

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU073019\
 Data File : VU033489.D
 Acq On : 30 Jul 2019 12:58
 Operator : JC/SP
 Sample : MDL05
 Misc : 5.00u/5mL/100uL/5.0mL/MSVOA_U/MEOH
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL05

Manual Integrations
 APPROVED

MMdadoda
 8/1/2019 3:14:58 PM

Quant Time: Jul 31 09:08:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SFAMULM072919W.M
 Quant Title : VOC Analysis
 QLast Update : Wed Jul 31 08:44:45 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.86	114	280611	50.00	ug/L	0.00
28) Chlorobenzene-d5	9.07	117	291755	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.47	152	137263	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.39	65	113850	44.68	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	89.36%
7) Chloroethane-d5	1.67	69	101227	48.08	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	96.16%
11) 1,1-Dichloroethene-d2	2.26	63	155564	33.39	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	66.78%
21) 2-Butanone-d5	4.15	46	138175	94.64	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	94.64%
24) Chloroform-d	4.62	84	177431	46.53	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	93.06%
26) 1,2-Dichloroethane-d4	5.29	65	121938	49.56	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	99.12%
32) Benzene-d6	5.32	84	374134	47.77	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	95.54%
36) 1,2-Dichloropropane-d6	6.31	67	119413	49.15	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	98.30%
41) Toluene-d8	7.55	98	342401	46.50	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	93.00%
43) trans-1,3-Dichloropropene-	7.83	79	53389	44.97	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	89.94%
47) 2-Hexanone-d5	8.29	63	101504	100.58	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	100.58%
56) 1,1,2,2-Tetrachloroethane-	10.41	84	180162	48.32	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	96.64%
66) 1,2-Dichlorobenzene-d4	11.85	152	135433	51.35	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	102.70%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	1.20	85	7892	2.819 ug/L	97
3) Chloromethane	1.32	50	8175	2.925 ug/L	94
5) Vinyl chloride	1.40	62	8794	2.751 ug/L #	67
6) Bromomethane	1.62	94	5287	2.366 ug/L	93
8) Chloroethane	1.69	64	5863	2.990 ug/L	95
9) Trichlorofluoromethane	1.87	101	12028	2.869 ug/L	97
10) 1,1,2-Trichloro-1,2,2-trif	2.27	101	7353	3.490 ug/L #	83
12) 1,1-Dichloroethene	2.27	96	6994	3.407 ug/L #	1
13) Acetone	2.31	43	7687	5.312 ug/L	99
14) Carbon disulfide	2.46	76	16449	2.689 ug/L	97
15) Methyl Acetate	2.60	43	6473	2.789 ug/L	100
16) Methylene chloride	2.68	84	6499	2.881 ug/L	91
17) trans-1,2-Dichloroethene	2.96	96	5542	2.718 ug/L	94
18) Methyl tert-butyl Ether	2.98	73	15842	2.633 ug/L	98
19) 1,1-Dichloroethane	3.42	63	11079	2.886 ug/L	99
20) cis-1,2-Dichloroethene	4.21	96	6594	2.930 ug/L	93
22) 2-Butanone	4.25	43	7120	4.141 ug/L	96

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU073019\
 Data File : VU033489.D
 Acq On : 30 Jul 2019 12:58
 Operator : JC/SP
 Sample : MDL05
 Misc : 5.00µ/5mL/100uL/5.0mL/MSVOA_U/MEOH
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL05

Manual Integrations
 APPROVED

MMdadoda
 8/1/2019 3:14:58 PM

Quant Time: Jul 31 09:08:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\SFAMULM072919W.M
 Quant Title : VOC Analysis
 QLast Update : Wed Jul 31 08:44:45 2019
 Response via : Initial Calibration

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

23) Bromochloromethane	4.53	128	3217m	2.691	ug/L	
25) Chloroform	4.65	83	22946	5.637	ug/L	98
27) 1,2-Dichloroethane	5.39	62	9852	3.116	ug/L	99
29) Cyclohexane	4.97	56	7338	2.289	ug/L	94
30) 1,1,1-Trichloroethane	4.89	97	9512	2.738	ug/L	98
31) Carbon tetrachloride	5.11	117	8470	2.739	ug/L	99
33) Benzene	5.37	78	22933	2.630	ug/L	100
34) Trichloroethene	6.17	95	6482	2.853	ug/L	88
35) Methylcyclohexane	6.39	83	9118	2.639	ug/L	94
37) 1,2-Dichloropropane	6.41	63	6530	2.784	ug/L #	90
38) Bromodichloromethane	6.74	83	8223	2.663	ug/L	96
39) cis-1,3-Dichloropropene	7.25	75	9175	2.623	ug/L	92
40) 4-Methyl-2-pentanone	7.44	43	15212	4.922	ug/L	96
42) Toluene	7.62	91	25441	2.711	ug/L	98
44) trans-1,3-Dichloropropene	7.87	75	8285m	2.610	ug/L	
45) 1,1,2-Trichloroethane	8.05	97	6032	2.697	ug/L	92
46) Tetrachloroethene	8.21	164	4724	2.555	ug/L	93
48) 2-Hexanone	8.35	43	14758	5.861	ug/L #	88
49) Dibromochloromethane	8.46	129	6581	2.628	ug/L	96
50) 1,2-Dibromoethane	8.57	107	6548	2.698	ug/L	96
51) Chlorobenzene	9.10	112	17418	2.793	ug/L	96
52) Ethylbenzene	9.23	91	25192	2.476	ug/L	96
53) m,p-Xylene	9.36	106	9333	2.440	ug/L	98
54) o-xylene	9.76	106	8781	2.341	ug/L	93
55) Styrene	9.78	104	13838	2.174	ug/L	98
57) 1,1,2,2-Tetrachloroethane	10.44	83	12067	3.034	ug/L	98
59) Bromoform	9.94	173	4659	2.713	ug/L	97
60) 1,2,3-Trichloropropane	10.48	75	8903	3.184	ug/L	96
61) Isopropylbenzene	10.15	105	22291	2.535	ug/L	100
62) 1,3,5-Trimethylbenzene	10.76	105	16903	2.373	ug/L	99
63) 1,2,4-Trimethylbenzene	11.13	105	16109	2.280	ug/L	94
64) 1,3-Dichlorobenzene	11.40	146	12374	2.761	ug/L	98
65) 1,4-Dichlorobenzene	11.49	146	13597	2.937	ug/L	98
67) 1,2-Dichlorobenzene	11.86	146	13422	2.989	ug/L #	90
68) 1,2-Dibromo-3-chloropropan	12.64	75	1938	2.493	ug/L	94
69) 1,3,5-Trichlorobenzene	12.88	180	8175	2.403	ug/L	94
70) 1,2,4-trichlorobenzene	13.50	180	5358	1.887	ug/L	98
71) Naphthalene	13.74	128	14024m	1.708	ug/L	
72) 1,2,3-Trichlorobenzene	13.98	180	6101m	2.051	ug/L	

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

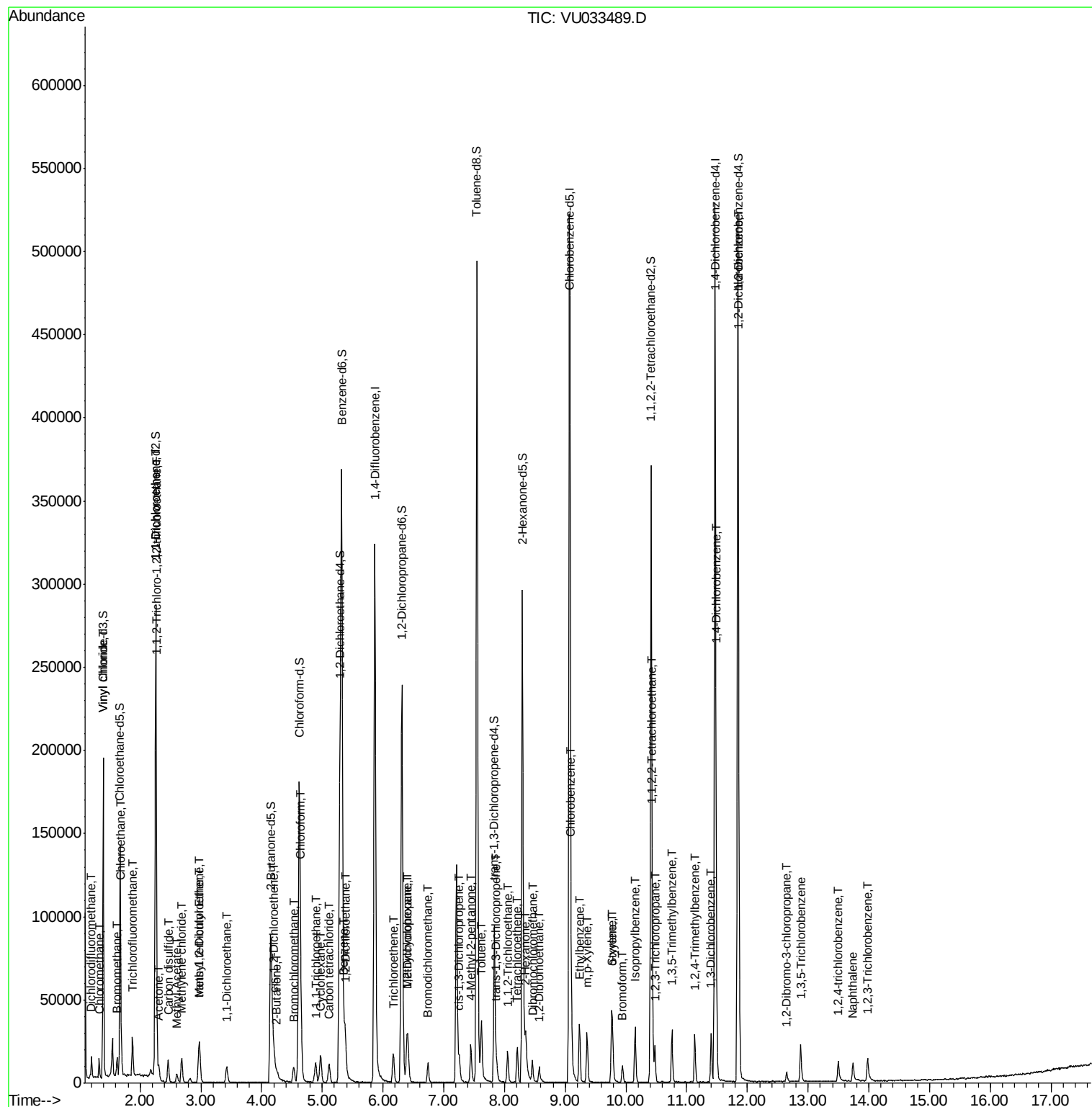
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU073019\
Data File : VU033489.D
Acq On : 30 Jul 2019 12:58
Operator : JC/SP
Sample : MDL05
Misc : 5.00µ/5mL/100µL/5.0mL/MSVOA_U/MEOH
ALS Vial : 10 Sample Multiplier: 1

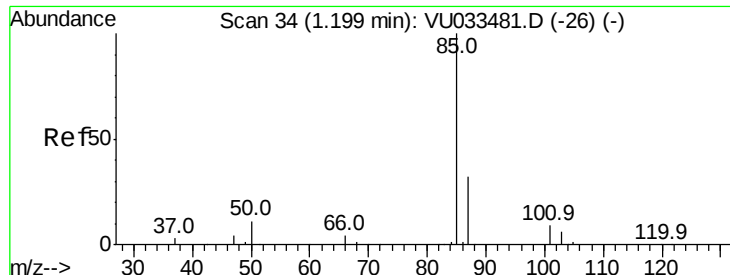
Instrument :
MSVOA_U
ClientSampleID :
MDL05

Manual Integrations
APPROVED

MMDadoda
8/1/2019 3:14:58 PM

Quant Time: Jul 31 09:08:02 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_U\METHOD\SFAMULM072919W.M
Quant Title : VOC Analysis
QLast Update : Wed Jul 31 08:44:45 2019
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 2.819 ug/L

RT: 1.20 min Scan# 34

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion: 85 Resp: 7892

Ion Ratio Lower Upper

85 100

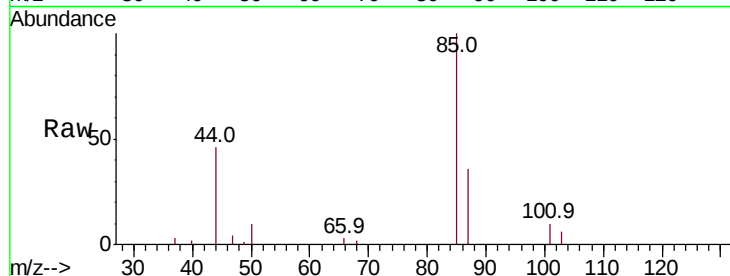
87 33.6 25.7 38.5

Manual Integrations

APPROVED

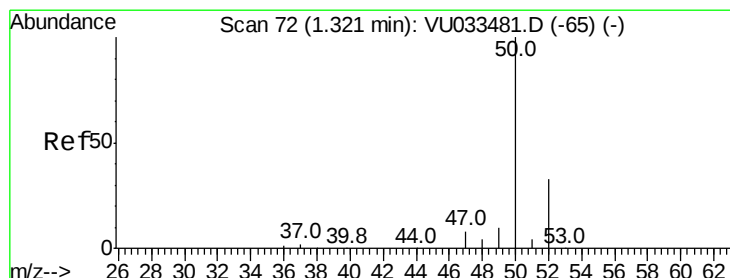
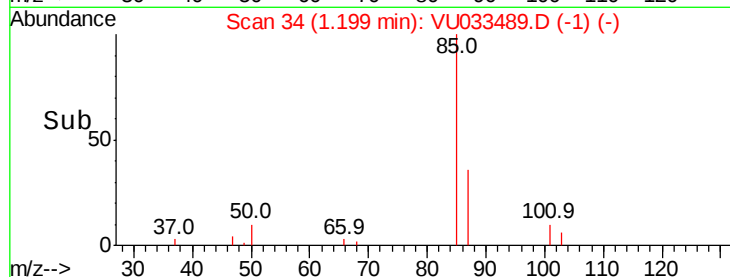
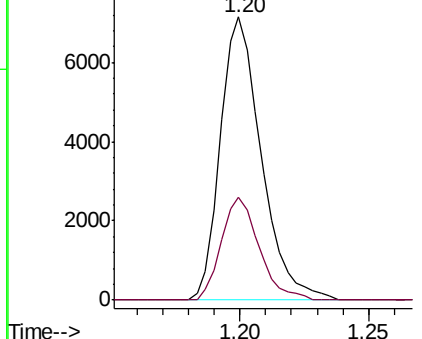
MMdadoda

8/1/2019 3:14:58 PM



Abundance Ion 85.00 (84.70 to 85.70): VU0

Ion 87.00 (86.70 to 87.70): VU0



#3

Chloromethane

Concen: 2.925 ug/L

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VU033489.D

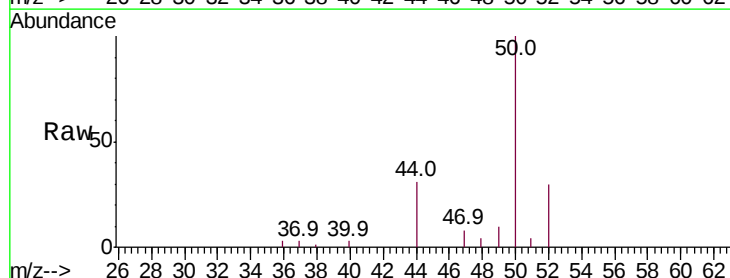
Acq: 30 Jul 2019 12:58

Tgt Ion: 50 Resp: 8175

Ion Ratio Lower Upper

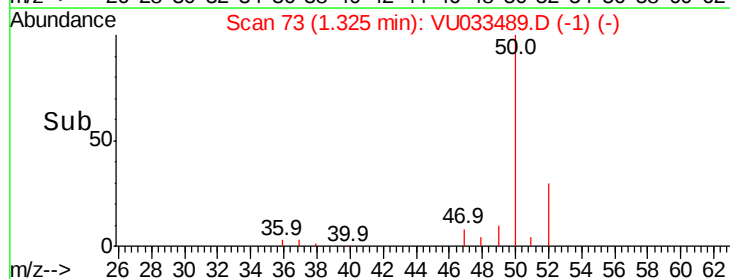
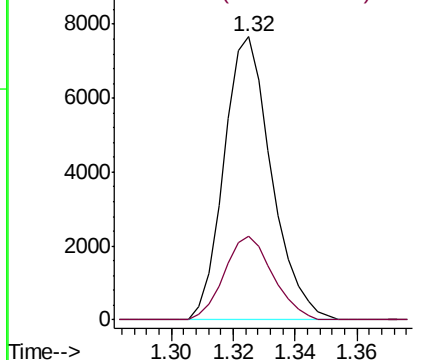
50 100

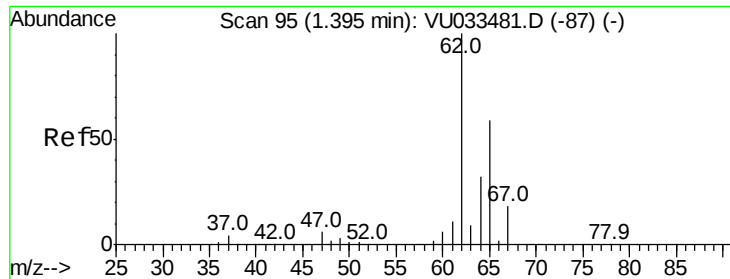
52 29.6 23.3 43.3



Abundance Ion 50.00 (49.70 to 50.70): VU0

Ion 52.00 (51.70 to 52.70): VU0





#5

Vinyl chloride

Concen: 2.751 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion: 62 Resp: 8794

Ion Ratio Lower Upper

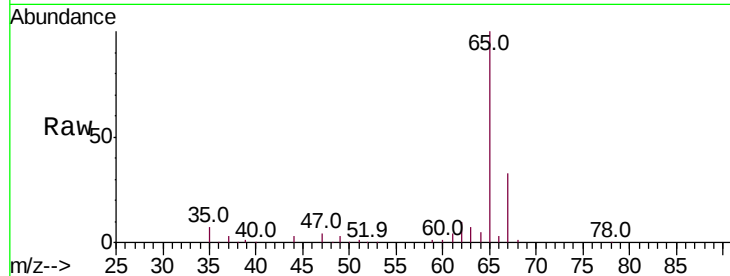
62 100

64 51.5 23.0 42.6#

Manual Integrations
APPROVED

MMdadoda

8/1/2019 3:14:58 PM



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0

1.40

8000

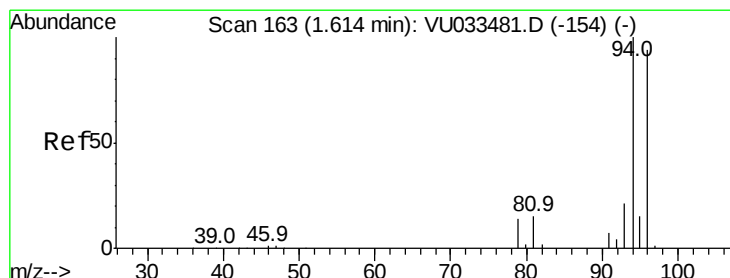
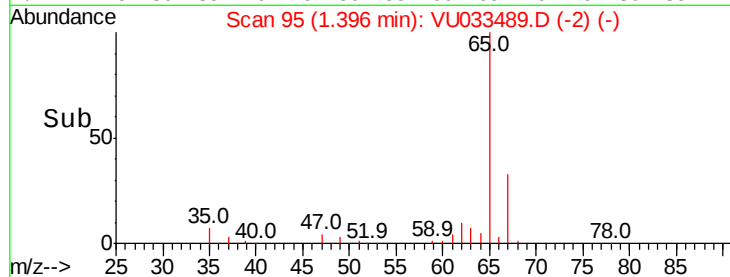
6000

