

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD100419\
 Data File : VD063889.D
 Acq On : 04 Oct 2019 17:11
 Operator : VA/SY
 Sample : K5111-01 4PPB LOD
 Misc : 5.00g/5.00mL/MSVOA D/SOIL
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Manual Integrations
 APPROVED

MMDadoda
 10/8/2019 3:11:38 PM

Quant Time: Oct 05 03:47:54 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D100219S.M
 Quant Title : SW846 8260
 QLast Update : Fri Oct 04 01:55:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.99	168	184950	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	305193	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.64	117	289925	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.57	152	146674	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.34	65	92716	51.49	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.98%	
35) Dibromofluoromethane	7.91	113	90804	48.69	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.38%	
50) Toluene-d8	10.34	98	376122	49.68	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.36%	
62) 4-Bromofluorobenzene	12.63	95	121848	46.32	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.64%	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.99	85	5889	4.490 ug/l #	48
3) Chloromethane	2.21	50	17995	4.480 ug/l	96
4) Vinyl Chloride	2.35	62	17929	4.229 ug/l	100
5) Bromomethane	2.77	94	11697	4.292 ug/l	88
6) Chloroethane	2.93	64	12609	4.498 ug/l	93
7) Trichlorofluoromethane	3.27	101	25850	4.612 ug/l	86
8) Diethyl Ether	3.70	74	4302m	4.782 ug/l	
9) 1,1,2-Trichlorotrifluoroet	4.09	101	7159	4.614 ug/l #	91
10) Methyl Iodide	4.29	142	8436	3.946 ug/l	94
11) Tert butyl alcohol	5.24	59	2712m	21.234 ug/l	
12) 1,1-Dichloroethene	4.07	96	7336	4.733 ug/l #	79
13) Acrolein	3.92	56	3631	22.578 ug/l	87
14) Allyl chloride	4.71	41	10355	4.018 ug/l #	92
15) Acrylonitrile	5.44	53	8146	20.538 ug/l #	79
16) Acetone	4.17	43	10280	21.928 ug/l #	82
17) Carbon Disulfide	4.39	76	22596	4.010 ug/l #	81
18) Methyl Acetate	4.73	43	4539	4.950 ug/l #	87
19) Methyl tert-butyl Ether	5.47	73	16854	4.199 ug/l #	90
20) Methylene Chloride	4.96	84	17727	7.368 ug/l #	83
21) trans-1,2-Dichloroethene	5.47	96	8748	4.534 ug/l #	86
22) Diisopropyl ether	6.37	45	23671	4.498 ug/l #	89
23) Vinyl Acetate	6.31	43	62134m	19.845 ug/l	
24) 1,1-Dichloroethane	6.27	63	15270	4.710 ug/l	98
25) 2-Butanone	7.23	43	12641	22.753 ug/l #	87
26) 2,2-Dichloropropane	7.21	77	13690	4.668 ug/l	100
27) cis-1,2-Dichloroethene	7.21	96	9291	4.254 ug/l	98
28) Bromochloromethane	7.56	49	5849	4.815 ug/l #	91
29) Tetrahydrofuran	7.57	42	6744	20.797 ug/l #	92
30) Chloroform	7.71	83	15382	4.369 ug/l	92
31) Cyclohexane	7.99	56	16933	5.570 ug/l #	78
32) 1,1,1-Trichloroethane	7.91	97	12697	4.204 ug/l	92
36) 1,1-Dichloropropene	8.11	75	12869	4.612 ug/l	96
37) Ethyl Acetate	7.29	43	5810	4.588 ug/l #	90
38) Carbon Tetrachloride	8.09	117	11528	4.088 ug/l	94

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.35	83	14227	4.147	ug/l	92
40) Benzene	8.36	78	33061	4.134	ug/l	96
41) Methacrylonitrile	7.53	41	2268m	3.506	ug/l	
42) 1,2-Dichloroethane	8.43	62	10610	4.587	ug/l	100
43) Isopropyl Acetate	8.46	43	9870	4.218	ug/l #	58
44) Trichloroethene	9.11	130	9927	4.305	ug/l	94
45) 1,2-Dichloropropane	9.38	63	9173	4.687	ug/l	96
46) Dibromomethane	9.47	93	4958	4.448	ug/l	99
47) Bromodichloromethane	9.67	83	11313	3.942	ug/l #	81
48) Methyl methacrylate	9.46	41	4389	3.914	ug/l #	88
49) 1,4-Dioxane	9.47	88	1298	85.307	ug/l #	76
51) 4-Methyl-2-Pentanone	10.23	43	25460	20.978	ug/l	94
52) Toluene	10.40	92	21285	3.877	ug/l	92
53) t-1,3-Dichloropropene	10.62	75	10665	3.808	ug/l #	78
54) cis-1,3-Dichloropropene	10.09	75	11427	3.545	ug/l #	92
55) 1,1,2-Trichloroethane	10.80	97	6028	3.830	ug/l	93
56) Ethyl methacrylate	10.67	69	7790	3.908	ug/l #	83
57) 1,3-Dichloropropane	10.95	76	10586	3.931	ug/l	96
58) 2-Chloroethyl Vinyl ether	9.94	63	15431	18.012	ug/l	95
59) 2-Hexanone	10.98	43	15452	17.600	ug/l	95
60) Dibromochloromethane	11.14	129	8122	3.964	ug/l	92
61) 1,2-Dibromoethane	11.25	107	6141	4.025	ug/l	95
64) Tetrachloroethene	10.88	164	8206	4.146	ug/l #	80
65) Chlorobenzene	11.67	112	24657	4.235	ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.74	131	8365	3.899	ug/l	96
67) Ethyl Benzene	11.74	91	41645	3.967	ug/l	99
68) m/p-Xylenes	11.85	106	30567	7.543	ug/l	96
69) o-Xylene	12.17	106	15601	4.021	ug/l	99
70) Styrene	12.19	104	23615	3.595	ug/l #	89
71) Bromoform	12.36	173	4636	4.026	ug/l #	94
73) Isopropylbenzene	12.48	105	38834	3.938	ug/l	97
74) N-amyl acetate	12.29	43	9573	4.509	ug/l	95
75) 1,1,2,2-Tetrachloroethane	12.73	83	6666	3.885	ug/l	97
76) 1,2,3-Trichloropropane	12.79	75	3540m	3.603	ug/l	
77) Bromobenzene	12.76	156	10815	4.402	ug/l	97
78) n-propylbenzene	12.82	91	45963	3.971	ug/l	96
79) 2-Chlorotoluene	12.91	91	26744	4.191	ug/l	96
80) 1,3,5-Trimethylbenzene	12.96	105	34590	4.205	ug/l	88
81) trans-1,4-Dichloro-2-buten	12.53	75	2304	4.150	ug/l #	76
82) 4-Chlorotoluene	13.00	91	28150	4.158	ug/l	95
83) tert-Butylbenzene	13.22	119	27052	3.695	ug/l	98
84) 1,2,4-Trimethylbenzene	13.27	105	31756	3.745	ug/l	99
85) sec-Butylbenzene	13.40	105	39854	4.031	ug/l	97
86) p-Isopropyltoluene	13.51	119	37001	3.955	ug/l	99
87) 1,3-Dichlorobenzene	13.52	146	19180	3.951	ug/l	93
88) 1,4-Dichlorobenzene	13.60	146	19328	4.036	ug/l	89
89) n-Butylbenzene	13.84	91	35239	4.047	ug/l	98
90) Hexachloroethane	14.11	117	7153	4.251	ug/l	89
91) 1,2-Dichlorobenzene	13.88	146	17870	4.272	ug/l	97
92) 1,2-Dibromo-3-Chloropropan	14.51	75	1371	4.619	ug/l	98

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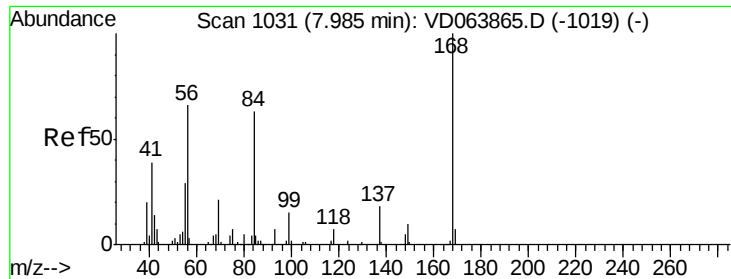
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.17	180	13389	4.148	ug/l	96
94) Hexachlorobutadiene	15.27	225	7659	4.300	ug/l	98
95) Naphthalene	15.40	128	20494	3.778	ug/l	97
96) 1,2,3-Trichlorobenzene	15.60	180	10716	3.848	ug/l	94

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.99 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:168 Resp: 184950

Ion Ratio Lower Upper

168 100

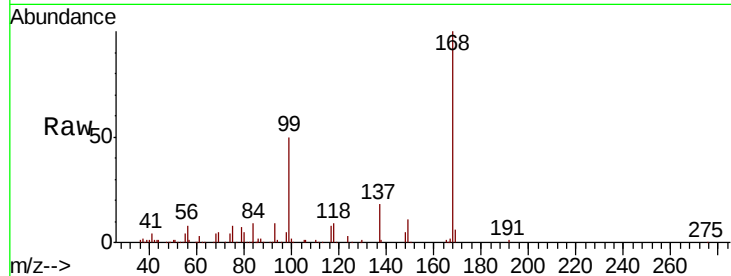
99 49.1 43.0 64.4

Manual Integrations

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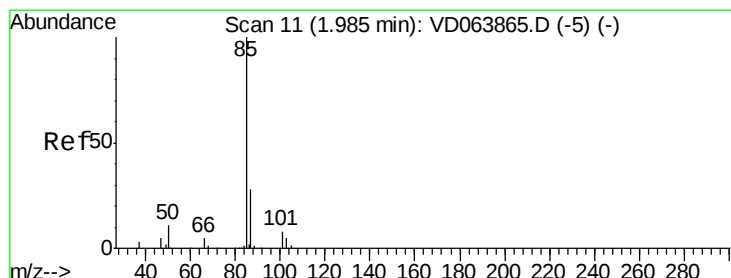
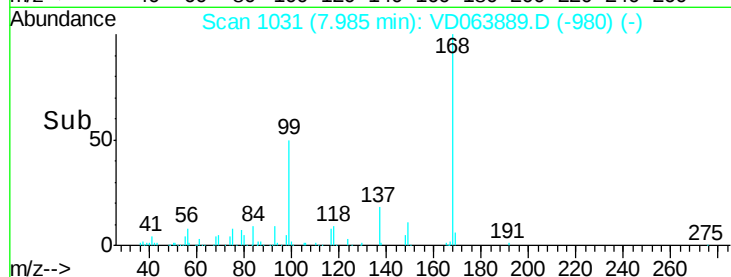
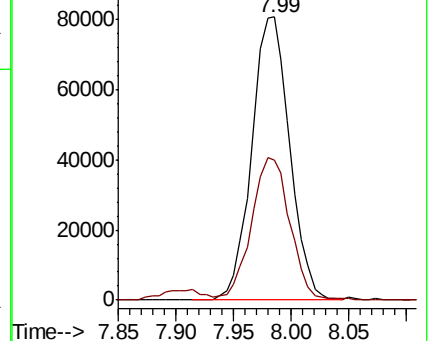
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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#2

Dichlorodifluoromethane

Concen: 4.490 ug/l

RT: 1.99 min Scan# 11

Delta R.T. -0.00 min

Lab File: VD063889.D

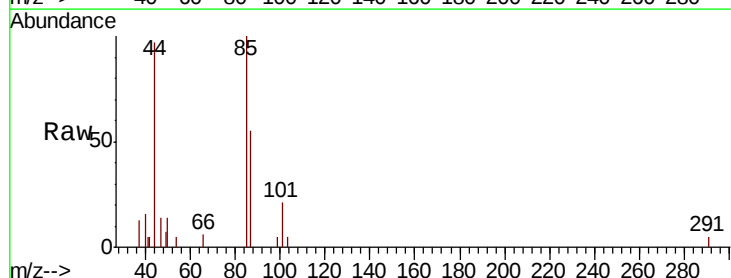
Acq: 04 Oct 2019 17:11

Tgt Ion: 85 Resp: 5889

Ion Ratio Lower Upper

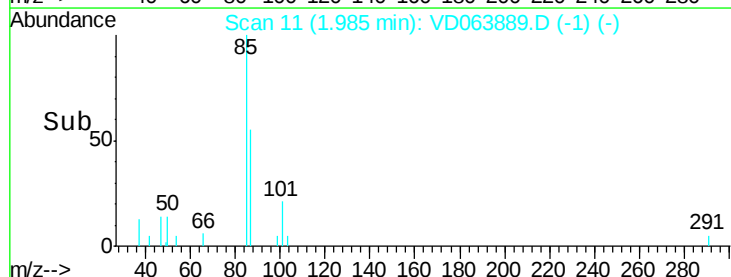
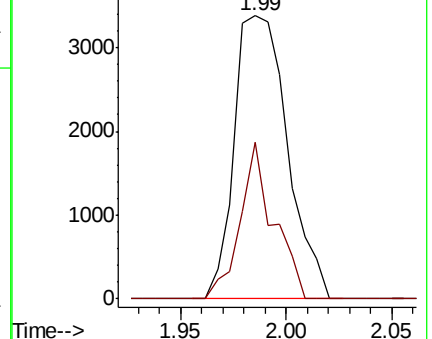
85 100

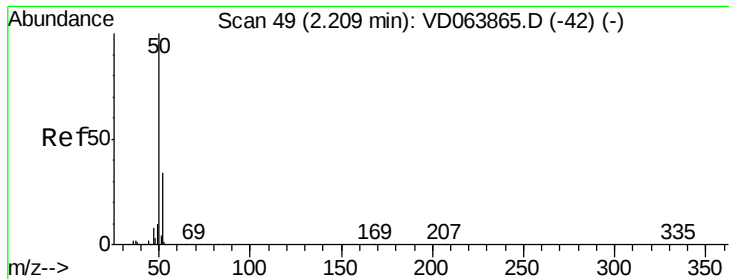
87 55.1 14.0 42.0#



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC





#3

Chloromethane

Concen: 4.480 ug/l

RT: 2.21 min Scan# 49

Delta R.T. 0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 50 Resp: 17995

Ion Ratio Lower Upper

50 100

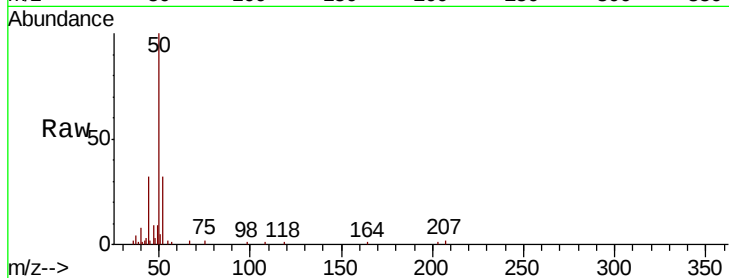
52 32.4 27.5 41.3

Manual Integrations

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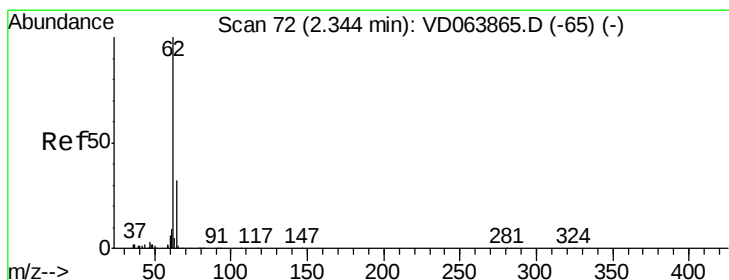
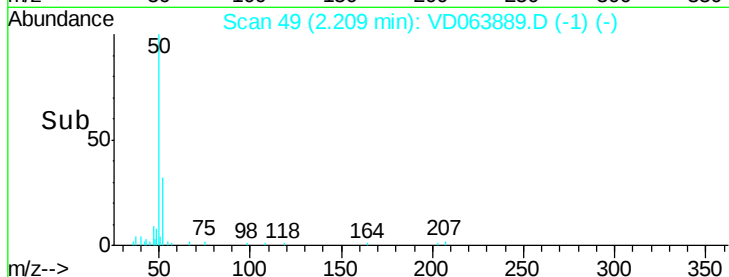
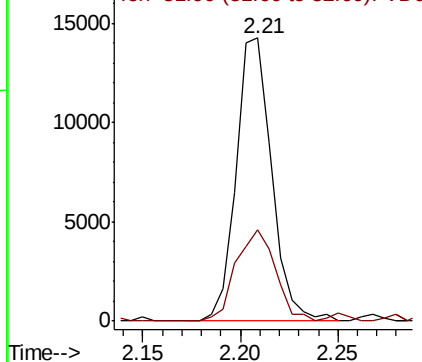
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Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC



#4

Vinyl Chloride

Concen: 4.229 ug/l

RT: 2.35 min Scan# 73

Delta R.T. 0.01 min

Lab File: VD063889.D

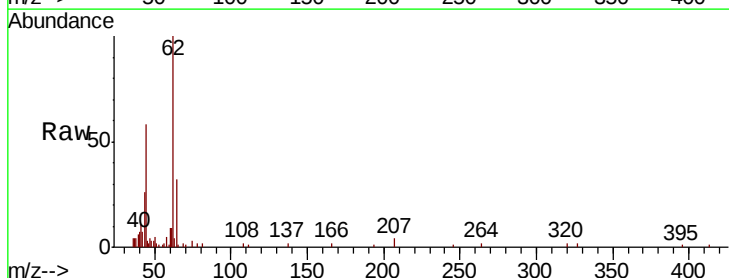
Acq: 04 Oct 2019 17:11

Tgt Ion: 62 Resp: 17929

Ion Ratio Lower Upper

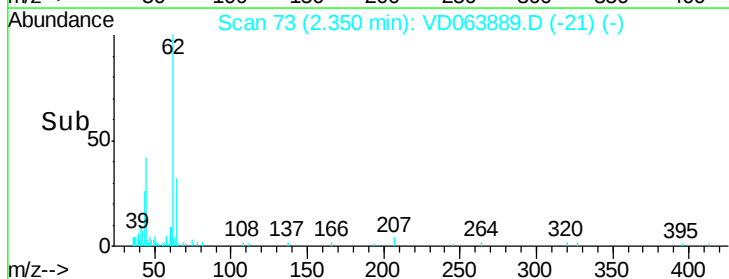
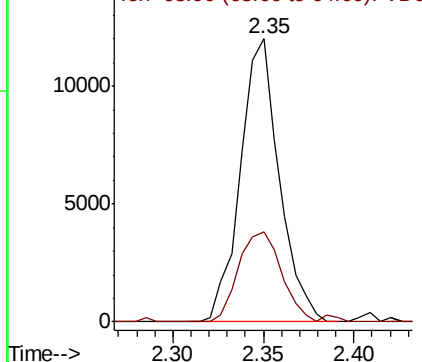
62 100

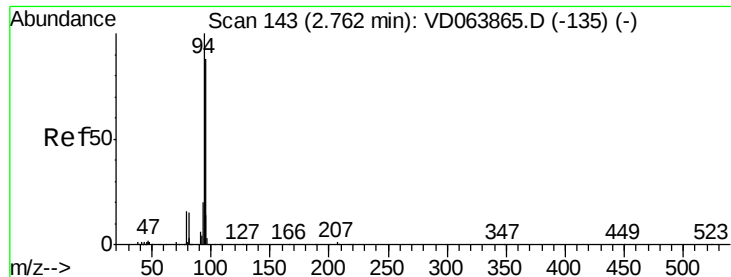
64 31.6 25.4 38.0



Abundance Ion 61.90 (61.60 to 62.60): VDC

Ion 63.90 (63.60 to 64.60): VDC





#5

Bromomethane

Concen: 4.292 ug/l

RT: 2.77 min Scan# 145

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 94 Resp: 11697

Ion Ratio Lower Upper

94 100

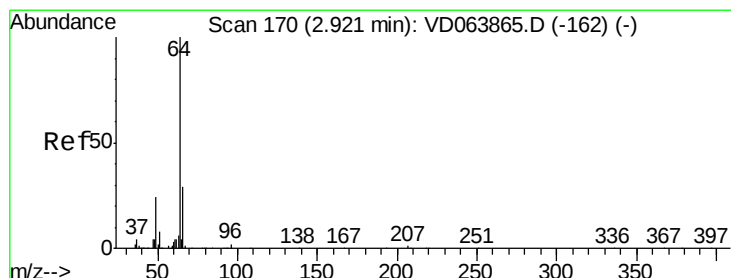
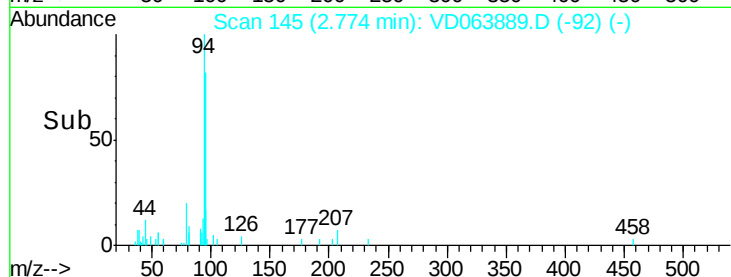
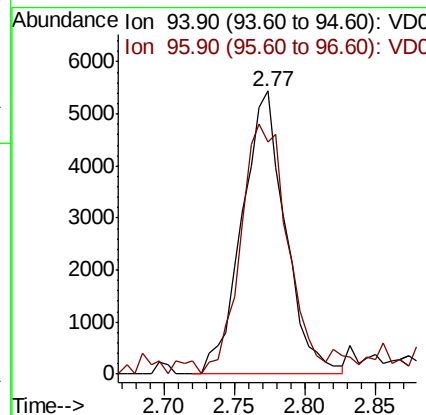
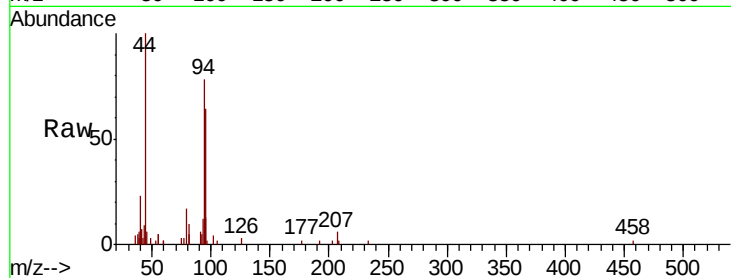
96 77.7 70.8 106.2

Manual Integrations

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#6

Chloroethane

Concen: 4.498 ug/l

RT: 2.93 min Scan# 171

Delta R.T. 0.01 min

Lab File: VD063889.D

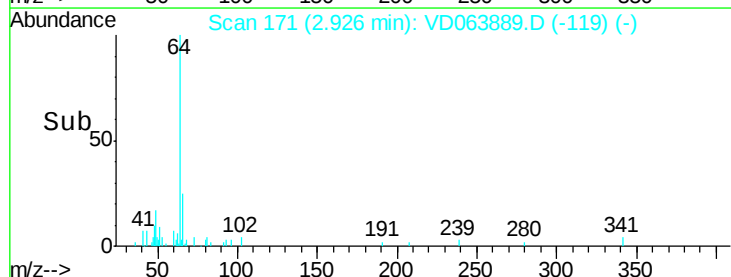
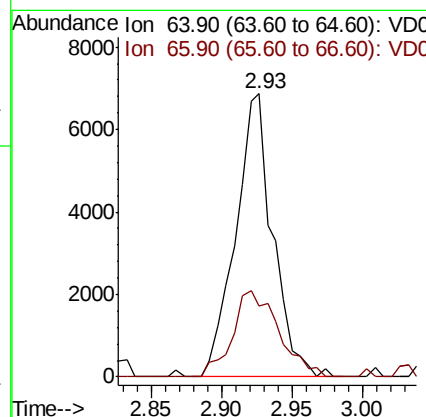
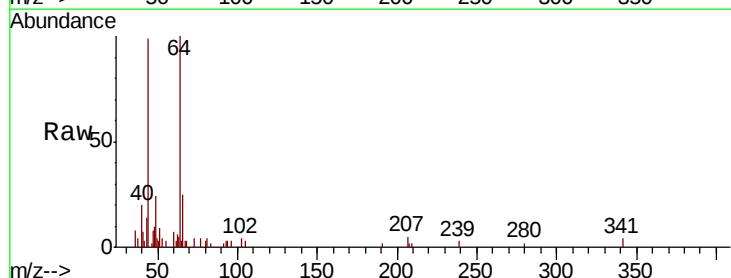
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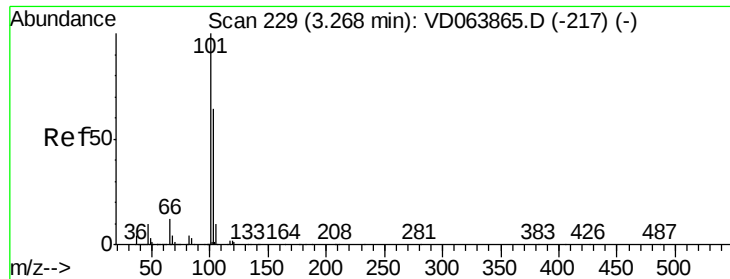
Tgt Ion: 64 Resp: 12609

Ion Ratio Lower Upper

64 100

66 25.2 23.0 34.4





#7

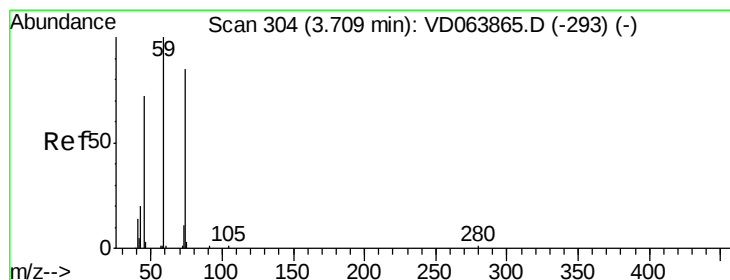
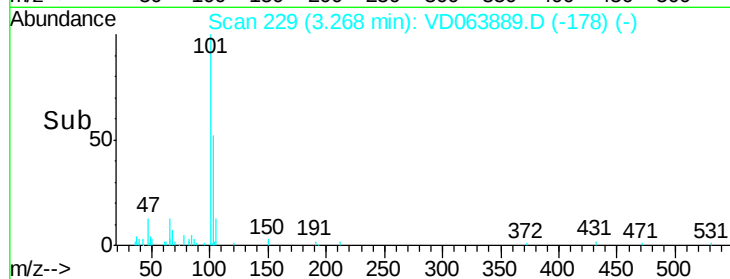
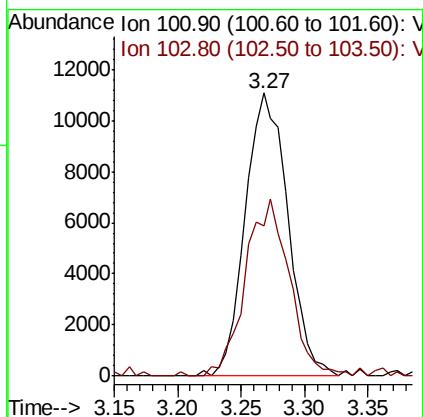
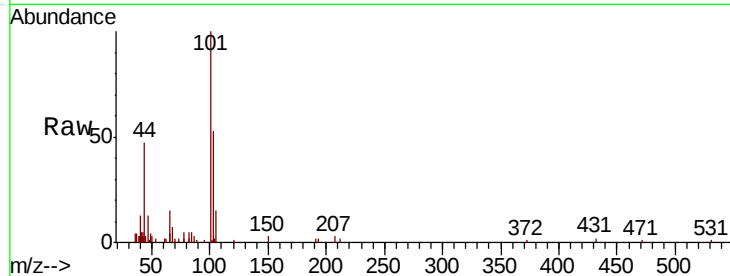
Trichlorofluoromethane
 Concen: 4.612 ug/l
 RT: 3.27 min Scan# 229
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
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 LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
101	100		
103	53.0	51.1	76.7

Manual Integrations
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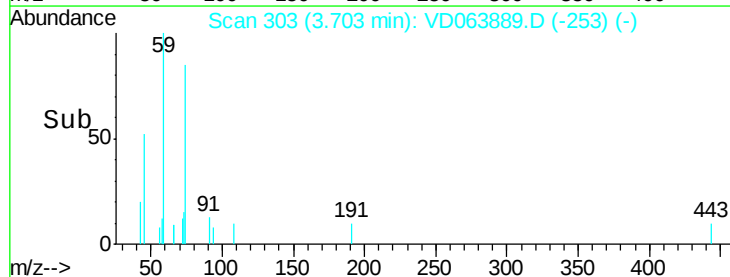
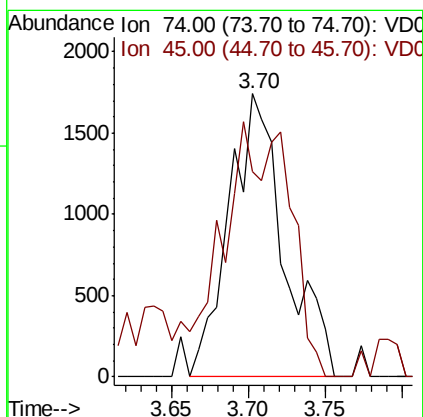
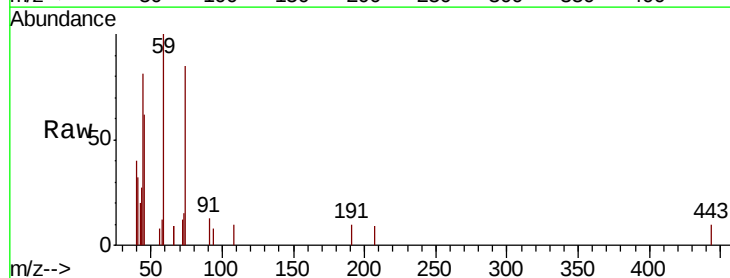
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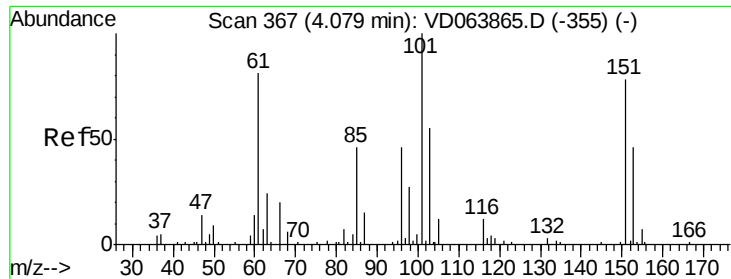


#8

Diethyl Ether
 Concen: 4.782 ug/l m
 RT: 3.70 min Scan# 303
 Delta R.T. -0.01 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
74	100		
45	44.8	48.1	144.4#





#9

1,1,2-Trichlorotrifluoroethane

Concen: 4.614 ug/l

RT: 4.09 min Scan# 368

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

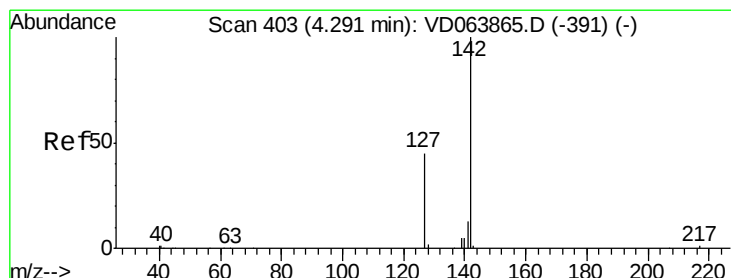
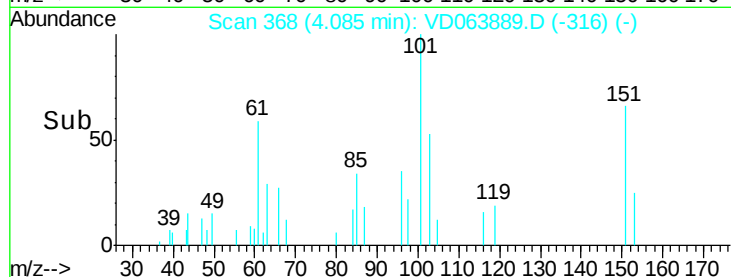
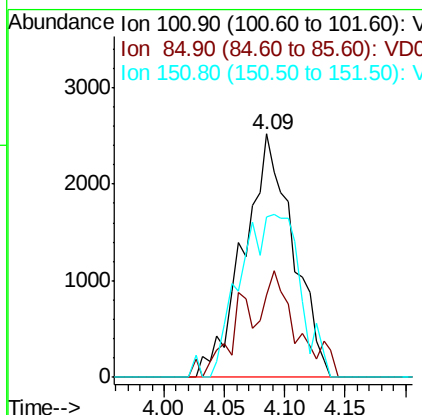
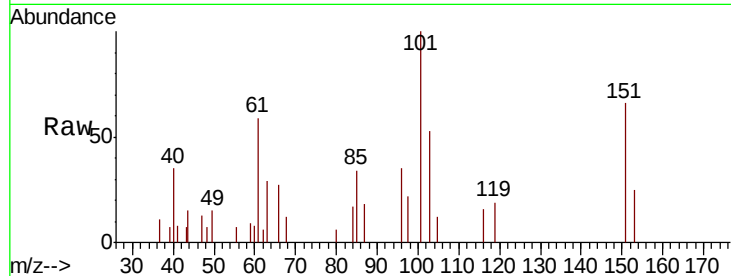
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	101	Resp:	7159
Ion Ratio	Lower	Upper	
101	100		
85	30.4	37.5	56.3#
151	81.9	65.5	98.3

