

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041719\
 Data File : VW010019.D
 Acq On : 17 Apr 2019 16:40
 Operator : SY/VA
 Sample : K2241-01
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Manual Integrations
 APPROVED

MMDadoda
 4/18/2019 11:40:33 AM

Quant Time: Apr 18 02:52:19 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W041719S.M
 Quant Title : SW846 8260
 QLast Update : Thu Apr 18 02:23:40 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.95	168	364903	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	613572	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	535947	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	258063	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.30	65	231473	51.40	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.80%	
35) Dibromofluoromethane	7.88	113	188812	48.40	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.80%	
50) Toluene-d8	10.32	98	723092	49.47	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.94%	
62) 4-Bromofluorobenzene	12.62	95	245140	46.14	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.28%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.01	85	5248	1.886	ug/l	73
3) Chloromethane	2.21	50	5016	1.803	ug/l #	83
4) Vinyl Chloride	2.37	62	4830	1.493	ug/l	97
5) Bromomethane	2.78	94	4431	2.039	ug/l	93
6) Chloroethane	2.92	64	3827	1.811	ug/l	97
7) Trichlorofluoromethane	3.24	101	3889	1.739	ug/l	85
8) Diethyl Ether	3.67	74	4746	2.551	ug/l	99
9) 1,1,2-Trichlorotrifluoroet	4.04	101	7690	2.044	ug/l	96
10) Methyl Iodide	4.26	142	9391	1.806	ug/l	96
11) Tert butyl alcohol	5.20	59	3199m	12.472	ug/l	
12) 1,1-Dichloroethene	4.03	96	7404	2.052	ug/l #	77
13) Acrolein	3.89	56	3686	13.660	ug/l	95
14) Allyl chloride	4.65	41	11308	1.763	ug/l #	80
15) Acrylonitrile	5.36	53	8676	9.063	ug/l	96
16) Acetone	4.13	43	16179	15.485	ug/l	100
17) Carbon Disulfide	4.37	76	11569	2.375	ug/l	96
18) Methyl Acetate	4.67	43	7721	3.193	ug/l	94
19) Methyl tert-butyl Ether	5.42	73	8689	1.854	ug/l	91
20) Methylene Chloride	4.91	84	26203	2.348	ug/l	91
21) trans-1,2-Dichloroethene	5.42	96	7335	1.878	ug/l #	76
22) Diisopropyl ether	6.31	45	21719	1.670	ug/l	88
23) Vinyl Acetate	6.25	43	60517	7.390	ug/l	98
24) 1,1-Dichloroethane	6.20	63	15947	2.051	ug/l #	96
25) 2-Butanone	7.18	43	12167	8.865	ug/l	98
26) 2,2-Dichloropropane	7.16	77	9203	2.139	ug/l	95
27) cis-1,2-Dichloroethene	7.17	96	8026	1.868	ug/l	96
28) Bromochloromethane	7.50	49	6712	2.112	ug/l	100
29) Tetrahydrofuran	7.54	42	7627	8.770	ug/l	95
30) Chloroform	7.67	83	15534	1.993	ug/l	89
31) Cyclohexane	7.95	56	20742	2.848	ug/l #	60
32) 1,1,1-Trichloroethane	7.87	97	12682	2.073	ug/l	95
36) 1,1-Dichloropropene	8.08	75	11736	1.873	ug/l	96
37) Ethyl Acetate	7.25	43	6692	2.101	ug/l #	93
38) Carbon Tetrachloride	8.06	117	12023	1.966	ug/l	95

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041719\
 Data File : VW010019.D
 Acq On : 17 Apr 2019 16:40
 Operator : SY/VA
 Sample : K2241-01
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Manual Integrations
 APPROVED

MMDadoda
 4/18/2019 11:40:33 AM

Quant Time: Apr 18 02:52:19 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W041719S.M
 Quant Title : SW846 8260
 QLast Update : Thu Apr 18 02:23:40 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.33	83	11701	2.695	ug/l	94
40) Benzene	8.32	78	31336	1.829	ug/l	97
41) Methacrylonitrile	7.52	41	4902m	2.701	ug/l	
42) 1,2-Dichloroethane	8.40	62	11691	1.985	ug/l	97
43) Isopropyl Acetate	8.42	43	10816	1.812	ug/l	98
44) Trichloroethene	9.09	130	8433	1.937	ug/l	95
45) 1,2-Dichloropropane	9.37	63	8574	1.903	ug/l	94
46) Dibromomethane	9.46	93	4368	1.871	ug/l	97
47) Bromodichloromethane	9.65	83	10991	1.824	ug/l	93
48) Methyl methacrylate	9.43	41	4103	1.412	ug/l	90
49) 1,4-Dioxane	9.46	88	1315	36.862	ug/l	89
51) 4-Methyl-2-Pentanone	10.21	43	25512	8.162	ug/l	95
52) Toluene	10.39	92	19993	1.873	ug/l	94
53) t-1,3-Dichloropropene	10.60	75	10177	1.703	ug/l	92
54) cis-1,3-Dichloropropene	10.07	75	11258	1.650	ug/l #	95
55) 1,1,2-Trichloroethane	10.79	97	6091	1.869	ug/l #	86
56) Ethyl methacrylate	10.65	69	6322	3.965	ug/l	91
57) 1,3-Dichloropropane	10.93	76	10520	1.801	ug/l	92
58) 2-Chloroethyl Vinyl ether	9.92	63	15281	7.848	ug/l	96
59) 2-Hexanone	10.97	43	17065	7.843	ug/l	95
60) Dibromochloromethane	11.13	129	6116	1.624	ug/l	91
61) 1,2-Dibromoethane	11.24	107	5447	1.757	ug/l	97
64) Tetrachloroethene	10.87	164	7394	2.125	ug/l #	73
65) Chlorobenzene	11.66	112	22513	2.052	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.73	131	7786	1.985	ug/l #	66
67) Ethyl Benzene	11.73	91	36464	1.863	ug/l	95
68) m/p-Xylenes	11.84	106	25803	3.527	ug/l	98
69) o-Xylene	12.16	106	11798	1.771	ug/l	94
70) Styrene	12.18	104	17722	1.543	ug/l	95
71) Bromoform	12.35	173	3939	1.899	ug/l #	100
73) Isopropylbenzene	12.46	105	31443	1.751	ug/l	98
74) N-amyl acetate	12.27	43	8172	1.643	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.72	83	6997	1.972	ug/l	90
76) 1,2,3-Trichloropropane	12.77	75	5846	2.263	ug/l #	100
77) Bromobenzene	12.75	156	8469	2.050	ug/l	96
78) n-propylbenzene	12.80	91	44273	1.989	ug/l	99
79) 2-Chlorotoluene	12.90	91	26263	2.051	ug/l	99
80) 1,3,5-Trimethylbenzene	12.94	105	27247	1.789	ug/l	99
81) trans-1,4-Dichloro-2-buten	12.52	75	1826m	1.667	ug/l	
82) 4-Chlorotoluene	12.99	91	28013	2.079	ug/l	100
83) tert-Butylbenzene	13.21	119	22441	1.779	ug/l	92
84) 1,2,4-Trimethylbenzene	13.25	105	27109	1.756	ug/l	98
85) sec-Butylbenzene	13.38	105	33988	1.803	ug/l	98
86) p-Isopropyltoluene	13.50	119	29020	1.747	ug/l	98
87) 1,3-Dichlorobenzene	13.51	146	17716	2.122	ug/l	97
88) 1,4-Dichlorobenzene	13.58	146	19684	2.362	ug/l	83
89) n-Butylbenzene	13.83	91	32710	1.988	ug/l	98
90) Hexachloroethane	14.09	117	6807	2.140	ug/l	100
91) 1,2-Dichlorobenzene	13.87	146	16607	2.218	ug/l	96
92) 1,2-Dibromo-3-Chloropropan	14.49	75	1332	2.098	ug/l	93

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW041719\
Data File : VW010019.D
Acq On : 17 Apr 2019 16:40
Operator : SY/VA
Sample : K2241-01
Misc : 5.00G/5ML/MSVOA W/SOIL
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

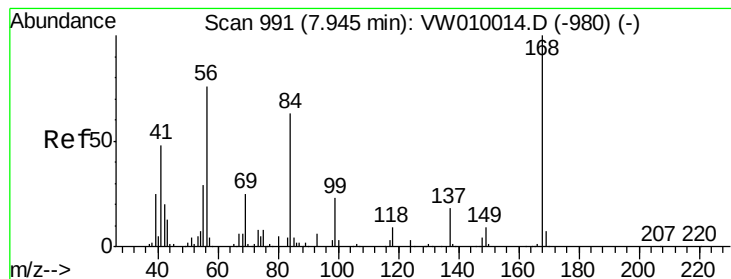
Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM

Quant Time: Apr 18 02:52:19 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W041719S.M
Quant Title : SW846 8260
QLast Update : Thu Apr 18 02:23:40 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.14	180	10348	2.095	ug/l	98
94) Hexachlorobutadiene	15.24	225	6658	2.220	ug/l	98
95) Naphthalene	15.37	128	15090	4.097	ug/l	97
96) 1,2,3-Trichlorobenzene	15.56	180	9092	2.122	ug/l	97

(#) = 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: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:168 Resp: 364903

Ion Ratio Lower Upper

168 100

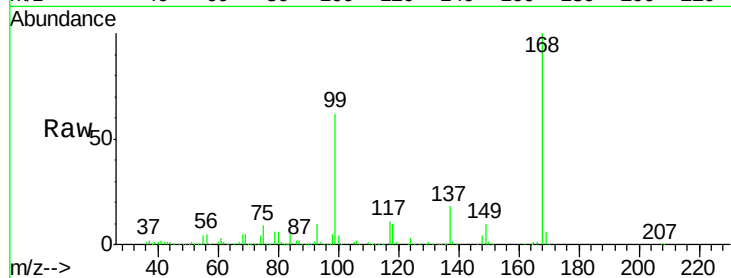
99 61.5 48.4 72.6

Manual Integrations

APPROVED

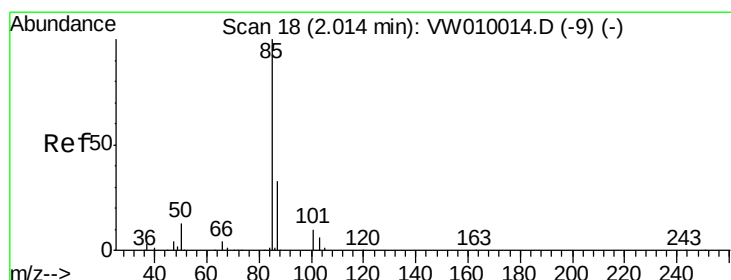
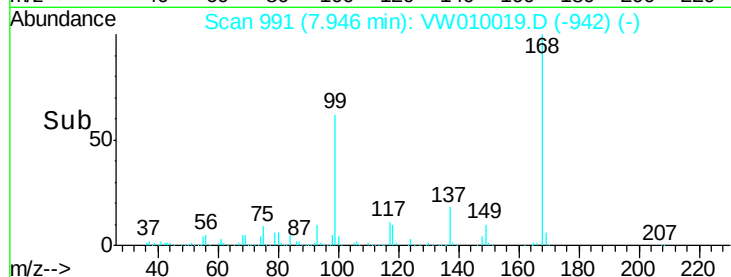
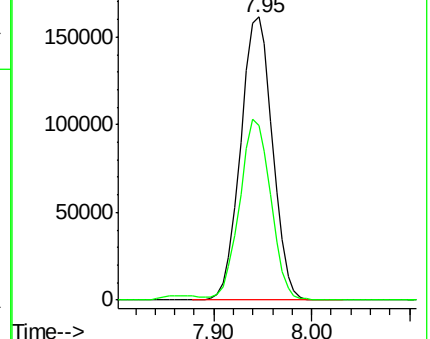
MMDadoda

4/18/2019 11:40:33 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#2

Dichlorodifluoromethane

Concen: 1.886 ug/l

RT: 2.01 min Scan# 17

Delta R.T. -0.01 min

Lab File: VW010019.D

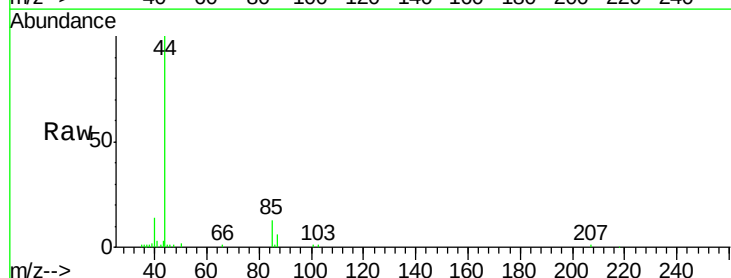
Acq: 17 Apr 2019 16:40

Tgt Ion: 85 Resp: 5248

Ion Ratio Lower Upper

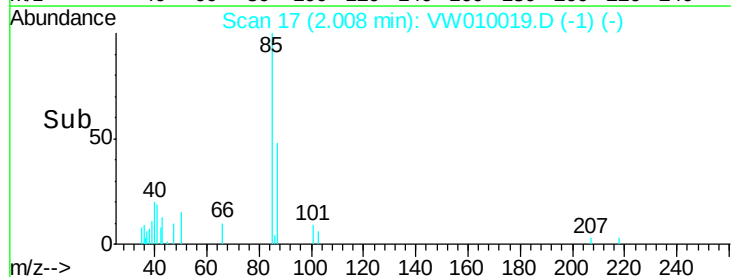
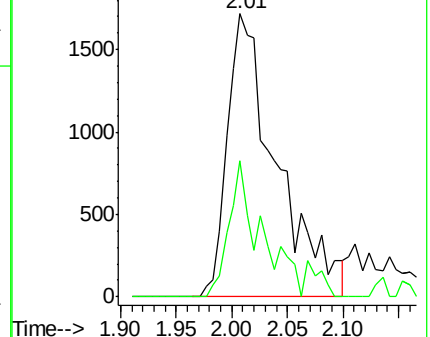
85 100

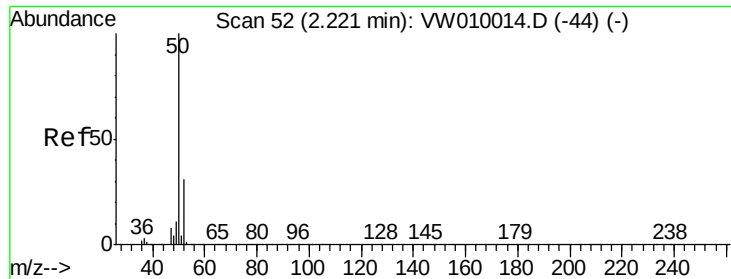
87 48.0 16.3 48.9



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW





#3

Chloromethane

Concen: 1.803 ug/l

RT: 2.21 min Scan# 50

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 50 Resp: 5016

Ion Ratio Lower Upper

50 100

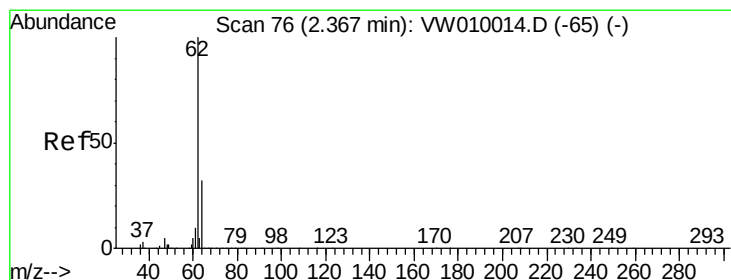
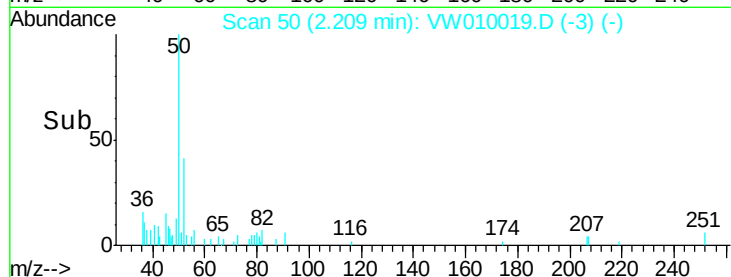
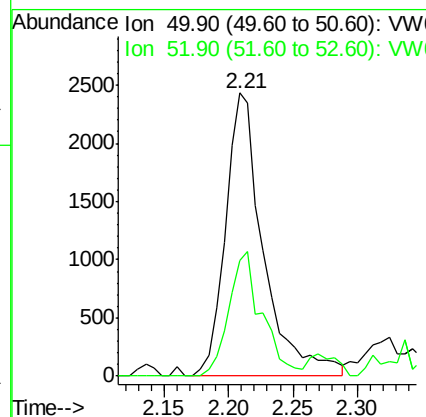
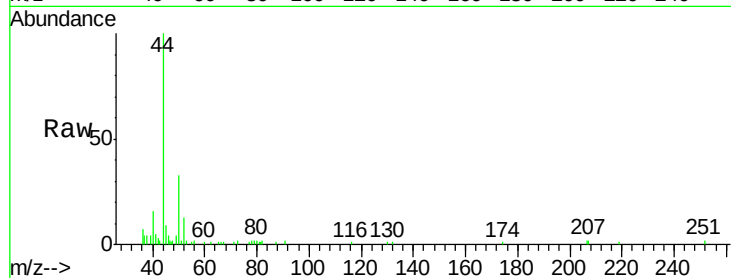
52 40.9 25.0 37.6#

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#4

Vinyl Chloride

Concen: 1.493 ug/l

RT: 2.37 min Scan# 76

Delta R.T. 0.00 min

Lab File: VW010019.D

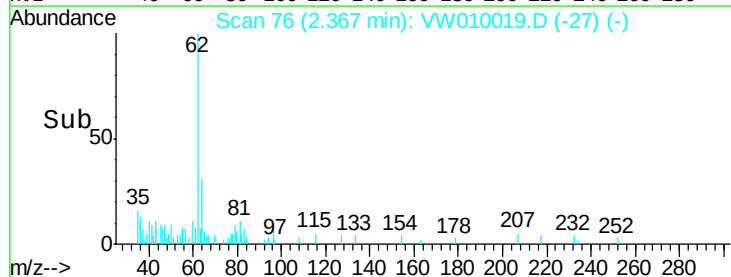
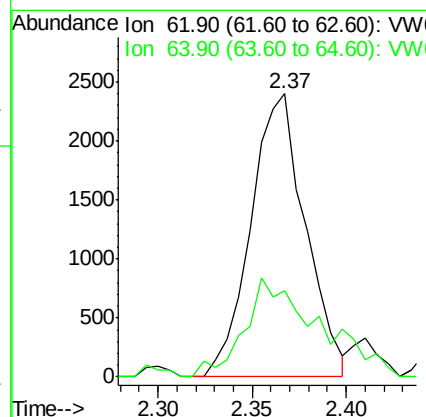
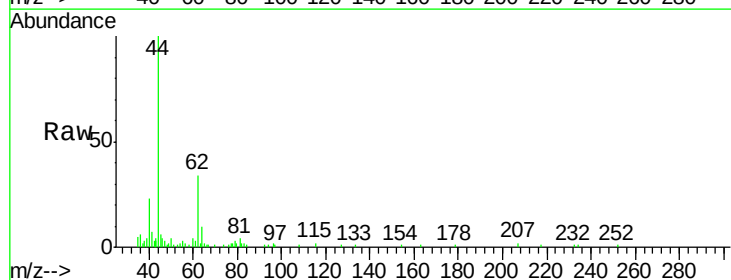
Acq: 17 Apr 2019 16:40

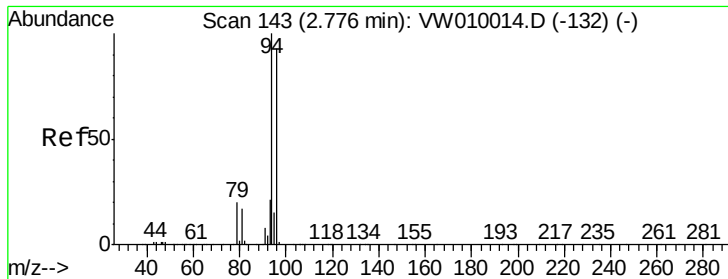
Tgt Ion: 62 Resp: 4830

Ion Ratio Lower Upper

62 100

64 30.5 25.9 38.9





#5

Bromomethane

Concen: 2.039 ug/l

RT: 2.78 min Scan# 144

Delta R.T. 0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 94 Resp: 4431

Ion Ratio Lower Upper

94 100

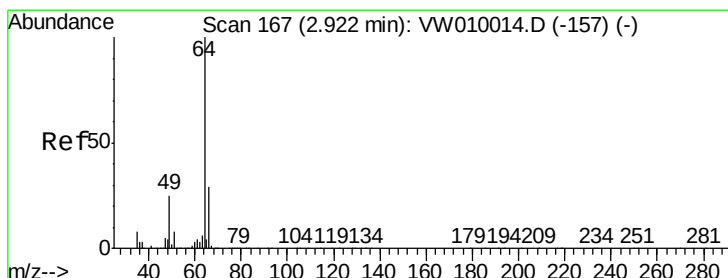
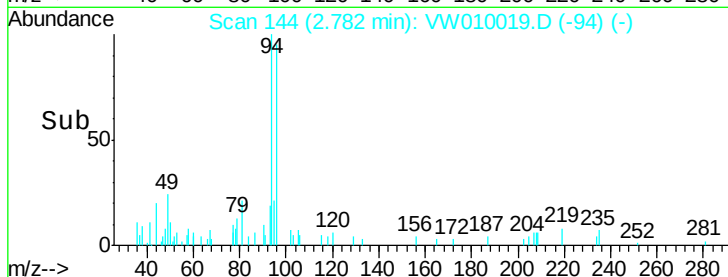
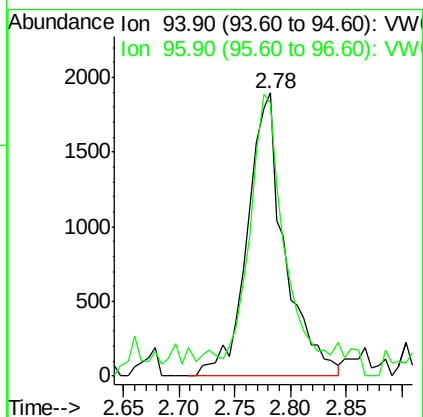
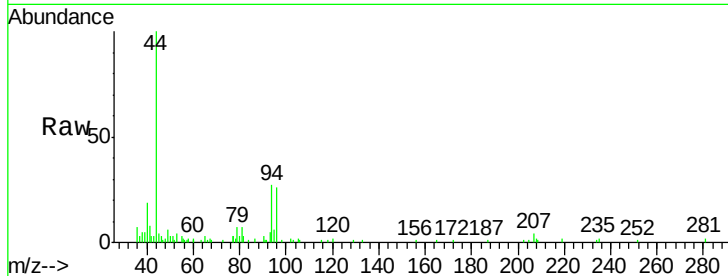
96 86.4 74.2 111.2

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#6

Chloroethane

Concen: 1.811 ug/l

RT: 2.92 min Scan# 167

Delta R.T. 0.00 min

Lab File: VW010019.D

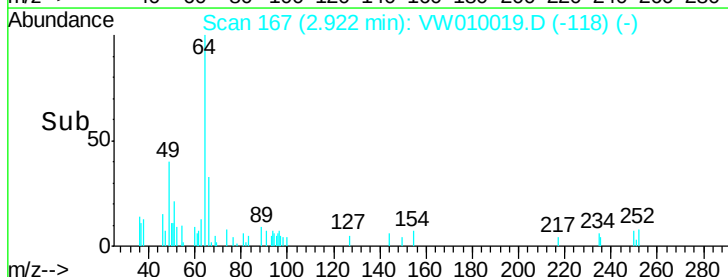
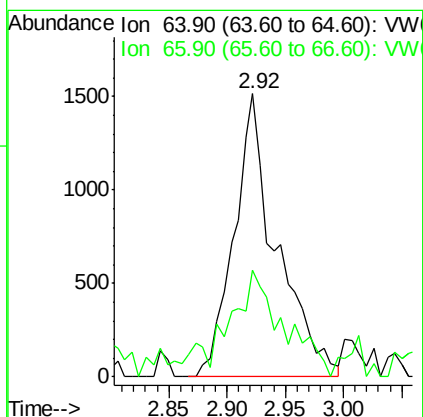
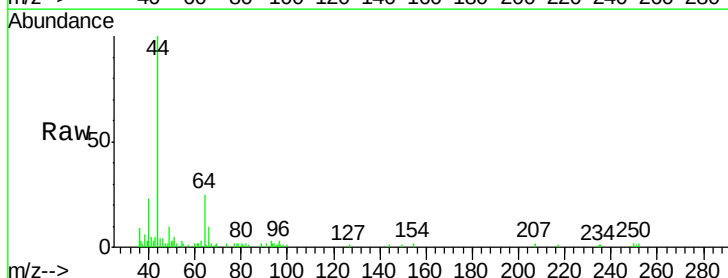
Acq: 17 Apr 2019 16:40

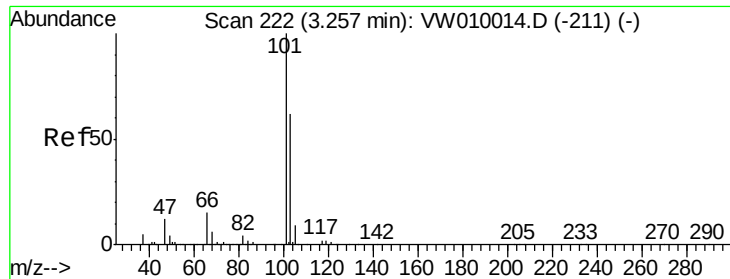
Tgt Ion: 64 Resp: 3827

Ion Ratio Lower Upper

64 100

66 31.0 23.4 35.0





#7

Trichlorofluoromethane

Concen: 1.739 ug/l

RT: 3.24 min Scan# 219

Delta R.T. -0.02 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:101 Resp: 3889

Ion Ratio Lower Upper

101 100

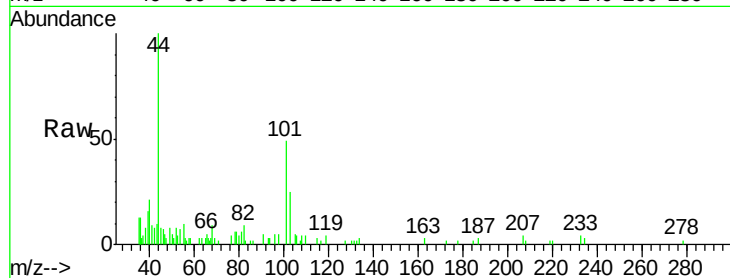
103 50.7 49.8 74.6

Manual Integrations

APPROVED

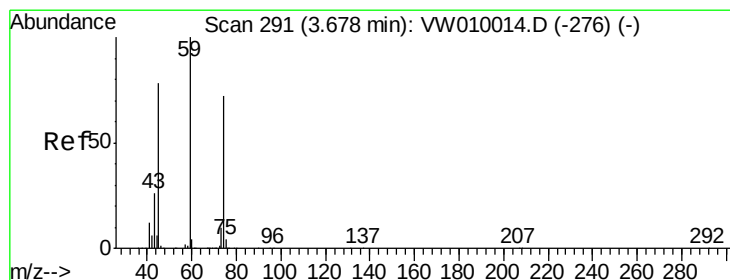
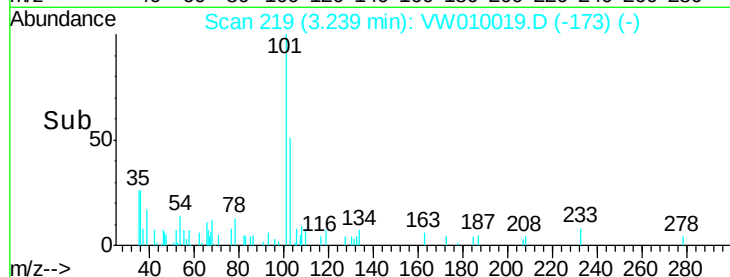
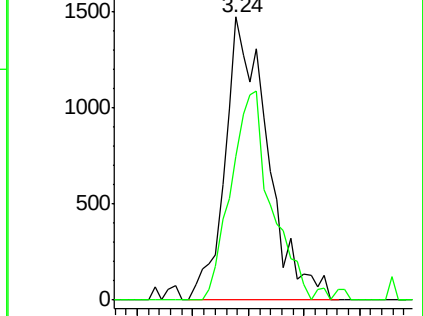
MMDadoda

4/18/2019 11:40:33 AM



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 102.80 (102.50 to 103.50): V



#8

Diethyl Ether

Concen: 2.551 ug/l

RT: 3.67 min Scan# 290

Delta R.T. -0.01 min

Lab File: VW010019.D

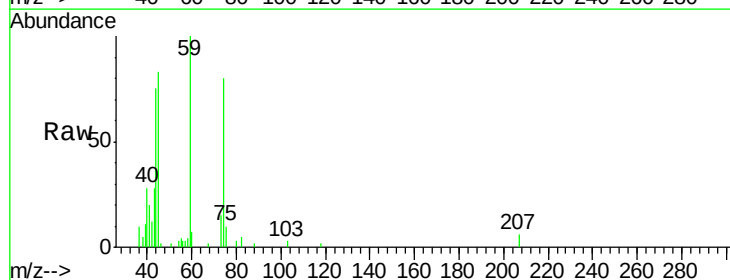
Acq: 17 Apr 2019 16:40

Tgt Ion: 74 Resp: 4746

Ion Ratio Lower Upper

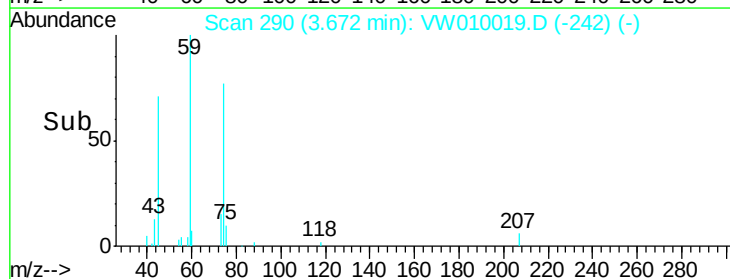
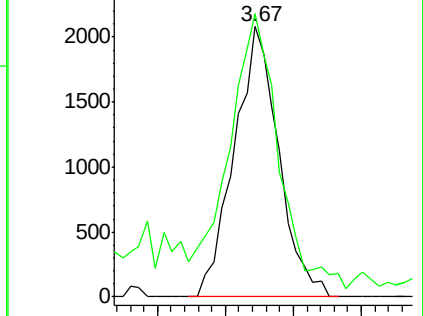
74 100

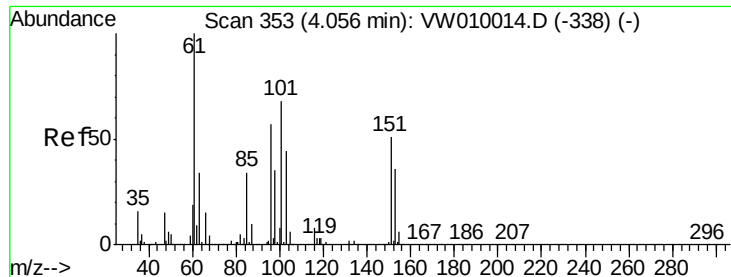
45 112.8 56.0 168.0



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW





#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.044 ug/l

RT: 4.04 min Scan# 351

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

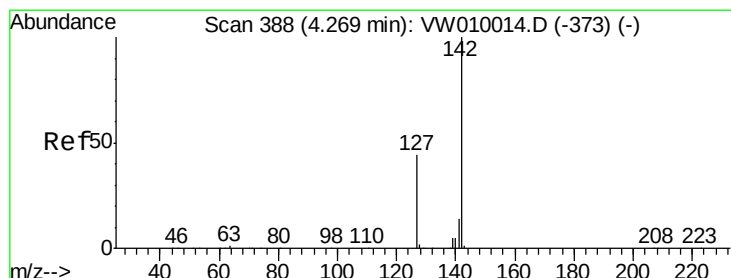
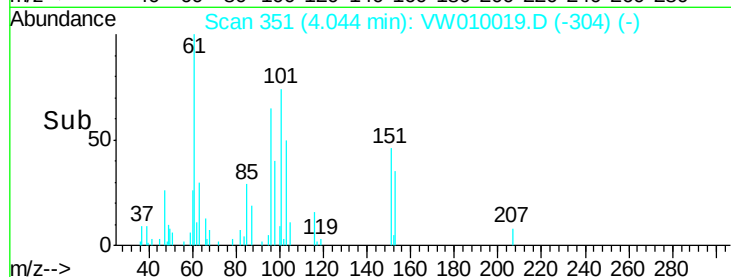
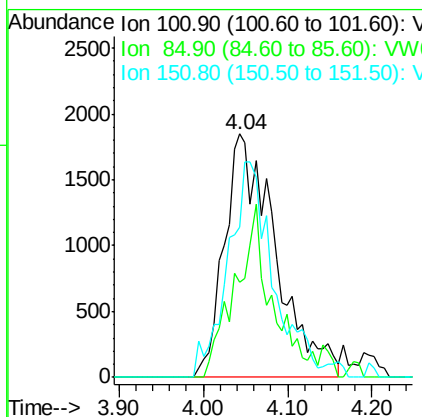
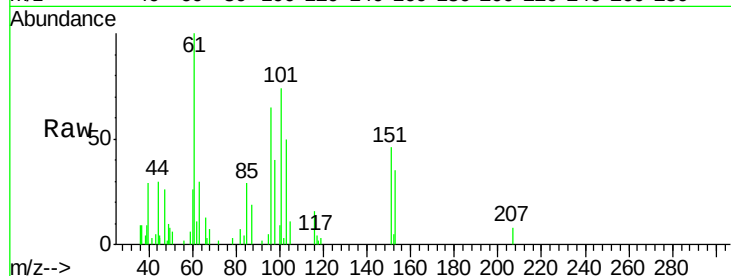
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	101	Resp:	7690
Ion Ratio	Lower	Upper	
101	100		
85	49.2	36.3	54.5
151	77.6	60.2	90.2

