

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041819\
 Data File : VW010040.D
 Acq On : 18 Apr 2019 12:55
 Operator : SY/VA
 Sample : K2241-03
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Manual Integrations
 APPROVED

MMDadoda
 4/19/2019 12:52:49 PM

Quant Time: Apr 18 15:51:18 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W041719S.M
 Quant Title : SW846 8260
 QLast Update : Thu Apr 18 15:47:48 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.95	168	388874	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	646568	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	574392	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	282151	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.30	65	238305	49.66	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.32%	
35) Dibromofluoromethane	7.88	113	193879	47.17	ug/l	0.00
Spiked Amount	50.000		Recovery	=	94.34%	
50) Toluene-d8	10.32	98	763154	49.54	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.08%	
62) 4-Bromofluorobenzene	12.62	95	260945	46.60	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.20%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.01	85	6250	2.108	ug/l	90
3) Chloromethane	2.21	50	6339	2.138	ug/l	96
4) Vinyl Chloride	2.36	62	7374	2.139	ug/l	91
5) Bromomethane	2.78	94	5164	2.229	ug/l	95
6) Chloroethane	2.92	64	5326	2.365	ug/l	91
7) Trichlorofluoromethane	3.24	101	5011	2.103	ug/l	96
8) Diethyl Ether	3.67	74	6090	3.072	ug/l	95
9) 1,1,2-Trichlorotrifluoroet	4.05	101	10483	2.614	ug/l #	88
10) Methyl Iodide	4.26	142	12283	2.217	ug/l #	92
11) Tert butyl alcohol	5.17	59	4607	16.854	ug/l #	84
12) 1,1-Dichloroethene	4.02	96	9782	2.545	ug/l	95
13) Acrolein	3.88	56	3734	12.984	ug/l #	79
14) Allyl chloride	4.66	41	17283	2.529	ug/l	98
15) Acrylonitrile	5.37	53	12714	12.463	ug/l	99
16) Acetone	4.12	43	21818	19.595	ug/l	96
17) Carbon Disulfide	4.37	76	17347	1.645	ug/l	95
18) Methyl Acetate	4.67	43	10064	3.905	ug/l #	90
19) Methyl tert-butyl Ether	5.42	73	12604	2.524	ug/l	100
20) Methylene Chloride	4.92	84	32155	6.277	ug/l	93
21) trans-1,2-Dichloroethene	5.41	96	9789	2.351	ug/l	94
22) Diisopropyl ether	6.31	45	31457	2.269	ug/l	89
23) Vinyl Acetate	6.25	43	86403	9.900	ug/l	98
24) 1,1-Dichloroethane	6.21	63	22634	2.731	ug/l	96
25) 2-Butanone	7.18	43	17266	11.805	ug/l #	84
26) 2,2-Dichloropropane	7.17	77	12358	2.695	ug/l	99
27) cis-1,2-Dichloroethene	7.16	96	11833	2.585	ug/l	97
28) Bromochloromethane	7.51	49	8207	2.423	ug/l	97
29) Tetrahydrofuran	7.52	42	10471	11.298	ug/l	96
30) Chloroform	7.67	83	22900	2.758	ug/l	94
31) Cyclohexane	7.95	56	25370	3.269	ug/l #	60
32) 1,1,1-Trichloroethane	7.87	97	17550	2.692	ug/l	97
36) 1,1-Dichloropropene	8.07	75	15452	2.340	ug/l	96
37) Ethyl Acetate	7.25	43	8116	2.418	ug/l	97
38) Carbon Tetrachloride	8.06	117	17027	2.642	ug/l	92

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041819\
 Data File : VW010040.D
 Acq On : 18 Apr 2019 12:55
 Operator : SY/VA
 Sample : K2241-03
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Manual Integrations
 APPROVED

MMDadoda
 4/19/2019 12:52:49 PM

Quant Time: Apr 18 15:51:18 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W041719S.M
 Quant Title : SW846 8260
 QLast Update : Thu Apr 18 15:47:48 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.33	83	17114	2.303	ug/l	95
40) Benzene	8.32	78	46268	2.562	ug/l	98
41) Methacrylonitrile	7.48	41	5121	2.677	ug/l	92
42) 1,2-Dichloroethane	8.40	62	16501	2.659	ug/l	99
43) Isopropyl Acetate	8.42	43	14542	2.312	ug/l #	61
44) Trichloroethene	9.09	130	11786	2.570	ug/l	76
45) 1,2-Dichloropropane	9.37	63	12210	2.572	ug/l	95
46) Dibromomethane	9.46	93	6101	2.480	ug/l	98
47) Bromodichloromethane	9.64	83	16823	2.649	ug/l	94
48) Methyl methacrylate	9.43	41	6792	2.219	ug/l	88
49) 1,4-Dioxane	9.45	88	2191	58.284	ug/l #	86
51) 4-Methyl-2-Pentanone	10.21	43	40575	12.318	ug/l	93
52) Toluene	10.39	92	30192	2.684	ug/l	100
53) t-1,3-Dichloropropene	10.60	75	14934	2.372	ug/l	93
54) cis-1,3-Dichloropropene	10.07	75	17132	2.383	ug/l	93
55) 1,1,2-Trichloroethane	10.79	97	8840	2.574	ug/l	94
56) Ethyl methacrylate	10.65	69	8795	2.060	ug/l	99
57) 1,3-Dichloropropane	10.93	76	15250	2.478	ug/l	95
58) 2-Chloroethyl Vinyl ether	9.92	63	25590	13.017	ug/l	97
59) 2-Hexanone	10.97	43	25492	11.118	ug/l	94
60) Dibromochloromethane	11.13	129	9684	2.440	ug/l	100
61) 1,2-Dibromoethane	11.23	107	7875	2.411	ug/l	100
64) Tetrachloroethene	10.86	164	9909	2.657	ug/l	90
65) Chlorobenzene	11.66	112	32860	2.795	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.73	131	11492	2.733	ug/l	94
67) Ethyl Benzene	11.73	91	52617	2.509	ug/l	98
68) m/p-Xylenes	11.84	106	37255	4.752	ug/l	96
69) o-Xylene	12.17	106	16926	2.371	ug/l	98
70) Styrene	12.18	104	26343	2.140	ug/l	96
71) Bromoform	12.35	173	5585	2.512	ug/l #	98
73) Isopropylbenzene	12.46	105	46726	2.379	ug/l	98
74) N-amyl acetate	12.27	43	11470	2.109	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.71	83	10719	2.763	ug/l	99
76) 1,2,3-Trichloropropane	12.77	75	7612m	2.696	ug/l	
77) Bromobenzene	12.75	156	12271	2.717	ug/l	99
78) n-propylbenzene	12.80	91	64129	2.635	ug/l	100
79) 2-Chlorotoluene	12.90	91	36443	2.604	ug/l	99
80) 1,3,5-Trimethylbenzene	12.94	105	41225	2.476	ug/l	96
81) trans-1,4-Dichloro-2-buten	12.52	75	2543m	2.123	ug/l	
82) 4-Chlorotoluene	12.99	91	38019	2.581	ug/l	100
83) tert-Butylbenzene	13.21	119	33733	2.447	ug/l	96
84) 1,2,4-Trimethylbenzene	13.25	105	41156	2.438	ug/l	99
85) sec-Butylbenzene	13.38	105	51802	2.514	ug/l	99
86) p-Isopropyltoluene	13.50	119	43442	2.392	ug/l	99
87) 1,3-Dichlorobenzene	13.50	146	25186	2.759	ug/l	96
88) 1,4-Dichlorobenzene	13.58	146	25792	2.830	ug/l	82
89) n-Butylbenzene	13.83	91	46061	2.560	ug/l	96
90) Hexachloroethane	14.10	117	9796	2.816	ug/l	99
91) 1,2-Dichlorobenzene	13.87	146	23446	2.864	ug/l	96
92) 1,2-Dibromo-3-Chloropropan	14.49	75	2081	2.997	ug/l	91

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041819\
Data File : VW010040.D
Acq On : 18 Apr 2019 12:55
Operator : SY/VA
Sample : K2241-03
Misc : 5.00G/5ML/MSVOA W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

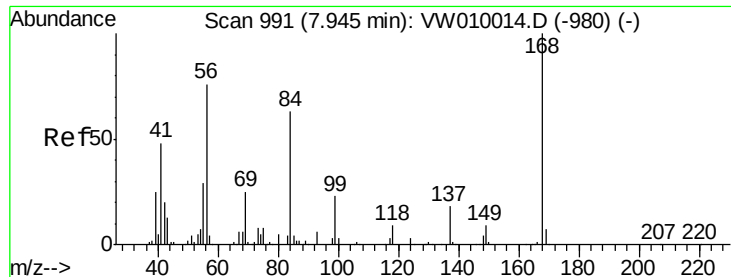
Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM

Quant Time: Apr 18 15:51:18 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W041719S.M
Quant Title : SW846 8260
QLast Update : Thu Apr 18 15:47:48 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.14	180	13478	2.496	ug/l	95
94) Hexachlorobutadiene	15.24	225	9039	2.756	ug/l	98
95) Naphthalene	15.37	128	20946	2.160	ug/l	98
96) 1,2,3-Trichlorobenzene	15.56	180	12095	2.581	ug/l	98

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:168 Resp: 388874

Ion Ratio Lower Upper

168 100

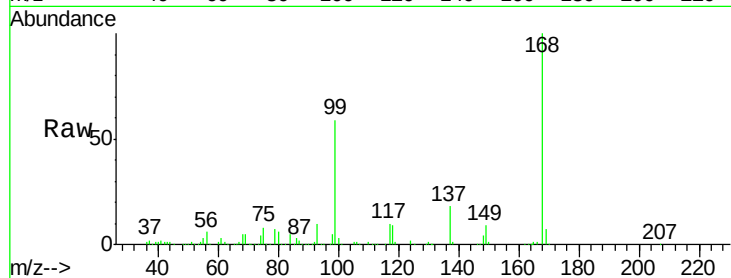
99 59.2 48.4 72.6

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

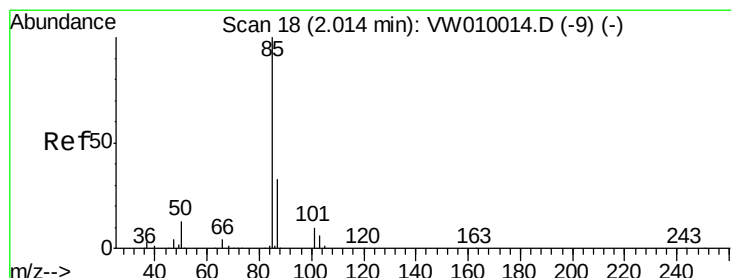
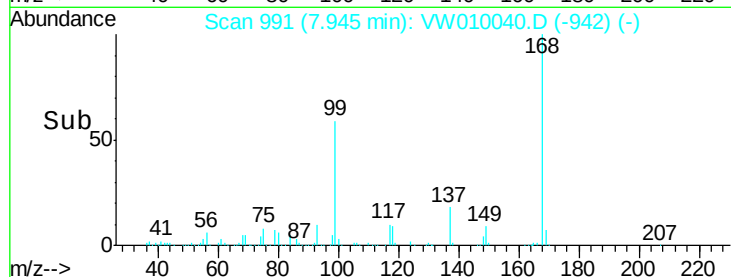
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 2.108 ug/l

RT: 2.01 min Scan# 18

Delta R.T. -0.00 min

Lab File: VW010040.D

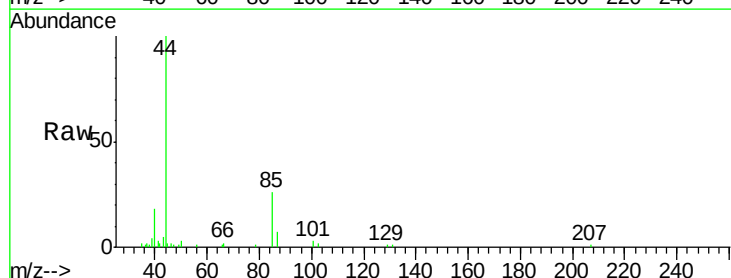
Acq: 18 Apr 2019 12:55

Tgt Ion: 85 Resp: 6250

Ion Ratio Lower Upper

85 100

87 27.2 16.3 48.9



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW

2.01

2500

2000

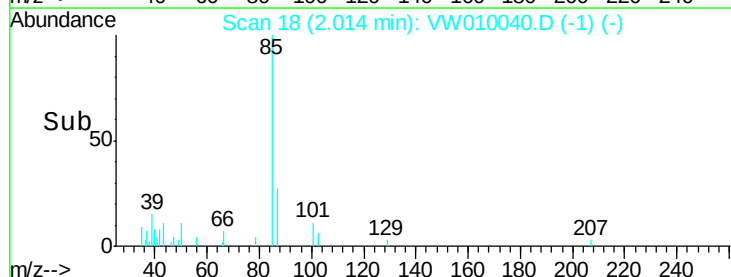
1500

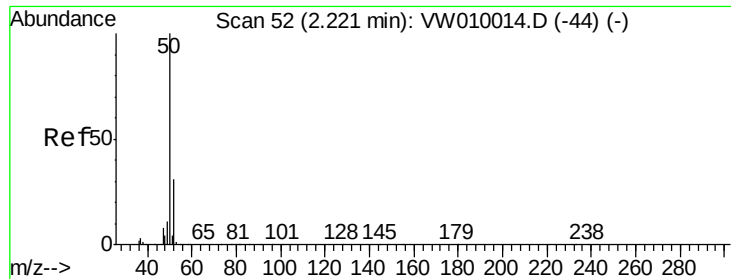
1000

500

0

Time-->





#3

Chloromethane

Concen: 2.138 ug/l

RT: 2.21 min Scan# 50

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 50 Resp: 6339

Ion Ratio Lower Upper

50 100

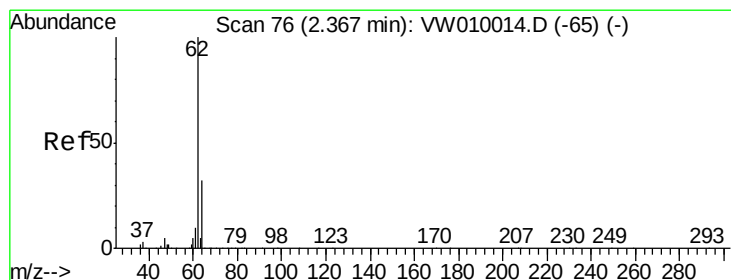
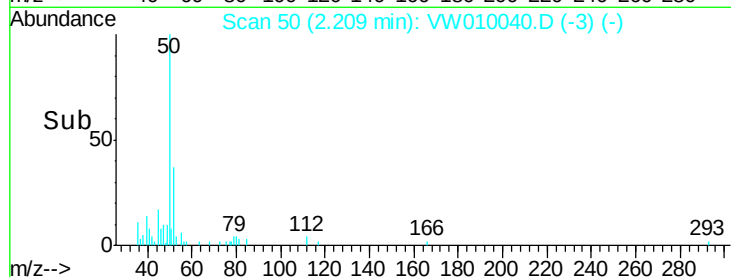
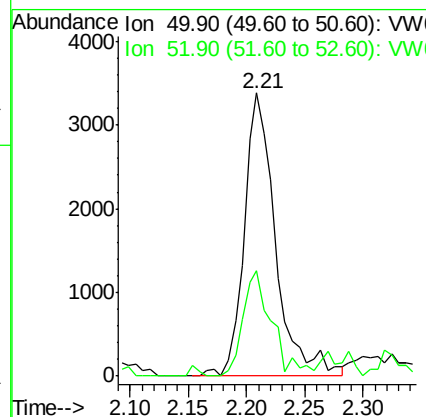
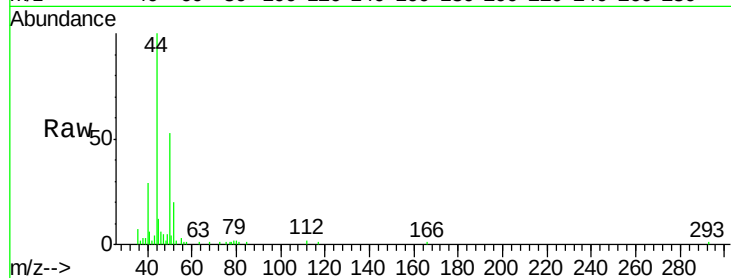
52 33.4 25.0 37.6

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#4

Vinyl Chloride

Concen: 2.139 ug/l

RT: 2.36 min Scan# 75

Delta R.T. -0.01 min

Lab File: VW010040.D

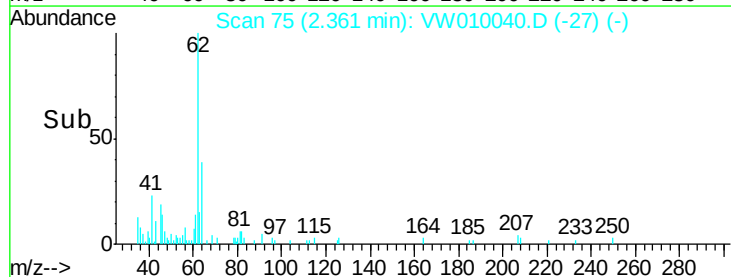
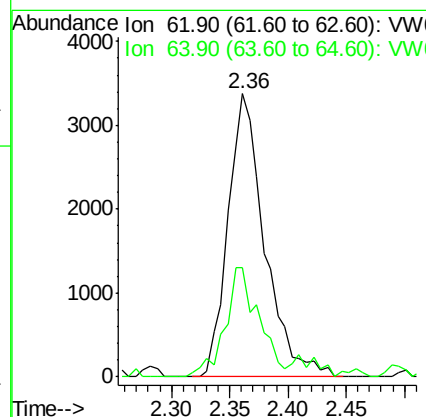
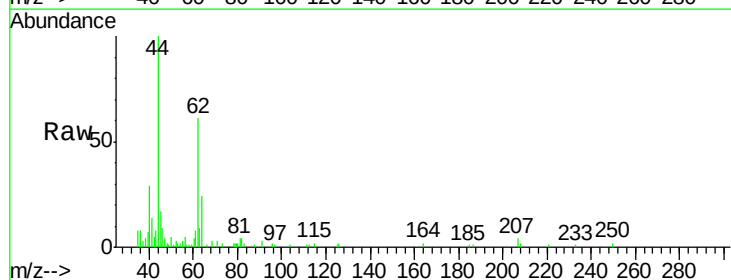
Acq: 18 Apr 2019 12:55

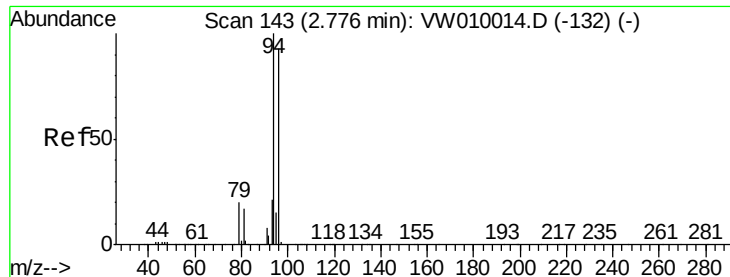
Tgt Ion: 62 Resp: 7374

Ion Ratio Lower Upper

62 100

64 37.2 25.9 38.9





#5

Bromomethane

Concen: 2.229 ug/l

RT: 2.78 min Scan# 143

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 94 Resp: 5164

Ion Ratio Lower Upper

94 100

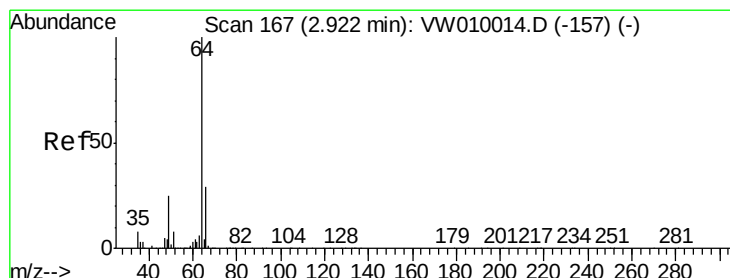
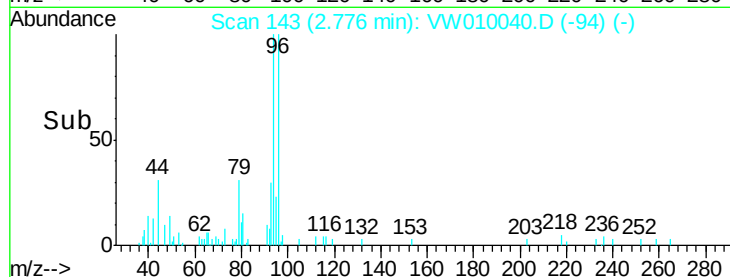
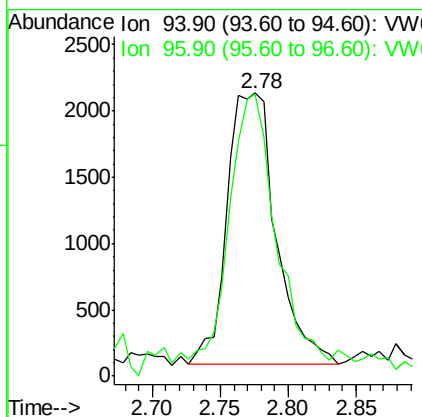
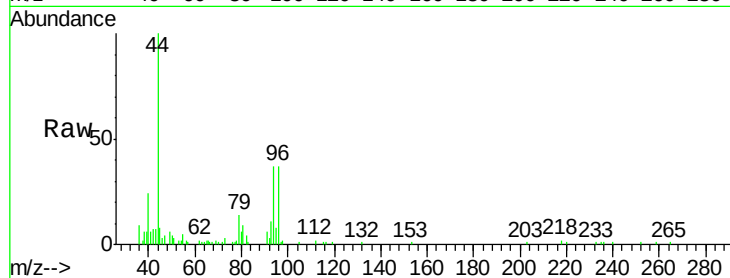
96 97.5 74.2 111.2

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#6

Chloroethane

Concen: 2.365 ug/l

RT: 2.92 min Scan# 166

Delta R.T. -0.01 min

Lab File: VW010040.D

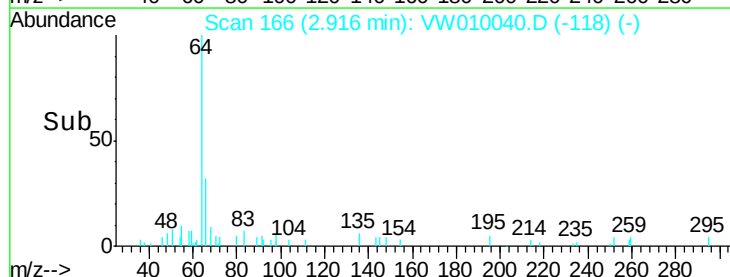
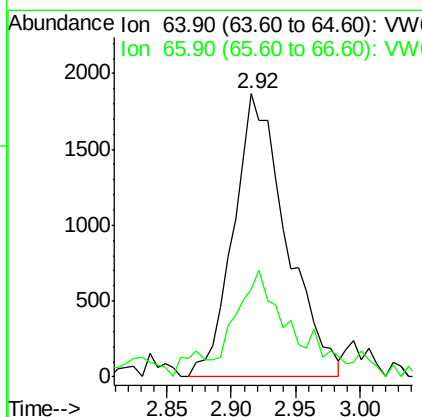
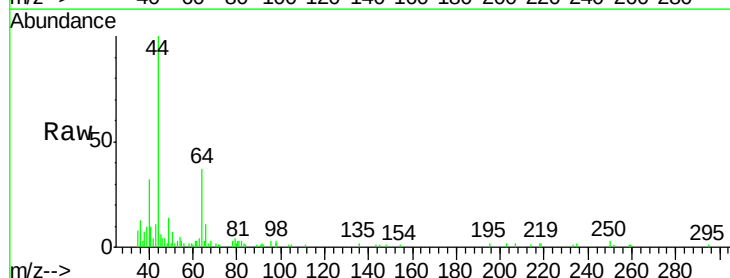
Acq: 18 Apr 2019 12:55

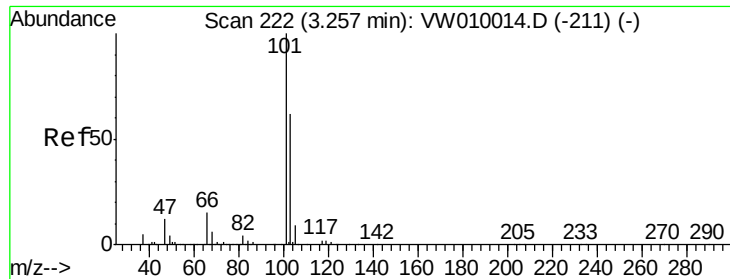
Tgt Ion: 64 Resp: 5326

Ion Ratio Lower Upper

64 100

66 24.6 23.4 35.0





#7

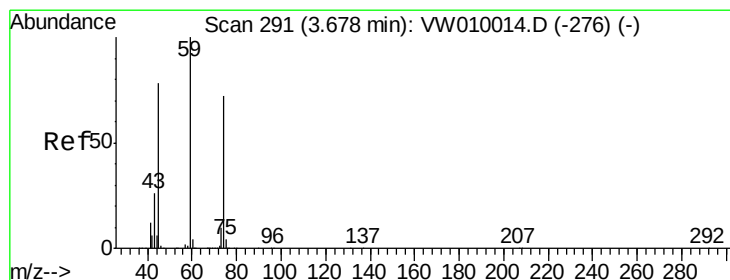
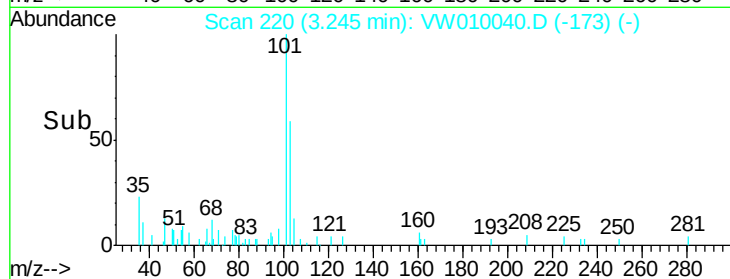
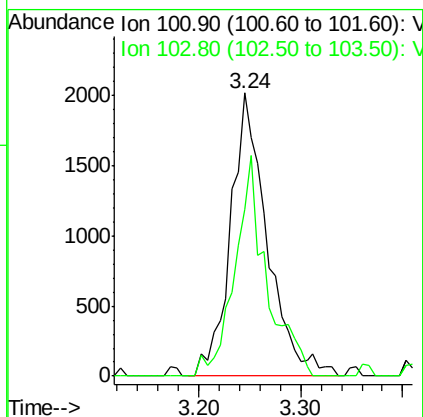
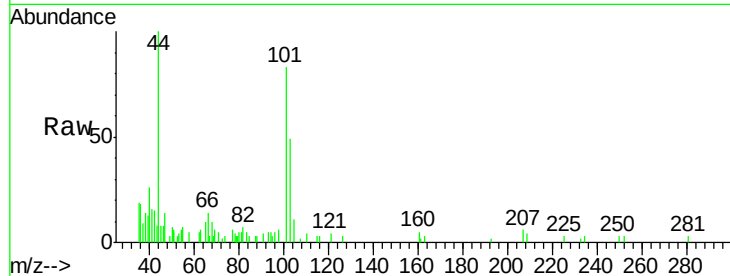
Trichlorofluoromethane
 Concen: 2.103 ug/l
 RT: 3.24 min Scan# 220
 Delta R.T. -0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
101	100		
103	59.2	49.8	74.6

Manual Integrations
 APPROVED

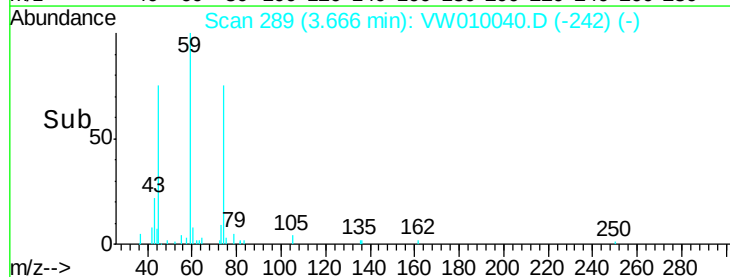
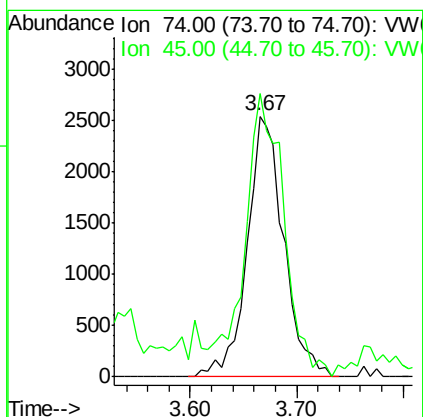
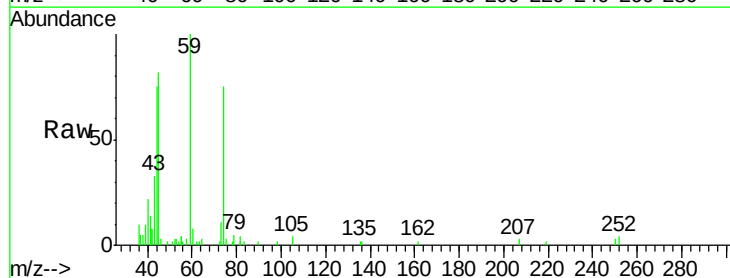
MMDadoda
 4/19/2019 12:52:49 PM

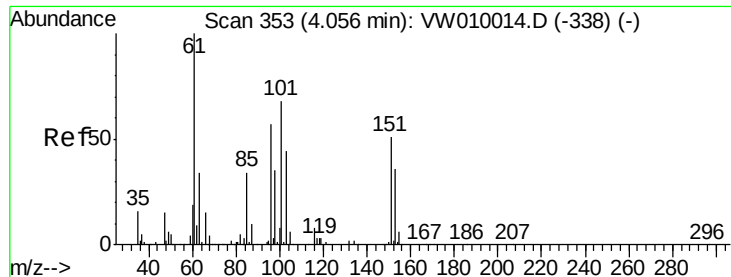


#8

Diethyl Ether
 Concen: 3.072 ug/l
 RT: 3.67 min Scan# 289
 Delta R.T. -0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
74	100		
45	116.9	56.0	168.0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.614 ug/l

RT: 4.05 min Scan# 352

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

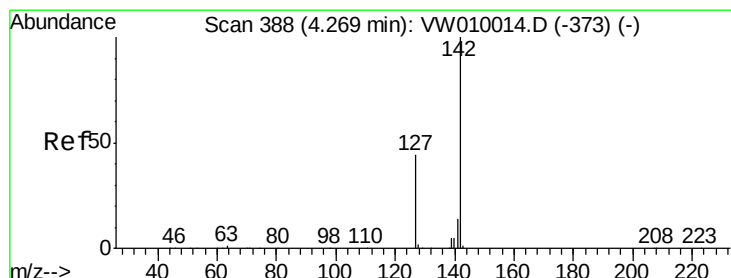
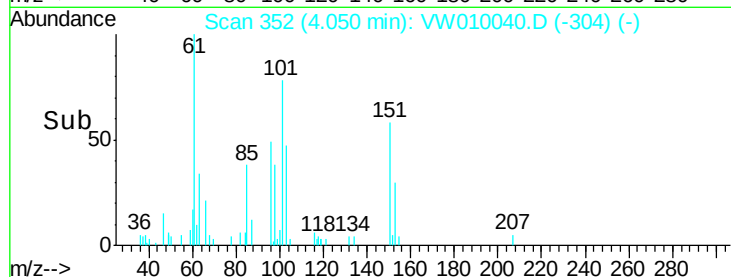
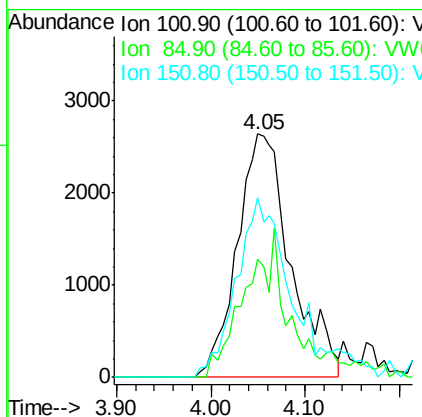
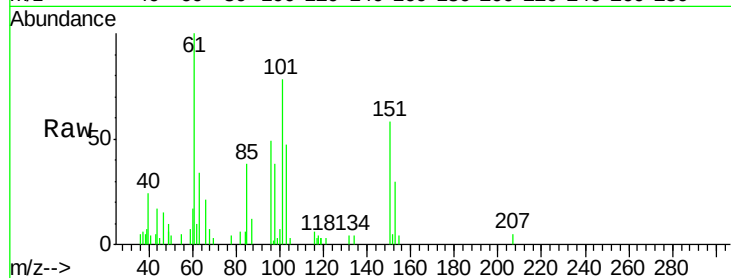
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	101	Resp:	10483
Ion Ratio	Lower	Upper	
101	100		
85	28.5	36.3	54.5#
151	72.5	60.2	90.2

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#10

Methyl Iodide

Concen: 2.217 ug/l

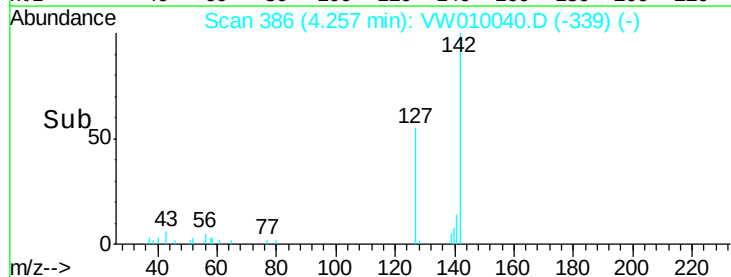
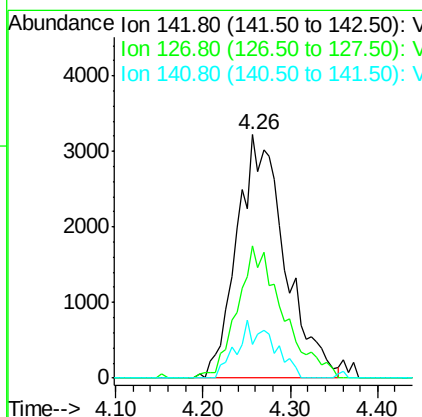
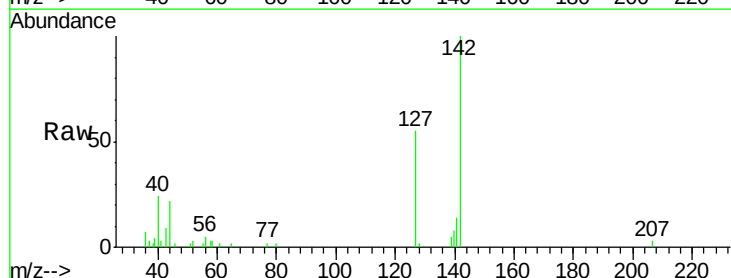
RT: 4.26 min Scan# 386

