

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW100919\
 Data File : VW013500.D
 Acq On : 09 Oct 2019 13:35
 Operator : SY/VA
 Sample : K5111-03 4PPBMDL
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Manual Integrations
 APPROVED

MMDadoda
 10/11/2019 4:40:16 PM

Quant Time: Oct 10 03:53:37 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W100819S.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 10 03:44:30 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.95	168	361761	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	511449	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	440304	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	224898	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.31	65	133602	47.80	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.60%	
35) Dibromofluoromethane	7.88	113	138764	48.58	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.16%	
50) Toluene-d8	10.32	98	576426	48.02	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.04%	
62) 4-Bromofluorobenzene	12.62	95	194511	48.23	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.46%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.01	85	4108	3.428	ug/l	96
3) Chloromethane	2.21	50	9767	4.637	ug/l	98
4) Vinyl Chloride	2.35	62	12927	4.161	ug/l	95
5) Bromomethane	2.78	94	8117	4.379	ug/l	96
6) Chloroethane	2.92	64	7480	4.287	ug/l	98
7) Trichlorofluoromethane	3.25	101	6199	4.217	ug/l	99
8) Diethyl Ether	3.68	74	6497	4.270	ug/l	100
9) 1,1,2-Trichlorotrifluoroet	4.06	101	12355	4.078	ug/l	94
10) Methyl Iodide	4.27	142	19631	4.092	ug/l #	92
11) Tert butyl alcohol	5.21	59	5240m	22.157	ug/l	
12) 1,1-Dichloroethene	4.04	96	13050	4.156	ug/l	98
13) Acrolein	3.89	56	1278m	5.609	ug/l	
14) Allyl chloride	4.67	41	19747	4.093	ug/l	98
15) Acrylonitrile	5.37	53	13389	18.828	ug/l	98
16) Acetone	4.13	43	13457	20.690	ug/l	98
17) Carbon Disulfide	4.38	76	35386	4.015	ug/l #	93
18) Methyl Acetate	4.67	43	8766m	4.705	ug/l	
19) Methyl tert-butyl Ether	5.43	73	20192	4.253	ug/l	99
20) Methylene Chloride	4.92	84	21688	6.057	ug/l	95
21) trans-1,2-Dichloroethene	5.42	96	13449	4.031	ug/l	91
22) Diisopropyl ether	6.31	45	37995	4.203	ug/l	96
23) Vinyl Acetate	6.25	43	97847	18.028	ug/l	100
24) 1,1-Dichloroethane	6.21	63	23165	4.192	ug/l	96
25) 2-Butanone	7.18	43	19381	20.219	ug/l #	87
26) 2,2-Dichloropropane	7.16	77	17888	5.022	ug/l	93
27) cis-1,2-Dichloroethene	7.17	96	15865	4.494	ug/l	98
28) Bromochloromethane	7.52	49	8461	4.293	ug/l #	100
29) Tetrahydrofuran	7.54	42	11492	19.616	ug/l	96
30) Chloroform	7.68	83	24348	4.555	ug/l	96
31) Cyclohexane	7.95	56	28794	4.923	ug/l #	76
32) 1,1,1-Trichloroethane	7.87	97	18172	4.183	ug/l	98
36) 1,1-Dichloropropene	8.08	75	19905	4.302	ug/l	98
37) Ethyl Acetate	7.25	43	8246	3.928	ug/l #	94
38) Carbon Tetrachloride	8.07	117	16850	4.108	ug/l #	91

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.34	83	25245	4.212	ug/l	95
40) Benzene	8.32	78	54724	4.237	ug/l	91
41) Methacrylonitrile	7.48	41	3989	3.342	ug/l	92
42) 1,2-Dichloroethane	8.40	62	14333	4.391	ug/l	97
43) Isopropyl Acetate	8.42	43	15303	4.035	ug/l	99
44) Trichloroethene	9.10	130	15354	4.167	ug/l	98
45) 1,2-Dichloropropane	9.37	63	13419	4.329	ug/l	93
46) Dibromomethane	9.46	93	6524	4.225	ug/l	98
47) Bromodichloromethane	9.65	83	16552	4.312	ug/l	99
48) Methyl methacrylate	9.43	41	6413	3.433	ug/l	93
49) 1,4-Dioxane	9.46	88	2008	74.051	ug/l #	91
51) 4-Methyl-2-Pentanone	10.21	43	40220	20.172	ug/l	99
52) Toluene	10.38	92	35447	4.261	ug/l	98
53) t-1,3-Dichloropropene	10.61	75	15895	3.985	ug/l	94
54) cis-1,3-Dichloropropene	10.07	75	20108	4.161	ug/l	95
55) 1,1,2-Trichloroethane	10.79	97	9315	4.019	ug/l	93
56) Ethyl methacrylate	10.65	69	11324	3.627	ug/l	95
57) 1,3-Dichloropropane	10.93	76	16880	4.241	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.93	63	26444	17.954	ug/l	99
59) 2-Hexanone	10.97	43	24160	17.671	ug/l	98
60) Dibromochloromethane	11.13	129	10880	4.081	ug/l	93
61) 1,2-Dibromoethane	11.24	107	9084	4.120	ug/l	100
64) Tetrachloroethene	10.87	164	14356	4.430	ug/l	87
65) Chlorobenzene	11.66	112	36985	4.227	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.73	131	12512	4.117	ug/l	99
67) Ethyl Benzene	11.73	91	67862	4.244	ug/l	100
68) m/p-Xylenes	11.84	106	51302	8.432	ug/l	99
69) o-Xylene	12.16	106	23819	4.237	ug/l	98
70) Styrene	12.18	104	39338	4.076	ug/l	99
71) Bromoform	12.35	173	6790	4.072	ug/l #	92
73) Isopropylbenzene	12.46	105	65247	4.050	ug/l	97
74) N-amyl acetate	12.27	43	12530	3.556	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.71	83	11390	4.148	ug/l	99
76) 1,2,3-Trichloropropane	12.77	75	7302m	3.898	ug/l	
77) Bromobenzene	12.74	156	16013	4.194	ug/l	99
78) n-propylbenzene	12.80	91	76752	4.120	ug/l	97
79) 2-Chlorotoluene	12.89	91	43246	4.144	ug/l	99
80) 1,3,5-Trimethylbenzene	12.94	105	55922	4.178	ug/l	100
81) trans-1,4-Dichloro-2-buten	12.51	75	3318	3.621	ug/l	96
82) 4-Chlorotoluene	12.99	91	45527	4.203	ug/l	100
83) tert-Butylbenzene	13.21	119	47892	4.029	ug/l	96
84) 1,2,4-Trimethylbenzene	13.25	105	54298	4.102	ug/l	99
85) sec-Butylbenzene	13.38	105	66306	4.037	ug/l	99
86) p-Isopropyltoluene	13.50	119	61447	4.072	ug/l	100
87) 1,3-Dichlorobenzene	13.50	146	31069	4.291	ug/l	97
88) 1,4-Dichlorobenzene	13.58	146	30967	4.366	ug/l	94
89) n-Butylbenzene	13.82	91	53684	3.938	ug/l	98
90) Hexachloroethane	14.09	117	10248	3.969	ug/l	98
91) 1,2-Dichlorobenzene	13.87	146	26586	4.159	ug/l	99
92) 1,2-Dibromo-3-Chloropropan	14.48	75	1639	3.744	ug/l	87

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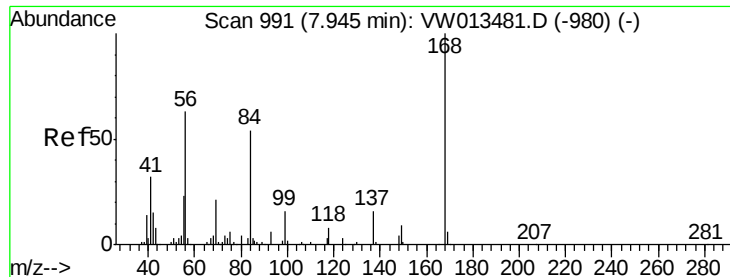
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.13	180	17281	3.825	ug/l	99
94) Hexachlorobutadiene	15.23	225	13128	4.373	ug/l	96
95) Naphthalene	15.36	128	25243	3.230	ug/l	98
96) 1,2,3-Trichlorobenzene	15.56	180	15223	3.853	ug/l	95

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:168 Resp: 361761

Ion Ratio Lower Upper

168 100

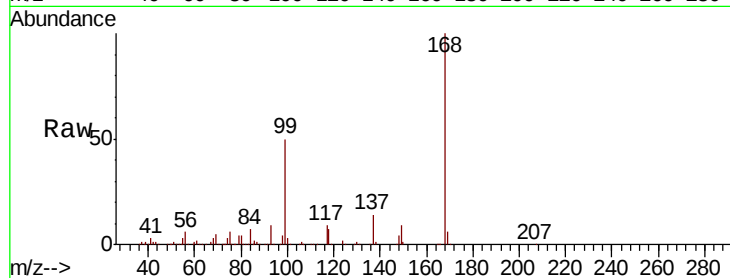
99 50.0 38.3 57.5

Manual Integrations

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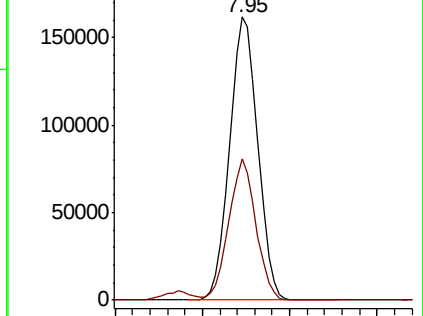
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10/11/2019 4:40:16 PM

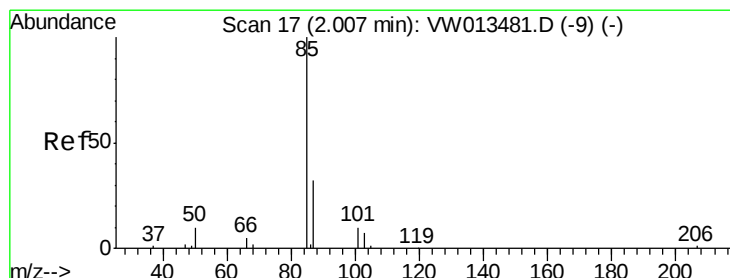
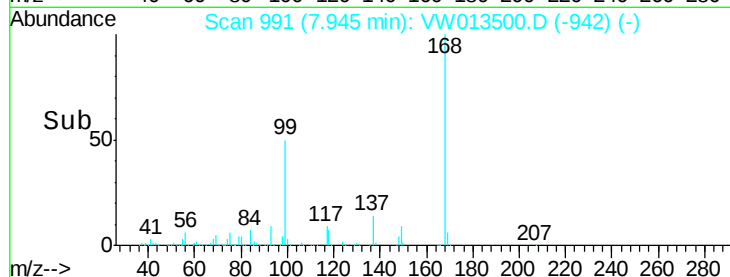


Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



Time-->



#2

Dichlorodifluoromethane

Concen: 3.428 ug/l

RT: 2.01 min Scan# 17

Delta R.T. 0.00 min

Lab File: VW013500.D

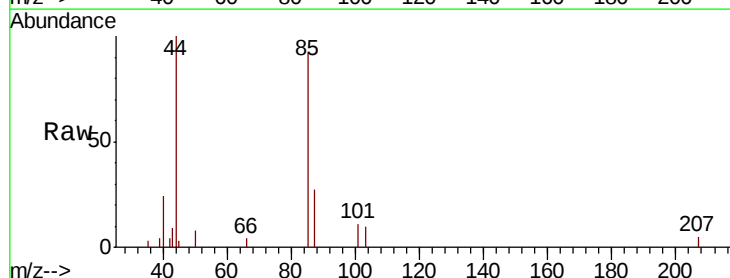
Acq: 09 Oct 2019 13:35

Tgt Ion: 85 Resp: 4108

Ion Ratio Lower Upper

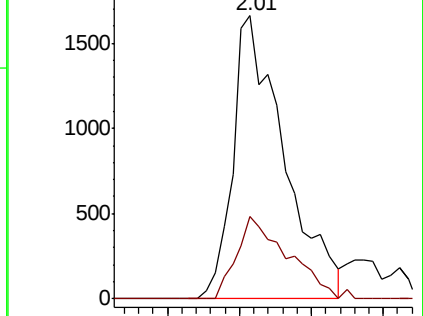
85 100

87 29.1 15.8 47.3

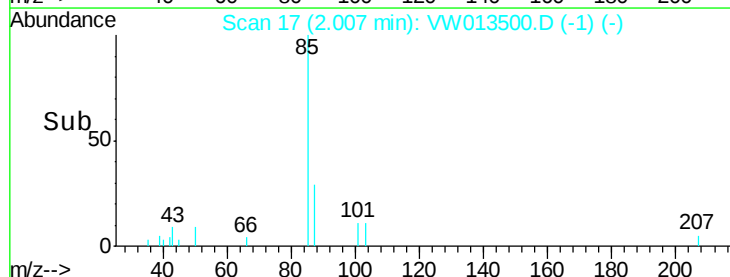


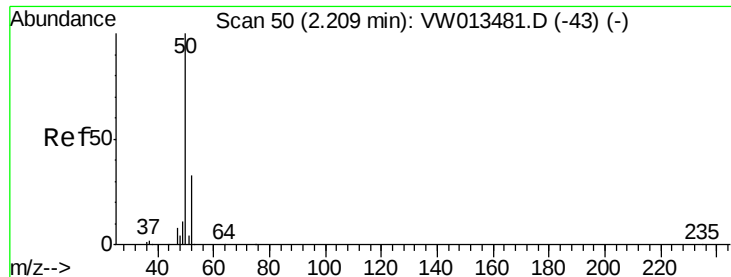
Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW



Time-->





#3

Chloromethane

Concen: 4.637 ug/l

RT: 2.21 min Scan# 50

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 50 Resp: 9767

Ion Ratio Lower Upper

50 100

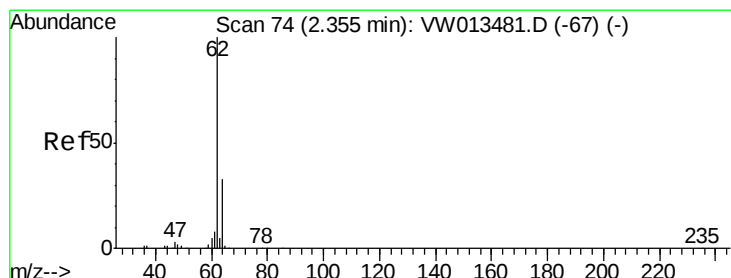
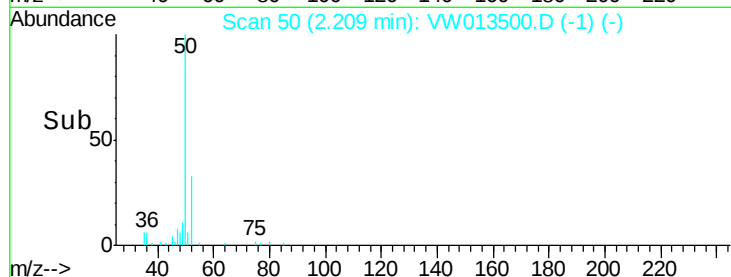
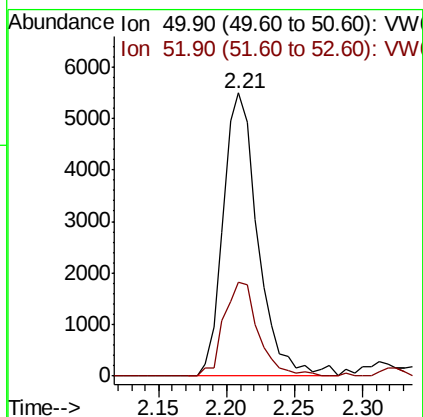
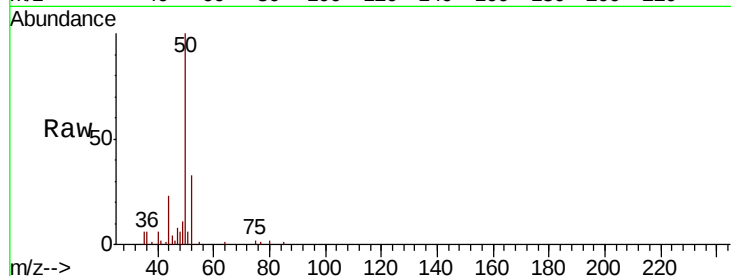
52 33.4 26.0 39.0

Manual Integrations

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#4

Vinyl Chloride

Concen: 4.161 ug/l

RT: 2.35 min Scan# 74

Delta R.T. 0.00 min

Lab File: VW013500.D

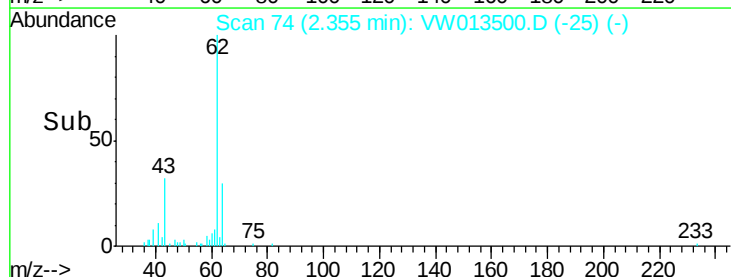
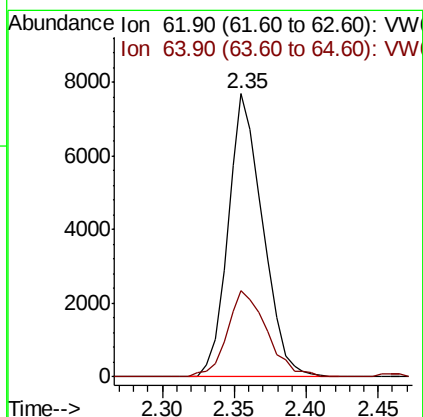
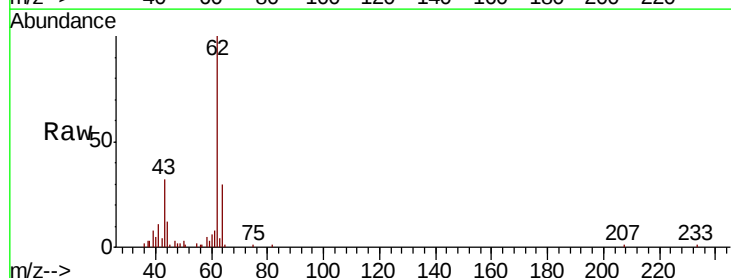
Acq: 09 Oct 2019 13:35

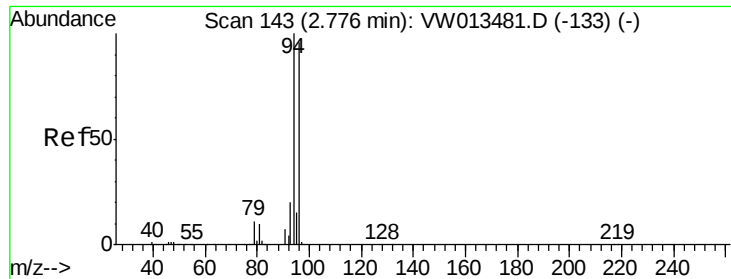
Tgt Ion: 62 Resp: 12927

Ion Ratio Lower Upper

62 100

64 30.3 26.6 39.8





#5

Bromomethane

Concen: 4.379 ug/l

RT: 2.78 min Scan# 143

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 94 Resp: 8117

Ion Ratio Lower Upper

94 100

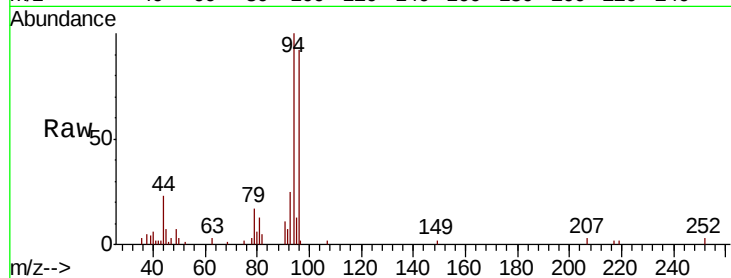
96 92.5 77.0 115.6

Manual Integrations

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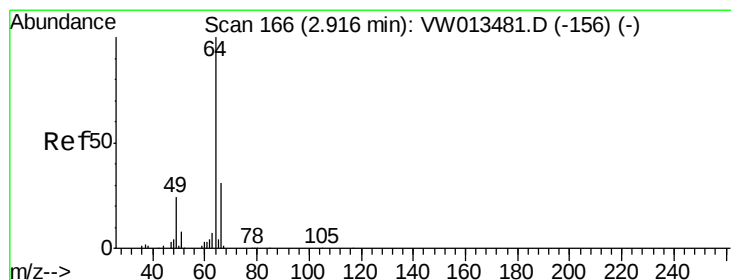
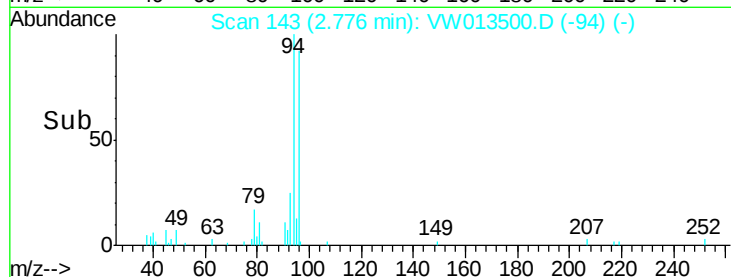
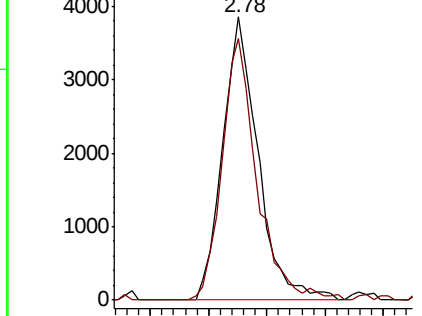
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Abundance Ion 93.90 (93.60 to 94.60): VW

Ion 95.90 (95.60 to 96.60): VW



#6

Chloroethane

Concen: 4.287 ug/l

RT: 2.92 min Scan# 166

Delta R.T. 0.00 min

Lab File: VW013500.D

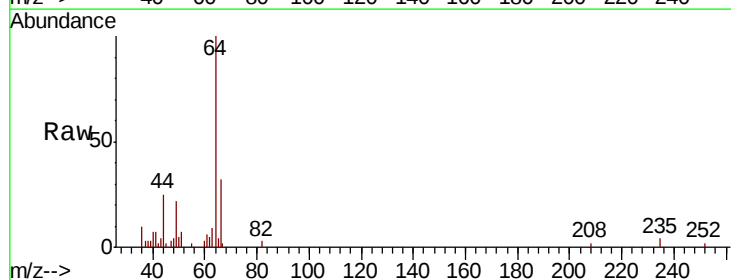
Acq: 09 Oct 2019 13:35

Tgt Ion: 64 Resp: 7480

Ion Ratio Lower Upper

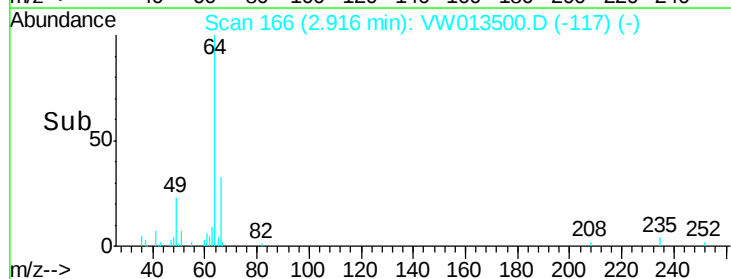
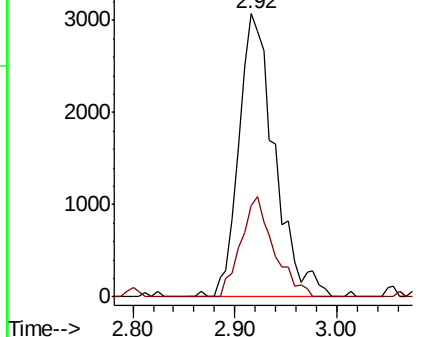
64 100

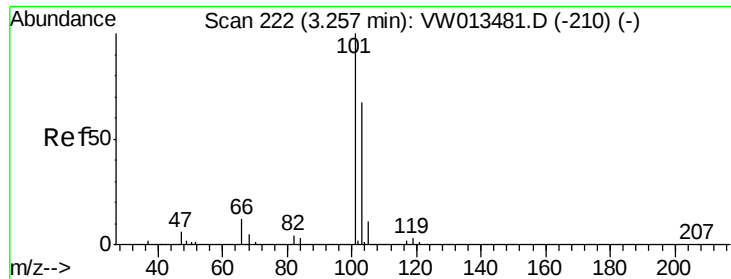
66 32.3 25.0 37.4



Abundance Ion 63.90 (63.60 to 64.60): VW

Ion 65.90 (65.60 to 66.60): VW





#7

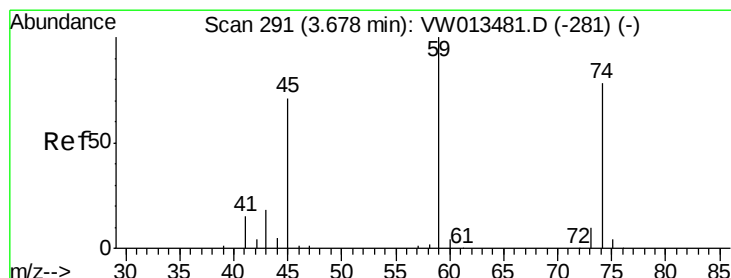
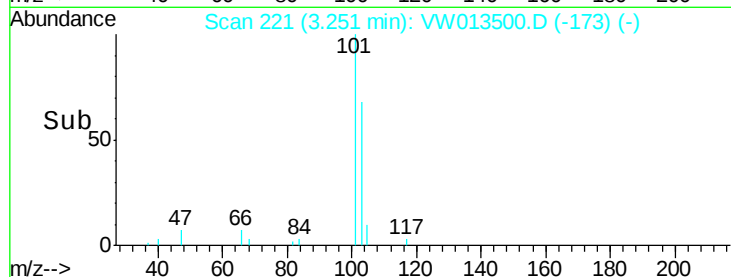
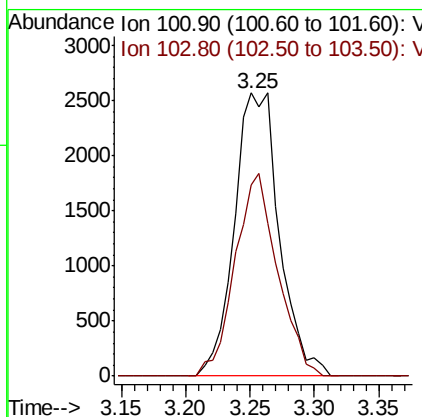
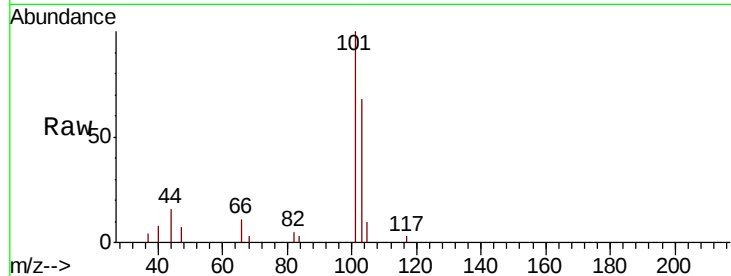
Trichlorofluoromethane
 Concen: 4.217 ug/l
 RT: 3.25 min Scan# 221
 Delta R.T. -0.01 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
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 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
101	100		
103	67.5	53.7	80.5

Manual Integrations
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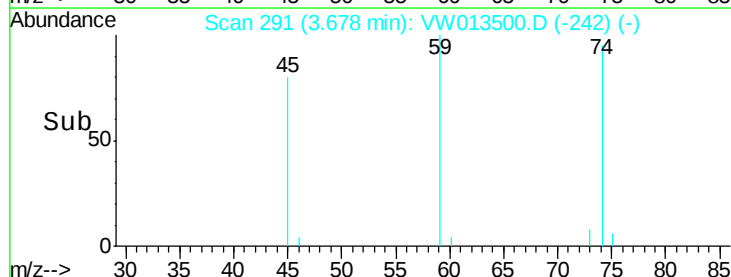
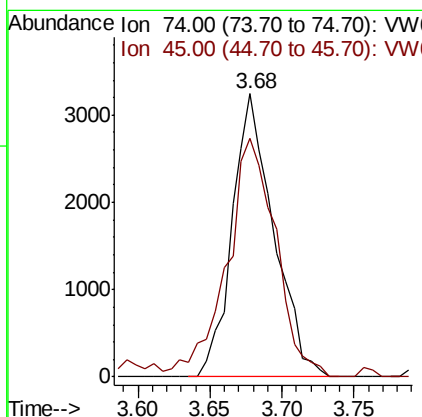
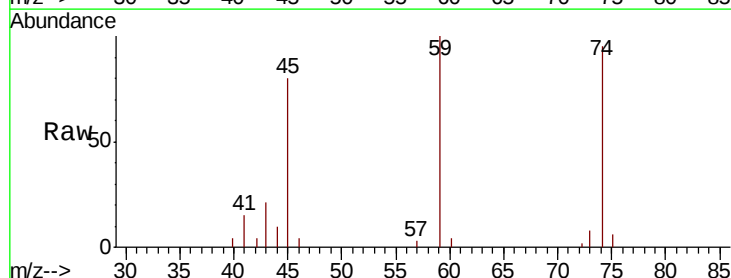
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 10/11/2019 4:40:16 PM

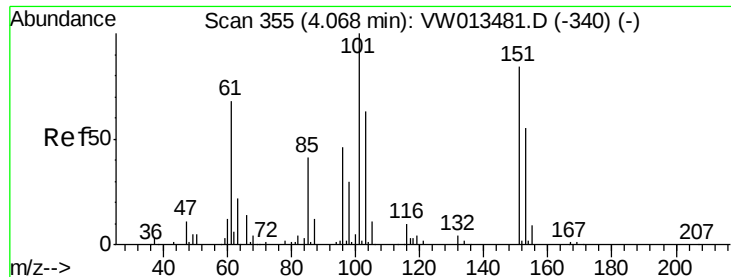


#8

Diethyl Ether
 Concen: 4.270 ug/l
 RT: 3.68 min Scan# 291
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
74	100		
45	99.9	50.0	150.1





#9

1,1,2-Trichlorotrifluoroethane

Concen: 4.078 ug/l

RT: 4.06 min Scan# 354

Delta R.T. -0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

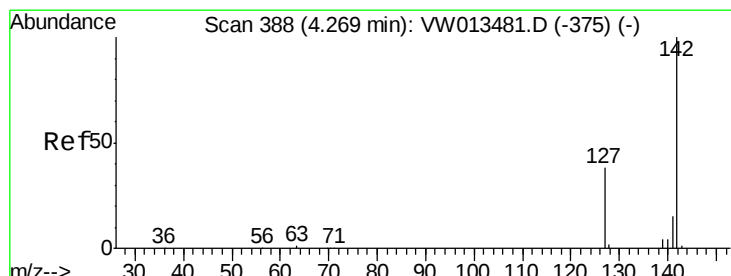
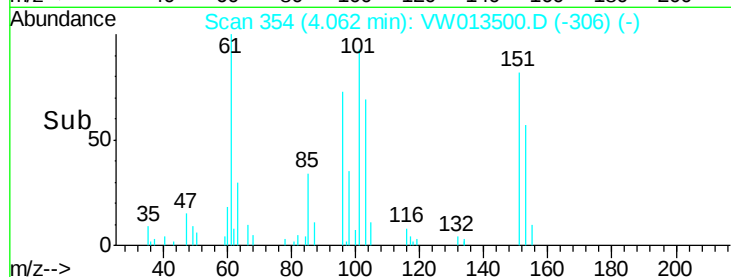
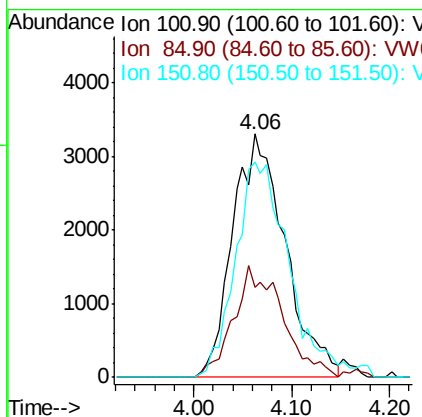
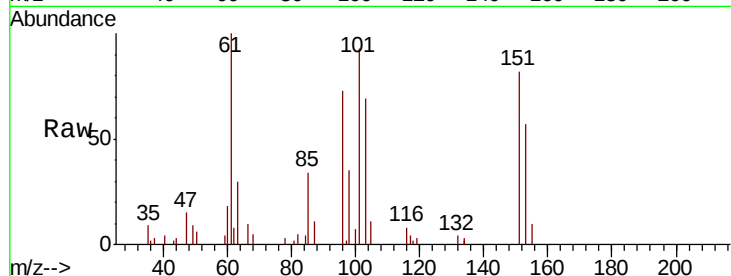
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	101	Resp:	12355
Ion Ratio	Lower	Upper	
101	100		
85	42.4	31.6	47.4
151	90.0	67.5	101.3

Manual Integrations
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#10

Methyl Iodide

Concen: 4.092 ug/l

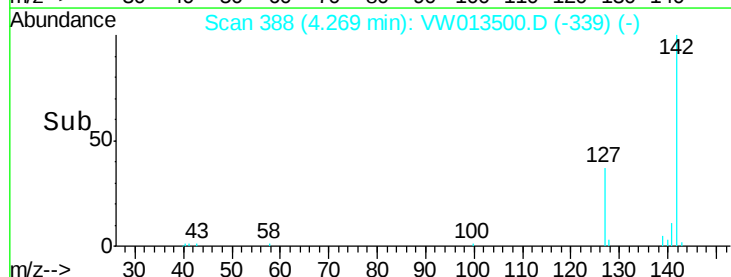
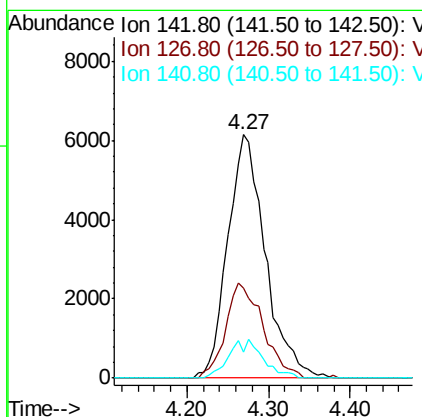
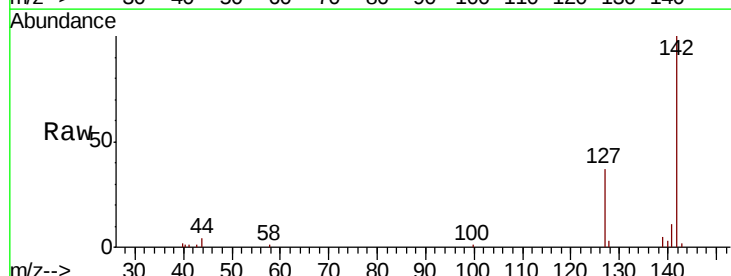
RT: 4.27 min Scan# 388