Manual Integrations
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#10

Methyl Iodide

Concen: 3.946 ug/l

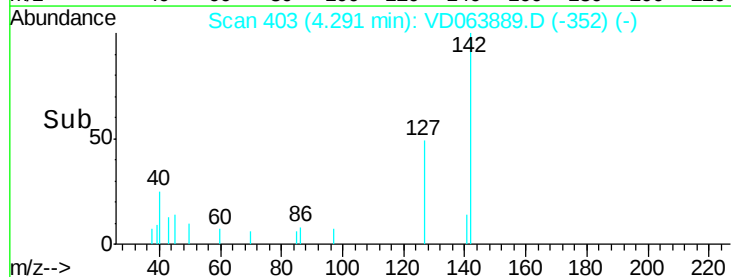
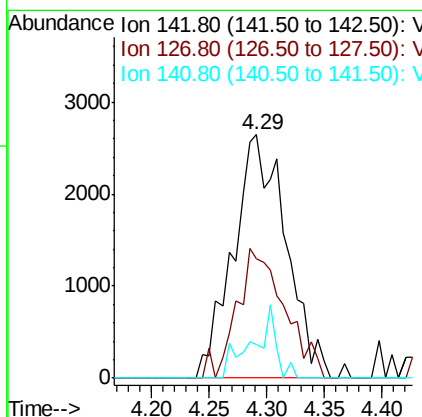
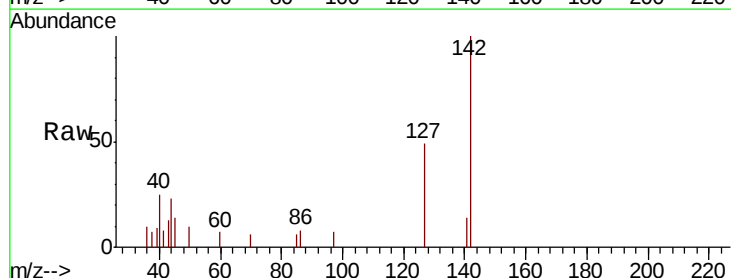
RT: 4.29 min Scan# 403

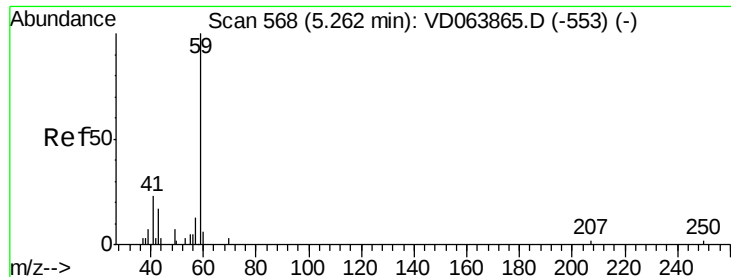
Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	142	Resp:	8436
Ion Ratio	Lower	Upper	
142	100		
127	48.4	35.3	52.9
141	13.7	12.2	18.2





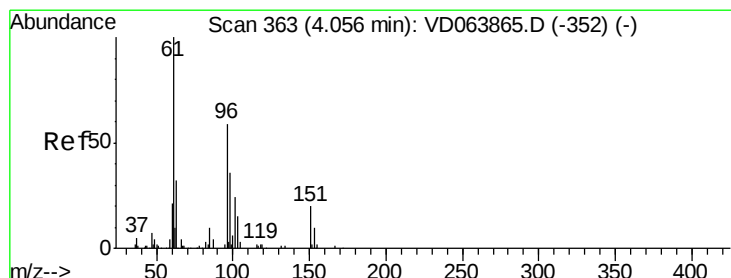
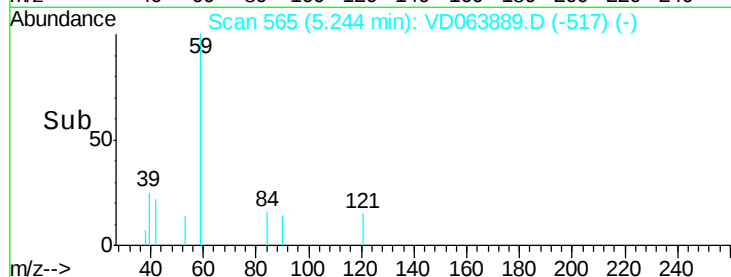
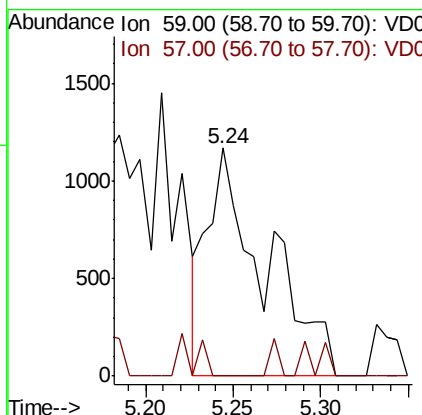
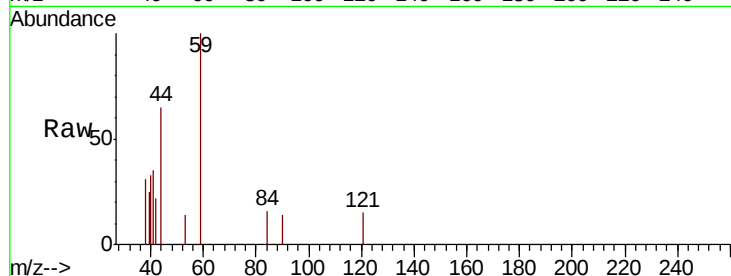
#11
Tert butyl alcohol
Concen: 21.234 ug/l m
RT: 5.24 min Scan# 565
Delta R.T. -0.02 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 59 Resp: 2712
Ion Ratio Lower Upper
59 100
57 0.0 8.8 13.2#

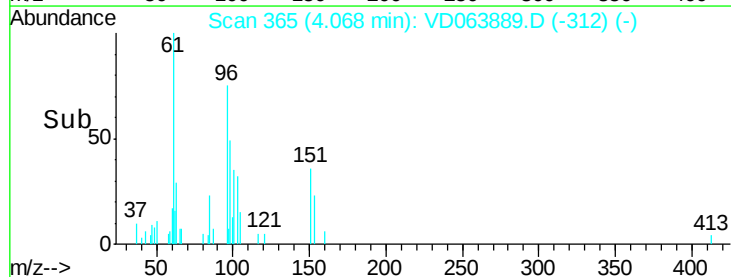
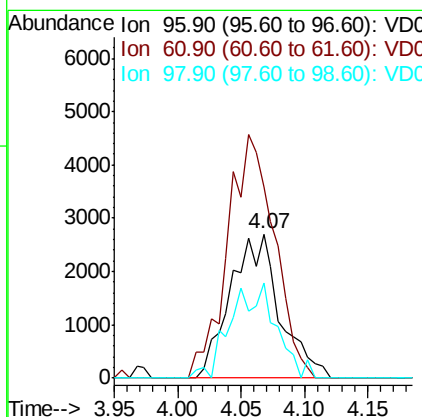
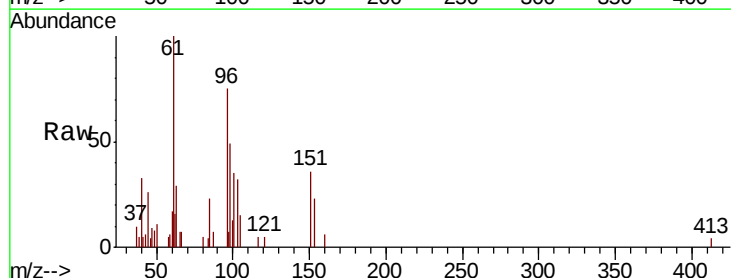
Manual Integrations
APPROVED

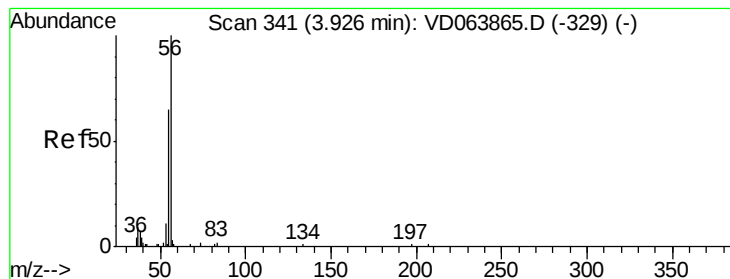
MMDadoda
10/8/2019 3:11:38 PM



#12
1,1-Dichloroethene
Concen: 4.733 ug/l
RT: 4.07 min Scan# 365
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 96 Resp: 7336
Ion Ratio Lower Upper
96 100
61 133.2 135.6 203.4#
98 65.9 49.2 73.8





#13

Acrolein

Concen: 22.578 ug/l

RT: 3.92 min Scan# 340

Delta R.T. -0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 56 Resp: 3631

Ion Ratio Lower Upper

56 100

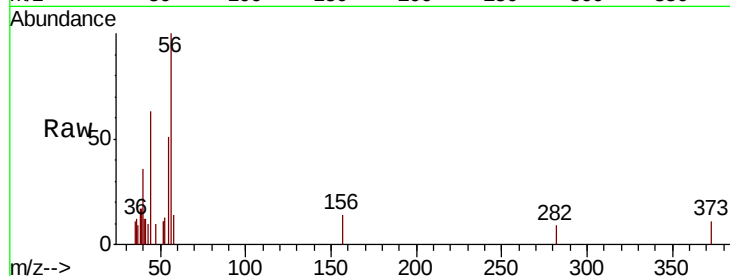
55 76.3 53.0 79.6

Manual Integrations

APPROVED

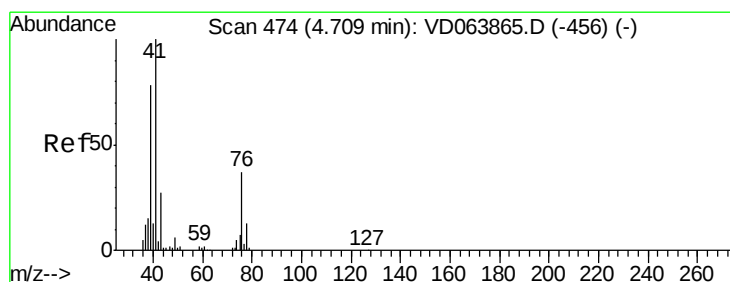
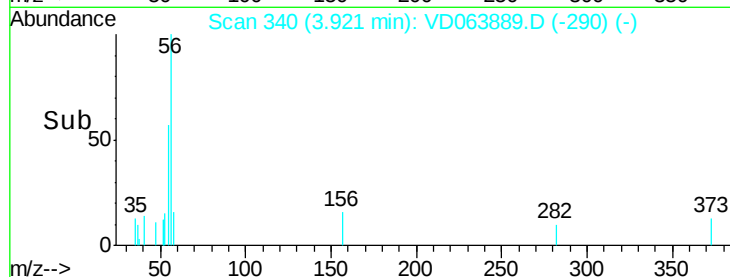
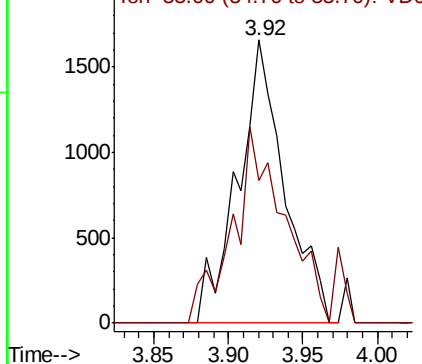
MMDadoda

10/8/2019 3:11:38 PM



Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 55.00 (54.70 to 55.70): VDC



#14

Allyl chloride

Concen: 4.018 ug/l

RT: 4.71 min Scan# 475

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

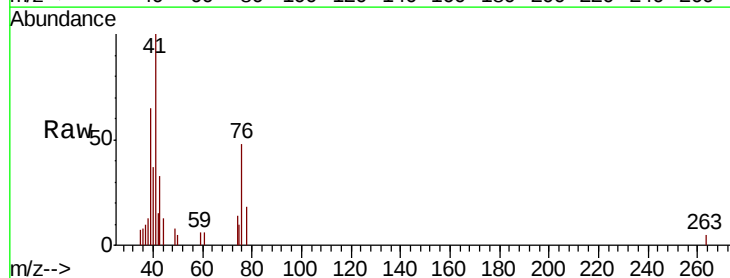
Tgt Ion: 41 Resp: 10355

Ion Ratio Lower Upper

41 100

39 80.1 61.8 92.6

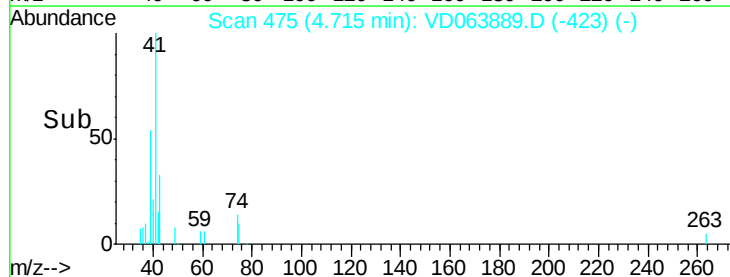
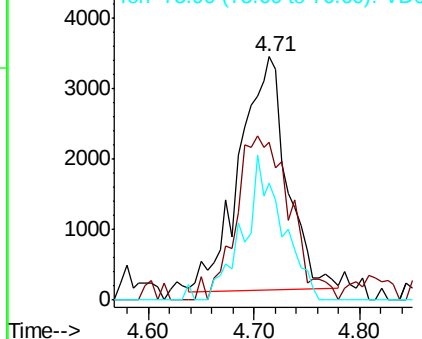
76 50.5 31.3 46.9#

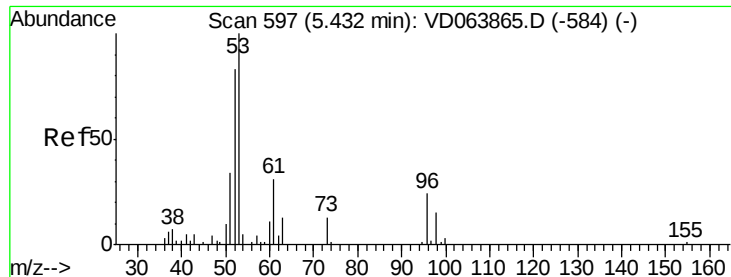


Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 75.90 (75.60 to 76.60): VDC





#15

Acrylonitrile

Concen: 20.538 ug/l

RT: 5.44 min Scan# 599

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

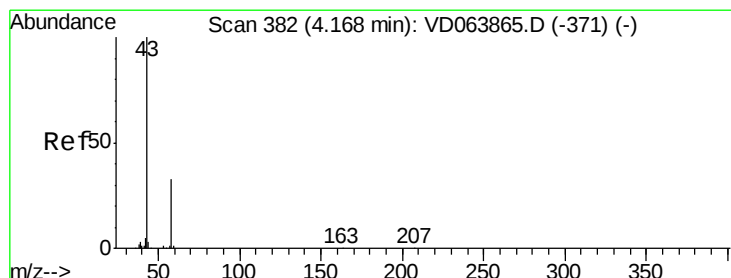
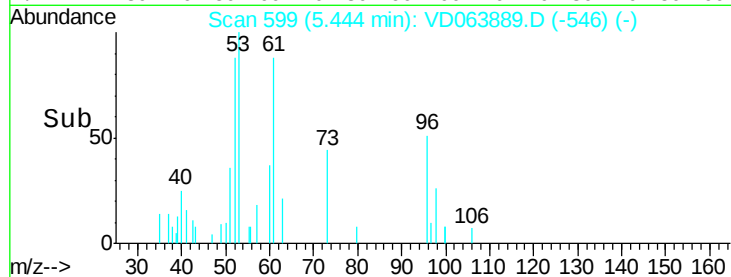
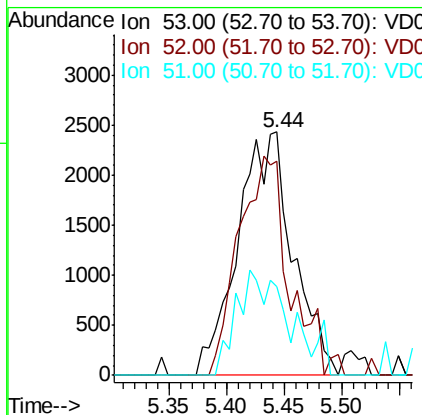
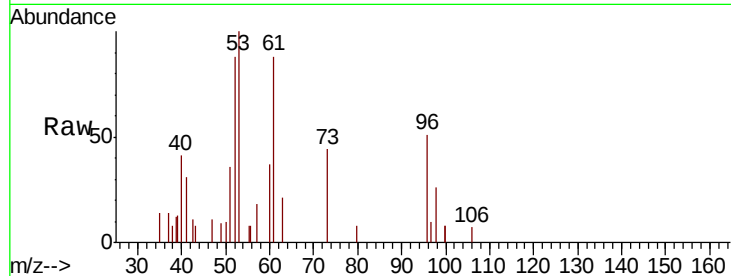
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	53	Resp:	8146
Ion Ratio	Lower	Upper	
53	100		
52	82.8	67.3	100.9
51	0.0	30.5	45.7#

Manual Integrations
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#16

Acetone

Concen: 21.928 ug/l

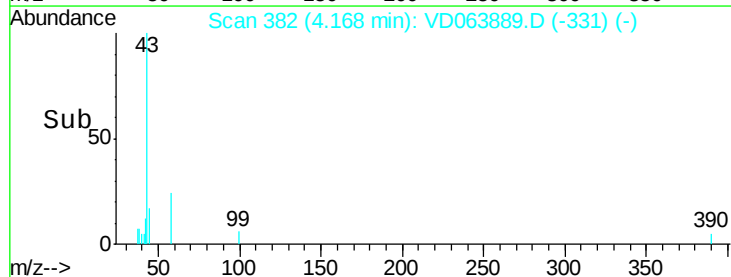
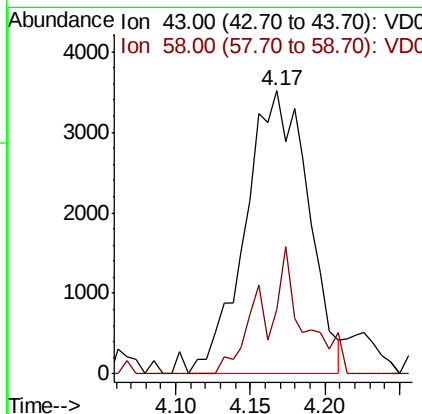
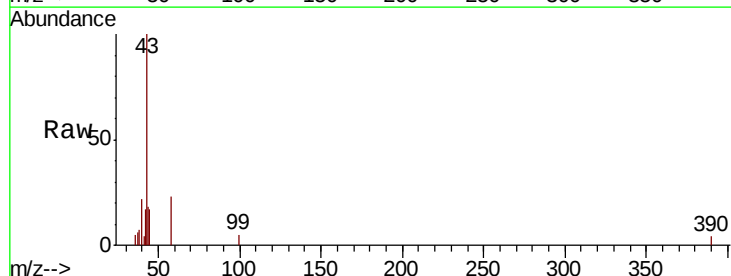
RT: 4.17 min Scan# 382

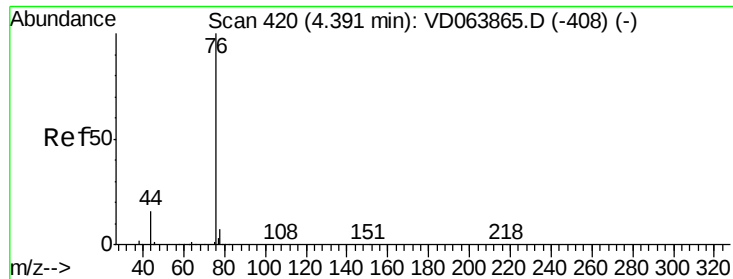
Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	43	Resp:	10280
Ion Ratio	Lower	Upper	
43	100		
58	22.6	26.2	39.4#





#17

Carbon Disulfide

Concen: 4.010 ug/l

RT: 4.39 min Scan# 420

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 76 Resp: 22596

Ion Ratio Lower Upper

76 100

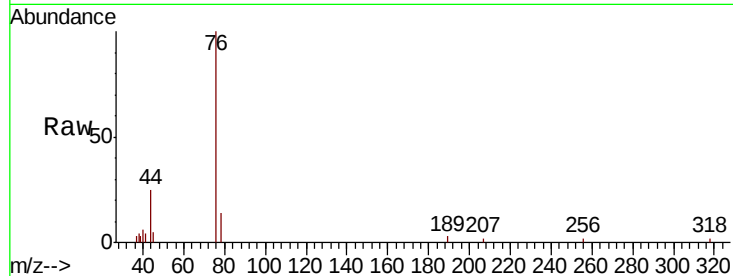
78 13.7 5.8 8.8#

Manual Integrations

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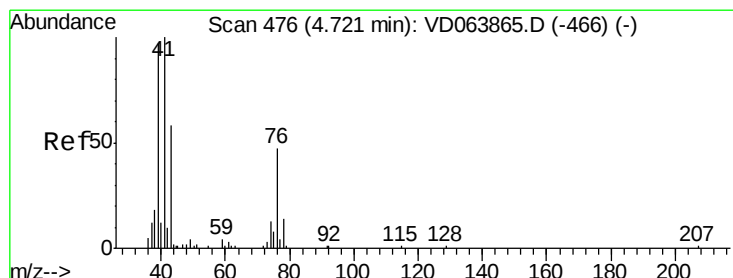
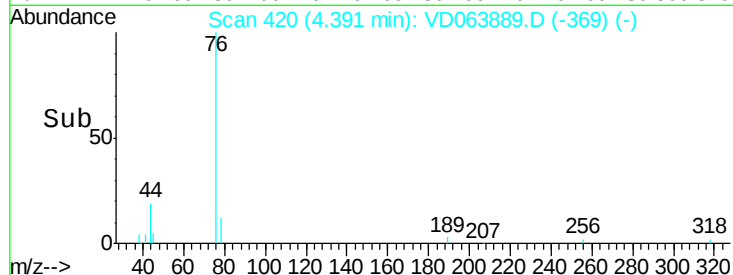
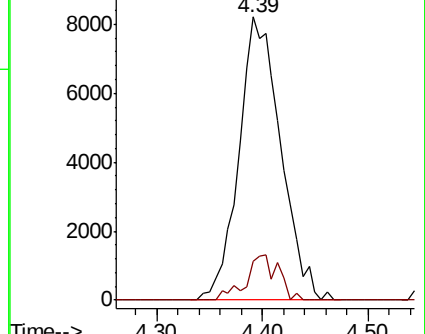
MMDadoda

10/8/2019 3:11:38 PM



Abundance Ion 75.90 (75.60 to 76.60): VDC

Ion 77.90 (77.60 to 78.60): VDC



#18

Methyl Acetate

Concen: 4.950 ug/l

RT: 4.73 min Scan# 478

Delta R.T. 0.01 min

Lab File: VD063889.D

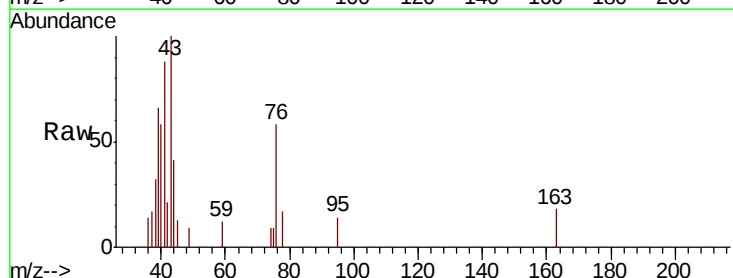
Acq: 04 Oct 2019 17:11

Tgt Ion: 43 Resp: 4539

Ion Ratio Lower Upper

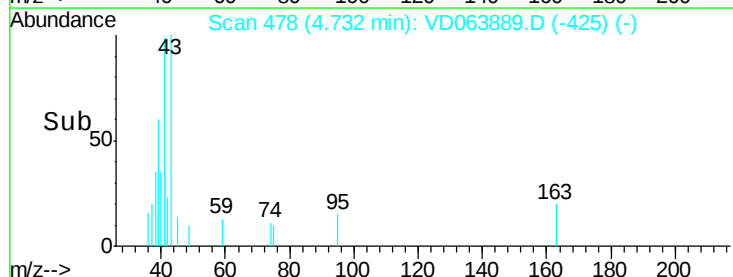
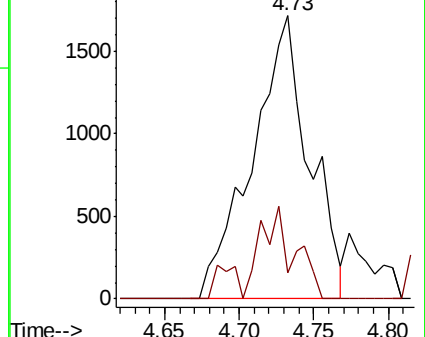
43 100

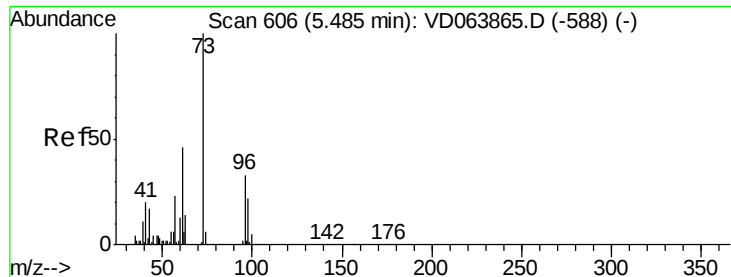
74 19.3 20.8 31.2#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 74.00 (73.70 to 74.70): VDC





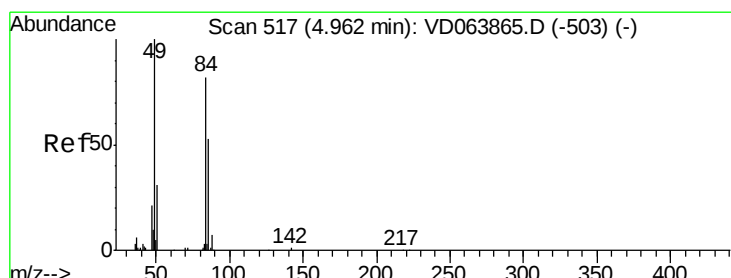
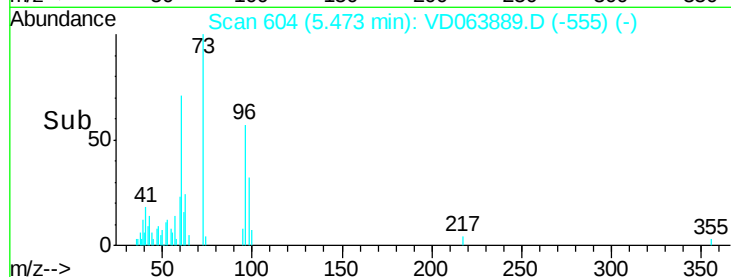
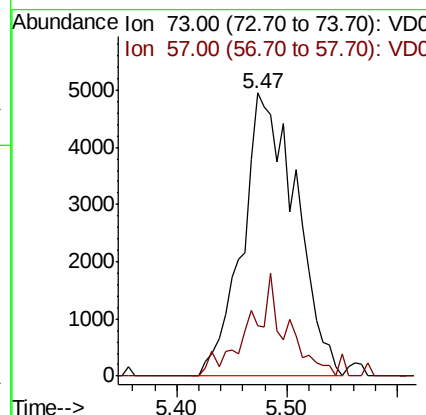
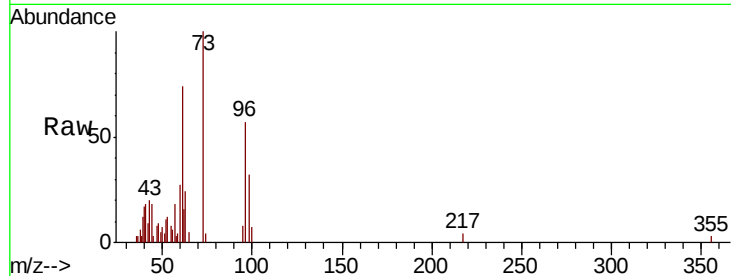
#19
Methyl tert-butyl Ether
Concen: 4.199 ug/l
RT: 5.47 min Scan# 604
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 73 Resp: 16854
Ion Ratio Lower Upper
73 100
57 17.9 18.1 27.1#

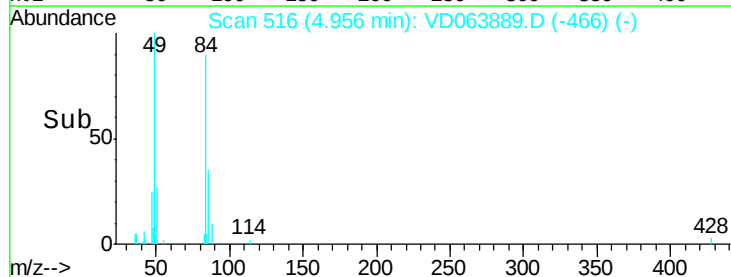
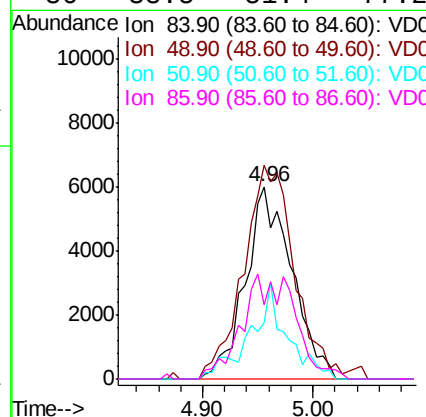
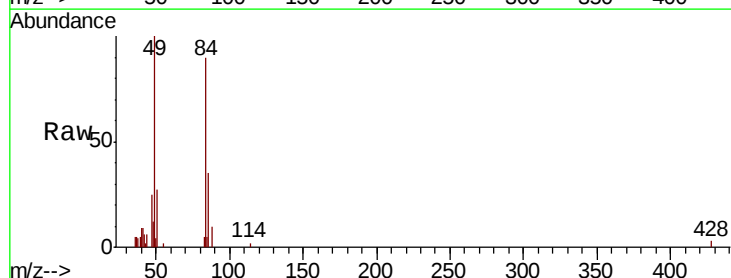
Manual Integrations
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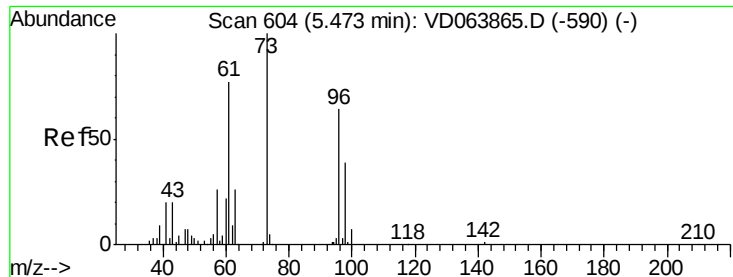
MMDadoda
10/8/2019 3:11:38 PM



#20
Methylene Chloride
Concen: 7.368 ug/l
RT: 4.96 min Scan# 516
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 84 Resp: 17727
Ion Ratio Lower Upper
84 100
49 111.1 97.3 145.9
51 29.5 30.1 45.1#
86 38.5 51.4 77.2#





#21

trans-1,2-Dichloroethene

Concen: 4.534 ug/l

RT: 5.47 min Scan# 603

Delta R.T. -0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

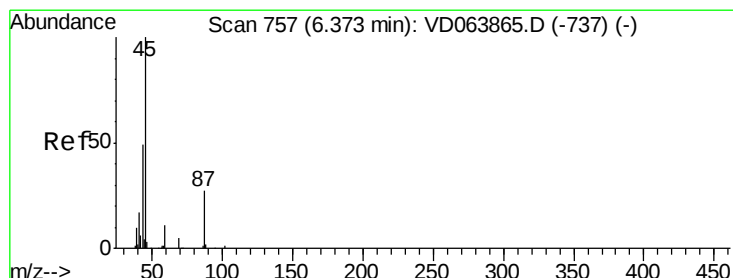
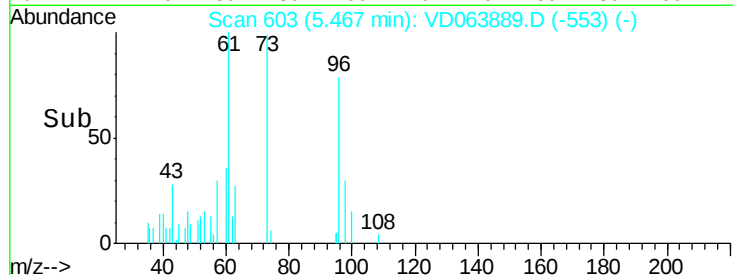
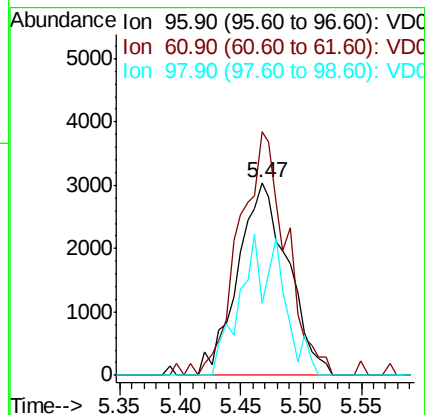
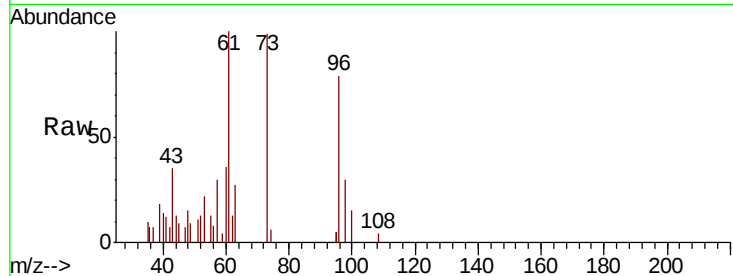
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	96	Resp:	8748
Ion	Ratio	Lower	Upper
96	100		
61	126.5	96.6	145.0
98	37.5	48.7	73.1#

Manual Integrations
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MMDadoda
10/8/2019 3:11:38 PM