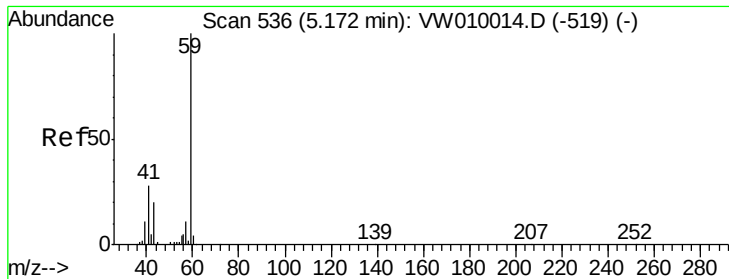
Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	142	Resp:	12283
Ion Ratio	Lower	Upper	
142	100		
127	51.4	38.1	57.1
141	8.2	12.2	18.2#





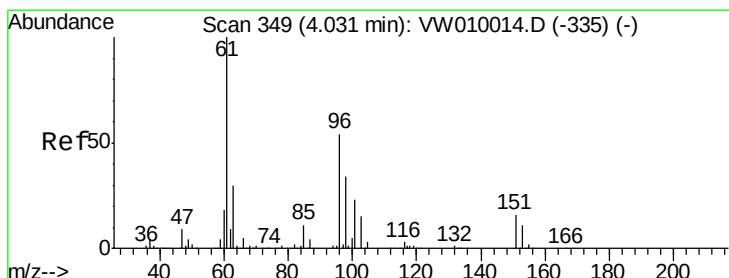
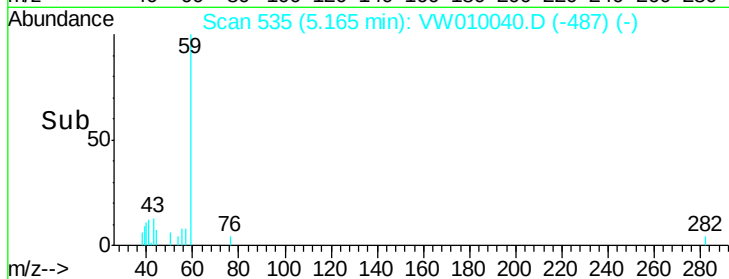
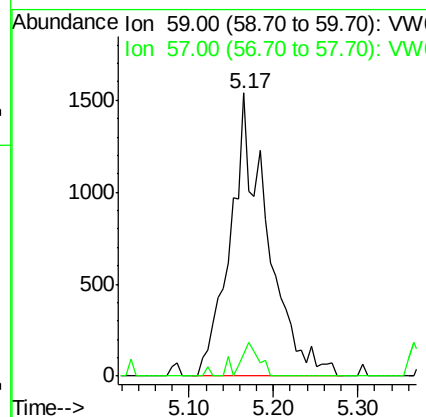
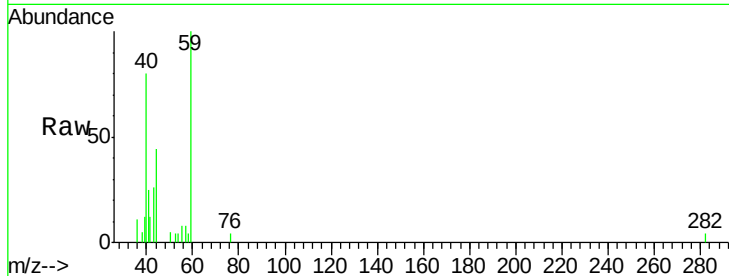
#11
Tert butyl alcohol
Concen: 16.854 ug/l
RT: 5.17 min Scan# 535
Delta R.T. -0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
59	100		
57	5.2	9.0	13.4#

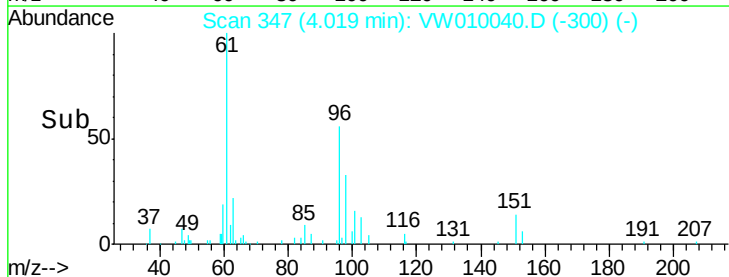
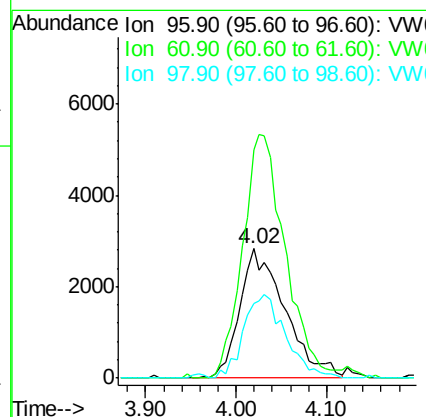
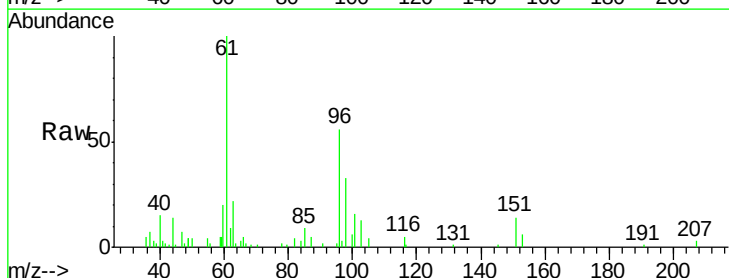
Manual Integrations
APPROVED

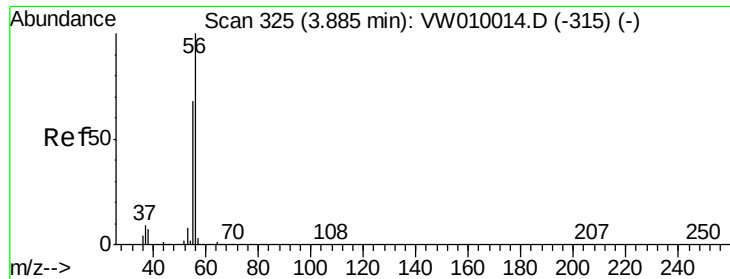
MMDadoda
4/19/2019 12:52:49 PM



#12
1,1-Dichloroethene
Concen: 2.545 ug/l
RT: 4.02 min Scan# 347
Delta R.T. -0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
96	100		
61	177.0	147.4	221.2
98	58.3	49.7	74.5





#13

Acrolein

Concen: 12.984 ug/l

RT: 3.88 min Scan# 324

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 56 Resp: 3734

Ion Ratio Lower Upper

56 100

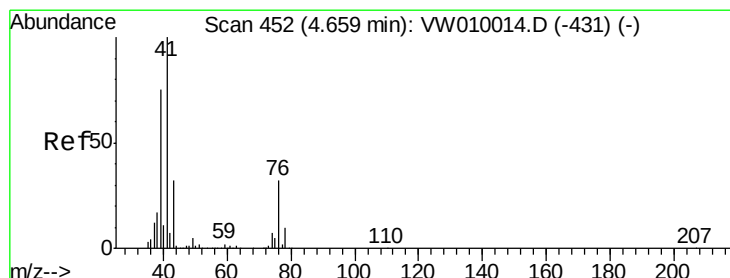
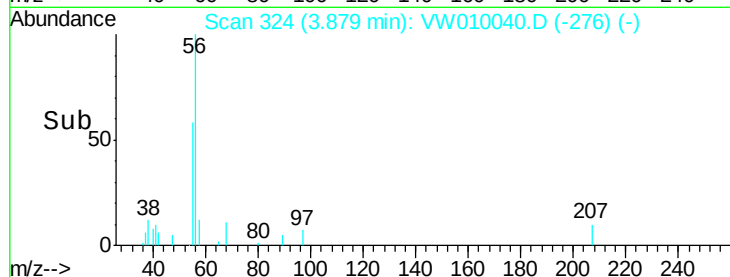
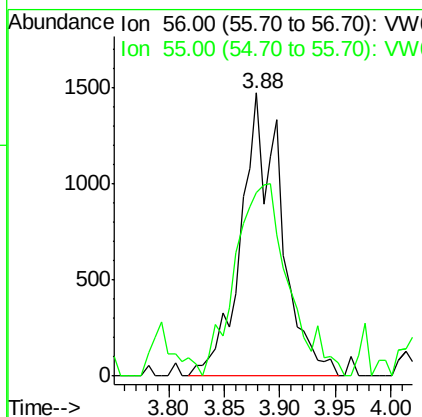
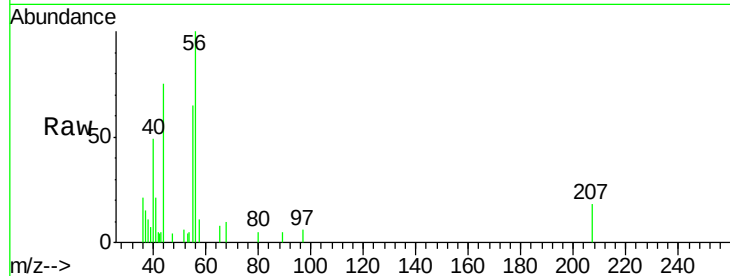
55 84.6 54.2 81.2#

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#14

Allyl chloride

Concen: 2.529 ug/l

RT: 4.66 min Scan# 452

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

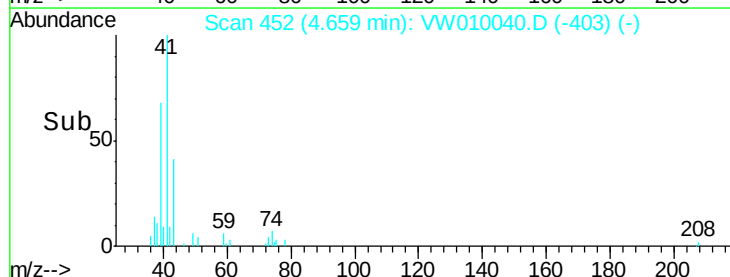
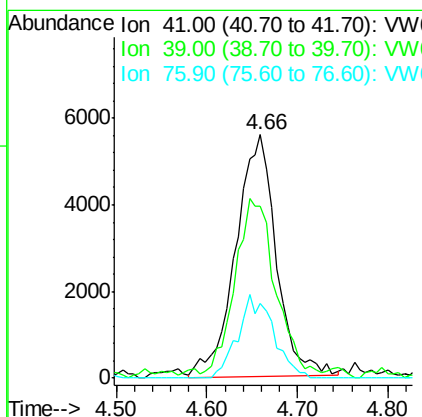
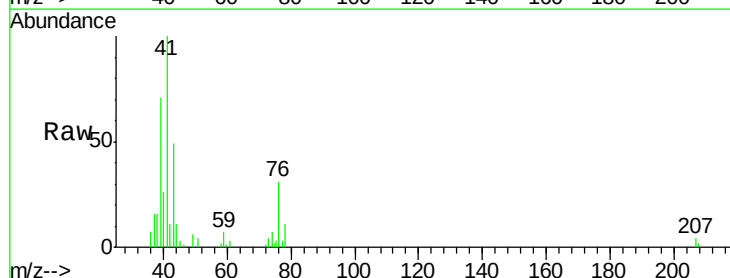
Tgt Ion: 41 Resp: 17283

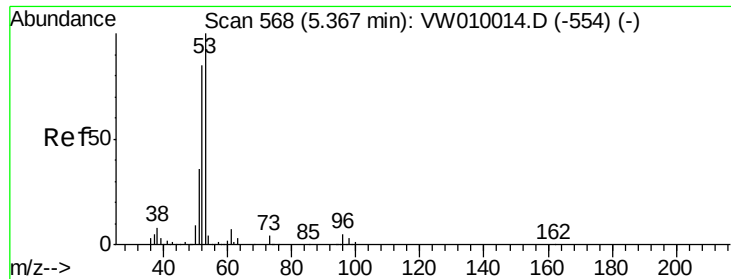
Ion Ratio Lower Upper

41 100

39 74.1 60.2 90.4

76 30.2 25.0 37.6





#15

Acrylonitrile

Concen: 12.463 ug/l

RT: 5.37 min Scan# 569

Delta R.T. 0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

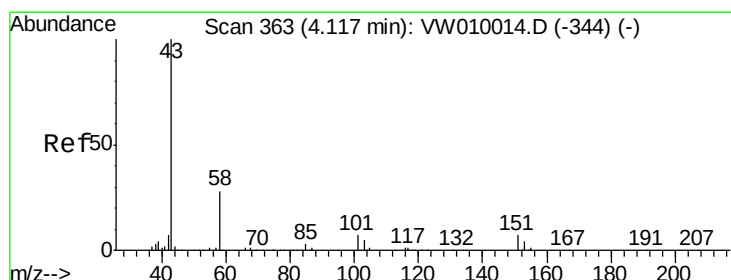
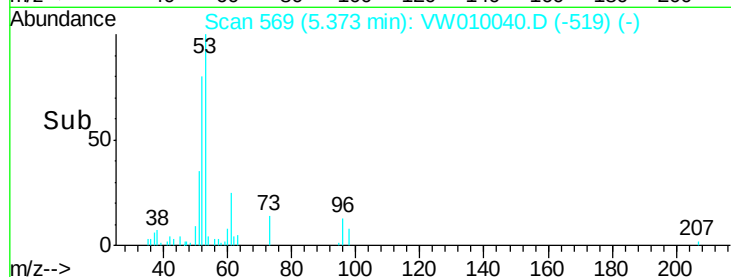
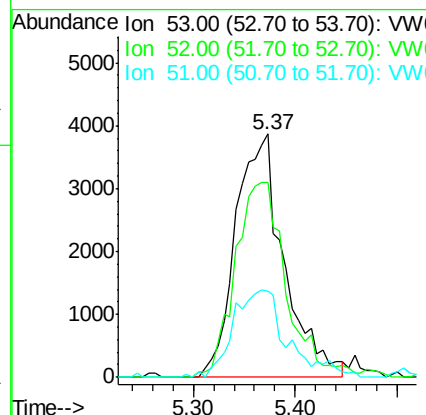
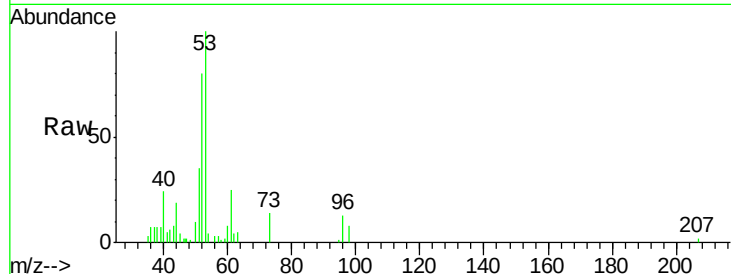
ClientSampleID :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	53	Resp:	12714
Ion	Ratio	Lower	Upper
53	100		
52	84.7	66.6	100.0
51	37.4	30.3	45.5

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#16

Acetone

Concen: 19.595 ug/l

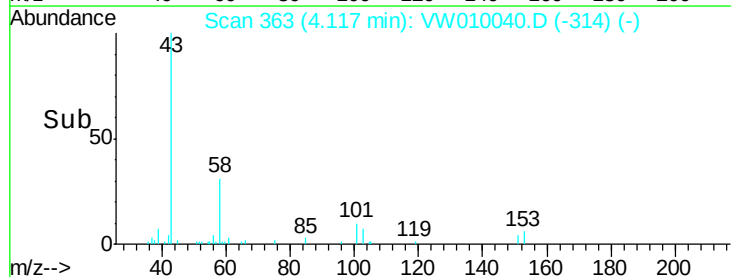
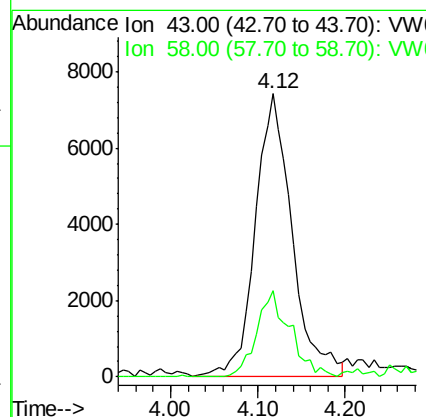
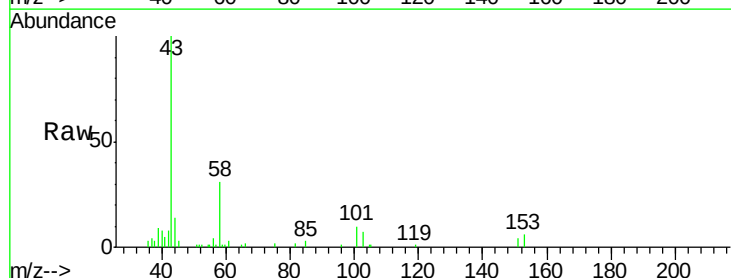
RT: 4.12 min Scan# 363

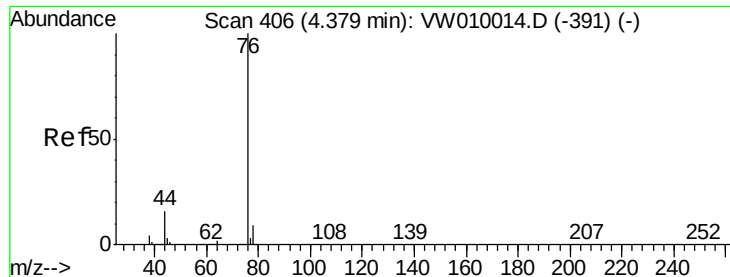
Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	43	Resp:	21818
Ion	Ratio	Lower	Upper
43	100		
58	30.6	22.7	34.1





#17

Carbon Disulfide

Concen: 1.645 ug/l

RT: 4.37 min Scan# 405

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 76 Resp: 17347

Ion Ratio Lower Upper

76 100

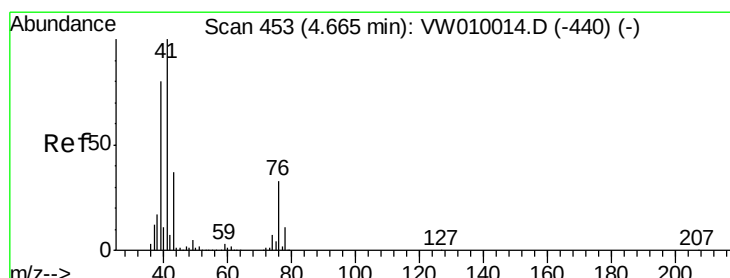
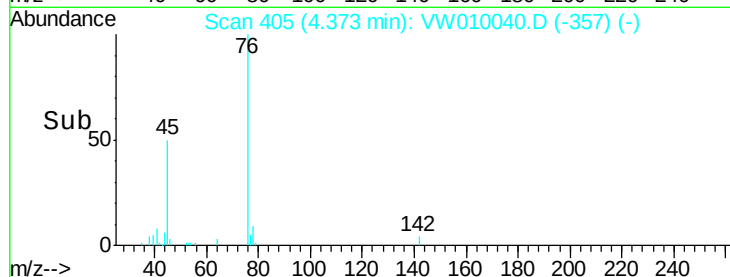
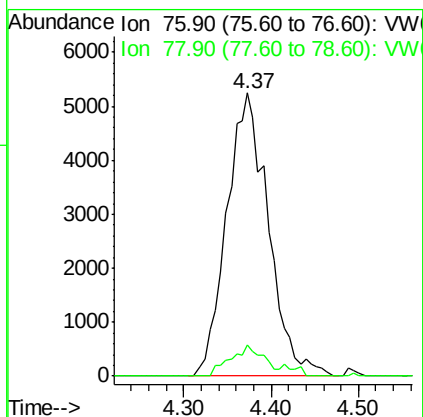
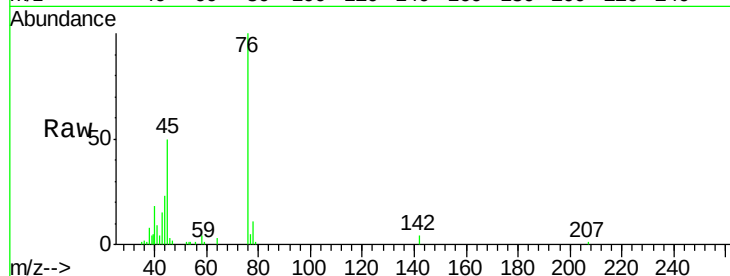
78 11.0 7.4 11.2

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#18

Methyl Acetate

Concen: 3.905 ug/l

RT: 4.67 min Scan# 453

Delta R.T. -0.00 min

Lab File: VW010040.D

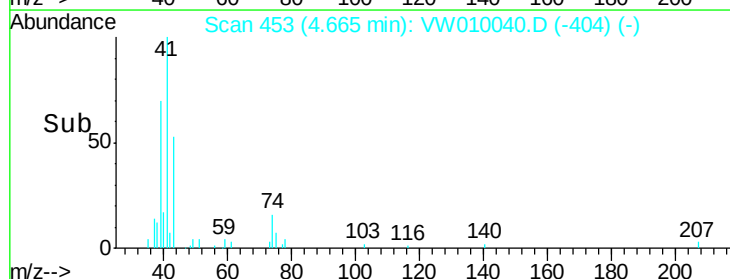
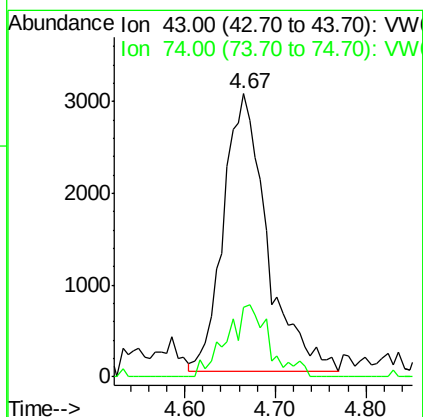
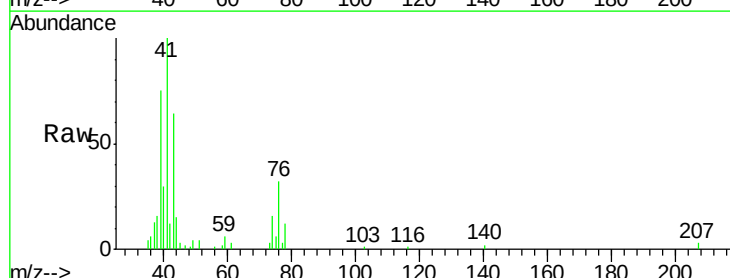
Acq: 18 Apr 2019 12:55

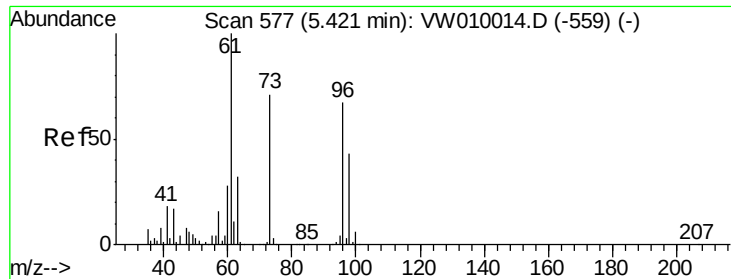
Tgt Ion: 43 Resp: 10064

Ion Ratio Lower Upper

43 100

74 25.5 16.8 25.2#





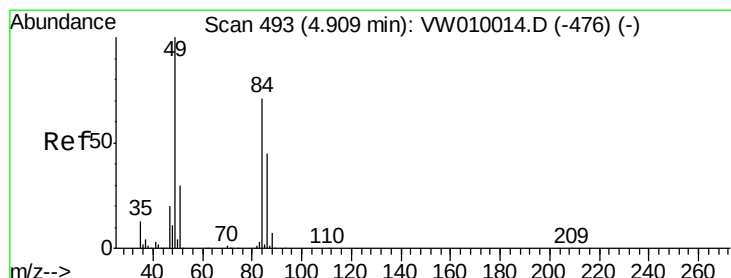
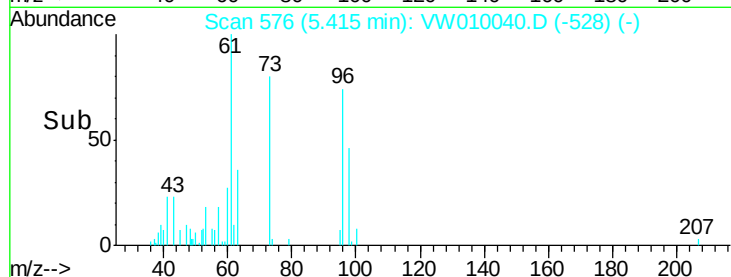
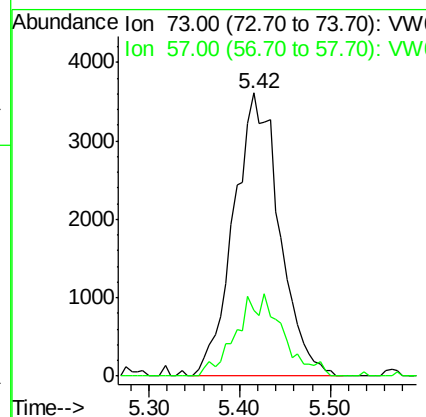
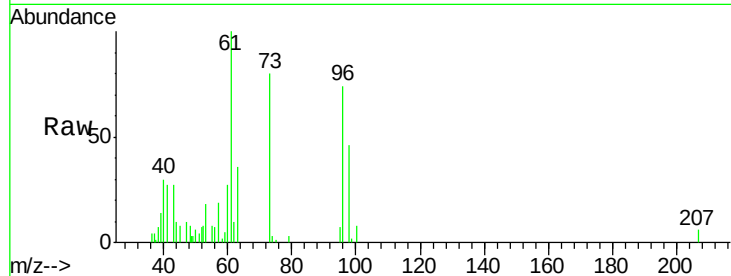
#19
Methyl tert-butyl Ether
Concen: 2.524 ug/l
RT: 5.42 min Scan# 576
Delta R.T. -0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 73 Resp: 12604
Ion Ratio Lower Upper
73 100
57 23.2 18.5 27.7

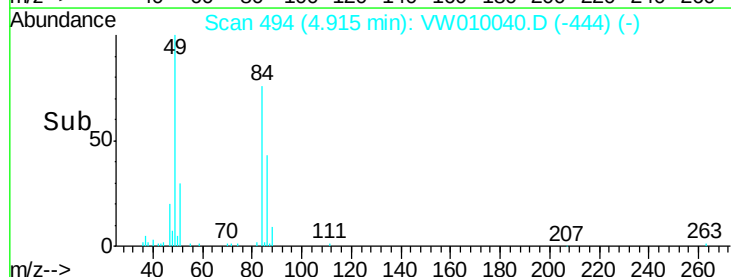
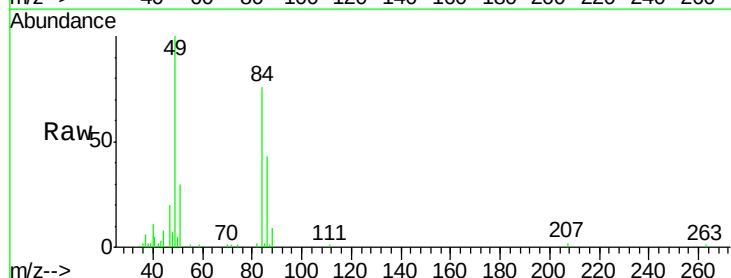
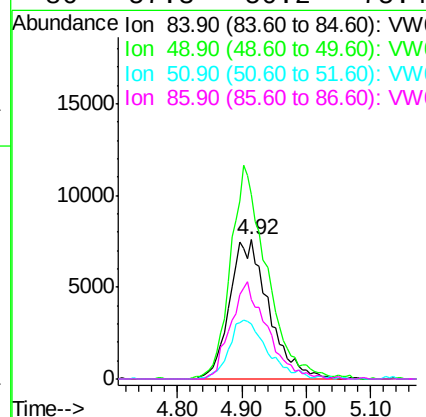
Manual Integrations
APPROVED

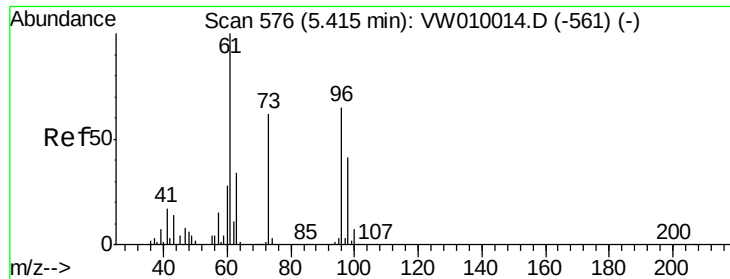
MMDadoda
4/19/2019 12:52:49 PM



#20
Methylene Chloride
Concen: 6.277 ug/l
RT: 4.92 min Scan# 494
Delta R.T. 0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion: 84 Resp: 32155
Ion Ratio Lower Upper
84 100
49 131.2 112.3 168.5
51 39.2 33.9 50.9
86 57.3 50.2 75.4





#21

trans-1,2-Dichloroethene

Concen: 2.351 ug/l

RT: 5.41 min Scan# 575

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

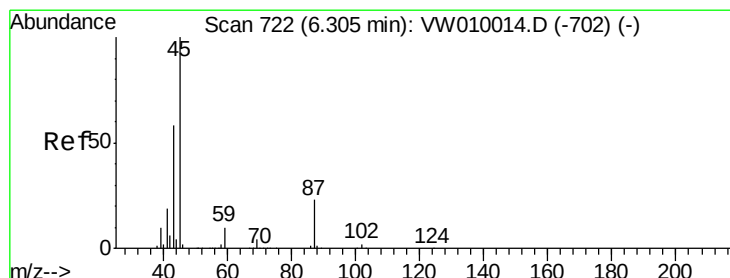
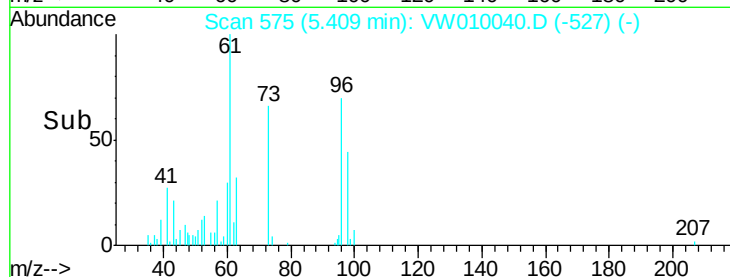
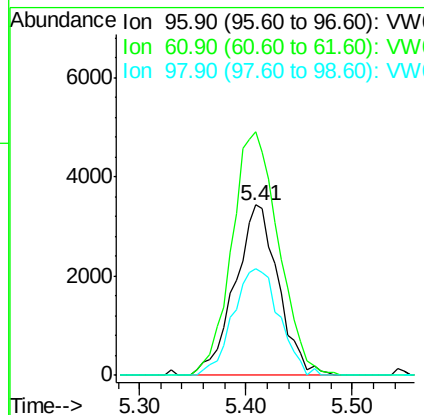
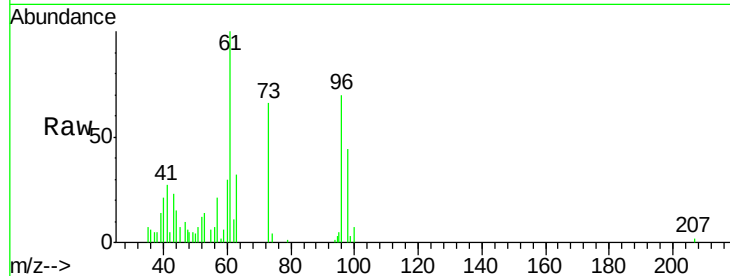
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	96	Resp:	9789
Ion	Ratio	Lower	Upper
96	100		
61	142.9	122.3	183.5
98	62.7	50.5	75.7

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#22

Diisopropyl ether

Concen: 2.269 ug/l

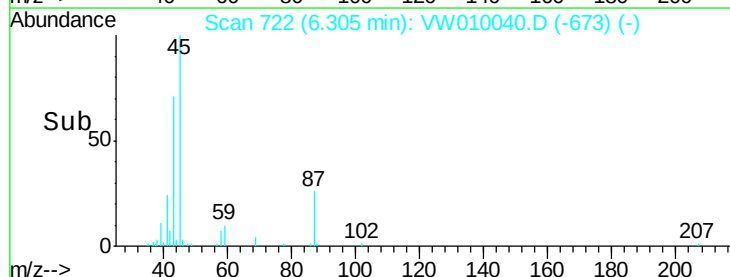
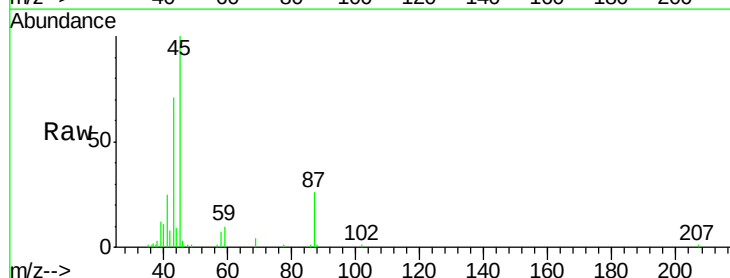
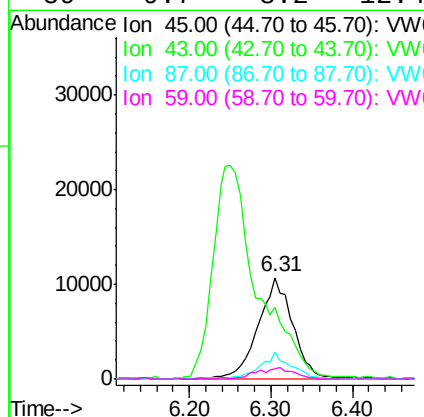
RT: 6.31 min Scan# 722