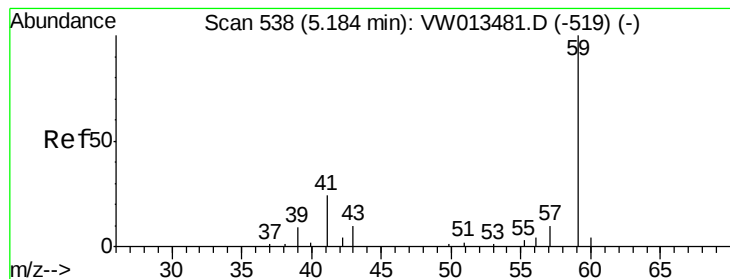
Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	142	Resp:	19631
Ion Ratio	Lower	Upper	
142	100		
127	38.5	29.6	44.4
141	6.9	12.1	18.1#





#11

Tert butyl alcohol

Concen: 22.157 ug/l m

RT: 5.21 min Scan# 542

Delta R.T. 0.03 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 59 Resp: 5240

Ion Ratio Lower Upper

59 100

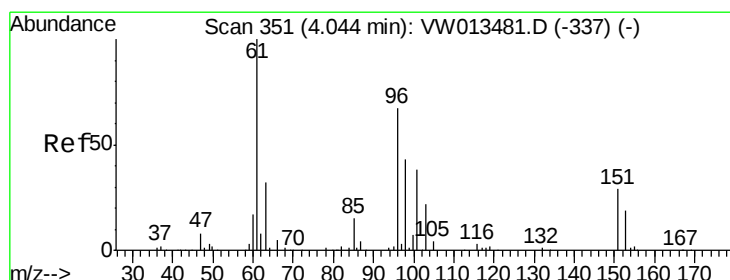
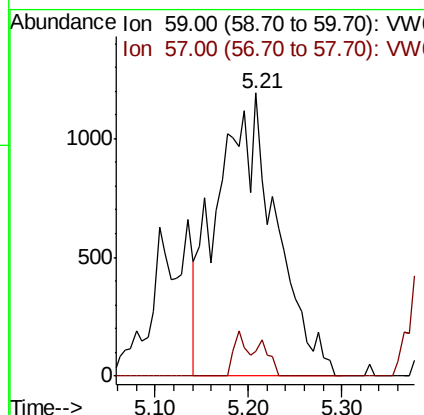
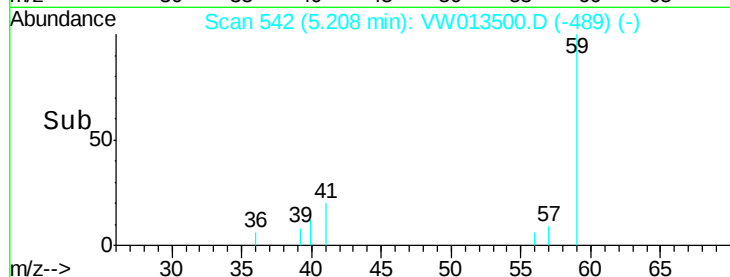
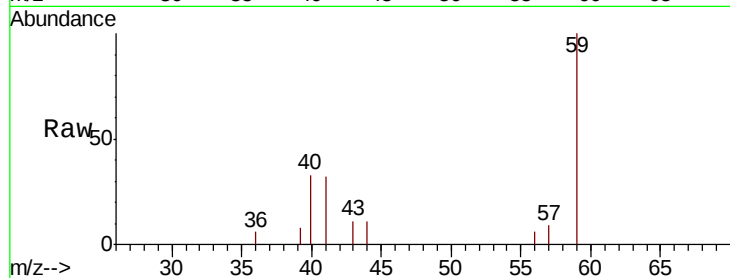
57 3.5 8.2 12.4#

Manual Integrations

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#12

1,1-Dichloroethene

Concen: 4.156 ug/l

RT: 4.04 min Scan# 350

Delta R.T. -0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

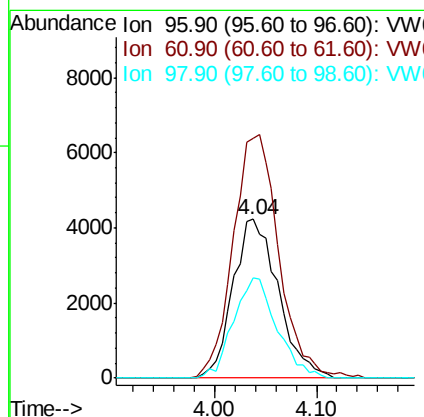
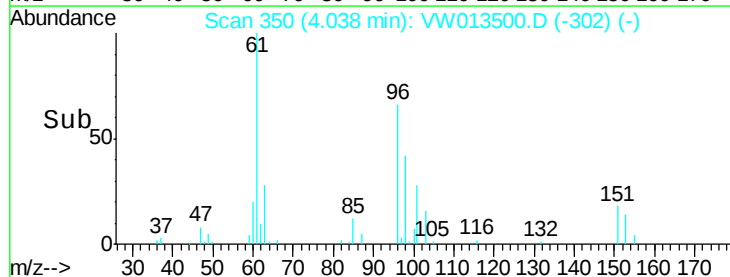
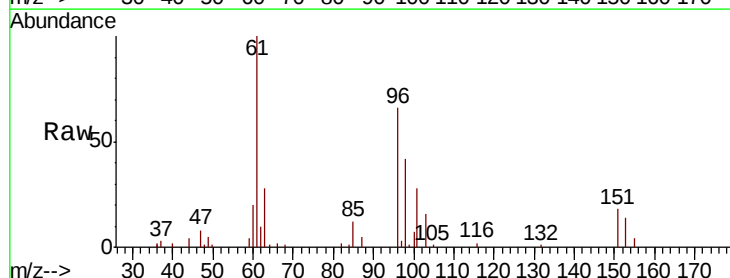
Tgt Ion: 96 Resp: 13050

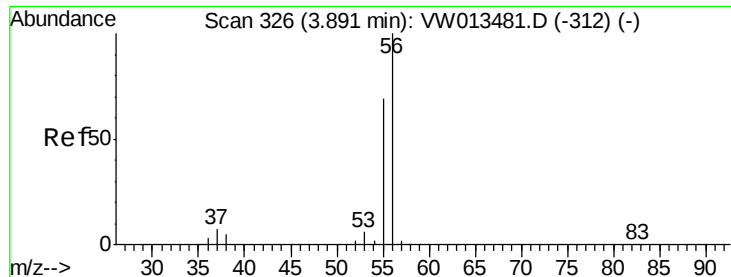
Ion Ratio Lower Upper

96 100

61 151.4 119.4 179.0

98 63.1 51.1 76.7





#13

Acrolein

Concen: 5.609 ug/l m

RT: 3.89 min Scan# 326

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tot Ion: 56 Resp: 1278

Ion Ratio Lower Upper

56 100

55 61.3 55.9 83.9

Instrument :

MSVOA_W

ClientSampleId :

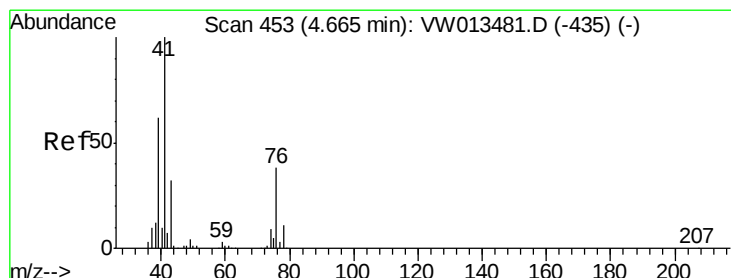
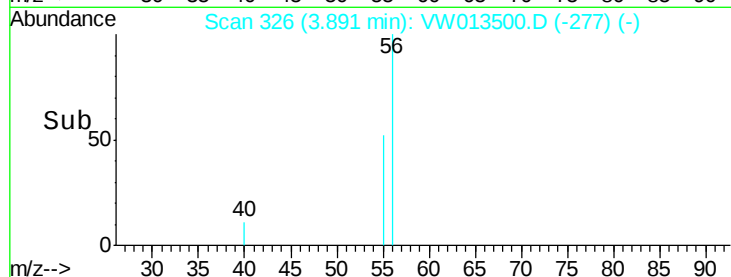
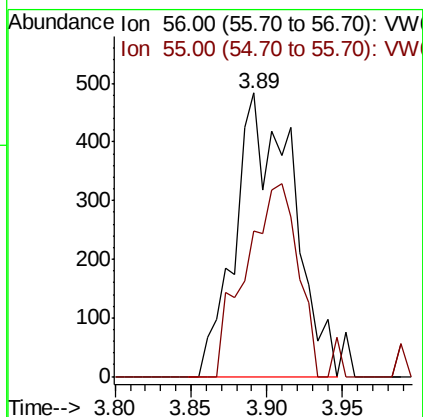
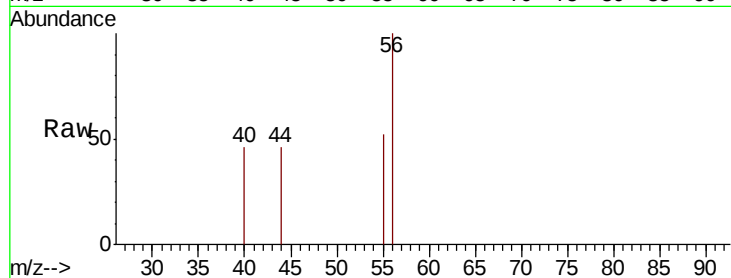
MDL-MDL-SOIL-03-QT4-2019DL

Manual Integrations

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#14

Allyl chloride

Concen: 4.093 ug/l

RT: 4.67 min Scan# 453

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

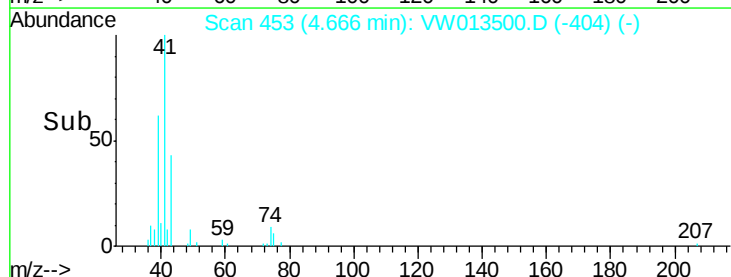
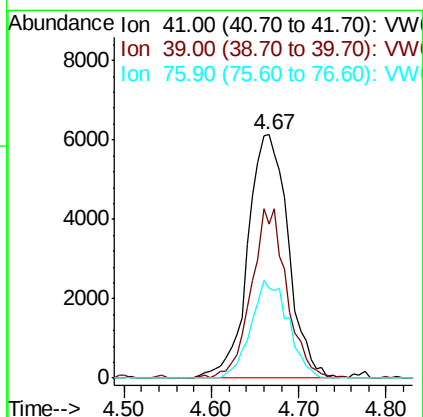
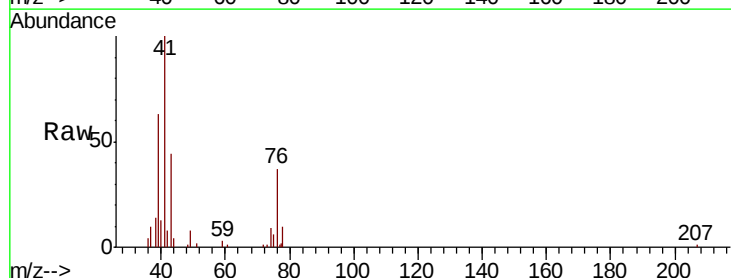
Tgt Ion: 41 Resp: 19747

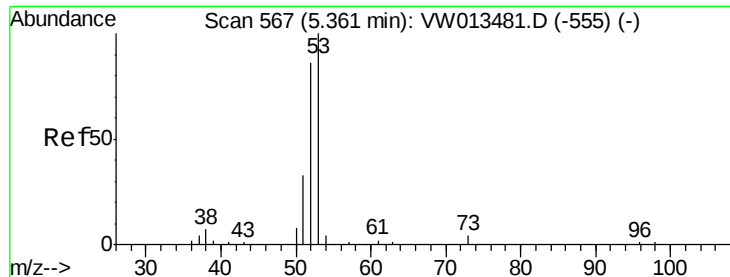
Ion Ratio Lower Upper

41 100

39 61.1 50.1 75.1

76 36.8 29.0 43.4





#15

Acrylonitrile

Concen: 18.828 ug/l

RT: 5.37 min Scan# 569

Delta R.T. 0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

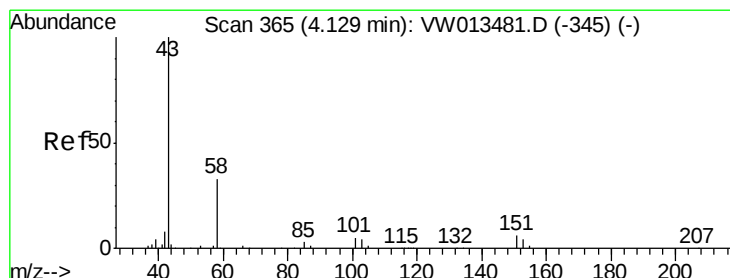
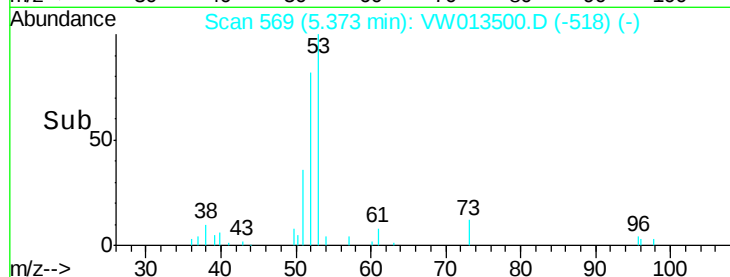
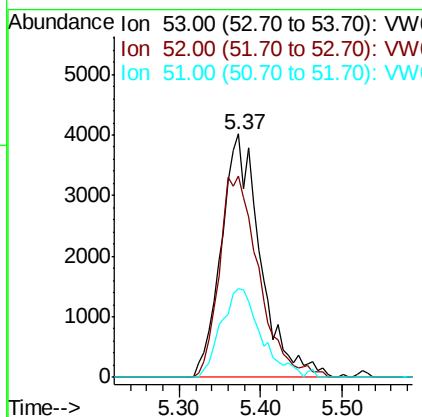
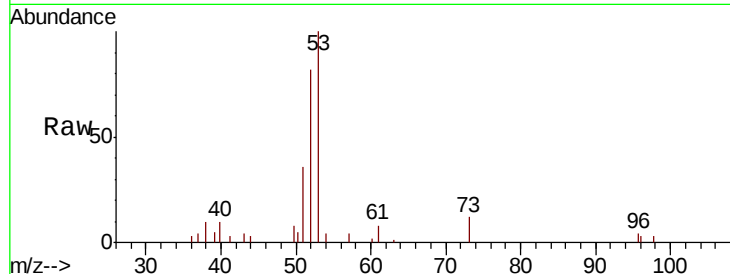
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	53	Resp:	13389
Ion	Ratio	Lower	Upper
53	100		
52	83.6	65.8	98.8
51	36.8	28.6	42.8

Manual Integrations
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#16

Acetone

Concen: 20.690 ug/l

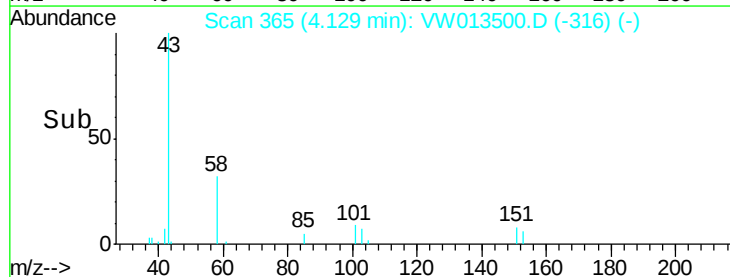
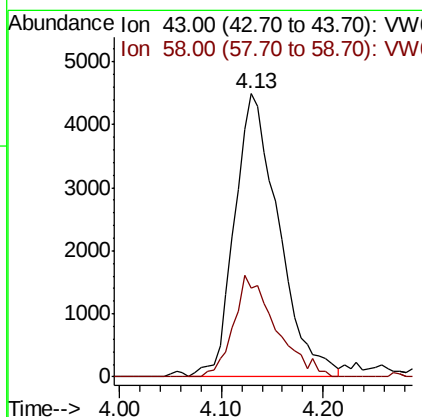
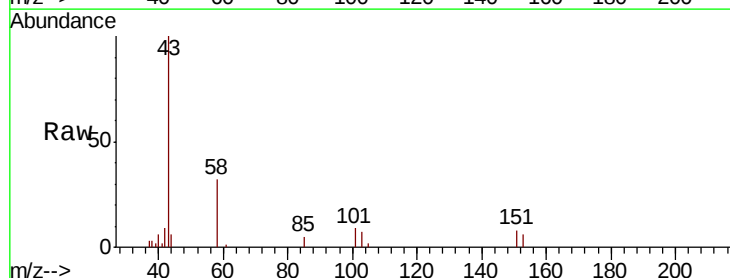
RT: 4.13 min Scan# 365

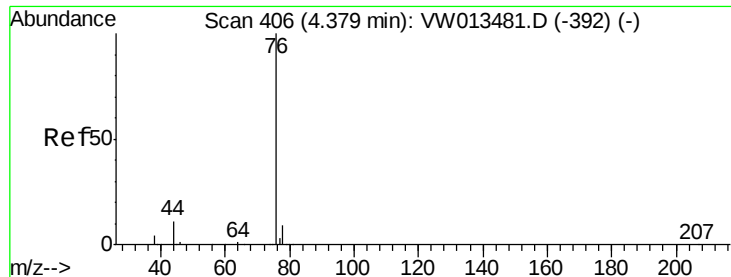
Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	43	Resp:	13457
Ion	Ratio	Lower	Upper
43	100		
58	31.6	26.1	39.1





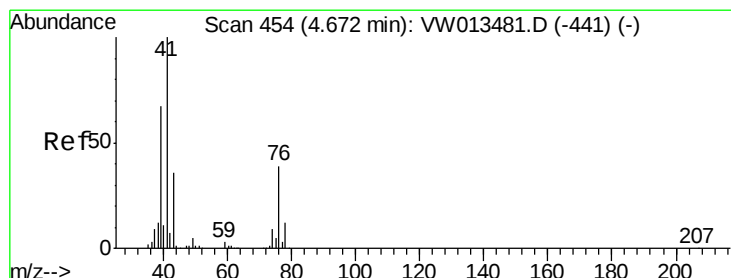
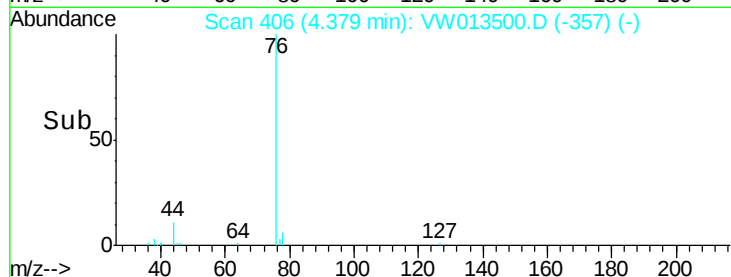
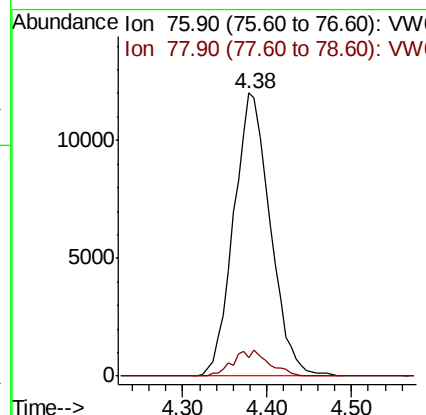
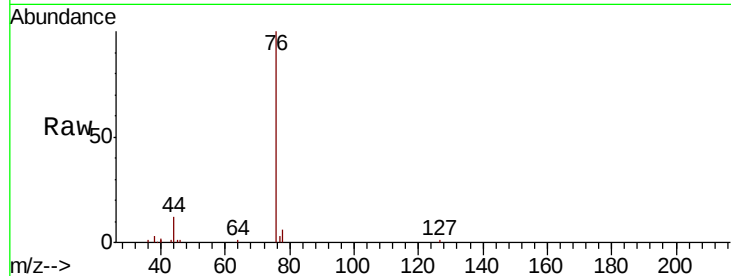
#17
Carbon Disulfide
Concen: 4.015 ug/l
RT: 4.38 min Scan# 406
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
76	100		
78	6.4	7.1	10.7#

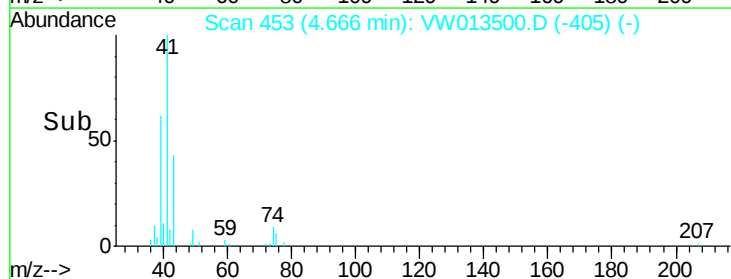
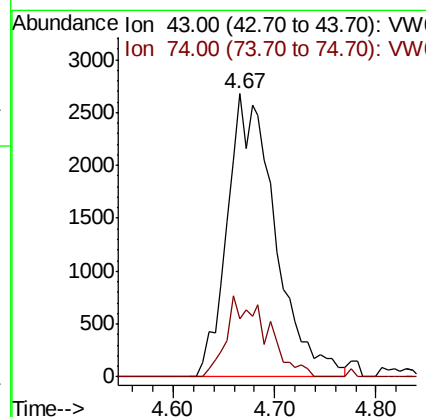
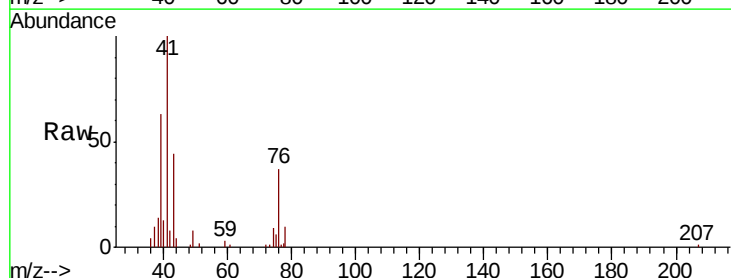
Manual Integrations
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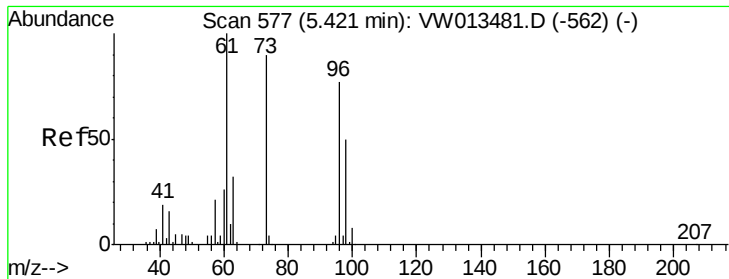
MMDadoda
10/11/2019 4:40:16 PM



#18
Methyl Acetate
Concen: 4.705 ug/l m
RT: 4.67 min Scan# 453
Delta R.T. -0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
43	100		
74	24.0	19.6	29.4





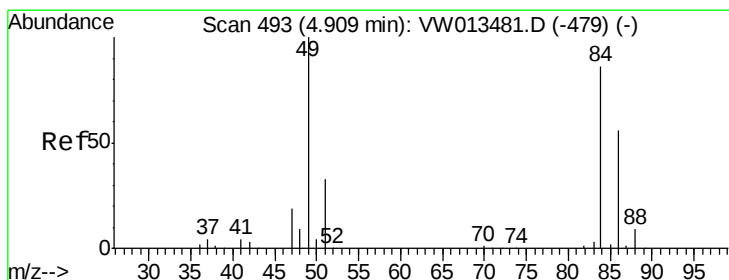
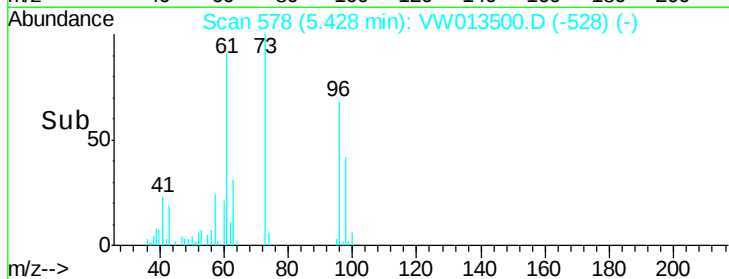
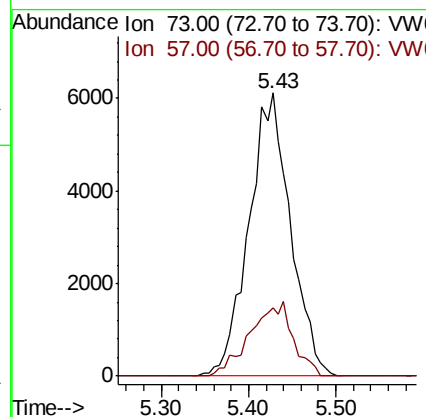
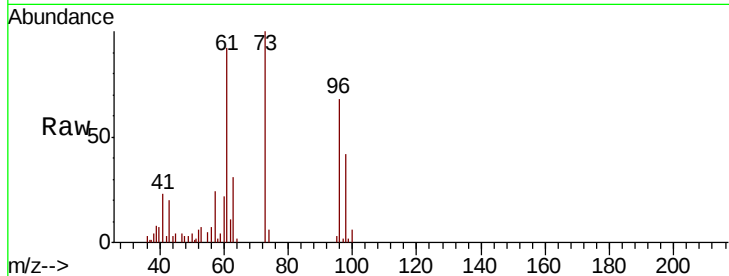
#19
Methyl tert-butyl Ether
Concen: 4.253 ug/l
RT: 5.43 min Scan# 578
Delta R.T. 0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 73 Resp: 20192
Ion Ratio Lower Upper
73 100
57 23.9 18.6 27.8

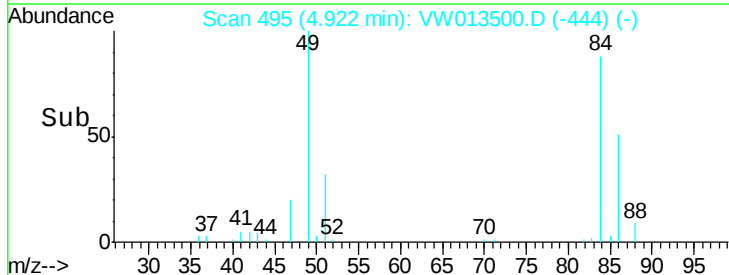
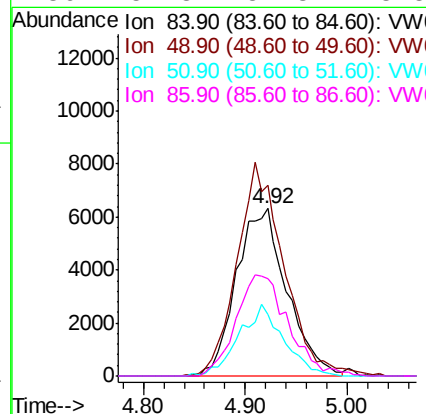
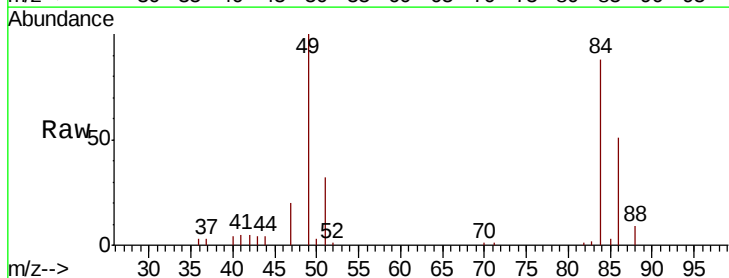
Manual Integrations
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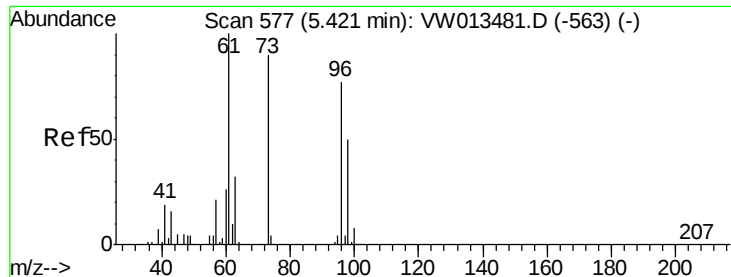
MMDadoda
10/11/2019 4:40:16 PM



#20
Methylene Chloride
Concen: 6.057 ug/l
RT: 4.92 min Scan# 495
Delta R.T. 0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion: 84 Resp: 21688
Ion Ratio Lower Upper
84 100
49 113.1 93.4 140.0
51 36.5 30.6 46.0
86 57.8 52.3 78.5





#21

trans-1,2-Dichloroethene

Concen: 4.031 ug/l

RT: 5.42 min Scan# 577

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

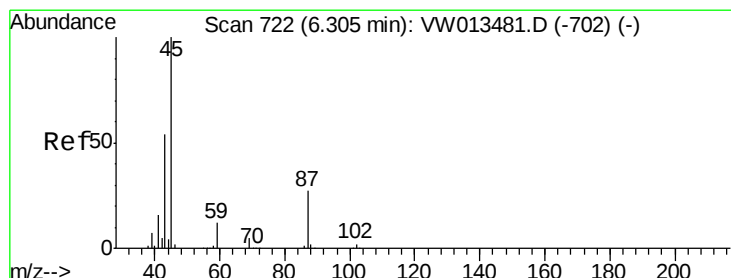
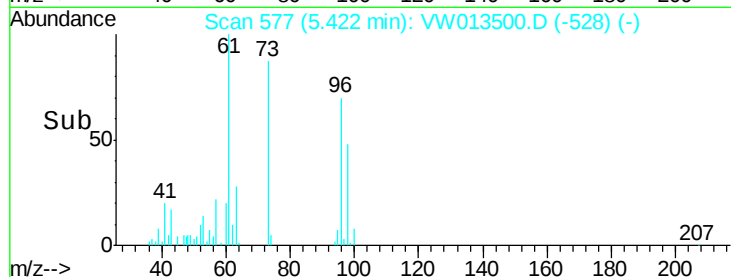
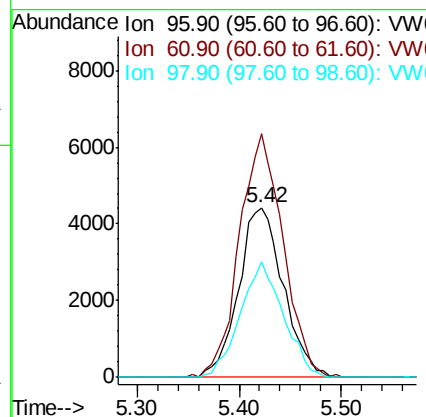
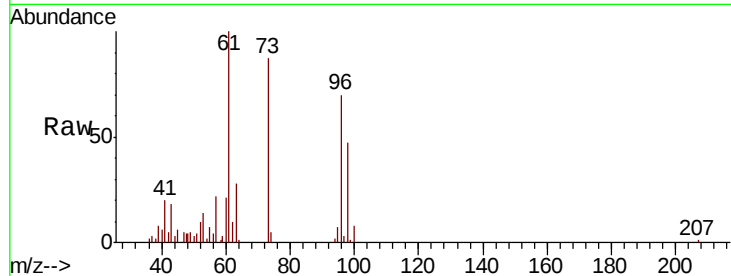
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	96	Resp:	13449
Ion	Ratio	Lower	Upper
96	100		
61	143.4	104.3	156.5
98	67.9	51.8	77.8

Manual Integrations
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#22

Diisopropyl ether

Concen: 4.203 ug/l

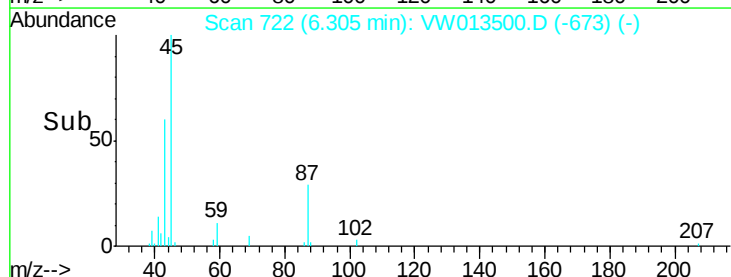
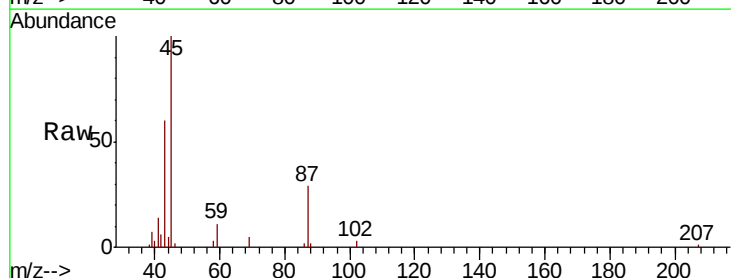
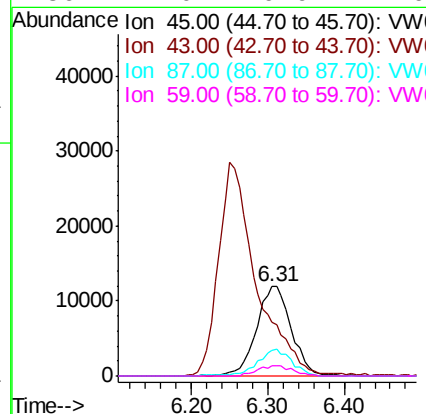
RT: 6.31 min Scan# 722