#22

Diisopropyl ether

Concen: 4.498 ug/l

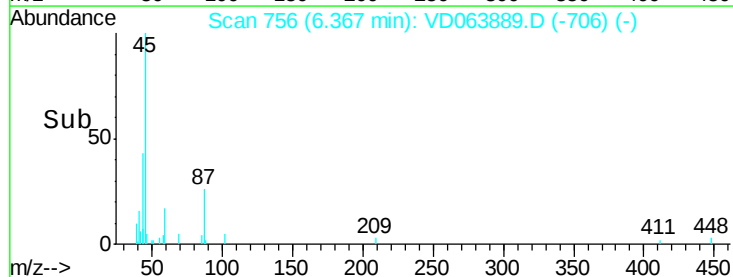
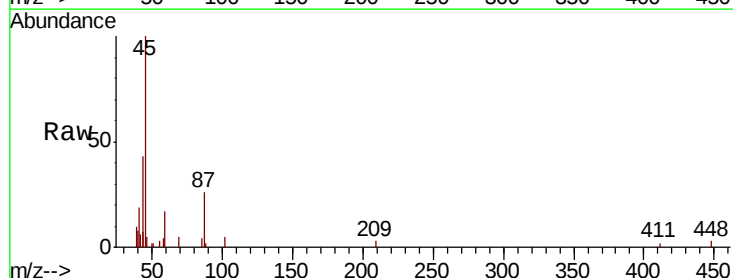
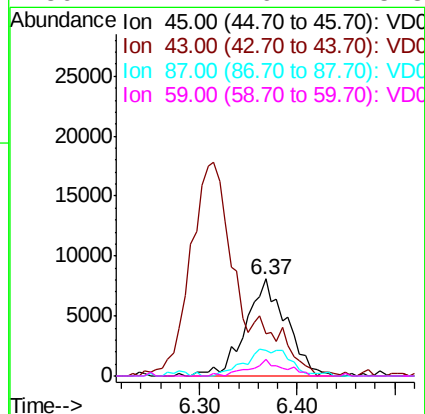
RT: 6.37 min Scan# 756

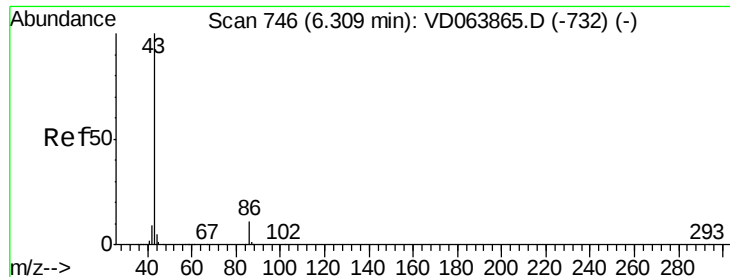
Delta R.T. -0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	45	Resp:	23671
Ion	Ratio	Lower	Upper
45	100		
43	41.6	41.2	61.8
87	25.9	22.2	33.4
59	17.1	9.2	13.8#





#23

Vinyl Acetate

Concen: 19.845 ug/l m

RT: 6.31 min Scan# 747

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 43 Resp: 62134

Ion Ratio Lower Upper

43 100

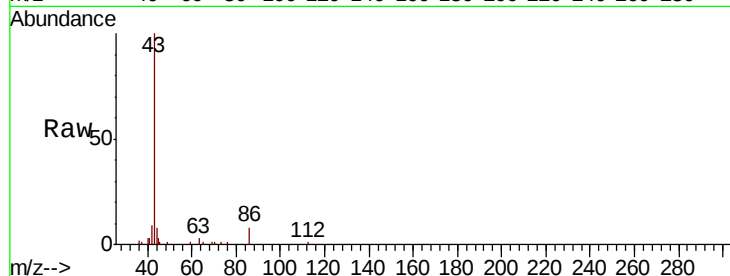
86 8.4 8.8 13.2#

Manual Integrations

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MMDadoda

10/8/2019 3:11:38 PM



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 86.00 (85.70 to 86.70): VDC

6.31

20000

15000

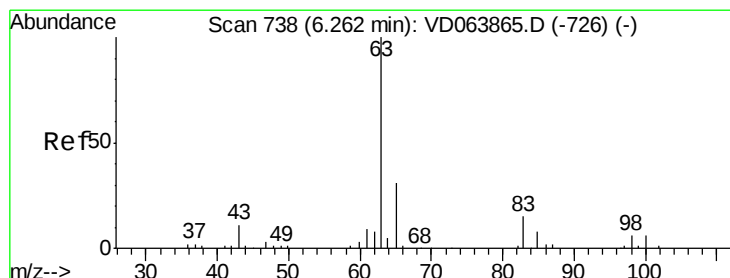
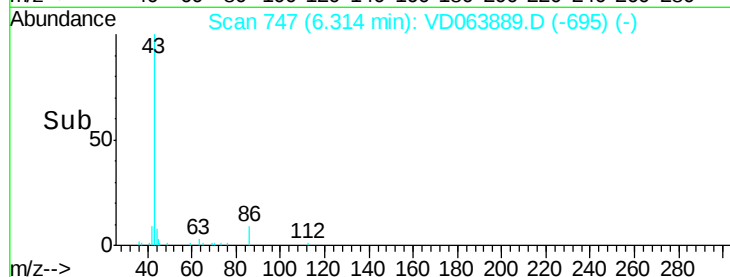
10000

5000

0

6.20 6.30 6.40

Time-->



#24

1,1-Dichloroethane

Concen: 4.710 ug/l

RT: 6.27 min Scan# 739

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

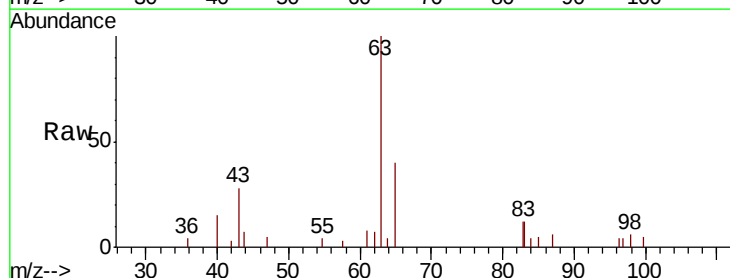
Tgt Ion: 63 Resp: 15270

Ion Ratio Lower Upper

63 100

98 5.6 3.1 9.4

100 5.4 3.0 9.2



Abundance Ion 62.90 (62.60 to 63.60): VDC

Ion 97.90 (97.60 to 98.60): VDC

Ion 99.90 (99.60 to 100.60): VDC

6.27

6000

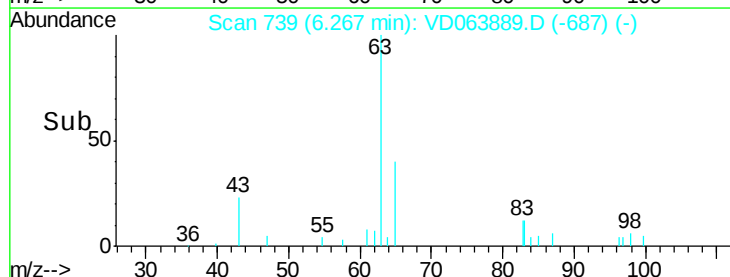
4000

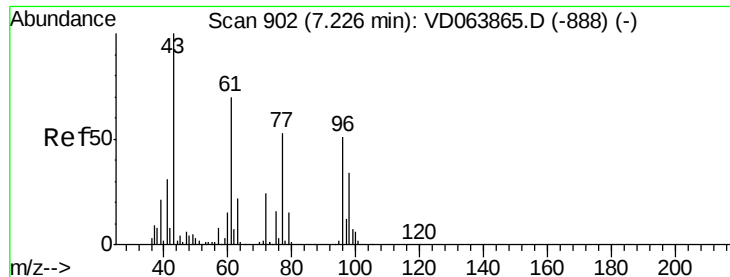
2000

0

6.20 6.30

Time-->





#25

2-Butanone

Concen: 22.753 ug/l

RT: 7.23 min Scan# 903

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 43 Resp: 12641

Ion Ratio Lower Upper

43 100

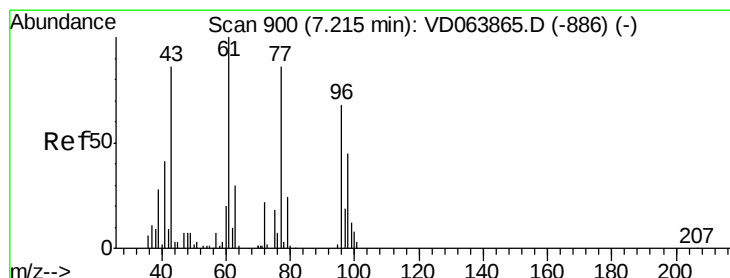
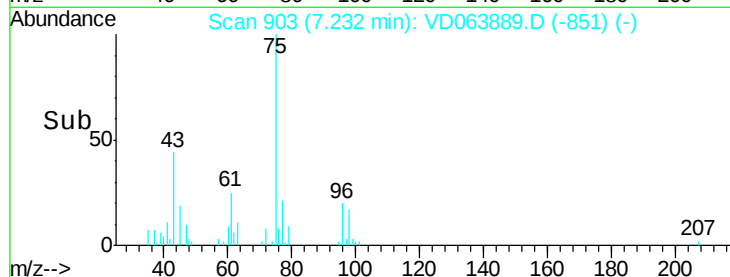
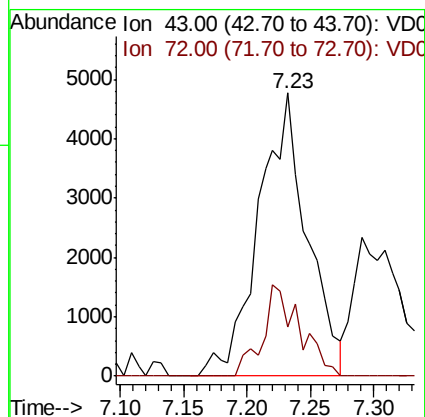
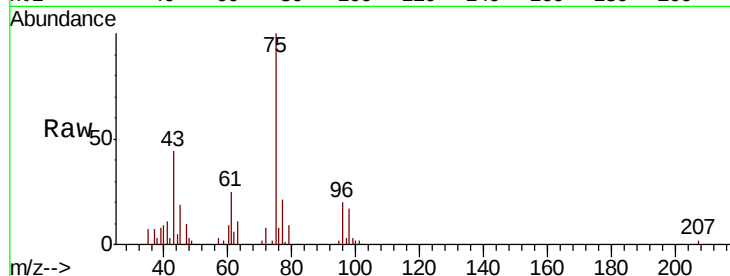
72 17.4 19.2 28.8#

Manual Integrations

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#26

2,2-Dichloropropane

Concen: 4.668 ug/l

RT: 7.21 min Scan# 899

Delta R.T. -0.01 min

Lab File: VD063889.D

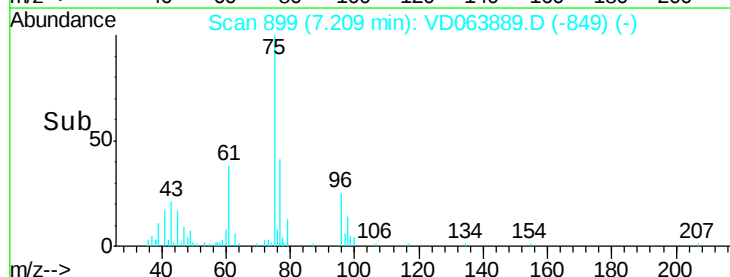
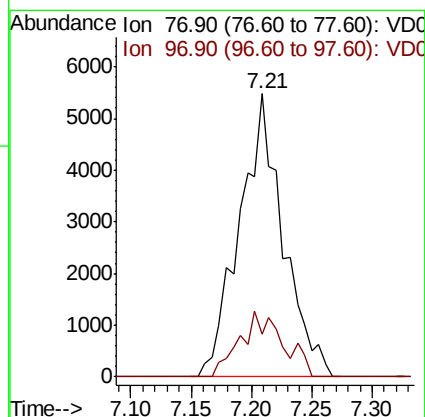
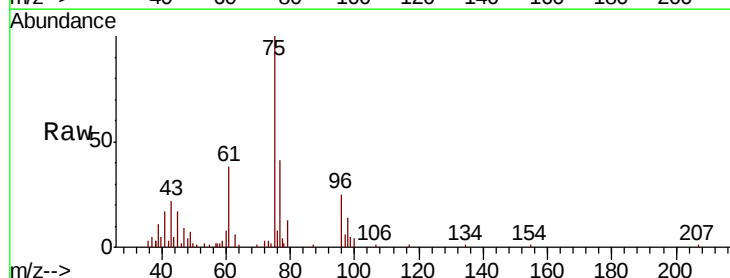
Acq: 04 Oct 2019 17:11

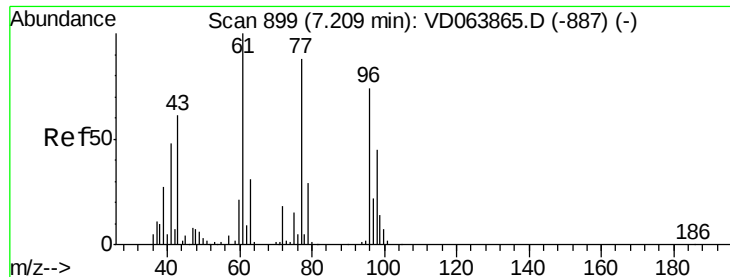
Tgt Ion: 77 Resp: 13690

Ion Ratio Lower Upper

77 100

97 22.8 11.4 34.1





#27

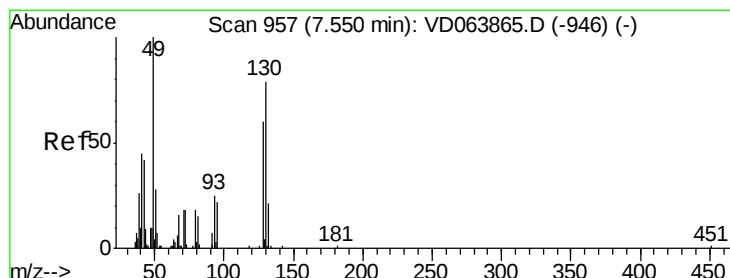
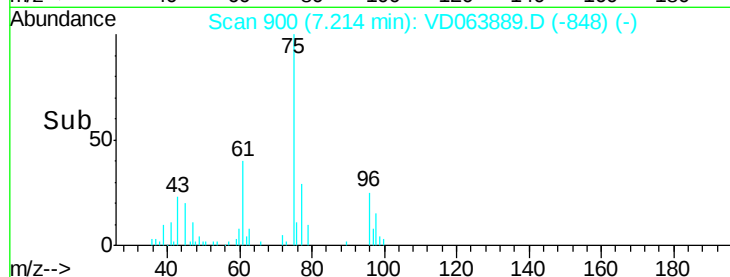
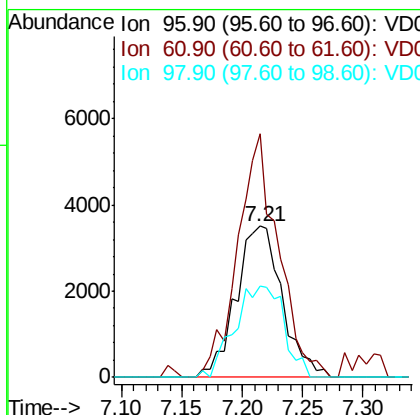
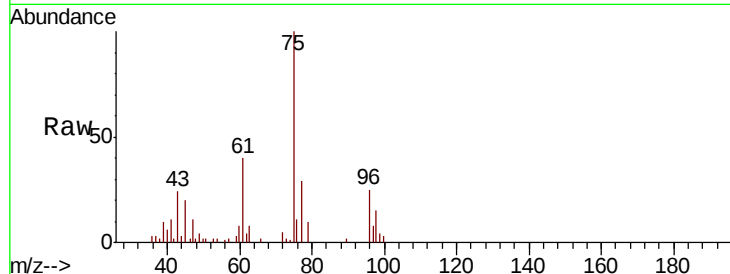
cis-1,2-Dichloroethene
Concen: 4.254 ug/l
RT: 7.21 min Scan# 900
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
96	100		
61	142.5	0.0	280.0
98	64.4	0.0	130.4

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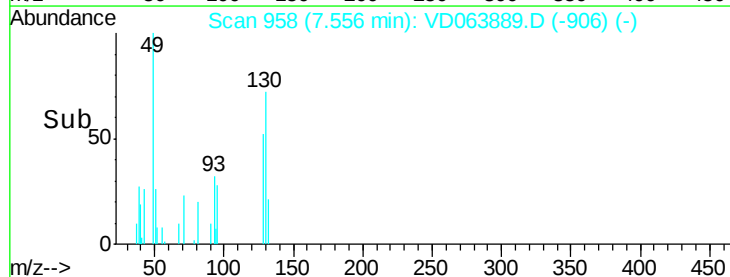
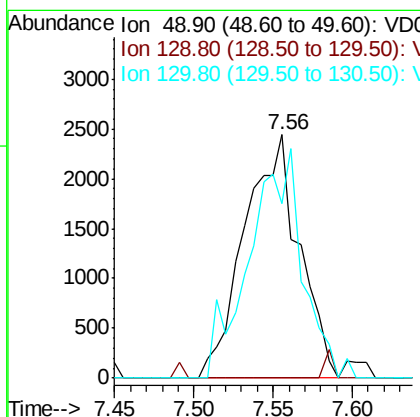
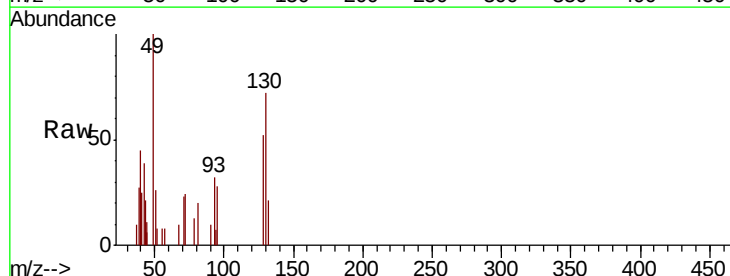
MMDadoda
10/8/2019 3:11:38 PM

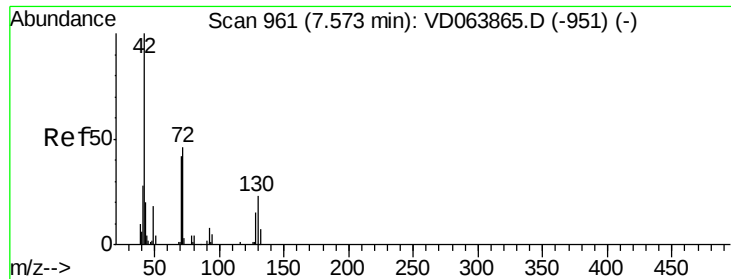


#28

Bromochloromethane
Concen: 4.815 ug/l
RT: 7.56 min Scan# 958
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	5.6
130	91.5	66.8	100.2





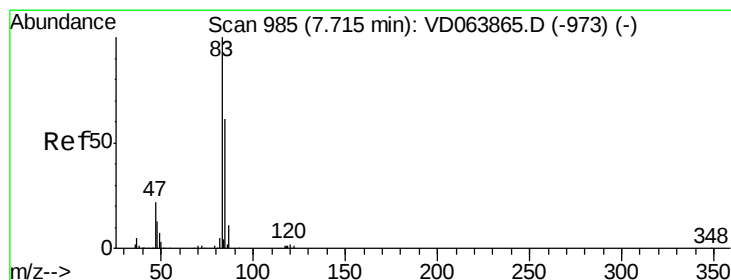
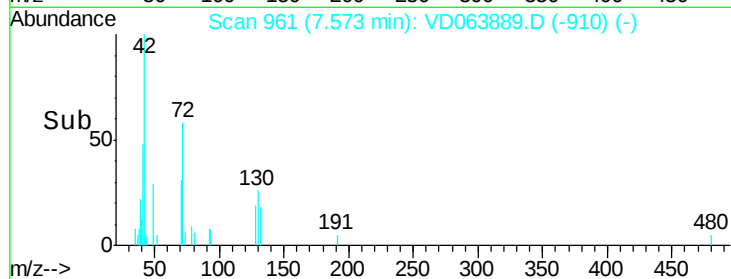
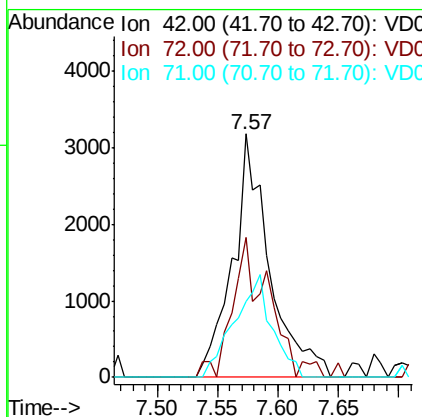
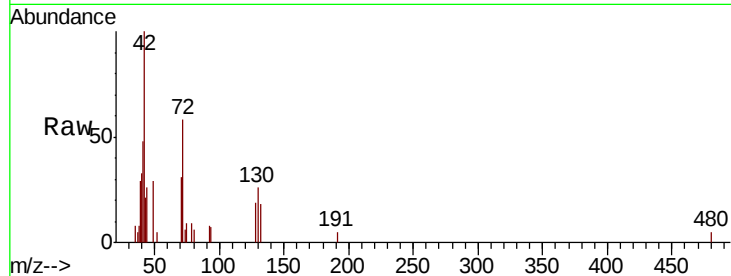
#29
Tetrahydrofuran
Concen: 20.797 ug/l
RT: 7.57 min Scan# 961
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 42 Resp: 6744
Ion Ratio Lower Upper
42 100
72 56.7 37.6 56.4#
71 42.9 35.0 52.6

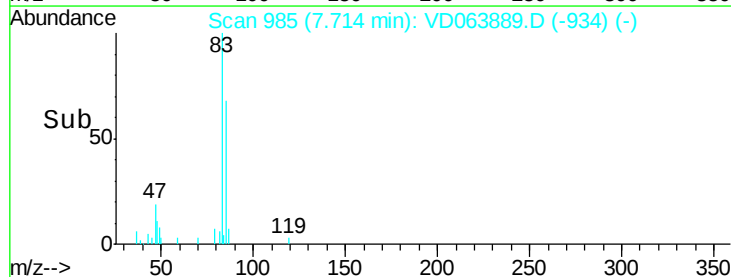
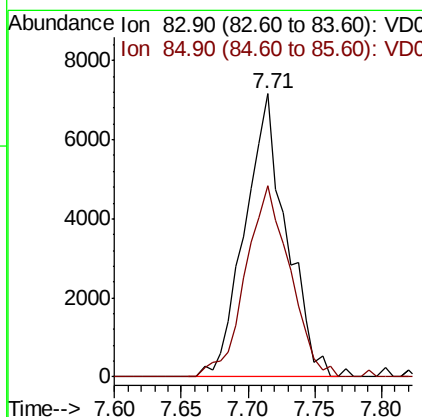
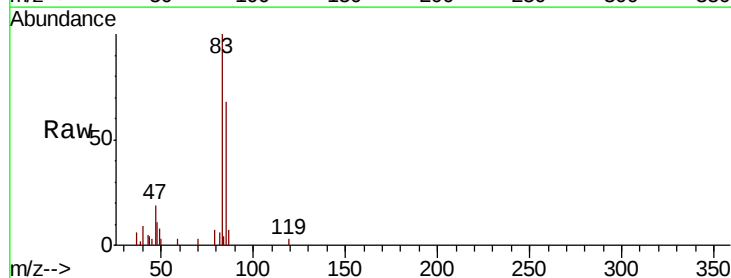
Manual Integrations
APPROVED

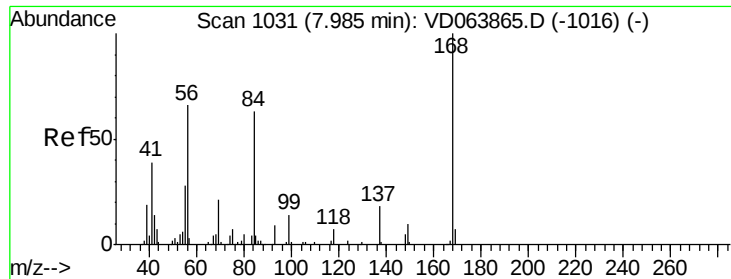
MMDadoda
10/8/2019 3:11:38 PM



#30
Chloroform
Concen: 4.369 ug/l
RT: 7.71 min Scan# 985
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 83 Resp: 15382
Ion Ratio Lower Upper
83 100
85 67.5 48.9 73.3





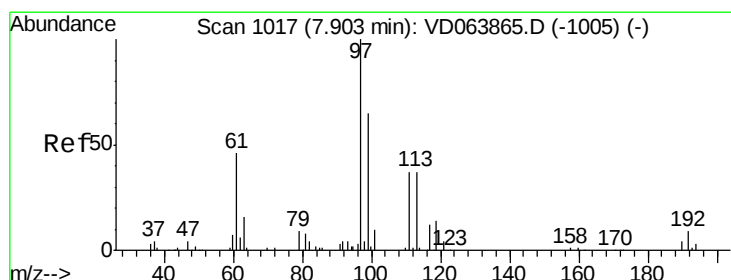
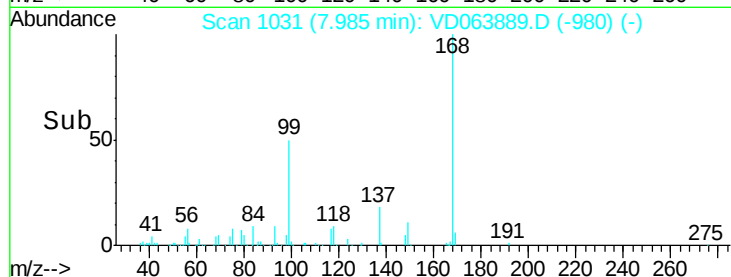
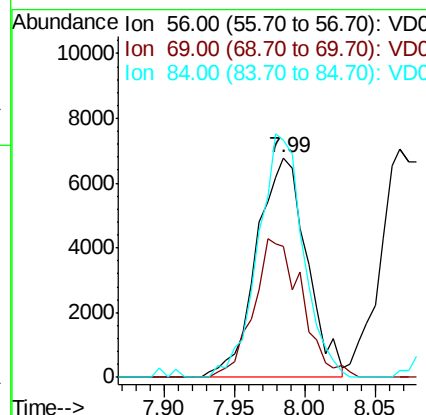
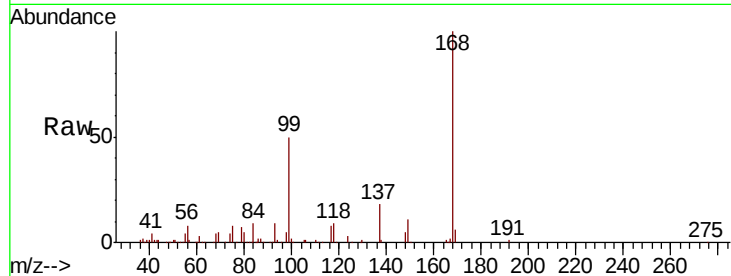
#31
Cyclohexane
Concen: 5.570 ug/l
RT: 7.99 min Scan# 1031
Delta R.T. 0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ion	Ratio	Lower	Upper
56	100			
69	59.5	25.0	37.4#	
84	107.8	76.3	114.5	

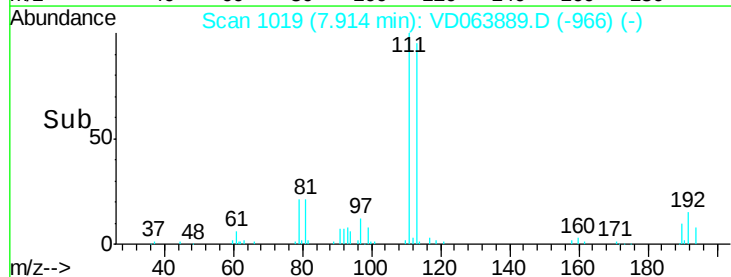
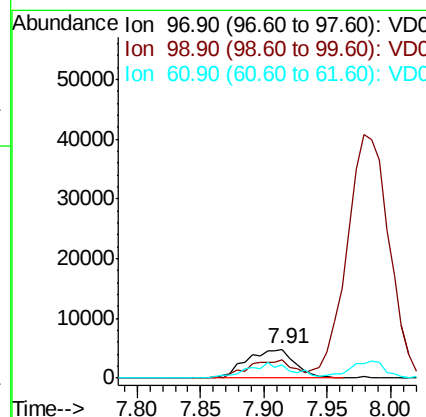
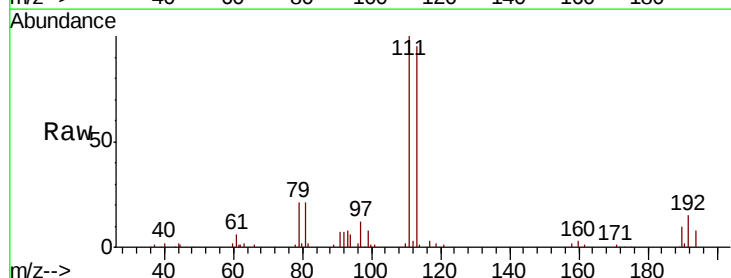
Manual Integrations
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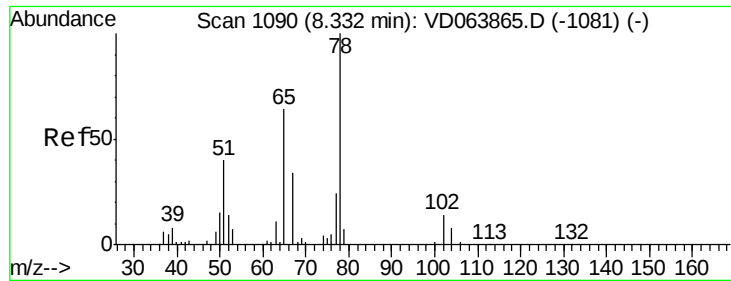
MMDadoda
10/8/2019 3:11:38 PM



#32
1,1,1-Trichloroethane
Concen: 4.204 ug/l
RT: 7.91 min Scan# 1019
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ion	Ratio	Lower	Upper
97	100			
99	59.4	52.4	78.6	
61	47.5	33.8	50.8	





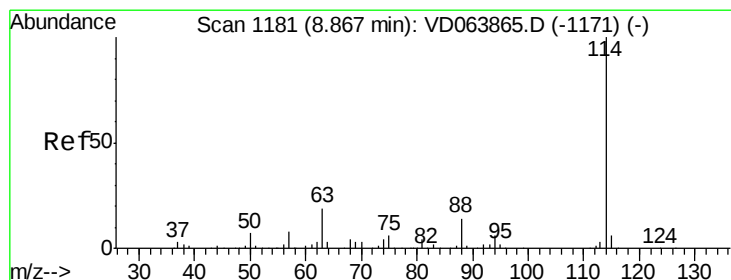
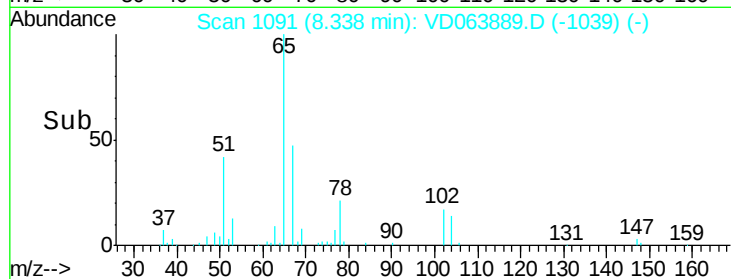
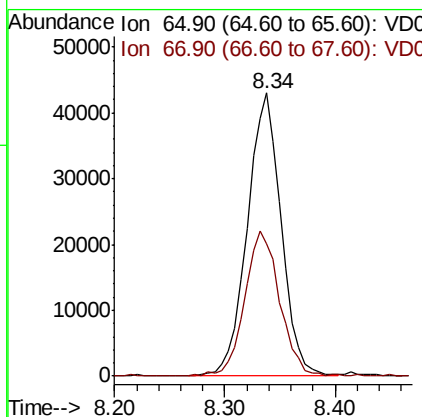
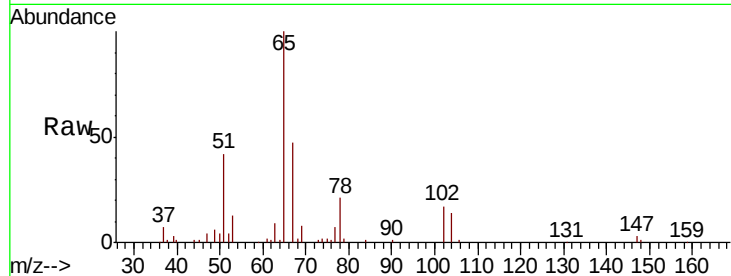
#33
 1,2-Dichloroethane-d4
 Concen: 51.491 ug/l
 RT: 8.34 min Scan# 1091
 Delta R.T. 0.01 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
65	100		
67	53.0	0.0	106.4