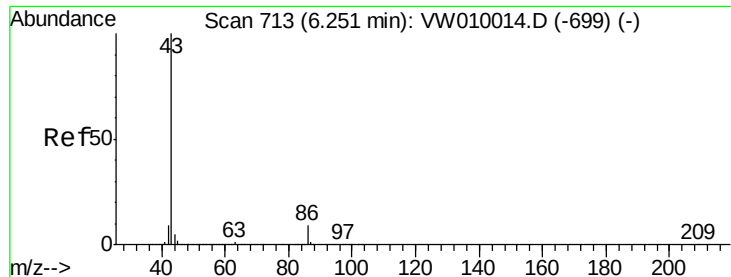
Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	45	Resp:	31457
Ion	Ratio	Lower	Upper
45	100		
43	68.4	46.1	69.1
87	26.0	18.3	27.5
59	9.7	8.2	12.4





#23

Vinyl Acetate

Concen: 9.900 ug/l

RT: 6.25 min Scan# 713

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tot Ion: 43 Resp: 86403

Ion Ratio Lower Upper

43 100

86 8.0 7.0 10.6

Instrument :

MSVOA_W

ClientSampleId :

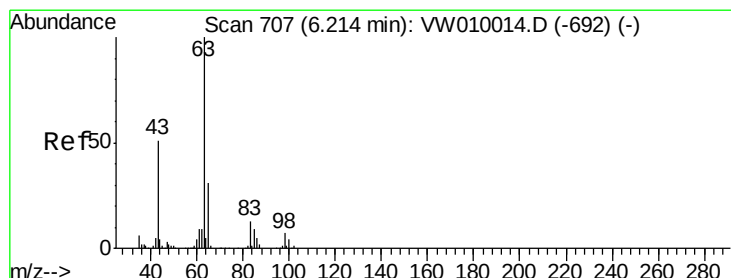
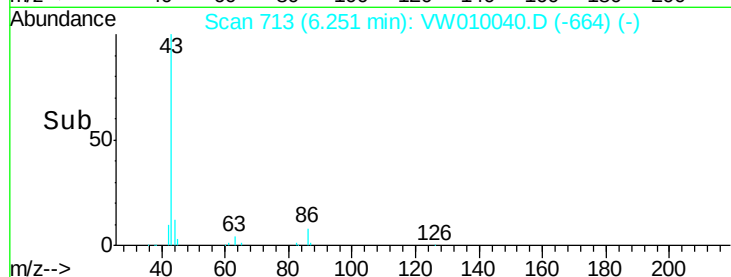
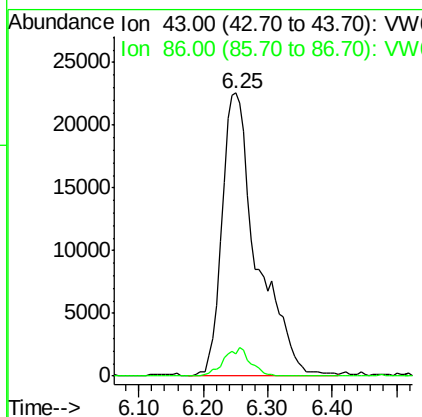
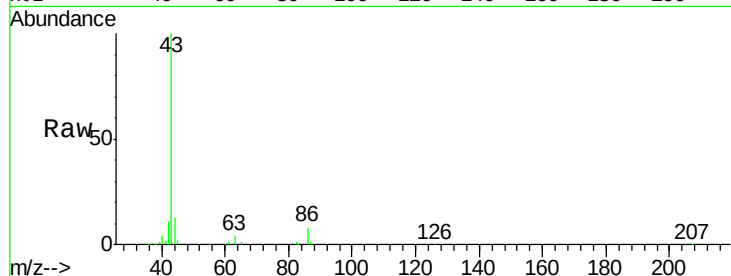
MDL-MDL-SOIL-03-QT2-2019

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#24

1,1-Dichloroethane

Concen: 2.731 ug/l

RT: 6.21 min Scan# 706

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

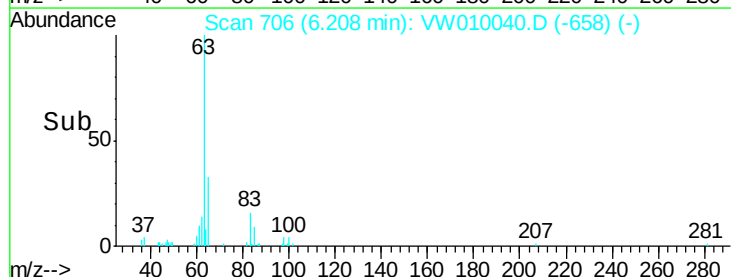
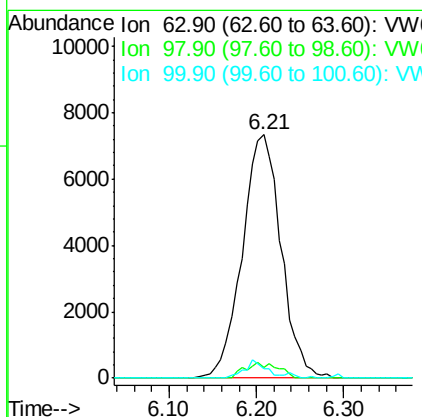
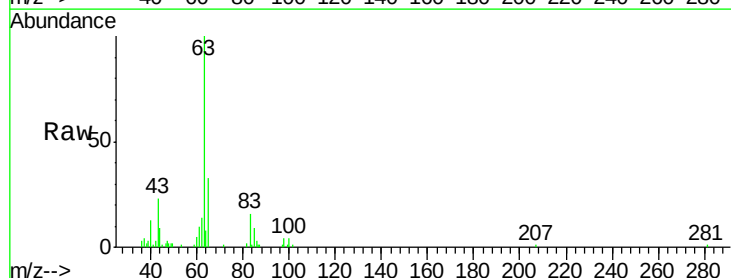
Tgt Ion: 63 Resp: 22634

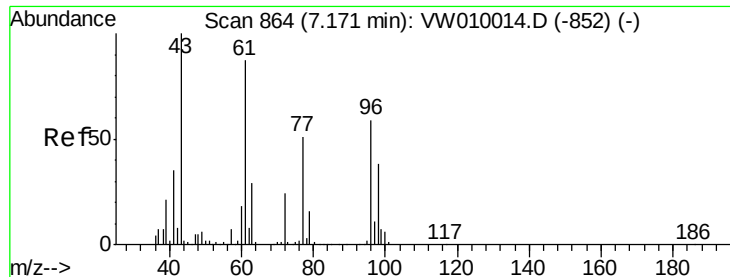
Ion Ratio Lower Upper

63 100

98 4.3 3.3 9.8

100 3.7 2.0 6.0





#25

2-Butanone

Concen: 11.805 ug/l

RT: 7.18 min Scan# 866

Delta R.T. 0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 43 Resp: 17266

Ion Ratio Lower Upper

43 100

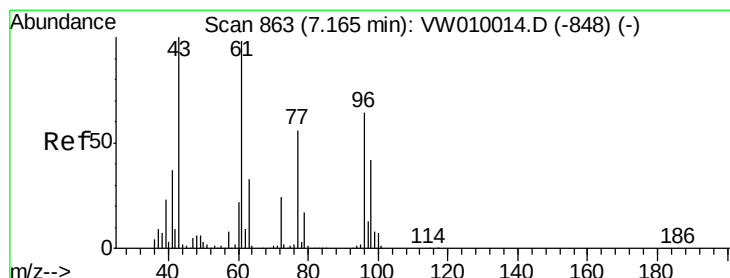
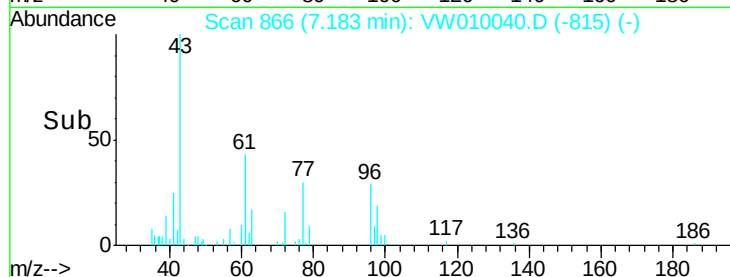
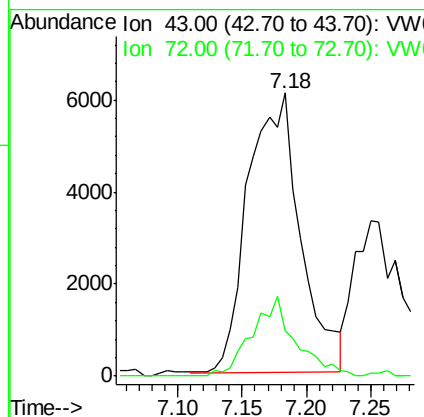
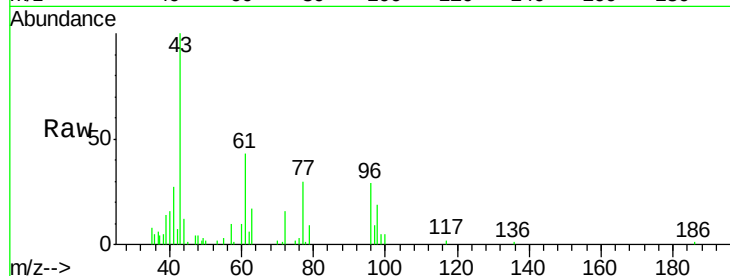
72 16.0 19.1 28.7#

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#26

2,2-Dichloropropane

Concen: 2.695 ug/l

RT: 7.17 min Scan# 863

Delta R.T. -0.00 min

Lab File: VW010040.D

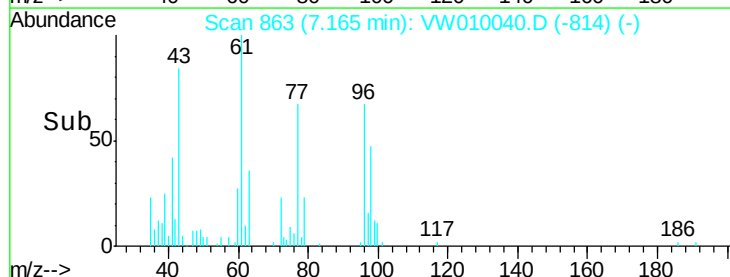
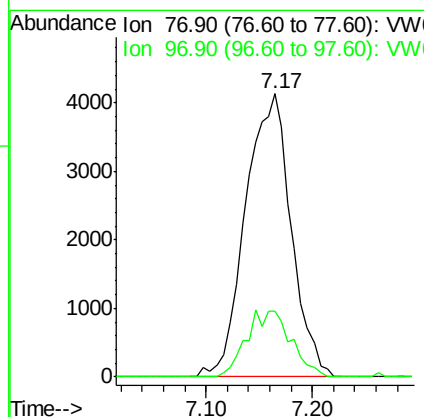
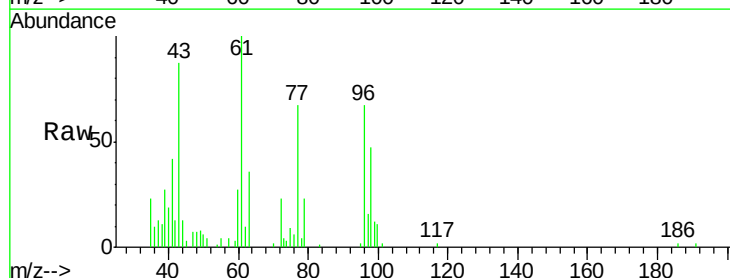
Acq: 18 Apr 2019 12:55

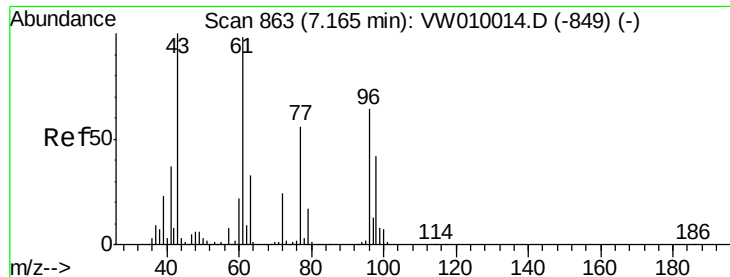
Tgt Ion: 77 Resp: 12358

Ion Ratio Lower Upper

77 100

97 22.9 11.3 33.9





#27

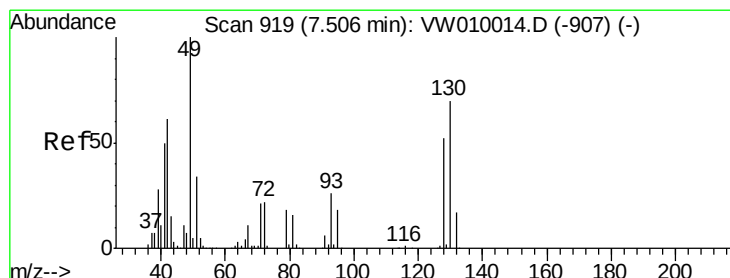
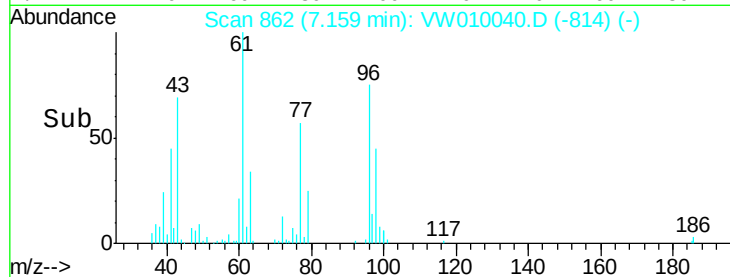
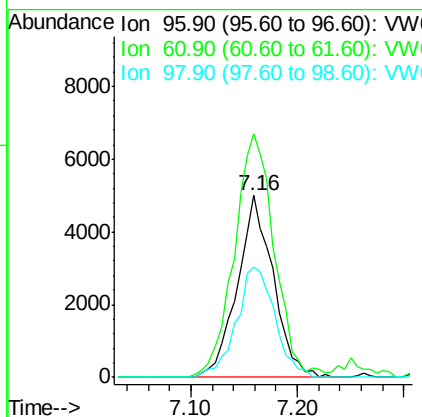
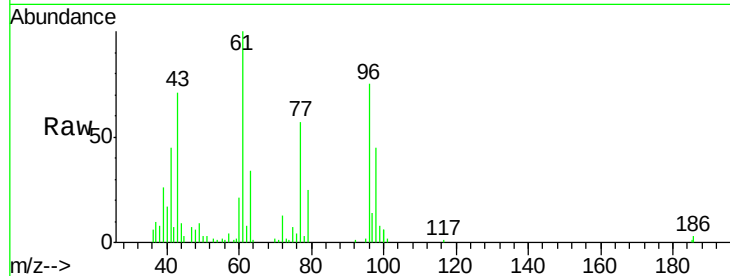
cis-1,2-Dichloroethene
 Concen: 2.585 ug/l
 RT: 7.16 min Scan# 862
 Delta R.T. -0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
96	100		
61	149.0	0.0	309.4
98	65.1	0.0	128.6

Manual Integrations
 APPROVED

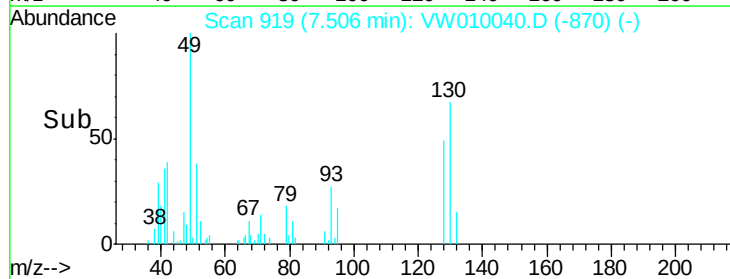
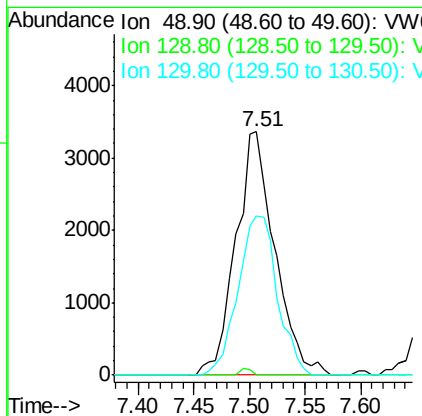
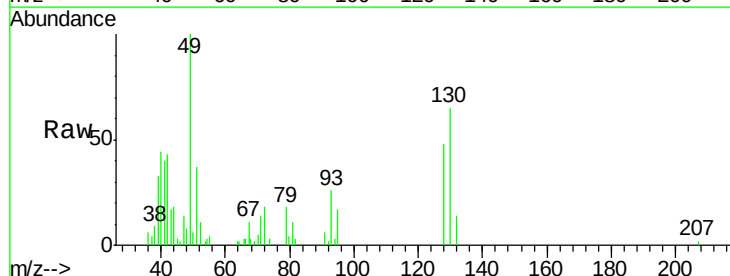
MMDadoda
 4/19/2019 12:52:49 PM

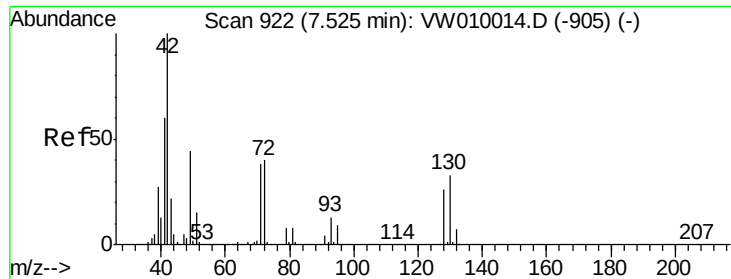


#28

Bromochloromethane
 Concen: 2.423 ug/l
 RT: 7.51 min Scan# 919
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.7	0.0	3.8
130	65.7	54.6	82.0





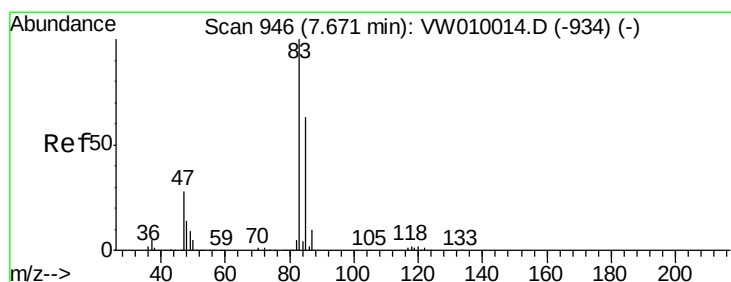
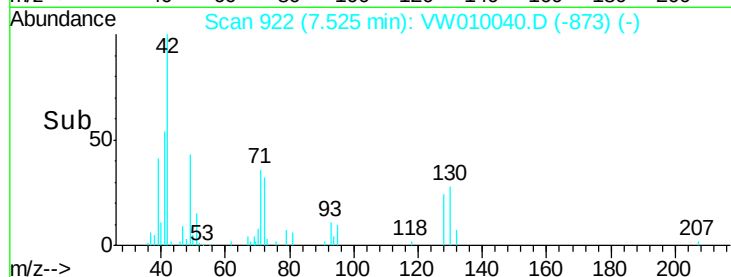
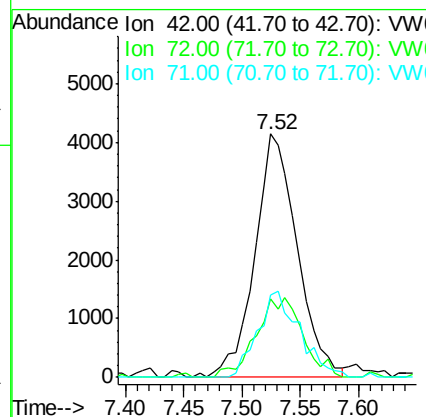
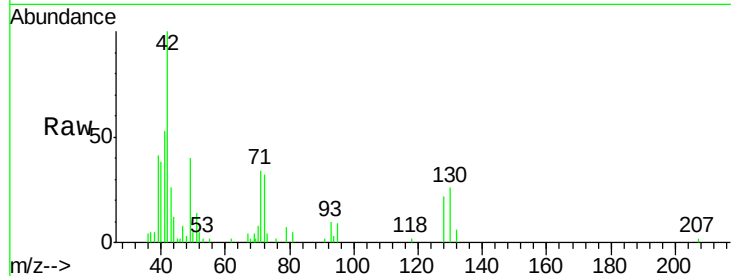
#29
Tetrahydrofuran
Concen: 11.298 ug/l
RT: 7.52 min Scan# 922
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
42	100		
72	36.0	31.0	46.6
71	34.8	29.7	44.5

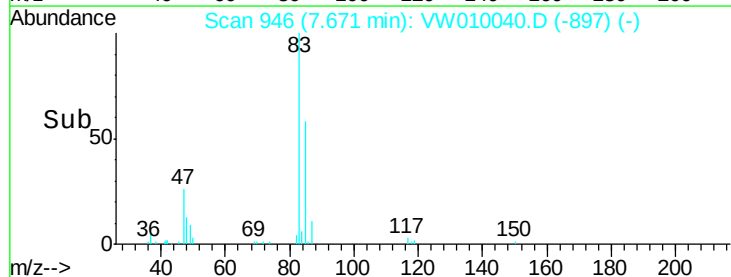
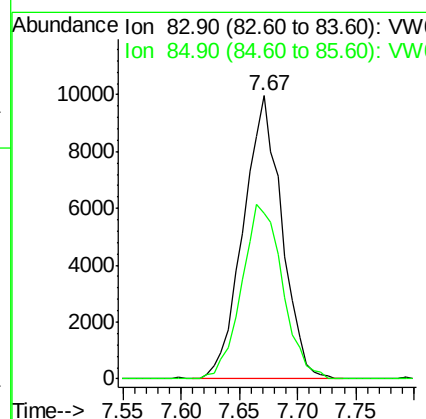
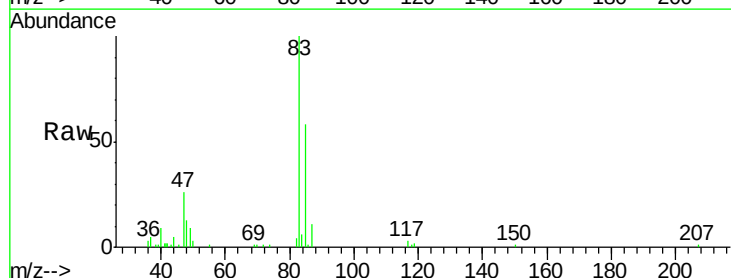
Manual Integrations
APPROVED

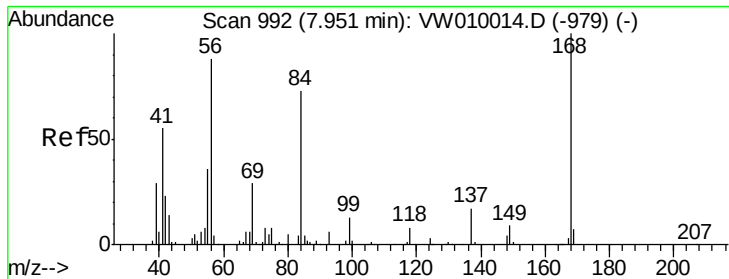
MMDadoda
4/19/2019 12:52:49 PM



#30
Chloroform
Concen: 2.758 ug/l
RT: 7.67 min Scan# 946
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
83	100		
85	58.5	50.7	76.1





#31

Cyclohexane

Concen: 3.269 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

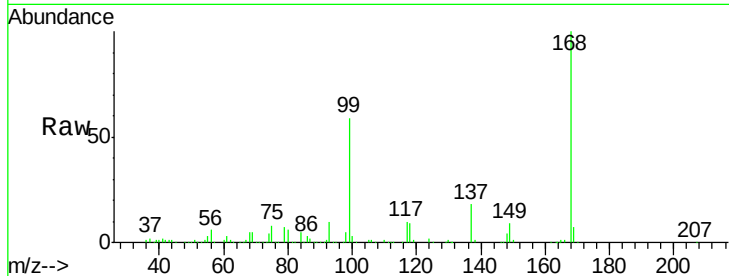
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

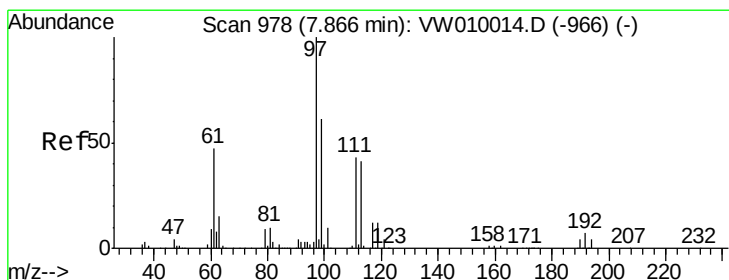
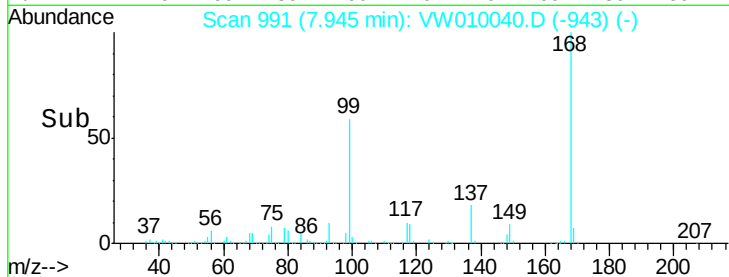
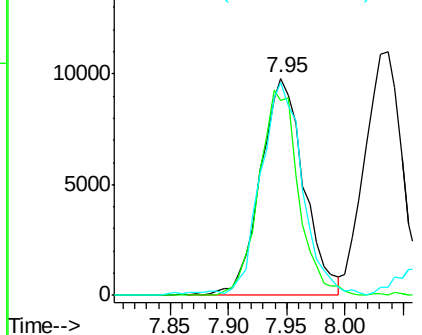
Tot Ion:	56	Resp:	25370
Ion Ratio	Lower	Upper	
56	100		
69	89.6	26.6	40.0#
84	97.0	66.2	99.2

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



Abundance Ion 56.00 (55.70 to 56.70): VW
Ion 69.00 (68.70 to 69.70): VW
Ion 84.00 (83.70 to 84.70): VW



#32

1,1,1-Trichloroethane

Concen: 2.692 ug/l

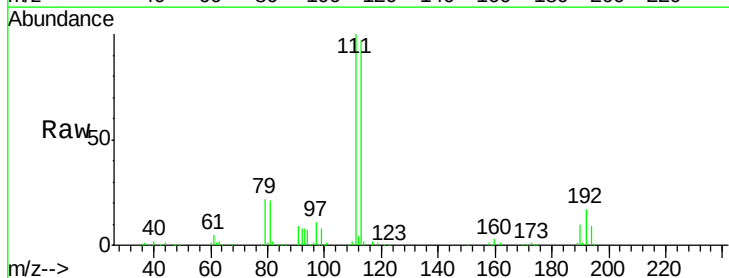
RT: 7.87 min Scan# 978

Delta R.T. -0.00 min

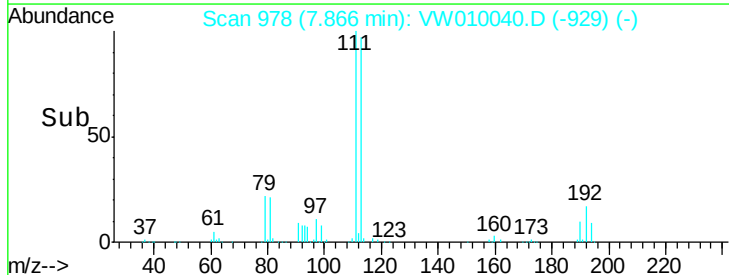
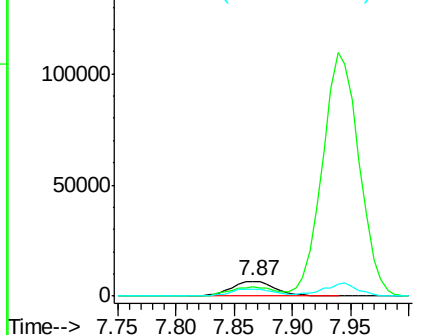
Lab File: VW010040.D

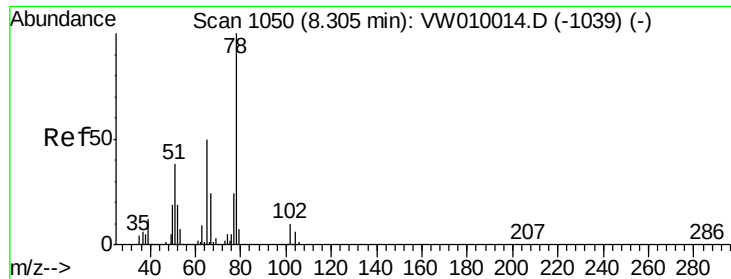
Acq: 18 Apr 2019 12:55

Tgt Ion:	97	Resp:	17550
Ion Ratio	Lower	Upper	
97	100		
99	67.2	50.2	75.2
61	47.7	38.2	57.2



Abundance Ion 96.90 (96.60 to 97.60): VW
Ion 98.90 (98.60 to 99.60): VW
Ion 60.90 (60.60 to 61.60): VW





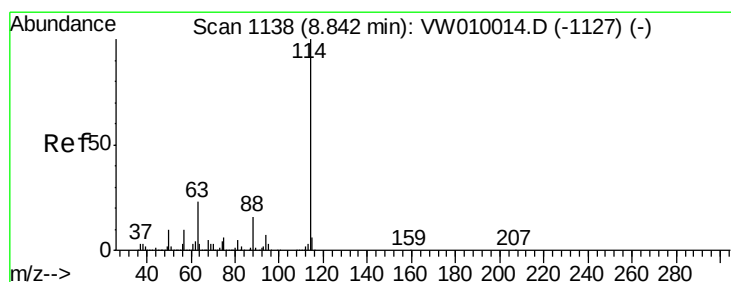
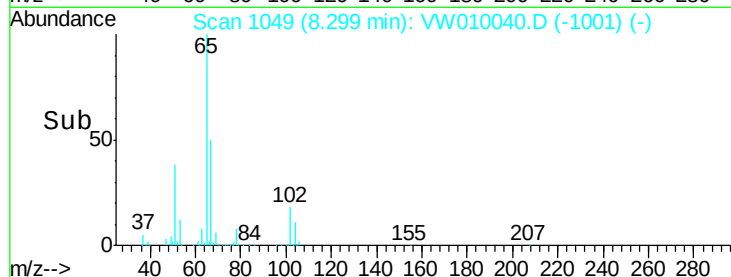
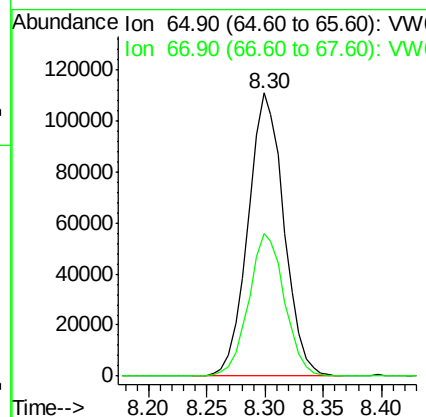
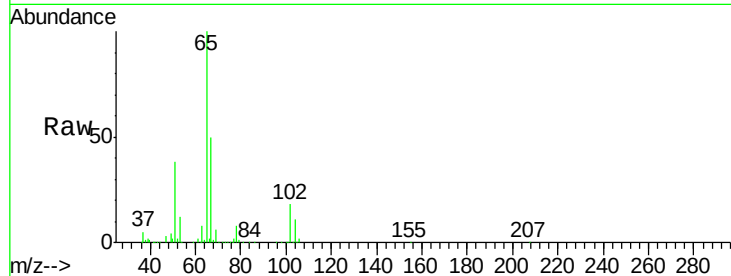
#33
 1,2-Dichloroethane-d4
 Concen: 49.658 ug/l
 RT: 8.30 min Scan# 1049
 Delta R.T. -0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
65	100			
67	50.3	0.0	100.8	

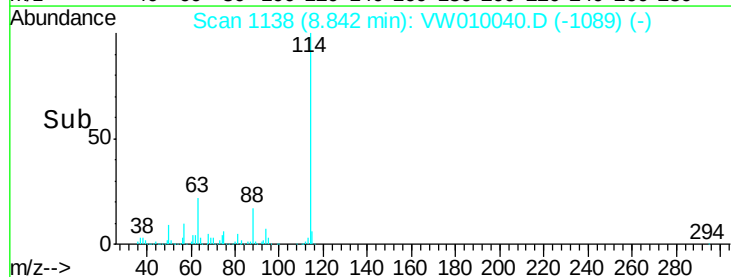
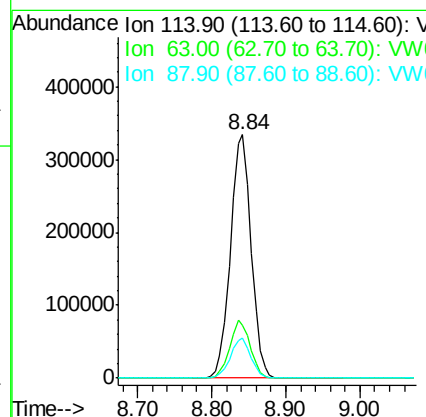
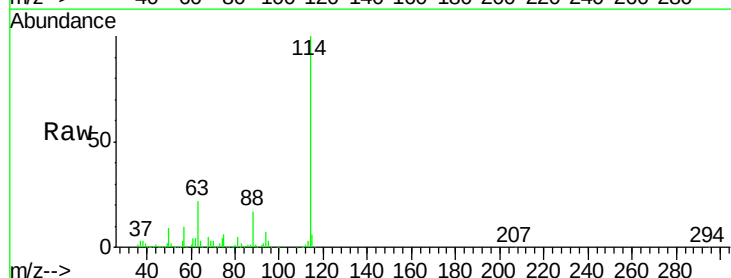
Manual Integrations
 APPROVED

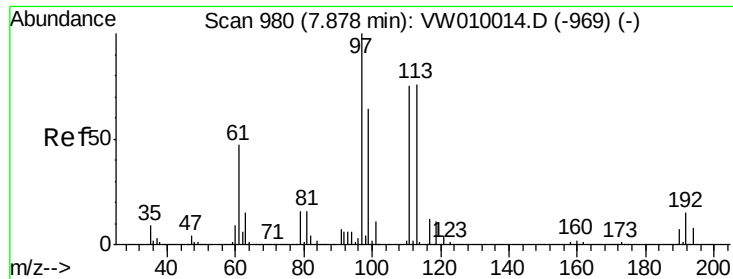
MMDadoda
 4/19/2019 12:52:49 PM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.84 min Scan# 1138
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Resp	Lower	Upper
114	100			
63	21.8	0.0	46.2	
88	16.6	0.0	32.6	





