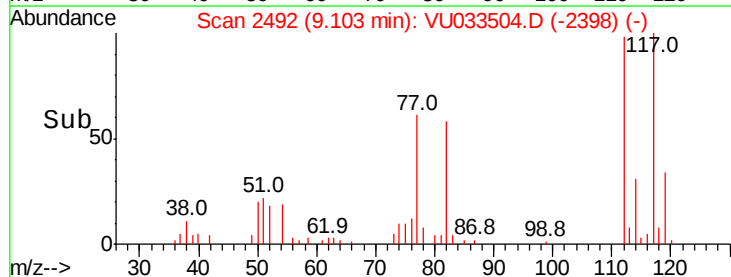
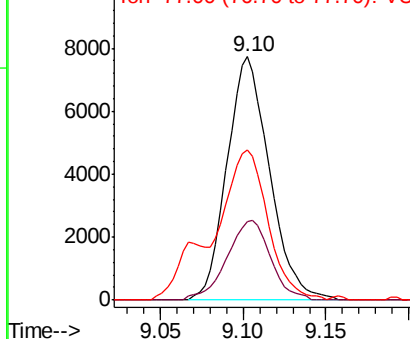
Lab File: VU033504.D

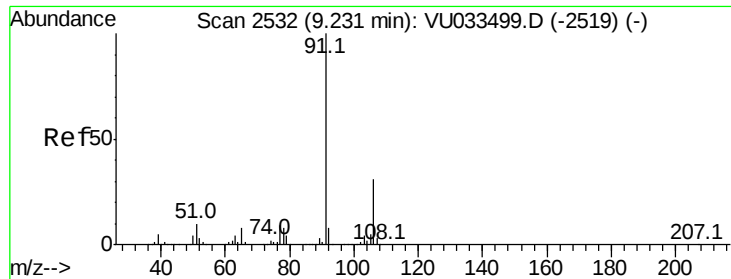
Acq: 30 Jul 2019 19:57

Tgt Ion:	112	Resp:	13783
Ion Ratio	Lower	Upper	
112	100		
114	32.0	22.3	41.5
77	61.6	45.6	68.4



Abundance Ion 112.00 (111.70 to 112.70): V
Ion 114.00 (113.70 to 114.70): V
Ion 77.00 (76.70 to 77.70): V





#52

Ethylbenzene

Concen: 1.962 ug/L

RT: 9.24 min Scan# 2534

Delta R.T. 0.01 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

MDL04

Tot Ion: 91 Resp: 19768

Ion Ratio Lower Upper

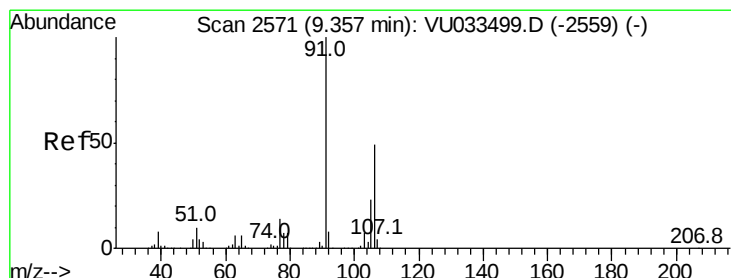
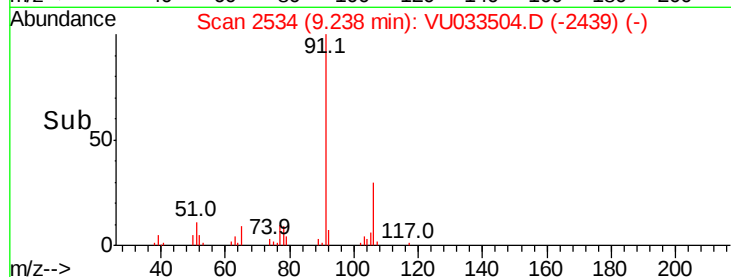
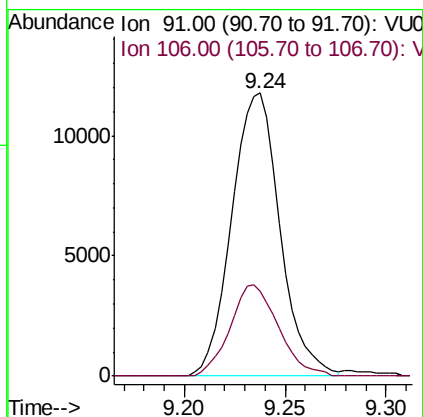
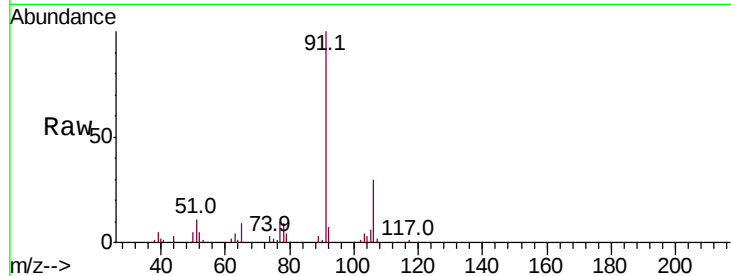
91 100