4000

2000

0

Time--> 1.35 1.40 1.45



#6

Bromomethane

Concen: 2.366 ug/L

RT: 1.62 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU033489.D

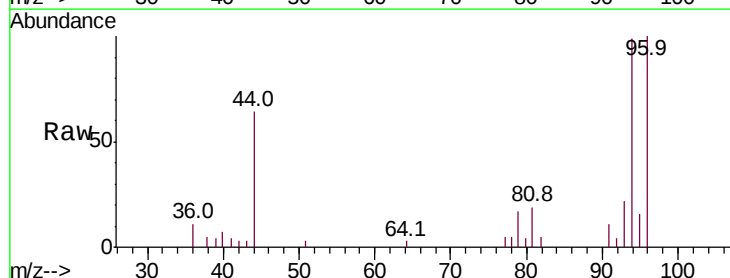
Acq: 30 Jul 2019 12:58

Tgt Ion: 94 Resp: 5287

Ion Ratio Lower Upper

94 100

96 101.0 66.2 123.0



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

1.62

4000

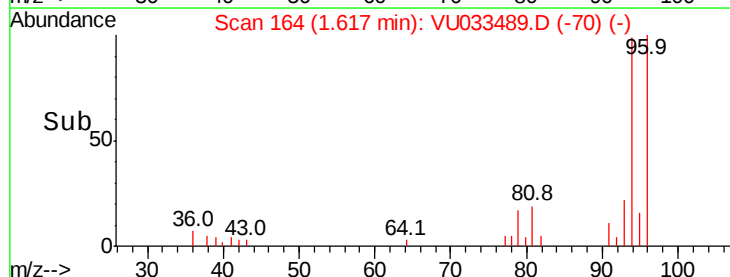
3000

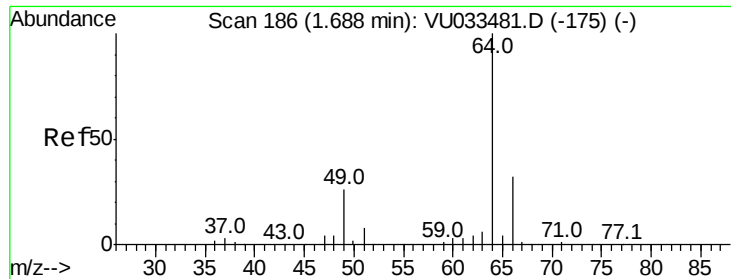
2000

1000

0

Time--> 1.60 1.65





#8

Chloroethane

Concen: 2.990 ug/L

RT: 1.69 min Scan# 186

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion: 64 Resp: 5863

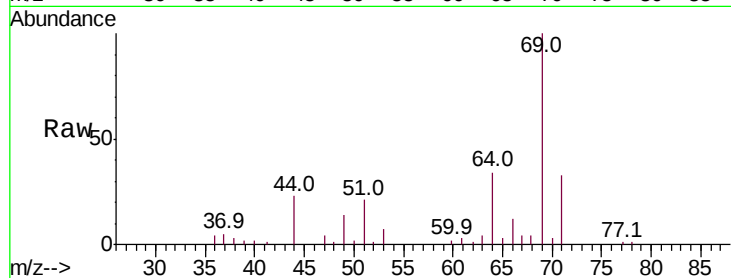
Ion Ratio Lower Upper

64 100

66 34.2 22.1 41.1

Manual Integrations
APPROVED

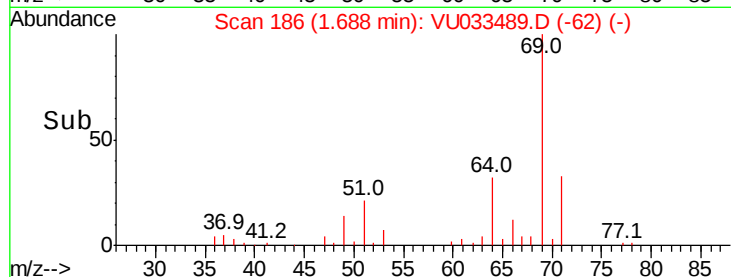
MMdadoda
8/1/2019 3:14:58 PM



Abundance Ion 64.00 (63.70 to 64.70): VU033489.D (-175) (-)

Ion 66.00 (65.70 to 66.70): VU033489.D (-175) (-)

1.69

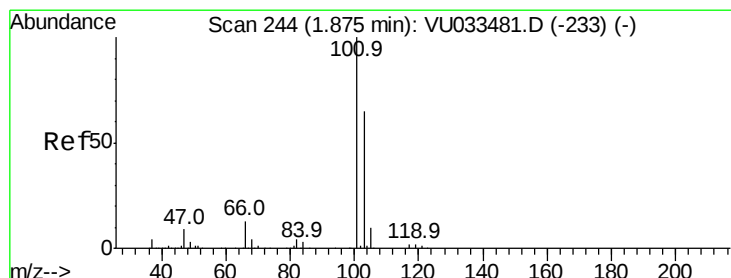


Abundance Ion 64.00 (63.70 to 64.70): VU033489.D (-62) (-)

Ion 66.00 (65.70 to 66.70): VU033489.D (-62) (-)

1.69

Time-->



#9

Trichlorofluoromethane

Concen: 2.869 ug/L

RT: 1.87 min Scan# 244

Delta R.T. 0.00 min

Lab File: VU033489.D

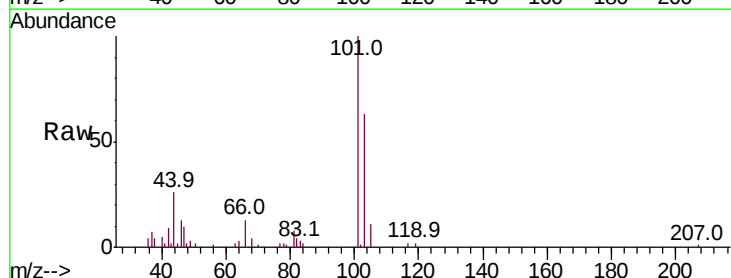
Acq: 30 Jul 2019 12:58

Tgt Ion: 101 Resp: 12028

Ion Ratio Lower Upper

101 100

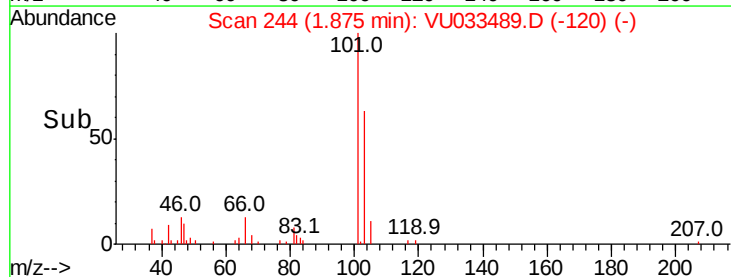
103 61.3 51.2 76.8



Abundance Ion 101.00 (100.70 to 101.70): VU033489.D (-233) (-)

Ion 103.00 (102.70 to 103.70): VU033489.D (-233) (-)

1.87

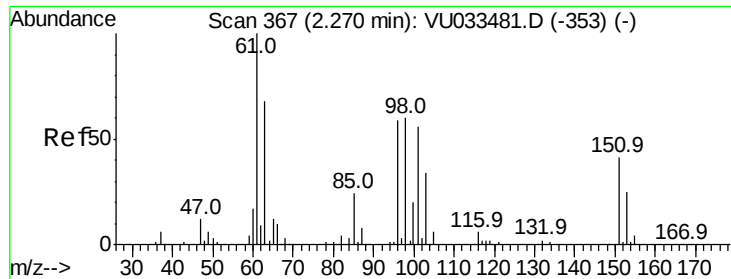


Abundance Ion 101.00 (100.70 to 101.70): VU033489.D (-120) (-)

Ion 103.00 (102.70 to 103.70): VU033489.D (-120) (-)

1.87

Time-->



#10

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

Concen: 3.490 ug/L

RT: 2.27 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

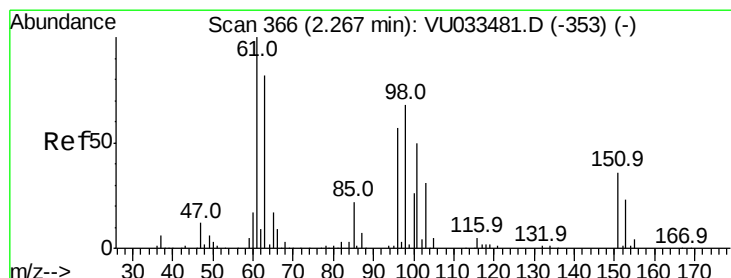
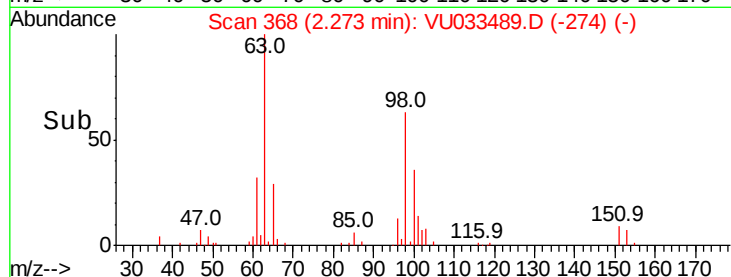
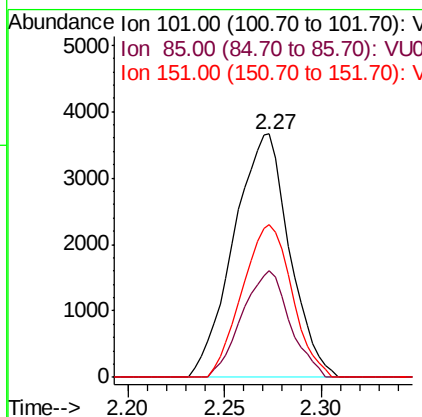
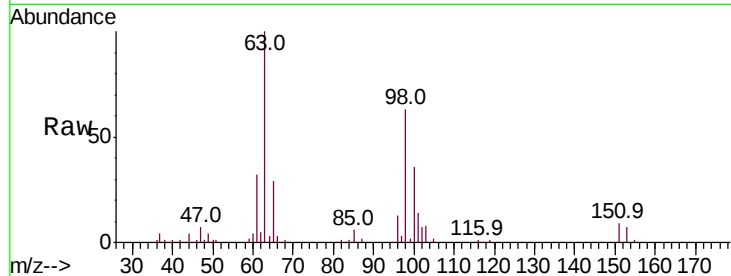
ClientSampled :

MDL05

Tot Ion:	101	Resp:	7353
Ion Ratio	Lower	Upper	
101	100		
85	37.6	35.8	53.8
151	56.1	58.6	87.8#

Manual Integrations
APPROVED

MMDadoda
8/1/2019 3:14:58 PM



#12

1,1-Dichloroethene

Concen: 3.407 ug/L

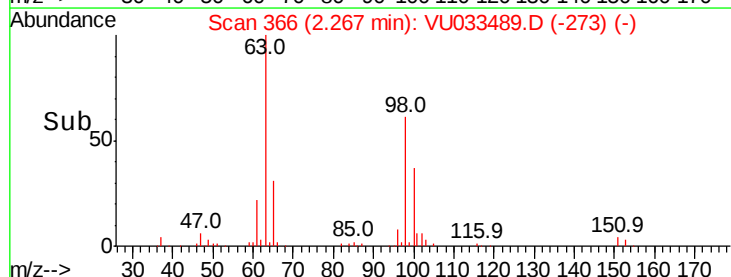
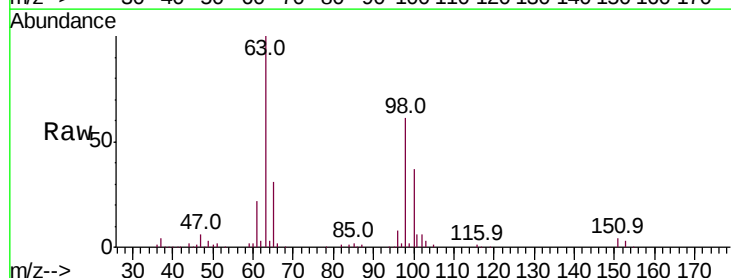
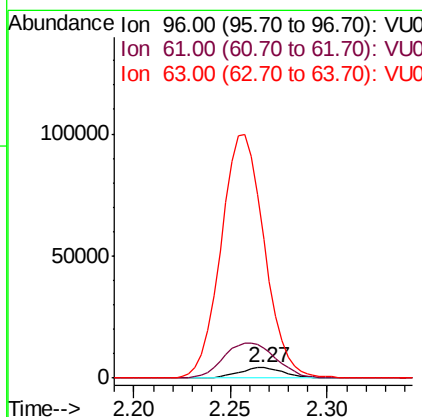
RT: 2.27 min Scan# 366

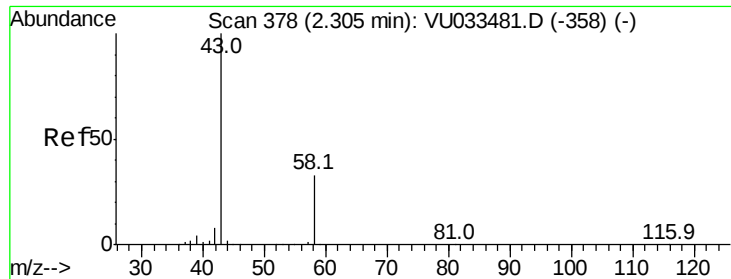
Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Tgt Ion:	96	Resp:	6994
Ion Ratio	Lower	Upper	
96	100		
61	291.9	124.1	230.5#
63	1329.3	101.8	189.2#





#13

Acetone

Concen: 5.312 ug/L

RT: 2.31 min Scan# 378

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampled :

MDL05

Tot Ion: 43 Resp: 7687

Ion Ratio Lower Upper

43 100

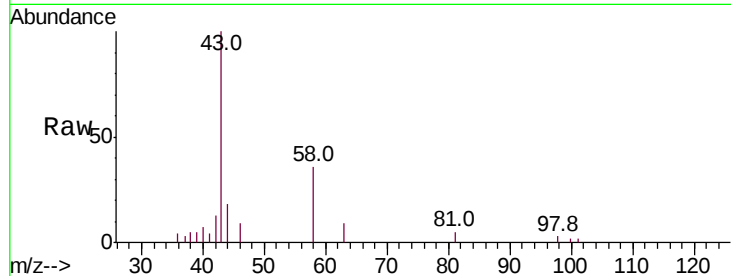
58 34.1 0.0 67.4

Manual Integrations

APPROVED

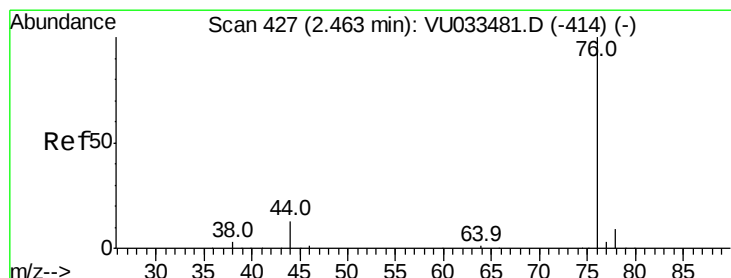
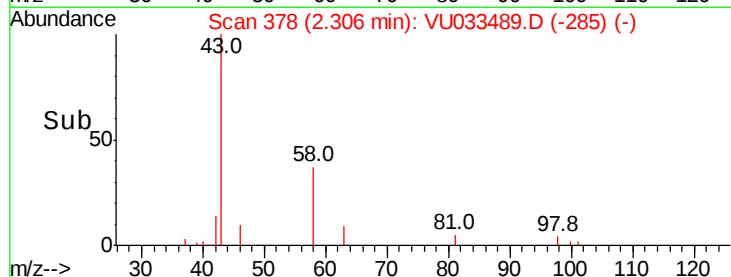
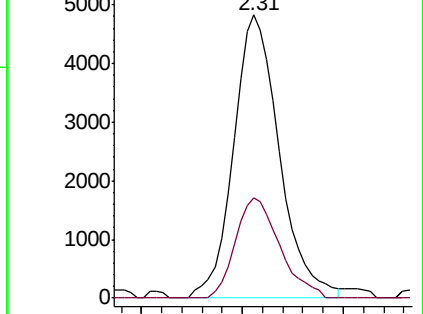
MMdadoda

8/1/2019 3:14:58 PM



Abundance Ion 43.00 (42.70 to 43.70): VU033489.D (-358) (-)

Ion 58.00 (57.70 to 58.70): VU033489.D (-358) (-)



#14

Carbon disulfide

Concen: 2.689 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VU033489.D

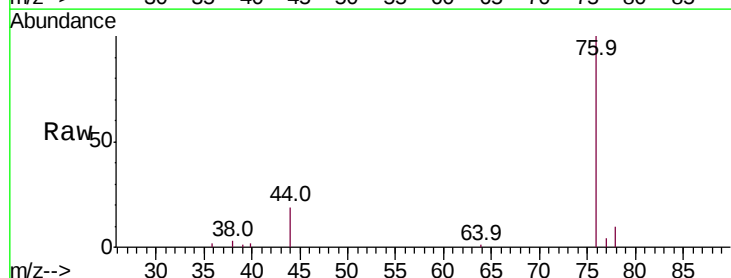
Acq: 30 Jul 2019 12:58

Tgt Ion: 76 Resp: 16449

Ion Ratio Lower Upper

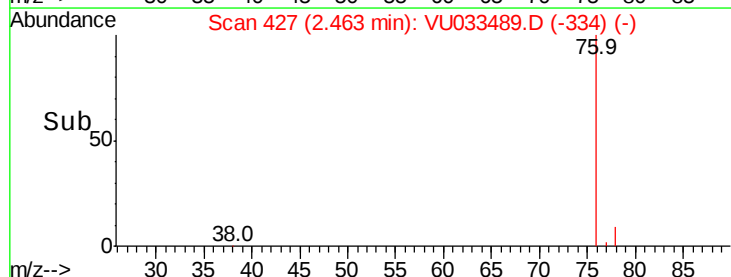
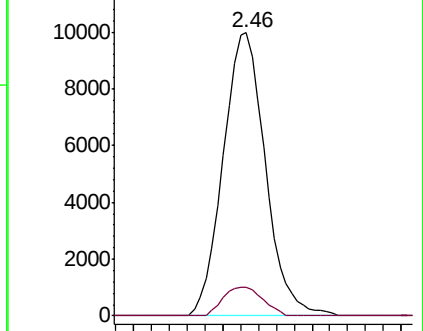
76 100

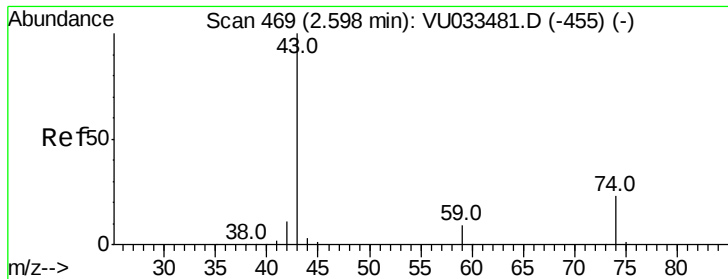
78 10.2 7.2 10.8



Abundance Ion 76.00 (75.70 to 76.70): VU033489.D (-414) (-)

Ion 78.00 (77.70 to 78.70): VU033489.D (-414) (-)





#15

Methvl Acetate

Concen: 2.789 ug/L

RT: 2.60 min Scan# 471

Delta R.T. 0.01 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion: 43 Resp: 6473

Ion Ratio Lower Upper

43 100

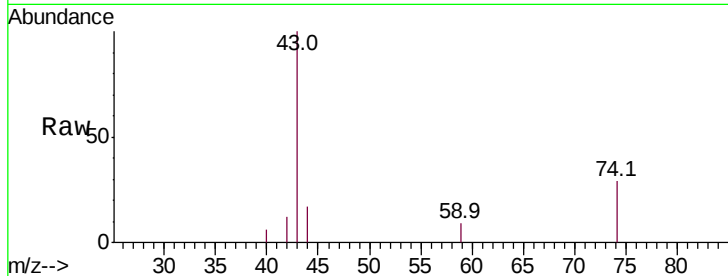
74 25.7 20.5 30.7

Manual Integrations

APPROVED

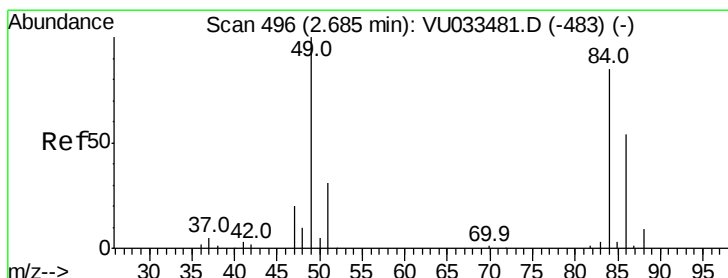
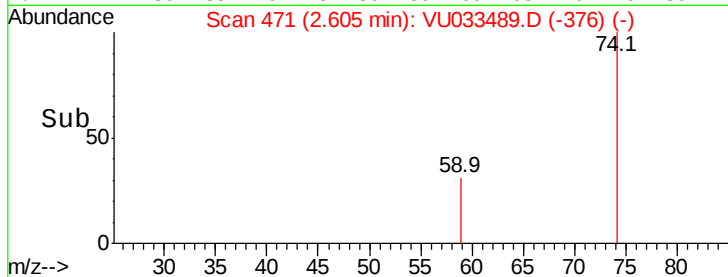
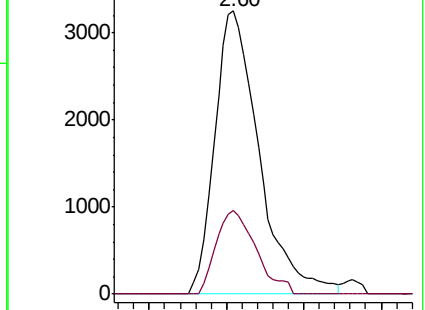
MMdadoda