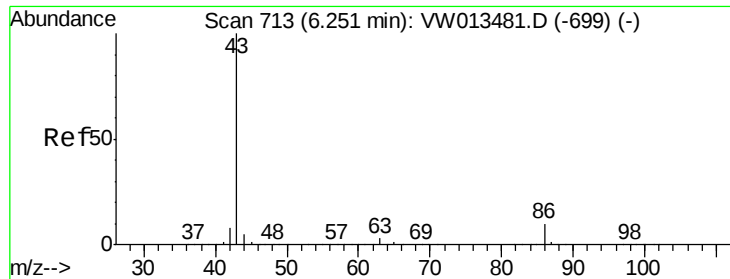
Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	45	Resp:	37995
Ion	Ratio	Lower	Upper
45	100		
43	57.6	43.4	65.0
87	28.7	22.1	33.1
59	11.0	9.9	14.9





#23

Vinyl Acetate

Concen: 18.028 ug/l

RT: 6.25 min Scan# 713

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 43 Resp: 97847

Ion Ratio Lower Upper

43 100

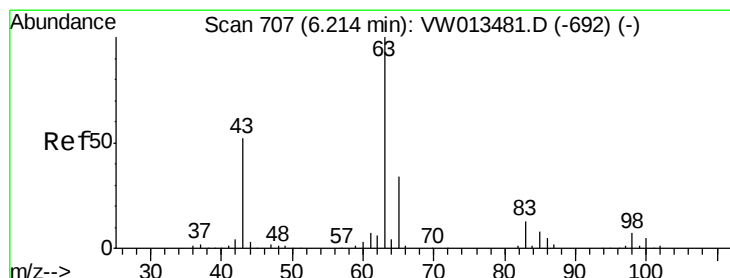
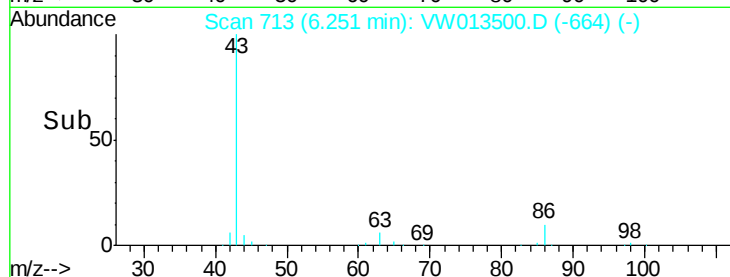
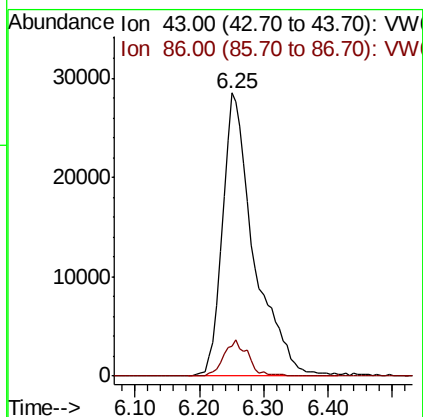
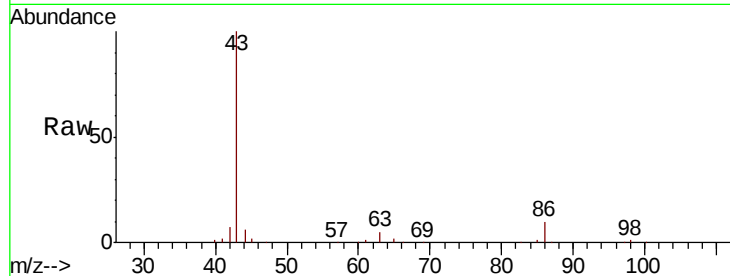
86 10.4 8.3 12.5

Manual Integrations

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#24

1,1-Dichloroethane

Concen: 4.192 ug/l

RT: 6.21 min Scan# 707

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

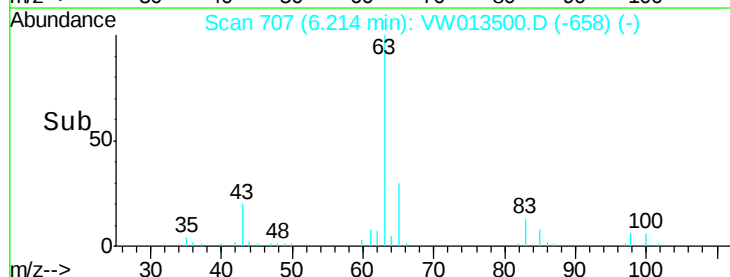
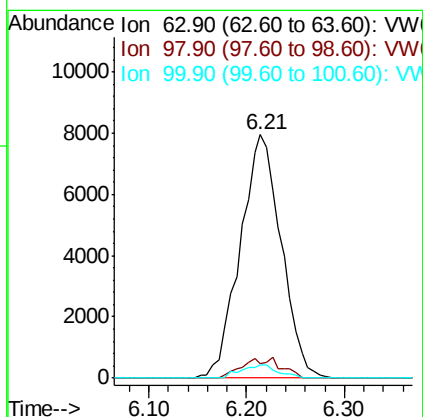
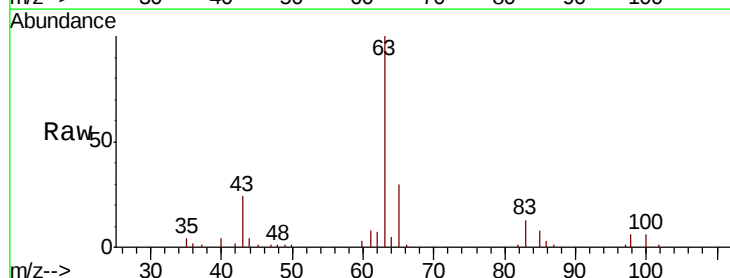
Tgt Ion: 63 Resp: 23165

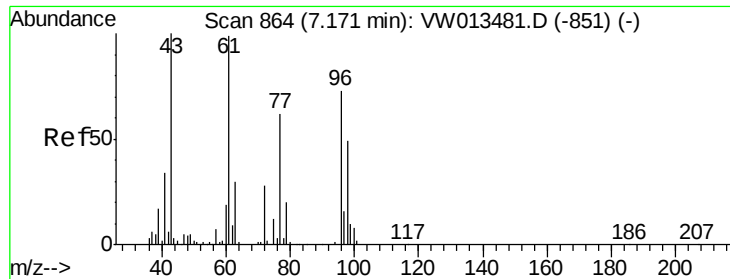
Ion Ratio Lower Upper

63 100

98 5.7 3.5 10.6

100 5.6 2.3 6.8





#25

2-Butanone

Concen: 20.219 ug/l

RT: 7.18 min Scan# 865

Delta R.T. 0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 43 Resp: 19381

Ion Ratio Lower Upper

43 100

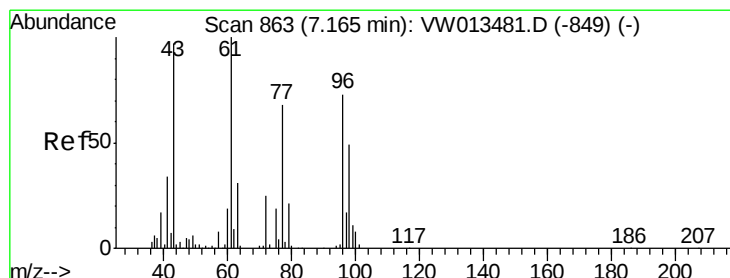
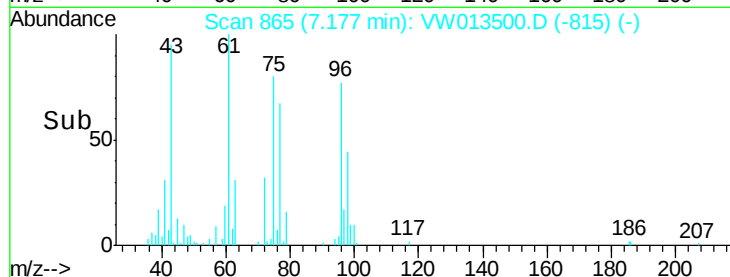
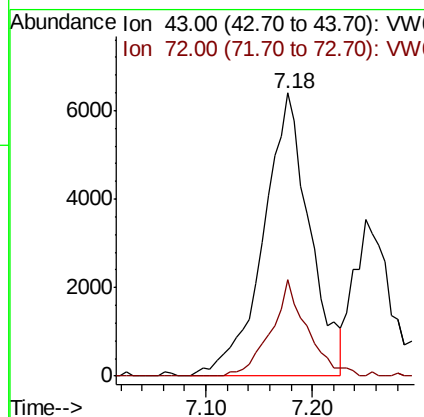
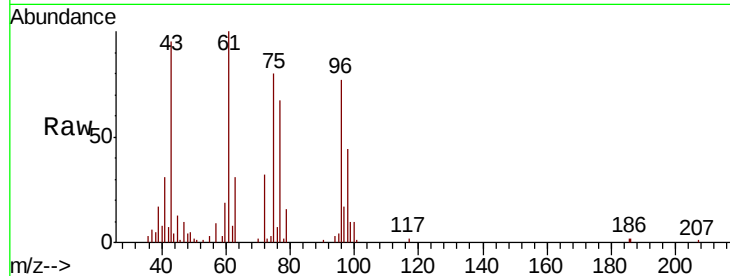
72 34.3 22.1 33.1#

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#26

2,2-Dichloropropane

Concen: 5.022 ug/l

RT: 7.16 min Scan# 862

Delta R.T. -0.01 min

Lab File: VW013500.D

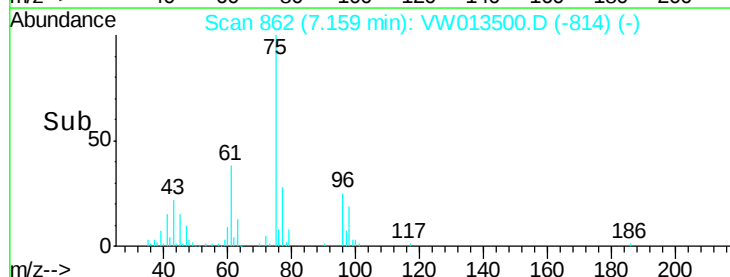
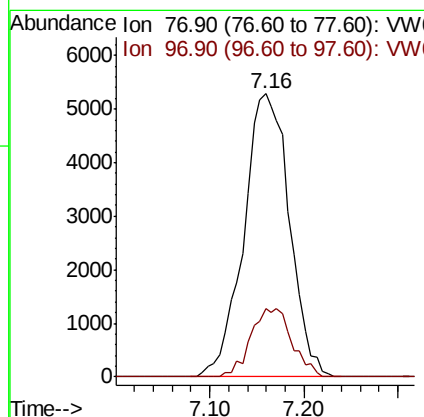
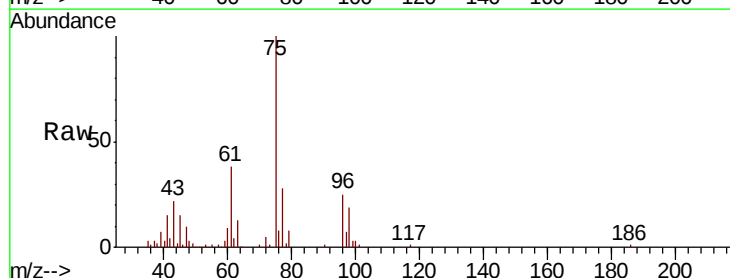
Acq: 09 Oct 2019 13:35

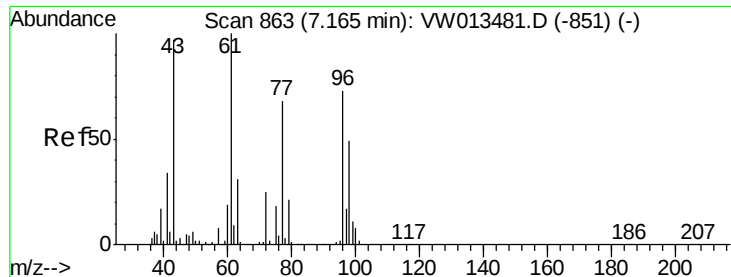
Tgt Ion: 77 Resp: 17888

Ion Ratio Lower Upper

77 100

97 21.8 12.6 37.6





#27

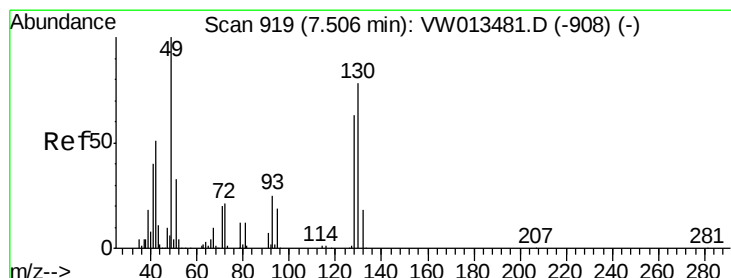
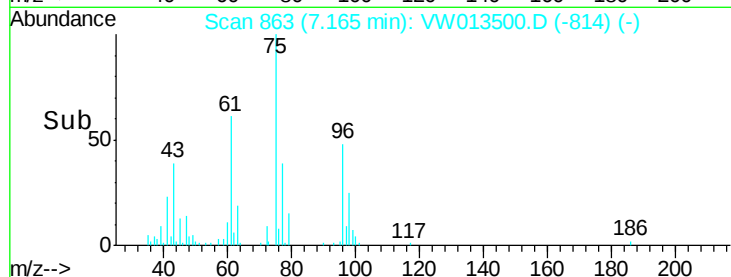
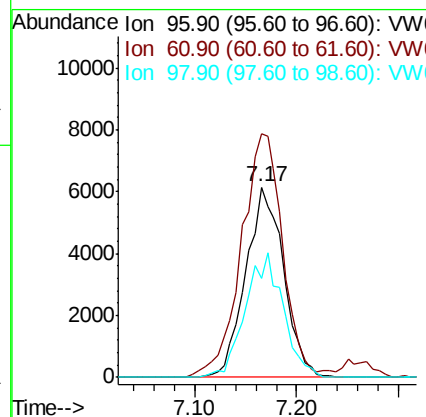
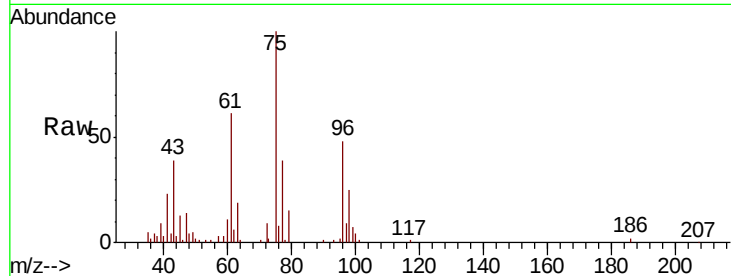
cis-1,2-Dichloroethene
 Concen: 4.494 ug/l
 RT: 7.17 min Scan# 863
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleID :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
96	100		
61	140.0	0.0	274.4
98	65.0	0.0	130.2

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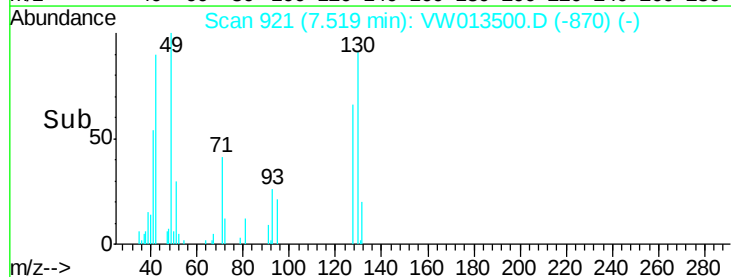
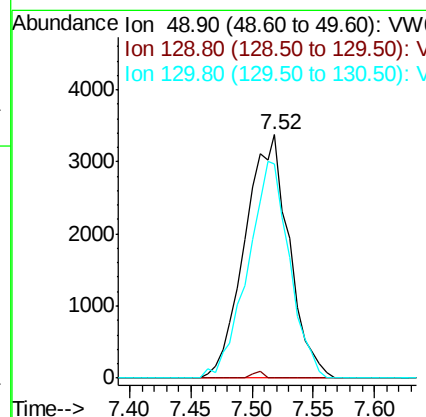
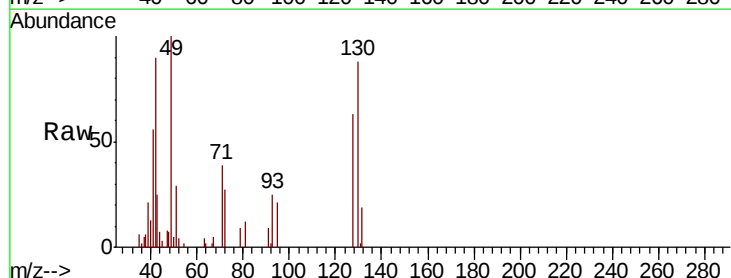
MMDadoda
 10/11/2019 4:40:16 PM

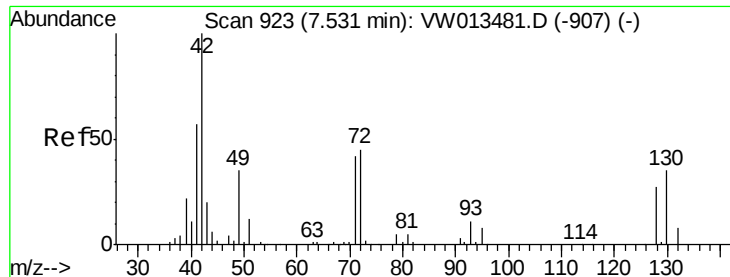


#28

Bromochloromethane
 Concen: 4.293 ug/l
 RT: 7.52 min Scan# 921
 Delta R.T. 0.01 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.6	0.0	1.6
130	84.2	0.0	0.0#





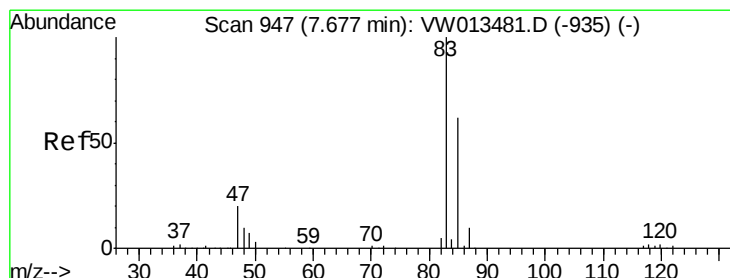
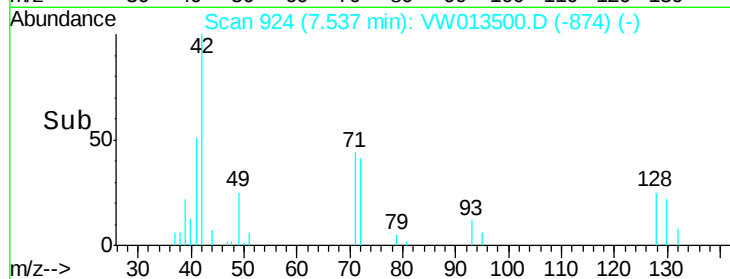
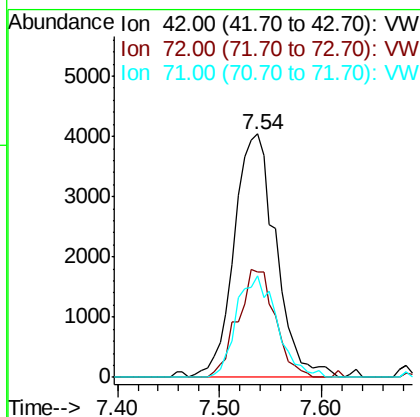
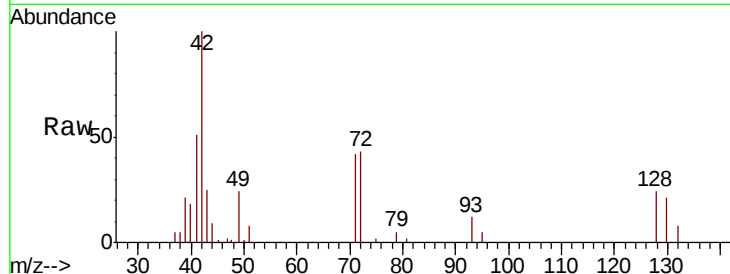
#29
Tetrahydrofuran
Concen: 19.616 ug/l
RT: 7.54 min Scan# 924
Delta R.T. 0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
42	100		
72	39.7	34.8	52.2
71	40.2	33.6	50.4

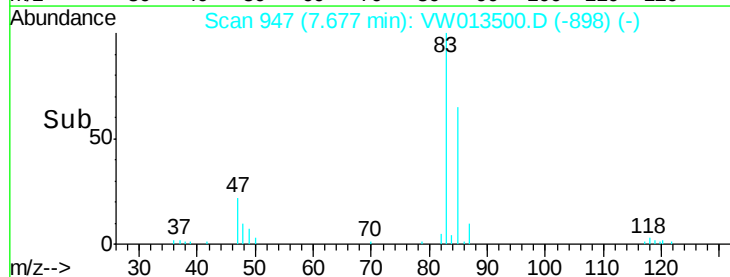
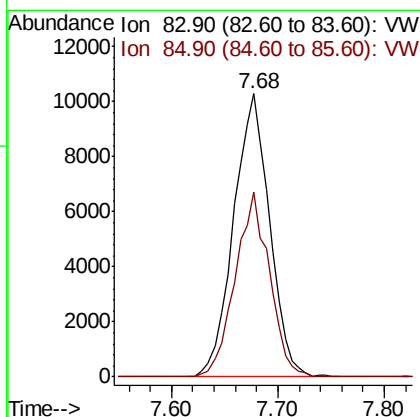
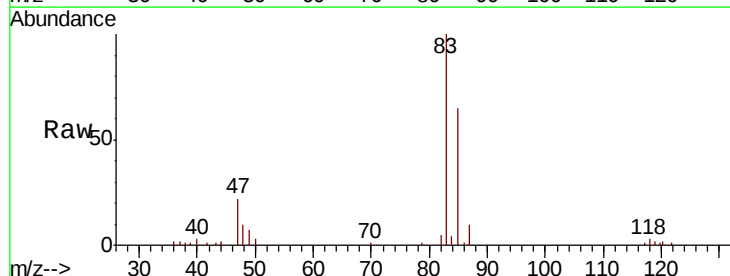
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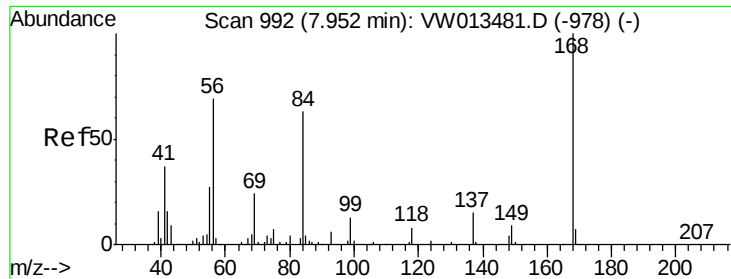
MMDadoda
10/11/2019 4:40:16 PM



#30
Chloroform
Concen: 4.555 ug/l
RT: 7.68 min Scan# 947
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.2	49.4	74.2





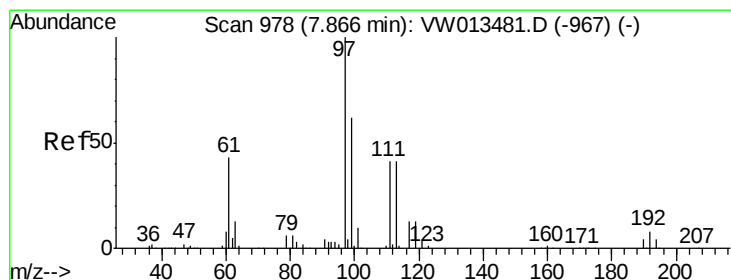
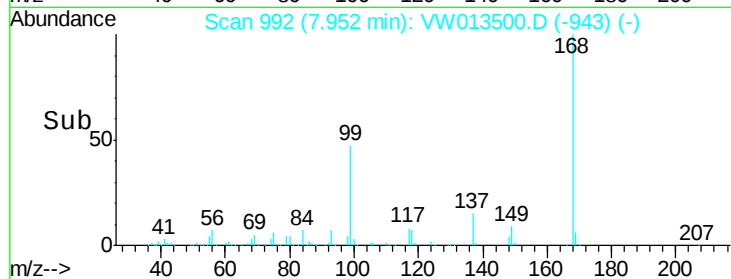
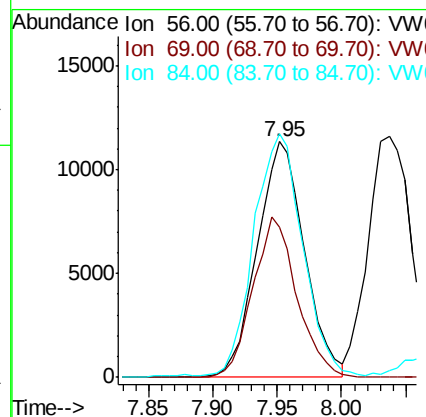
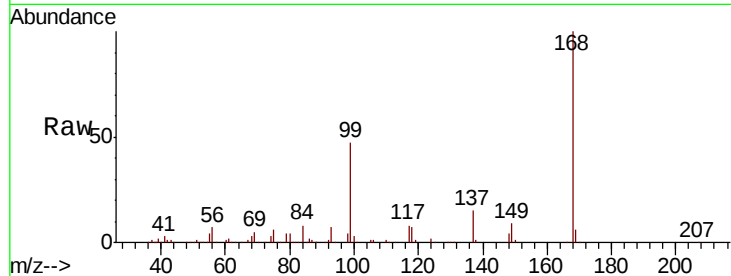
#31
Cyclohexane
Concen: 4.923 ug/l
RT: 7.95 min Scan# 992
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
56	100		
69	63.9	28.0	42.0#
84	102.8	71.8	107.6

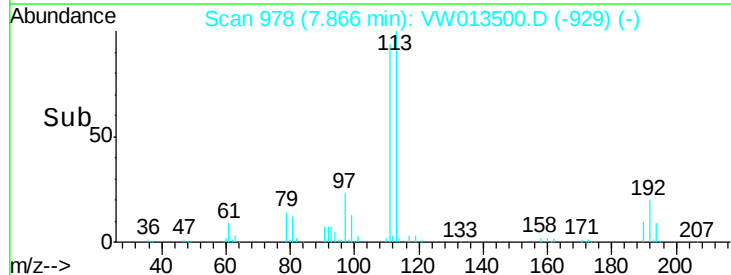
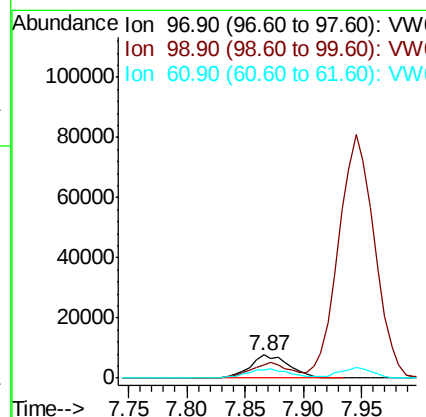
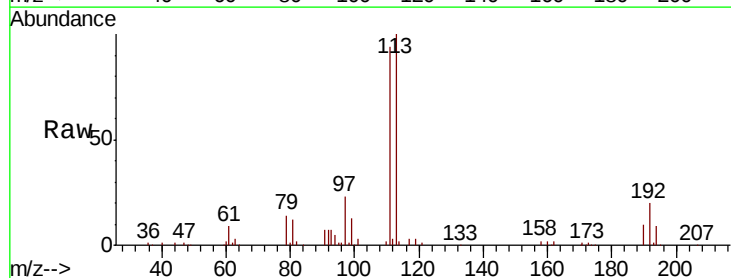
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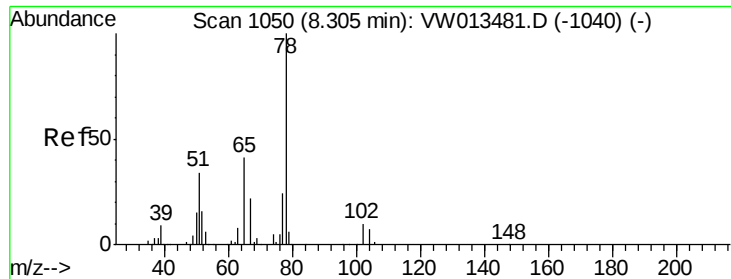
MMDadoda
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#32
1,1,1-Trichloroethane
Concen: 4.183 ug/l
RT: 7.87 min Scan# 978
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
97	100		
99	68.0	52.3	78.5
61	42.4	33.7	50.5





#33

1,2-Dichloroethane-d4

Concen: 47.801 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 65 Resp: 133602

Ion Ratio Lower Upper

65 100

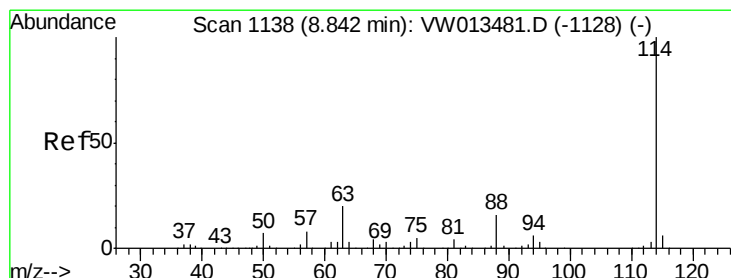
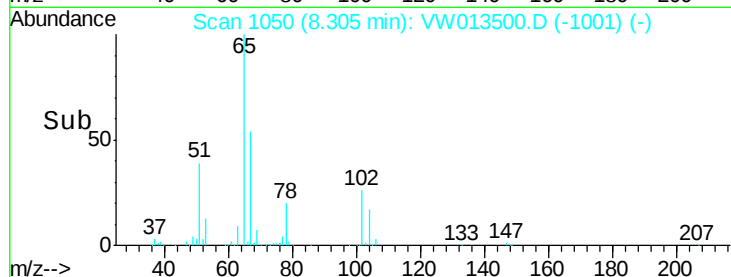
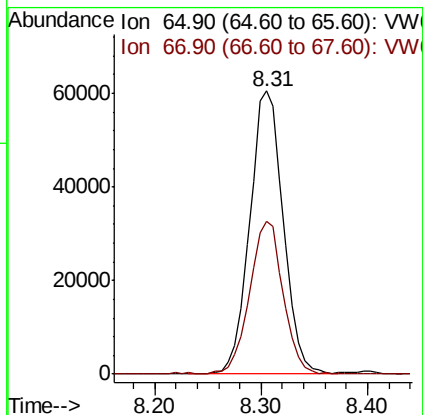
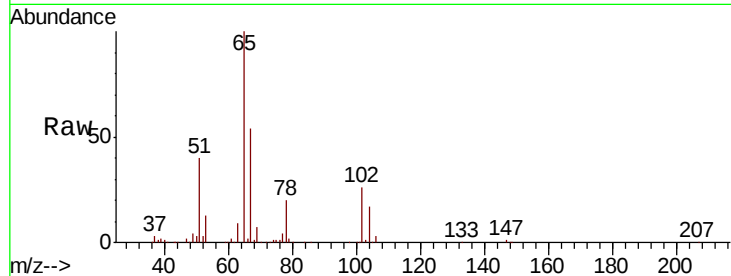
67 53.9 0.0 109.4

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#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

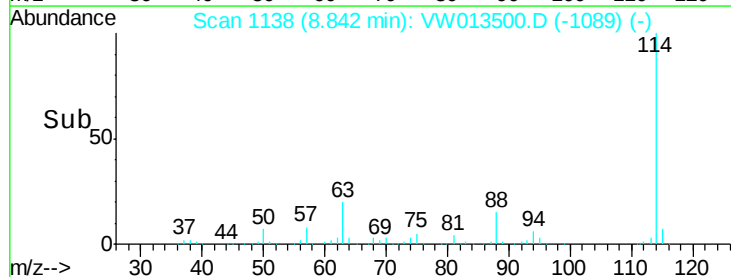
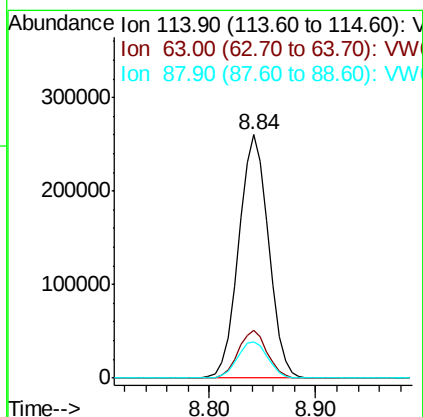
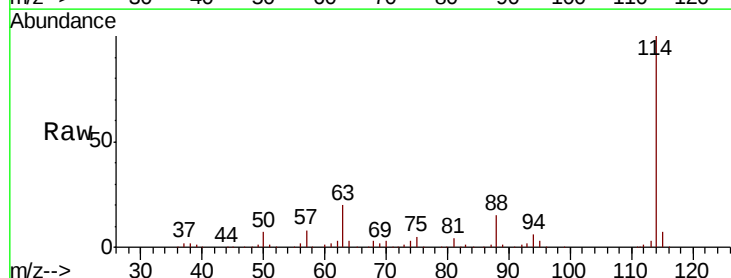
Tgt Ion: 114 Resp: 511449