#35

Dibromofluoromethane

Concen: 47.165 ug/l

RT: 7.88 min Scan# 980

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

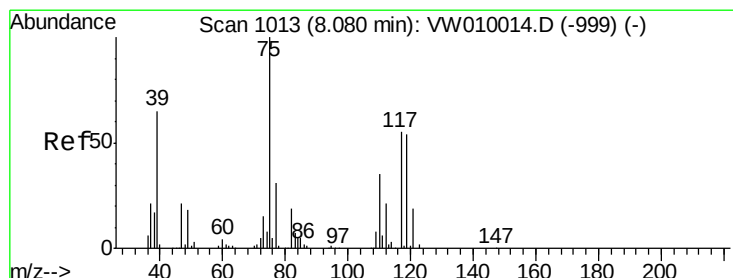
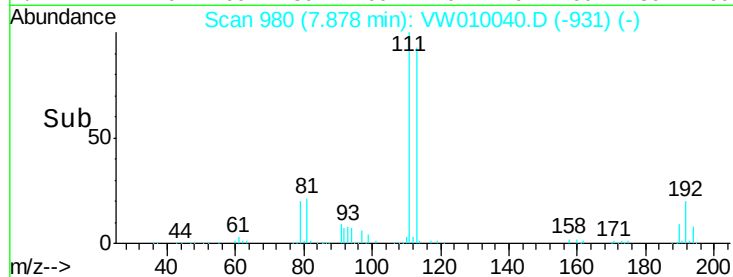
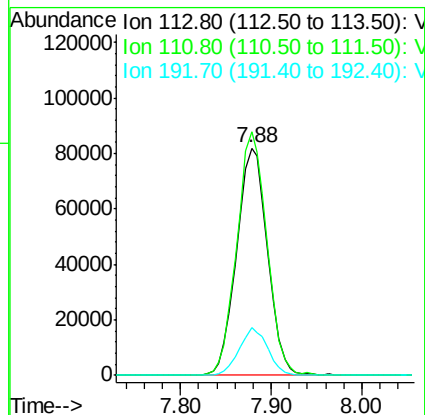
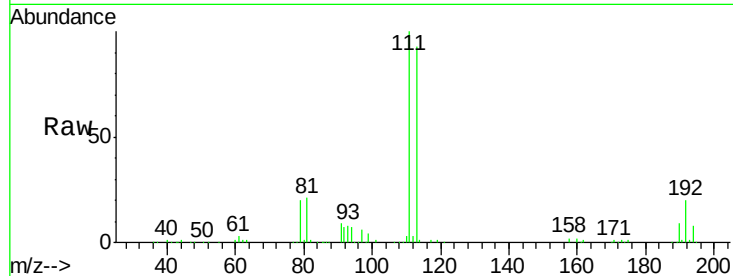
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	113	Resp:	193879
Ion Ratio	Lower	Upper	
113	100		
111	104.3	82.6	123.8
192	19.4	15.4	23.2

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#36

1,1-Dichloropropene

Concen: 2.340 ug/l

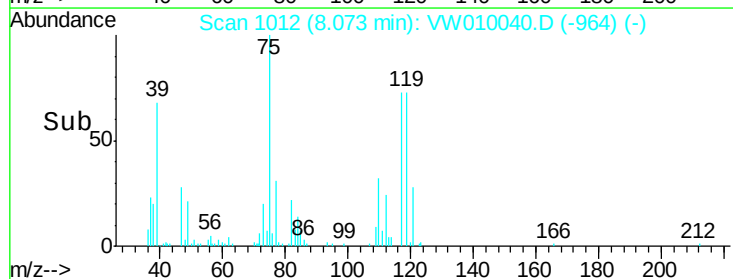
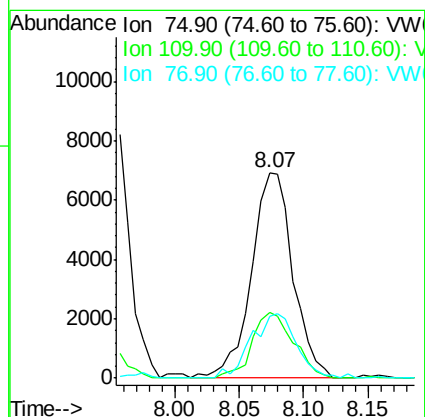
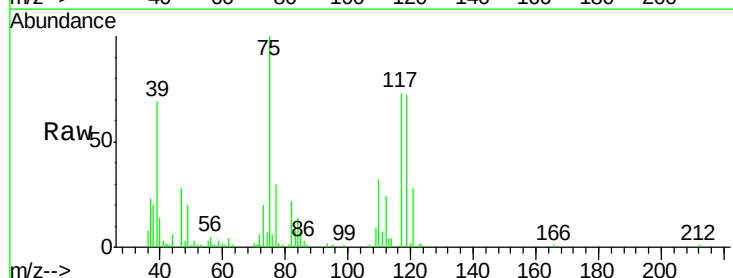
RT: 8.07 min Scan# 1012

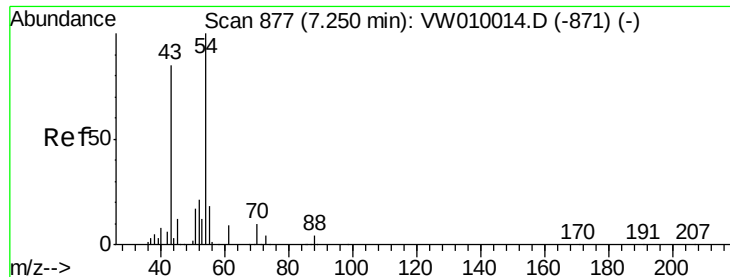
Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	75	Resp:	15452
Ion Ratio	Lower	Upper	
75	100		
110	32.0	16.6	49.8
77	34.1	24.8	37.2





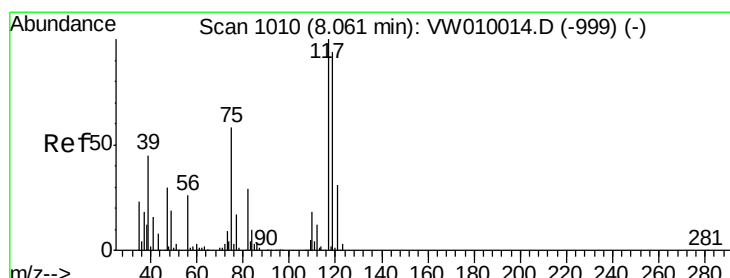
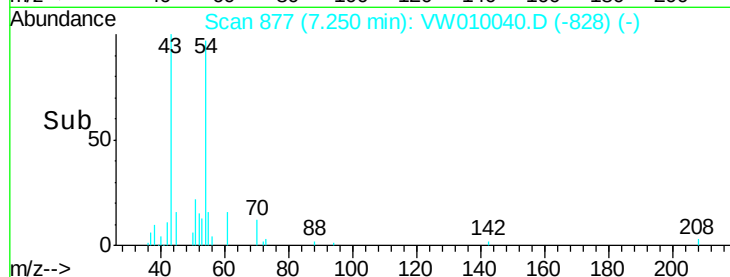
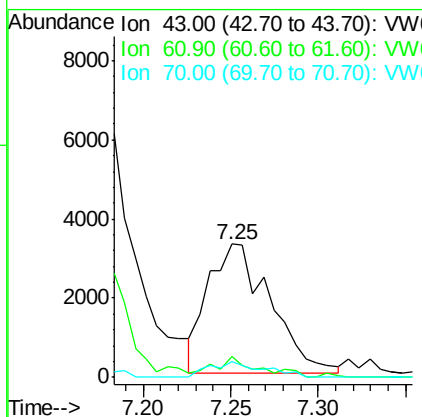
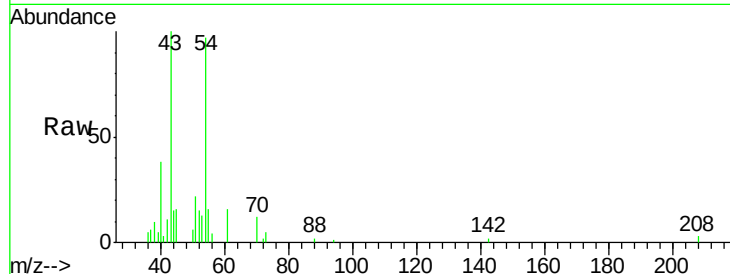
#37
Ethyl Acetate
Concen: 2.418 ug/l
RT: 7.25 min Scan# 877
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
43	100		
61	11.1	9.8	14.8
70	10.5	7.4	11.0

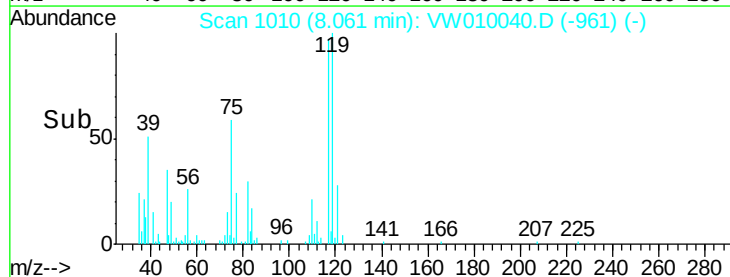
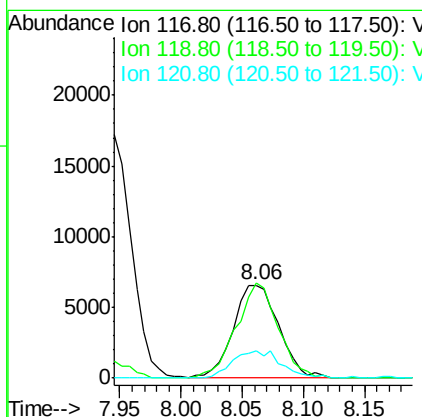
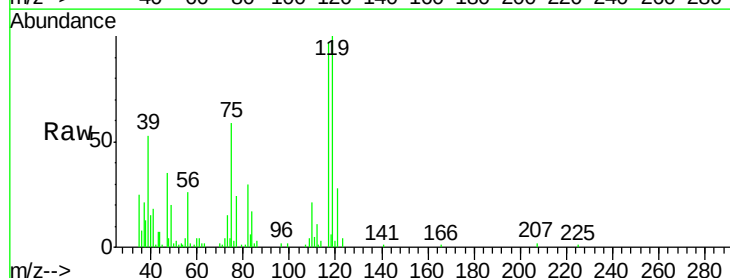
Manual Integrations
APPROVED

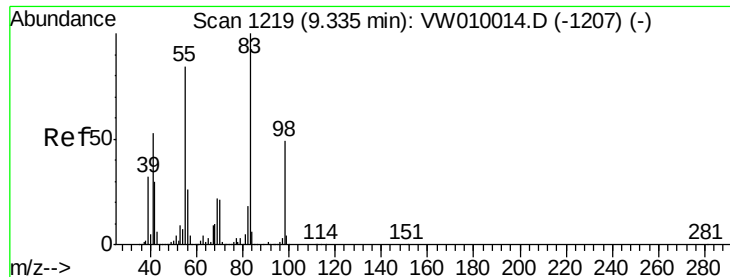
MMDadoda
4/19/2019 12:52:49 PM



#38
Carbon Tetrachloride
Concen: 2.642 ug/l
RT: 8.06 min Scan# 1010
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
117	100		
119	102.8	75.3	112.9
121	28.7	24.4	36.6





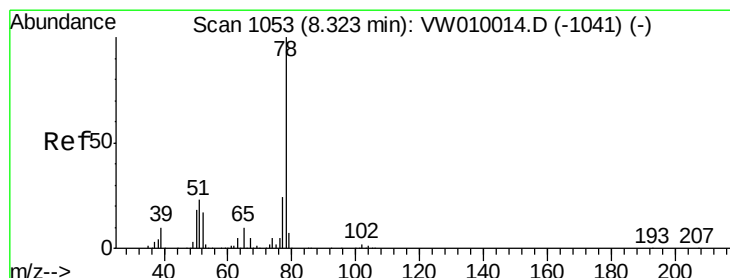
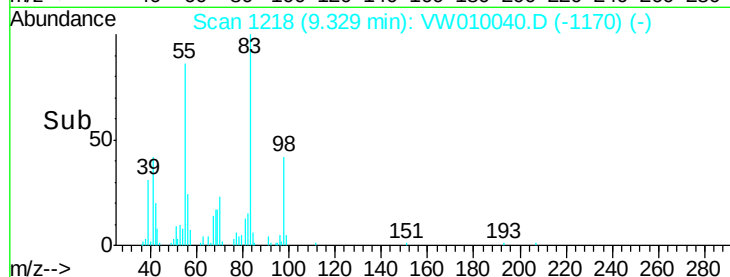
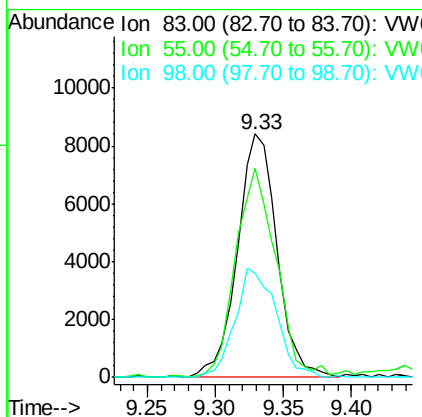
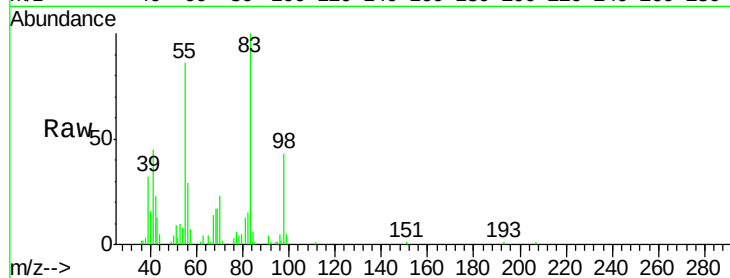
#39
Methylvlcyclohexane
Concen: 2.303 ug/l
RT: 9.33 min Scan# 1218
Delta R.T. -0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	83	Resp	17114
Ion Ratio	Lower	Upper	
83	100		
55	85.6	67.1	100.7
98	42.6	39.2	58.8

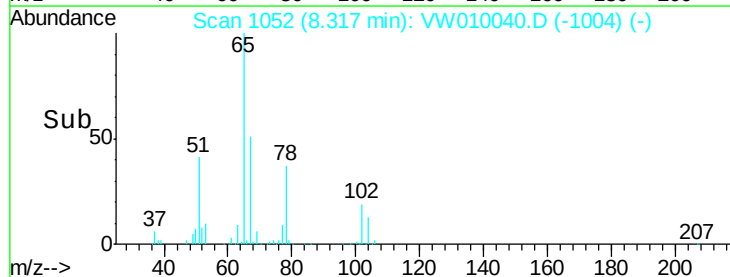
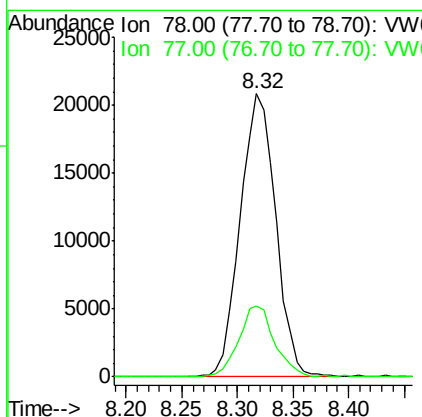
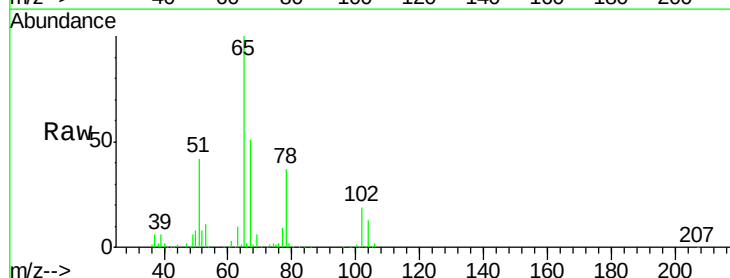
Manual Integrations
APPROVED

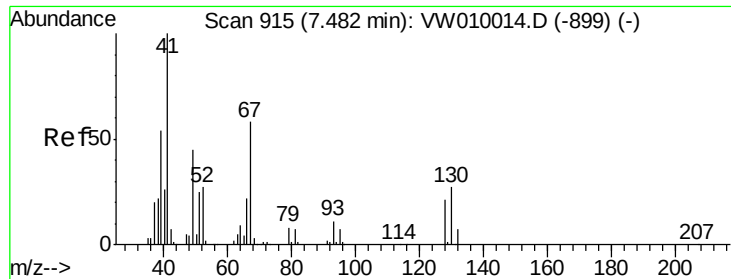
MMDadoda
4/19/2019 12:52:49 PM



#40
Benzene
Concen: 2.562 ug/l
RT: 8.32 min Scan# 1052
Delta R.T. -0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	78	Resp	46268
Ion Ratio	Lower	Upper	
78	100		
77	25.1	19.1	28.7





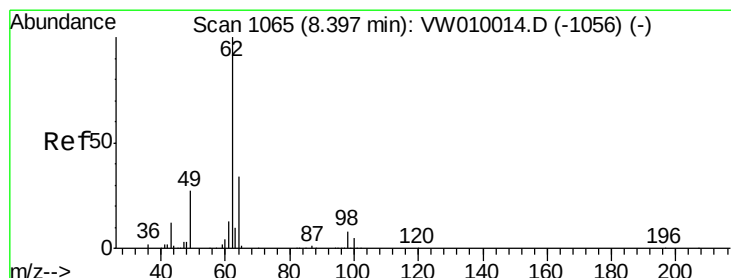
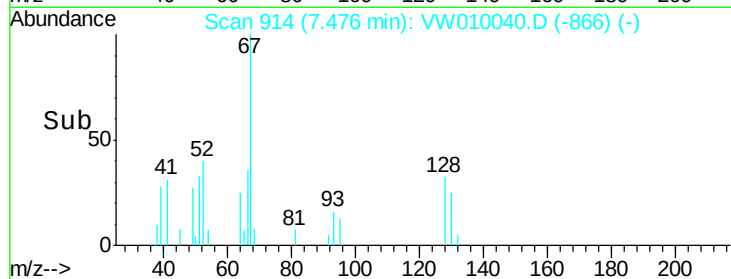
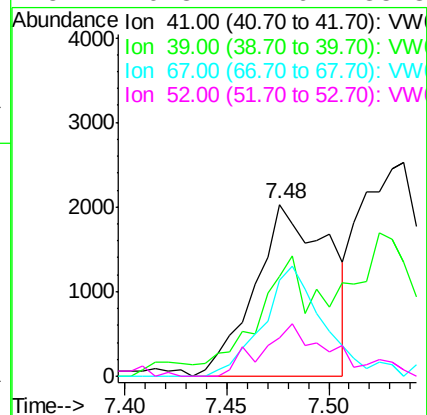
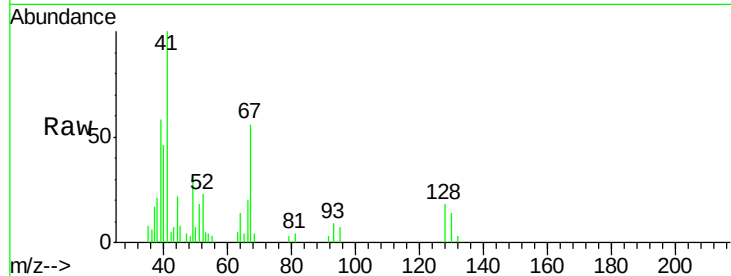
#41
Methacrylonitrile
Concen: 2.677 ug/l
RT: 7.48 min Scan# 914
Delta R.T. -0.01 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
41	100		
39	53.5	45.0	67.4
67	53.0	50.7	76.1
52	26.3	22.6	33.8

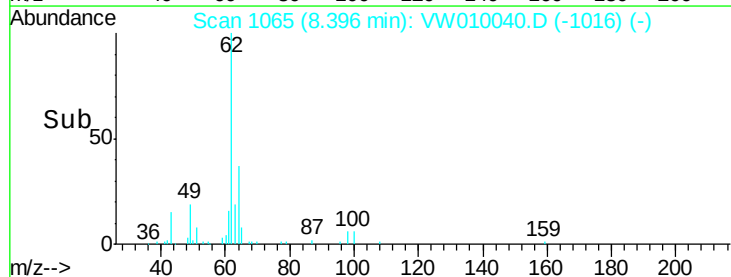
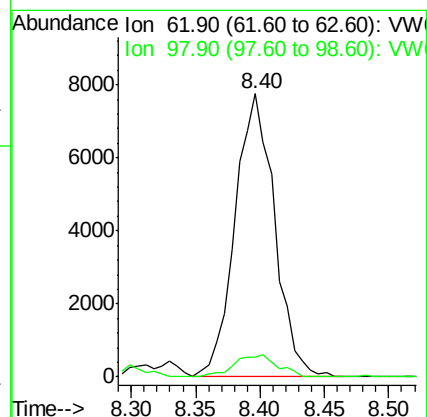
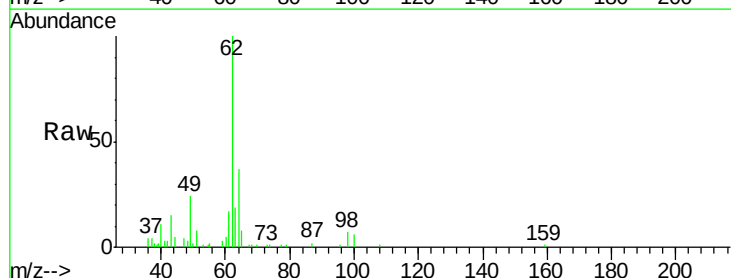
Manual Integrations
APPROVED

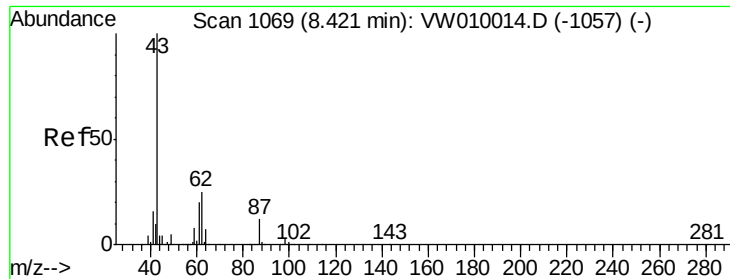
MMDadoda
4/19/2019 12:52:49 PM



#42
1,2-Dichloroethane
Concen: 2.659 ug/l
RT: 8.40 min Scan# 1065
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
62	100		
98	8.5	0.0	16.6





#43

Isopropyl Acetate

Concen: 2.312 ug/l

RT: 8.42 min Scan# 1069

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

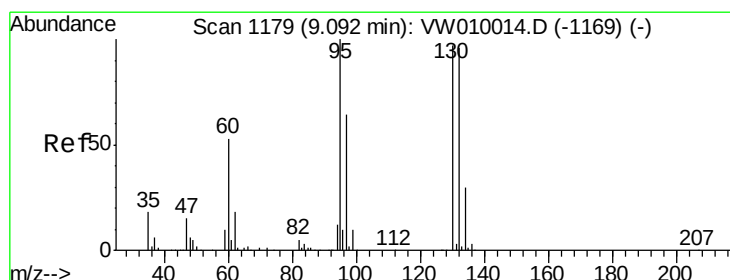
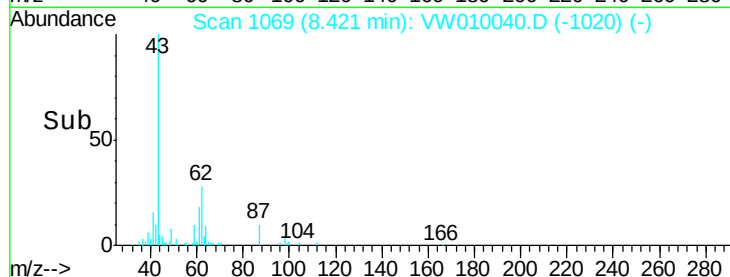
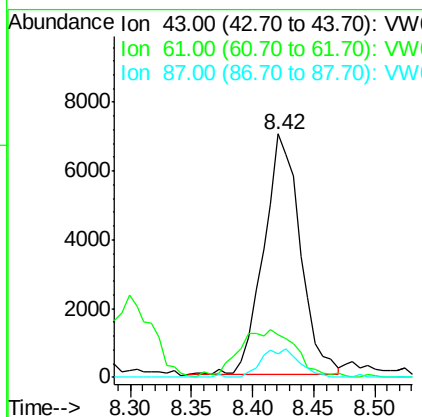
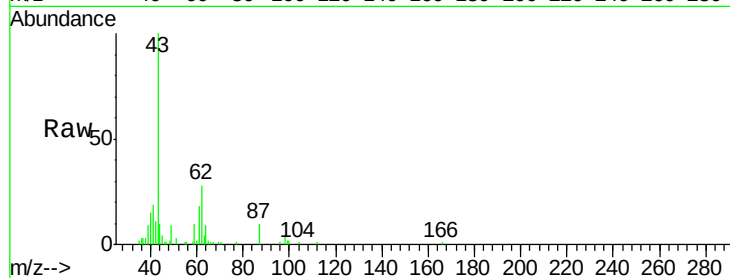
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	43	Resp:	14542
Ion Ratio	Lower	Upper	
43	100		
61	0.0	23.0	34.6#
87	12.3	9.3	13.9

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#44

Trichloroethene

Concen: 2.570 ug/l

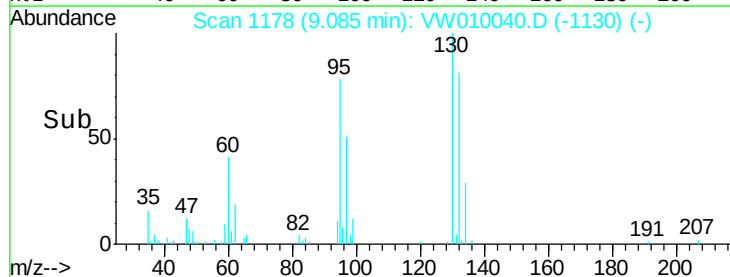
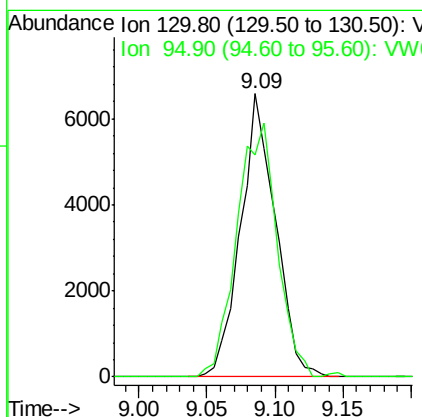
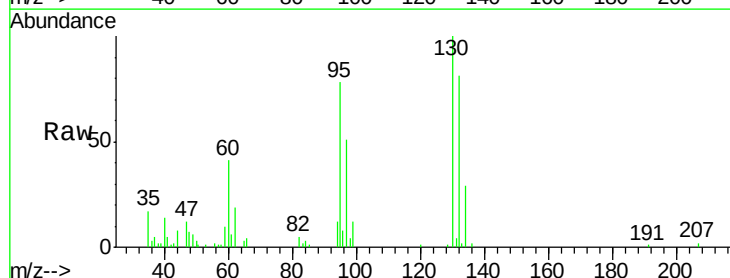
RT: 9.09 min Scan# 1178

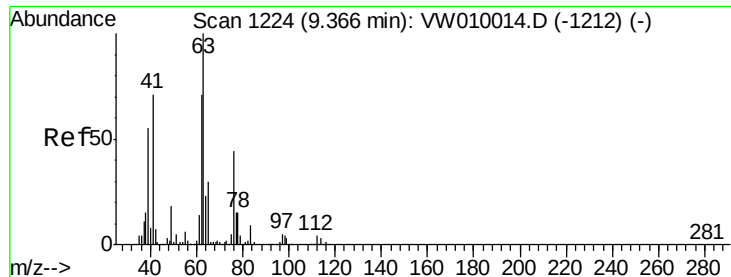
Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	130	Resp:	11786
Ion Ratio	Lower	Upper	
130	100		
95	78.2	0.0	205.4





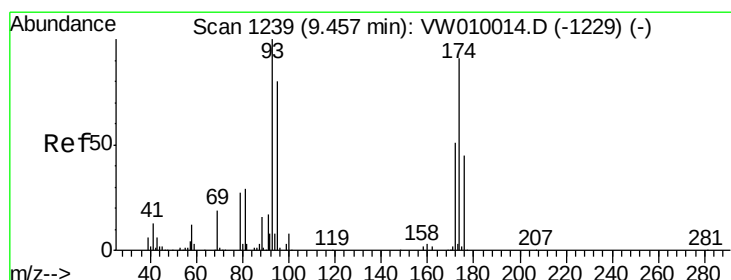
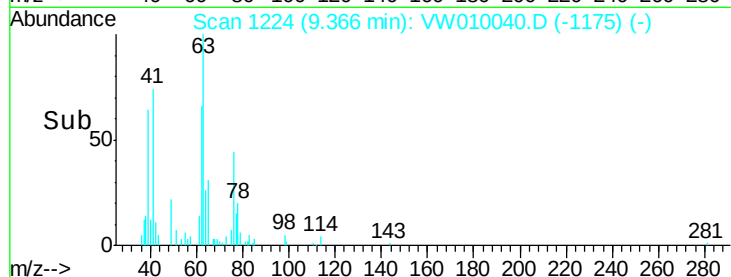
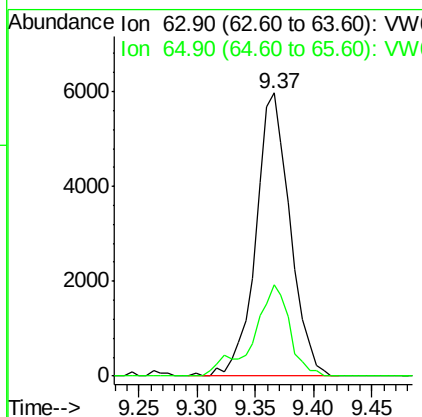
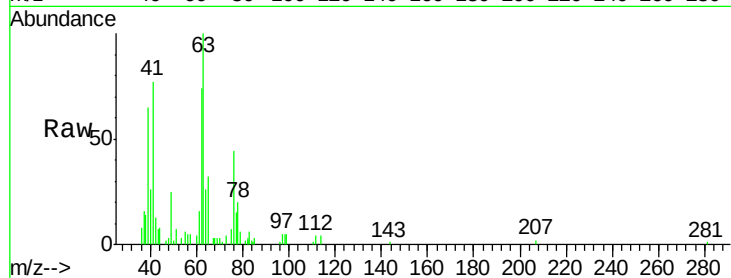
#45
 1,2-Dichloropropane
 Concen: 2.572 ug/l
 RT: 9.37 min Scan# 1224
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
63	100		
65	32.2	23.8	35.6

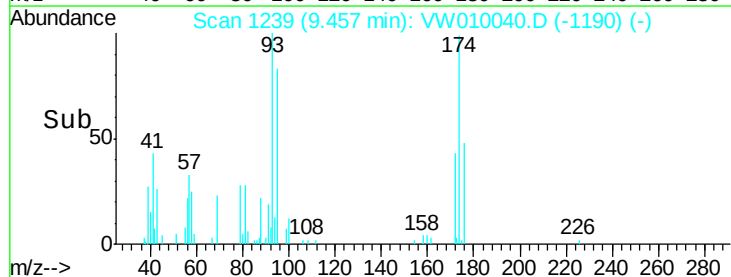
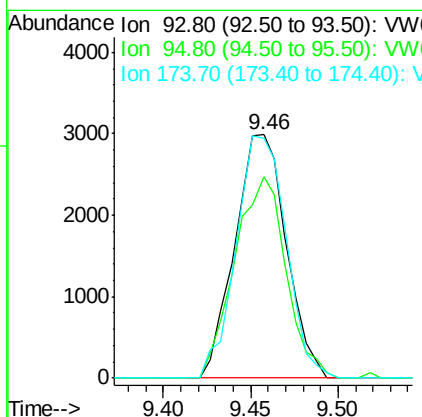
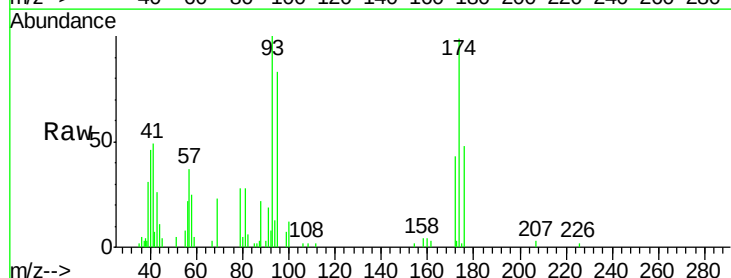
Manual Integrations
 APPROVED

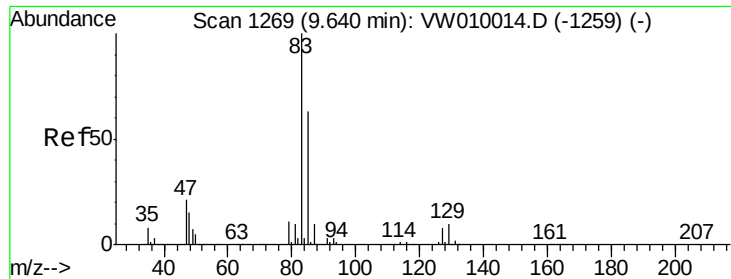
MMDadoda
 4/19/2019 12:52:49 PM



#46
 Dibromomethane
 Concen: 2.480 ug/l
 RT: 9.46 min Scan# 1239
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
93	100		
95	82.8	65.8	98.8
174	97.0	75.5	113.3