8/1/2019 3:14:58 PM



Abundance Ion 43.00 (42.70 to 43.70): VU033489.D (-455) (-)

Ion 74.00 (73.70 to 74.70): VU033489.D (-455) (-)



#16

Methylene chloride

Concen: 2.881 ug/L

RT: 2.68 min Scan# 496

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

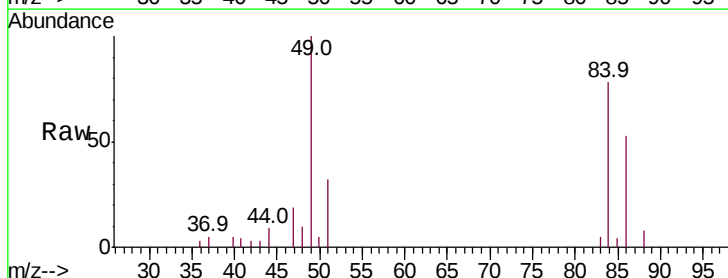
Tgt Ion: 84 Resp: 6499

Ion Ratio Lower Upper

84 100

86 68.0 44.2 82.0

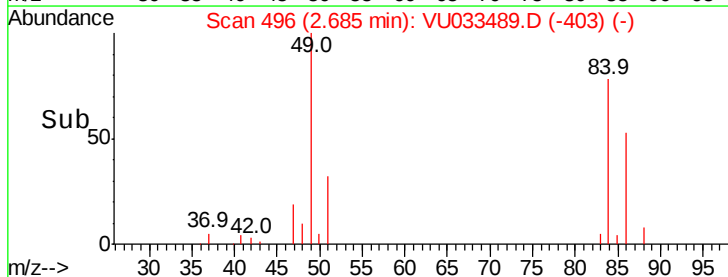
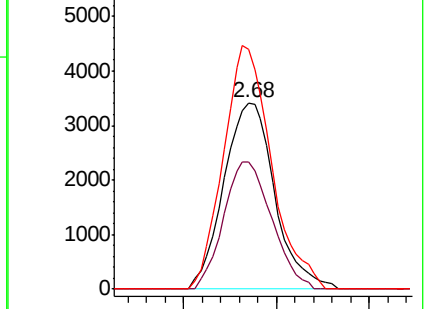
49 128.4 82.3 152.8

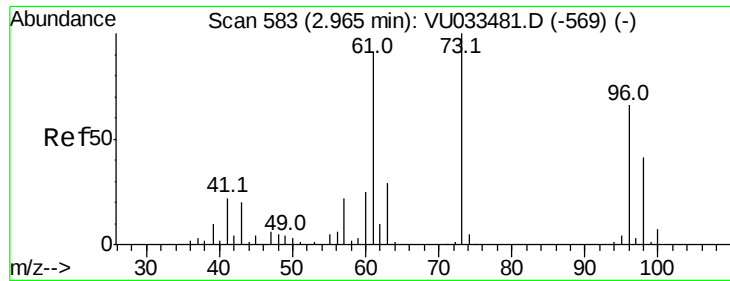


Abundance Ion 84.00 (83.70 to 84.70): VU033489.D (-483) (-)

Ion 86.00 (85.70 to 86.70): VU033489.D (-483) (-)

Ion 49.00 (48.70 to 49.70): VU033489.D (-483) (-)





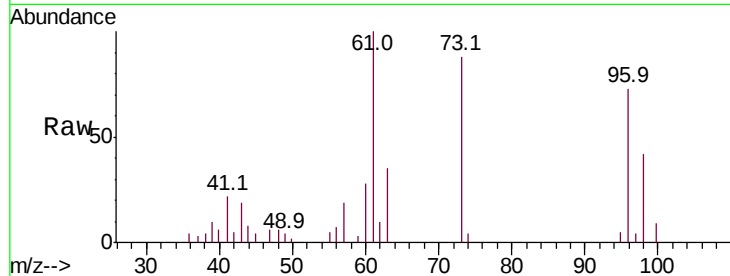
#17
trans-1,2-Dichloroethene
Concen: 2.718 ug/L
RT: 2.96 min Scan# 583
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampled :
MDL05

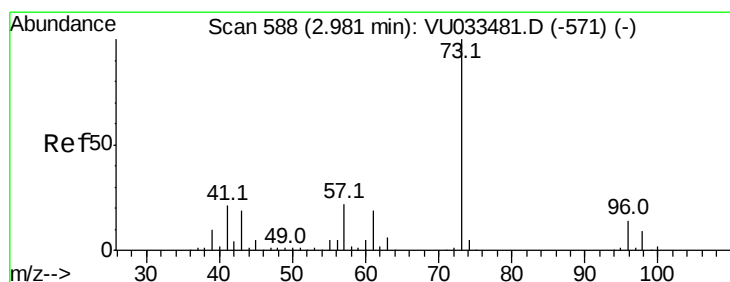
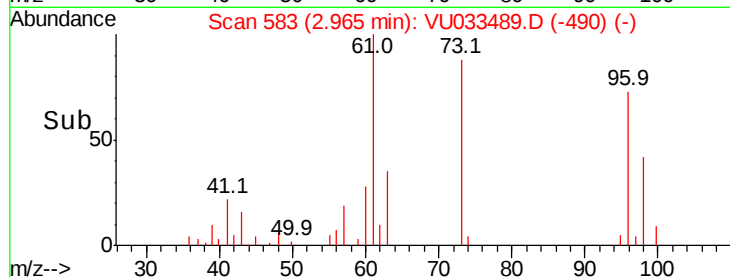
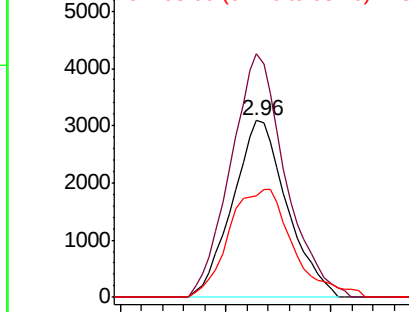
Tot Ion: 96 Resp: 5542
Ion Ratio Lower Upper
96 100
61 137.6 100.3 186.3
98 57.6 45.1 83.9

Manual Integrations
APPROVED

MMdadoda
8/1/2019 3:14:58 PM

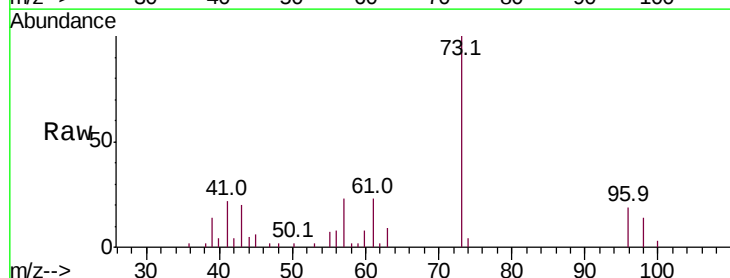


Abundance Ion 96.00 (95.70 to 96.70): VU0
Ion 61.00 (60.70 to 61.70): VU0
Ion 98.00 (97.70 to 98.70): VU0

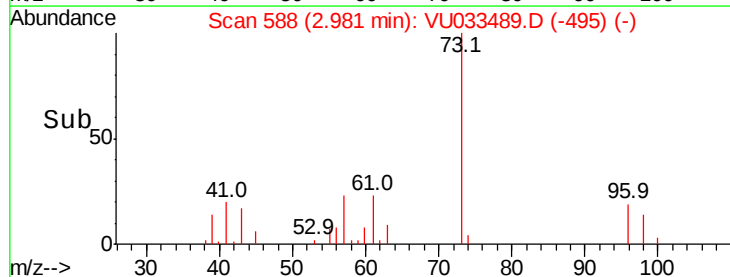
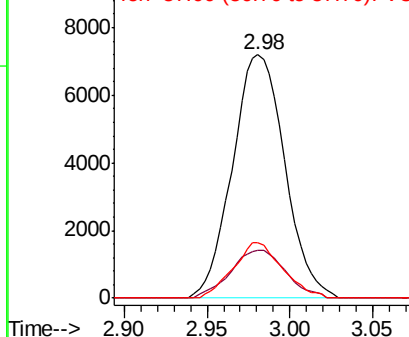


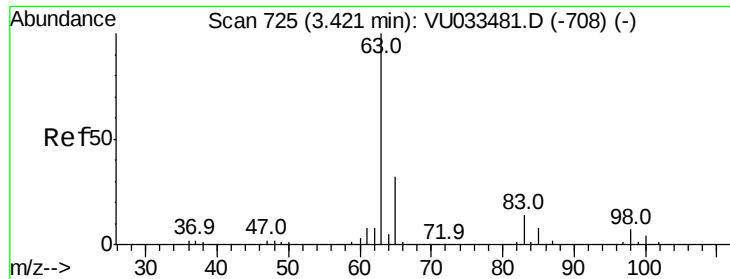
#18
Methyl tert-butyl Ether
Concen: 2.633 ug/L
RT: 2.98 min Scan# 588
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion: 73 Resp: 15842
Ion Ratio Lower Upper
73 100
43 20.7 15.3 22.9
57 21.6 17.7 26.5



Abundance Ion 73.00 (72.70 to 73.70): VU0
Ion 43.00 (42.70 to 43.70): VU0
Ion 57.00 (56.70 to 57.70): VU0





#19

1,1-Dichloroethane

Concen: 2.886 ug/L

RT: 3.42 min Scan# 726

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

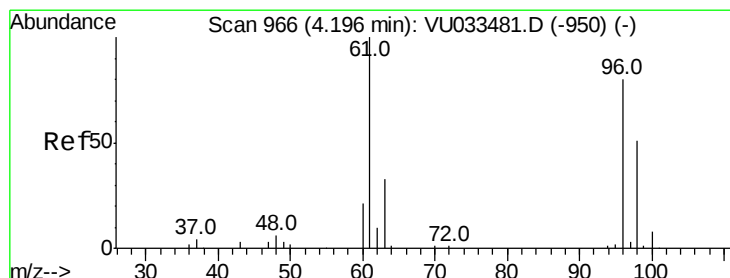
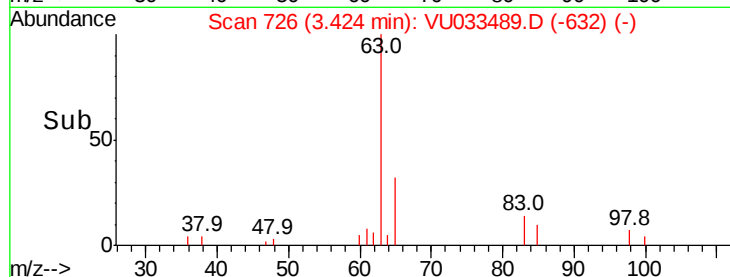
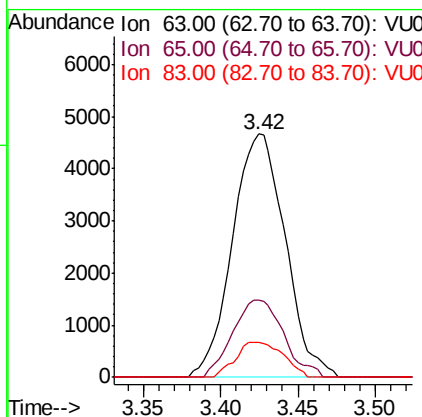
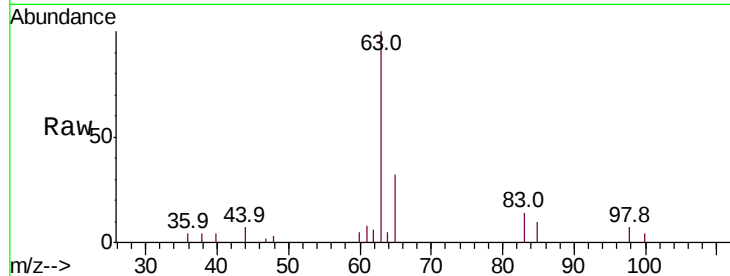
ClientSampled :

MDL05

Tot Ion:	63	Resp:	11079
Ion	Ratio	Lower	Upper
63	100		
65	31.9	22.7	42.1
83	14.2	9.4	17.6

Manual Integrations
APPROVED

MMdadoda
8/1/2019 3:14:58 PM



#20

cis-1,2-Dichloroethene

Concen: 2.930 ug/L

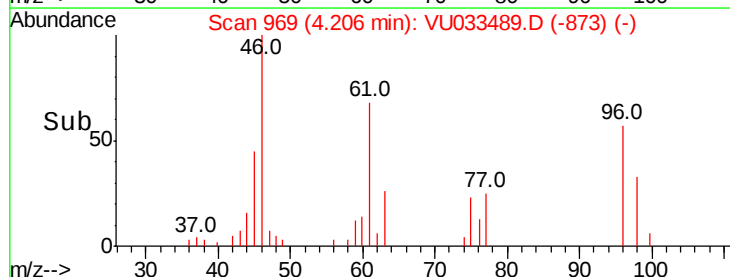
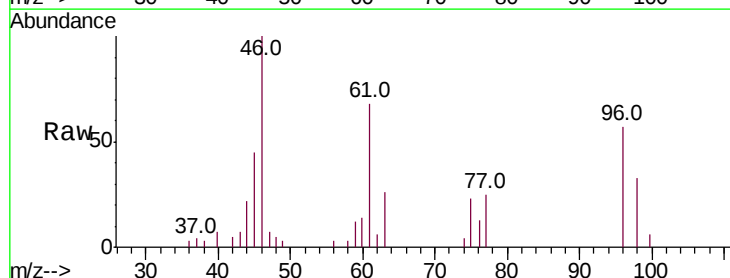
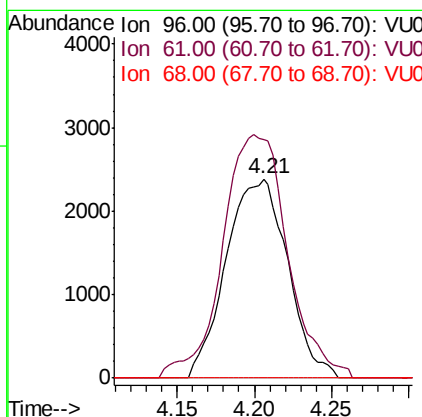
RT: 4.21 min Scan# 969

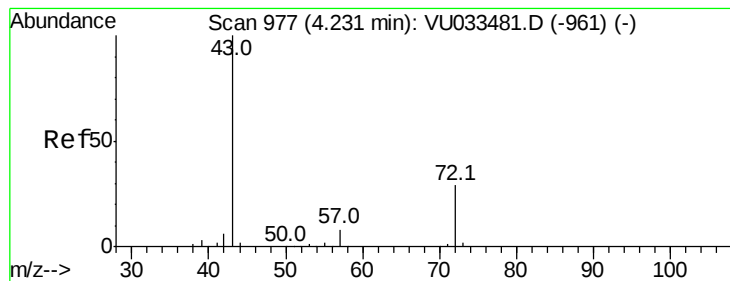
Delta R.T. 0.01 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Tgt Ion:	96	Resp:	6594
Ion	Ratio	Lower	Upper
96	100		
61	119.3	88.9	165.1
68	0.0	0.0	0.0





#22

2-Butanone

Concen: 4.141 ug/L

RT: 4.25 min Scan# 984

Delta R.T. 0.02 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion: 43 Resp: 7120

Ion Ratio Lower Upper

43 100

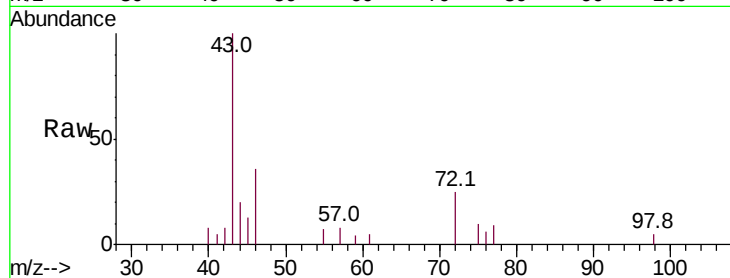
72 26.1 14.1 42.3

Manual Integrations

APPROVED

MMdadoda

8/1/2019 3:14:58 PM

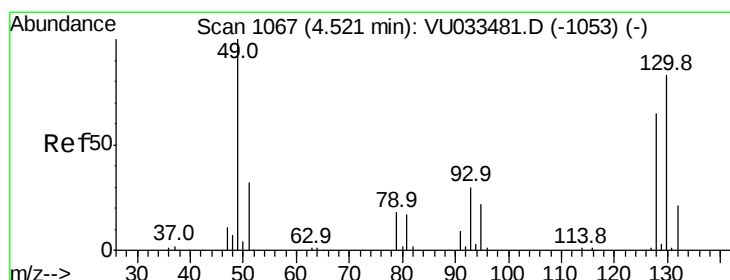
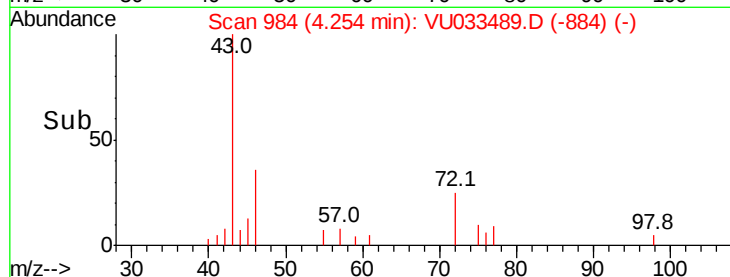


Abundance Ion 43.00 (42.70 to 43.70): VU033489.D (-961) (-)

Ion 72.00 (71.70 to 72.70): VU033489.D (-961) (-)

4.25

Time-->



#23

Bromochloromethane

Concen: 2.691 ug/L m

RT: 4.53 min Scan# 1069

Delta R.T. 0.01 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Tgt Ion:128 Resp: 3217

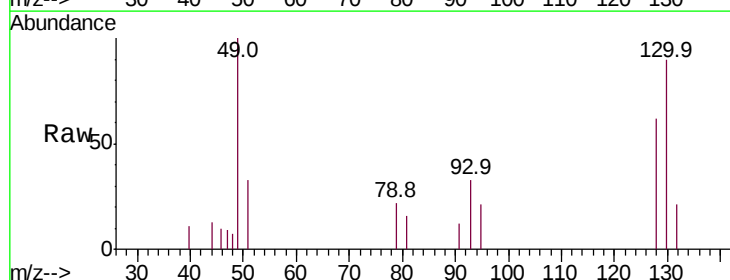
Ion Ratio Lower Upper

128 100

49 161.4 108.0 200.6

130 144.5 92.9 172.5

51 53.9 40.2 60.4



Abundance Ion 128.00 (127.70 to 128.70): VU033489.D (-1053) (-)

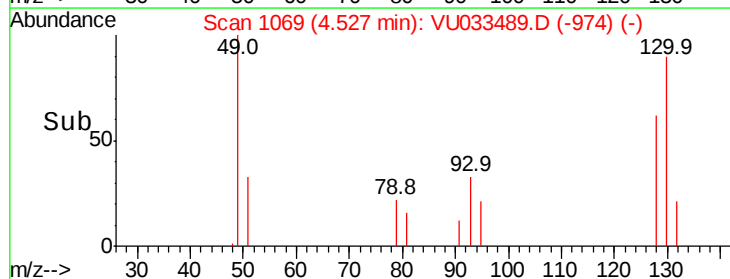
Ion 49.00 (48.70 to 49.70): VU033489.D (-1053) (-)

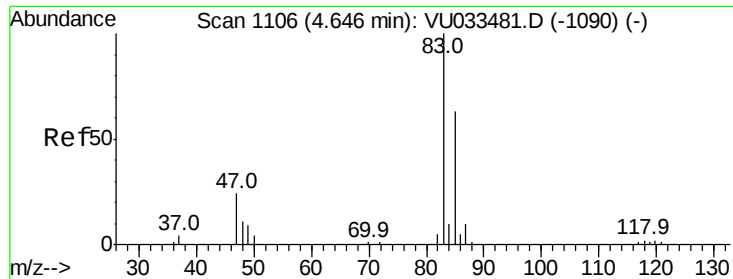
Ion 130.00 (129.70 to 130.70): VU033489.D (-1053) (-)

Ion 51.00 (50.70 to 51.70): VU033489.D (-1053) (-)

