

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081518\
 Data File : VU026163.D
 Acq On : 15 Aug 2018 22:25
 Operator : MD/SY
 Sample : MDL01
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 36 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Manual Integrations
 APPROVED

MMDadoda
 8/16/2018 4:20:25 PM

Quant Time: Aug 16 08:45:25 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SOMULM081518WMA.M
 Quant Title : VOC Analysis
 QLast Update : Thu Aug 16 04:40:24 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.89	114	277864	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.09	117	261966	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.49	152	111860	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.40	65	67566	41.41	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	82.82%
7) Chloroethane-d5	1.67	69	58637	43.72	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	87.44%
11) 1,1-Dichloroethene-d2	2.27	63	106003	33.08	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	66.16%
21) 2-Butanone-d5	4.18	46	130116	103.93	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	103.93%
24) Chloroform-d	4.65	84	164905	45.12	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	90.24%
26) 1,2-Dichloroethane-d4	5.31	65	112607	47.08	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	94.16%
32) Benzene-d6	5.34	84	318845	47.21	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	94.42%
36) 1,2-Dichloropropane-d6	6.33	67	105693	47.60	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	95.20%
41) Toluene-d8	7.57	98	288966	44.70	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	89.40%
43) trans-1,3-Dichloropropene-	7.85	79	47598	45.27	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	90.54%
47) 2-Hexanone-d5	8.31	63	91923	101.04	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	101.04%
57) 1,1,2,2-Tetrachloroethane-	10.44	84	145191	46.46	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	92.92%
64) 1,2-Dichlorobenzene-d4	11.86	152	112939	48.52	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.04%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	1.20	85	4458	2.03	ug/L	97
3) Chloromethane	1.33	50	4742	2.37	ug/L	95
5) Vinyl chloride	1.40	62	4082	2.04	ug/L #	59
6) Bromomethane	1.62	94	2219	2.15	ug/L	99
8) Chloroethane	1.69	64	2518	2.10	ug/L	96
9) Trichlorofluoromethane	1.88	101	5726	1.94	ug/L	96
10) 1,1,2-Trichloro-1,2,2-trif	2.28	101	4162	2.60	ug/L #	76
12) 1,1-Dichloroethene	2.28	96	3657	2.49	ug/L #	1
13) Acetone	2.32	43	4878	4.26	ug/L	89
14) Carbon disulfide	2.48	76	9908	1.95	ug/L	99
15) Methyl Acetate	2.62	43	4768	2.40	ug/L #	78
16) Methylene chloride	2.70	84	4372	2.22	ug/L	90
17) trans-1,2-Dichloroethene	2.98	96	3799	2.18	ug/L	97
18) Methyl tert-butyl Ether	3.00	73	10460	1.89	ug/L	97
19) 1,1-Dichloroethane	3.45	63	6798	2.03	ug/L	99
20) cis-1,2-Dichloroethene	4.23	96	3777	1.93	ug/L	96
22) 2-Butanone	4.27	43	5649m	3.96	ug/L	

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Bromochloromethane	4.55	128	2129m	2.02	ug/L	
25) Chloroform	4.68	83	8688	2.47	ug/L	96
27) 1,2-Dichloroethane	5.41	62	6044	2.12	ug/L #	90
29) Cyclohexane	5.00	56	4523	1.73	ug/L #	92
30) 1,1,1-Trichloroethane	4.91	97	6364	2.03	ug/L	99
31) Carbon tetrachloride	5.13	117	5736m	2.02	ug/L	
33) Benzene	5.40	78	15104	2.13	ug/L	100
34) Trichloroethene	6.19	95	3814	2.06	ug/L	88
35) Methylcyclohexane	6.42	83	5140	1.85	ug/L	93
37) 1,2-Dichloropropane	6.44	63	3751	1.89	ug/L	99
38) Bromodichloromethane	6.76	83	5524	2.11	ug/L	98
39) cis-1,3-Dichloropropene	7.27	75	5594	1.90	ug/L	94
40) 4-Methyl-2-pentanone	7.46	43	9825	4.00	ug/L	97
42) Toluene	7.64	91	15003	1.99	ug/L	87
44) trans-1,3-Dichloropropene	7.88	75	5277	1.86	ug/L	99
45) 1,1,2-Trichloroethane	8.07	97	4135	2.20	ug/L	88
46) Tetrachloroethene	8.23	164	3285	2.06	ug/L	89
48) 2-Hexanone	8.37	43	8427	4.38	ug/L	94
49) Dibromochloromethane	8.48	129	4196	1.85	ug/L	90
50) 1,2-Dibromoethane	8.59	107	4061	2.08	ug/L #	90
51) Chlorobenzene	9.12	112	10017	1.95	ug/L	96
52) Ethylbenzene	9.26	91	14004	1.71	ug/L	100
53) m,p-Xylene	9.38	106	5159	1.63	ug/L	99
54) o-xylene	9.78	106	5139	1.63	ug/L	95
55) Styrene	9.80	104	7442	1.42	ug/L	100
56) Isopropylbenzene	10.17	105	12034	1.49	ug/L	96
58) 1,1,1,2,2-Tetrachloroethane	10.46	83	7047	2.25	ug/L	97
59) 1,2,3-Trichloropropane	10.50	75	5171m	2.12	ug/L	
61) Bromoform	9.96	173	3125	2.14	ug/L #	97
62) 1,3-Dichlorobenzene	11.42	146	6252	1.87	ug/L	85
63) 1,4-Dichlorobenzene	11.51	146	7113	2.06	ug/L	98
65) 1,2-Dichlorobenzene	11.88	146	7535	2.10	ug/L	97
66) 1,2-Dibromo-3-chloropropan	12.66	75	1155	2.03	ug/L	84
67) 1,3,5-Trichlorobenzene	12.89	180	4164	1.68	ug/L	98
68) 1,2,4-trichlorobenzene	13.51	180	2594	1.38	ug/L	89
69) Naphthalene	13.75	128	7170m	1.34	ug/L	
70) 1,2,3-Trichlorobenzene	13.99	180	2510m	1.25	ug/L	

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

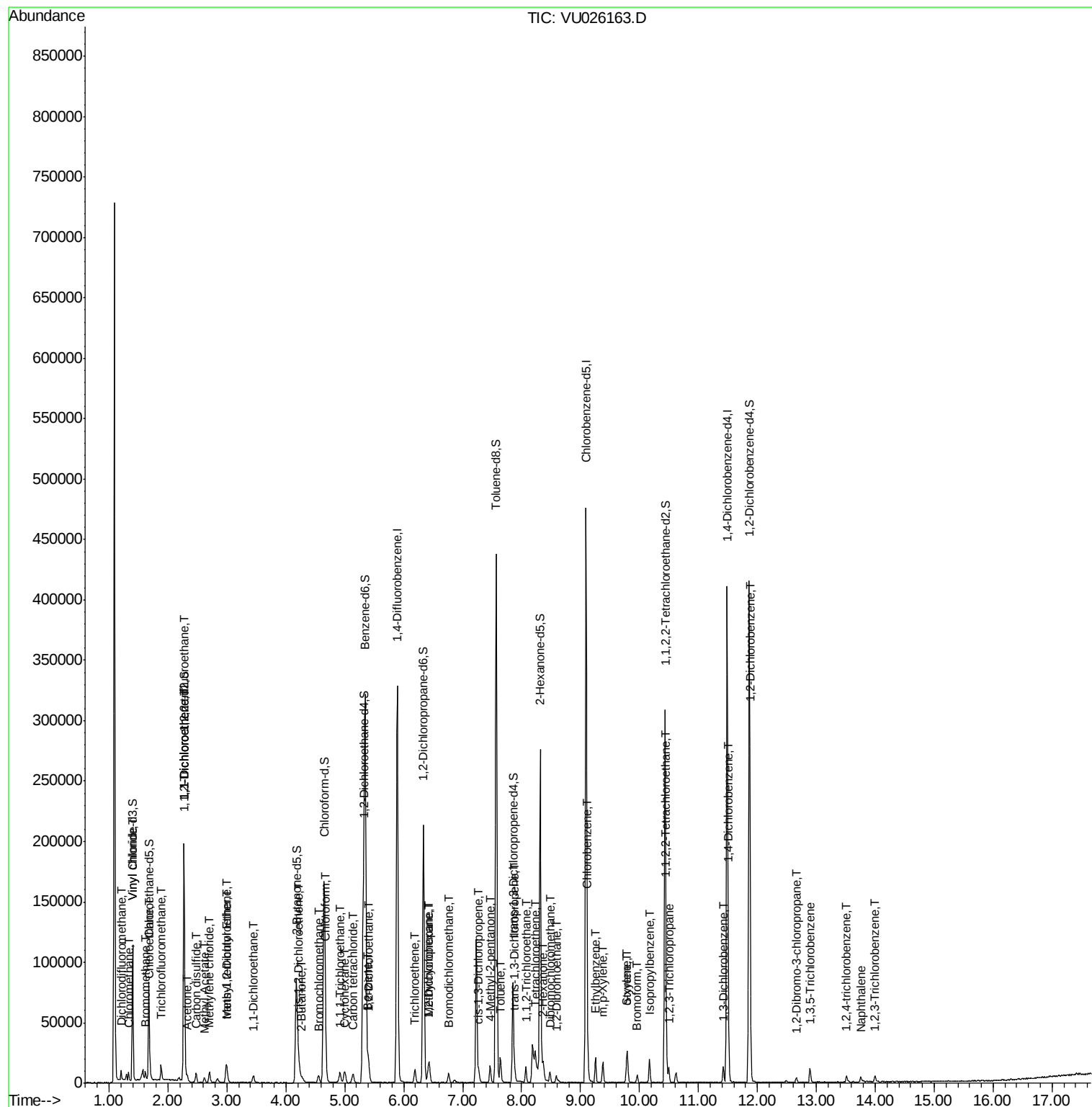
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU081518\
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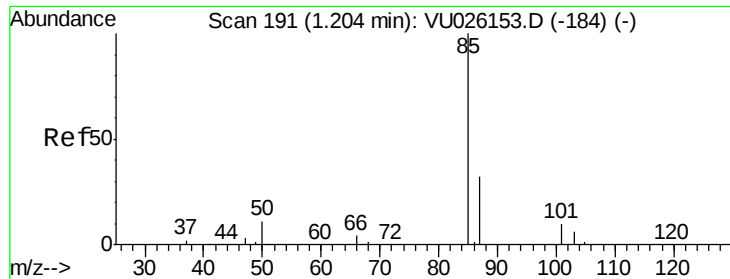
Instrument :
MSVOA_U
ClientSampleId :
MDL01

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#2

Dichlorodifluoromethane

Concen: 2.03 ug/L

RT: 1.20 min Scan# 191

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampled :

MDL01

Tot Ion: 85 Resp: 4458

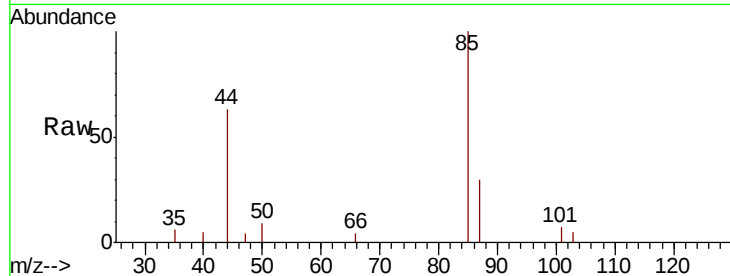
Ion Ratio Lower Upper

85 100

87 30.7 26.1 39.1

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Abundance Ion 85.00 (84.70 to 85.70): VU026163.D (-184) (-)

Ion 87.00 (86.70 to 87.70): VU026163.D (-184) (-)

1.20

4000

3000

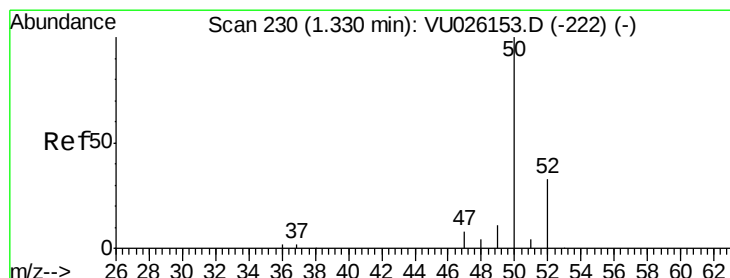
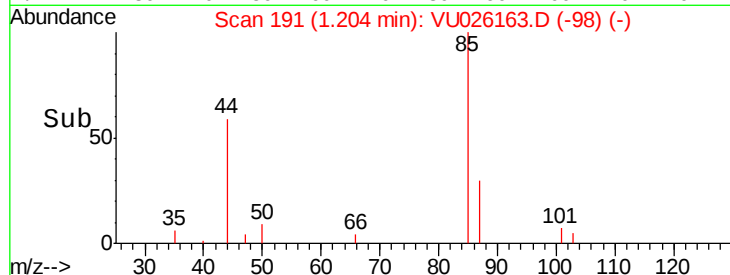
2000

1000

0

1.18 1.20 1.22 1.24

Time-->



#3

Chloromethane

Concen: 2.37 ug/L

RT: 1.33 min Scan# 230

Delta R.T. 0.00 min

Lab File: VU026163.D

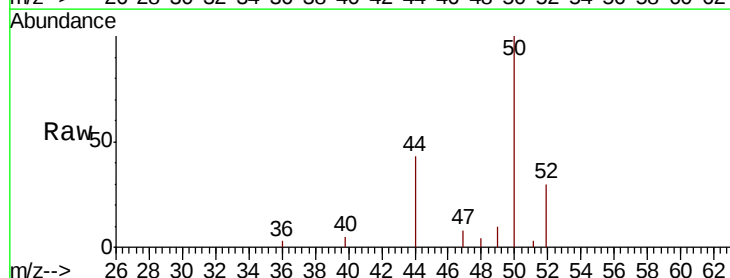
Acq: 15 Aug 2018 22:25

Tgt Ion: 50 Resp: 4742

Ion Ratio Lower Upper

50 100

52 30.3 23.0 42.8



Abundance Ion 50.00 (49.70 to 50.70): VU026163.D (-222) (-)

Ion 52.00 (51.70 to 52.70): VU026163.D (-222) (-)

1.33

4000

3000

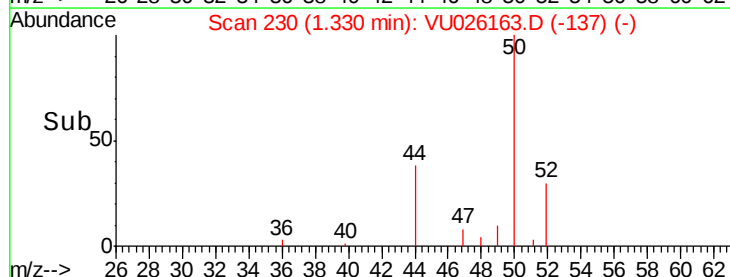
2000

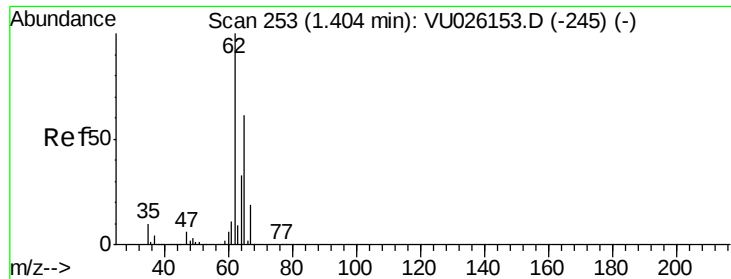
1000

0

1.30 1.32 1.34 1.36

Time-->





#5

Vinyl chloride

Concen: 2.04 ug/L

RT: 1.40 min Scan# 253

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampleId :

MDL01

Tot Ion: 62 Resp: 4082

Ion Ratio Lower Upper

62 100

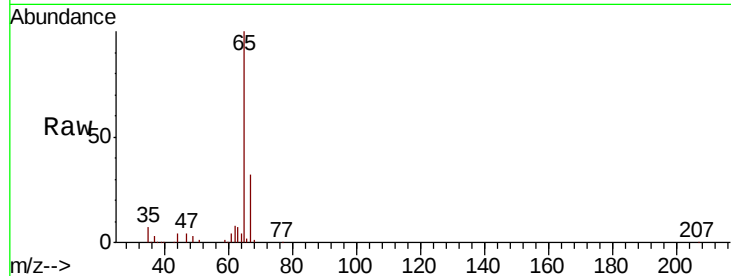
64 55.9 23.0 42.8#

Manual Integrations

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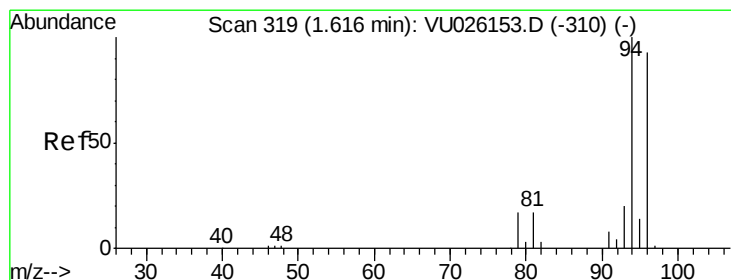
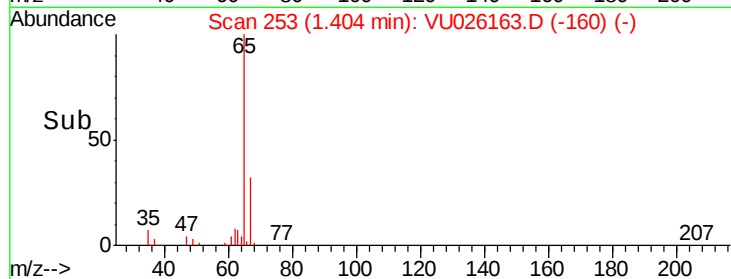
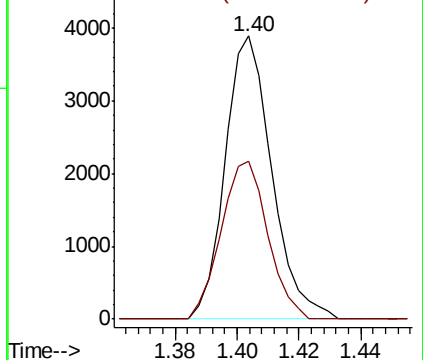
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Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0



#6

Bromomethane

Concen: 2.15 ug/L

RT: 1.62 min Scan# 320

Delta R.T. 0.00 min

Lab File: VU026163.D

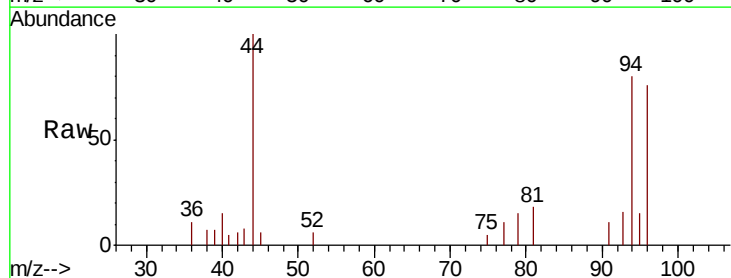
Acq: 15 Aug 2018 22:25

Tgt Ion: 94 Resp: 2219

Ion Ratio Lower Upper

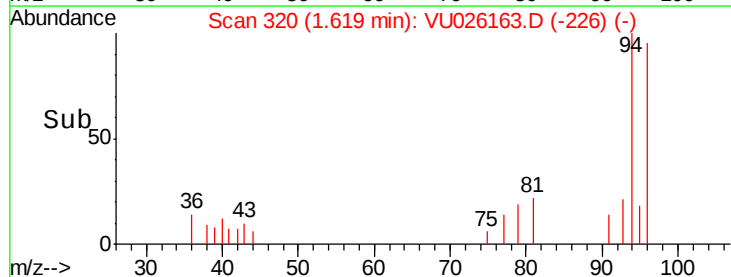
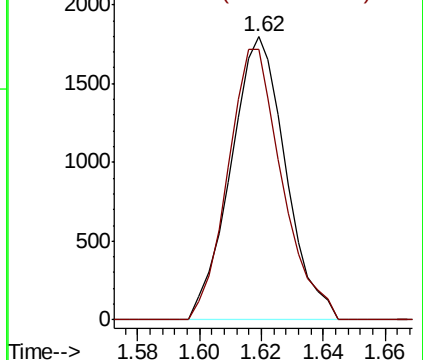
94 100

