

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW100919\
 Data File : VW013499.D
 Acq On : 09 Oct 2019 13:09
 Operator : SY/VA
 Sample : K5111-03 2.5PPBMDL
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 6 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

MMDadoda
 10/11/2019 4:40:20 PM

Quant Time: Oct 10 03:49:58 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	358895	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	515246	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	441277	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	217775	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.31	65	142881	51.53	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.06%	
35) Dibromofluoromethane	7.88	113	148477	51.59	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.18%	
50) Toluene-d8	10.32	98	621627	51.40	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.80%	
62) 4-Bromofluorobenzene	12.62	95	208426	51.30	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.60%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.01	85	2772	2.332	ug/l	94
3) Chloromethane	2.21	50	6530	3.125	ug/l	99
4) Vinyl Chloride	2.36	62	8232	2.671	ug/l	92
5) Bromomethane	2.78	94	5425	2.950	ug/l	95
6) Chloroethane	2.92	64	4806	2.776	ug/l	99
7) Trichlorofluoromethane	3.26	101	4215	2.890	ug/l	95
8) Diethyl Ether	3.68	74	4341	2.876	ug/l	96
9) 1,1,2-Trichlorotrifluoroet	4.06	101	8451	2.812	ug/l	96
10) Methyl Iodide	4.27	142	12906	2.712	ug/l	100
11) Tert butyl alcohol	5.18	59	3847	16.397	ug/l #	86
12) 1,1-Dichloroethene	4.04	96	8260	2.652	ug/l #	91
13) Acrolein	3.90	56	577	2.553	ug/l	89
14) Allyl chloride	4.66	41	13157	2.749	ug/l	98
15) Acrylonitrile	5.37	53	9082	12.873	ug/l	97
16) Acetone	4.13	43	10700	16.583	ug/l	98
17) Carbon Disulfide	4.38	76	23392	2.675	ug/l	99
18) Methyl Acetate	4.67	43	5767	3.120	ug/l #	51
19) Methyl tert-butyl Ether	5.42	73	13344	2.833	ug/l	95
20) Methylene Chloride	4.91	84	19399	5.461	ug/l	96
21) trans-1,2-Dichloroethene	5.41	96	9352	2.825	ug/l	88
22) Diisopropyl ether	6.31	45	24278	2.707	ug/l	96
23) Vinyl Acetate	6.25	43	63224	11.742	ug/l	97
24) 1,1-Dichloroethane	6.22	63	15398	2.809	ug/l	96
25) 2-Butanone	7.18	43	13121	13.798	ug/l	91
26) 2,2-Dichloropropane	7.16	77	12111	3.427	ug/l	89
27) cis-1,2-Dichloroethene	7.17	96	9587	2.737	ug/l	91
28) Bromochloromethane	7.51	49	5413	2.769	ug/l #	99
29) Tetrahydrofuran	7.54	42	7097	12.211	ug/l	96
30) Chloroform	7.67	83	15922	3.003	ug/l	90
31) Cyclohexane	7.95	56	20732	3.573	ug/l #	52
32) 1,1,1-Trichloroethane	7.87	97	11752	2.726	ug/l	99
36) 1,1-Dichloropropene	8.08	75	12973	2.783	ug/l	96
37) Ethyl Acetate	7.26	43	5564	2.631	ug/l #	92
38) Carbon Tetrachloride	8.07	117	11054	2.675	ug/l	99

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.34	83	17076	2.828	ug/l	98
40) Benzene	8.32	78	36412	2.799	ug/l	96
41) Methacrylonitrile	7.48	41	2878	2.393	ug/l #	94
42) 1,2-Dichloroethane	8.40	62	9520	2.895	ug/l	98
43) Isopropyl Acetate	8.43	43	9387	2.457	ug/l	98
44) Trichloroethene	9.09	130	10473	2.822	ug/l	96
45) 1,2-Dichloropropane	9.37	63	8668	2.776	ug/l	96
46) Dibromomethane	9.46	93	4215	2.709	ug/l	98
47) Bromodichloromethane	9.65	83	10517	2.719	ug/l	97
48) Methyl methacrylate	9.44	41	4178	2.220	ug/l	91
49) 1,4-Dioxane	9.48	88	1085m	39.718	ug/l	
51) 4-Methyl-2-Pentanone	10.21	43	26830	13.357	ug/l	98
52) Toluene	10.38	92	25028	2.986	ug/l	96
53) t-1,3-Dichloropropene	10.60	75	10762	2.678	ug/l	92
54) cis-1,3-Dichloropropene	10.07	75	12811	2.631	ug/l #	88
55) 1,1,2-Trichloroethane	10.79	97	6403	2.742	ug/l #	92
56) Ethyl methacrylate	10.65	69	7730	2.458	ug/l	96
57) 1,3-Dichloropropane	10.93	76	10781	2.689	ug/l	96
58) 2-Chloroethyl Vinyl ether	9.93	63	15819	10.661	ug/l	97
59) 2-Hexanone	10.97	43	15531	11.276	ug/l	97
60) Dibromochloromethane	11.13	129	6790	2.528	ug/l	91
61) 1,2-Dibromoethane	11.23	107	5743	2.586	ug/l	96
64) Tetrachloroethene	10.86	164	9085	2.797	ug/l	96
65) Chlorobenzene	11.66	112	25065	2.859	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.73	131	8157	2.678	ug/l	96
67) Ethyl Benzene	11.73	91	43465	2.712	ug/l	98
68) m/p-Xylenes	11.84	106	33554	5.503	ug/l	98
69) o-Xylene	12.16	106	15635	2.775	ug/l	98
70) Styrene	12.18	104	24464	2.529	ug/l	96
71) Bromoform	12.35	173	4022	2.407	ug/l #	94
73) Isopropylbenzene	12.46	105	42311	2.712	ug/l	100
74) N-amyl acetate	12.27	43	8224	2.411	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.71	83	6980	2.625	ug/l	99
76) 1,2,3-Trichloropropane	12.76	75	4620m	2.547	ug/l	
77) Bromobenzene	12.74	156	10331	2.794	ug/l	97
78) n-propylbenzene	12.80	91	48902	2.711	ug/l	96
79) 2-Chlorotoluene	12.89	91	29273	2.897	ug/l	97
80) 1,3,5-Trimethylbenzene	12.94	105	35926	2.772	ug/l	99
81) trans-1,4-Dichloro-2-buten	12.51	75	2191m	2.469	ug/l	
82) 4-Chlorotoluene	12.99	91	30358	2.894	ug/l	99
83) tert-Butylbenzene	13.21	119	31015	2.694	ug/l	98
84) 1,2,4-Trimethylbenzene	13.25	105	36582	2.854	ug/l	99
85) sec-Butylbenzene	13.38	105	43356	2.726	ug/l	99
86) p-Isopropyltoluene	13.50	119	39603	2.710	ug/l	97
87) 1,3-Dichlorobenzene	13.49	146	19853	2.832	ug/l	99
88) 1,4-Dichlorobenzene	13.58	146	19899	2.897	ug/l	86
89) n-Butylbenzene	13.82	91	36276	2.748	ug/l	98
90) Hexachloroethane	14.09	117	7147	2.858	ug/l	93
91) 1,2-Dichlorobenzene	13.87	146	17731	2.864	ug/l	99
92) 1,2-Dibromo-3-Chloropropan	14.49	75	926	2.185	ug/l	94

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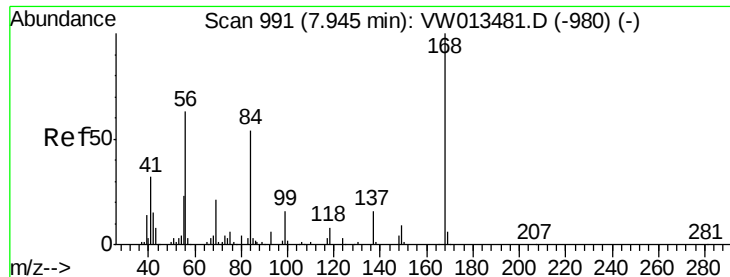
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.13	180	11719	2.679	ug/l	99
94) Hexachlorobutadiene	15.23	225	8618	2.964	ug/l	93
95) Naphthalene	15.36	128	16503	2.181	ug/l	97
96) 1,2,3-Trichlorobenzene	15.56	180	10406	2.720	ug/l	98

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion:168 Resp: 358895

Ion Ratio Lower Upper

168 100

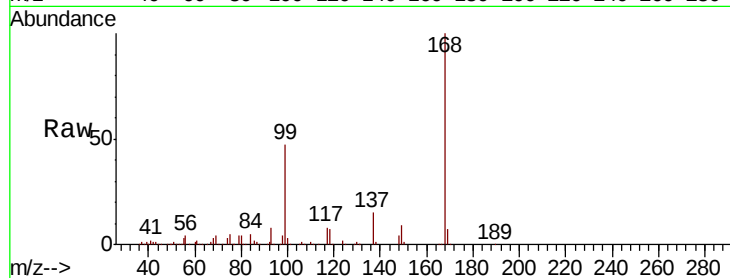
99 47.4 38.3 57.5

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

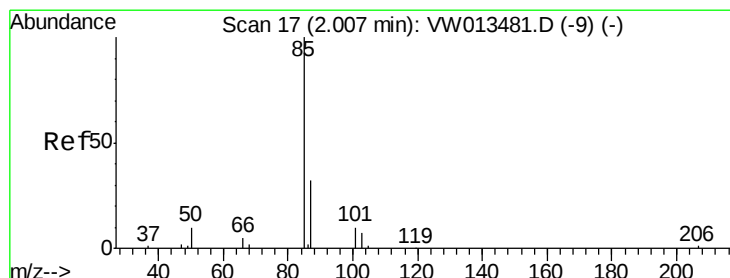
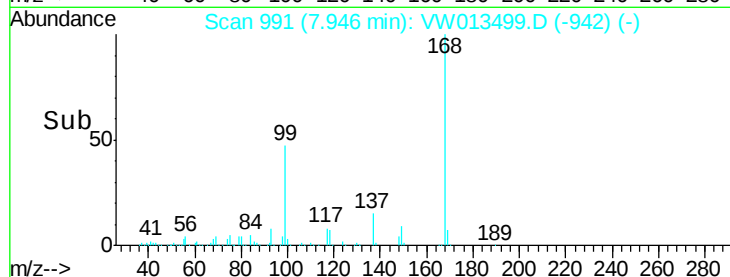
150000

100000

50000

0

Time--> 7.80 7.90 8.00



#2

Dichlorodifluoromethane

Concen: 2.332 ug/l

RT: 2.01 min Scan# 17

Delta R.T. 0.00 min

Lab File: VW013499.D

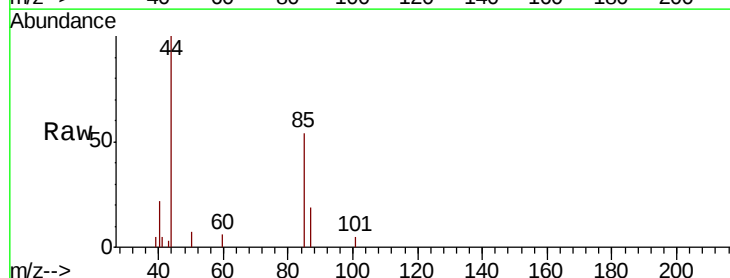
Acq: 09 Oct 2019 13:09

Tgt Ion: 85 Resp: 2772

Ion Ratio Lower Upper

85 100

87 34.9 15.8 47.3



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW

2.01

1000

800

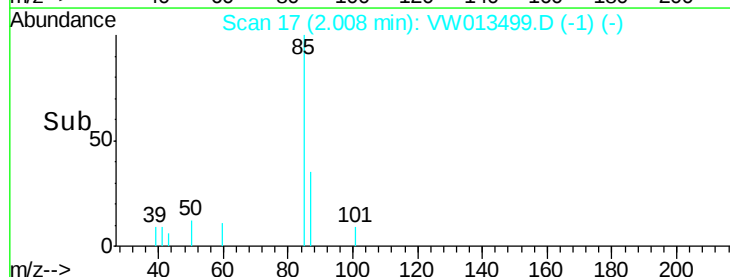
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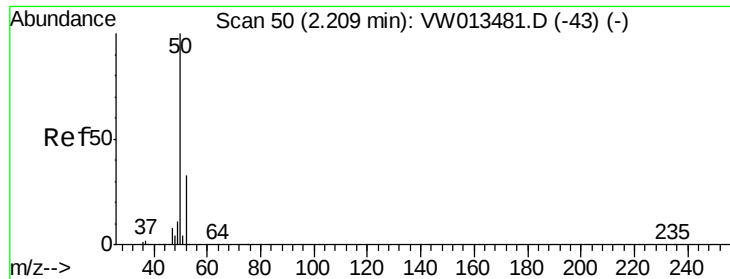
400

200

0

Time--> 1.95 2.00 2.05 2.10





#3

Chloromethane

Concen: 3.125 ug/l

RT: 2.21 min Scan# 50

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 50 Resp: 6530

Ion Ratio Lower Upper

50 100

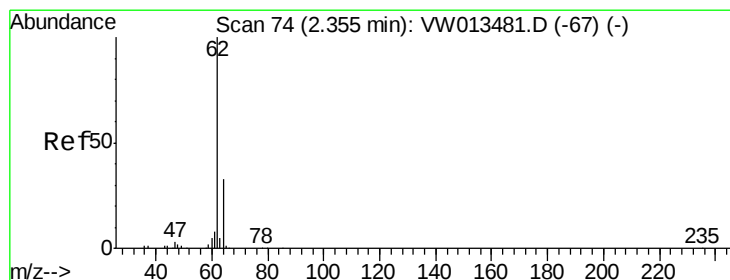
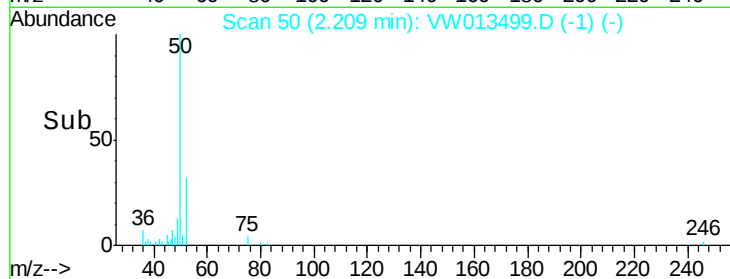
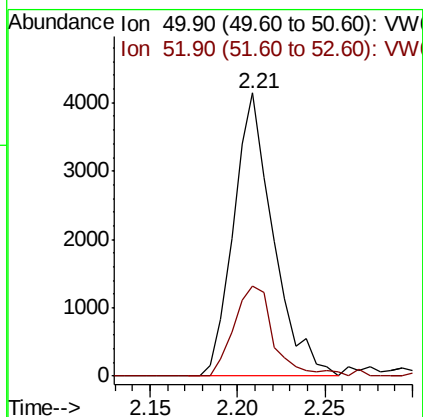
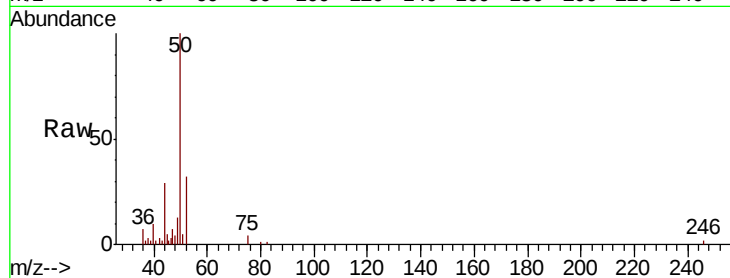
52 31.9 26.0 39.0

Manual Integrations

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#4

Vinyl Chloride

Concen: 2.671 ug/l

RT: 2.36 min Scan# 74

Delta R.T. 0.00 min

Lab File: VW013499.D

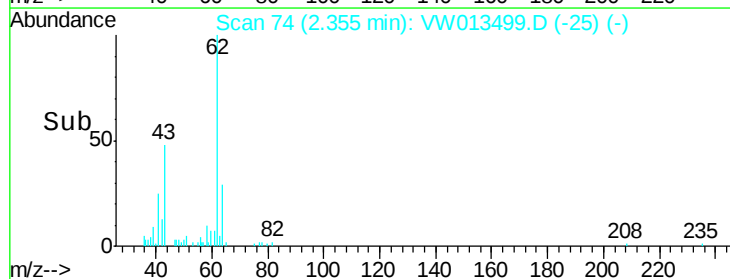
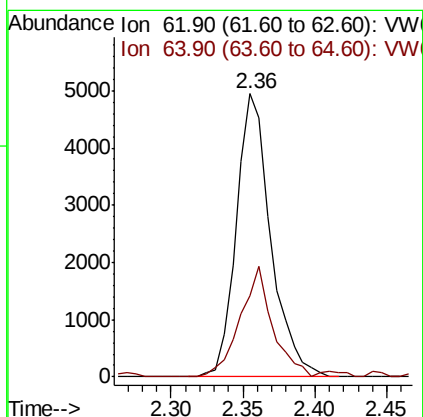
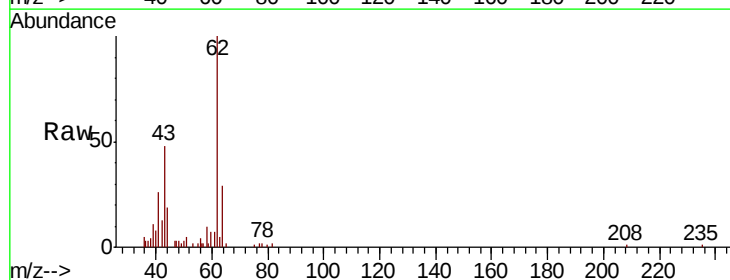
Acq: 09 Oct 2019 13:09

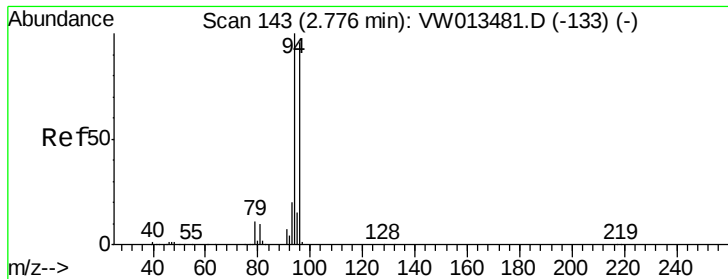
Tgt Ion: 62 Resp: 8232

Ion Ratio Lower Upper

62 100

64 28.7 26.6 39.8





#5

Bromomethane

Concen: 2.950 ug/l

RT: 2.78 min Scan# 143

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

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Tot Ion: 94 Resp: 5425

Ion Ratio Lower Upper

94 100

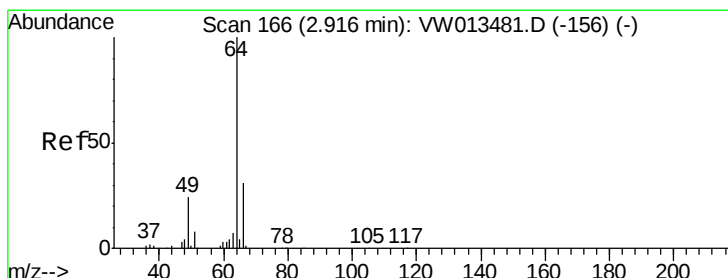
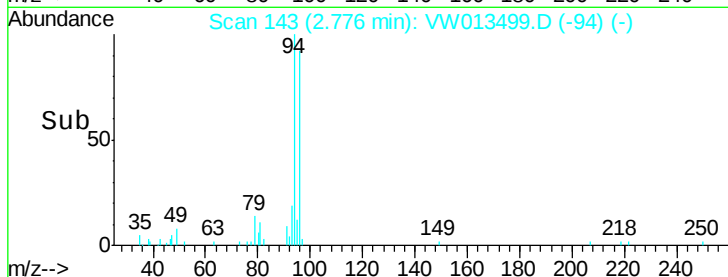
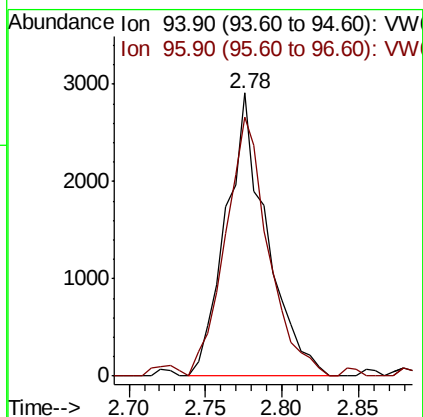
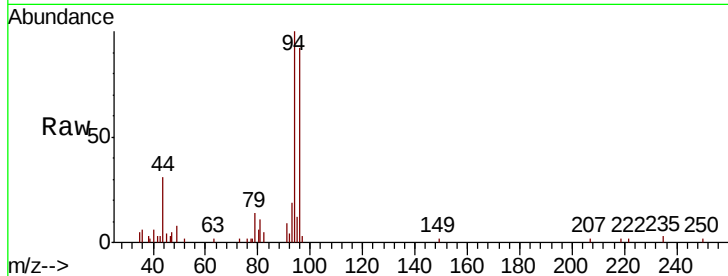
96 91.5 77.0 115.6

Manual Integrations

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#6

Chloroethane

Concen: 2.776 ug/l

RT: 2.92 min Scan# 166

Delta R.T. 0.00 min

Lab File: VW013499.D

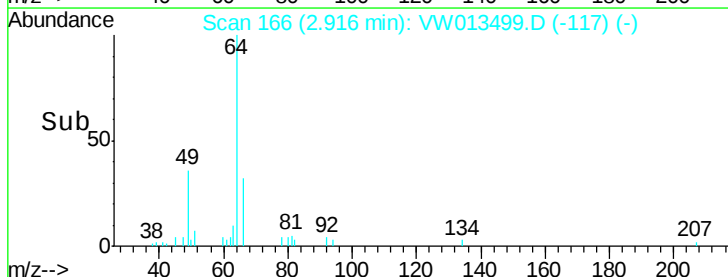
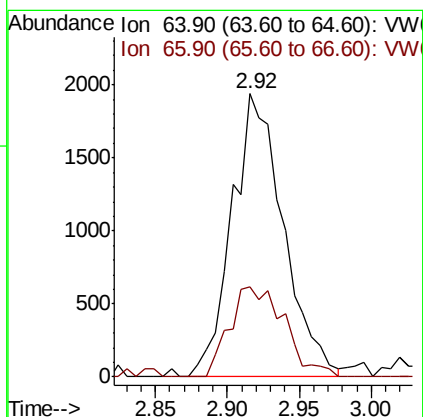
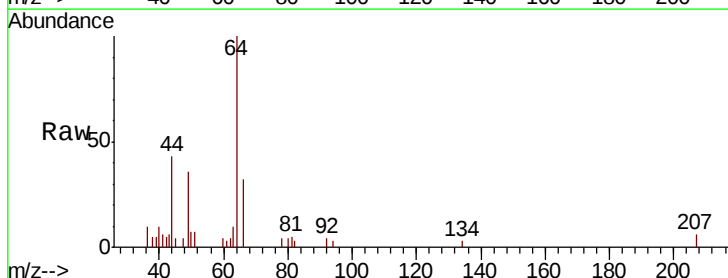
Acq: 09 Oct 2019 13:09

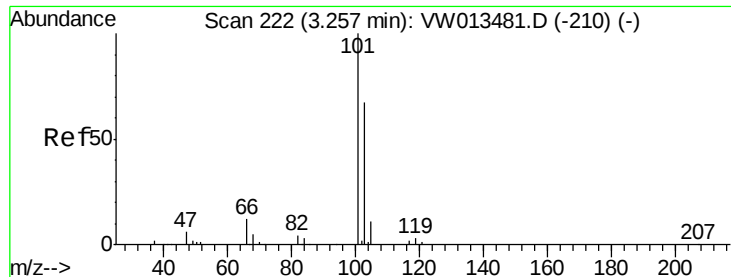
Tgt Ion: 64 Resp: 4806

Ion Ratio Lower Upper

64 100

66 31.9 25.0 37.4





#7

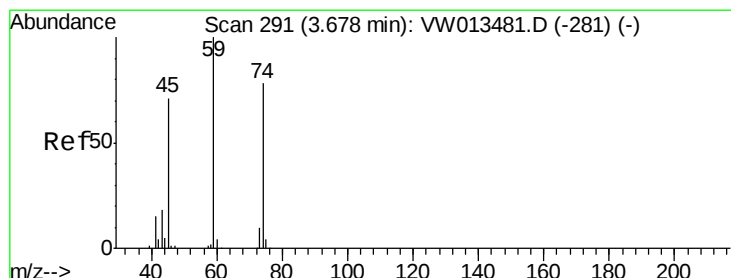
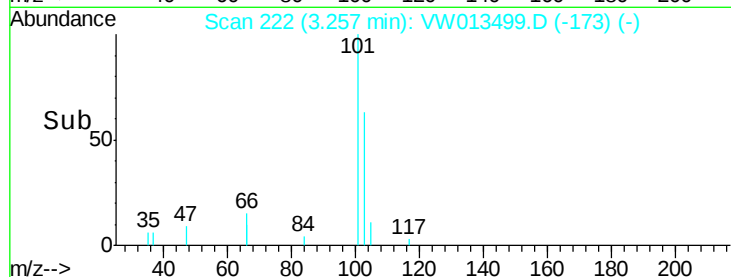
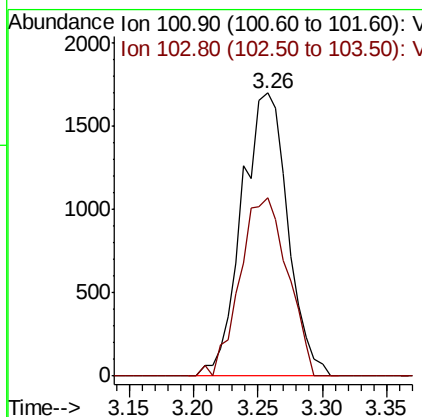
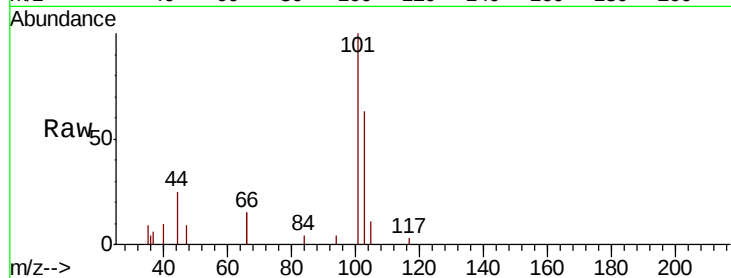
Trichlorofluoromethane
 Concen: 2.890 ug/l
 RT: 3.26 min Scan# 222
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
101	100		
103	63.1	53.7	80.5

Manual Integrations
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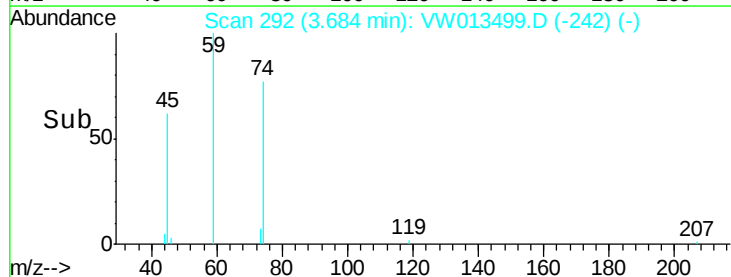
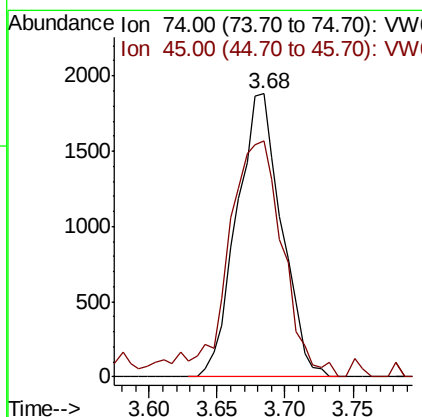
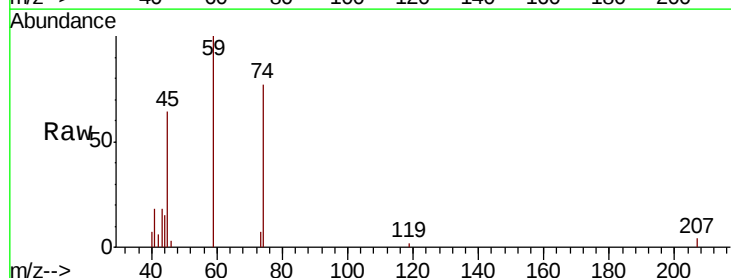
MMDadoda
 10/11/2019 4:40:20 PM

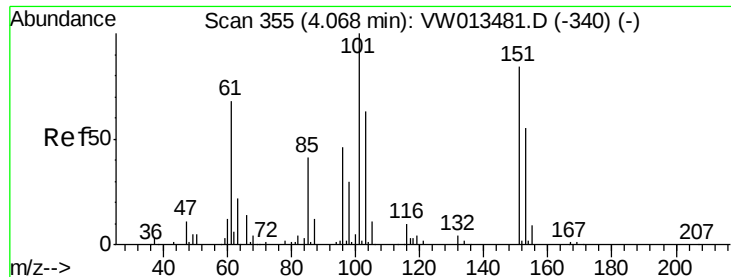


#8

Diethyl Ether
 Concen: 2.876 ug/l
 RT: 3.68 min Scan# 292
 Delta R.T. 0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
74	100		
45	104.3	50.0	150.1





#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.812 ug/l

RT: 4.06 min Scan# 353

Delta R.T. -0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

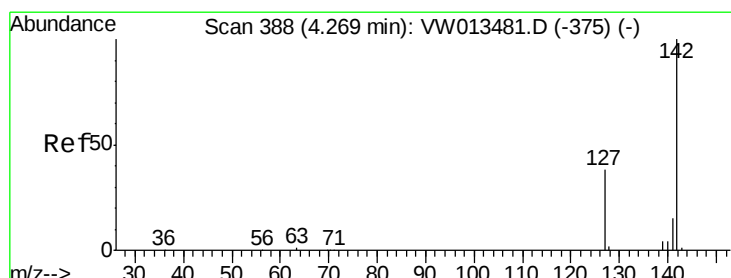
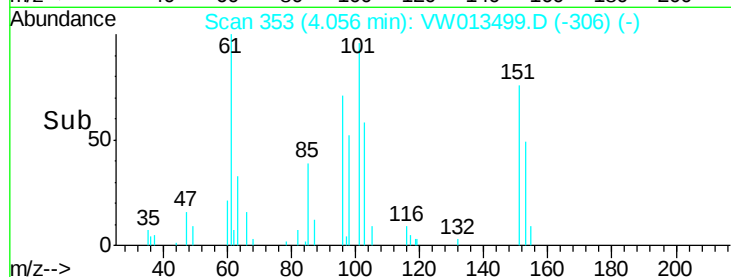
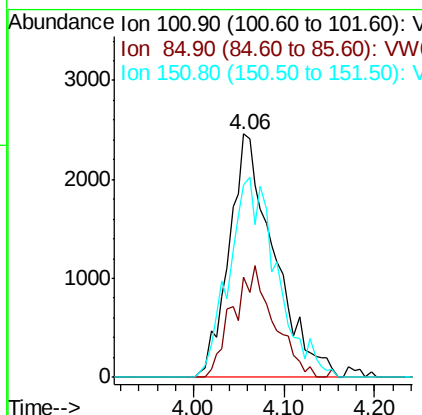
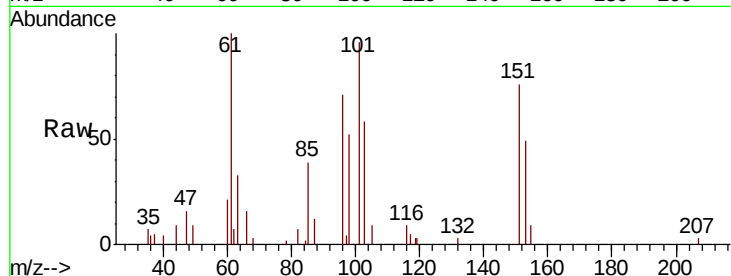
ClientSampleId :

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

Tot Ion:	101	Resp:	8451
Ion Ratio	Lower	Upper	
101	100		
85	41.7	31.6	47.4
151	88.2	67.5	101.3