4.53

Time-->





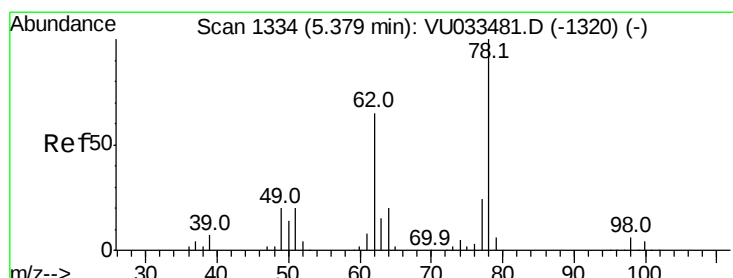
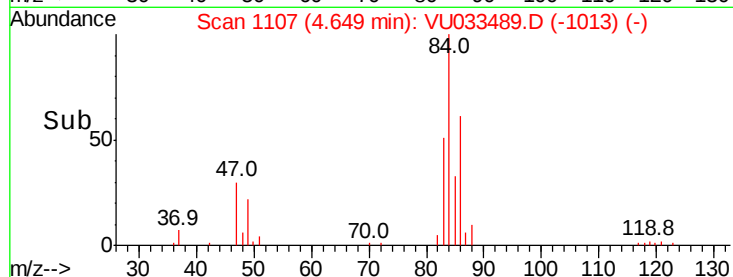
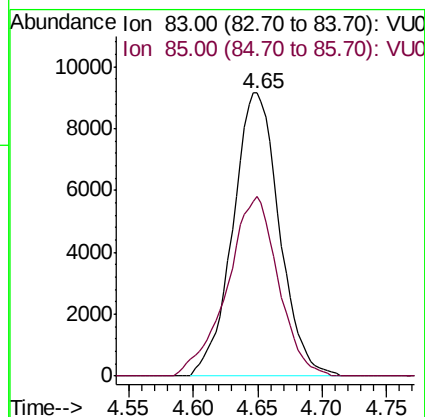
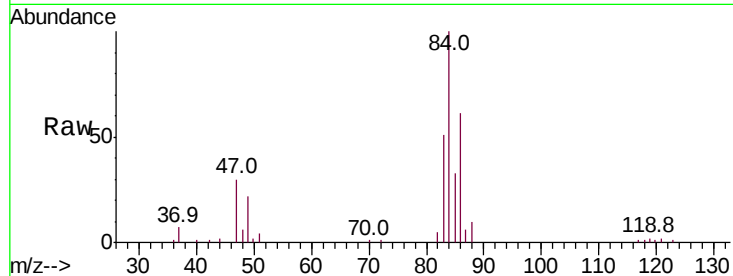
#25
Chloroform
Concen: 5.637 ug/L
RT: 4.65 min Scan# 1107
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampled :
MDL05

Tot Ion: 83 Resp: 22946
Ion Ratio Lower Upper
83 100
85 63.6 45.6 84.8

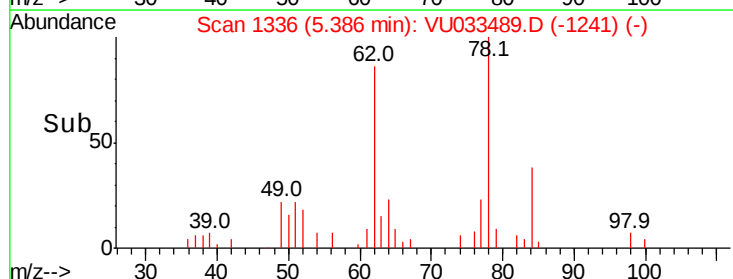
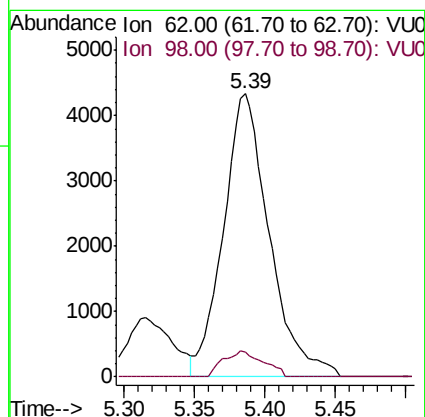
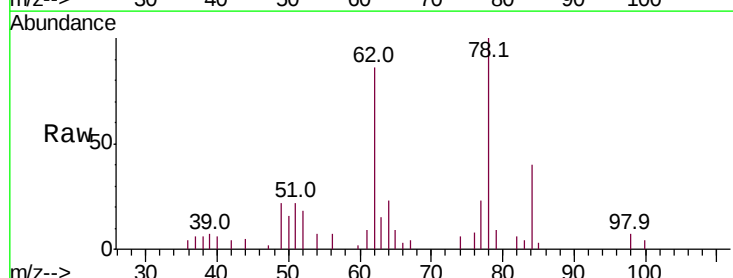
Manual Integrations
APPROVED

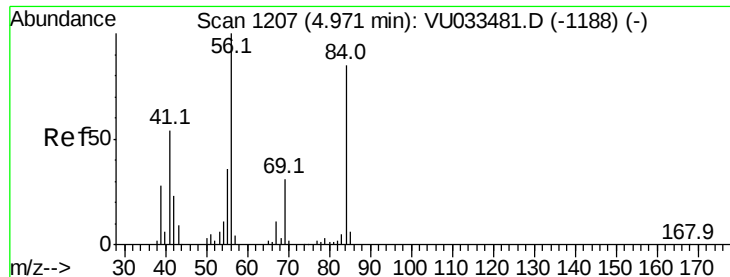
MMDadoda
8/1/2019 3:14:58 PM



#27
1,2-Dichloroethane
Concen: 3.116 ug/L
RT: 5.39 min Scan# 1336
Delta R.T. 0.01 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion: 62 Resp: 9852
Ion Ratio Lower Upper
62 100
98 8.7 6.7 10.1





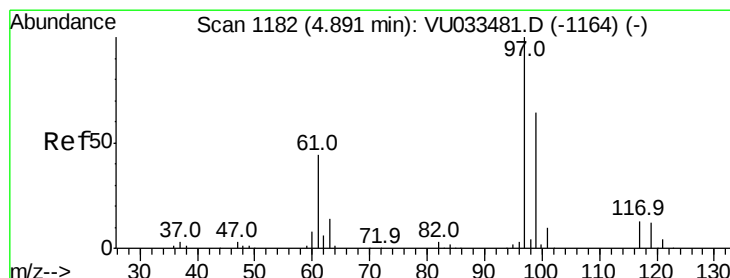
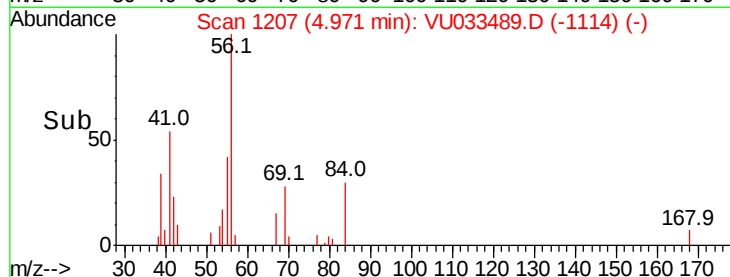
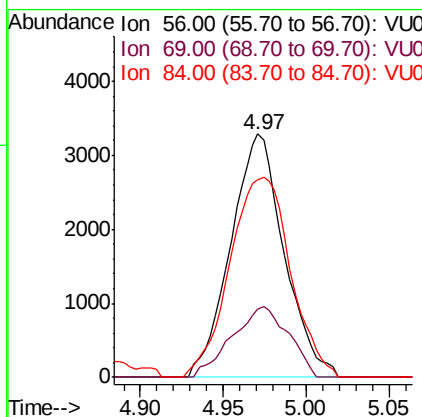
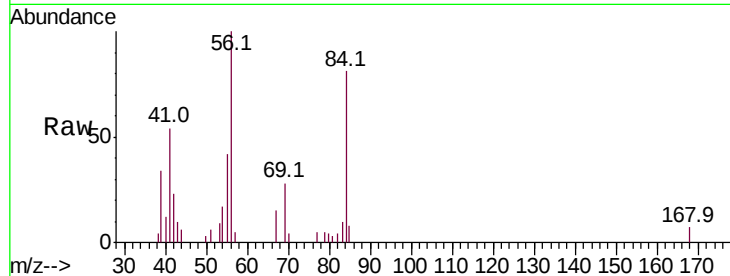
#29
Cyclohexane
Concen: 2.289 ug/L
RT: 4.97 min Scan# 1207
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampleId :
MDL05

Tot Ion	Ratio	Lower	Upper
56	100		
69	30.6	25.3	37.9
84	93.7	69.6	104.4

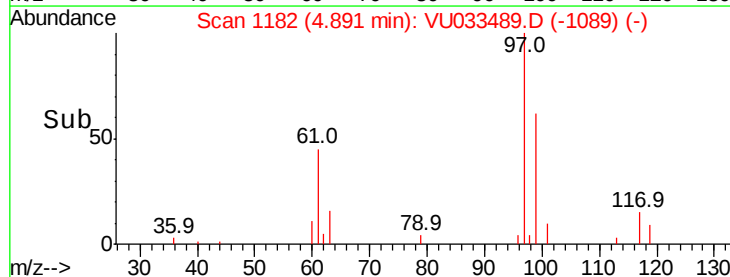
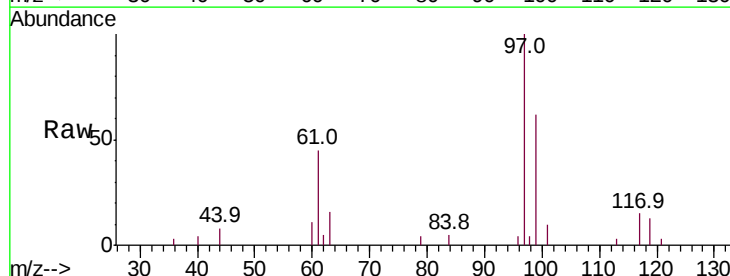
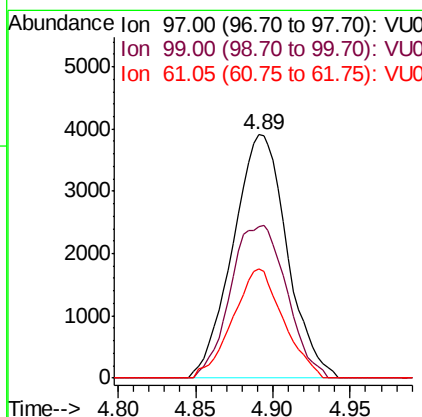
Manual Integrations
APPROVED

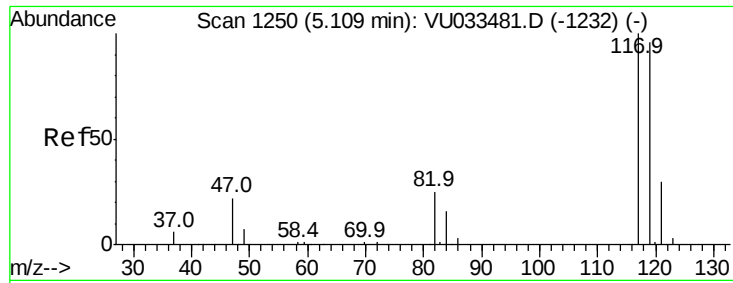
MMDadoda
8/1/2019 3:14:58 PM



#30
1,1,1-Trichloroethane
Concen: 2.738 ug/L
RT: 4.89 min Scan# 1182
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
97	100		
99	65.1	51.8	77.6
61	41.9	36.2	54.2





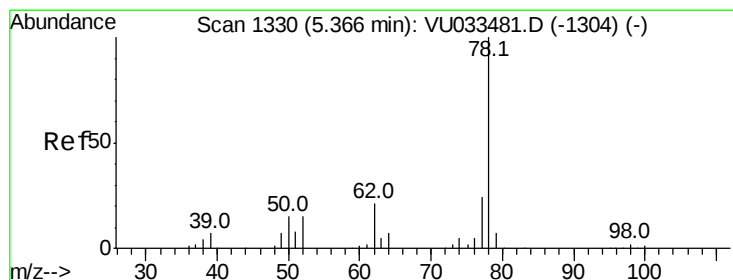
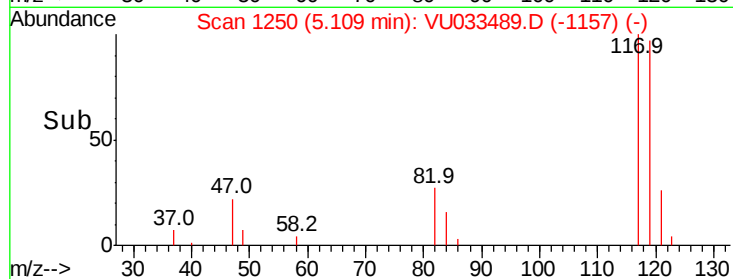
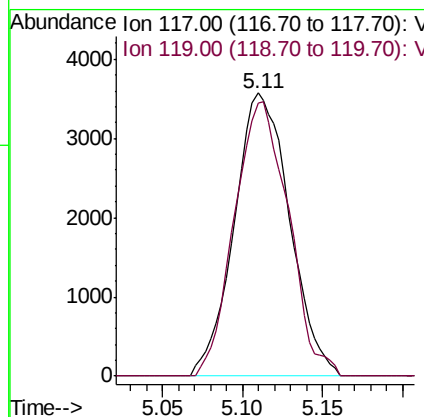
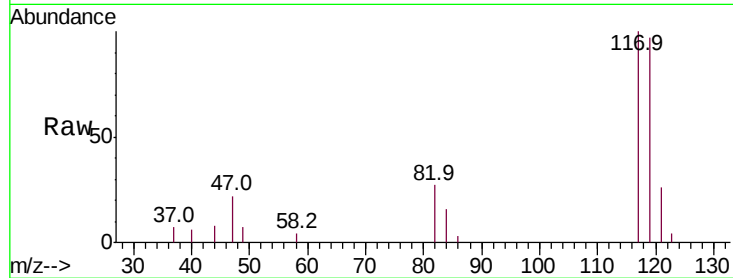
#31
Carbon tetrachloride
Concen: 2.739 ug/L
RT: 5.11 min Scan# 1250
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampleId :
MDL05

Tot Ion:117 Resp: 8470
Ion Ratio Lower Upper
117 100
119 94.8 76.8 115.2

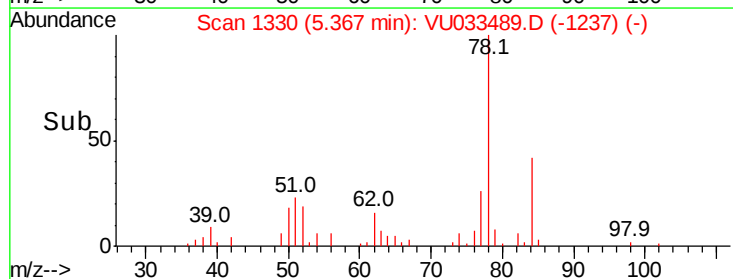
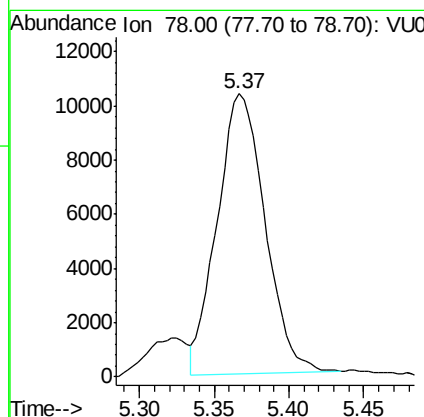
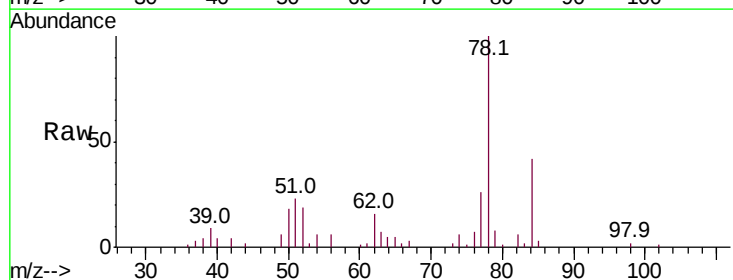
Manual Integrations
APPROVED

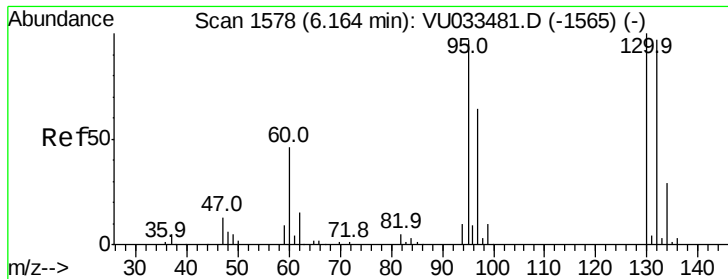
MMdadoda
8/1/2019 3:14:58 PM



#33
Benzene
Concen: 2.630 ug/L
RT: 5.37 min Scan# 1330
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion: 78 Resp: 22933





#34

Trichloroethene

Concen: 2.853 ug/L

RT: 6.17 min Scan# 1579

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampled :

MDL05

Tot Ion: 95 Resp: 6482

Ion Ratio Lower Upper

95 100

97 53.8 45.4 84.2

132 87.3 67.1 124.5

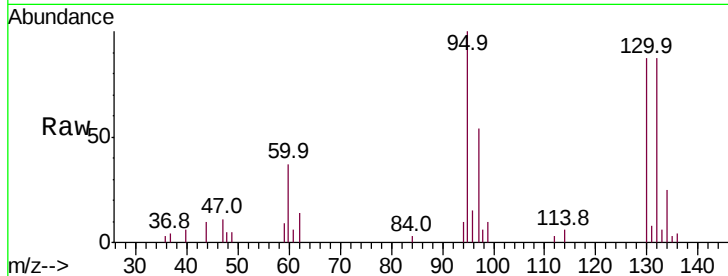
130 86.9 71.4 132.6

Manual Integrations

APPROVED

MMdadoda

8/1/2019 3:14:58 PM



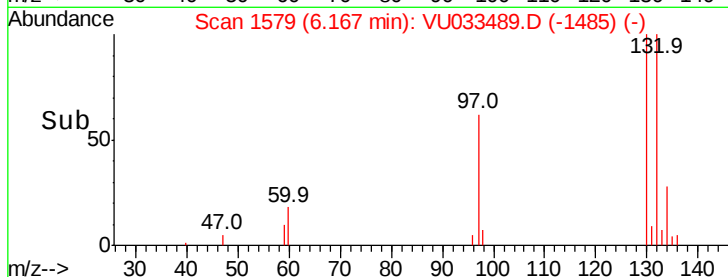
Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



Abundance

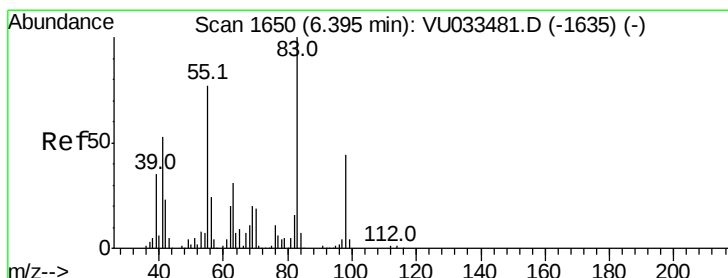
Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