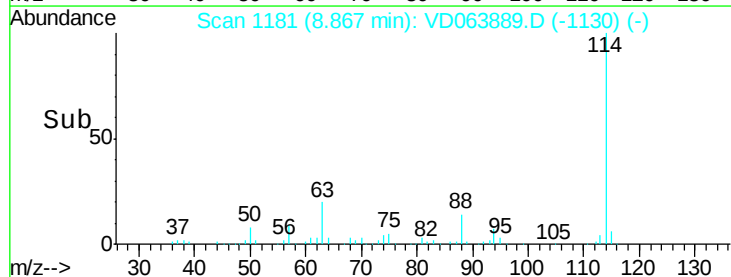
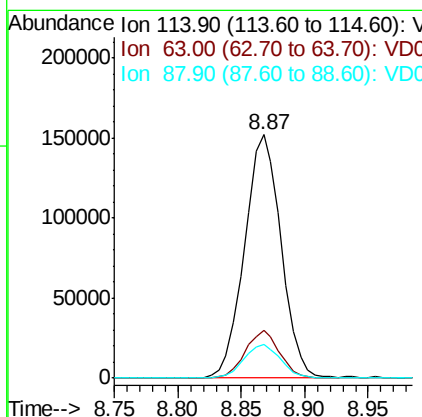
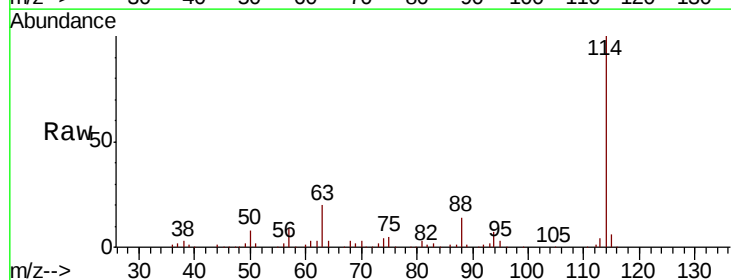
Manual Integrations
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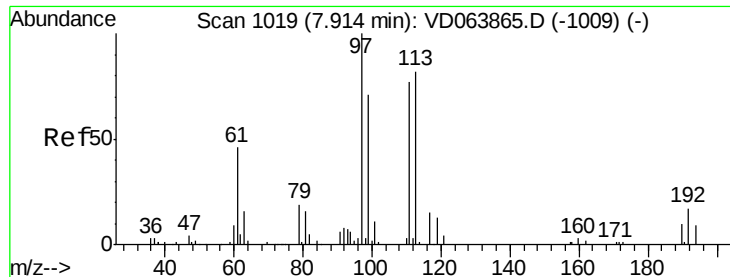
MMDadoda
 10/8/2019 3:11:38 PM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.87 min Scan# 1181
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
114	100		
63	19.8	0.0	38.4
88	13.6	0.0	27.4





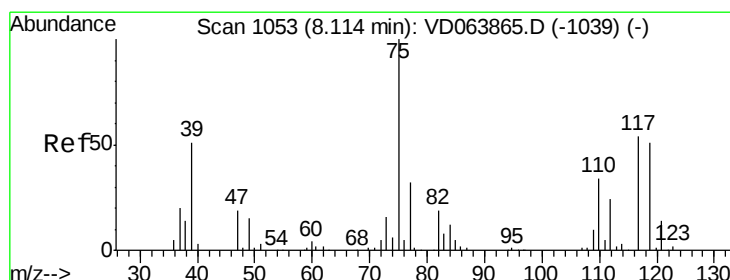
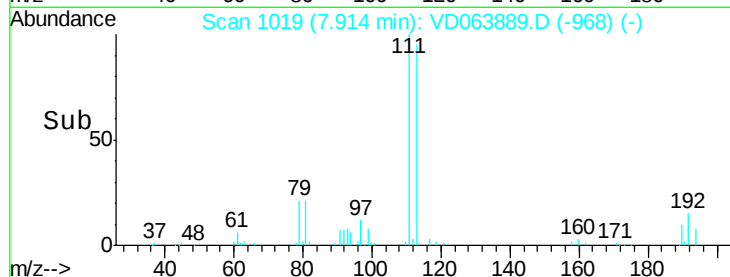
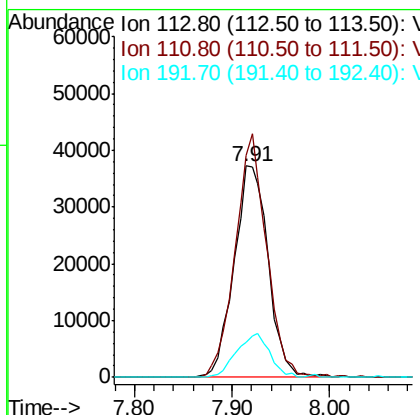
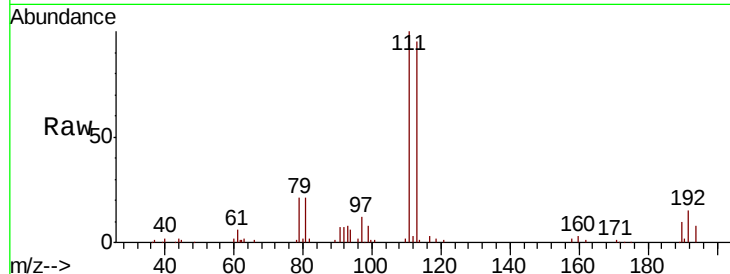
#35
 Dibromofluoromethane
 Concen: 48.685 ug/l
 RT: 7.91 min Scan# 1019
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
113	100		
111	105.7	82.6	123.8
192	20.2	17.1	25.7

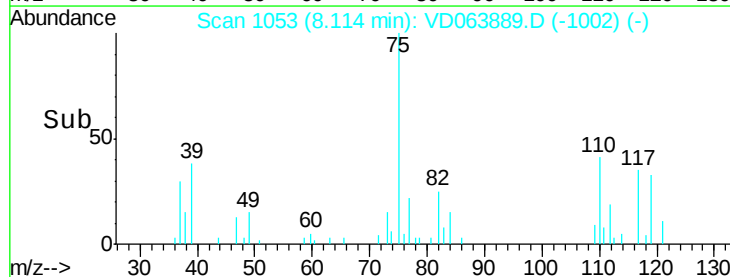
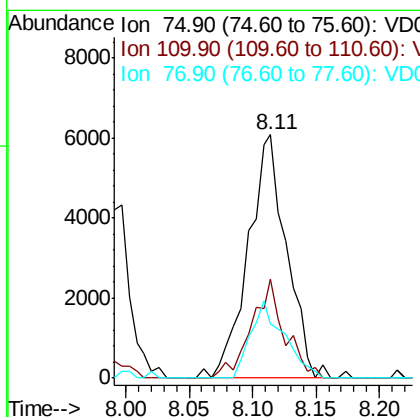
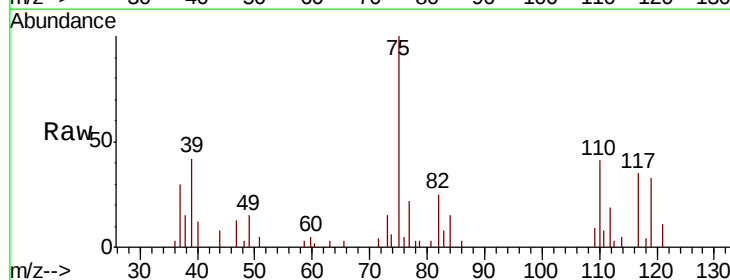
Manual Integrations
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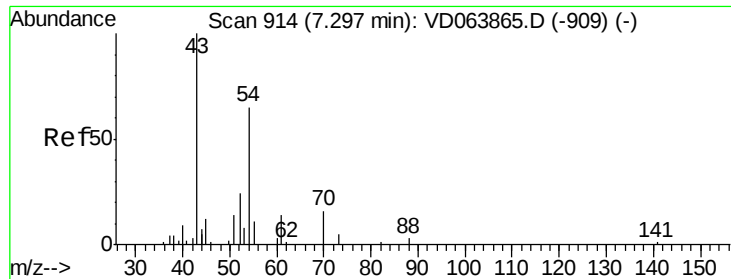
MMDadoda
 10/8/2019 3:11:38 PM



#36
 1,1-Dichloropropene
 Concen: 4.612 ug/l
 RT: 8.11 min Scan# 1053
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
75	100		
110	35.1	17.4	52.3
77	27.5	25.4	38.0





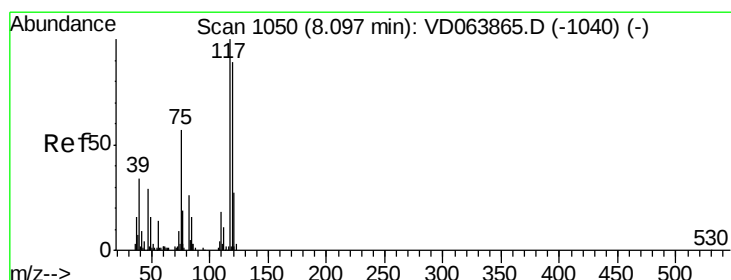
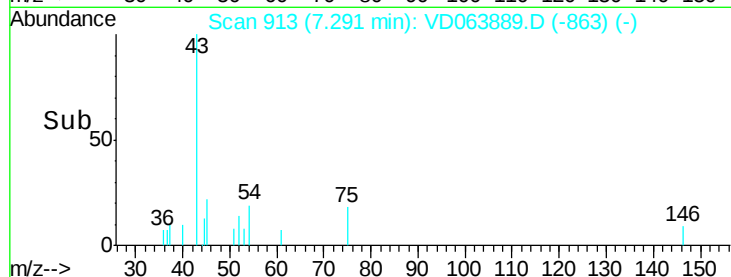
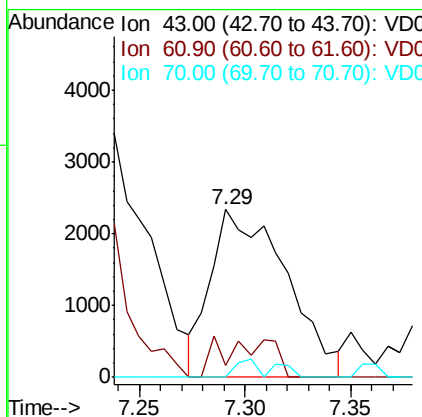
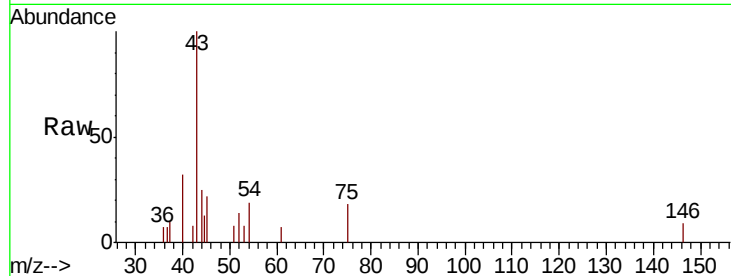
#37
Ethyl Acetate
Concen: 4.588 ug/l
RT: 7.29 min Scan# 913
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
43	100		
61	15.7	11.5	17.3
70	2.8	8.2	12.4

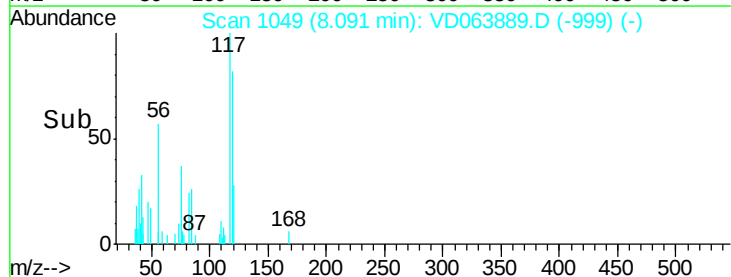
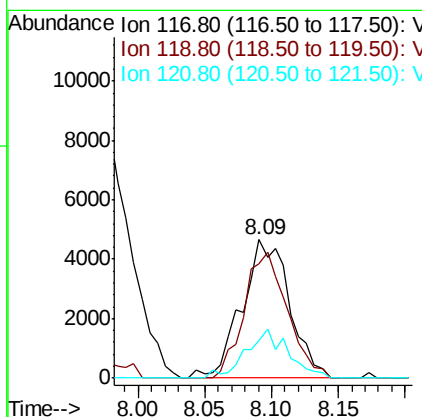
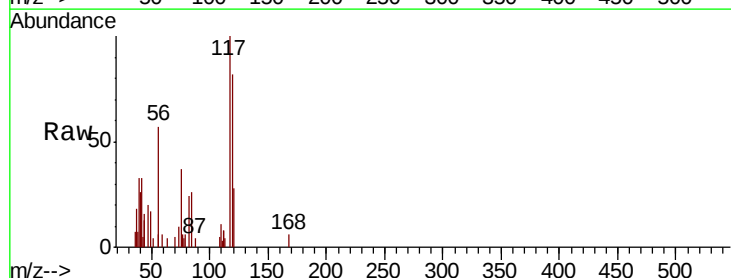
Manual Integrations
APPROVED

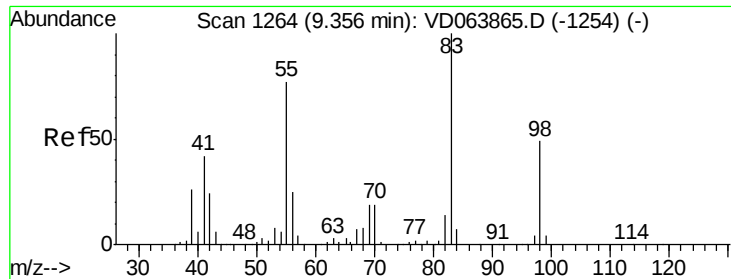
MMDadoda
10/8/2019 3:11:38 PM



#38
Carbon Tetrachloride
Concen: 4.088 ug/l
RT: 8.09 min Scan# 1049
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
117	100		
119	82.2	70.8	106.2
121	27.6	21.4	32.0





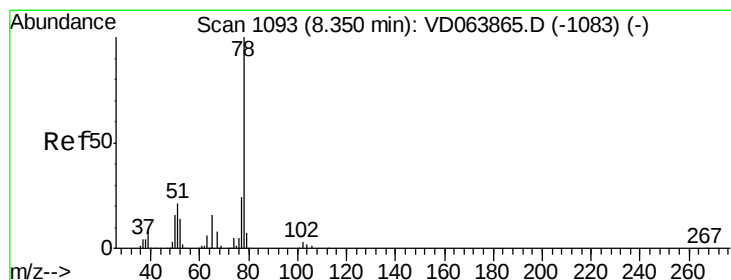
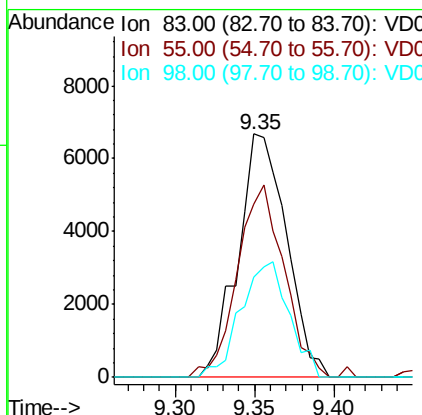
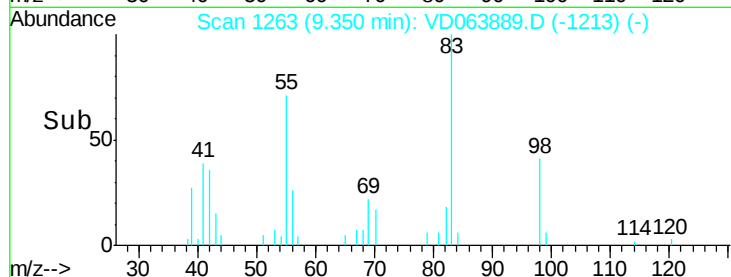
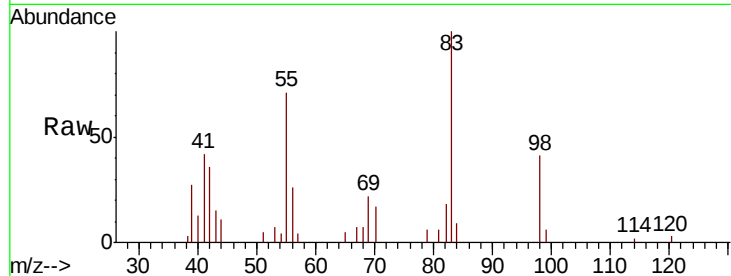
#39
Methvlcvclohexane
Concen: 4.147 ug/l
RT: 9.35 min Scan# 1263
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	83	Resp	14227
Ion Ratio	Lower	Upper	
83	100		
55	71.3	61.3	91.9
98	41.4	39.3	58.9

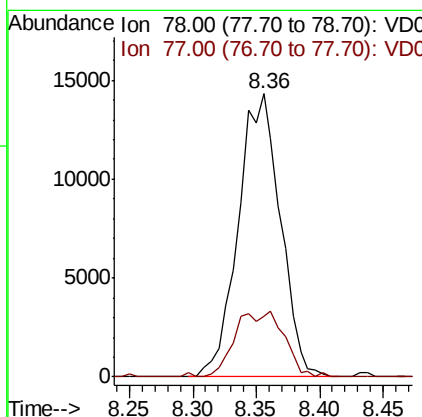
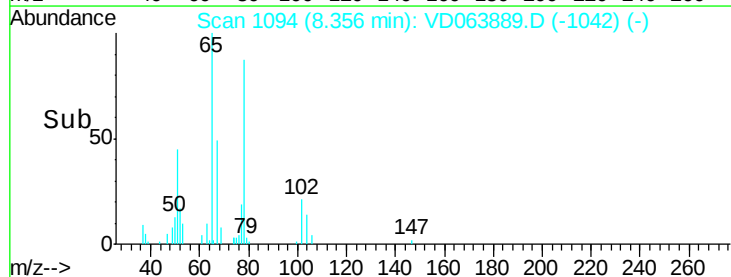
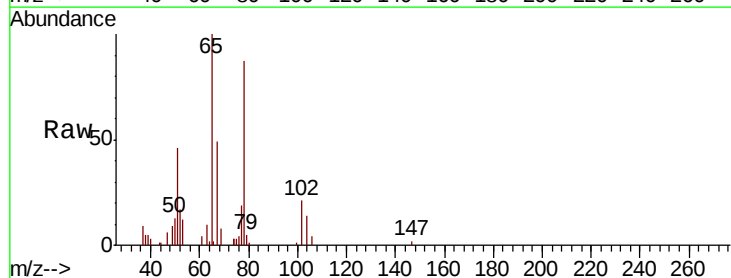
Manual Integrations
APPROVED

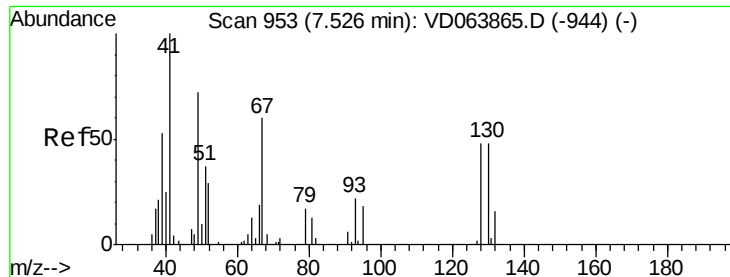
MMDadoda
10/8/2019 3:11:38 PM



#40
Benzene
Concen: 4.134 ug/l
RT: 8.36 min Scan# 1094
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	78	Resp	33061
Ion Ratio	Lower	Upper	
78	100		
77	21.7	19.0	28.6





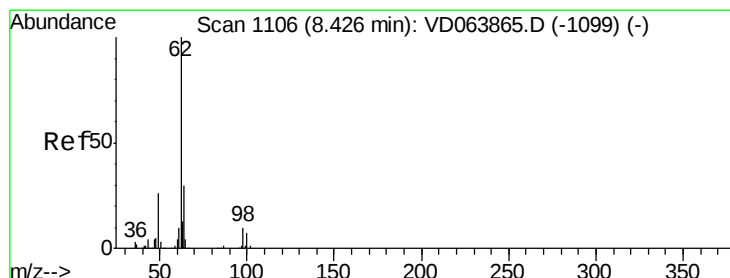
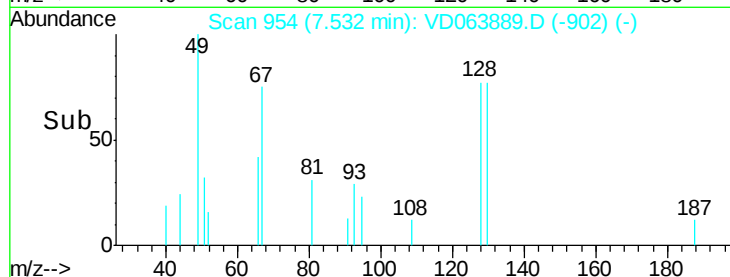
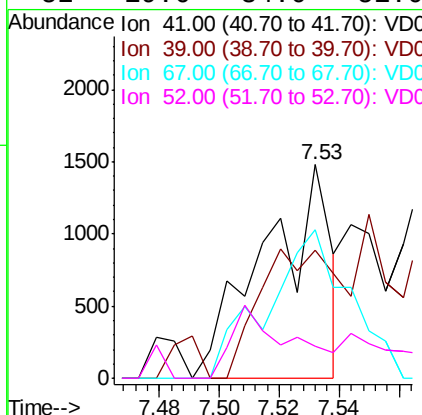
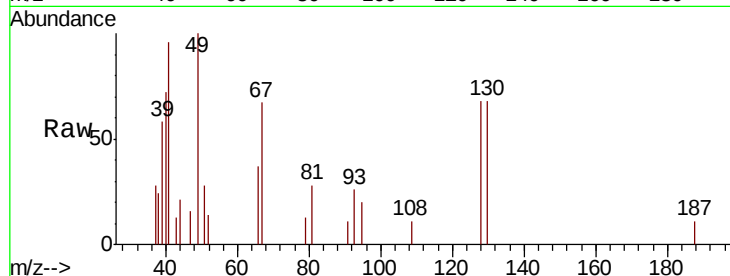
#41
Methacrylonitrile
Concen: 3.506 ug/l m
RT: 7.53 min Scan# 954
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 41 Resp: 2268
Ion Ratio Lower Upper
41 100
39 0.0 52.6 78.8#
67 86.2 74.2 111.2
52 19.6 34.0 51.0#

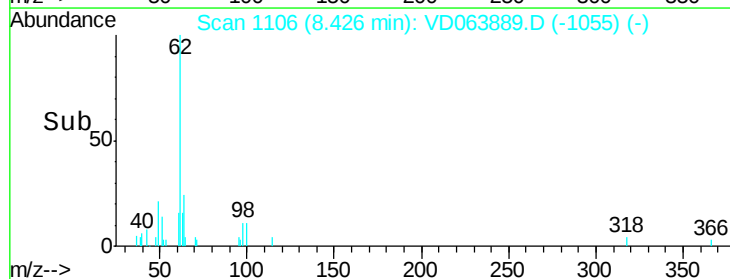
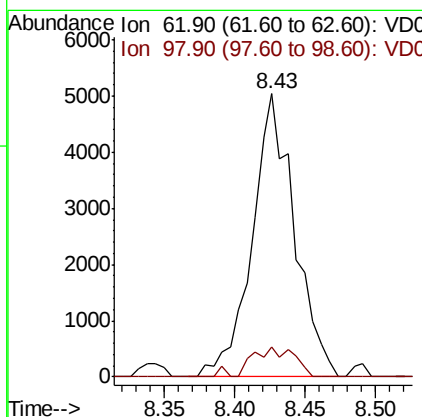
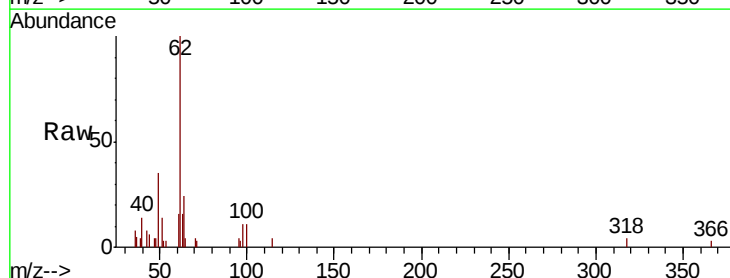
Manual Integrations
APPROVED

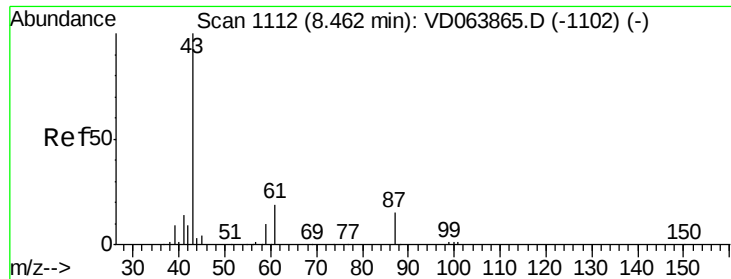
MMDadoda
10/8/2019 3:11:38 PM



#42
1,2-Dichloroethane
Concen: 4.587 ug/l
RT: 8.43 min Scan# 1106
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 62 Resp: 10610
Ion Ratio Lower Upper
62 100
98 10.1 0.0 20.0





#43

Isopropyl Acetate

Concen: 4.218 ug/l

RT: 8.46 min Scan# 1112

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

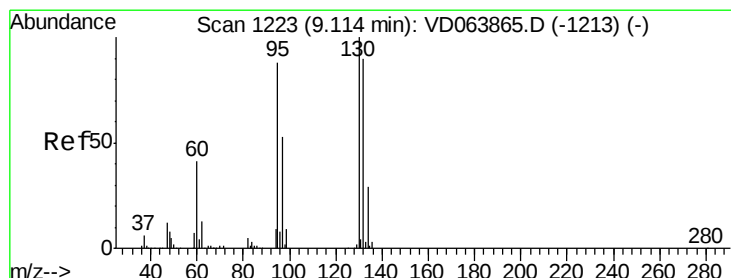
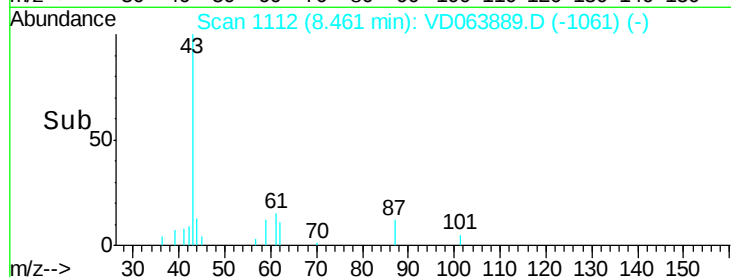
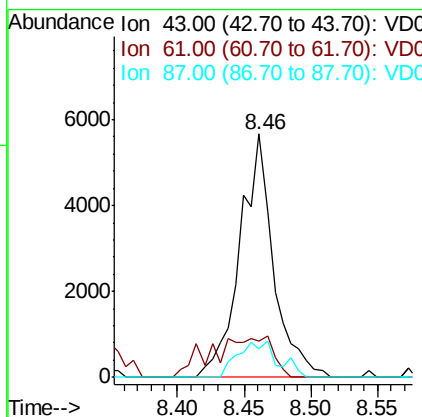
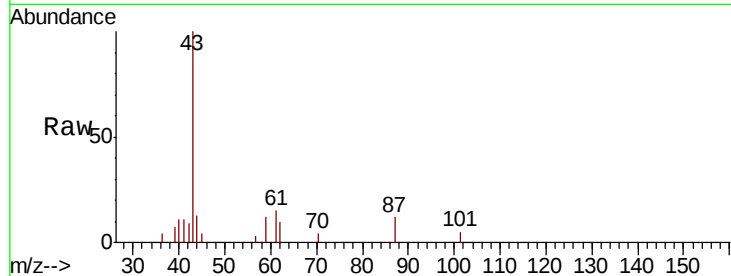
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	43	Resp:	9870
Ion	Ratio	Lower	Upper
43	100		
61	0.0	25.7	38.5#
87	17.6	11.6	17.4#

Manual Integrations
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#44

Trichloroethene

Concen: 4.305 ug/l

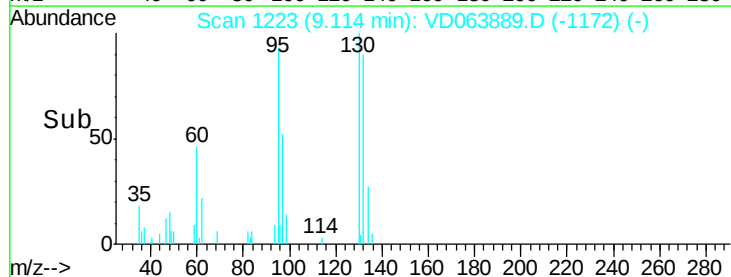
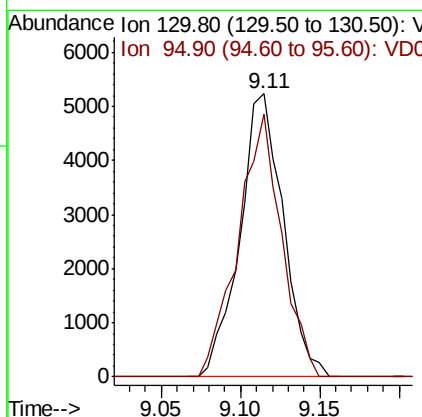
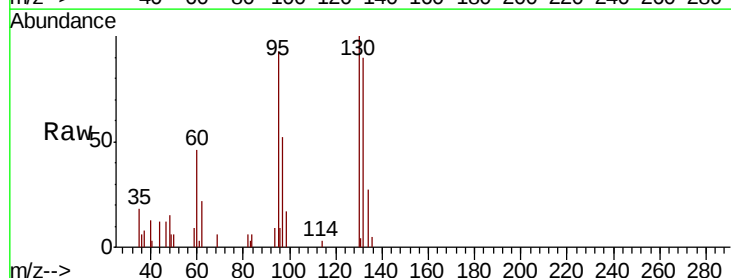
RT: 9.11 min Scan# 1223

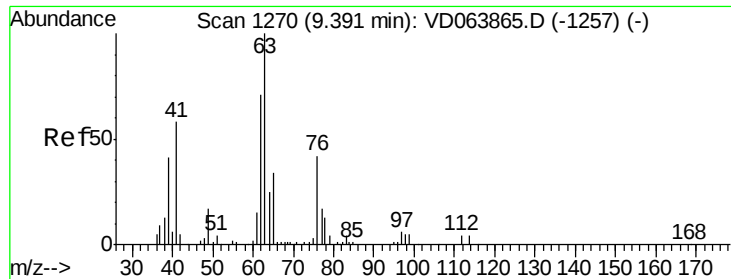
Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	130	Resp:	9927
Ion	Ratio	Lower	Upper
130	100		
95	92.9	0.0	175.6





#45

1,2-Dichloropropane

Concen: 4.687 ug/l

RT: 9.38 min Scan# 1269

Delta R.T. -0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 63 Resp: 9173

Ion Ratio Lower Upper

63 100

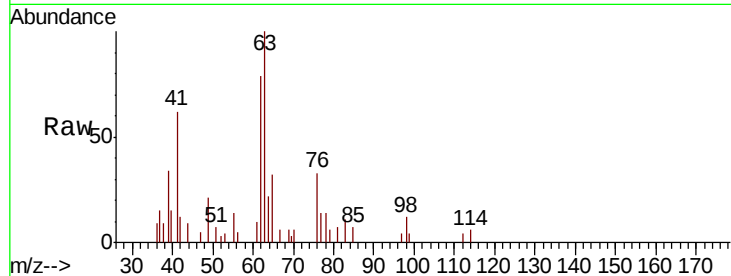
65 31.8 27.3 40.9

Manual Integrations

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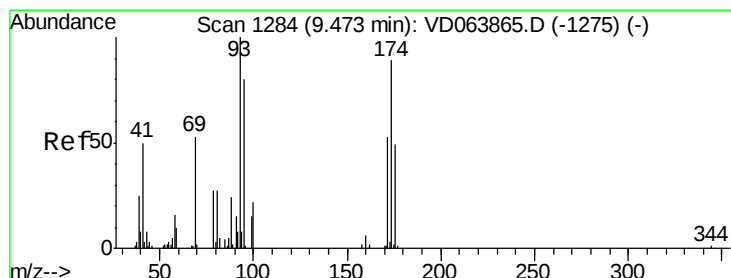
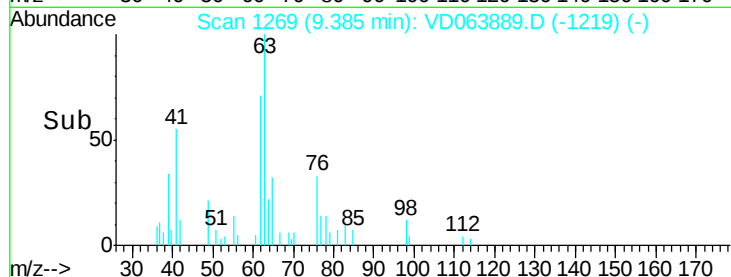
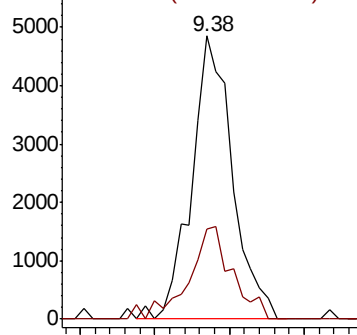
MMDadoda

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Abundance Ion 62.90 (62.60 to 63.60): VDC

Ion 64.90 (64.60 to 65.60): VDC



#46

Dibromomethane

Concen: 4.448 ug/l

RT: 9.47 min Scan# 1284

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

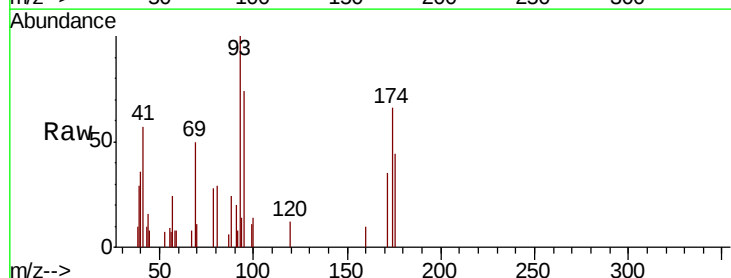
Tgt Ion: 93 Resp: 4958

Ion Ratio Lower Upper

93 100

95 81.5 66.0 99.0

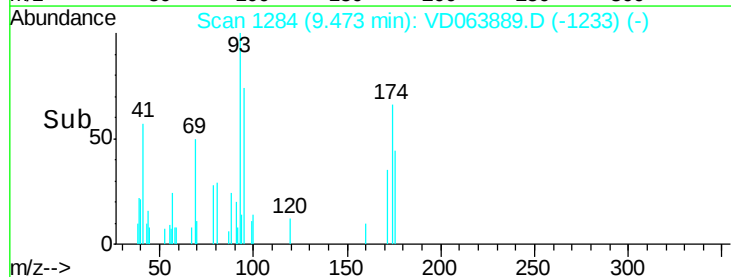
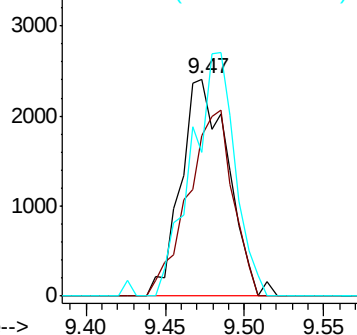
174 104.6 83.4 125.0