106 29.9 22.2 41.2

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#53

m,p-Xylene

Concen: 1.980 ug/L

RT: 9.36 min Scan# 2572

Delta R.T. 0.00 min

Lab File: VU033504.D

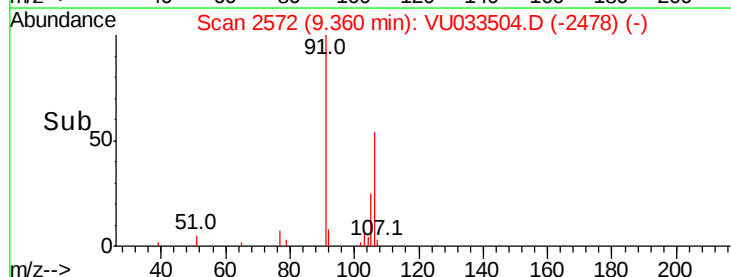
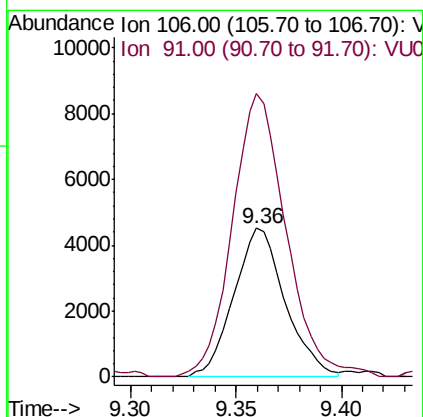
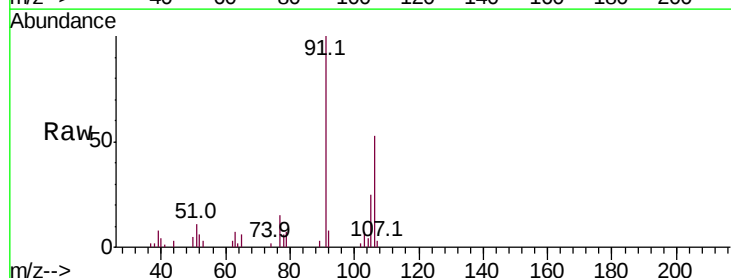
Acq: 30 Jul 2019 19:57

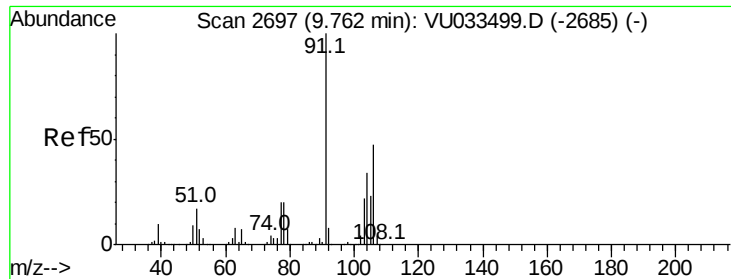
Tgt Ion: 106 Resp: 7655

Ion Ratio Lower Upper

106 100

91 190.2 143.0 265.6





#54

o-xylene

Concen: 1.841 ug/L

RT: 9.76 min Scan# 2698

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

MDL04

Tot Ion:106 Resp: 6906

Ion Ratio Lower Upper

106 100

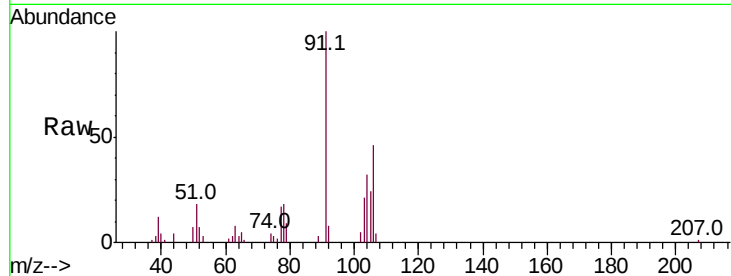
91 219.4 148.4 275.6

Manual Integrations

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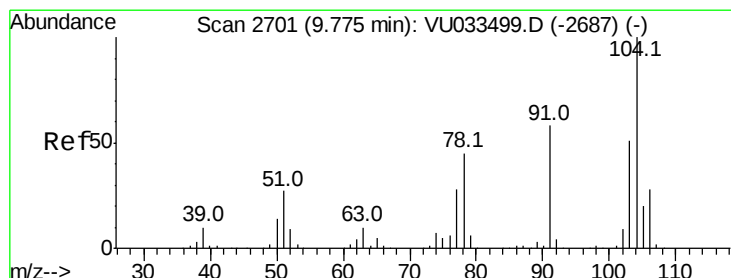
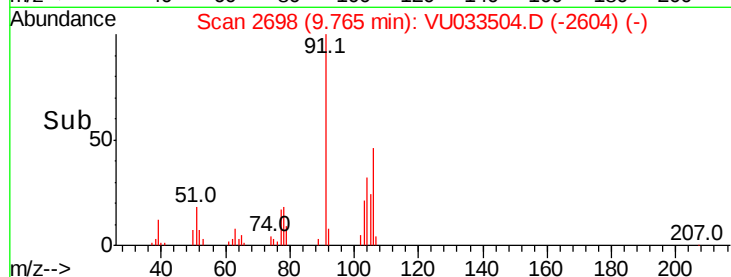
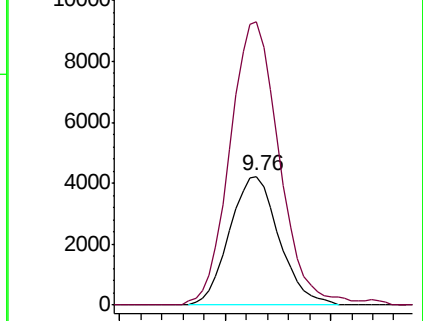
MMDadoda

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Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 1.791 ug/L