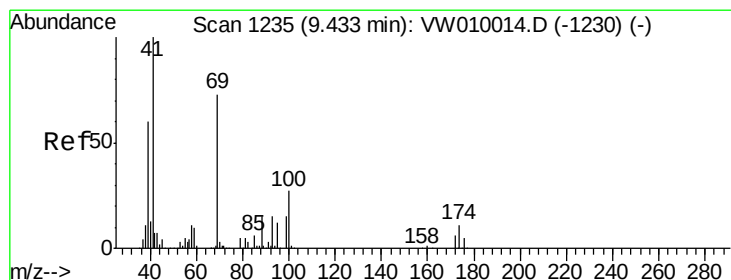
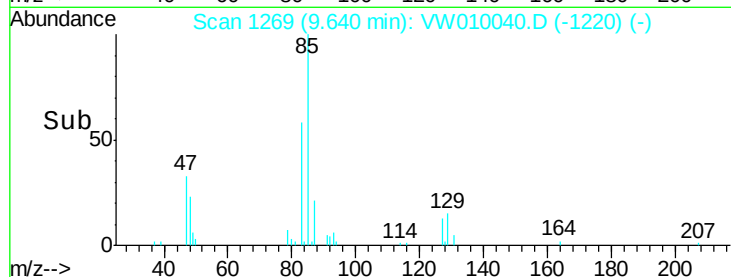
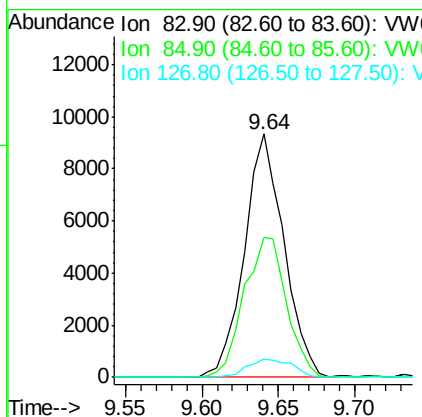
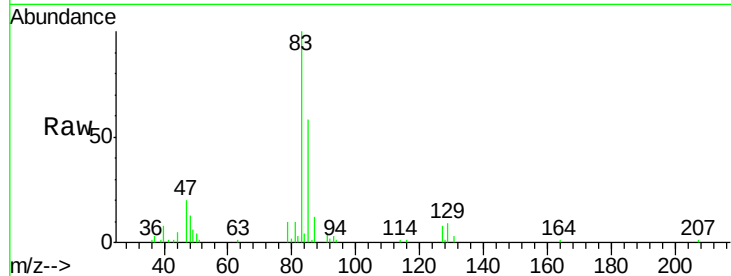
#47
Bromodichloromethane
Concen: 2.649 ug/l
RT: 9.64 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	83	Resp	16823
Ion Ratio	100	Lower	Upper
83	100		
85	57.7	50.6	75.8
127	7.5	6.6	10.0

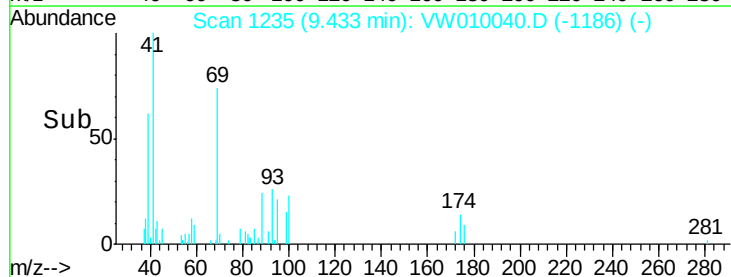
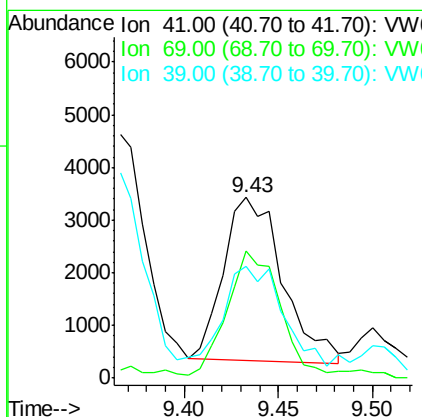
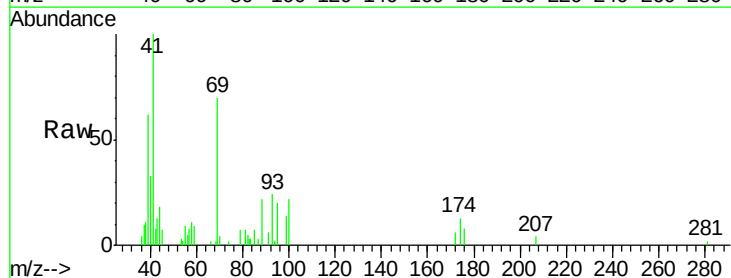
Manual Integrations
APPROVED

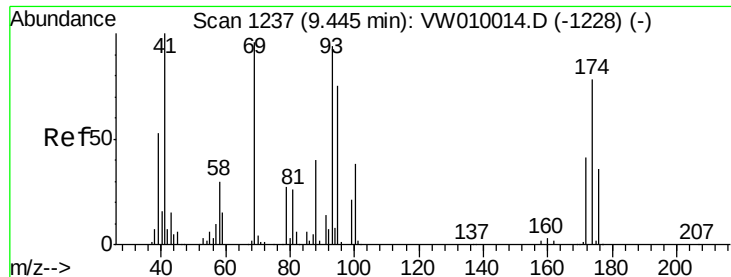
MMDadoda
4/19/2019 12:52:49 PM



#48
Methyl methacrylate
Concen: 2.219 ug/l
RT: 9.43 min Scan# 1235
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	41	Resp	6792
Ion Ratio	100	Lower	Upper
41	100		
69	66.3	60.1	90.1
39	74.1	51.0	76.6





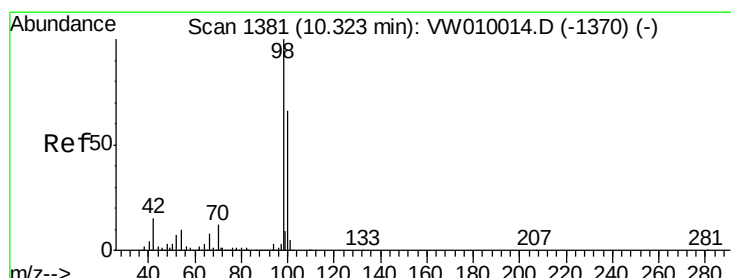
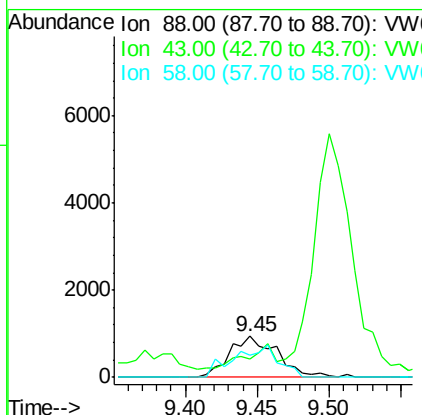
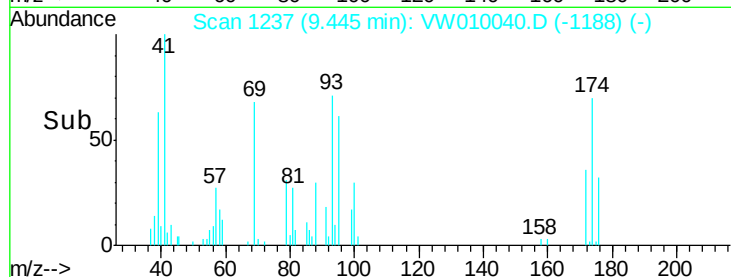
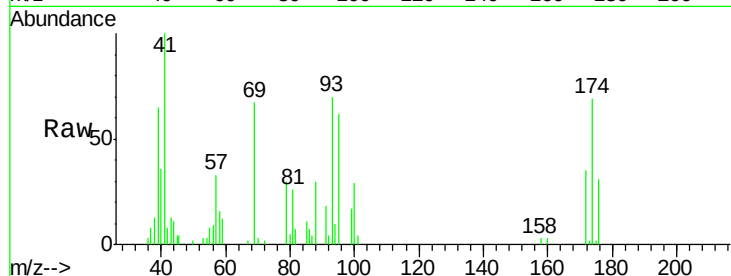
#49
1,4-Dioxane
Concen: 58.284 ug/l
RT: 9.45 min Scan# 1237
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
88	100	2191		
43	58.2		31.9	47.9#
58	72.3		61.8	92.6

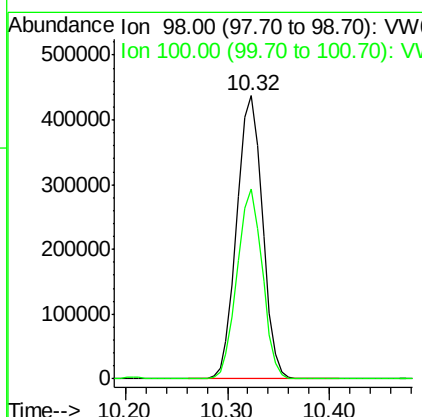
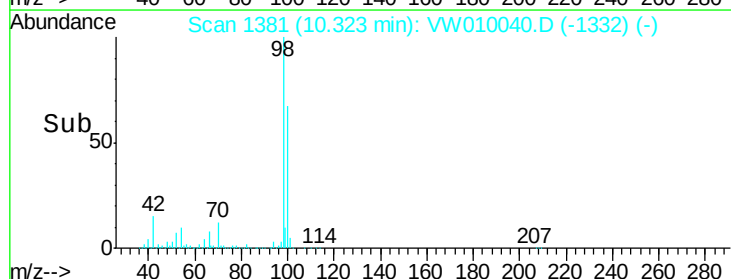
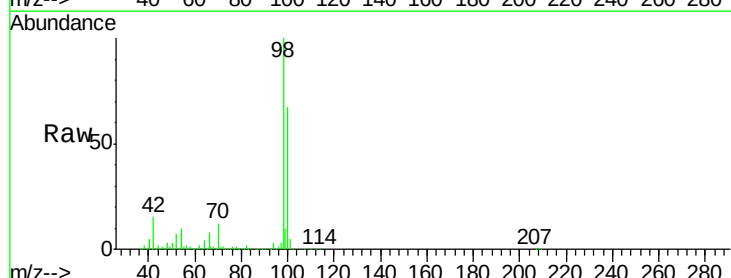
Manual Integrations
APPROVED

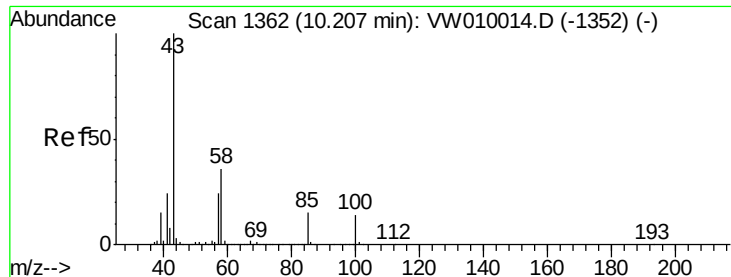
MMDadoda
4/19/2019 12:52:49 PM



#50
Toluene-d8
Concen: 49.545 ug/l
RT: 10.32 min Scan# 1381
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Resp	Lower	Upper
98	100	763154		
100	65.7		52.3	78.5





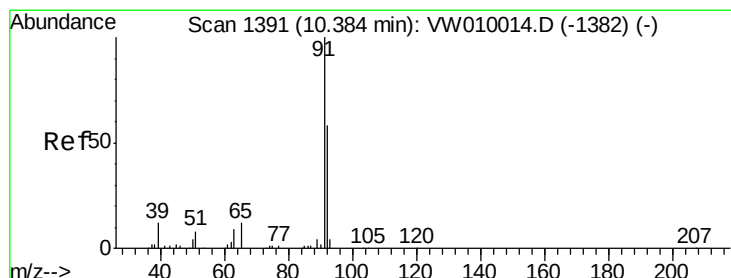
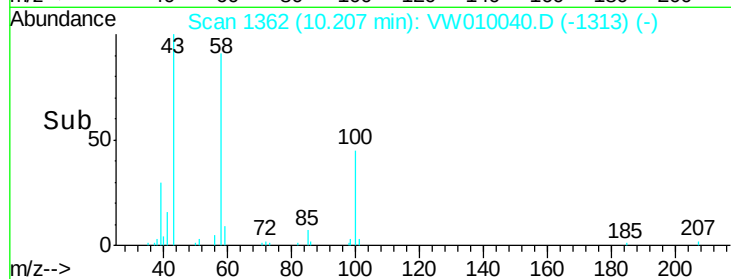
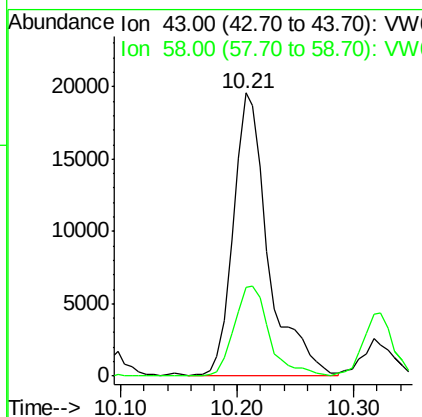
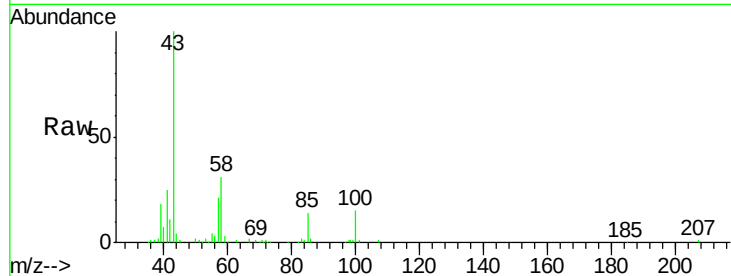
#51
 4-Methyl-2-Pentanone
 Concen: 12.318 ug/l
 RT: 10.21 min Scan# 1362
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 43 Resp: 40575
 Ion Ratio Lower Upper
 43 100
 58 32.2 28.9 43.3

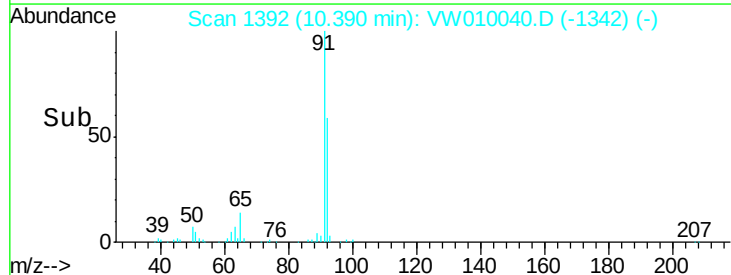
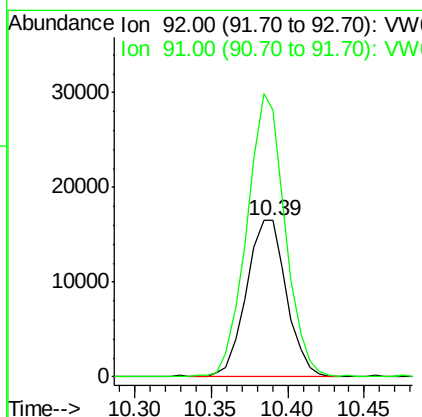
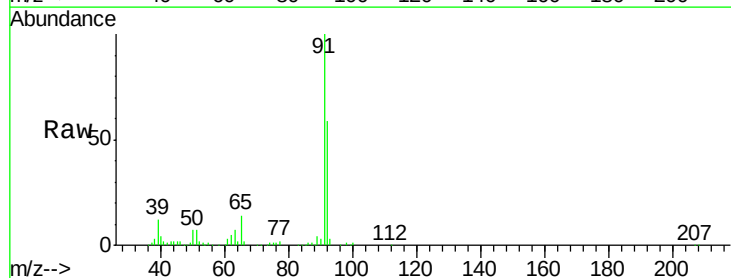
Manual Integrations
 APPROVED

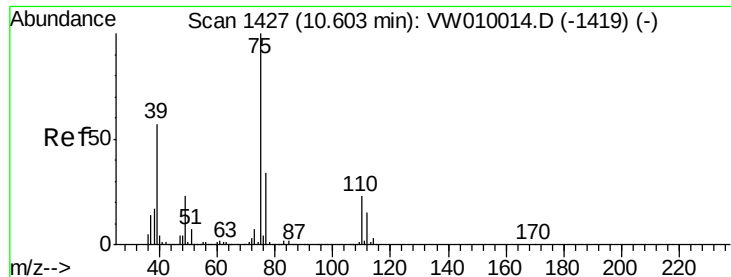
MMDadoda
 4/19/2019 12:52:49 PM



#52
 Toluene
 Concen: 2.684 ug/l
 RT: 10.39 min Scan# 1392
 Delta R.T. 0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion: 92 Resp: 30192
 Ion Ratio Lower Upper
 92 100
 91 172.5 138.5 207.7





#53

t-1,3-Dichloropropene

Concen: 2.372 ug/l

RT: 10.60 min Scan# 1427

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 75 Resp: 14934

Ion Ratio Lower Upper

75 100

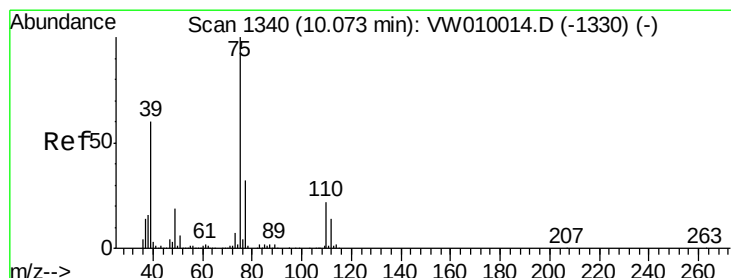
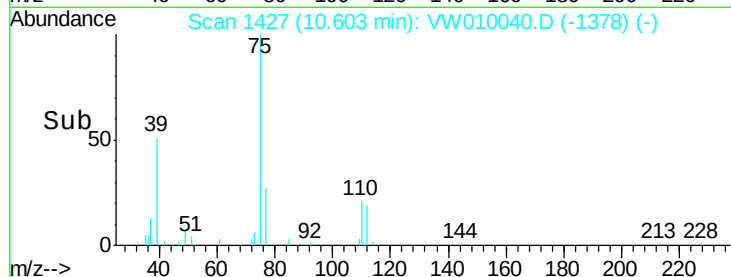
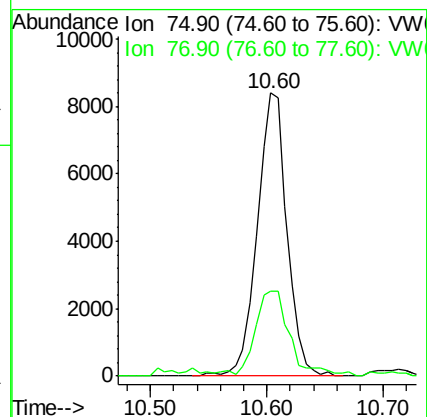
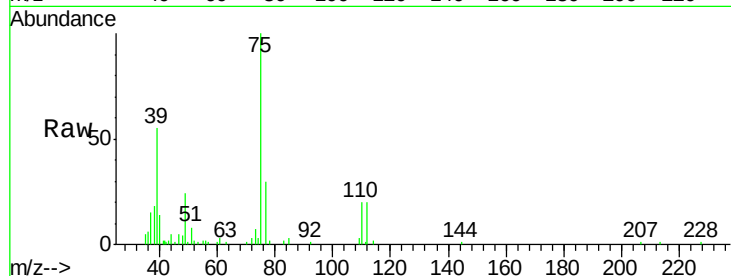
77 29.4 26.9 40.3

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#54

cis-1,3-Dichloropropene

Concen: 2.383 ug/l

RT: 10.07 min Scan# 1340

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

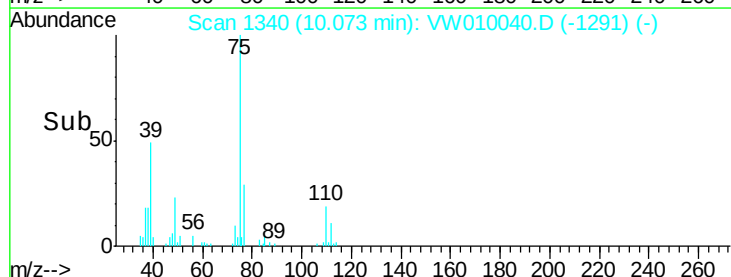
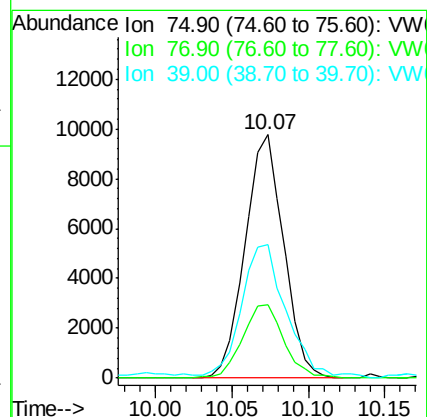
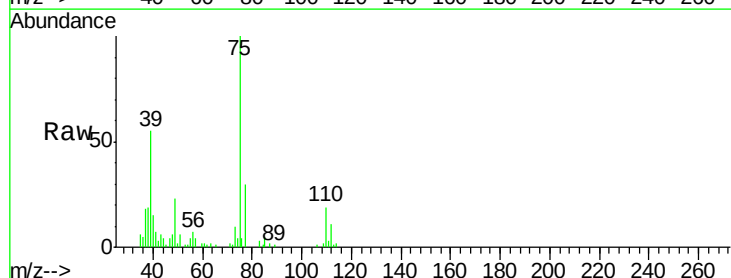
Tgt Ion: 75 Resp: 17132

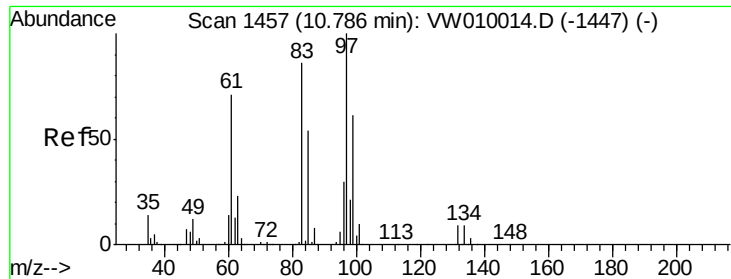
Ion Ratio Lower Upper

75 100

77 29.9 25.6 38.4

39 53.2 47.8 71.6





#55

1,1,2-Trichloroethane

Concen: 2.574 ug/l

RT: 10.79 min Scan# 1457

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

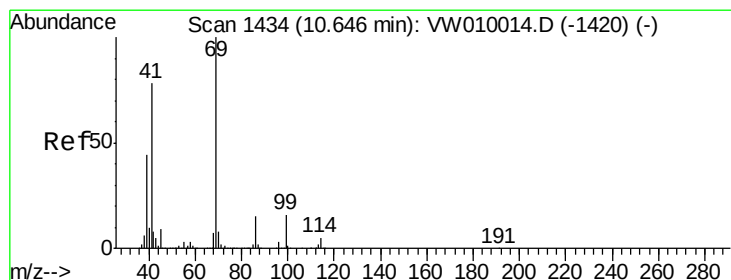
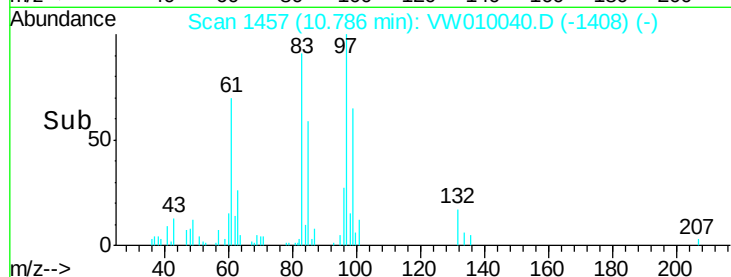
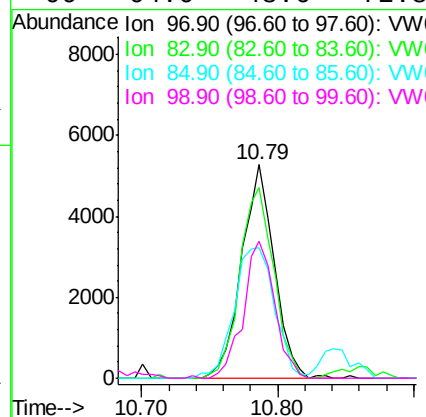
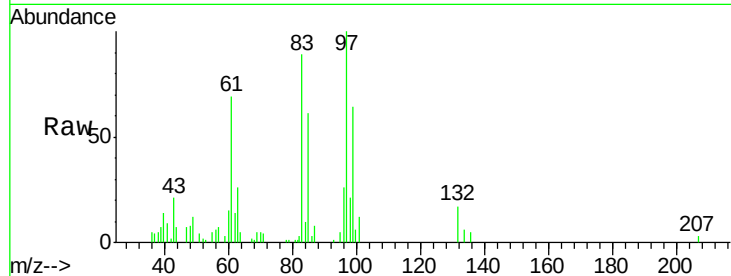
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	97	Resp:	8840
Ion	Ratio	Lower	Upper
97	100		
83	89.3	68.9	103.3
85	61.0	42.9	64.3
99	64.0	48.6	72.8

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#56

Ethyl methacrylate

Concen: 2.060 ug/l

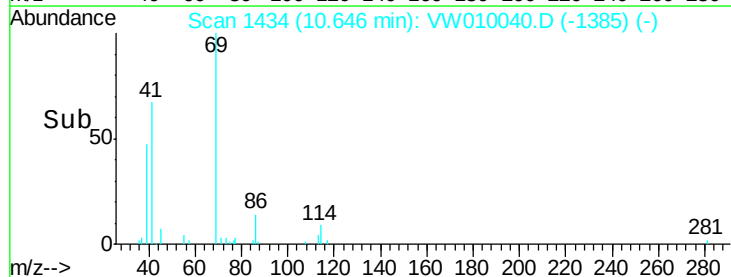
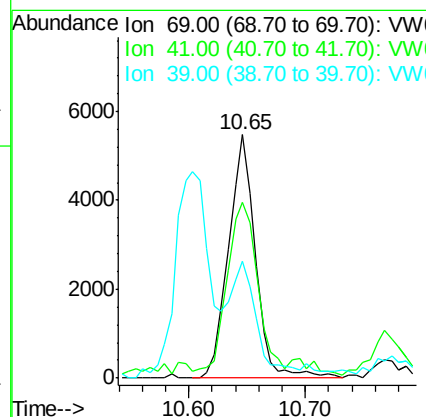
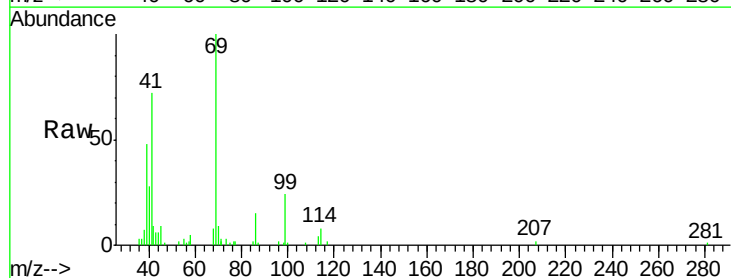
RT: 10.65 min Scan# 1434

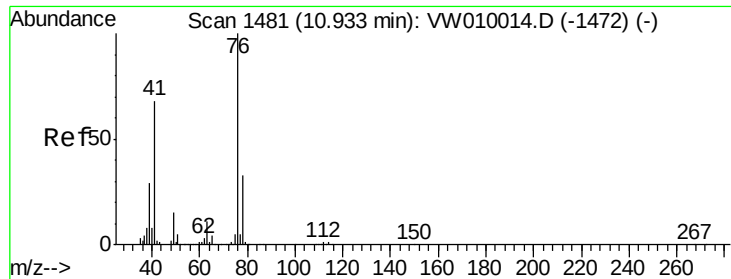
Delta R.T. 0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	69	Resp:	8795
Ion	Ratio	Lower	Upper
69	100		
41	77.2	61.0	91.6
39	41.0	33.8	50.6





#57

1,3-Dichloropropane

Concen: 2.478 ug/l

RT: 10.93 min Scan# 1481

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 76 Resp: 15250

Ion Ratio Lower Upper

76 100

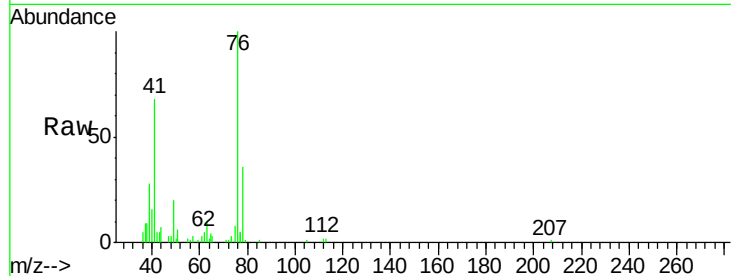
78 35.1 25.8 38.8

Manual Integrations

APPROVED

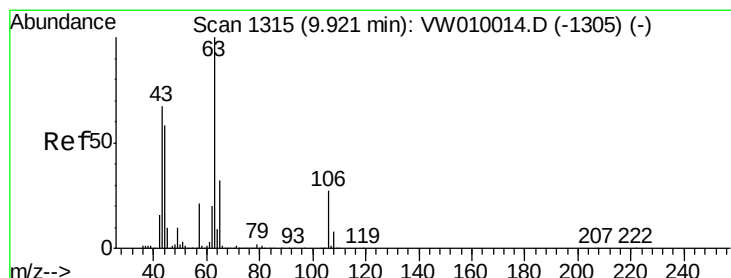
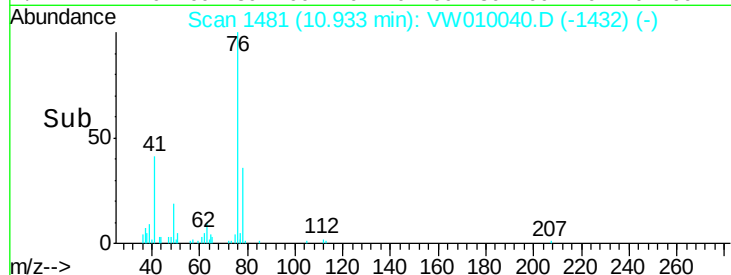
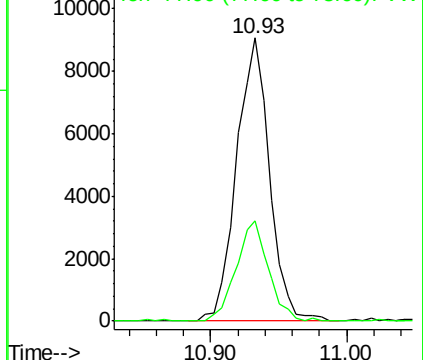
MMDadoda

4/19/2019 12:52:49 PM



Abundance Ion 75.90 (75.60 to 76.60): VW

Ion 77.90 (77.60 to 78.60): VW



#58

2-Chloroethyl Vinyl ether

Concen: 13.017 ug/l

RT: 9.92 min Scan# 1315

Delta R.T. 0.00 min

Lab File: VW010040.D

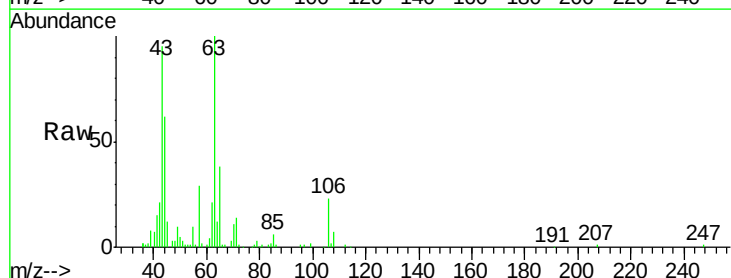
Acq: 18 Apr 2019 12:55

Tgt Ion: 63 Resp: 25590

Ion Ratio Lower Upper

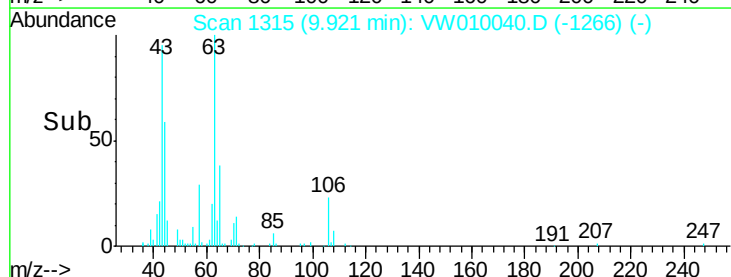
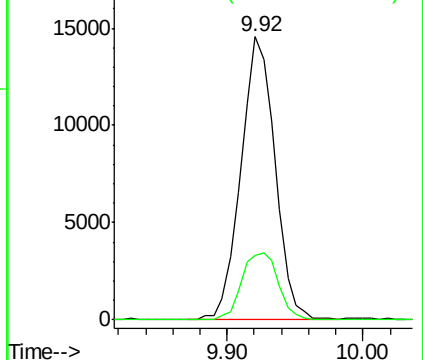
63 100

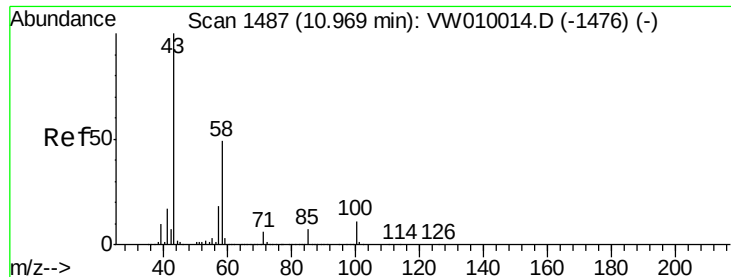
106 25.2 21.4 32.0



Abundance Ion 62.90 (62.60 to 63.60): VW

Ion 105.90 (105.60 to 106.60): V





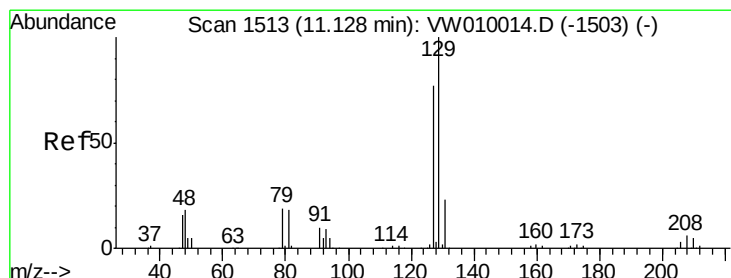
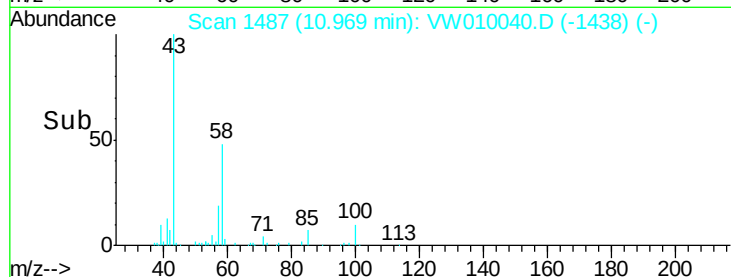
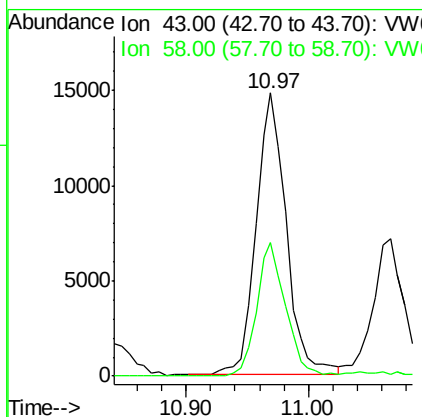
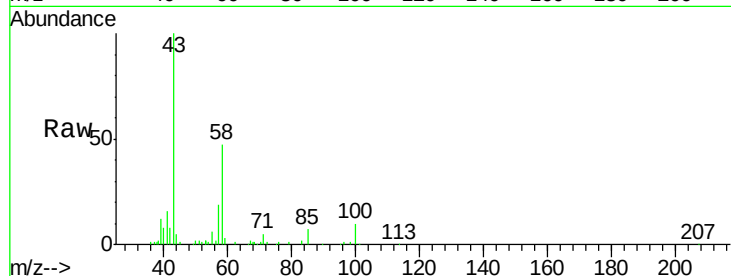
#59
2-Hexanone
Concen: 11.118 ug/l
RT: 10.97 min Scan# 1487
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 43 Resp: 25492
Ion Ratio Lower Upper
43 100
58 45.4 24.9 74.7