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#10

Methyl Iodide

Concen: 2.712 ug/l

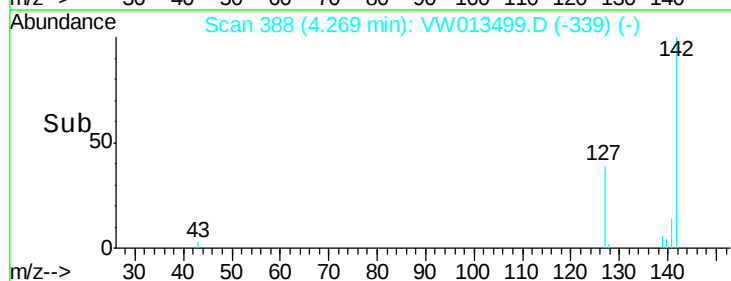
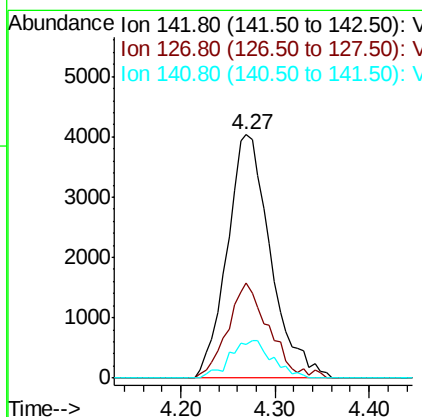
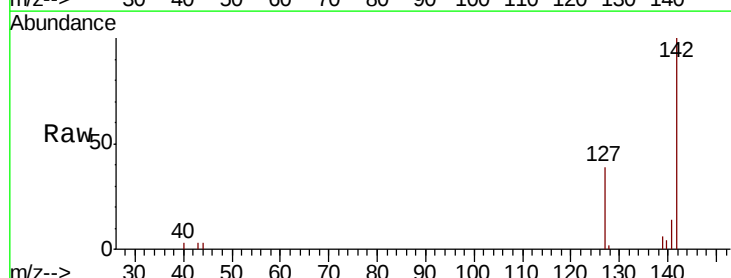
RT: 4.27 min Scan# 388

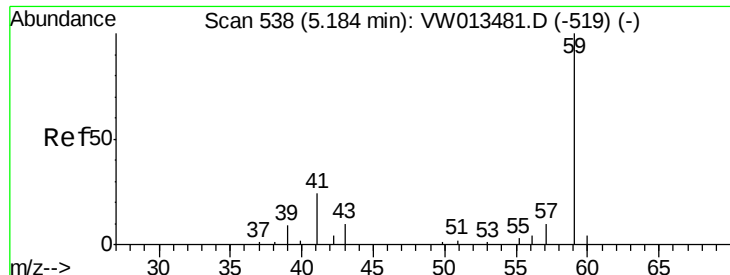
Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion:	142	Resp:	12906
Ion Ratio	Lower	Upper	
142	100		
127	37.3	29.6	44.4
141	15.1	12.1	18.1





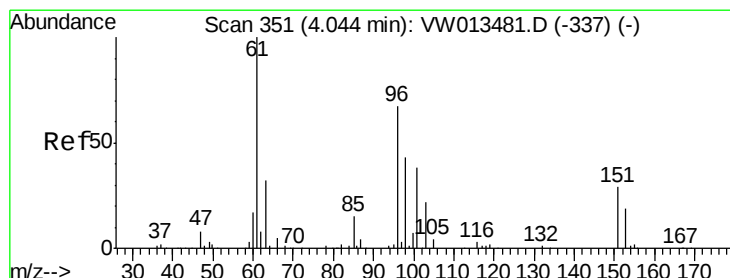
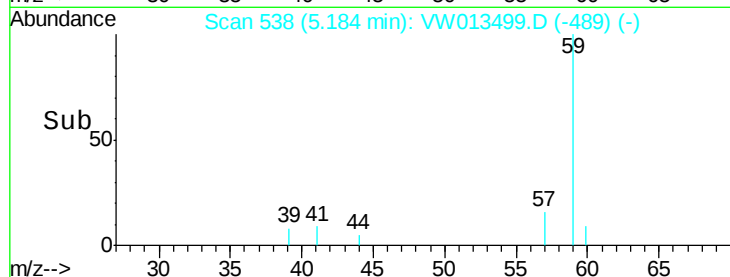
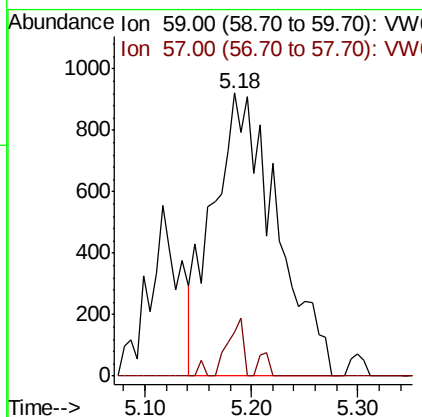
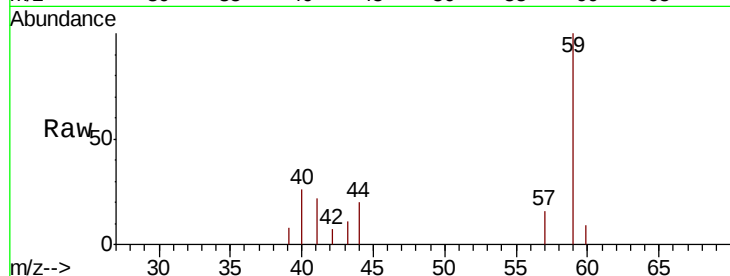
#11
Tert butyl alcohol
Concen: 16.397 ug/l
RT: 5.18 min Scan# 538
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
59	100		
57	4.9	8.2	12.4#

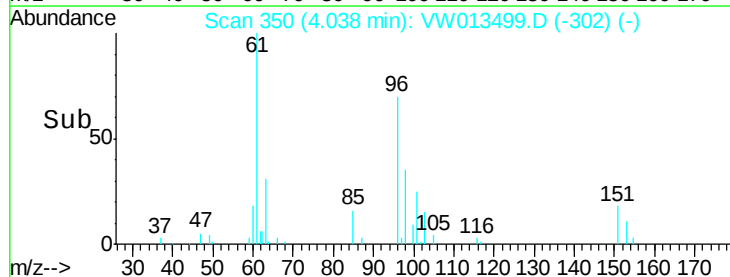
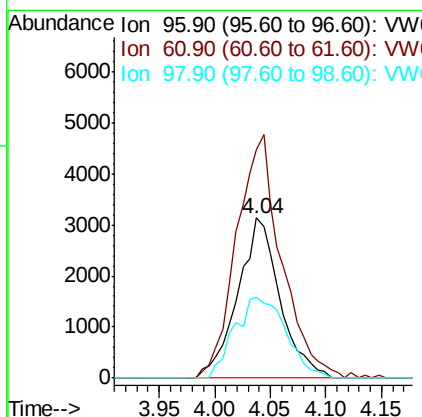
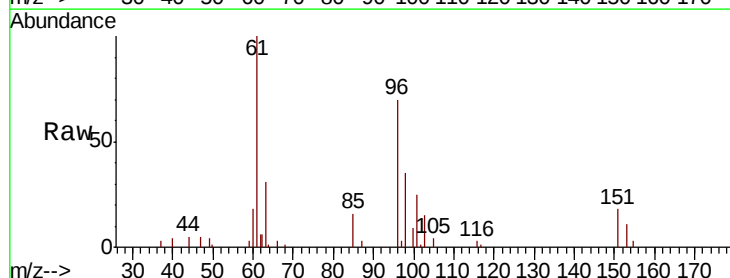
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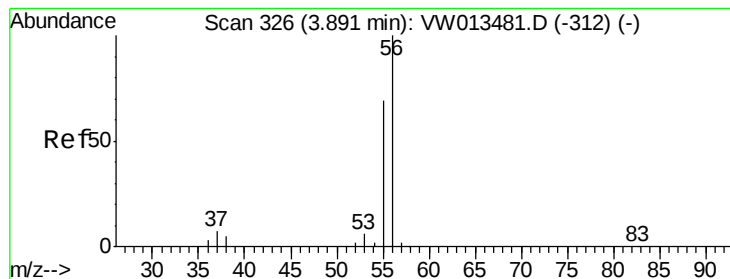
MMDadoda
10/11/2019 4:40:20 PM



#12
1,1-Dichloroethene
Concen: 2.652 ug/l
RT: 4.04 min Scan# 350
Delta R.T. -0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
96	100		
61	142.6	119.4	179.0
98	50.5	51.1	76.7#





#13

Acrolein

Concen: 2.553 ug/l

RT: 3.90 min Scan# 328

Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 56 Resp: 577

Ion Ratio Lower Upper

56 100

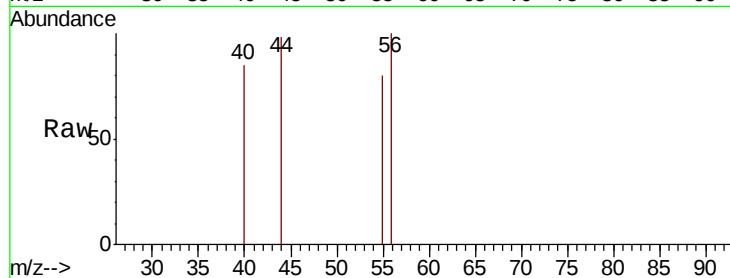
55 60.7 55.9 83.9

Manual Integrations

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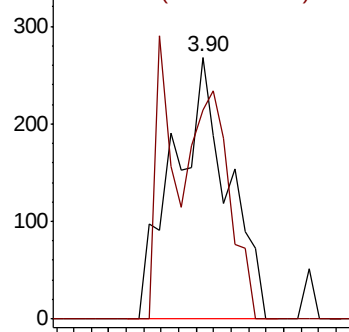
MMDadoda

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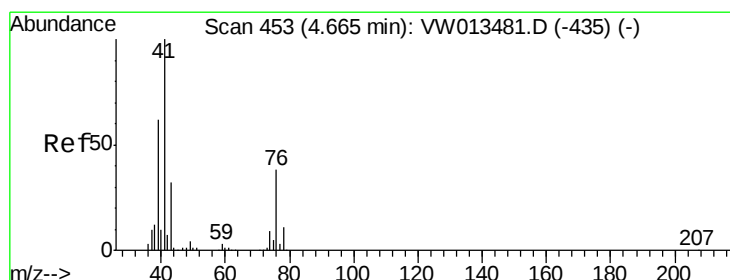
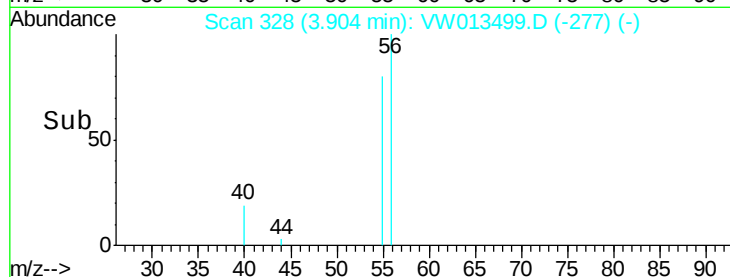


Abundance Ion 56.00 (55.70 to 56.70): VW

Ion 55.00 (54.70 to 55.70): VW



Time-->



#14

Allyl chloride

Concen: 2.749 ug/l

RT: 4.66 min Scan# 452

Delta R.T. -0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

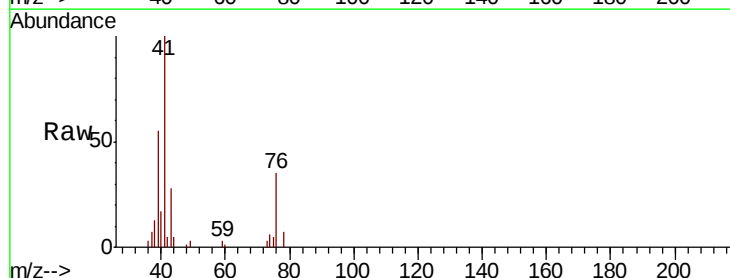
Tgt Ion: 41 Resp: 13157

Ion Ratio Lower Upper

41 100

39 60.4 50.1 75.1

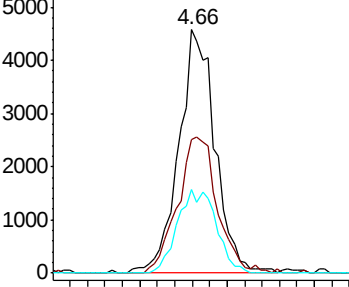
76 36.7 29.0 43.4



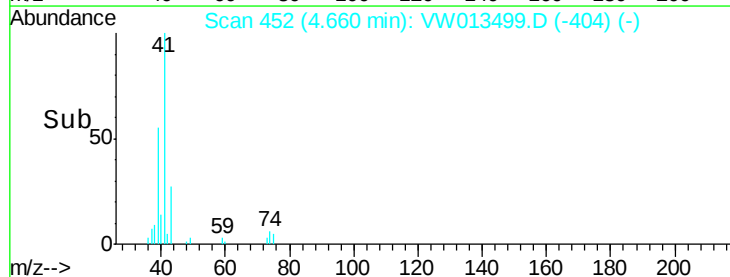
Abundance Ion 41.00 (40.70 to 41.70): VW

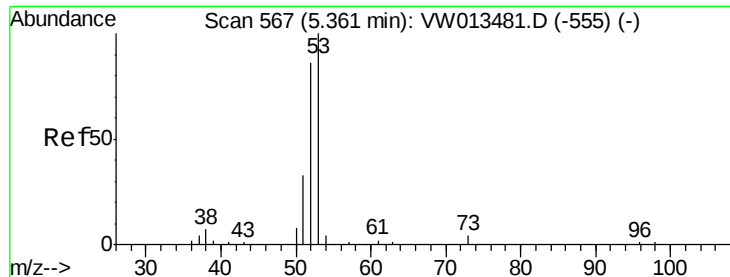
Ion 39.00 (38.70 to 39.70): VW

Ion 75.90 (75.60 to 76.60): VW



Time-->





#15

Acrylonitrile

Concen: 12.873 ug/l

RT: 5.37 min Scan# 568

Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

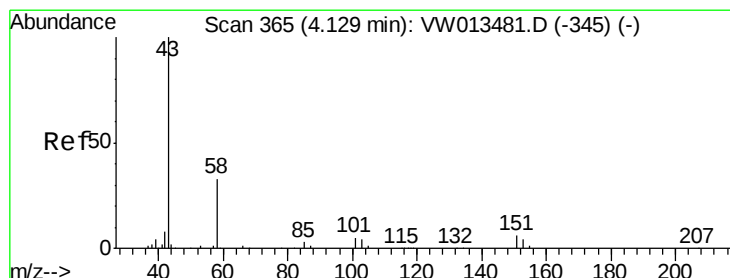
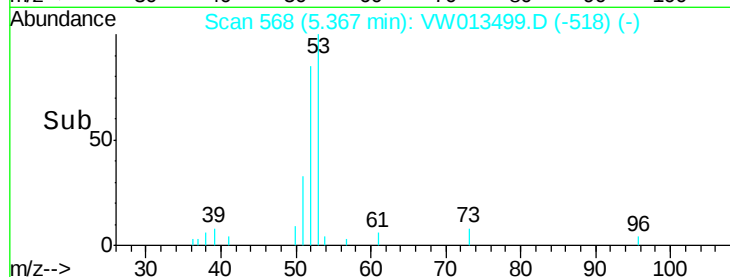
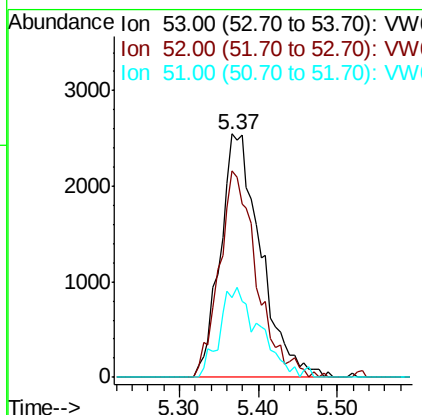
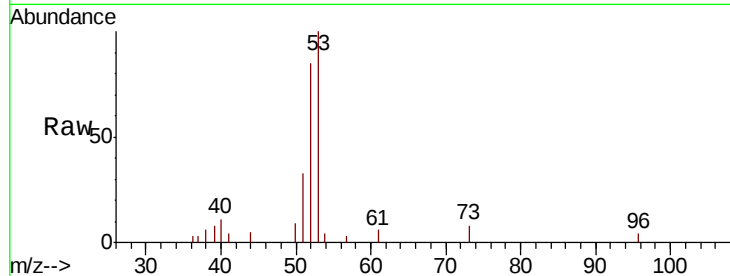
ClientSampleId :

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

Tot Ion:	53	Resp:	9082
Ion	Ratio	Lower	Upper
53	100		
52	78.7	65.8	98.8
51	36.1	28.6	42.8

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#16

Acetone

Concen: 16.583 ug/l

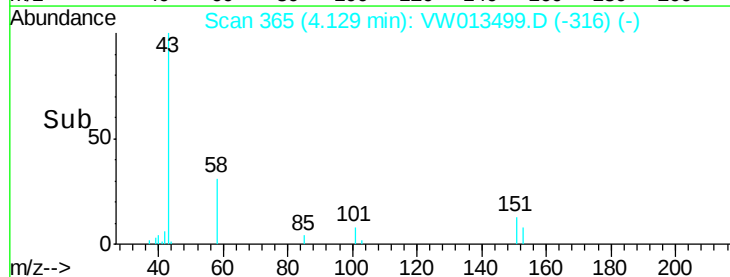
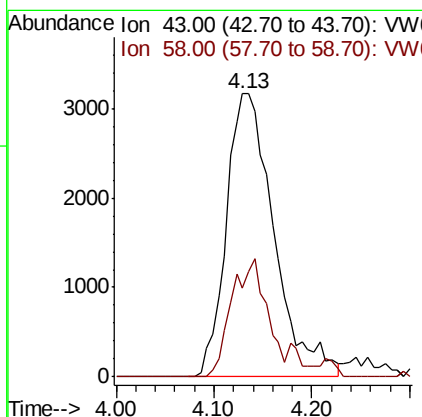
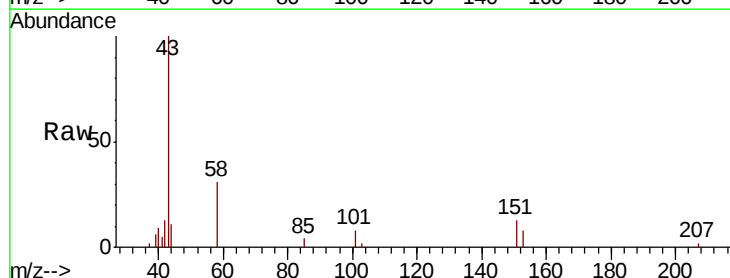
RT: 4.13 min Scan# 365

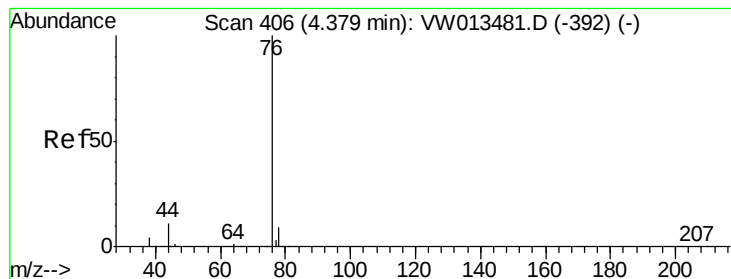
Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion:	43	Resp:	10700
Ion	Ratio	Lower	Upper
43	100		
58	31.3	26.1	39.1





#17

Carbon Disulfide

Concen: 2.675 ug/l

RT: 4.38 min Scan# 406

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 76 Resp: 23392

Ion Ratio Lower Upper

76 100

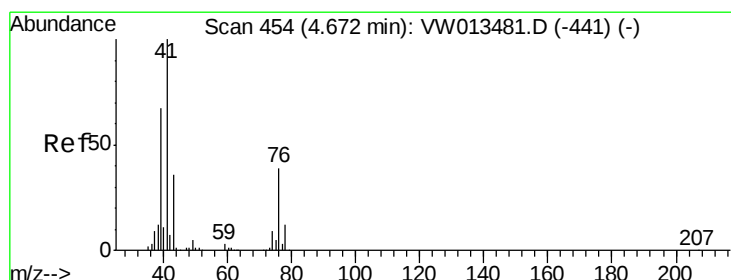
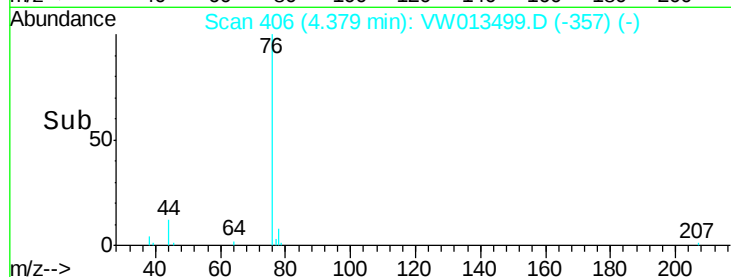
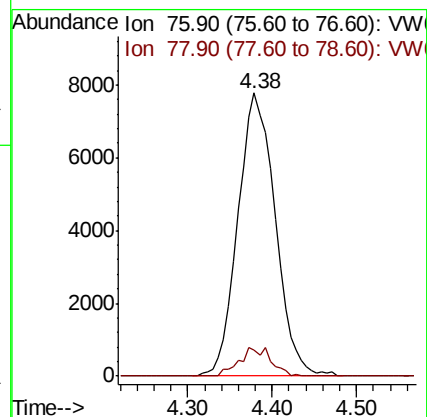
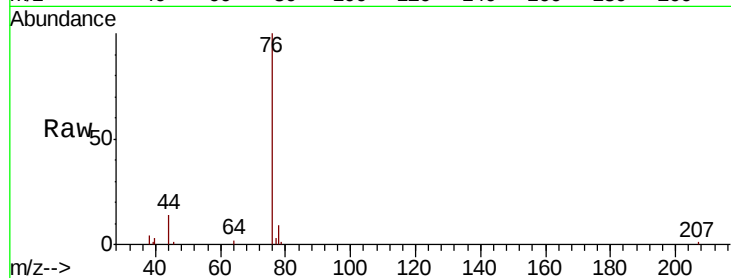
78 9.1 7.1 10.7

Manual Integrations

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#18

Methyl Acetate

Concen: 3.120 ug/l

RT: 4.67 min Scan# 453

Delta R.T. -0.01 min

Lab File: VW013499.D

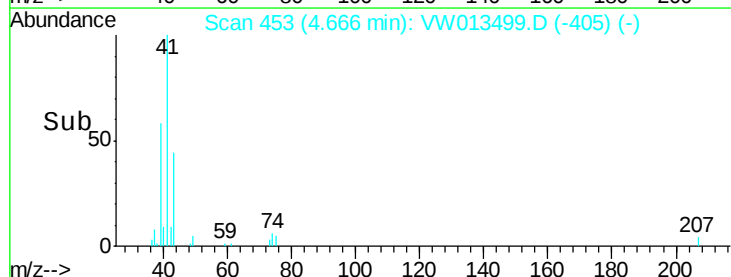
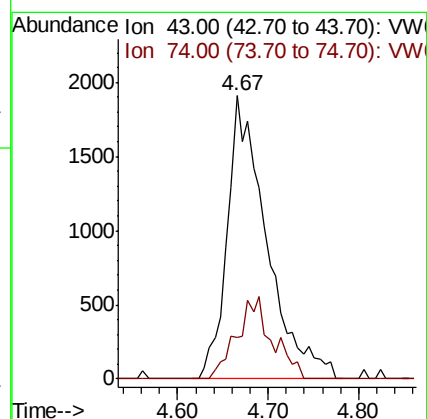
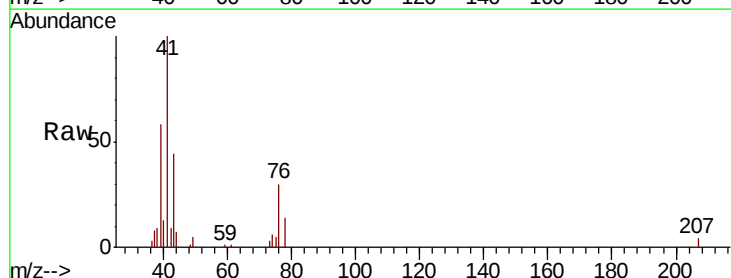
Acq: 09 Oct 2019 13:09

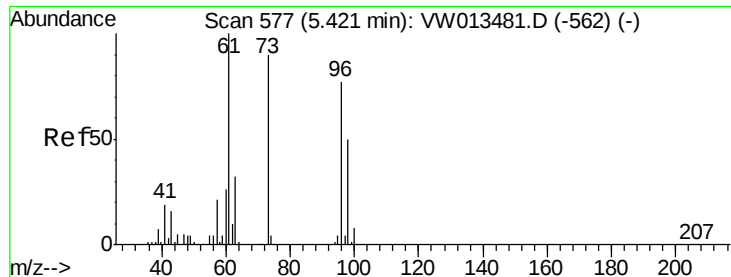
Tgt Ion: 43 Resp: 5767

Ion Ratio Lower Upper

43 100

74 0.0 19.6 29.4#





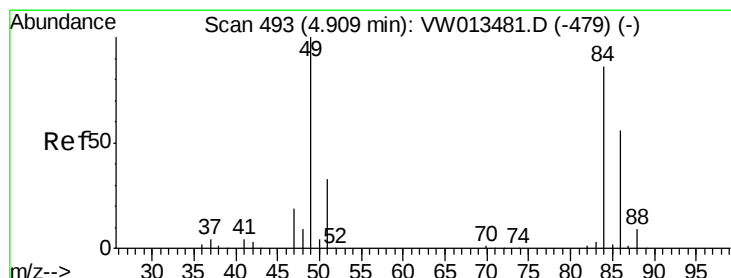
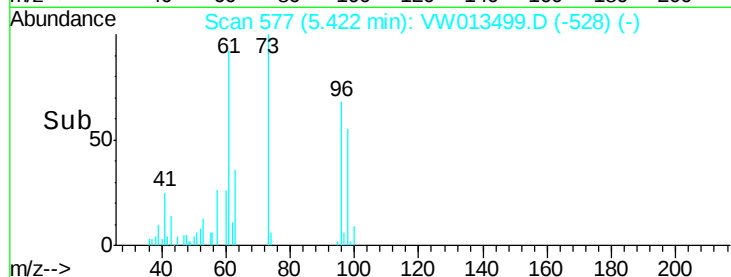
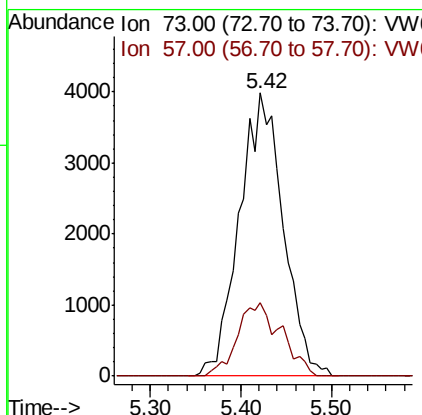
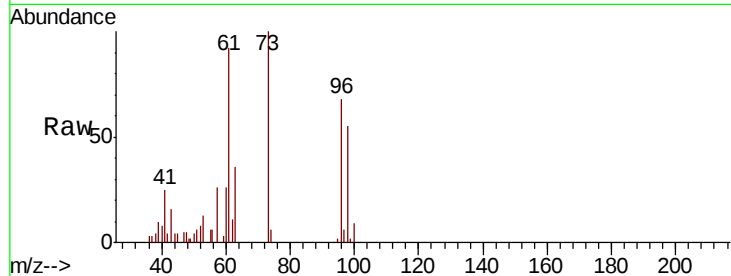
#19
Methyl tert-butyl Ether
Concen: 2.833 ug/l
RT: 5.42 min Scan# 577
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion: 73 Resp: 13344
Ion Ratio Lower Upper
73 100
57 25.8 18.6 27.8

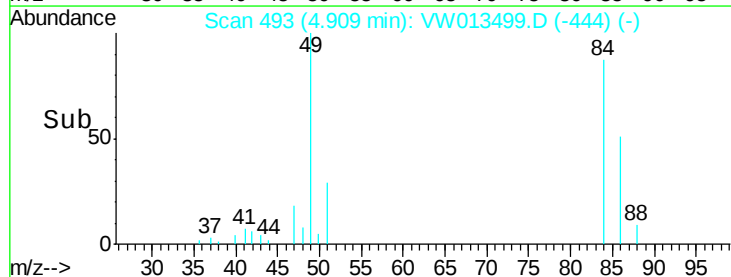
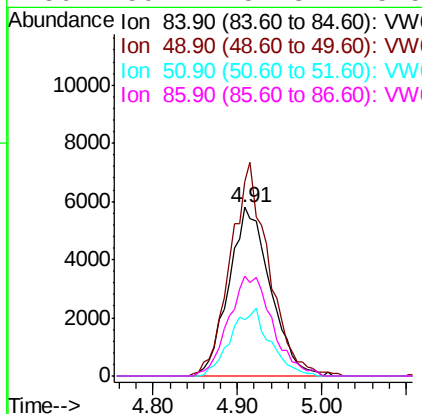
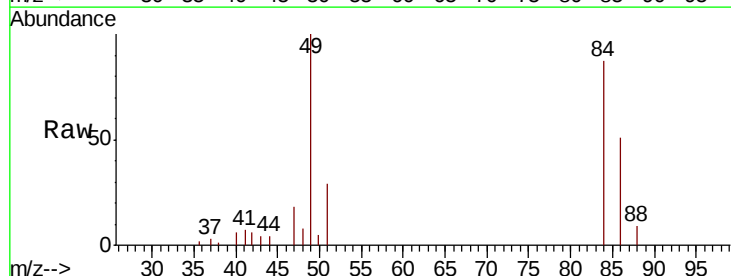
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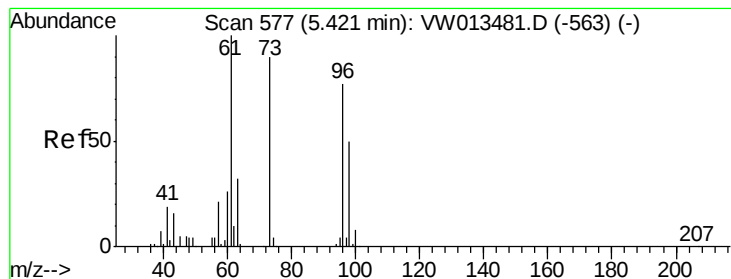
MMDadoda
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#20
Methylene Chloride
Concen: 5.461 ug/l
RT: 4.91 min Scan# 493
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion: 84 Resp: 19399
Ion Ratio Lower Upper
84 100
49 115.2 93.4 140.0
51 33.8 30.6 46.0
86 59.2 52.3 78.5





#21

trans-1,2-Dichloroethene

Concen: 2.825 ug/l

RT: 5.41 min Scan# 575

Delta R.T. -0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

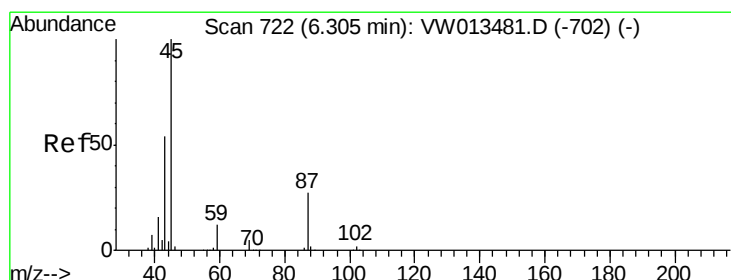
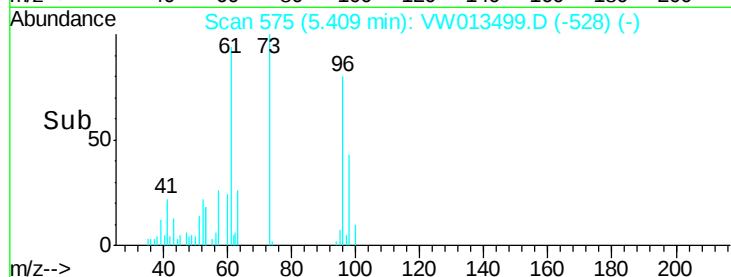
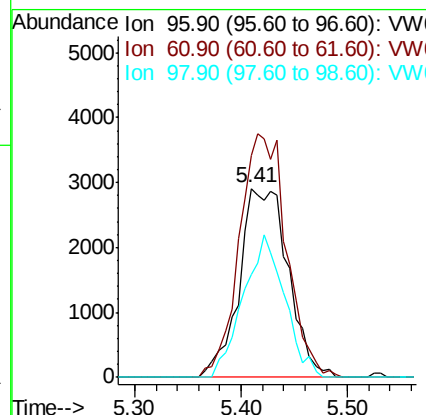
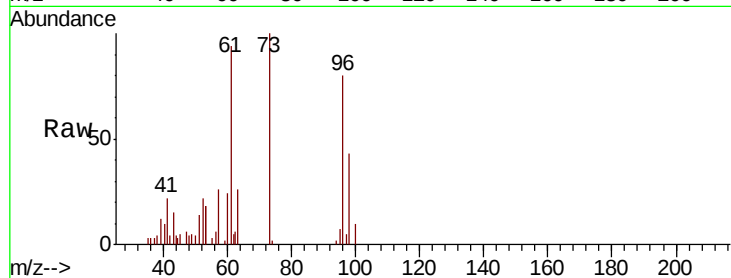
ClientSampleId :