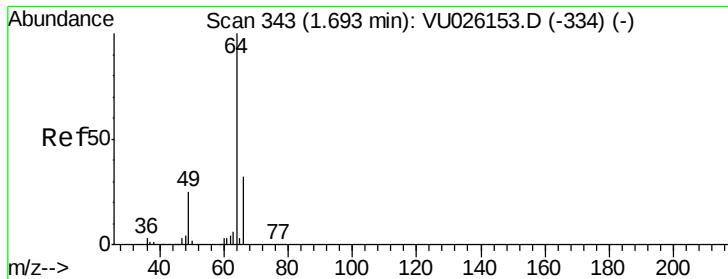
96 95.5 65.9 122.5



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 2.10 ug/L

RT: 1.69 min Scan# 343

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampleId :

MDL01

Tot Ion: 64 Resp: 2518

Ion Ratio Lower Upper

64 100

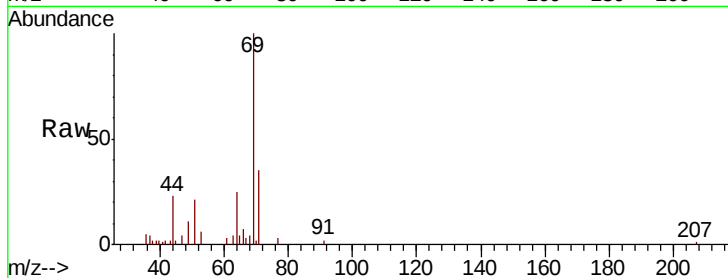
66 29.6 22.2 41.2

Manual Integrations

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Abundance Ion 64.00 (63.70 to 64.70): VU026163.D (-334) (-)

Ion 66.00 (65.70 to 66.70): VU026163.D (-334) (-)

1.69

2000

1500

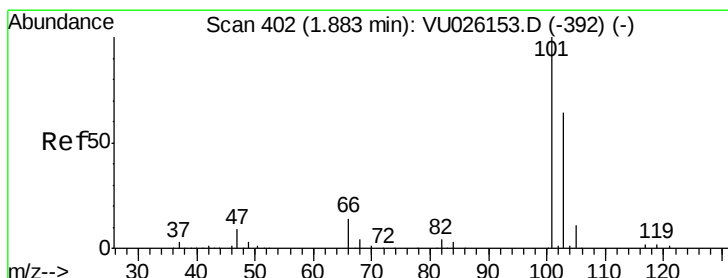
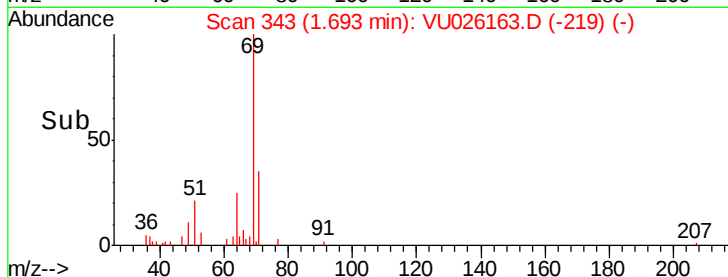
1000

500

0

1.66 1.68 1.70 1.72 1.74

Time-->



#9

Trichlorofluoromethane

Concen: 1.94 ug/L

RT: 1.88 min Scan# 402

Delta R.T. 0.00 min

Lab File: VU026163.D

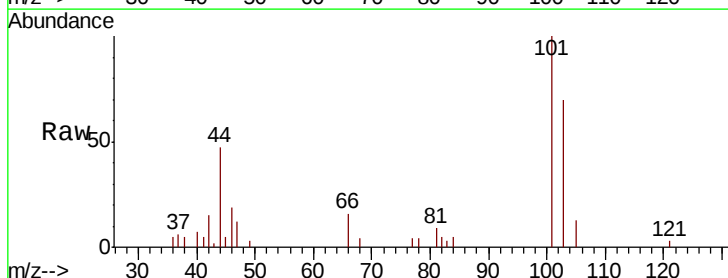
Acq: 15 Aug 2018 22:25

Tgt Ion:101 Resp: 5726

Ion Ratio Lower Upper

101 100

103 67.6 51.4 77.2



Abundance Ion 101.00 (100.70 to 101.70): VU026163.D (-392) (-)

Ion 103.00 (102.70 to 103.70): VU026163.D (-392) (-)

1.88

5000

4000

3000

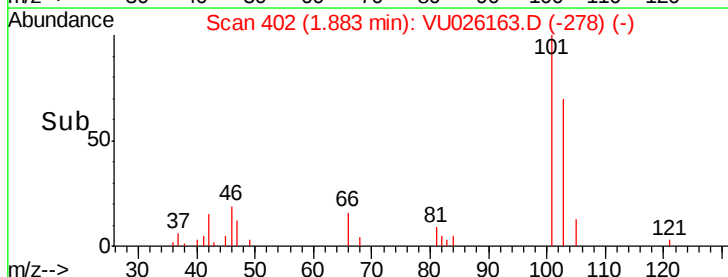
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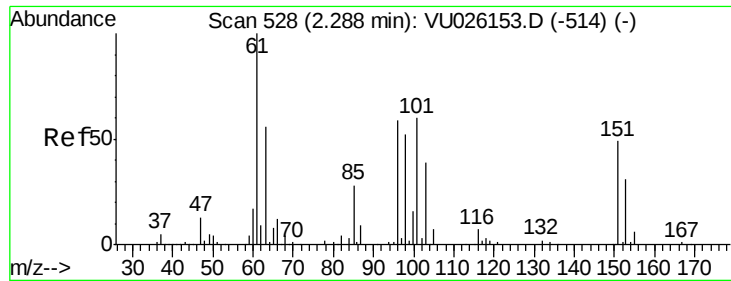
1000

0

1.85 1.90

Time-->





#10

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

Concen: 2.60 ug/L

RT: 2.28 min Scan# 527

Delta R.T. -0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

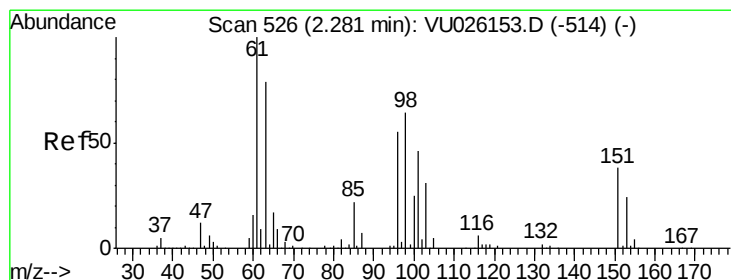
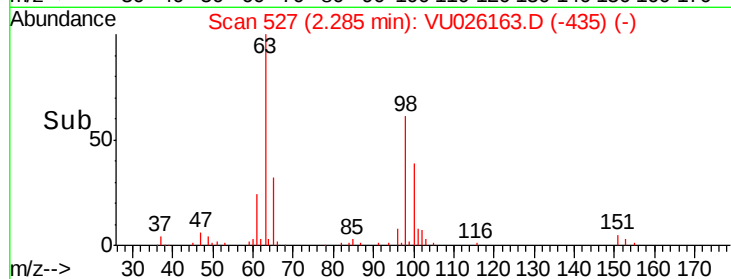
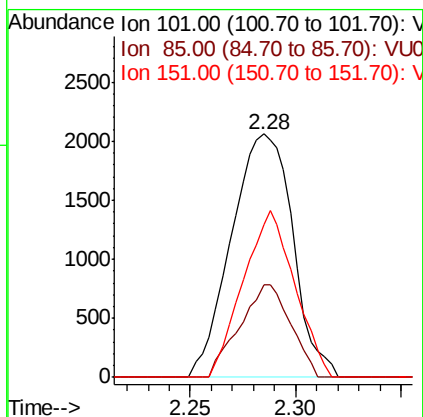
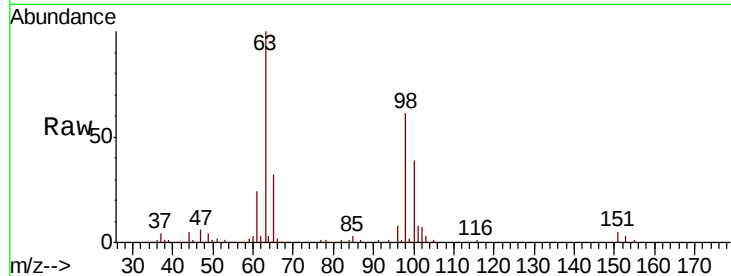
ClientSampled :

MDL01

Tot Ion:	101	Resp:	4162
Ion Ratio	Lower	Upper	
101	100		
85	31.6	36.6	55.0#
151	57.5	63.8	95.8#

Manual Integrations
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#12

1,1-Dichloroethene

Concen: 2.49 ug/L

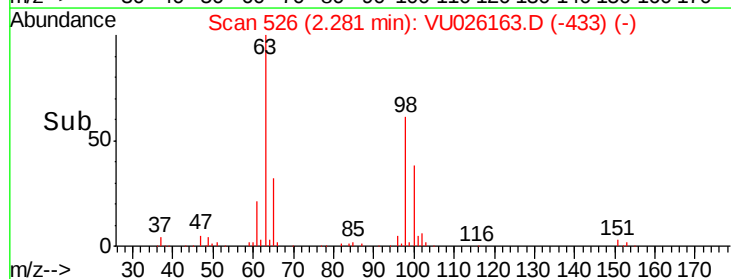
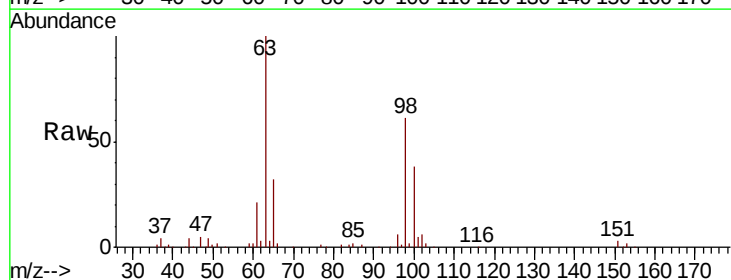
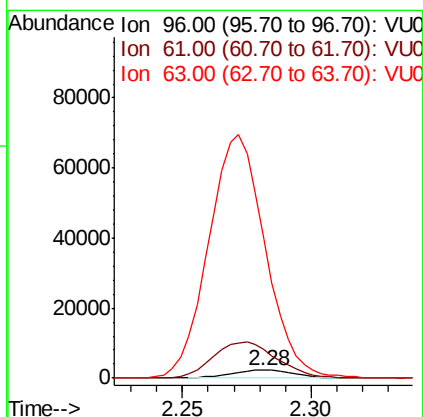
RT: 2.28 min Scan# 526

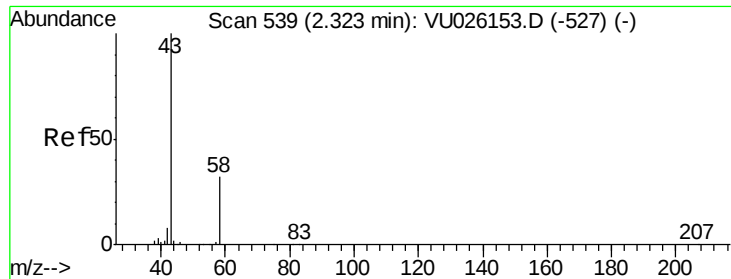
Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Tgt Ion:	96	Resp:	3657
Ion Ratio	Lower	Upper	
96	100		
61	364.9	126.8	235.4#
63	1766.4	97.0	180.2#





#13

Acetone

Concen: 4.26 ug/L

RT: 2.32 min Scan# 538

Delta R.T. -0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampled :

MDL01

Tot Ion: 43 Resp: 4878

Ion Ratio Lower Upper

43 100

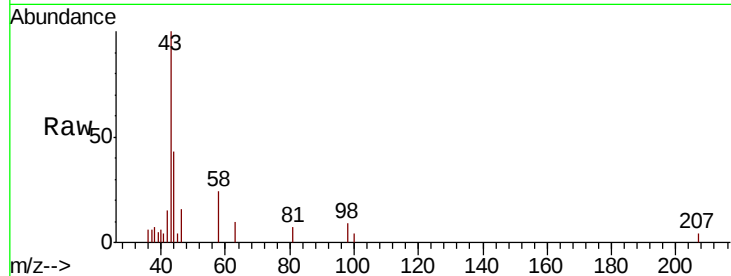
58 25.3 0.0 62.6

Manual Integrations

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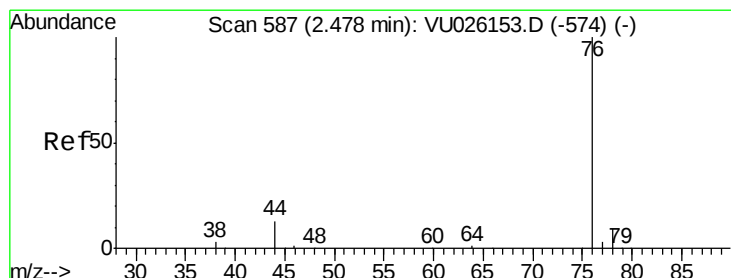
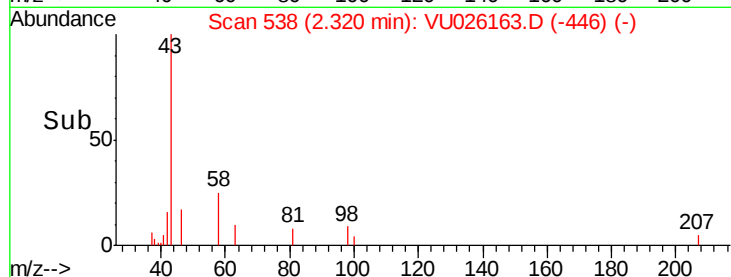
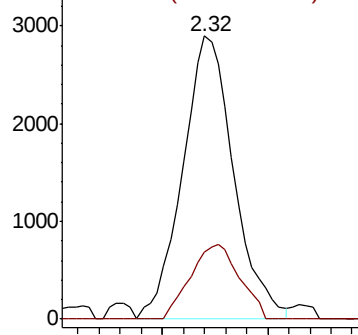
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Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



#14

Carbon disulfide

Concen: 1.95 ug/L

RT: 2.48 min Scan# 587

Delta R.T. 0.00 min

Lab File: VU026163.D

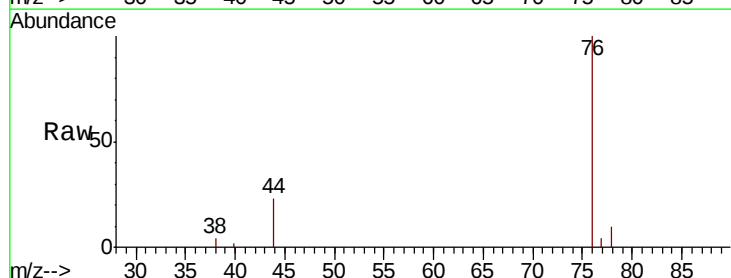
Acq: 15 Aug 2018 22:25

Tgt Ion: 76 Resp: 9908

Ion Ratio Lower Upper

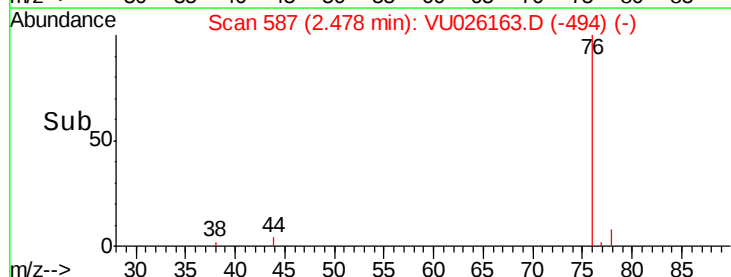
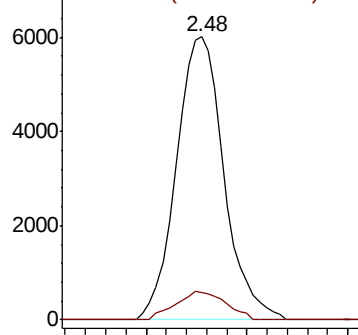
76 100

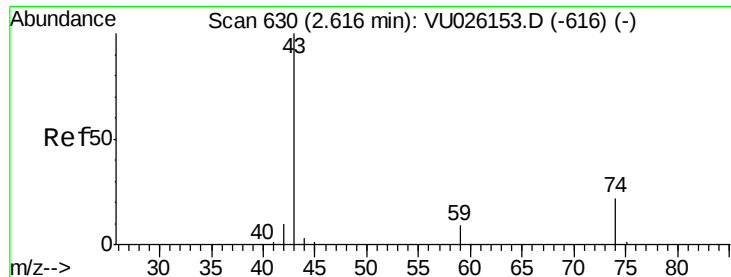
78 9.8 7.4 11.2



Abundance Ion 76.00 (75.70 to 76.70): VU0

Ion 78.00 (77.70 to 78.70): VU0





#15

Methvl Acetate

Concen: 2.40 ug/L

RT: 2.62 min Scan# 630

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampleId :

MDL01

Tot Ion: 43 Resp: 4768

Ion Ratio Lower Upper

43 100

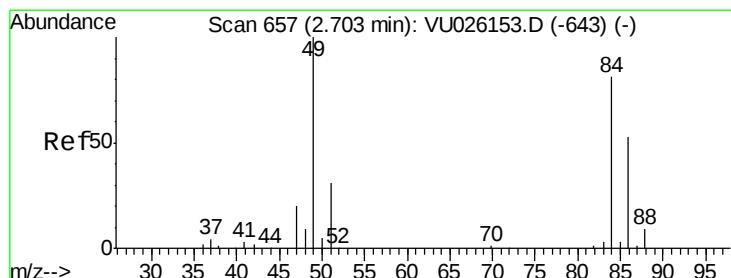
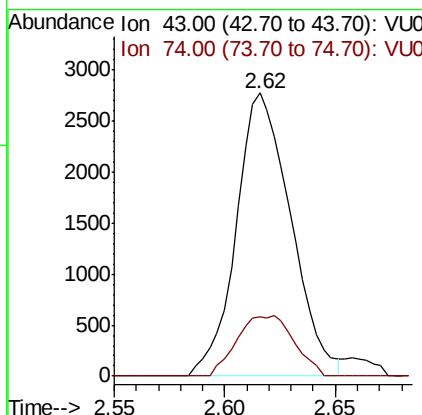
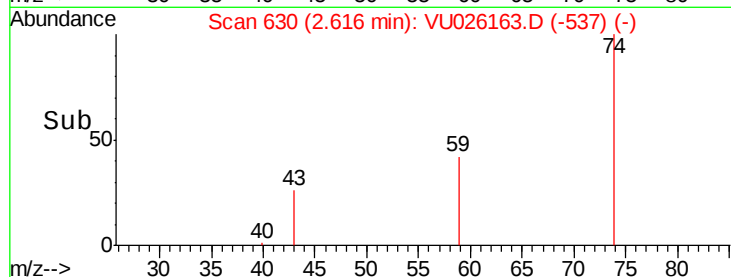
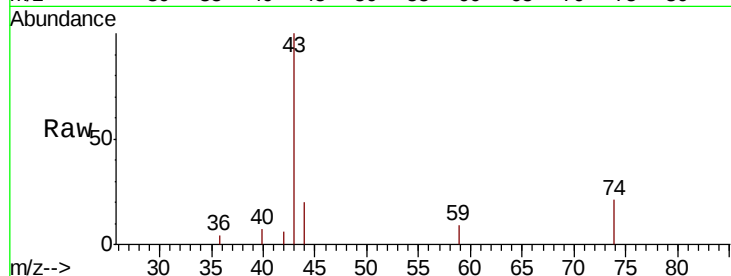
74 12.7 18.6 28.0#