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VU033504.D

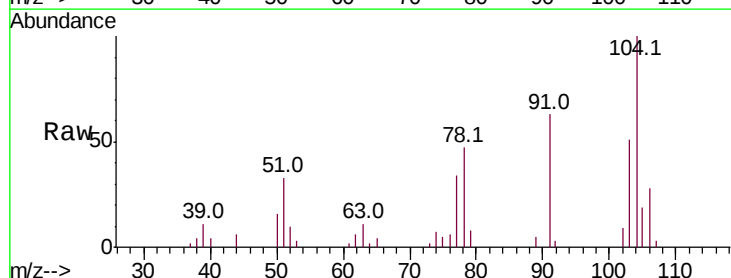
Acq: 30 Jul 2019 19:57

Tgt Ion:104 Resp: 11409

Ion Ratio Lower Upper

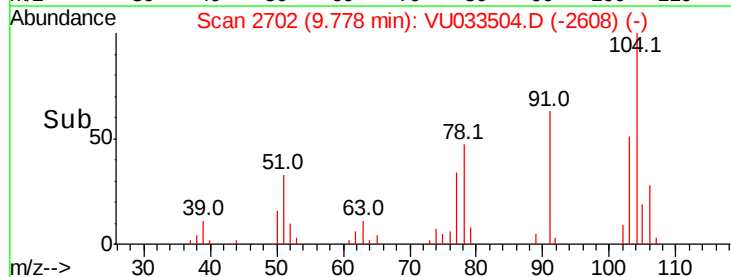
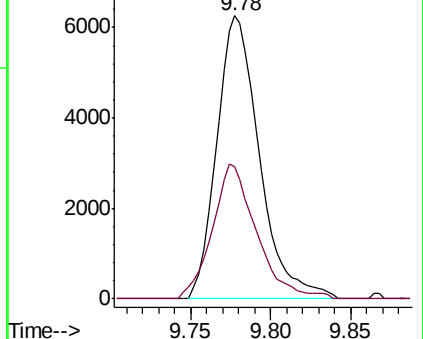
104 100

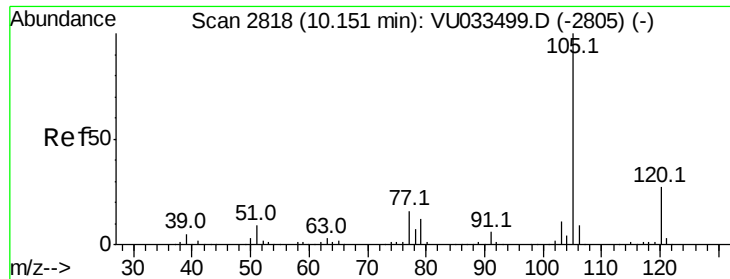
78 47.0 32.2 59.8



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0





#56

Isopropylbenzene

Concen: 1.785 ug/L

RT: 10.15 min Scan# 2818

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

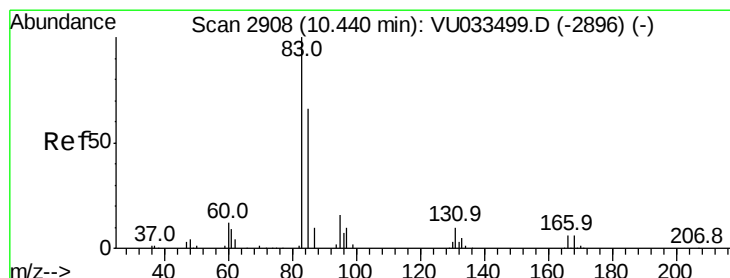
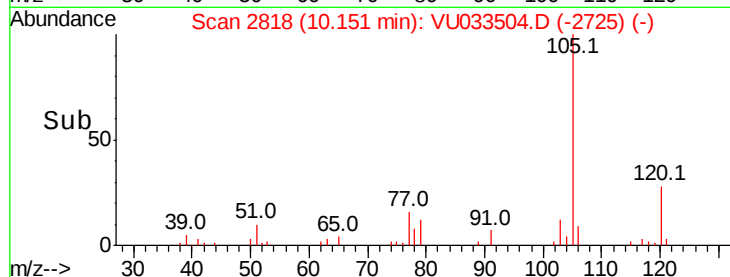
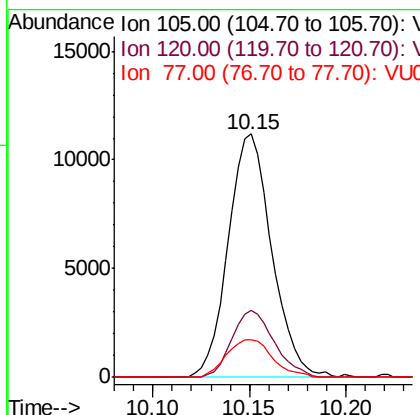
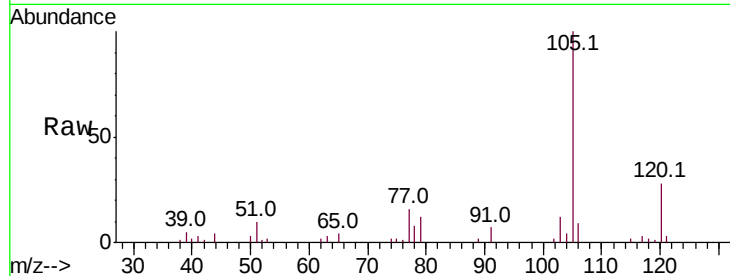
ClientSampleId :

MDL04

Tot Ion:	105	Resp:	17500
Ion Ratio	Lower	Upper	
105	100		
120	26.6	21.4	32.0
77	16.5	12.5	18.7