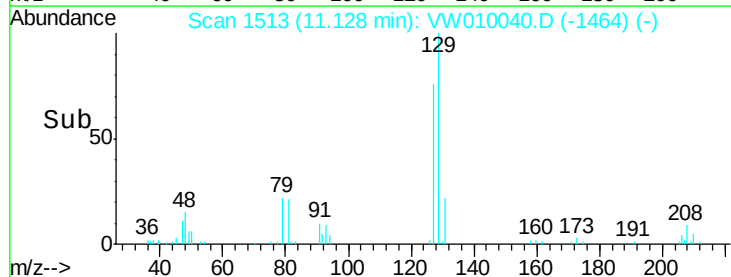
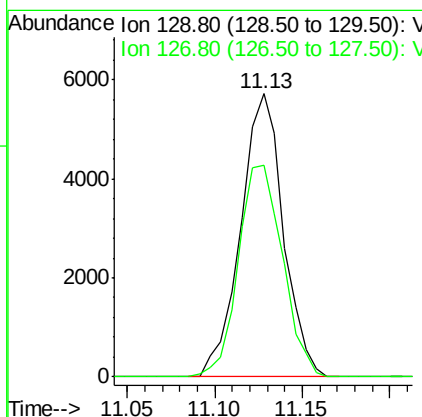
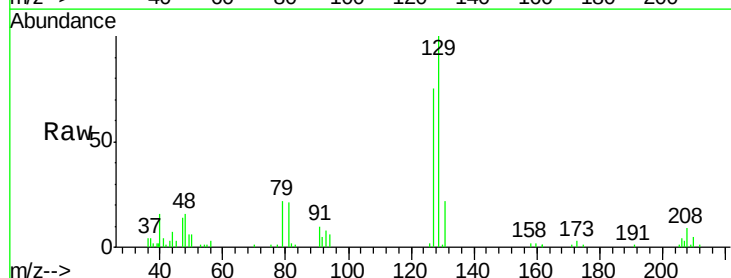
Manual Integrations
APPROVED

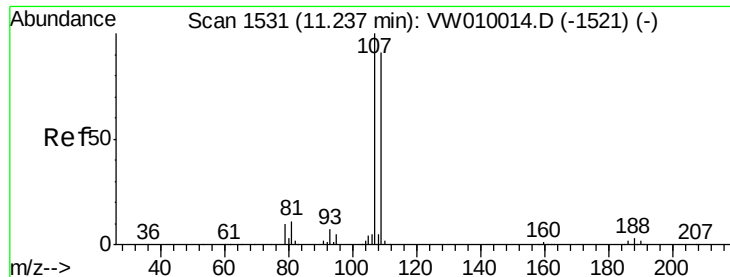
MMDadoda
4/19/2019 12:52:49 PM



#60
Dibromochloromethane
Concen: 2.440 ug/l
RT: 11.13 min Scan# 1513
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion: 129 Resp: 9684
Ion Ratio Lower Upper
129 100
127 77.5 38.6 116.0





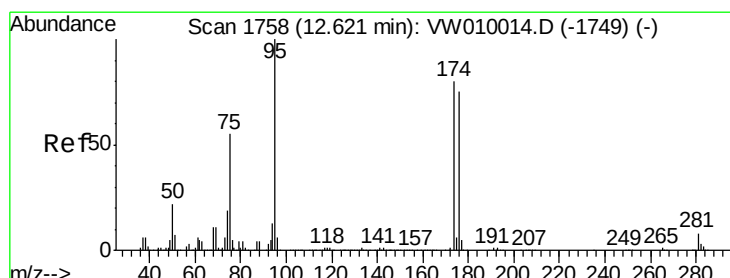
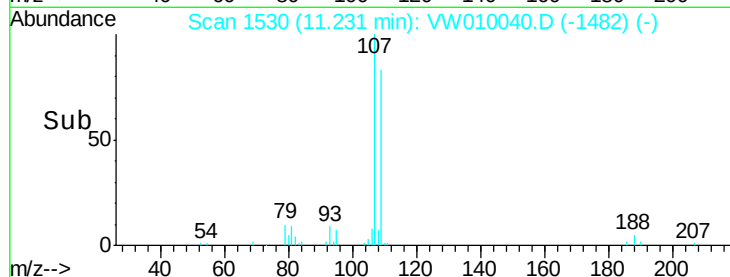
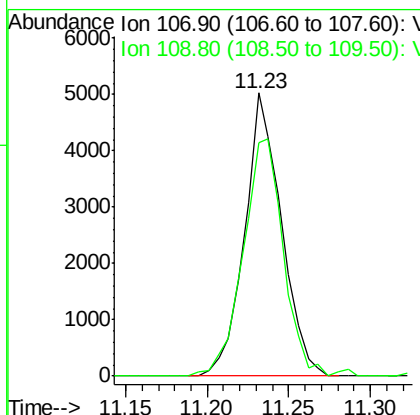
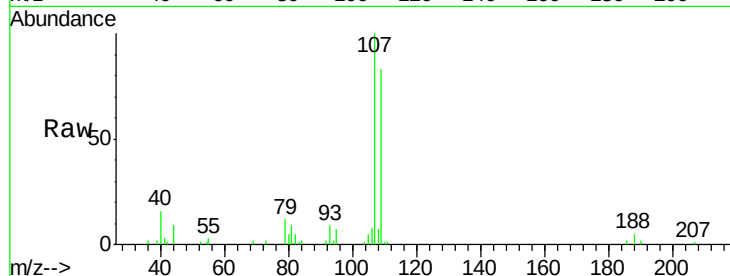
#61
 1,2-Dibromoethane
 Concen: 2.411 ug/l
 RT: 11.23 min Scan# 1530
 Delta R.T. -0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
107	100	7875		
109	92.1	73.6	110.4	

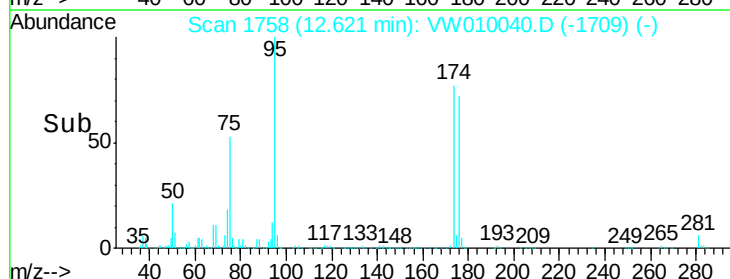
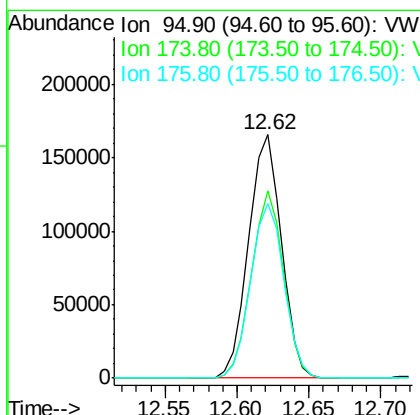
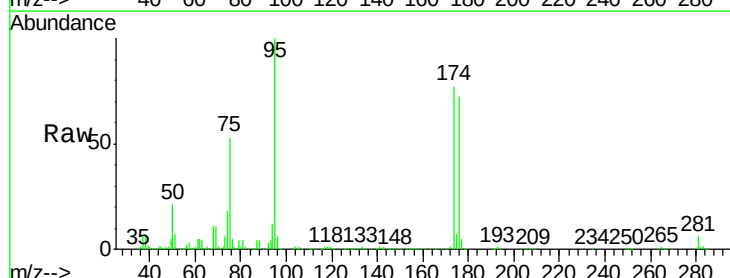
Manual Integrations
 APPROVED

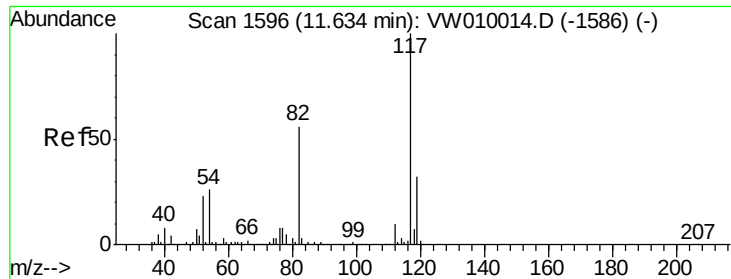
MMDadoda
 4/19/2019 12:52:49 PM



#62
 4-Bromofluorobenzene
 Concen: 46.605 ug/l
 RT: 12.62 min Scan# 1758
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Resp	Lower	Upper
95	100	260945		
174	75.5	0.0	151.4	
176	72.8	0.0	146.2	





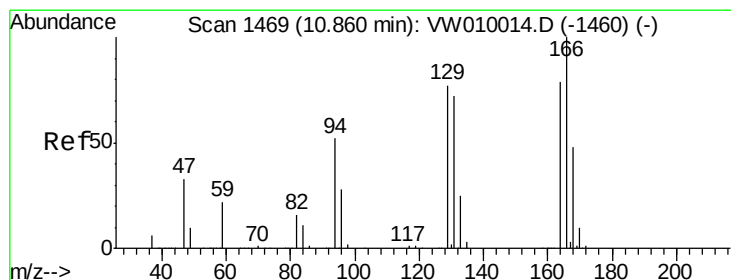
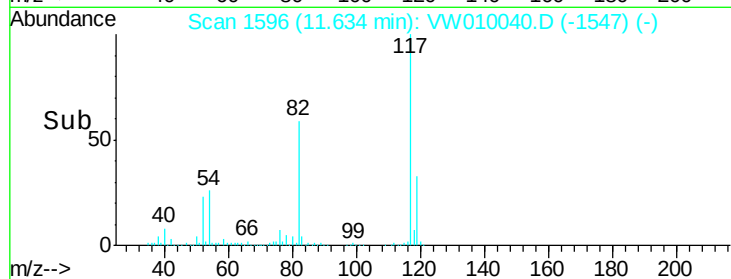
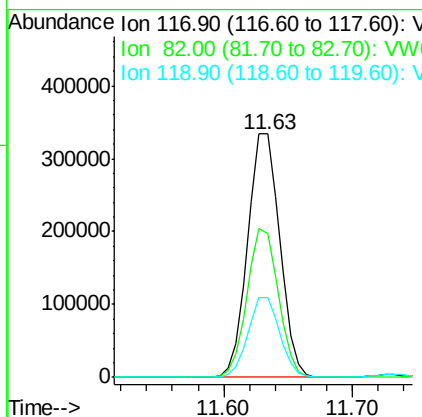
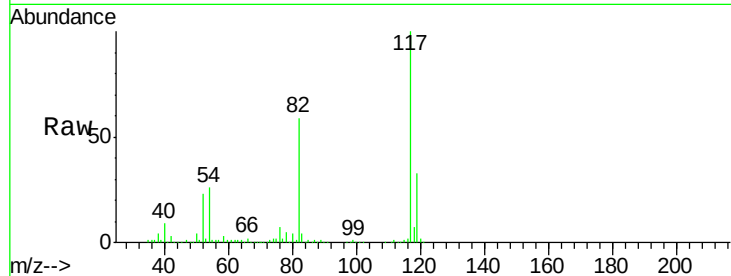
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.63 min Scan# 1596
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
117	100	574392		
82	58.9		45.2	67.8
119	32.5		25.4	38.2

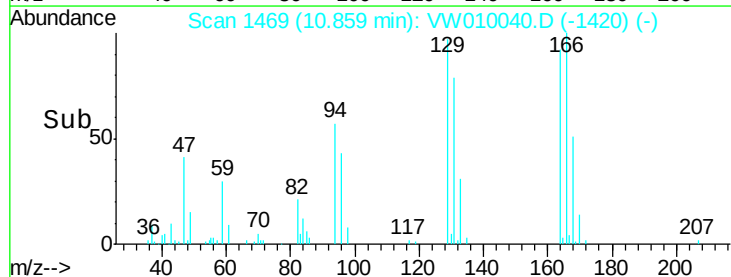
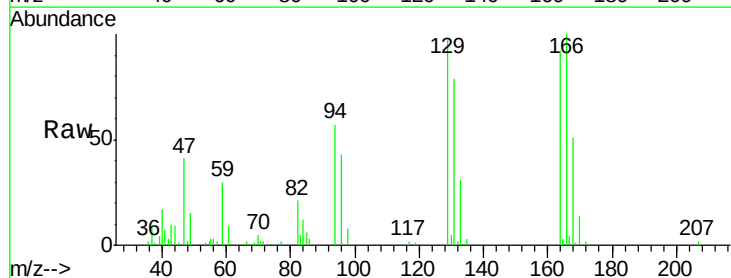
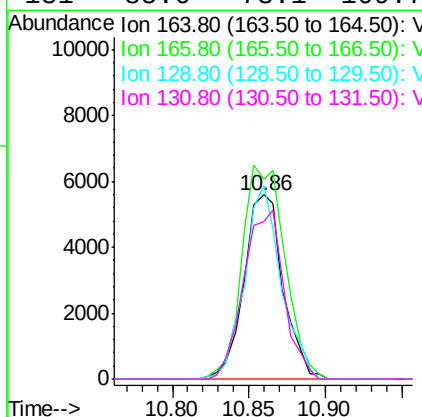
Manual Integrations
APPROVED

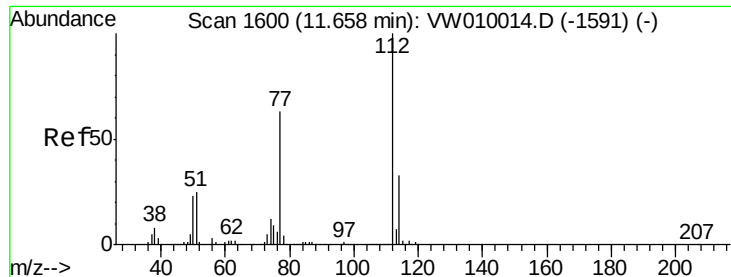
MMDadoda
4/19/2019 12:52:49 PM



#64
Tetrachloroethene
Concen: 2.657 ug/l
RT: 10.86 min Scan# 1469
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	9909		
166	108.7		101.2	151.8
129	105.0		77.8	116.6
131	85.6		73.1	109.7





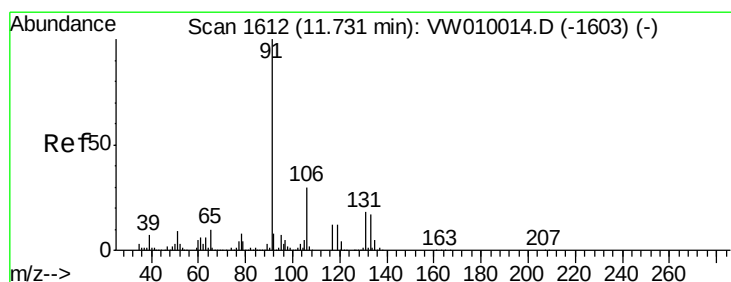
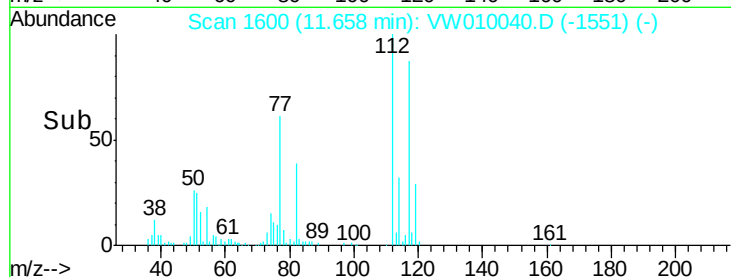
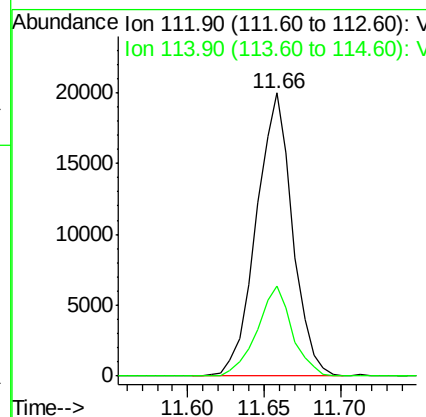
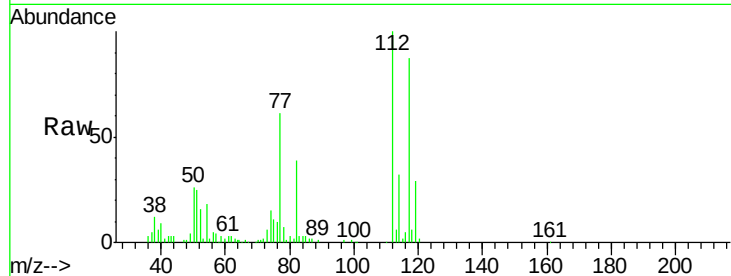
#65
Chlorobenzene
Concen: 2.795 ug/l
RT: 11.66 min Scan# 1600
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion:112 Resp: 32860
Ion Ratio Lower Upper
112 100
114 31.8 26.5 39.7

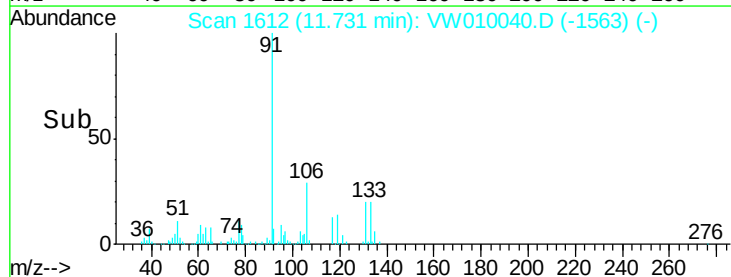
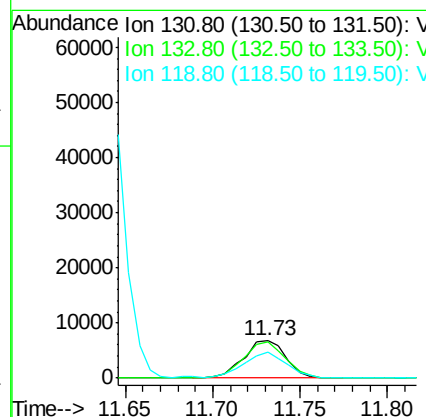
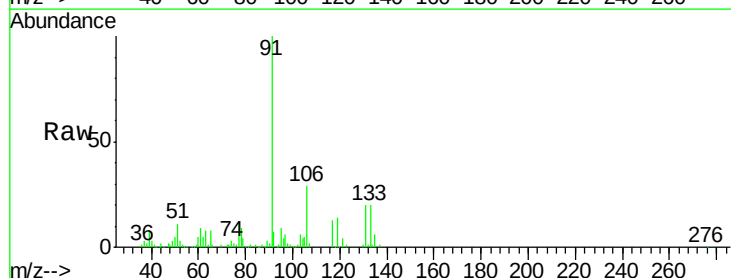
Manual Integrations
APPROVED

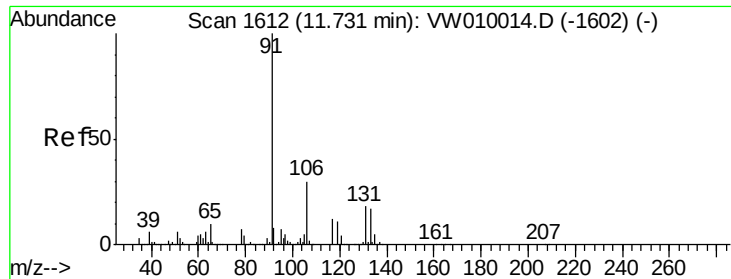
MMDadoda
4/19/2019 12:52:49 PM



#66
1,1,1,2-Tetrachloroethane
Concen: 2.733 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion:131 Resp: 11492
Ion Ratio Lower Upper
131 100
133 97.3 46.5 139.5
119 70.7 31.9 95.5





#67

Ethyl Benzene

Concen: 2.509 ug/l

RT: 11.73 min Scan# 1612

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 91 Resp: 52617

Ion Ratio Lower Upper

91 100

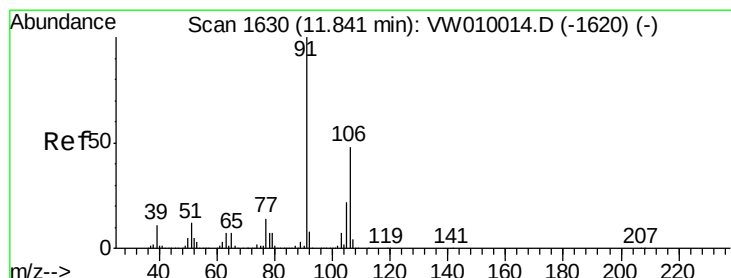
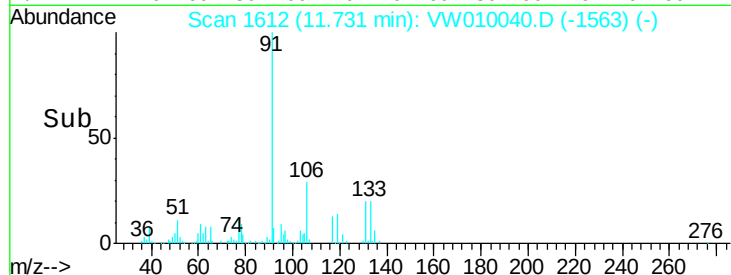
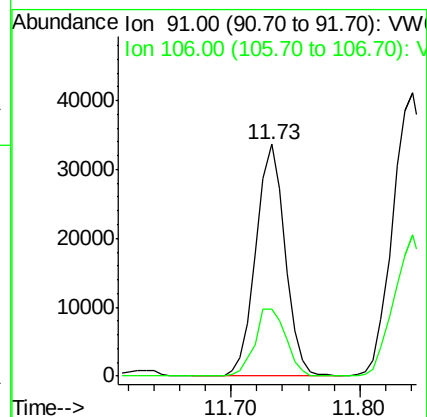
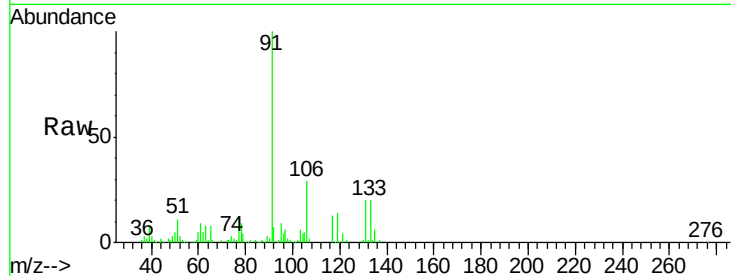
106 28.9 23.8 35.8

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#68

m/p-Xylenes

Concen: 4.752 ug/l

RT: 11.84 min Scan# 1630

Delta R.T. -0.00 min

Lab File: VW010040.D

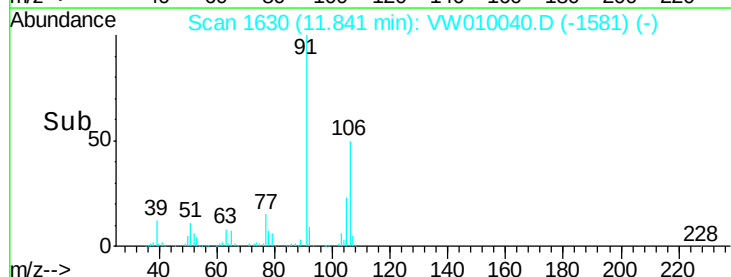
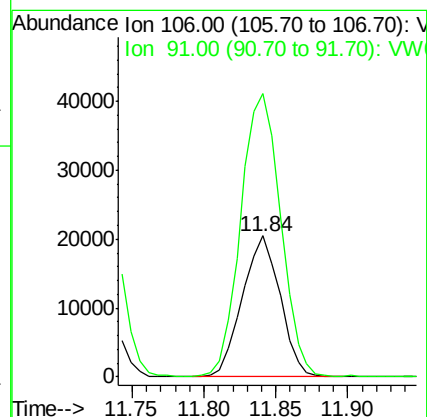
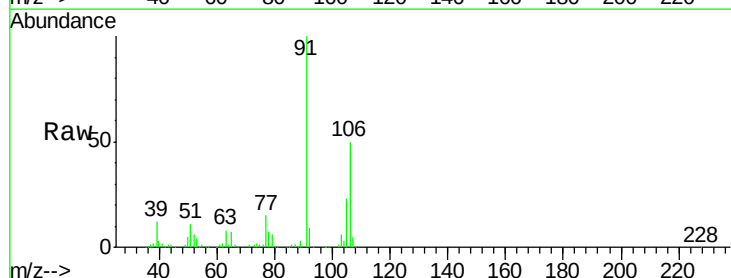
Acq: 18 Apr 2019 12:55

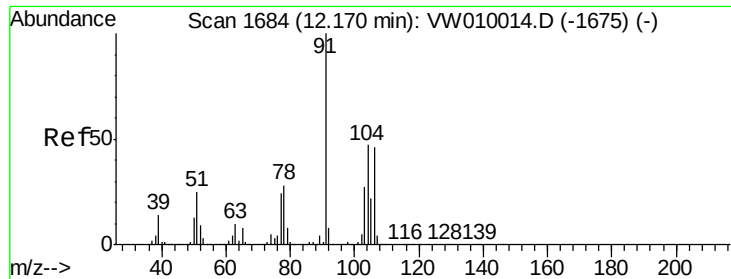
Tgt Ion: 106 Resp: 37255

Ion Ratio Lower Upper

106 100

91 212.0 165.0 247.6





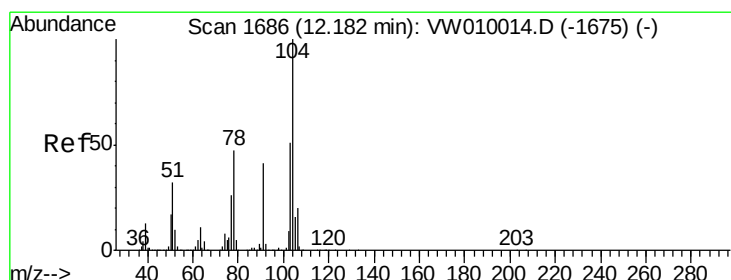
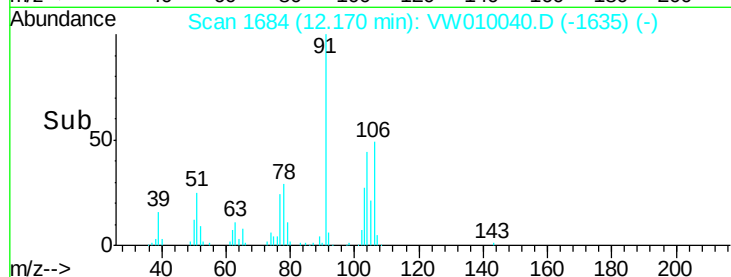
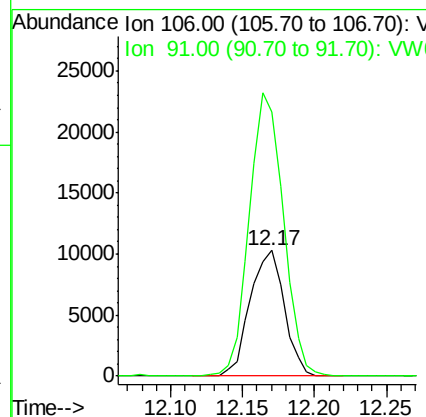
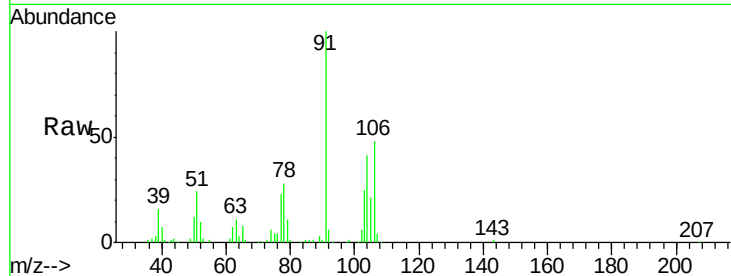
#69
o-Xylene
Concen: 2.371 ug/l
RT: 12.17 min Scan# 1684
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion:106 Resp: 16926
Ion Ratio Lower Upper
106 100
91 224.5 110.5 331.4

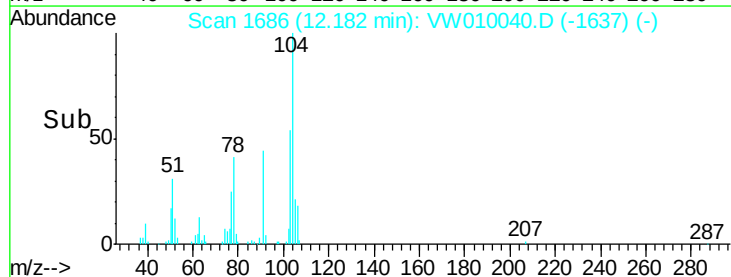
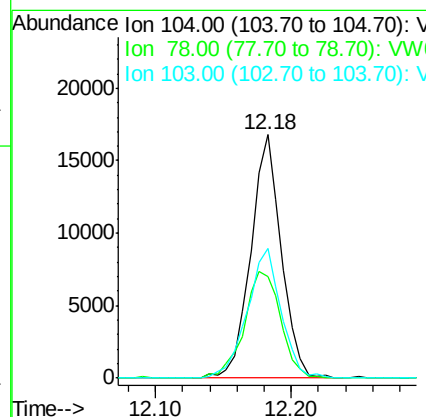
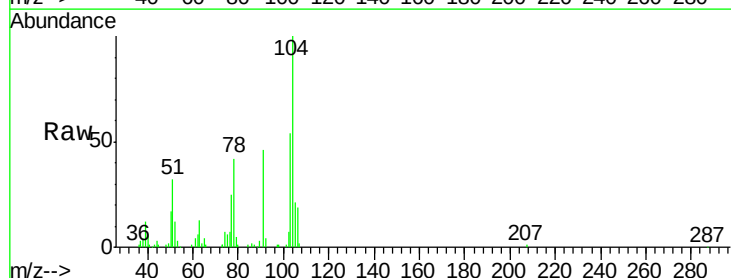
Manual Integrations
APPROVED

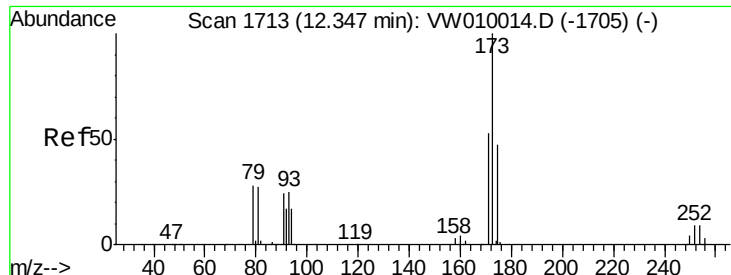
MMDadoda
4/19/2019 12:52:49 PM



#70
Styrene
Concen: 2.140 ug/l
RT: 12.18 min Scan# 1686
Delta R.T. -0.00 min
Lab File: VW010040.D
Acq: 18 Apr 2019 12:55

Tgt Ion:104 Resp: 26343
Ion Ratio Lower Upper
104 100
78 52.3 42.5 63.7
103 59.3 43.6 65.4





#71

Bromoform

Concen: 2.512 ug/l

RT: 12.35 min Scan# 1713

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:173 Resp: 5585

Ion Ratio Lower Upper

173 100

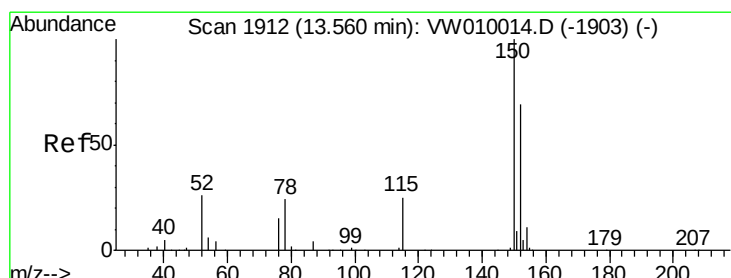
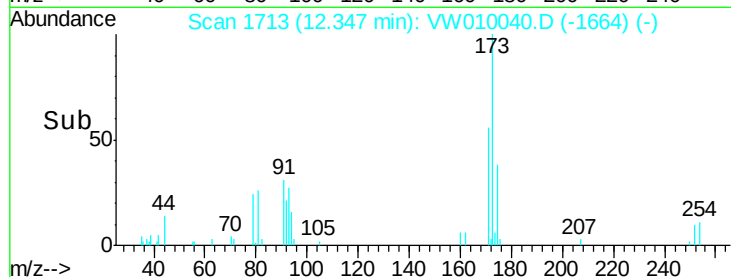
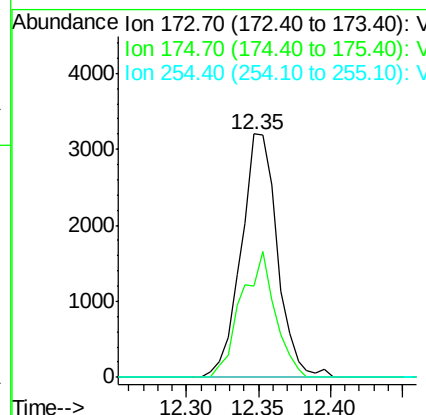
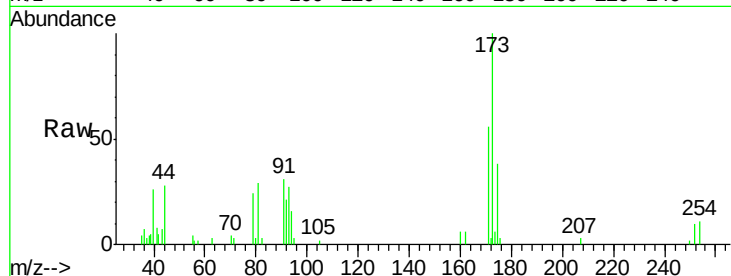
175 49.0 23.8 71.4