Manual Integrations

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#16

Methylene chloride

Concen: 2.22 ug/L

RT: 2.70 min Scan# 656

Delta R.T. -0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

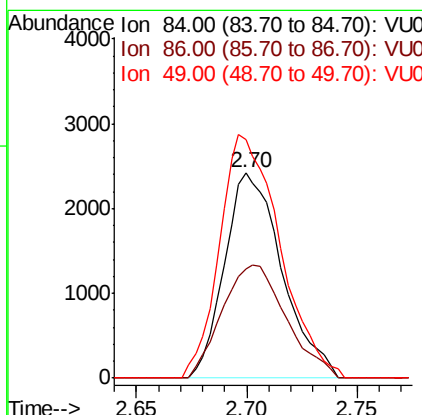
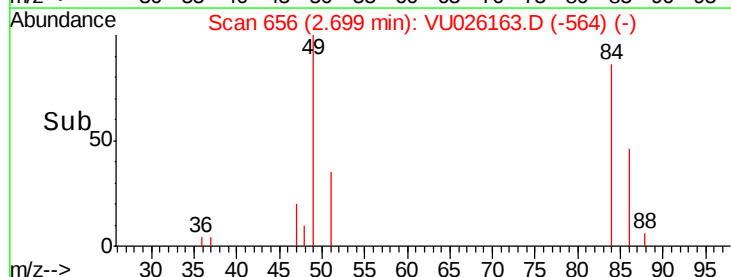
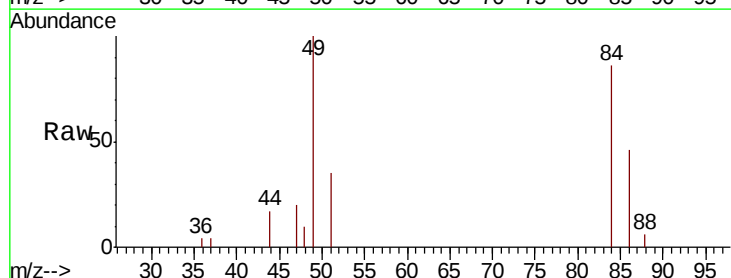
Tgt Ion: 84 Resp: 4372

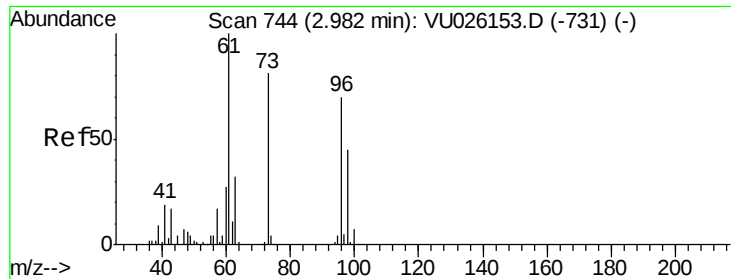
Ion Ratio Lower Upper

84 100

86 53.0 44.0 81.6

49 116.1 87.7 162.9





#17

trans-1,2-Dichloroethene

Concen: 2.18 ug/L

RT: 2.98 min Scan# 744

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

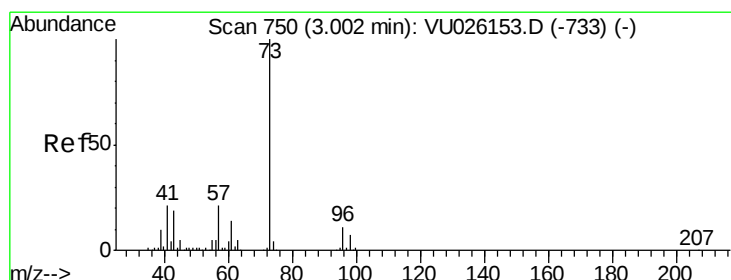
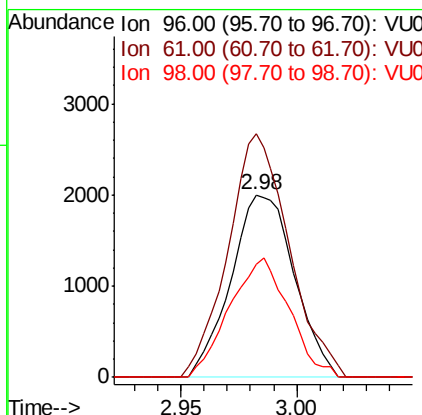
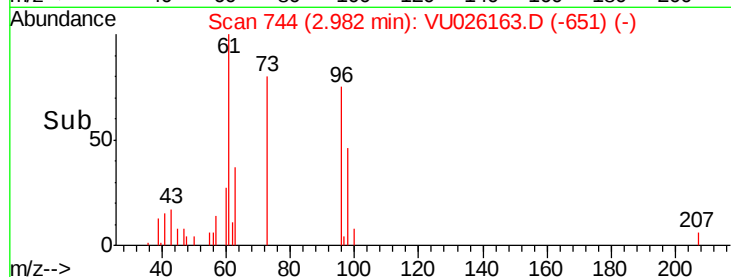
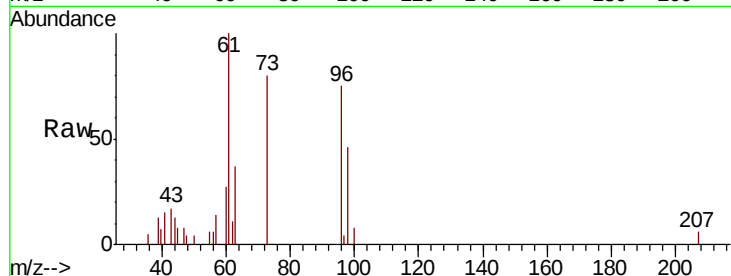
ClientSampleId :

MDL01

Tot Ion:	96	Resp:	3799
Ion	Ratio	Lower	Upper
96	100		
61	133.6	96.7	179.5
98	62.0	43.6	81.0

Manual Integrations
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#18

Methyl tert-butyl Ether

Concen: 1.89 ug/L

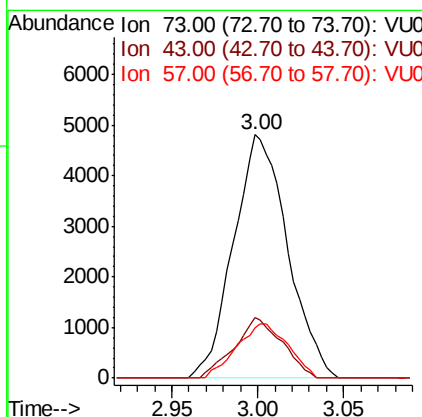
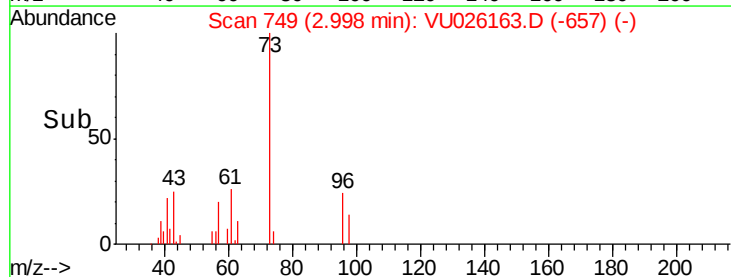
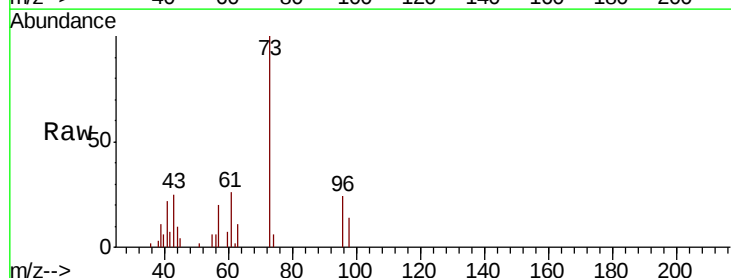
RT: 3.00 min Scan# 749

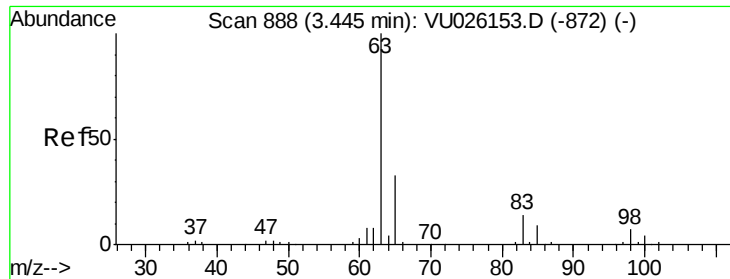
Delta R.T. -0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Tgt Ion:	73	Resp:	10460
Ion	Ratio	Lower	Upper
73	100		
43	21.9	16.2	24.4
57	21.1	18.2	27.2





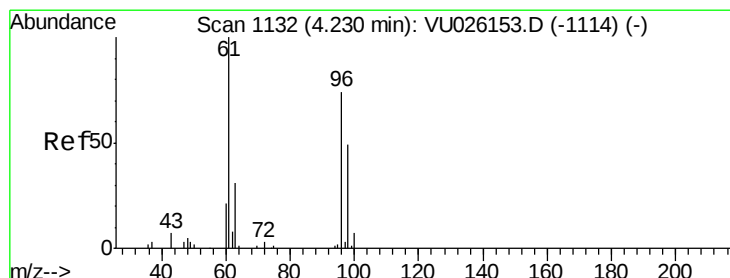
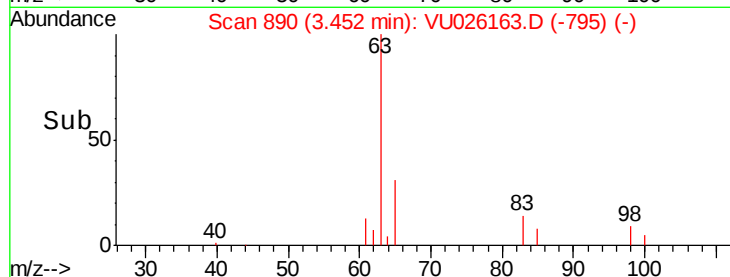
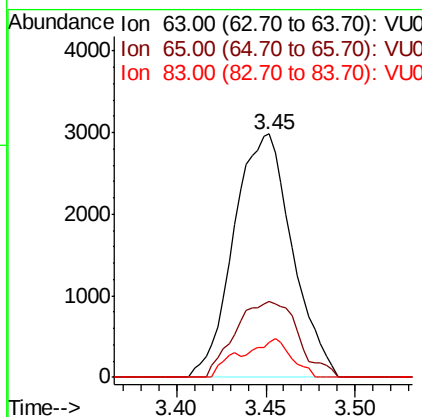
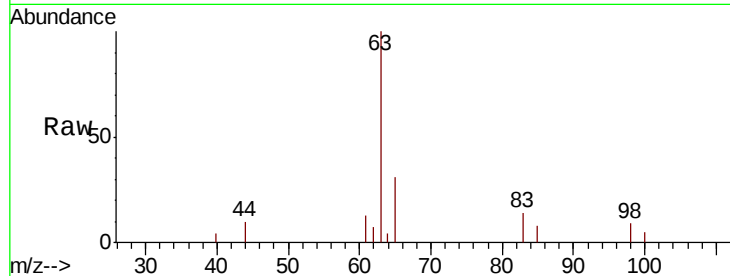
#19
 1,1-Dichloroethane
 Concen: 2.03 ug/L
 RT: 3.45 min Scan# 890
 Delta R.T. 0.01 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Tot Ion	Ratio	Lower	Upper
63	100		
65	30.9	22.1	41.1
83	14.1	9.4	17.4

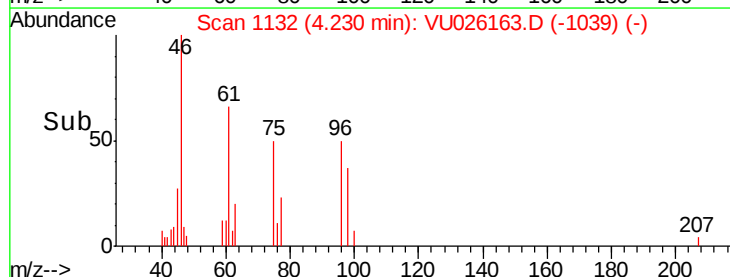
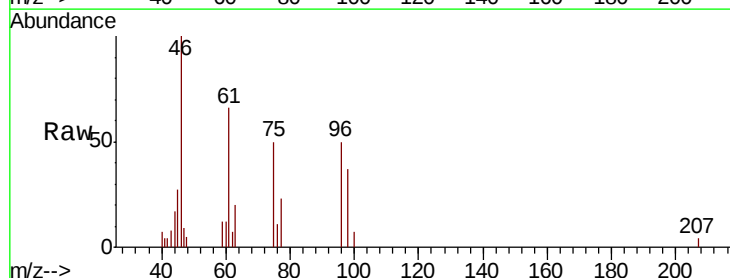
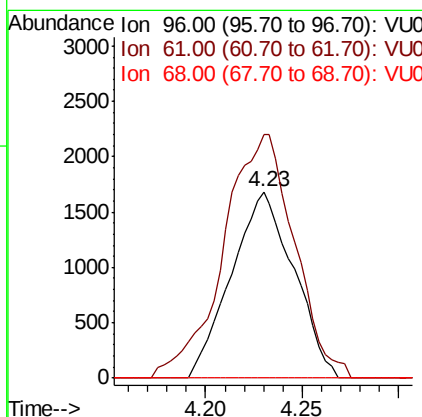
Manual Integrations
 APPROVED

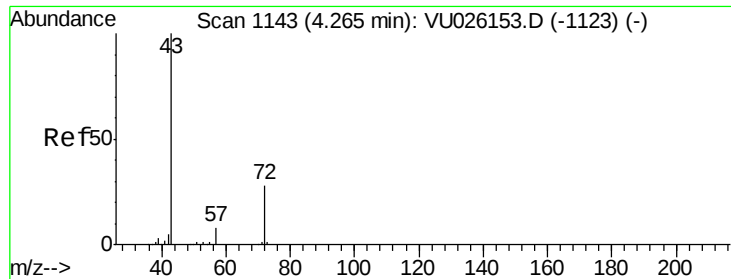
MMDadoda
 8/16/2018 4:20:25 PM



#20
 cis-1,2-Dichloroethene
 Concen: 1.93 ug/L
 RT: 4.23 min Scan# 1132
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion	Ratio	Lower	Upper
96	100		
61	130.9	88.6	164.6
68	0.0	0.0	0.0





#22

2-Butanone

Concen: 3.96 ug/L m

RT: 4.27 min Scan# 1146

Delta R.T. 0.01 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Tot Ion: 43 Resp: 5649

Ion Ratio Lower Upper

43 100

72 16.5 13.4 40.1

Instrument :

MSVOA_U

ClientSampled :

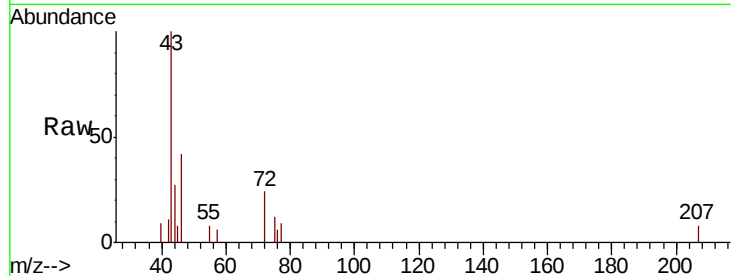
MDL01

Manual Integrations

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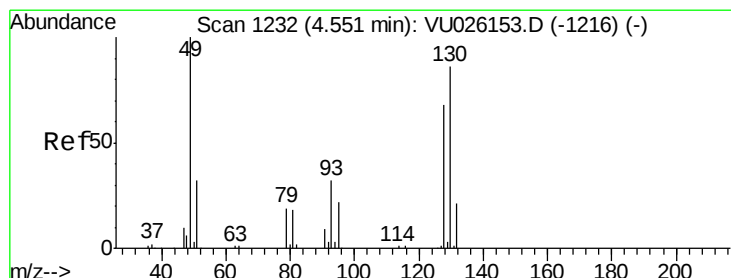
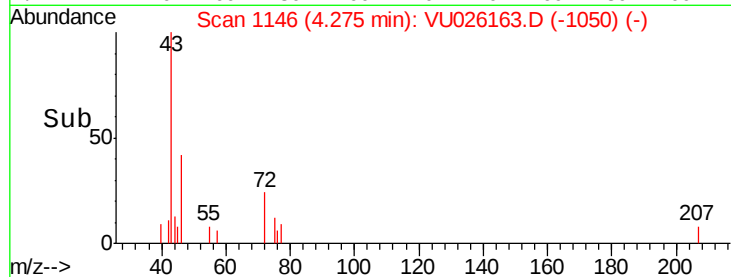
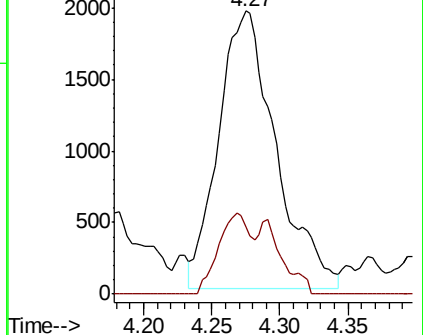
MMDadoda

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Abundance Ion 43.00 (42.70 to 43.70): VU026163.D (-1146) (-)

Ion 72.00 (71.70 to 72.70): VU026163.D (-1146) (-)



#23

Bromochloromethane

Concen: 2.02 ug/L m

RT: 4.55 min Scan# 1233

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Tgt Ion:128 Resp: 2129

Ion Ratio Lower Upper

128 100

49 154.5 101.3 188.1

130 135.9 86.4 160.4

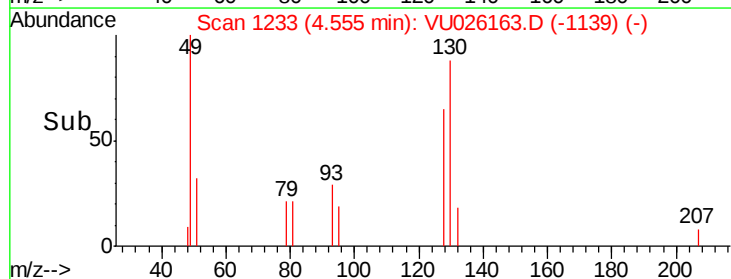
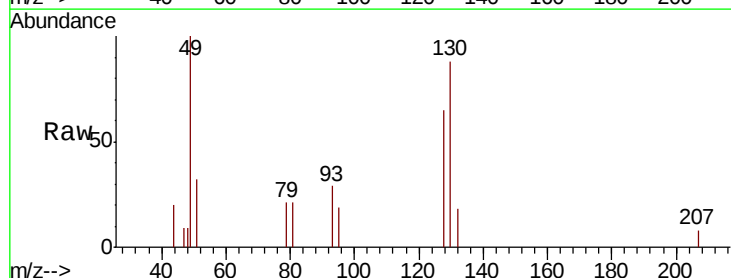
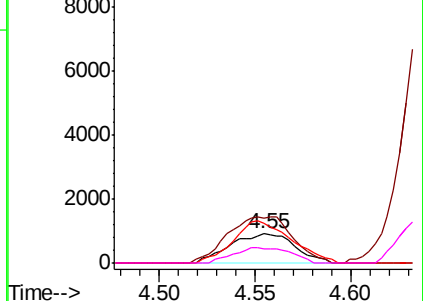
51 50.1 38.1 57.1

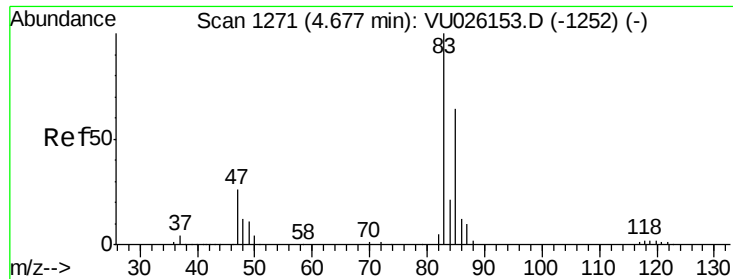
Abundance Ion 128.00 (127.70 to 128.70): VU026163.D (-1233) (-)