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#58

1,1,2,2-Tetrachloroethane

Concen: 2.429 ug/L

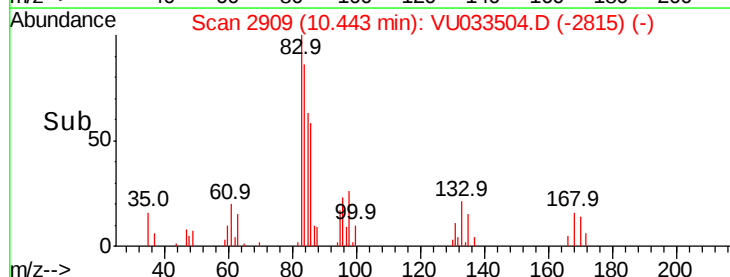
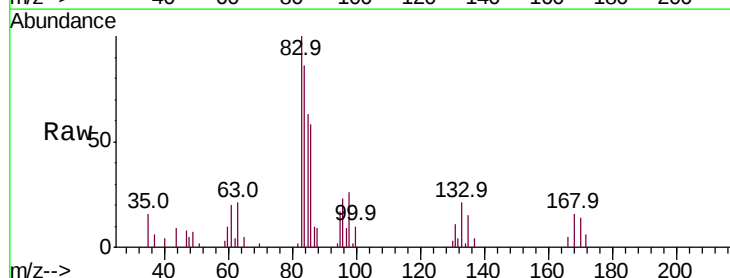
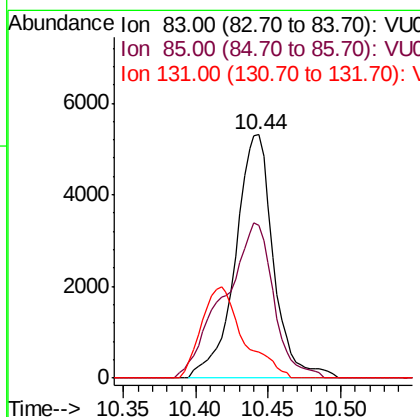
RT: 10.44 min Scan# 2909

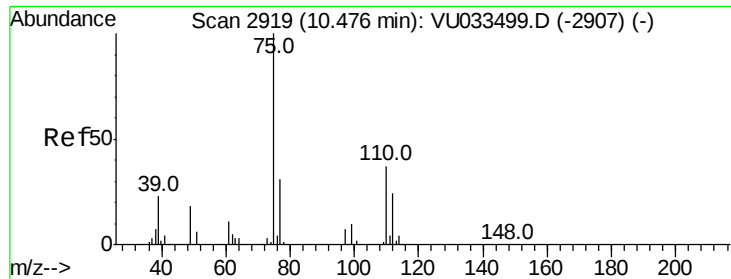
Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Tgt Ion:	83	Resp:	9686
Ion Ratio	Lower	Upper	
83	100		
85	62.6	45.4	84.4
131	10.8	7.9	11.9





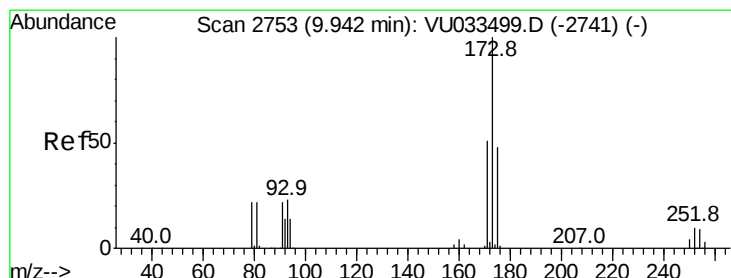
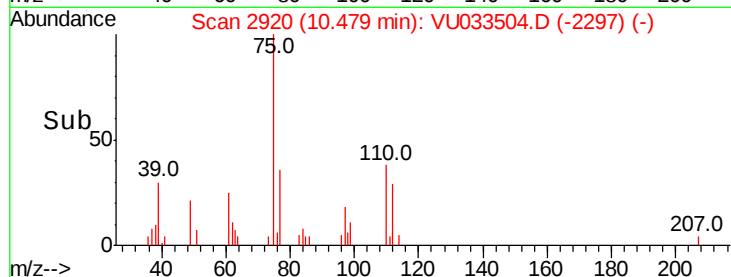
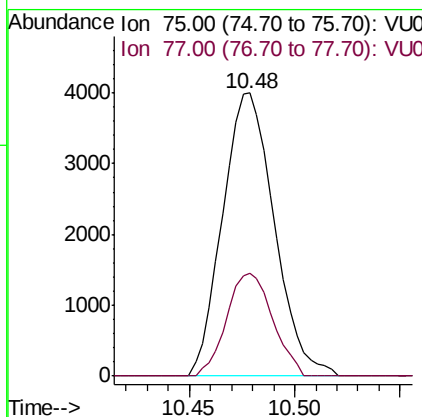
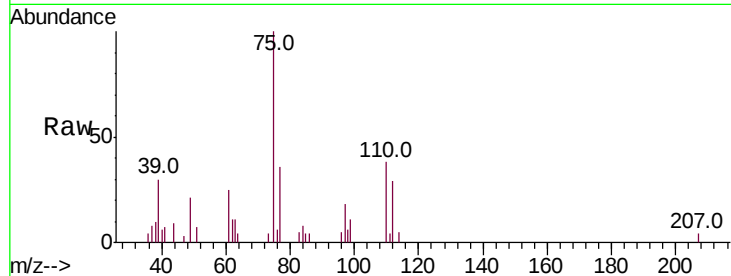
#59
 1,2,3-Trichloropropane
 Concen: 2.212 ug/L
 RT: 10.48 min Scan# 2920
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Instrument :
 MSVOA_U
 ClientSampled :
 MDL04