#35

Methylcyclohexane

Concen: 2.639 ug/L

RT: 6.39 min Scan# 1649

Delta R.T. -0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

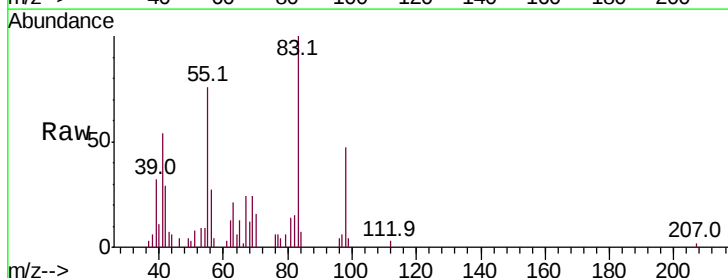
Tgt Ion: 83 Resp: 9118

Ion Ratio Lower Upper

83 100

55 72.4 62.4 93.6

98 43.7 37.3 55.9

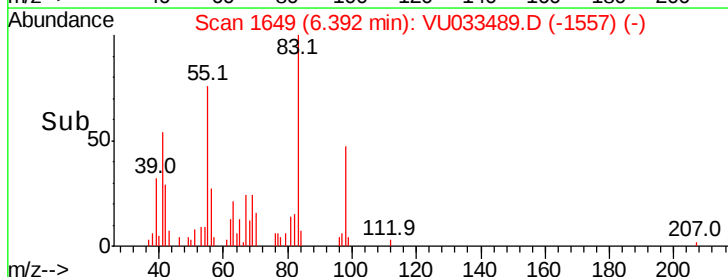


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0

Time-->



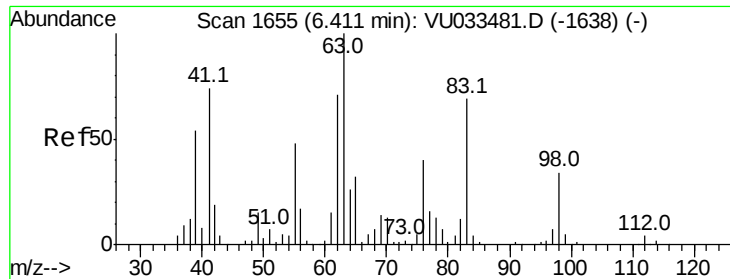
Abundance

Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0

Time-->



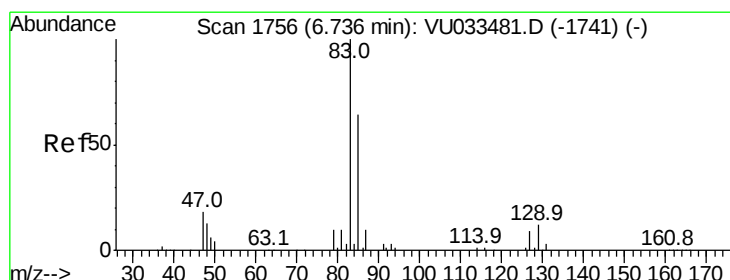
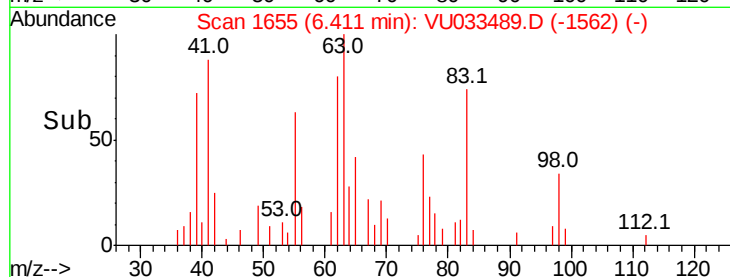
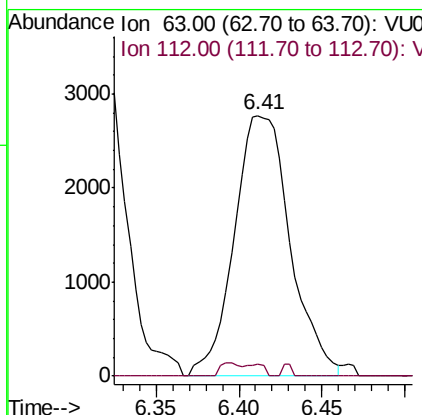
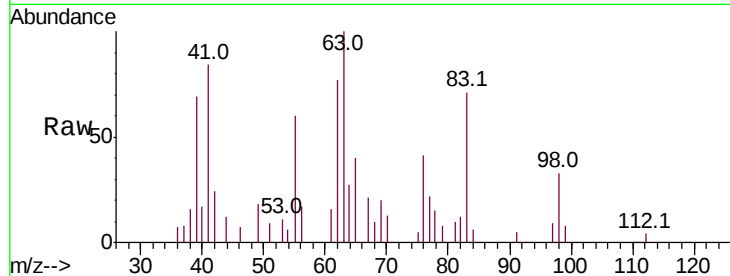
#37
 1,2-Dichloropropane
 Concen: 2.784 ug/L
 RT: 6.41 min Scan# 1655
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL05

Tot Ion: 63 Resp: 6530
 Ion Ratio Lower Upper
 63 100
 112 0.8 3.1 4.7#

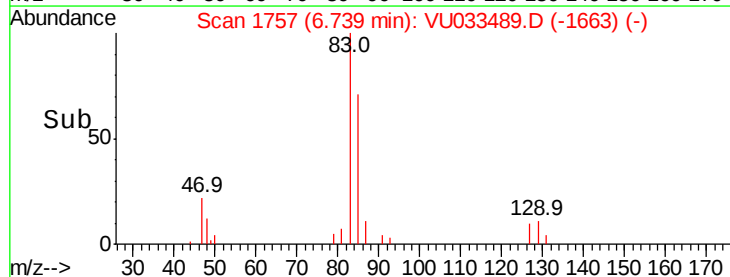
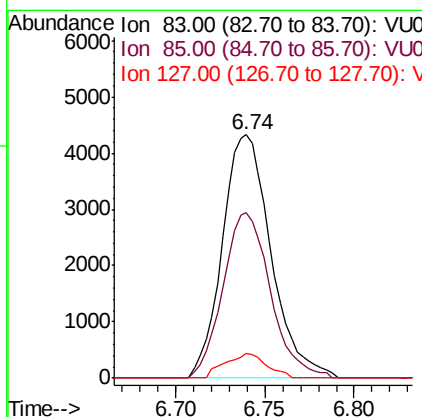
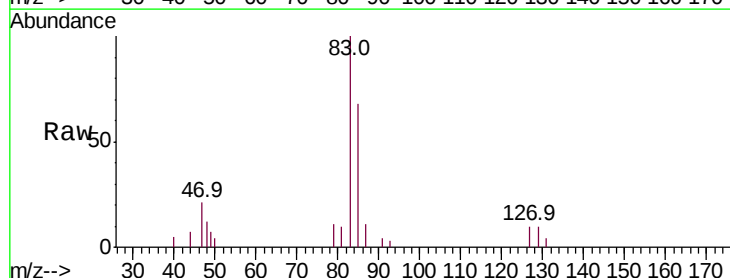
Manual Integrations
 APPROVED

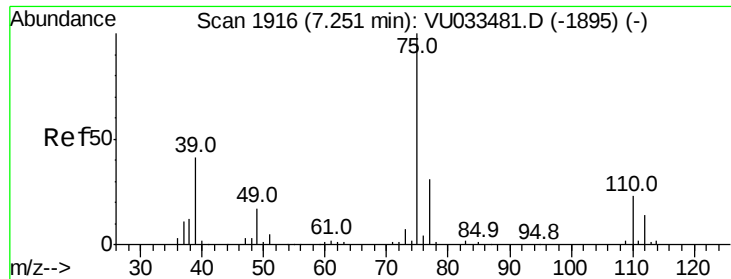
MMdadoda
 8/1/2019 3:14:58 PM



#38
 Bromodichloromethane
 Concen: 2.663 ug/L
 RT: 6.74 min Scan# 1757
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Tgt Ion: 83 Resp: 8223
 Ion Ratio Lower Upper
 83 100
 85 67.8 45.4 84.4
 127 9.9 7.3 10.9





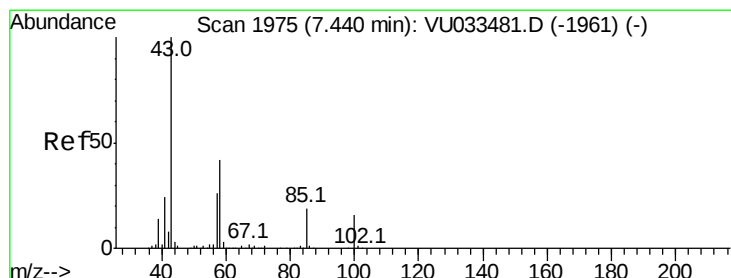
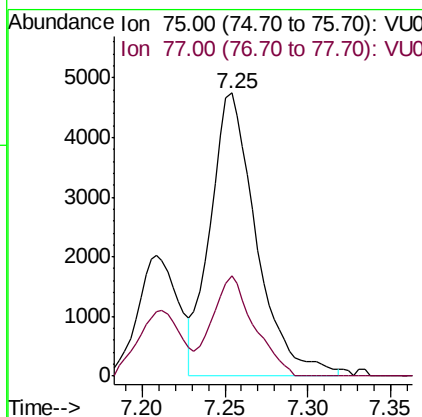
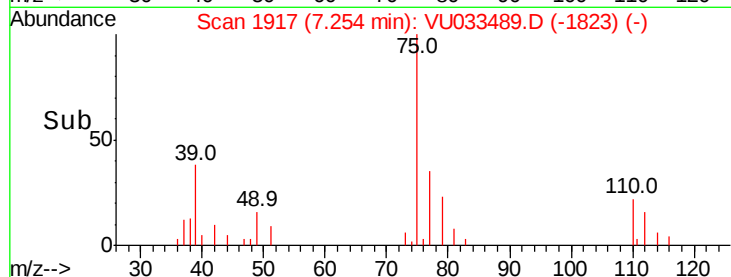
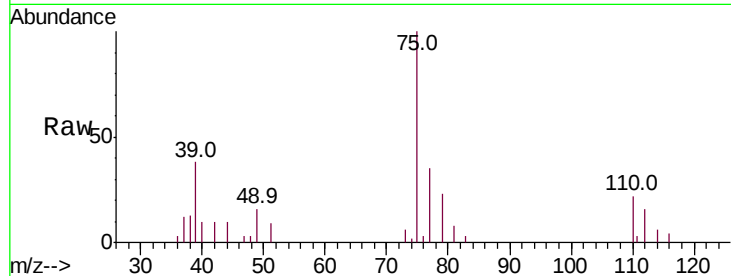
#39
 cis-1,3-Dichloropropene
 Concen: 2.623 ug/L
 RT: 7.25 min Scan# 1917
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Instrument :
 MSVOA_U
 ClientSampled :
 MDL05

Tot Ion: 75 Resp: 9175
 Ion Ratio Lower Upper
 75 100
 77 35.3 21.6 40.2

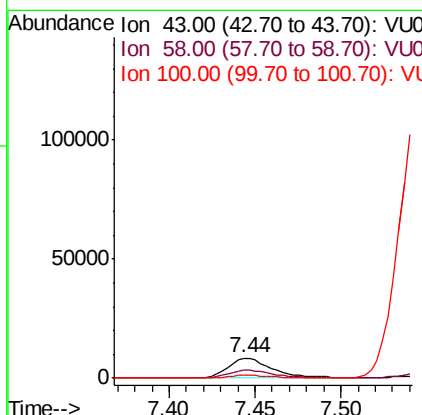
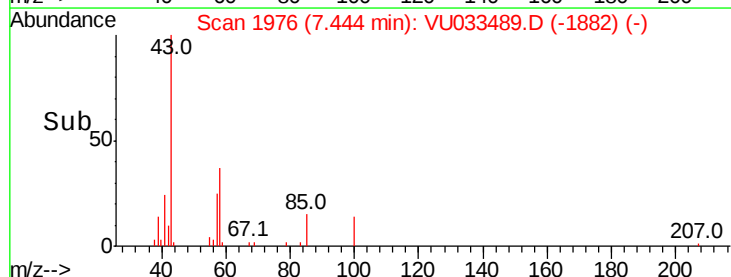
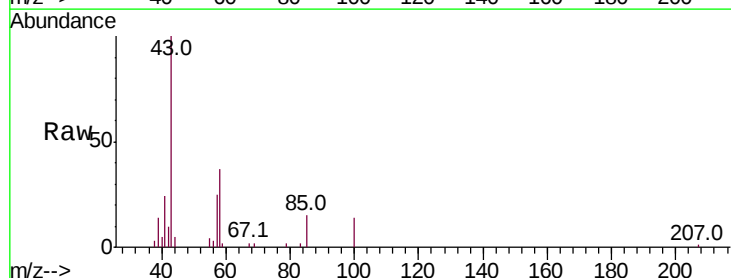
Manual Integrations
 APPROVED

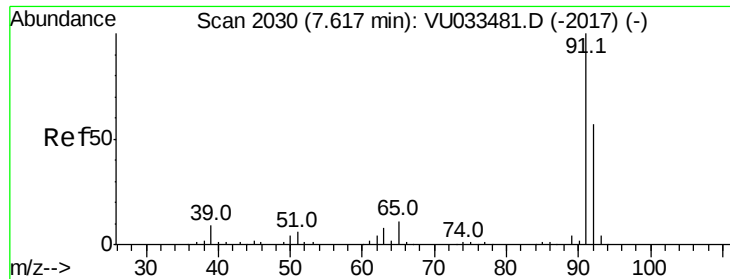
MMdadoda
 8/1/2019 3:14:58 PM



#40
 4-Methyl-2-pentanone
 Concen: 4.922 ug/L
 RT: 7.44 min Scan# 1976
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Tgt Ion: 43 Resp: 15212
 Ion Ratio Lower Upper
 43 100
 58 38.8 33.4 50.2
 100 14.3 12.3 18.5





#42

Toluene

Concen: 2.711 ug/L

RT: 7.62 min Scan# 2031

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion: 91 Resp: 25441

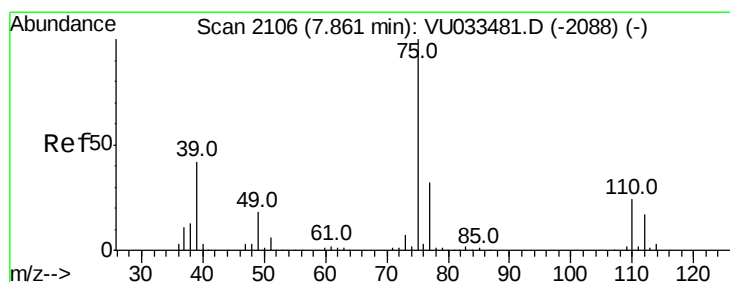
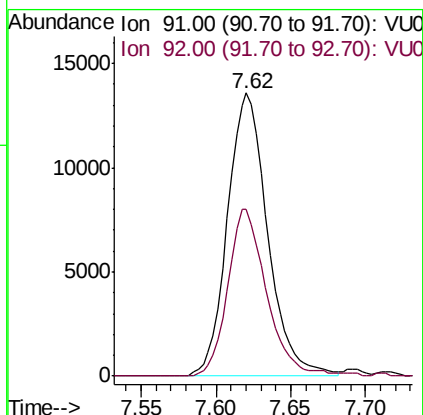
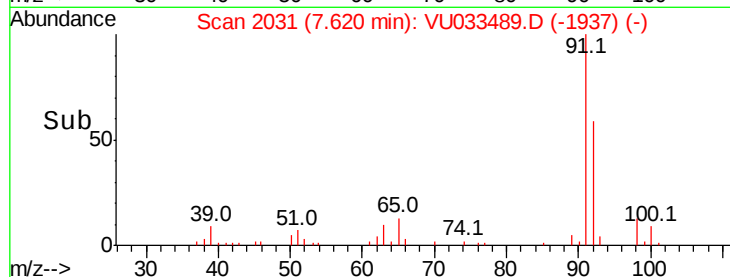
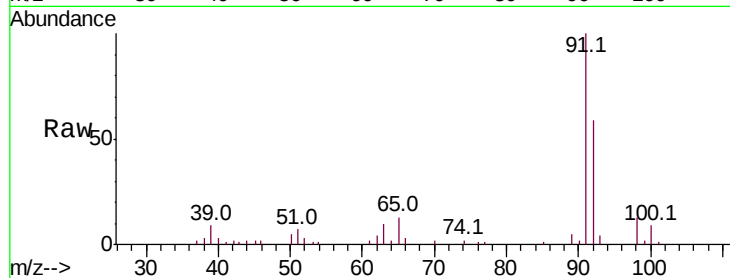
Ion Ratio Lower Upper

91 100

92 58.9 40.1 74.5

Manual Integrations
APPROVED

MMdadoda
8/1/2019 3:14:58 PM



#44

trans-1,3-Dichloropropene

Concen: 2.610 ug/L m

RT: 7.87 min Scan# 2108

Delta R.T. 0.01 min

Lab File: VU033489.D

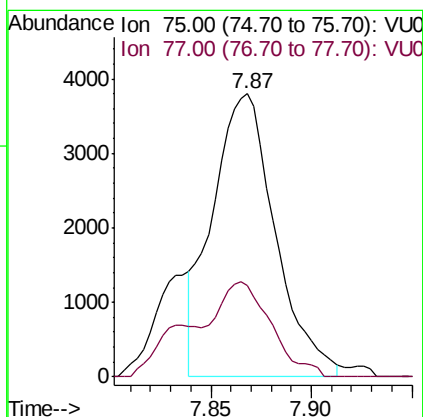
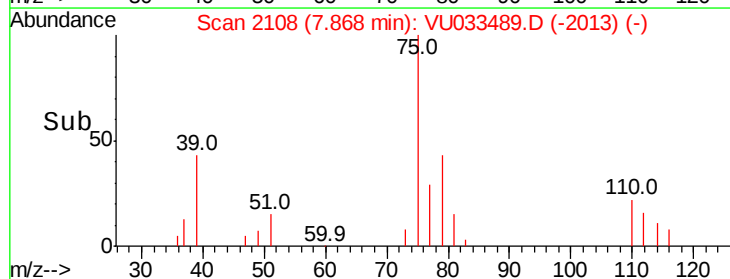
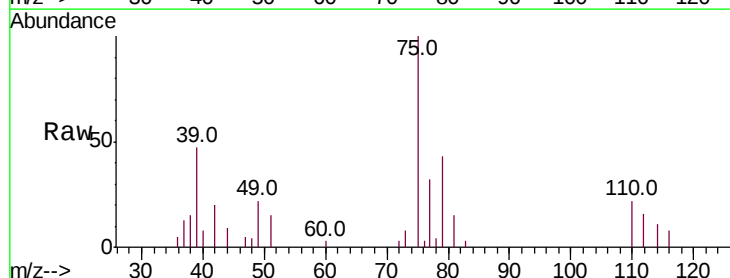
Acq: 30 Jul 2019 12:58

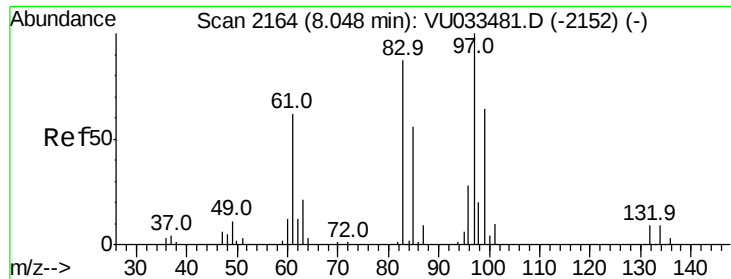
Tgt Ion: 75 Resp: 8285

Ion Ratio Lower Upper

75 100

77 32.1 22.3 41.5





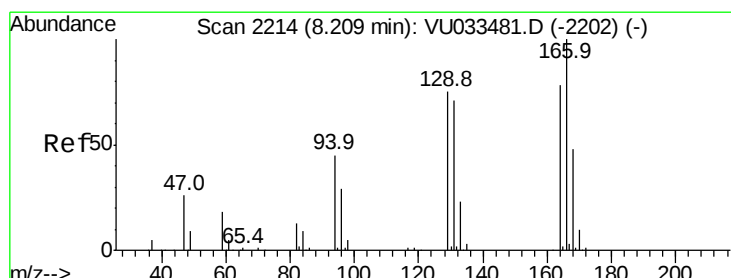
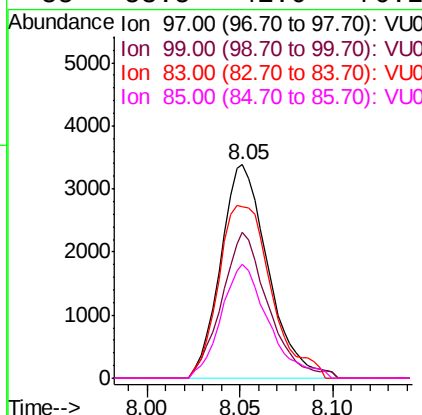
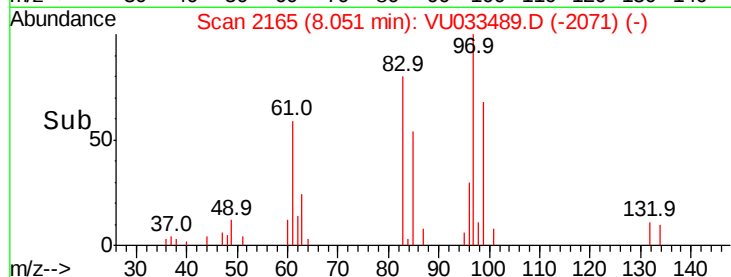
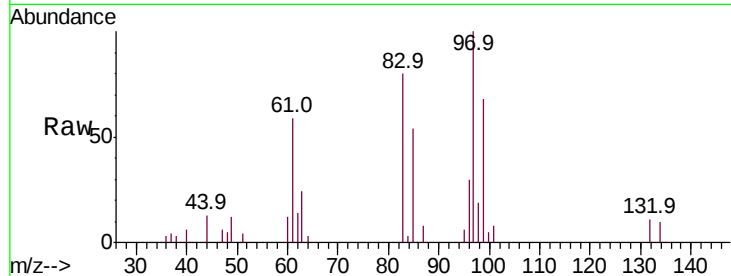
#45
1,1,2-Trichloroethane
Concen: 2.697 ug/L
RT: 8.05 min Scan# 2165
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampled :
MDL05

Tot Ion:	97	Resp:	6032
Ion	Ratio	Lower	Upper
97	100		
99	68.4	43.3	80.5
83	80.4	61.3	113.9
85	53.5	41.0	76.2