Ion 49.00 (48.70 to 49.70): VU026163.D (-1233) (-)

Ion 130.00 (129.70 to 130.70): VU026163.D (-1233) (-)

Ion 51.00 (50.70 to 51.70): VU026163.D (-1233) (-)





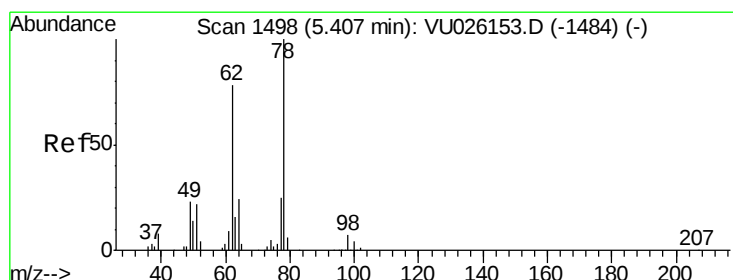
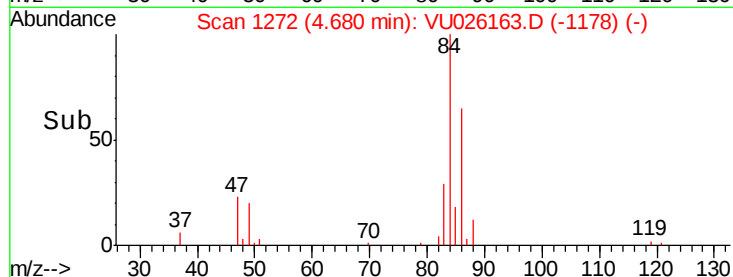
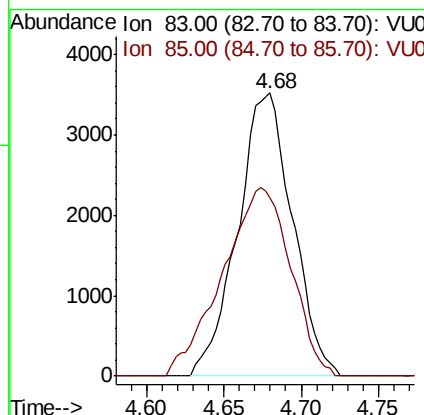
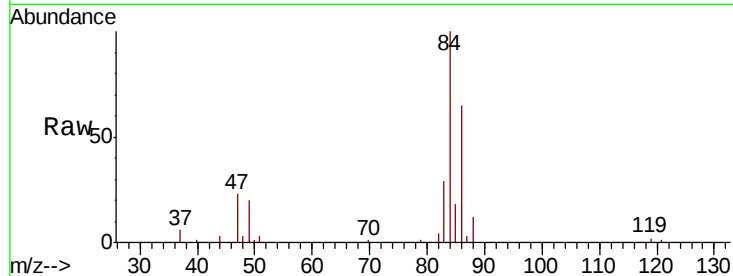
#25
Chloroform
Concen: 2.47 ug/L
RT: 4.68 min Scan# 1272
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Instrument :
MSVOA_U
ClientSampled :
MDL01

Tot Ion	83	Resp	8688
Ion Ratio	100	Lower	Upper
85	63.1	46.3	86.1

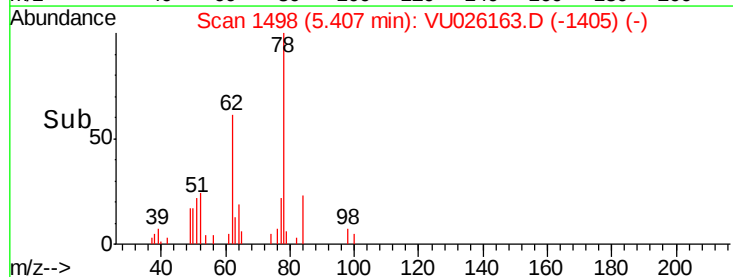
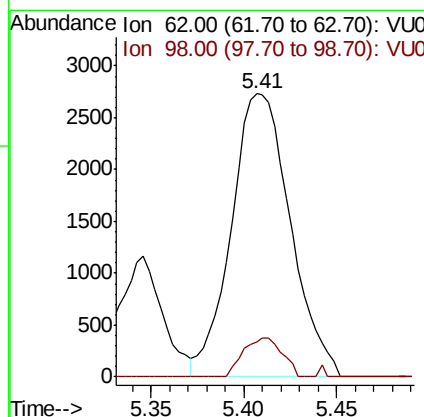
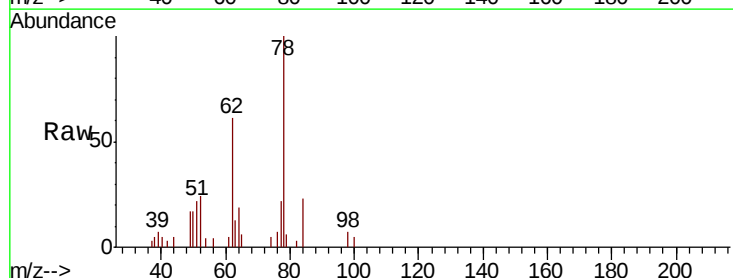
Manual Integrations
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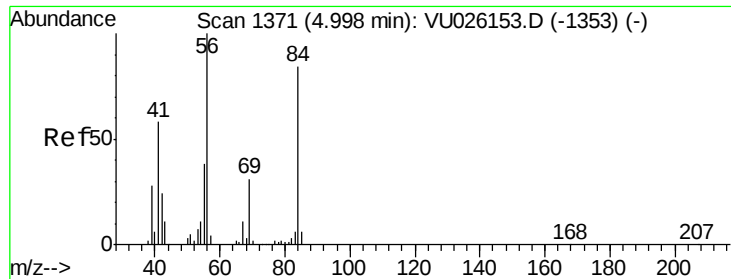
MMDadoda
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#27
1,2-Dichloroethane
Concen: 2.12 ug/L
RT: 5.41 min Scan# 1498
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Tgt Ion	62	Resp	6044
Ion Ratio	100	Lower	Upper
98	12.2	7.0	10.4#





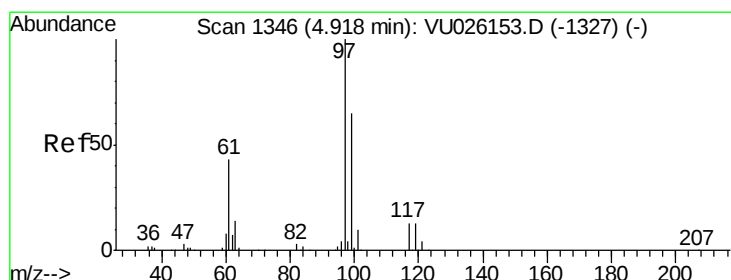
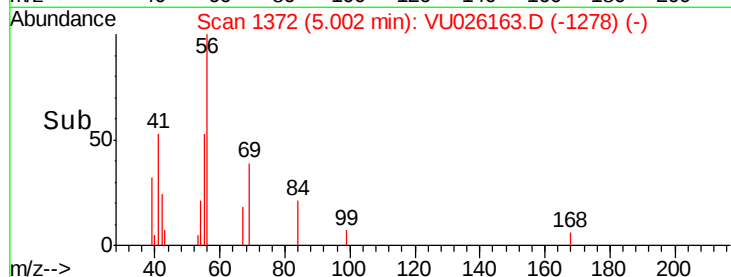
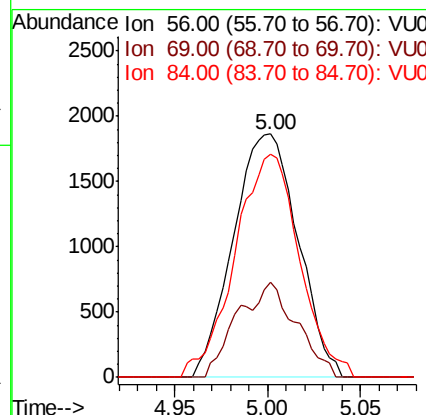
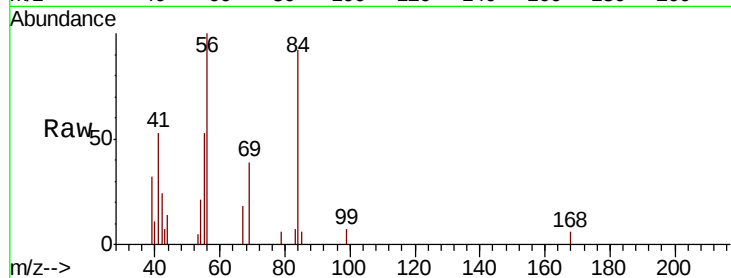
#29
Cyclohexane
Concen: 1.73 ug/L
RT: 5.00 min Scan# 1372
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Instrument :
MSVOA_U
ClientSampleId :
MDL01

Tot Ion	Ratio	Lower	Upper
56	100		
69	23.0	24.1	36.1#
84	91.5	68.6	102.8

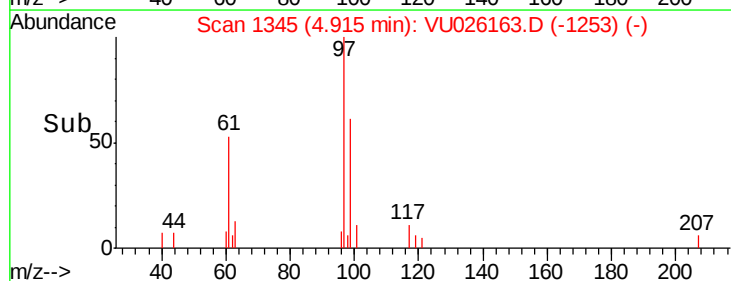
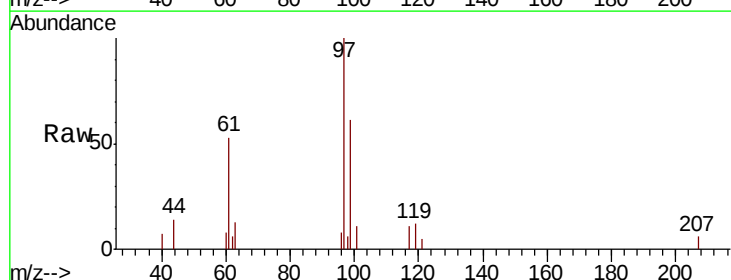
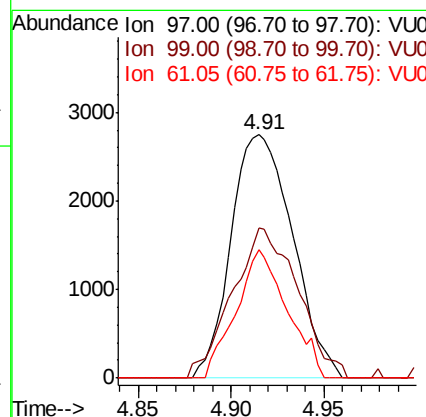
Manual Integrations
APPROVED

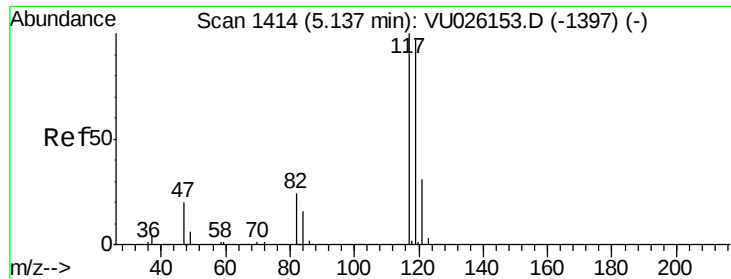
MMDadoda
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#30
1,1,1-Trichloroethane
Concen: 2.03 ug/L
RT: 4.91 min Scan# 1345
Delta R.T. -0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.5	52.2	78.2
61	43.6	35.4	53.0





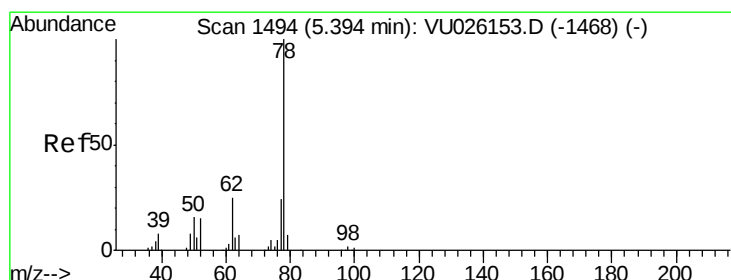
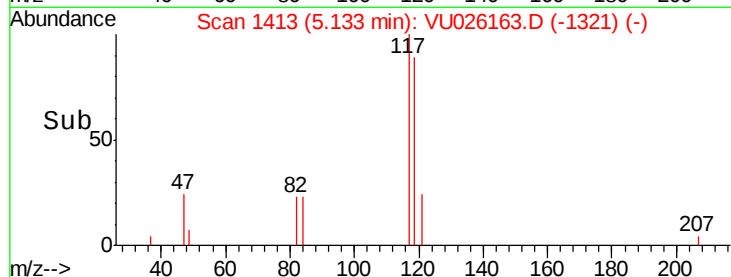
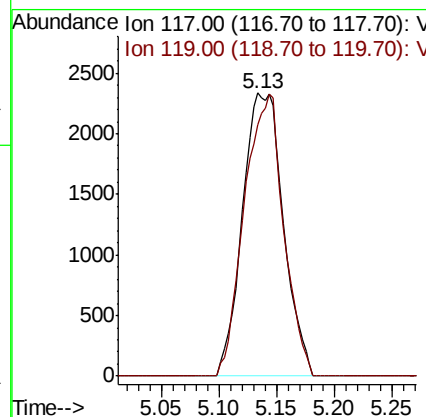
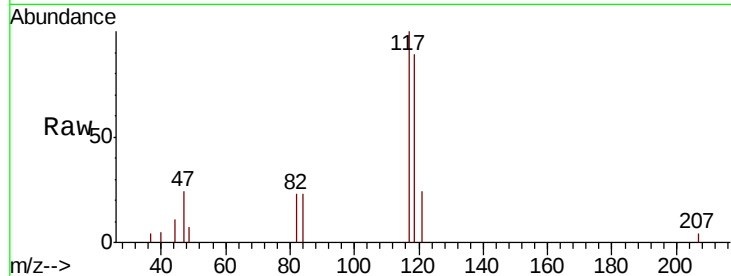
#31
Carbon tetrachloride
Concen: 2.02 ug/L m
RT: 5.13 min Scan# 1413
Delta R.T. -0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Instrument :
MSVOA_U
ClientSampled :
MDL01

Tot Ion:117 Resp: 5736
Ion Ratio Lower Upper
117 100
119 7.0 77.4 116.2#

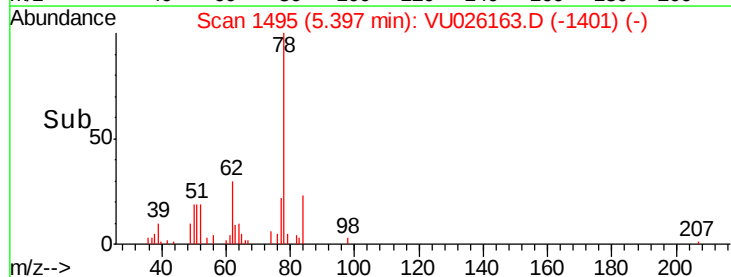
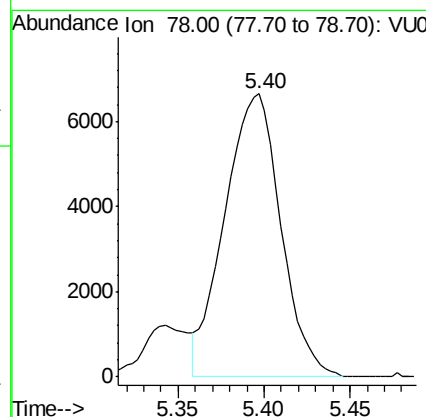
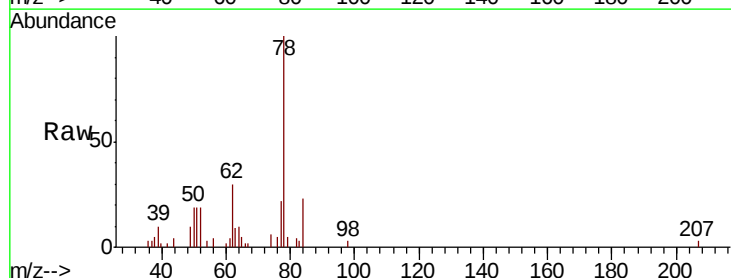
Manual Integrations
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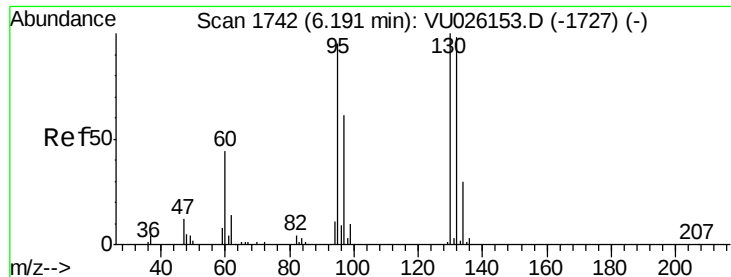
MMDadoda
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#33
Benzene
Concen: 2.13 ug/L
RT: 5.40 min Scan# 1495
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Tgt Ion: 78 Resp: 15104





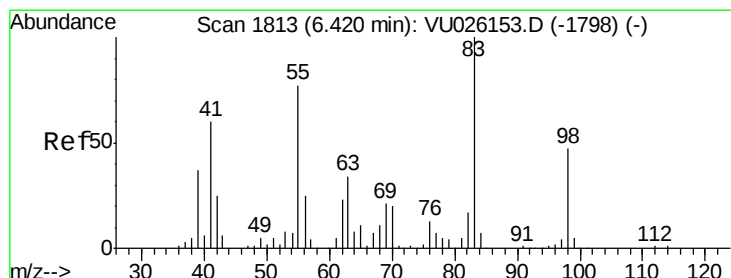
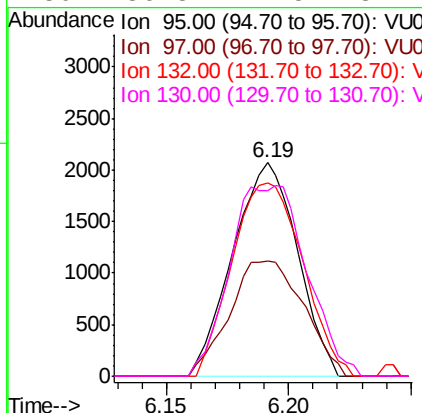
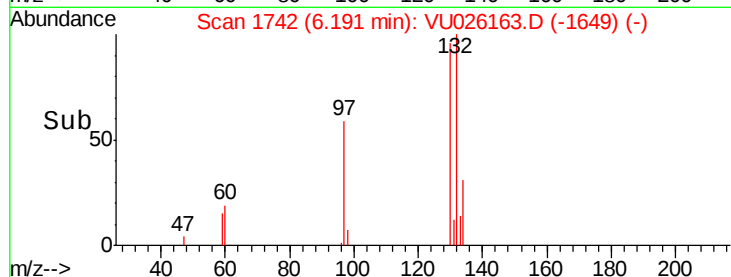
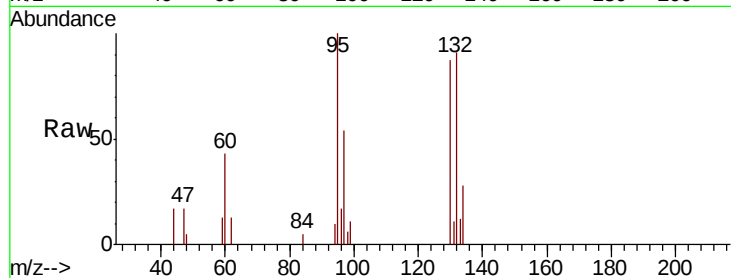
#34
 Trichloroethene
 Concen: 2.06 ug/L
 RT: 6.19 min Scan# 1742
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampled :
 MDL01