Tot Ion: 75 Resp: 6800
 Ion Ratio Lower Upper
 75 100
 77 32.3 25.8 38.6

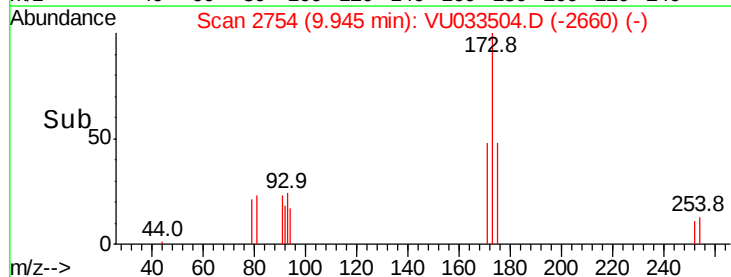
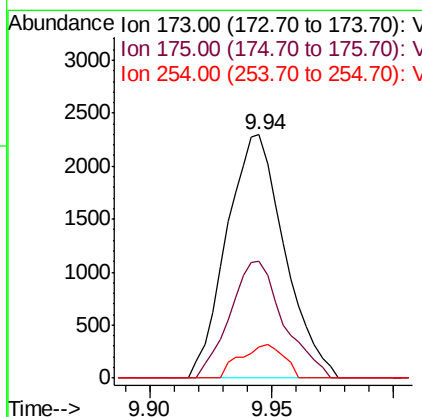
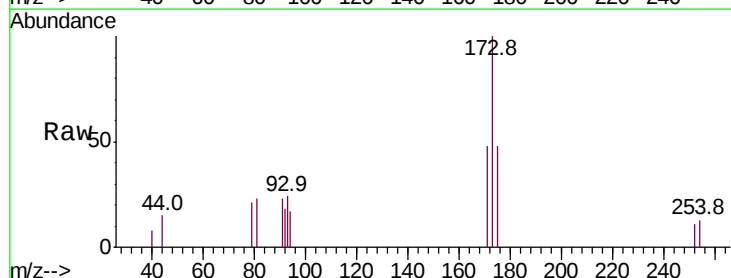
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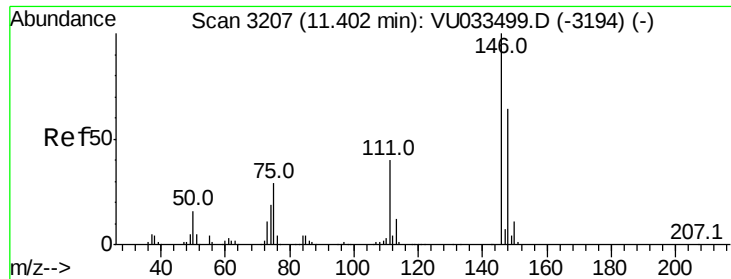
MMDadoda
 7/31/2019 10:34:08 AM



#61
 Bromoform
 Concen: 2.110 ug/L
 RT: 9.94 min Scan# 2754
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Tgt Ion: 173 Resp: 3782
 Ion Ratio Lower Upper
 173 100
 175 44.3 38.7 58.1
 254 10.3 7.5 11.3





#62

1,3-Dichlorobenzene

Concen: 2.224 ug/L

RT: 11.40 min Scan# 3208

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

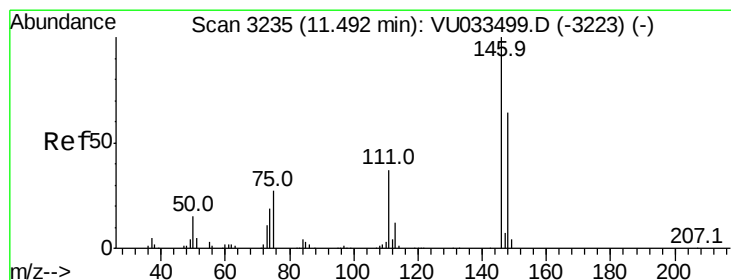
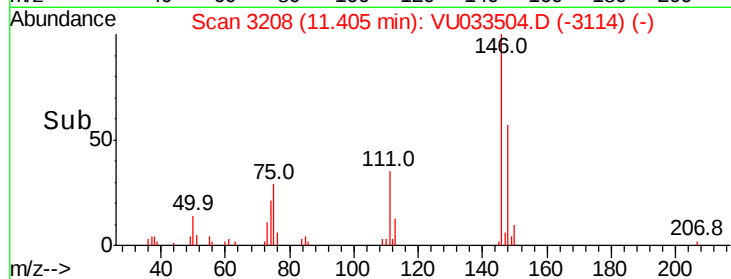
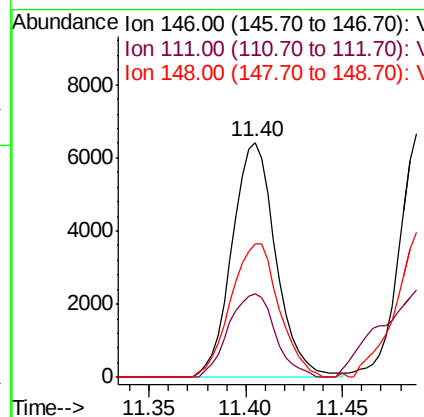
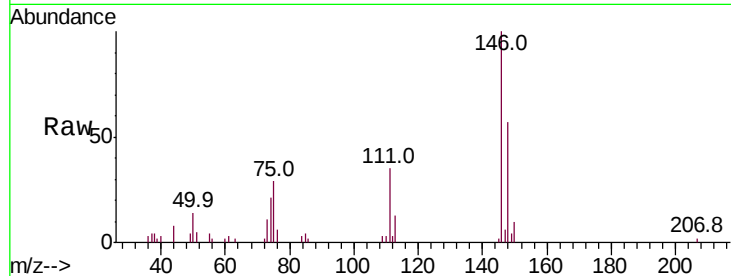
ClientSampled :

MDL04

Tot Ion:	146	Resp:	10134
Ion Ratio	Lower	Upper	
146	100		
111	35.5	28.1	52.1
148	56.9	45.0	83.6