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

Tot Ion:	96	Resp:	9352
Ion	Ratio	Lower	Upper
96	100		
61	117.3	104.3	156.5
98	54.2	51.8	77.8

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#22

Diisopropyl ether

Concen: 2.707 ug/l

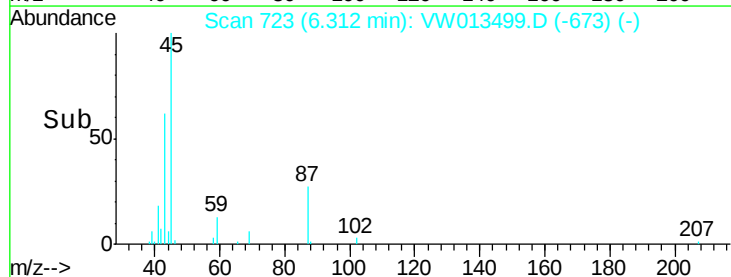
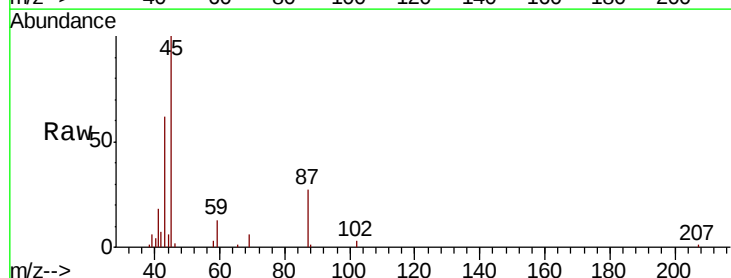
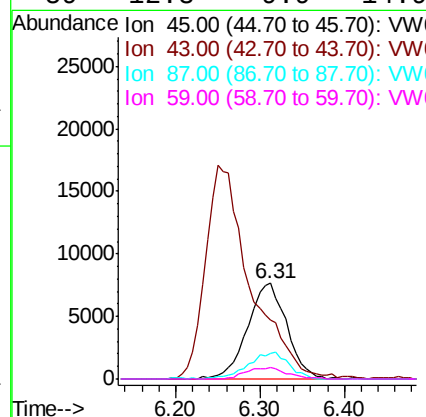
RT: 6.31 min Scan# 723

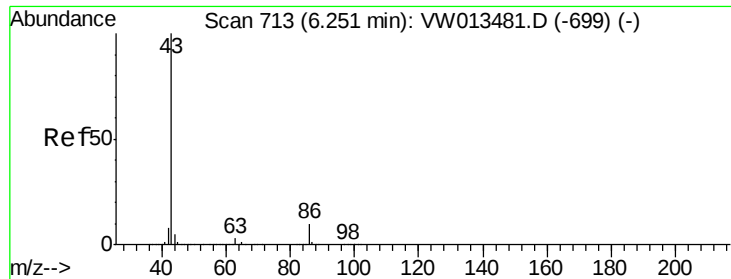
Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion:	45	Resp:	24278
Ion	Ratio	Lower	Upper
45	100		
43	58.9	43.4	65.0
87	26.7	22.1	33.1
59	12.8	9.9	14.9





#23

Vinyl Acetate

Concen: 11.742 ug/l

RT: 6.25 min Scan# 713

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 43 Resp: 63224

Ion Ratio Lower Upper

43 100

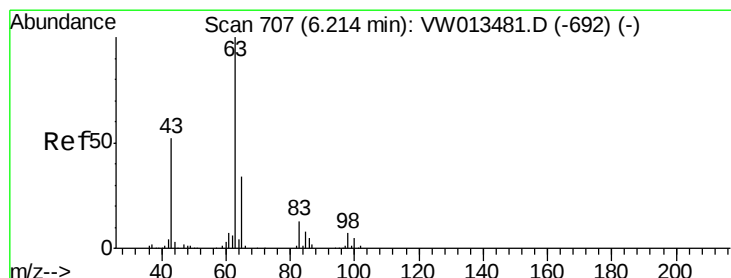
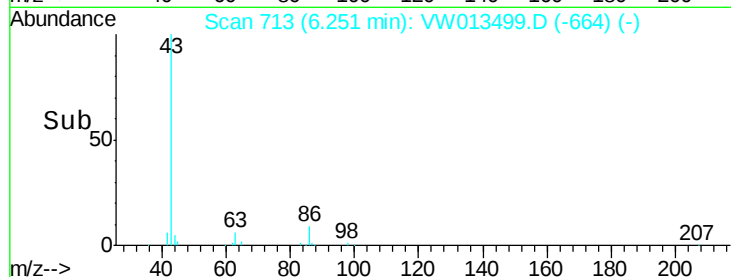
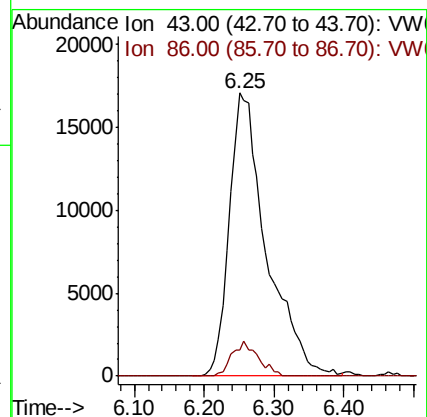
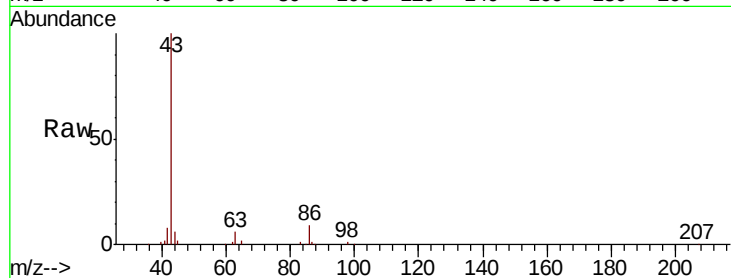
86 9.4 8.3 12.5

Manual Integrations

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#24

1,1-Dichloroethane

Concen: 2.809 ug/l

RT: 6.22 min Scan# 708

Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

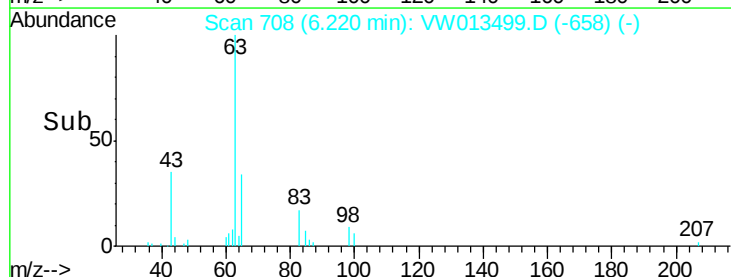
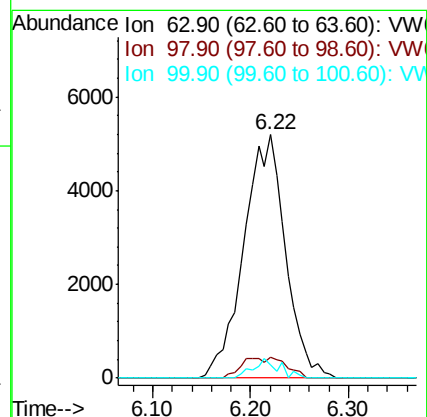
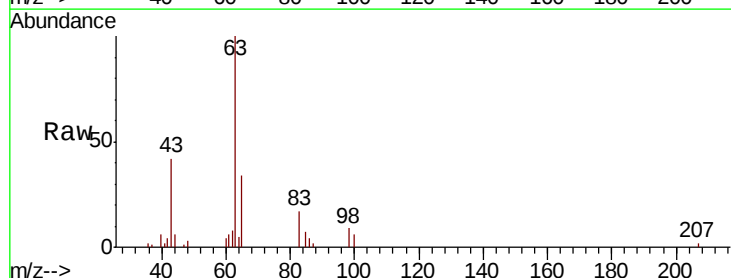
Tgt Ion: 63 Resp: 15398

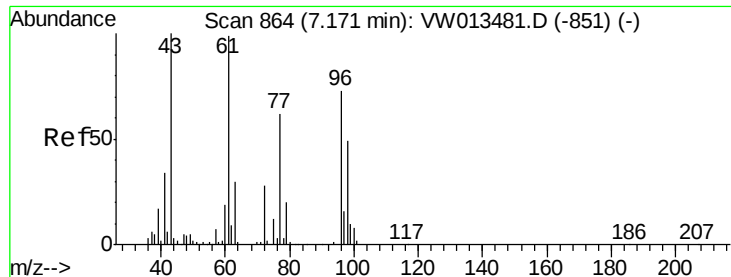
Ion Ratio Lower Upper

63 100

98 8.6 3.5 10.6

100 5.7 2.3 6.8





#25

2-Butanone

Concen: 13.798 ug/l

RT: 7.18 min Scan# 865

Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 43 Resp: 13121

Ion Ratio Lower Upper

43 100

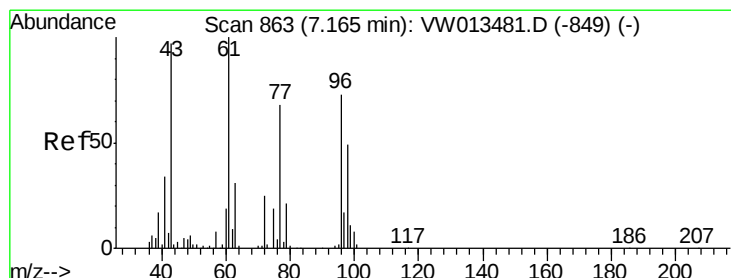
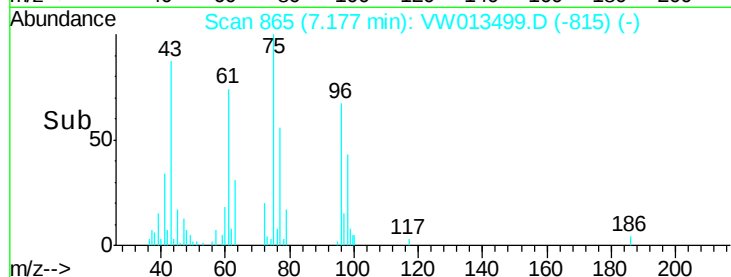
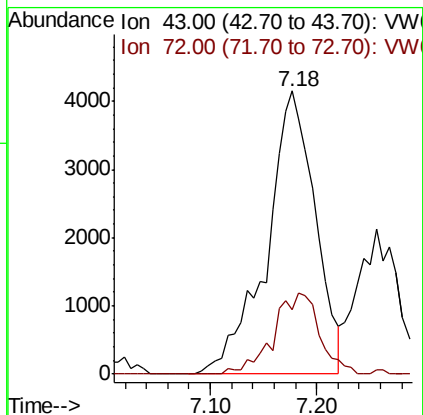
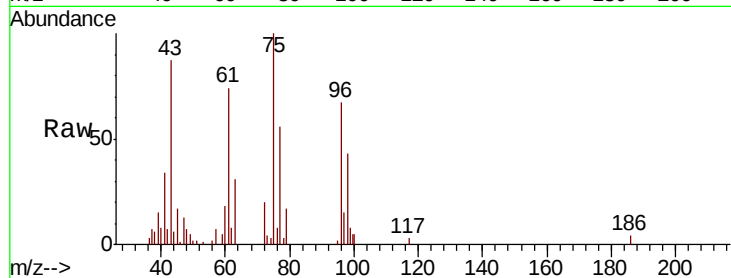
72 23.0 22.1 33.1

Manual Integrations

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MMDadoda

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#26

2,2-Dichloropropane

Concen: 3.427 ug/l

RT: 7.16 min Scan# 862

Delta R.T. -0.01 min

Lab File: VW013499.D

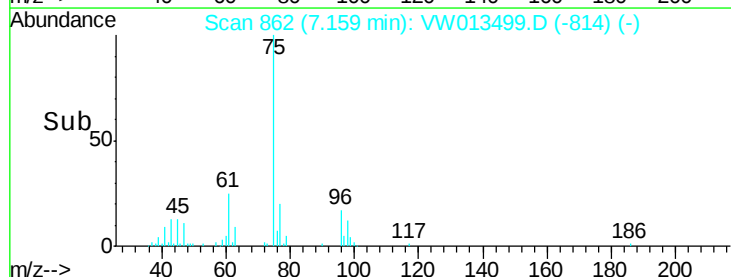
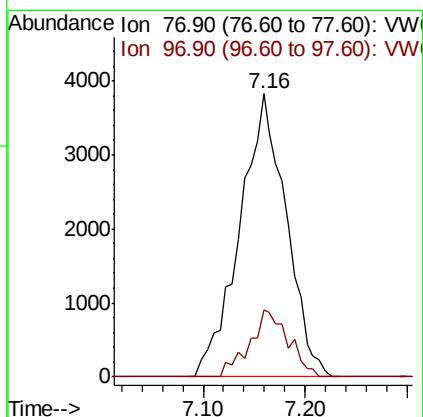
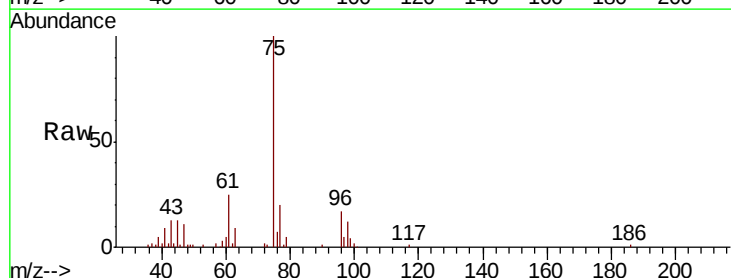
Acq: 09 Oct 2019 13:09

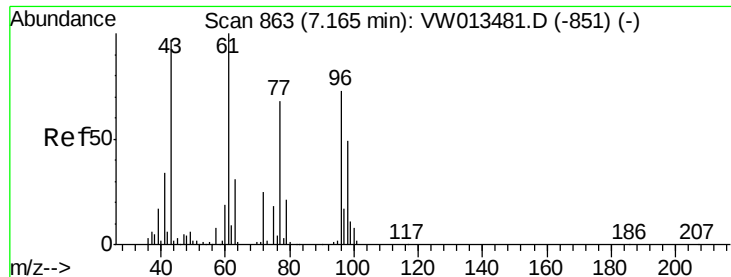
Tgt Ion: 77 Resp: 12111

Ion Ratio Lower Upper

77 100

97 19.8 12.6 37.6





#27

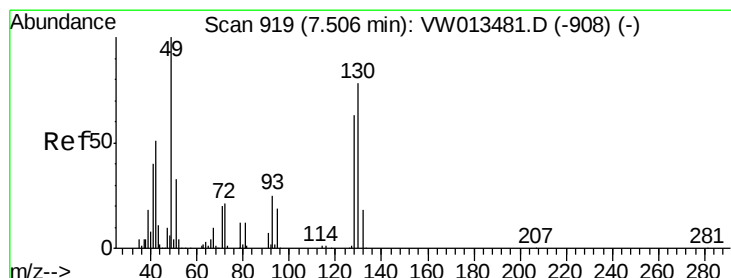
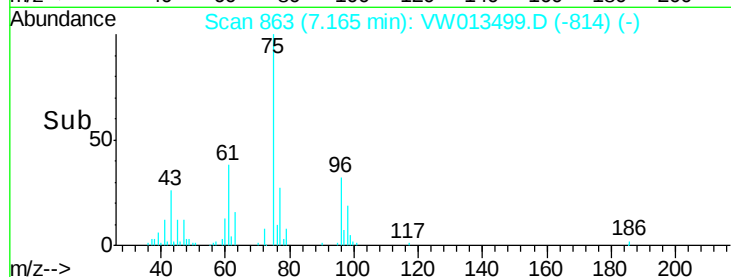
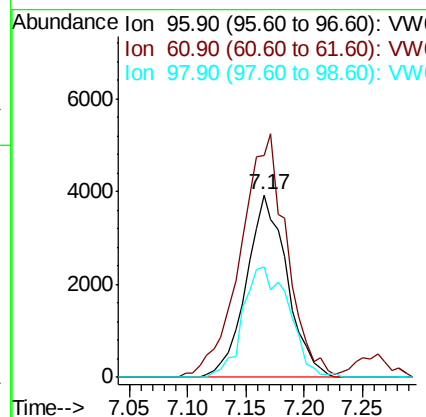
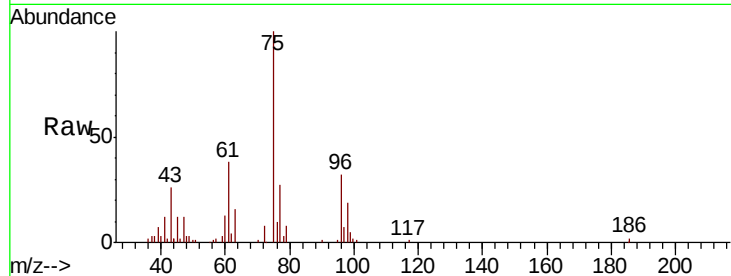
cis-1,2-Dichloroethene
Concen: 2.737 ug/l
RT: 7.17 min Scan# 863
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
96	100		
61	151.1	0.0	274.4
98	68.7	0.0	130.2

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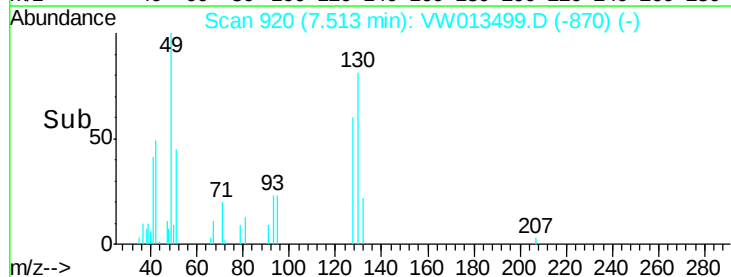
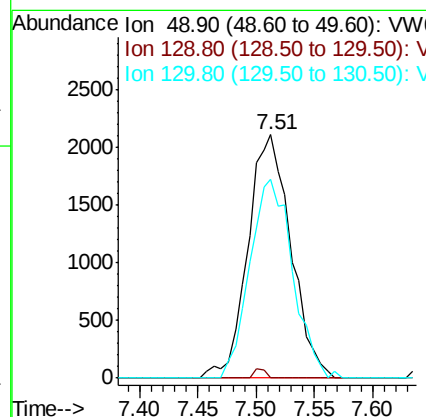
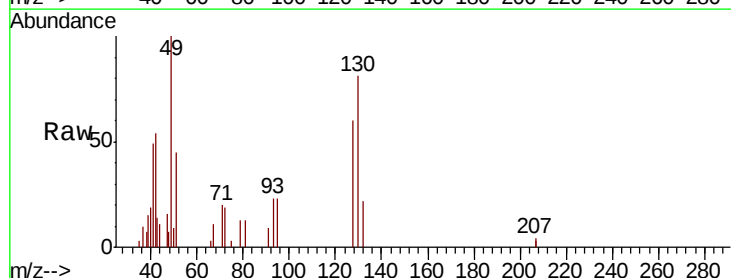
MMDadoda
10/11/2019 4:40:20 PM

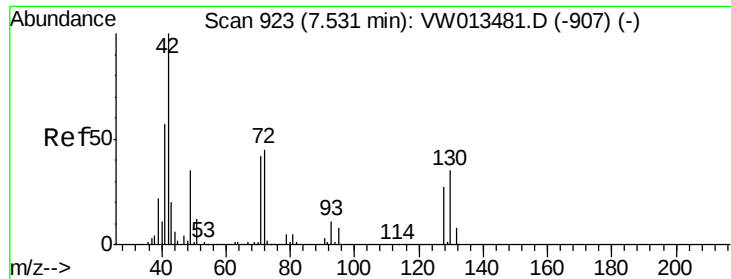


#28

Bromochloromethane
Concen: 2.769 ug/l
RT: 7.51 min Scan# 920
Delta R.T. 0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
49	100		
129	1.1	0.0	1.6
130	81.3	0.0	0.0#





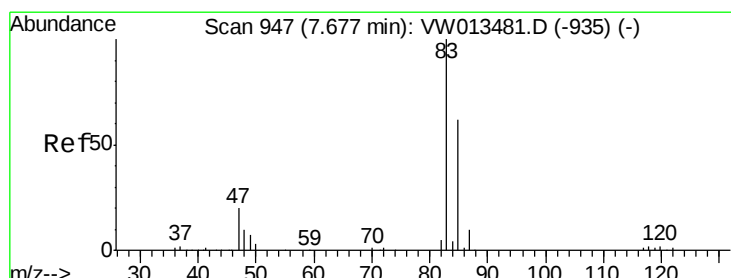
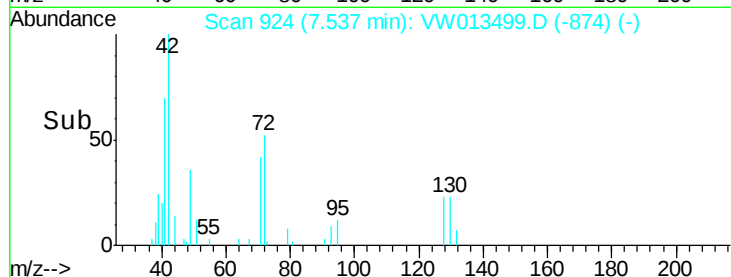
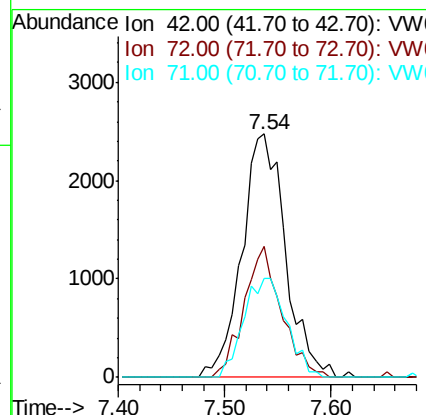
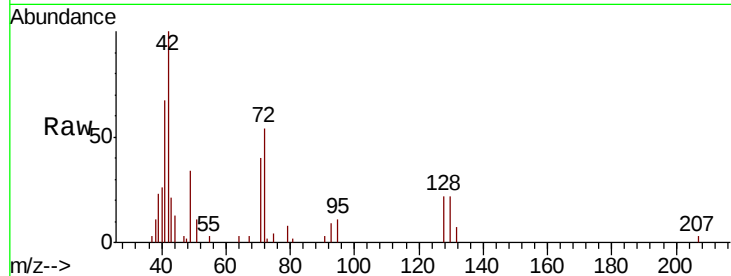
#29
Tetrahydrofuran
Concen: 12.211 ug/l
RT: 7.54 min Scan# 924
Delta R.T. 0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	46.5	34.8	52.2
71	40.0	33.6	50.4

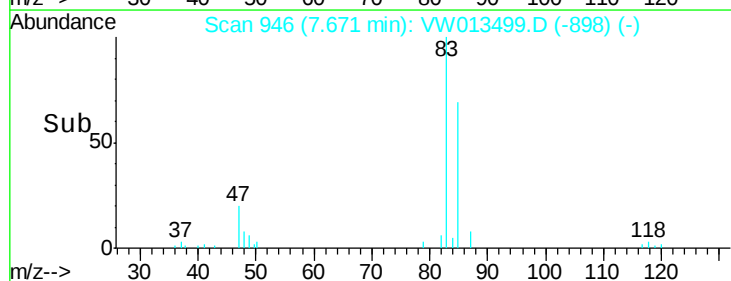
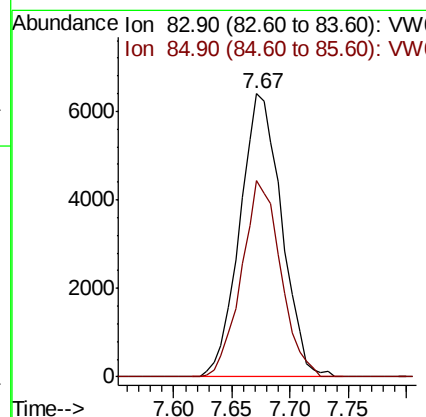
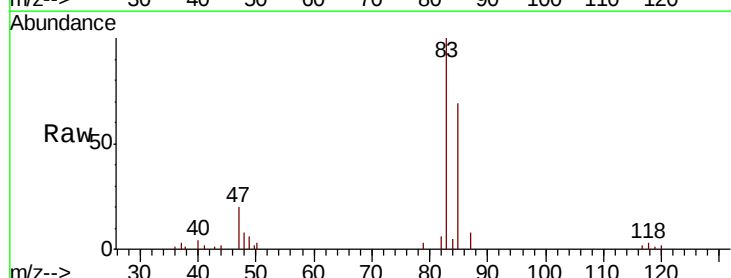
Manual Integrations
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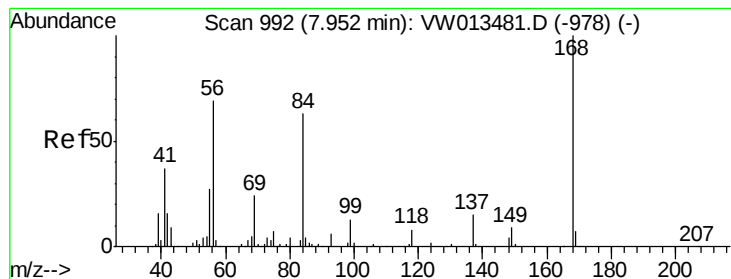
MMDadoda
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#30
Chloroform
Concen: 3.003 ug/l
RT: 7.67 min Scan# 946
Delta R.T. -0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
83	100		
85	69.4	49.4	74.2





#31

Cyclohexane

Concen: 3.573 ug/l

RT: 7.95 min Scan# 992

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

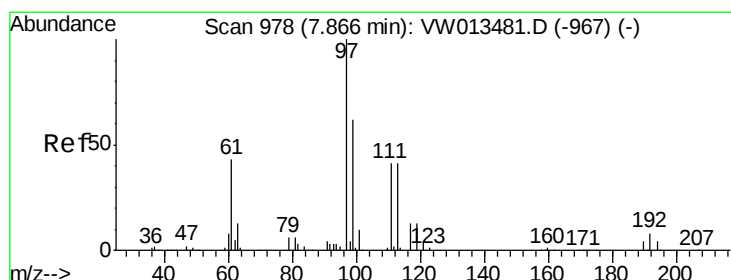
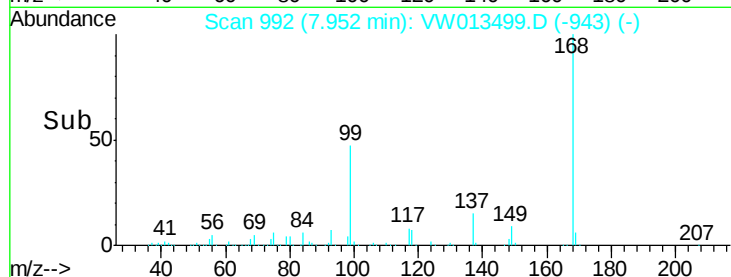
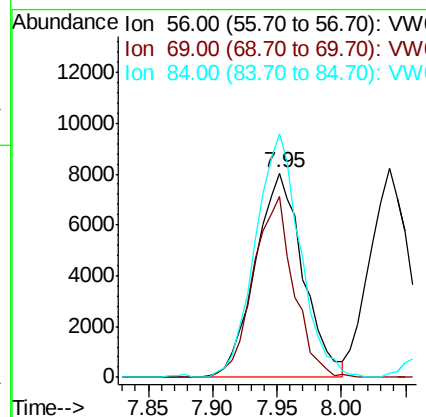
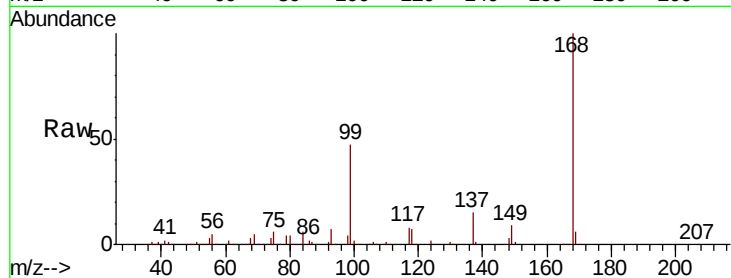
ClientSampleId :

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

Tot Ion	Ratio	Lower	Upper
56	100		
69	88.2	28.0	42.0#
84	119.1	71.8	107.6#

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#32

1,1,1-Trichloroethane

Concen: 2.726 ug/l

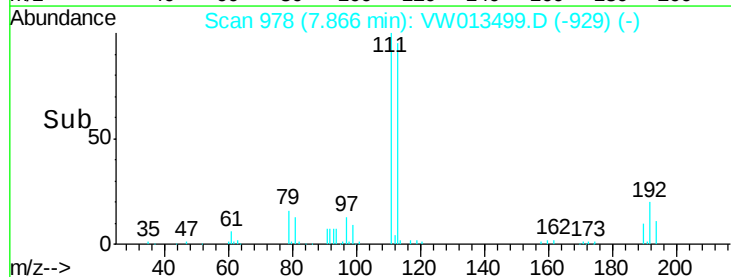
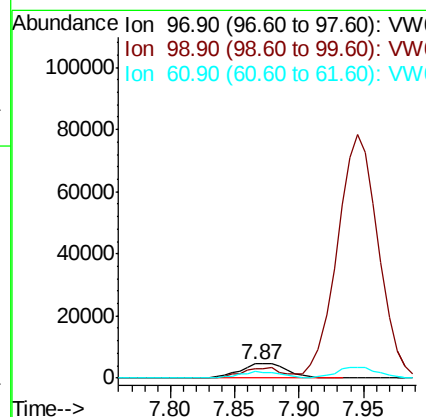
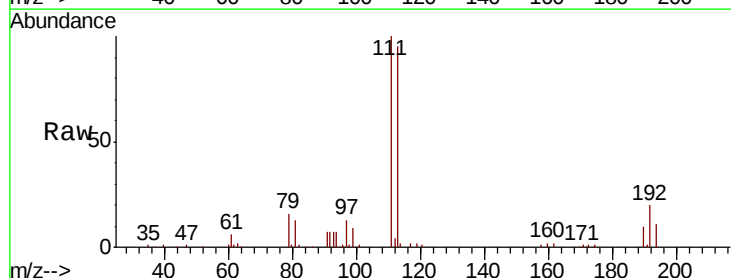
RT: 7.87 min Scan# 978

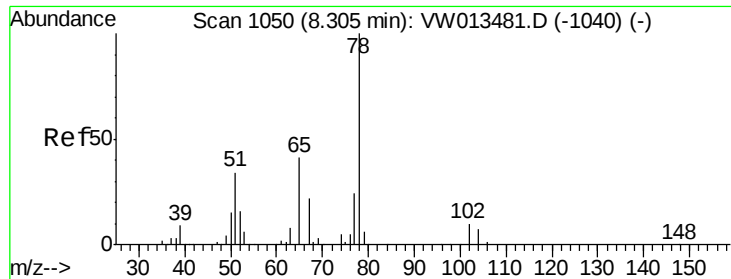
Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
97	100		
99	63.8	52.3	78.5
61	42.0	33.7	50.5





#33

1,2-Dichloroethane-d4

Concen: 51.529 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 65 Resp: 142881