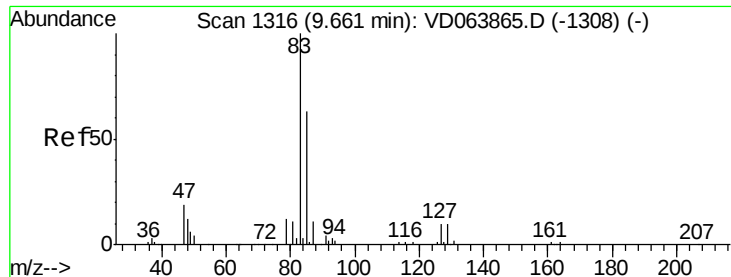


Abundance Ion 92.80 (92.50 to 93.50): VDC

Ion 94.80 (94.50 to 95.50): VDC

Ion 173.70 (173.40 to 174.40): V





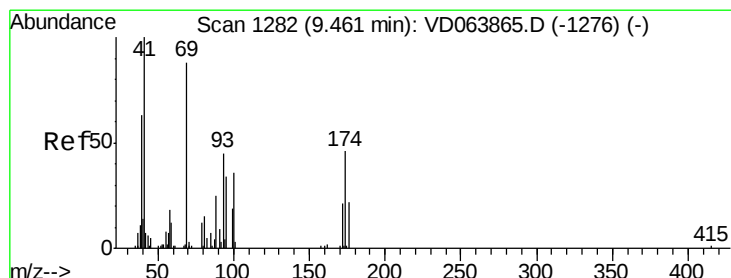
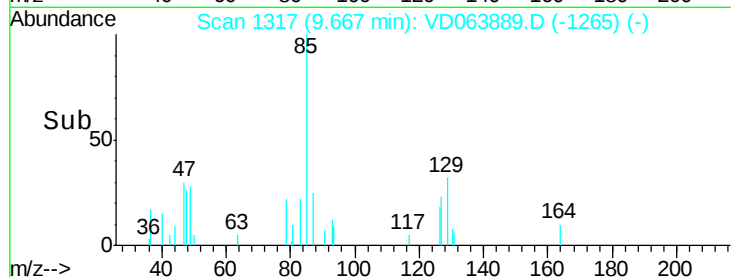
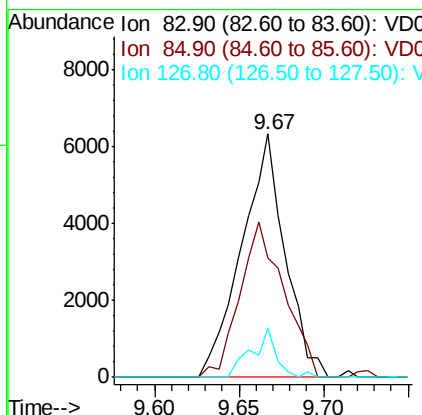
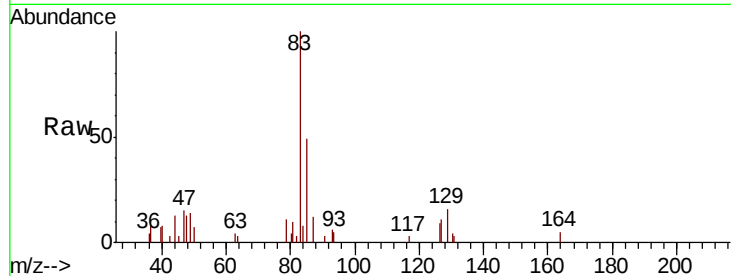
#47
Bromodichloromethane
Concen: 3.942 ug/l
RT: 9.67 min Scan# 1317
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
83	100		
85	48.9	50.2	75.2#
127	20.0	7.6	11.4#

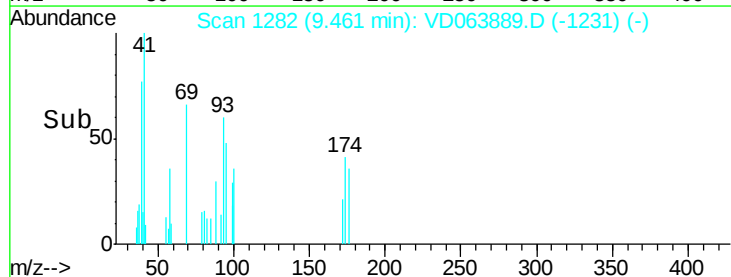
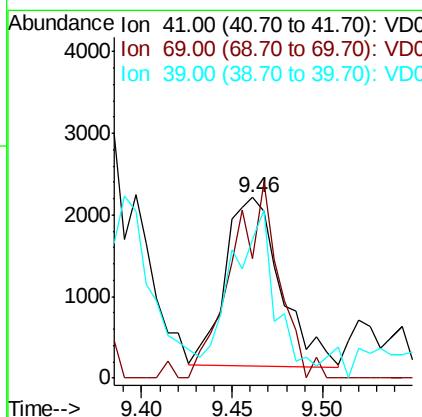
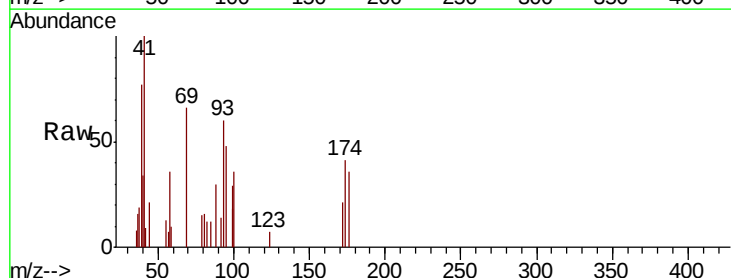
Manual Integrations
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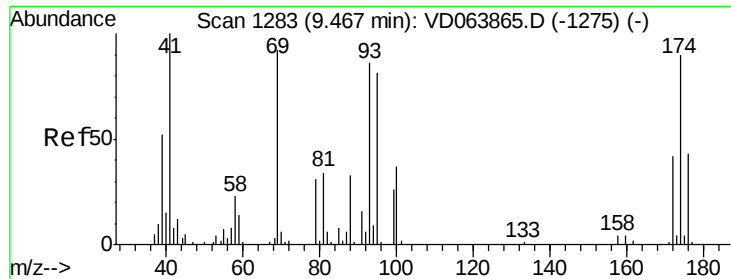
MMDadoda
10/8/2019 3:11:38 PM



#48
Methyl methacrylate
Concen: 3.914 ug/l
RT: 9.46 min Scan# 1282
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
41	100		
69	98.6	75.1	112.7
39	79.8	50.2	75.2#





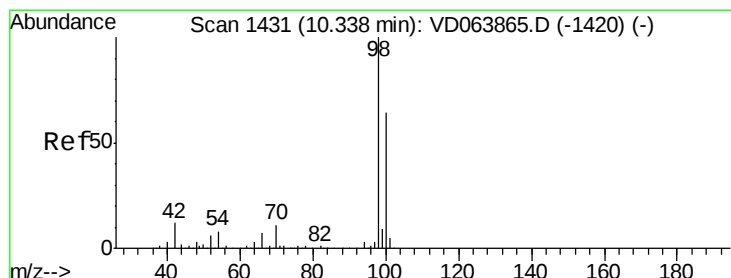
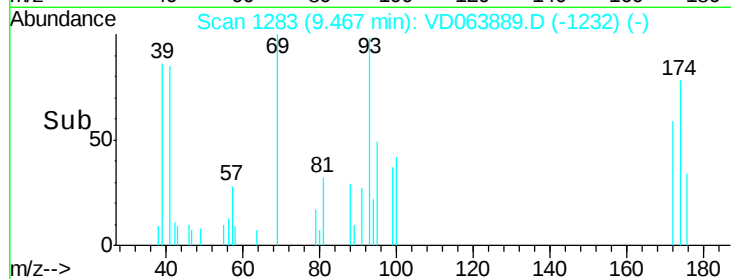
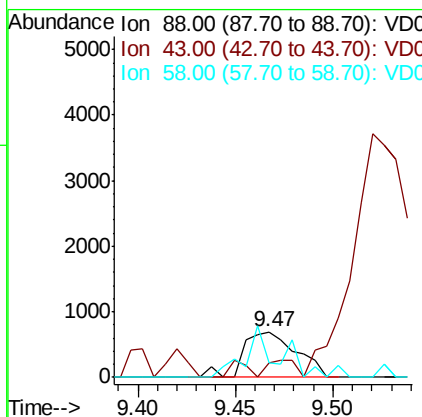
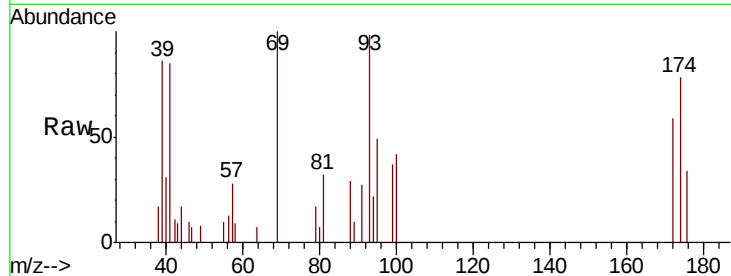
#49
1,4-Dioxane
Concen: 85.307 ug/l
RT: 9.47 min Scan# 1283
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
88	100		
43	20.3	27.6	41.4#
58	49.1	54.1	81.1#

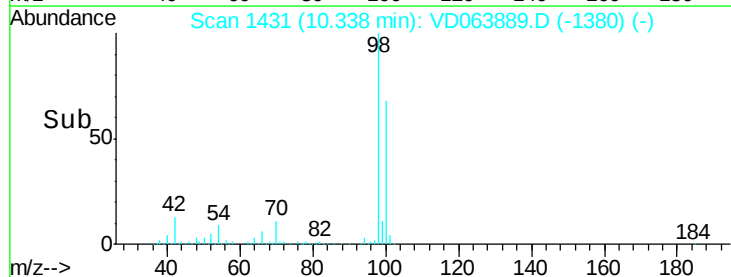
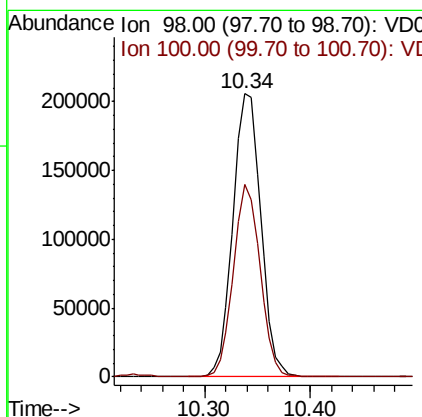
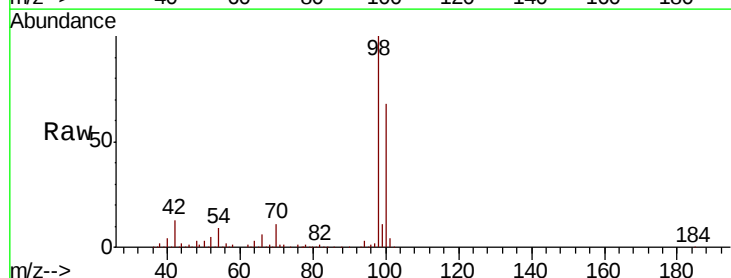
Manual Integrations
APPROVED

MMDadoda
10/8/2019 3:11:38 PM



#50
Toluene-d8
Concen: 49.684 ug/l
RT: 10.34 min Scan# 1431
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.1	78.1





#51

4-Methyl-2-Pentanone

Concen: 20.978 ug/l

RT: 10.23 min Scan# 1413

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 43 Resp: 25460

Ion Ratio Lower Upper

43 100

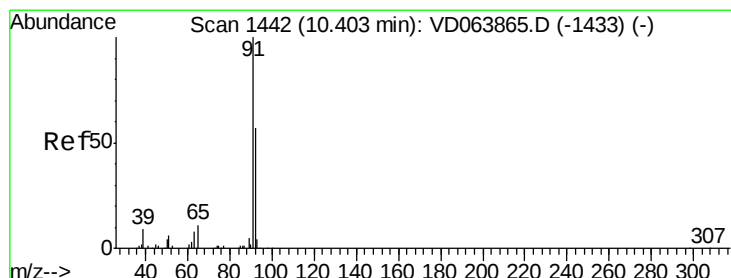
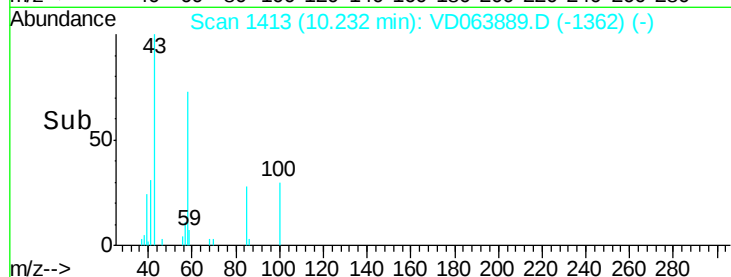
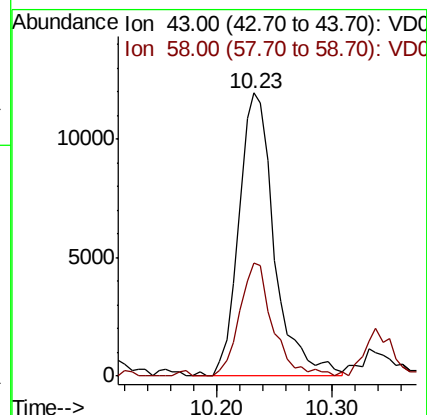
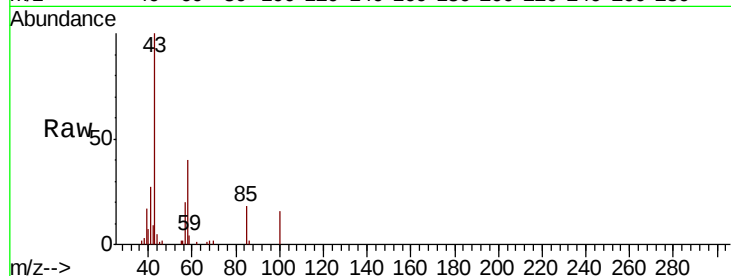
58 37.2 33.0 49.4

Manual Integrations

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10/8/2019 3:11:38 PM



#52

Toluene

Concen: 3.877 ug/l

RT: 10.40 min Scan# 1442

Delta R.T. -0.00 min

Lab File: VD063889.D

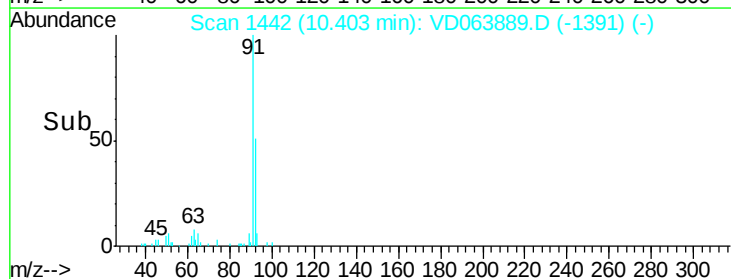
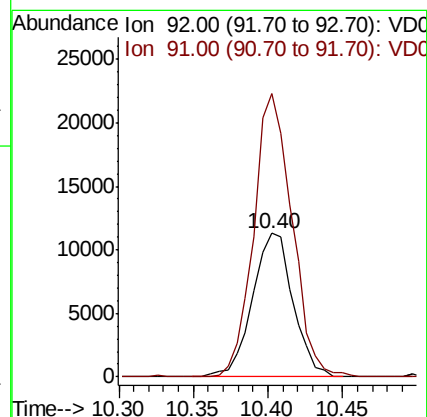
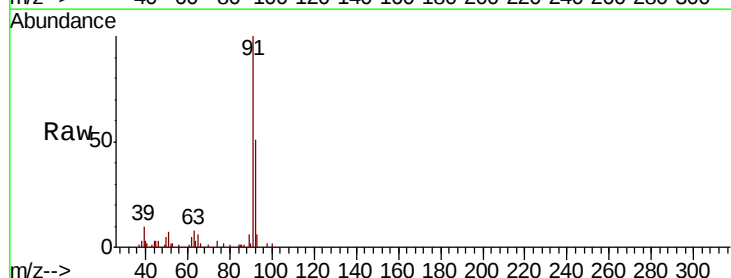
Acq: 04 Oct 2019 17:11

Tgt Ion: 92 Resp: 21285

Ion Ratio Lower Upper

92 100

91 185.7 139.5 209.3





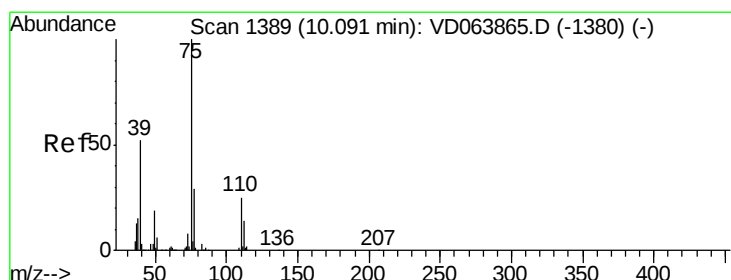
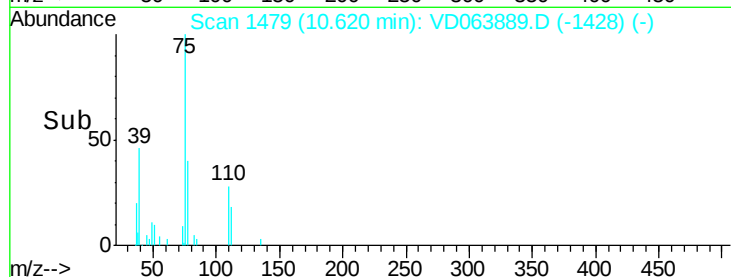
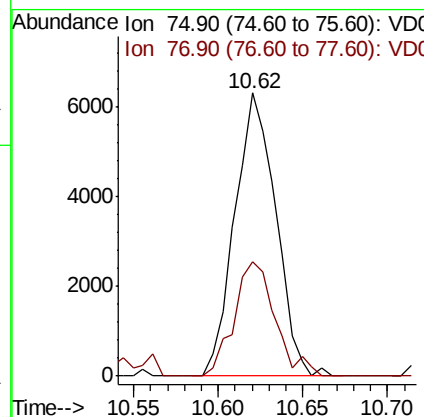
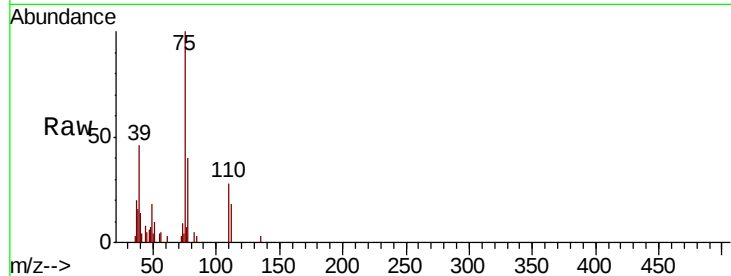
#53
 t-1,3-Dichloropropene
 Concen: 3.808 ug/l
 RT: 10.62 min Scan# 1479
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 75 Resp: 10665
 Ion Ratio Lower Upper
 75 100
 77 40.4 22.8 34.2#

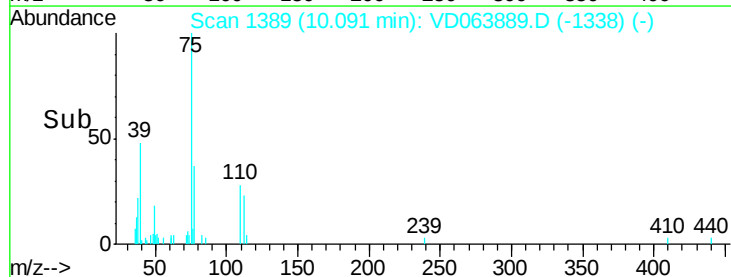
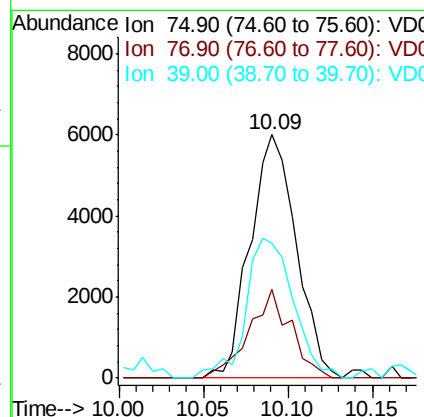
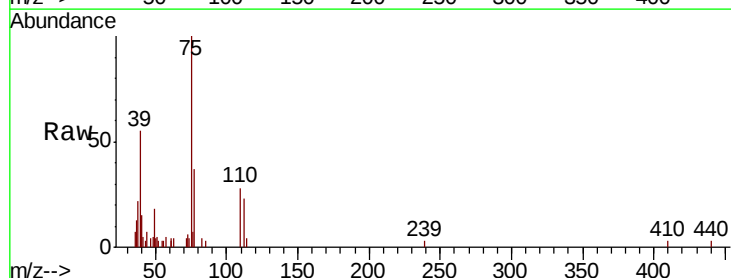
Manual Integrations
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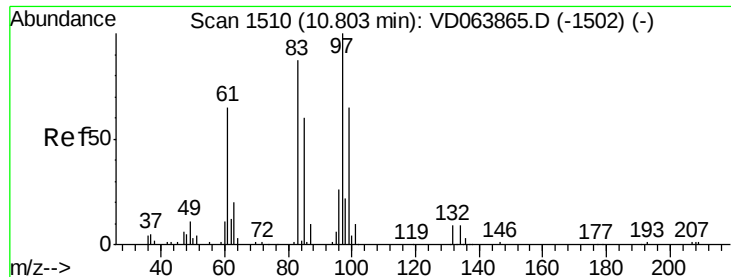
MMDadoda
 10/8/2019 3:11:38 PM



#54
 cis-1,3-Dichloropropene
 Concen: 3.545 ug/l
 RT: 10.09 min Scan# 1389
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion: 75 Resp: 11427
 Ion Ratio Lower Upper
 75 100
 77 36.6 23.2 34.8#
 39 55.2 41.5 62.3





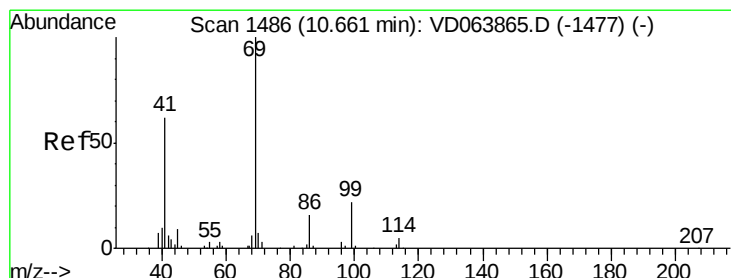
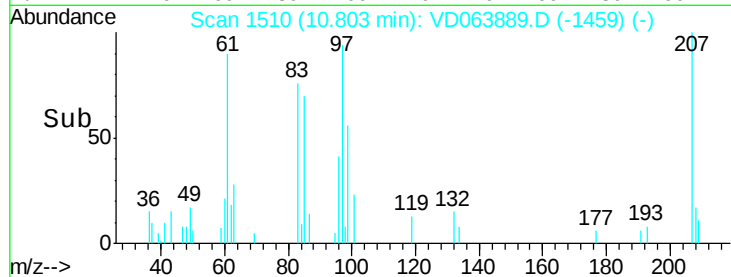
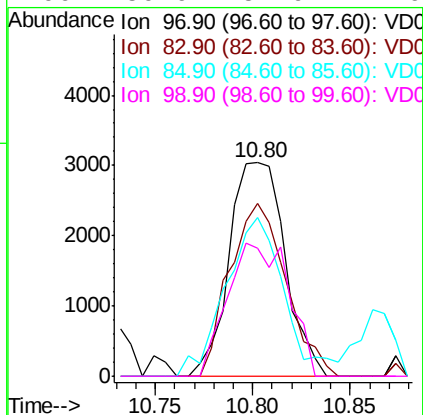
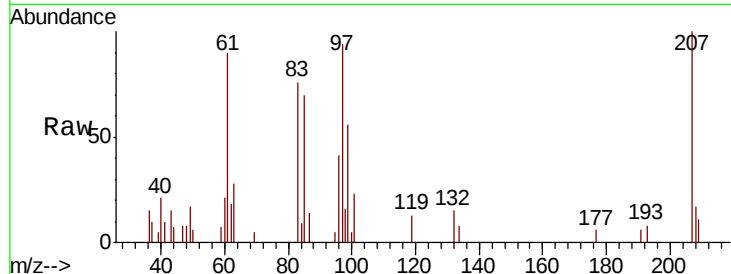
#55
 1,1,2-Trichloroethane
 Concen: 3.830 ug/l
 RT: 10.80 min Scan# 1510
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	97	Resp:	6028
Ion	Ratio	Lower	Upper
97	100		
83	81.1	69.7	104.5
85	67.4	48.1	72.1
99	59.9	51.9	77.9

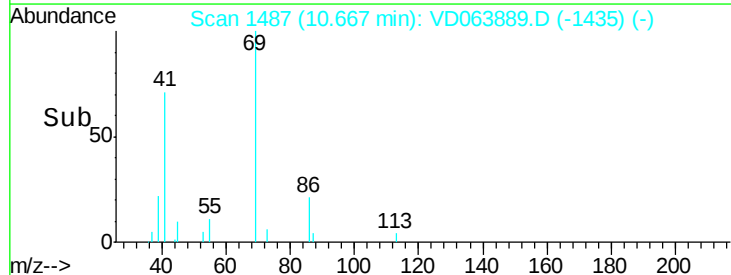
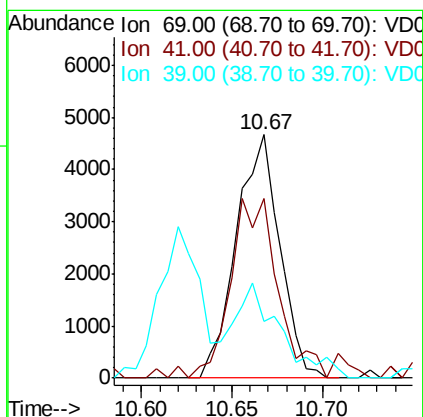
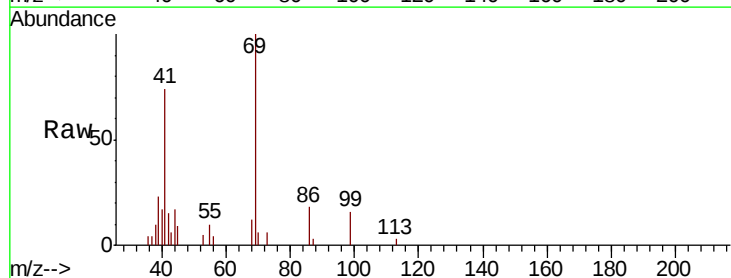
Manual Integrations
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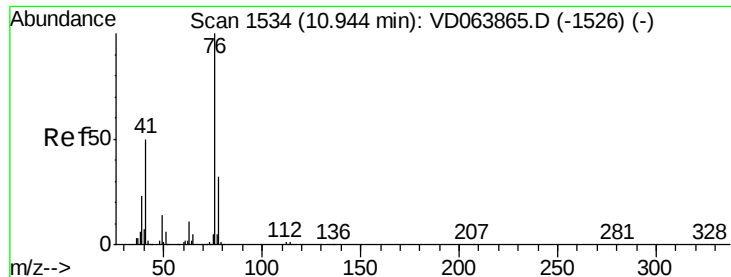
MMDadoda
 10/8/2019 3:11:38 PM



#56
 Ethyl methacrylate
 Concen: 3.908 ug/l
 RT: 10.67 min Scan# 1487
 Delta R.T. 0.01 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion:	69	Resp:	7790
Ion	Ratio	Lower	Upper
69	100		
41	81.0	51.3	76.9#
39	40.6	28.0	42.0





#57

1,3-Dichloropropane

Concen: 3.931 ug/l

RT: 10.95 min Scan# 1535

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 76 Resp: 10586

Ion Ratio Lower Upper

76 100

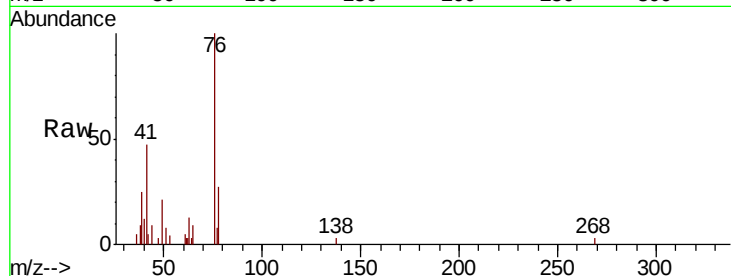
78 35.5 26.6 40.0

Manual Integrations

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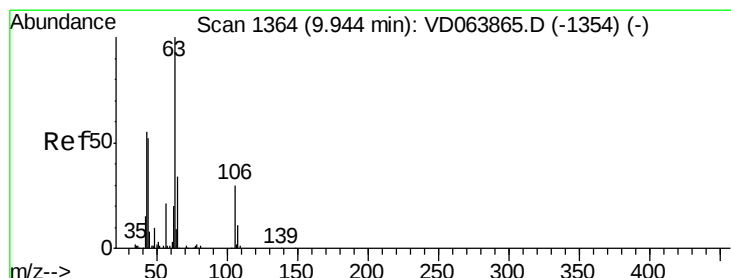
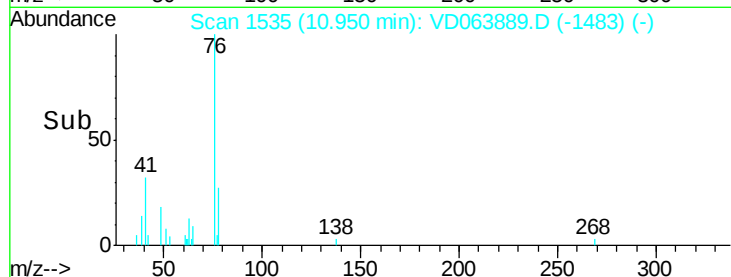
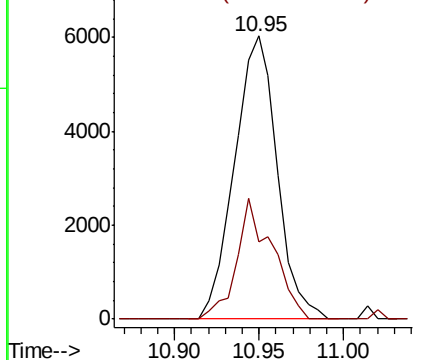
MMDadoda

10/8/2019 3:11:38 PM



Abundance Ion 75.90 (75.60 to 76.60): VDC

Ion 77.90 (77.60 to 78.60): VDC



#58

2-Chloroethyl Vinyl ether

Concen: 18.012 ug/l

RT: 9.94 min Scan# 1364

Delta R.T. -0.00 min

Lab File: VD063889.D

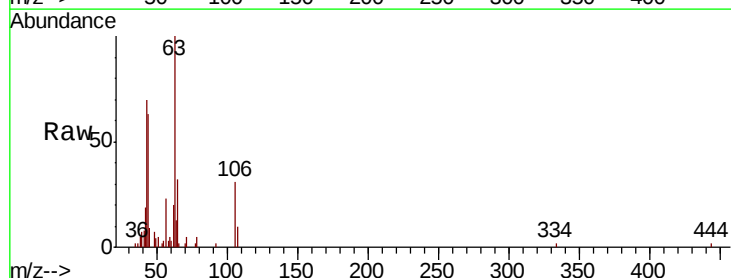
Acq: 04 Oct 2019 17:11

Tgt Ion: 63 Resp: 15431

Ion Ratio Lower Upper

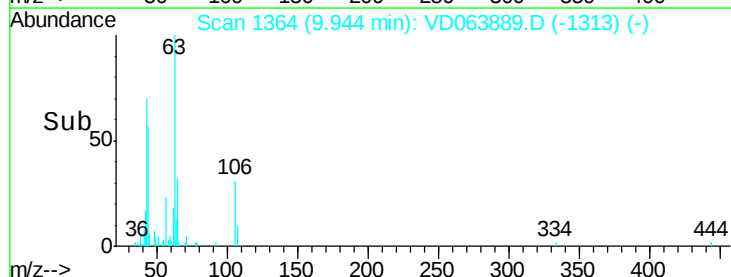
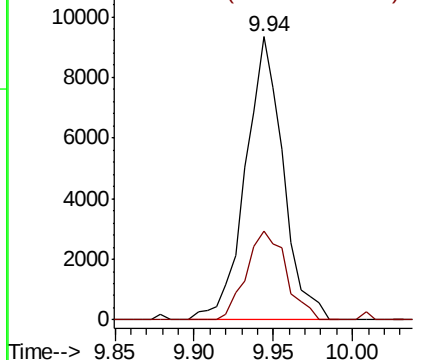
63 100