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#63

1,4-Dichlorobenzene

Concen: 2.332 ug/L

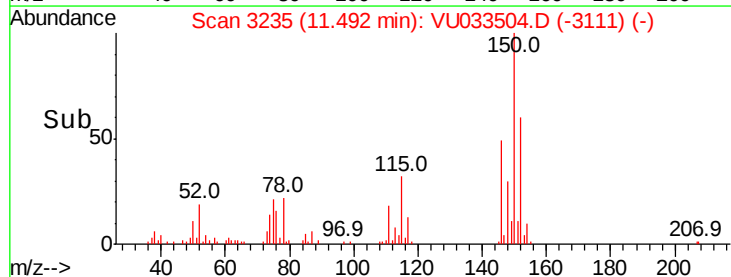
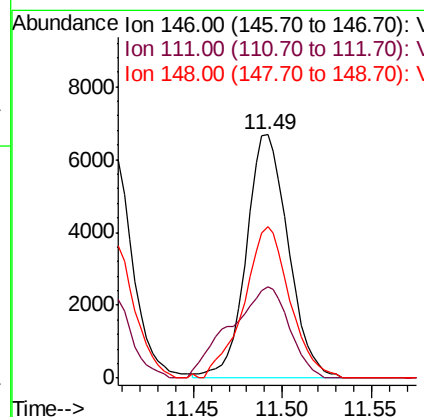
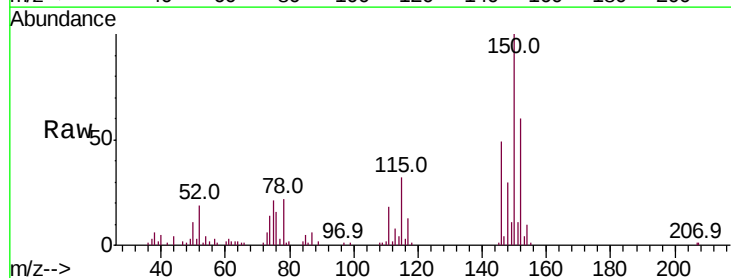
RT: 11.49 min Scan# 3235

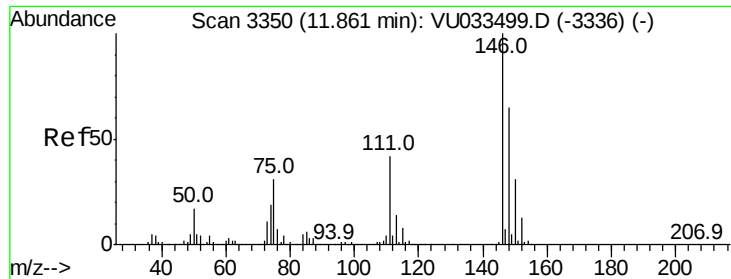
Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Tgt Ion:	146	Resp:	11042
Ion Ratio	Lower	Upper	
146	100		
111	37.6	27.2	50.4
148	62.2	44.5	82.7





#65

1,2-Dichlorobenzene

Concen: 2.397 ug/L

RT: 11.86 min Scan# 3351

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

Instrument :

MSVOA_U

ClientSampled :

MDL04

Tot Ion:146 Resp: 11045

Ion Ratio Lower Upper

146 100

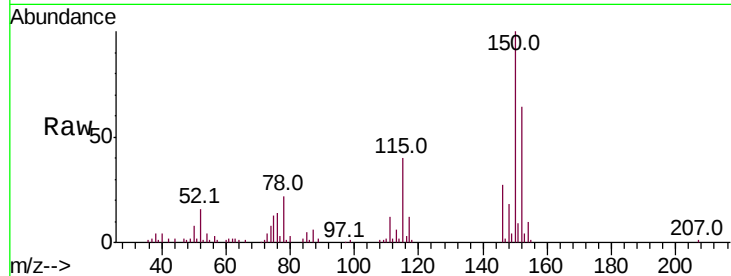
111 44.6 31.7 47.5

148 65.6 50.3 75.5

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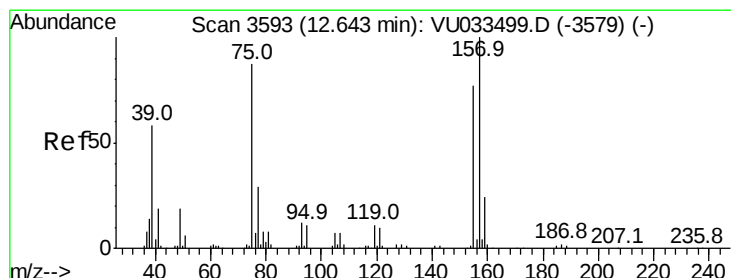
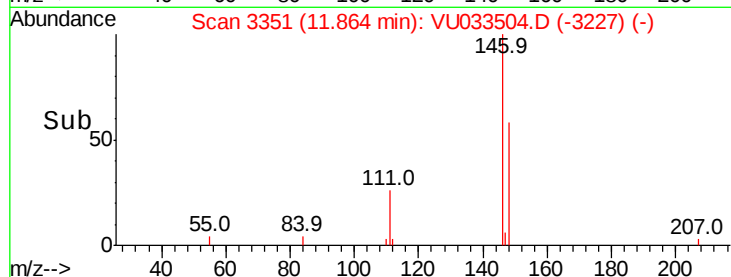
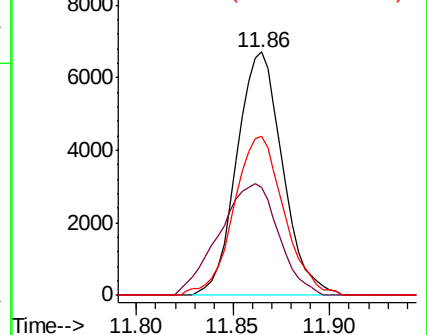
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Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 2.032 ug/L