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#10

Methyl Iodide

Concen: 1.806 ug/l

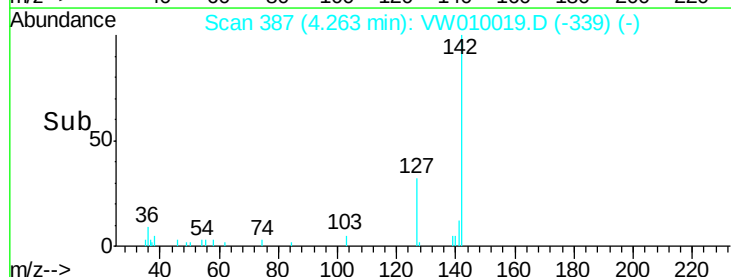
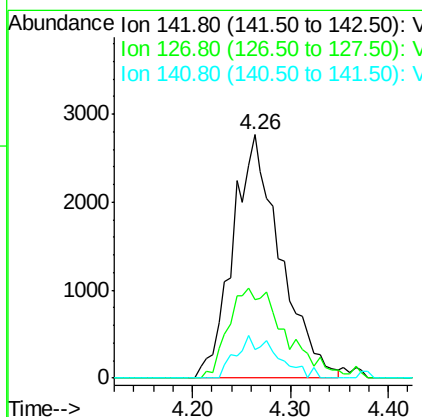
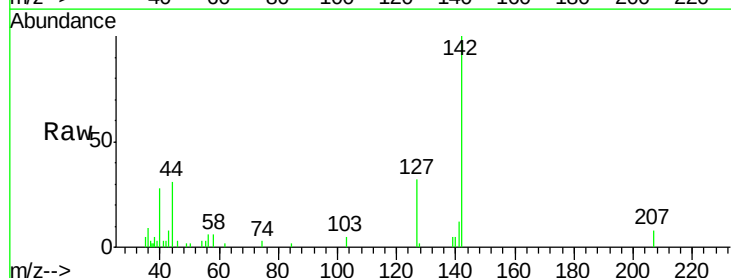
RT: 4.26 min Scan# 387

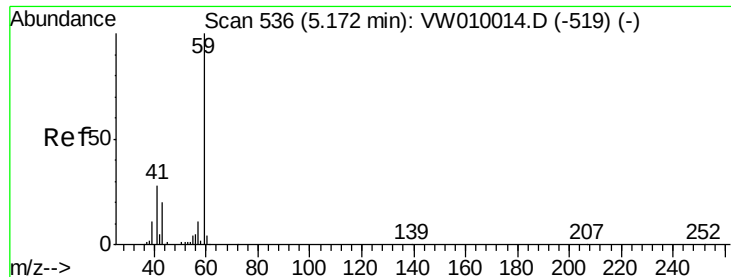
Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	142	Resp:	9391
Ion Ratio	Lower	Upper	
142	100		
127	43.9	38.1	57.1
141	14.8	12.2	18.2





#11

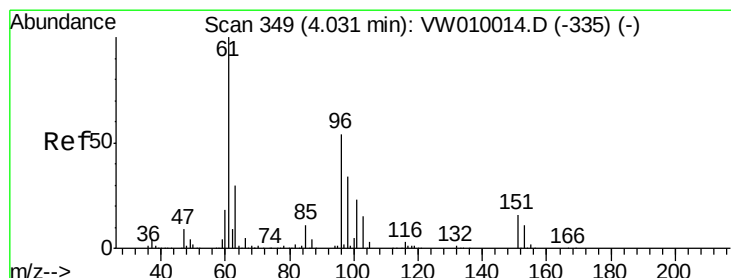
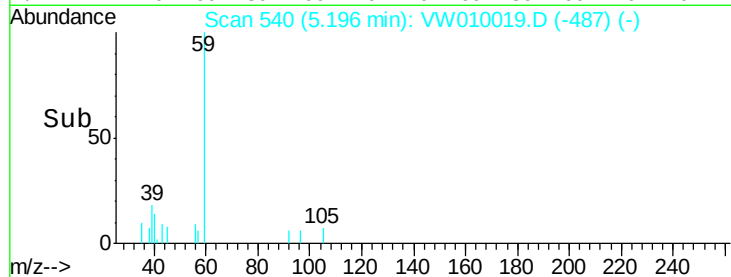
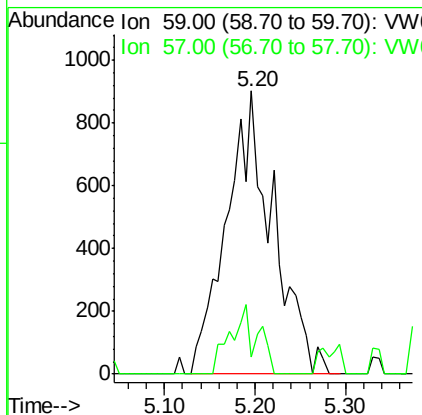
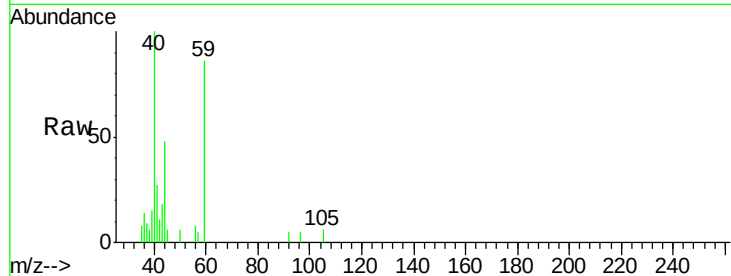
Tert butyl alcohol
 Concen: 12.472 ug/l m
 RT: 5.20 min Scan# 540
 Delta R.T. 0.02 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
59	100		
57	10.0	9.0	13.4

Manual Integrations
 APPROVED

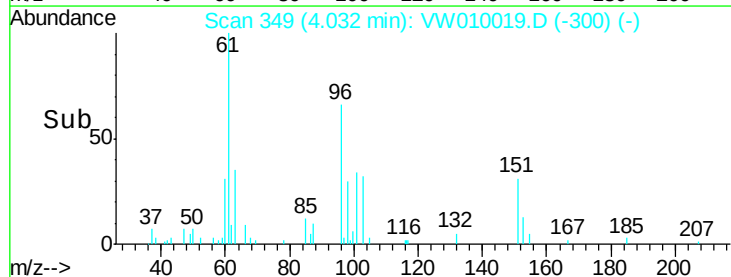
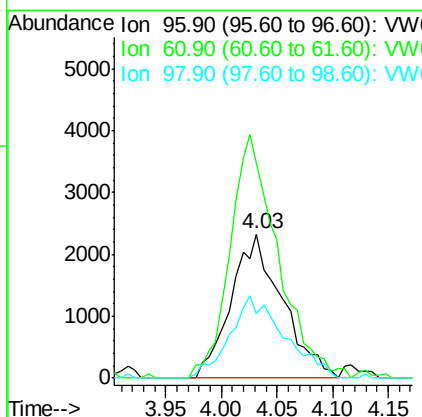
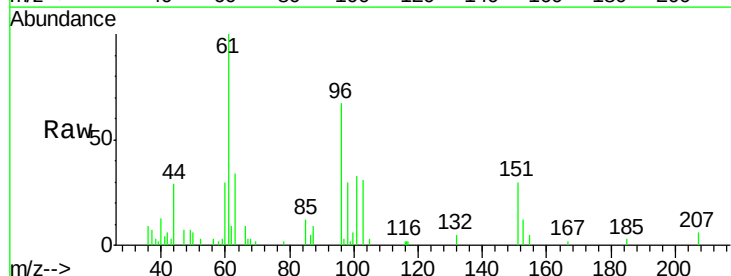
MMDadoda
 4/18/2019 11:40:33 AM

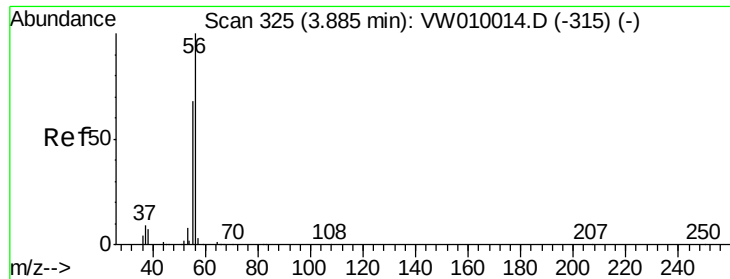


#12

1,1-Dichloroethene
 Concen: 2.052 ug/l
 RT: 4.03 min Scan# 349
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
96	100		
61	150.1	147.4	221.2
98	45.0	49.7	74.5#





#13

Acrolein

Concen: 13.660 ug/l

RT: 3.89 min Scan# 325

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 56 Resp: 3686

Ion Ratio Lower Upper

56 100

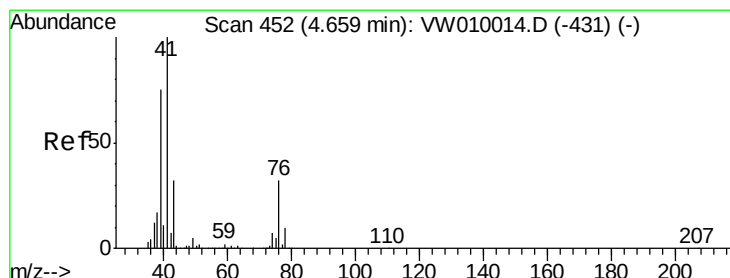
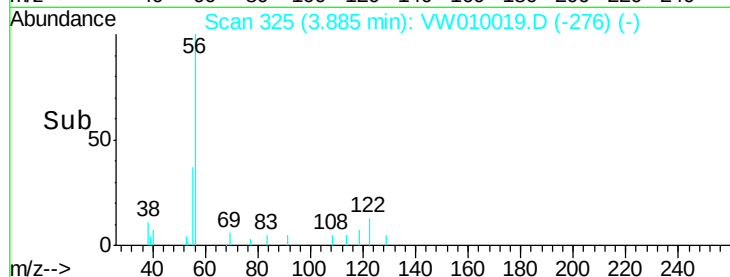
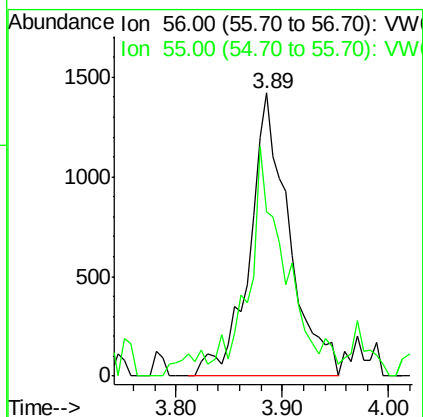
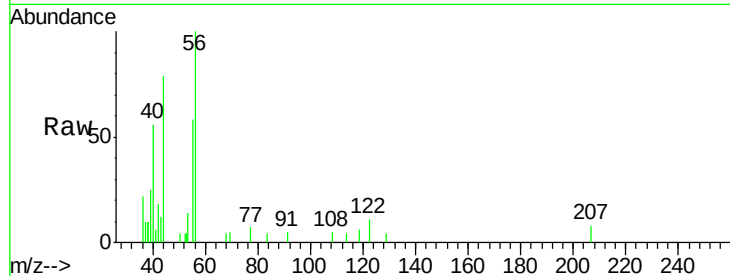
55 71.4 54.2 81.2

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#14

Allyl chloride

Concen: 1.763 ug/l

RT: 4.65 min Scan# 451

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

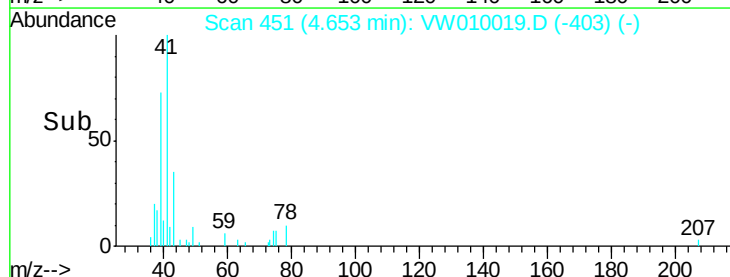
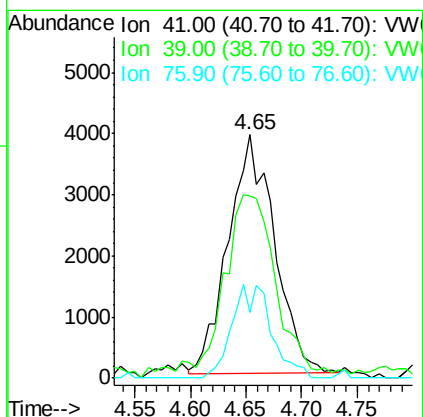
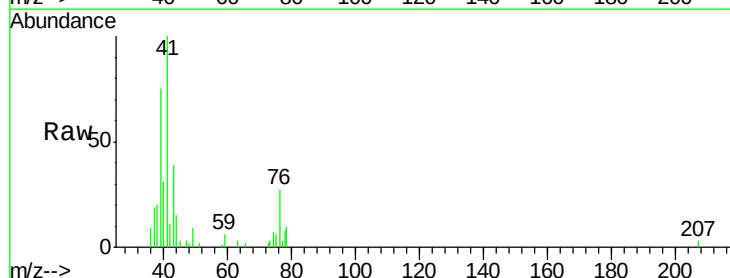
Tgt Ion: 41 Resp: 11308

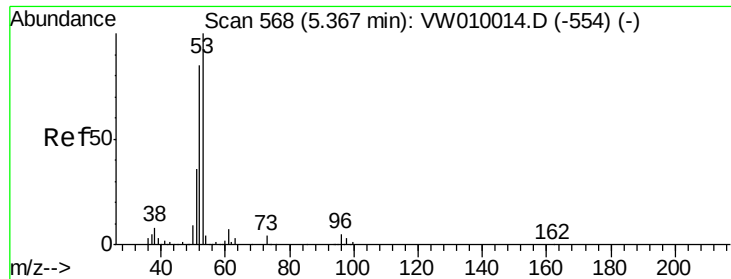
Ion Ratio Lower Upper

41 100

39 89.6 60.2 90.4

76 16.4 25.0 37.6#





#15

Acrylonitrile

Concen: 9.063 ug/l

RT: 5.36 min Scan# 567

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

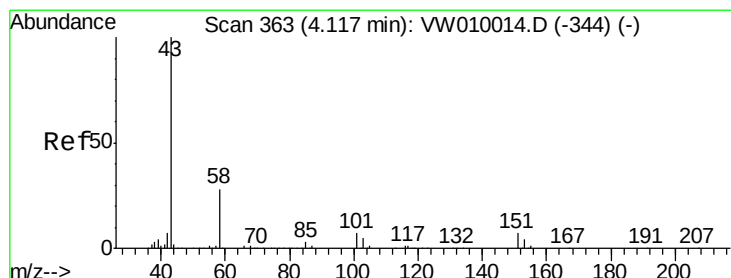
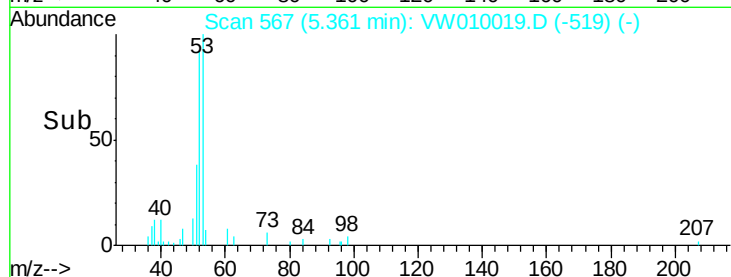
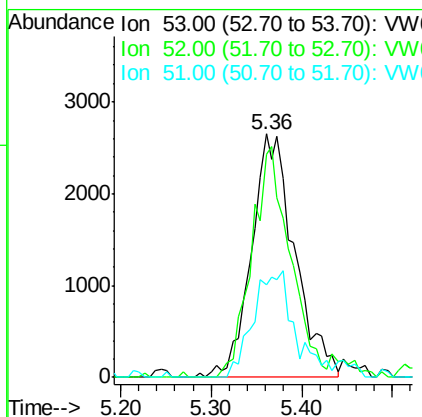
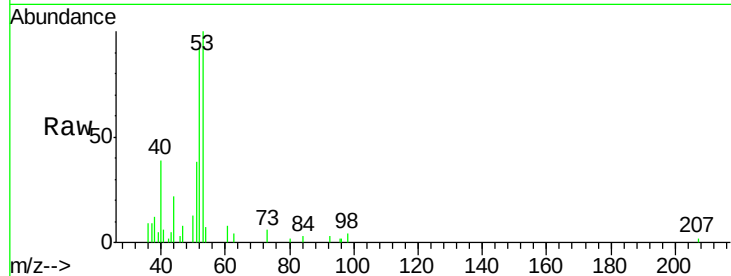
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	53	Resp:	8676
Ion	Ratio	Lower	Upper
53	100		
52	85.2	66.6	100.0
51	42.0	30.3	45.5

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#16

Acetone

Concen: 15.485 ug/l

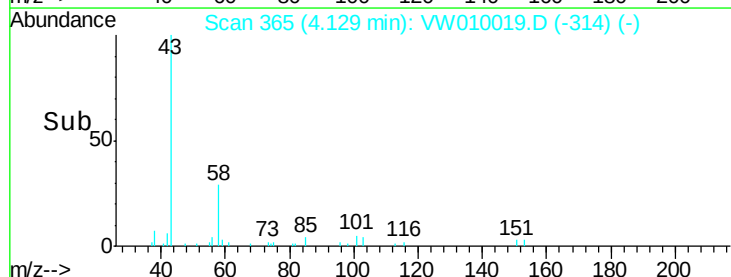
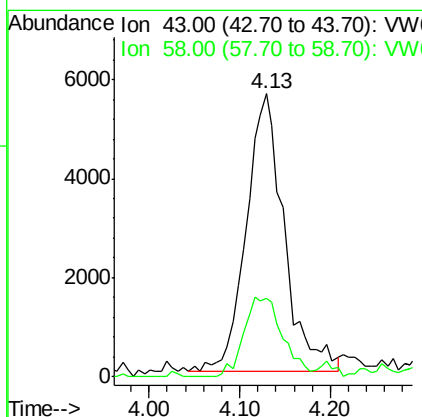
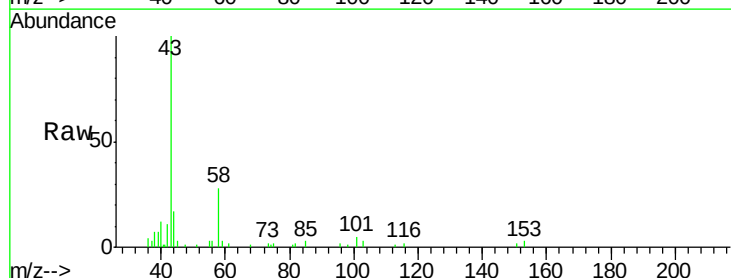
RT: 4.13 min Scan# 365

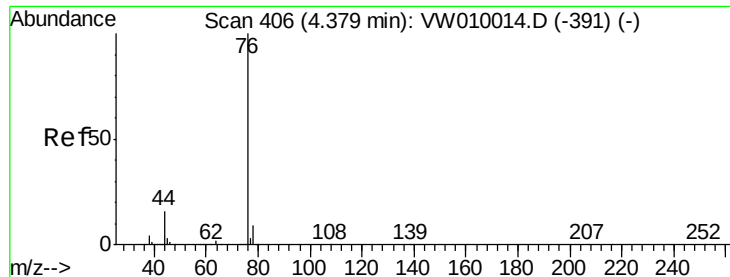
Delta R.T. 0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	43	Resp:	16179
Ion	Ratio	Lower	Upper
43	100		
58	28.3	22.7	34.1





#17

Carbon Disulfide

Concen: 2.375 ug/l

RT: 4.37 min Scan# 405

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 76 Resp: 11569

Ion Ratio Lower Upper

76 100

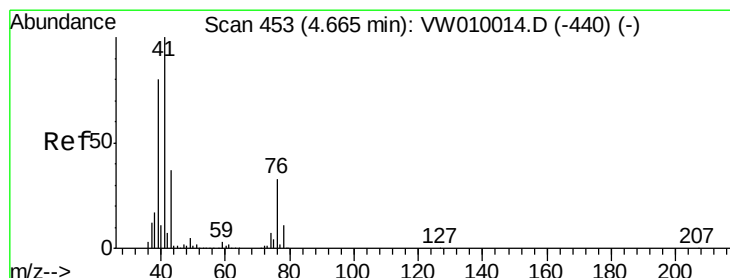
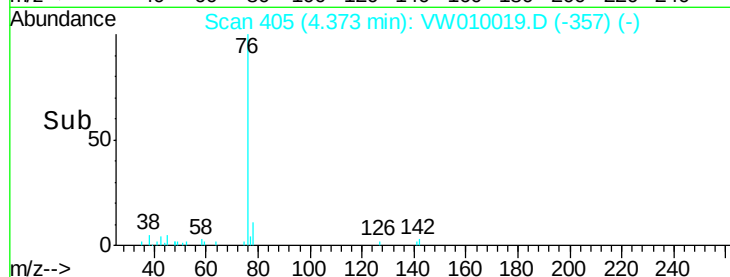
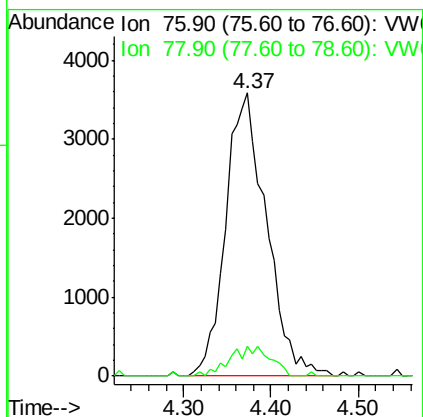
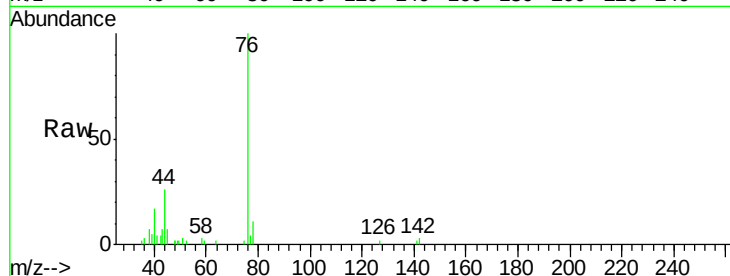
78 10.7 7.4 11.2

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#18

Methyl Acetate

Concen: 3.193 ug/l

RT: 4.67 min Scan# 454

Delta R.T. 0.01 min

Lab File: VW010019.D

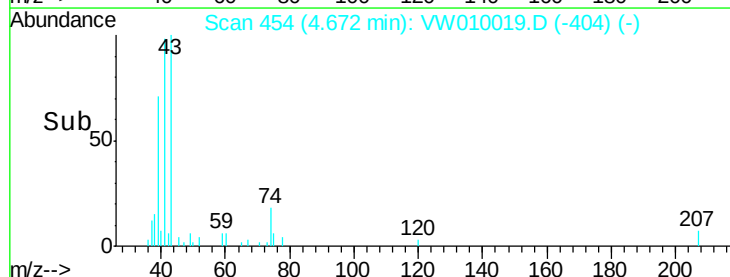
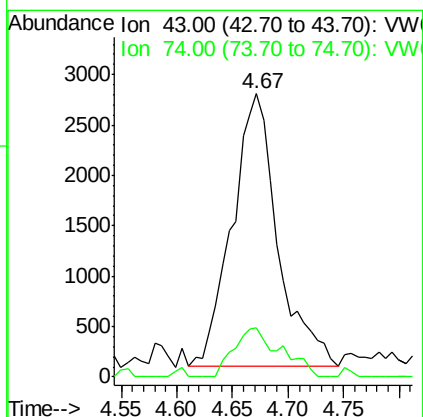
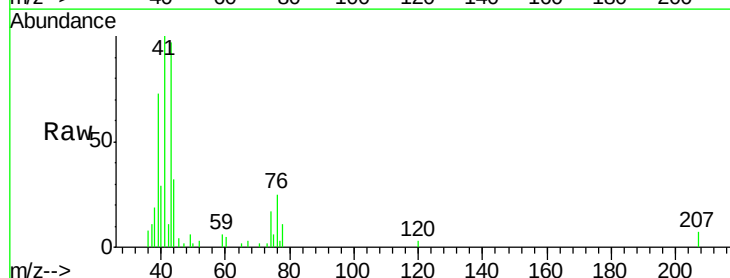
Acq: 17 Apr 2019 16:40

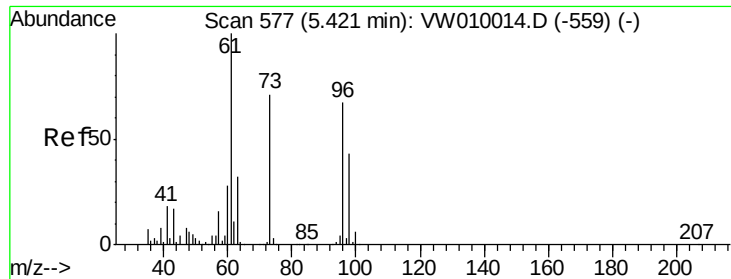
Tgt Ion: 43 Resp: 7721

Ion Ratio Lower Upper

43 100

74 18.2 16.8 25.2





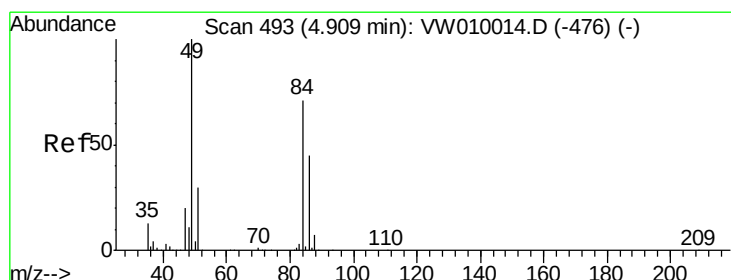
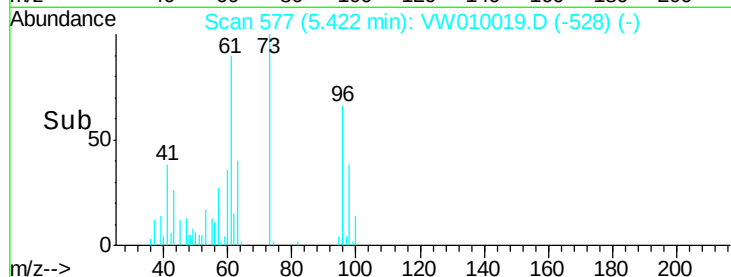
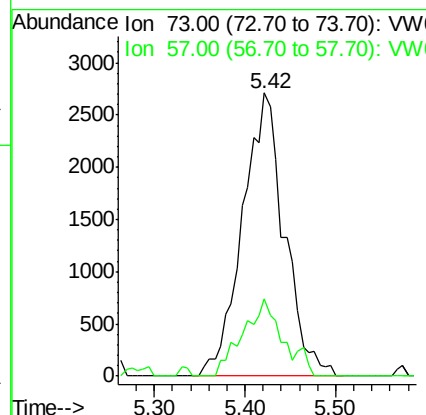
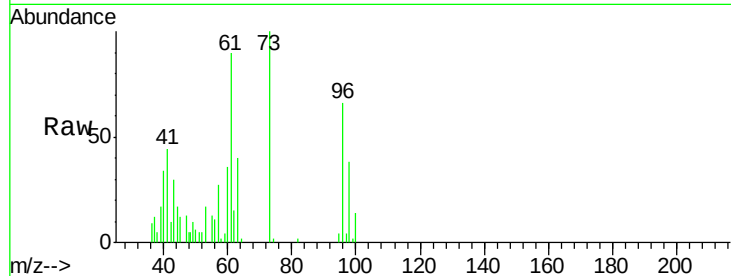
#19
Methyl tert-butyl Ether
Concen: 1.854 ug/l
RT: 5.42 min Scan# 577
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 73 Resp: 8689
Ion Ratio Lower Upper
73 100
57 27.3 18.5 27.7

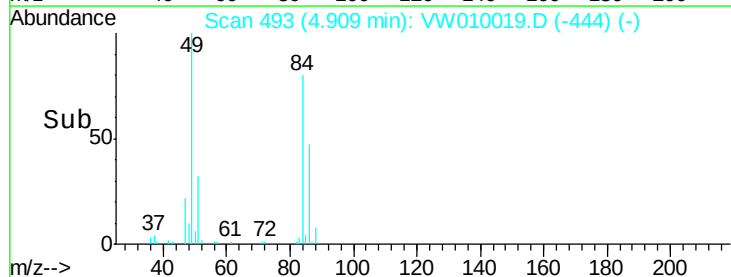
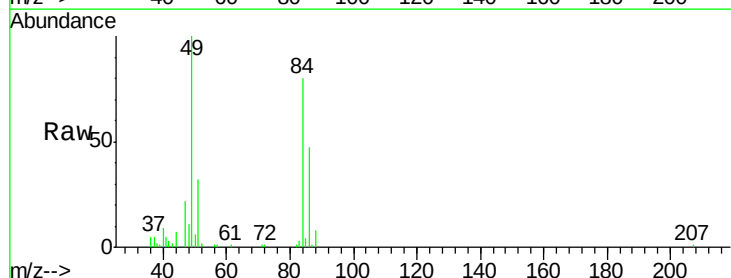
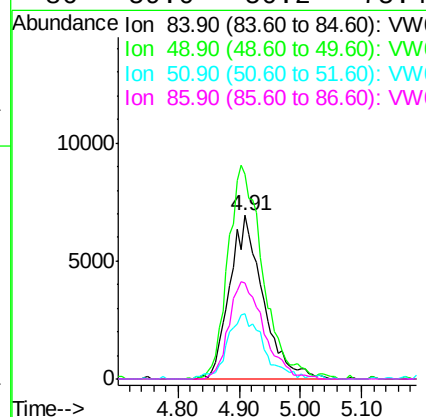
Manual Integrations
APPROVED

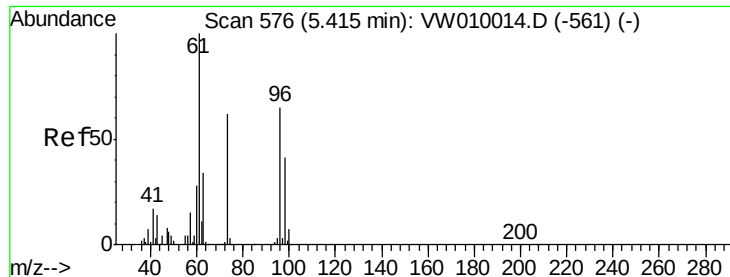
MMDadoda
4/18/2019 11:40:33 AM



#20
Methylene Chloride
Concen: 2.348 ug/l
RT: 4.91 min Scan# 493
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion: 84 Resp: 26203
Ion Ratio Lower Upper
84 100
49 125.7 112.3 168.5
51 40.0 33.9 50.9
86 59.0 50.2 75.4





#21

trans-1,2-Dichloroethene

Concen: 1.878 ug/l

RT: 5.42 min Scan# 576

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

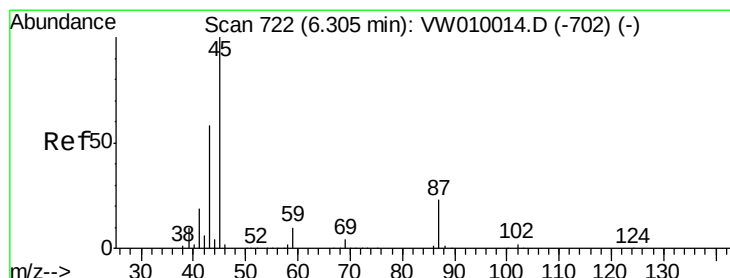
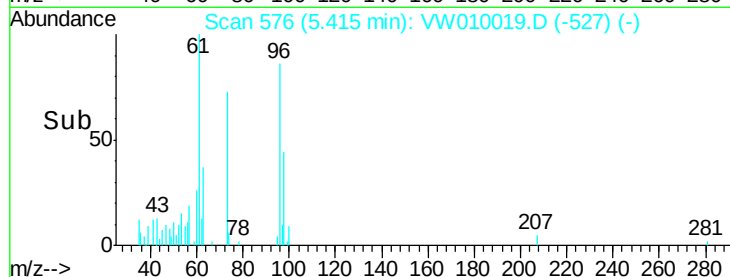
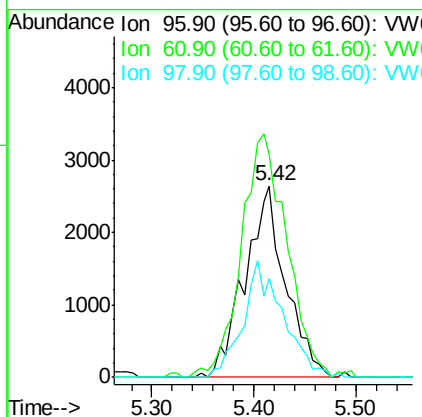
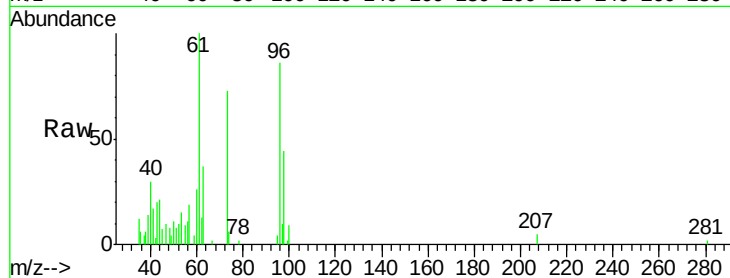
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	96	Resp:	7335
Ion	Ratio	Lower	Upper
96	100		
61	116.7	122.3	183.5#
98	51.8	50.5	75.7

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#22

Diisopropyl ether

Concen: 1.670 ug/l

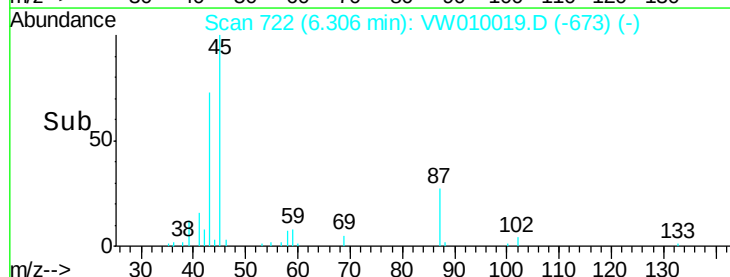
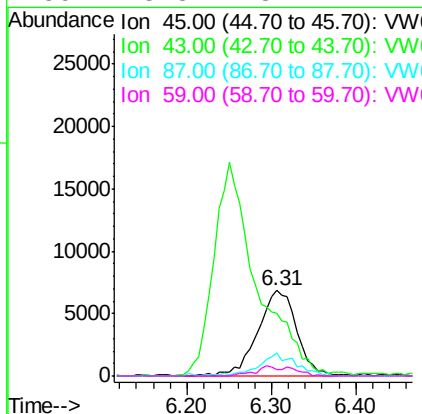
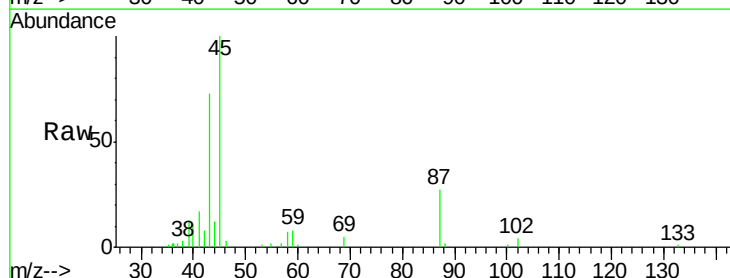
RT: 6.31 min Scan# 722