Tot Ion:	95	Resp:	3814
Ion	Ratio	Lower	Upper
95	100		
97	53.7	45.7	84.9
132	90.6	68.8	127.8
130	86.8	71.5	132.7

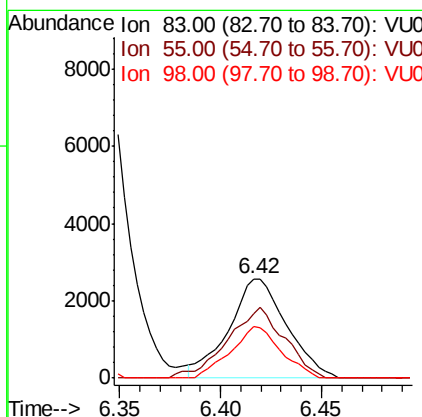
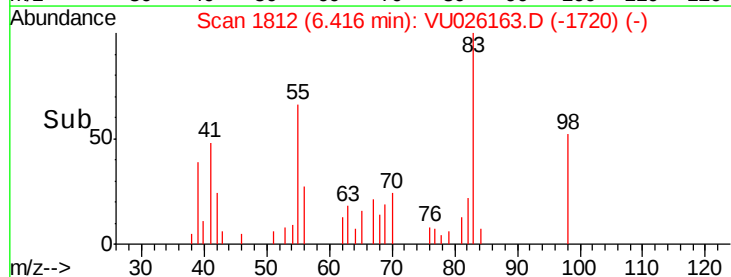
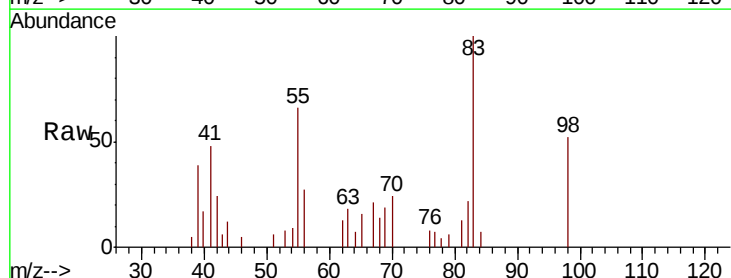
Manual Integrations
 APPROVED

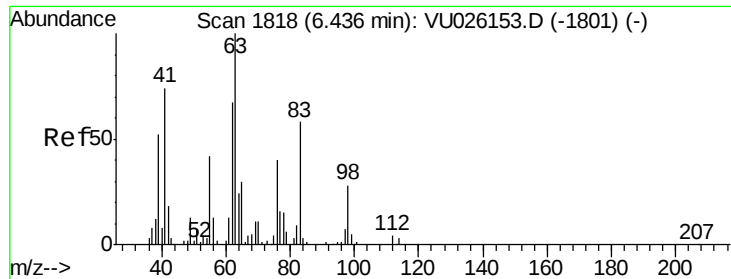
MMDadoda
 8/16/2018 4:20:25 PM



#35
 Methylcyclohexane
 Concen: 1.85 ug/L
 RT: 6.42 min Scan# 1812
 Delta R.T. -0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion:	83	Resp:	5140
Ion	Ratio	Lower	Upper
83	100		
55	67.9	61.0	91.6
98	45.0	37.6	56.4





#37

1,2-Dichloropropane

Concen: 1.89 ug/L

RT: 6.44 min Scan# 1818

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampleId :

MDL01

Tot Ion: 63 Resp: 3751

Ion Ratio Lower Upper

63 100

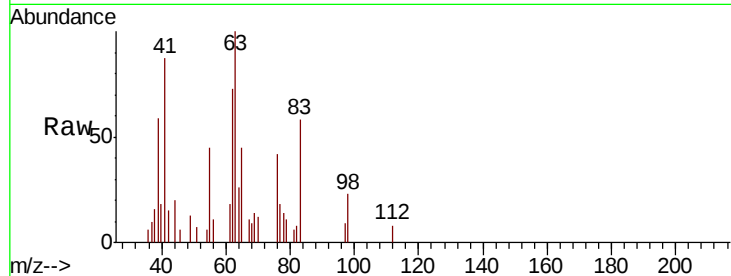
112 4.0 3.5 5.3

Manual Integrations

APPROVED

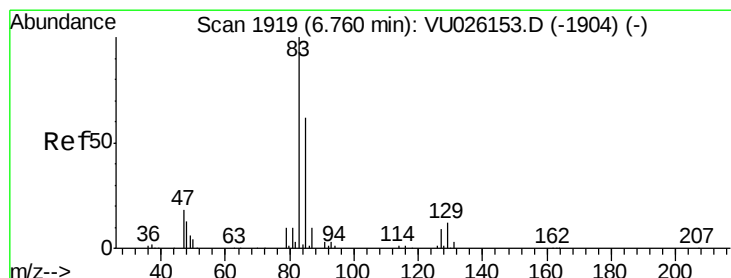
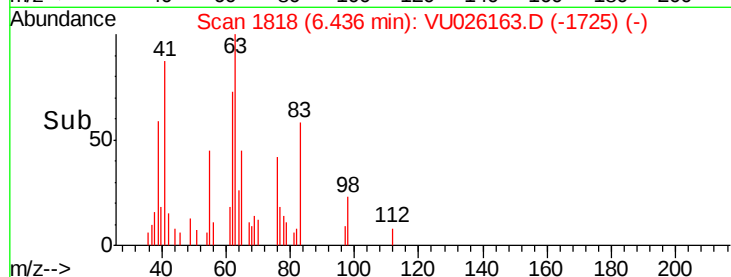
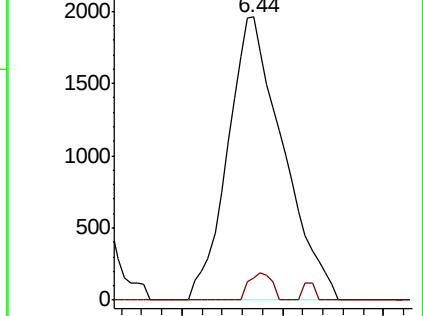
MMDadoda

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Abundance Ion 63.00 (62.70 to 63.70): VU0

Ion 112.00 (111.70 to 112.70): V



#38

Bromodichloromethane

Concen: 2.11 ug/L

RT: 6.76 min Scan# 1919

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

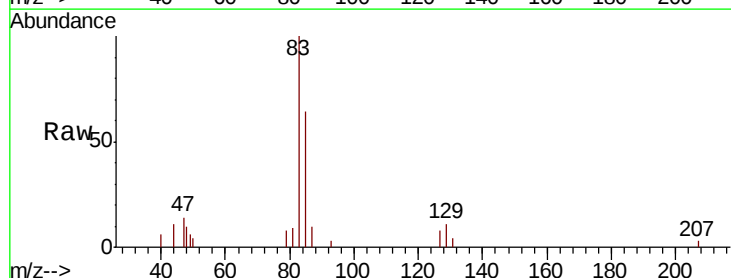
Tgt Ion: 83 Resp: 5524

Ion Ratio Lower Upper

83 100

85 64.5 46.0 85.4

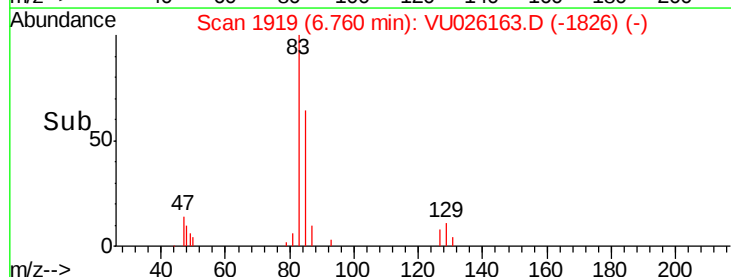
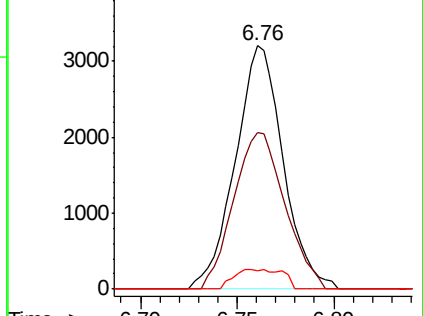
127 7.7 7.5 11.3

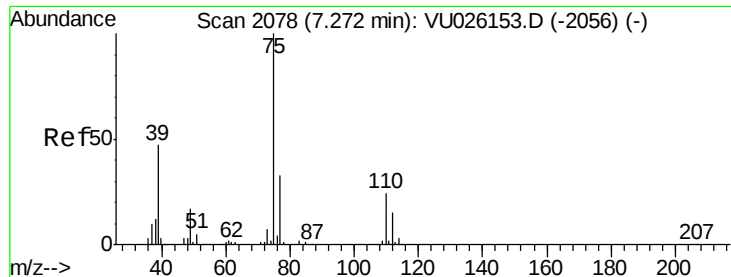


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 127.00 (126.70 to 127.70): V





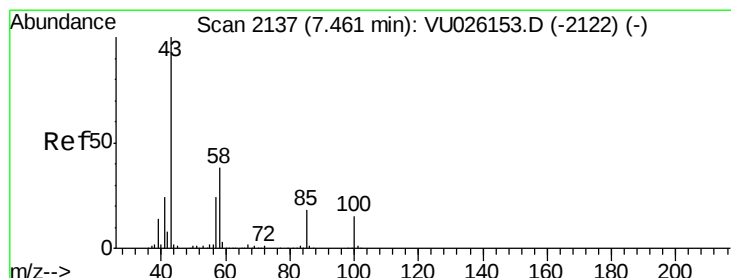
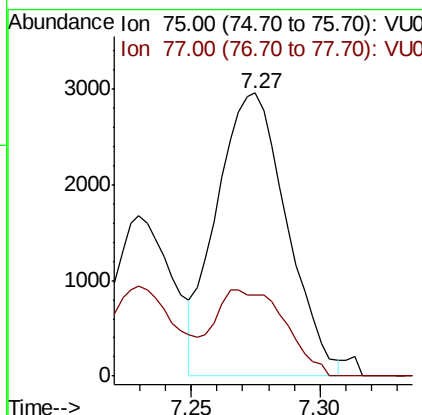
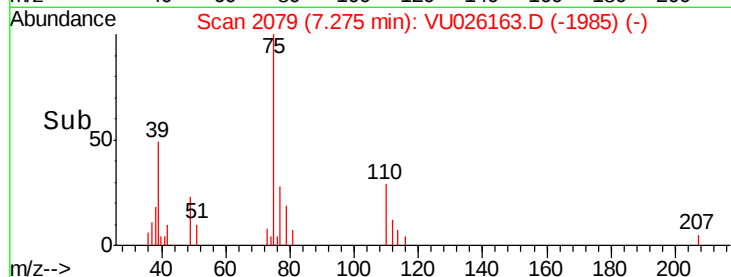
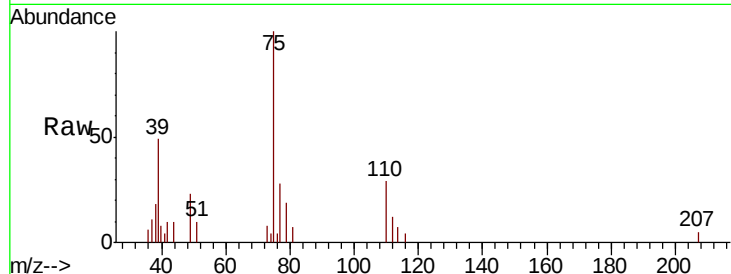
#39
 cis-1,3-Dichloropropene
 Concen: 1.90 ug/L
 RT: 7.27 min Scan# 2079
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Tot Ion: 75 Resp: 5594
 Ion Ratio Lower Upper
 75 100
 77 28.5 22.2 41.2

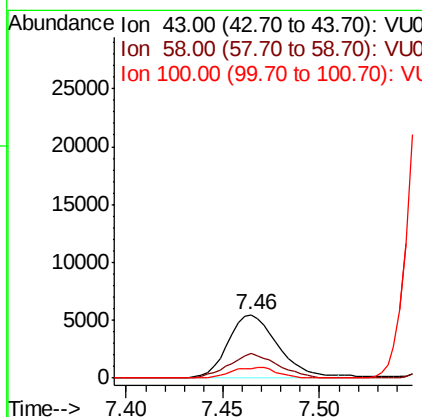
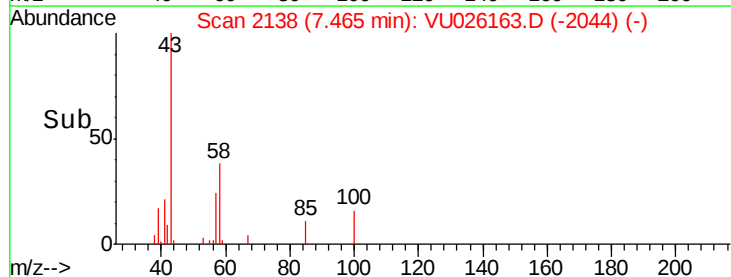
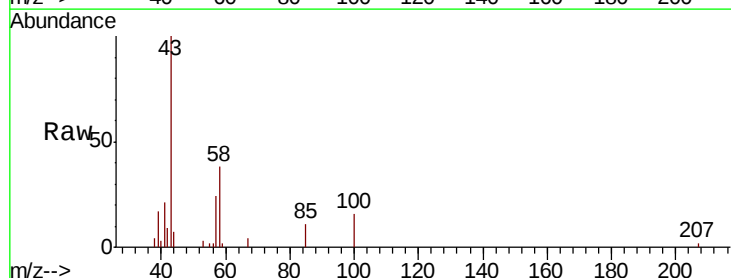
Manual Integrations
 APPROVED

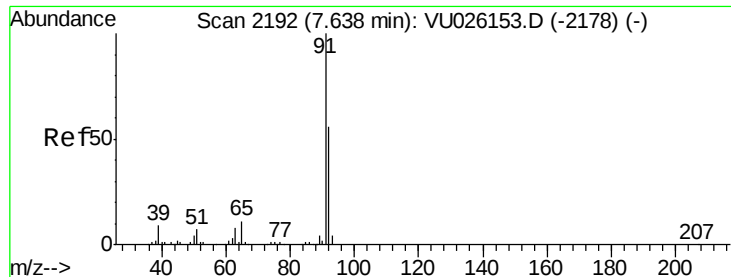
MMDadoda
 8/16/2018 4:20:25 PM



#40
 4-Methyl-2-pentanone
 Concen: 4.00 ug/L
 RT: 7.46 min Scan# 2138
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion: 43 Resp: 9825
 Ion Ratio Lower Upper
 43 100
 58 37.1 31.8 47.8
 100 15.0 12.2 18.2





#42

Toluene

Concen: 1.99 ug/L

RT: 7.64 min Scan# 2193

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampleId :

MDL01

Tot Ion: 91 Resp: 15003

Ion Ratio Lower Upper

91 100

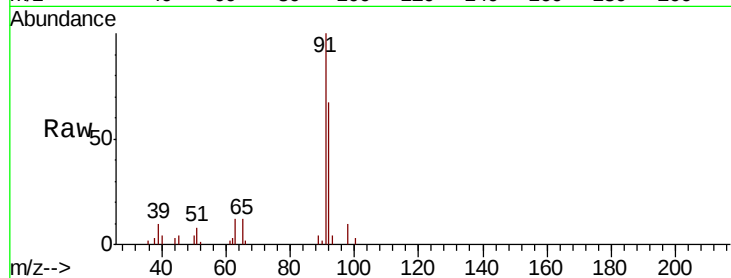
92 66.7 40.0 74.4

Manual Integrations

APPROVED

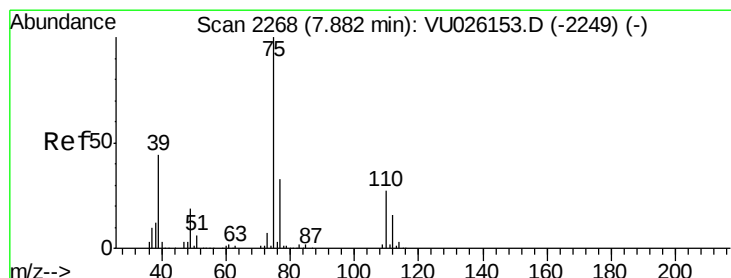
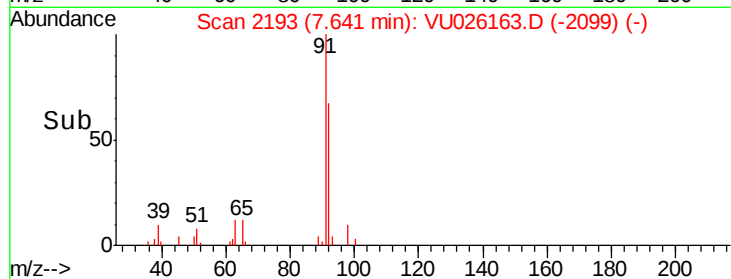
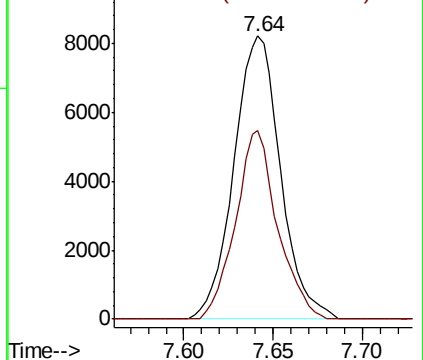
MMDadoda

8/16/2018 4:20:25 PM



Abundance Ion 91.00 (90.70 to 91.70): VU0

Ion 92.00 (91.70 to 92.70): VU0



#44

trans-1,3-Dichloropropene

Concen: 1.86 ug/L

RT: 7.88 min Scan# 2268

Delta R.T. 0.00 min

Lab File: VU026163.D

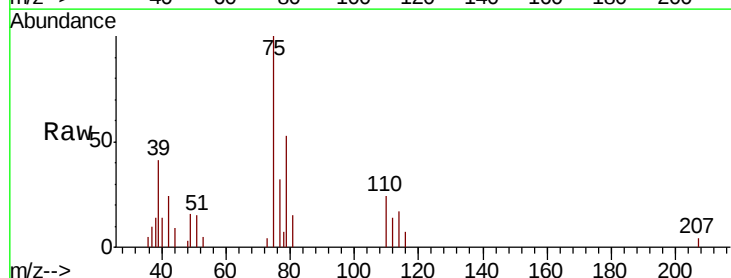
Acq: 15 Aug 2018 22:25

Tgt Ion: 75 Resp: 5277

Ion Ratio Lower Upper

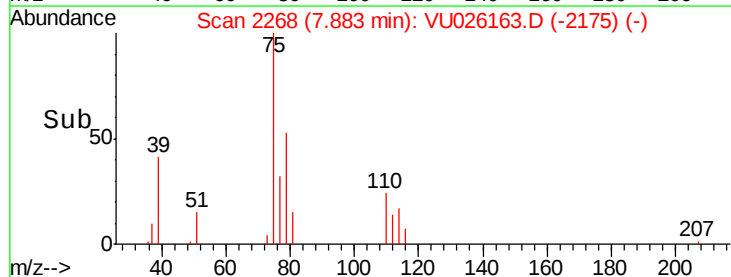
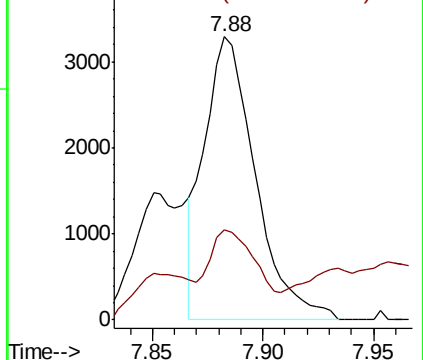
75 100