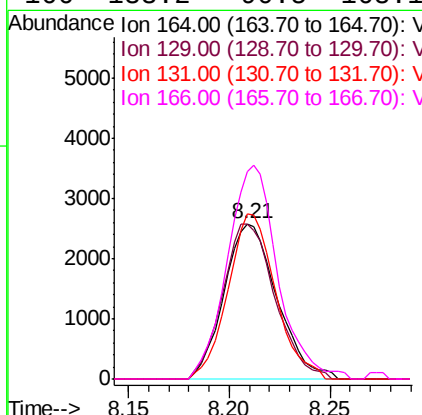
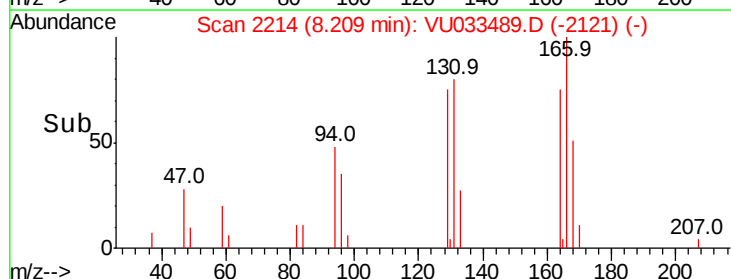
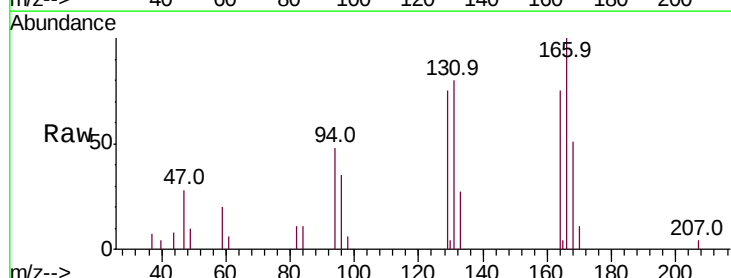
Manual Integrations
APPROVED

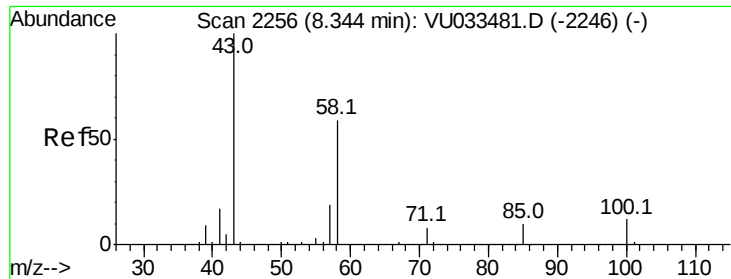
MMdadoda
8/1/2019 3:14:58 PM



#46
Tetrachloroethene
Concen: 2.555 ug/L
RT: 8.21 min Scan# 2214
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion:	164	Resp:	4724
Ion	Ratio	Lower	Upper
164	100		
129	99.8	66.6	123.8
131	106.4	63.9	118.7
166	133.2	90.5	168.1





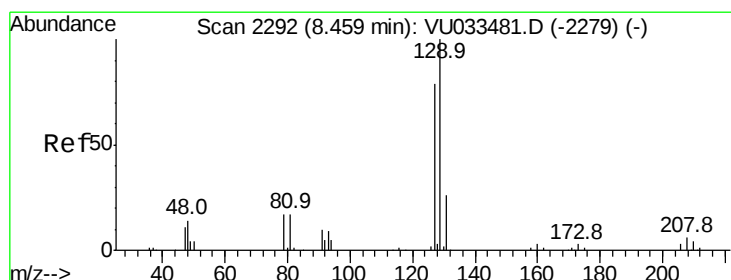
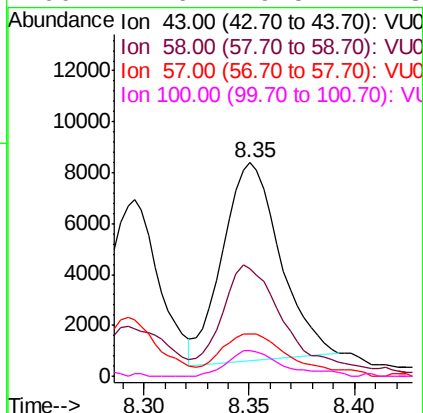
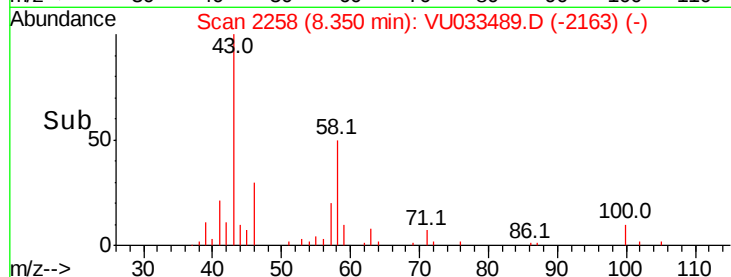
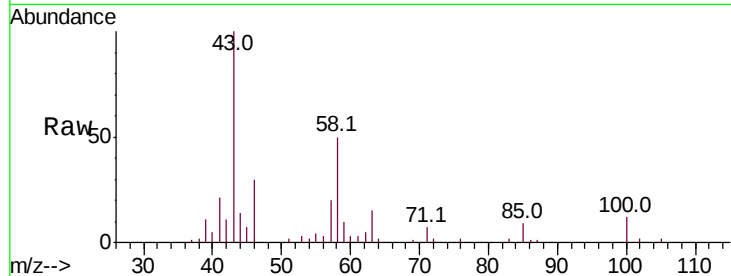
#48
2-Hexanone
Concen: 5.861 ug/L
RT: 8.35 min Scan# 2258
Delta R.T. 0.01 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampleId :
MDL05

Tot Ion	Ratio	Lower	Upper
43	100		
58	56.2	46.6	69.8
57	0.0	16.0	24.0
100	11.6	9.5	14.3

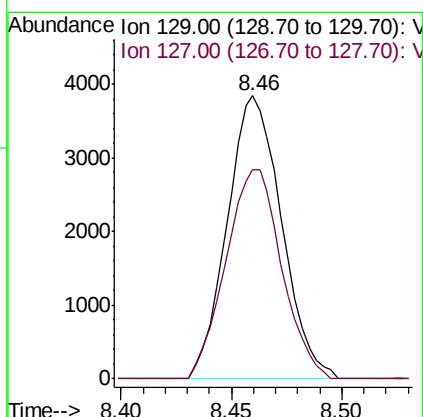
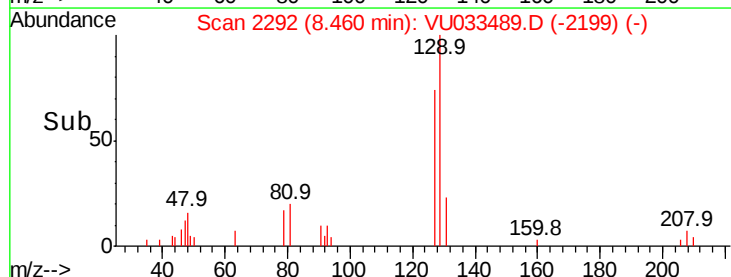
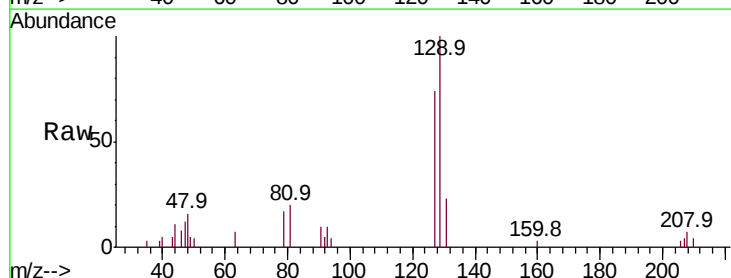
Manual Integrations
APPROVED

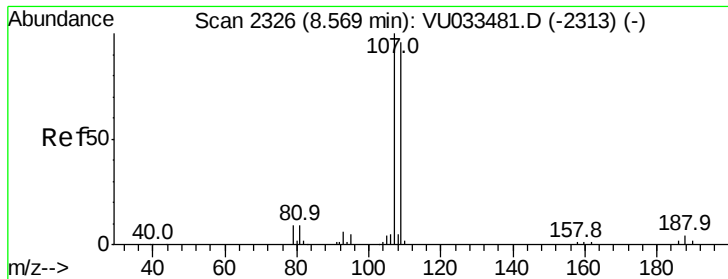
MMdadoda
8/1/2019 3:14:58 PM



#49
Dibromochloromethane
Concen: 2.628 ug/L
RT: 8.46 min Scan# 2292
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
129	100		
127	74.0	54.5	101.1





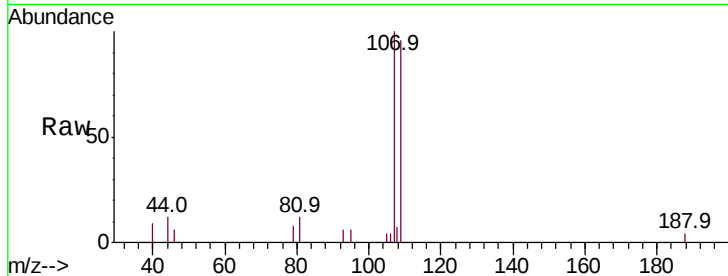
#50
 1,2-Dibromoethane
 Concen: 2.698 ug/L
 RT: 8.57 min Scan# 2327
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL05

Tot Ion	Ratio	Lower	Upper
107	100		
109	95.9	64.7	120.1
188	3.7	2.8	4.2

Manual Integrations
 APPROVED

MMdadoda
 8/1/2019 3:14:58 PM

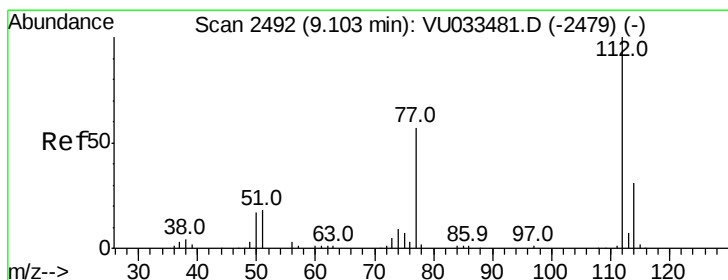
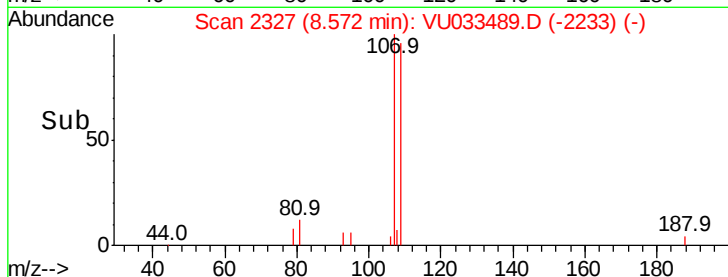
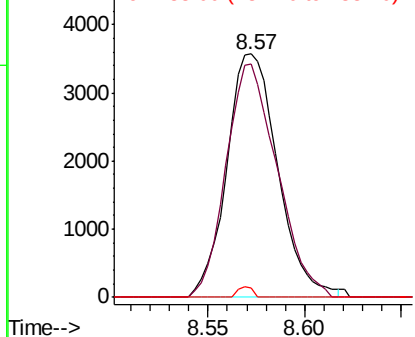


Abundance

Ion 107.00 (106.70 to 107.70): V

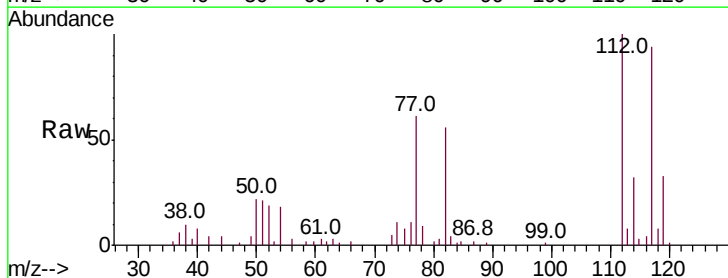
Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V



#51
 Chlorobenzene
 Concen: 2.793 ug/L
 RT: 9.10 min Scan# 2492
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
112	100		
114	32.1	21.9	40.7
77	61.1	46.1	69.1

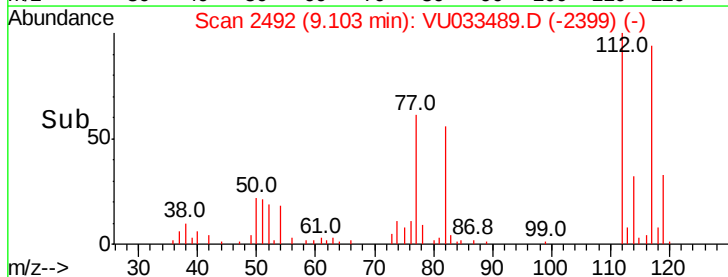
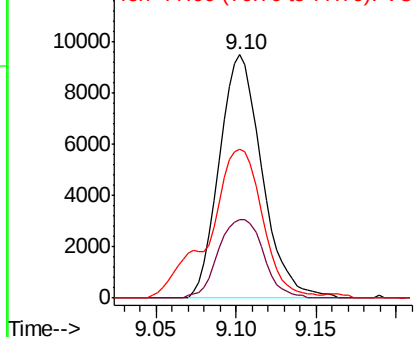


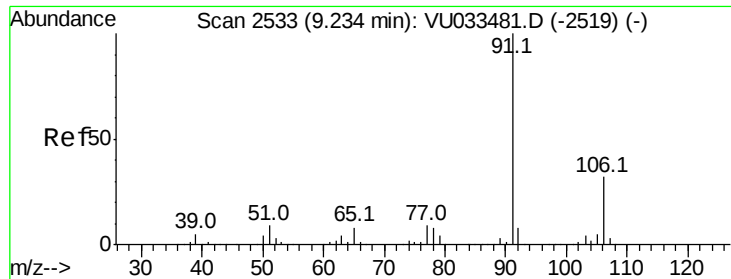
Abundance

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: 2.476 ug/L

RT: 9.23 min Scan# 2533

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampled :

MDL05

Tot Ion: 91 Resp: 25192

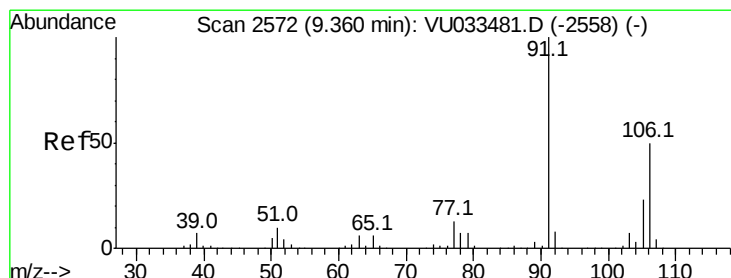
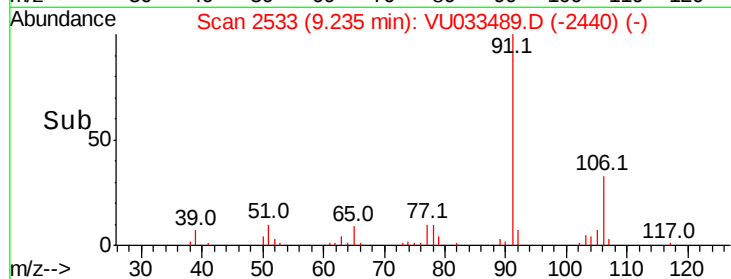
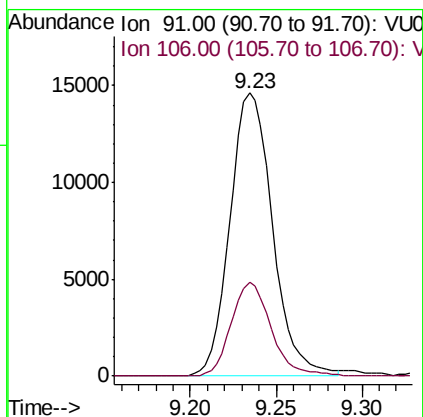
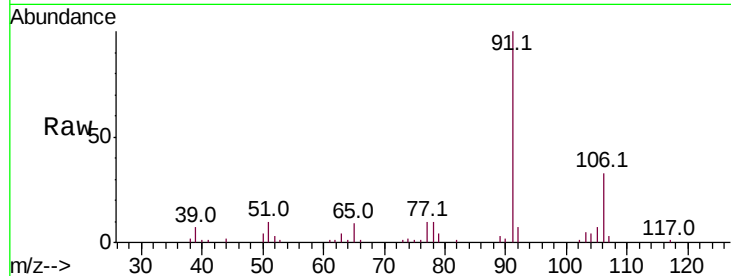
Ion Ratio Lower Upper

91 100

106 33.2 21.6 40.2

Manual Integrations
APPROVED

MMdadoda
8/1/2019 3:14:58 PM



#53

m,p-Xylene

Concen: 2.440 ug/L

RT: 9.36 min Scan# 2572

Delta R.T. 0.00 min

Lab File: VU033489.D

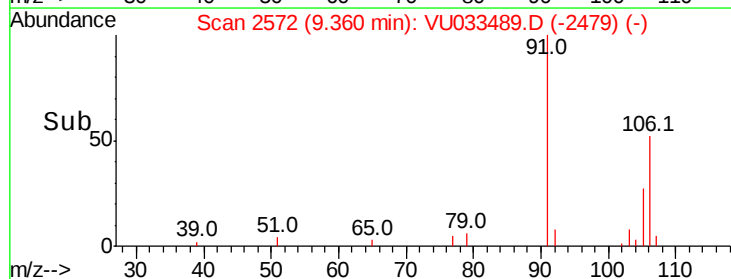
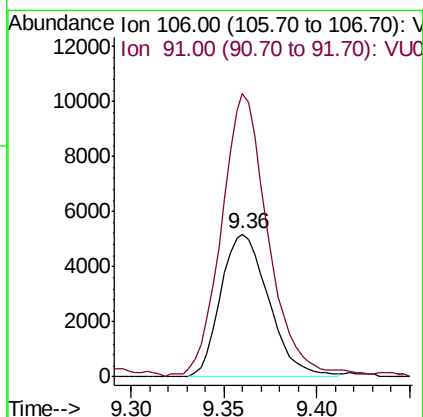
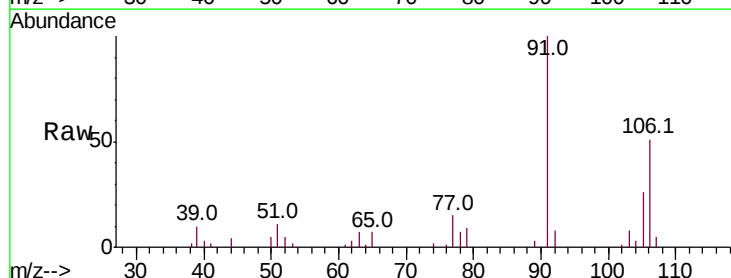
Acq: 30 Jul 2019 12:58

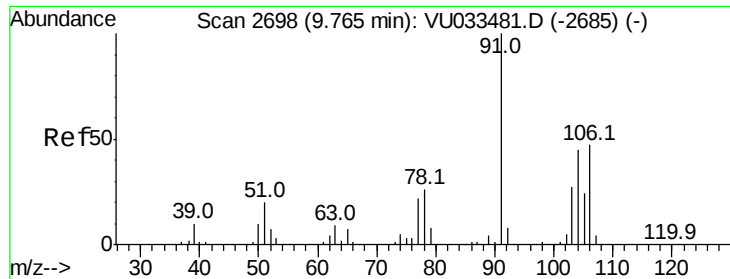
Tgt Ion: 106 Resp: 9333

Ion Ratio Lower Upper

106 100

91 198.0 140.7 261.3





#54

o-xylene

Concen: 2.341 ug/L

RT: 9.76 min Scan# 2697

Delta R.T. -0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampled :

MDL05

Tot Ion:106 Resp: 8781

Ion Ratio Lower Upper

106 100

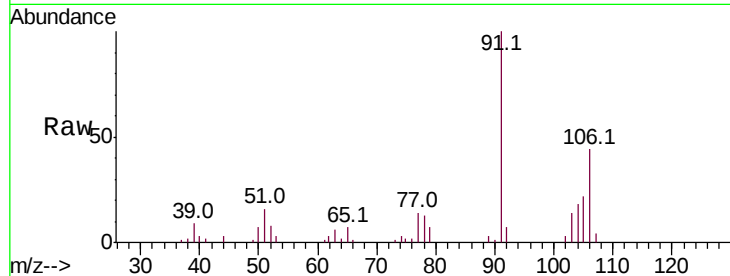
91 227.1 151.1 280.7

Manual Integrations

APPROVED

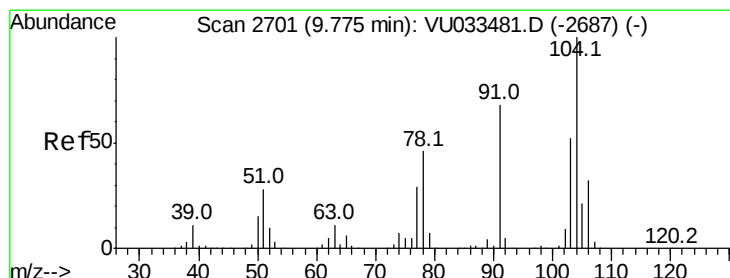
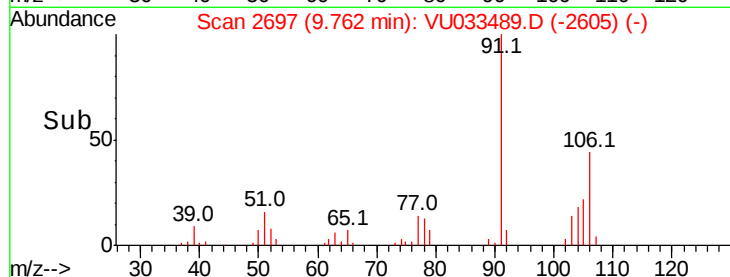
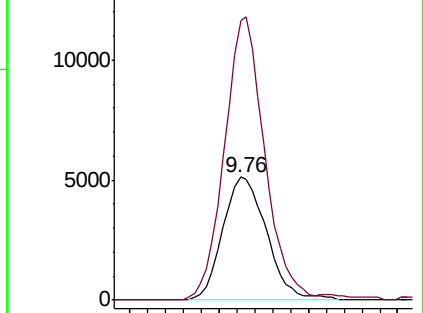
MMdadoda