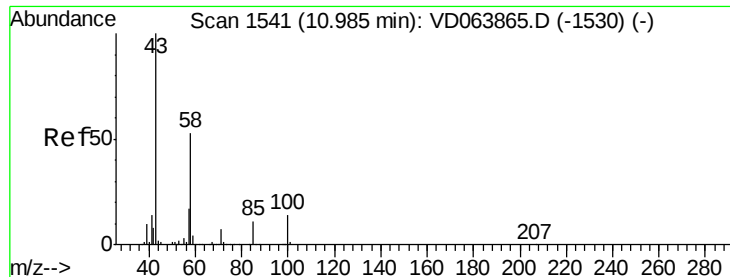
106 33.2 24.3 36.5



Abundance Ion 62.90 (62.60 to 63.60): VDC

Ion 105.90 (105.60 to 106.60): V





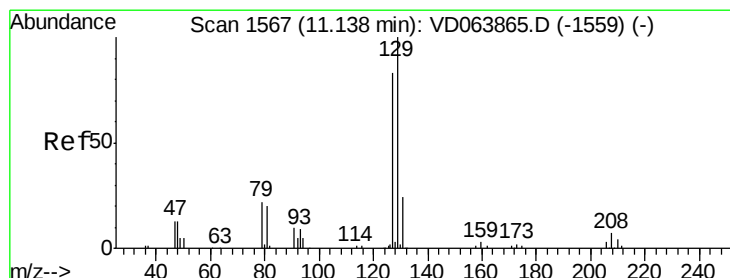
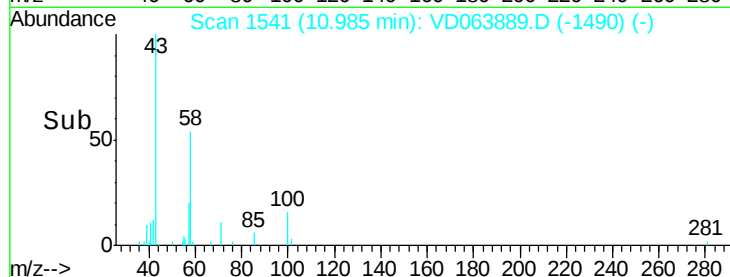
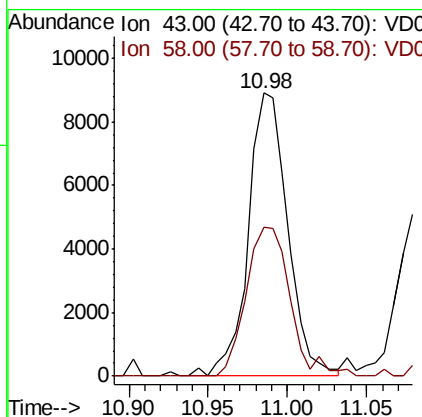
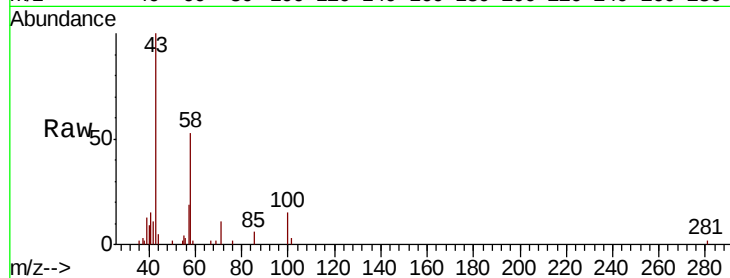
#59
2-Hexanone
Concen: 17.600 ug/l
RT: 10.98 min Scan# 1541
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 43 Resp: 15452
Ion Ratio Lower Upper
43 100
58 58.7 27.7 83.0

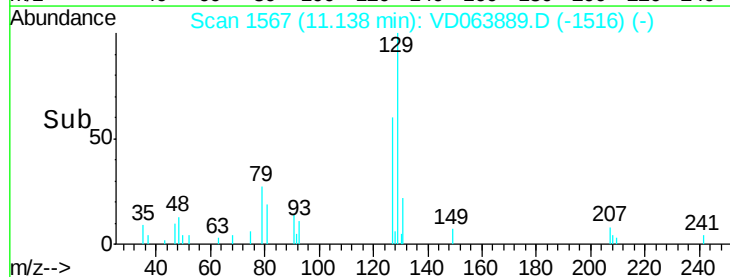
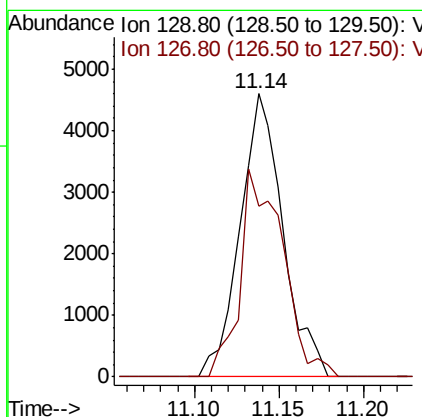
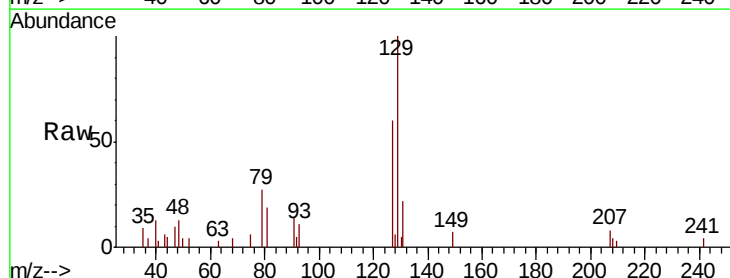
Manual Integrations
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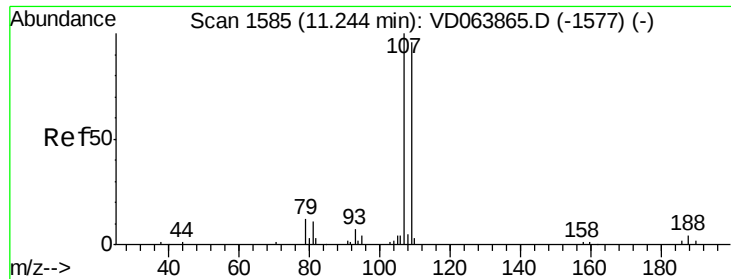
MMDadoda
10/8/2019 3:11:38 PM



#60
Dibromochloromethane
Concen: 3.964 ug/l
RT: 11.14 min Scan# 1567
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 129 Resp: 8122
Ion Ratio Lower Upper
129 100
127 72.9 39.9 119.6





#61

1,2-Dibromoethane

Concen: 4.025 ug/l

RT: 11.25 min Scan# 1586

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 107 Resp: 6141

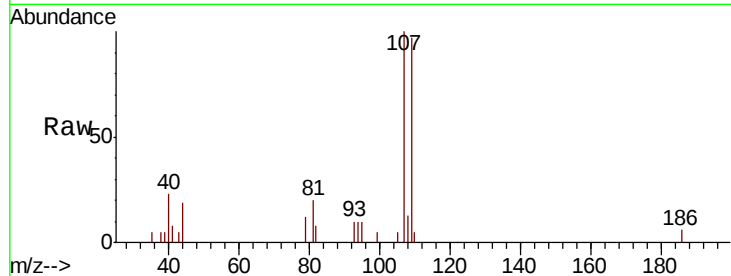
Ion Ratio Lower Upper

107 100

109 89.6 75.2 112.8

Manual Integrations
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10/8/2019 3:11:38 PM



Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V

11.25

4000

3000

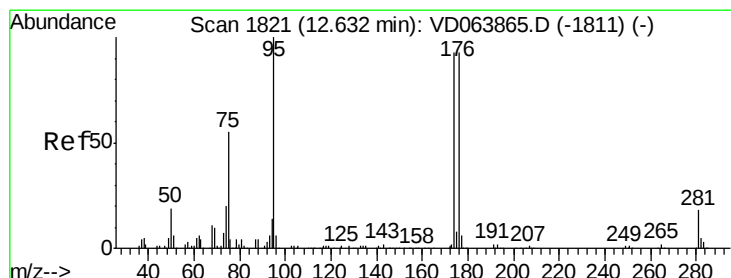
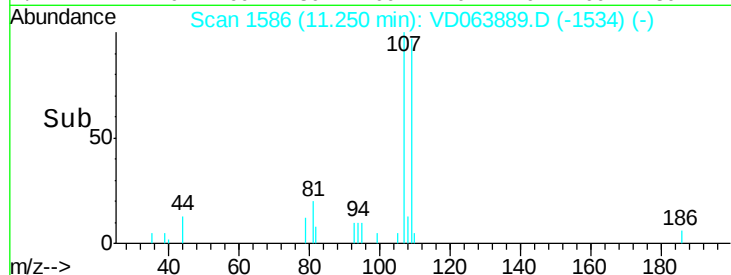
2000

1000

0

Time-->

11.20 11.25 11.30



#62

4-Bromofluorobenzene

Concen: 46.318 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

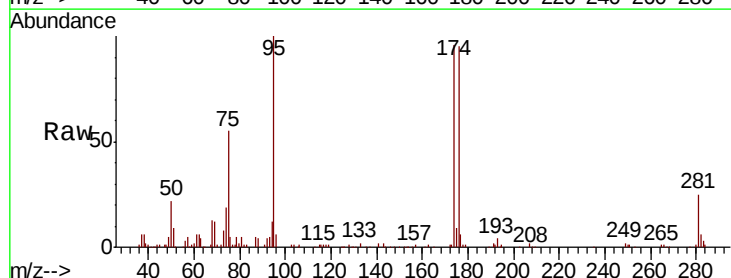
Tgt Ion: 95 Resp: 121848

Ion Ratio Lower Upper

95 100

174 94.3 0.0 186.4

176 90.4 0.0 184.2



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

100000

80000

60000

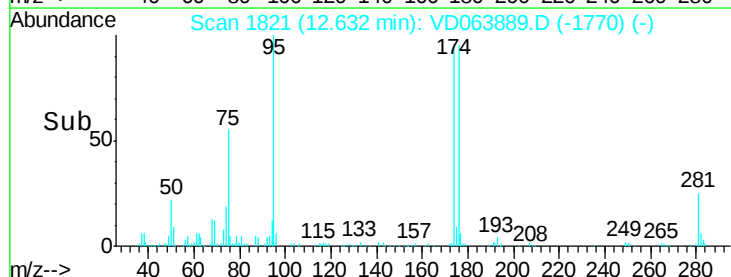
40000

20000

0

Time-->

12.55 12.60 12.65 12.70





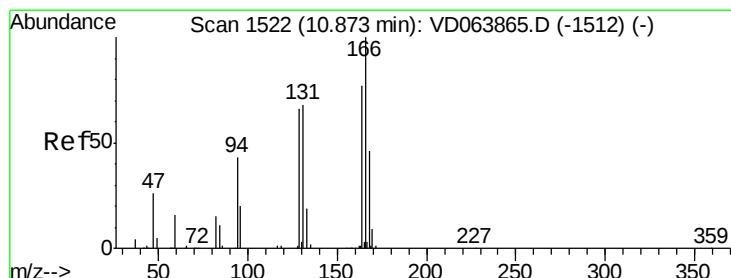
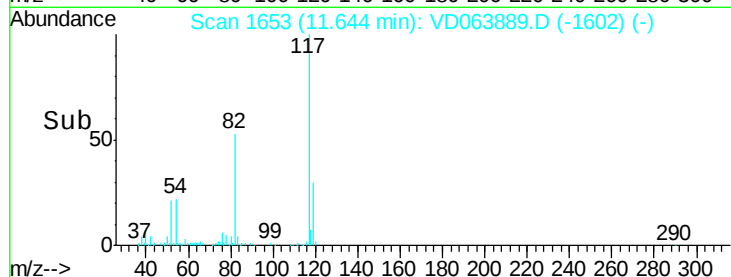
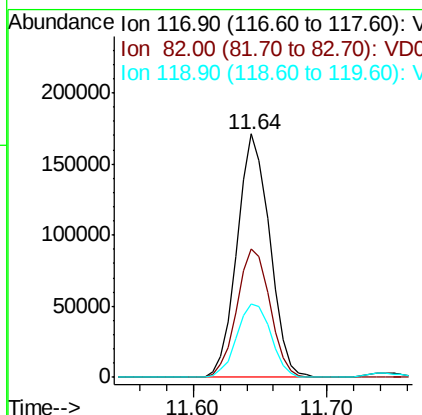
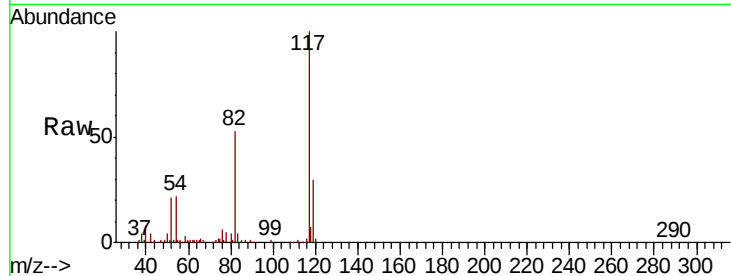
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.64 min Scan# 1653
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Resp	Lower	Upper
117	100	289925		
82	52.8		42.8	64.2
119	30.1		24.4	36.6

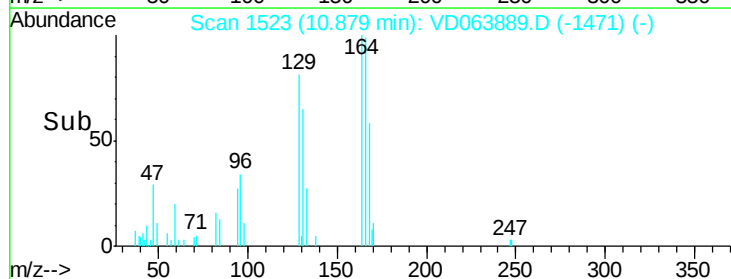
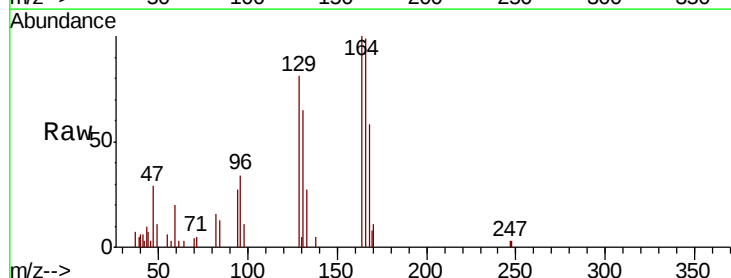
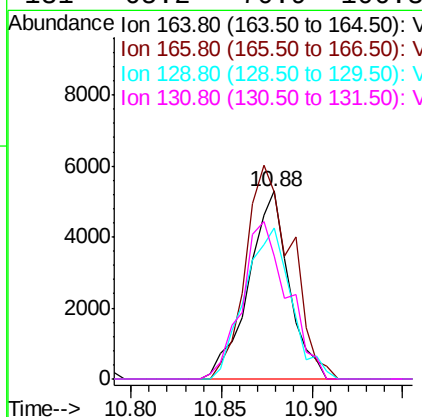
Manual Integrations
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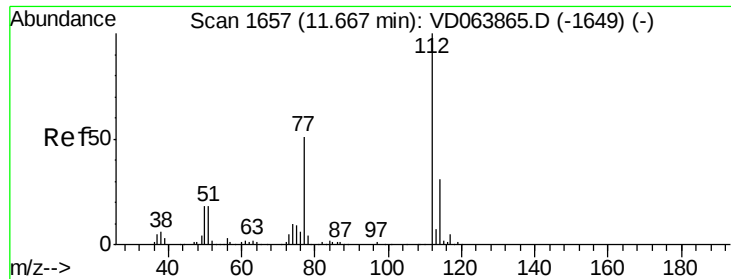
MMDadoda
10/8/2019 3:11:38 PM



#64
Tetrachloroethene
Concen: 4.146 ug/l
RT: 10.88 min Scan# 1523
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	8206		
166	99.5		103.8	155.6#
129	80.8		68.9	103.3
131	65.2		70.9	106.3#





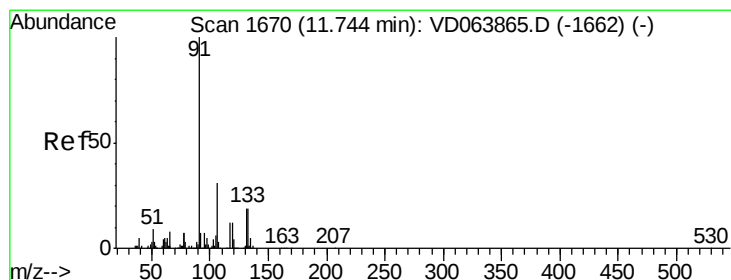
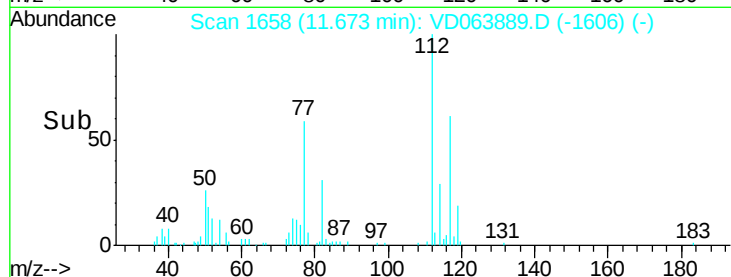
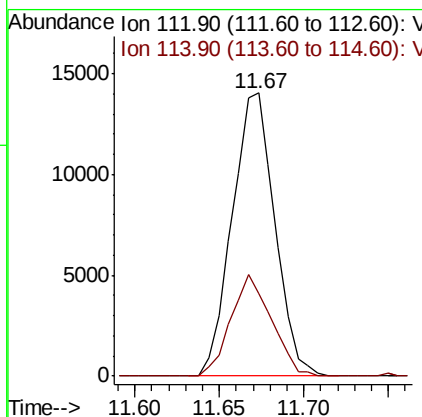
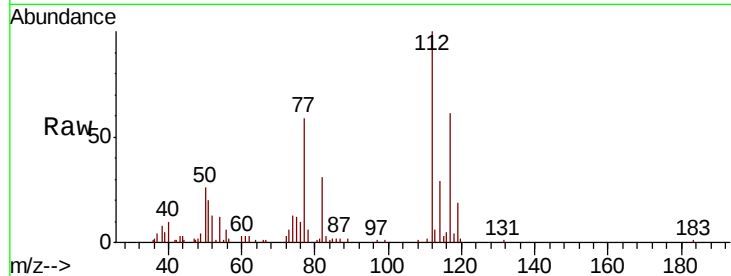
#65
Chlorobenzene
Concen: 4.235 ug/l
RT: 11.67 min Scan# 1658
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion:112 Resp: 24657
Ion Ratio Lower Upper
112 100
114 28.9 25.1 37.7

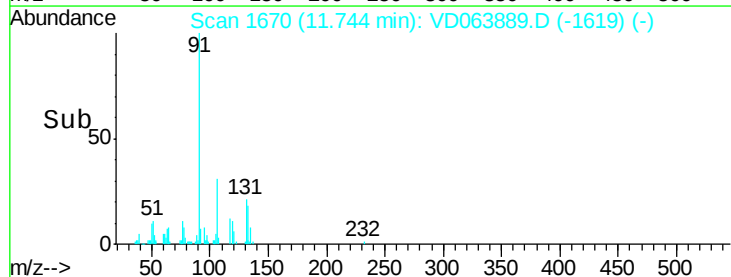
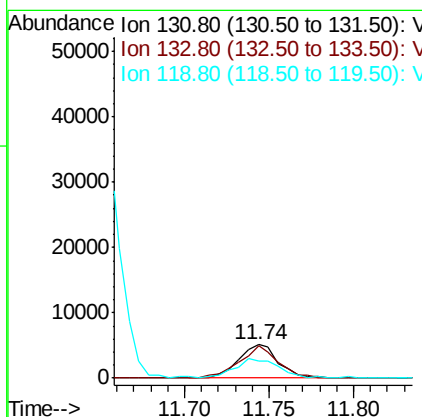
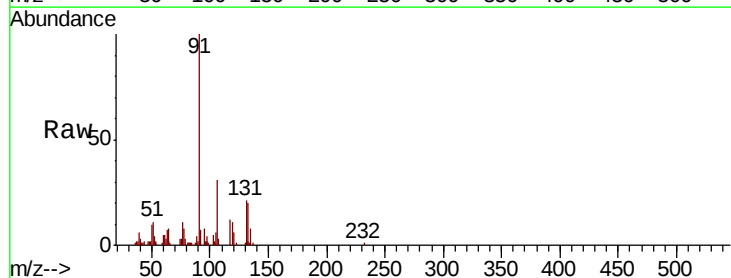
Manual Integrations
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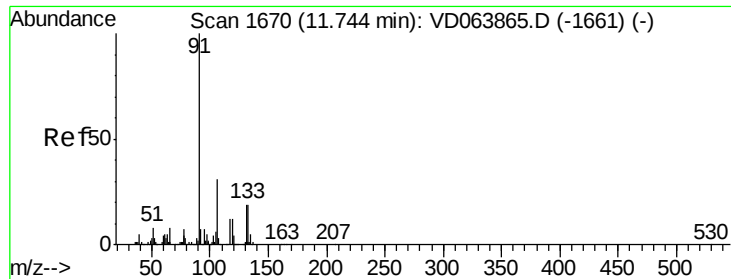
MMDadoda
10/8/2019 3:11:38 PM



#66
1,1,1,2-Tetrachloroethane
Concen: 3.899 ug/l
RT: 11.74 min Scan# 1670
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion:131 Resp: 8365
Ion Ratio Lower Upper
131 100
133 91.9 48.9 146.7
119 64.7 32.6 97.8





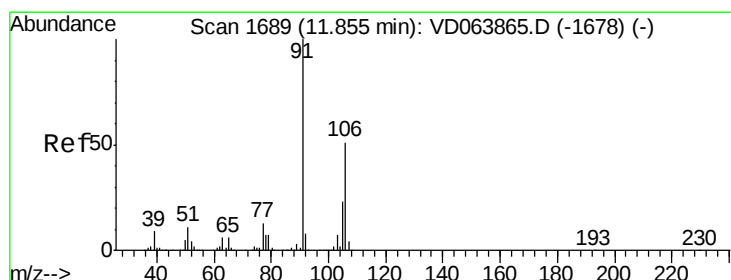
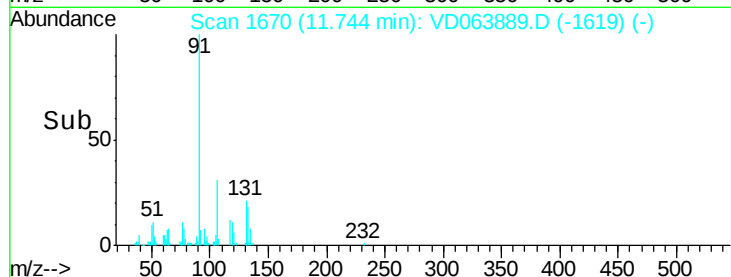
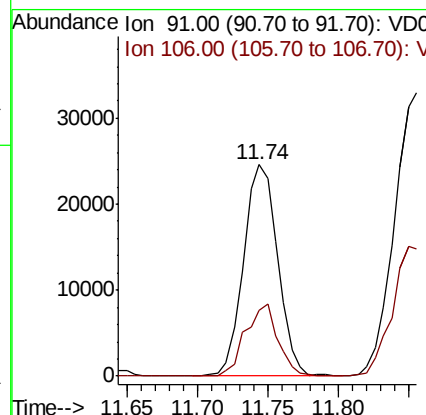
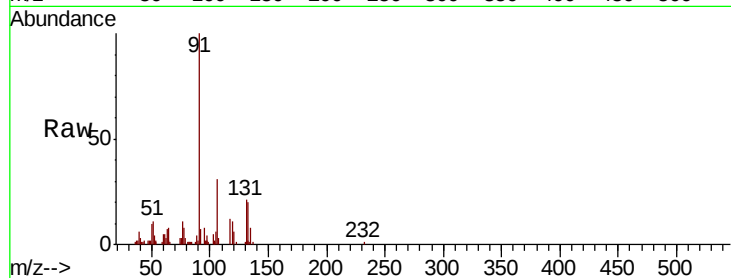
#67
Ethyl Benzene
Concen: 3.967 ug/l
RT: 11.74 min Scan# 1670
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 91 Resp: 41645
Ion Ratio Lower Upper
91 100
106 31.4 24.6 37.0

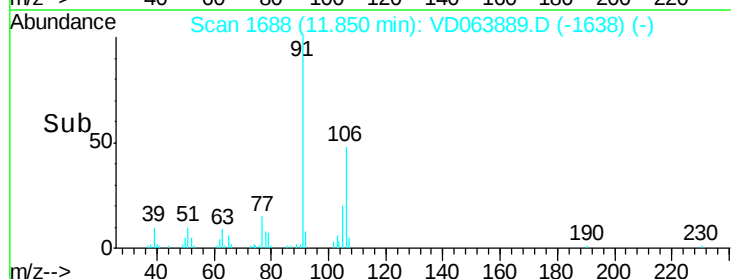
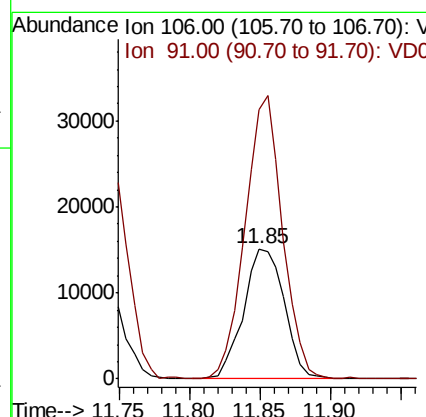
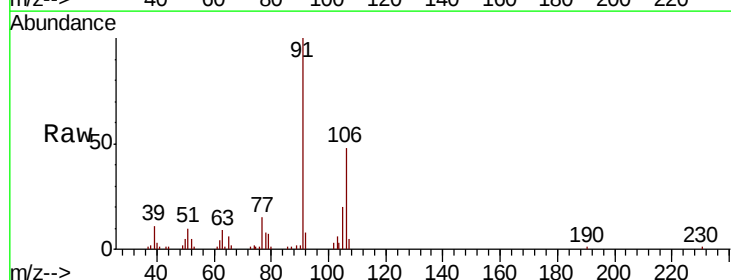
Manual Integrations
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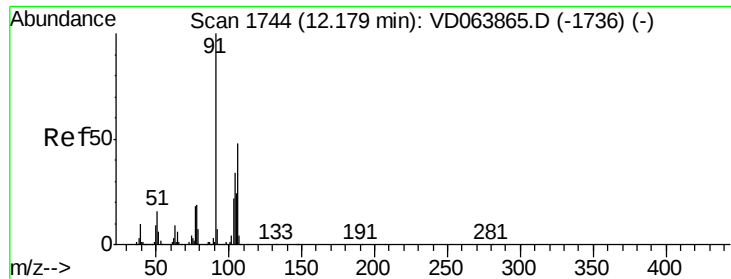
MMDadoda
10/8/2019 3:11:38 PM



#68
m/p-Xylenes
Concen: 7.543 ug/l
RT: 11.85 min Scan# 1688
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 106 Resp: 30567
Ion Ratio Lower Upper
106 100
91 199.4 154.8 232.2





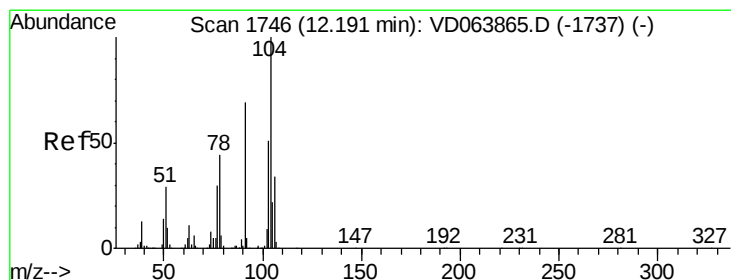
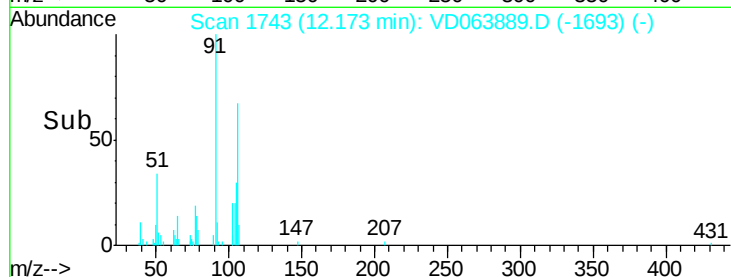
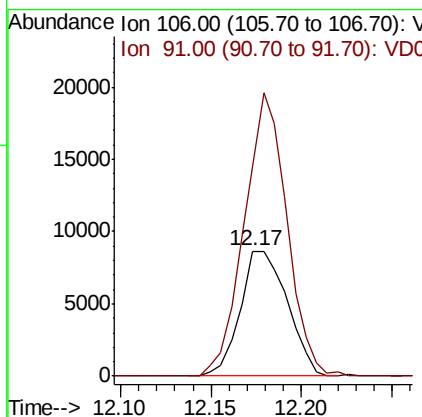
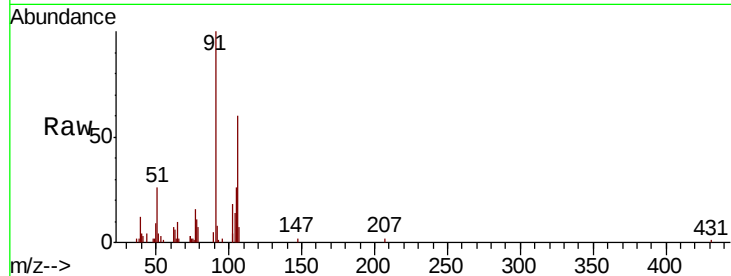
#69
o-Xylene
Concen: 4.021 ug/l
RT: 12.17 min Scan# 1743
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion:106 Resp: 15601
Ion Ratio Lower Upper
106 100
91 205.5 103.9 311.7

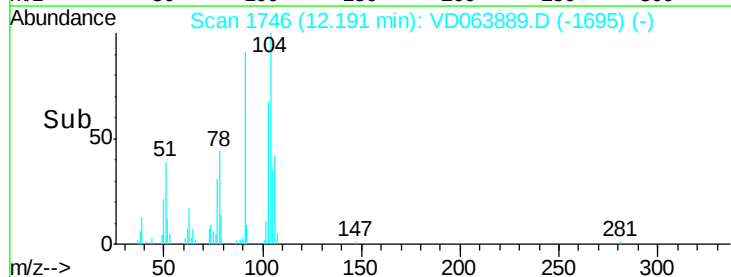
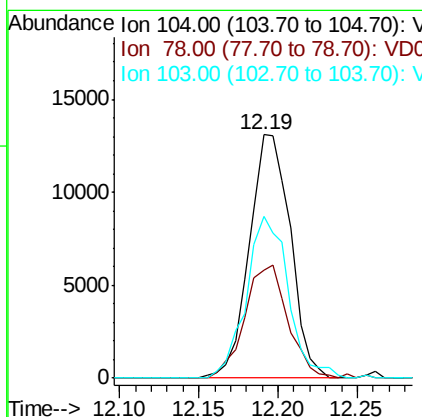
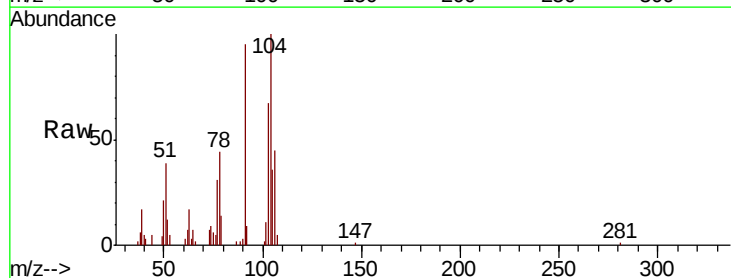
Manual Integrations
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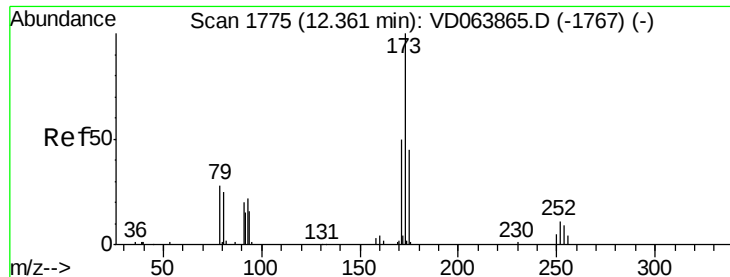
MMDadoda
10/8/2019 3:11:38 PM



#70
Styrene
Concen: 3.595 ug/l
RT: 12.19 min Scan# 1746
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion:104 Resp: 23615
Ion Ratio Lower Upper
104 100
78 48.6 37.0 55.4
103 68.0 44.2 66.4#