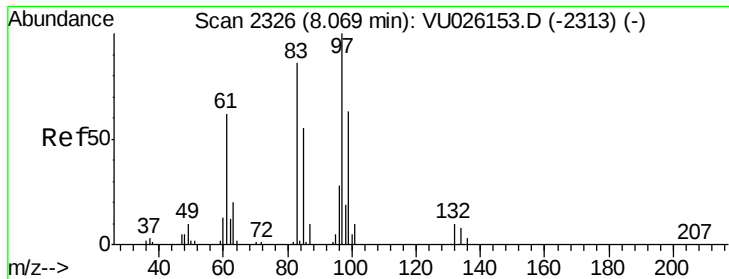
77 31.9 22.0 41.0



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0





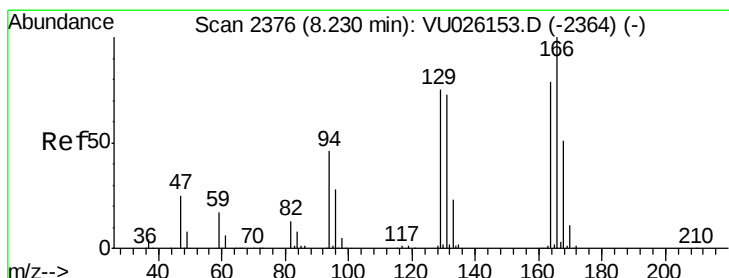
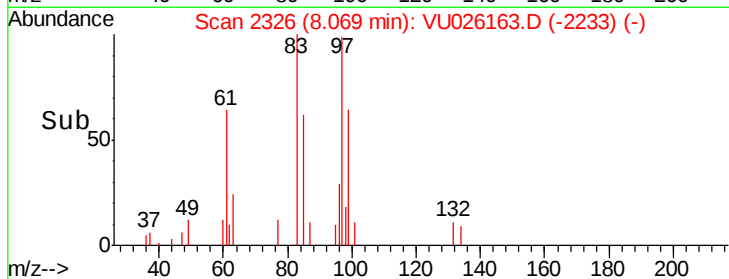
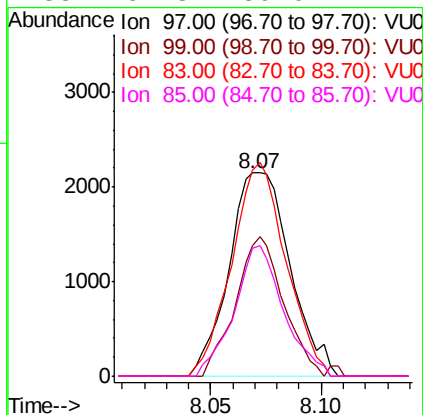
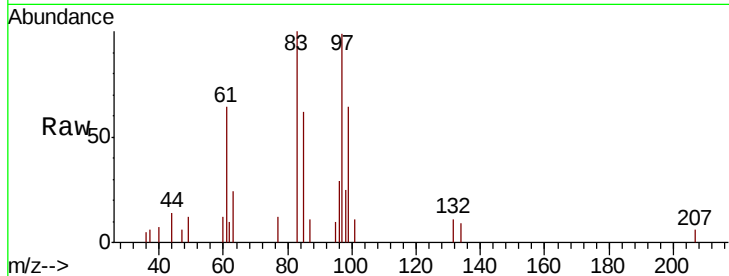
#45
1,1,2-Trichloroethane
Concen: 2.20 ug/L
RT: 8.07 min Scan# 2326
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Instrument :
MSVOA_U
ClientSampleId :
MDL01

Tot Ion:	97	Resp:	4135
Ion	Ratio	Lower	Upper
97	100		
99	64.4	43.3	80.5
83	101.4	58.4	108.6
85	62.8	39.0	72.4

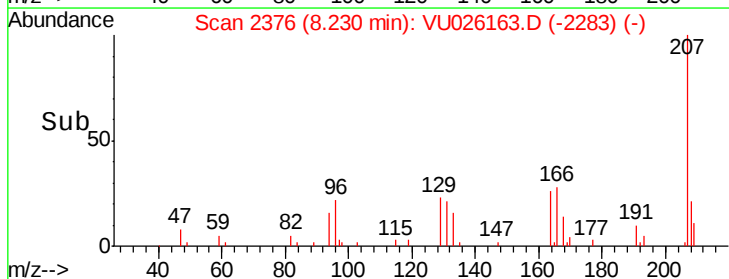
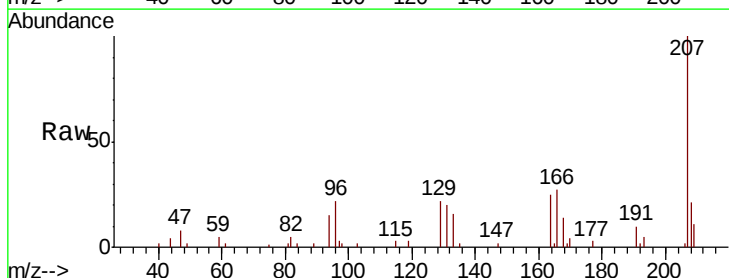
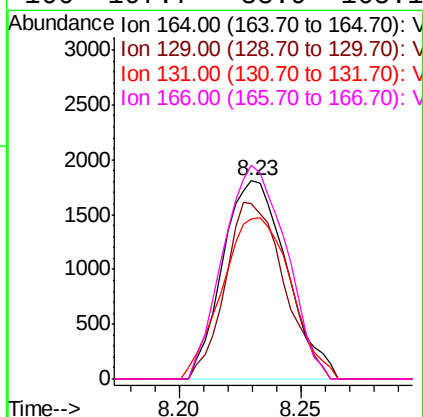
Manual Integrations
APPROVED

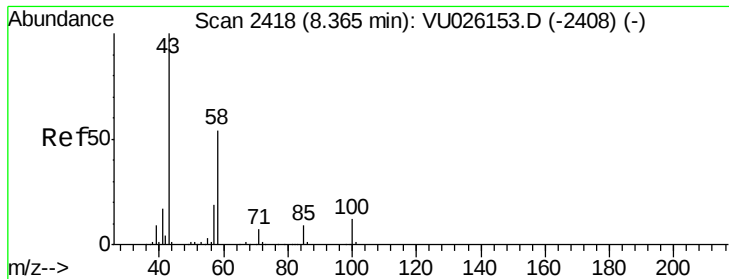
MMDadoda
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#46
Tetrachloroethene
Concen: 2.06 ug/L
RT: 8.23 min Scan# 2376
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Tgt Ion:	164	Resp:	3285
Ion	Ratio	Lower	Upper
164	100		
129	88.2	65.7	121.9
131	80.8	62.0	115.2
166	107.7	88.9	165.1





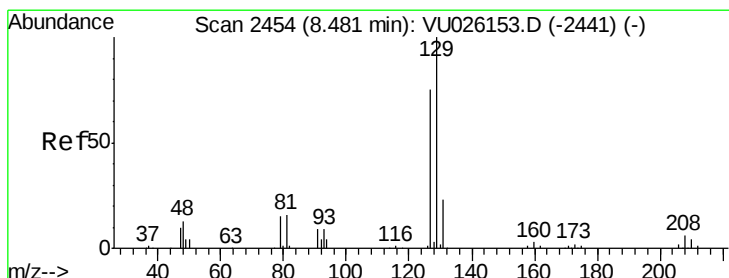
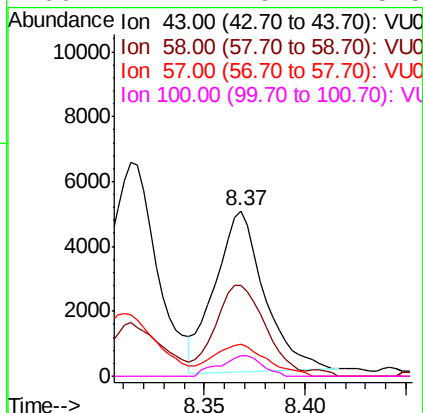
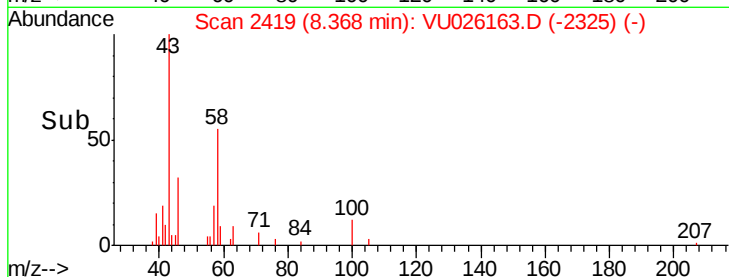
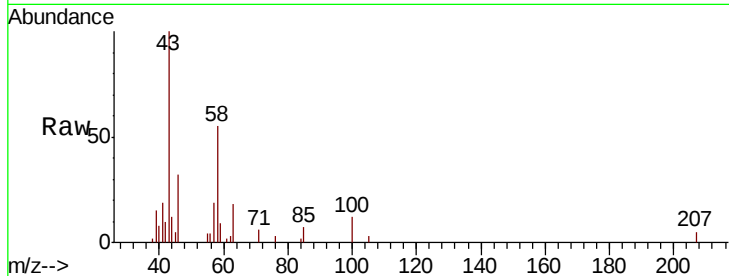
#48
2-Hexanone
Concen: 4.38 ug/L
RT: 8.37 min Scan# 2419
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Instrument :
MSVOA_U
ClientSampled :
MDL01

Tot Ion	Ratio	Lower	Upper
43	100		
58	58.2	42.9	64.3
57	22.3	15.1	22.7
100	11.1	9.2	13.8

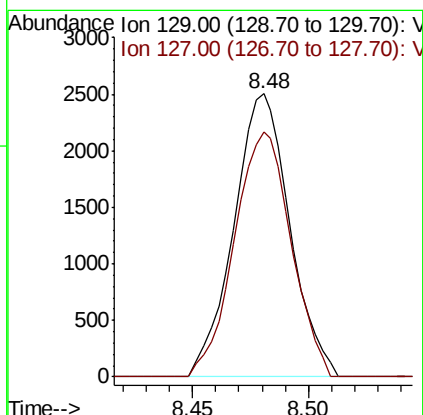
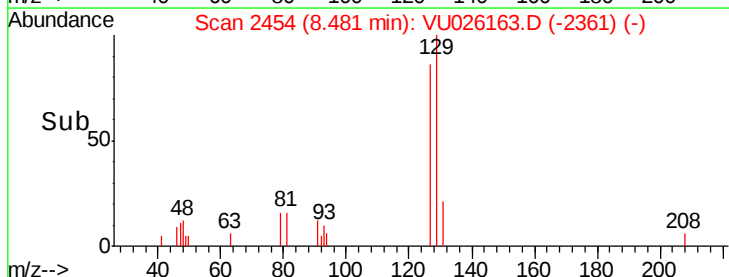
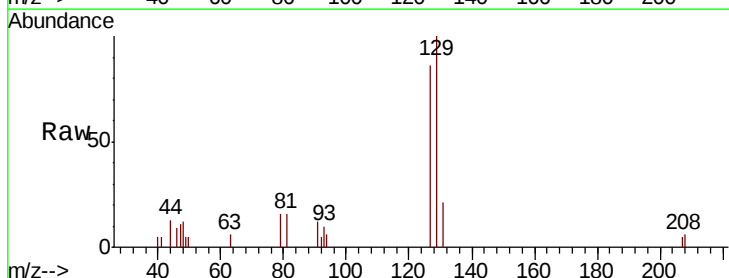
Manual Integrations
APPROVED

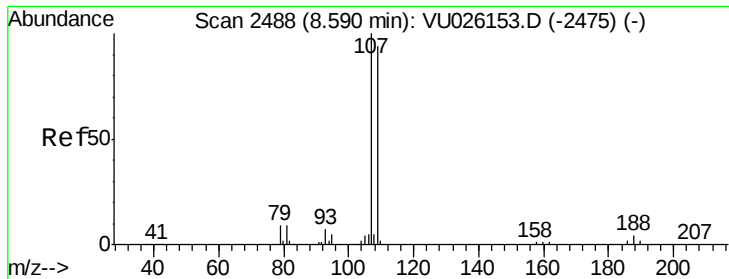
MMDadoda
8/16/2018 4:20:25 PM



#49
Dibromochloromethane
Concen: 1.85 ug/L
RT: 8.48 min Scan# 2454
Delta R.T. 0.00 min
Lab File: VU026163.D
Acq: 15 Aug 2018 22:25

Tgt Ion	Ratio	Lower	Upper
129	100		
127	86.5	54.6	101.4





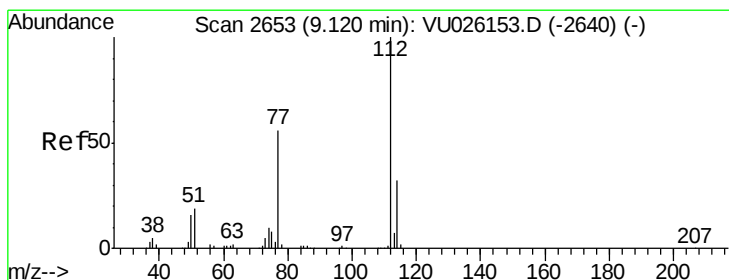
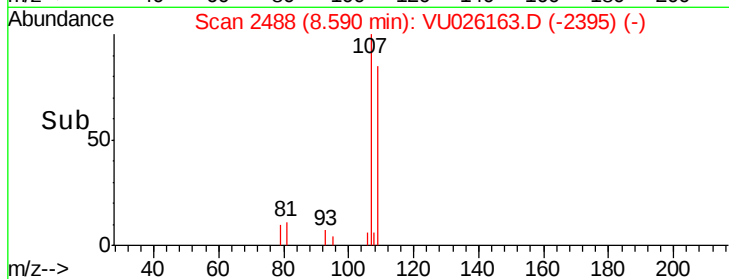
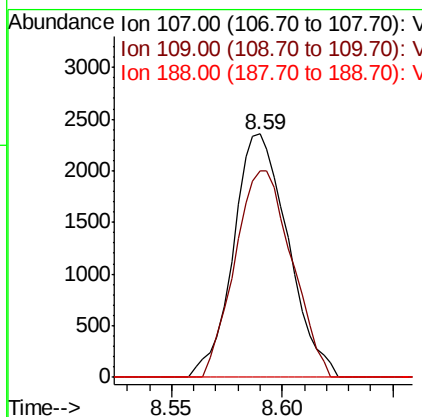
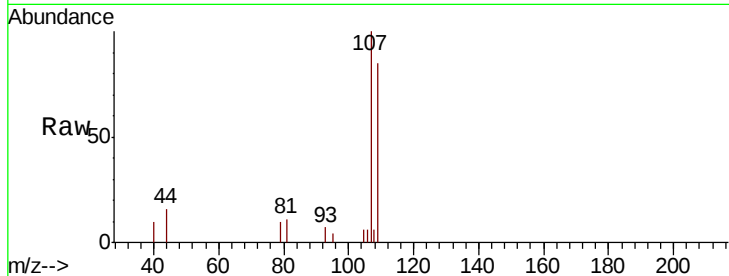
#50
 1,2-Dibromoethane
 Concen: 2.08 ug/L
 RT: 8.59 min Scan# 2488
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Tot Ion	Ratio	Resp	Lower	Upper
107	100	4061		
109	84.7	66.1	122.7	
188	0.0	3.2	4.8#	

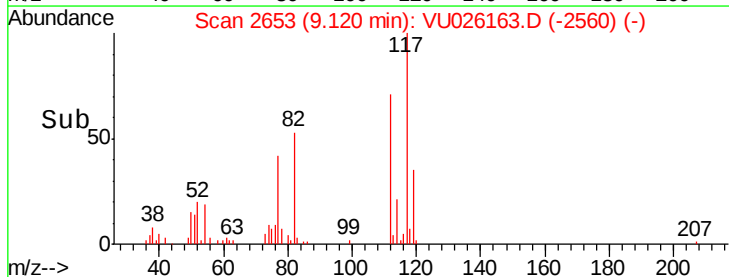
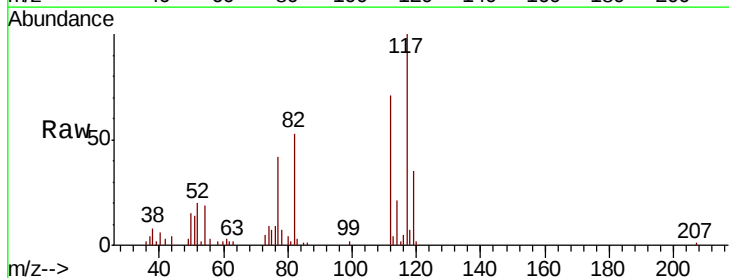
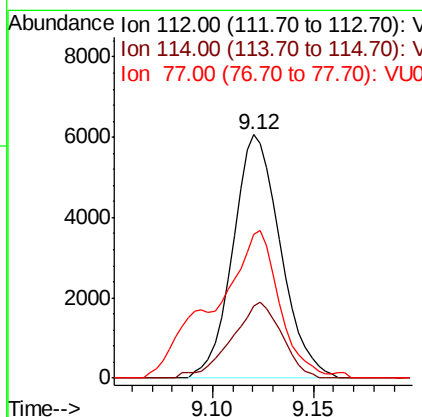
Manual Integrations
 APPROVED

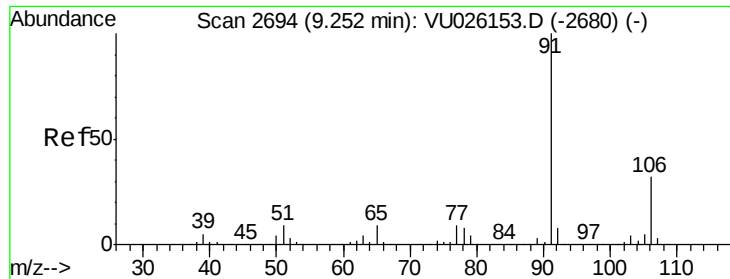
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#51
 Chlorobenzene
 Concen: 1.95 ug/L
 RT: 9.12 min Scan# 2653
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion	Ratio	Resp	Lower	Upper
112	100	10017		
114	29.7	22.5	41.9	
77	58.8	45.0	67.4	





#52

Ethylbenzene

Concen: 1.71 ug/L

RT: 9.26 min Scan# 2695

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampled :

MDL01

Tot Ion: 91 Resp: 14004

Ion Ratio Lower Upper

91 100

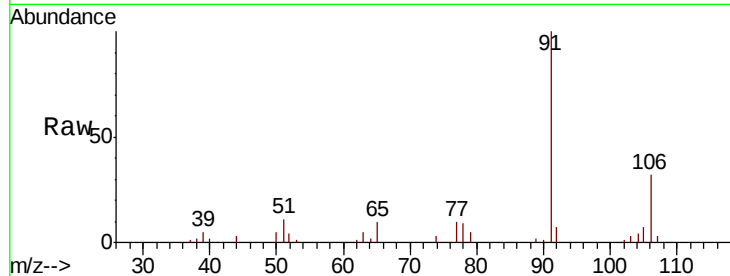
106 31.8 22.3 41.5

Manual Integrations

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Abundance Ion 91.00 (90.70 to 91.70): VU026163.D (-2680) (-)

Ion 106.00 (105.70 to 106.70): VU026163.D (-2680) (-)

9.26

8000

6000

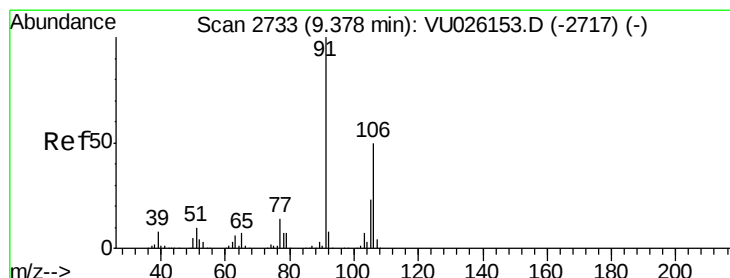
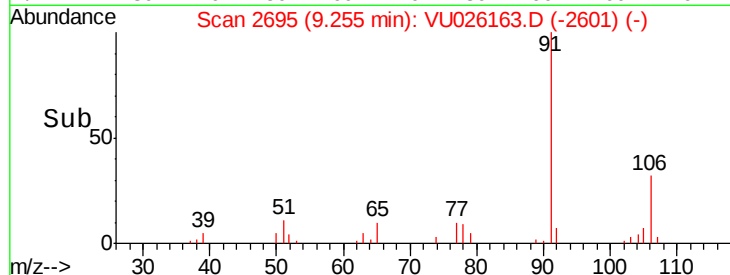
4000