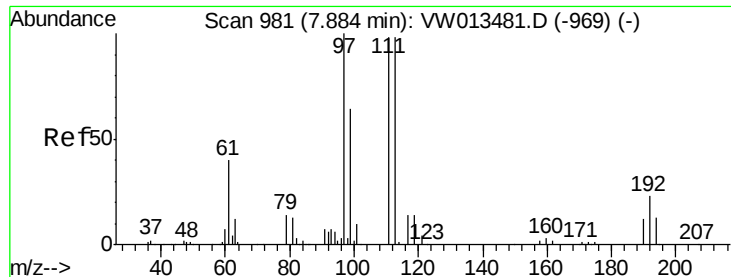
Ion Ratio Lower Upper

114 100

63 19.7 0.0 40.4

88 14.8 0.0 31.4





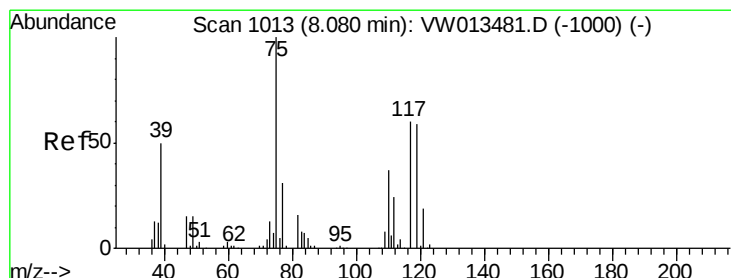
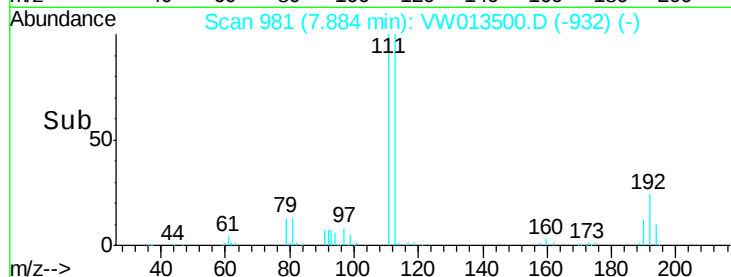
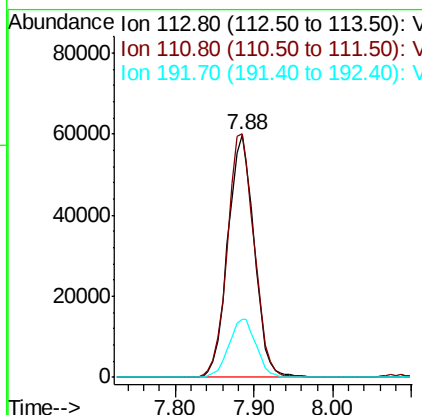
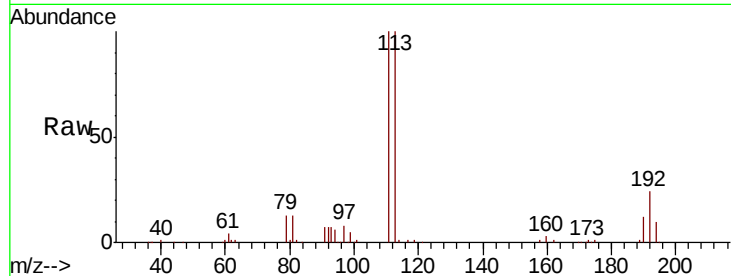
#35
 Dibromofluoromethane
 Concen: 48.578 ug/l
 RT: 7.88 min Scan# 981
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Resp	Lower	Upper
113	100	138764		
111	102.4	82.3	123.5	
192	24.8	19.3	28.9	

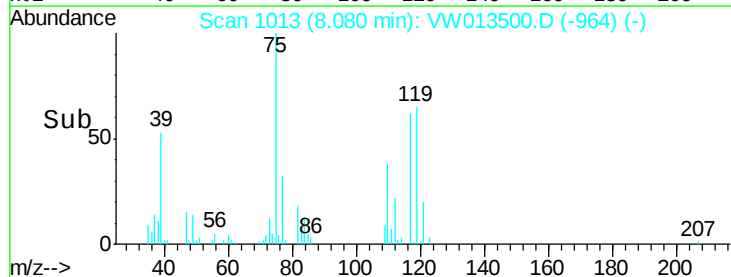
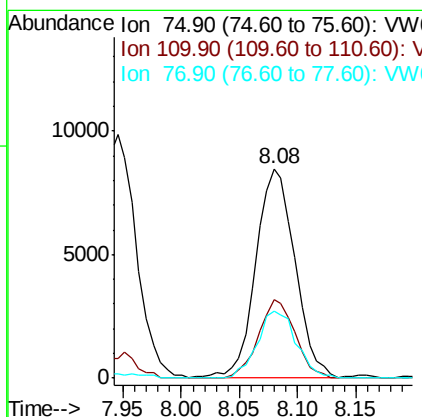
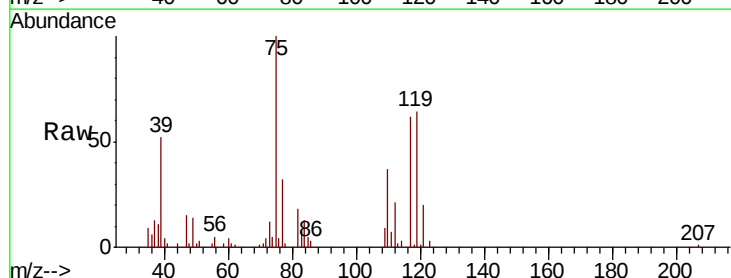
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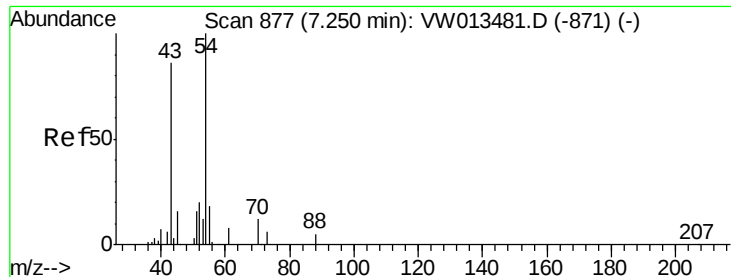
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 10/11/2019 4:40:16 PM



#36
 1,1-Dichloropropene
 Concen: 4.302 ug/l
 RT: 8.08 min Scan# 1013
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	19905		
110	34.8	18.4	55.2	
77	31.8	25.0	37.4	





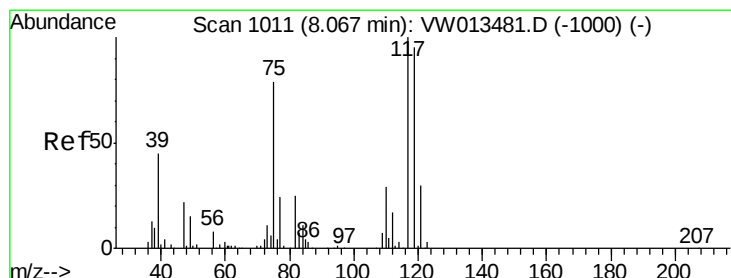
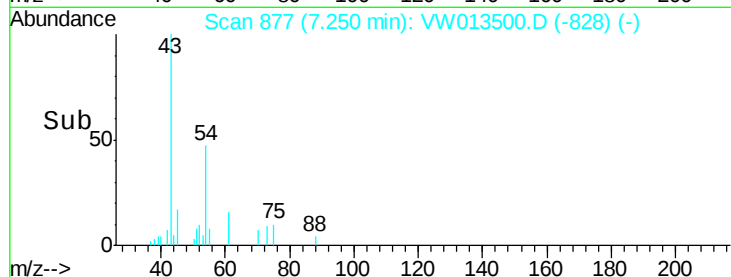
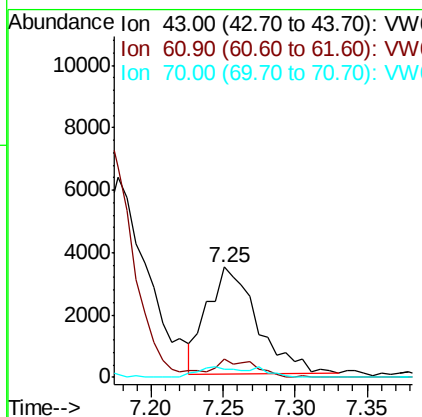
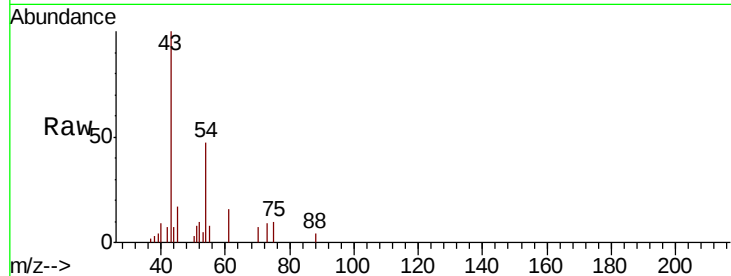
#37
Ethyl Acetate
Concen: 3.928 ug/l
RT: 7.25 min Scan# 877
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
43	100		
61	12.8	10.9	16.3
70	7.4	9.2	13.8#

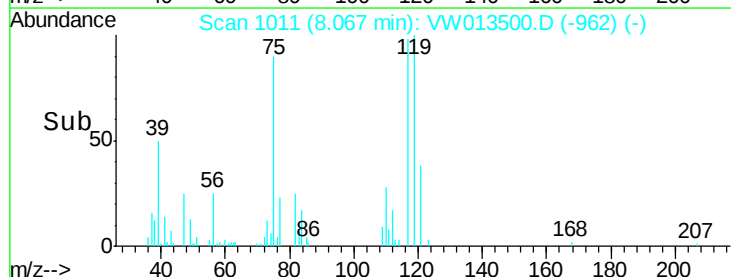
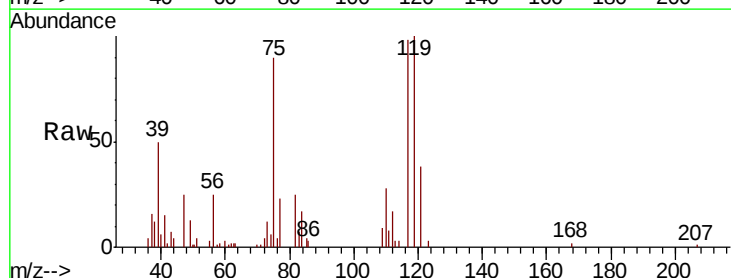
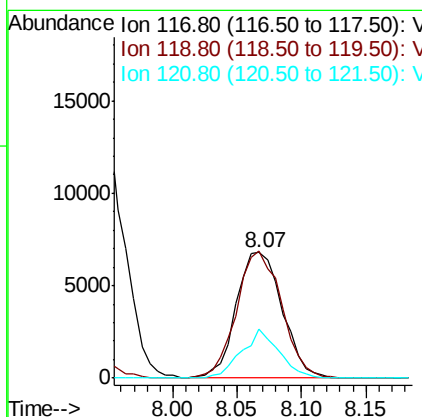
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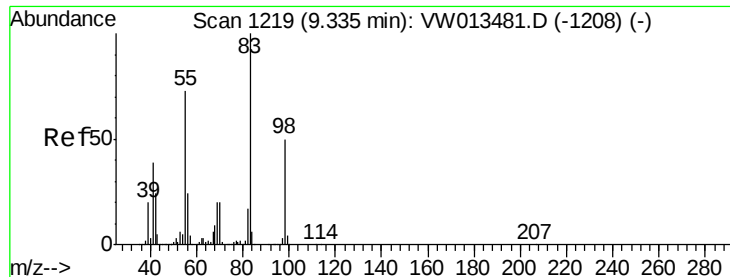
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#38
Carbon Tetrachloride
Concen: 4.108 ug/l
RT: 8.07 min Scan# 1011
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
117	100		
119	101.6	76.3	114.5
121	38.8	23.6	35.4#





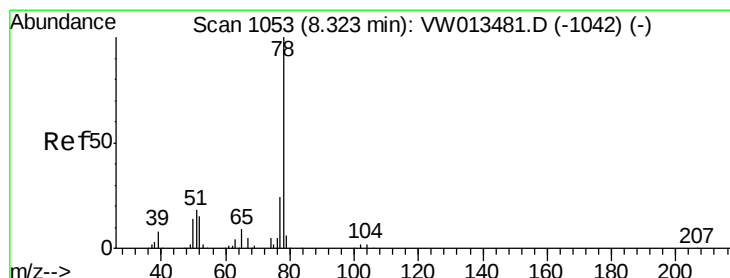
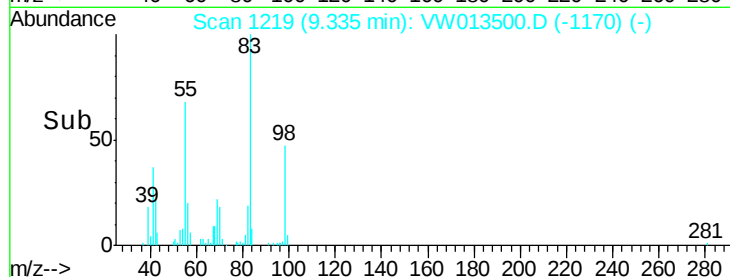
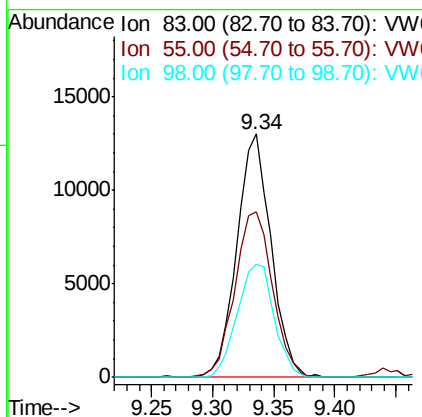
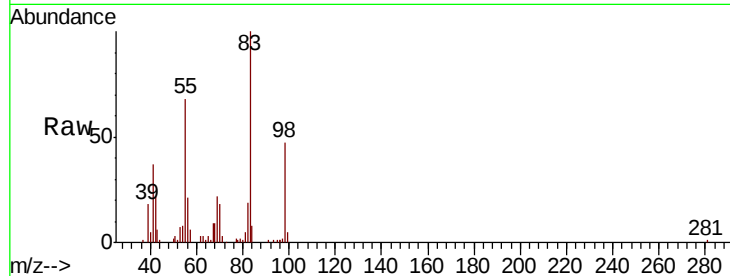
#39
Methvlcvclohexane
Concen: 4.212 ug/l
RT: 9.34 min Scan# 1219
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
83	100		
55	68.2	58.2	87.4
98	46.5	39.8	59.6

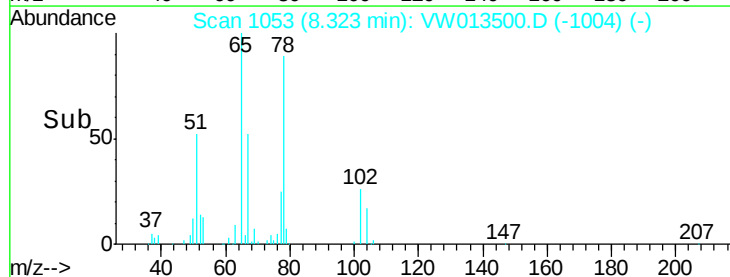
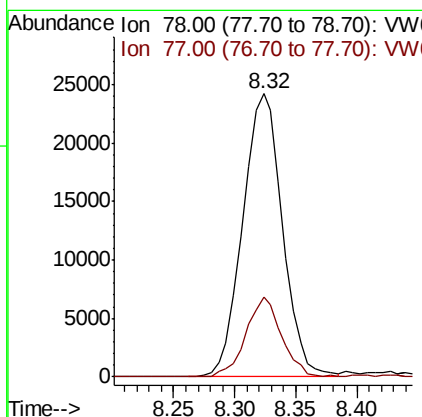
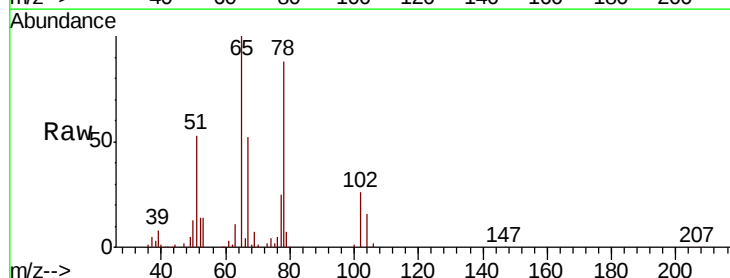
Manual Integrations
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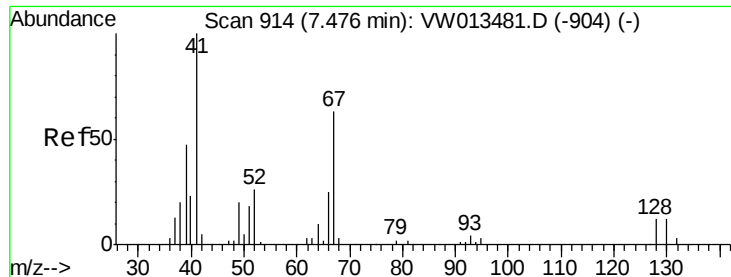
MMDadoda
10/11/2019 4:40:16 PM



#40
Benzene
Concen: 4.237 ug/l
RT: 8.32 min Scan# 1053
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
78	100		
77	28.2	19.2	28.8





#41

Methacrylonitrile

Concen: 3.342 ug/l

RT: 7.48 min Scan# 914

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

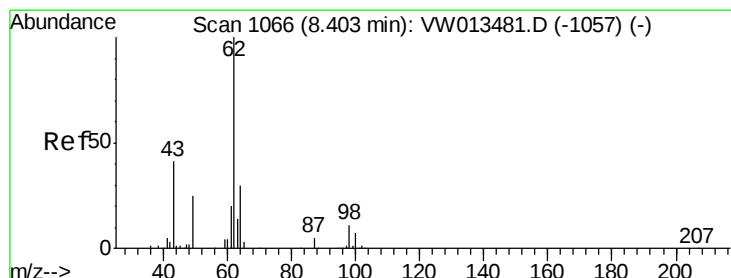
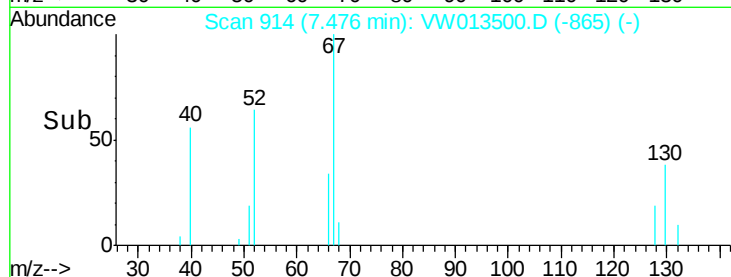
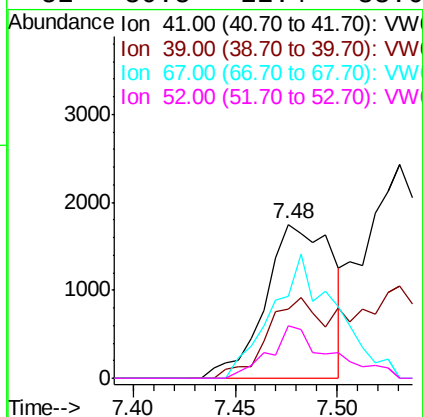
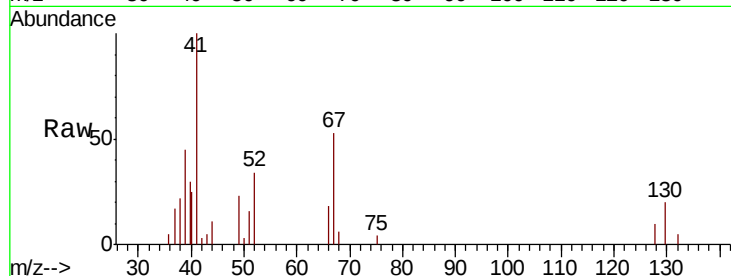
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	41	Resp:	3989
Ion	Ratio	Lower	Upper
41	100		
39	42.0	39.4	59.0
67	77.4	57.0	85.6
52	30.8	22.4	33.6

Manual Integrations
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10/11/2019 4:40:16 PM



#42

1,2-Dichloroethane

Concen: 4.391 ug/l

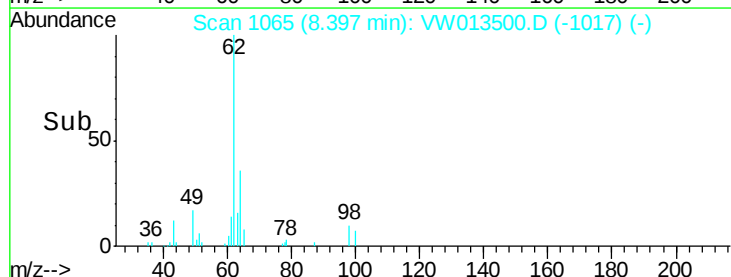
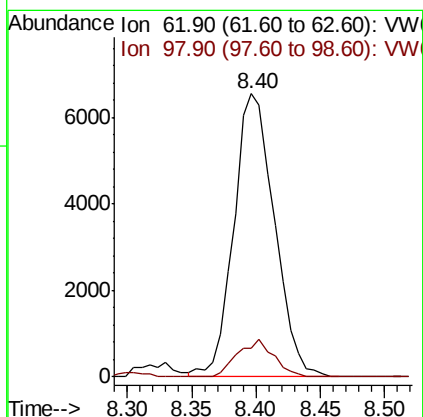
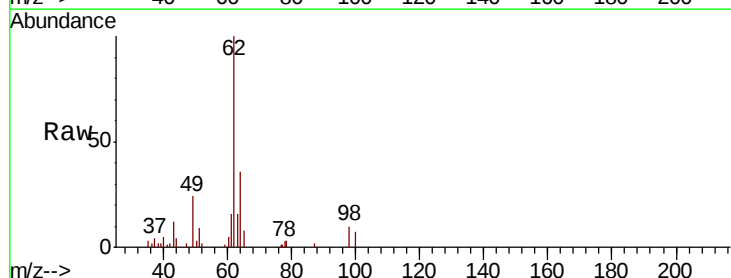
RT: 8.40 min Scan# 1065

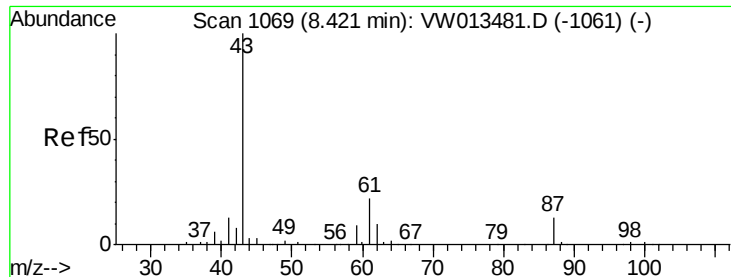
Delta R.T. -0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	62	Resp:	14333
Ion	Ratio	Lower	Upper
62	100		
98	11.8	0.0	21.4





#43

Isopropyl Acetate

Concen: 4.035 ug/l

RT: 8.42 min Scan# 1069

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

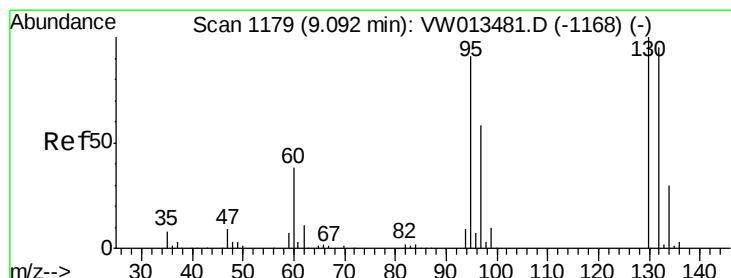
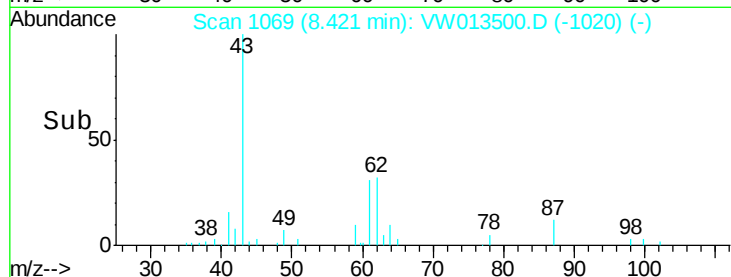
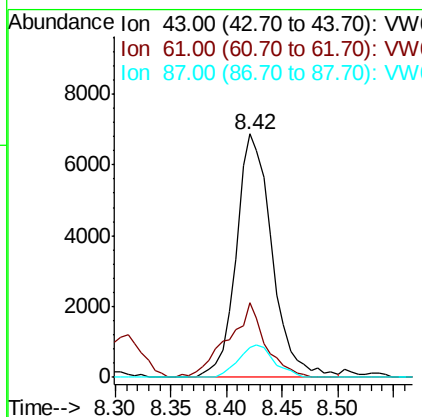
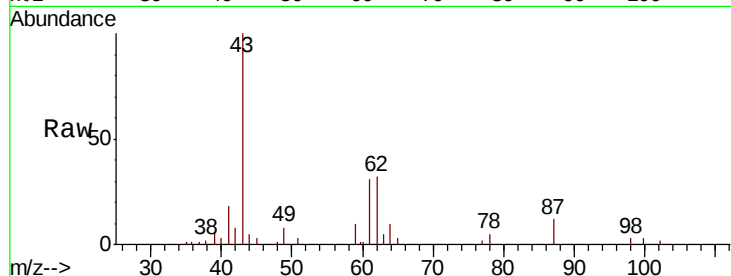
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	43	Resp:	15303
Ion	Ratio	Lower	Upper
43	100		
61	32.2	25.4	38.2
87	13.2	10.8	16.2

Manual Integrations
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#44

Trichloroethene

Concen: 4.167 ug/l

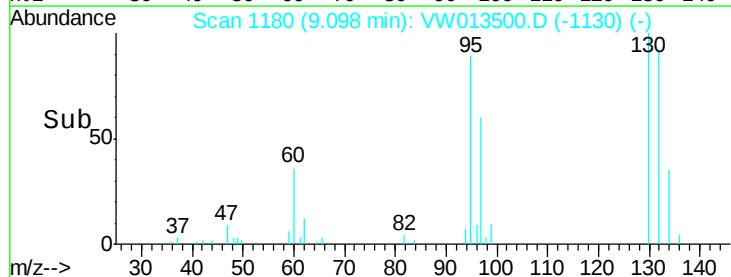
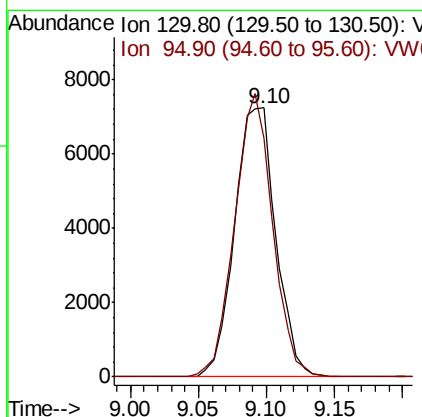
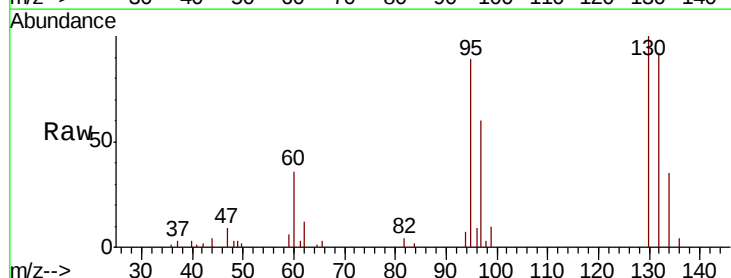
RT: 9.10 min Scan# 1180

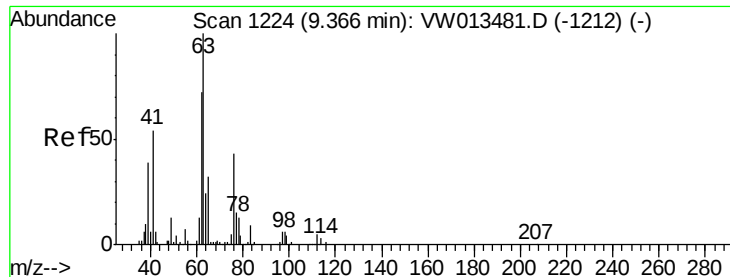
Delta R.T. 0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	130	Resp:	15354
Ion	Ratio	Lower	Upper
130	100		
95	88.8	0.0	182.2





#45

1,2-Dichloropropane

Concen: 4.329 ug/l

RT: 9.37 min Scan# 1224

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 63 Resp: 13419

Ion Ratio Lower Upper

63 100

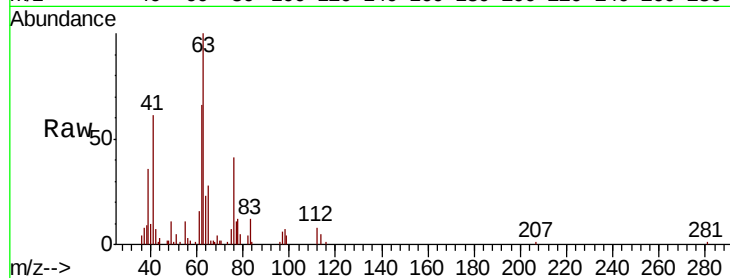
65 28.4 25.8 38.6

Manual Integrations

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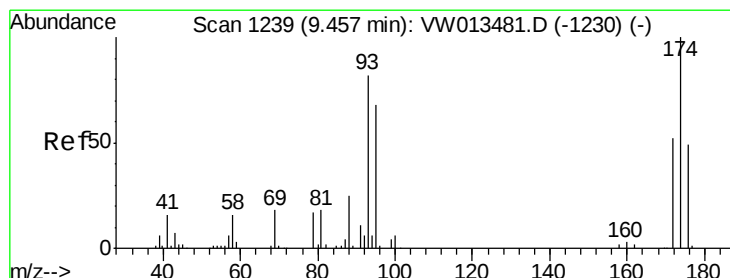
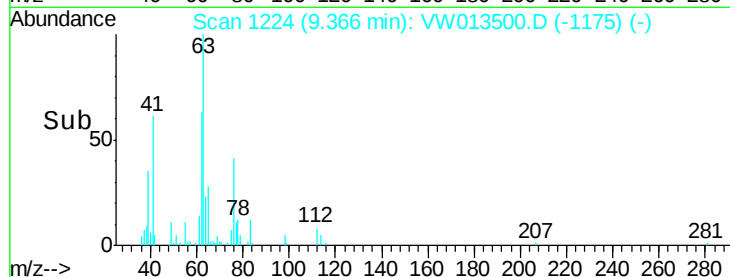
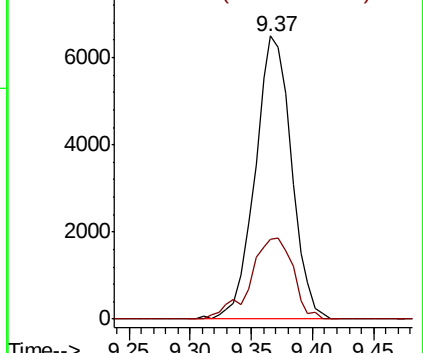
MMDadoda

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Abundance Ion 62.90 (62.60 to 63.60): VW

Ion 64.90 (64.60 to 65.60): VW



#46

Dibromomethane

Concen: 4.225 ug/l

RT: 9.46 min Scan# 1239

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

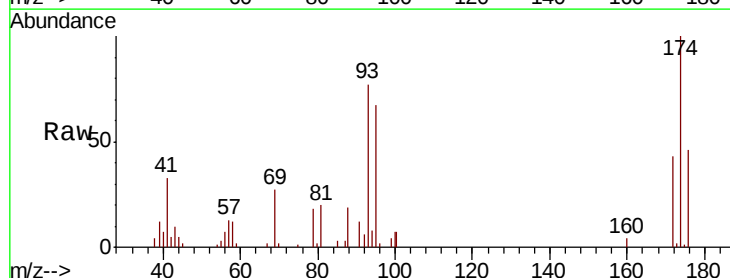
Tgt Ion: 93 Resp: 6524

Ion Ratio Lower Upper

93 100

95 86.8 68.0 102.0

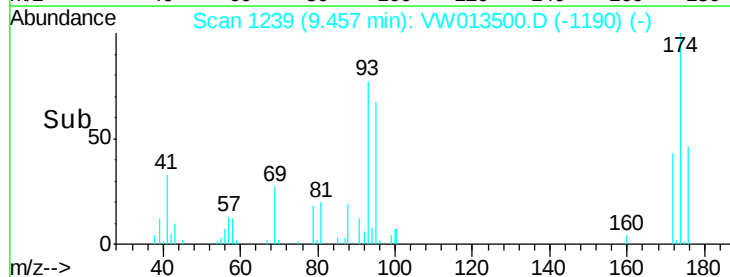
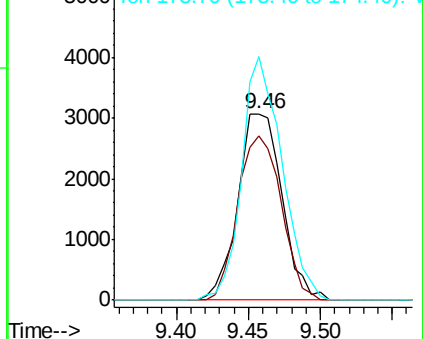
174 119.0 97.0 145.6