Ion Ratio Lower Upper

65 100

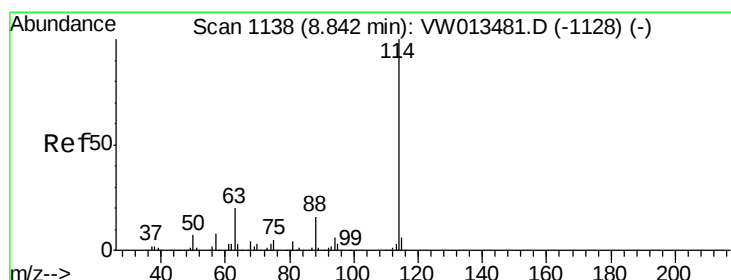
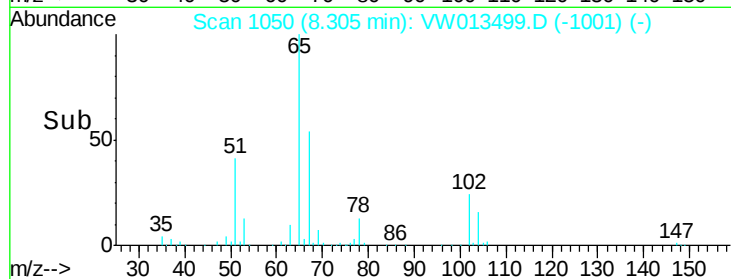
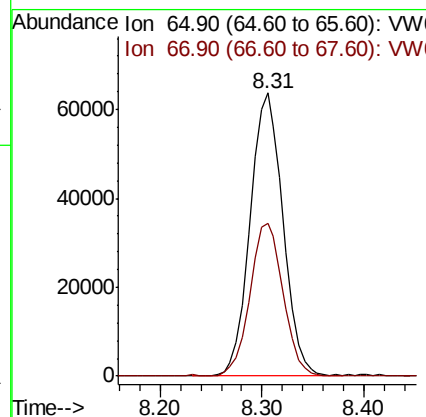
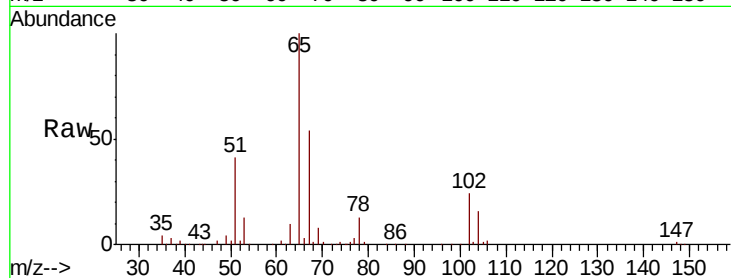
67 54.4 0.0 109.4

Manual Integrations

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10/11/2019 4:40:20 PM



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

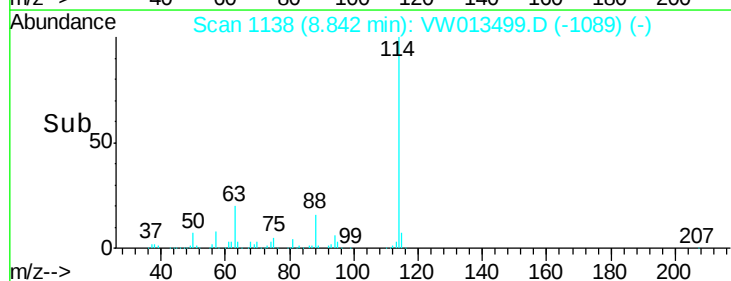
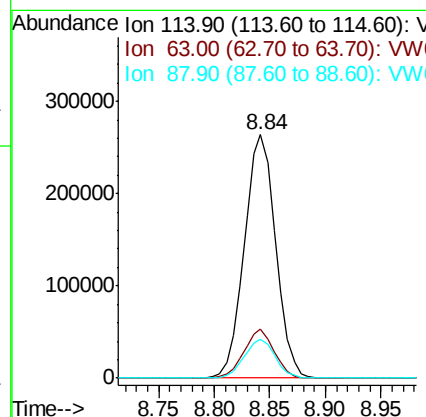
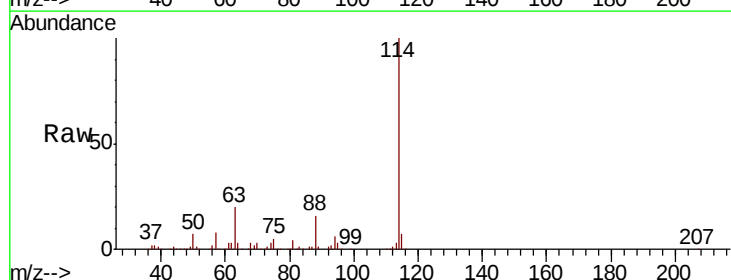
Tgt Ion: 114 Resp: 515246

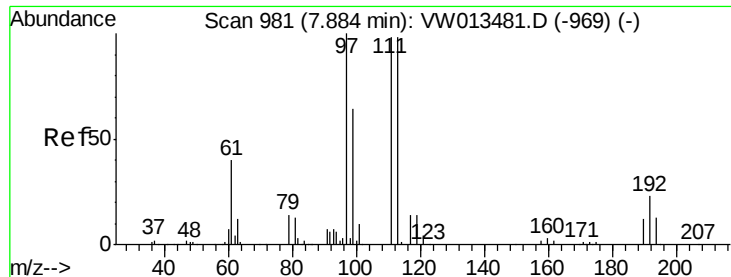
Ion Ratio Lower Upper

114 100

63 20.2 0.0 40.4

88 16.0 0.0 31.4





#35

Dibromofluoromethane

Concen: 51.595 ug/l

RT: 7.88 min Scan# 981

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

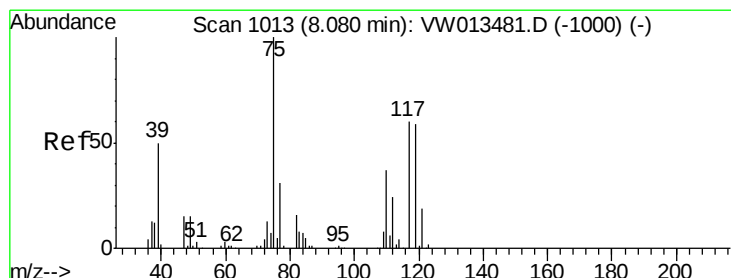
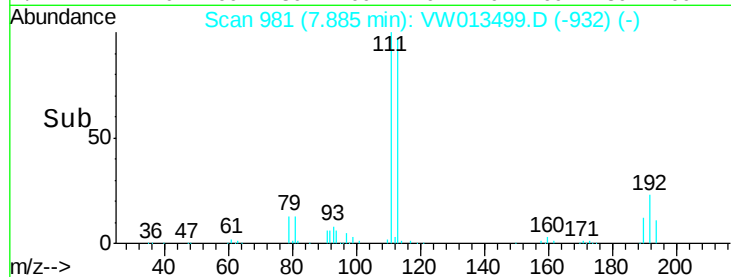
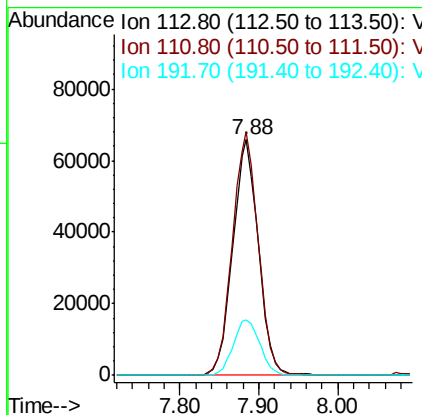
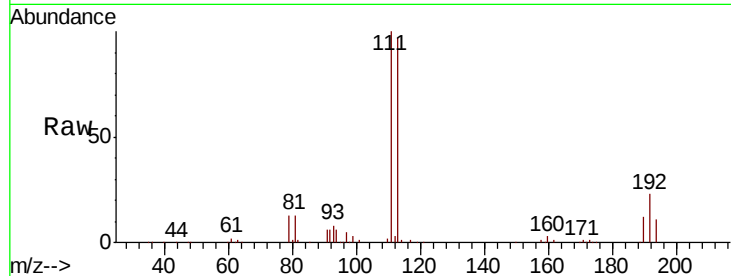
ClientSampleId :

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

Tot Ion:	113	Resp:	148477
Ion Ratio	Lower	Upper	
113	100		
111	104.5	82.3	123.5
192	24.5	19.3	28.9

Manual Integrations
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#36

1,1-Dichloropropene

Concen: 2.783 ug/l

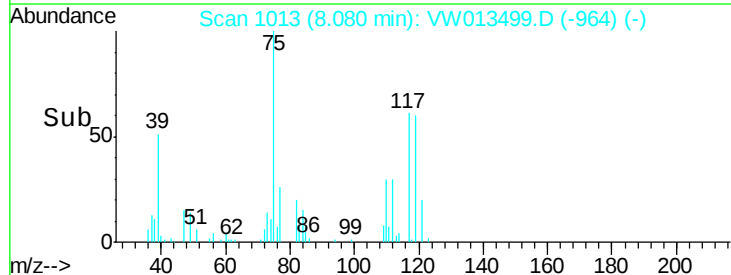
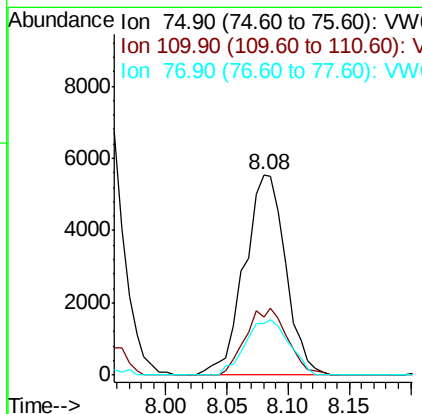
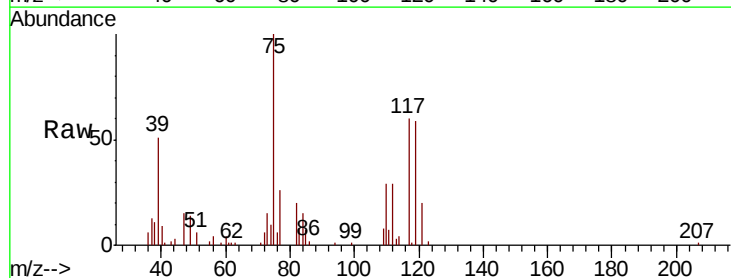
RT: 8.08 min Scan# 1013

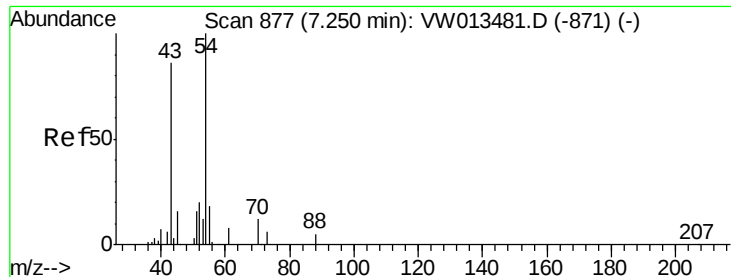
Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion:	75	Resp:	12973
Ion Ratio	Lower	Upper	
75	100		
110	33.8	18.4	55.2
77	29.4	25.0	37.4





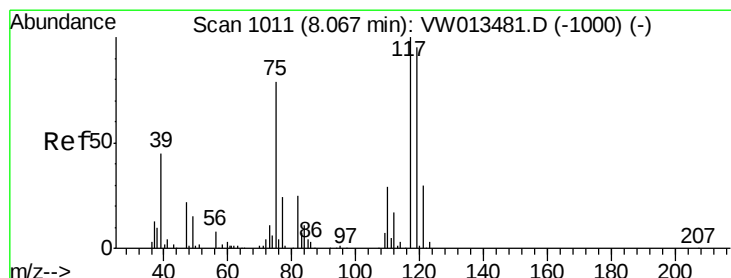
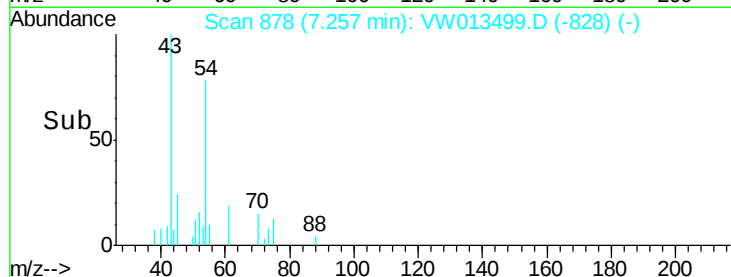
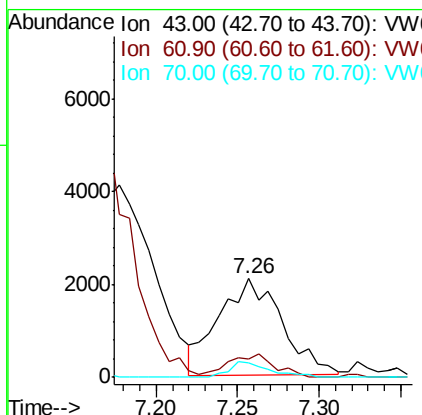
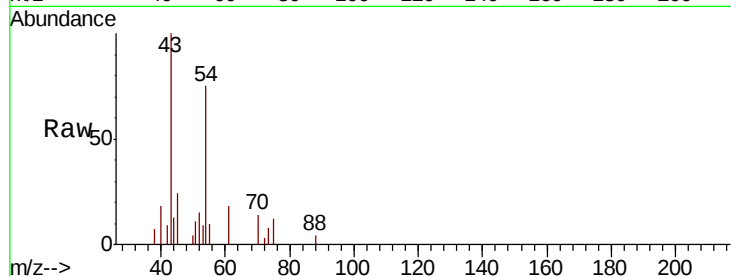
#37
Ethyl Acetate
Concen: 2.631 ug/l
RT: 7.26 min Scan# 878
Delta R.T. 0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	18.1	10.9	16.3#
70	10.1	9.2	13.8

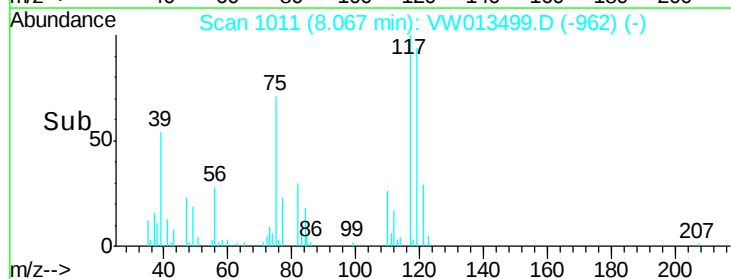
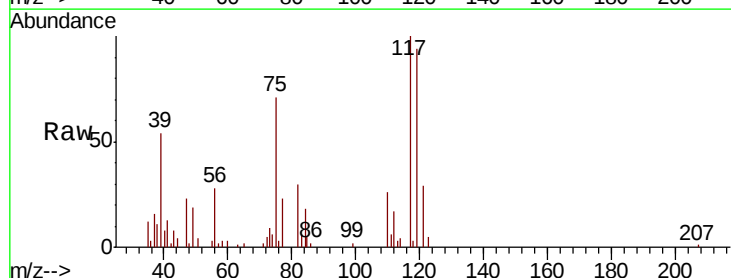
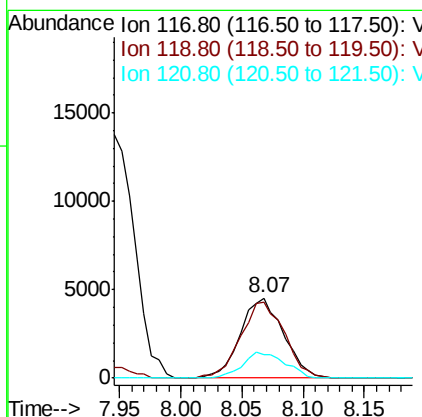
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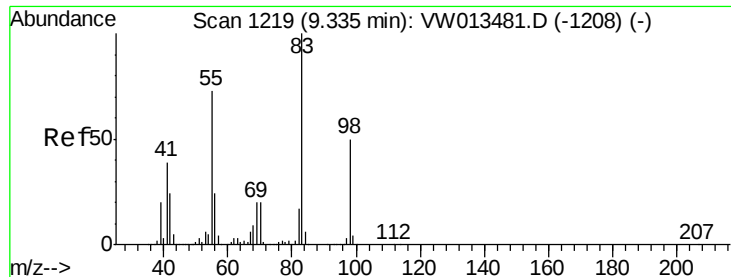
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#38
Carbon Tetrachloride
Concen: 2.675 ug/l
RT: 8.07 min Scan# 1011
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
117	100		
119	94.5	76.3	114.5
121	28.7	23.6	35.4





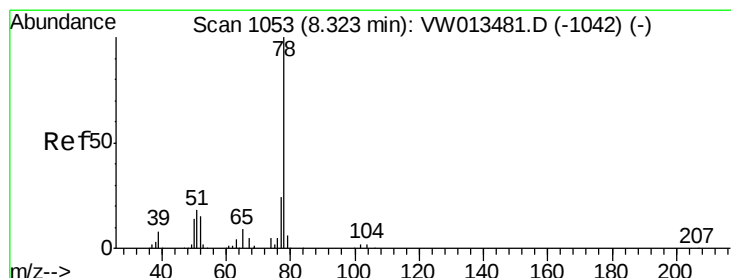
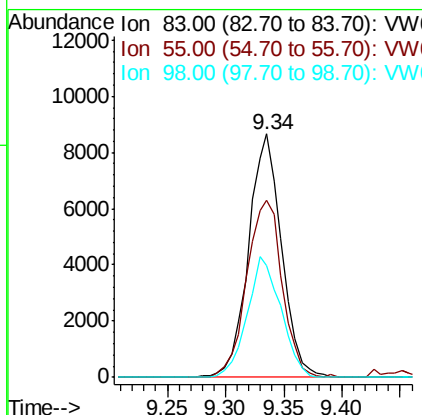
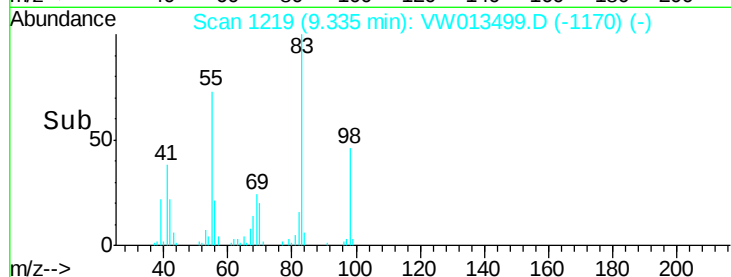
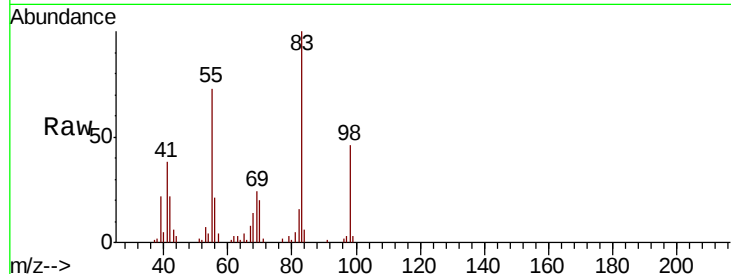
#39
Methvlcvclohexane
Concen: 2.828 ug/l
RT: 9.34 min Scan# 1219
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
83	100		
55	72.7	58.2	87.4
98	45.9	39.8	59.6

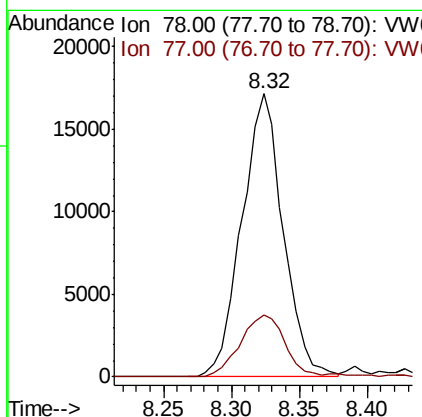
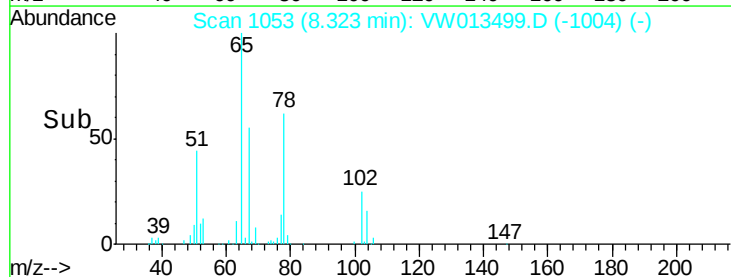
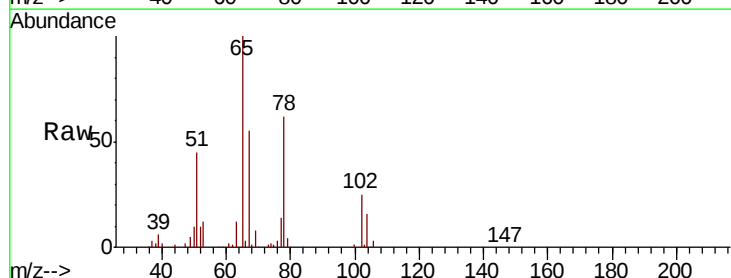
Manual Integrations
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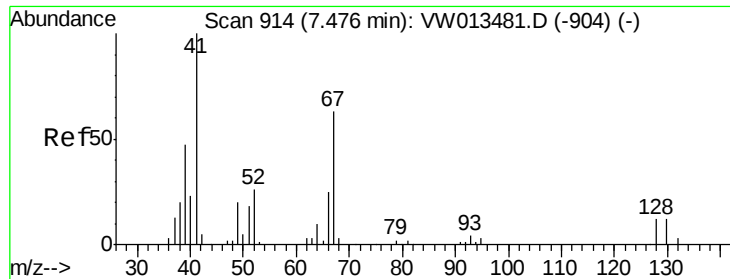
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#40
Benzene
Concen: 2.799 ug/l
RT: 8.32 min Scan# 1053
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.1	19.2	28.8





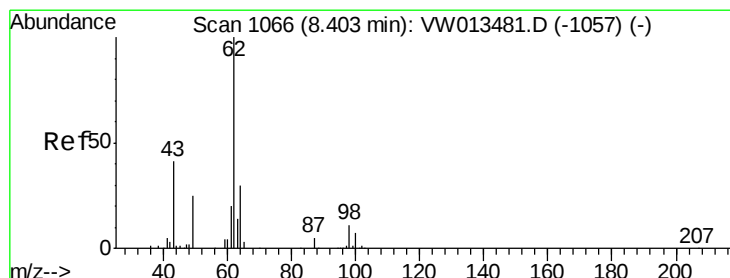
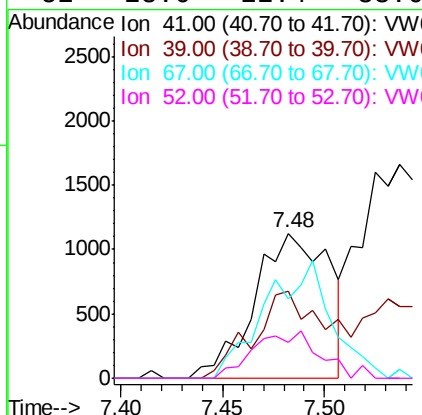
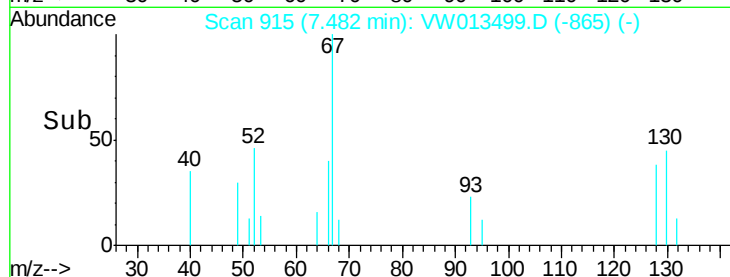
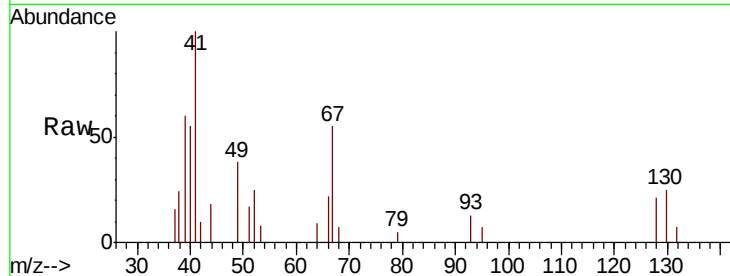
#41
Methacrylonitrile
Concen: 2.393 ug/l
RT: 7.48 min Scan# 915
Delta R.T. 0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
41	100		
39	59.6	39.4	59.0#
67	72.9	57.0	85.6
52	28.6	22.4	33.6

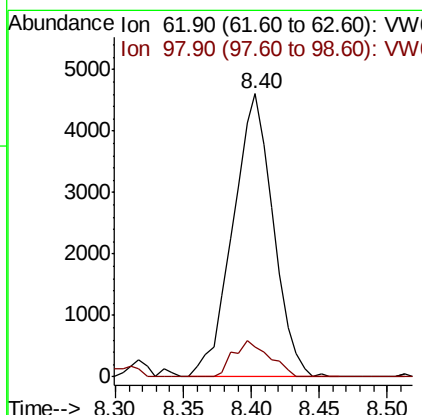
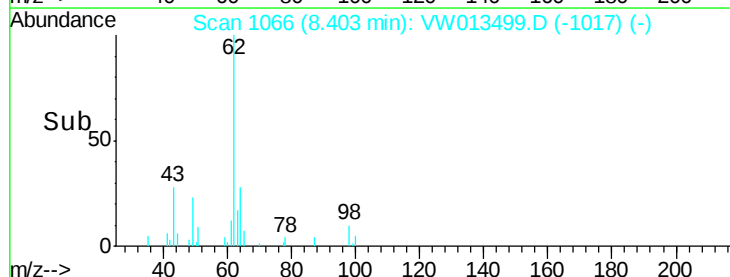
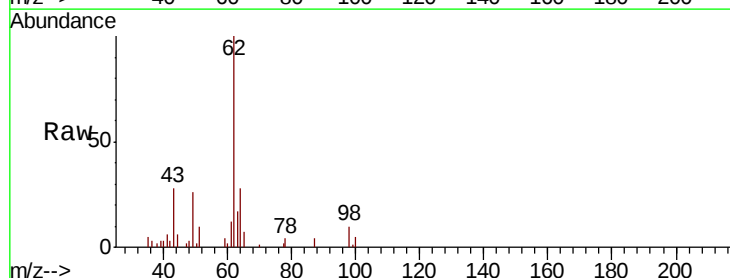
Manual Integrations
APPROVED

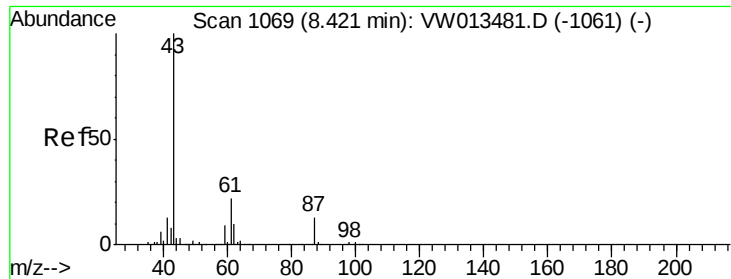
MMDadoda
10/11/2019 4:40:20 PM



#42
1,2-Dichloroethane
Concen: 2.895 ug/l
RT: 8.40 min Scan# 1066
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
62	100		
98	11.5	0.0	21.4





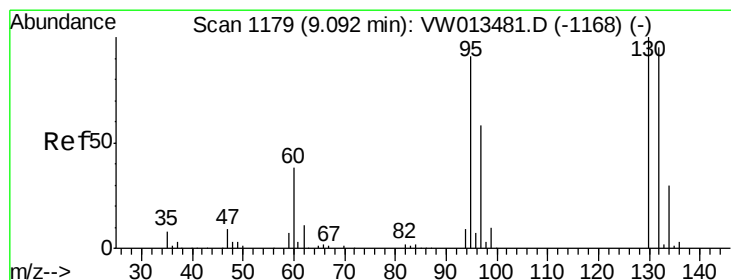
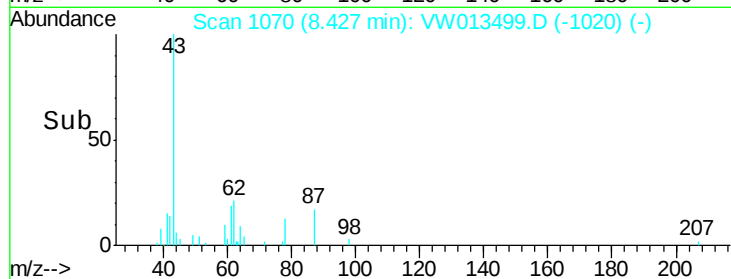
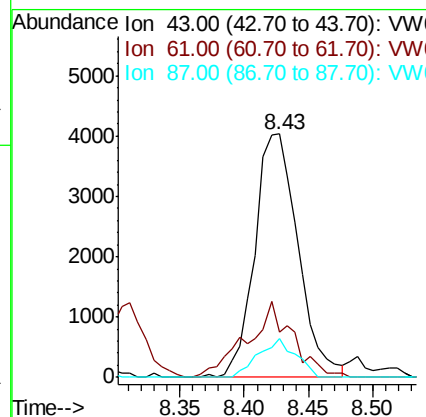
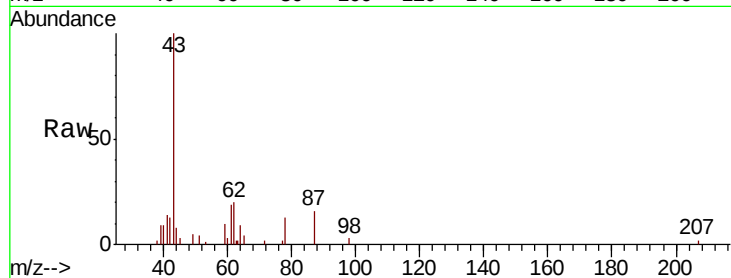
#43
Isopropyl Acetate
Concen: 2.457 ug/l
RT: 8.43 min Scan# 1070
Delta R.T. 0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	33.2	25.4	38.2
87	13.6	10.8	16.2

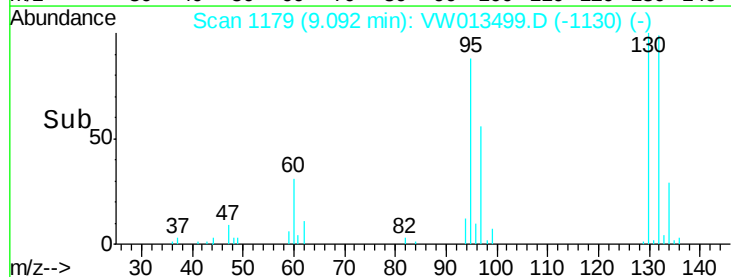
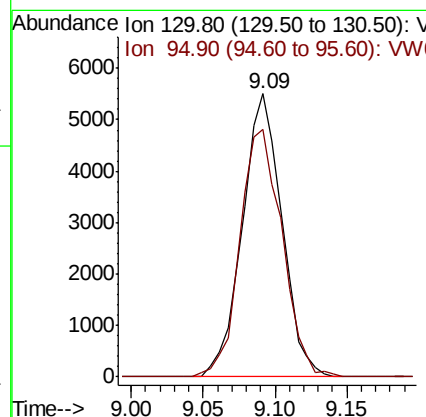
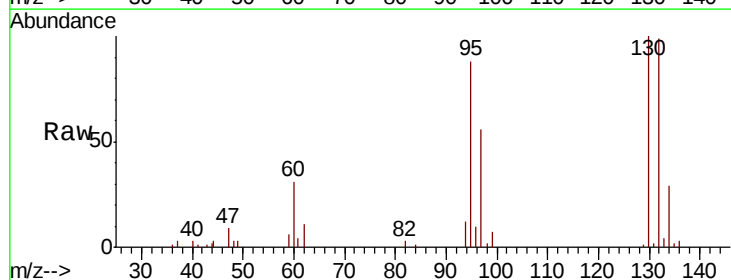
Manual Integrations
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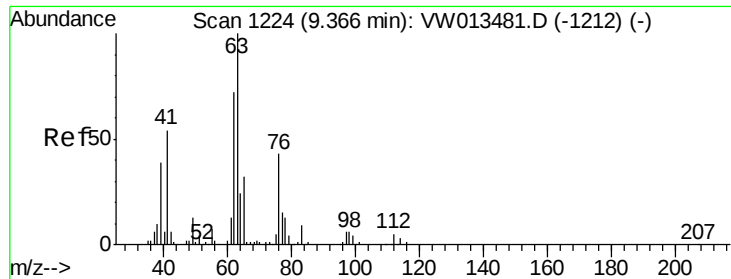
MMDadoda
10/11/2019 4:40:20 PM