#71

Bromoform

Concen: 4.026 ug/l

RT: 12.36 min Scan# 1775

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:173 Resp: 4636

Ion Ratio Lower Upper

173 100

175 45.4 24.6 74.0

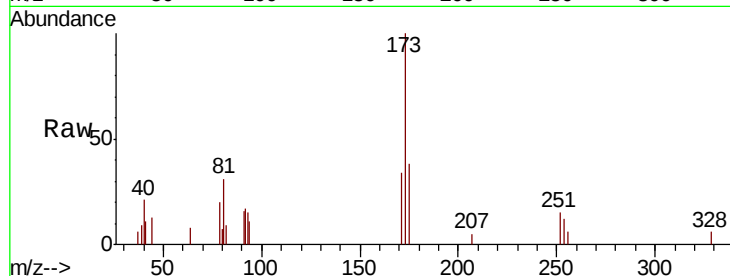
254 0.0 0.0 0.0

Manual Integrations

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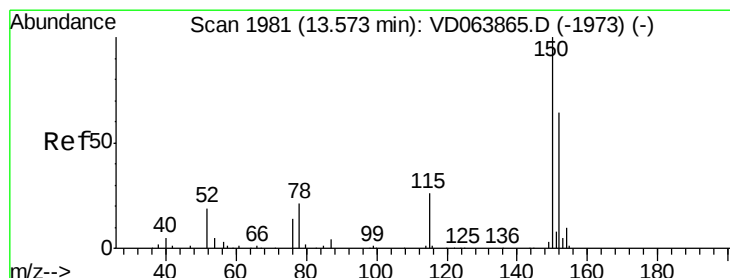
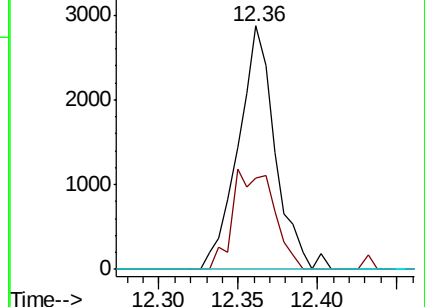
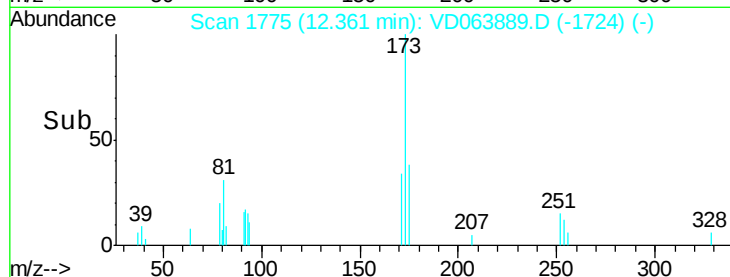
10/8/2019 3:11:38 PM



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.57 min Scan# 1981

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

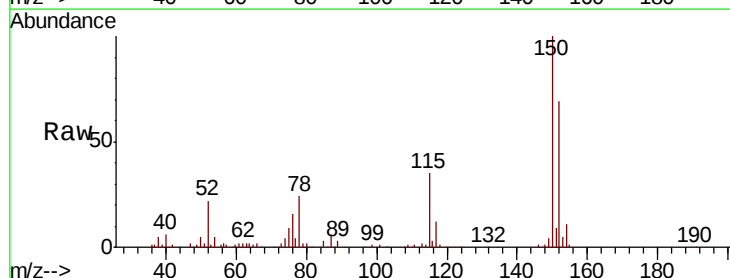
Tgt Ion:152 Resp: 146674

Ion Ratio Lower Upper

152 100

115 55.6 25.9 77.7

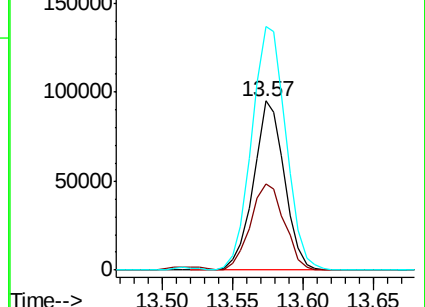
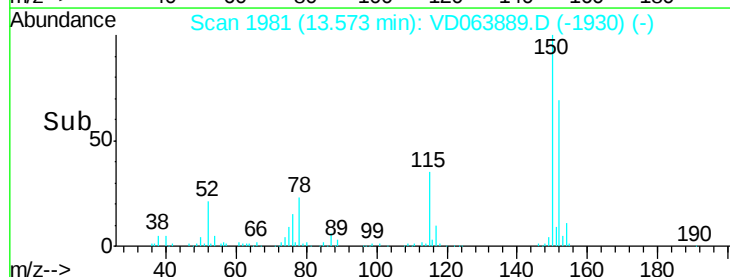
150 158.8 0.0 344.2

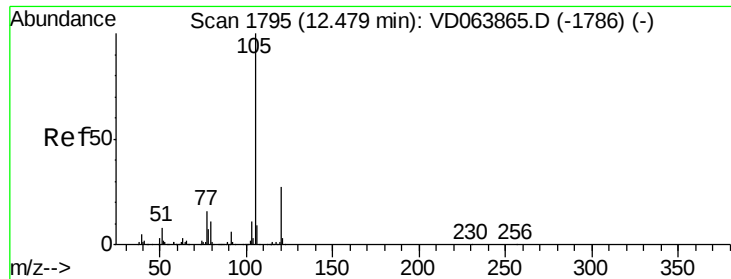


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#73

Isopropylbenzene

Concen: 3.938 ug/l

RT: 12.48 min Scan# 1795

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 105 Resp: 38834

Ion Ratio Lower Upper

105 100

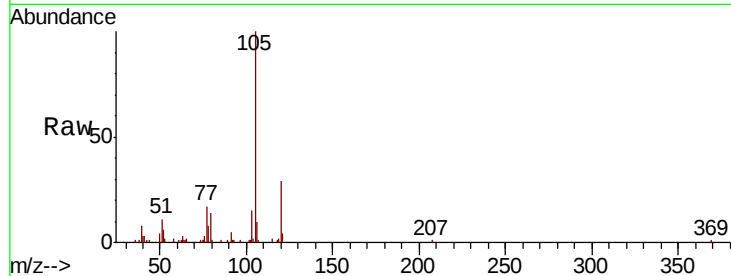
120 28.1 13.3 39.8

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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

25000

20000

15000

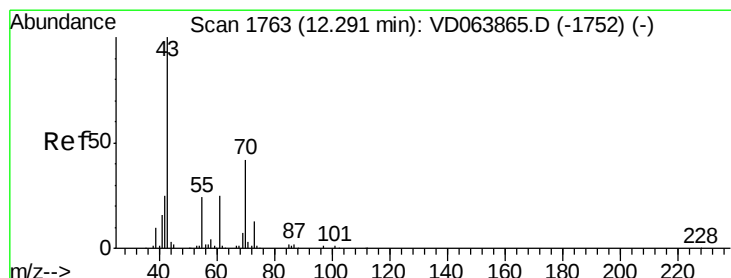
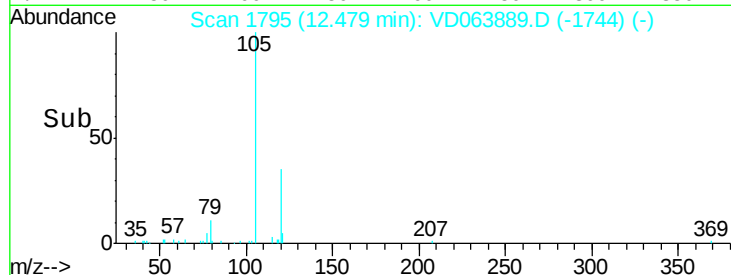
10000

5000

0

12.40 12.45 12.50 12.55

Time-->



#74

N-ethyl acetate

Concen: 4.509 ug/l

RT: 12.29 min Scan# 1763

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion: 43 Resp: 9573

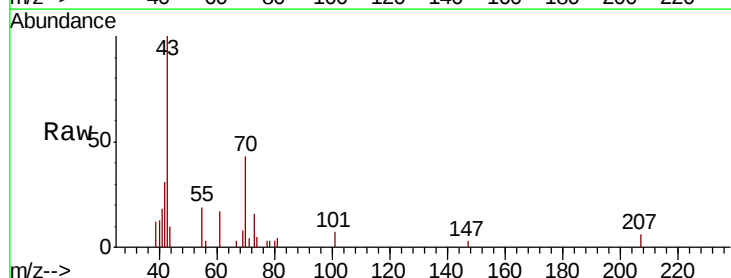
Ion Ratio Lower Upper

43 100

70 42.0 35.8 53.6

55 25.1 19.4 29.0

61 21.2 20.4 30.6



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 61.00 (60.70 to 61.70): VDC

8000

6000

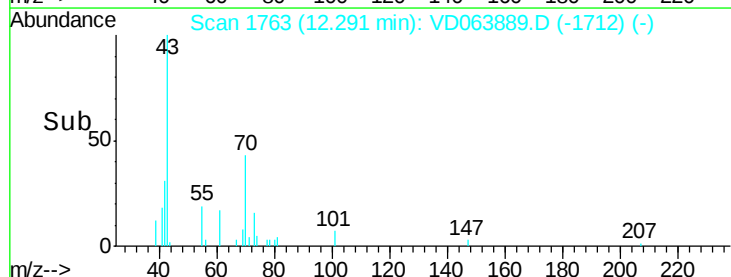
4000

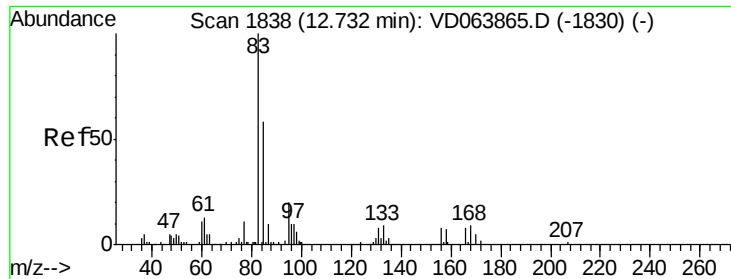
2000

0

12.20 12.30

Time-->





#75

1,1,2,2-Tetrachloroethane

Concen: 3.885 ug/l

RT: 12.73 min Scan# 1838

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

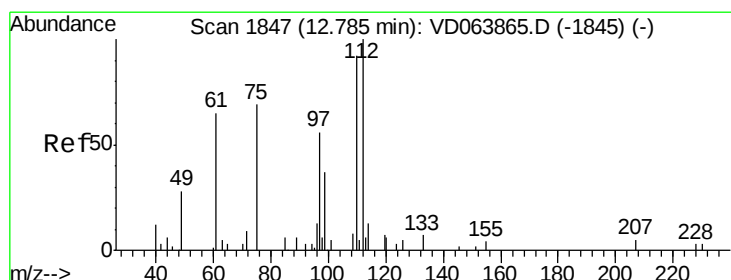
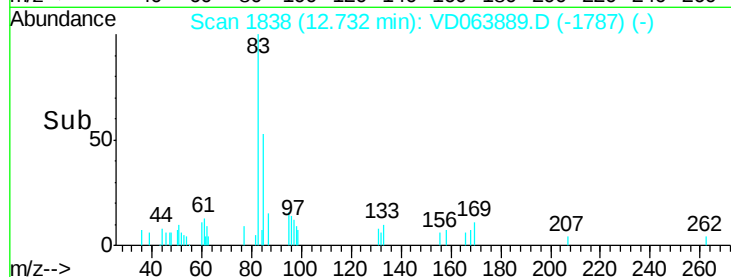
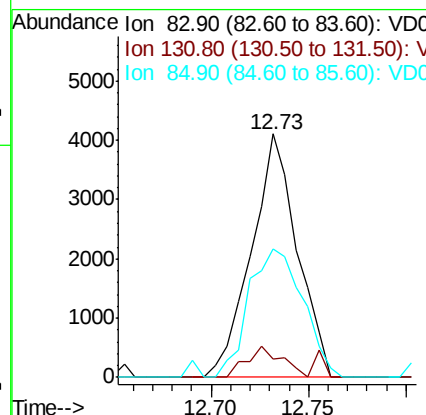
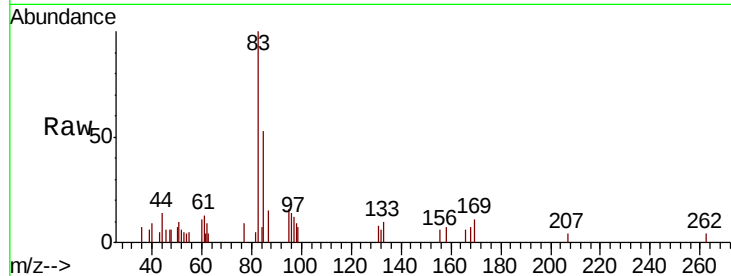
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	83	Resp:	6666
Ion Ratio	Lower	Upper	
83	100		
131	9.8	5.6	16.8
85	62.5	32.3	96.8

Manual Integrations
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#76

1,2,3-Trichloropropane

Concen: 3.603 ug/l m

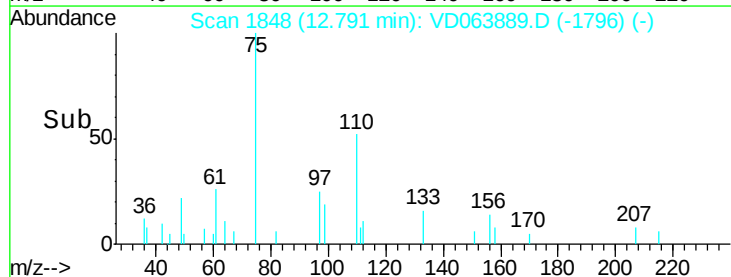
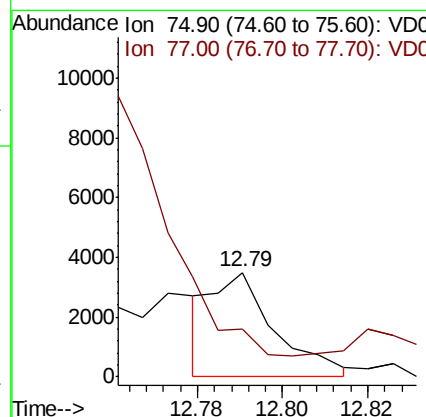
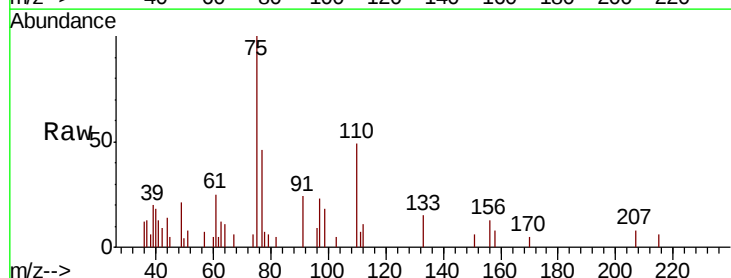
RT: 12.79 min Scan# 1848

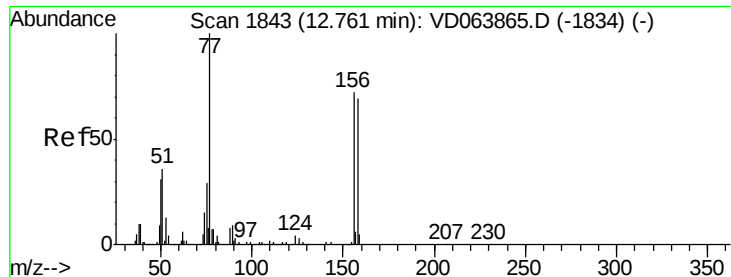
Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	75	Resp:	3540
Ion Ratio	Lower	Upper	
75	100		
77	0.0	0.0	0.0





#77

Bromobenzene

Concen: 4.402 ug/l

RT: 12.76 min Scan# 1843

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

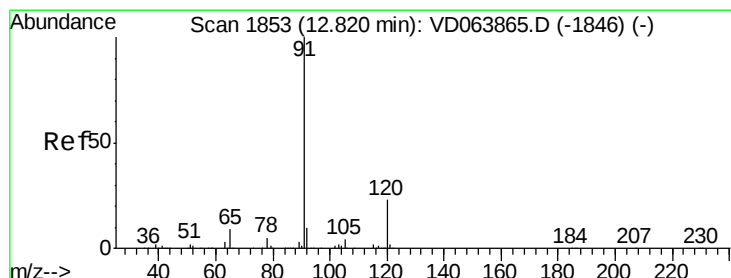
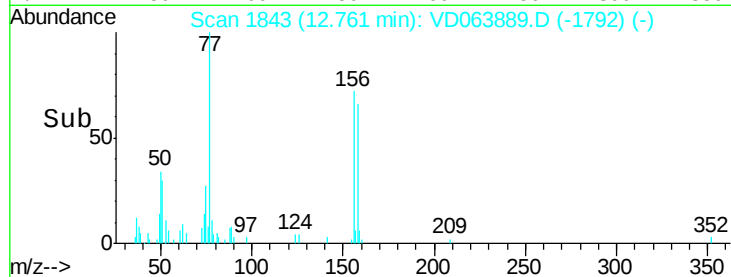
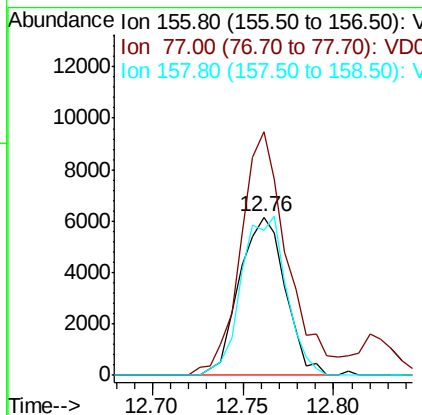
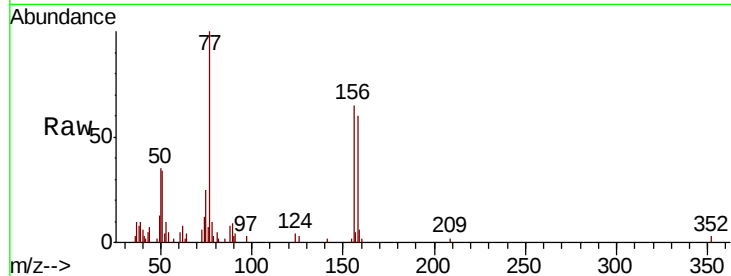
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	156	Resp:	10815
Ion Ratio	Lower	Upper	
156	100		
77	157.2	80.3	241.0
158	99.2	47.4	142.2

Manual Integrations
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#78

n-propylbenzene

Concen: 3.971 ug/l

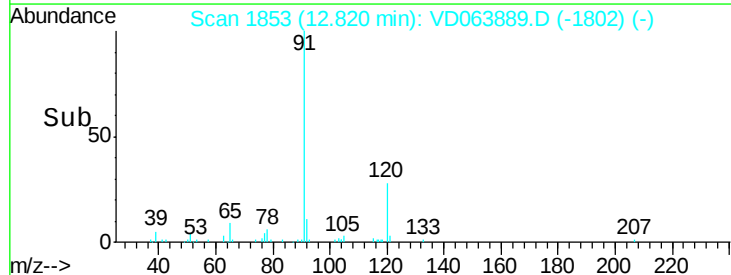
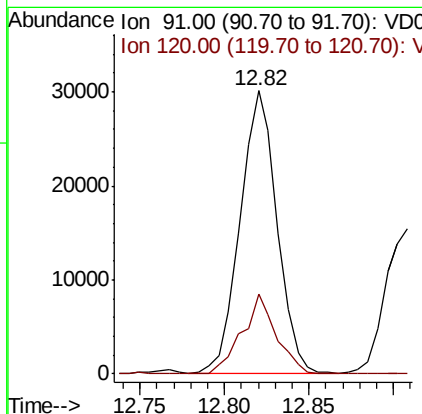
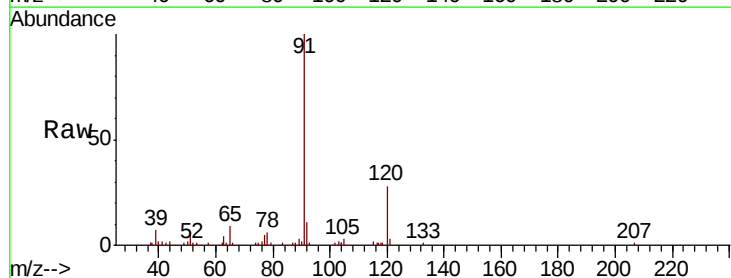
RT: 12.82 min Scan# 1853

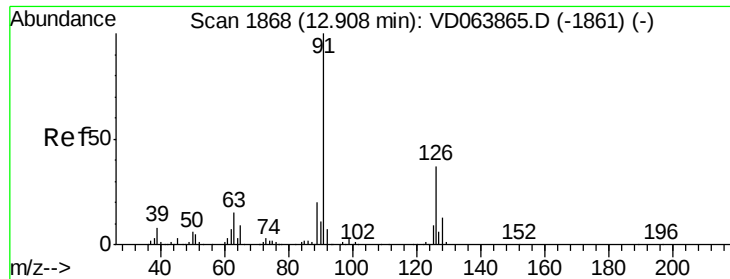
Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	91	Resp:	45963
Ion Ratio	Lower	Upper	
91	100		
120	25.9	12.0	36.0





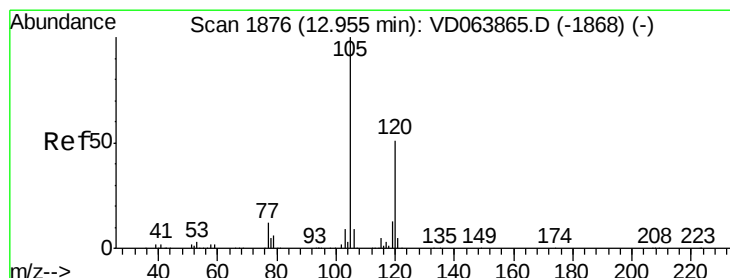
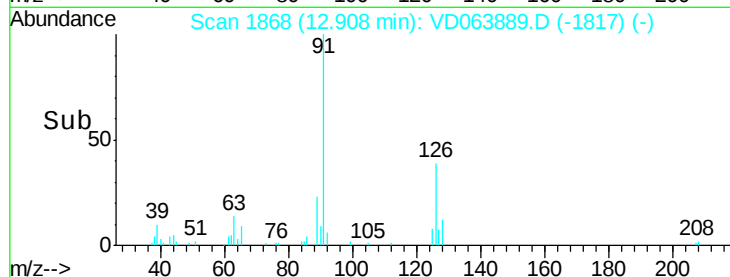
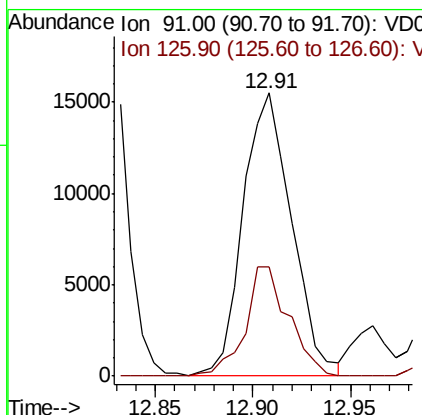
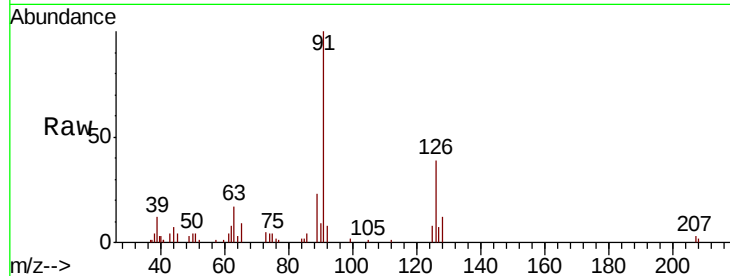
#79
2-Chlorotoluene
Concen: 4.191 ug/l
RT: 12.91 min Scan# 1868
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion: 91 Resp: 26744
Ion Ratio Lower Upper
91 100
126 34.6 18.4 55.2

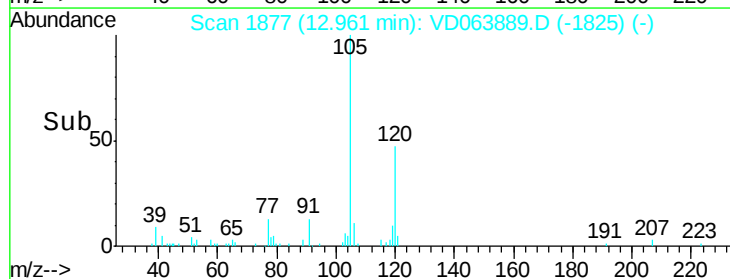
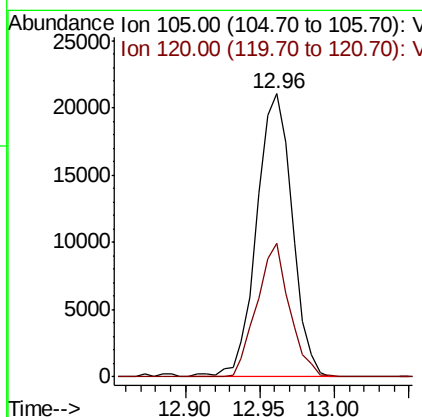
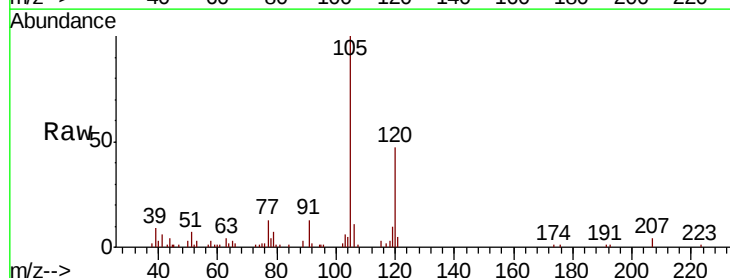
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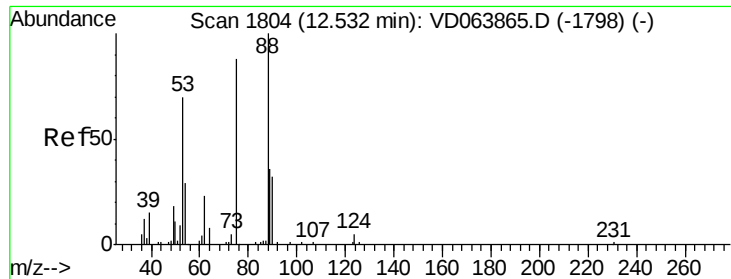
MMDadoda
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#80
1,3,5-Trimethylbenzene
Concen: 4.205 ug/l
RT: 12.96 min Scan# 1877
Delta R.T. 0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion: 105 Resp: 34590
Ion Ratio Lower Upper
105 100
120 43.7 25.9 77.8





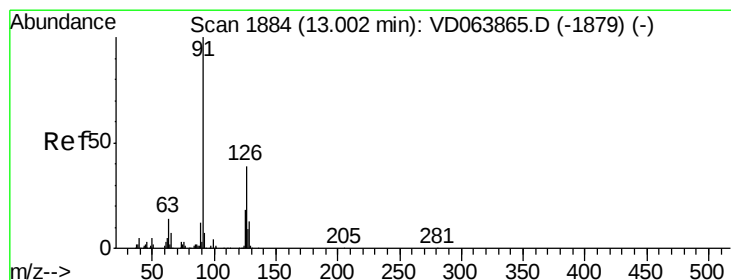
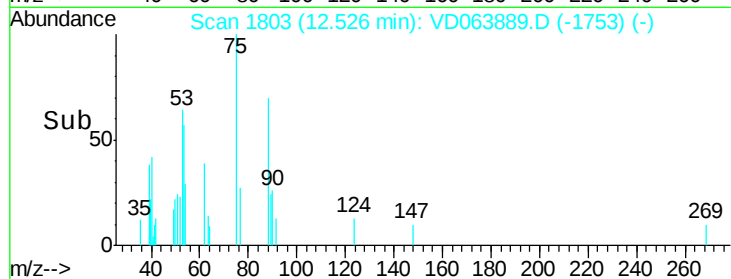
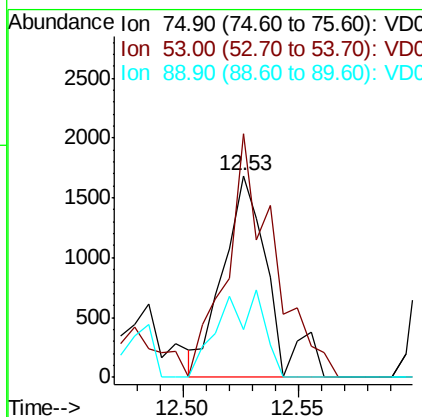
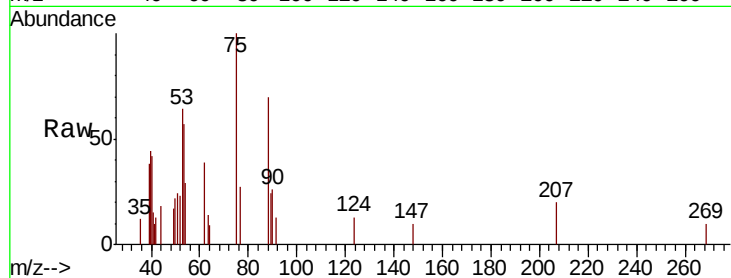
#81
trans-1,4-Dichloro-2-butene
Concen: 4.150 ug/l
RT: 12.53 min Scan# 1803
Delta R.T. -0.01 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
75	100		
53	124.5	75.0	112.6#
89	41.4	38.2	57.4

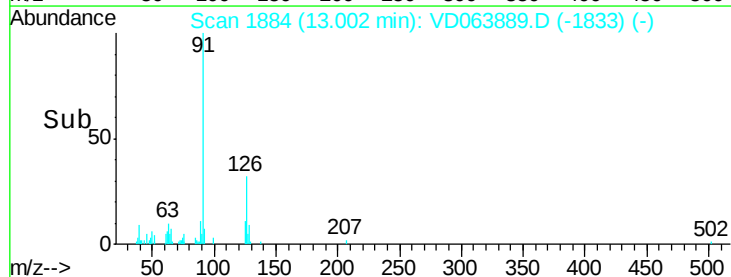
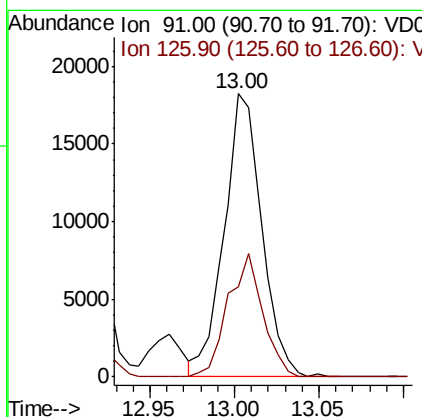
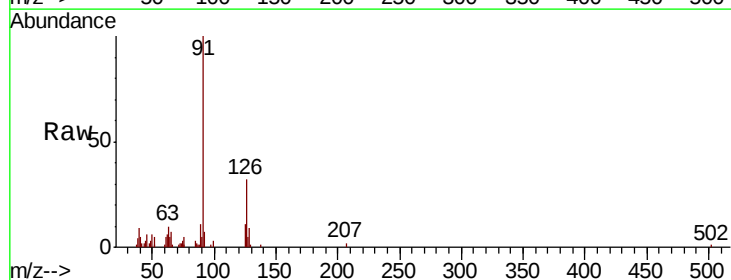
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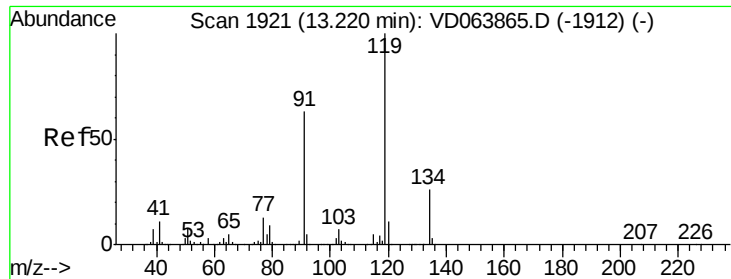
MMDadoda
10/8/2019 3:11:38 PM



#82
4-Chlorotoluene
Concen: 4.158 ug/l
RT: 13.00 min Scan# 1884
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
91	100		
126	40.4	18.6	55.8





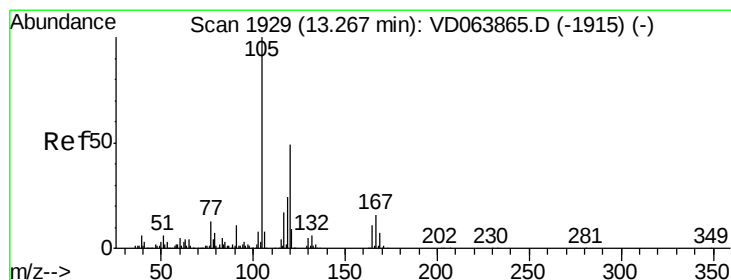
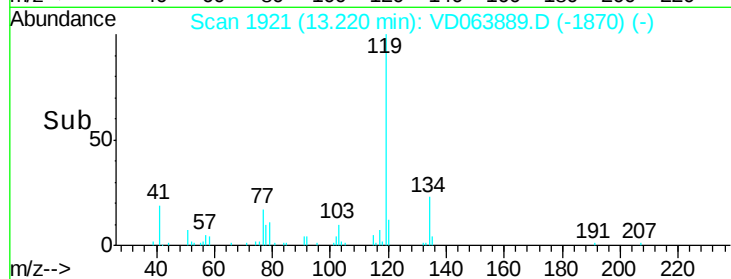
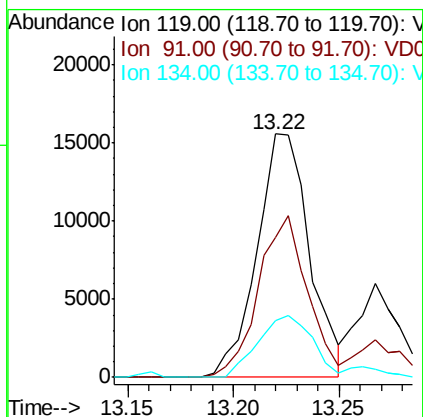
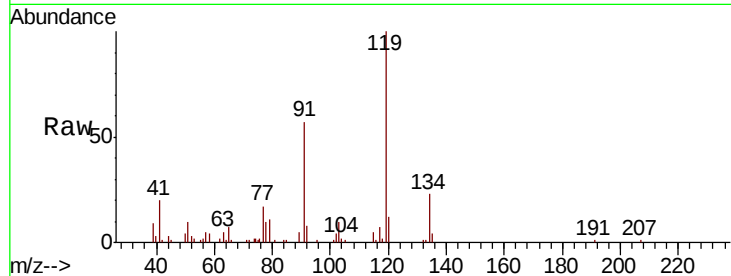
#83
 tert-Butylbenzene
 Concen: 3.695 ug/l
 RT: 13.22 min Scan# 1921
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
119	100		
91	61.6	30.0	90.0
134	26.0	13.0	38.9