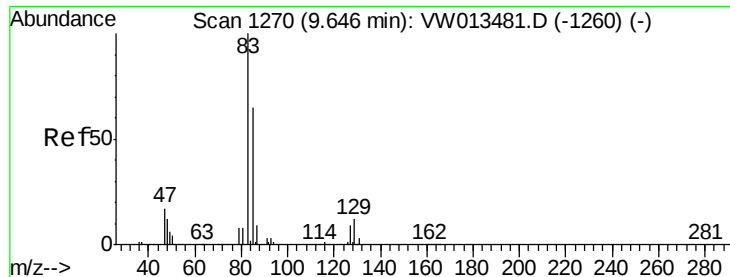


Abundance Ion 92.80 (92.50 to 93.50): VW

Ion 94.80 (94.50 to 95.50): VW

Ion 173.70 (173.40 to 174.40): V





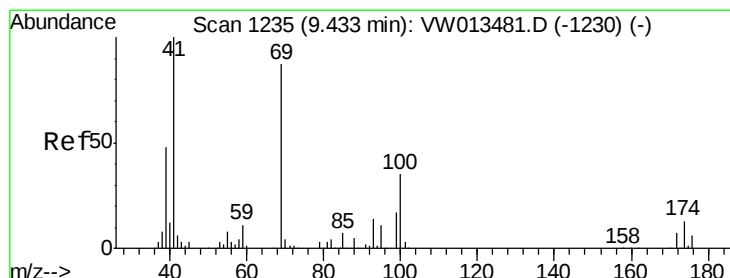
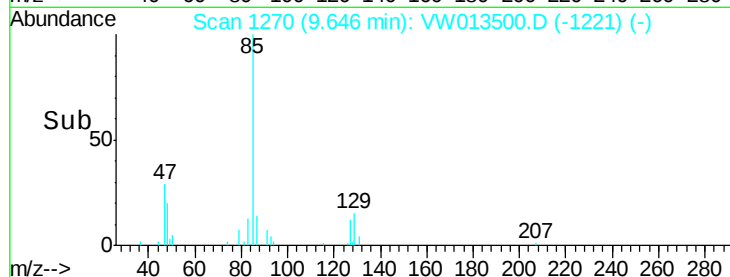
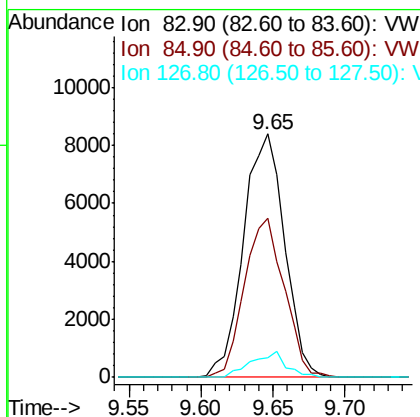
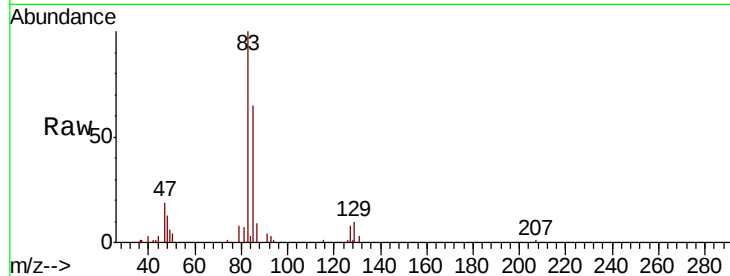
#47
Bromodichloromethane
Concen: 4.312 ug/l
RT: 9.65 min Scan# 1270
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
83	100		
85	65.3	51.9	77.9
127	8.0	7.4	11.2

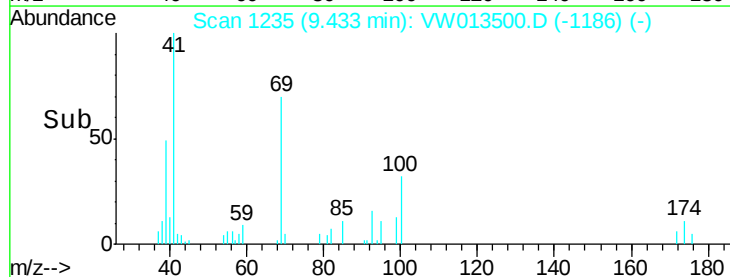
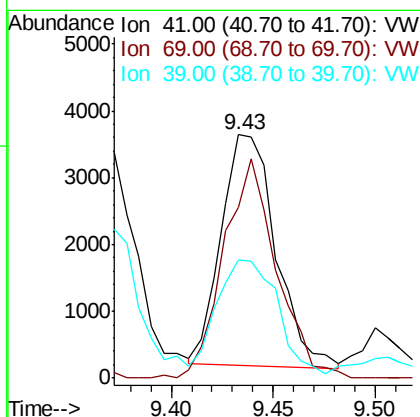
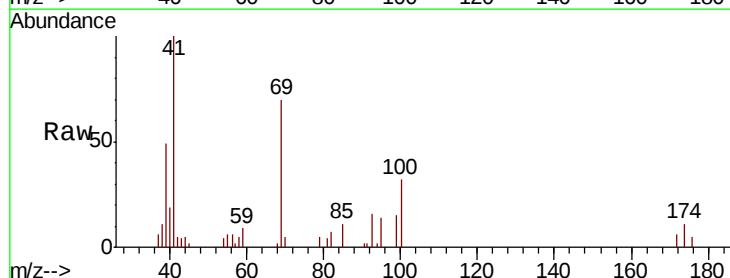
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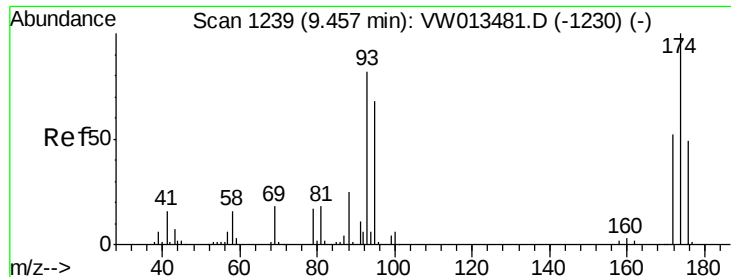
MMDadoda
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#48
Methyl methacrylate
Concen: 3.433 ug/l
RT: 9.43 min Scan# 1235
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
41	100		
69	92.3	70.4	105.6
39	54.1	37.3	55.9





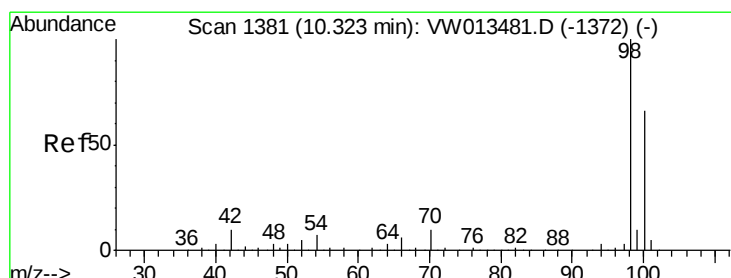
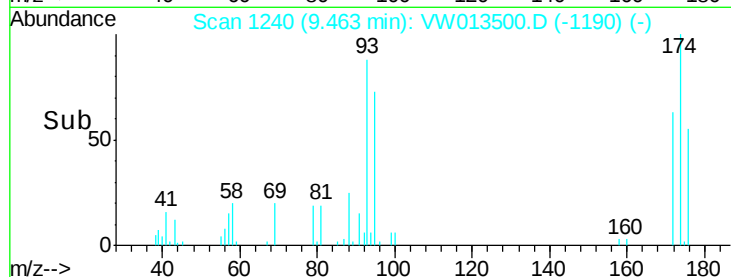
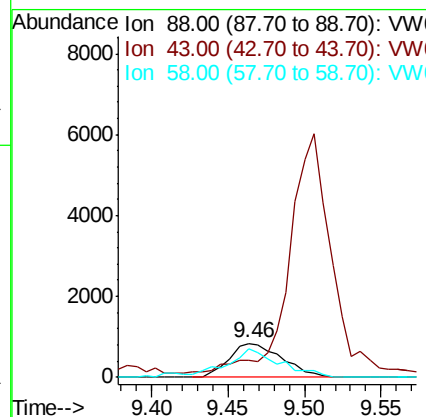
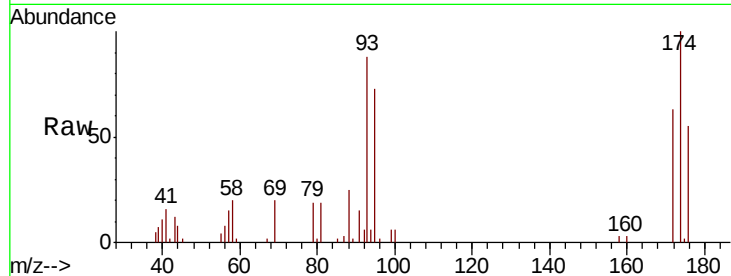
#49
1,4-Dioxane
Concen: 74.051 ug/l
RT: 9.46 min Scan# 1240
Delta R.T. 0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	82.9	60.0	90.0

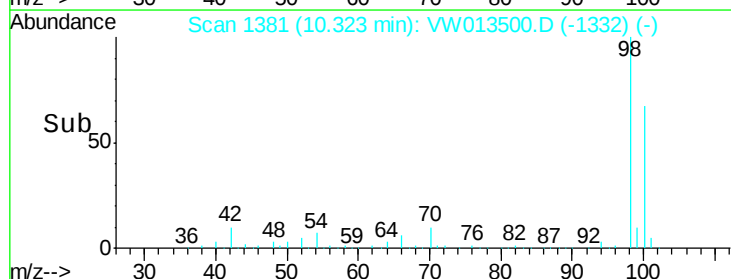
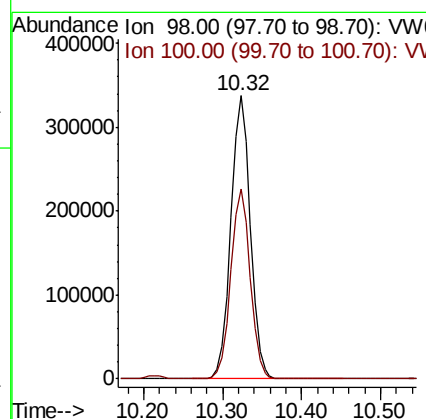
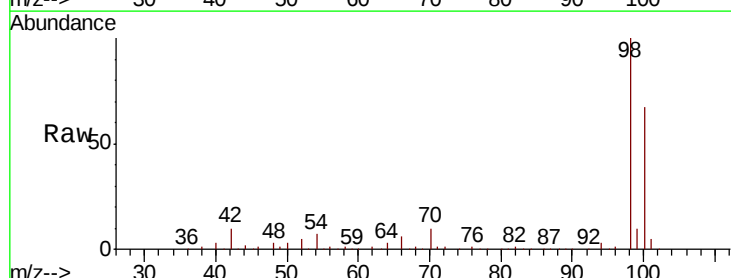
Manual Integrations
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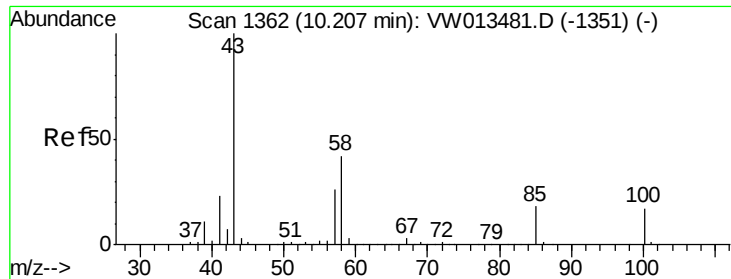
MMDadoda
10/11/2019 4:40:16 PM



#50
Toluene-d8
Concen: 48.018 ug/l
RT: 10.32 min Scan# 1381
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
98	100		
100	66.9	53.2	79.8





#51

4-Methyl-2-Pentanone

Concen: 20.172 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 43 Resp: 40220

Ion Ratio Lower Upper

43 100

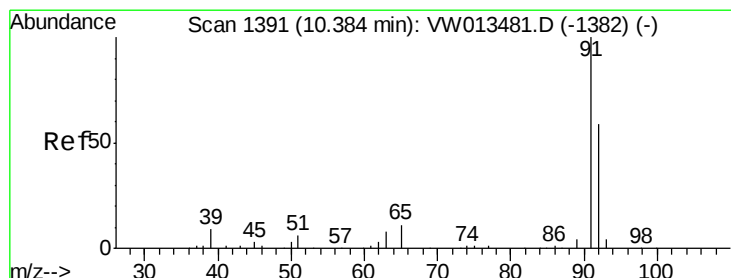
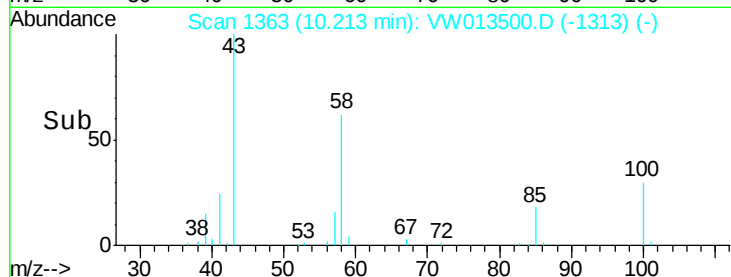
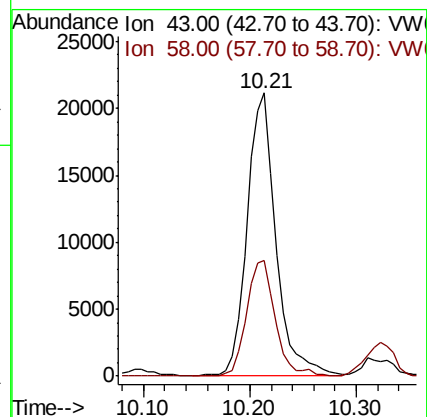
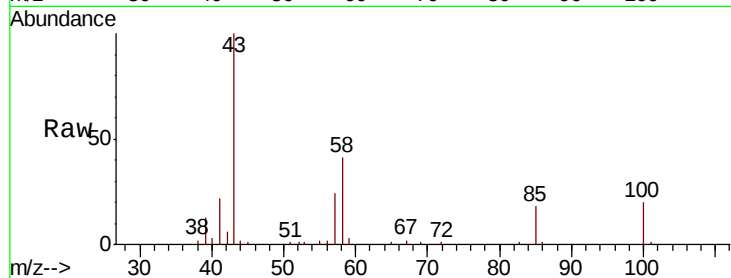
58 40.4 32.8 49.2

Manual Integrations

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MMDadoda

10/11/2019 4:40:16 PM



#52

Toluene

Concen: 4.261 ug/l

RT: 10.38 min Scan# 1391

Delta R.T. 0.00 min

Lab File: VW013500.D

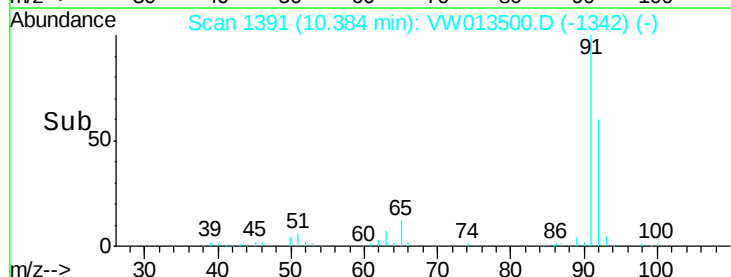
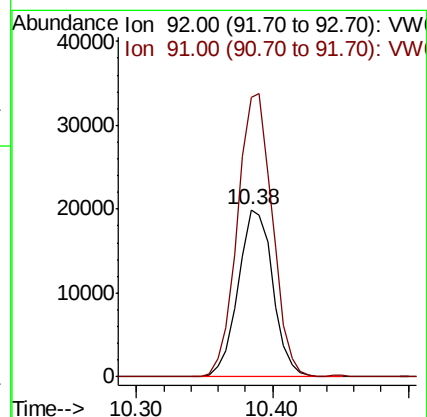
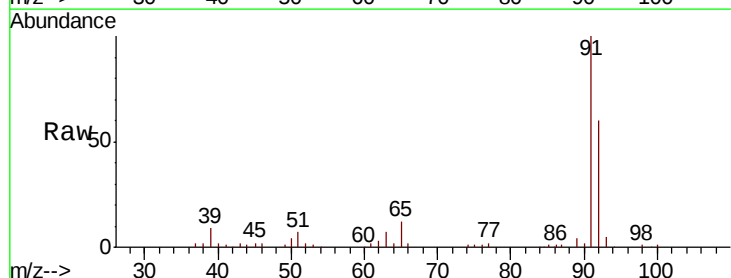
Acq: 09 Oct 2019 13:35

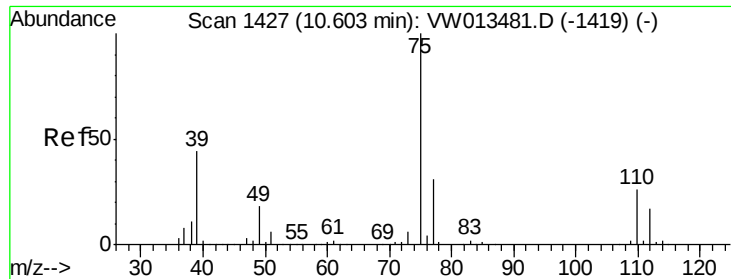
Tgt Ion: 92 Resp: 35447

Ion Ratio Lower Upper

92 100

91 171.2 134.8 202.2





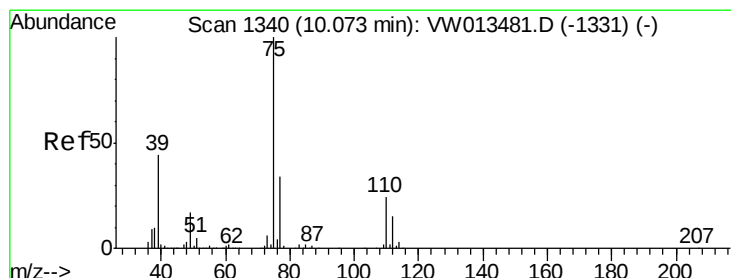
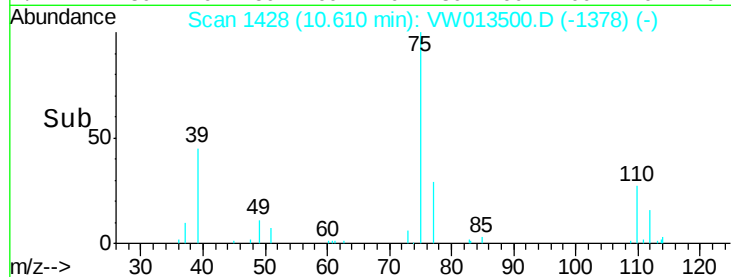
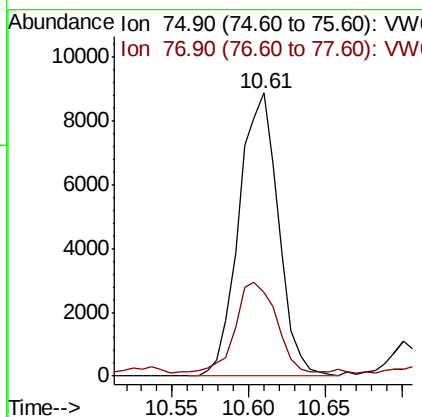
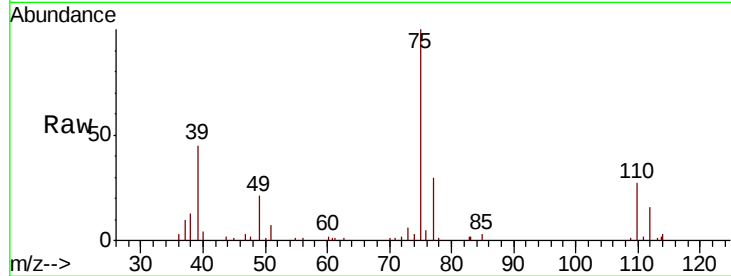
#53
 t-1,3-Dichloropropene
 Concen: 3.985 ug/l
 RT: 10.61 min Scan# 1428
 Delta R.T. 0.01 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 75 Resp: 15895
 Ion Ratio Lower Upper
 75 100
 77 28.0 25.2 37.8

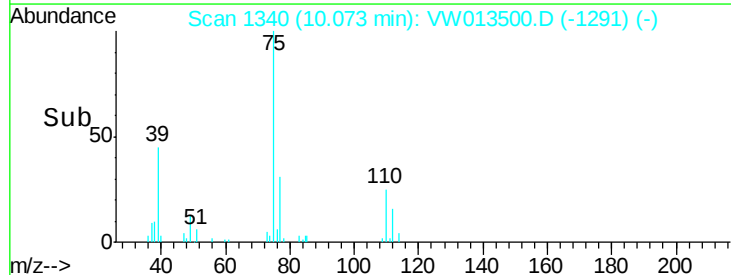
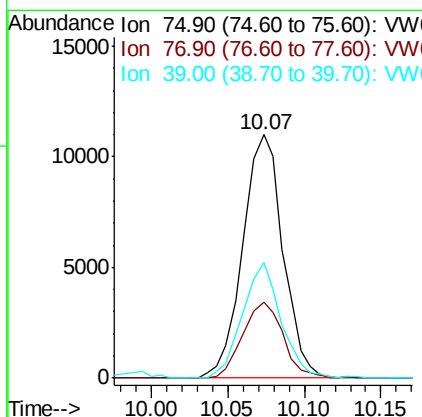
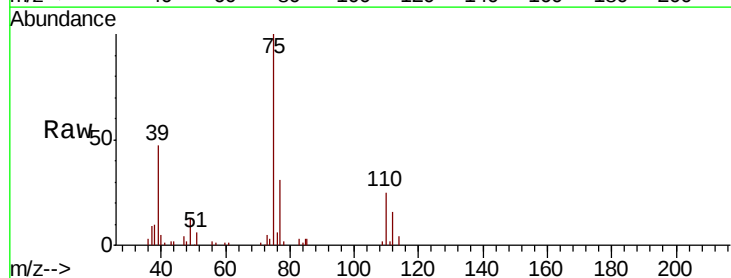
Manual Integrations
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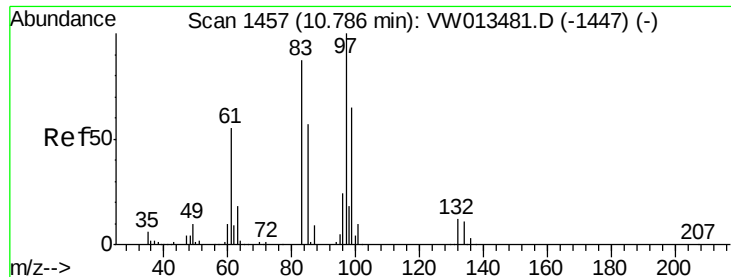
MMDadoda
 10/11/2019 4:40:16 PM



#54
 cis-1,3-Dichloropropene
 Concen: 4.161 ug/l
 RT: 10.07 min Scan# 1340
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion: 75 Resp: 20108
 Ion Ratio Lower Upper
 75 100
 77 31.4 27.0 40.4
 39 47.3 35.0 52.4





#55

1,1,2-Trichloroethane

Concen: 4.019 ug/l

RT: 10.79 min Scan# 1457

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

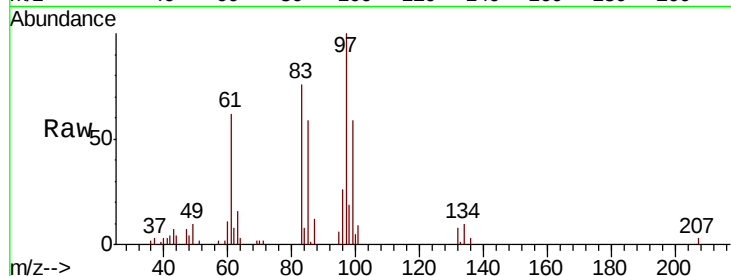
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	97	Resp:	9315
Ion	Ratio	Lower	Upper
97	100		
83	76.1	69.8	104.8
85	56.9	45.4	68.0
99	59.1	51.9	77.9

Manual Integrations
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MMDadoda
10/11/2019 4:40:16 PM



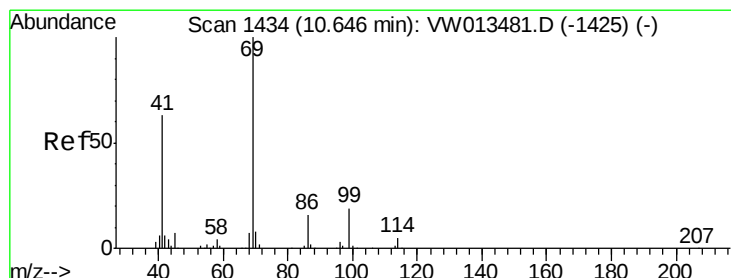
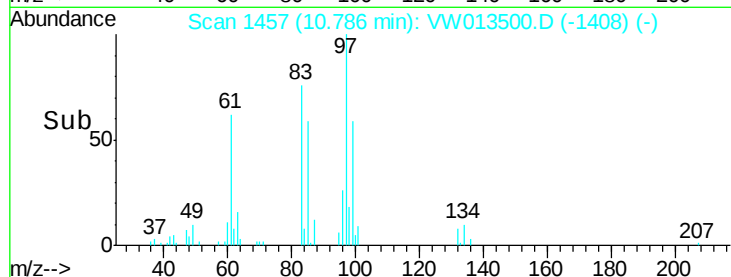
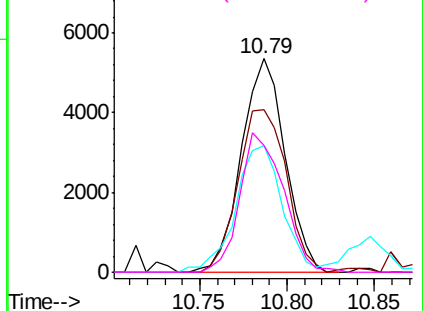
Abundance

Ion 96.90 (96.60 to 97.60): VW

Ion 82.90 (82.60 to 83.60): VW

Ion 84.90 (84.60 to 85.60): VW

Ion 98.90 (98.60 to 99.60): VW



#56

Ethyl methacrylate

Concen: 3.627 ug/l

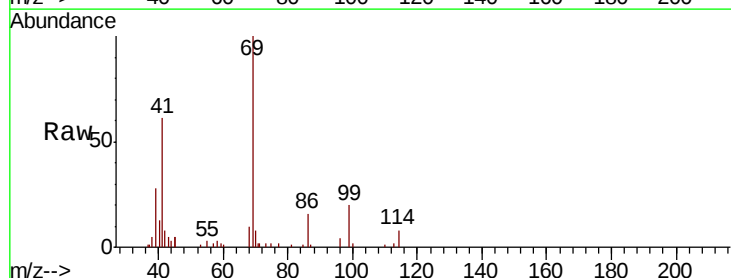
RT: 10.65 min Scan# 1434

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	69	Resp:	11324
Ion	Ratio	Lower	Upper
69	100		
41	69.7	51.8	77.6
39	26.4	21.7	32.5

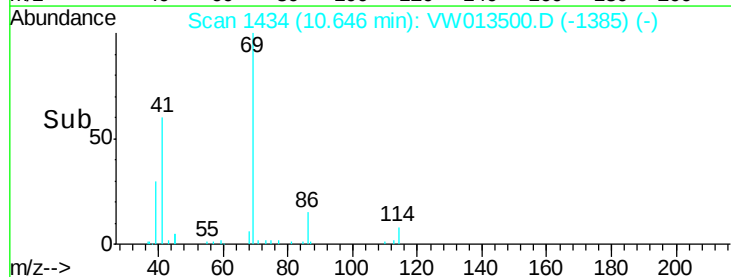
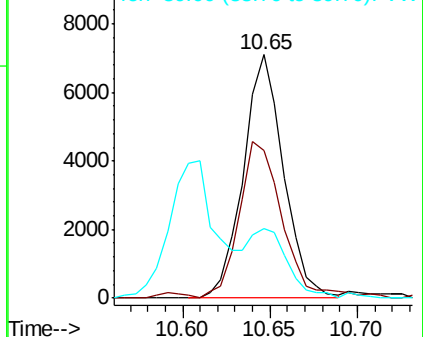


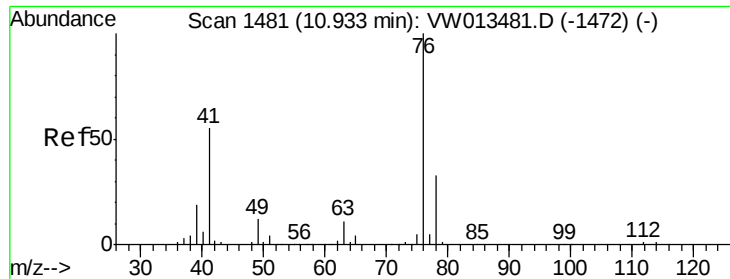
Abundance

Ion 69.00 (68.70 to 69.70): VW

Ion 41.00 (40.70 to 41.70): VW

Ion 39.00 (38.70 to 39.70): VW





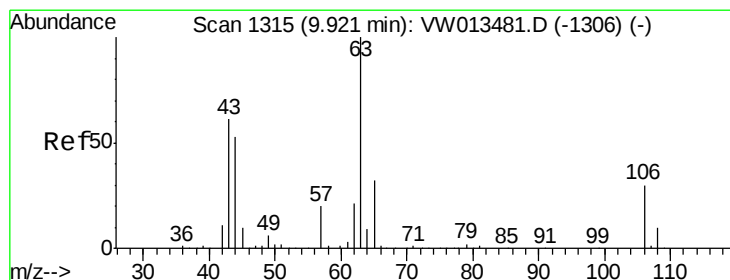
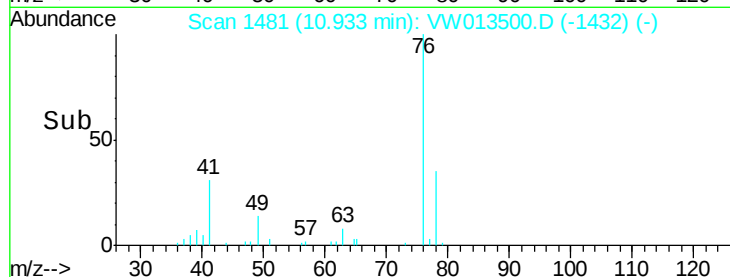
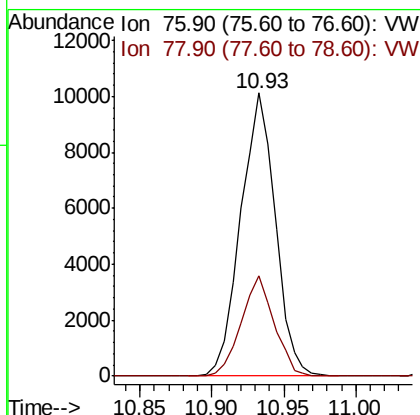
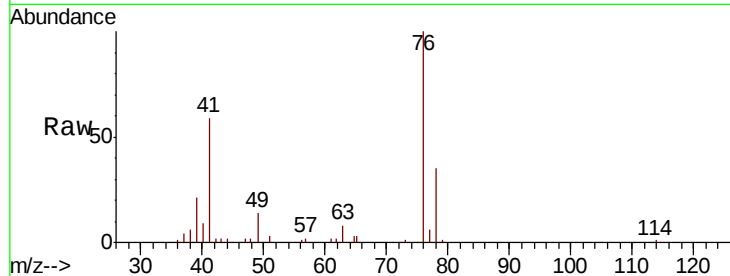
#57
 1,3-Dichloropropane
 Concen: 4.241 ug/l
 RT: 10.93 min Scan# 1481
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 76 Resp: 16880
 Ion Ratio Lower Upper
 76 100
 78 33.4 25.9 38.9

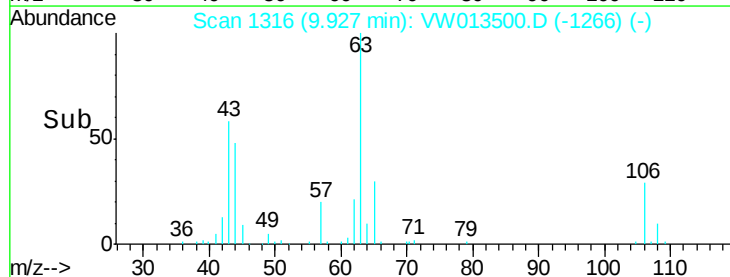
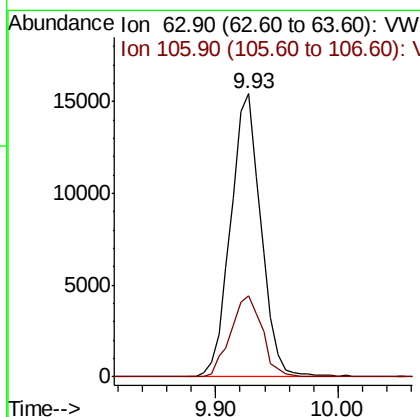
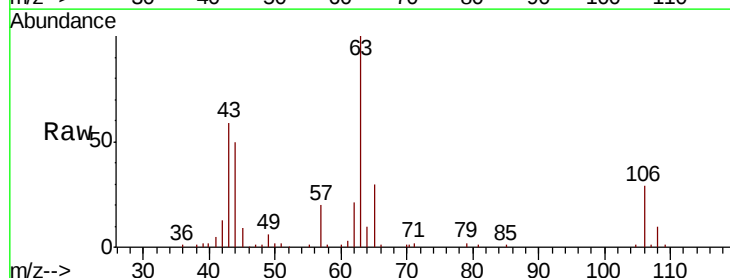
Manual Integrations
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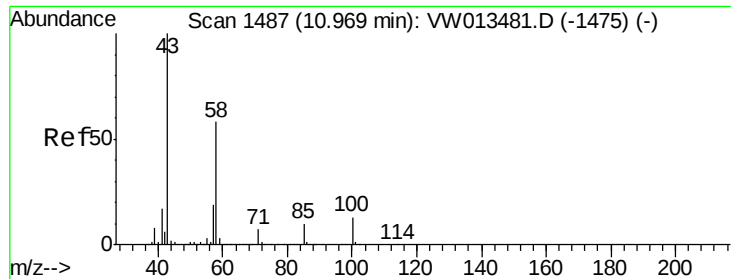
MMDadoda
 10/11/2019 4:40:16 PM



#58
 2-Chloroethyl Vinyl ether
 Concen: 17.954 ug/l
 RT: 9.93 min Scan# 1316
 Delta R.T. 0.01 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion: 63 Resp: 26444
 Ion Ratio Lower Upper
 63 100
 106 29.8 24.5 36.7