8/1/2019 3:14:58 PM



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 2.174 ug/L

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VU033489.D

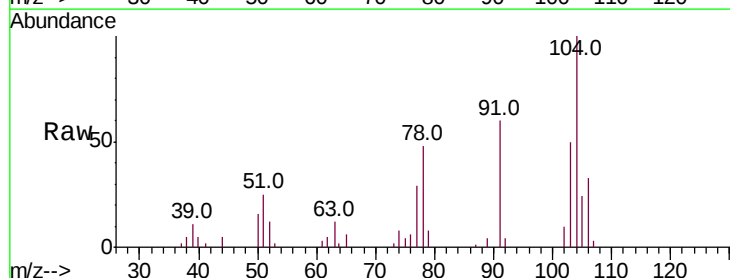
Acq: 30 Jul 2019 12:58

Tgt Ion:104 Resp: 13838

Ion Ratio Lower Upper

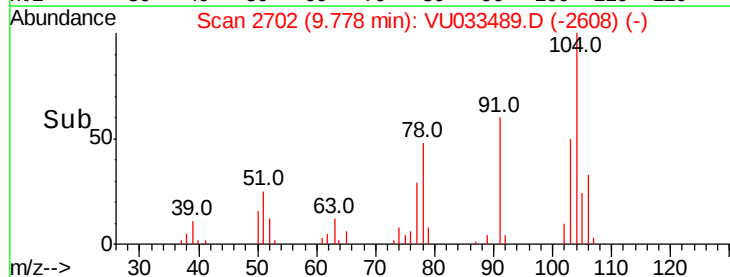
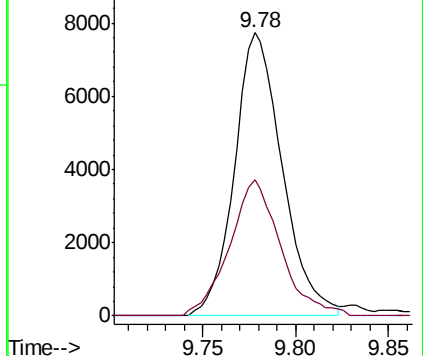
104 100

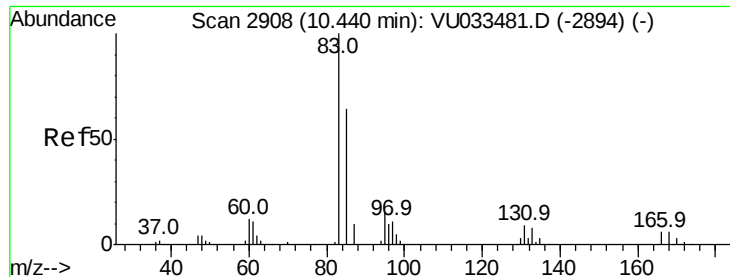
78 48.0 32.6 60.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0





#57

1,1,2,2-Tetrachloroethane

Concen: 3.034 ug/L

RT: 10.44 min Scan# 2908

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

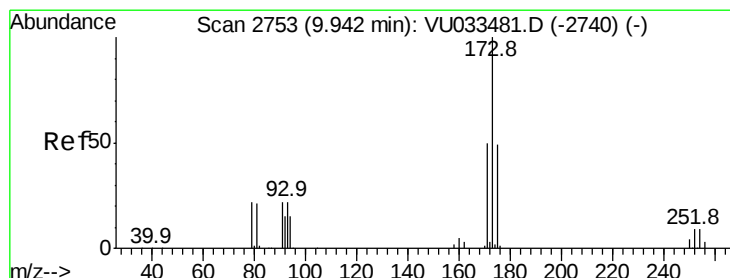
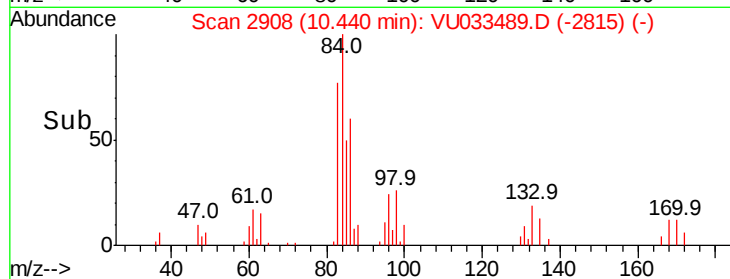
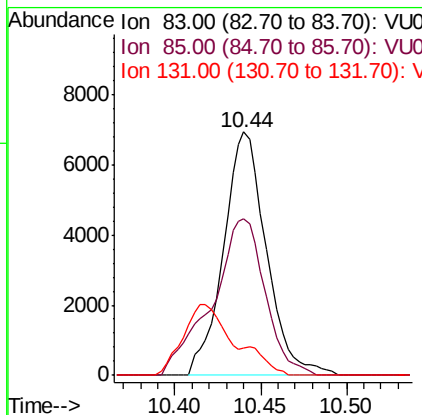
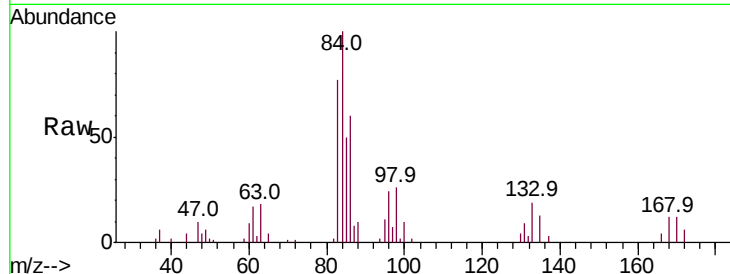
ClientSampleId :

MDL05

Tot Ion:	83	Resp:	12067
Ion	Ratio	Lower	Upper
83	100		
85	64.2	45.9	85.3
131	11.0	7.8	11.8

Manual Integrations
APPROVED

MMdadoda
8/1/2019 3:14:58 PM



#59

Bromoform

Concen: 2.713 ug/L

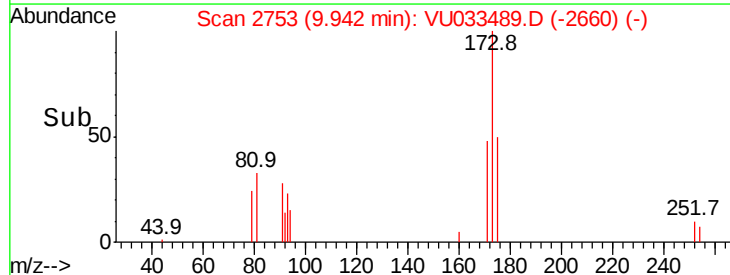
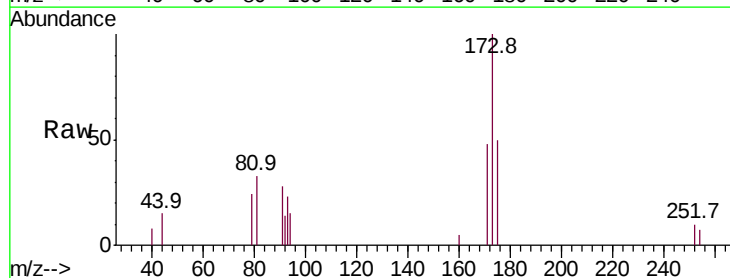
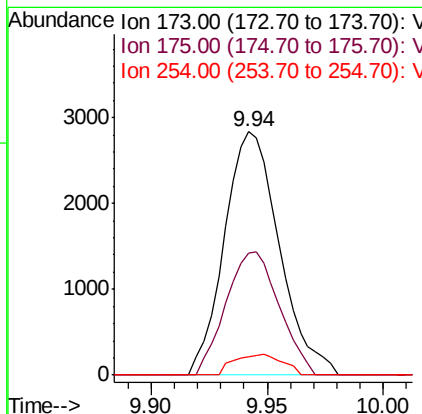
RT: 9.94 min Scan# 2753

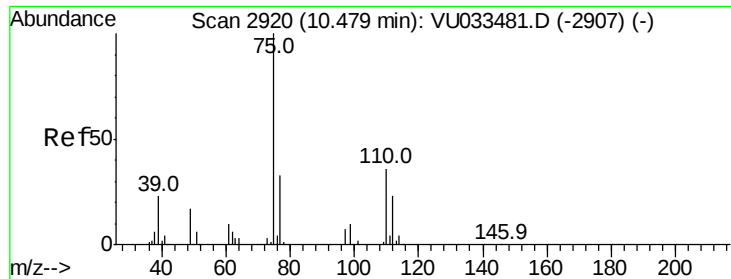
Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Tgt Ion:	173	Resp:	4659
Ion	Ratio	Lower	Upper
173	100		
175	49.2	38.1	57.1
254	7.6	7.3	10.9





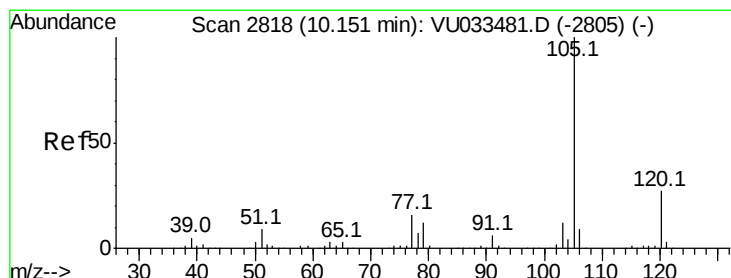
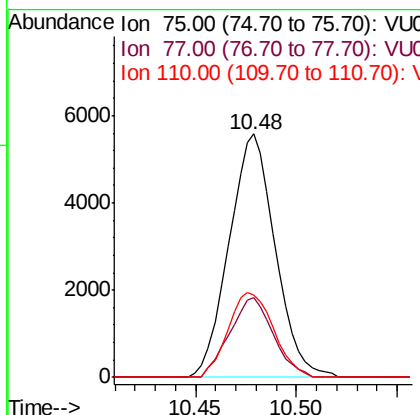
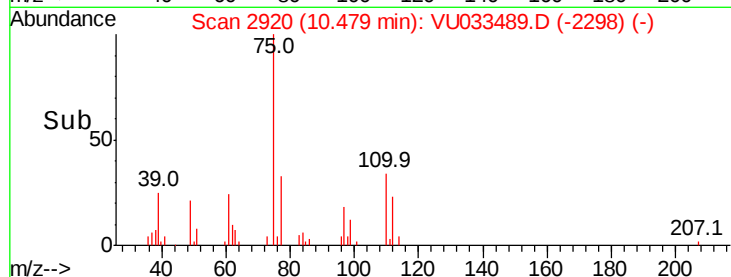
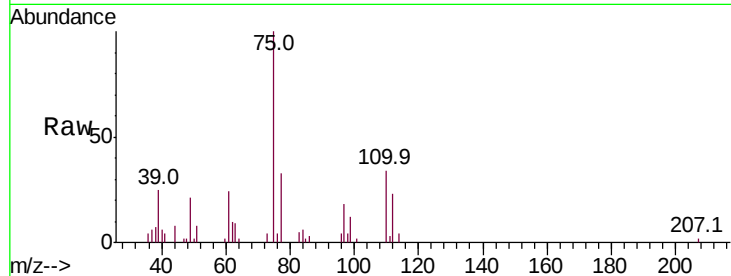
#60
1,2,3-Trichloropropane
Concen: 3.184 ug/L
RT: 10.48 min Scan# 2920
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampled :
MDL05

Tot Ion	Ratio	Lower	Upper
75	100		
77	31.0	25.9	38.9
110	34.4	30.2	45.4

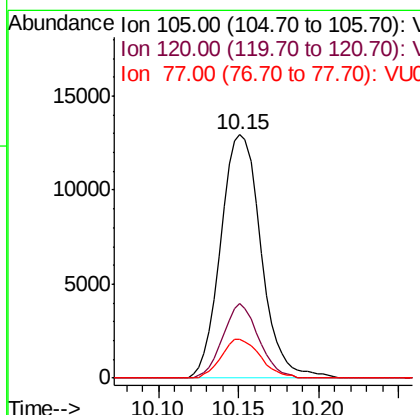
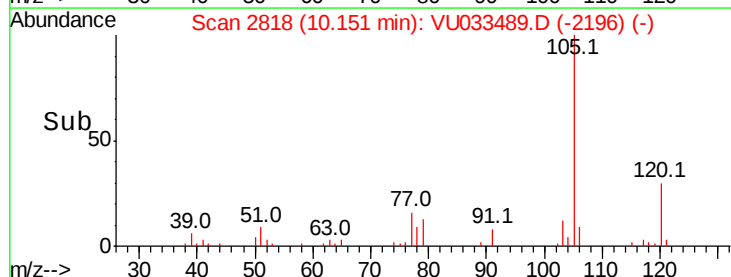
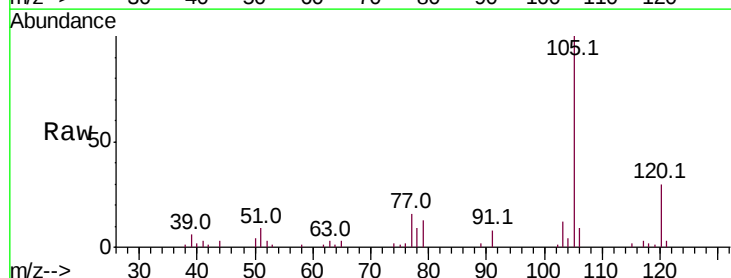
Manual Integrations
APPROVED

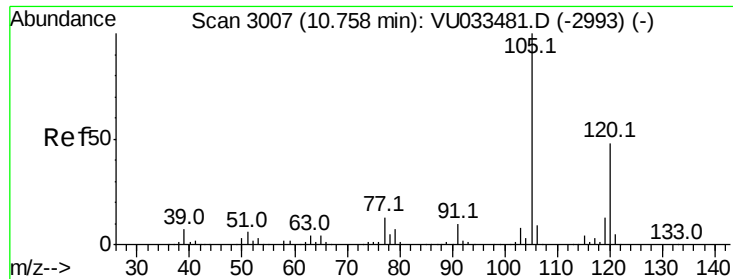
MMDadoda
8/1/2019 3:14:58 PM



#61
Isopropylbenzene
Concen: 2.535 ug/L
RT: 10.15 min Scan# 2818
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.0	21.7	32.5
77	15.5	12.6	19.0





#62

1,3,5-Trimethylbenzene

Concen: 2.373 ug/L

RT: 10.76 min Scan# 3007

Delta R.T. 0.00 min

Lab File: VU033489.D

Acq: 30 Jul 2019 12:58

Instrument :

MSVOA_U

ClientSampleId :

MDL05

Tot Ion:105 Resp: 16903

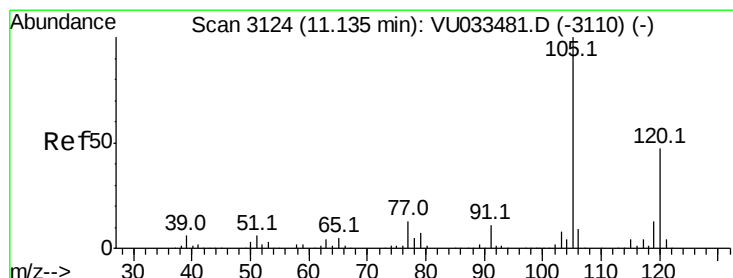
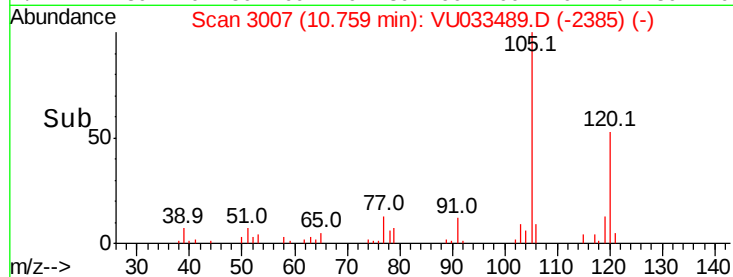
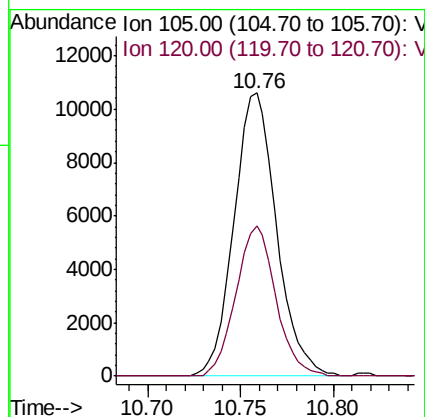
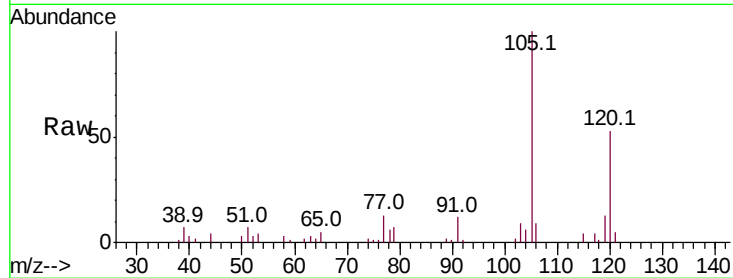
Ion Ratio Lower Upper

105 100

120 49.8 39.0 58.6

Manual Integrations
APPROVED

MMdadoda
8/1/2019 3:14:58 PM



#63

1,2,4-Trimethylbenzene

Concen: 2.280 ug/L

RT: 11.13 min Scan# 3123

Delta R.T. -0.00 min

Lab File: VU033489.D

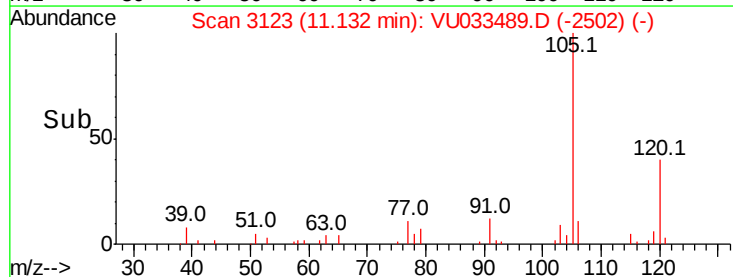
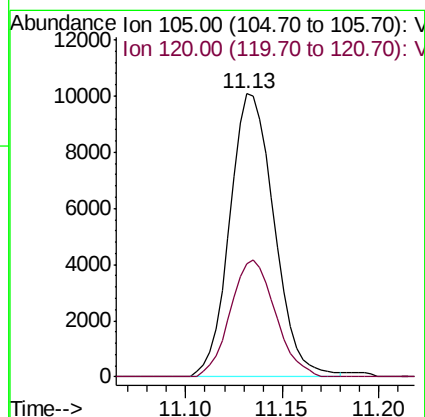
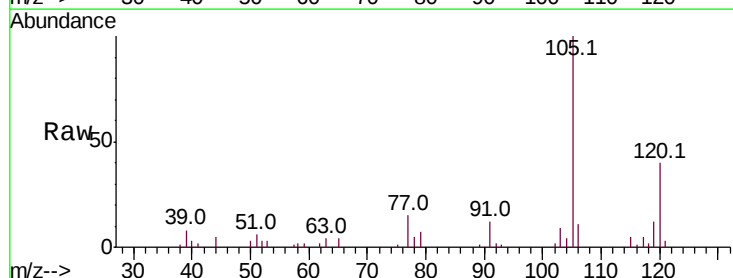
Acq: 30 Jul 2019 12:58