#44
Trichloroethene
Concen: 2.822 ug/l
RT: 9.09 min Scan# 1179
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
130	100		
95	87.6	0.0	182.2





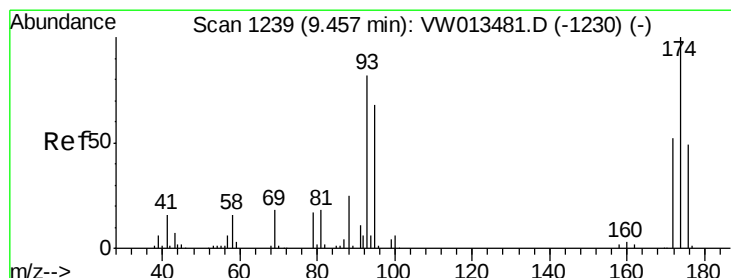
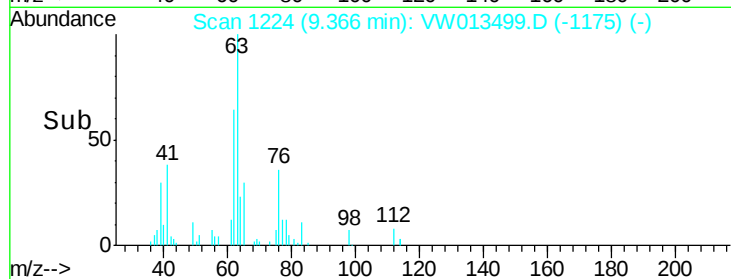
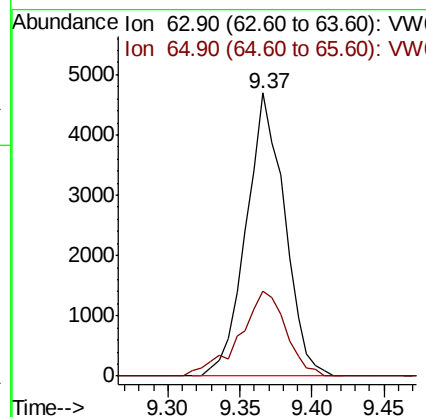
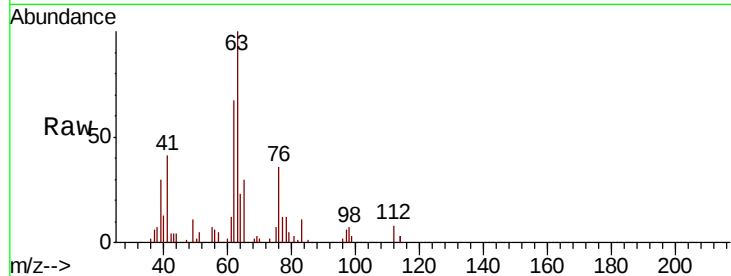
#45
 1,2-Dichloropropane
 Concen: 2.776 ug/l
 RT: 9.37 min Scan# 1224
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion: 63 Resp: 8668
 Ion Ratio Lower Upper
 63 100
 65 30.1 25.8 38.6

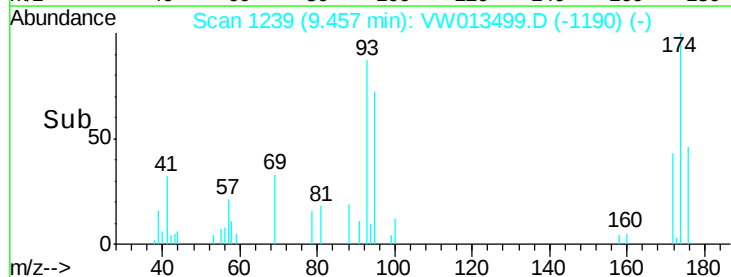
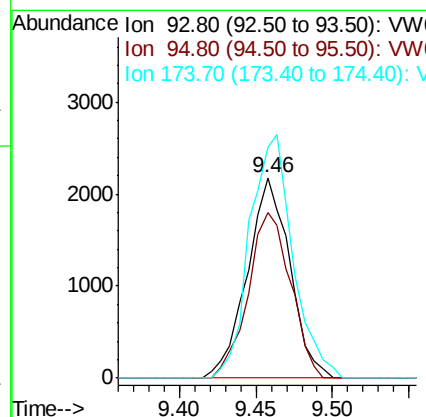
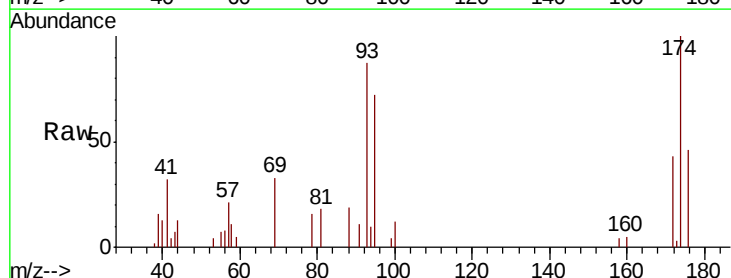
Manual Integrations
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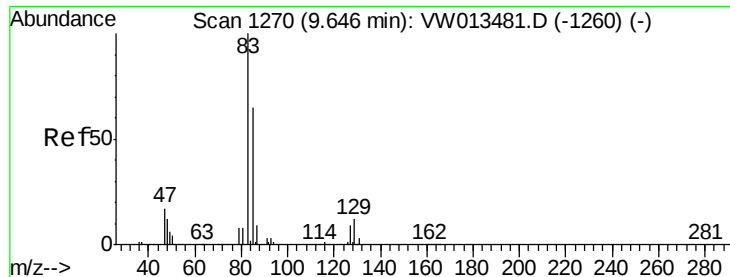
MMDadoda
 10/11/2019 4:40:20 PM



#46
 Dibromomethane
 Concen: 2.709 ug/l
 RT: 9.46 min Scan# 1239
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion: 93 Resp: 4215
 Ion Ratio Lower Upper
 93 100
 95 82.0 68.0 102.0
 174 123.1 97.0 145.6





#47

Bromodichloromethane

Concen: 2.719 ug/l

RT: 9.65 min Scan# 1270

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

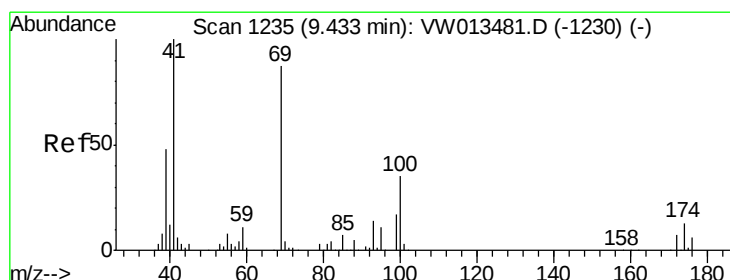
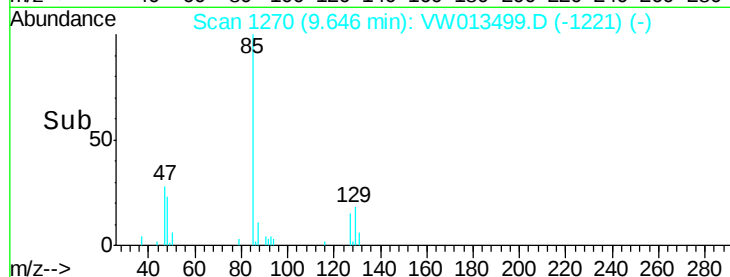
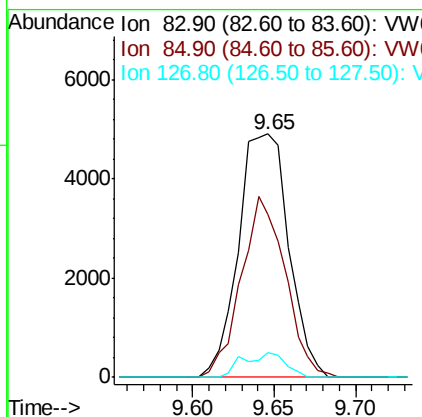
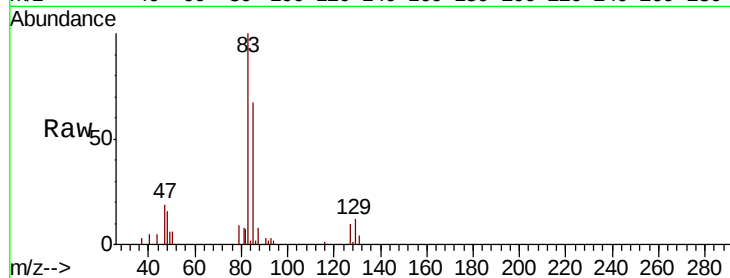
ClientSampleId :

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

Tot Ion:	83	Resp:	10517
Ion	Ratio	Lower	Upper
83	100		
85	67.1	51.9	77.9
127	10.3	7.4	11.2

Manual Integrations
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#48

Methyl methacrylate

Concen: 2.220 ug/l

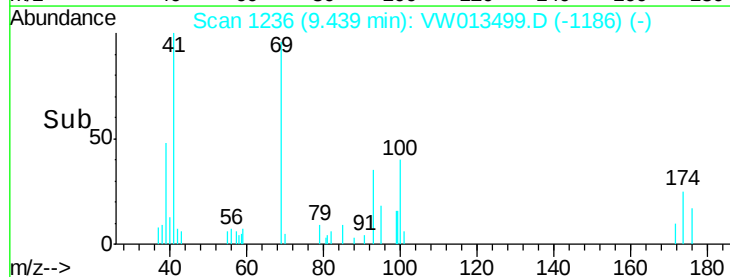
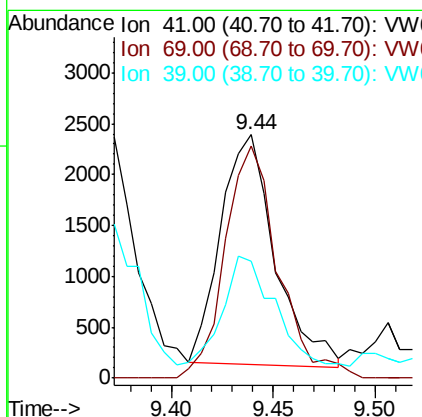
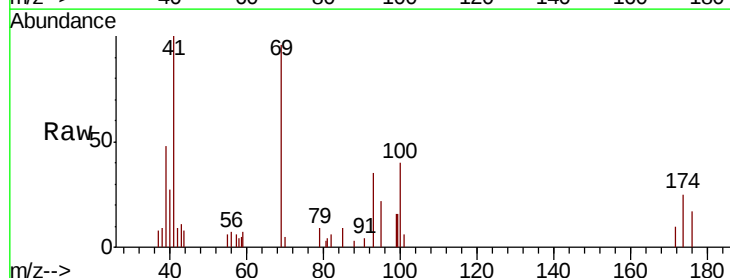
RT: 9.44 min Scan# 1236

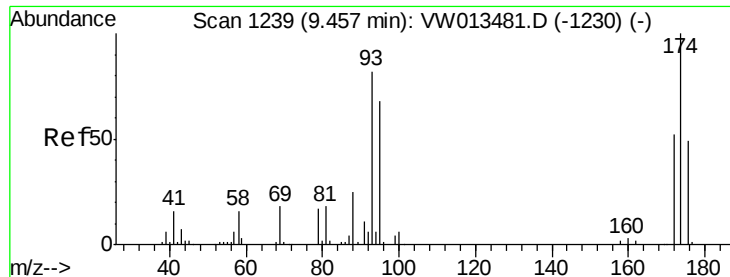
Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion:	41	Resp:	4178
Ion	Ratio	Lower	Upper
41	100		
69	98.6	70.4	105.6
39	49.2	37.3	55.9





#49

1,4-Dioxane

Concen: 39.718 ug/l m

RT: 9.48 min Scan# 1243

Delta R.T. 0.02 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 88 Resp: 1085

Ion Ratio Lower Upper

88 100

43 35.3 0.0 0.0#

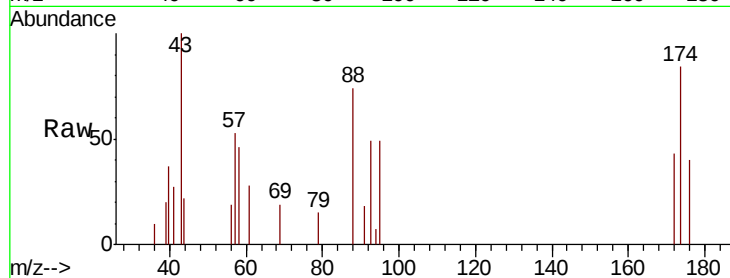
58 0.0 60.0 90.0#

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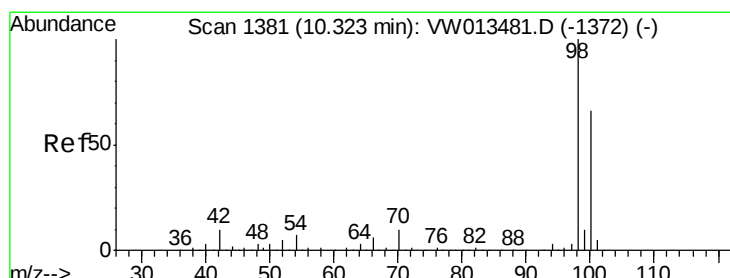
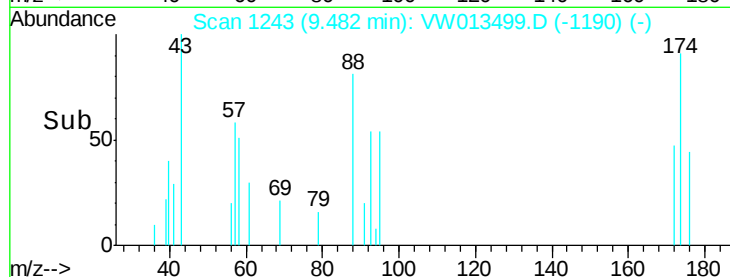
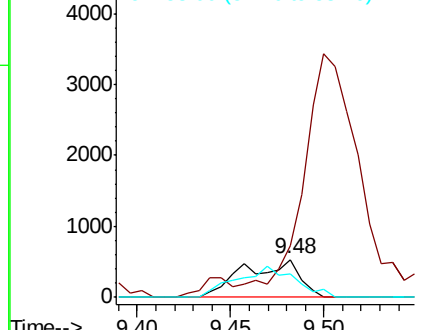
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Abundance Ion 88.00 (87.70 to 88.70): VW

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#50

Toluene-d8

Concen: 51.401 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VW013499.D

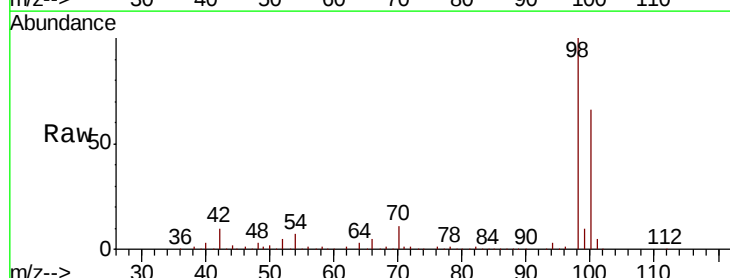
Acq: 09 Oct 2019 13:09

Tgt Ion: 98 Resp: 621627

Ion Ratio Lower Upper

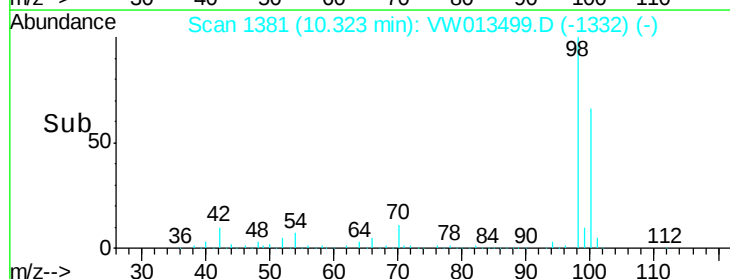
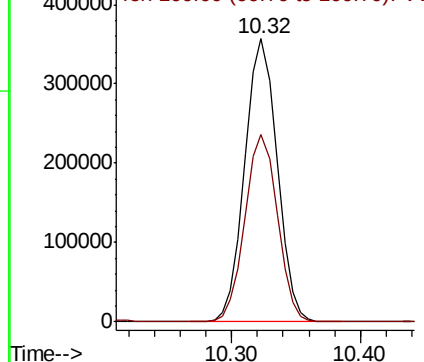
98 100

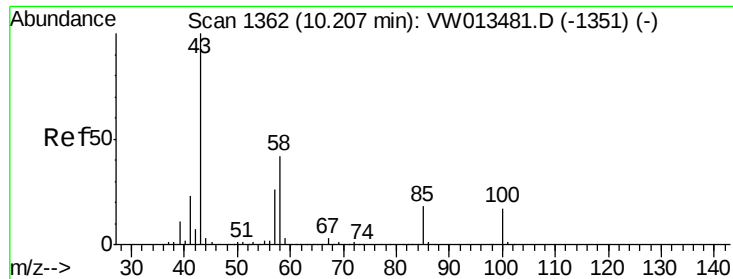
100 66.4 53.2 79.8



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW





#51

4-Methyl-2-Pentanone

Concen: 13.357 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 43 Resp: 26830

Ion Ratio Lower Upper

43 100

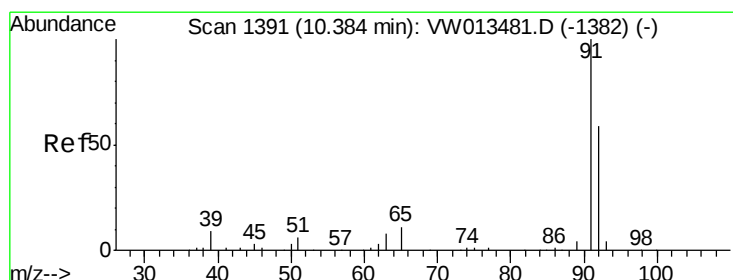
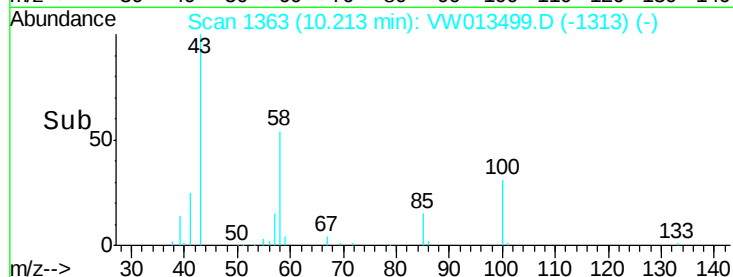
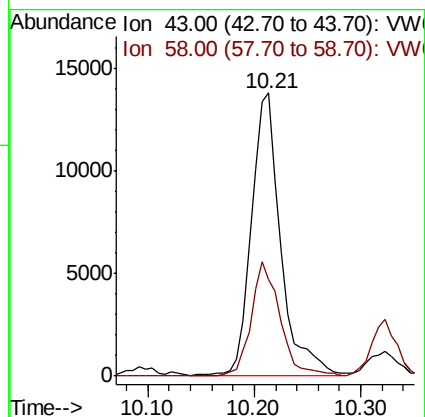
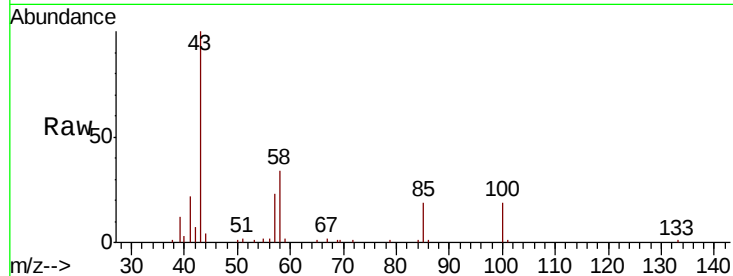
58 39.4 32.8 49.2

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#52

Toluene

Concen: 2.986 ug/l

RT: 10.38 min Scan# 1391

Delta R.T. 0.00 min

Lab File: VW013499.D

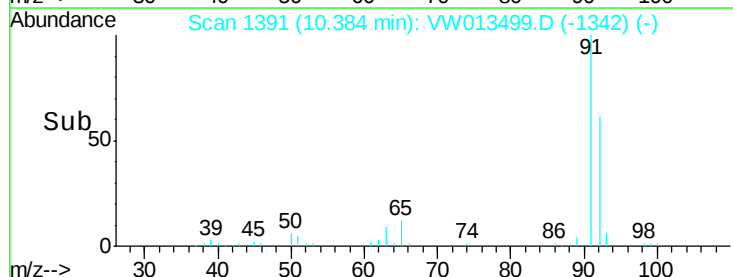
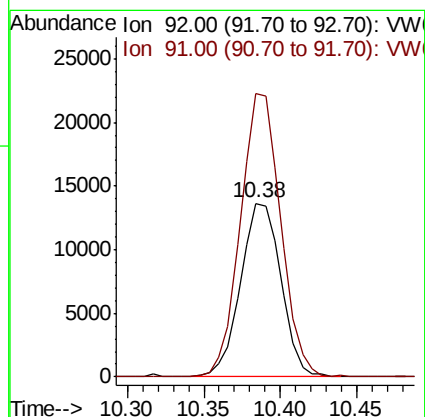
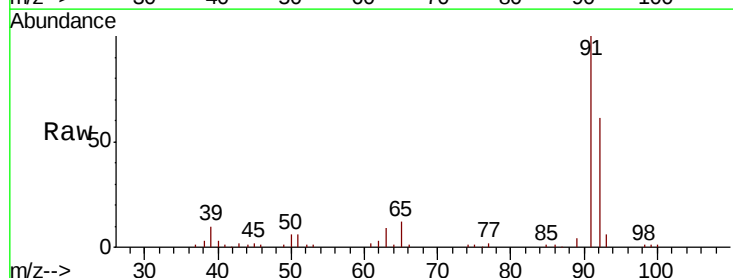
Acq: 09 Oct 2019 13:09

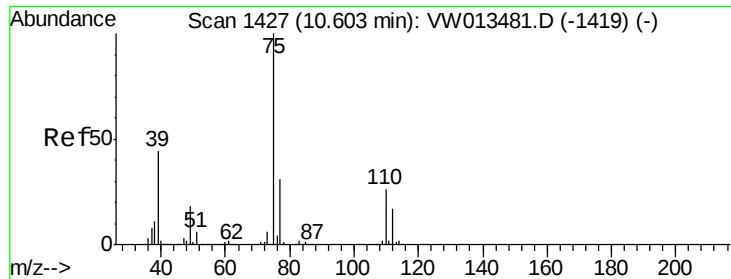
Tgt Ion: 92 Resp: 25028

Ion Ratio Lower Upper

92 100

91 163.1 134.8 202.2





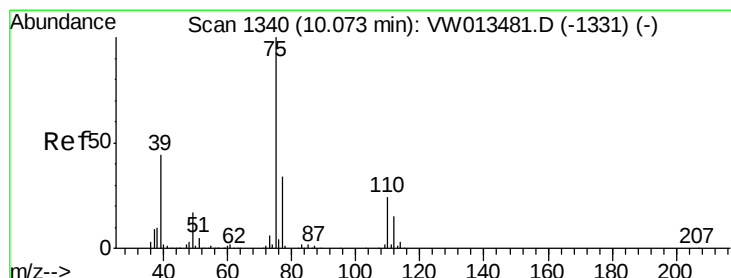
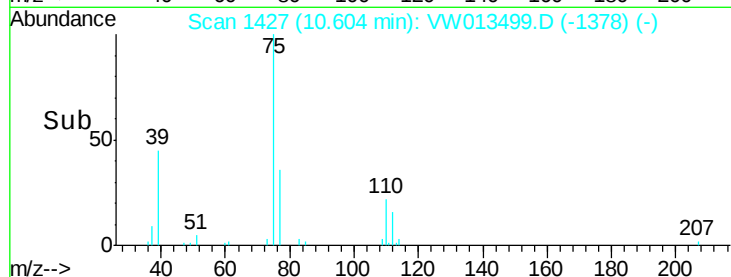
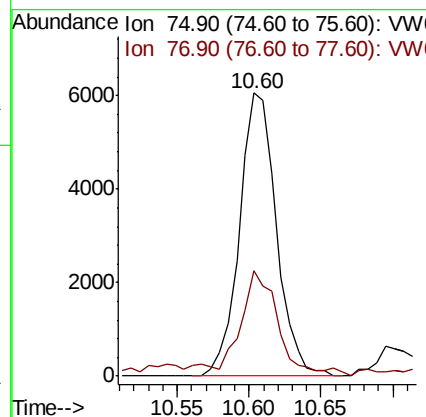
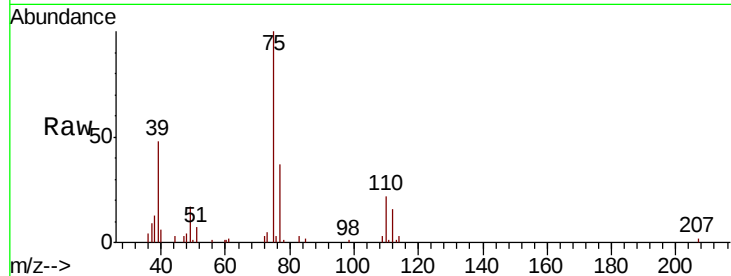
#53
 t-1,3-Dichloropropene
 Concen: 2.678 ug/l
 RT: 10.60 min Scan# 1427
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion: 75 Resp: 10762
 Ion Ratio Lower Upper
 75 100
 77 35.7 25.2 37.8

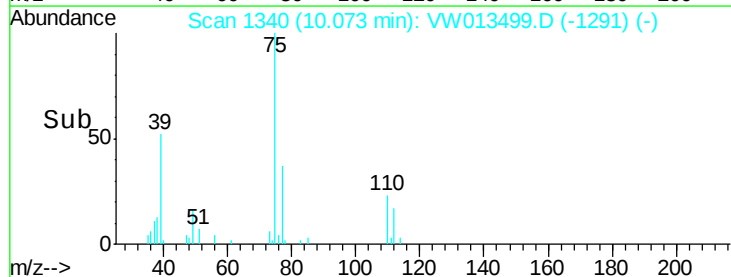
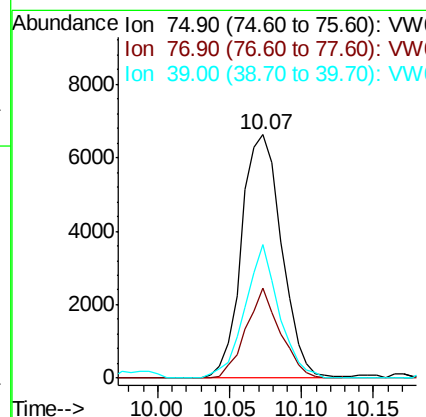
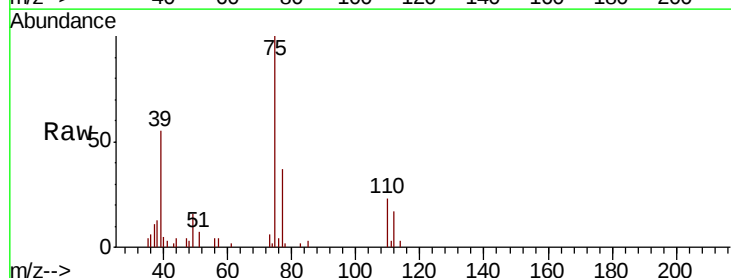
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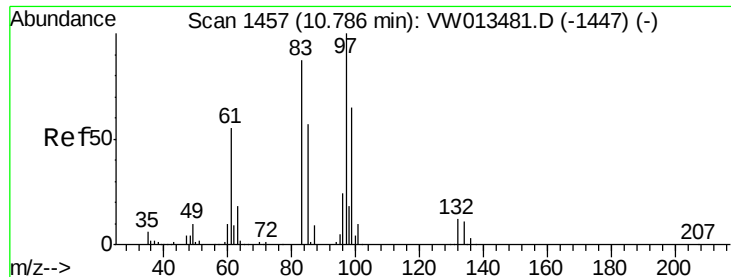
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#54
 cis-1,3-Dichloropropene
 Concen: 2.631 ug/l
 RT: 10.07 min Scan# 1340
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion: 75 Resp: 12811
 Ion Ratio Lower Upper
 75 100
 77 36.8 27.0 40.4
 39 54.9 35.0 52.4#





#55

1,1,2-Trichloroethane

Concen: 2.742 ug/l

RT: 10.79 min Scan# 1457

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

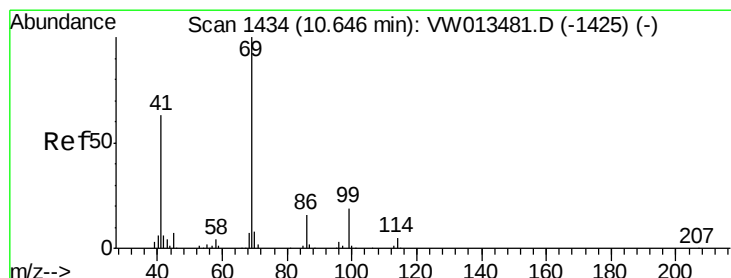
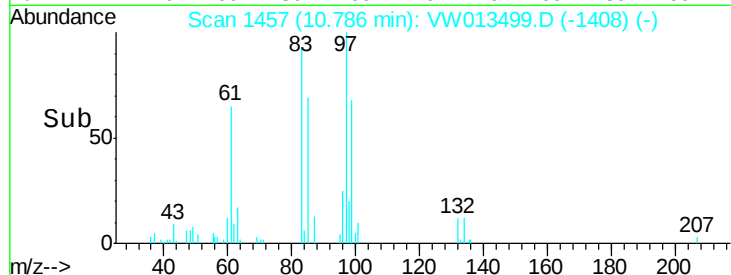
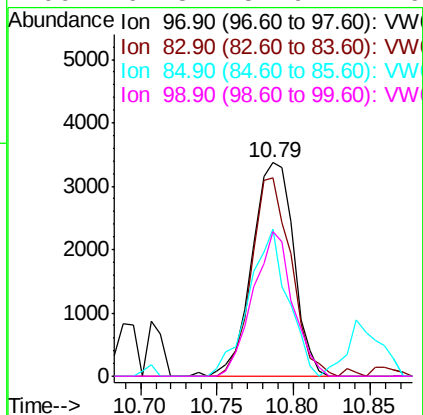
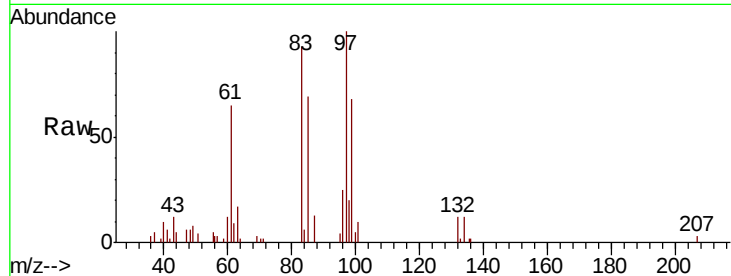
ClientSampleId :

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

Tot Ion:	97	Resp:	6403
Ion	Ratio	Lower	Upper
97	100		
83	92.8	69.8	104.8
85	68.7	45.4	68.0#
99	67.8	51.9	77.9