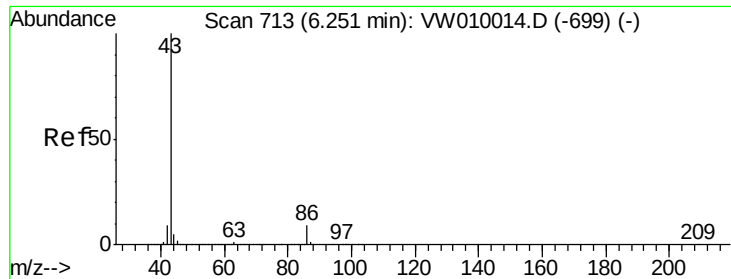
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	45	Resp:	21719
Ion	Ratio	Lower	Upper
45	100		
43	68.1	46.1	69.1
87	26.9	18.3	27.5
59	8.3	8.2	12.4





#23

Vinyl Acetate

Concen: 7.390 ug/l

RT: 6.25 min Scan# 713

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 43 Resp: 60517

Ion Ratio Lower Upper

43 100

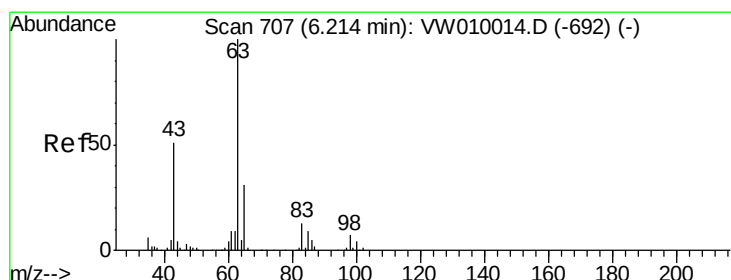
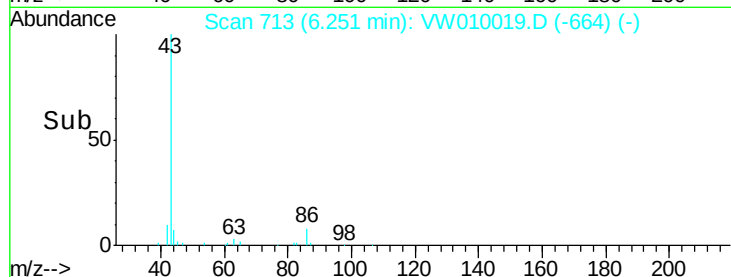
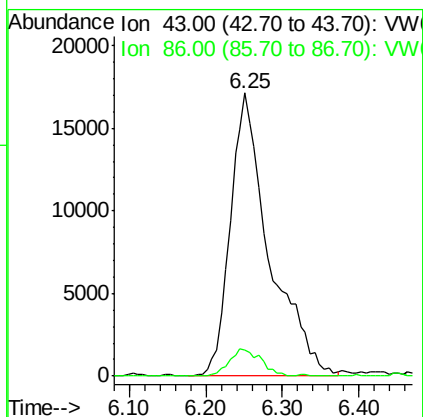
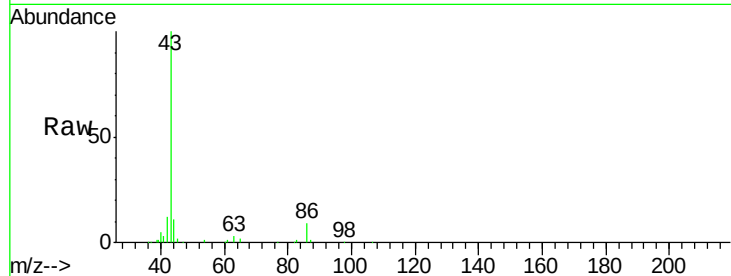
86 9.4 7.0 10.6

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#24

1,1-Dichloroethane

Concen: 2.051 ug/l

RT: 6.20 min Scan# 705

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

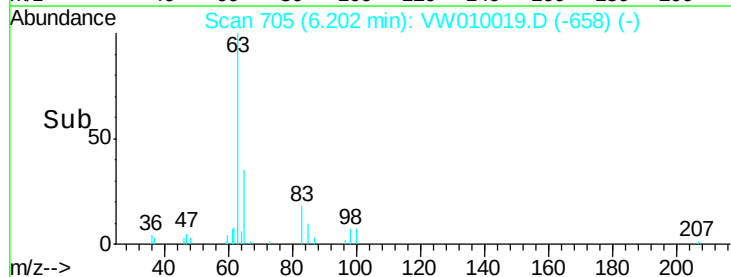
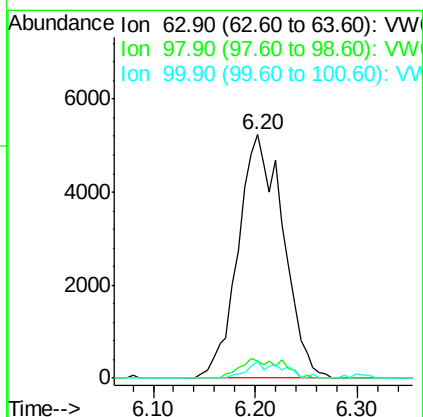
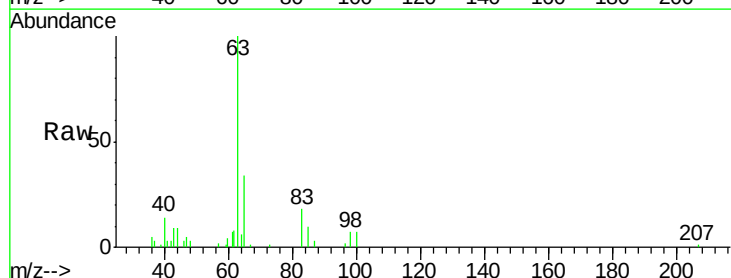
Tgt Ion: 63 Resp: 15947

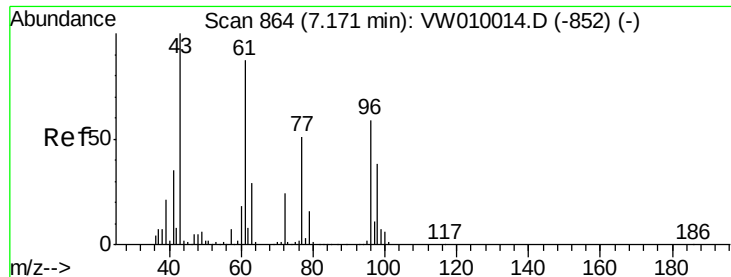
Ion Ratio Lower Upper

63 100

98 7.0 3.3 9.8

100 6.9 2.0 6.0#





#25

2-Butanone

Concen: 8.865 ug/l

RT: 7.18 min Scan# 866

Delta R.T. 0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 43 Resp: 12167

Ion Ratio Lower Upper

43 100

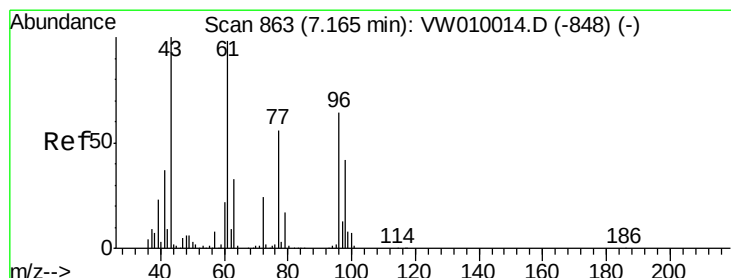
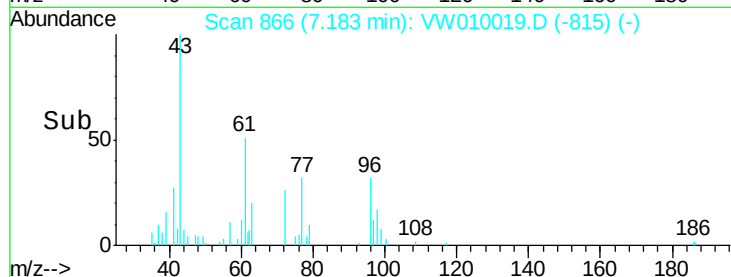
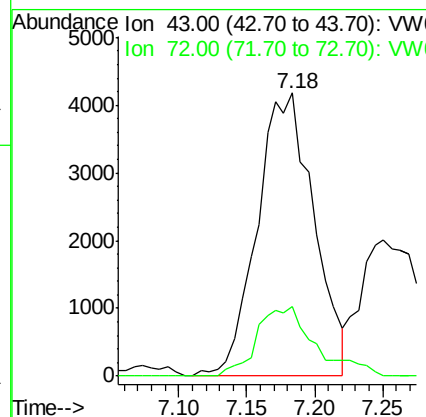
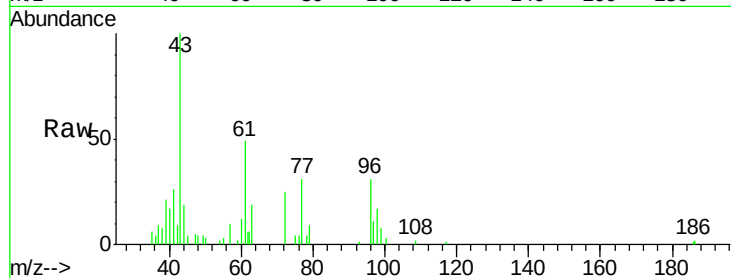
72 24.7 19.1 28.7

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#26

2,2-Dichloropropane

Concen: 2.139 ug/l

RT: 7.16 min Scan# 862

Delta R.T. -0.01 min

Lab File: VW010019.D

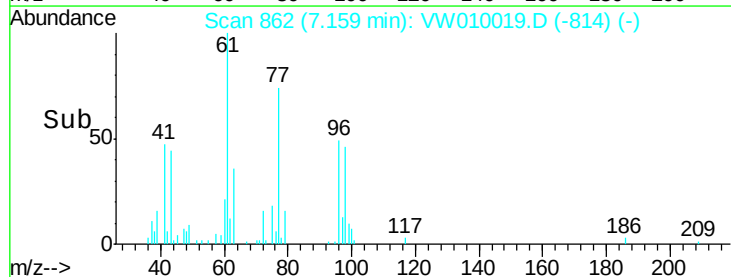
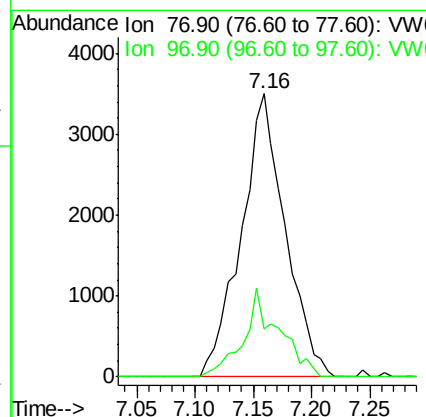
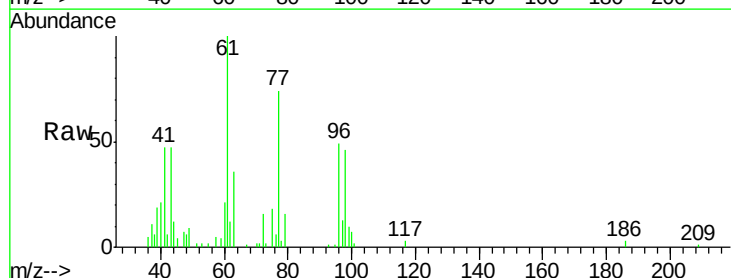
Acq: 17 Apr 2019 16:40

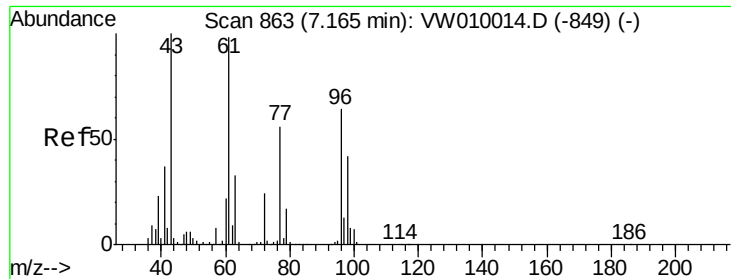
Tgt Ion: 77 Resp: 9203

Ion Ratio Lower Upper

77 100

97 25.2 11.3 33.9





#27

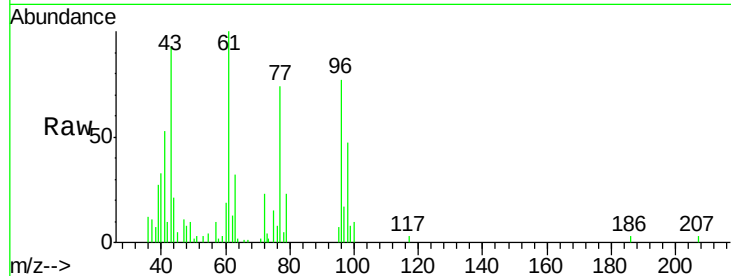
cis-1,2-Dichloroethene
Concen: 1.868 ug/l
RT: 7.17 min Scan# 863
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

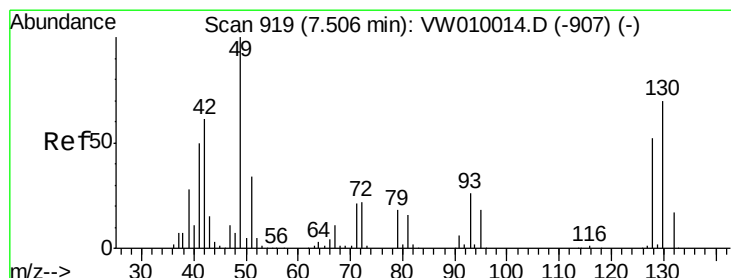
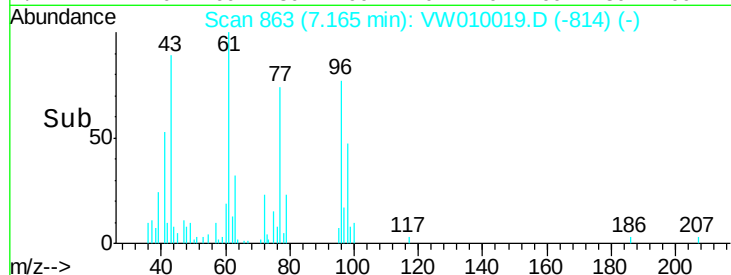
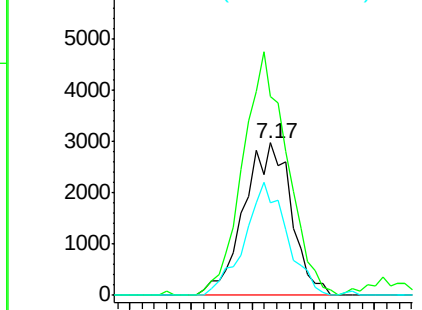
Tot Ion	Ratio	Lower	Upper
96	100		
61	149.5	0.0	309.4
98	66.4	0.0	128.6

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



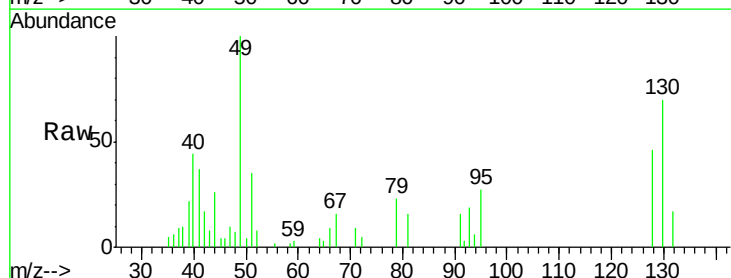
Abundance Ion 95.90 (95.60 to 96.60): VW
Ion 60.90 (60.60 to 61.60): VW
Ion 97.90 (97.60 to 98.60): VW



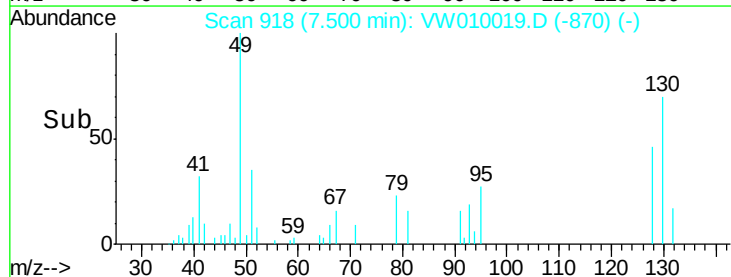
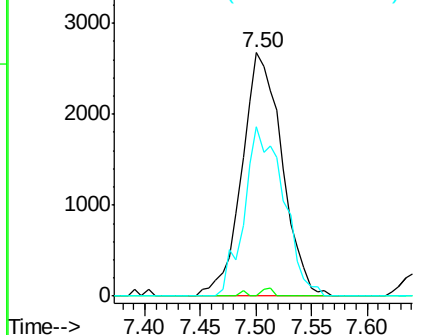
#28

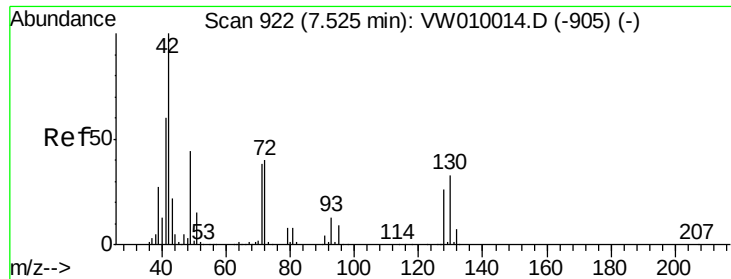
Bromochloromethane
Concen: 2.112 ug/l
RT: 7.50 min Scan# 918
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.9	0.0	3.8
130	68.3	54.6	82.0



Abundance Ion 48.90 (48.60 to 49.60): VW
Ion 128.80 (128.50 to 129.50): V
Ion 129.80 (129.50 to 130.50): V





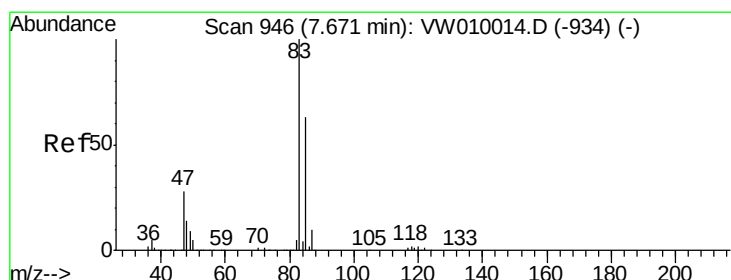
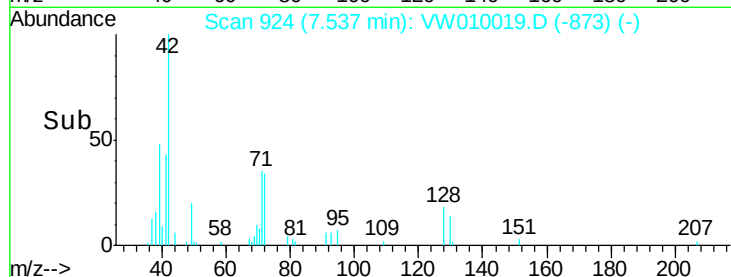
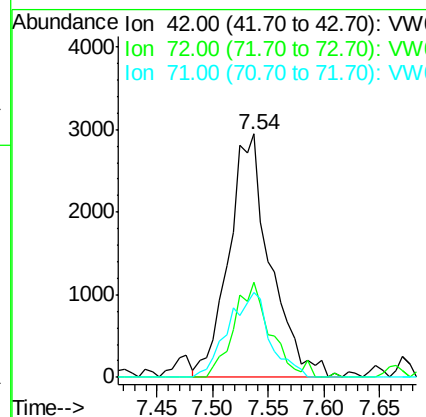
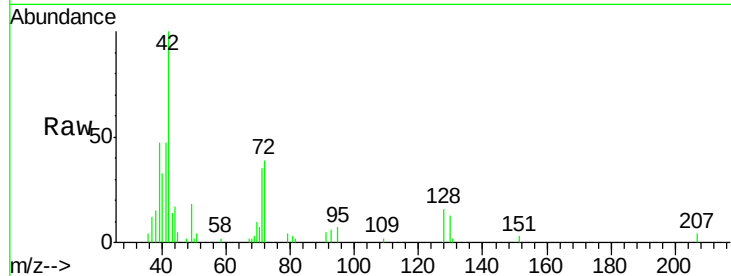
#29
Tetrahydrofuran
Concen: 8.770 ug/l
RT: 7.54 min Scan# 924
Delta R.T. 0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
42	100		
72	34.7	31.0	46.6
71	34.8	29.7	44.5

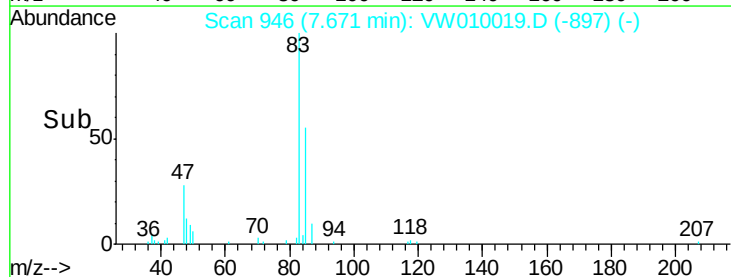
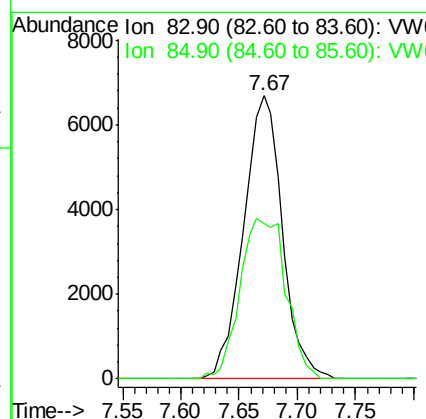
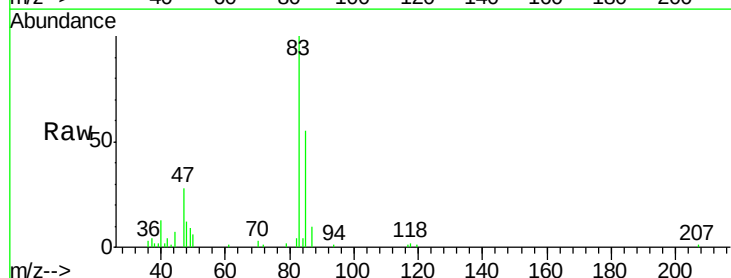
Manual Integrations
APPROVED

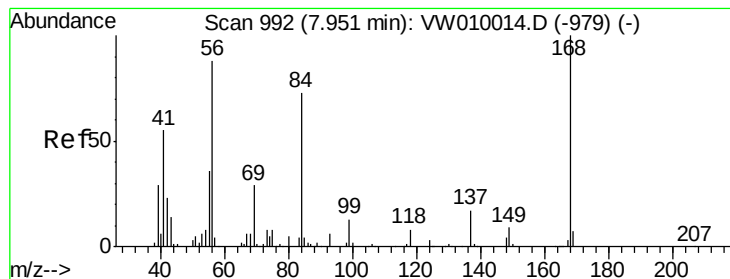
MMDadoda
4/18/2019 11:40:33 AM



#30
Chloroform
Concen: 1.993 ug/l
RT: 7.67 min Scan# 946
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
83	100		
85	55.1	50.7	76.1





#31

Cyclohexane

Concen: 2.848 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

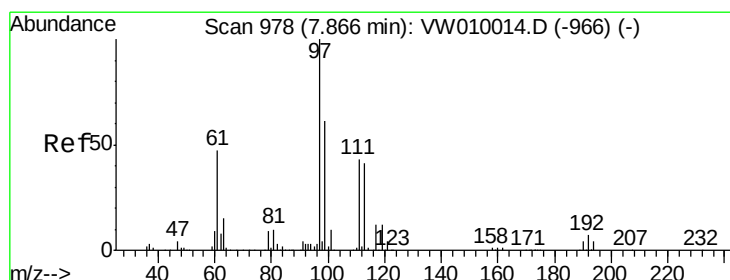
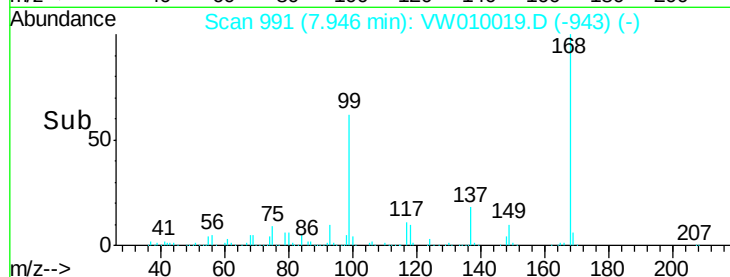
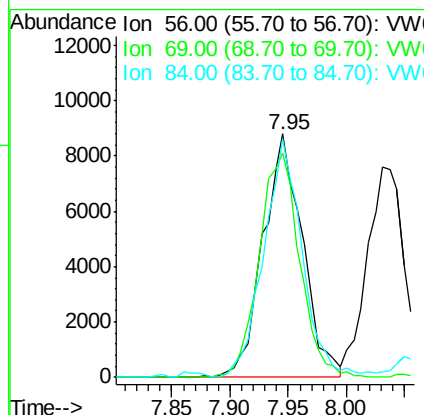
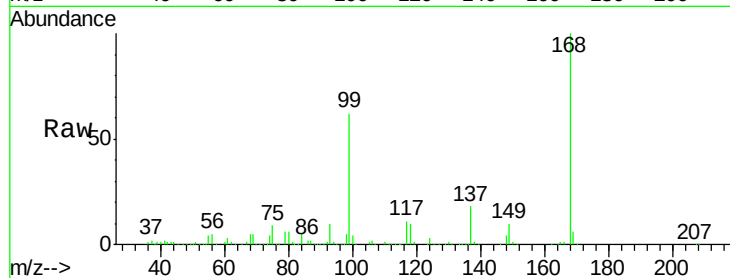
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	56	Resp:	20742
Ion Ratio	Lower	Upper	
56	100		
69	92.0	26.6	40.0#
84	96.0	66.2	99.2

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#32

1,1,1-Trichloroethane

Concen: 2.073 ug/l

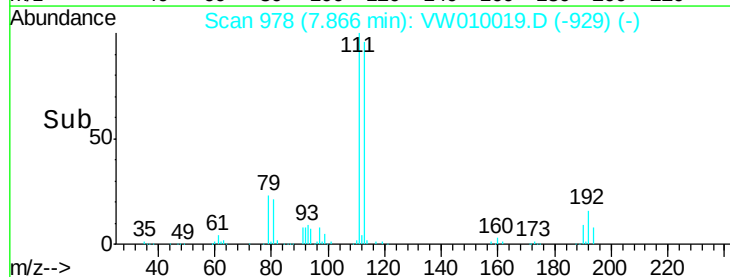
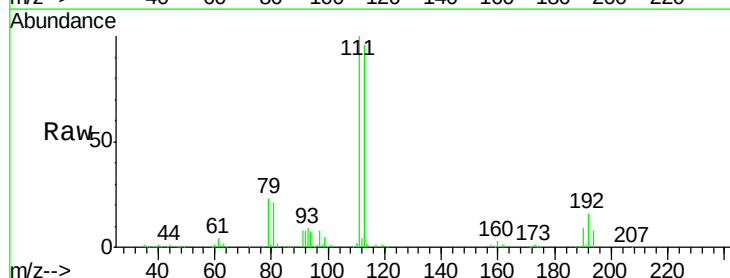
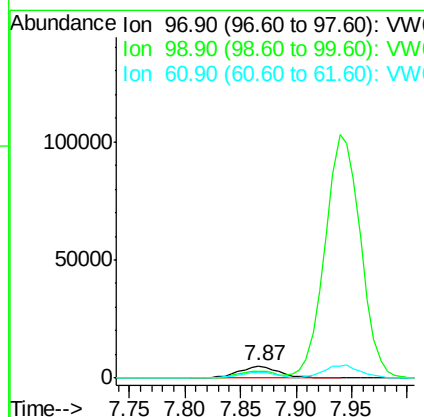
RT: 7.87 min Scan# 978

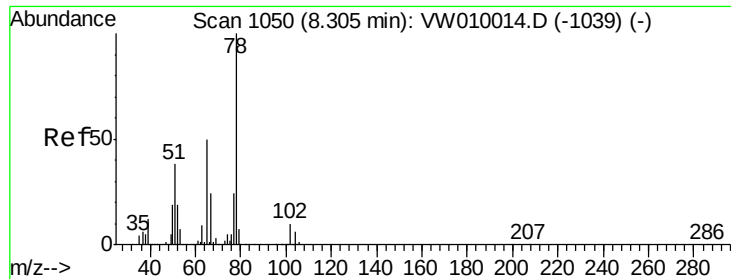
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	97	Resp:	12682
Ion Ratio	Lower	Upper	
97	100		
99	57.5	50.2	75.2
61	46.2	38.2	57.2





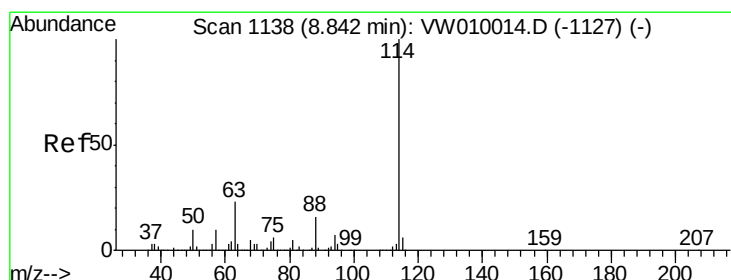
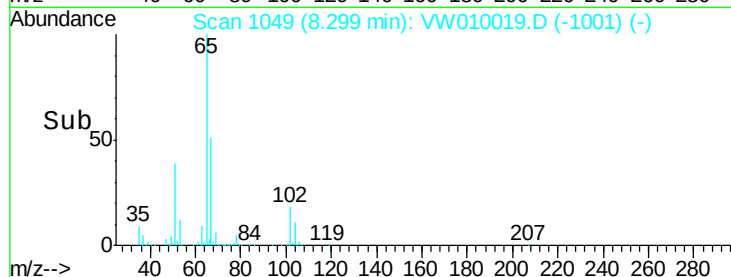
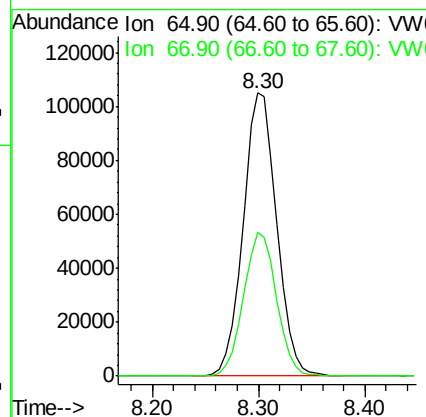
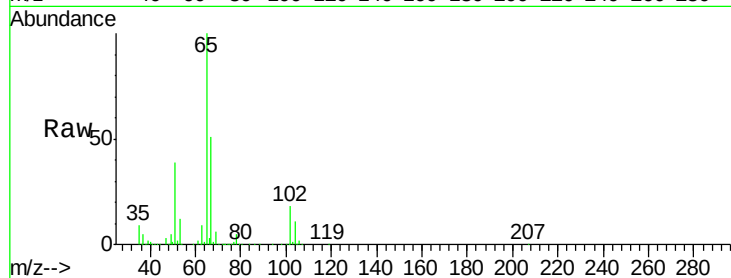
#33
 1,2-Dichloroethane-d4
 Concen: 51.403 ug/l
 RT: 8.30 min Scan# 1049
 Delta R.T. -0.01 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
65	100	231473		
67	50.1	0.0	100.8	

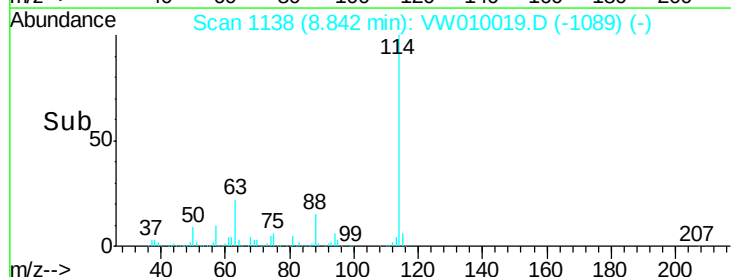
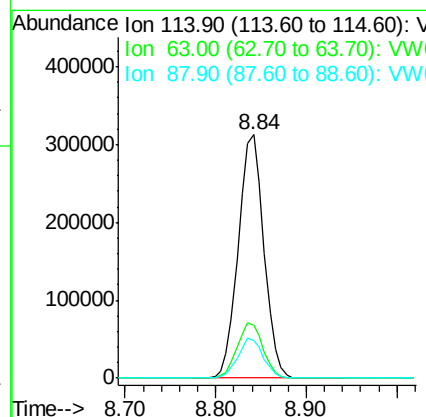
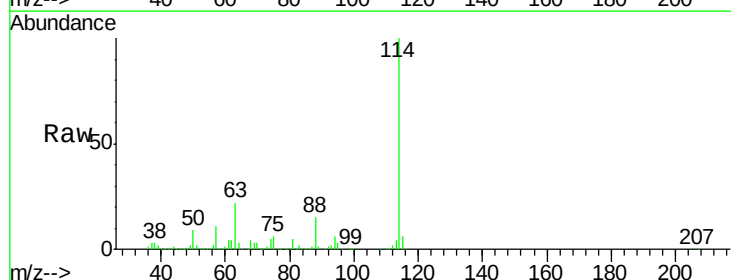
Manual Integrations
 APPROVED