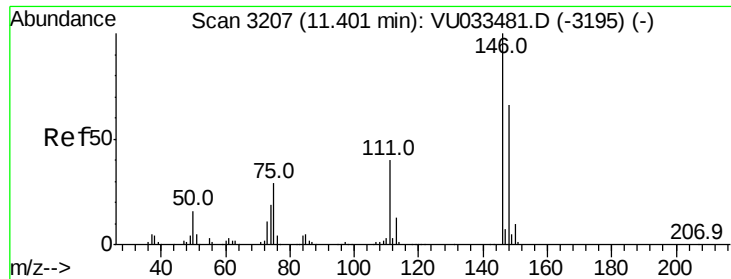
Tgt Ion:105 Resp: 16109

Ion Ratio Lower Upper

105 100

120 41.8 36.6 55.0





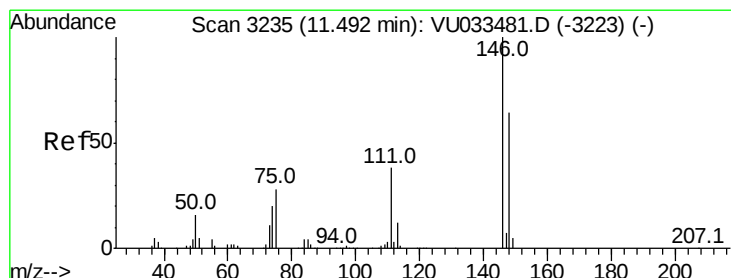
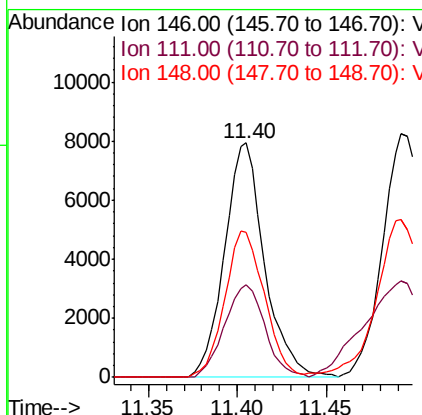
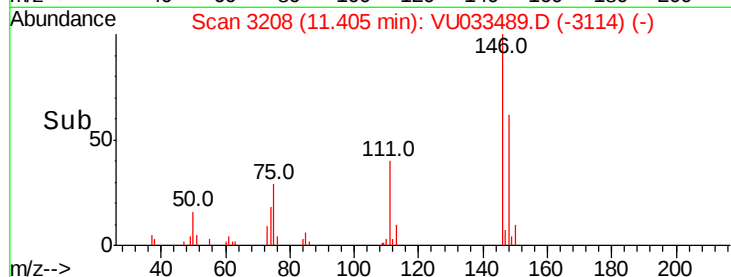
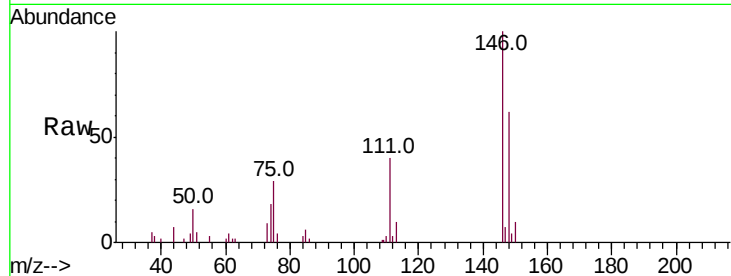
#64
1,3-Dichlorobenzene
Concen: 2.761 ug/L
RT: 11.40 min Scan# 3208
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampled :
MDL05

Tot Ion	Ratio	Lower	Upper
146	100		
111	39.7	28.2	52.4
148	61.9	44.4	82.5

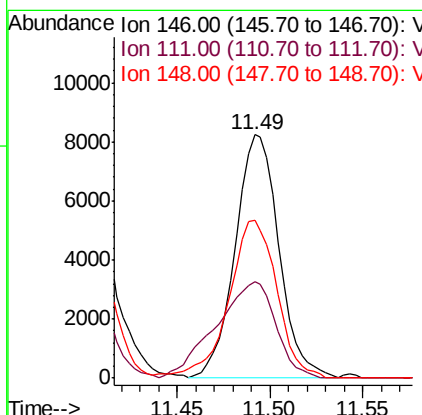
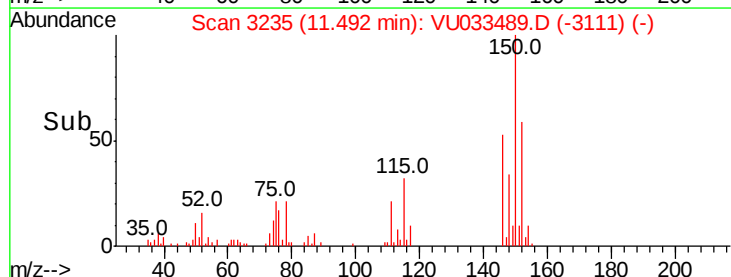
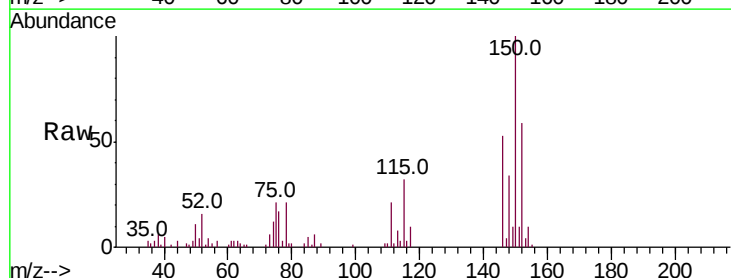
Manual Integrations
APPROVED

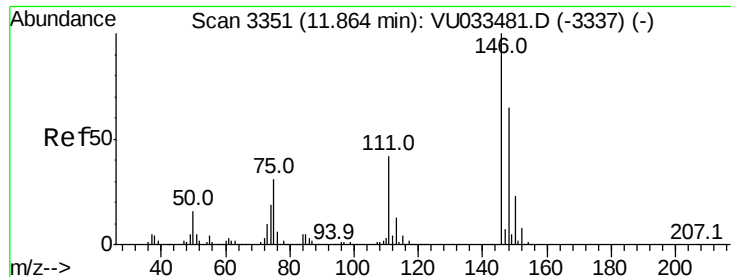
MMdadoda
8/1/2019 3:14:58 PM



#65
1,4-Dichlorobenzene
Concen: 2.937 ug/L
RT: 11.49 min Scan# 3235
Delta R.T. 0.00 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.7	27.0	50.2
148	64.9	44.7	82.9





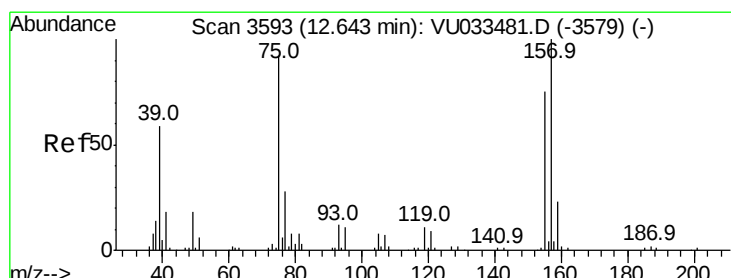
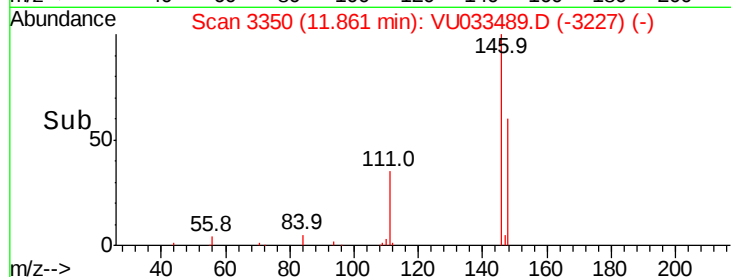
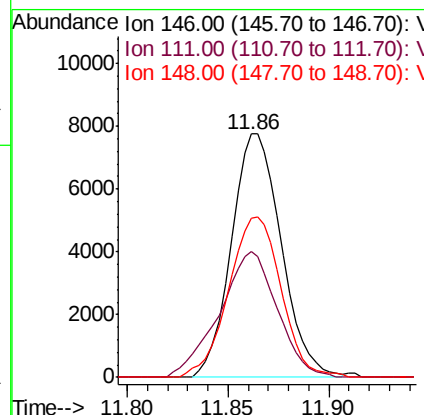
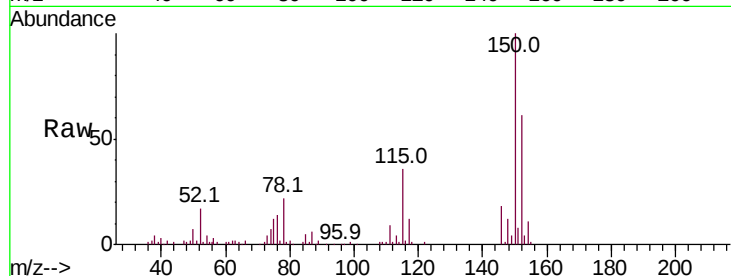
#67
 1,2-Dichlorobenzene
 Concen: 2.989 ug/L
 RT: 11.86 min Scan# 3350
 Delta R.T. -0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Instrument :
 MSVOA_U
 ClientSampled :
 MDL05

Tot Ion	Ratio	Lower	Upper
146	100		
111	51.7	32.8	49.2#
148	65.4	49.2	73.8

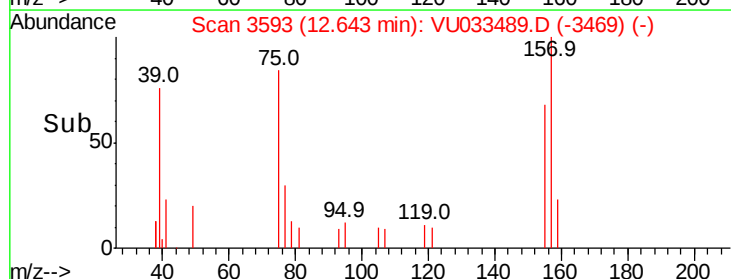
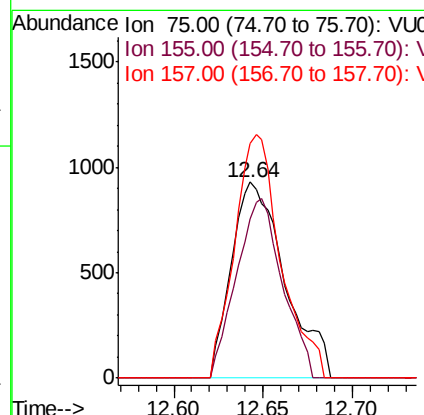
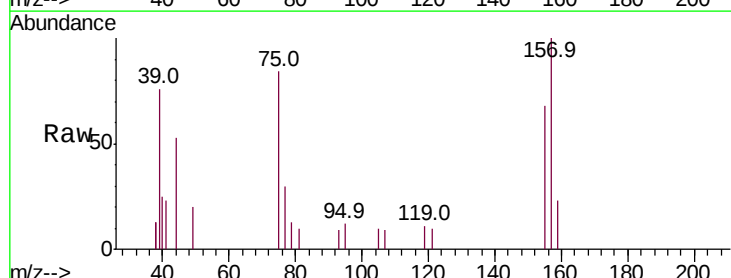
Manual Integrations
 APPROVED

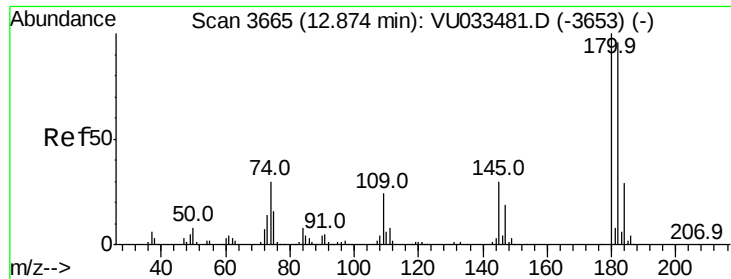
MMdadoda
 8/1/2019 3:14:58 PM



#68
 1,2-Dibromo-3-chloropropane
 Concen: 2.493 ug/L
 RT: 12.64 min Scan# 3593
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
75	100		
155	81.2	64.8	97.2
157	119.5	87.1	130.7





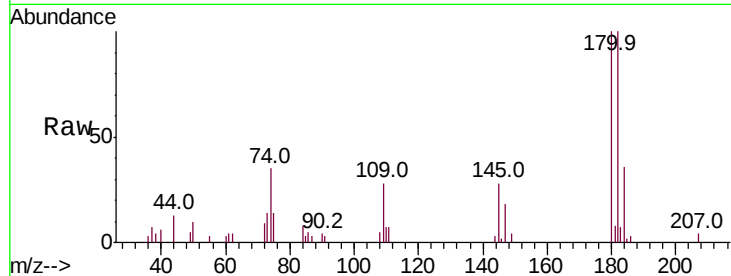
#69
 1,3,5-Trichlorobenzene
 Concen: 2.403 ug/L
 RT: 12.88 min Scan# 3666
 Delta R.T. 0.00 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL05

Tot Ion	Ratio	Lower	Upper
180	100		
182	102.2	76.2	114.4
184	33.2	24.1	36.1
145	28.7	23.7	35.5

Manual Integrations
 APPROVED

MMdadoda
 8/1/2019 3:14:58 PM



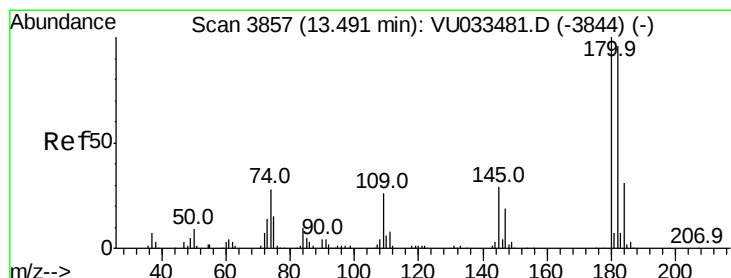
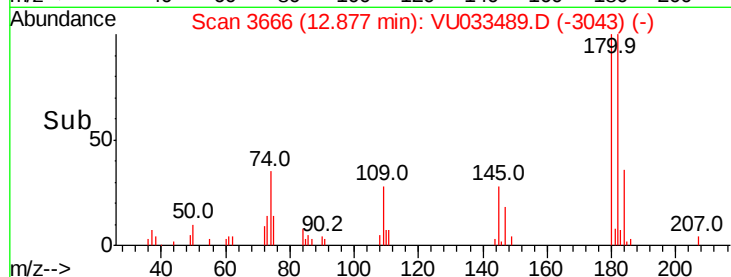
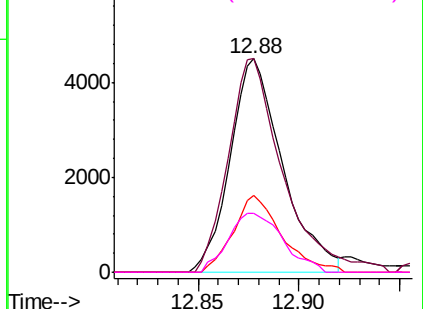
Abundance

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



#70
 1,2,4-trichlorobenzene
 Concen: 1.887 ug/L
 RT: 13.50 min Scan# 3860
 Delta R.T. 0.01 min
 Lab File: VU033489.D
 Acq: 30 Jul 2019 12:58

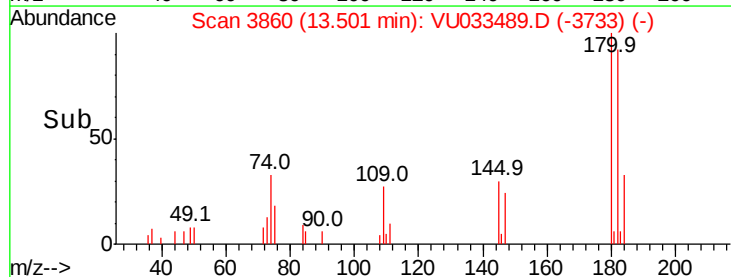
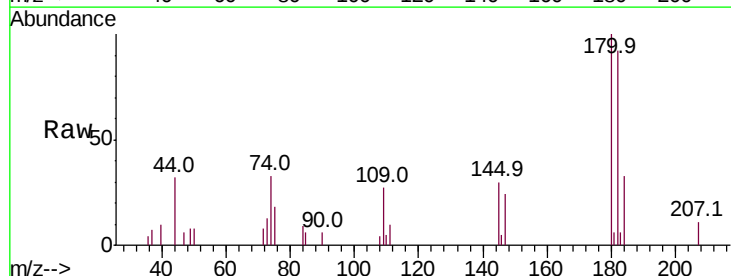
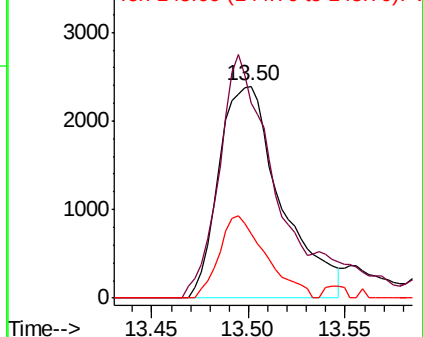
Tgt Ion	Ratio	Lower	Upper
180	100		
182	94.6	77.5	116.3
145	29.1	23.9	35.9

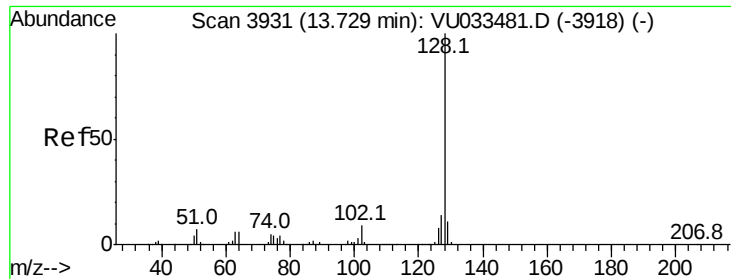
Abundance

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





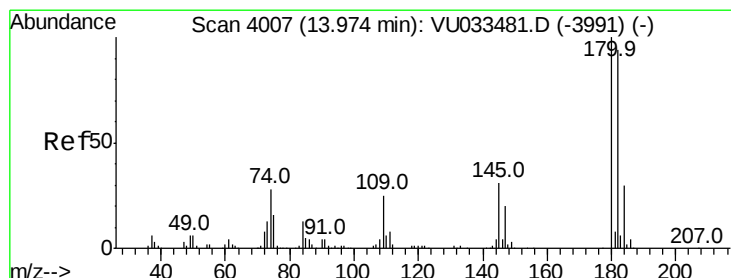
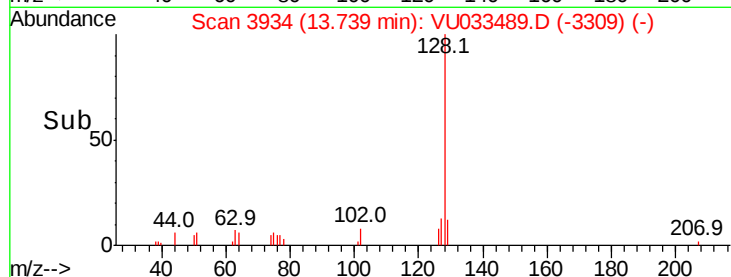
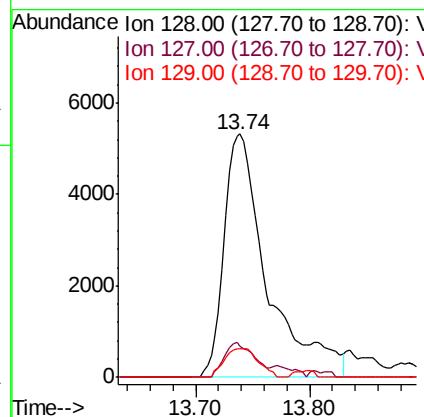
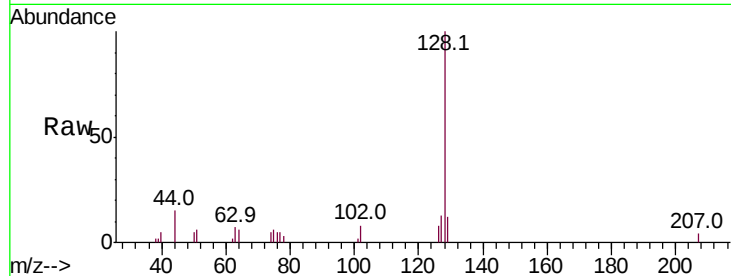
#71
Naphthalene
Concen: 1.708 ug/L m
RT: 13.74 min Scan# 3934
Delta R.T. 0.01 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Instrument :
MSVOA_U
ClientSampleId :
MDL05

Tot Ion	Ratio	Lower	Upper
128	100		
127	9.9	10.8	16.2#
129	9.3	8.7	13.1

Manual Integrations
APPROVED

MMDadoda
8/1/2019 3:14:58 PM



#72
1,2,3-Trichlorobenzene
Concen: 2.051 ug/L m
RT: 13.98 min Scan# 4009
Delta R.T. 0.01 min
Lab File: VU033489.D
Acq: 30 Jul 2019 12:58

Tgt Ion	Ratio	Lower	Upper
180	100		
182	82.5	76.4	114.6
145	30.9	24.9	37.3