254 0.0 0.1 0.1#

Manual Integrations
APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

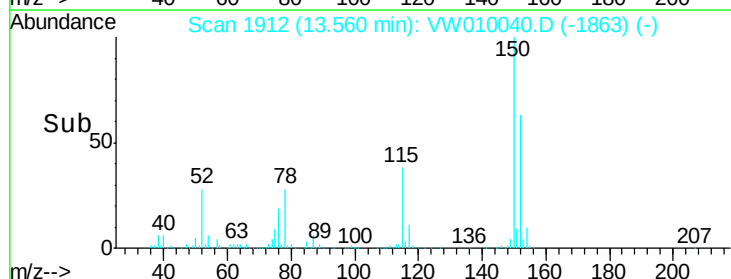
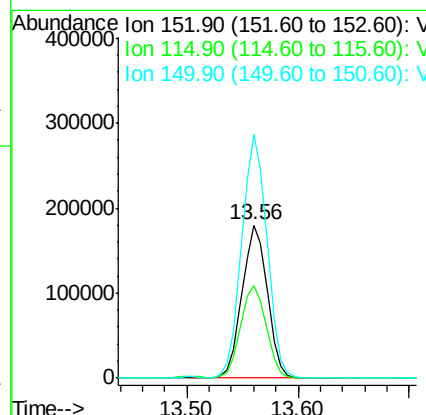
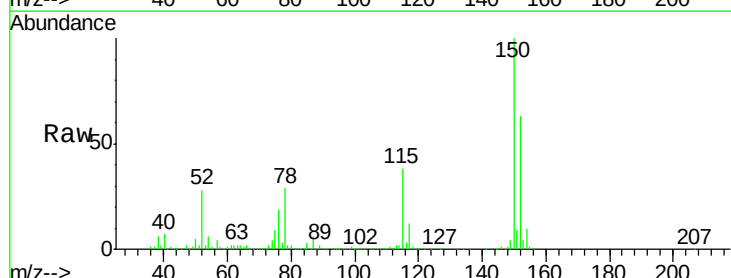
Tgt Ion:152 Resp: 282151

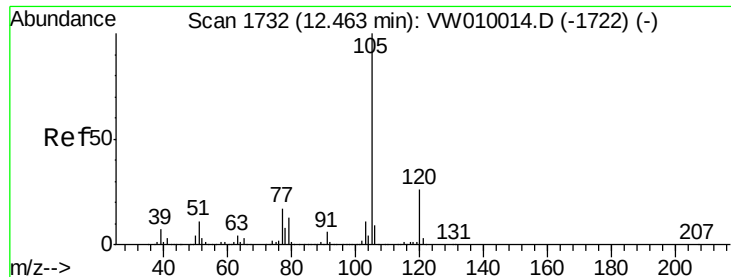
Ion Ratio Lower Upper

152 100

115 61.2 30.4 91.2

150 159.8 0.0 347.0





#73

Isopropylbenzene

Concen: 2.379 ug/l

RT: 12.46 min Scan# 1732

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:105 Resp: 46726

Ion Ratio Lower Upper

105 100

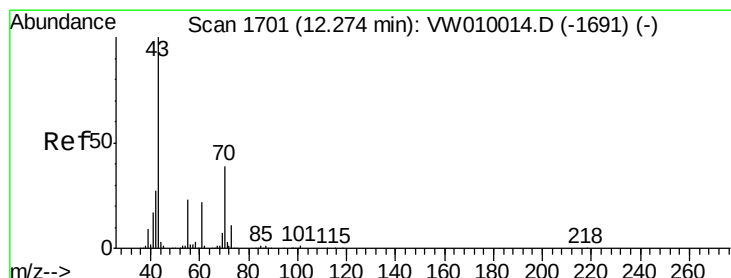
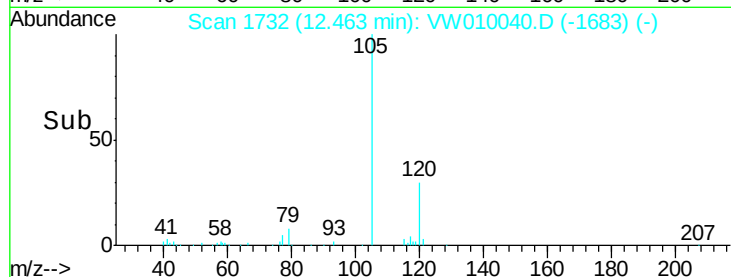
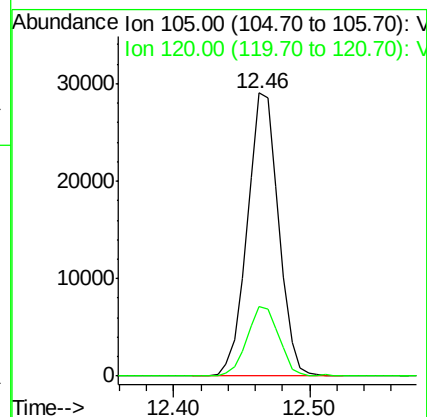
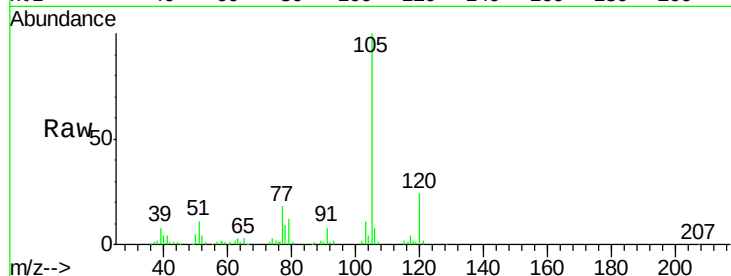
120 24.9 13.1 39.1

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#74

N-ethyl acetate

Concen: 2.109 ug/l

RT: 12.27 min Scan# 1701

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion: 43 Resp: 11470

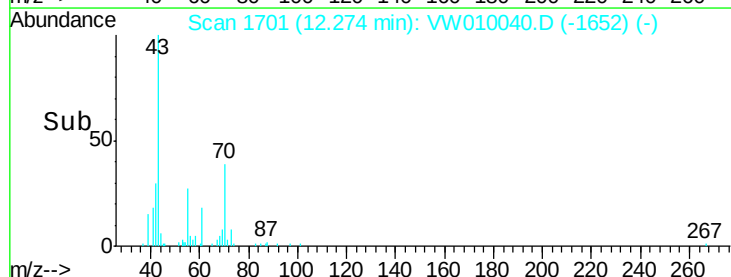
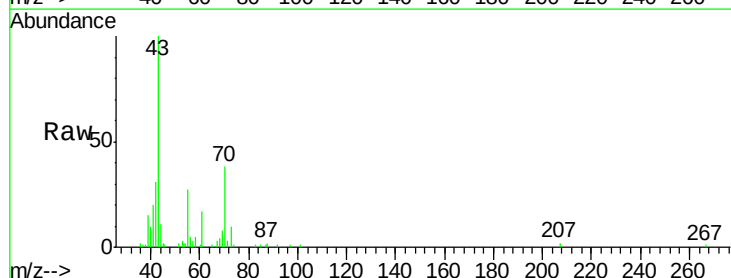
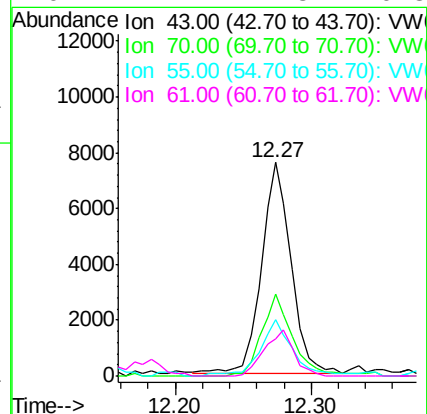
Ion Ratio Lower Upper

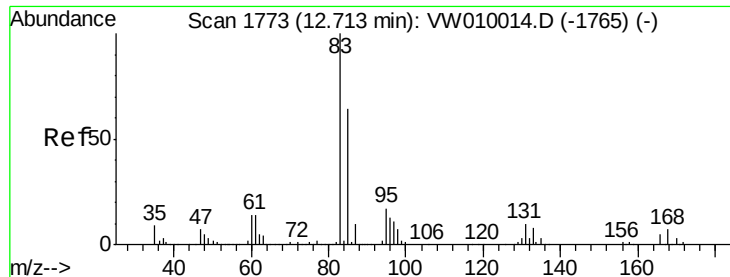
43 100

70 40.4 31.3 46.9

55 29.2 20.0 30.0

61 22.1 17.8 26.8





#75

1,1,2,2-Tetrachloroethane

Concen: 2.763 ug/l

RT: 12.71 min Scan# 1773

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

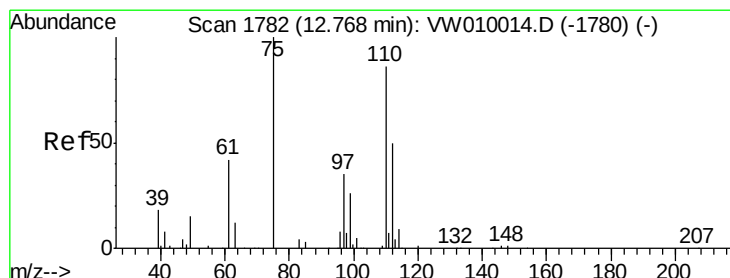
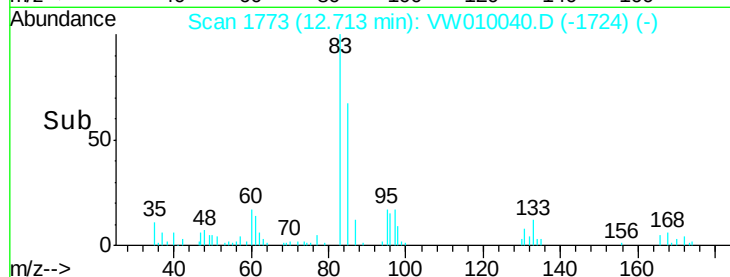
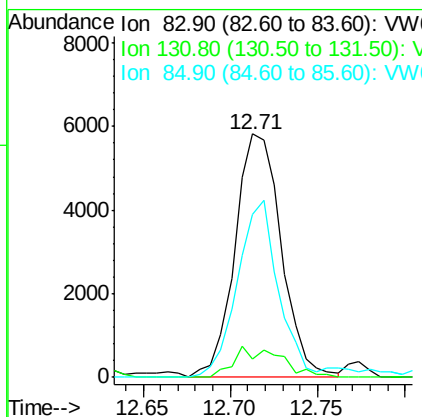
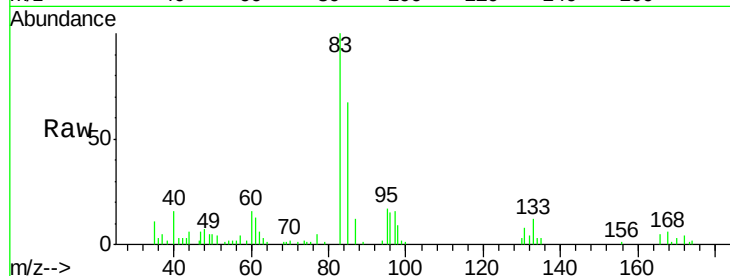
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	83	Resp:	10719
Ion Ratio	Lower	Upper	
83	100		
131	12.8	5.3	15.8
85	63.9	32.0	96.2

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#76

1,2,3-Trichloropropane

Concen: 2.696 ug/l m

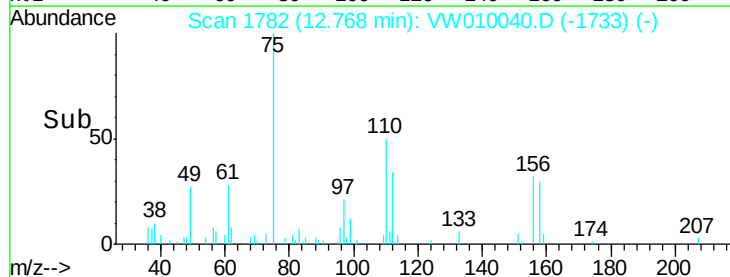
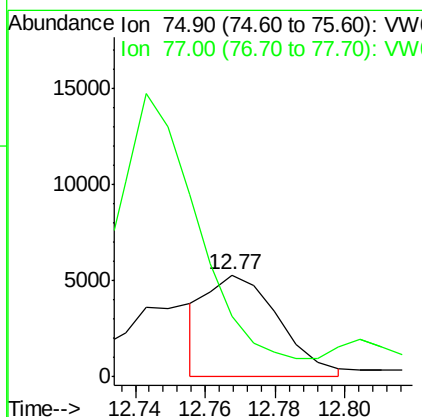
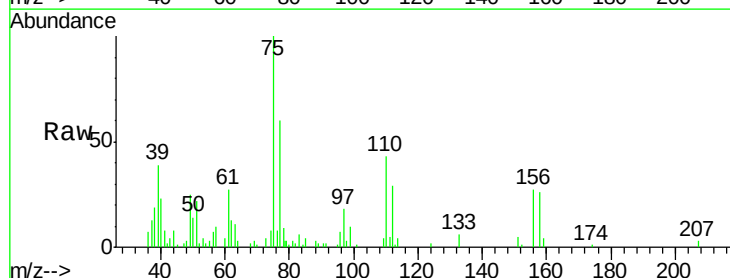
RT: 12.77 min Scan# 1782

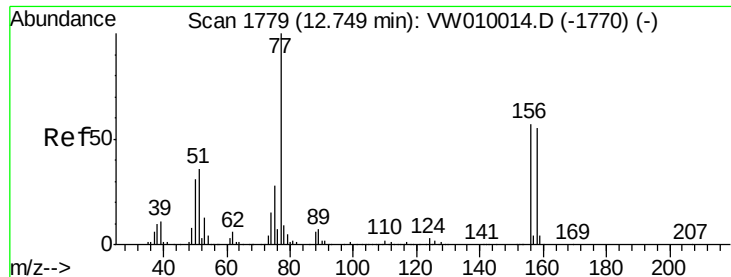
Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	75	Resp:	7612
Ion Ratio	Lower	Upper	
75	100		
77	0.0	0.0	0.0





#77

Bromobenzene

Concen: 2.717 ug/l

RT: 12.75 min Scan# 1779

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

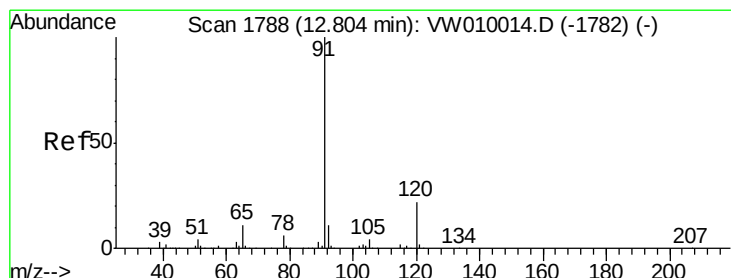
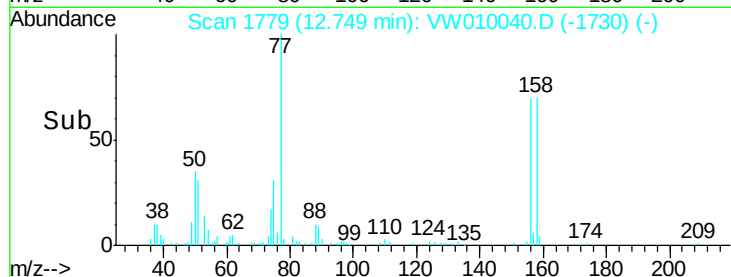
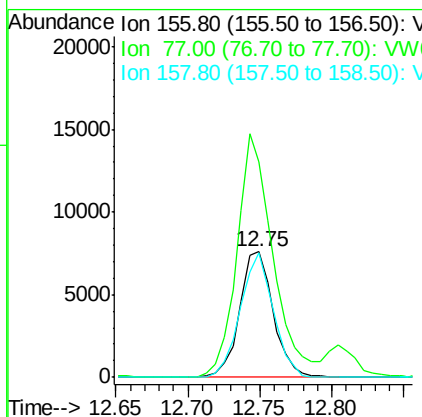
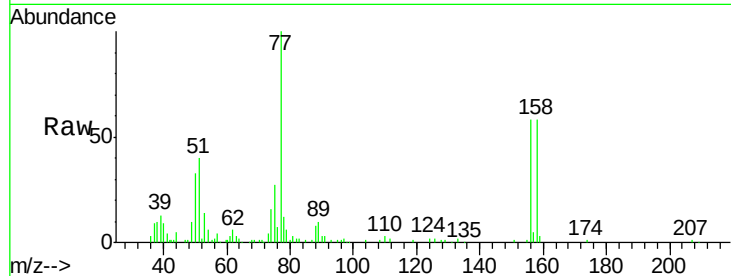
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	156	Resp:	12271
Ion	Ratio	Lower	Upper
156	100		
77	206.4	102.5	307.4
158	97.3	48.8	146.4

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#78

n-propylbenzene

Concen: 2.635 ug/l

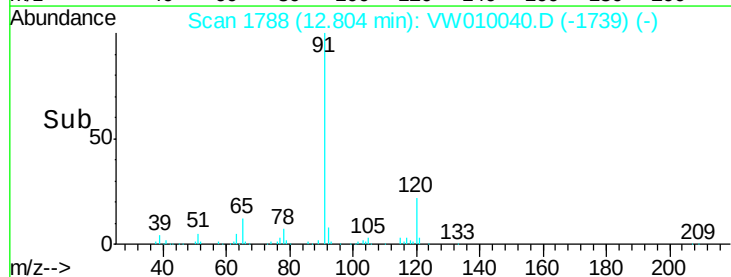
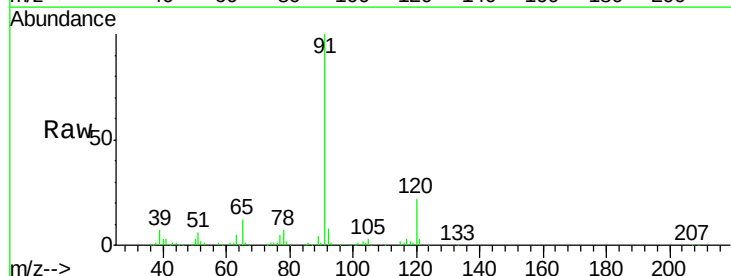
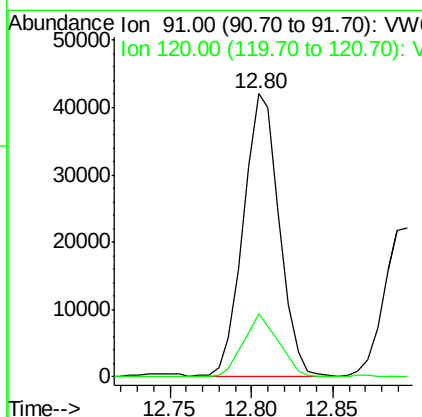
RT: 12.80 min Scan# 1788

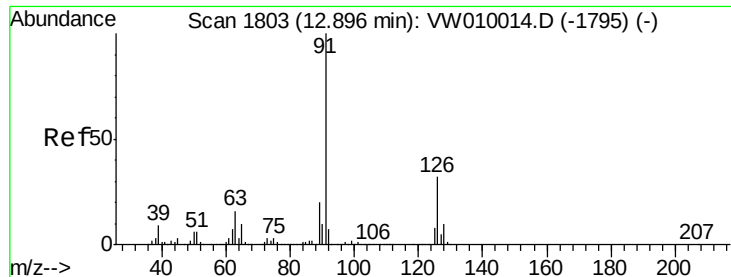
Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	91	Resp:	64129
Ion	Ratio	Lower	Upper
91	100		
120	22.1	11.1	33.1





#79

2-Chlorotoluene

Concen: 2.604 ug/l

RT: 12.90 min Scan# 1803

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion: 91 Resp: 36443

Ion Ratio Lower Upper

91 100

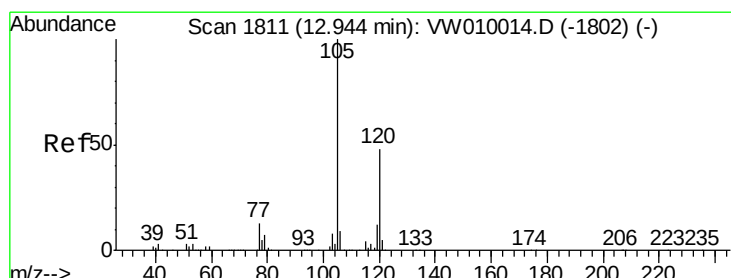
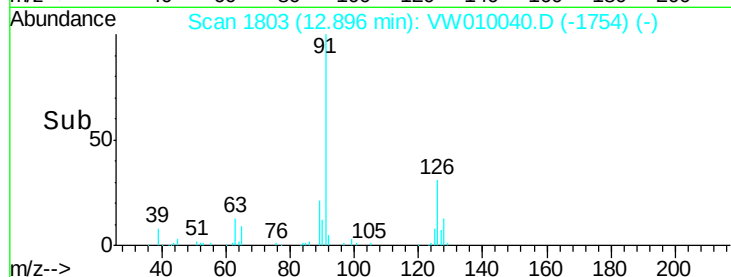
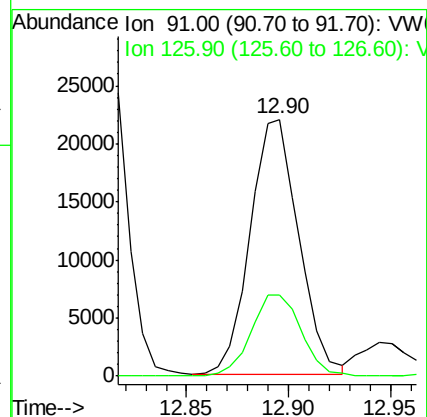
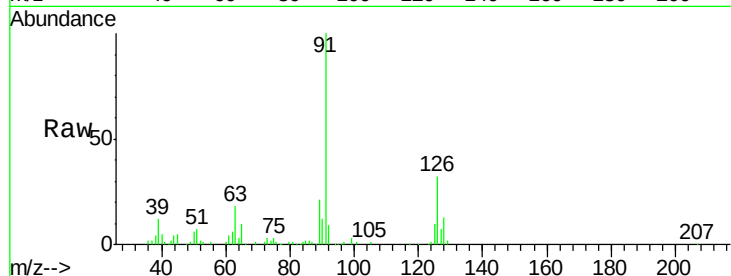
126 33.0 16.3 48.8

Manual Integrations

APPROVED

MMDadoda

4/19/2019 12:52:49 PM



#80

1,3,5-Trimethylbenzene

Concen: 2.476 ug/l

RT: 12.94 min Scan# 1811

Delta R.T. -0.00 min

Lab File: VW010040.D

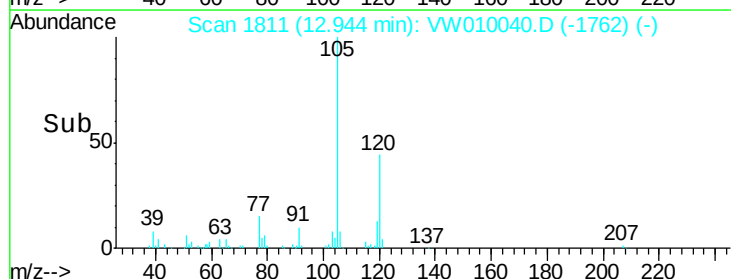
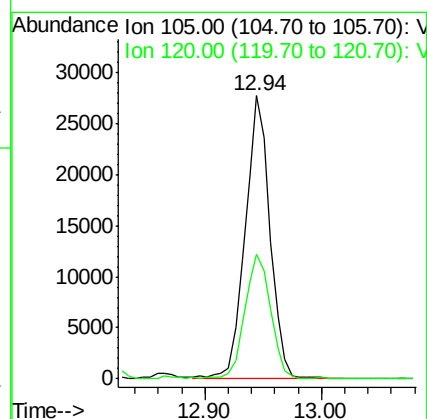
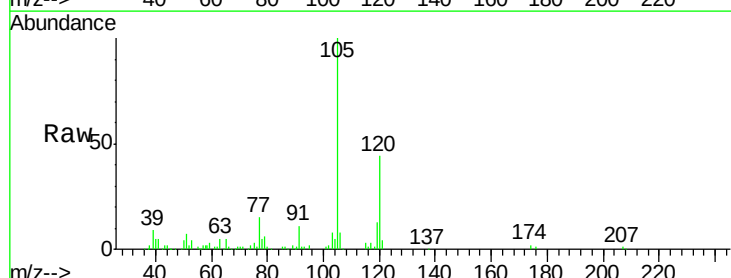
Acq: 18 Apr 2019 12:55

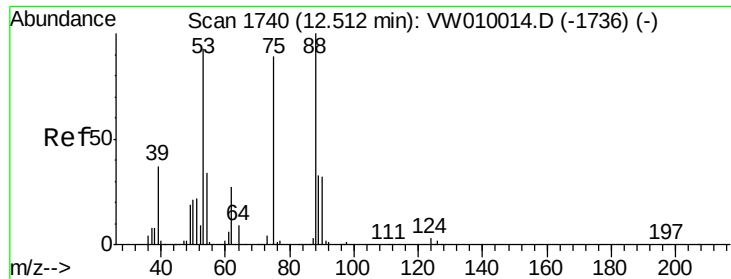
Tgt Ion:105 Resp: 41225

Ion Ratio Lower Upper

105 100

120 46.0 24.3 72.8





#81

trans-1,4-Dichloro-2-butene

Concen: 2.123 ug/l m

RT: 12.52 min Scan# 1741

Delta R.T. 0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

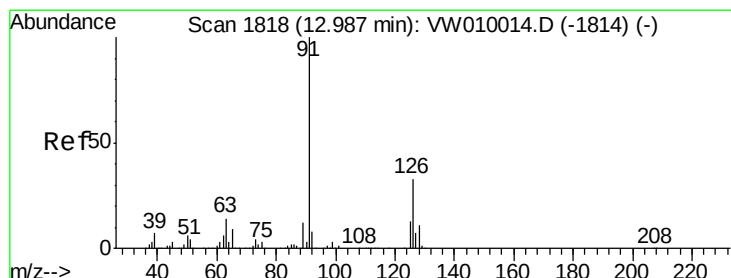
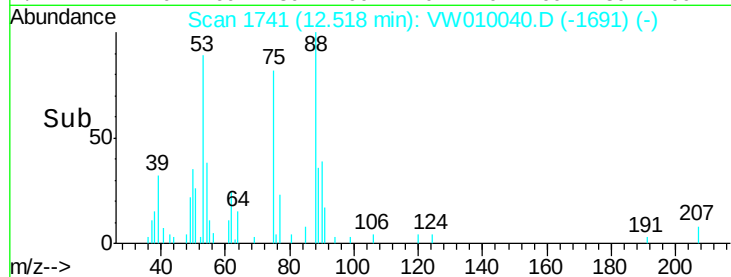
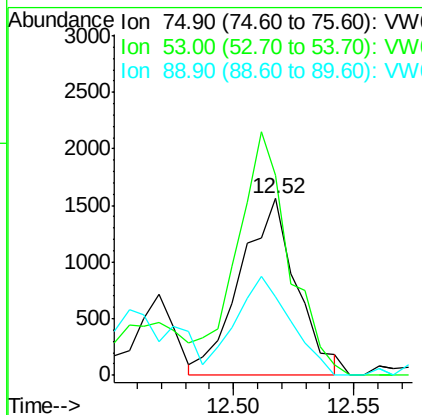
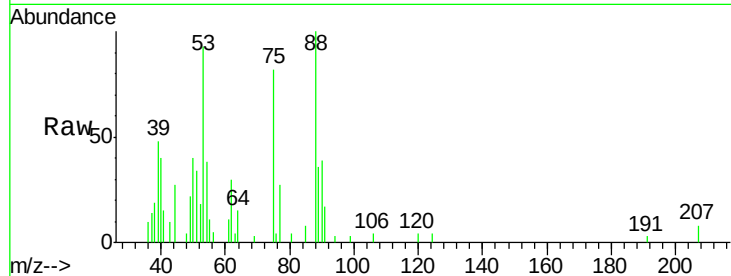
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
75	100		
53	8.1	89.8	134.8#
89	12.1	36.6	54.8#

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#82

4-Chlorotoluene

Concen: 2.581 ug/l

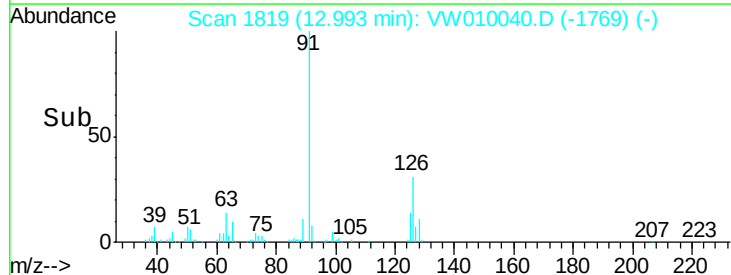
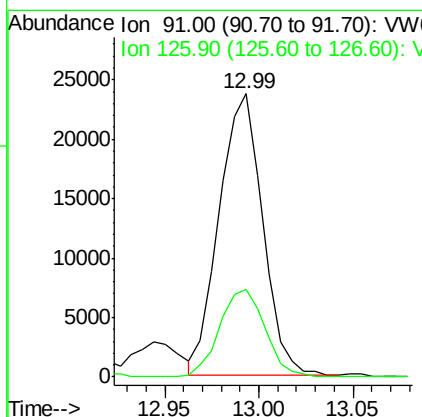
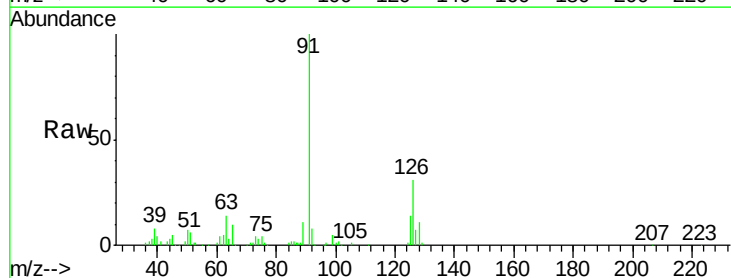
RT: 12.99 min Scan# 1819

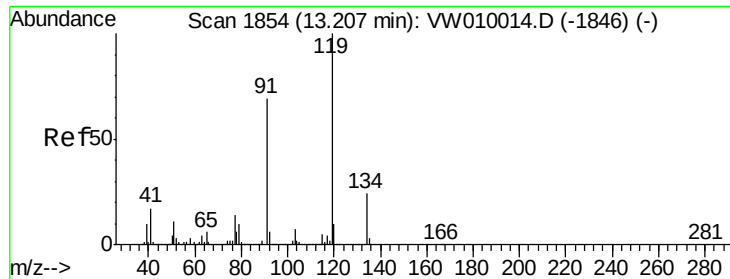
Delta R.T. 0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
91	100		
126	32.5	16.4	49.1





#83

tert-Butylbenzene

Concen: 2.447 ug/l

RT: 13.21 min Scan# 1854

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

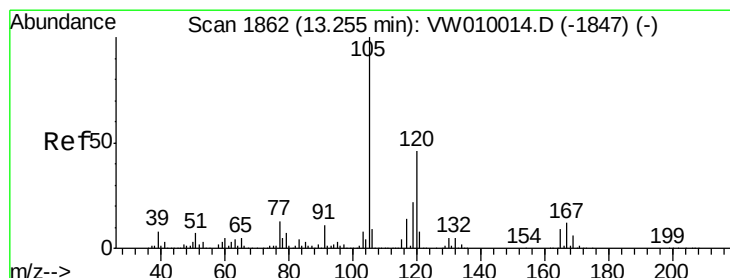
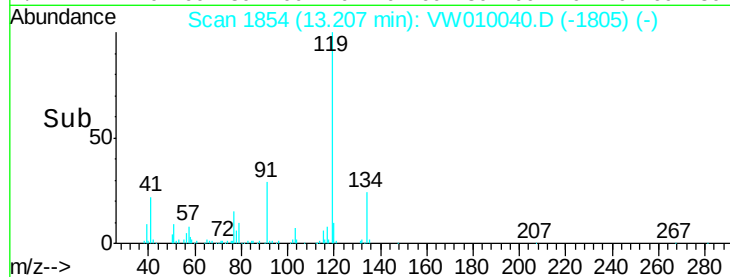
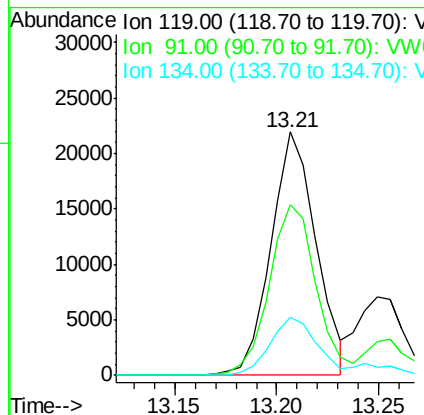
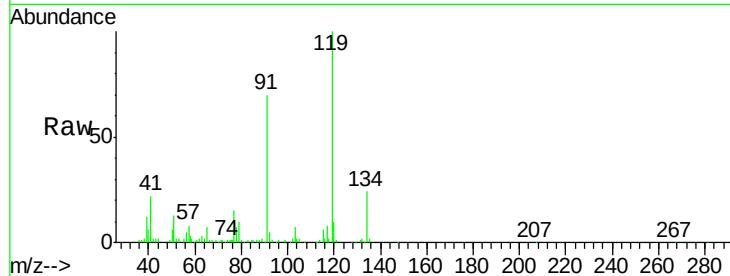
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
119	100		
91	73.1	34.8	104.4
134	25.2	13.7	41.1