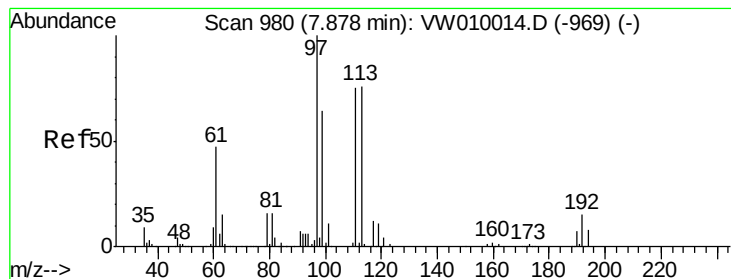
MMDadoda
 4/18/2019 11:40:33 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.84 min Scan# 1138
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	613572		
63	22.0	0.0	46.2	
88	15.5	0.0	32.6	





#35

Dibromofluoromethane

Concen: 48.402 ug/l

RT: 7.88 min Scan# 980

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

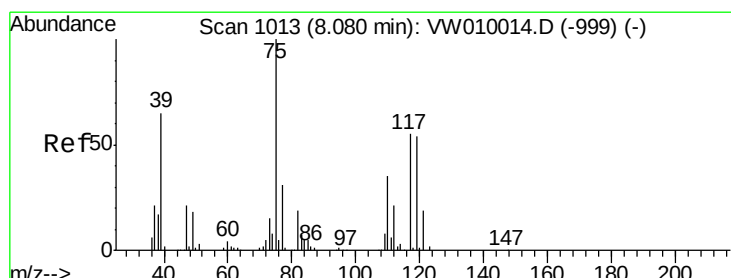
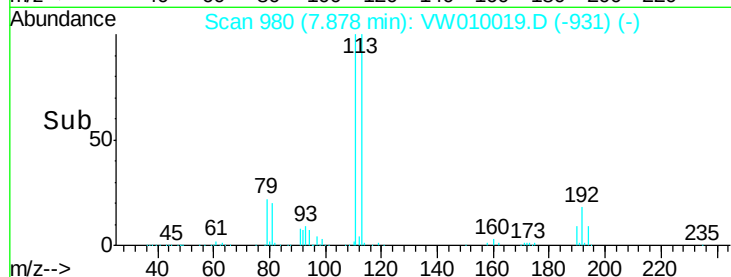
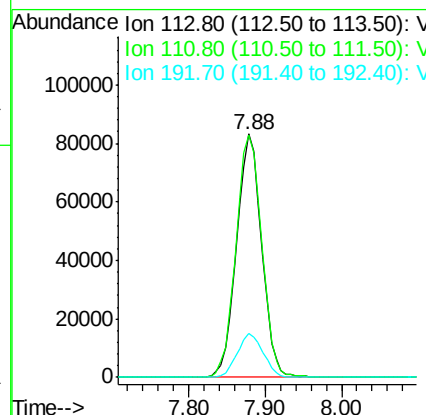
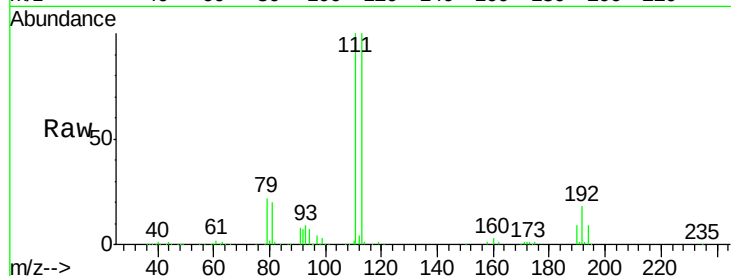
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	113	Resp:	188812
Ion Ratio	Lower	Upper	
113	100		
111	102.6	82.6	123.8
192	18.5	15.4	23.2

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#36

1,1-Dichloropropene

Concen: 1.873 ug/l

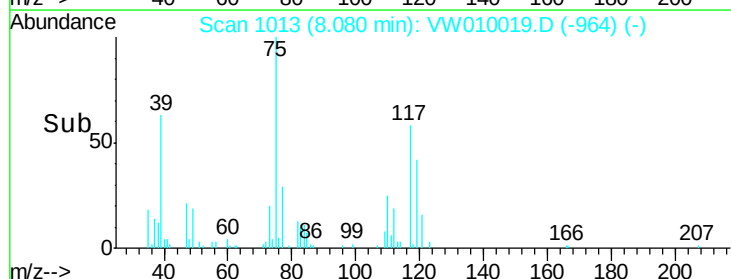
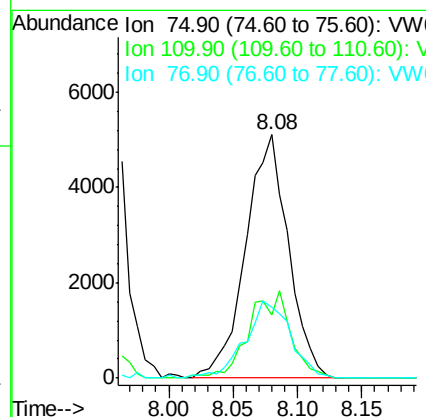
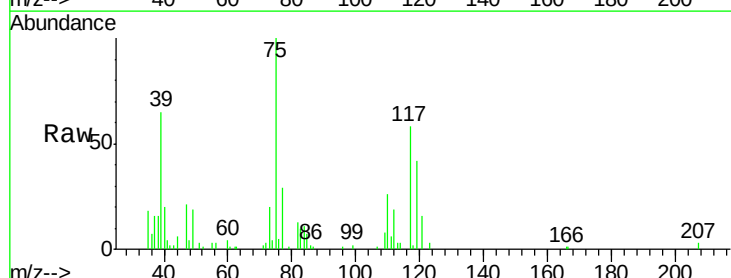
RT: 8.08 min Scan# 1013

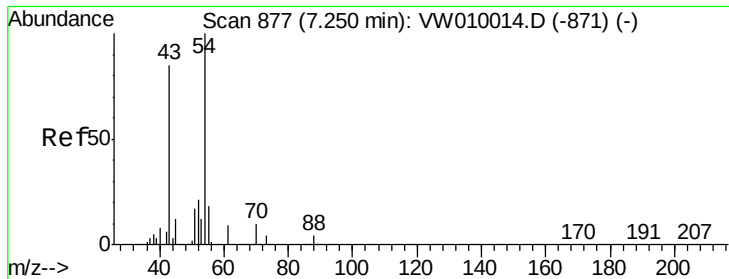
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	75	Resp:	11736
Ion Ratio	Lower	Upper	
75	100		
110	35.0	16.6	49.8
77	33.5	24.8	37.2





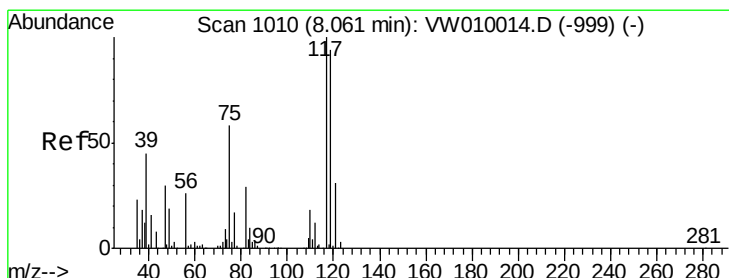
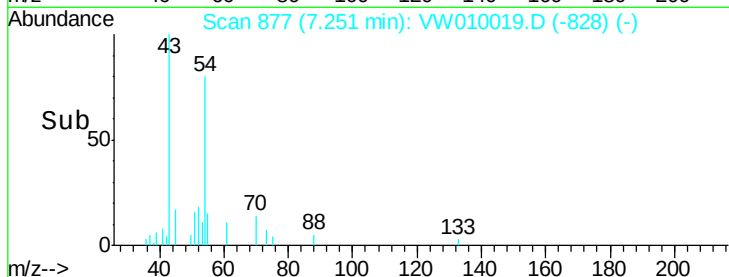
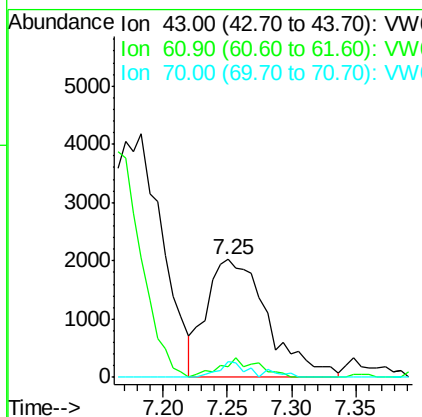
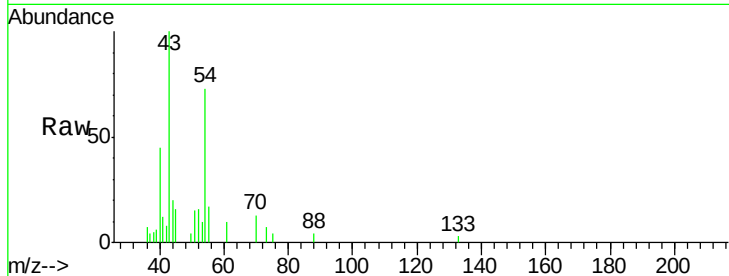
#37
Ethyl Acetate
Concen: 2.101 ug/l
RT: 7.25 min Scan# 877
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
43	100		
61	10.7	9.8	14.8
70	5.7	7.4	11.0

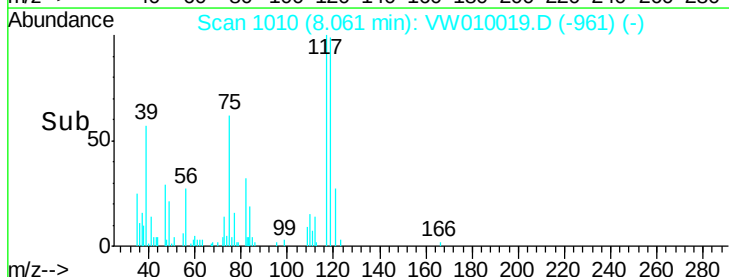
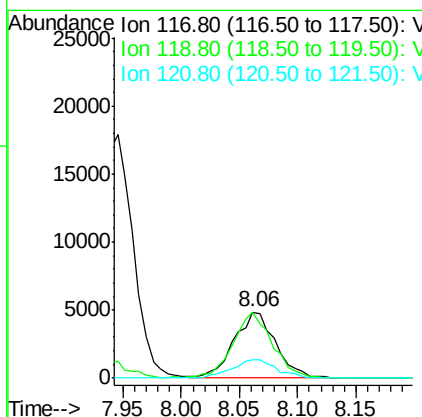
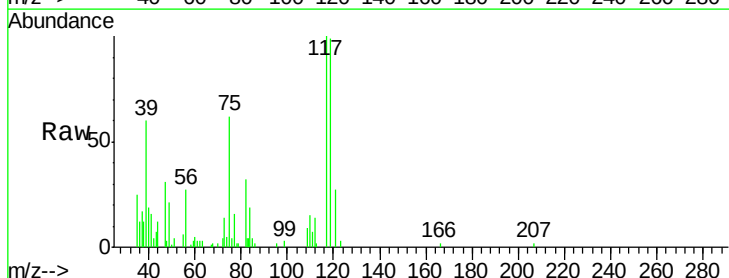
Manual Integrations
APPROVED

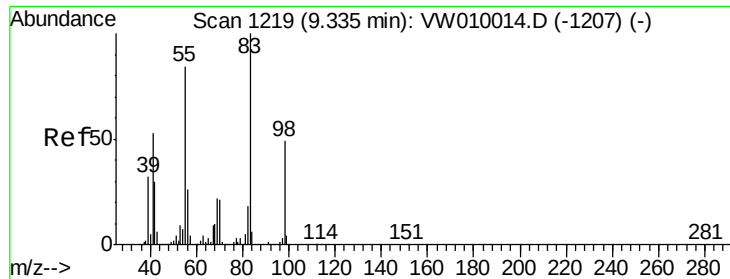
MMDadoda
4/18/2019 11:40:33 AM



#38
Carbon Tetrachloride
Concen: 1.966 ug/l
RT: 8.06 min Scan# 1010
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
117	100		
119	99.0	75.3	112.9
121	26.8	24.4	36.6





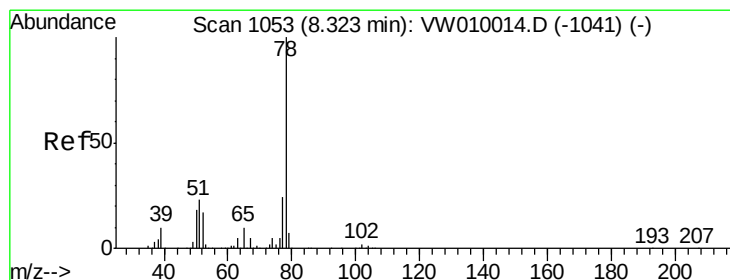
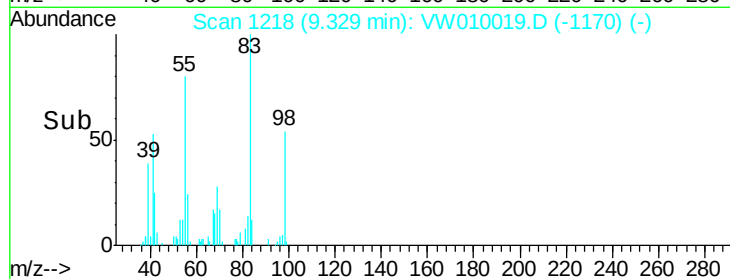
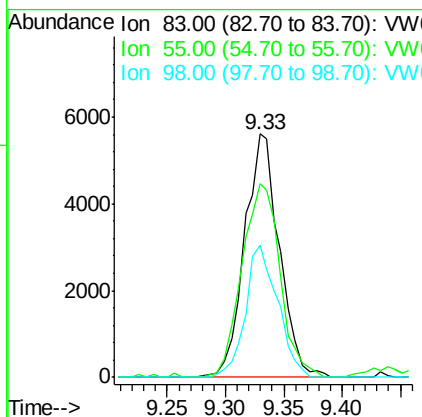
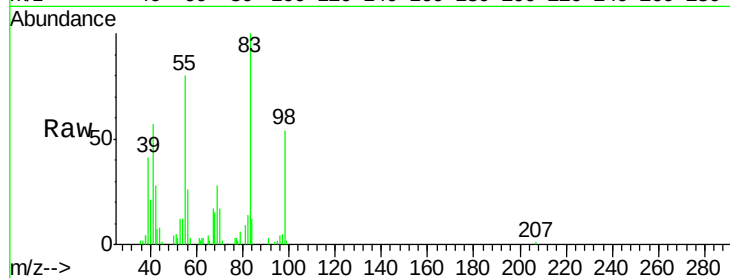
#39
Methylvlcyclohexane
Concen: 2.695 ug/l
RT: 9.33 min Scan# 1218
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
83	100		
55	79.5	67.1	100.7
98	54.1	39.2	58.8

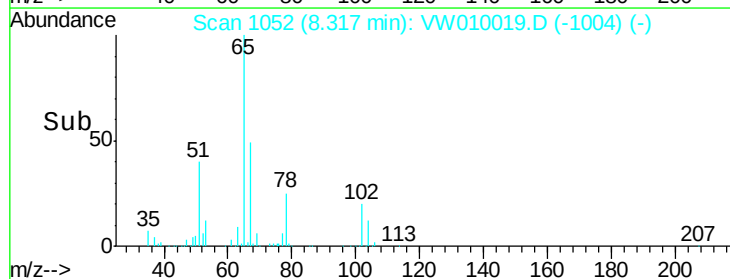
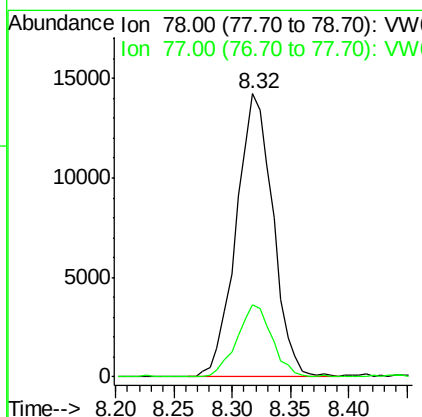
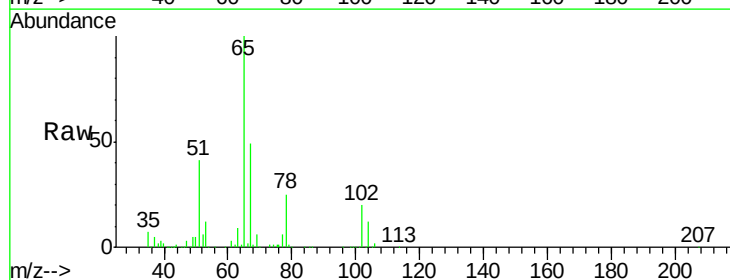
Manual Integrations
APPROVED

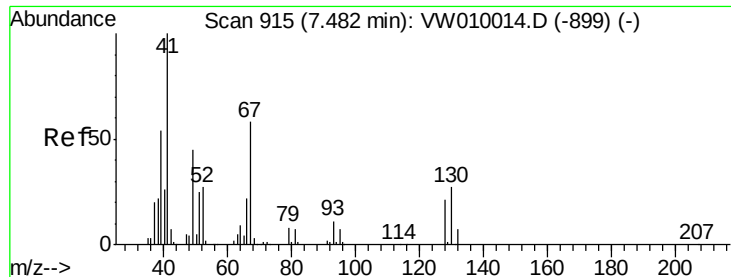
MMDadoda
4/18/2019 11:40:33 AM



#40
Benzene
Concen: 1.829 ug/l
RT: 8.32 min Scan# 1052
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.6	19.1	28.7





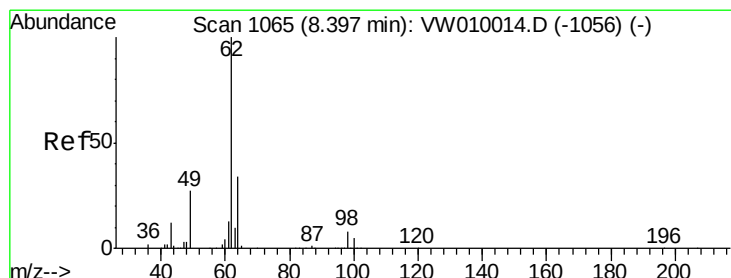
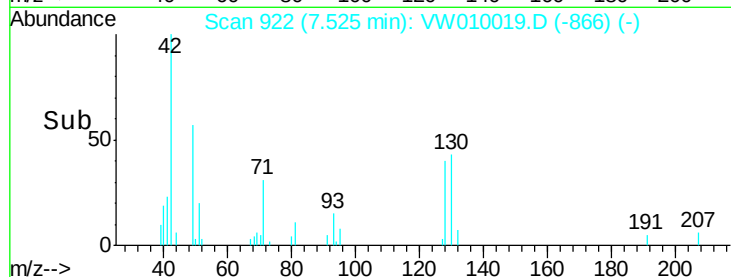
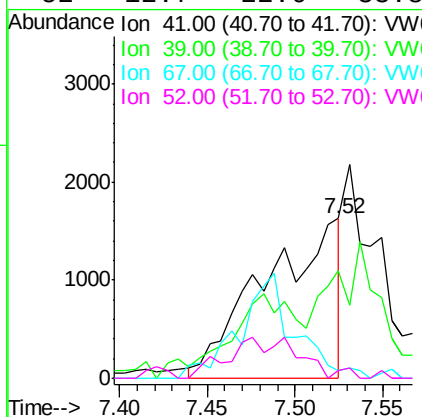
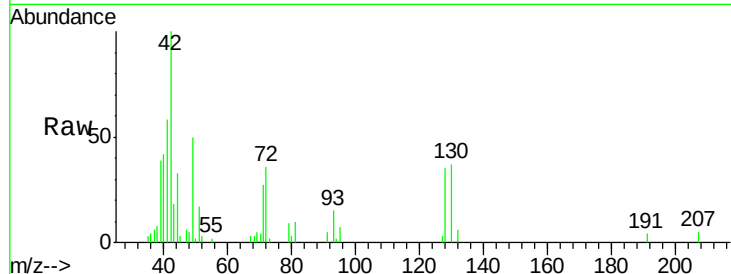
#41
Methacrylonitrile
Concen: 2.701 ug/l m
RT: 7.52 min Scan# 922
Delta R.T. 0.04 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	41	Resp:	4902
Ion	Ratio	Lower	Upper
41	100		
39	47.9	45.0	67.4
67	47.4	50.7	76.1#
52	12.7	22.6	33.8#

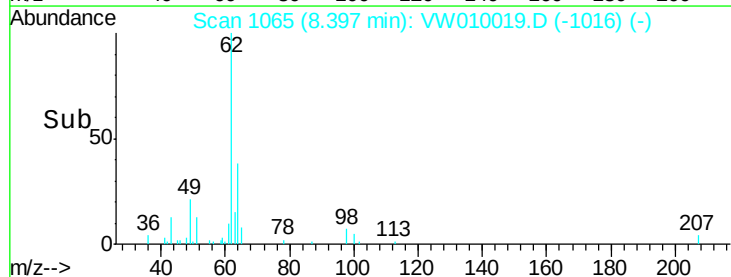
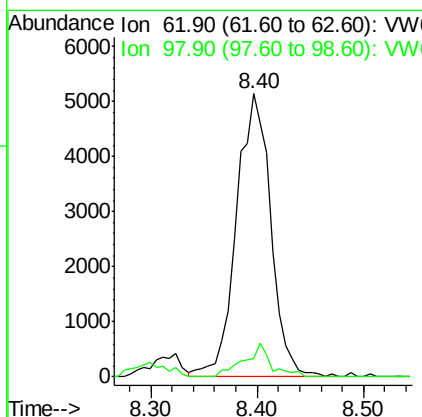
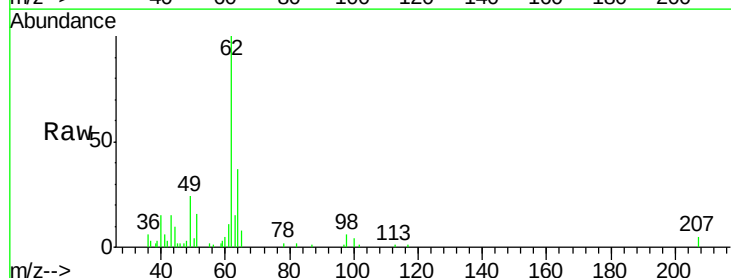
Manual Integrations
APPROVED

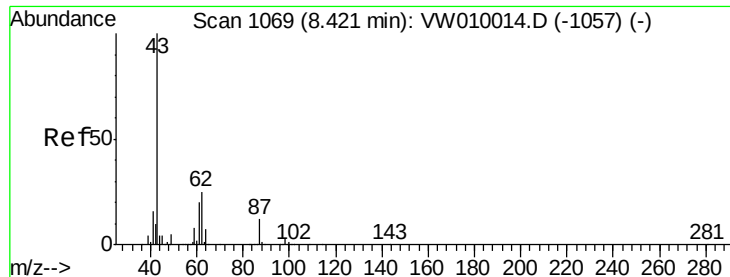
MMDadoda
4/18/2019 11:40:33 AM



#42
1,2-Dichloroethane
Concen: 1.985 ug/l
RT: 8.40 min Scan# 1065
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion:	62	Resp:	11691
Ion	Ratio	Lower	Upper
62	100		
98	9.2	0.0	16.6





#43

Isopropyl Acetate

Concen: 1.812 ug/l

RT: 8.42 min Scan# 1069

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

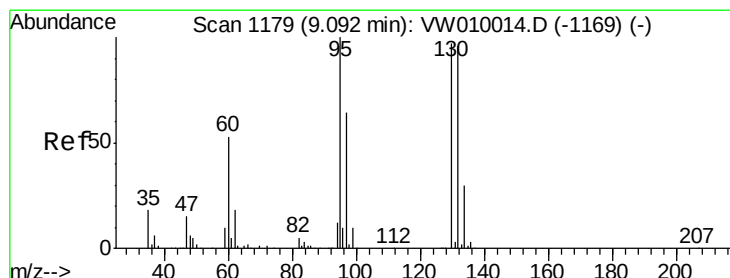
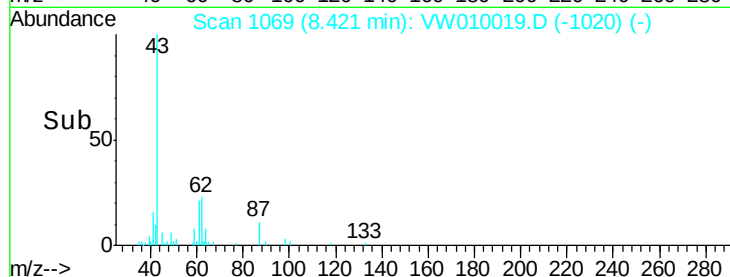
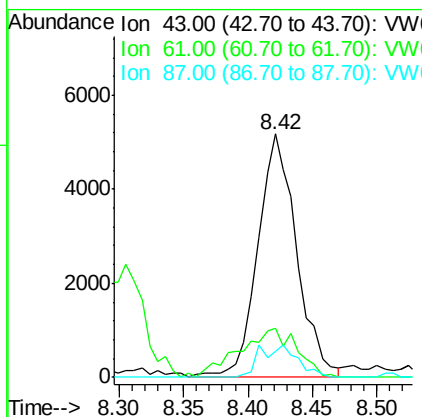
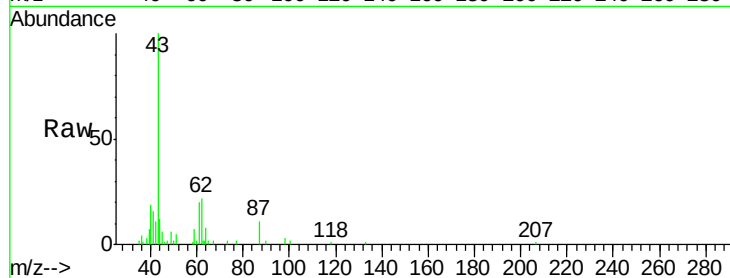
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	43	Resp:	10816
Ion Ratio	Lower	Upper	
43	100		
61	29.9	23.0	34.6
87	12.8	9.3	13.9

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#44

Trichloroethene

Concen: 1.937 ug/l

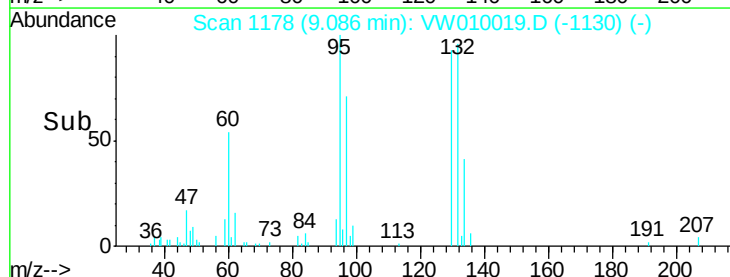
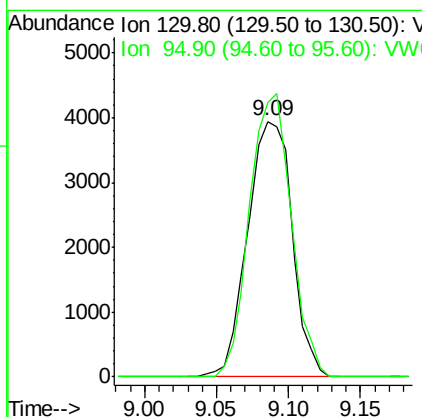
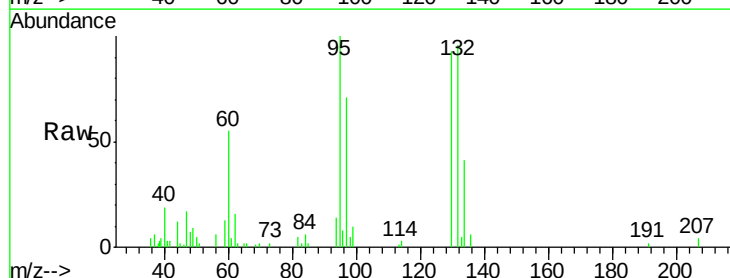
RT: 9.09 min Scan# 1178

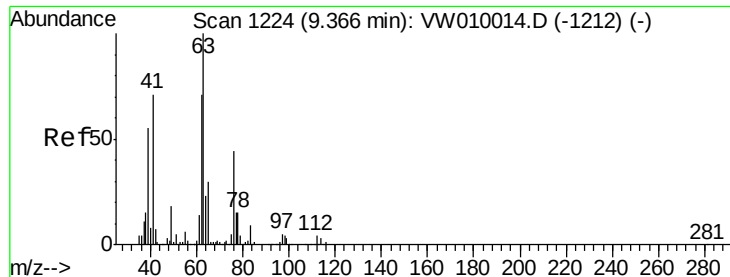
Delta R.T. -0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	130	Resp:	8433
Ion Ratio	Lower	Upper	
130	100		
95	107.4	0.0	205.4





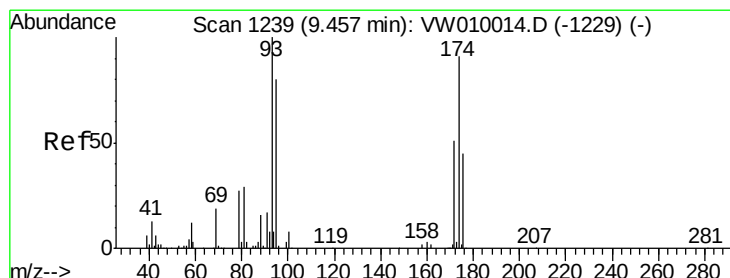
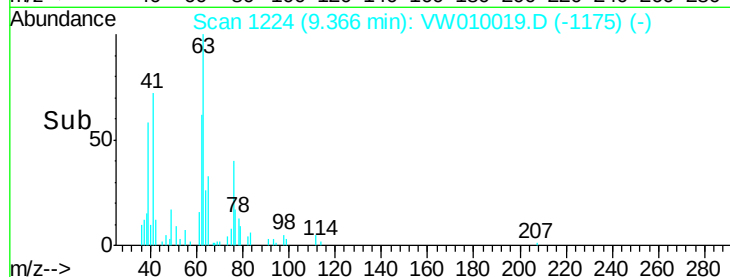
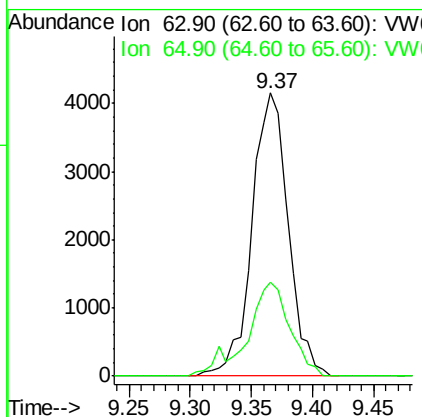
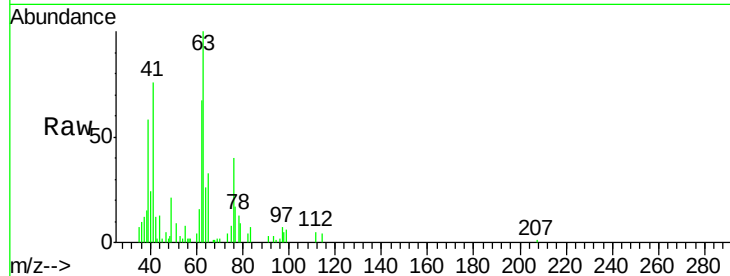
#45
 1,2-Dichloropropane
 Concen: 1.903 ug/l
 RT: 9.37 min Scan# 1224
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
63	100		
65	33.1	23.8	35.6

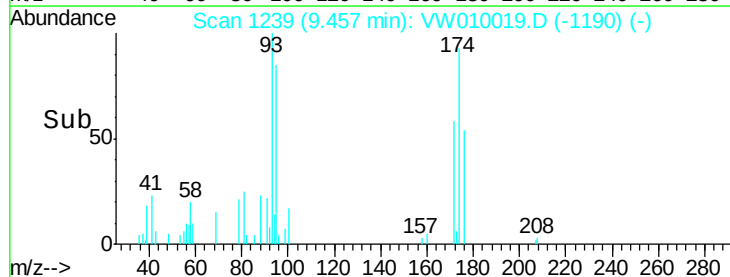
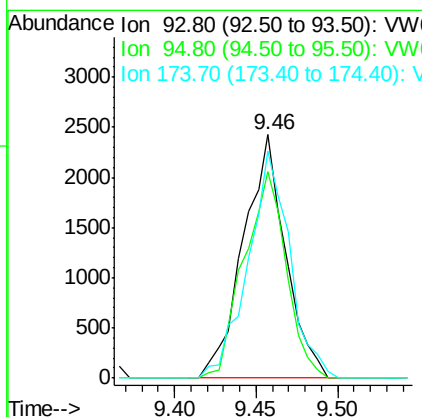
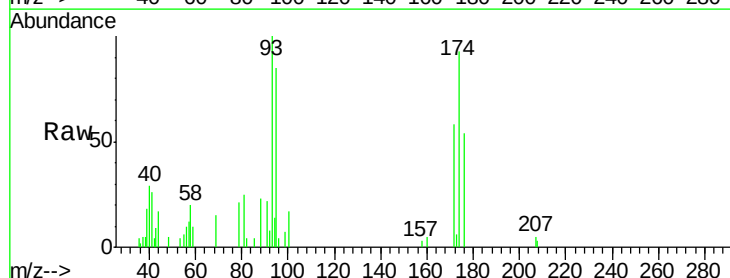
Manual Integrations
 APPROVED

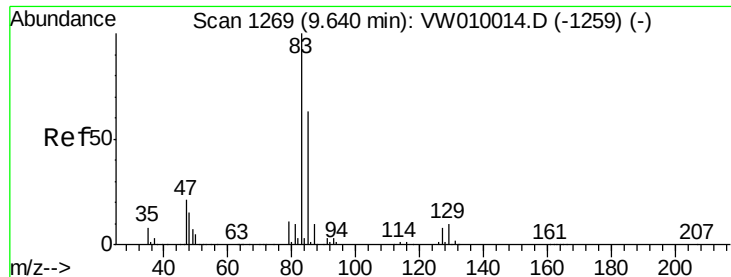
MMDadoda
 4/18/2019 11:40:33 AM



#46
 Dibromomethane
 Concen: 1.871 ug/l
 RT: 9.46 min Scan# 1239
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
93	100		
95	84.2	65.8	98.8
174	91.5	75.5	113.3