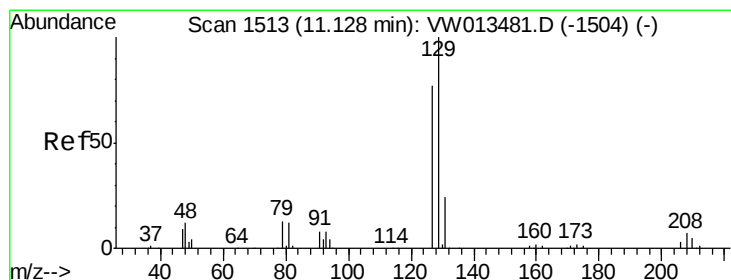
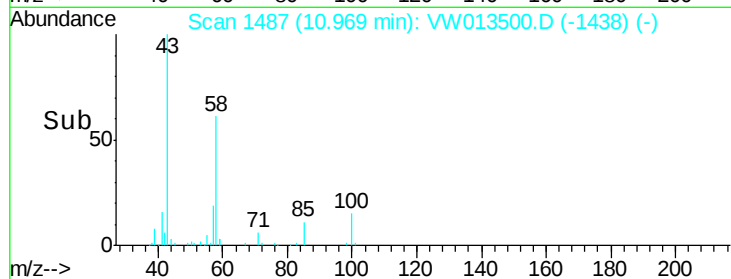
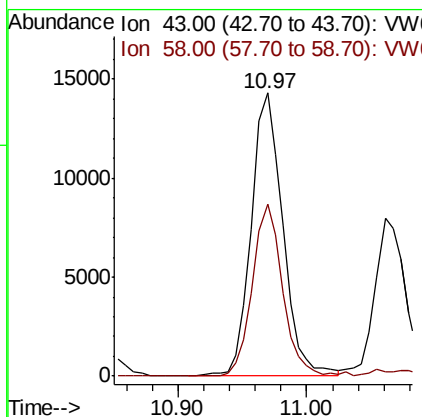
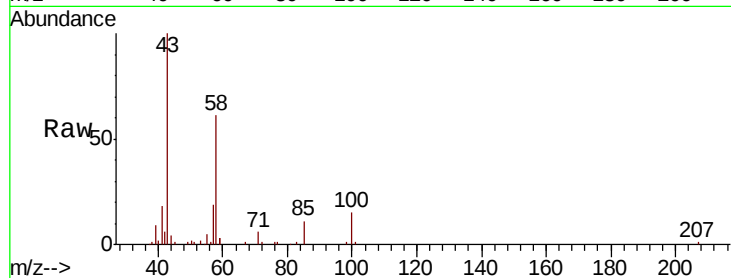
#59
2-Hexanone
Concen: 17.671 ug/l
RT: 10.97 min Scan# 1487
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 43 Resp: 24160
Ion Ratio Lower Upper
43 100
58 58.2 28.4 85.2

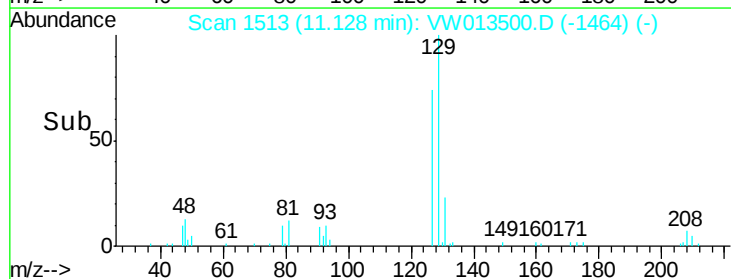
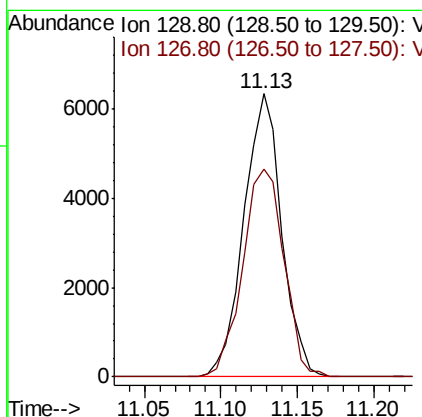
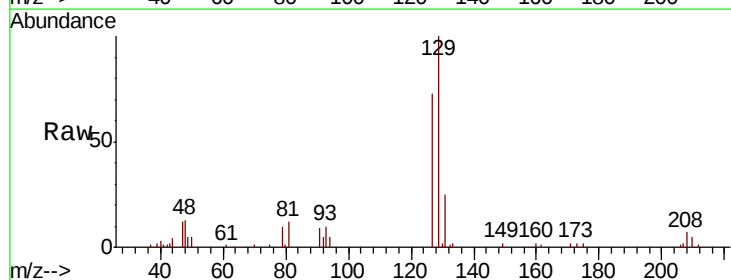
Manual Integrations
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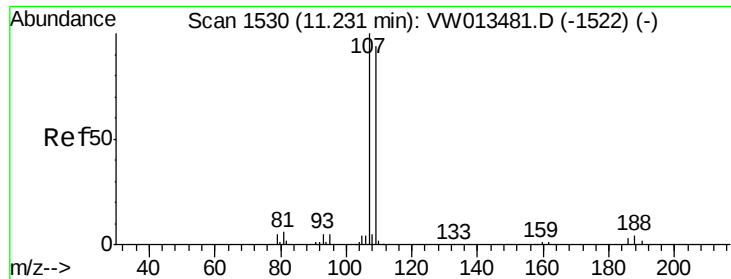
MMDadoda
10/11/2019 4:40:16 PM



#60
Dibromochloromethane
Concen: 4.081 ug/l
RT: 11.13 min Scan# 1513
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion: 129 Resp: 10880
Ion Ratio Lower Upper
129 100
127 80.5 37.4 112.1





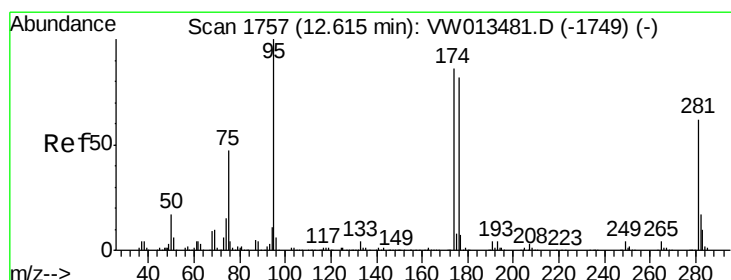
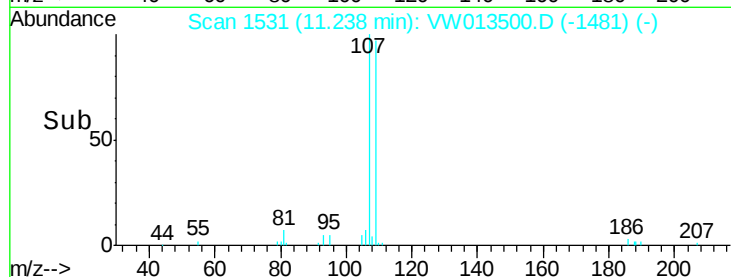
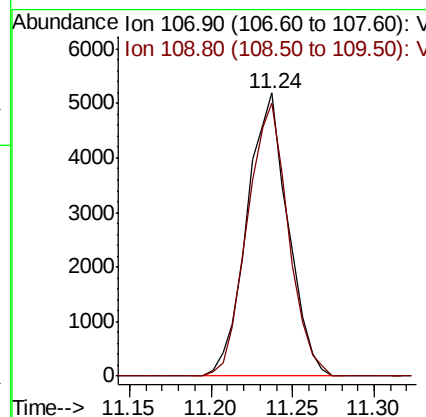
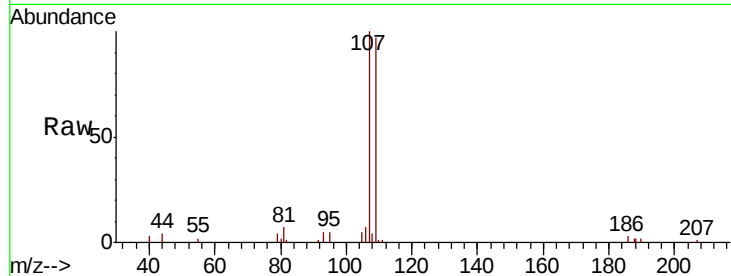
#61
 1,2-Dibromoethane
 Concen: 4.120 ug/l
 RT: 11.24 min Scan# 1531
 Delta R.T. 0.01 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 107 Resp: 9084
 Ion Ratio Lower Upper
 107 100
 109 96.2 76.6 115.0

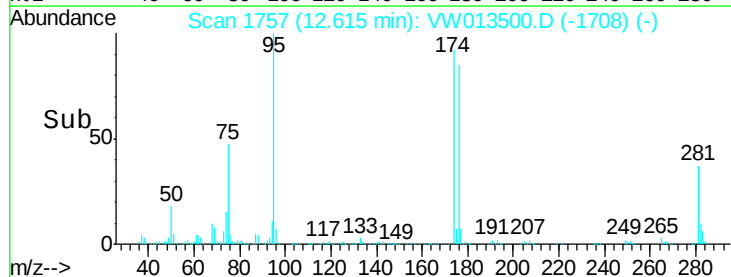
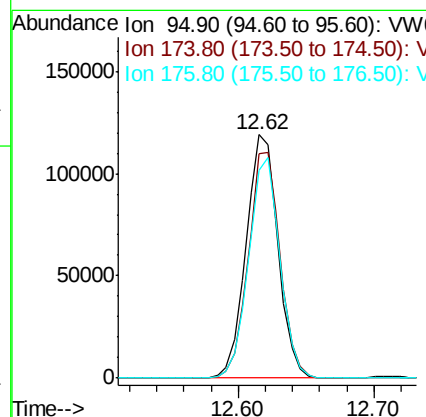
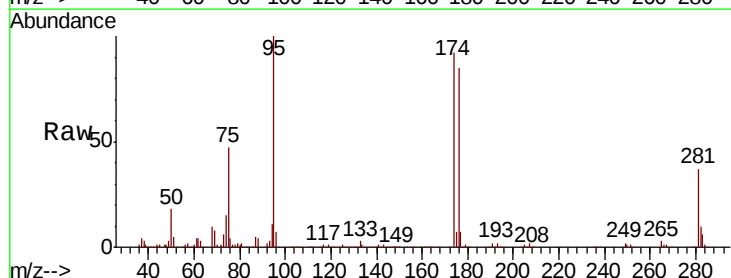
Manual Integrations
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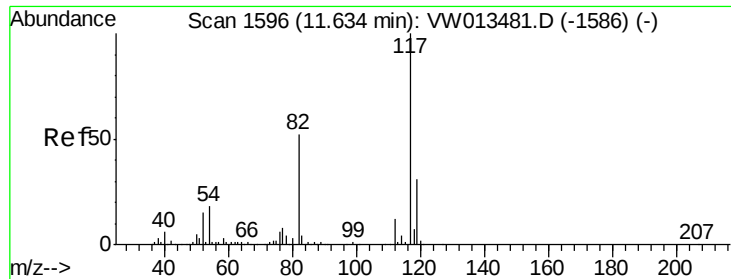
MMDadoda
 10/11/2019 4:40:16 PM



#62
 4-Bromofluorobenzene
 Concen: 48.233 ug/l
 RT: 12.62 min Scan# 1757
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion: 95 Resp: 194511
 Ion Ratio Lower Upper
 95 100
 174 92.5 0.0 177.4
 176 88.9 0.0 173.4





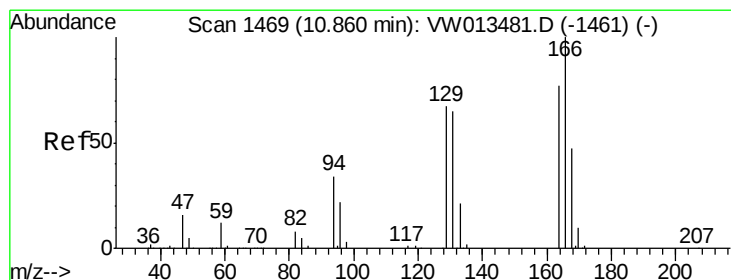
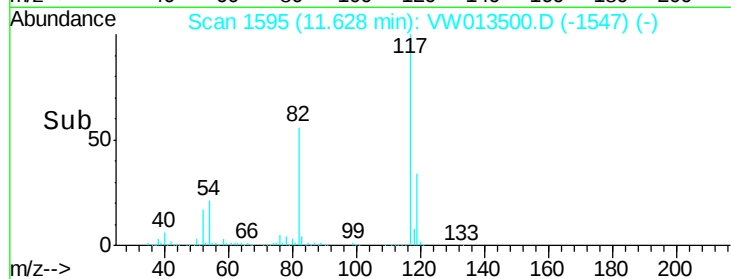
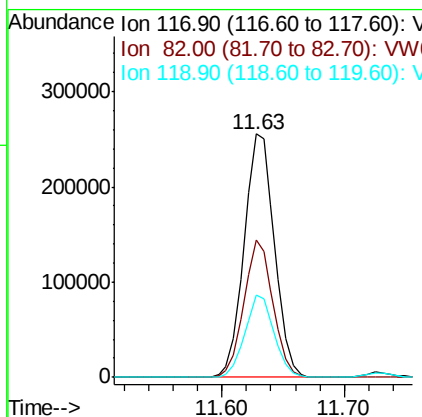
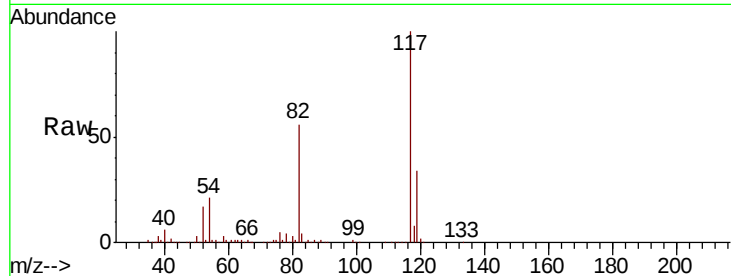
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.63 min Scan# 1595
Delta R.T. -0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Resp	Lower	Upper
117	100	440304		
82	56.4		41.4	62.2
119	34.0		25.1	37.7

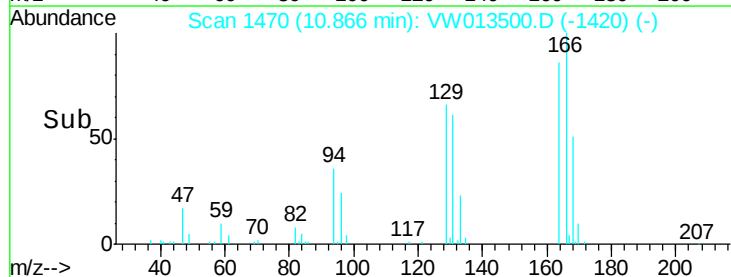
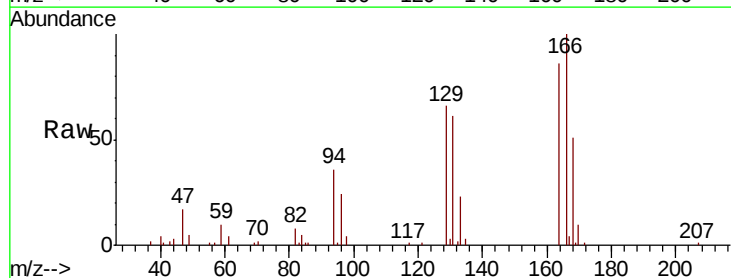
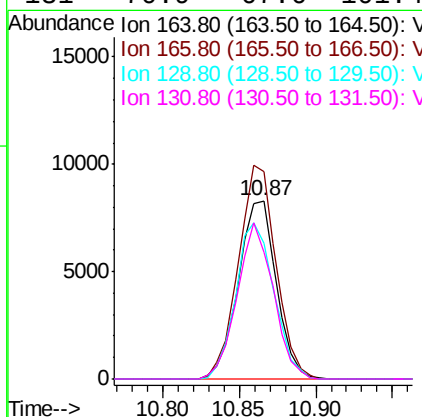
Manual Integrations
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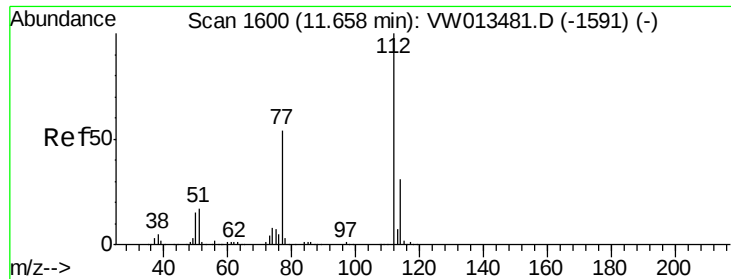
MMDadoda
10/11/2019 4:40:16 PM



#64
Tetrachloroethene
Concen: 4.430 ug/l
RT: 10.87 min Scan# 1470
Delta R.T. 0.01 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	14356		
166	116.6		104.6	156.8
129	76.4		70.2	105.2
131	70.9		67.6	101.4





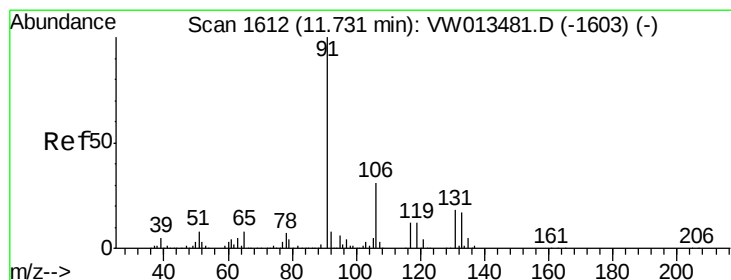
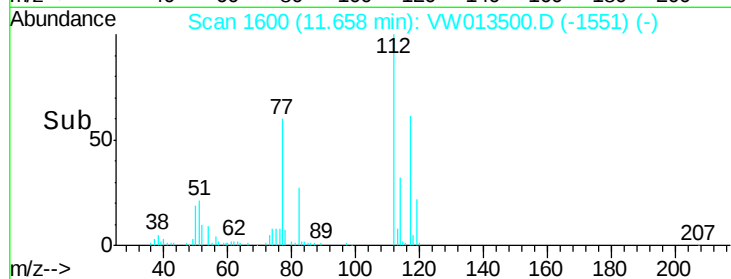
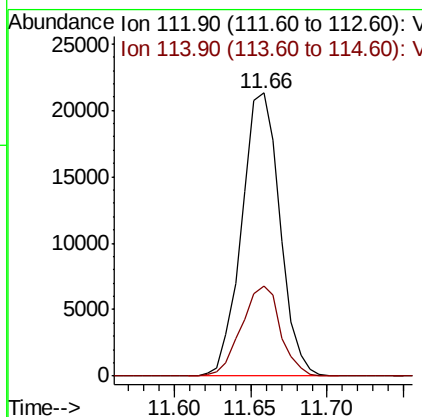
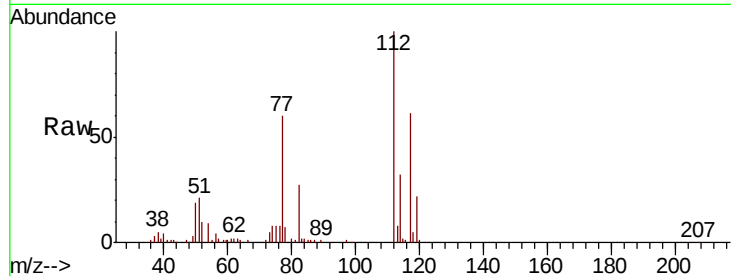
#65
Chlorobenzene
Concen: 4.227 ug/l
RT: 11.66 min Scan# 1600
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:112 Resp: 36985
Ion Ratio Lower Upper
112 100
114 31.8 24.6 37.0

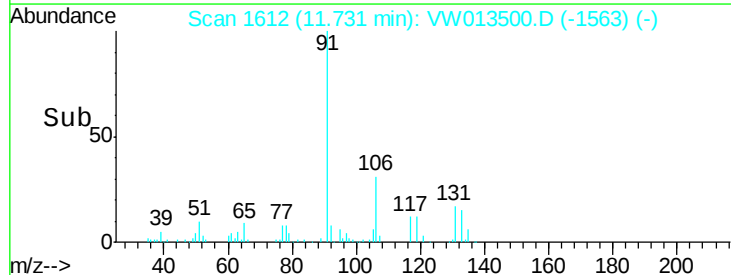
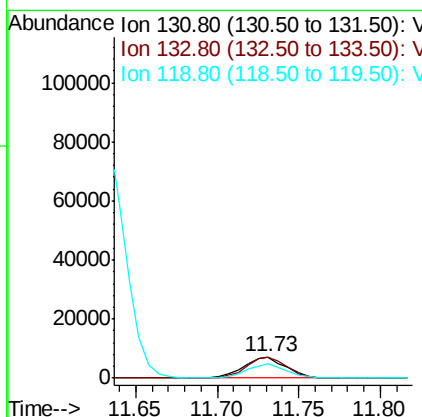
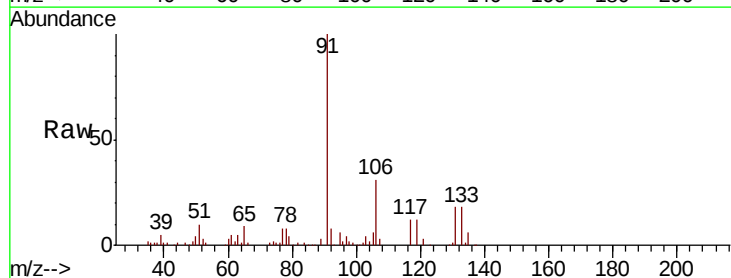
Manual Integrations
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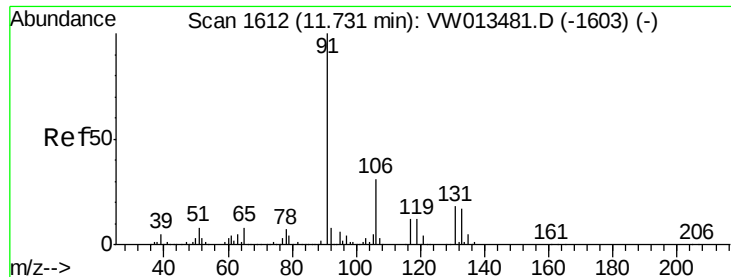
MMDadoda
10/11/2019 4:40:16 PM



#66
1,1,1,2-Tetrachloroethane
Concen: 4.117 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion:131 Resp: 12512
Ion Ratio Lower Upper
131 100
133 96.4 47.6 142.9
119 65.2 32.6 98.0





#67

Ethyl Benzene

Concen: 4.244 ug/l

RT: 11.73 min Scan# 1612

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 91 Resp: 67862

Ion Ratio Lower Upper

91 100

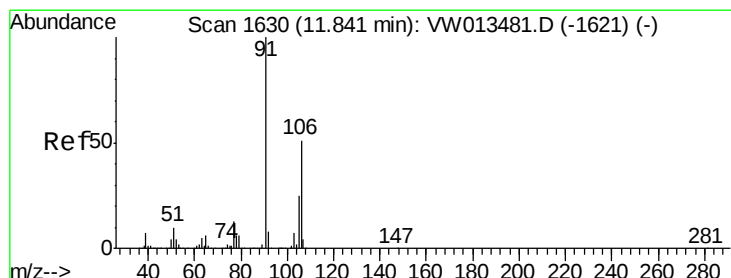
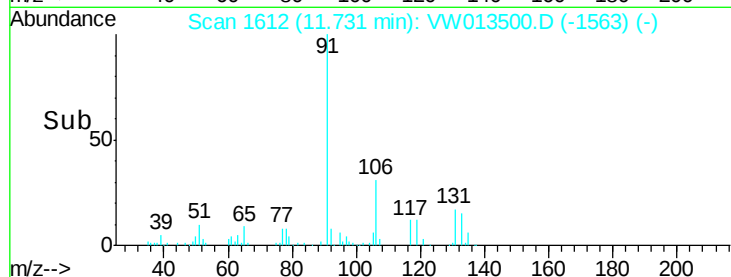
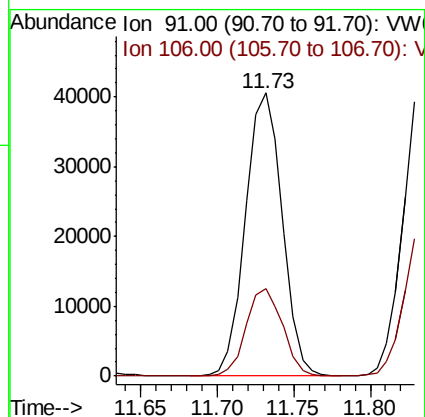
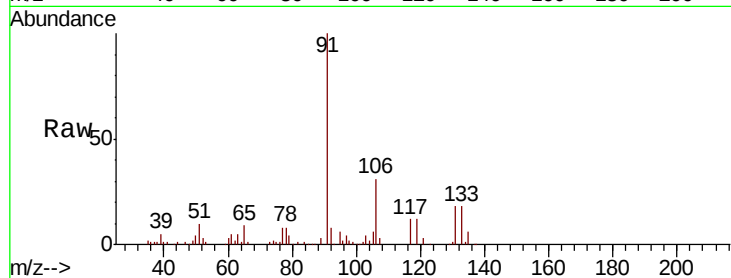
106 30.9 24.8 37.2

Manual Integrations

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MMDadoda

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#68

m/p-Xylenes

Concen: 8.432 ug/l

RT: 11.84 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VW013500.D

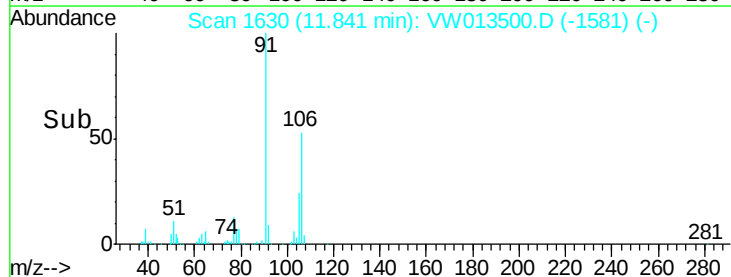
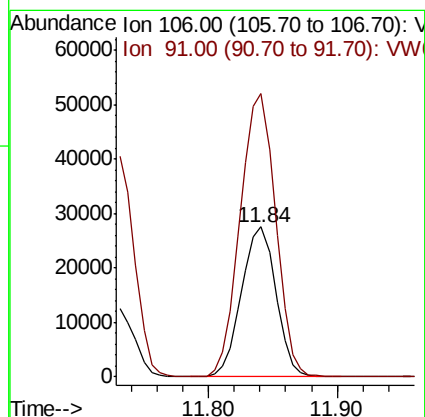
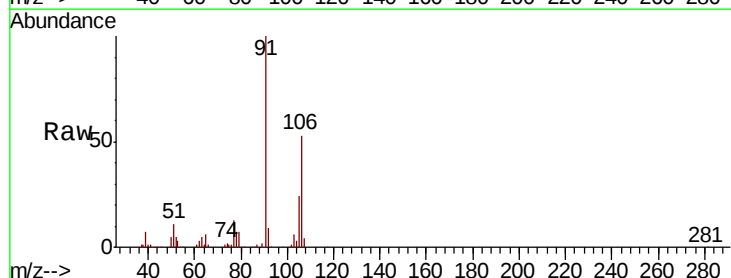
Acq: 09 Oct 2019 13:35

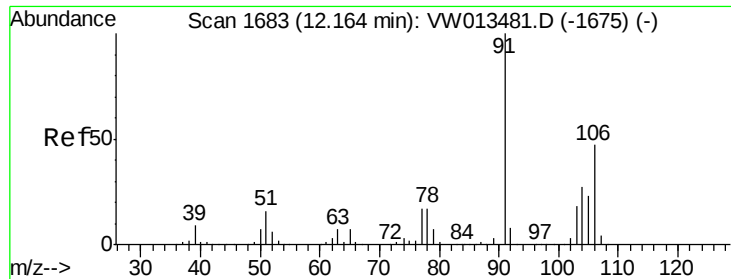
Tgt Ion: 106 Resp: 51302

Ion Ratio Lower Upper

106 100

91 193.6 156.2 234.4





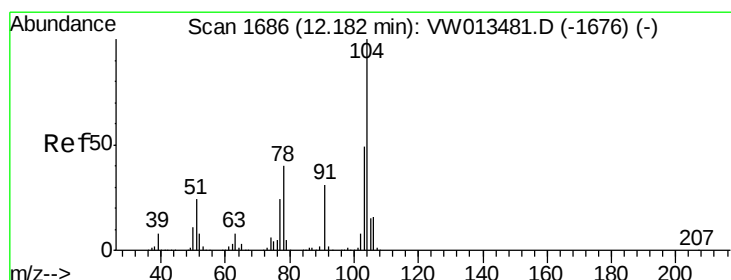
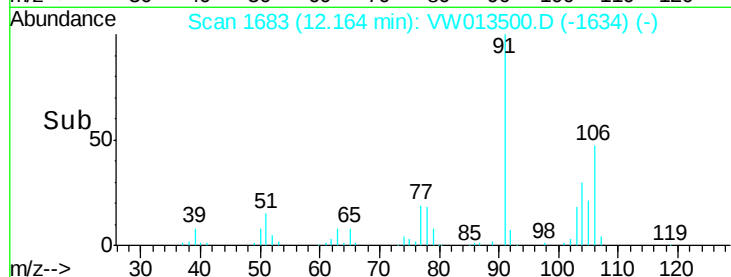
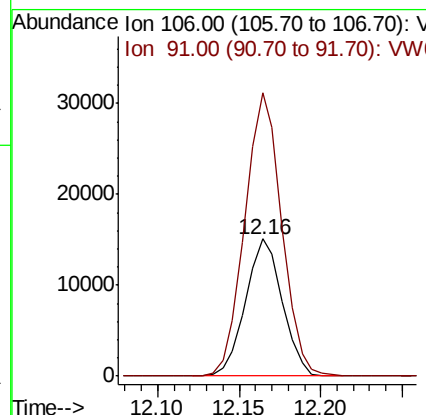
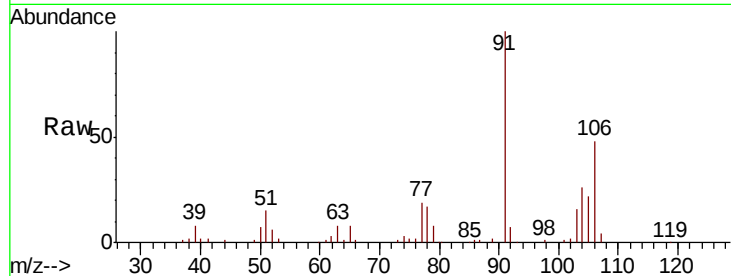
#69
o-Xylene
Concen: 4.237 ug/l
RT: 12.16 min Scan# 1683
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ion	Ratio	Lower	Upper
106	100			
91	206.2	105.0	315.0	

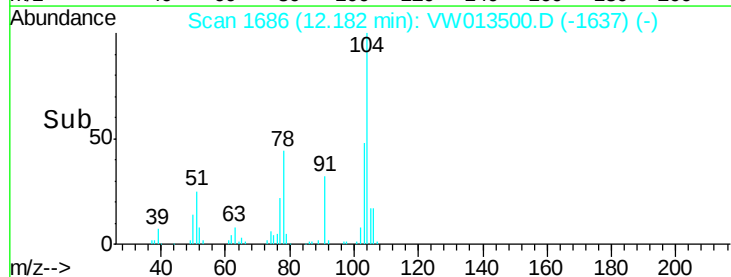
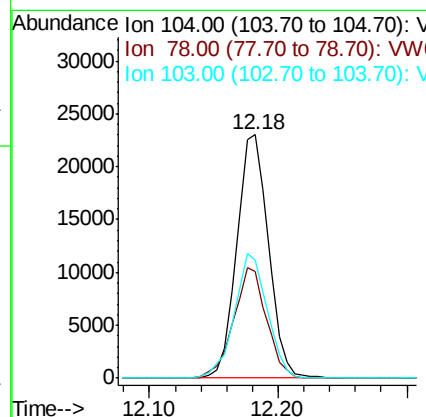
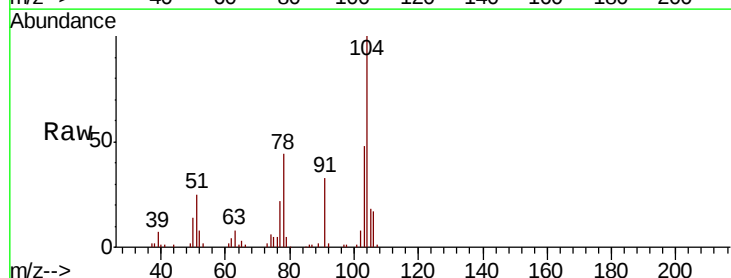
Manual Integrations
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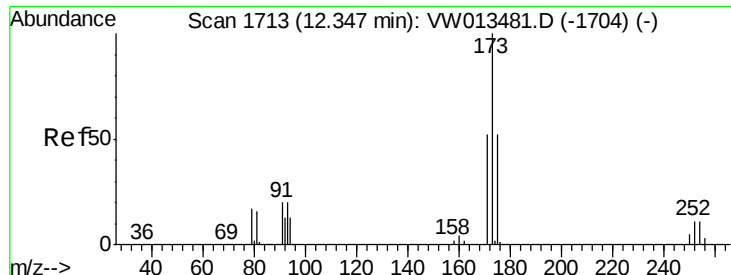
MMDadoda
10/11/2019 4:40:16 PM



#70
Styrene
Concen: 4.076 ug/l
RT: 12.18 min Scan# 1686
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ion	Ratio	Lower	Upper
104	100			
78	47.3	37.1	55.7	
103	53.2	43.2	64.8	





#71

Bromoform

Concen: 4.072 ug/l

RT: 12.35 min Scan# 1713

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:173 Resp: 6790

Ion Ratio Lower Upper

173 100

175 43.8 24.4 73.4

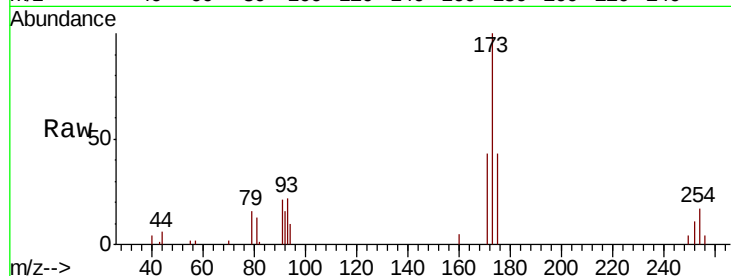
254 0.0 0.1 0.1#

Manual Integrations

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MMDadoda

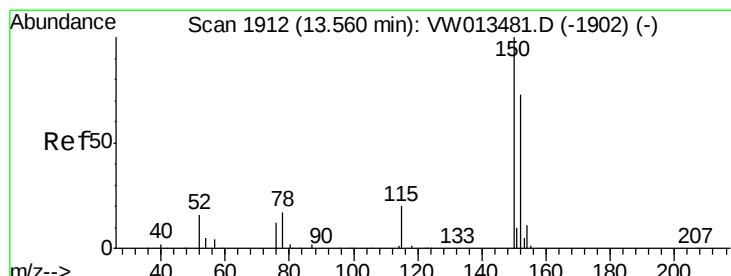
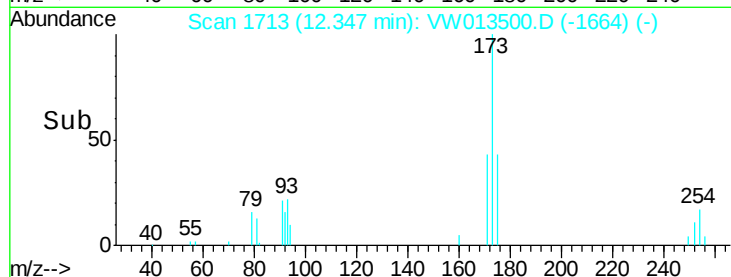
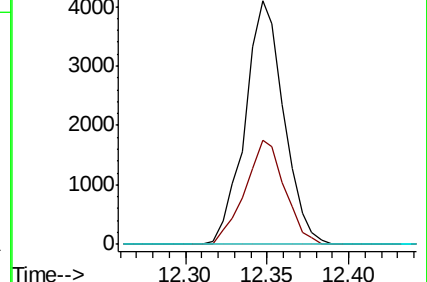
10/11/2019 4:40:16 PM