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#56

Ethyl methacrylate

Concen: 2.458 ug/l

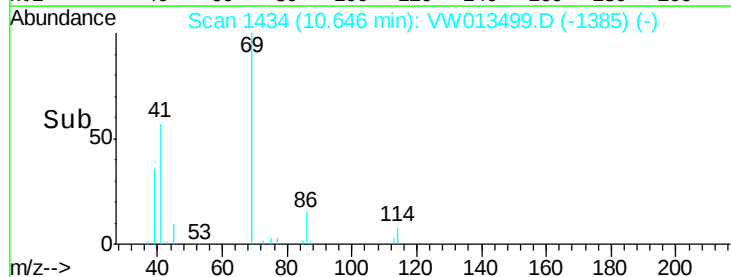
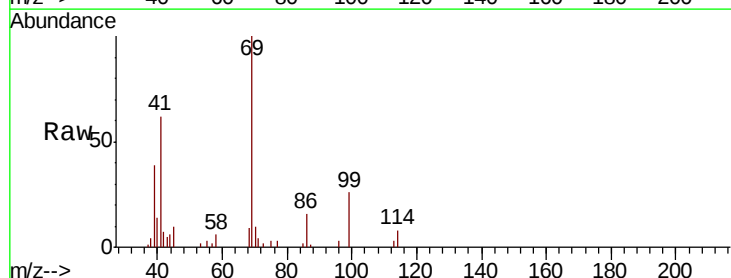
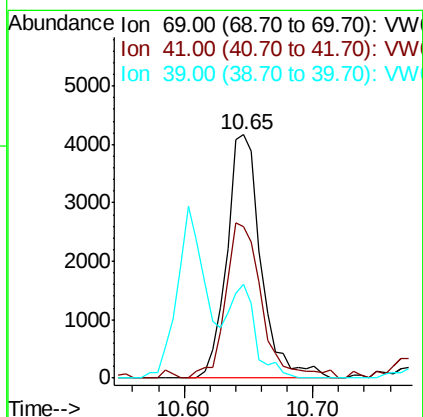
RT: 10.65 min Scan# 1434

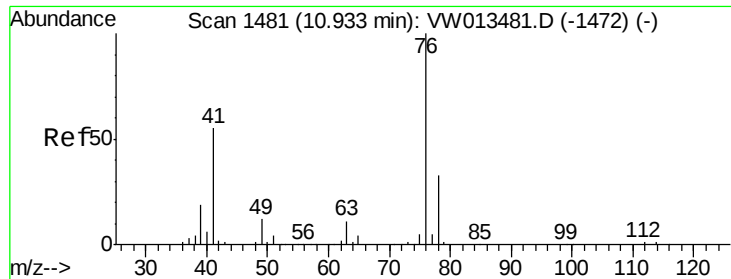
Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion:	69	Resp:	7730
Ion	Ratio	Lower	Upper
69	100		
41	67.5	51.8	77.6
39	30.4	21.7	32.5





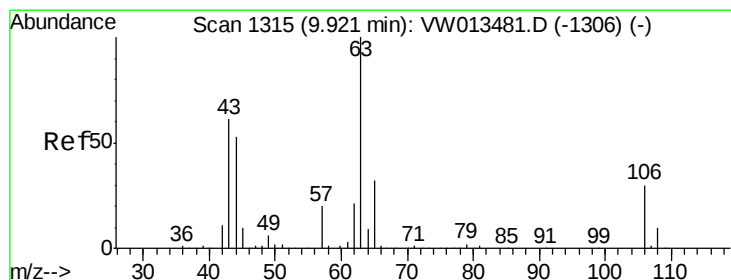
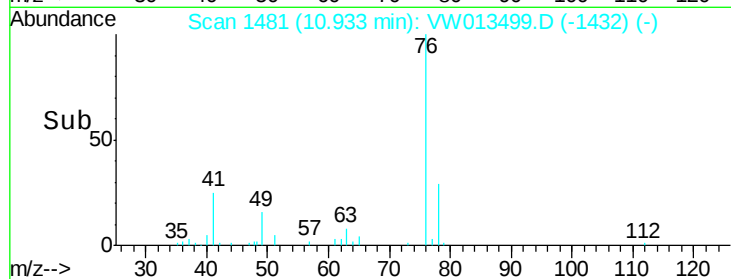
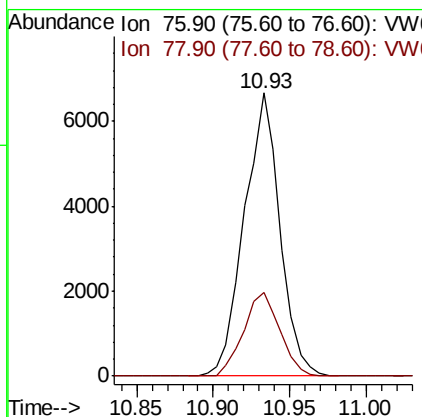
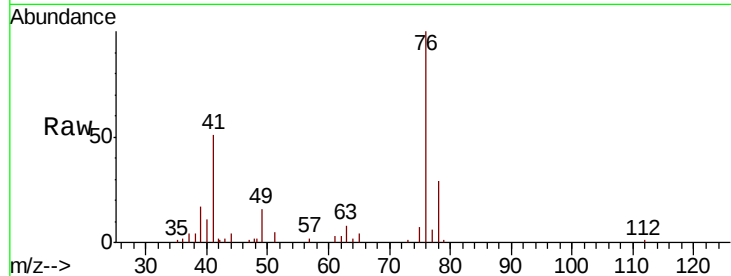
#57
 1,3-Dichloropropane
 Concen: 2.689 ug/l
 RT: 10.93 min Scan# 1481
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
76	100		
78	30.0	25.9	38.9

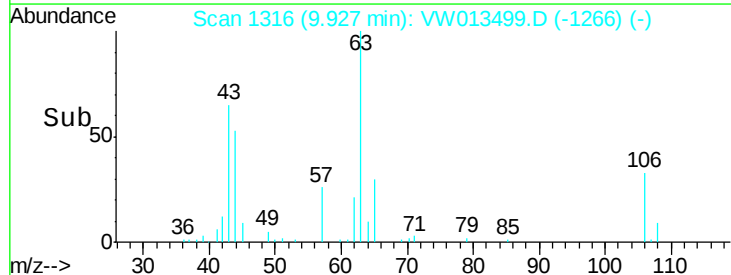
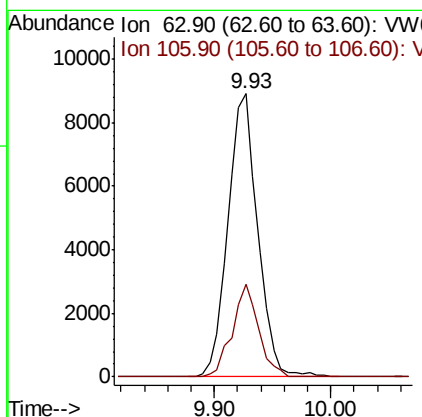
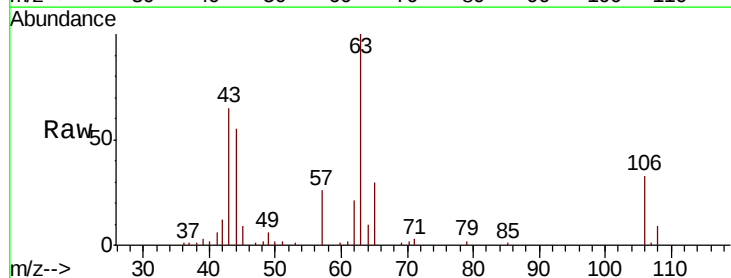
Manual Integrations
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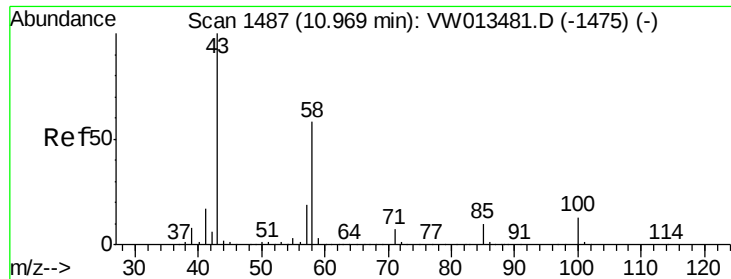
MMDadoda
 10/11/2019 4:40:20 PM



#58
 2-Chloroethyl Vinyl ether
 Concen: 10.661 ug/l
 RT: 9.93 min Scan# 1316
 Delta R.T. 0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
63	100		
106	29.0	24.5	36.7





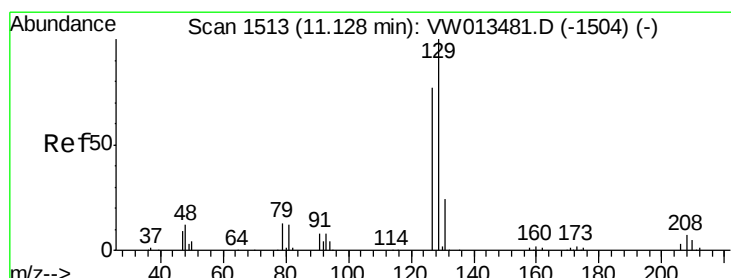
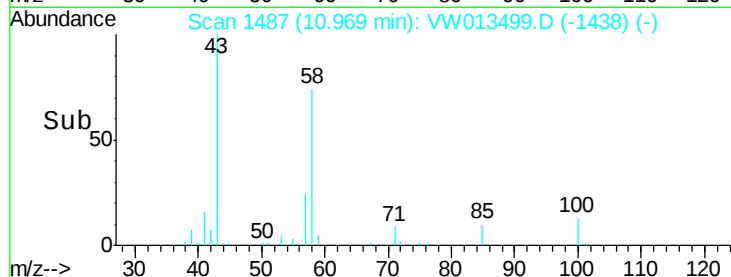
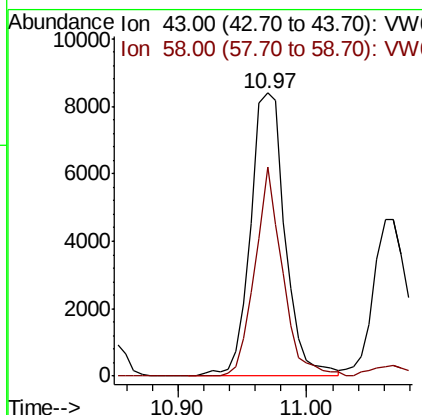
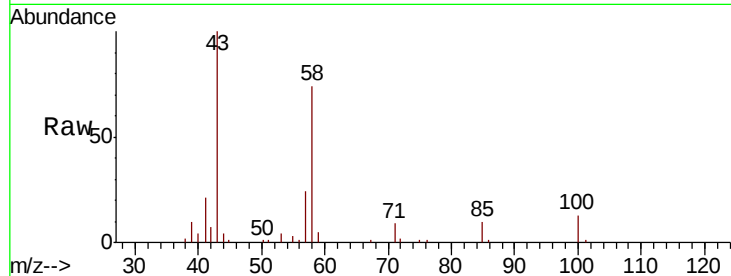
#59
2-Hexanone
Concen: 11.276 ug/l
RT: 10.97 min Scan# 1487
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion: 43 Resp: 15531
Ion Ratio Lower Upper
43 100
58 59.0 28.4 85.2

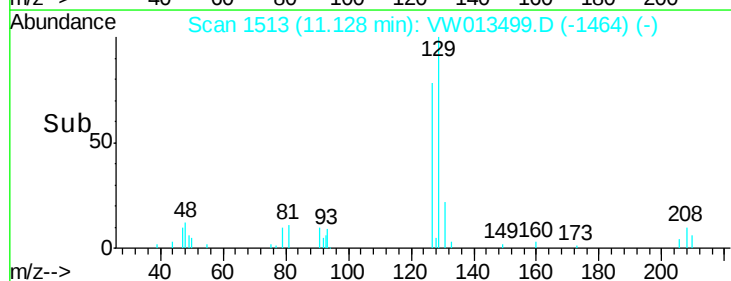
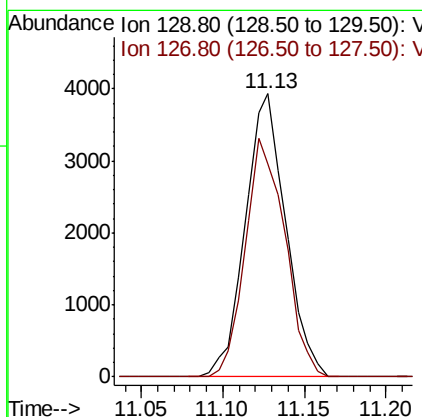
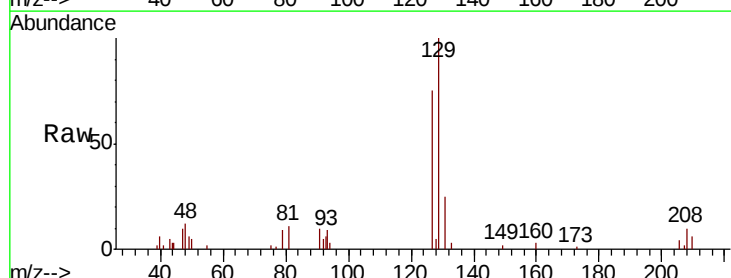
Manual Integrations
APPROVED

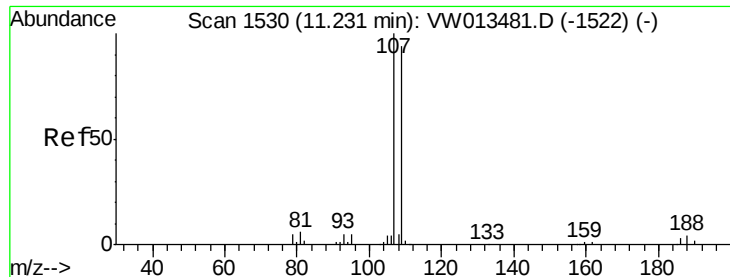
MMDadoda
10/11/2019 4:40:20 PM



#60
Dibromochloromethane
Concen: 2.528 ug/l
RT: 11.13 min Scan# 1513
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion:129 Resp: 6790
Ion Ratio Lower Upper
129 100
127 82.6 37.4 112.1





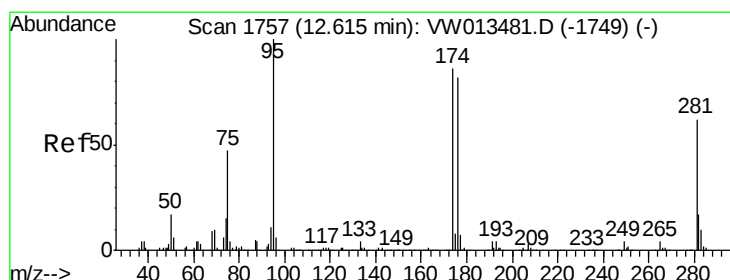
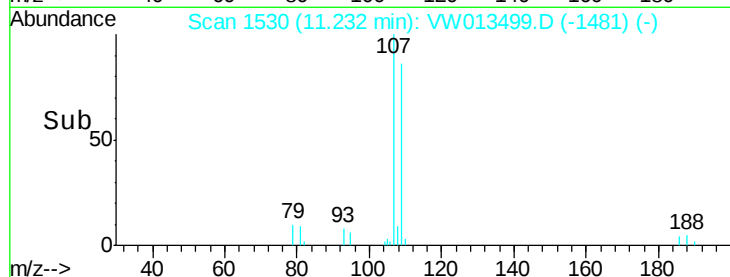
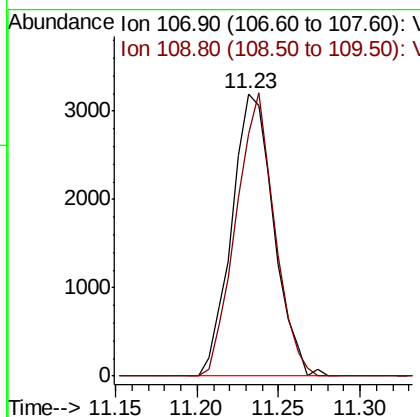
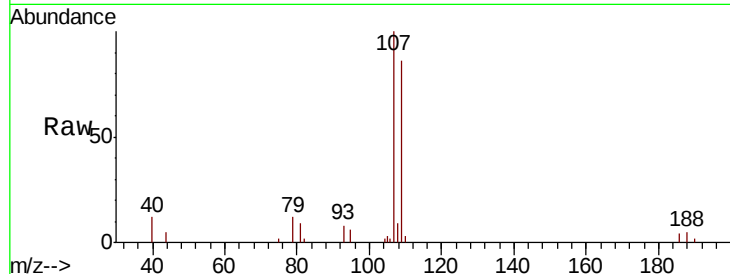
#61
 1,2-Dibromoethane
 Concen: 2.586 ug/l
 RT: 11.23 min Scan# 1530
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
107	100		
109	92.3	76.6	115.0

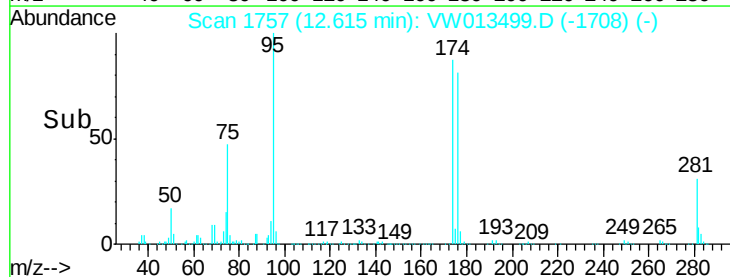
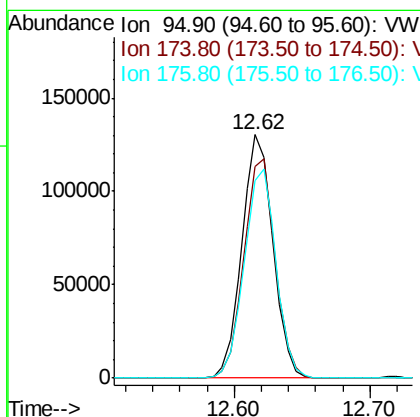
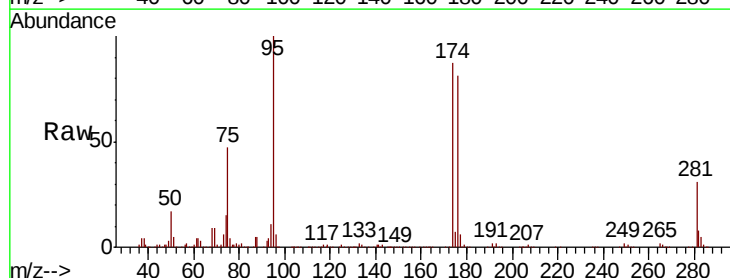
Manual Integrations
 APPROVED

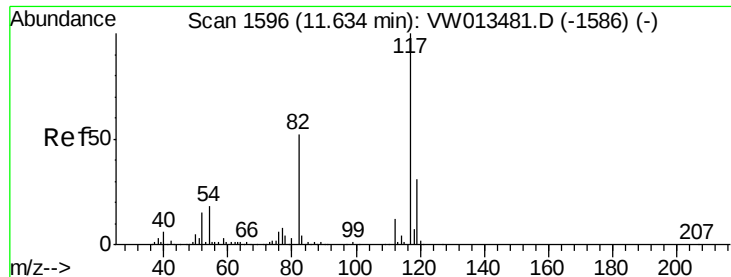
MMDadoda
 10/11/2019 4:40:20 PM



#62
 4-Bromofluorobenzene
 Concen: 51.303 ug/l
 RT: 12.62 min Scan# 1757
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
95	100		
174	91.4	0.0	177.4
176	87.9	0.0	173.4





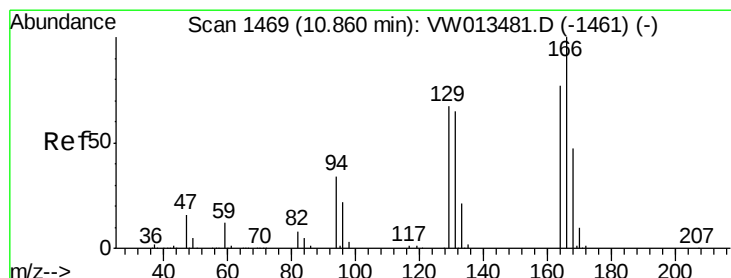
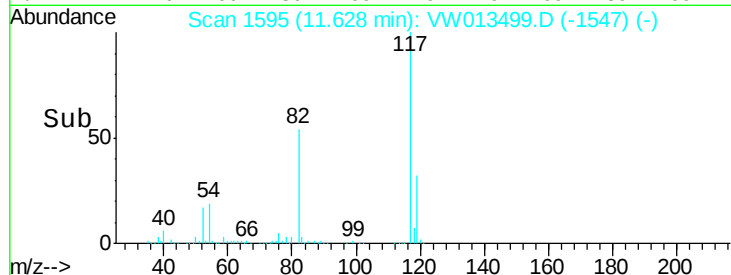
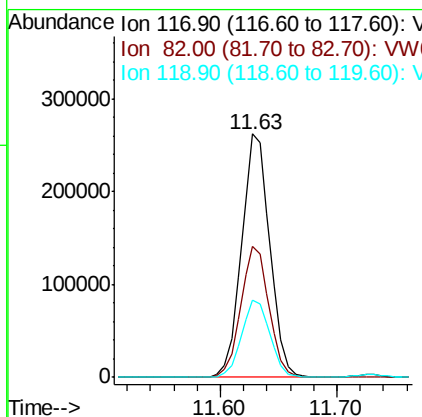
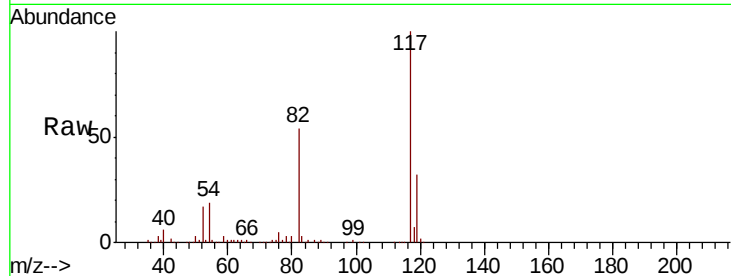
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.63 min Scan# 1595
Delta R.T. -0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Resp	Lower	Upper
117	100	441277		
82	53.6		41.4	62.2
119	32.0		25.1	37.7

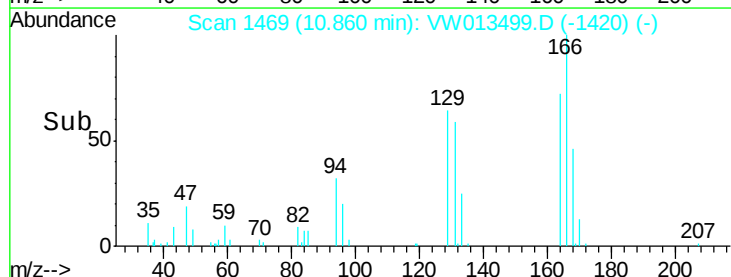
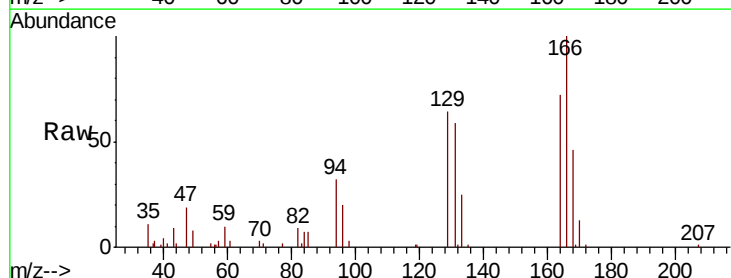
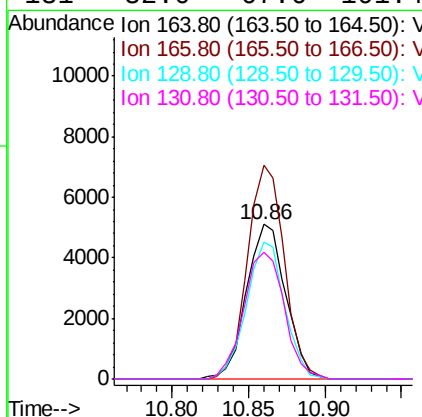
Manual Integrations
APPROVED

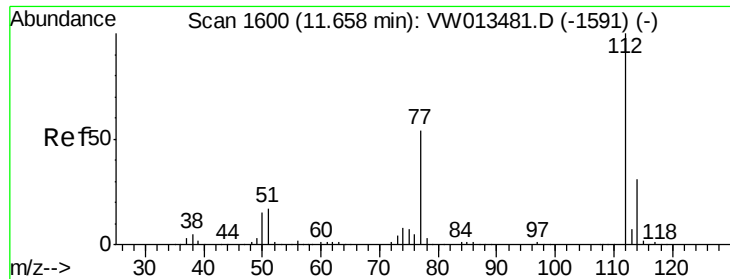
MMDadoda
10/11/2019 4:40:20 PM



#64
Tetrachloroethene
Concen: 2.797 ug/l
RT: 10.86 min Scan# 1469
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	9085		
166	138.4		104.6	156.8
129	89.1		70.2	105.2
131	82.0		67.6	101.4





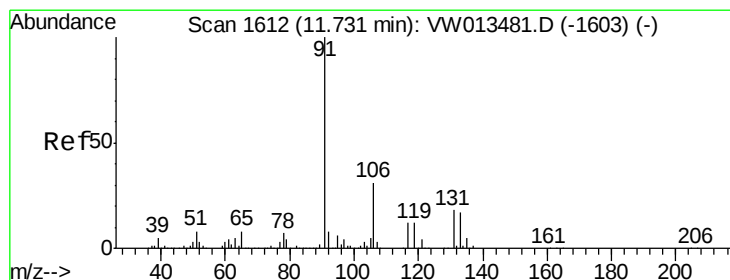
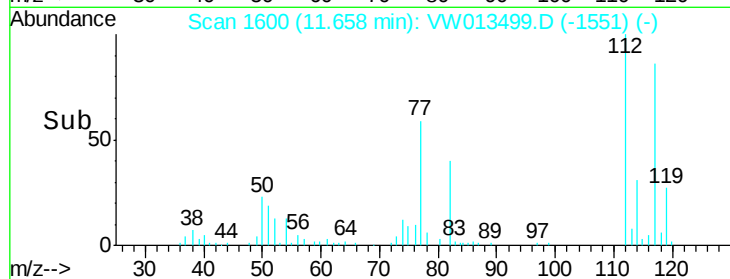
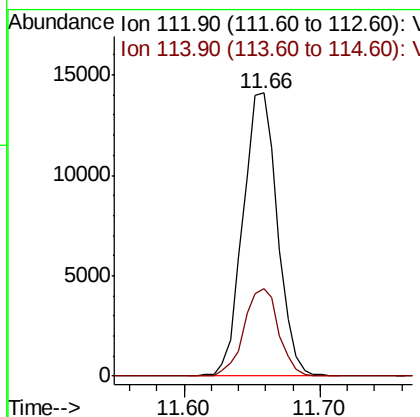
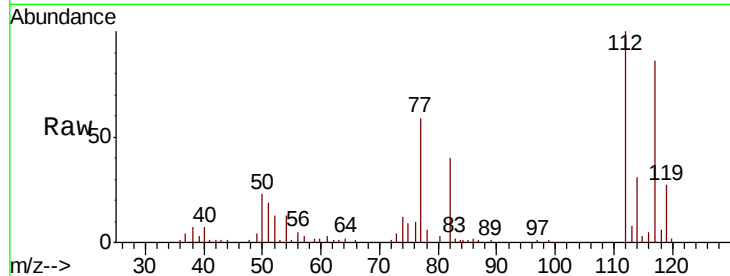
#65
Chlorobenzene
Concen: 2.859 ug/l
RT: 11.66 min Scan# 1600
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion:112 Resp: 25065
Ion Ratio Lower Upper
112 100
114 30.8 24.6 37.0

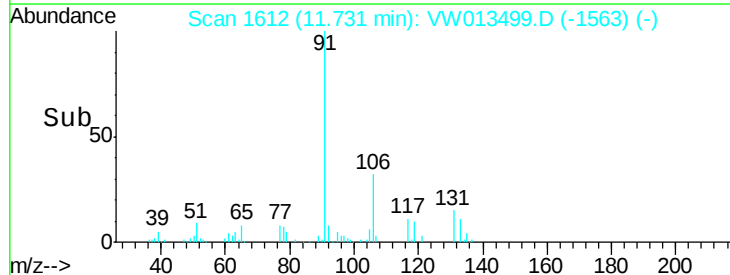
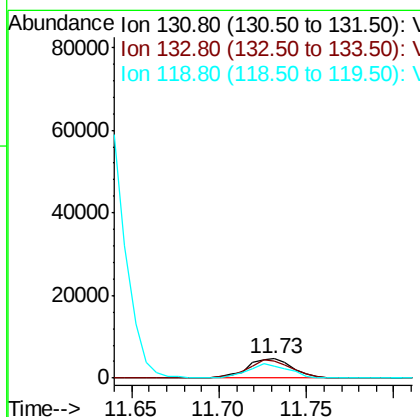
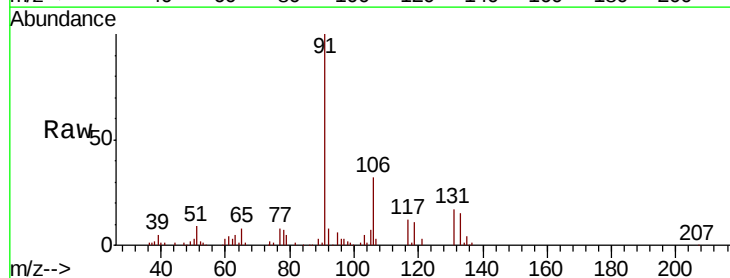
Manual Integrations
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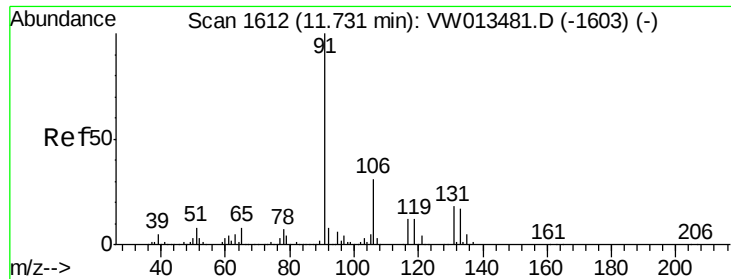
MMDadoda
10/11/2019 4:40:20 PM



#66
1,1,1,2-Tetrachloroethane
Concen: 2.678 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion:131 Resp: 8157
Ion Ratio Lower Upper
131 100
133 91.7 47.6 142.9
119 68.4 32.6 98.0





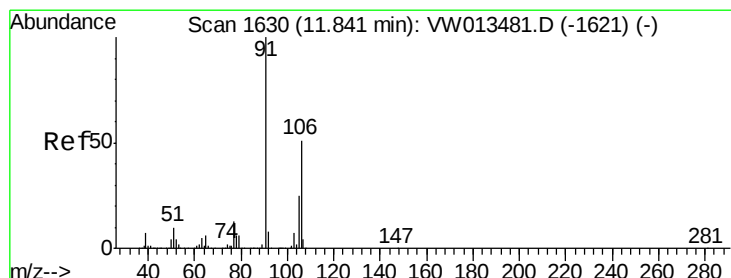
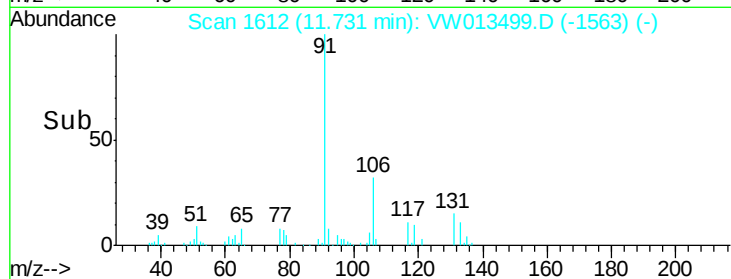
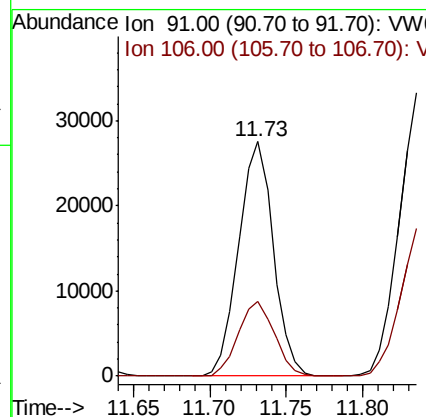
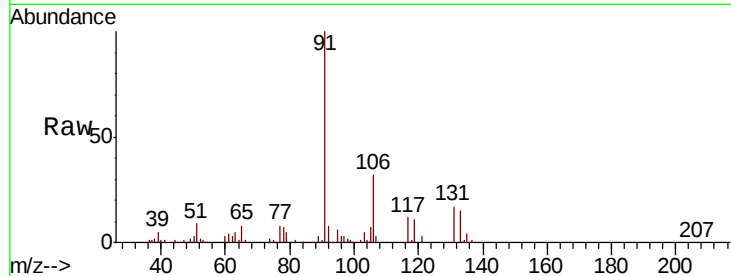
#67
Ethyl Benzene
Concen: 2.712 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion: 91 Resp: 43465
Ion Ratio Lower Upper
91 100
106 32.2 24.8 37.2