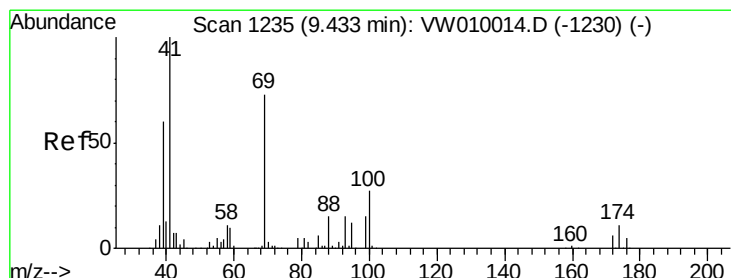
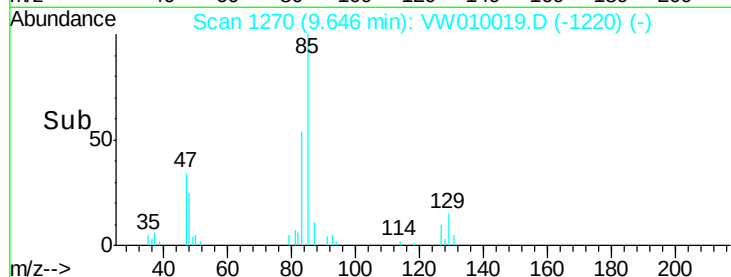
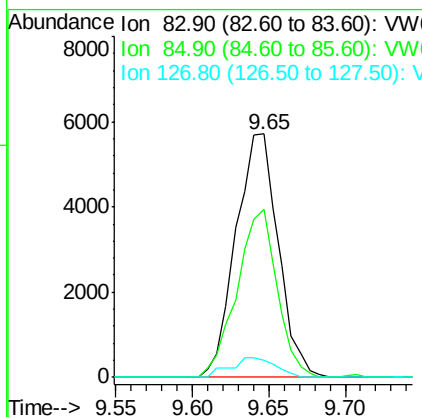
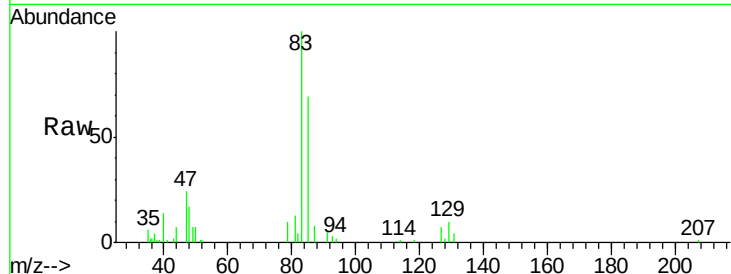
#47
Bromodichloromethane
Concen: 1.824 ug/l
RT: 9.65 min Scan# 1270
Delta R.T. 0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	83	Resp	10991
Ion Ratio	100	Lower	Upper
83	100		
85	68.9	50.6	75.8
127	6.8	6.6	10.0

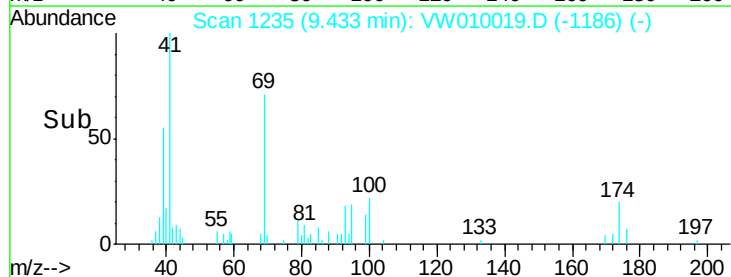
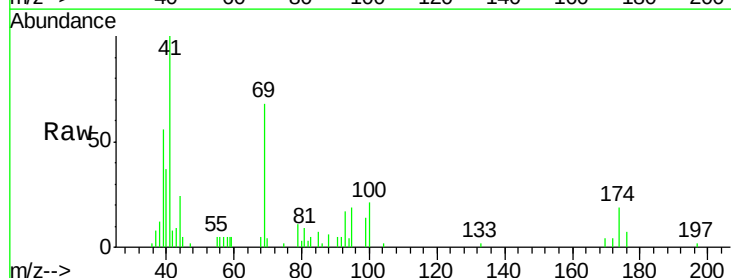
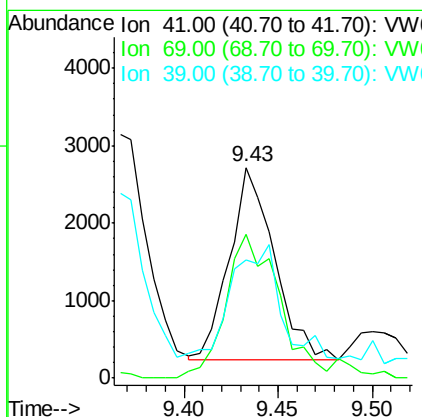
Manual Integrations
APPROVED

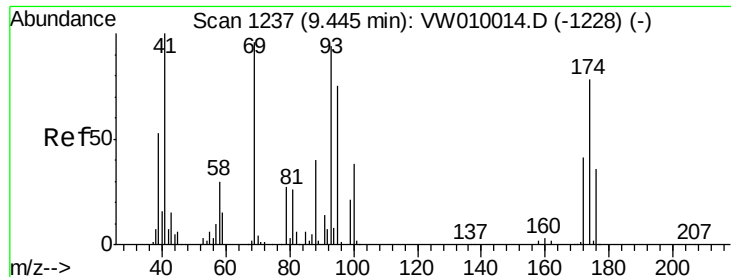
MMDadoda
4/18/2019 11:40:33 AM



#48
Methyl methacrylate
Concen: 1.412 ug/l
RT: 9.43 min Scan# 1235
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	41	Resp	4103
Ion Ratio	100	Lower	Upper
41	100		
69	87.9	60.1	90.1
39	67.8	51.0	76.6





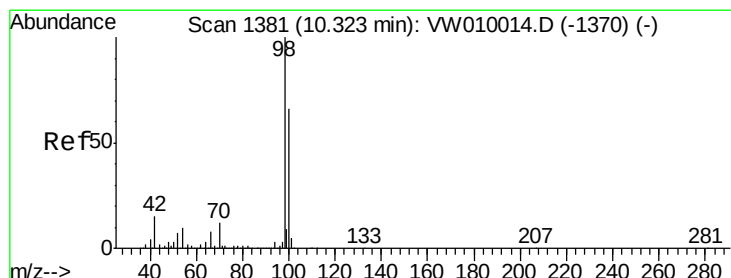
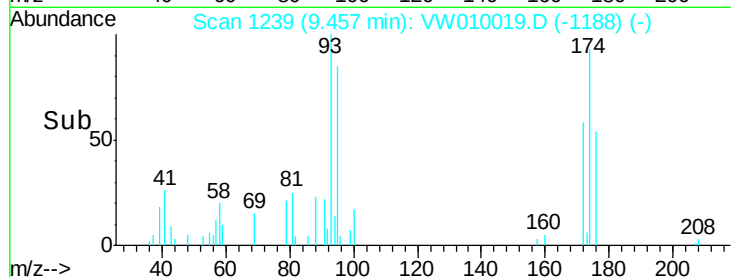
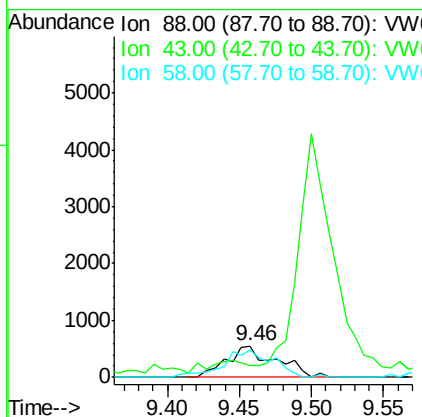
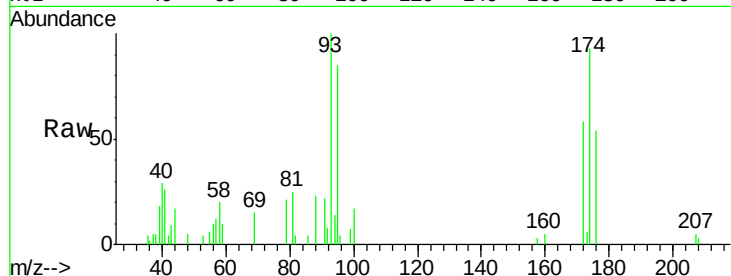
#49
1,4-Dioxane
Concen: 36.862 ug/l
RT: 9.46 min Scan# 1239
Delta R.T. 0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
88	100		
43	34.5	31.9	47.9
58	87.7	61.8	92.6

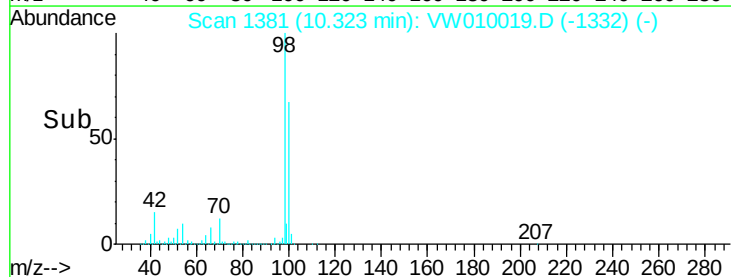
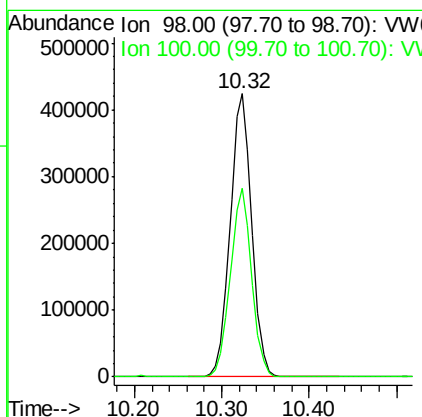
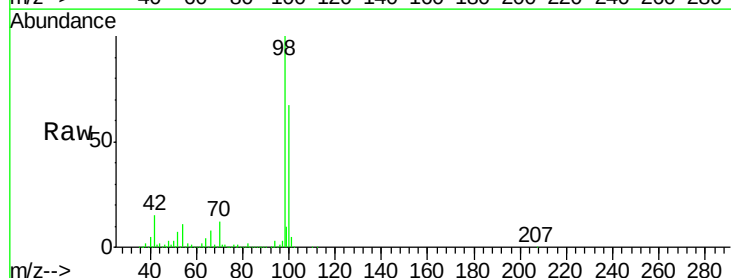
Manual Integrations
APPROVED

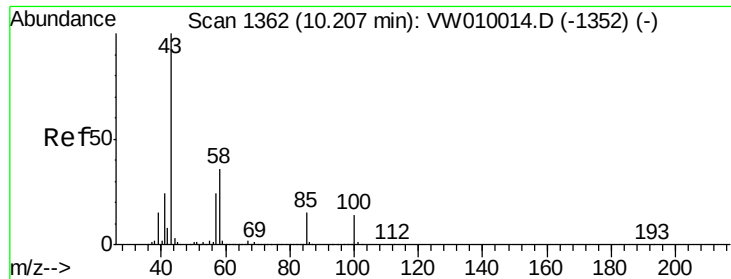
MMDadoda
4/18/2019 11:40:33 AM



#50
Toluene-d8
Concen: 49.468 ug/l
RT: 10.32 min Scan# 1381
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
98	100		
100	66.1	52.3	78.5





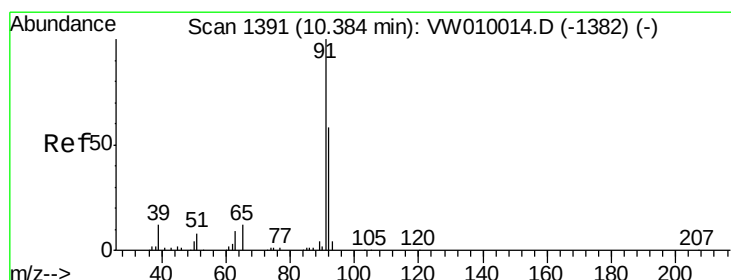
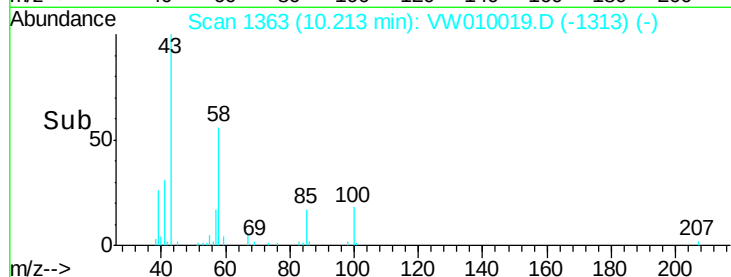
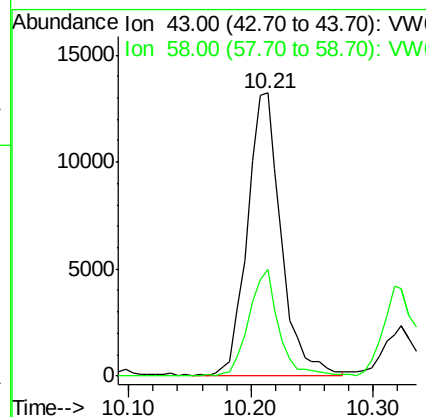
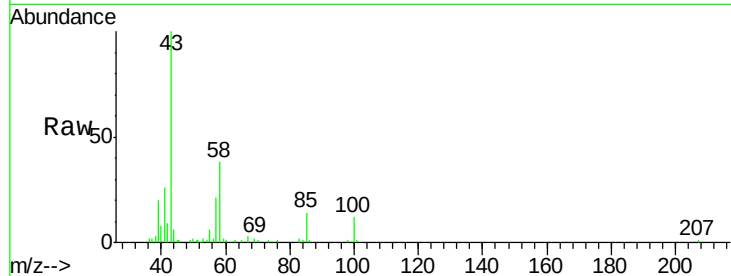
#51
 4-Methyl-2-Pentanone
 Concen: 8.162 ug/l
 RT: 10.21 min Scan# 1363
 Delta R.T. 0.01 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
43	100		
58	33.4	28.9	43.3

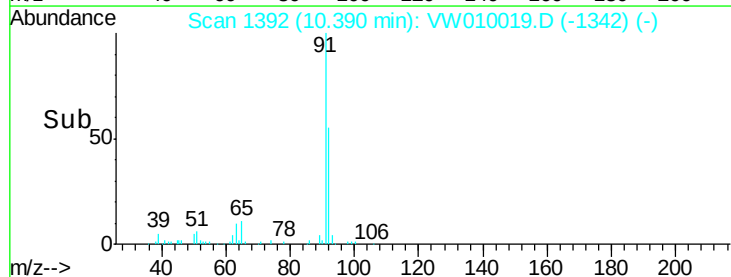
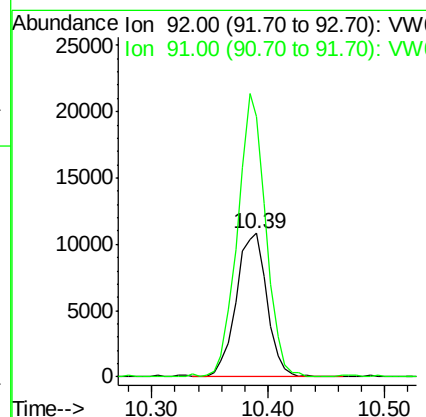
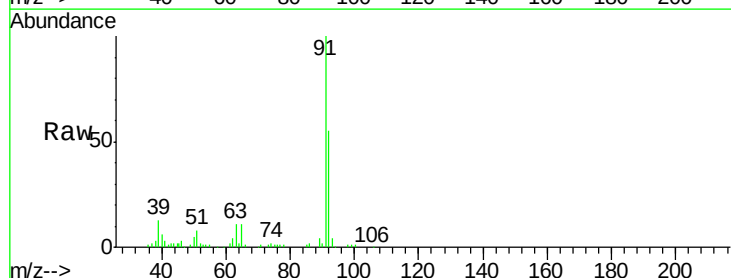
Manual Integrations
 APPROVED

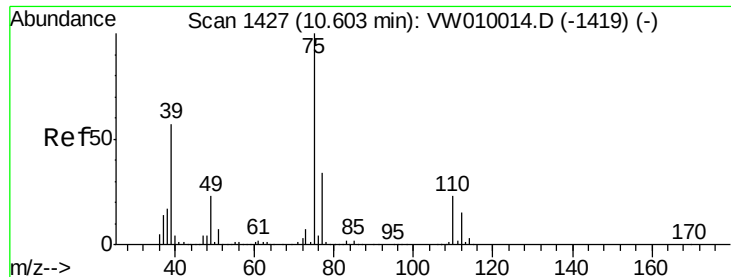
MMDadoda
 4/18/2019 11:40:33 AM



#52
 Toluene
 Concen: 1.873 ug/l
 RT: 10.39 min Scan# 1392
 Delta R.T. 0.01 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
92	100		
91	180.8	138.5	207.7





#53

t-1,3-Dichloropropene

Concen: 1.703 ug/l

RT: 10.60 min Scan# 1427

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 75 Resp: 10177

Ion Ratio Lower Upper

75 100

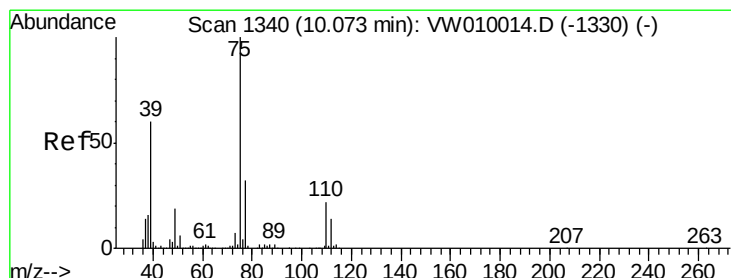
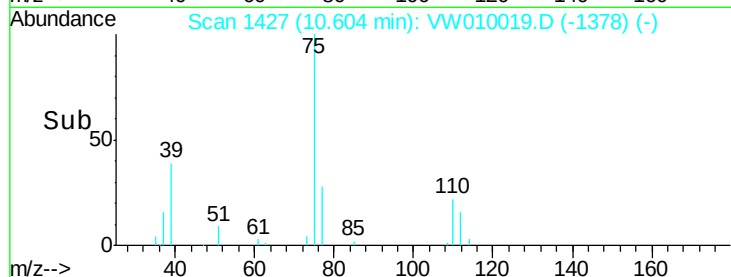
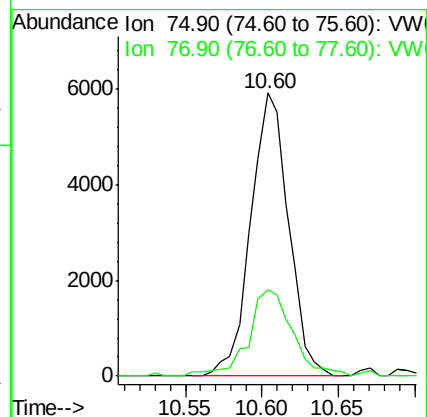
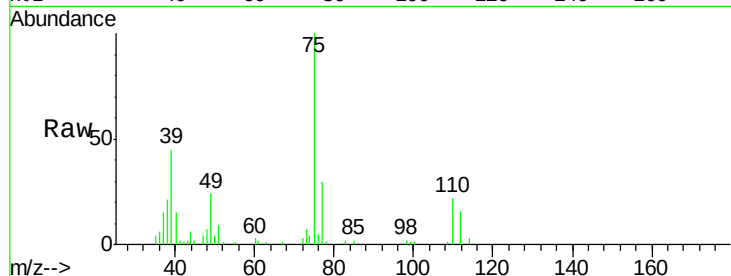
77 29.1 26.9 40.3

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#54

cis-1,3-Dichloropropene

Concen: 1.650 ug/l

RT: 10.07 min Scan# 1340

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

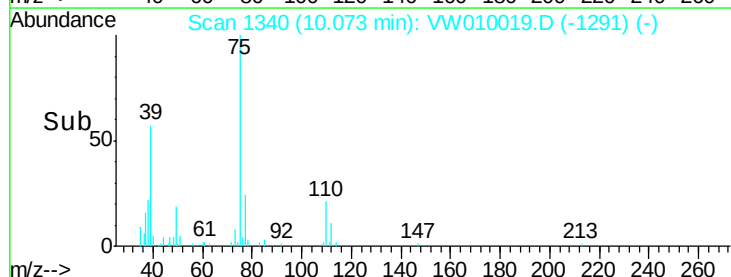
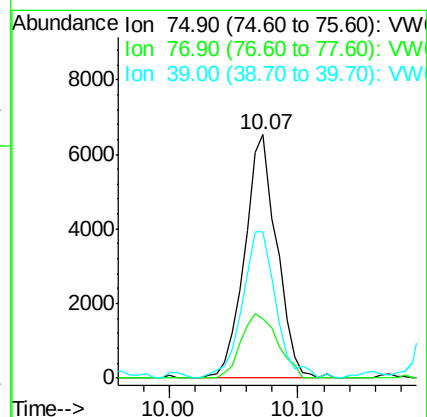
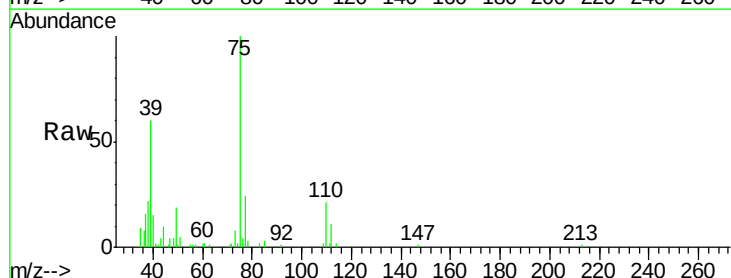
Tgt Ion: 75 Resp: 11258

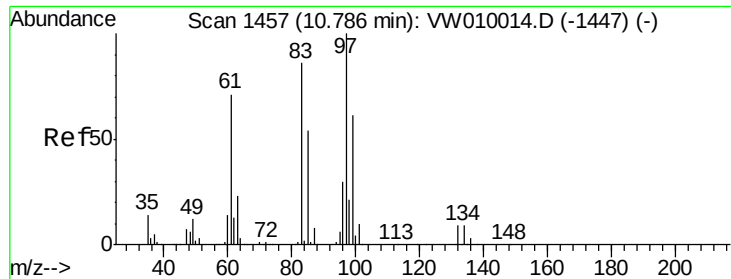
Ion Ratio Lower Upper

75 100

77 24.4 25.6 38.4#

39 59.9 47.8 71.6





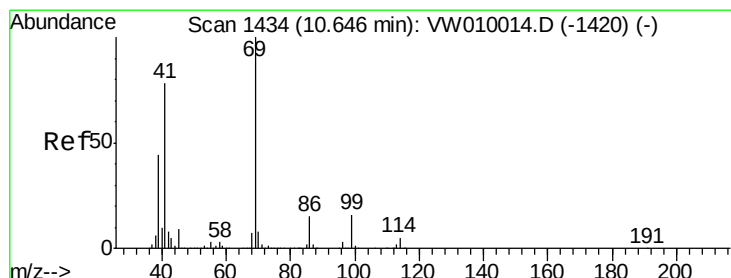
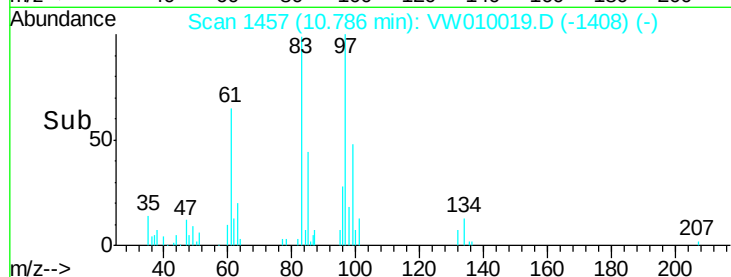
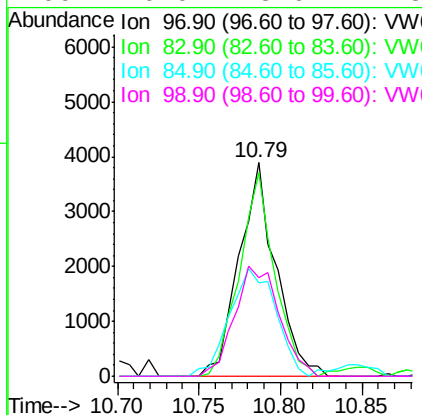
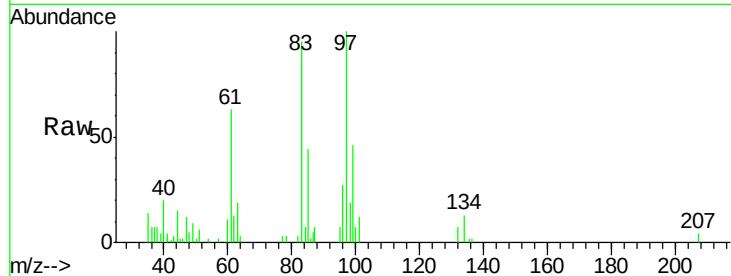
#55
 1,1,2-Trichloroethane
 Concen: 1.869 ug/l
 RT: 10.79 min Scan# 1457
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
97	100		
83	95.4	68.9	103.3
85	44.0	42.9	64.3
99	46.0	48.6	72.8#

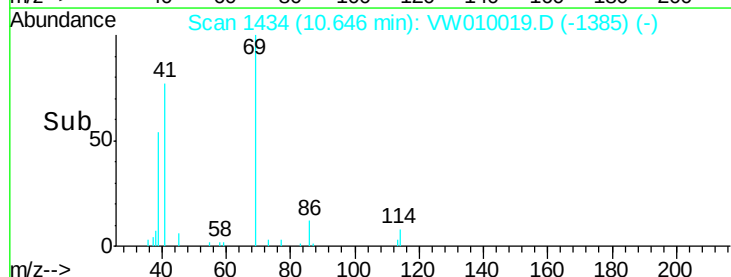
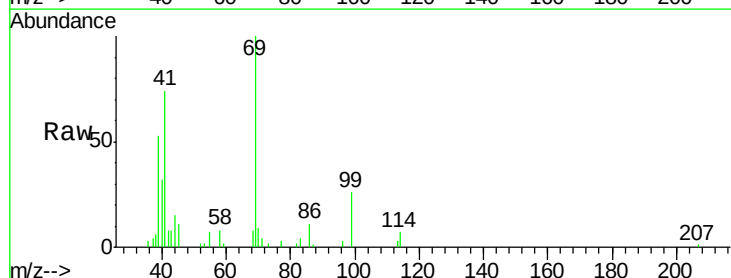
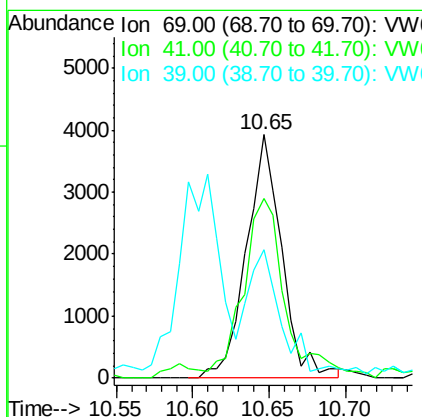
Manual Integrations
 APPROVED

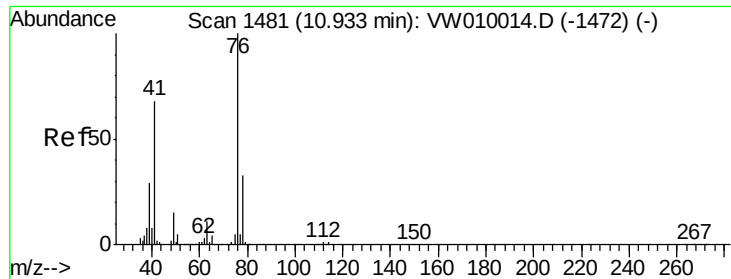
MMDadoda
 4/18/2019 11:40:33 AM



#56
 Ethyl methacrylate
 Concen: 3.965 ug/l
 RT: 10.65 min Scan# 1434
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
69	100		
41	87.6	61.0	91.6
39	42.8	33.8	50.6





#57

1,3-Dichloropropane

Concen: 1.801 ug/l

RT: 10.93 min Scan# 1481

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 76 Resp: 10520

Ion Ratio Lower Upper

76 100

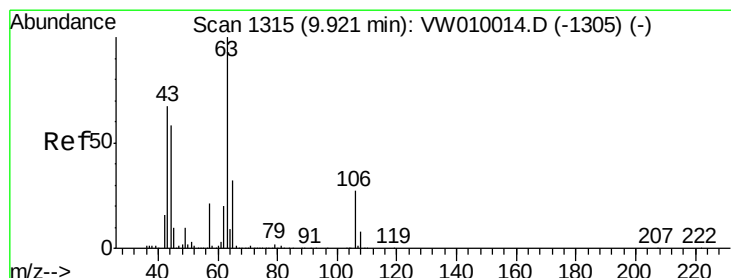
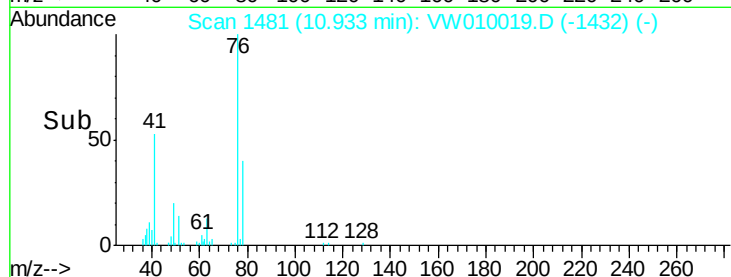
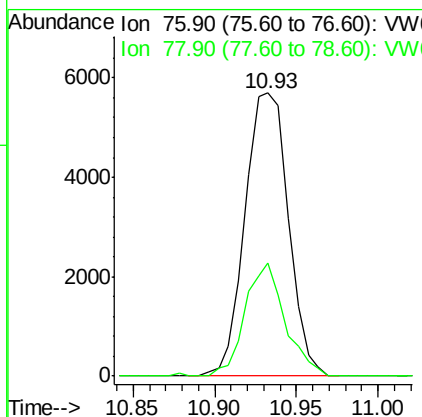
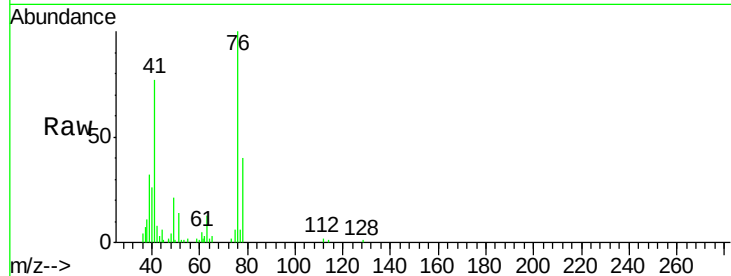
78 36.9 25.8 38.8

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#58

2-Chloroethyl Vinyl ether

Concen: 7.848 ug/l

RT: 9.92 min Scan# 1315

Delta R.T. 0.00 min

Lab File: VW010019.D

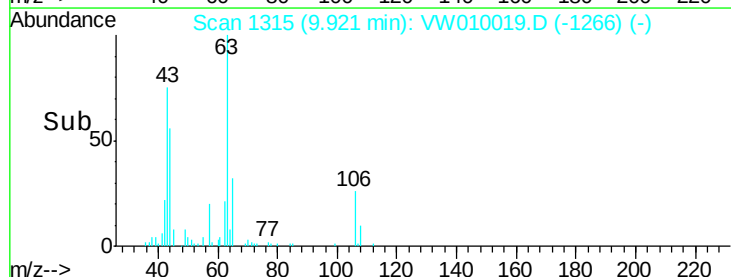
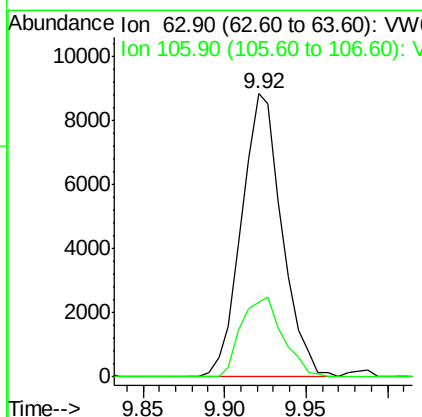
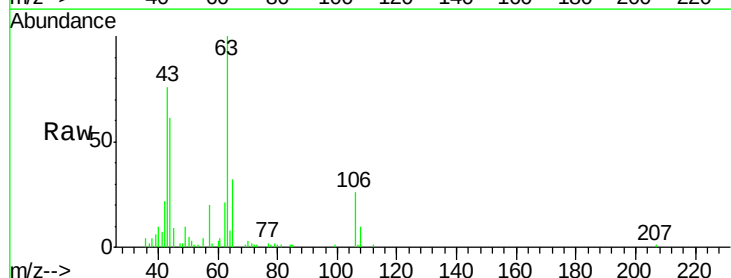
Acq: 17 Apr 2019 16:40

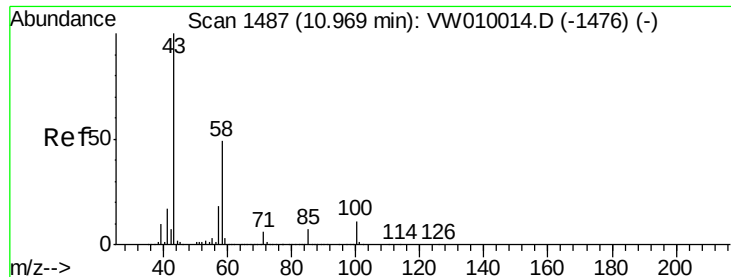
Tgt Ion: 63 Resp: 15281

Ion Ratio Lower Upper

63 100

106 28.7 21.4 32.0





#59

2-Hexanone

Concen: 7.843 ug/l

RT: 10.97 min Scan# 1487

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 43 Resp: 17065

Ion Ratio Lower Upper

43 100

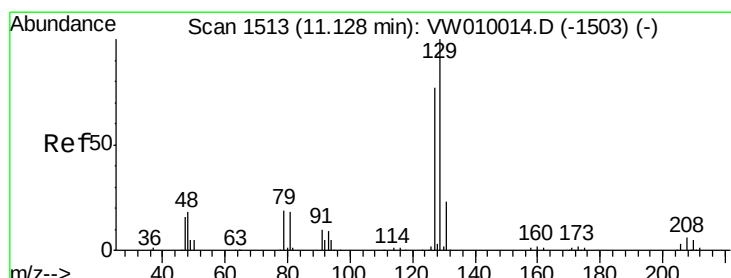
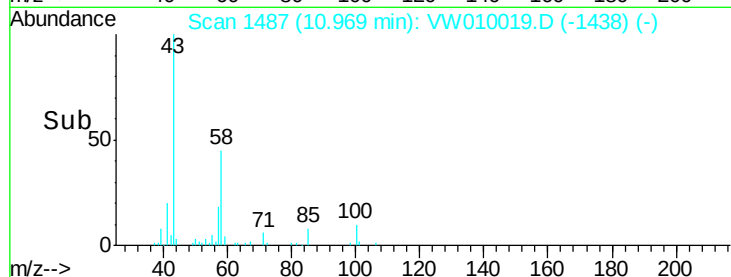
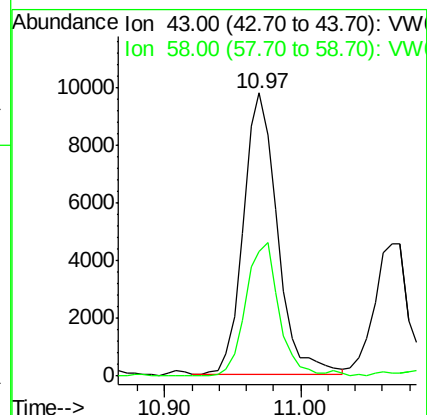
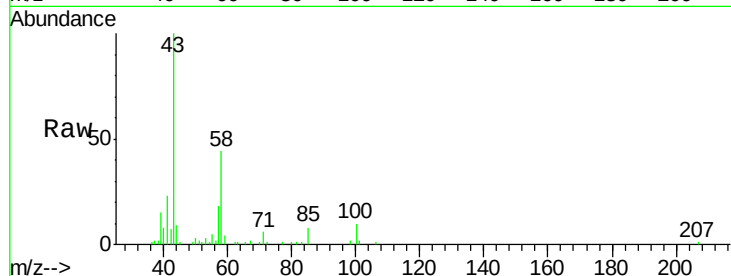
58 46.2 24.9 74.7