RT: 12.64 min Scan# 3593

Delta R.T. 0.00 min

Lab File: VU033504.D

Acq: 30 Jul 2019 19:57

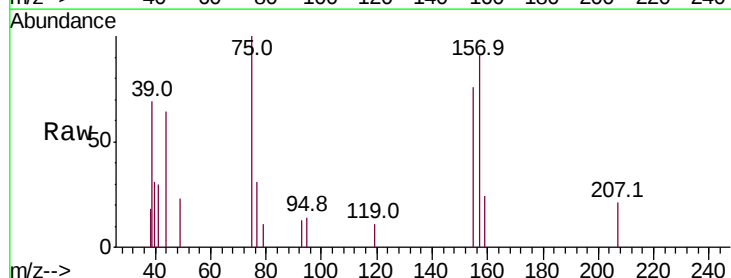
Tgt Ion: 75 Resp: 1730

Ion Ratio Lower Upper

75 100

155 76.1 69.4 104.0

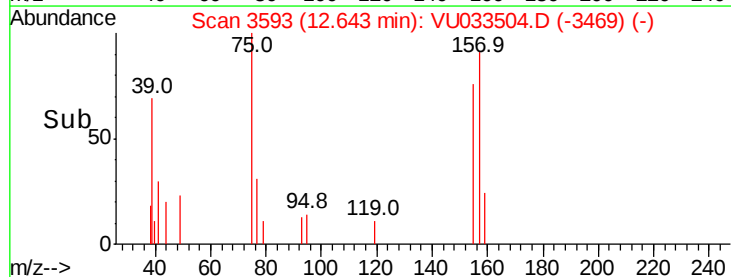
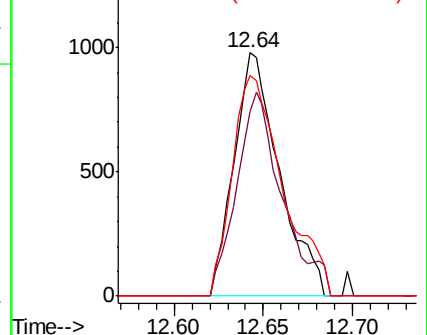
157 90.8 91.8 137.8#

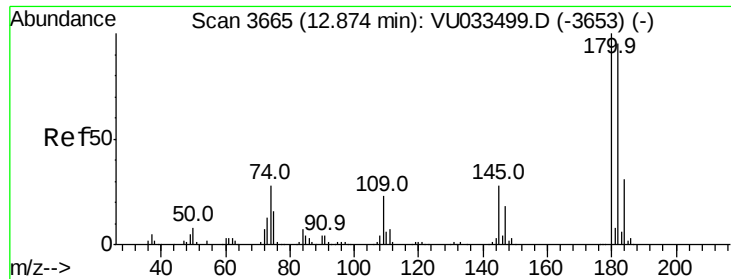


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V





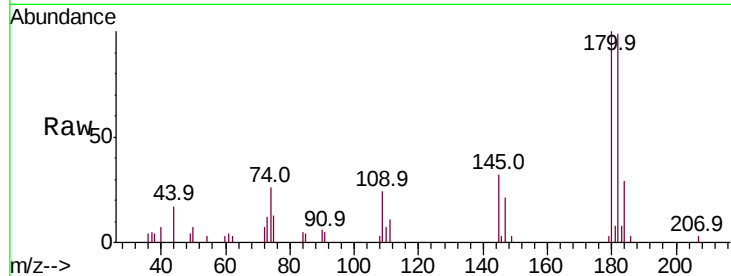
#67
 1,3,5-Trichlorobenzene
 Concen: 1.929 ug/L
 RT: 12.88 min Scan# 3666
 Delta R.T. 0.00 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL04

Tot Ion:	180	Resp:	7093
Ion Ratio	Lower	Upper	
180	100		
182	90.5	75.6	113.4
184	26.8	24.2	36.2
145	32.1	22.7	34.1

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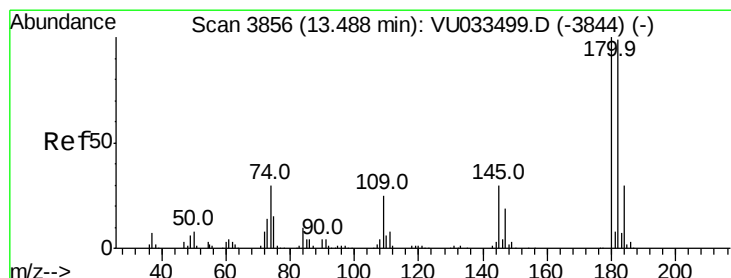
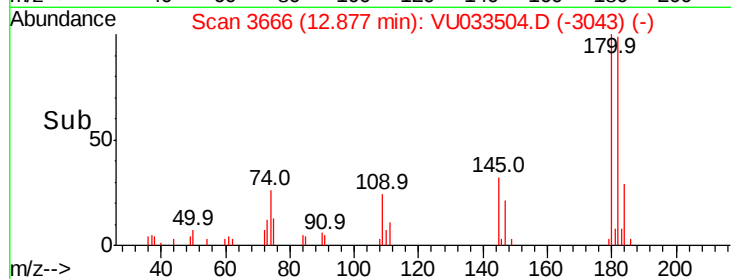
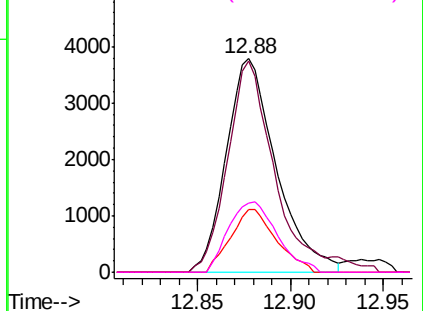
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68
 1,2,4-trichlorobenzene
 Concen: 1.606 ug/L
 RT: 13.50 min Scan# 3859
 Delta R.T. 0.01 min
 Lab File: VU033504.D
 Acq: 30 Jul 2019 19:57