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: 13.56 min Scan# 1912

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

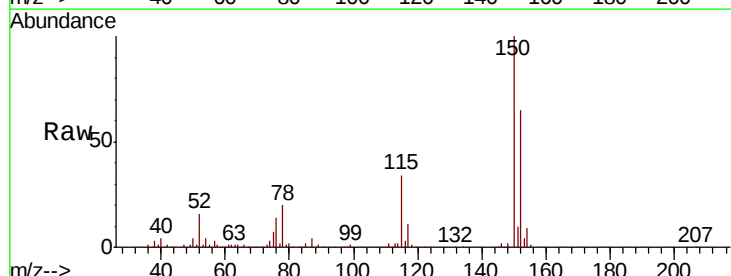
Tgt Ion:152 Resp: 224898

Ion Ratio Lower Upper

152 100

115 53.4 27.0 81.0

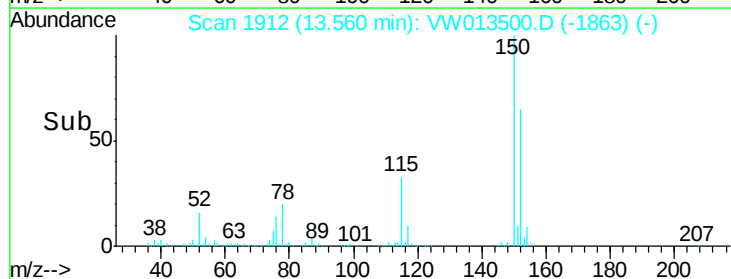
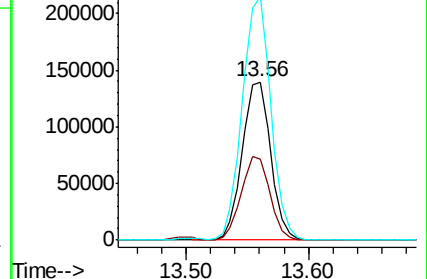
150 154.7 0.0 337.4

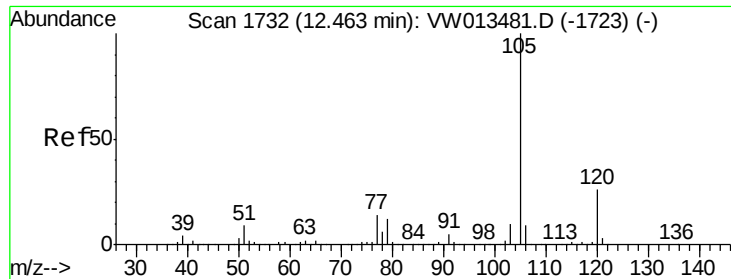


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#73

Isopropylbenzene

Concen: 4.050 ug/l

RT: 12.46 min Scan# 1732

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 105 Resp: 65247

Ion Ratio Lower Upper

105 100

120 25.6

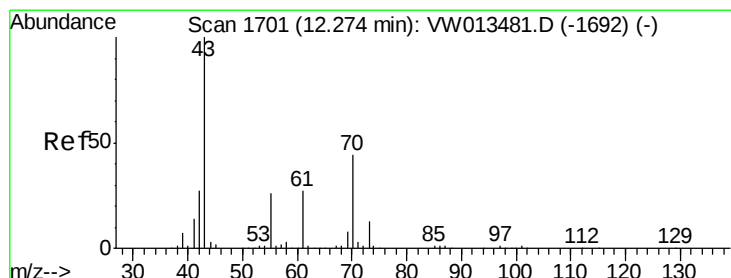
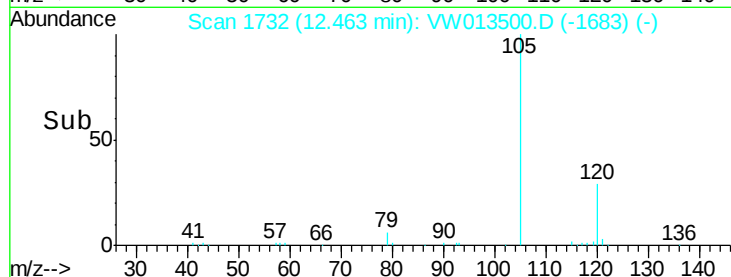
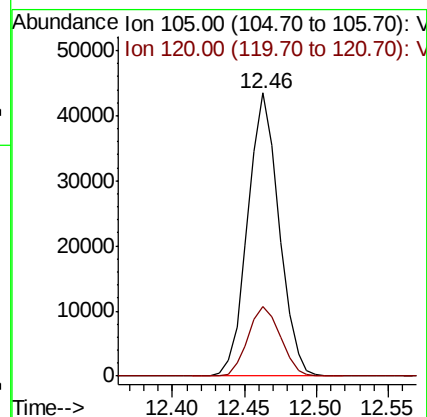
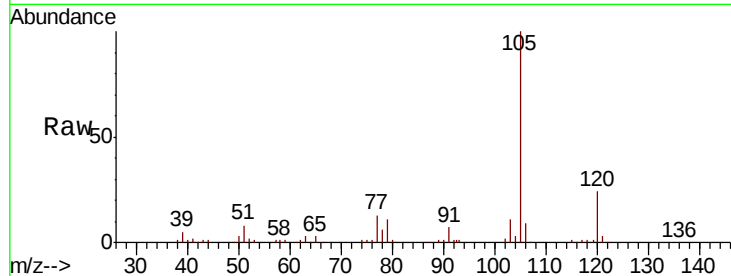
13.5 40.5

Manual Integrations

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#74

N-ethyl acetate

Concen: 3.556 ug/l

RT: 12.27 min Scan# 1701

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion: 43 Resp: 12530

Ion Ratio Lower Upper

43 100

70 45.4

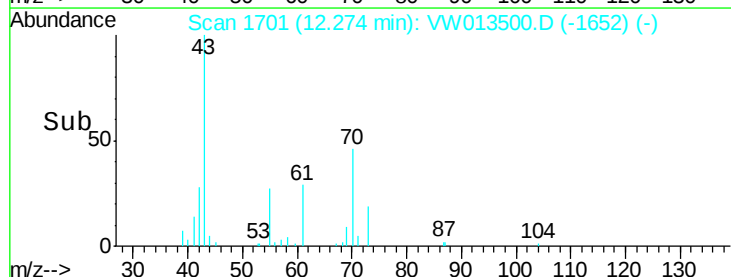
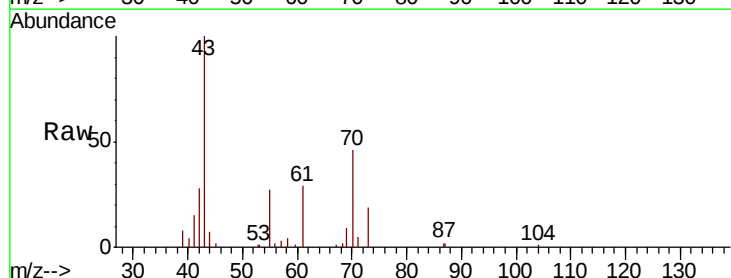
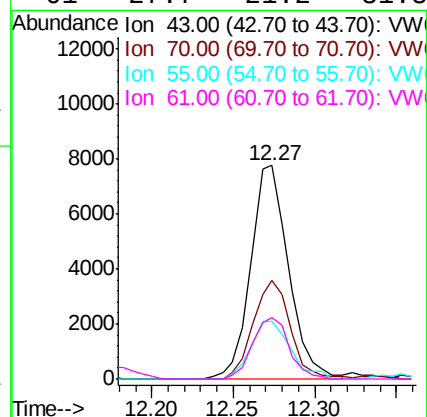
55 28.7

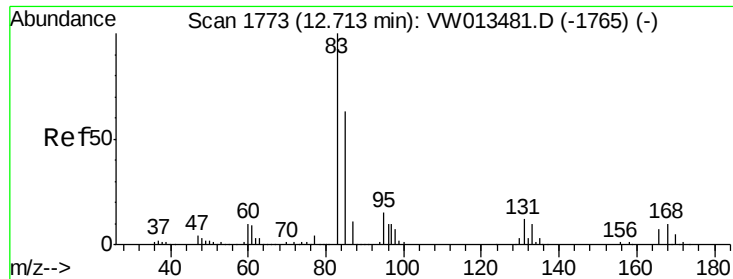
61 27.7

35.3 52.9

20.0 30.0

21.2 31.8





#75

1,1,2,2-Tetrachloroethane

Concen: 4.148 ug/l

RT: 12.71 min Scan# 1773

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

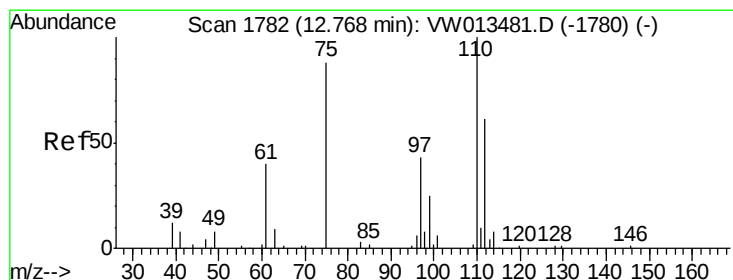
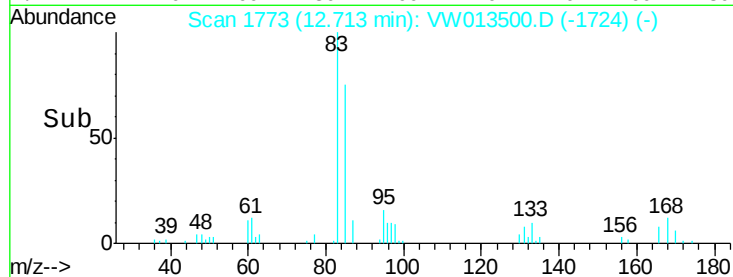
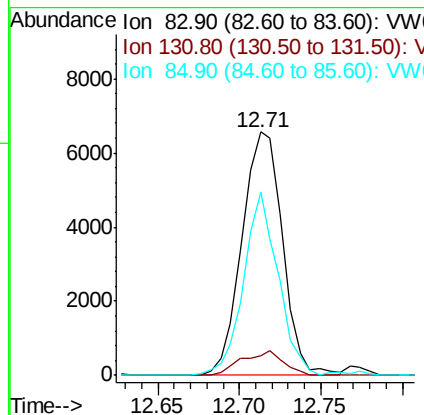
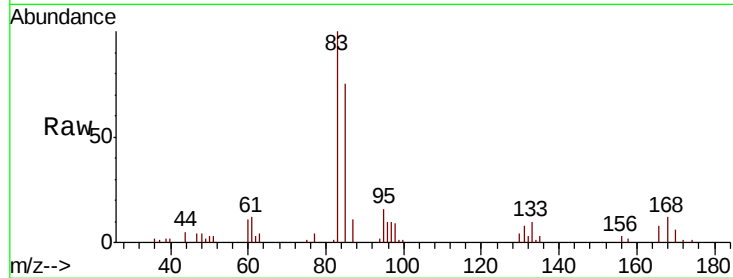
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	83	Resp:	11390
Ion Ratio	Lower	Upper	
83	100		
131	10.2	5.9	17.7
85	64.1	32.5	97.4

Manual Integrations
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#76

1,2,3-Trichloropropane

Concen: 3.898 ug/l m

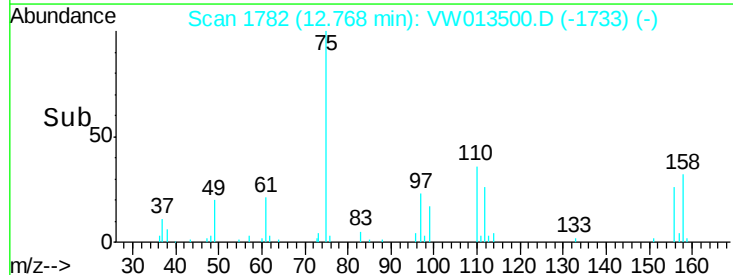
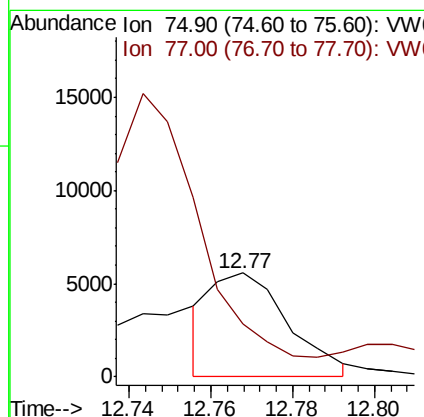
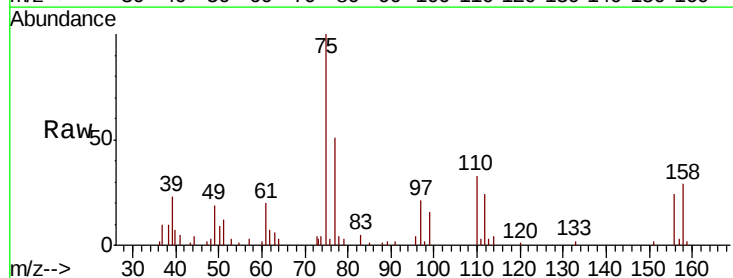
RT: 12.77 min Scan# 1782

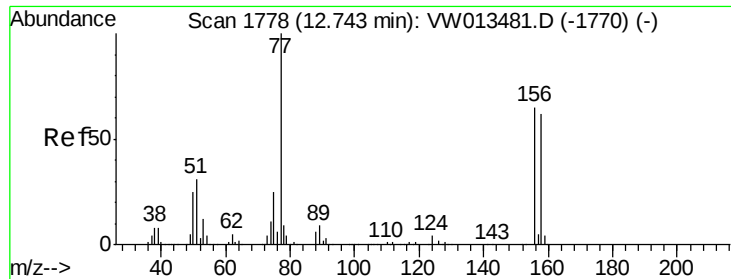
Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	75	Resp:	7302
Ion Ratio	Lower	Upper	
75	100		
77	0.0	0.0	0.0





#77

Bromobenzene

Concen: 4.194 ug/l

RT: 12.74 min Scan# 1778

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

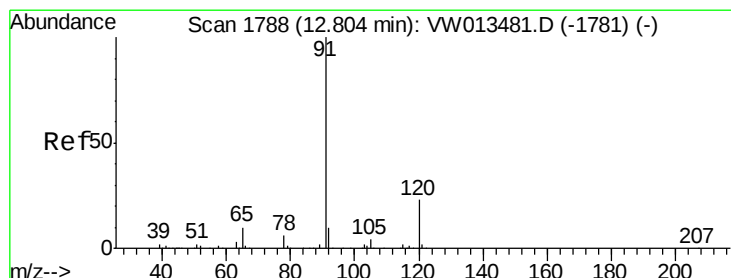
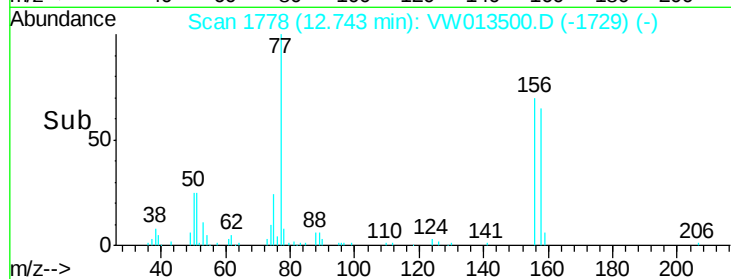
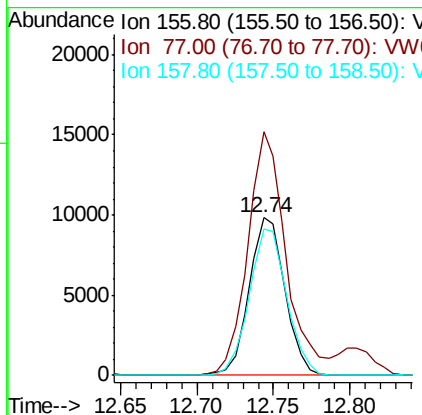
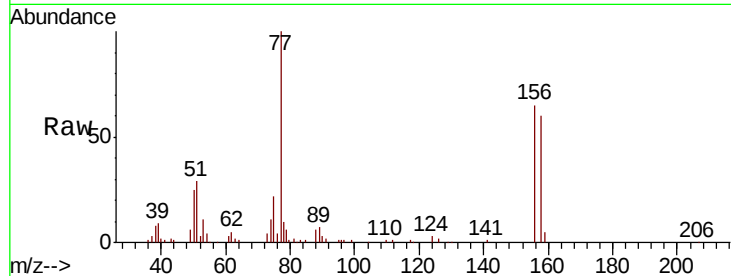
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ion	Ratio	Lower	Upper
156	100			
77	164.9	83.7	251.0	
158	97.1	49.0	147.0	

Manual Integrations
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#78

n-propylbenzene

Concen: 4.120 ug/l

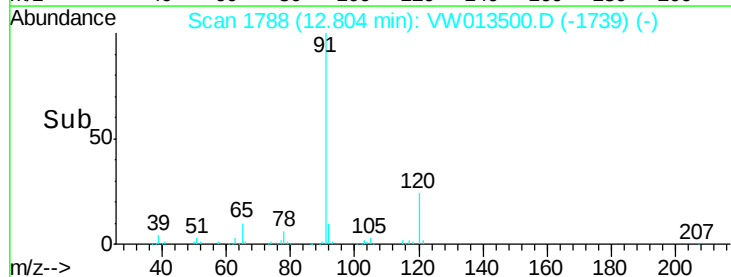
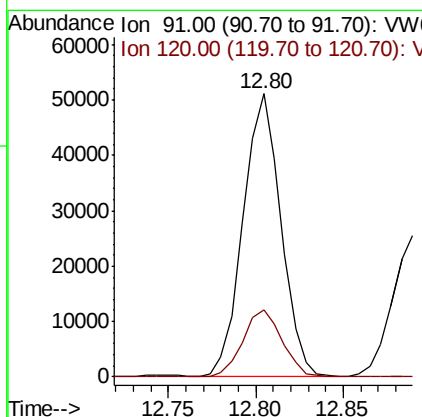
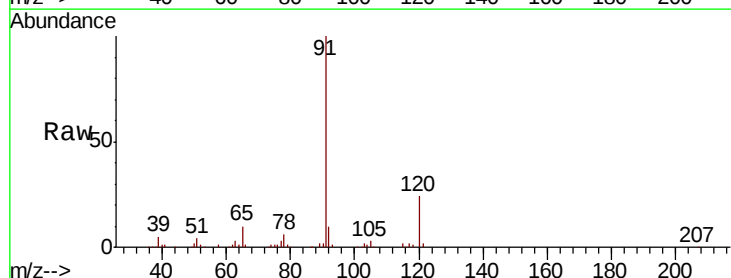
RT: 12.80 min Scan# 1788

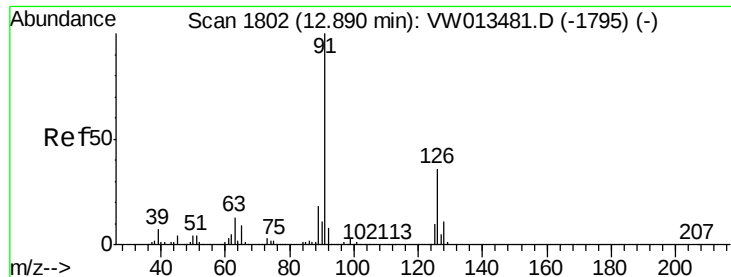
Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion	Ion	Ratio	Lower	Upper
91	100			
120	24.7	11.7	35.1	





#79

2-Chlorotoluene

Concen: 4.144 ug/l

RT: 12.89 min Scan# 1802

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion: 91 Resp: 43246

Ion Ratio Lower Upper

91 100

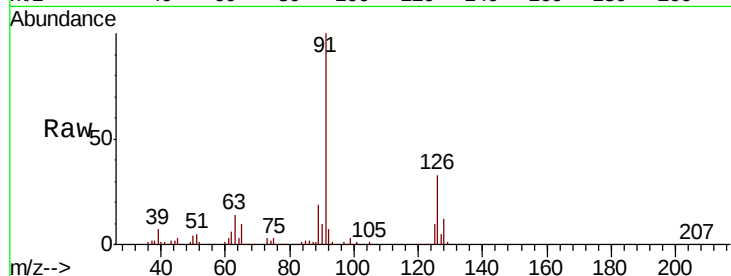
126 34.8 17.8 53.4

Manual Integrations

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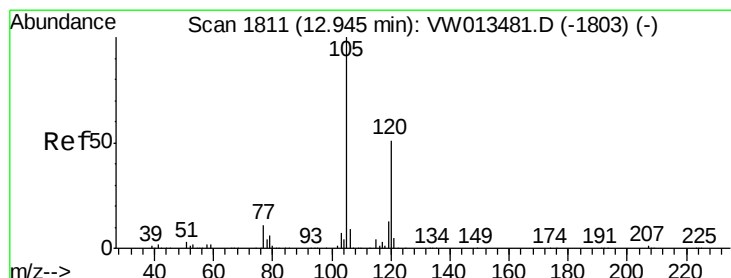
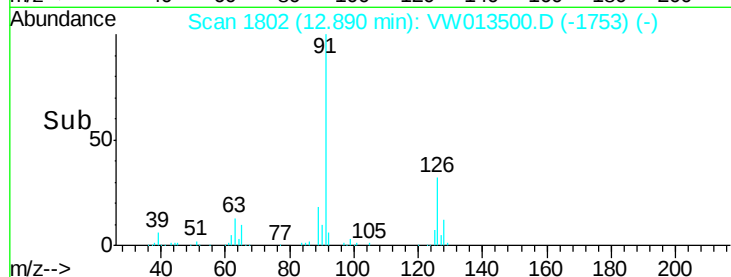
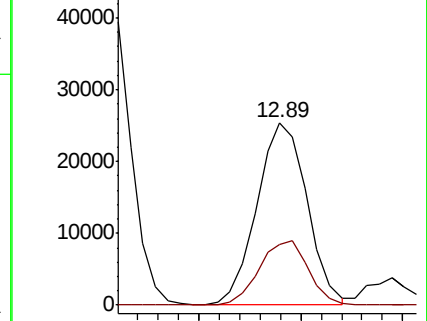
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Abundance Ion 91.00 (90.70 to 91.70): VW

Ion 125.90 (125.60 to 126.60): V



#80

1,3,5-Trimethylbenzene

Concen: 4.178 ug/l

RT: 12.94 min Scan# 1811

Delta R.T. 0.00 min

Lab File: VW013500.D

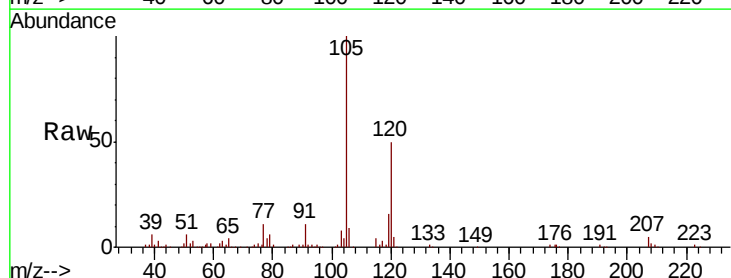
Acq: 09 Oct 2019 13:35

Tgt Ion: 105 Resp: 55922

Ion Ratio Lower Upper

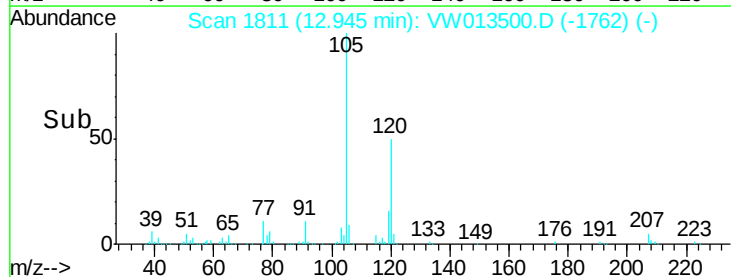
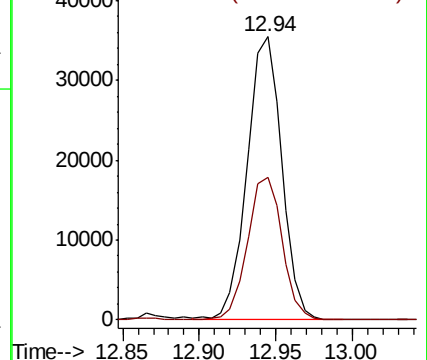
105 100

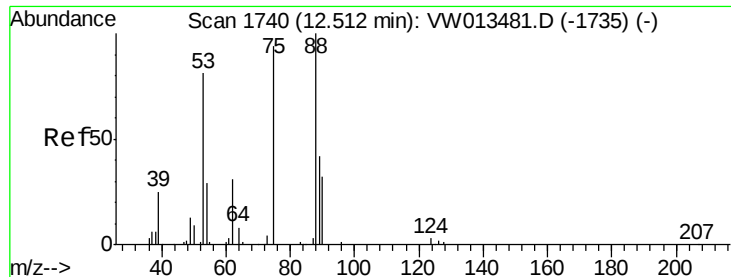
120 50.5 25.4 76.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





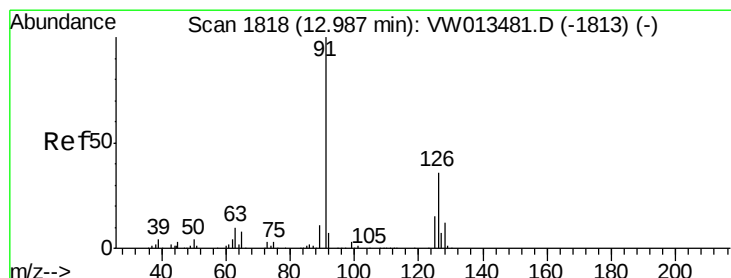
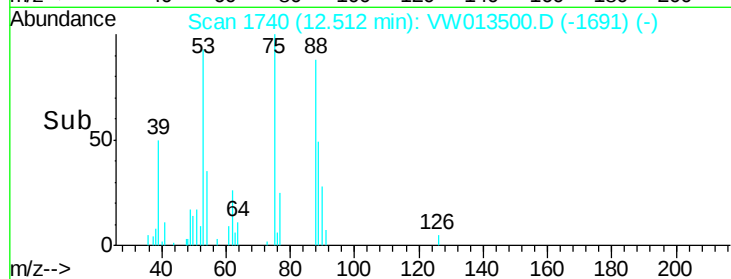
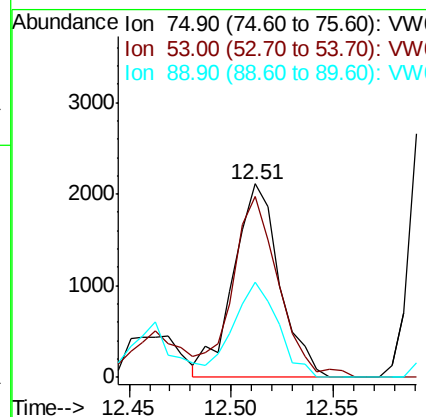
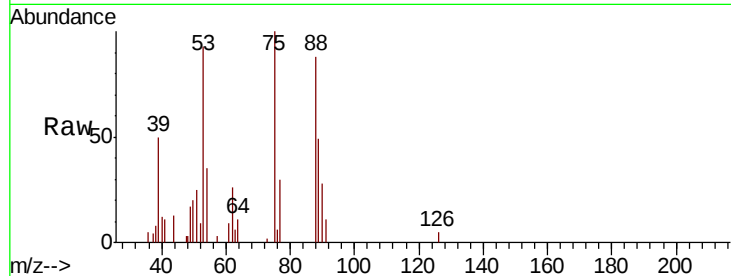
#81
trans-1,4-Dichloro-2-butene
Concen: 3.621 ug/l
RT: 12.51 min Scan# 1740
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
75	100		
53	93.7	71.0	106.6
89	47.0	36.1	54.1

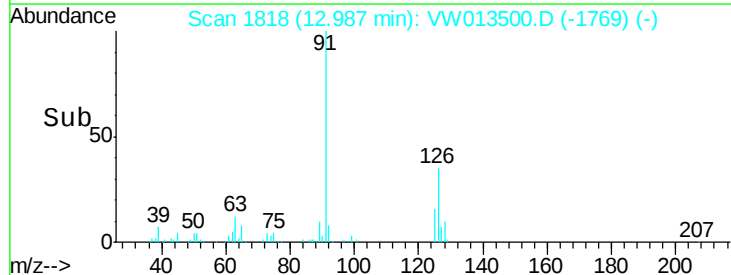
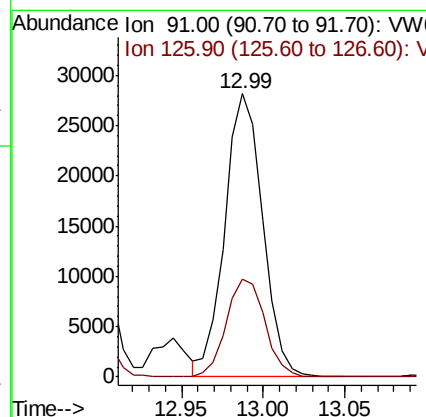
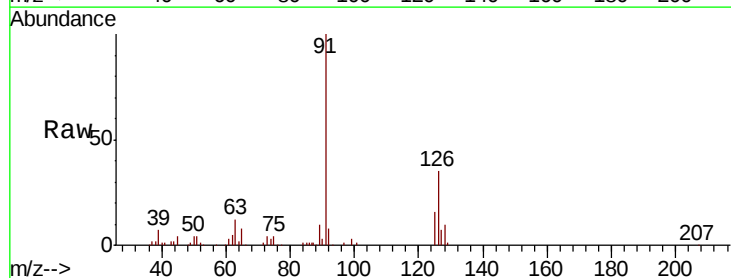
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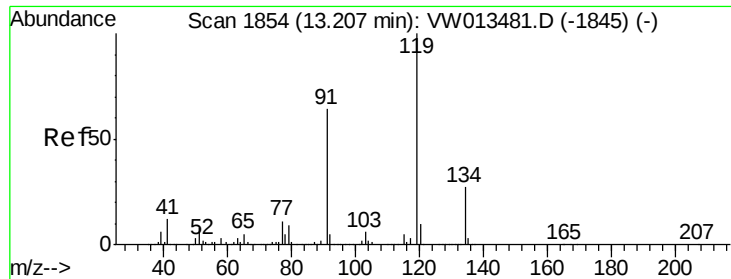
MMDadoda
10/11/2019 4:40:16 PM



#82
4-Chlorotoluene
Concen: 4.203 ug/l
RT: 12.99 min Scan# 1818
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
91	100		
126	35.2	17.5	52.6





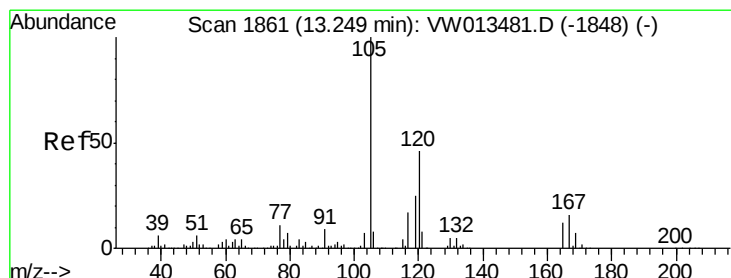
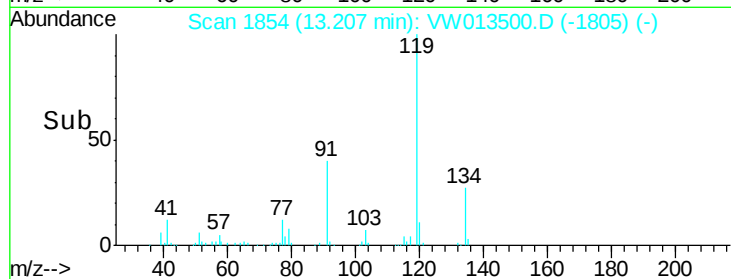
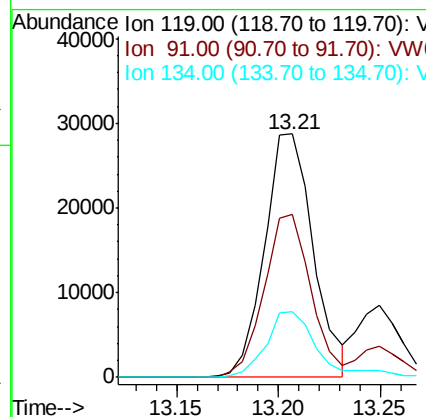
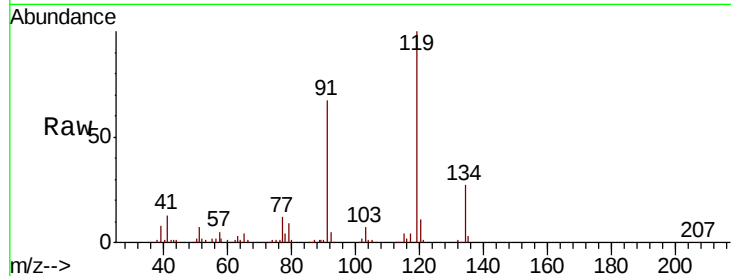
#83
 tert-Butylbenzene
 Concen: 4.029 ug/l
 RT: 13.21 min Scan# 1854
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
119	100		
91	64.6	30.6	91.6
134	28.7	13.8	41.3