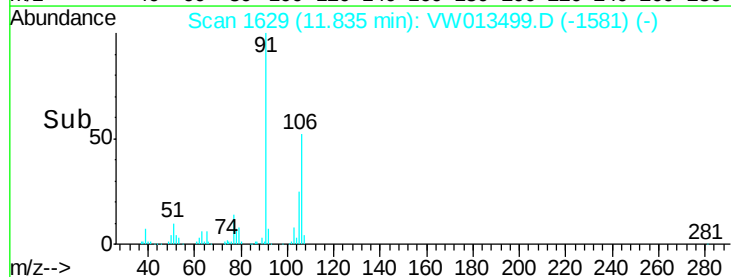
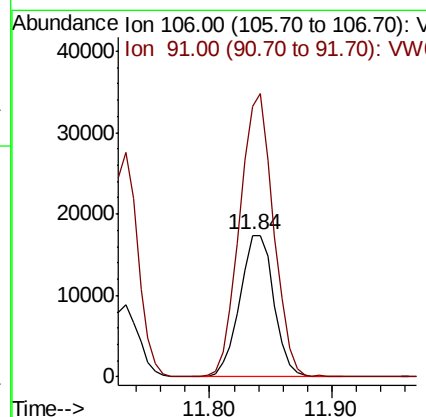
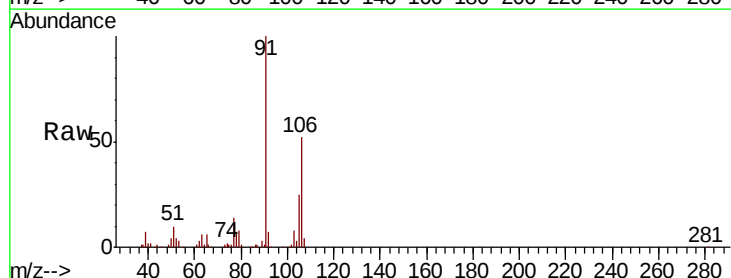
Manual Integrations
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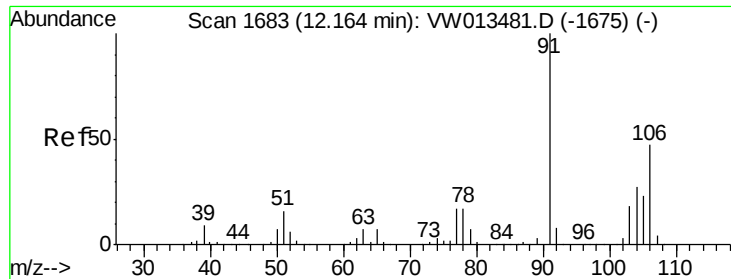
MMDadoda
10/11/2019 4:40:20 PM



#68
m/p-Xylenes
Concen: 5.503 ug/l
RT: 11.84 min Scan# 1629
Delta R.T. -0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion: 106 Resp: 33554
Ion Ratio Lower Upper
106 100
91 198.1 156.2 234.4





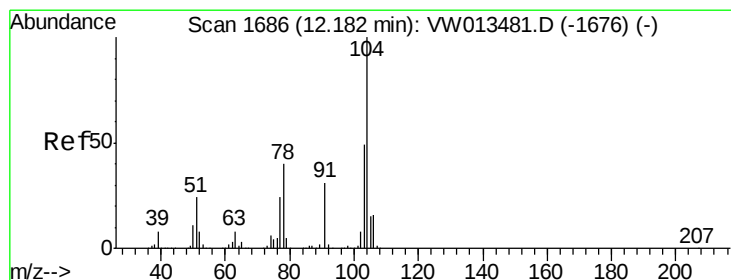
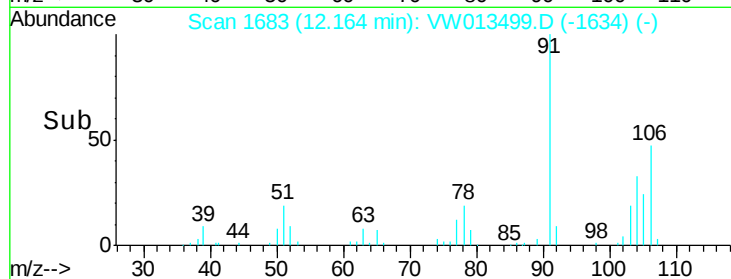
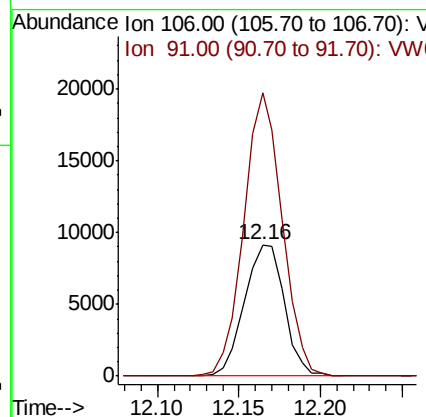
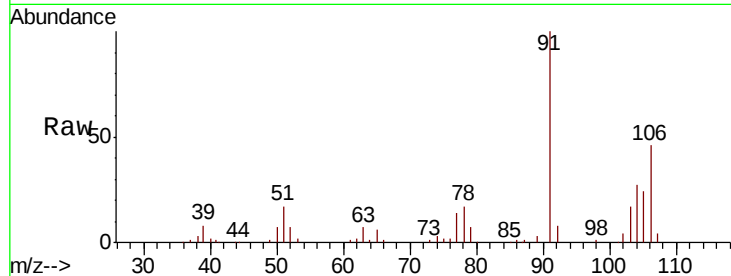
#69
o-Xylene
Concen: 2.775 ug/l
RT: 12.16 min Scan# 1683
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion:106 Resp: 15635
Ion Ratio Lower Upper
106 100
91 206.7 105.0 315.0

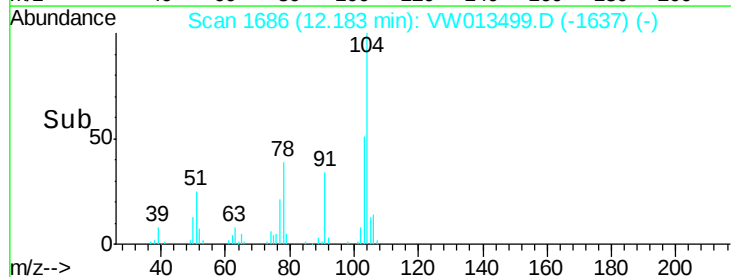
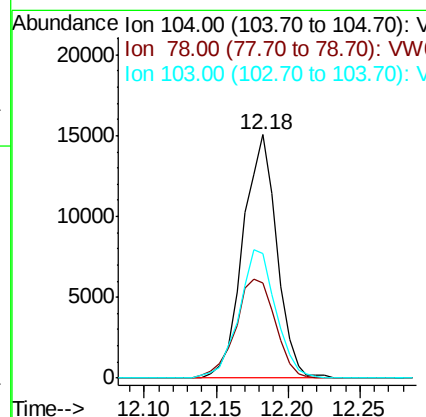
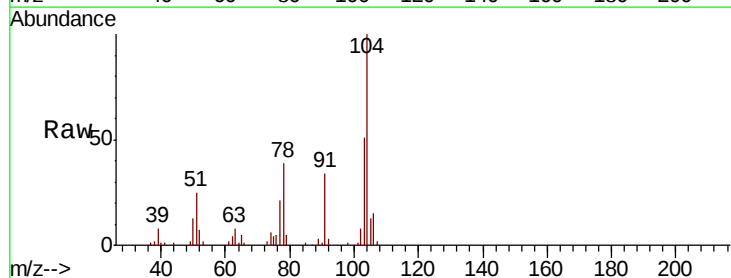
Manual Integrations
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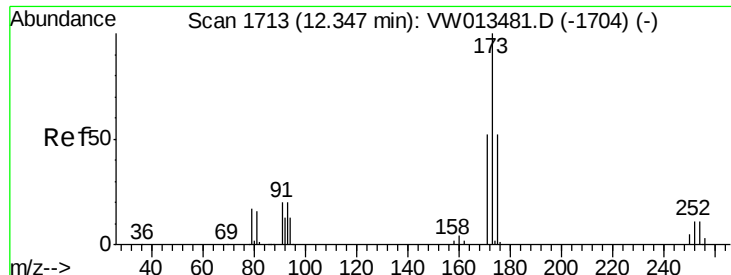
MMDadoda
10/11/2019 4:40:20 PM



#70
Styrene
Concen: 2.529 ug/l
RT: 12.18 min Scan# 1686
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion:104 Resp: 24464
Ion Ratio Lower Upper
104 100
78 47.9 37.1 55.7
103 57.4 43.2 64.8





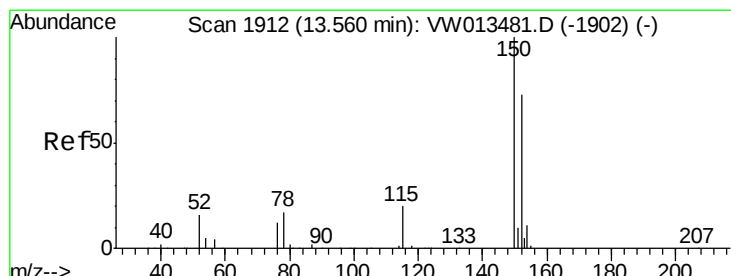
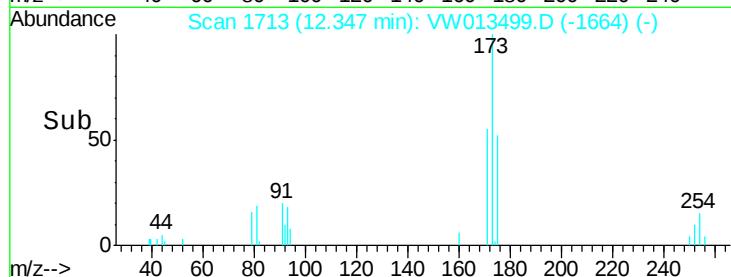
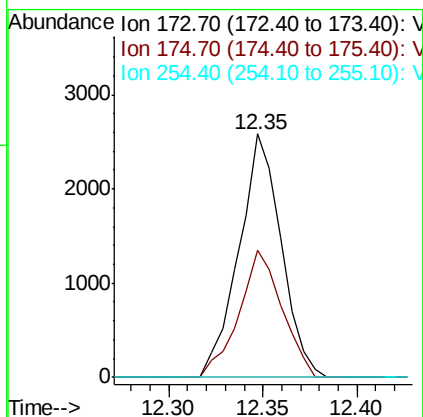
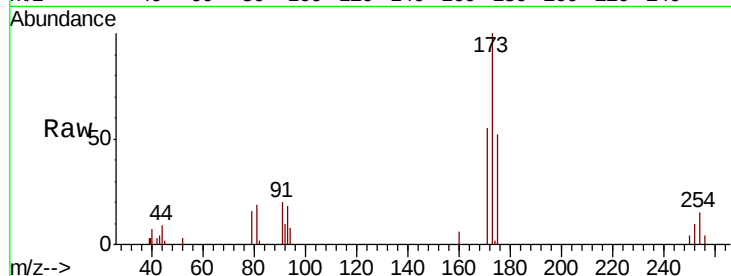
#71
Bromoform
Concen: 2.407 ug/l
RT: 12.35 min Scan# 1713
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
173	100		
175	53.0	24.4	73.4
254	0.0	0.1	0.1

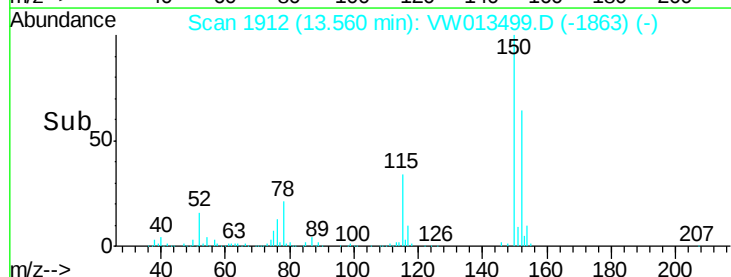
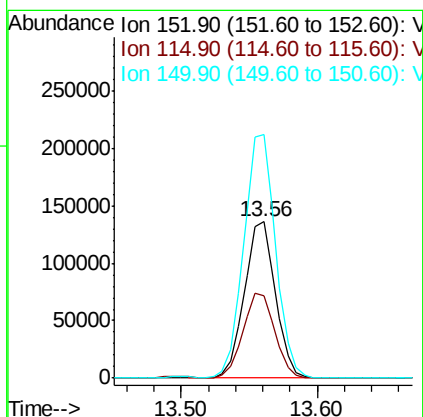
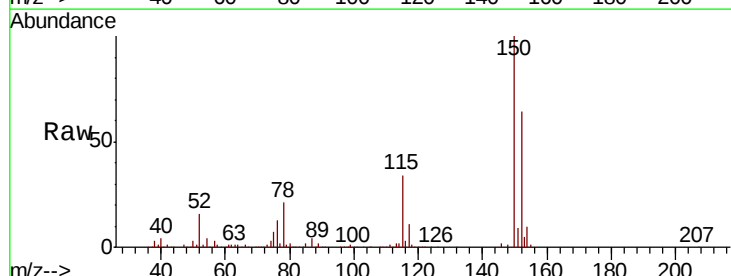
Manual Integrations
APPROVED

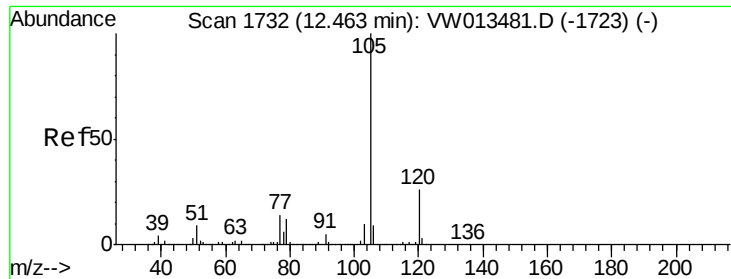
MMDadoda
10/11/2019 4:40:20 PM



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.56 min Scan# 1912
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
152	100		
115	55.5	27.0	81.0
150	159.6	0.0	337.4





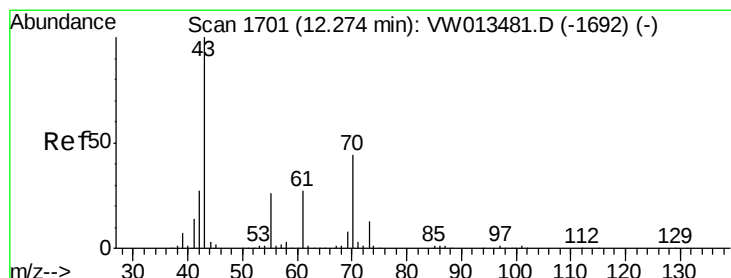
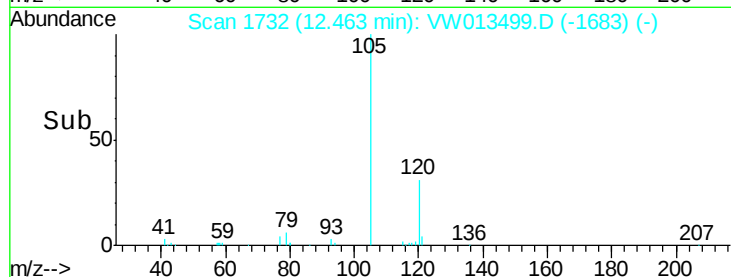
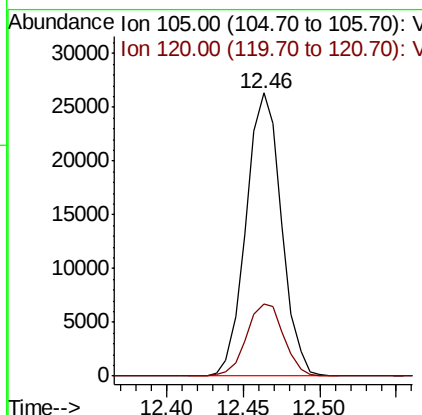
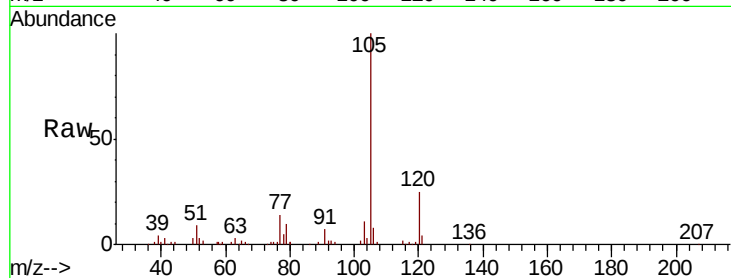
#73
Isopropylbenzene
Concen: 2.712 ug/l
RT: 12.46 min Scan# 1732
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
105	100		
120	26.8	13.5	40.5

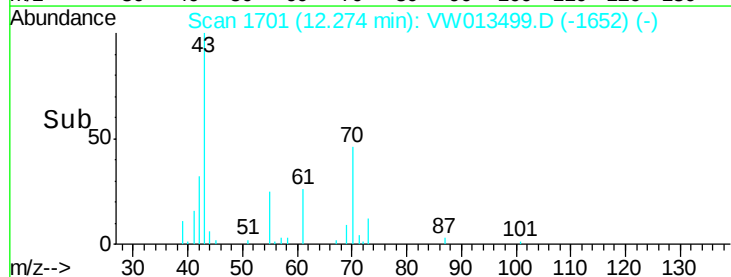
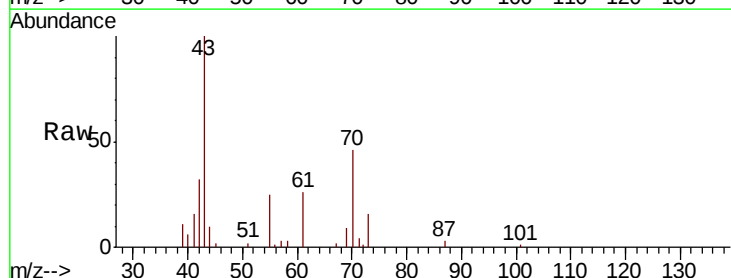
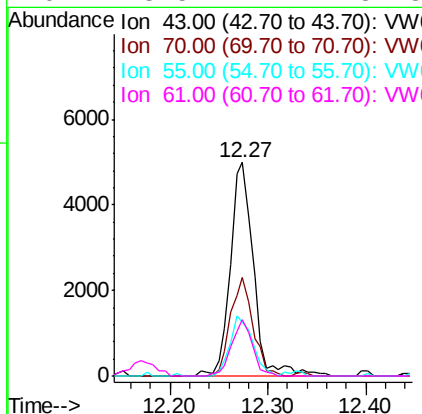
Manual Integrations
APPROVED

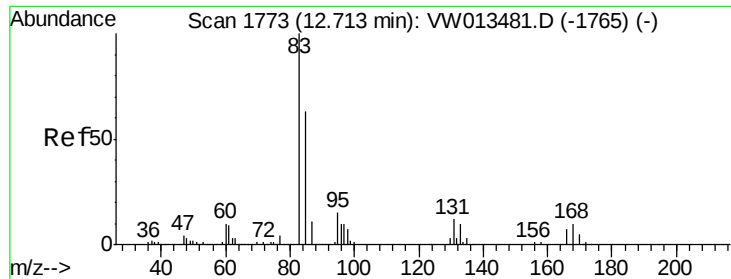
MMDadoda
10/11/2019 4:40:20 PM



#74
N-ethyl acetate
Concen: 2.411 ug/l
RT: 12.27 min Scan# 1701
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
43	100		
70	44.5	35.3	52.9
55	27.1	20.0	30.0
61	23.5	21.2	31.8





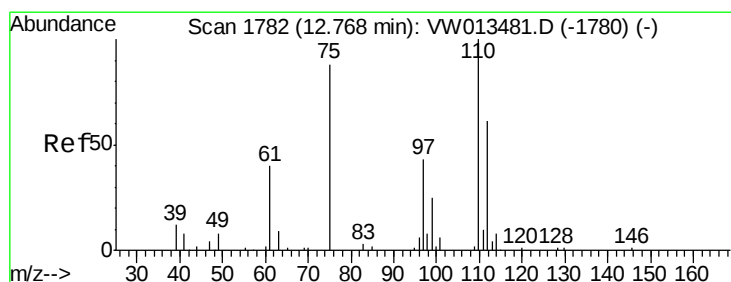
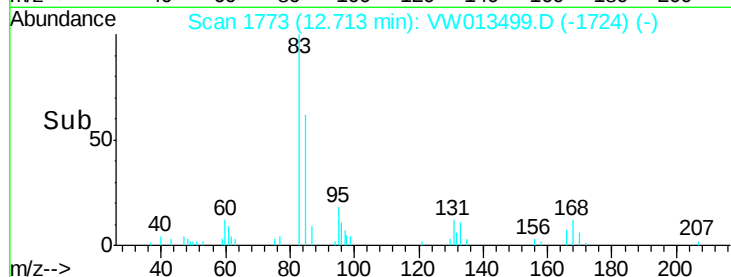
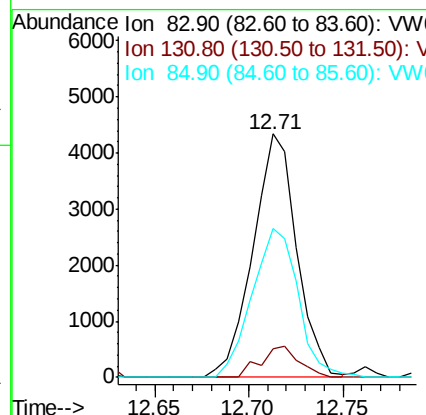
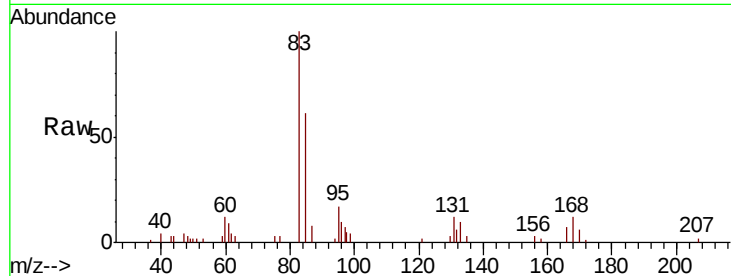
#75
 1,1,2,2-Tetrachloroethane
 Concen: 2.625 ug/l
 RT: 12.71 min Scan# 1773
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
83	100		
131	11.0	5.9	17.7
85	64.2	32.5	97.4

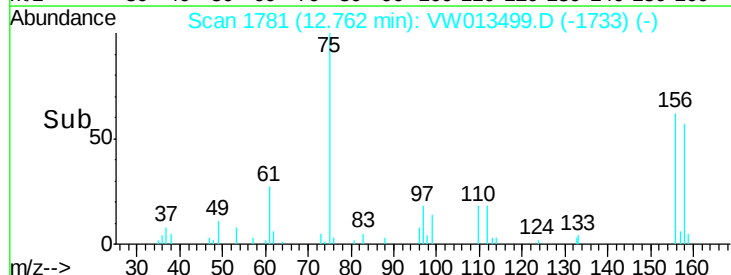
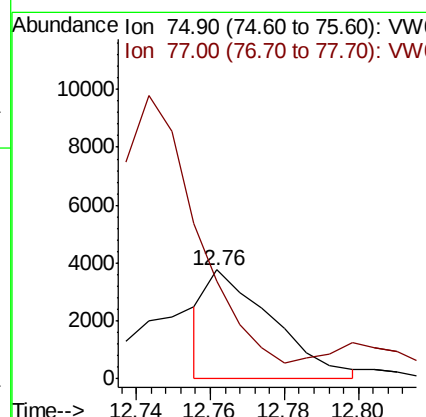
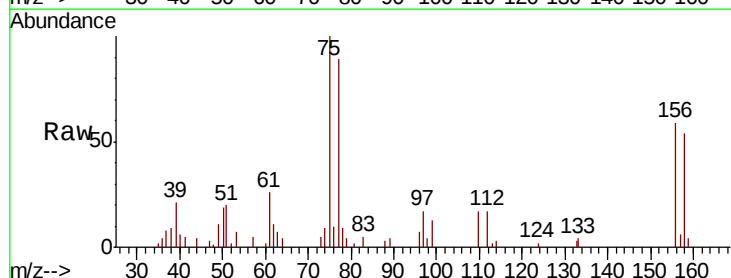
Manual Integrations
 APPROVED

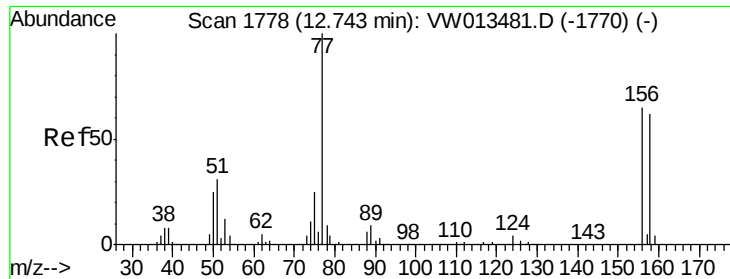
MMDadoda
 10/11/2019 4:40:20 PM



#76
 1,2,3-Trichloropropane
 Concen: 2.547 ug/l m
 RT: 12.76 min Scan# 1781
 Delta R.T. -0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
75	100		
77	363.0	0.0	0.0#





#77

Bromobenzene

Concen: 2.794 ug/l

RT: 12.74 min Scan# 1778

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

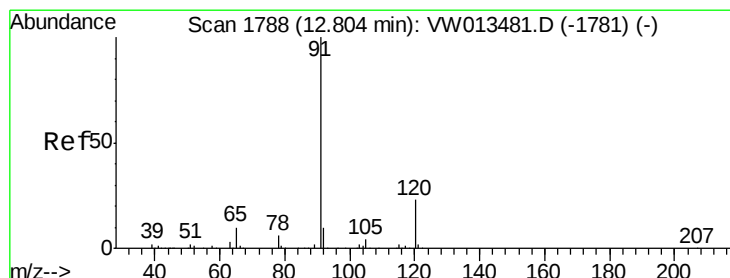
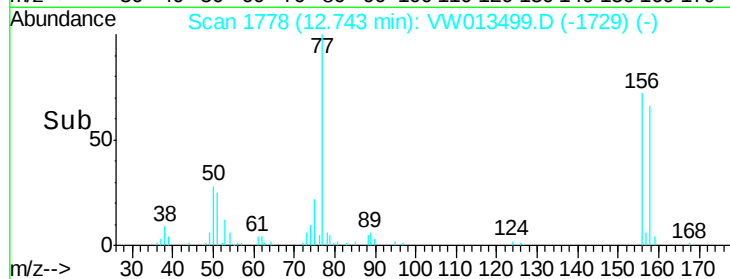
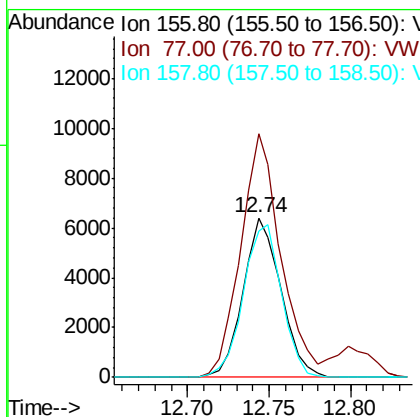
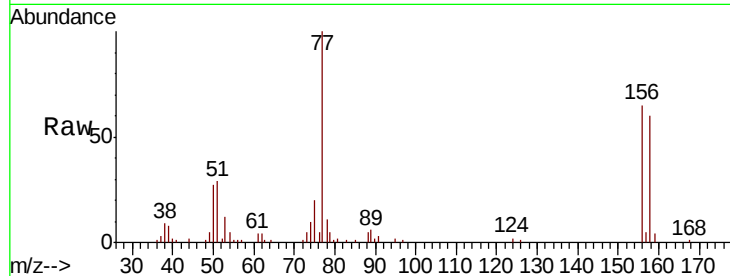
ClientSampleId :

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

Tot Ion	Ion	Ratio	Lower	Upper
156	100			
77	162.3	83.7	251.0	
158	96.9	49.0	147.0	

Manual Integrations
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10/11/2019 4:40:20 PM



#78

n-propylbenzene

Concen: 2.711 ug/l

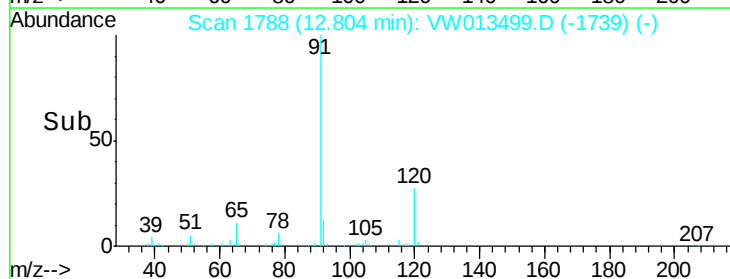
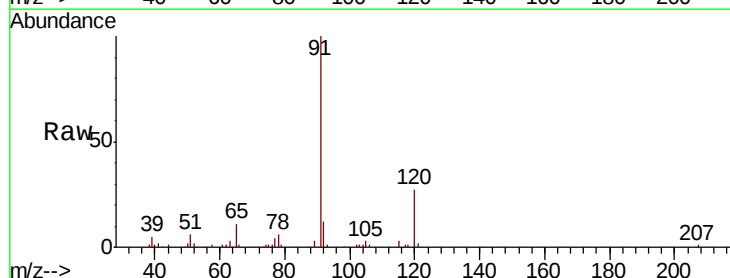
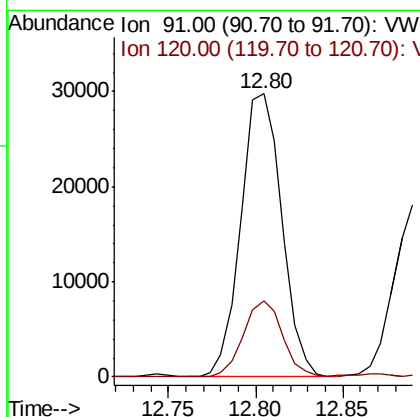
RT: 12.80 min Scan# 1788

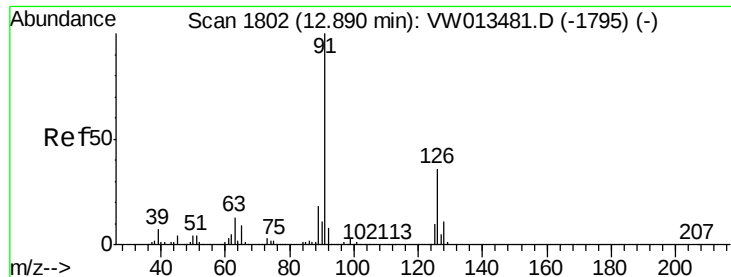
Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Tgt Ion	Ion	Ratio	Lower	Upper
91	100			
120	25.5	11.7	35.1	