2000

0

9.20 9.25 9.30

Time-->



#53

m,p-Xylene

Concen: 1.63 ug/L

RT: 9.38 min Scan# 2734

Delta R.T. 0.00 min

Lab File: VU026163.D

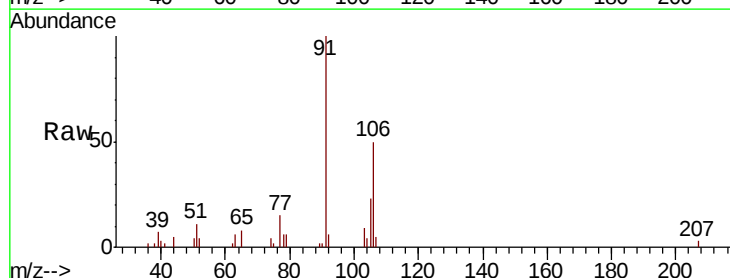
Acq: 15 Aug 2018 22:25

Tgt Ion: 106 Resp: 5159

Ion Ratio Lower Upper

106 100

91 200.5 139.2 258.4



Abundance Ion 106.00 (105.70 to 106.70): VU026163.D (-2717) (-)

Ion 91.00 (90.70 to 91.70): VU026163.D (-2717) (-)

9.38

6000

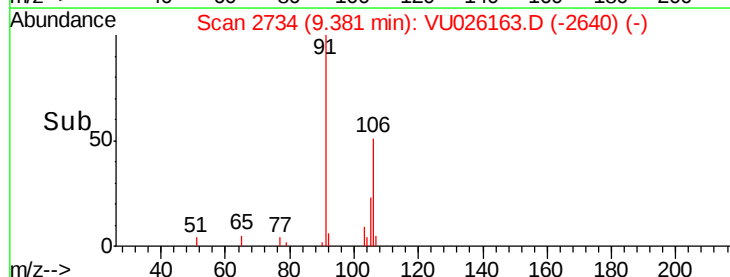
4000

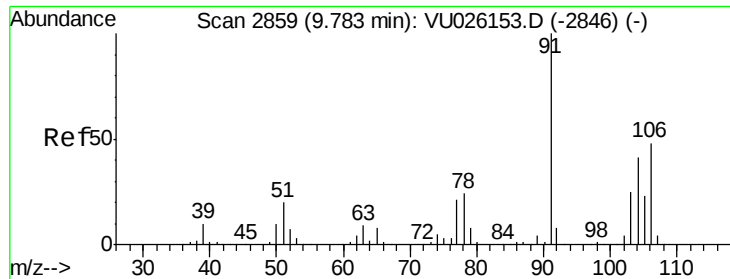
2000

0

9.35 9.40

Time-->





#54

o-xylene

Concen: 1.63 ug/L

RT: 9.78 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

ClientSampled :

MDL01

Tot Ion:106 Resp: 5139

Ion Ratio Lower Upper

106 100

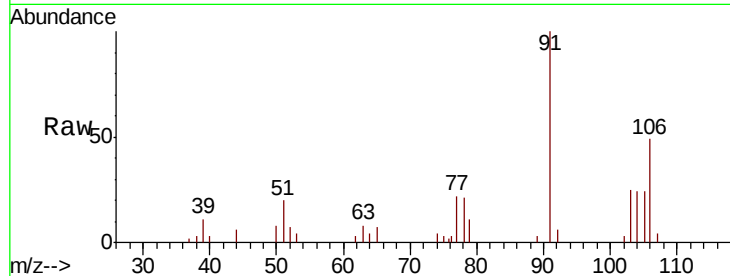
91 203.3 148.0 274.8

Manual Integrations

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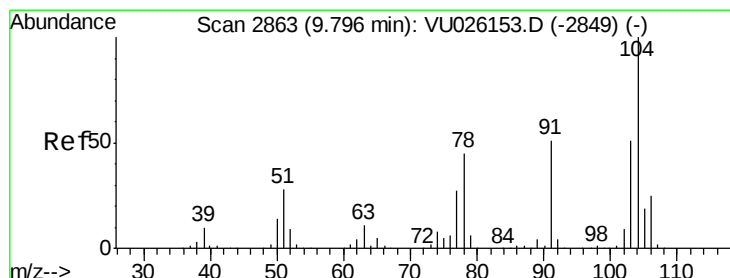
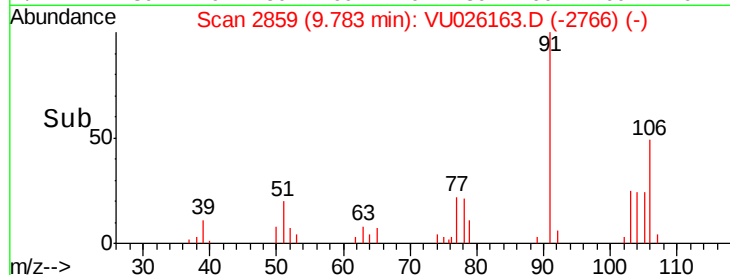
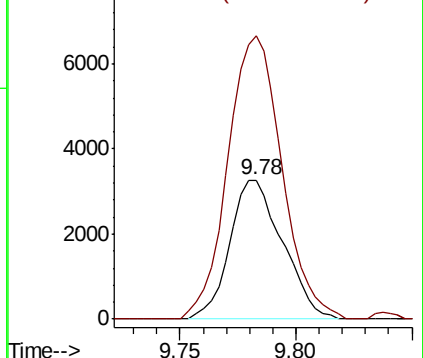
MMDadoda

8/16/2018 4:20:25 PM



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 1.42 ug/L

RT: 9.80 min Scan# 2864

Delta R.T. 0.00 min

Lab File: VU026163.D

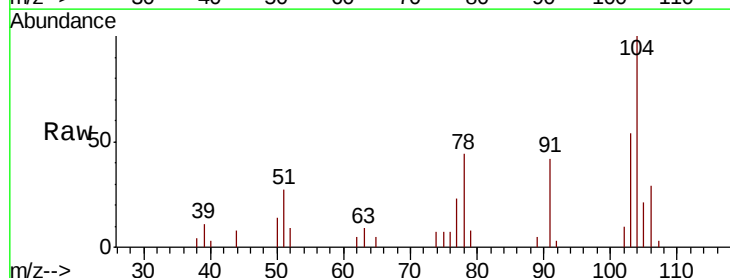
Acq: 15 Aug 2018 22:25

Tgt Ion:104 Resp: 7442

Ion Ratio Lower Upper

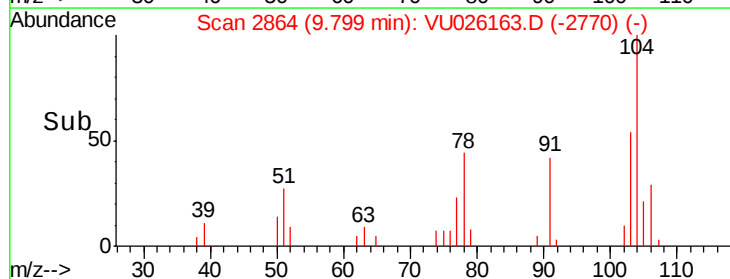
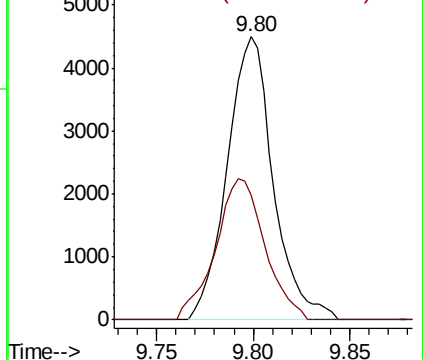
104 100

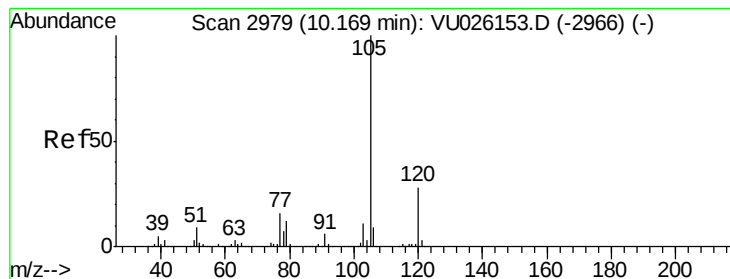
78 43.9 30.9 57.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0





#56

Isopropylbenzene

Concen: 1.49 ug/L

RT: 10.17 min Scan# 2979

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

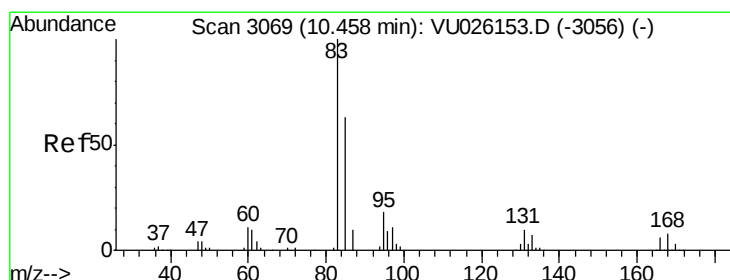
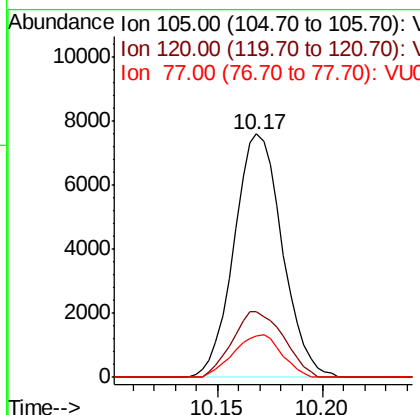
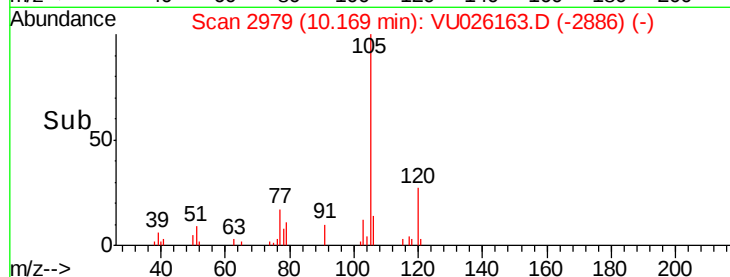
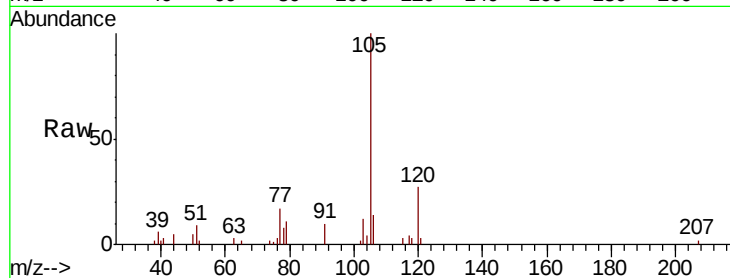
ClientSampled :

MDL01

Tot Ion:	105	Resp:	12034
Ion Ratio	Lower	Upper	
105	100		
120	28.8	21.5	32.3
77	17.4	12.3	18.5

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#58

1,1,2,2-Tetrachloroethane

Concen: 2.25 ug/L

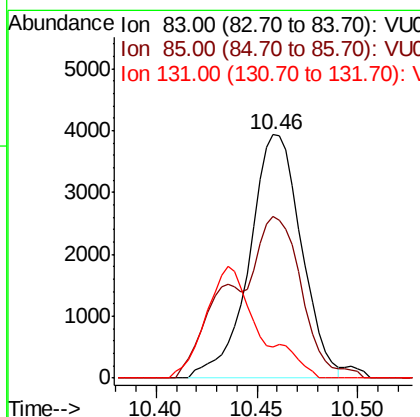
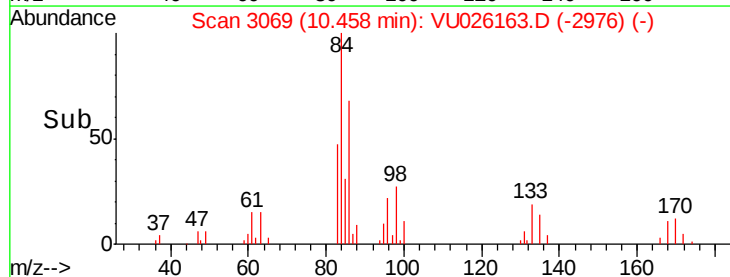
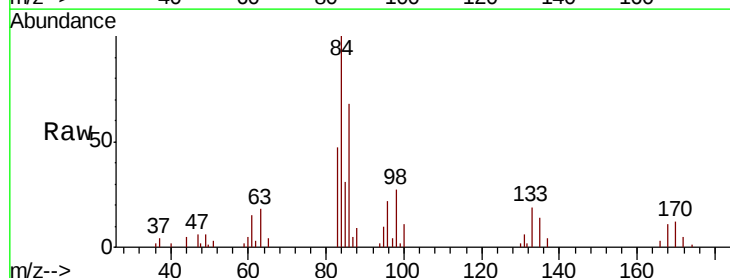
RT: 10.46 min Scan# 3069

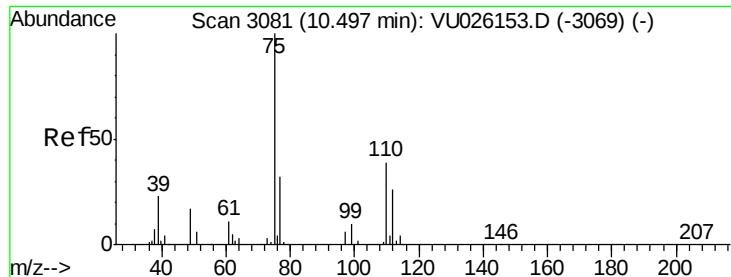
Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Tgt Ion:	83	Resp:	7047
Ion Ratio	Lower	Upper	
83	100		
85	66.5	45.0	83.6
131	12.5	8.4	12.6





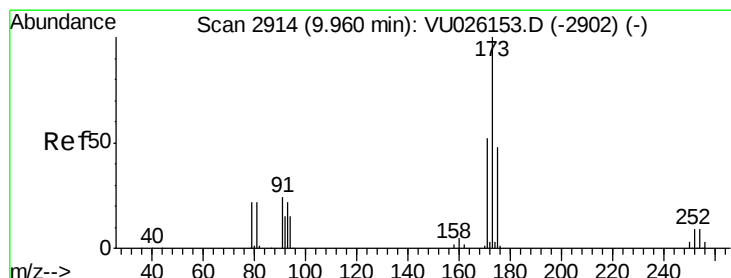
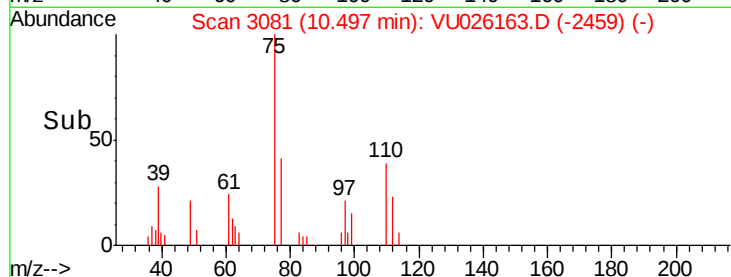
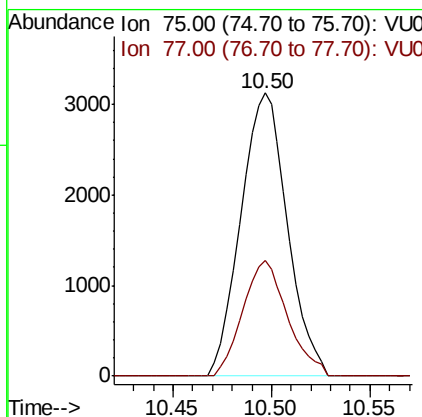
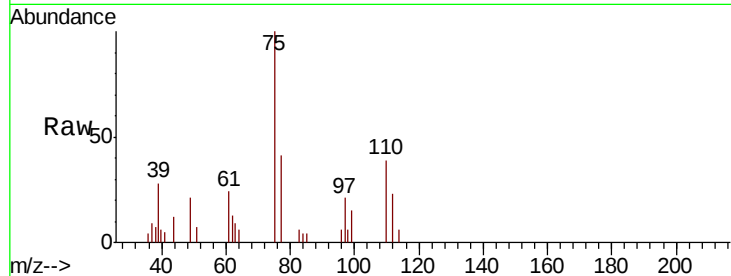
#59
 1,2,3-Trichloropropane
 Concen: 2.12 ug/L m
 RT: 10.50 min Scan# 3081
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Tot Ion: 75 Resp: 5171
 Ion Ratio Lower Upper
 75 100
 77 99.7 26.1 39.1#

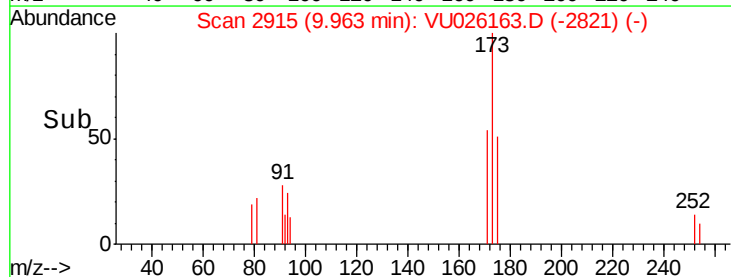
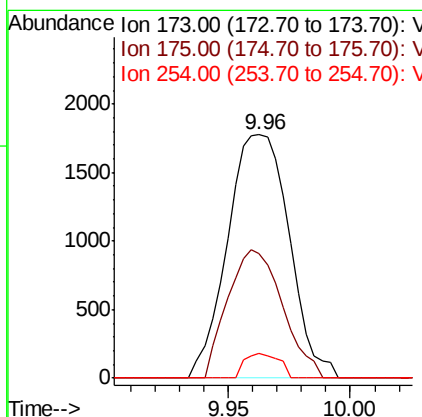
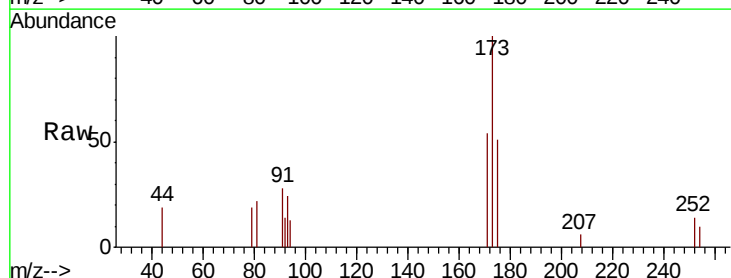
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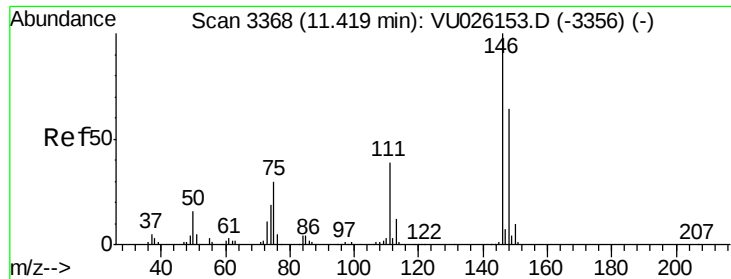
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#61
 Bromoform
 Concen: 2.14 ug/L
 RT: 9.96 min Scan# 2915
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion: 173 Resp: 3125
 Ion Ratio Lower Upper
 173 100
 175 47.0 38.8 58.2
 254 5.6 7.3 10.9#