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#84

1,2,4-Trimethylbenzene

Concen: 2.438 ug/l

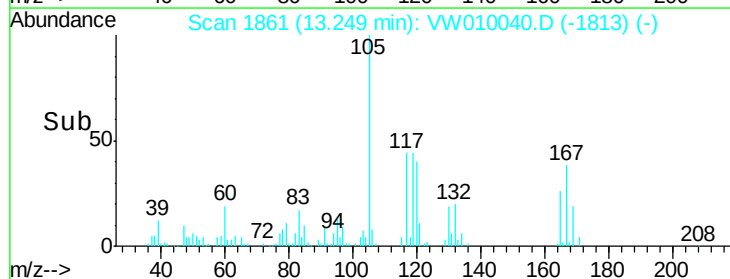
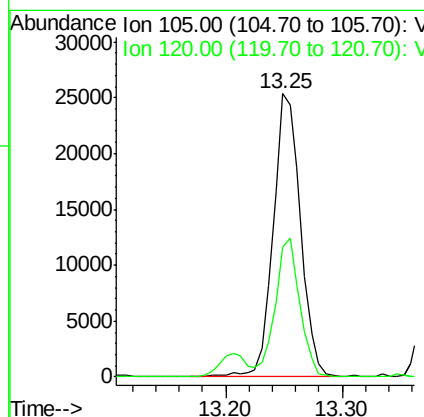
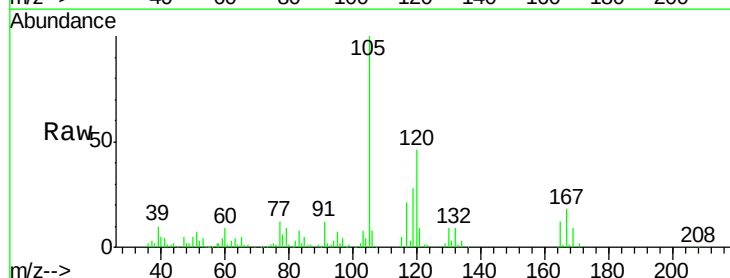
RT: 13.25 min Scan# 1861

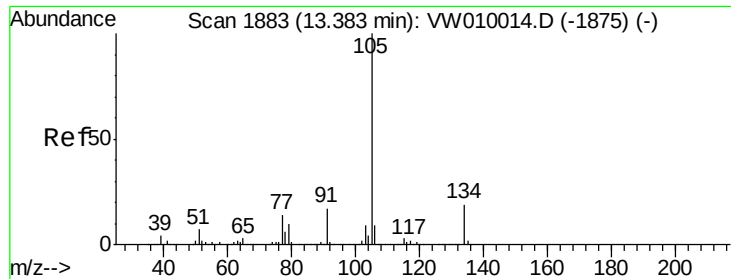
Delta R.T. -0.01 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
105	100		
120	44.1	22.6	67.7





#85

sec-Butylbenzene

Concen: 2.514 ug/l

RT: 13.38 min Scan# 1883

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:105 Resp: 51802

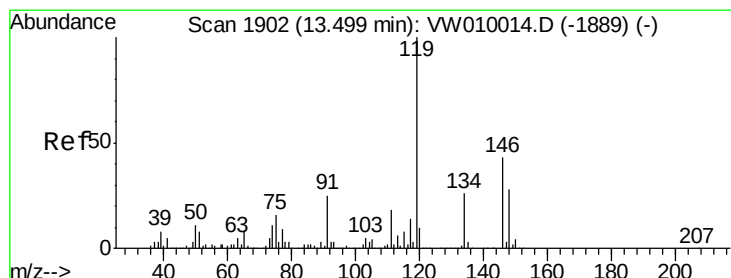
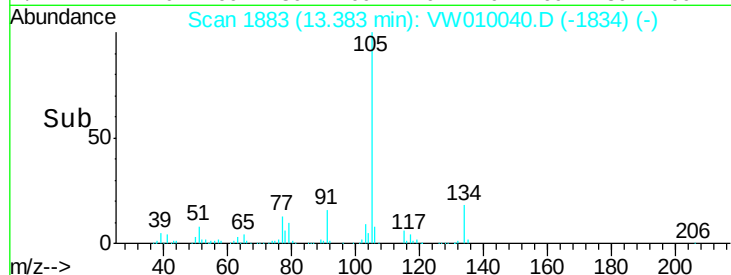
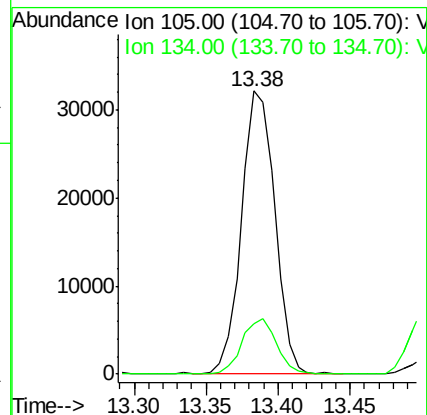
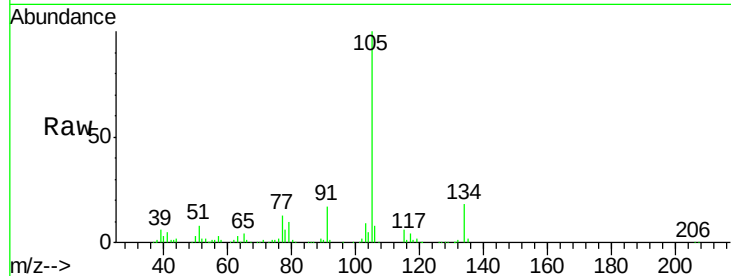
Ion Ratio Lower Upper

105 100

134 20.1 9.8 29.5

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#86

p-Isopropyltoluene

Concen: 2.392 ug/l

RT: 13.50 min Scan# 1902

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

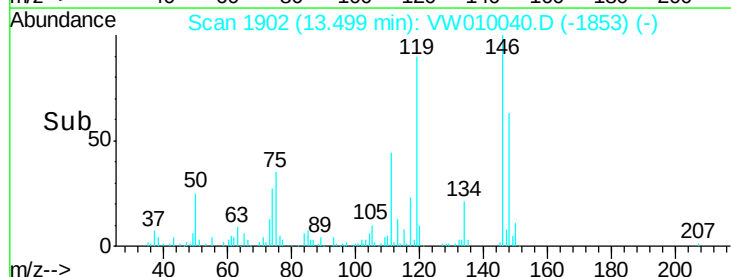
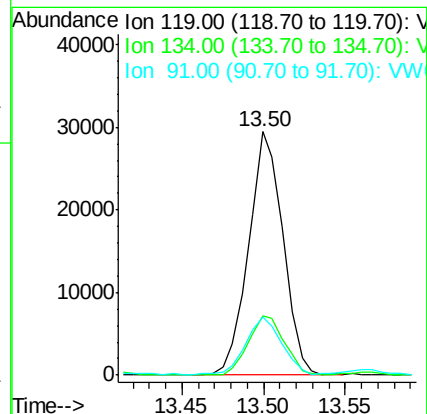
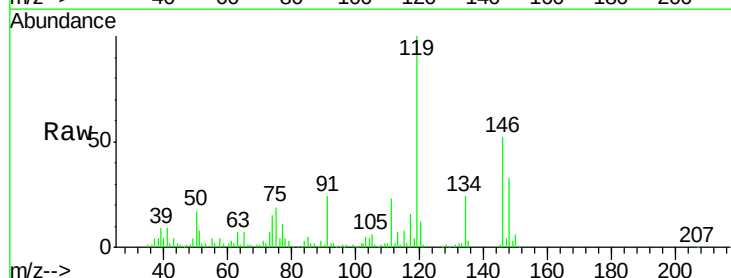
Tgt Ion:119 Resp: 43442

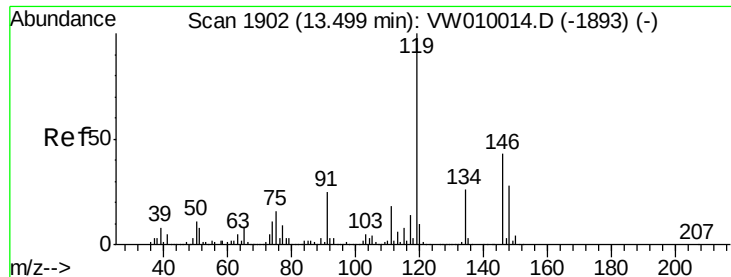
Ion Ratio Lower Upper

119 100

134 25.4 13.0 38.9

91 25.3 12.3 36.9





#87

1,3-Dichlorobenzene

Concen: 2.759 ug/l

RT: 13.50 min Scan# 1902

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

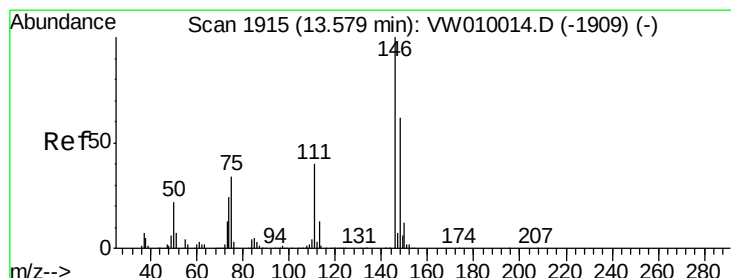
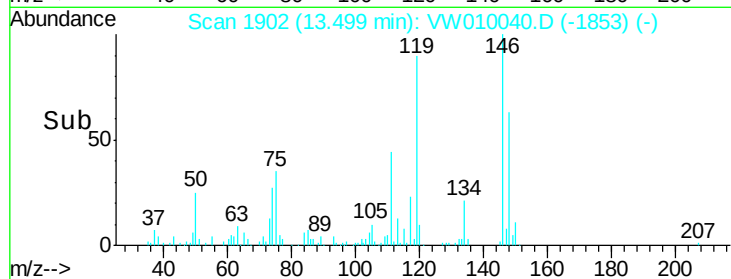
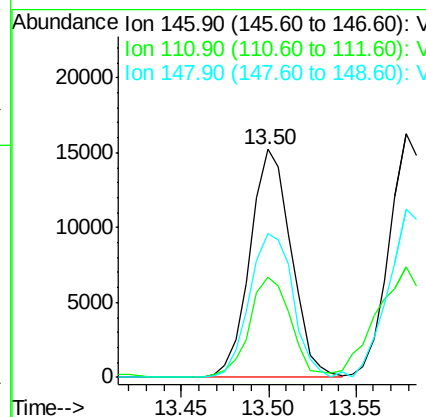
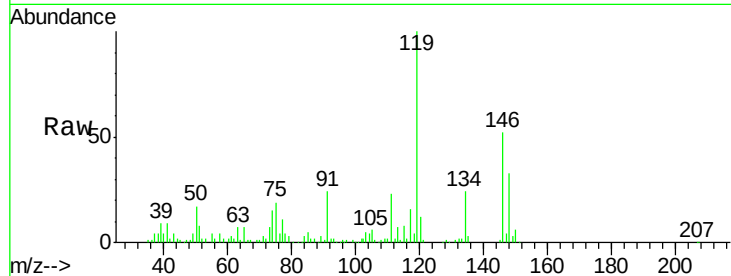
Instrument :
MSVOA_W

ClientSampleId :
MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	44.2	20.3	61.0
148	66.0	32.0	96.2

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#88

1,4-Dichlorobenzene

Concen: 2.830 ug/l

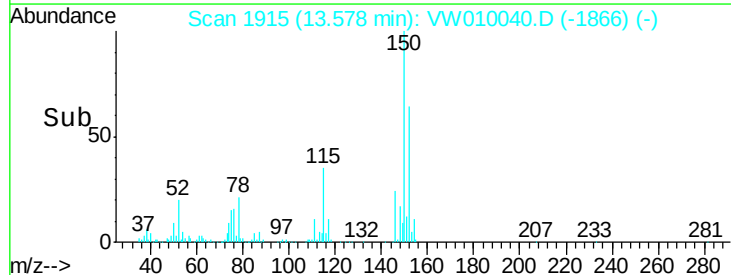
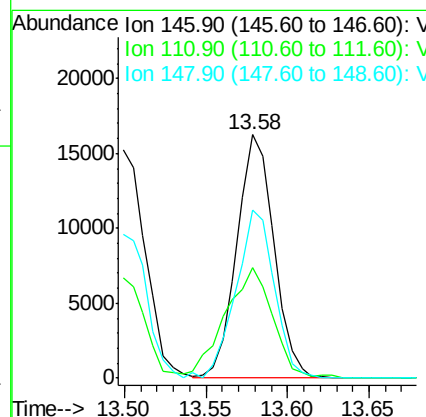
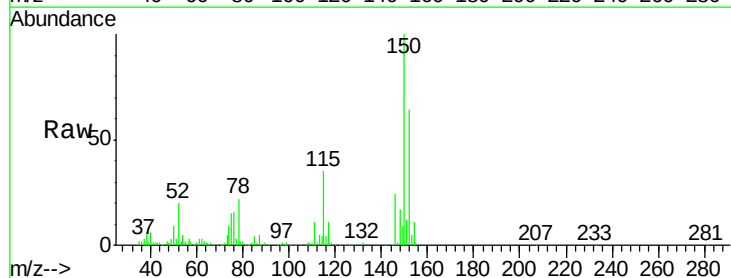
RT: 13.58 min Scan# 1915

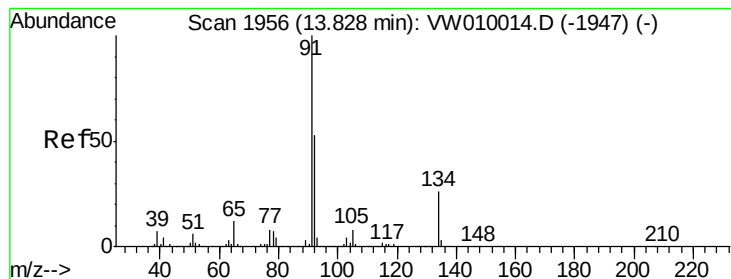
Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
146	100		
111	58.3	20.1	60.3
148	71.5	31.8	95.3





#89

n-Butylbenzene

Concen: 2.560 ug/l

RT: 13.83 min Scan# 1956

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

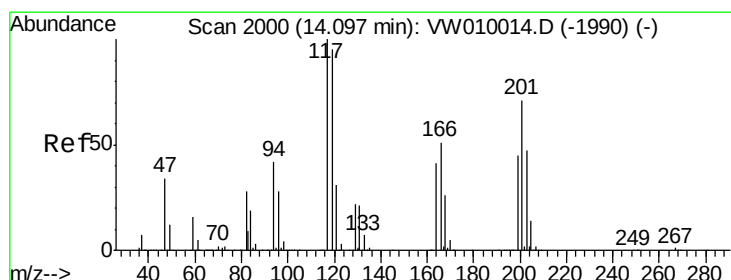
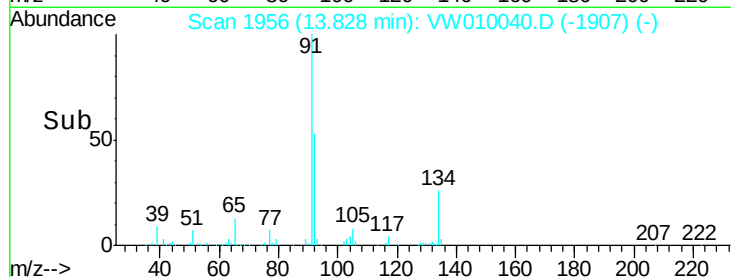
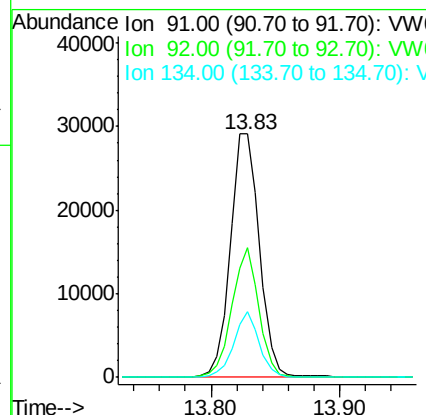
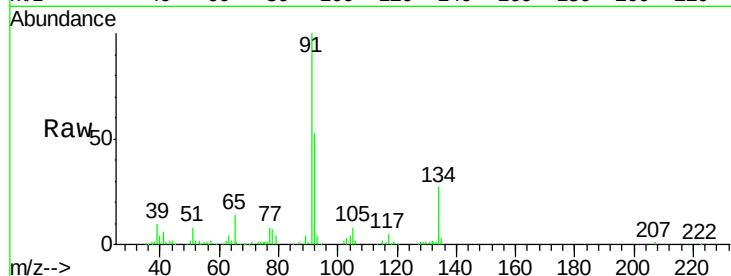
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

Tot Ion:	91	Resp:	46061
Ion Ratio	Lower	Upper	
91	100		
92	49.1	26.5	79.4
134	23.7	12.4	37.0

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



#90

Hexachloroethane

Concen: 2.816 ug/l

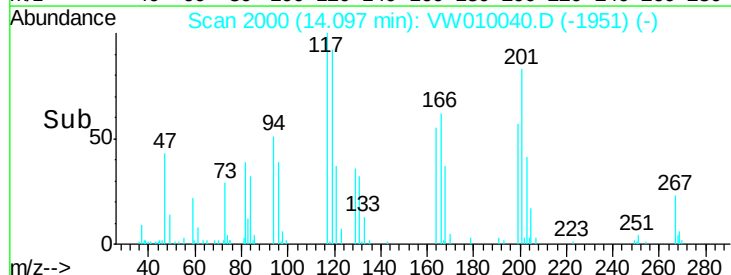
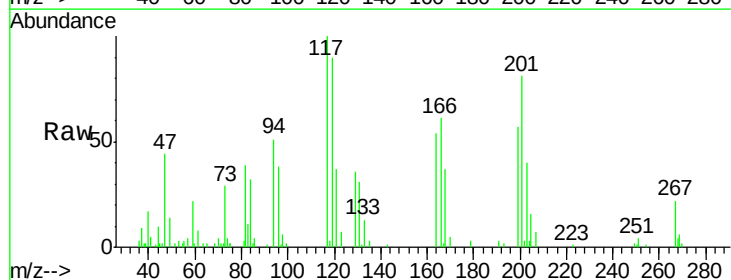
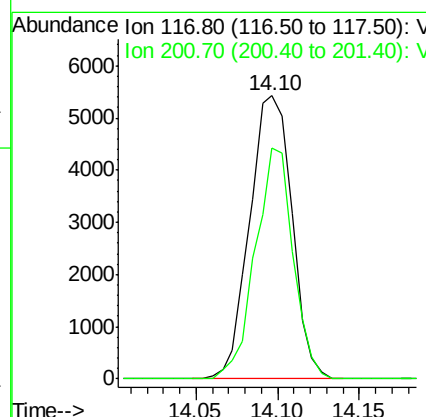
RT: 14.10 min Scan# 2000

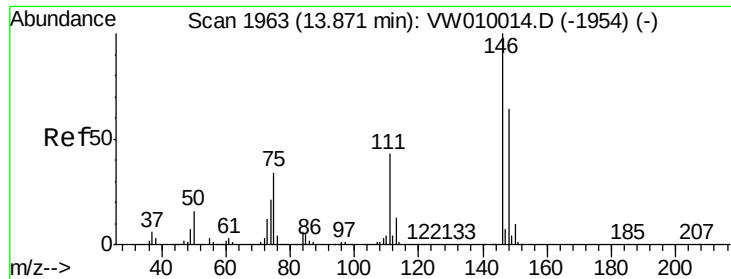
Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	117	Resp:	9796
Ion Ratio	Lower	Upper	
117	100		
201	73.1	36.1	108.3





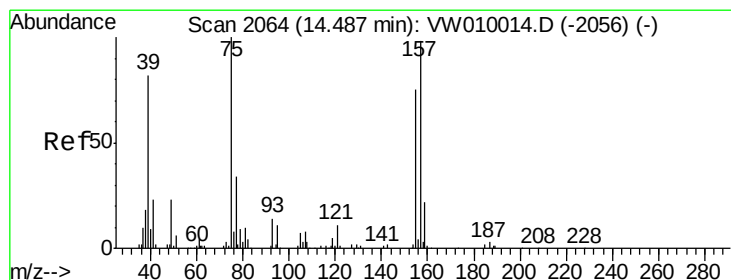
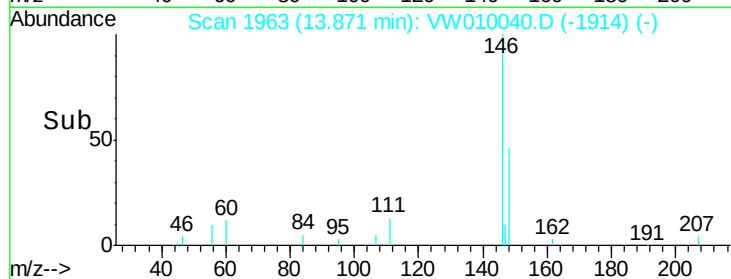
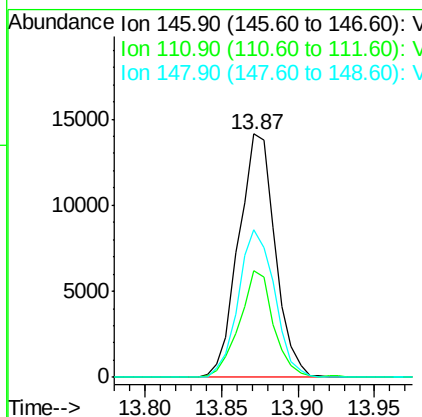
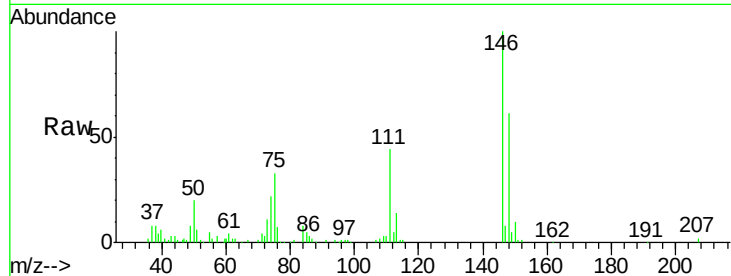
#91
 1,2-Dichlorobenzene
 Concen: 2.864 ug/l
 RT: 13.87 min Scan# 1963
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	40.8	20.9	62.8
148	60.2	31.9	95.7

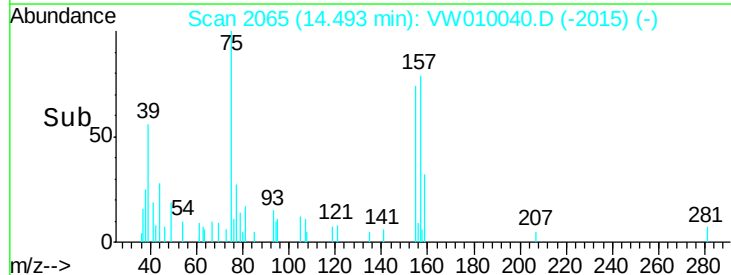
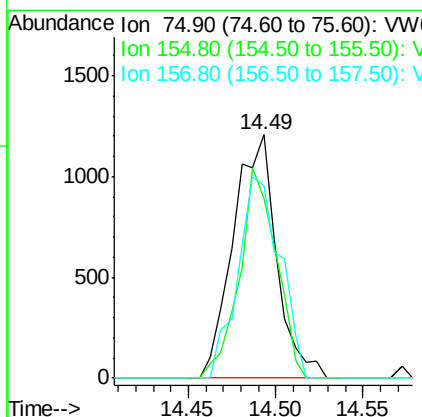
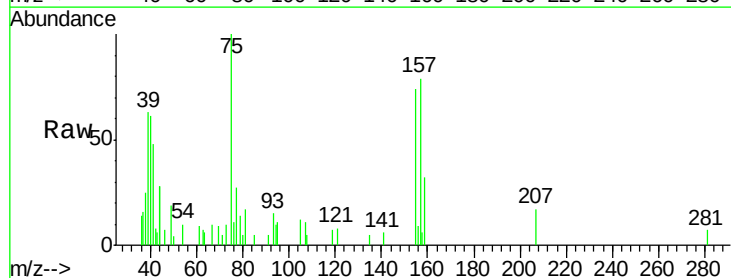
Manual Integrations
 APPROVED

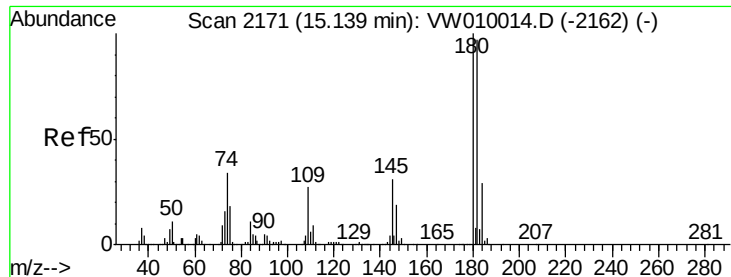
MMDadoda
 4/19/2019 12:52:49 PM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 2.997 ug/l
 RT: 14.49 min Scan# 2065
 Delta R.T. 0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
75	100		
155	73.2	37.1	111.5
157	80.2	47.3	141.9





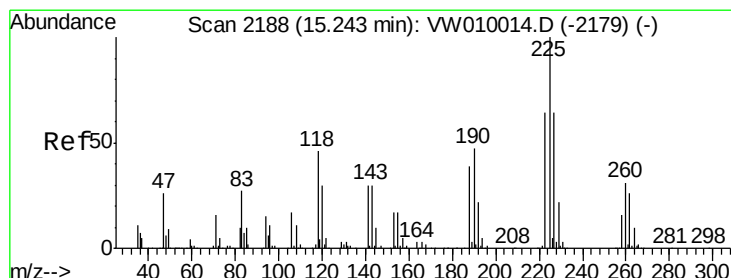
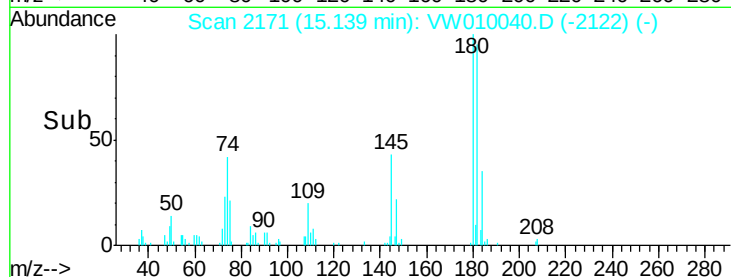
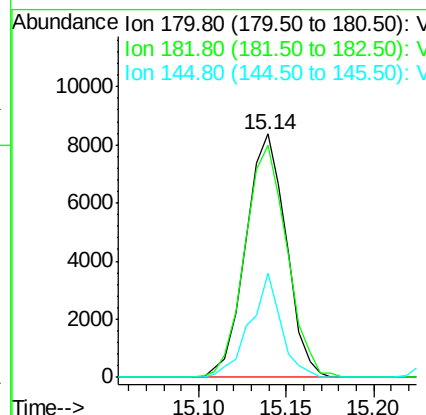
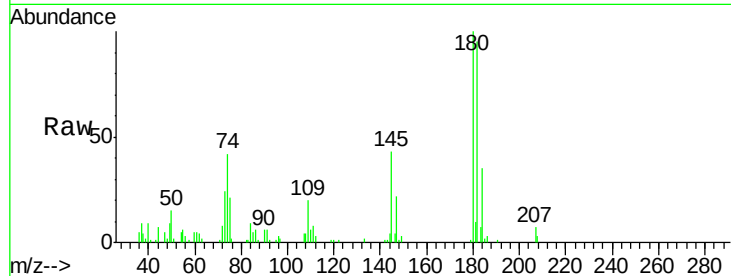
#93
 1,2,4-Trichlorobenzene
 Concen: 2.496 ug/l
 RT: 15.14 min Scan# 2171
 Delta R.T. -0.00 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT2-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	99.6	47.1	141.4
145	33.2	15.2	45.6

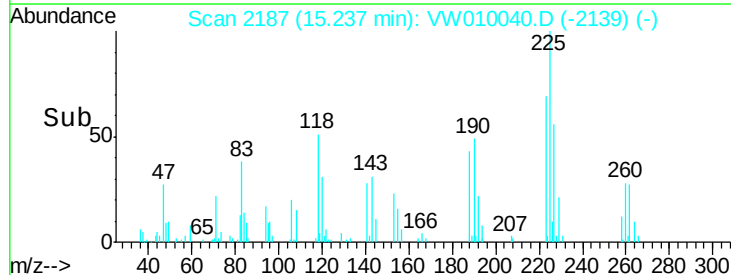
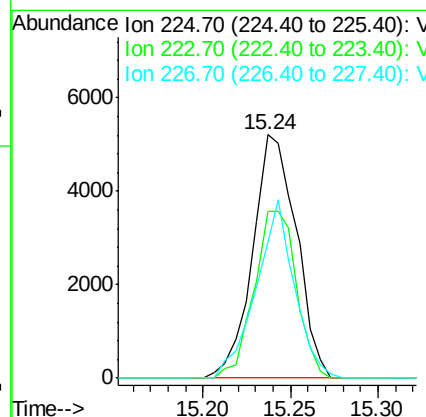
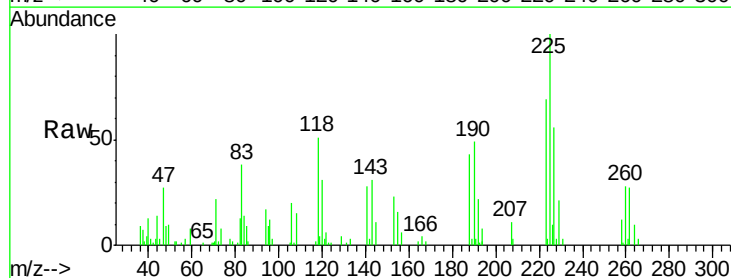
Manual Integrations
 APPROVED

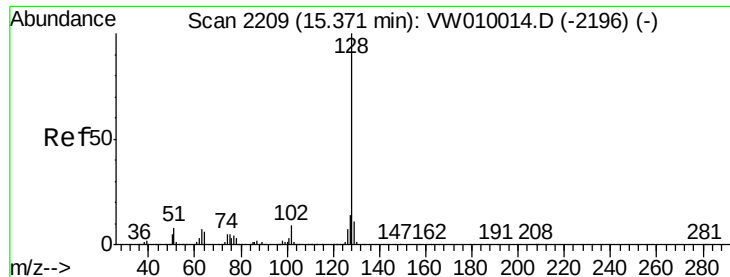
MMDadoda
 4/19/2019 12:52:49 PM



#94
 Hexachlorobutadiene
 Concen: 2.756 ug/l
 RT: 15.24 min Scan# 2187
 Delta R.T. -0.01 min
 Lab File: VW010040.D
 Acq: 18 Apr 2019 12:55

Tgt Ion	Ratio	Lower	Upper
225	100		
223	66.4	31.9	95.5
227	64.0	31.8	95.3





#95

Naphthalene

Concen: 2.160 ug/l

RT: 15.37 min Scan# 2209

Delta R.T. 0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Instrument :

MSVOA_W

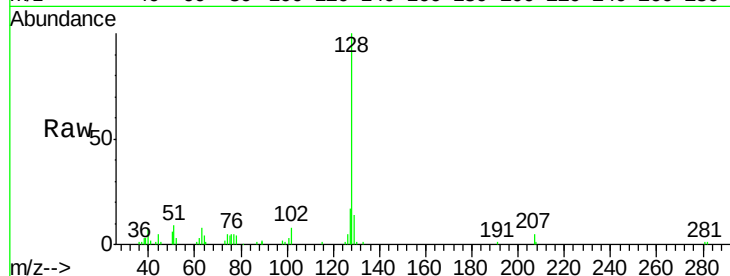
ClientSampleId :

MDL-MDL-SOIL-03-QT2-2019

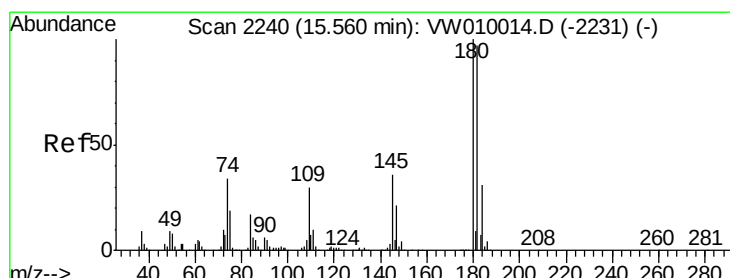
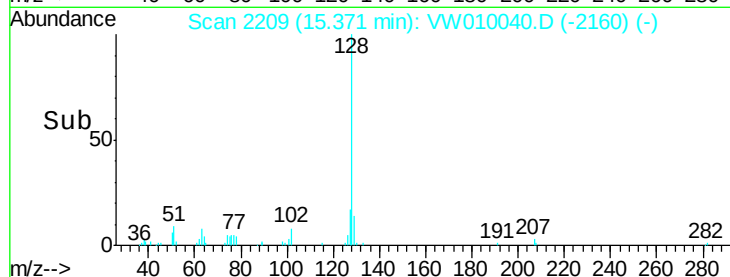
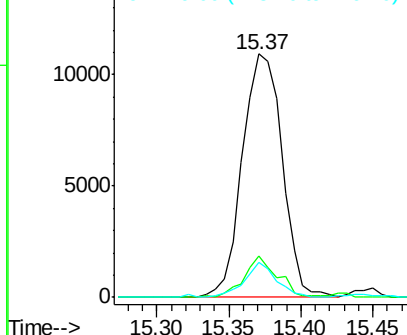
Tot Ion:	128	Resp:	20946
Ion Ratio	Lower	Upper	
128	100		
127	14.0	10.6	15.8
129	11.5	8.7	13.1

Manual Integrations
APPROVED

MMDadoda
4/19/2019 12:52:49 PM



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



#96

1,2,3-Trichlorobenzene

Concen: 2.581 ug/l

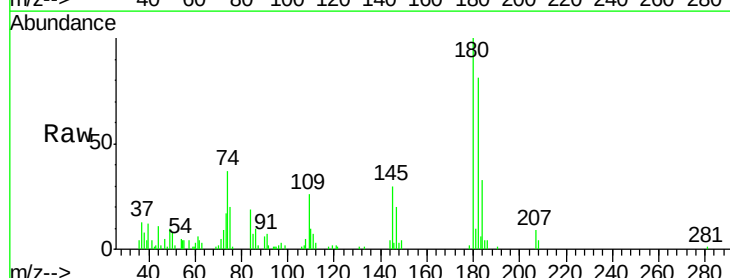
RT: 15.56 min Scan# 2240

Delta R.T. -0.00 min

Lab File: VW010040.D

Acq: 18 Apr 2019 12:55

Tgt Ion:	180	Resp:	12095
Ion Ratio	Lower	Upper	
180	100		
182	92.4	47.8	143.3
145	32.6	16.4	49.2



Abundance Ion 179.80 (179.50 to 180.50): V
Ion 181.80 (181.50 to 182.50): V
Ion 144.90 (144.60 to 145.60): V