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#60

Dibromochloromethane

Concen: 1.624 ug/l

RT: 11.13 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VW010019.D

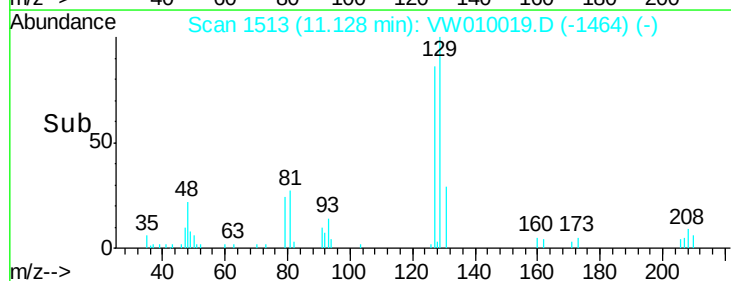
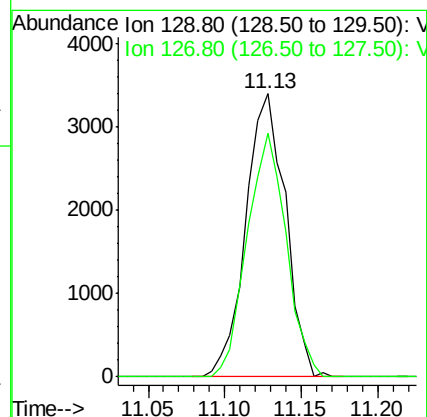
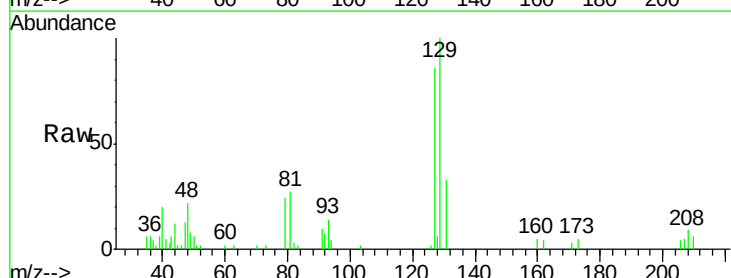
Acq: 17 Apr 2019 16:40

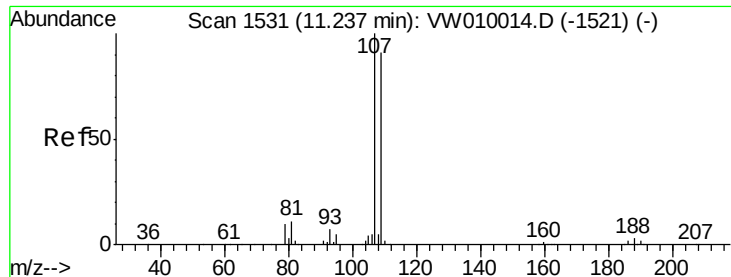
Tgt Ion: 129 Resp: 6116

Ion Ratio Lower Upper

129 100

127 84.8 38.6 116.0





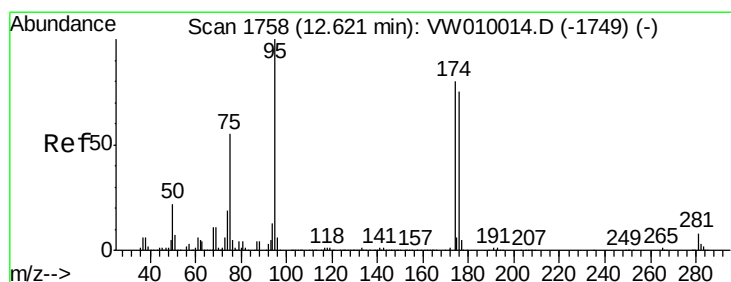
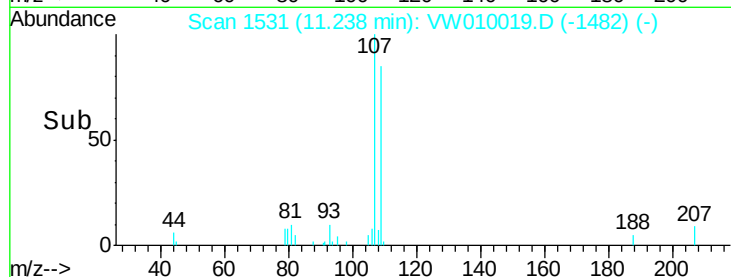
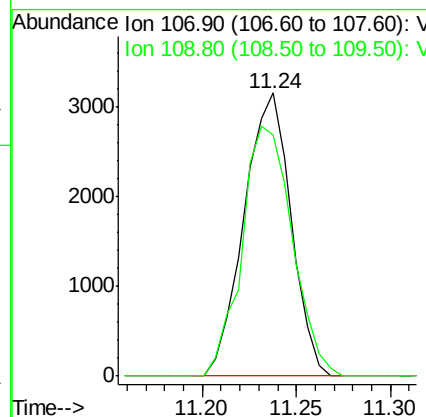
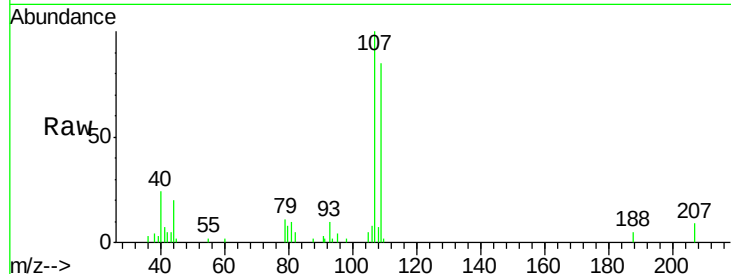
#61
 1,2-Dibromoethane
 Concen: 1.757 ug/l
 RT: 11.24 min Scan# 1531
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 107 Resp: 5447
 Ion Ratio Lower Upper
 107 100
 109 94.6 73.6 110.4

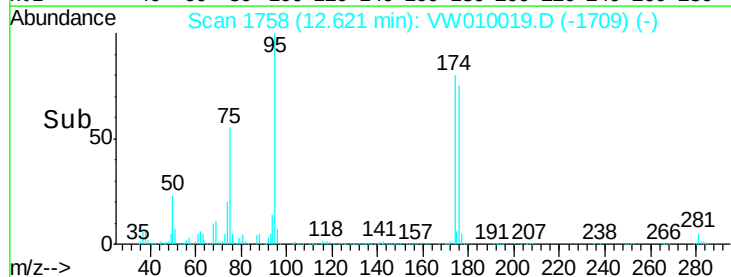
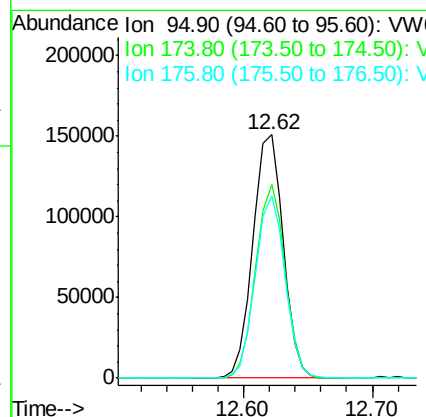
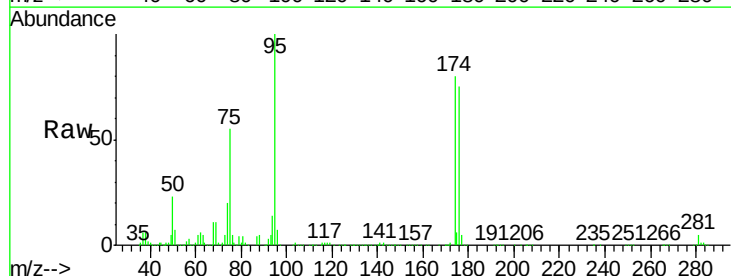
Manual Integrations
 APPROVED

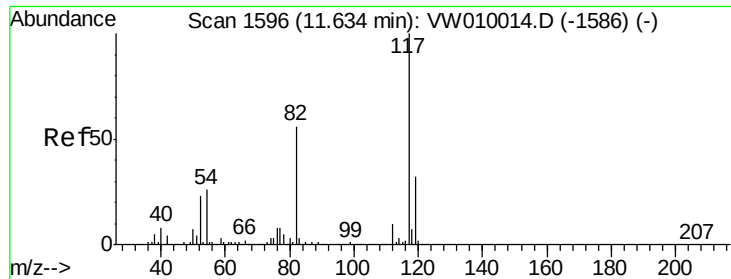
MMDadoda
 4/18/2019 11:40:33 AM



#62
 4-Bromofluorobenzene
 Concen: 46.137 ug/l
 RT: 12.62 min Scan# 1758
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion: 95 Resp: 245140
 Ion Ratio Lower Upper
 95 100
 174 77.2 0.0 151.4
 176 73.2 0.0 146.2





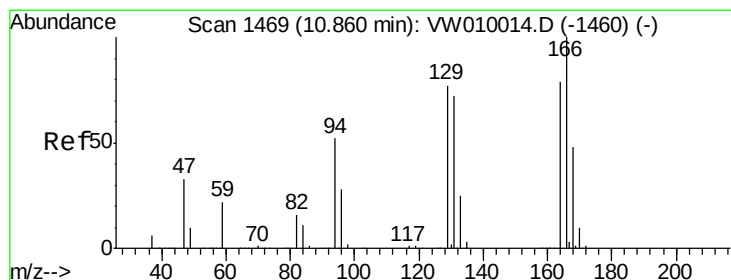
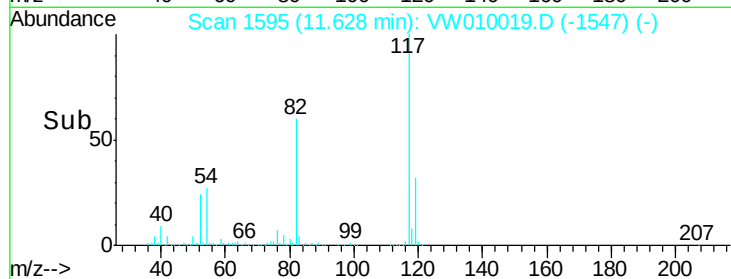
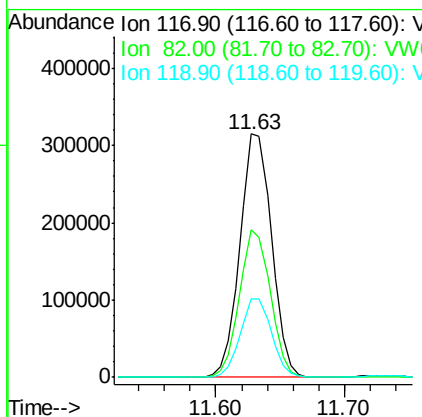
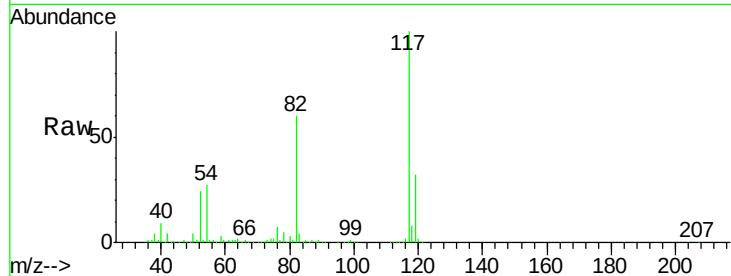
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.63 min Scan# 1595
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
117	100	535947		
82	60.5	45.2	67.8	
119	32.1	25.4	38.2	

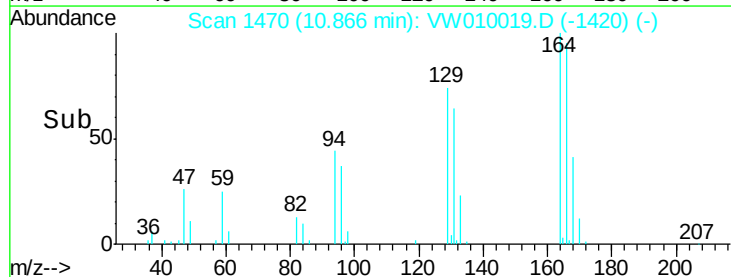
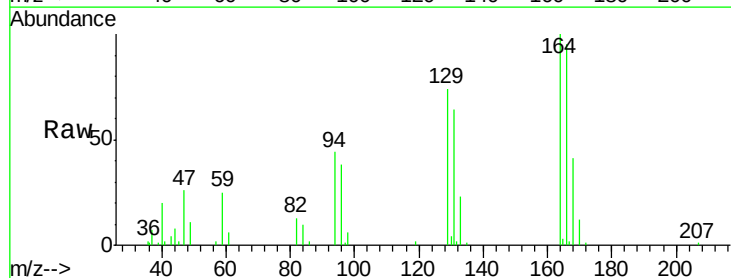
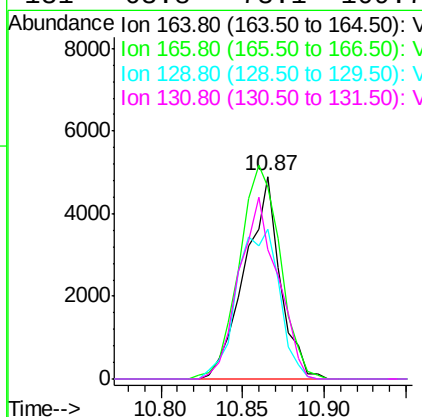
Manual Integrations
APPROVED

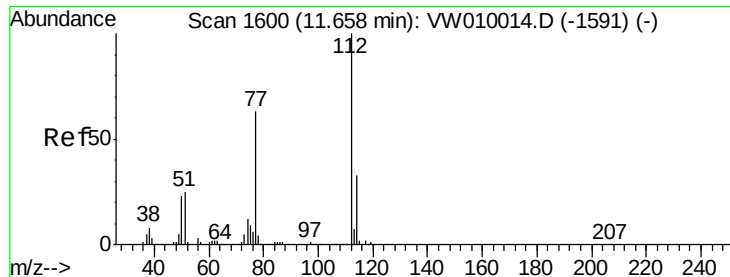
MMDadoda
4/18/2019 11:40:33 AM



#64
Tetrachloroethene
Concen: 2.125 ug/l
RT: 10.87 min Scan# 1470
Delta R.T. 0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	7394		
166	95.1	101.2	151.8#	
129	74.0	77.8	116.6#	
131	63.8	73.1	109.7#	





#65

Chlorobenzene

Concen: 2.052 ug/l

RT: 11.66 min Scan# 1600

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:112 Resp: 22513

Ion Ratio Lower Upper

112 100

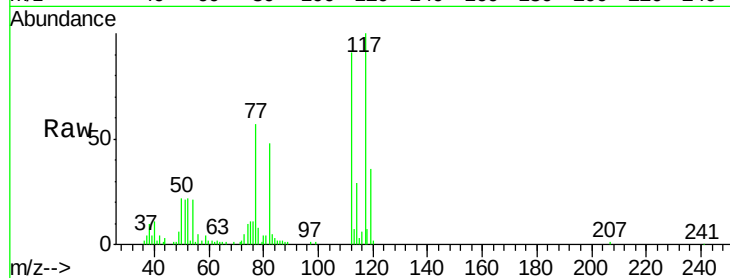
114 32.0 26.5 39.7

Manual Integrations

APPROVED

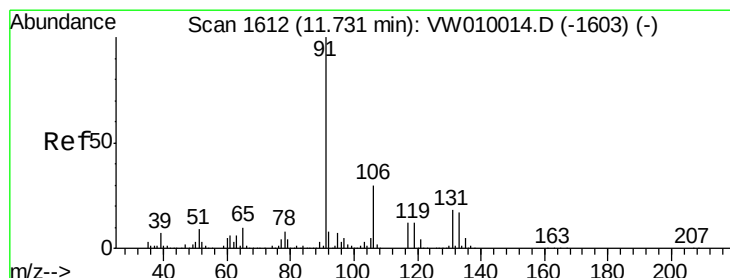
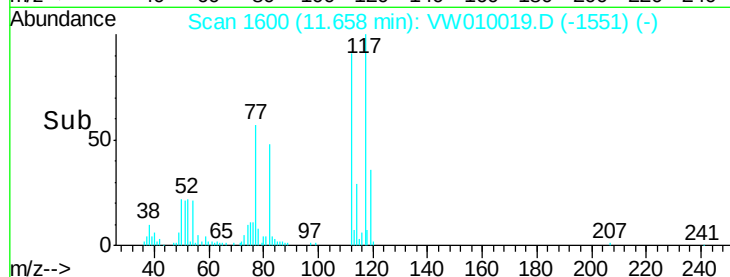
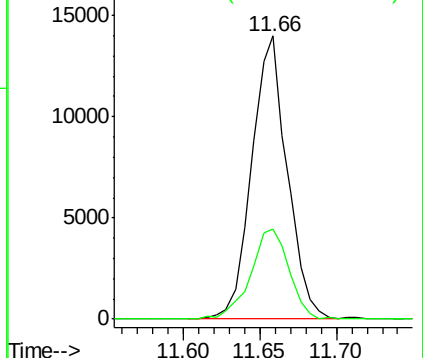
MMDadoda

4/18/2019 11:40:33 AM



Abundance Ion 111.90 (111.60 to 112.60): V

Ion 113.90 (113.60 to 114.60): V



#66

1,1,1,2-Tetrachloroethane

Concen: 1.985 ug/l

RT: 11.73 min Scan# 1612

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

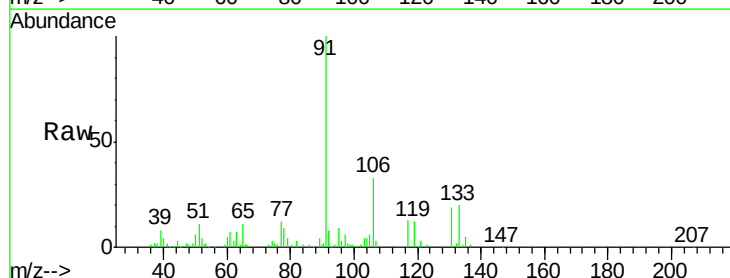
Tgt Ion:131 Resp: 7786

Ion Ratio Lower Upper

131 100

133 94.5 46.5 139.5

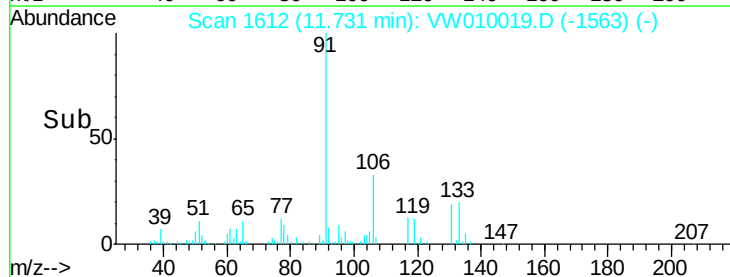
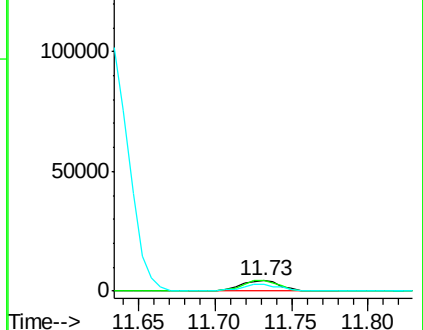
119 0.0 31.9 95.5#

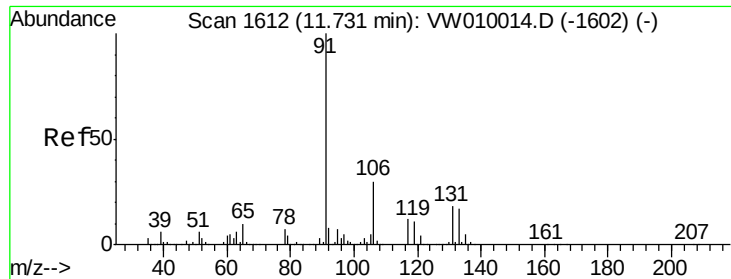


Abundance Ion 130.80 (130.50 to 131.50): V

Ion 132.80 (132.50 to 133.50): V

Ion 118.80 (118.50 to 119.50): V





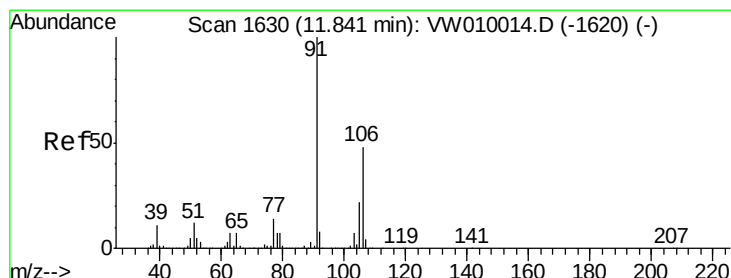
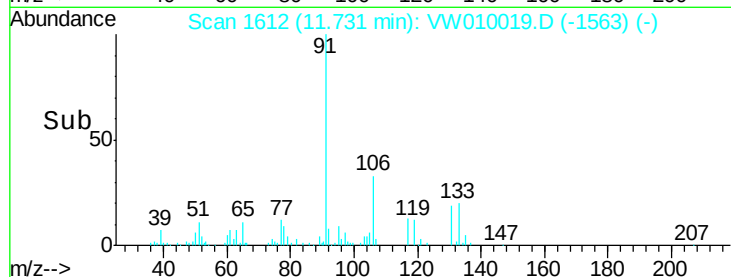
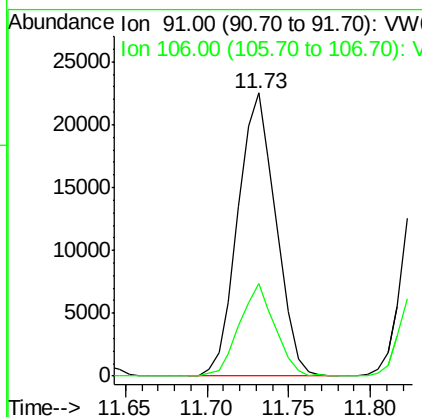
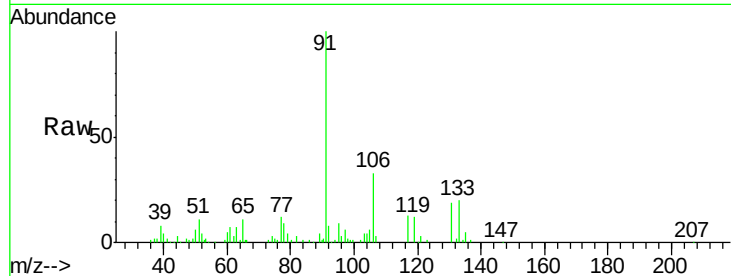
#67
Ethyl Benzene
Concen: 1.863 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 91 Resp: 36464
Ion Ratio Lower Upper
91 100
106 32.6 23.8 35.8

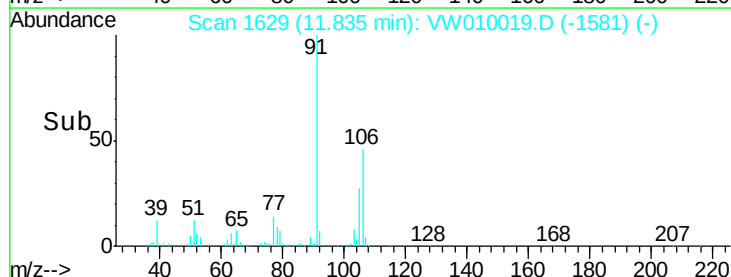
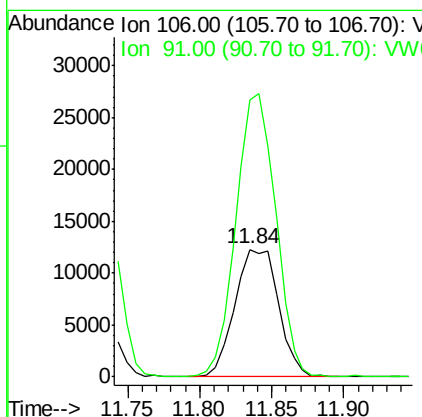
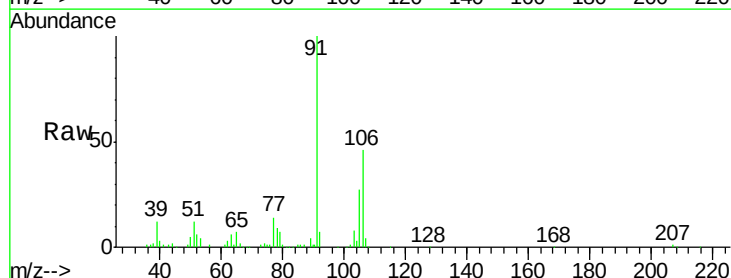
Manual Integrations
APPROVED

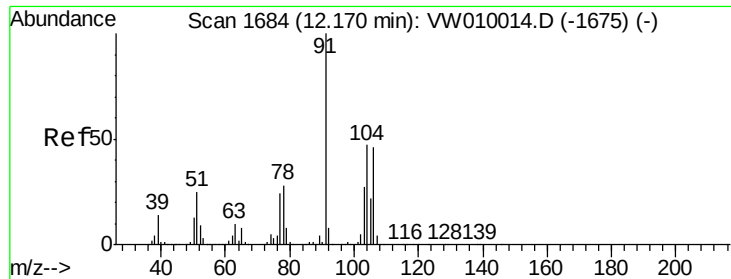
MMDadoda
4/18/2019 11:40:33 AM



#68
m/p-Xylenes
Concen: 3.527 ug/l
RT: 11.84 min Scan# 1629
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion: 106 Resp: 25803
Ion Ratio Lower Upper
106 100
91 203.2 165.0 247.6





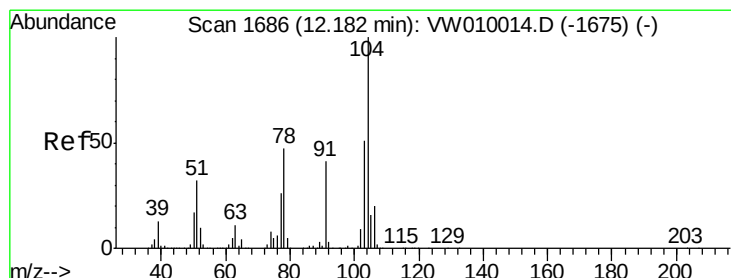
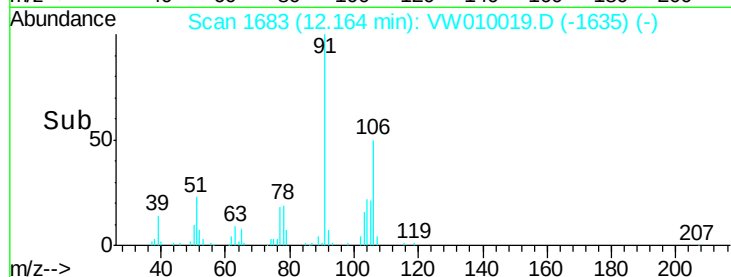
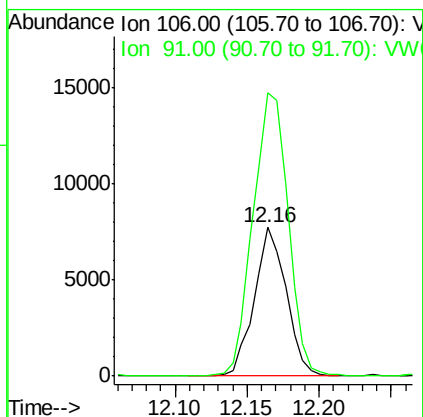
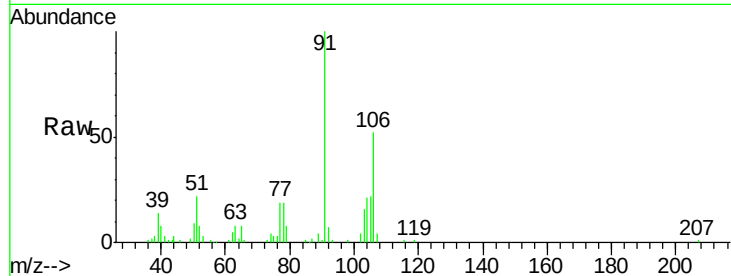
#69
o-Xylene
Concen: 1.771 ug/l
RT: 12.16 min Scan# 1683
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion:106 Resp: 11798
Ion Ratio Lower Upper
106 100
91 210.5 110.5 331.4

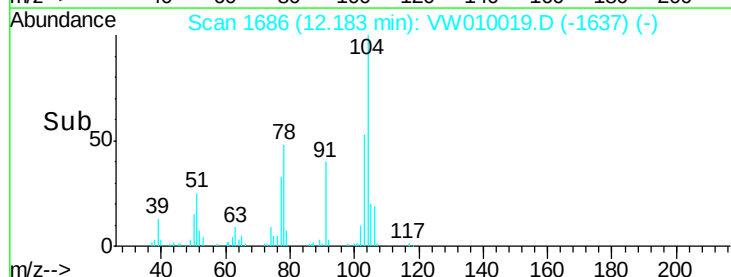
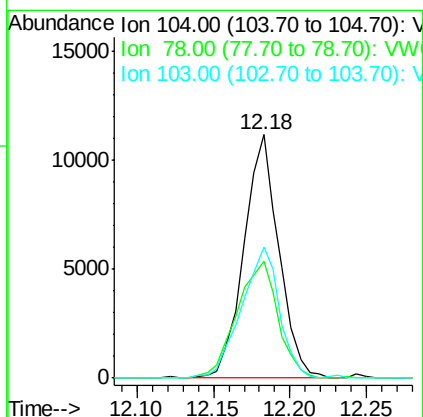
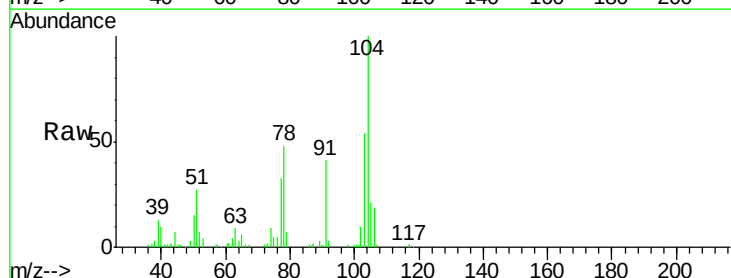
Manual Integrations
APPROVED

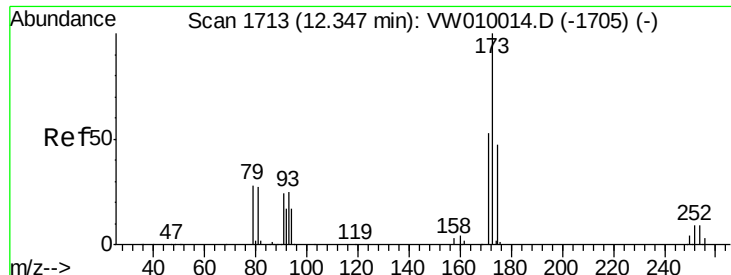
MMDadoda
4/18/2019 11:40:33 AM



#70
Styrene
Concen: 1.543 ug/l
RT: 12.18 min Scan# 1686
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion:104 Resp: 17722
Ion Ratio Lower Upper
104 100
78 56.3 42.5 63.7
103 58.4 43.6 65.4





#71

Bromoform

Concen: 1.899 ug/l

RT: 12.35 min Scan# 1713

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

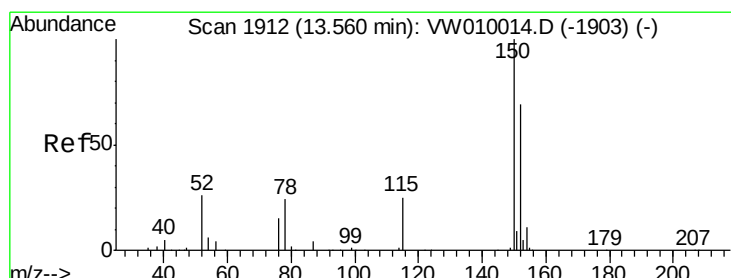
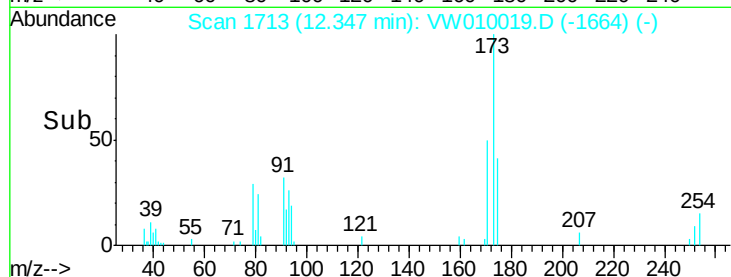
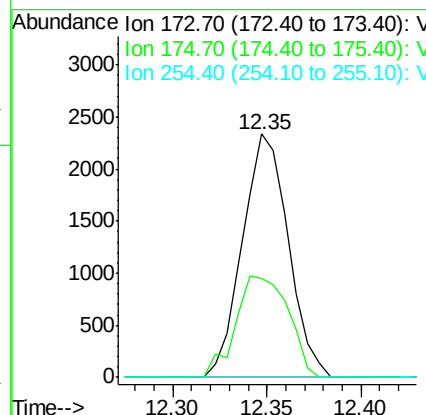
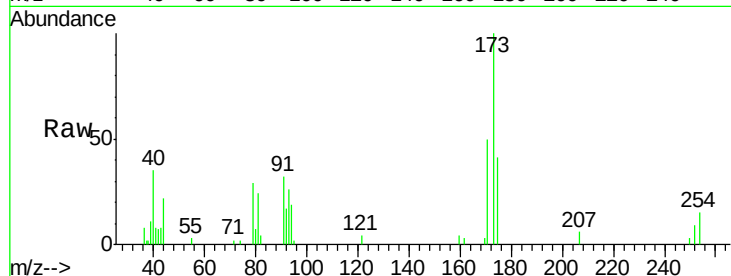
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
173	100		
175	47.7	23.8	71.4
254	0.0	0.1	0.1#