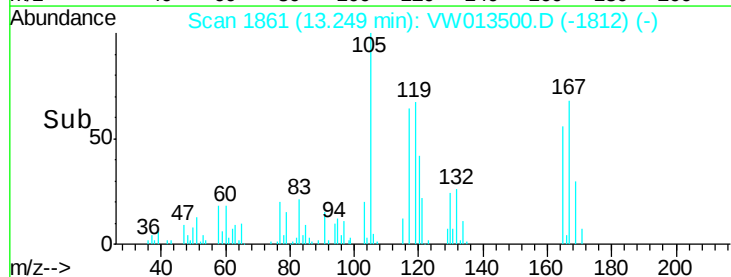
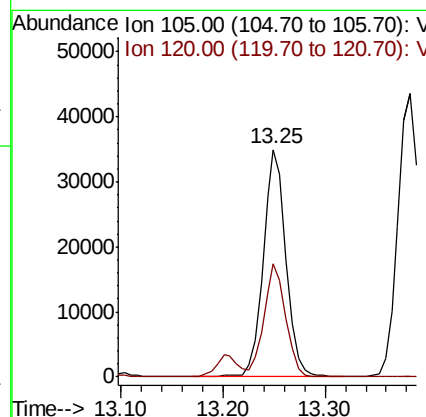
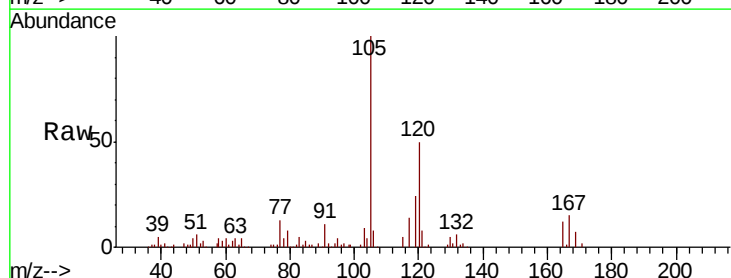
Manual Integrations
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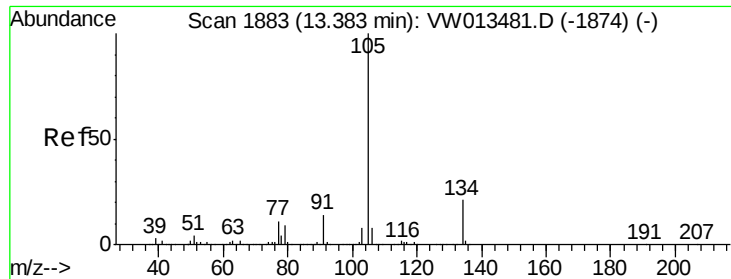
MMDadoda
 10/11/2019 4:40:16 PM



#84
 1,2,4-Trimethylbenzene
 Concen: 4.102 ug/l
 RT: 13.25 min Scan# 1861
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.3	23.2	69.5





#85

sec-Butylbenzene

Concen: 4.037 ug/l

RT: 13.38 min Scan# 1883

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:105 Resp: 66306

Ion Ratio Lower Upper

105 100

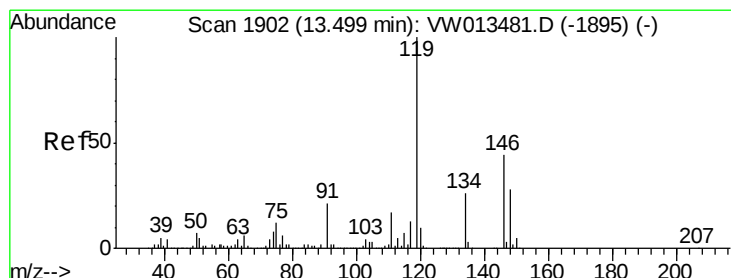
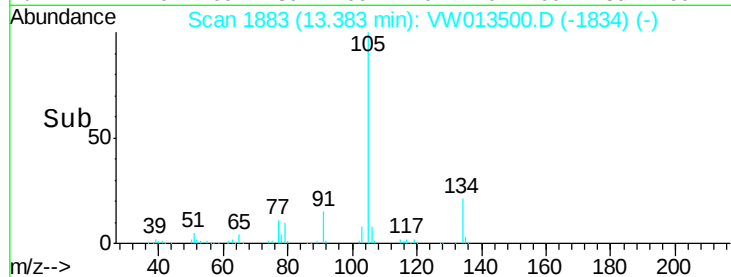
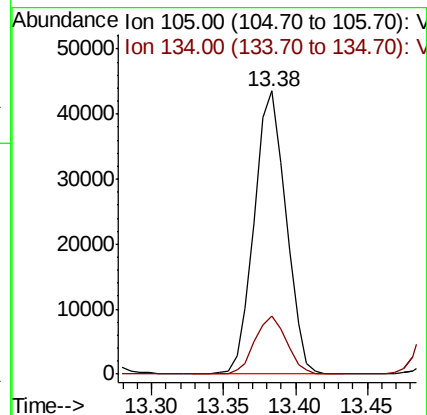
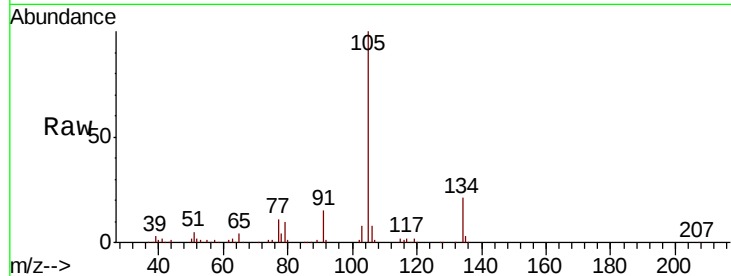
134 20.5 10.4 31.4

Manual Integrations

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#86

p-Isopropyltoluene

Concen: 4.072 ug/l

RT: 13.50 min Scan# 1902

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

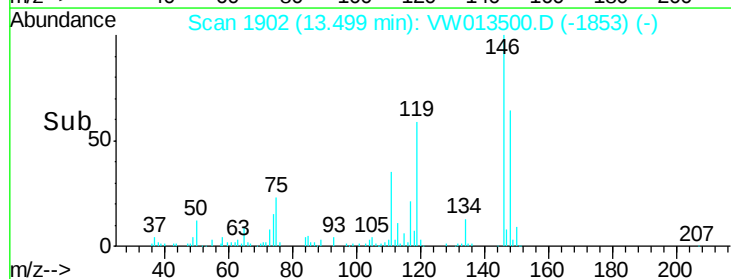
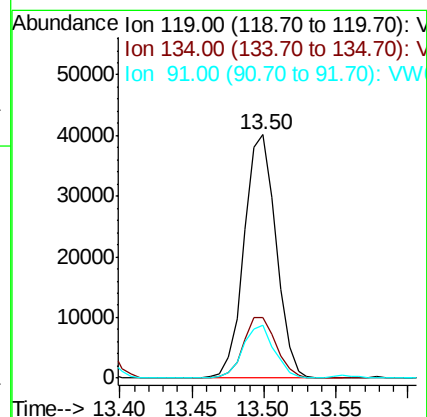
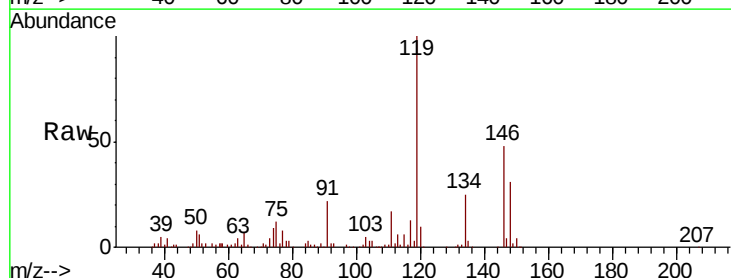
Tgt Ion:119 Resp: 61447

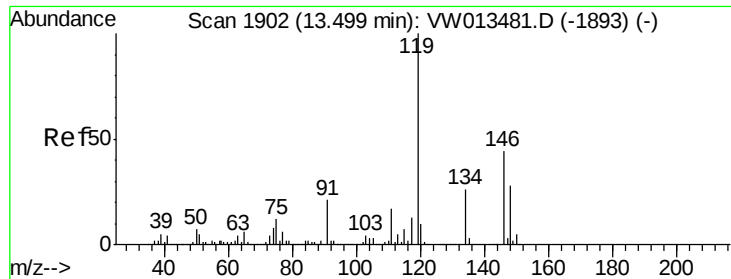
Ion Ratio Lower Upper

119 100

134 26.0 13.1 39.1

91 21.6 10.8 32.3





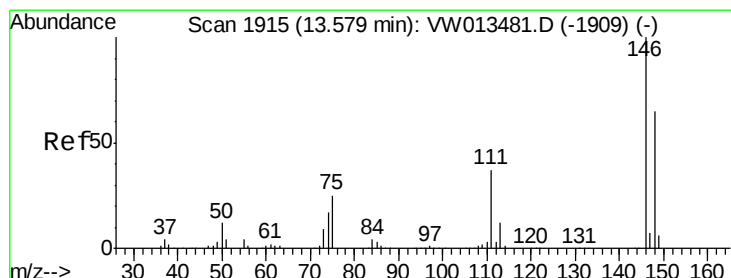
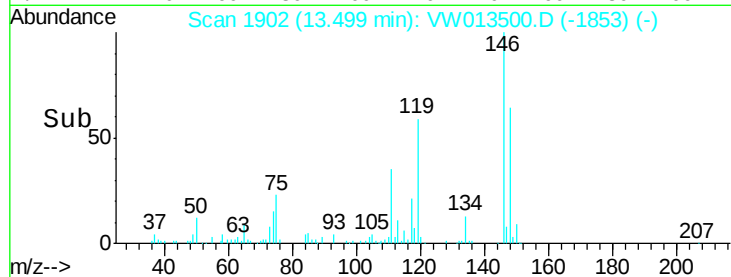
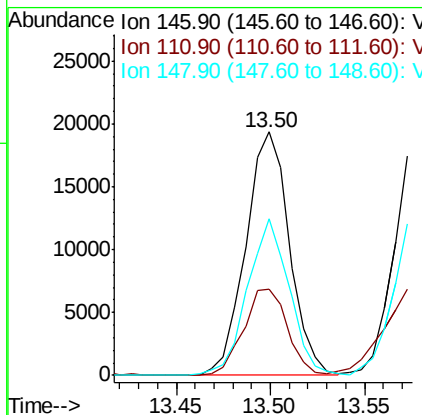
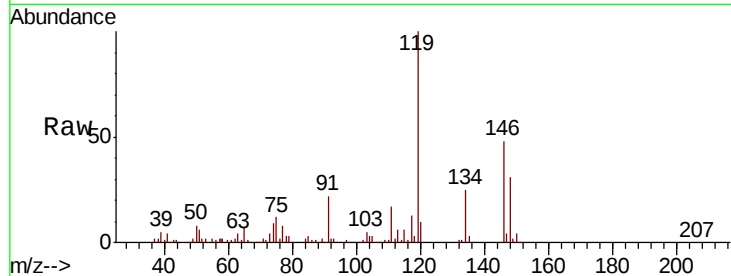
#87
 1,3-Dichlorobenzene
 Concen: 4.291 ug/l
 RT: 13.50 min Scan# 1902
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
146	100		
111	35.8	18.7	56.1
148	61.6	32.3	96.8

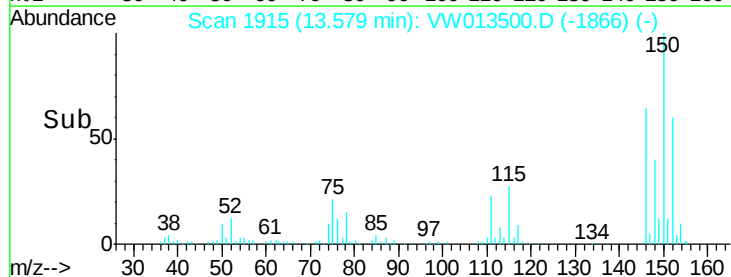
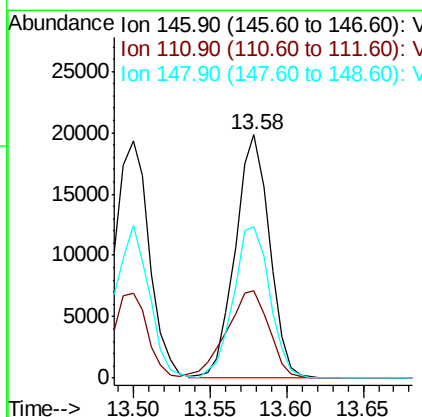
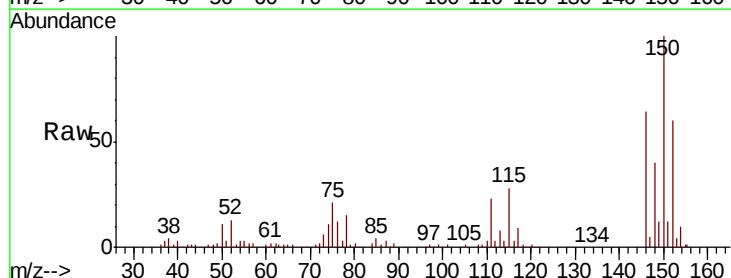
Manual Integrations
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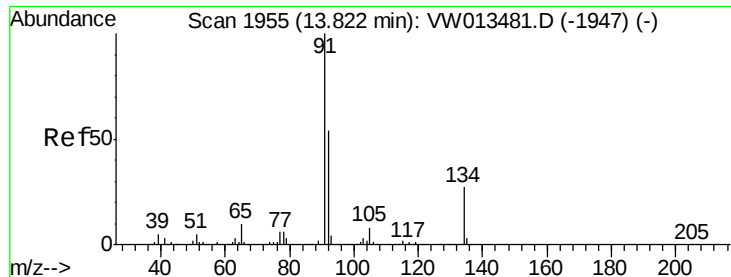
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 10/11/2019 4:40:16 PM



#88
 1,4-Dichlorobenzene
 Concen: 4.366 ug/l
 RT: 13.58 min Scan# 1915
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
146	100		
111	44.5	18.4	55.4
148	66.3	32.0	96.2





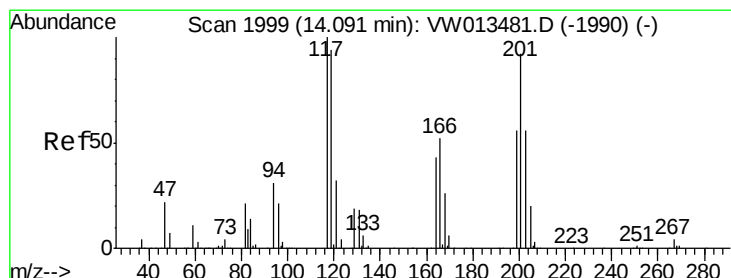
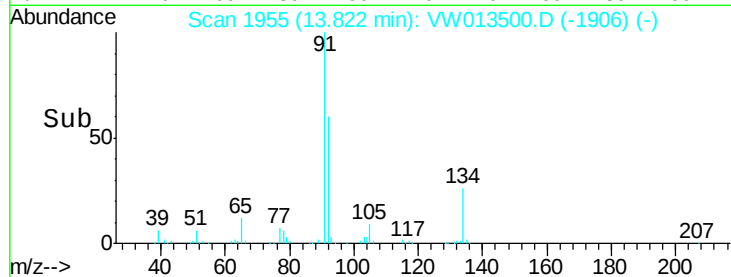
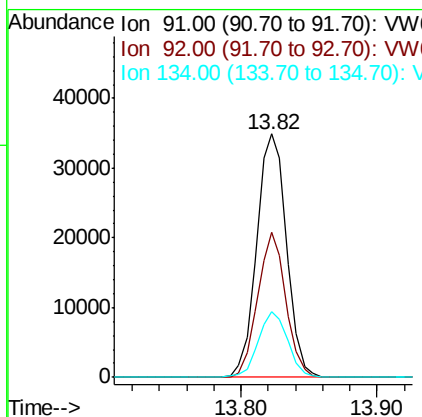
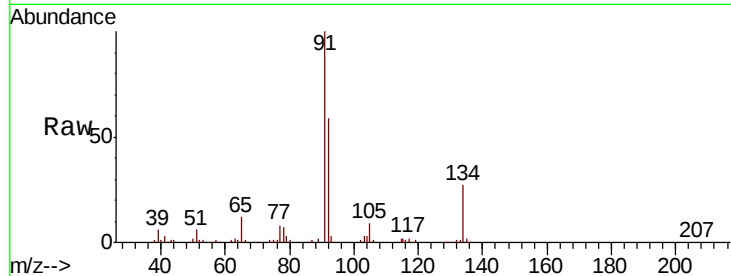
#89
n-Butylbenzene
Concen: 3.938 ug/l
RT: 13.82 min Scan# 1955
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Instrument :
MSVOA_W
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
91	100		
92	56.3	27.5	82.4
134	26.7	13.8	41.3

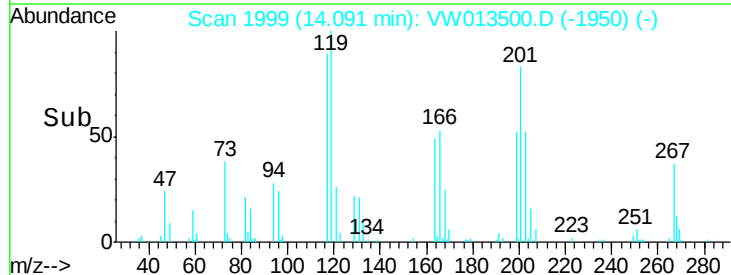
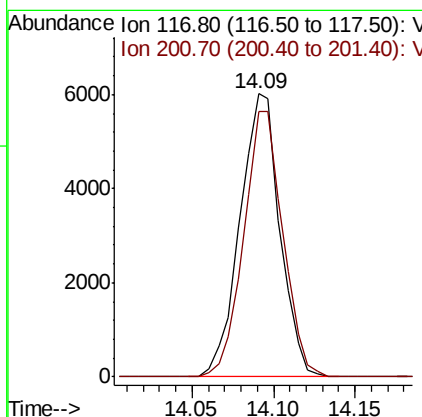
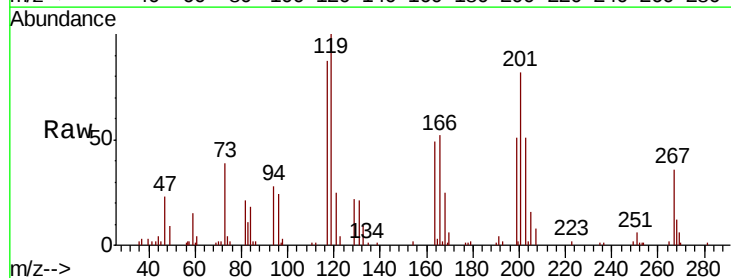
Manual Integrations
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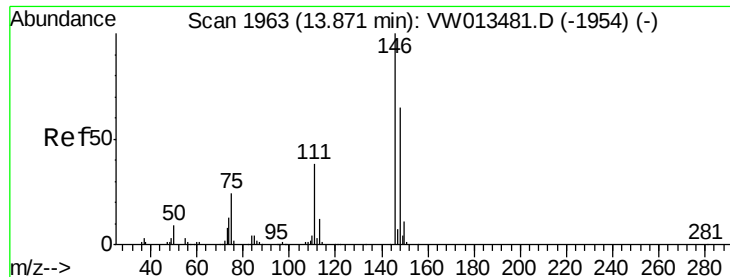
MMDadoda
10/11/2019 4:40:16 PM



#90
Hexachloroethane
Concen: 3.969 ug/l
RT: 14.09 min Scan# 1999
Delta R.T. 0.00 min
Lab File: VW013500.D
Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
117	100		
201	92.0	46.9	140.7





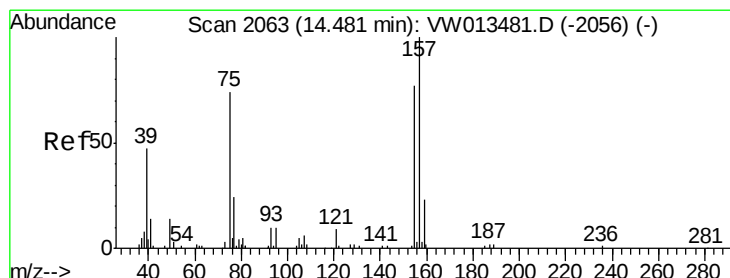
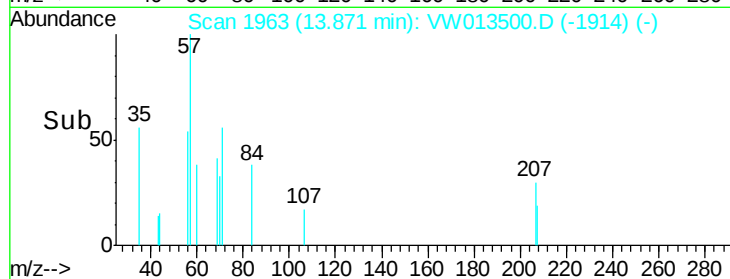
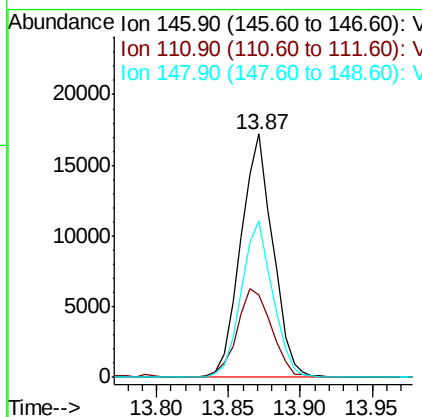
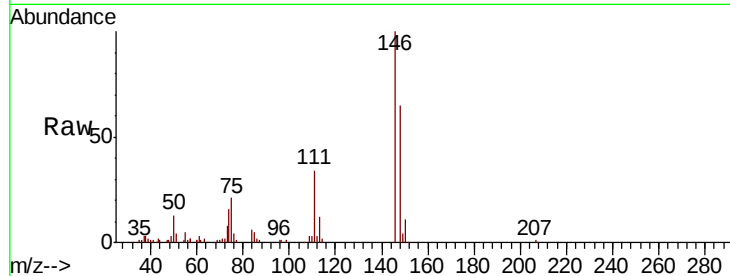
#91
 1,2-Dichlorobenzene
 Concen: 4.159 ug/l
 RT: 13.87 min Scan# 1963
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
146	100		
111	39.5	19.4	58.2
148	63.0	31.8	95.3

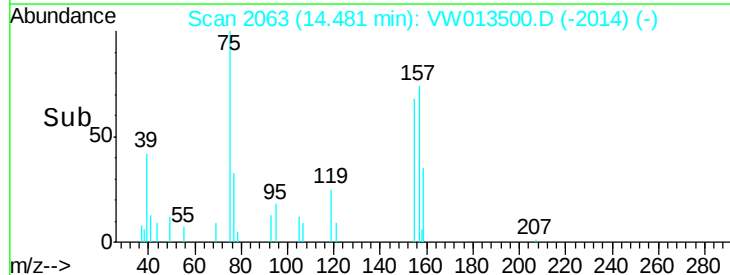
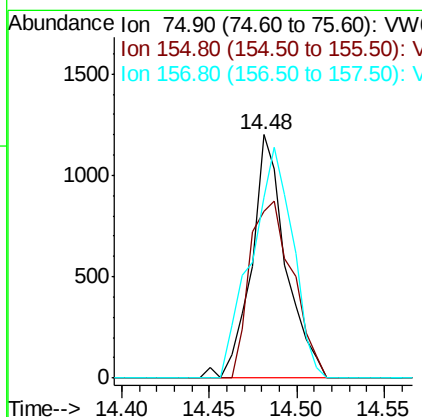
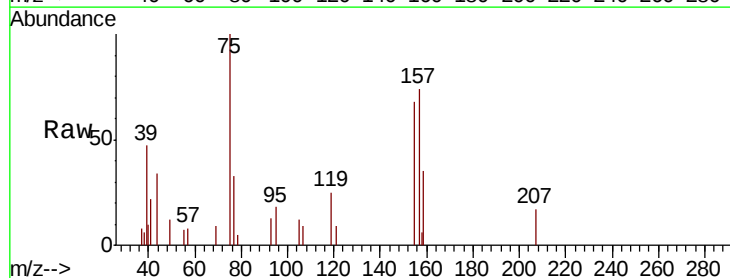
Manual Integrations
 APPROVED

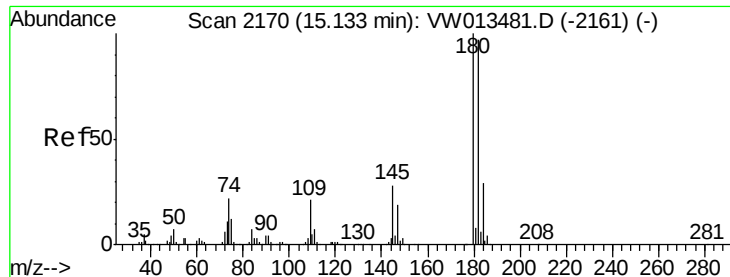
MMDadoda
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#92
 1,2-Dibromo-3-Chloropropane
 Concen: 3.744 ug/l
 RT: 14.48 min Scan# 2063
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
75	100		
155	91.0	51.0	153.1
157	114.7	65.9	197.7





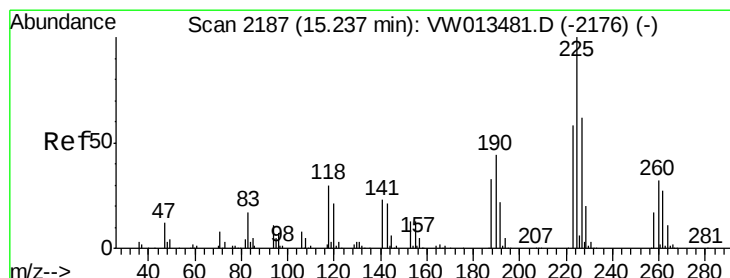
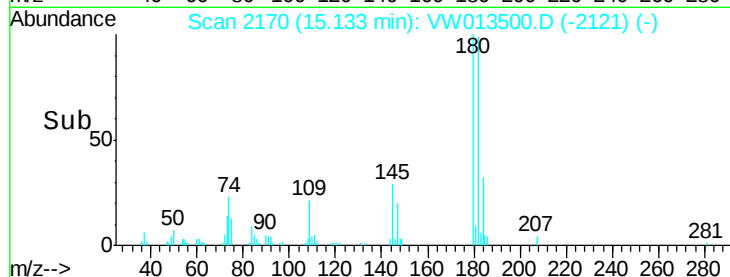
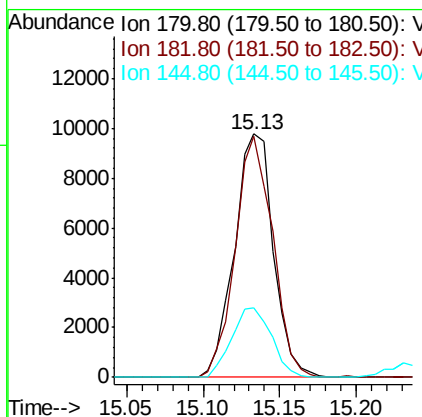
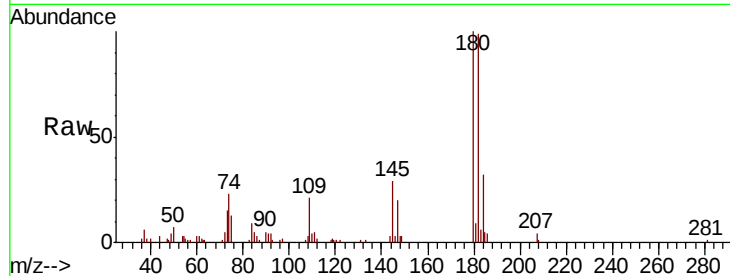
#93
 1,2,4-Trichlorobenzene
 Concen: 3.825 ug/l
 RT: 15.13 min Scan# 2170
 Delta R.T. 0.00 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Instrument :
 MSVOA_W
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.4	47.7	143.1
145	29.3	14.0	41.9

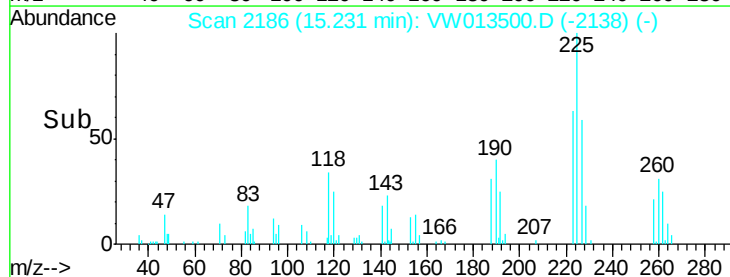
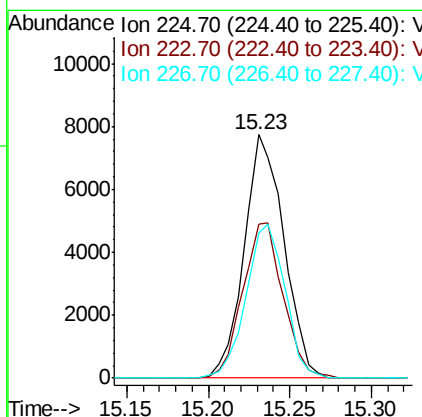
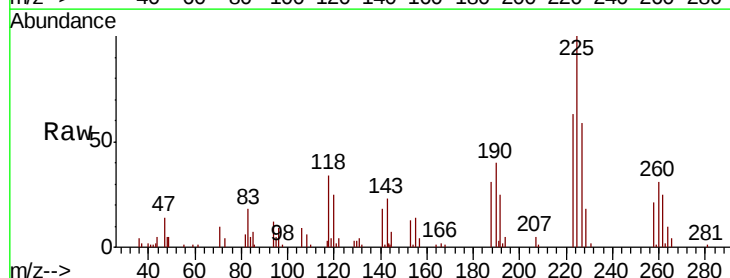
Manual Integrations
 APPROVED

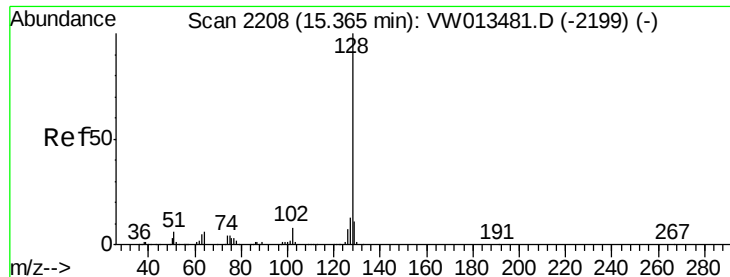
MMDadoda
 10/11/2019 4:40:16 PM



#94
 Hexachlorobutadiene
 Concen: 4.373 ug/l
 RT: 15.23 min Scan# 2186
 Delta R.T. -0.01 min
 Lab File: VW013500.D
 Acq: 09 Oct 2019 13:35

Tgt Ion	Ratio	Lower	Upper
225	100		
223	64.7	30.3	90.9
227	62.3	32.0	96.0





#95

Naphthalene

Concen: 3.230 ug/l

RT: 15.36 min Scan# 2208

Delta R.T. 0.00 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Instrument :

MSVOA_W

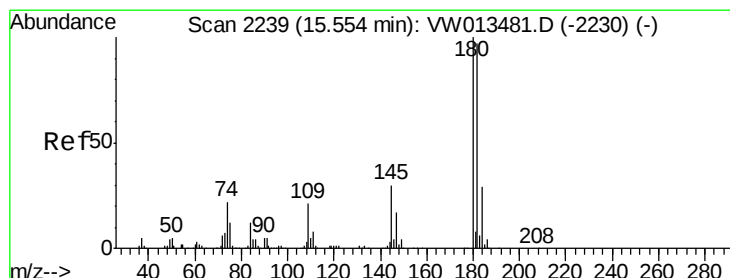
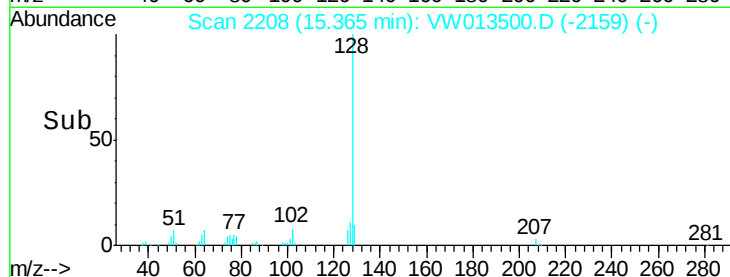
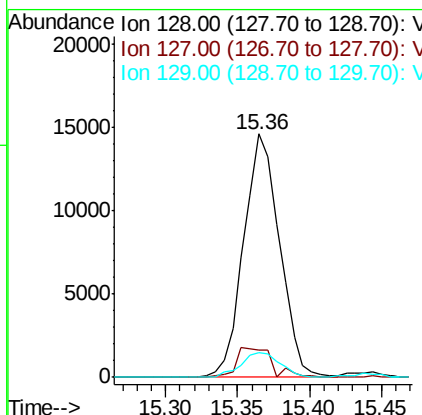
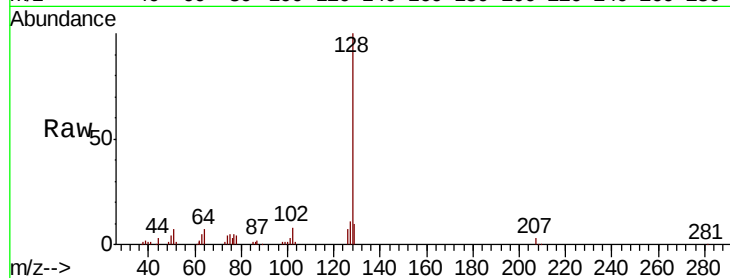
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2019DL

Tot Ion:	128	Resp:	25243
Ion Ratio	Lower	Upper	
128	100		
127	12.2	10.6	16.0
129	11.0	8.8	13.2

Manual Integrations
APPROVED

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#96

1,2,3-Trichlorobenzene

Concen: 3.853 ug/l

RT: 15.56 min Scan# 2240

Delta R.T. 0.01 min

Lab File: VW013500.D

Acq: 09 Oct 2019 13:35

Tgt Ion:	180	Resp:	15223
Ion Ratio	Lower	Upper	
180	100		
182	90.2	47.7	143.1
145	28.3	14.9	44.9