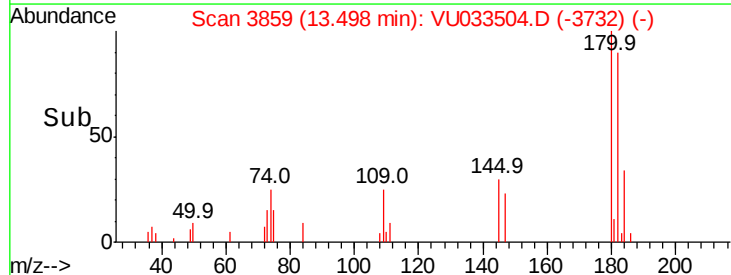
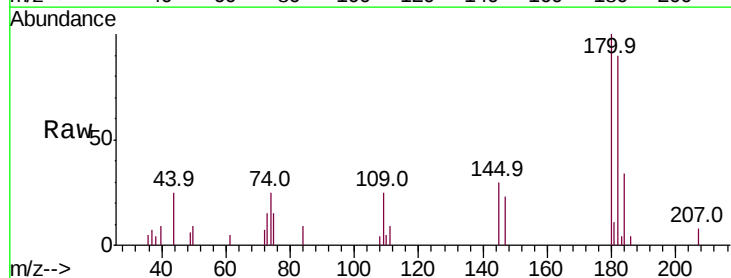
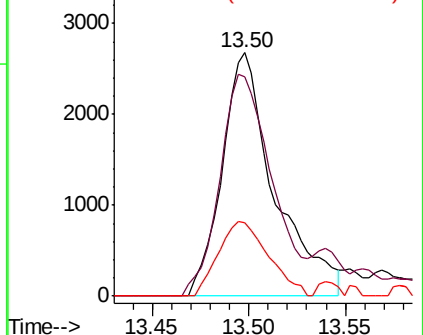
Tgt Ion:	180	Resp:	5045
Ion Ratio	Lower	Upper	
180	100		
182	90.6	75.8	113.8
145	29.1	24.3	36.5

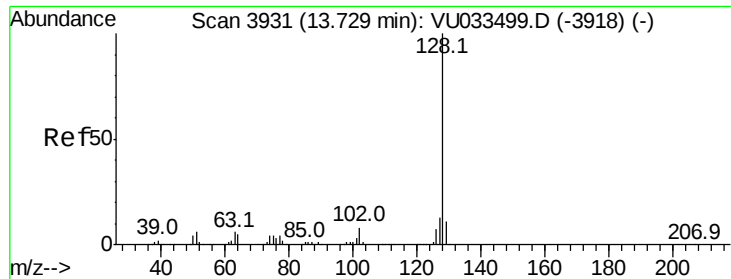
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





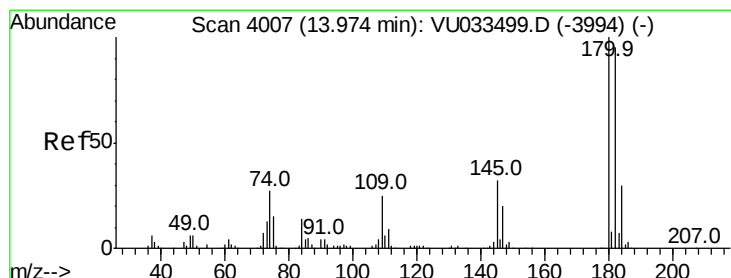
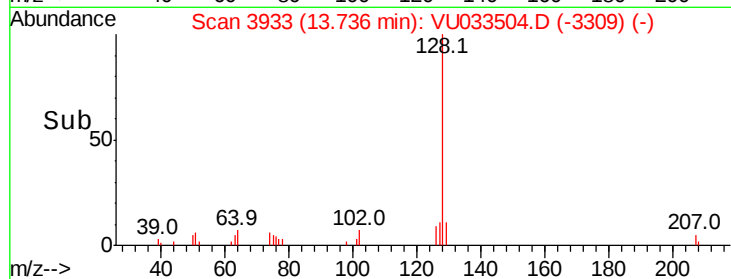
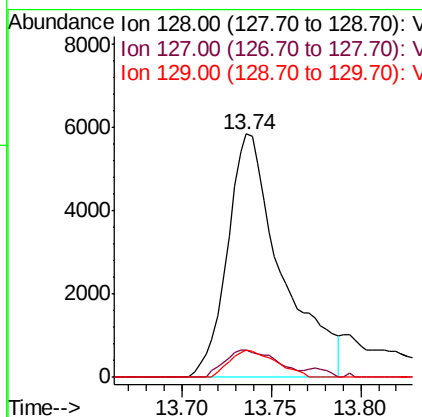
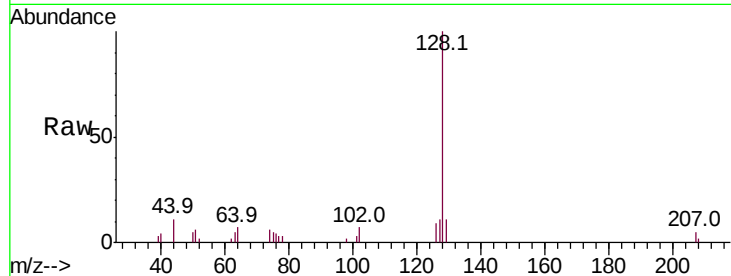
#69
Naphthalene
Concen: 1.364 ug/L
RT: 13.74 min Scan# 3933
Delta R.T. 0.01 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Instrument :
MSVOA_U
ClientSampleId :
MDL04

Tot Ion	Ratio	Lower	Upper
128	100		
127	10.9	10.8	16.2
129	9.5	8.7	13.1

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#70
1,2,3-Trichlorobenzene
Concen: 1.608 ug/L
RT: 13.98 min Scan# 4010
Delta R.T. 0.01 min
Lab File: VU033504.D
Acq: 30 Jul 2019 19:57

Tgt Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.5	113.3
145	29.5	24.4	36.6