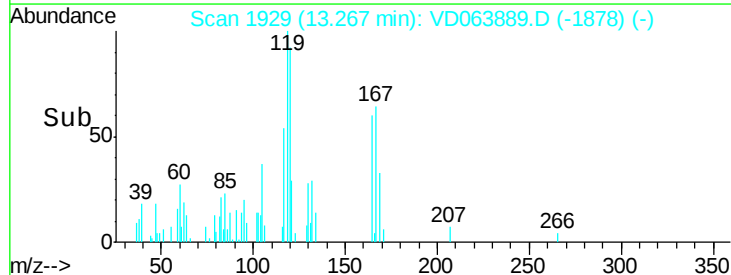
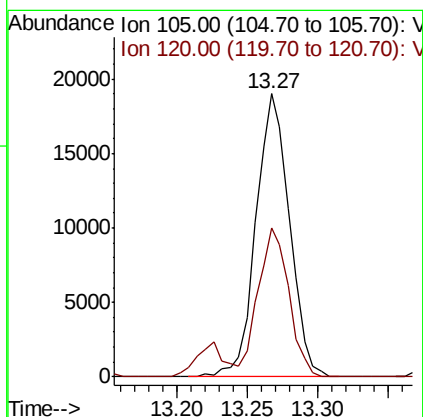
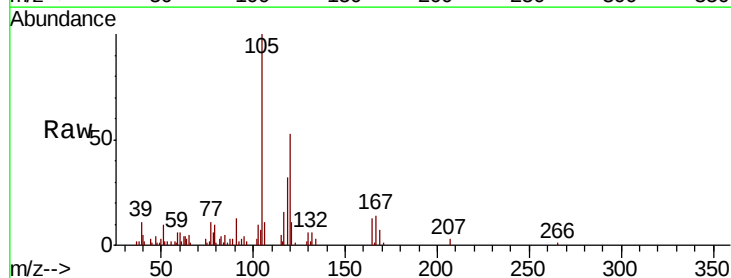
Manual Integrations
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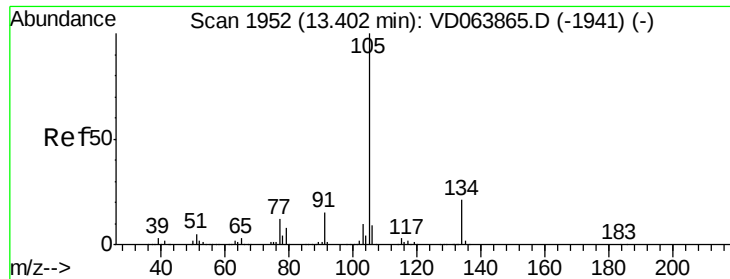
MMDadoda
 10/8/2019 3:11:38 PM



#84
 1,2,4-Trimethylbenzene
 Concen: 3.745 ug/l
 RT: 13.27 min Scan# 1929
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.1	23.8	71.5





#85

sec-Butylbenzene

Concen: 4.031 ug/l

RT: 13.40 min Scan# 1951

Delta R.T. -0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:105 Resp: 39854

Ion Ratio Lower Upper

105 100

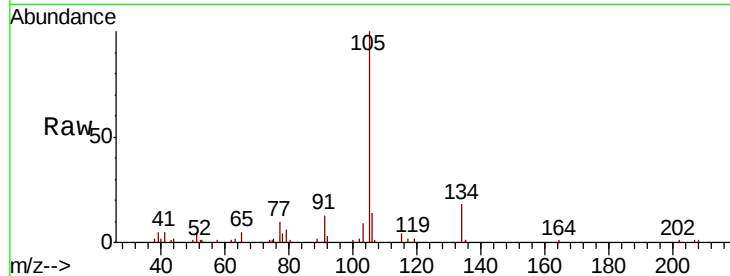
134 19.6 10.6 31.8

Manual Integrations

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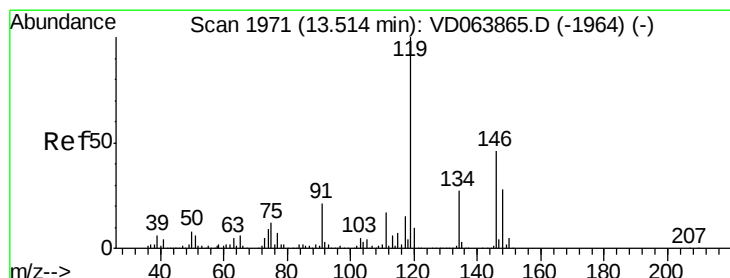
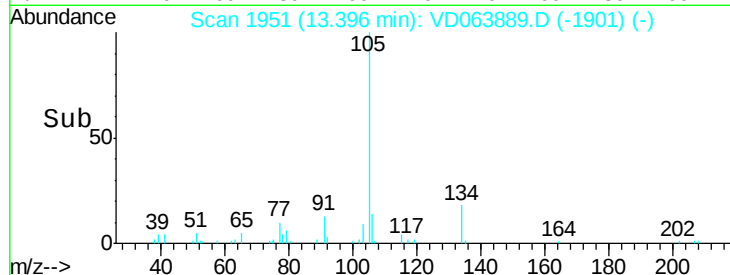
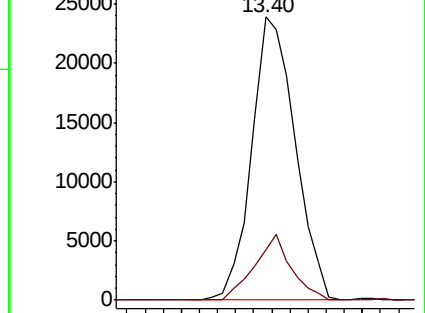
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 3.955 ug/l

RT: 13.51 min Scan# 1971

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

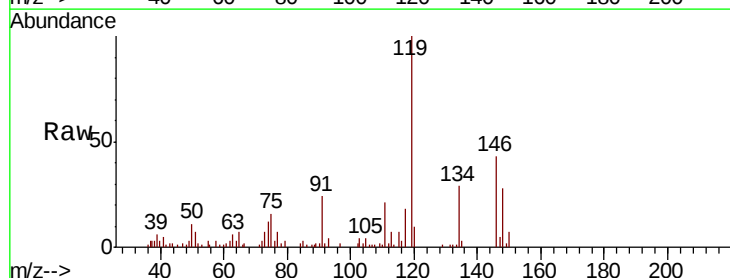
Tgt Ion:119 Resp: 37001

Ion Ratio Lower Upper

119 100

134 28.7 13.9 41.6

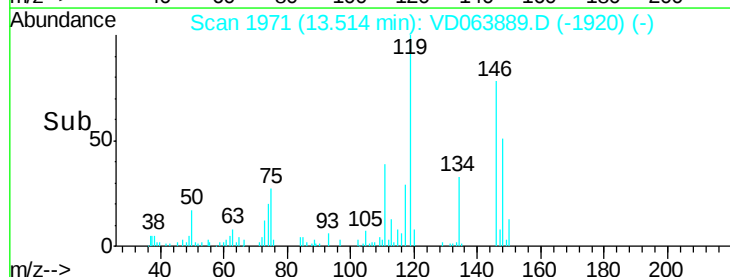
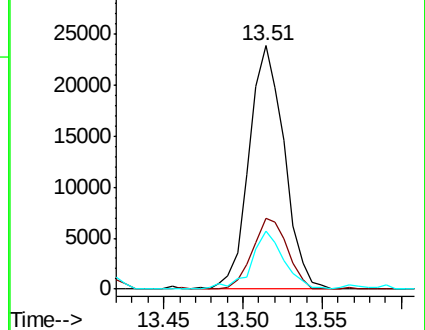
91 21.8 11.2 33.5

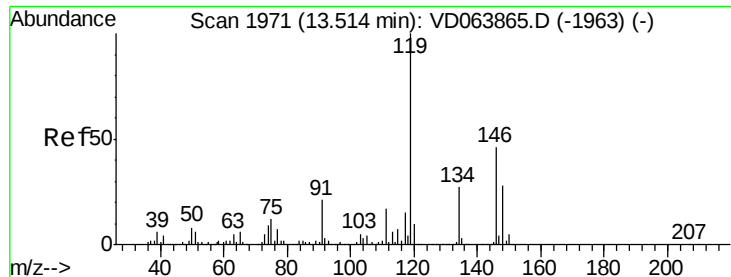


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V





#87

1,3-Dichlorobenzene

Concen: 3.951 ug/l

RT: 13.52 min Scan# 1972

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

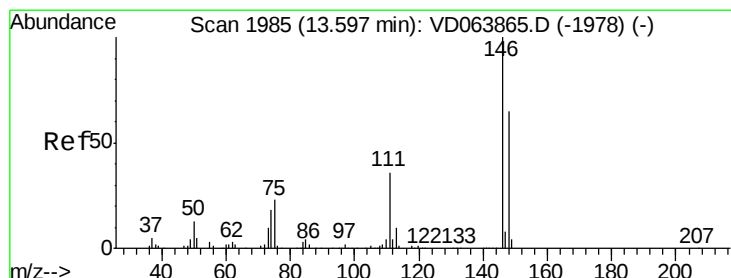
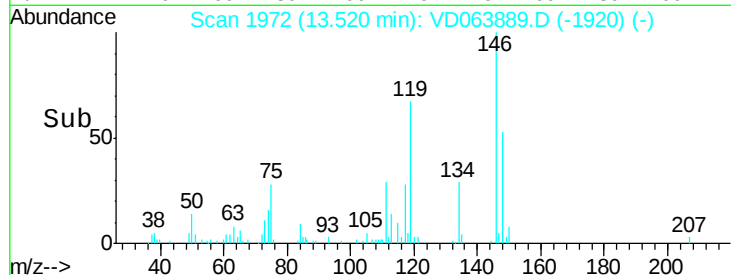
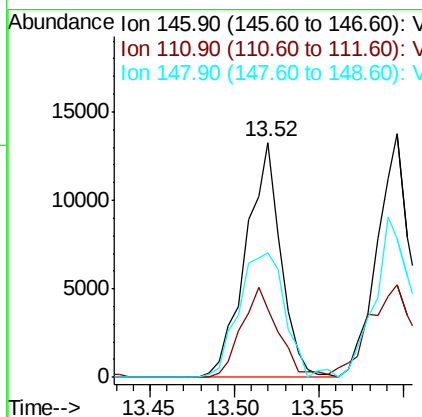
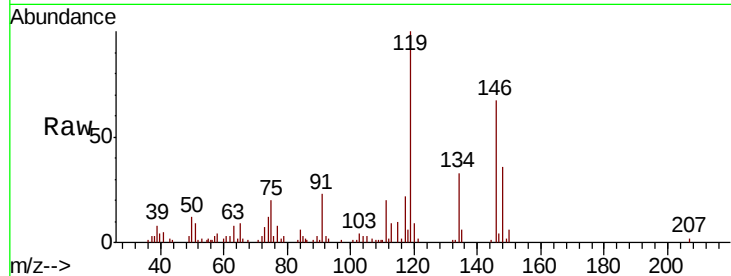
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	146	Resp:	19180
Ion Ratio	Lower	Upper	
146	100		
111	39.4	18.3	54.9
148	69.6	31.8	95.4

Manual Integrations
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#88

1,4-Dichlorobenzene

Concen: 4.036 ug/l

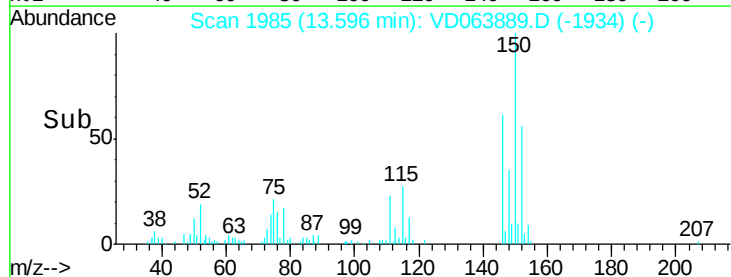
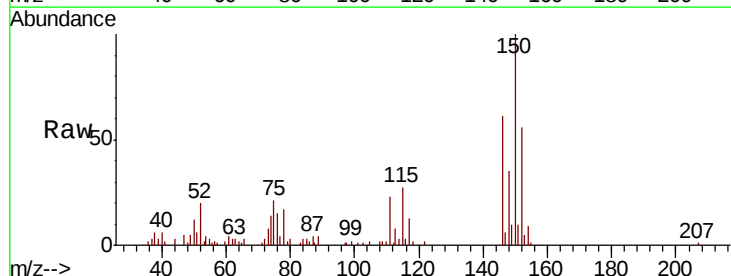
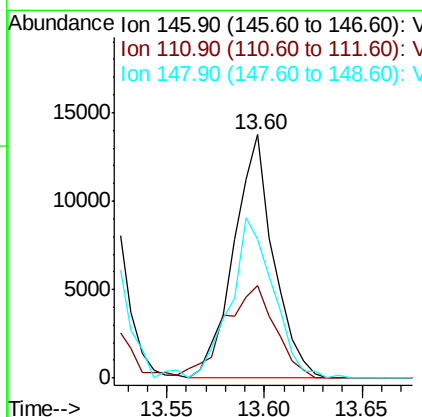
RT: 13.60 min Scan# 1985

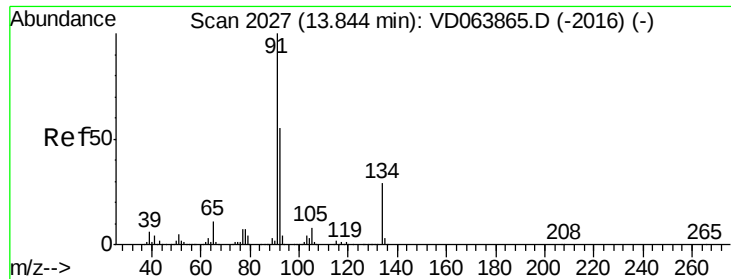
Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	146	Resp:	19328
Ion Ratio	Lower	Upper	
146	100		
111	48.3	18.6	56.0
148	70.8	32.6	98.0





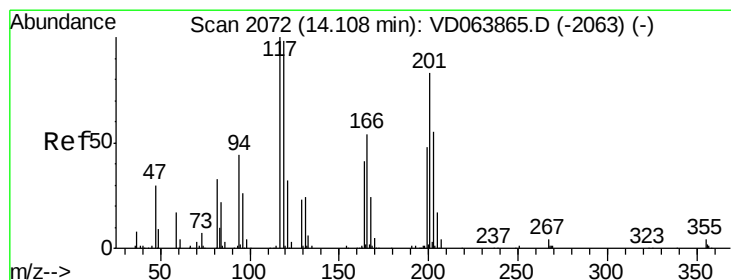
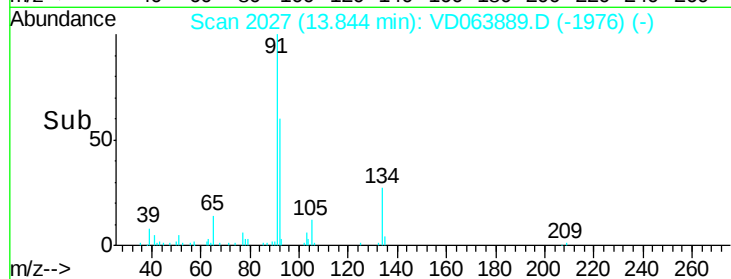
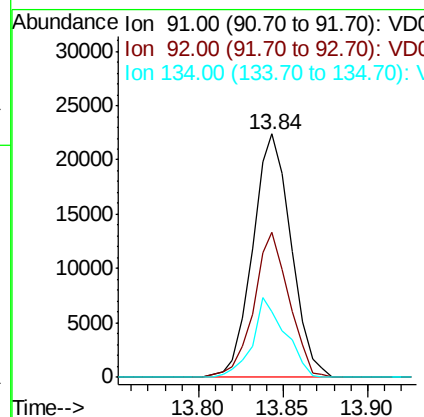
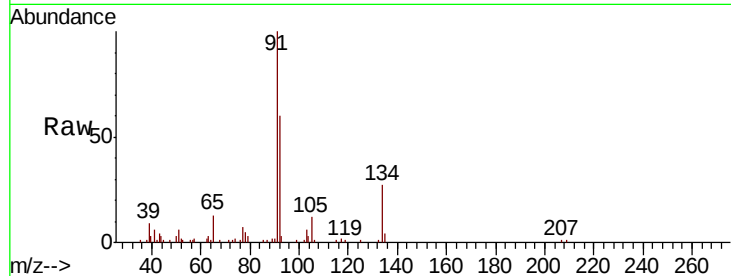
#89
n-Butylbenzene
Concen: 4.047 ug/l
RT: 13.84 min Scan# 2027
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
91	100		
92	54.9	26.8	80.3
134	28.2	14.4	43.0

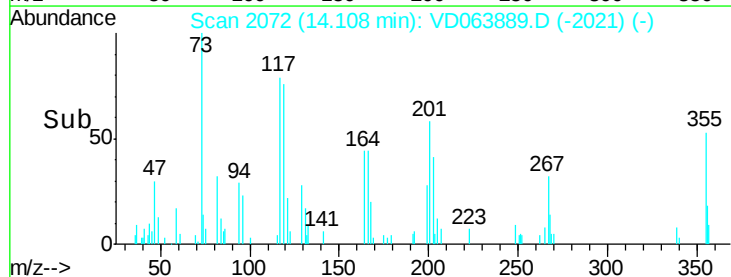
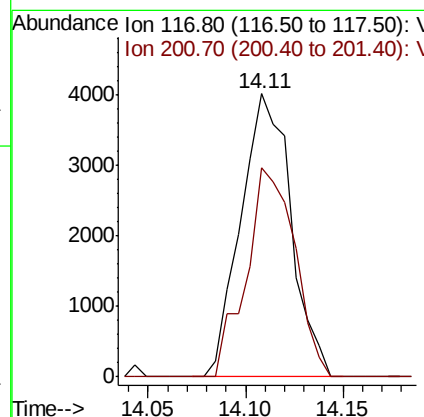
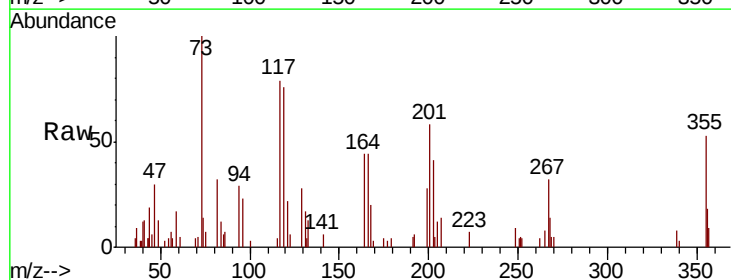
Manual Integrations
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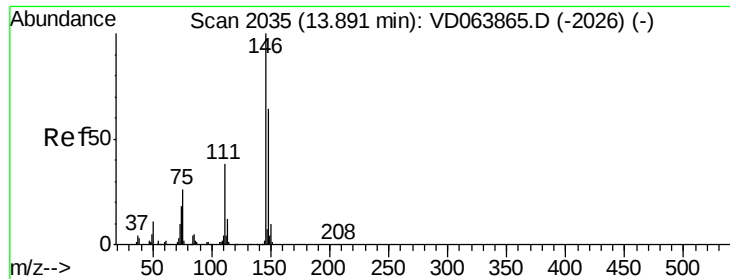
MMDadoda
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#90
Hexachloroethane
Concen: 4.251 ug/l
RT: 14.11 min Scan# 2072
Delta R.T. -0.00 min
Lab File: VD063889.D
Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
117	100		
201	71.2	40.6	121.7





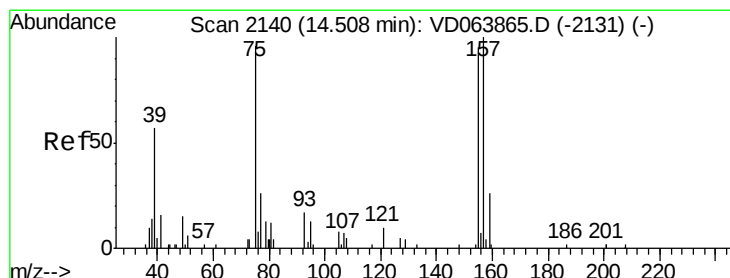
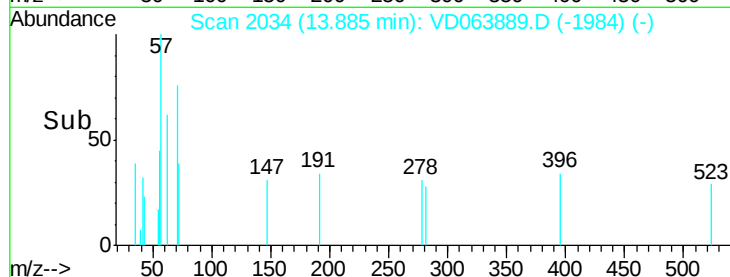
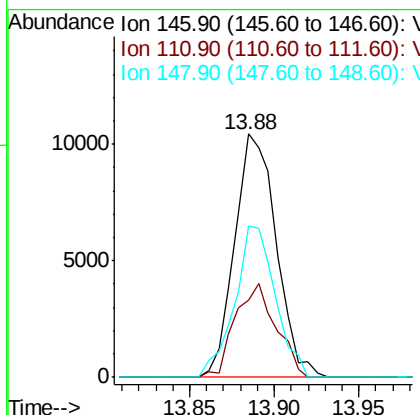
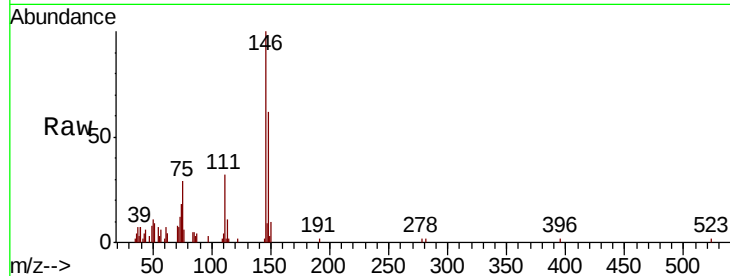
#91
 1,2-Dichlorobenzene
 Concen: 4.272 ug/l
 RT: 13.88 min Scan# 2034
 Delta R.T. -0.01 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	37.8	18.6	55.6
148	60.8	31.6	95.0

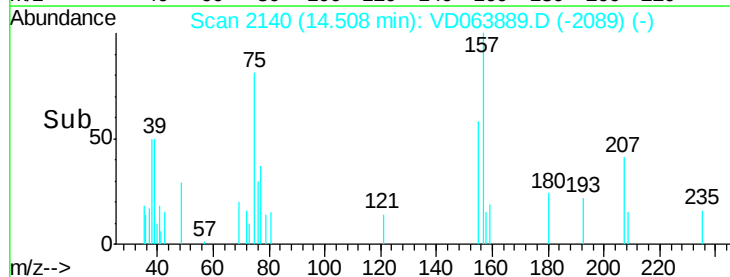
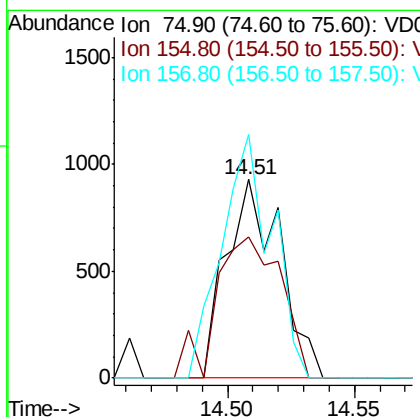
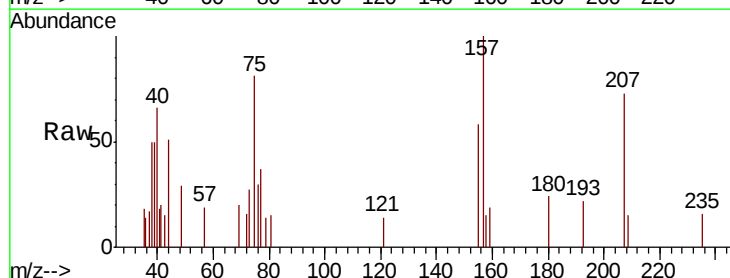
Manual Integrations
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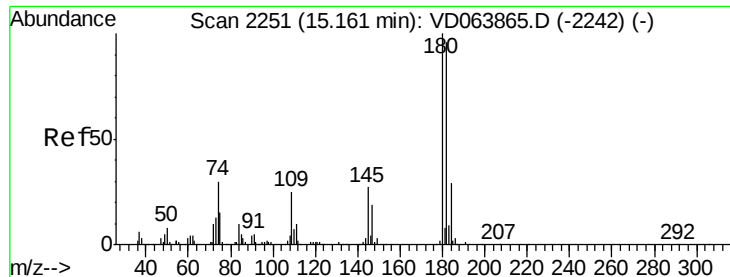
MMDadoda
 10/8/2019 3:11:38 PM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 4.619 ug/l
 RT: 14.51 min Scan# 2140
 Delta R.T. 0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
75	100		
155	85.7	43.9	131.6
157	114.6	56.0	167.9





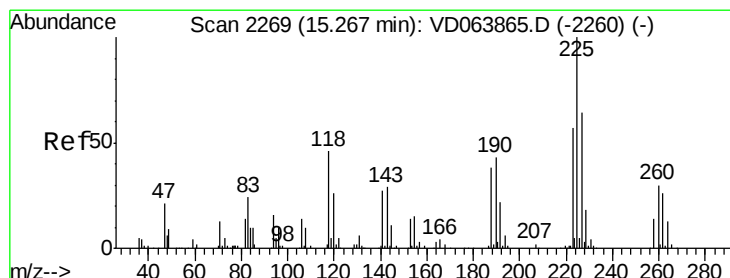
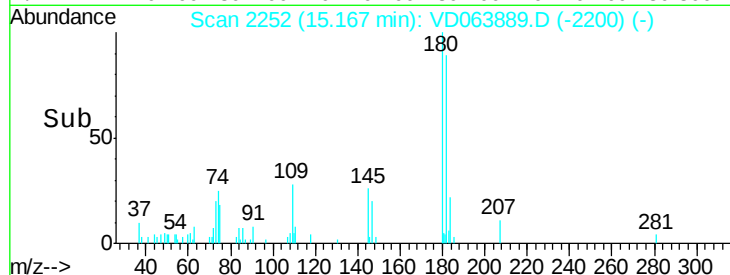
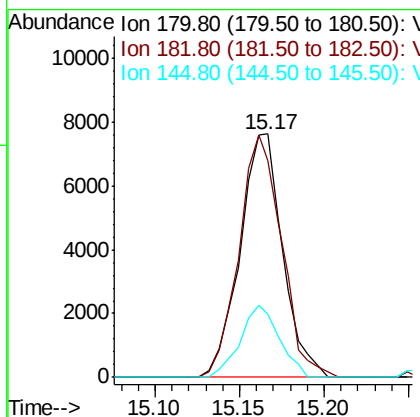
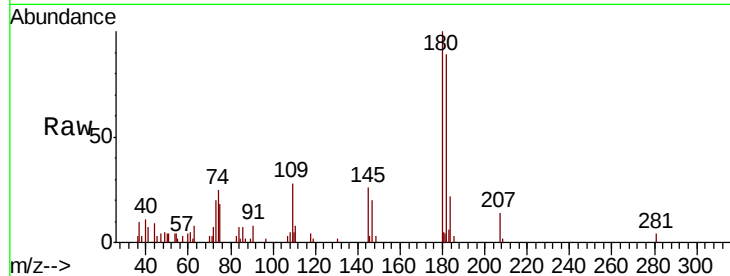
#93
 1,2,4-Trichlorobenzene
 Concen: 4.148 ug/l
 RT: 15.17 min Scan# 2252
 Delta R.T. 0.01 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Instrument :
 MSVOA_D
 ClientSampleId :
 LOD-MDL-SOIL-01-QT4-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	99.4	47.4	142.3
145	27.0	13.9	41.7

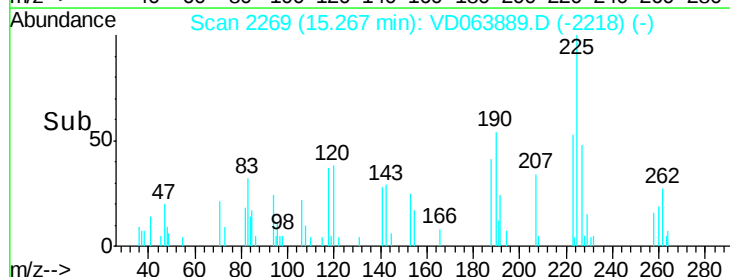
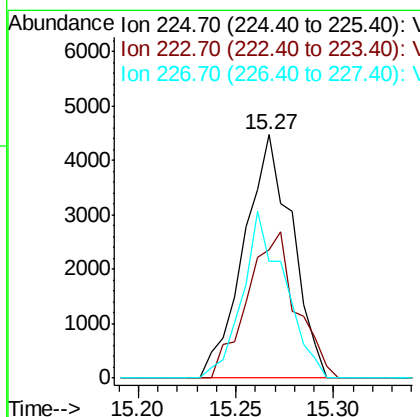
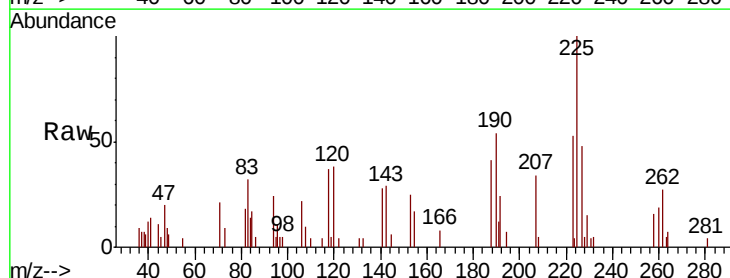
Manual Integrations
 APPROVED

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 10/8/2019 3:11:38 PM



#94
 Hexachlorobutadiene
 Concen: 4.300 ug/l
 RT: 15.27 min Scan# 2269
 Delta R.T. -0.00 min
 Lab File: VD063889.D
 Acq: 04 Oct 2019 17:11

Tgt Ion	Ratio	Lower	Upper
225	100		
223	61.0	29.5	88.6
227	59.8	30.8	92.4





#95

Naphthalene

Concen: 3.778 ug/l

RT: 15.40 min Scan# 2291

Delta R.T. -0.00 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Instrument :

MSVOA_D

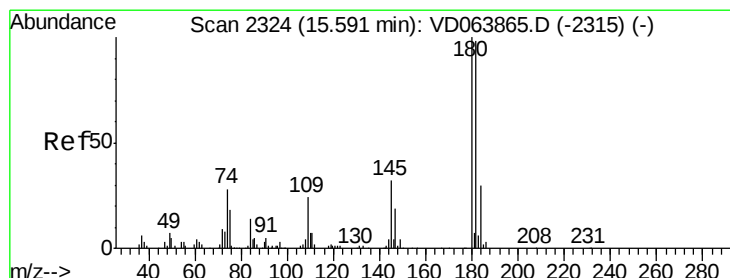
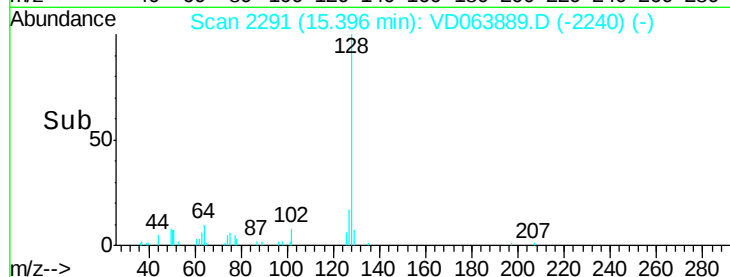
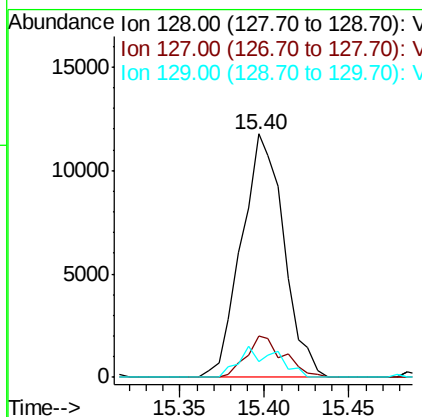
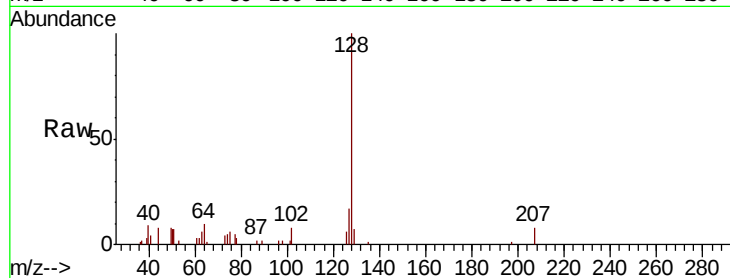
ClientSampleId :

LOD-MDL-SOIL-01-QT4-2019

Tot Ion:	128	Resp:	20494
Ion Ratio	Lower	Upper	
128	100		
127	15.2	10.6	16.0
129	11.3	8.6	13.0

Manual Integrations
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10/8/2019 3:11:38 PM



#96

1,2,3-Trichlorobenzene

Concen: 3.848 ug/l

RT: 15.60 min Scan# 2325

Delta R.T. 0.01 min

Lab File: VD063889.D

Acq: 04 Oct 2019 17:11

Tgt Ion:	180	Resp:	10716
Ion Ratio	Lower	Upper	
180	100		
182	100.7	47.0	141.0
145	32.4	15.3	45.9