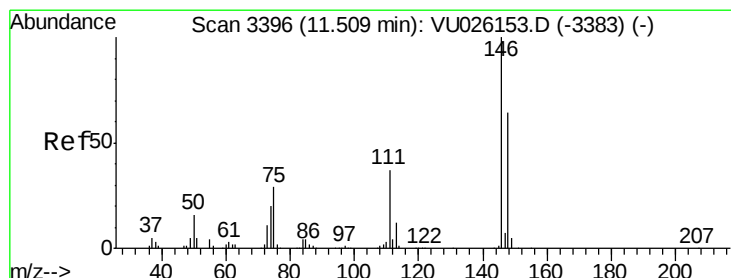
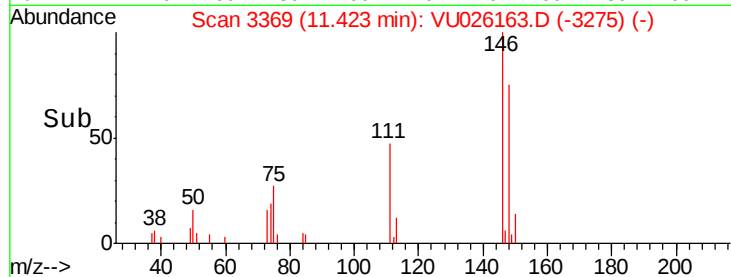
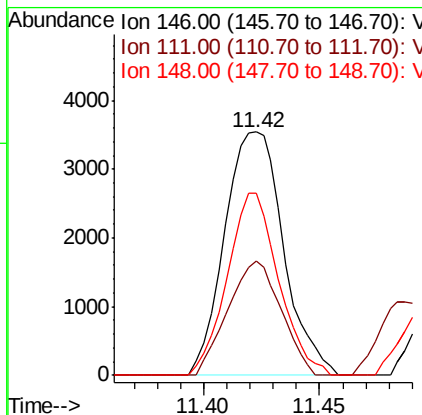
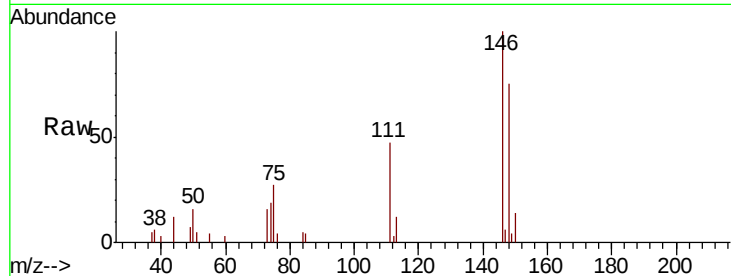
#62
 1,3-Dichlorobenzene
 Concen: 1.87 ug/L
 RT: 11.42 min Scan# 3369
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Tot Ion	Ratio	Lower	Upper
146	100		
111	47.2	26.7	49.7
148	74.6	44.1	81.9

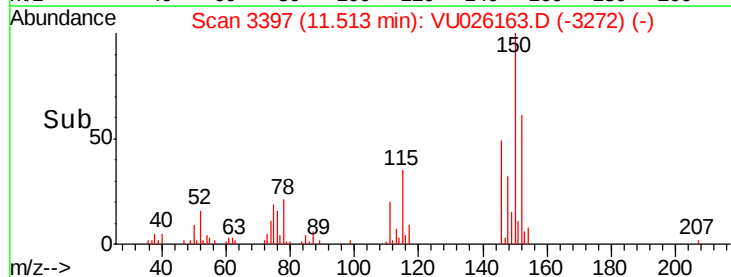
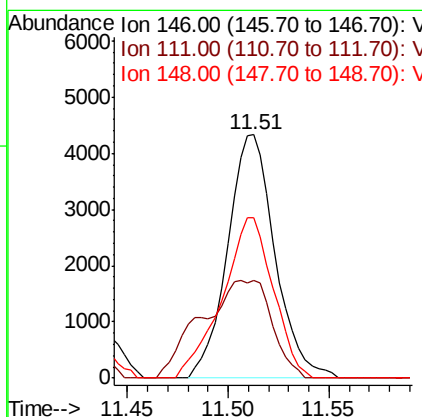
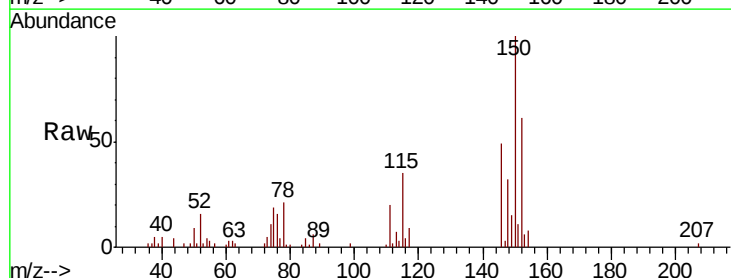
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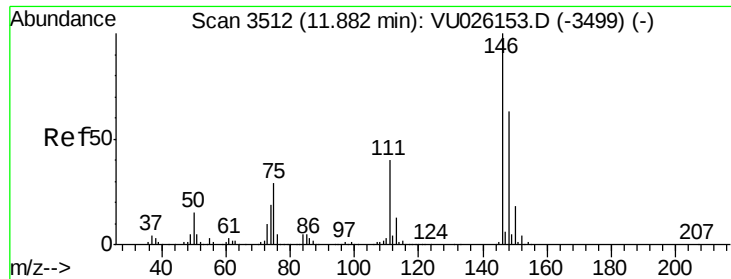
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#63
 1,4-Dichlorobenzene
 Concen: 2.06 ug/L
 RT: 11.51 min Scan# 3397
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.3	27.5	51.1
148	66.1	44.8	83.2





#65

1,2-Dichlorobenzene

Concen: 2.10 ug/L

RT: 11.88 min Scan# 3512

Delta R.T. 0.00 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

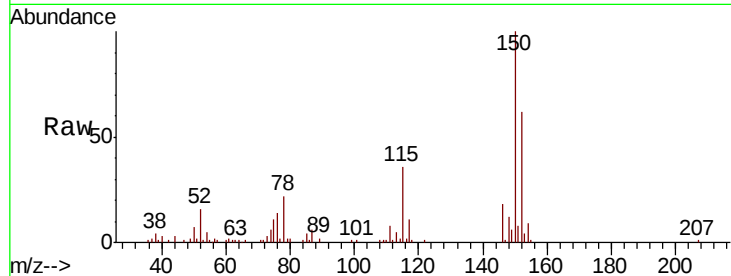
ClientSampled :

MDL01

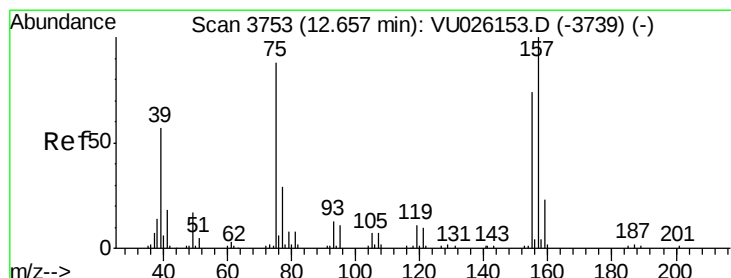
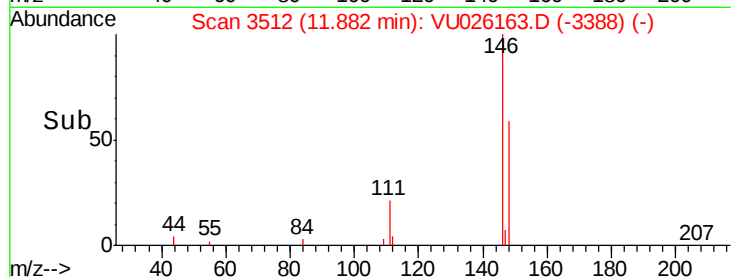
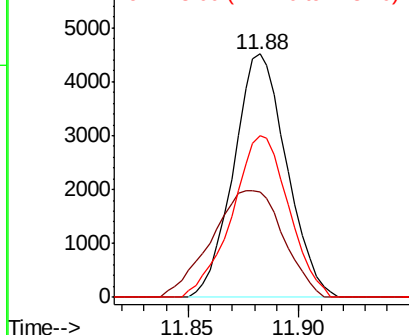
Tot Ion:	146	Resp:	7535
Ion Ratio	Lower	Upper	
146	100		
111	43.5	32.7	49.1
148	66.7	51.4	77.2

Manual Integrations
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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: 2.03 ug/L

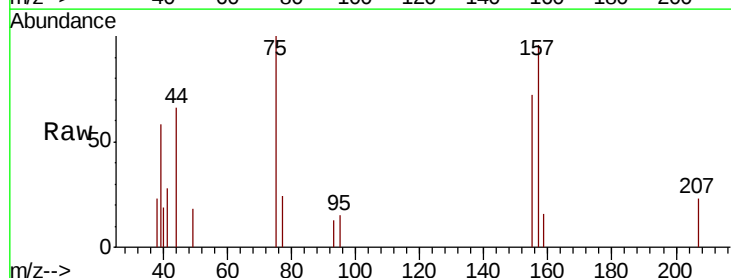
RT: 12.66 min Scan# 3753

Delta R.T. 0.00 min

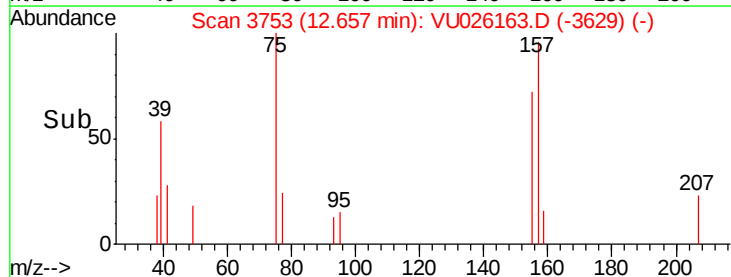
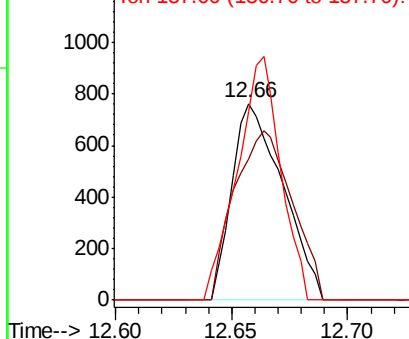
Lab File: VU026163.D

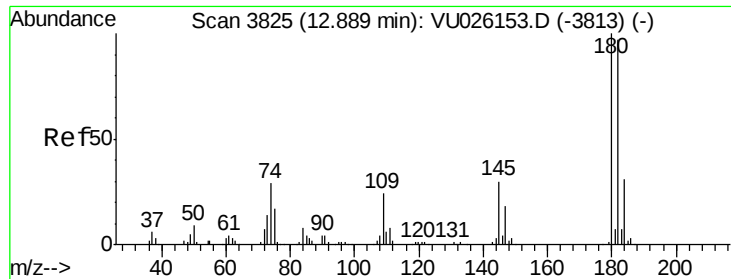
Acq: 15 Aug 2018 22:25

Tgt Ion:	75	Resp:	1155
Ion Ratio	Lower	Upper	
75	100		
155	71.7	68.2	102.2
157	95.8	90.5	135.7



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





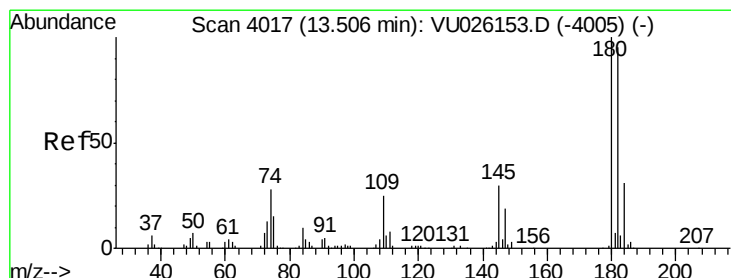
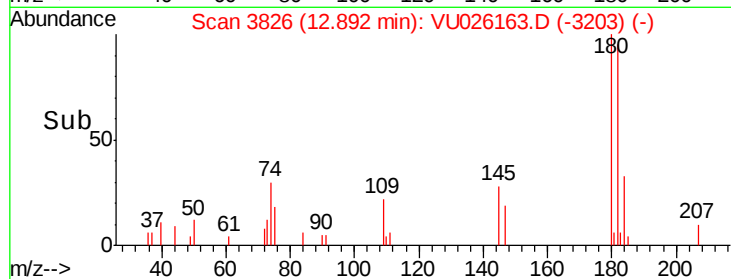
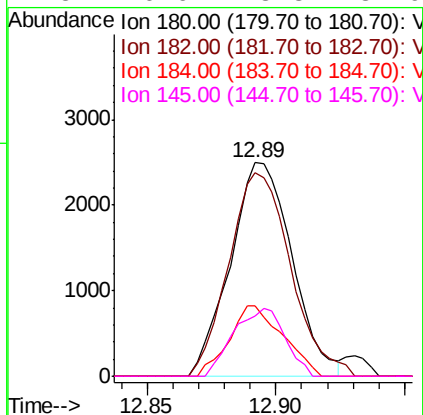
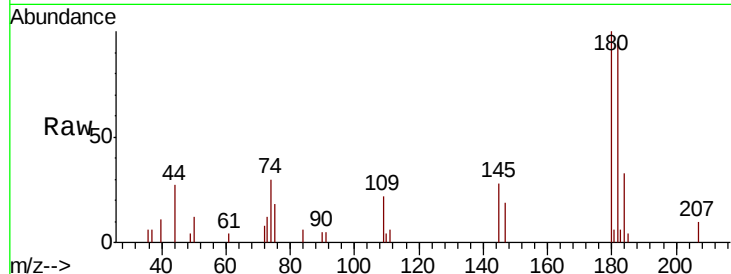
#67
 1,3,5-Trichlorobenzene
 Concen: 1.68 ug/L
 RT: 12.89 min Scan# 3826
 Delta R.T. 0.00 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL01

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.6	75.6	113.4
184	28.7	24.3	36.5
145	26.6	23.3	34.9

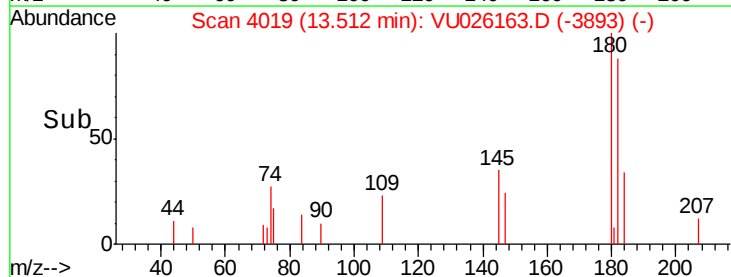
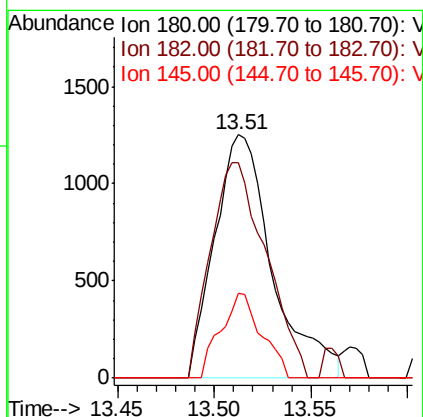
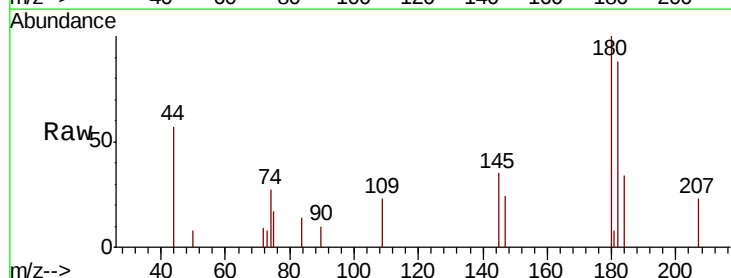
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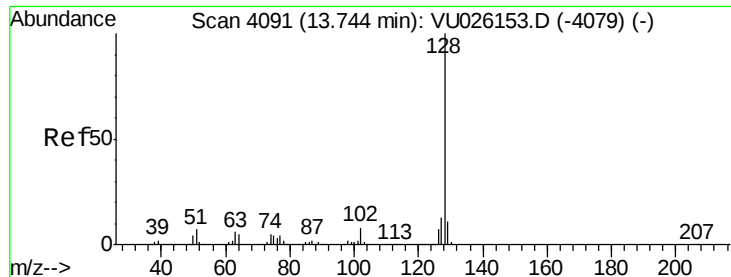
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#68
 1,2,4-trichlorobenzene
 Concen: 1.38 ug/L
 RT: 13.51 min Scan# 4019
 Delta R.T. 0.01 min
 Lab File: VU026163.D
 Acq: 15 Aug 2018 22:25

Tgt Ion	Ratio	Lower	Upper
180	100		
182	85.4	76.8	115.2
145	24.6	23.8	35.6





#69

Naphthalene

Concen: 1.34 ug/L m

RT: 13.75 min Scan# 4094

Delta R.T. 0.01 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Instrument :

MSVOA_U

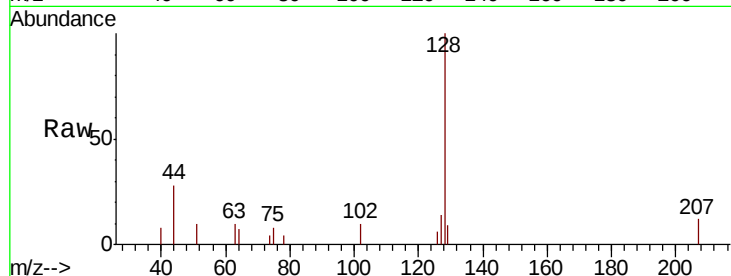
ClientSampleId :

MDL01

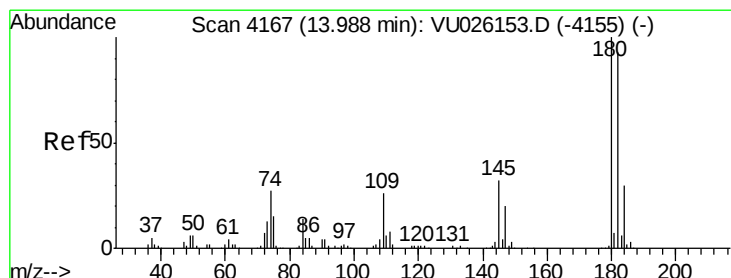
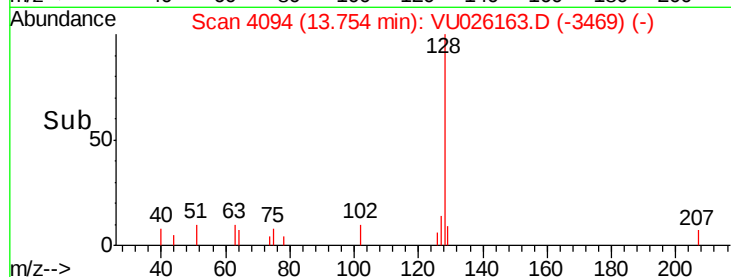
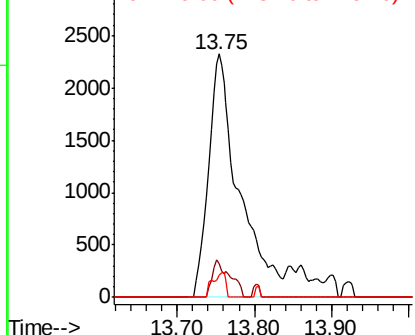
Tot Ion:	128	Resp:	7170
Ion	Ratio	Lower	Upper
128	100		
127	4.6	10.3	15.5#
129	2.8	8.6	13.0#

Manual Integrations
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Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 1.25 ug/L m

RT: 13.99 min Scan# 4169

Delta R.T. 0.01 min

Lab File: VU026163.D

Acq: 15 Aug 2018 22:25

Tgt Ion:	180	Resp:	2510
Ion	Ratio	Lower	Upper
180	100		
182	97.2	77.1	115.7
145	13.5	25.1	37.7#

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