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

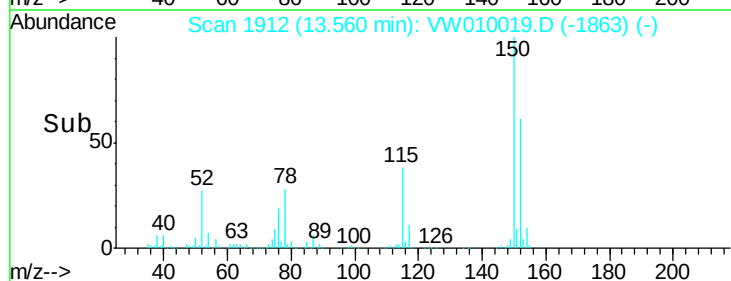
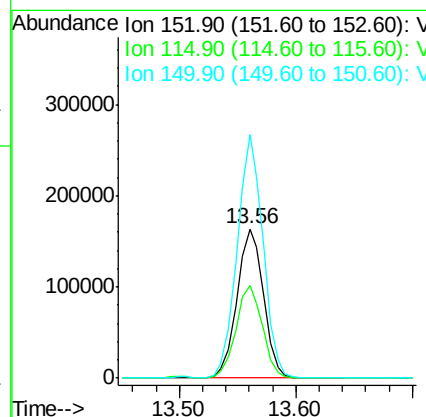
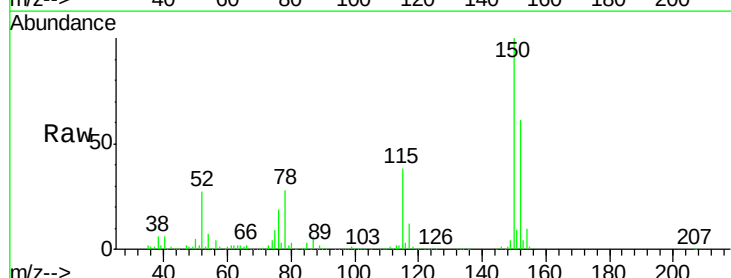
RT: 13.56 min Scan# 1912

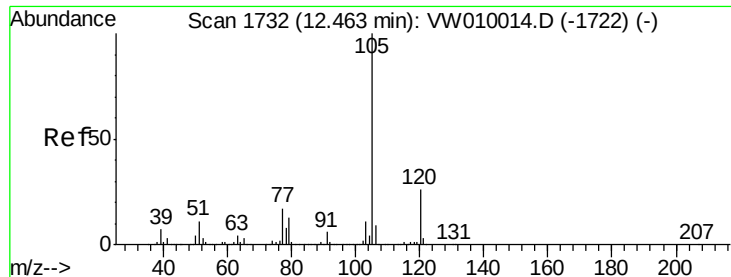
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
152	100		
115	61.8	30.4	91.2
150	159.3	0.0	347.0





#73

Isopropylbenzene

Concen: 1.751 ug/l

RT: 12.46 min Scan# 1732

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:105 Resp: 31443

Ion Ratio Lower Upper

105 100

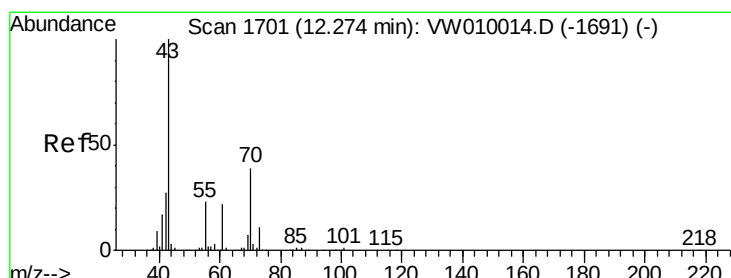
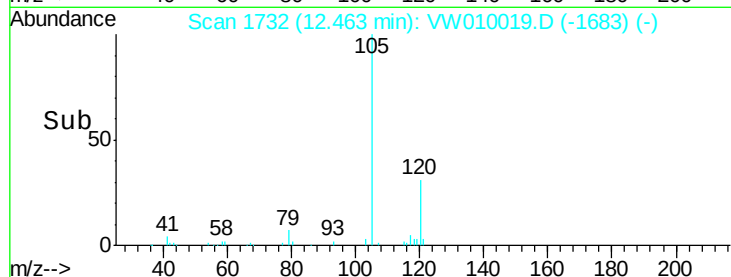
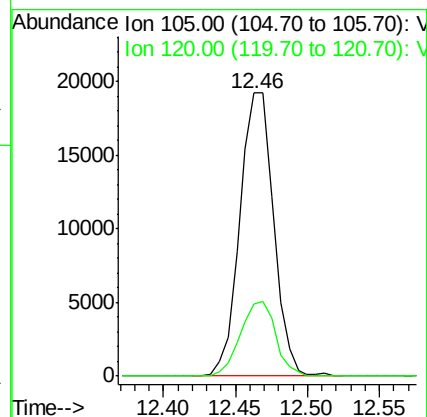
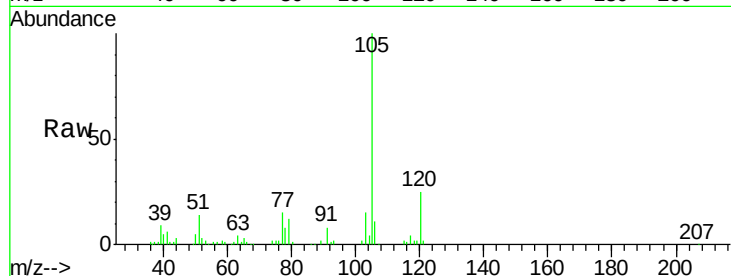
120 27.2 13.1 39.1

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#74

N-ethyl acetate

Concen: 1.643 ug/l

RT: 12.27 min Scan# 1701

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion: 43 Resp: 8172

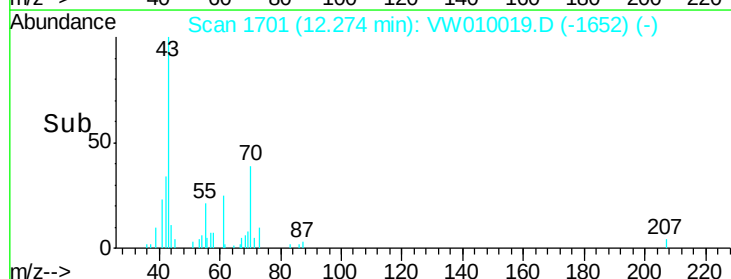
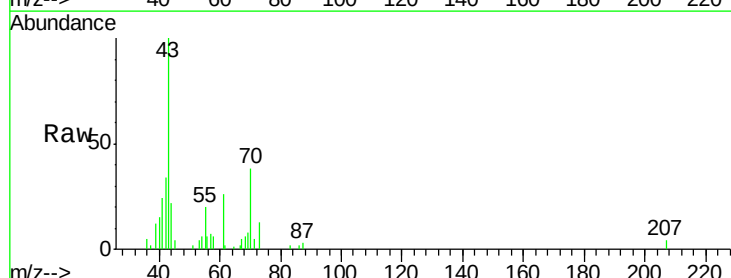
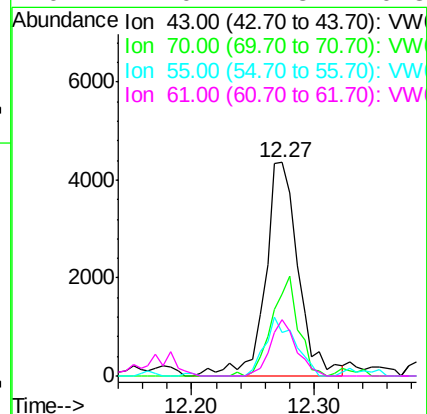
Ion Ratio Lower Upper

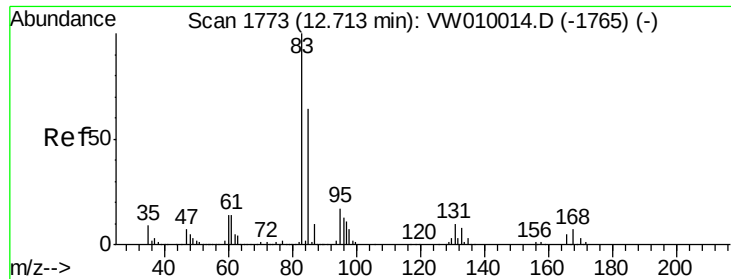
43 100

70 37.0 31.3 46.9

55 25.0 20.0 30.0

61 21.0 17.8 26.8





#75

1,1,2,2-Tetrachloroethane

Concen: 1.972 ug/l

RT: 12.72 min Scan# 1774

Delta R.T. 0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

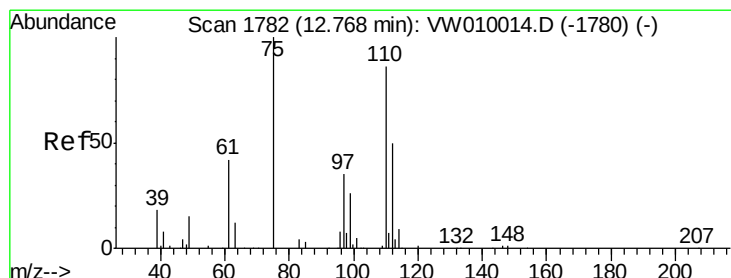
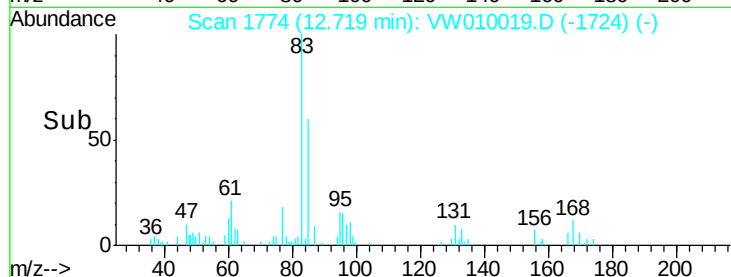
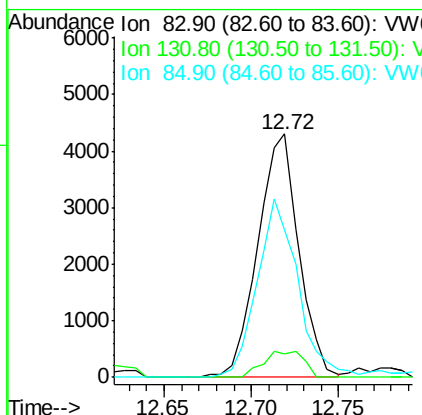
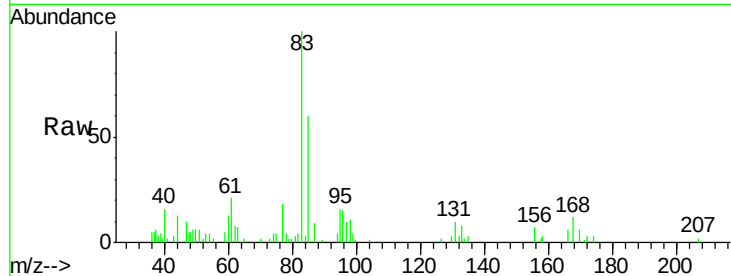
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	83	Resp:	6997
Ion	Ratio	Lower	Upper
83	100		
131	10.5	5.3	15.8
85	72.9	32.0	96.2

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#76

1,2,3-Trichloropropane

Concen: 2.263 ug/l

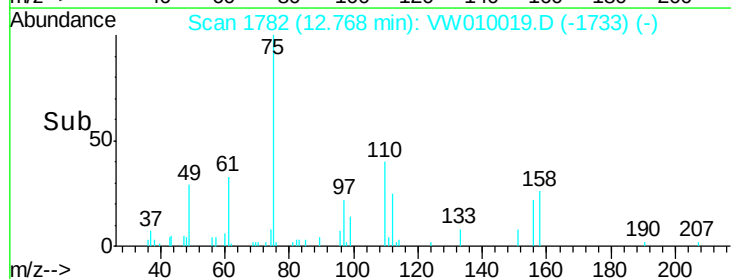
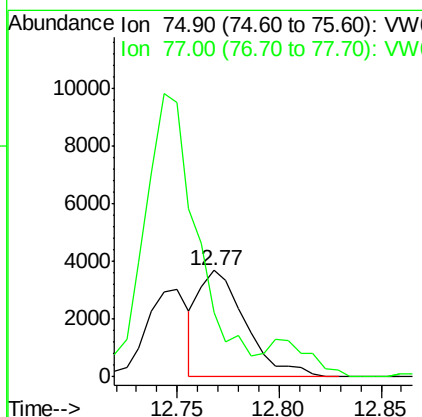
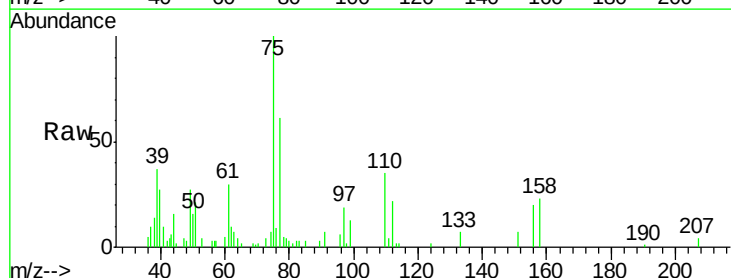
RT: 12.77 min Scan# 1782

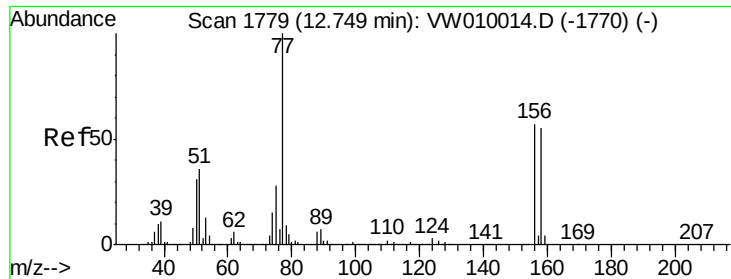
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	75	Resp:	5846
Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0





#77

Bromobenzene

Concen: 2.050 ug/l

RT: 12.75 min Scan# 1779

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

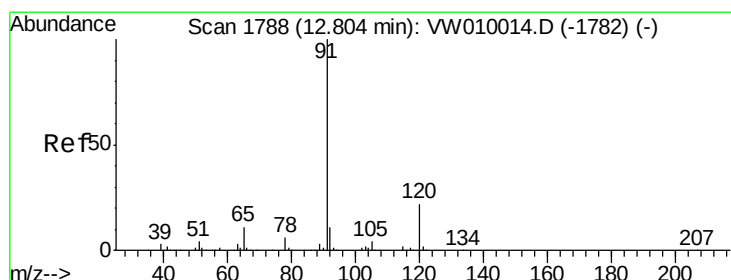
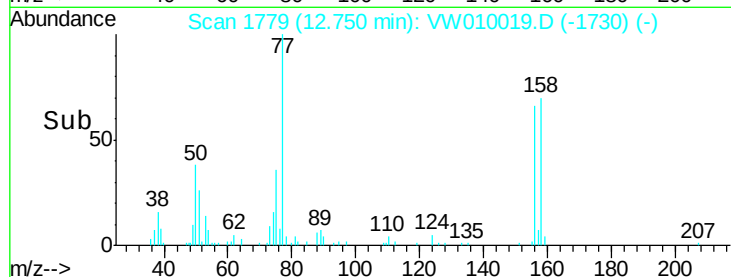
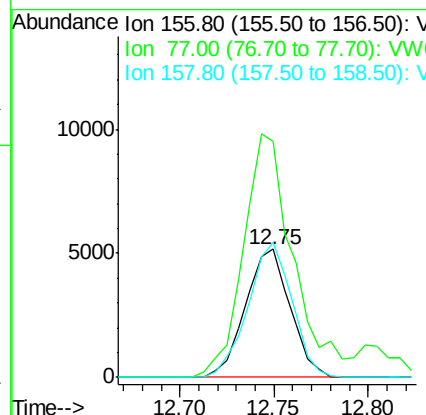
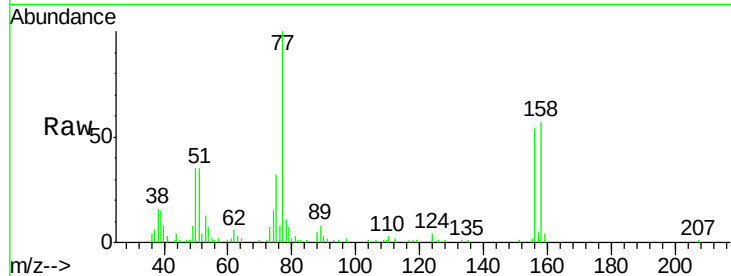
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	156	Resp:	8469
Ion	Ratio	Lower	Upper
156	100		
77	210.6	102.5	307.4
158	103.7	48.8	146.4

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#78

n-propylbenzene

Concen: 1.989 ug/l

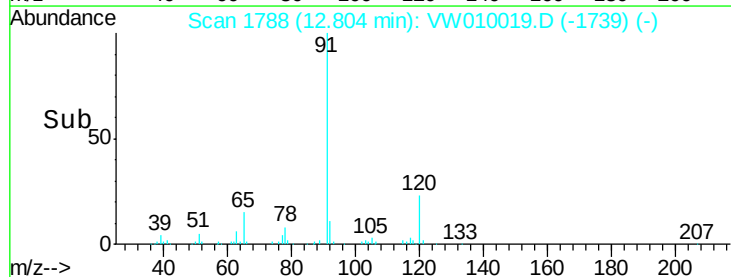
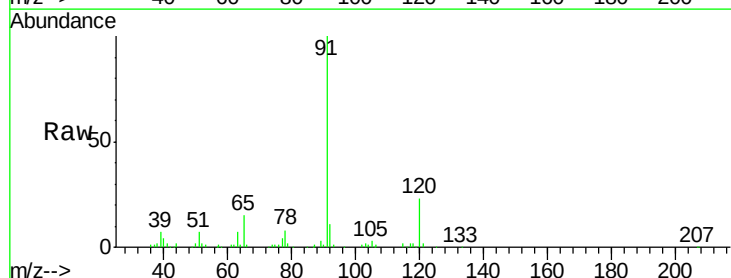
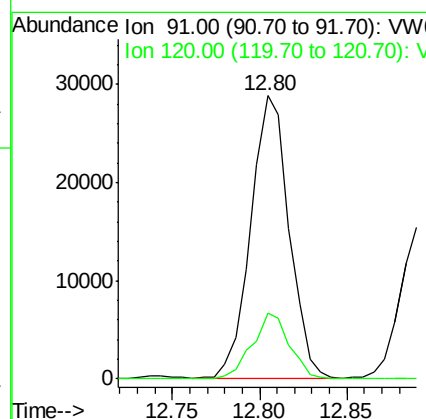
RT: 12.80 min Scan# 1788

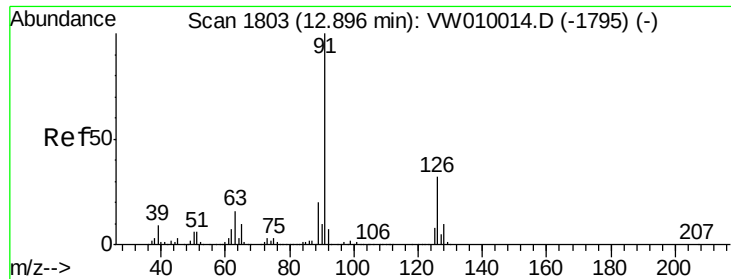
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	91	Resp:	44273
Ion	Ratio	Lower	Upper
91	100		
120	22.4	11.1	33.1





#79

2-Chlorotoluene

Concen: 2.051 ug/l

RT: 12.90 min Scan# 1803

Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion: 91 Resp: 26263

Ion Ratio Lower Upper

91 100

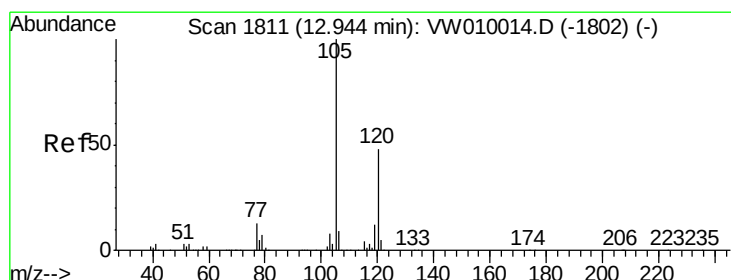
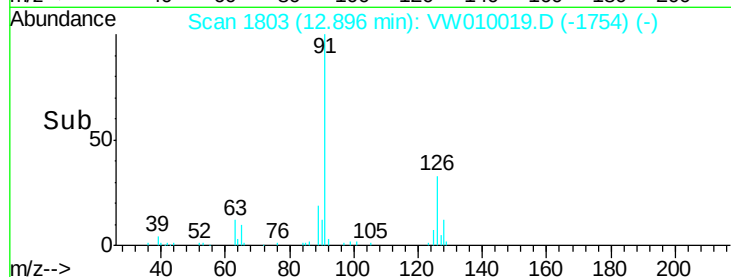
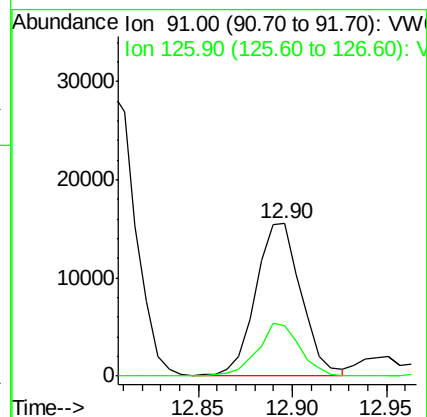
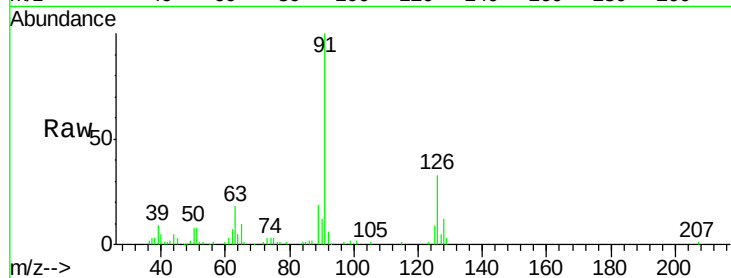
126 32.0 16.3 48.8

Manual Integrations

APPROVED

MMDadoda

4/18/2019 11:40:33 AM



#80

1,3,5-Trimethylbenzene

Concen: 1.789 ug/l

RT: 12.94 min Scan# 1811

Delta R.T. 0.00 min

Lab File: VW010019.D

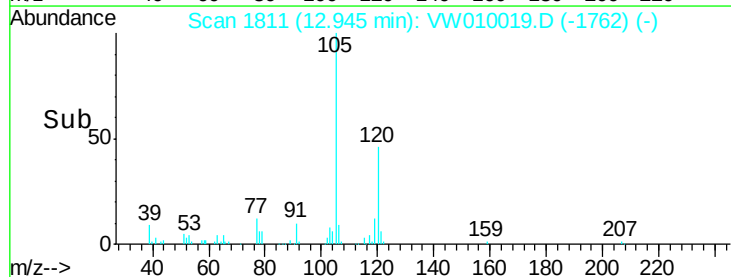
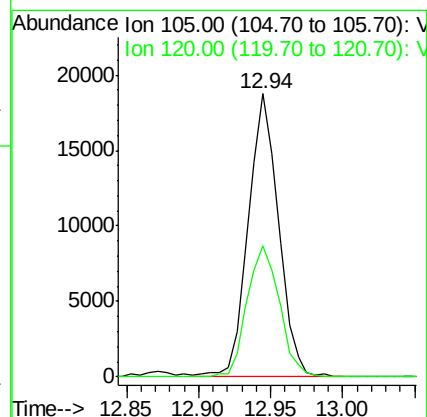
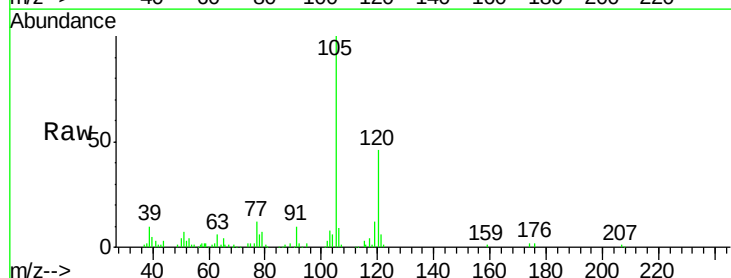
Acq: 17 Apr 2019 16:40

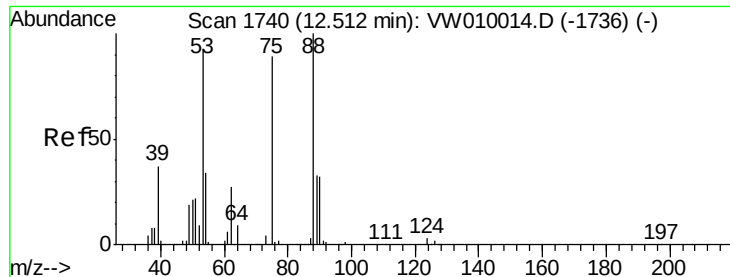
Tgt Ion:105 Resp: 27247

Ion Ratio Lower Upper

105 100

120 49.5 24.3 72.8





#81

trans-1,4-Dichloro-2-butene

Concen: 1.667 ug/l m

RT: 12.52 min Scan# 1741

Delta R.T. 0.01 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Instrument :

MSVOA_W

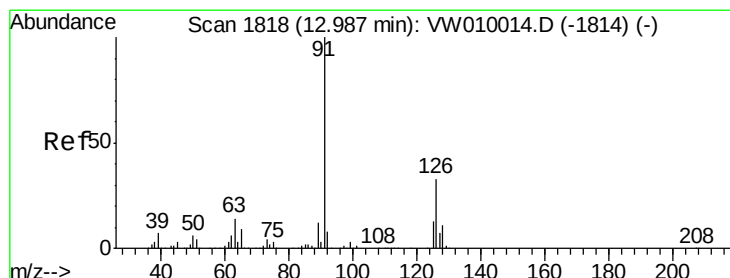
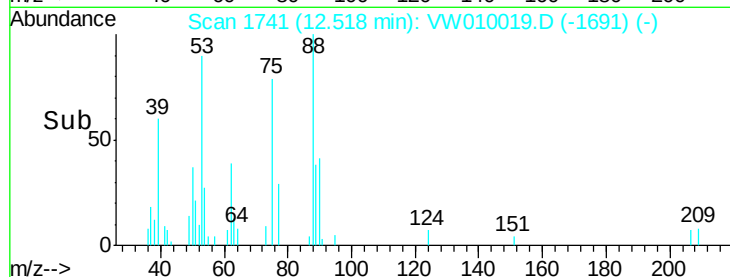
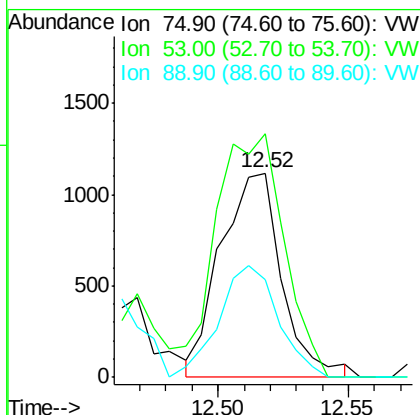
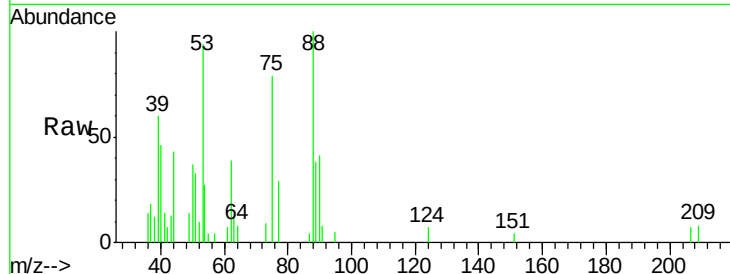
ClientSampleId :

LOD-MDL-SOIL-01-QT2-2019

Tot Ion:	75	Resp:	1826
Ion Ratio	Lower	Upper	
75	100		
53	10.4	89.8	134.8#
89	10.4	36.6	54.8#

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#82

4-Chlorotoluene

Concen: 2.079 ug/l

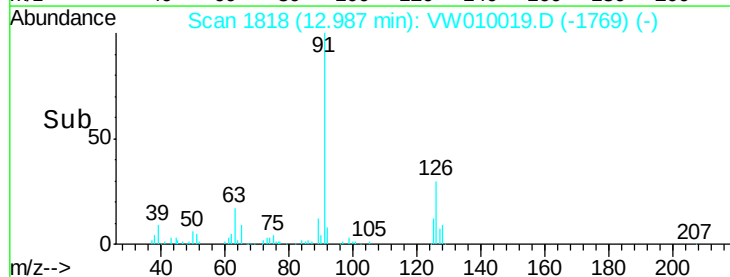
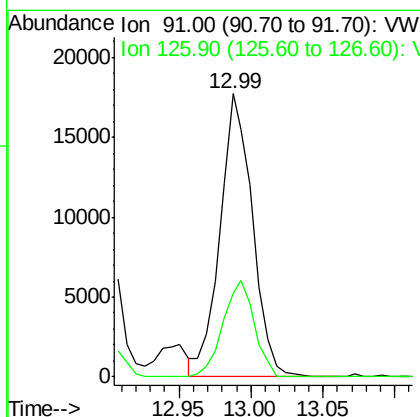
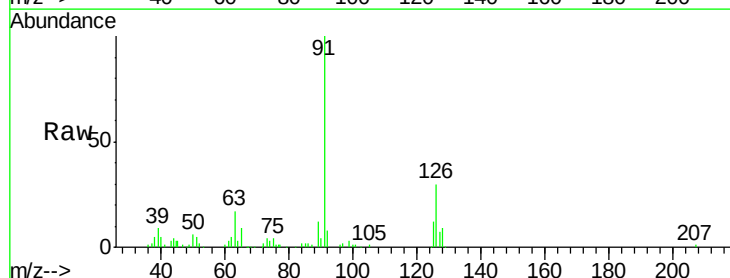
RT: 12.99 min Scan# 1818

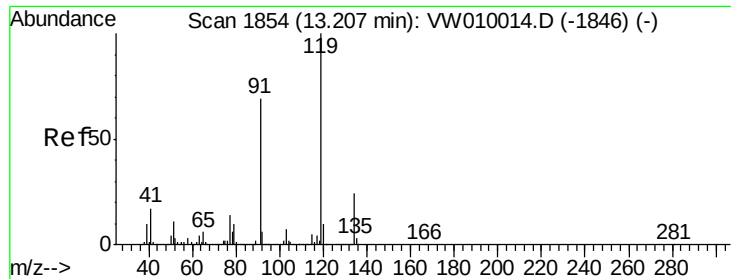
Delta R.T. 0.00 min

Lab File: VW010019.D

Acq: 17 Apr 2019 16:40

Tgt Ion:	91	Resp:	28013
Ion Ratio	Lower	Upper	
91	100		
126	32.8	16.4	49.1





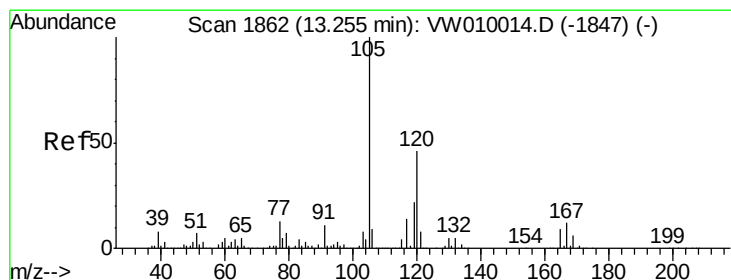
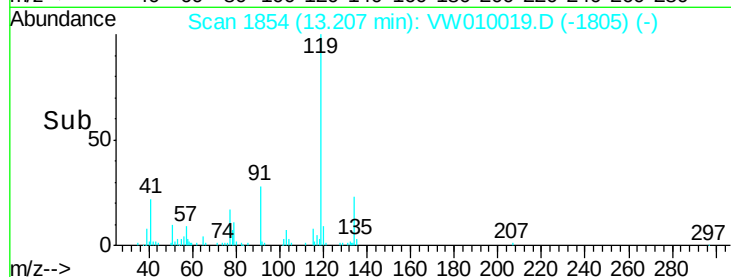
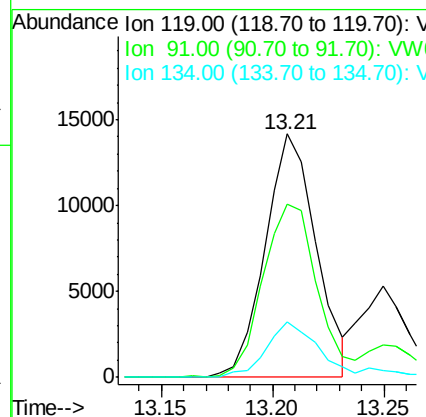
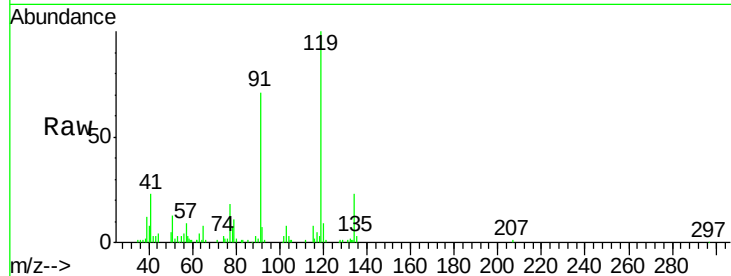
#83
 tert-Butylbenzene
 Concen: 1.779 ug/l
 RT: 13.21 min Scan# 1854
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
119	100		
91	76.2	34.8	104.4
134	22.8	13.7	41.1

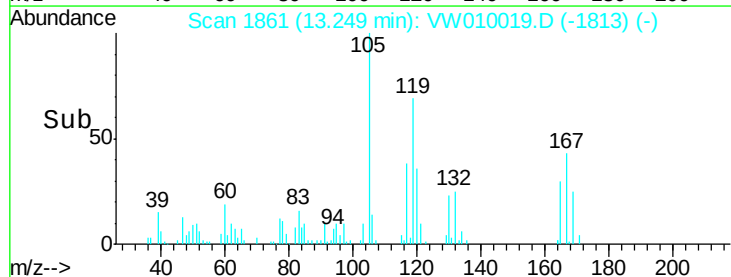
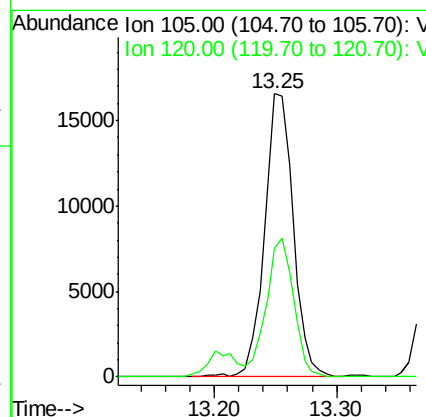
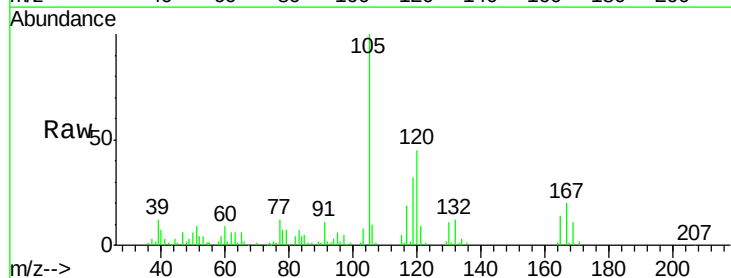
Manual Integrations
 APPROVED

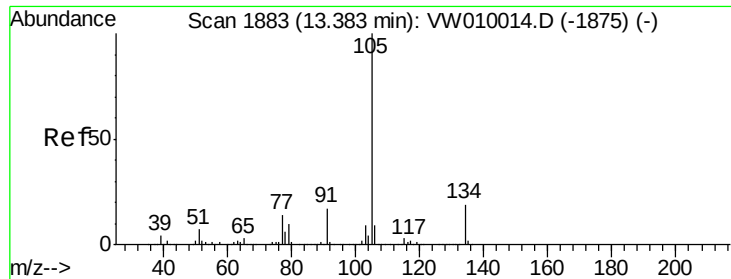
MMDadoda
 4/18/2019 11:40:33 AM



#84
 1,2,4-Trimethylbenzene
 Concen: 1.756 ug/l
 RT: 13.25 min Scan# 1861
 Delta R.T. -0.01 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.5	22.6	67.7





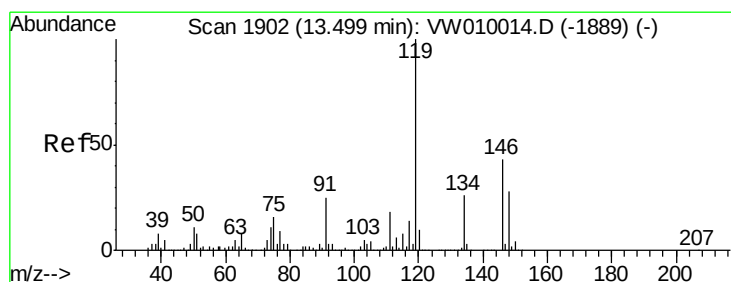
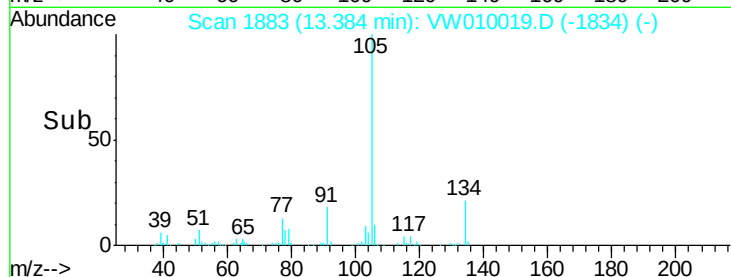
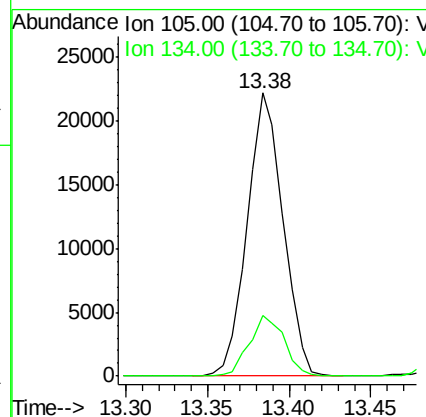
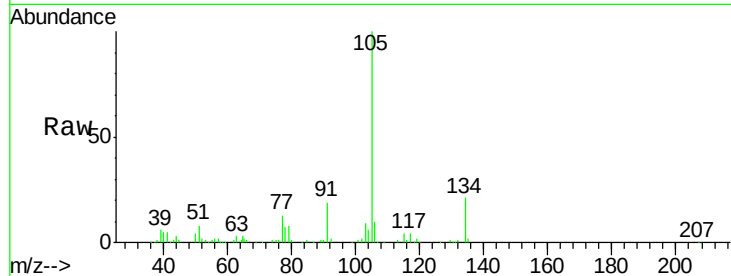
#85
 sec-Butylbenzene
 Concen: 1.803 ug/l
 RT: 13.38 min Scan# 1883
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
105	100		
134	20.8	9.8	29.5

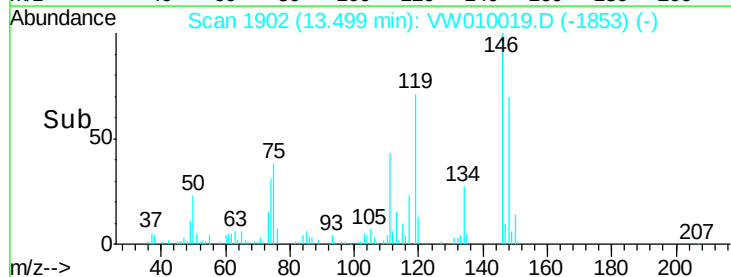
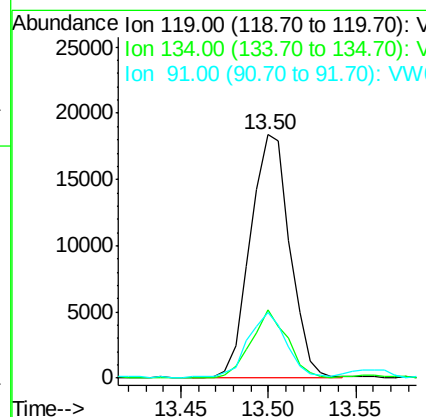
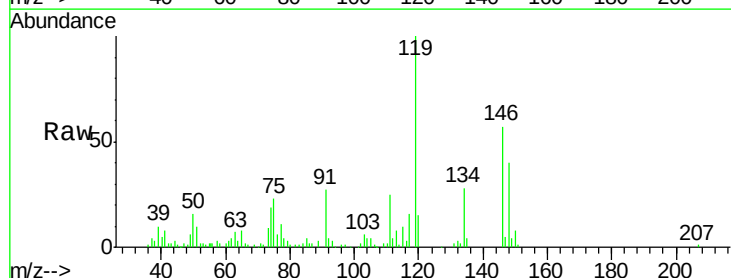
Manual Integrations
 APPROVED

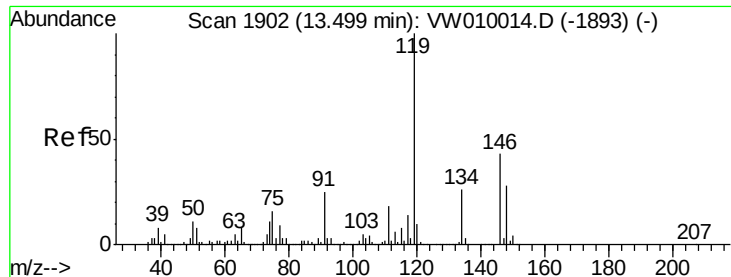
MMDadoda
 4/18/2019 11:40:33 AM



#86
 p-Isopropyltoluene
 Concen: 1.747 ug/l
 RT: 13.50 min Scan# 1902
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.8	13.0	38.9
91	26.8	12.3	36.9





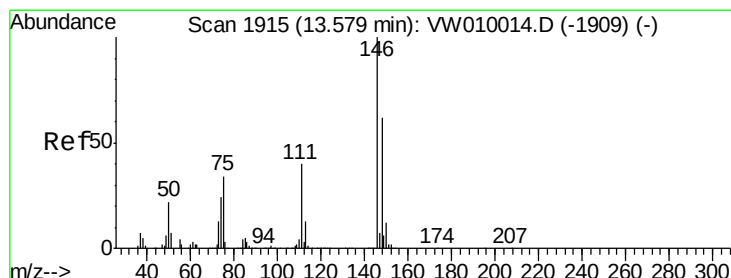
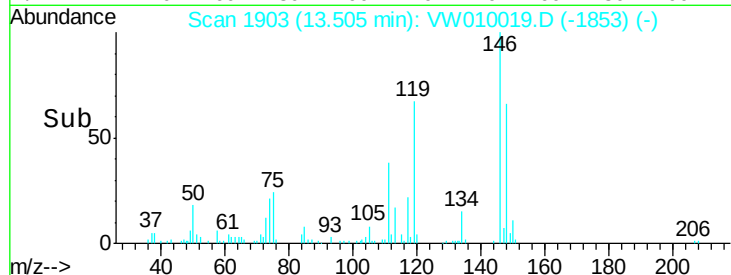
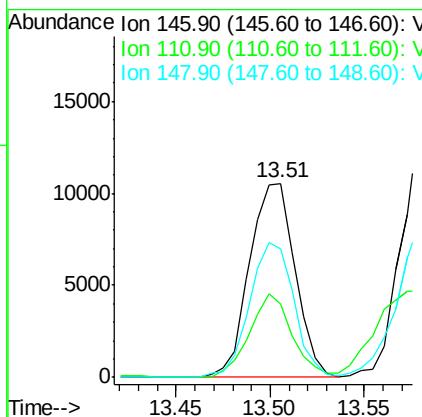
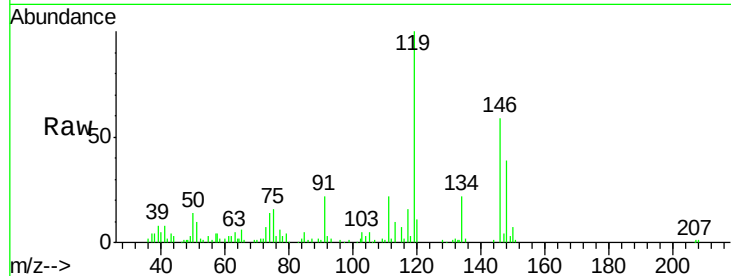
#87
 1,3-Dichlorobenzene
 Concen: 2.122 ug/l
 RT: 13.51 min Scan# 1903
 Delta R.T. 0.01 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	40.5	20.3	61.0
148	67.2	32.0	96.2

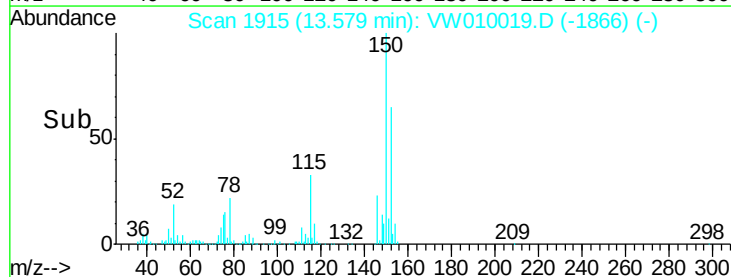
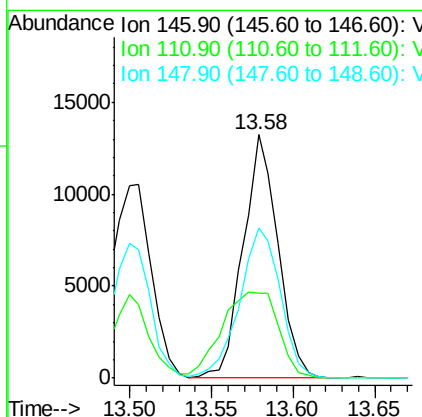
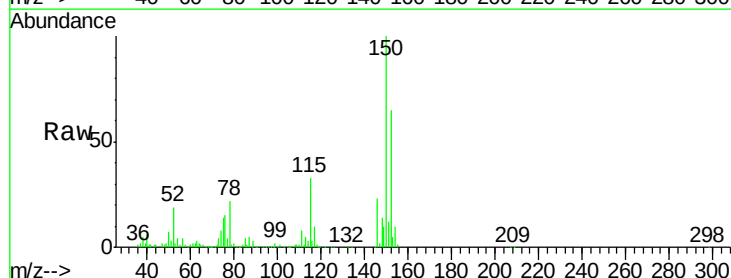
Manual Integrations
 APPROVED

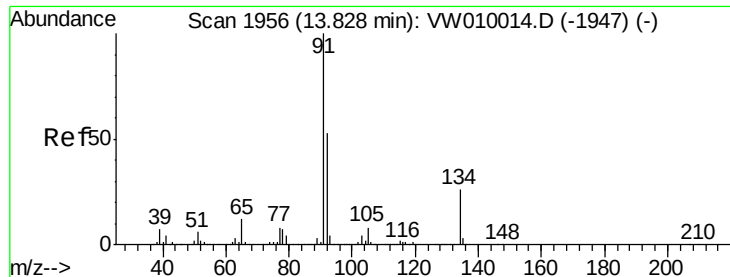
MMDadoda
 4/18/2019 11:40:33 AM



#88
 1,4-Dichlorobenzene
 Concen: 2.362 ug/l
 RT: 13.58 min Scan# 1915
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
146	100		
111	57.3	20.1	60.3
148	72.1	31.8	95.3





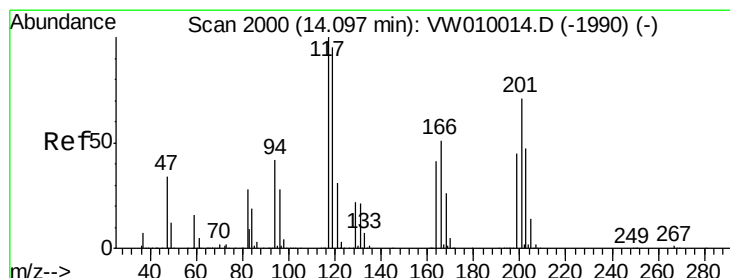
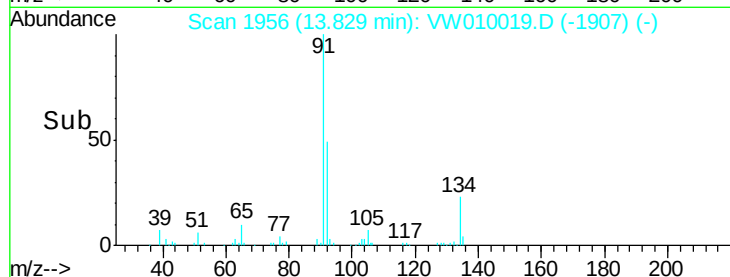
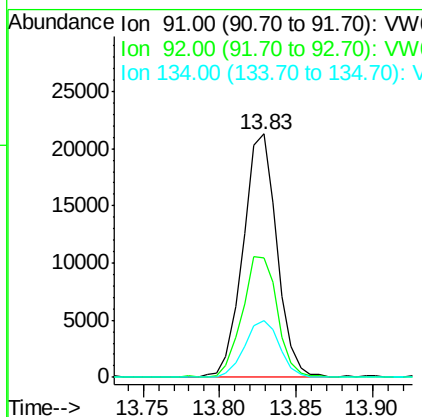
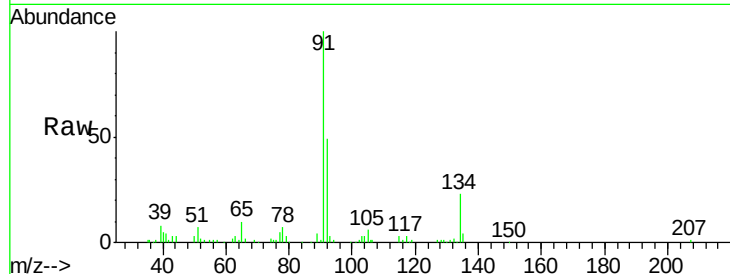
#89
n-Butylbenzene
Concen: 1.988 ug/l
RT: 13.83 min Scan# 1956
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
91	100		
92	51.4	26.5	79.4
134	23.9	12.4	37.0

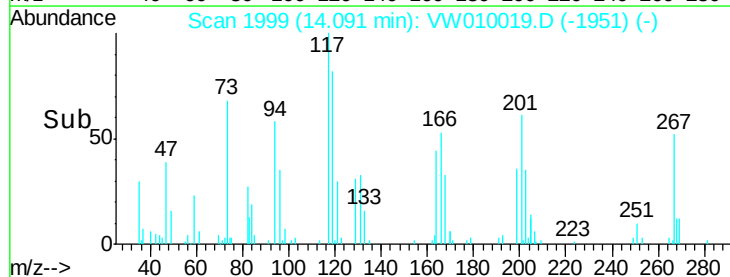
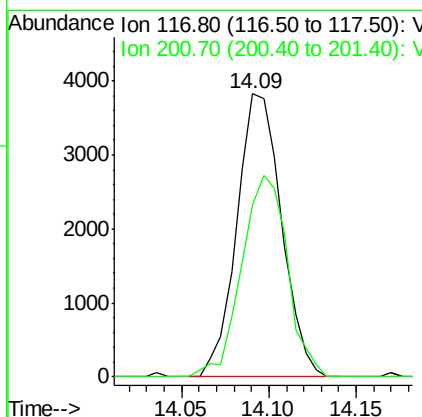
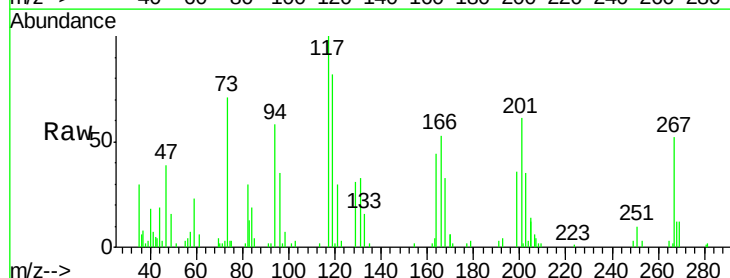
Manual Integrations
APPROVED

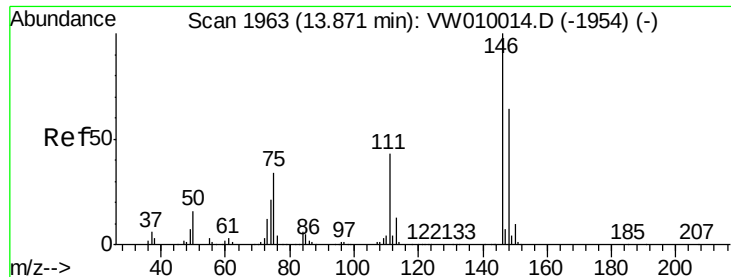
MMDadoda
4/18/2019 11:40:33 AM



#90
Hexachloroethane
Concen: 2.140 ug/l
RT: 14.09 min Scan# 1999
Delta R.T. -0.01 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
117	100		
201	72.6	36.1	108.3





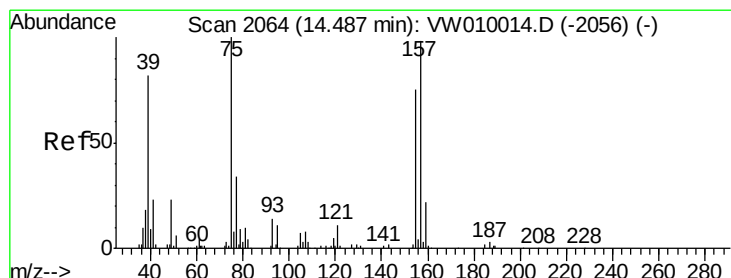
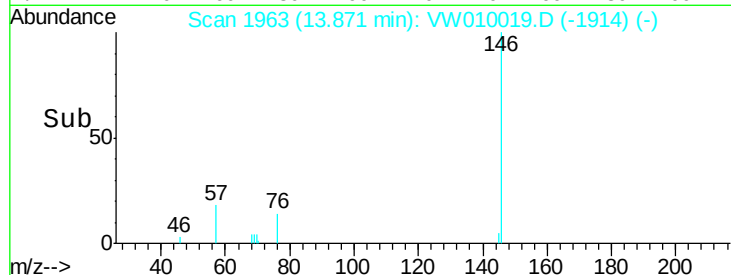
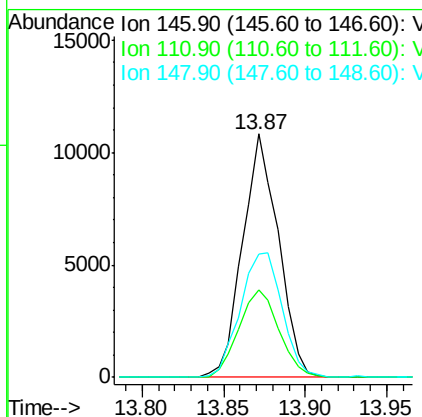
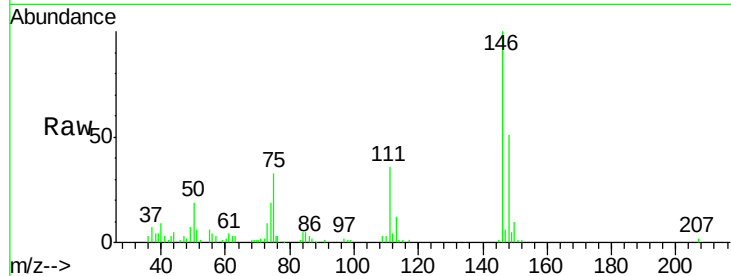
#91
 1,2-Dichlorobenzene
 Concen: 2.218 ug/l
 RT: 13.87 min Scan# 1963
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	40.3	20.9	62.8
148	59.8	31.9	95.7

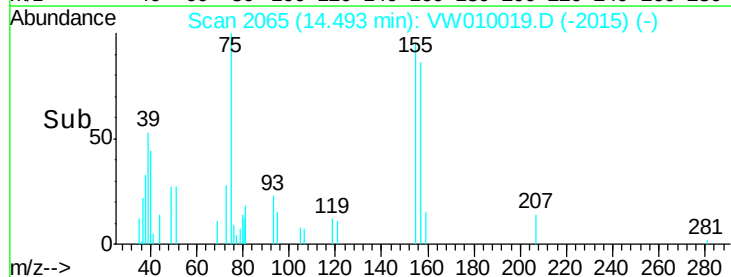
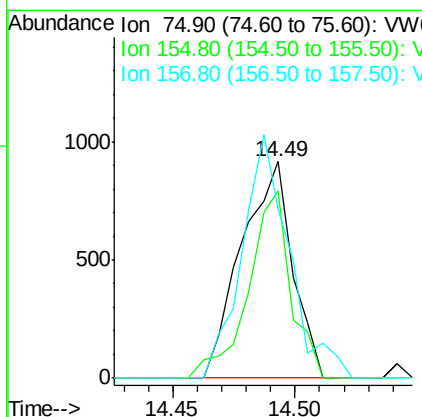
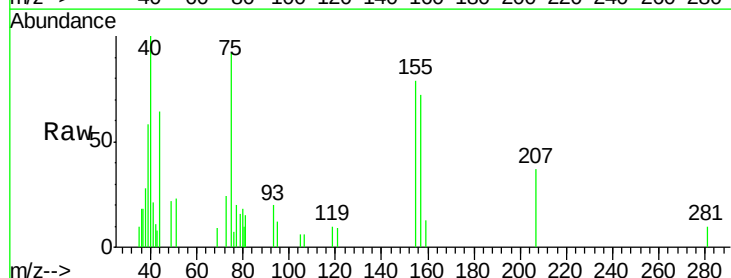
Manual Integrations
 APPROVED

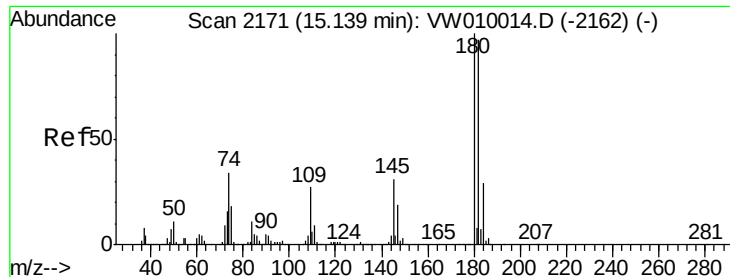
MMDadoda
 4/18/2019 11:40:33 AM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 2.098 ug/l
 RT: 14.49 min Scan# 2065
 Delta R.T. 0.01 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
75	100		
155	71.8	37.1	111.5
157	104.1	47.3	141.9





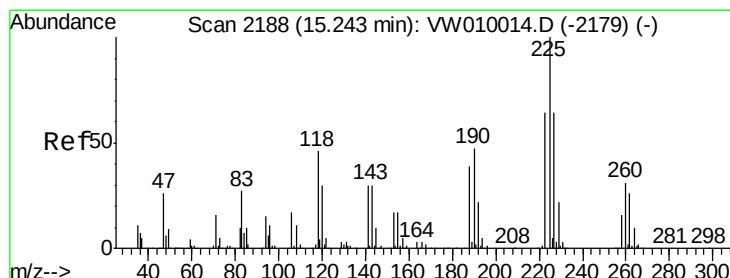
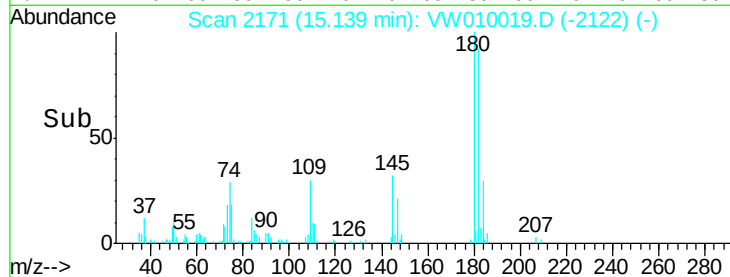
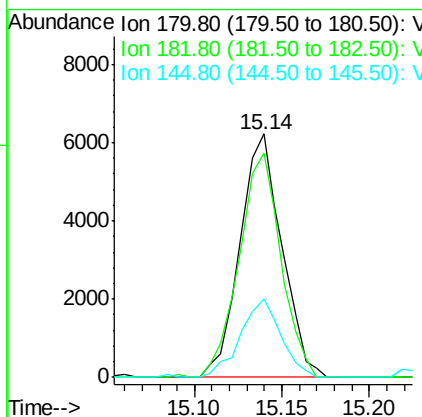
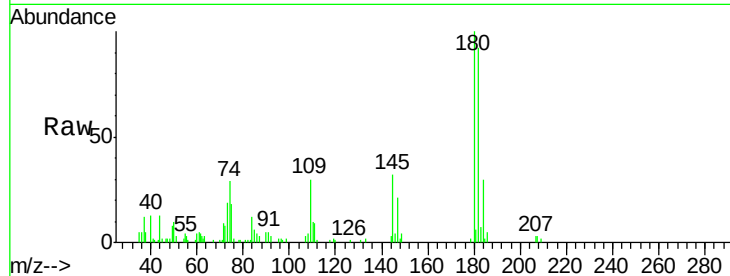
#93
 1,2,4-Trichlorobenzene
 Concen: 2.095 ug/l
 RT: 15.14 min Scan# 2171
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Instrument :
 MSVOA_W
 ClientSampleId :
 LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	91.9	47.1	141.4
145	31.1	15.2	45.6

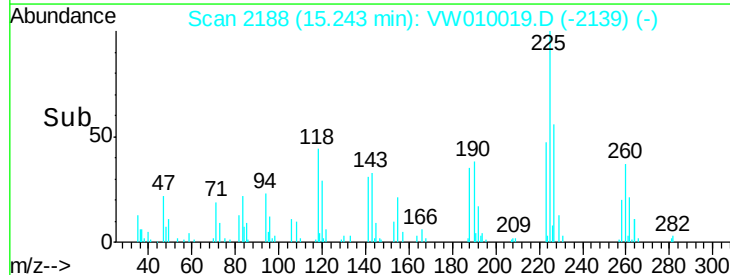
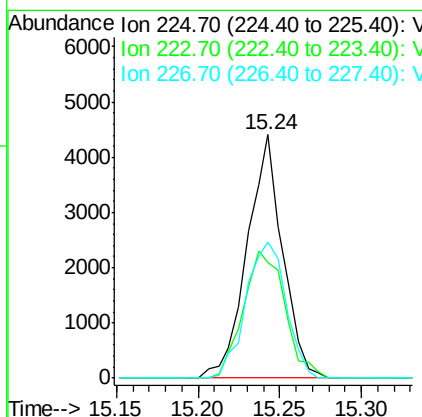
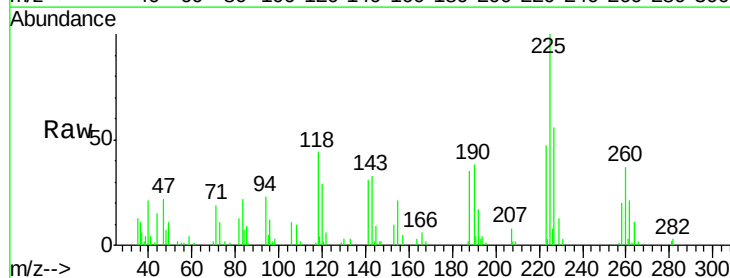
Manual Integrations
 APPROVED

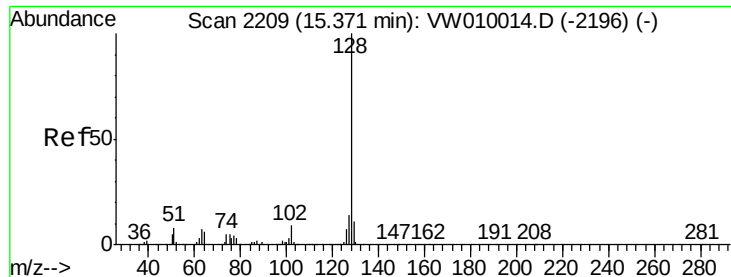
MMDadoda
 4/18/2019 11:40:33 AM



#94
 Hexachlorobutadiene
 Concen: 2.220 ug/l
 RT: 15.24 min Scan# 2188
 Delta R.T. 0.00 min
 Lab File: VW010019.D
 Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Lower	Upper
225	100		
223	61.3	31.9	95.5
227	63.1	31.8	95.3





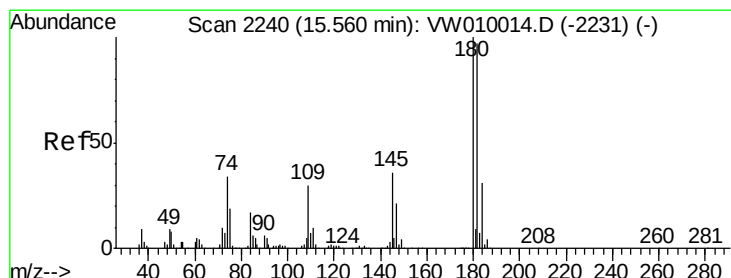
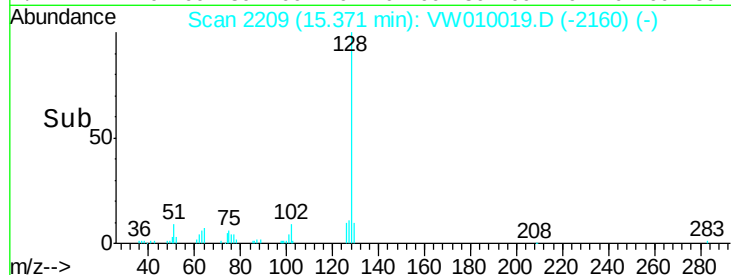
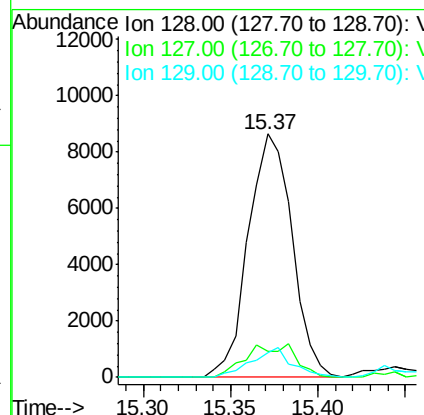
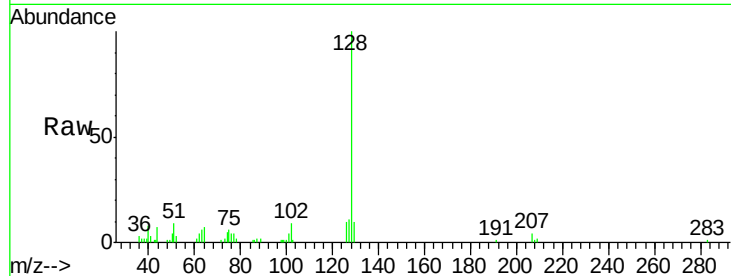
#95
Naphthalene
Concen: 4.097 ug/l
RT: 15.37 min Scan# 2209
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Instrument :
MSVOA_W
ClientSampleId :
LOD-MDL-SOIL-01-QT2-2019

Tot Ion	Ratio	Resp	Lower	Upper
128	100	15090		
127	15.1		10.6	15.8
129	11.1		8.7	13.1

Manual Integrations
APPROVED

MMDadoda
4/18/2019 11:40:33 AM



#96
1,2,3-Trichlorobenzene
Concen: 2.122 ug/l
RT: 15.56 min Scan# 2240
Delta R.T. 0.00 min
Lab File: VW010019.D
Acq: 17 Apr 2019 16:40

Tgt Ion	Ratio	Resp	Lower	Upper
180	100	9092		
182	92.2		47.8	143.3
145	31.2		16.4	49.2