#79

2-Chlorotoluene

Concen: 2.897 ug/l

RT: 12.89 min Scan# 1802

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion: 91 Resp: 29273

Ion Ratio Lower Upper

91 100

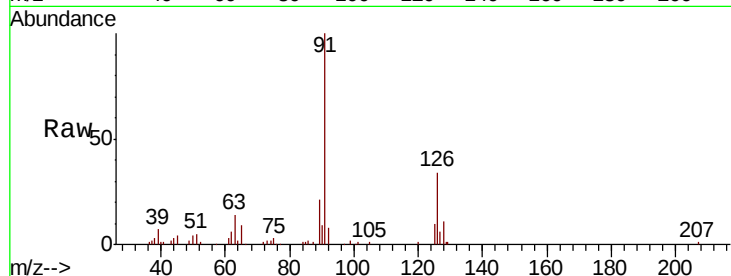
126 33.9 17.8 53.4

Manual Integrations

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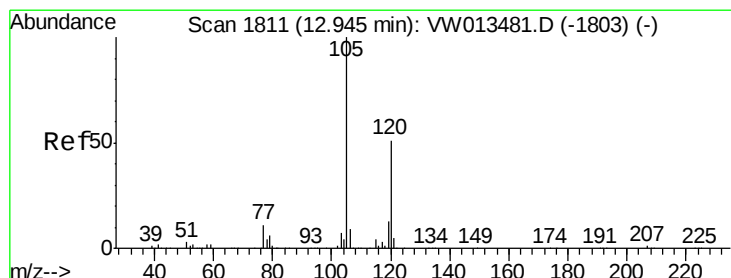
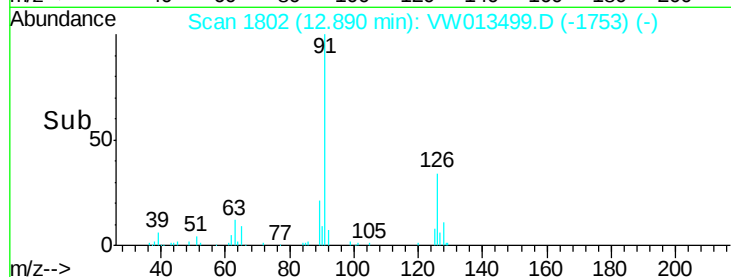
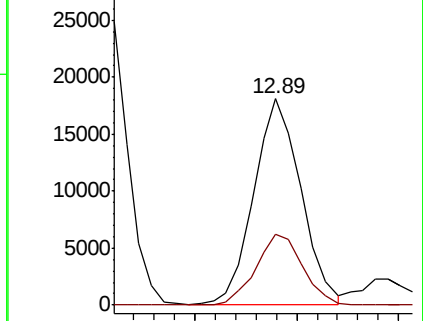
MMDadoda

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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: 2.772 ug/l

RT: 12.94 min Scan# 1810

Delta R.T. -0.01 min

Lab File: VW013499.D

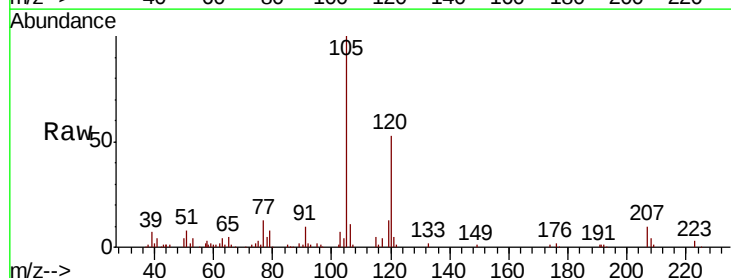
Acq: 09 Oct 2019 13:09

Tgt Ion: 105 Resp: 35926

Ion Ratio Lower Upper

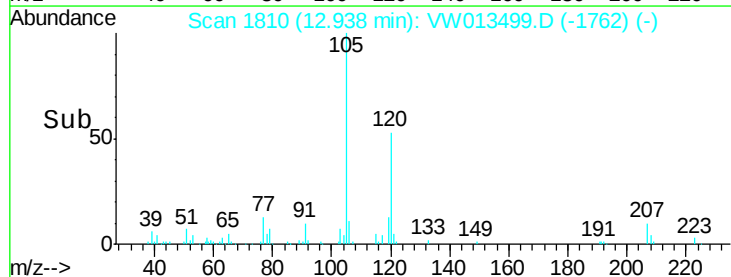
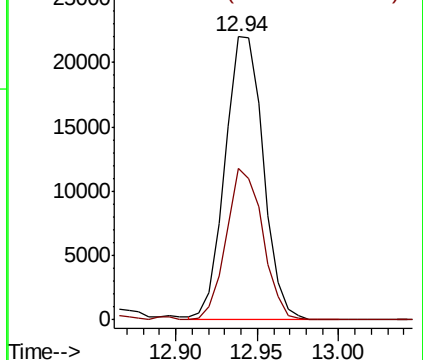
105 100

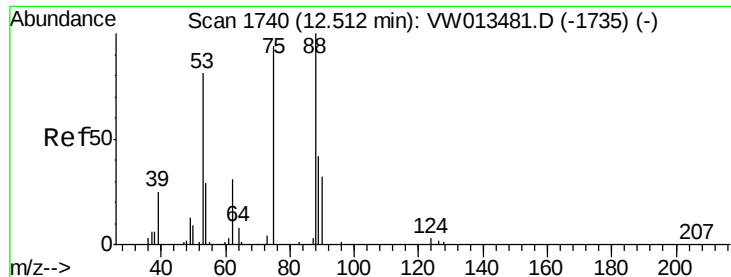
120 51.1 25.4 76.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





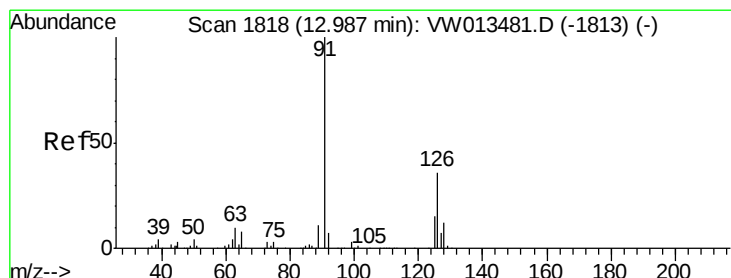
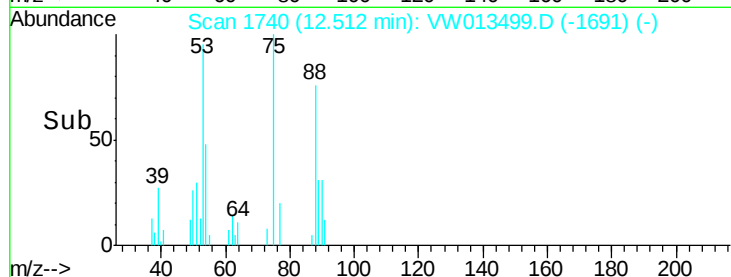
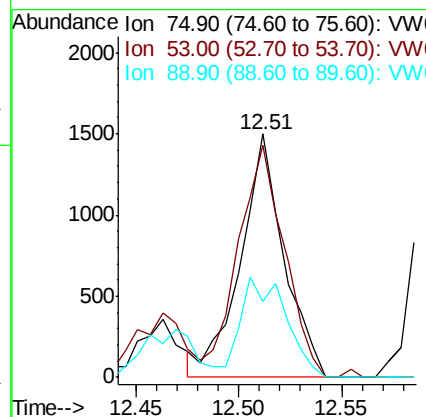
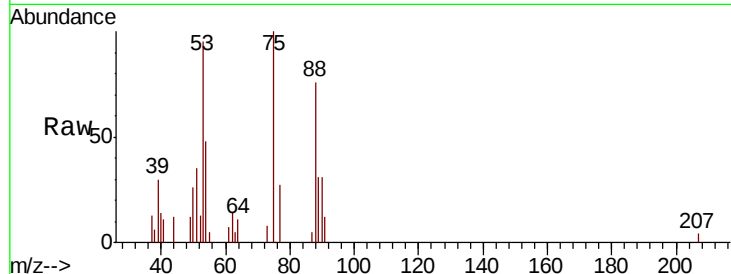
#81
trans-1,4-Dichloro-2-butene
Concen: 2.469 ug/l m
RT: 12.51 min Scan# 1740
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
75	100		
53	0.0	71.0	106.6#
89	2.0	36.1	54.1#

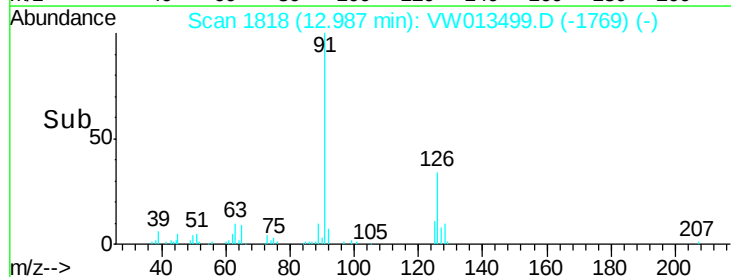
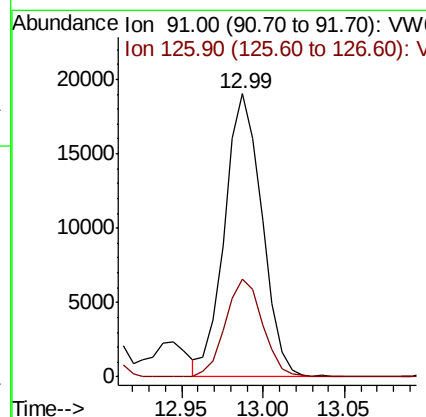
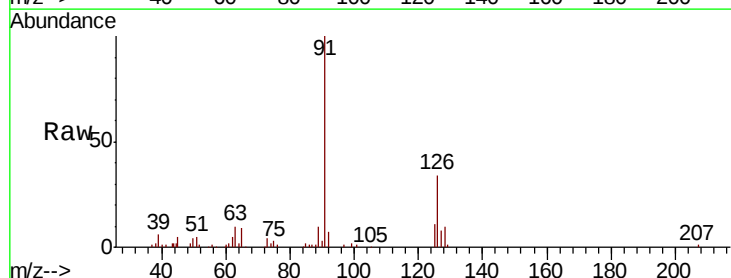
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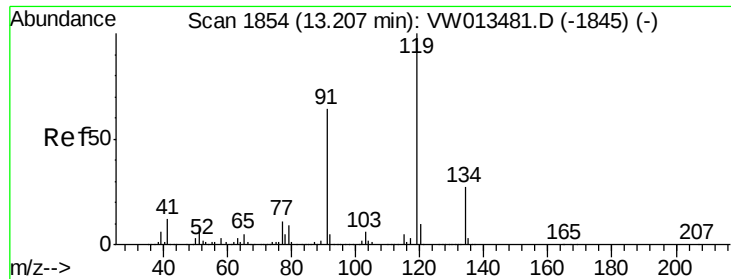
MMDadoda
10/11/2019 4:40:20 PM



#82
4-Chlorotoluene
Concen: 2.894 ug/l
RT: 12.99 min Scan# 1818
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
91	100		
126	34.3	17.5	52.6





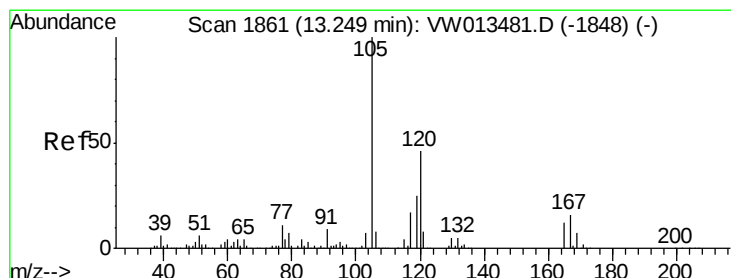
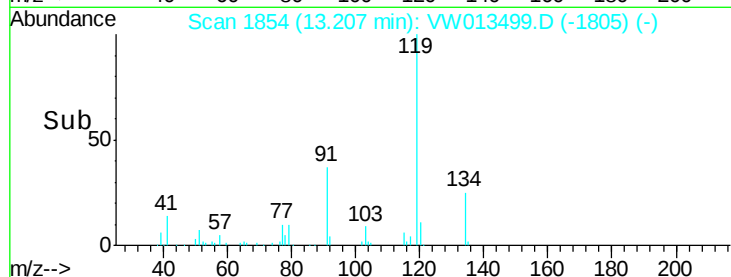
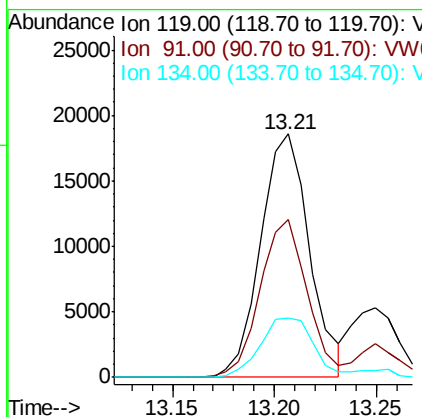
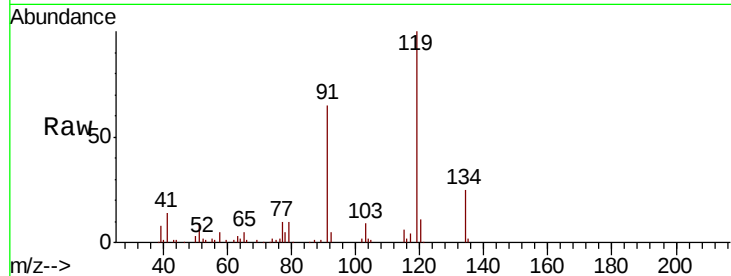
#83
tert-Butylbenzene
Concen: 2.694 ug/l
RT: 13.21 min Scan# 1854
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Resp	Lower	Upper
119	100	31015		
91	62.3	30.6	91.6	
134	26.7	13.8	41.3	

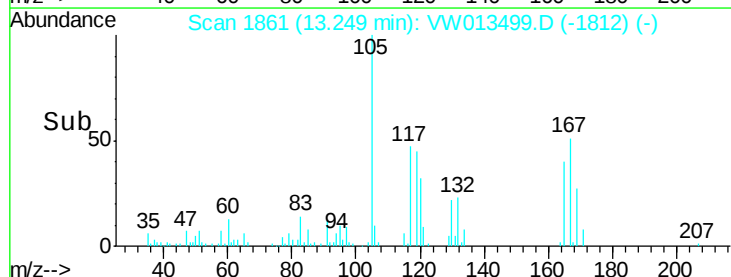
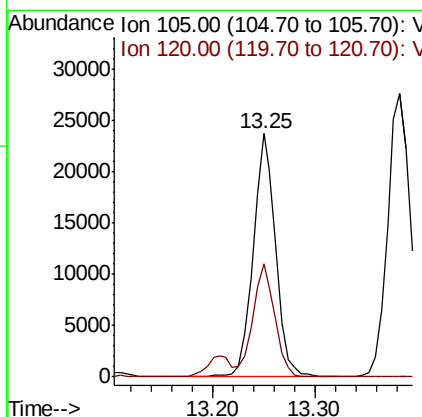
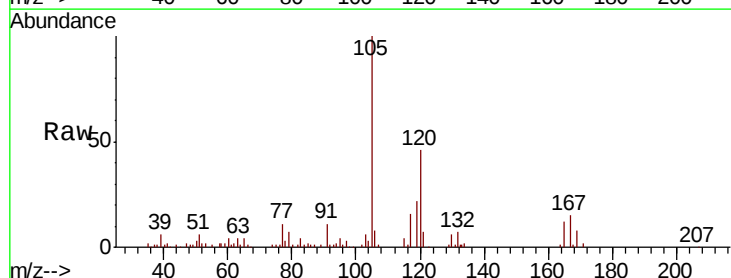
Manual Integrations
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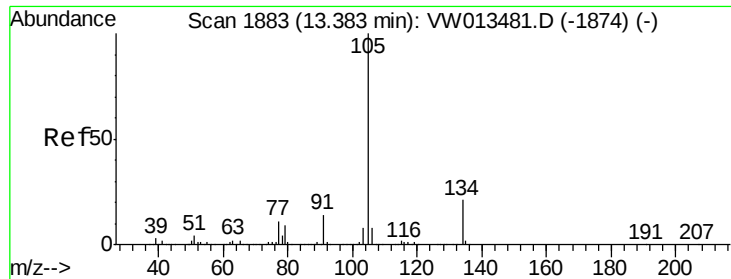
MMDadoda
10/11/2019 4:40:20 PM



#84
1,2,4-Trimethylbenzene
Concen: 2.854 ug/l
RT: 13.25 min Scan# 1861
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	36582		
120	45.8	23.2	69.5	





#85

sec-Butylbenzene

Concen: 2.726 ug/l

RT: 13.38 min Scan# 1883

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

Instrument :

MSVOA_W

ClientSampleId :

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

Tot Ion:105 Resp: 43356

Ion Ratio Lower Upper

105 100

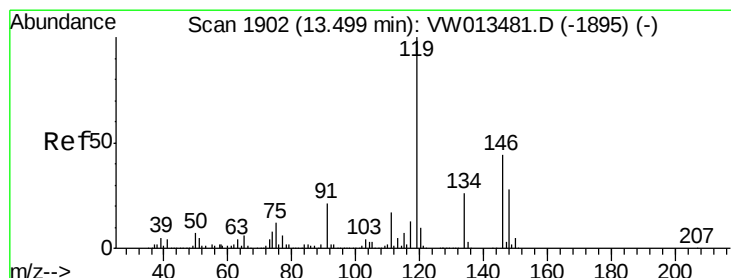
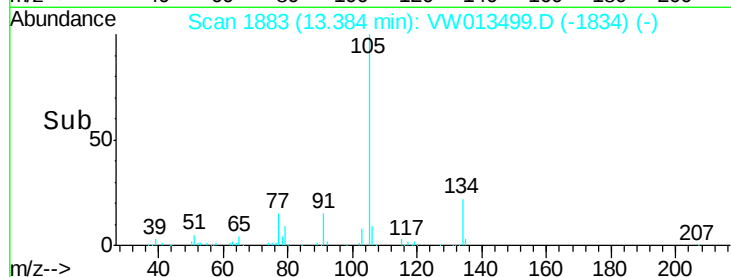
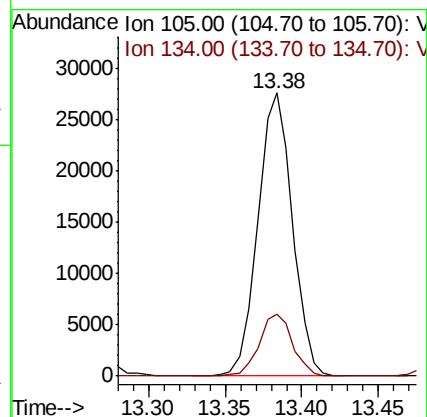
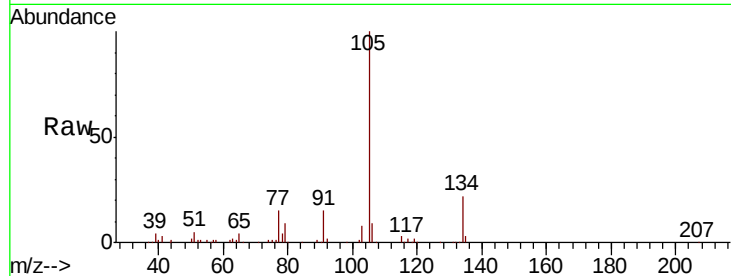
134 21.3 10.4 31.4

Manual Integrations

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10/11/2019 4:40:20 PM



#86

p-Isopropyltoluene

Concen: 2.710 ug/l

RT: 13.50 min Scan# 1902

Delta R.T. 0.00 min

Lab File: VW013499.D

Acq: 09 Oct 2019 13:09

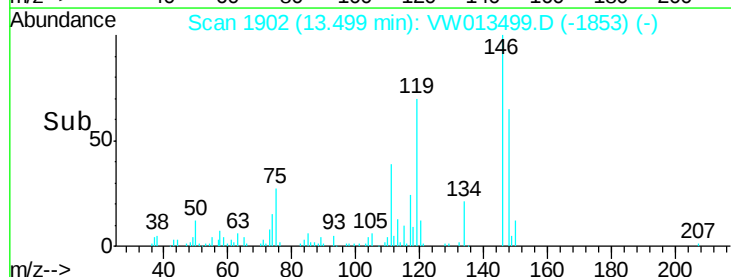
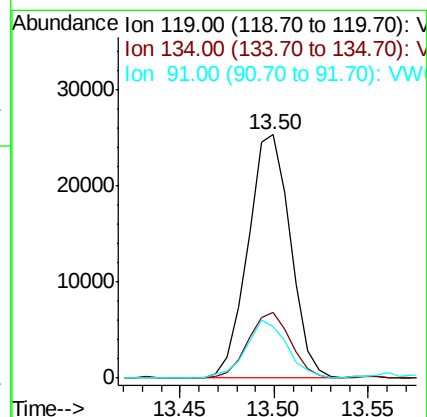
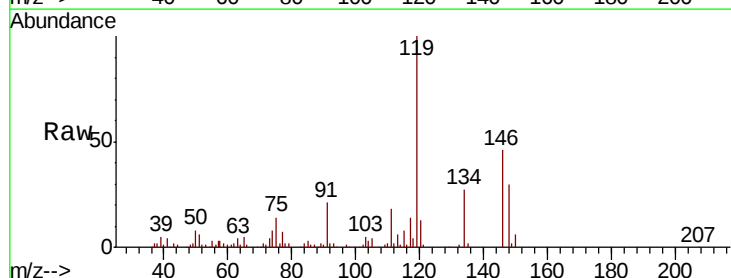
Tgt Ion:119 Resp: 39603

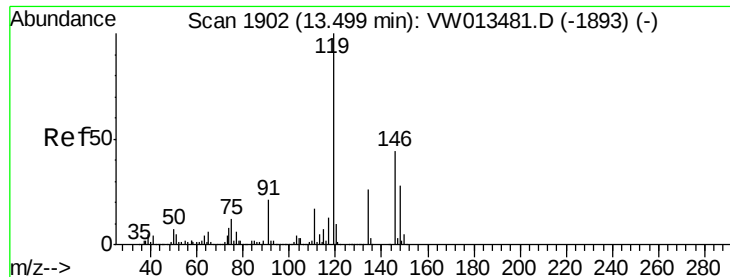
Ion Ratio Lower Upper

119 100

134 27.0 13.1 39.1

91 23.1 10.8 32.3





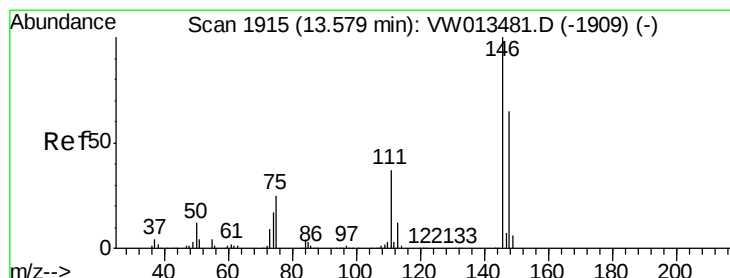
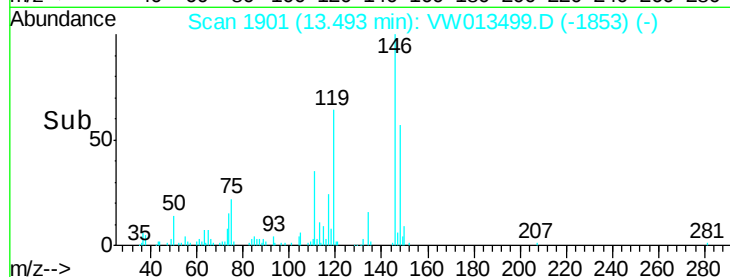
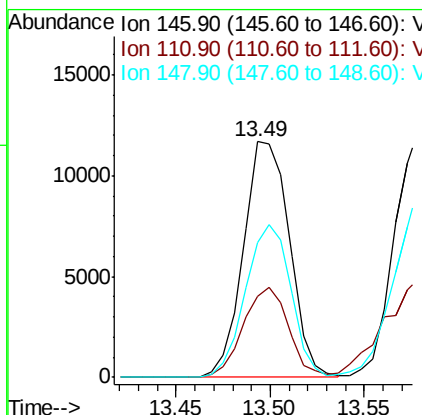
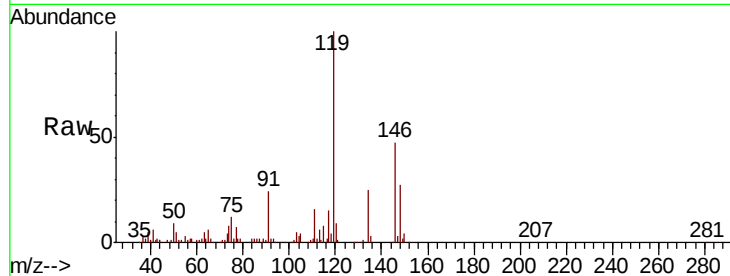
#87
 1,3-Dichlorobenzene
 Concen: 2.832 ug/l
 RT: 13.49 min Scan# 1901
 Delta R.T. -0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	37.7	18.7	56.1
148	63.8	32.3	96.8

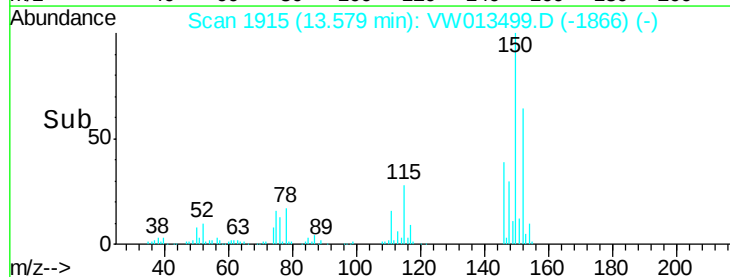
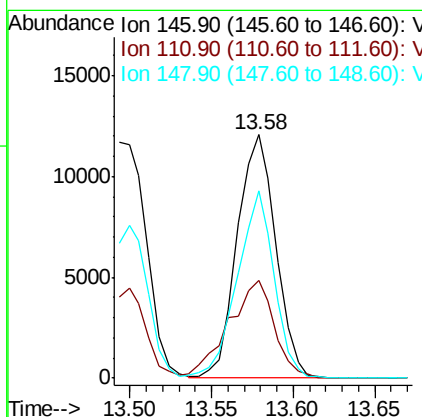
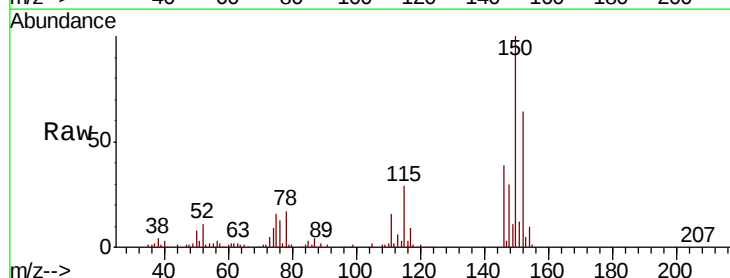
Manual Integrations
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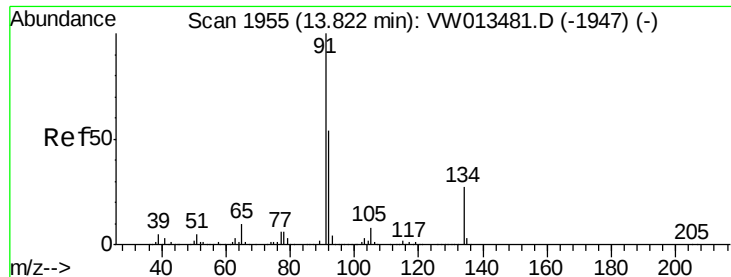
MMDadoda
 10/11/2019 4:40:20 PM



#88
 1,4-Dichlorobenzene
 Concen: 2.897 ug/l
 RT: 13.58 min Scan# 1915
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
146	100		
111	48.0	18.4	55.4
148	73.5	32.0	96.2





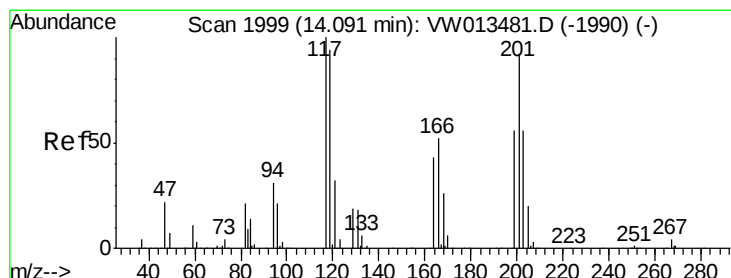
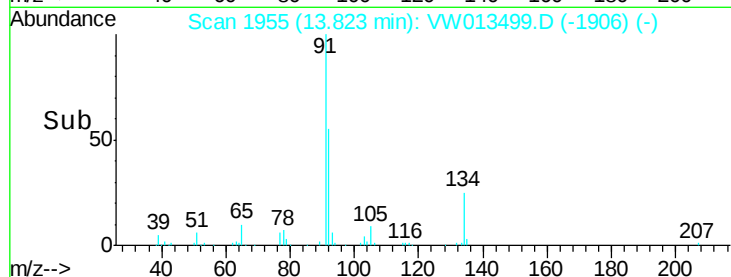
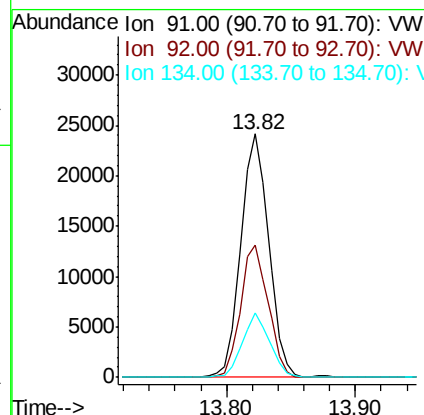
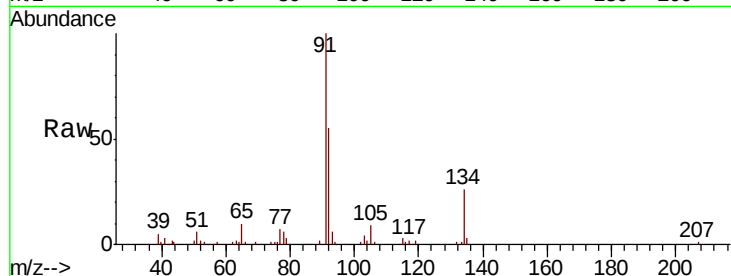
#89
n-Butylbenzene
Concen: 2.748 ug/l
RT: 13.82 min Scan# 1955
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
91	100		
92	53.6	27.5	82.4
134	25.6	13.8	41.3

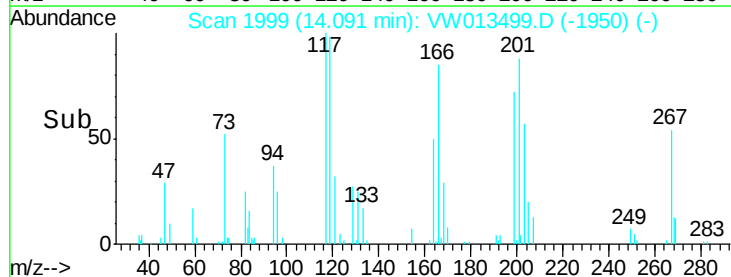
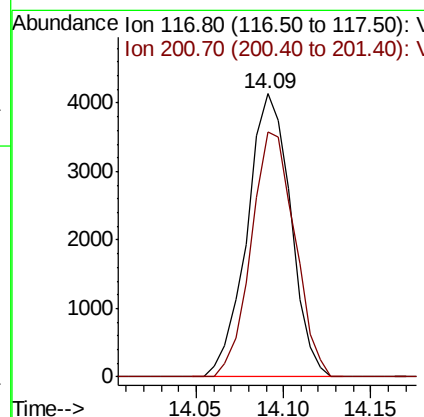
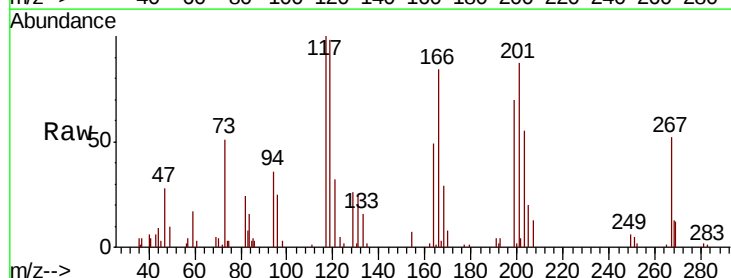
Manual Integrations
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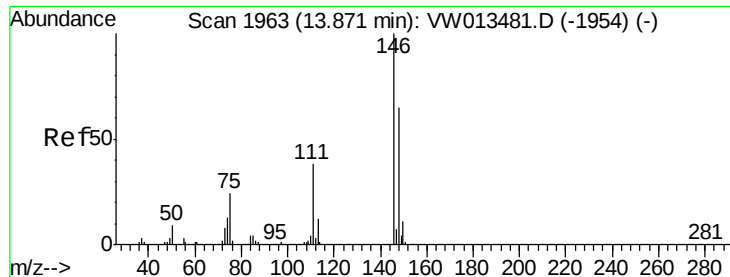
MMDadoda
10/11/2019 4:40:20 PM



#90
Hexachloroethane
Concen: 2.858 ug/l
RT: 14.09 min Scan# 1999
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
117	100		
201	86.7	46.9	140.7





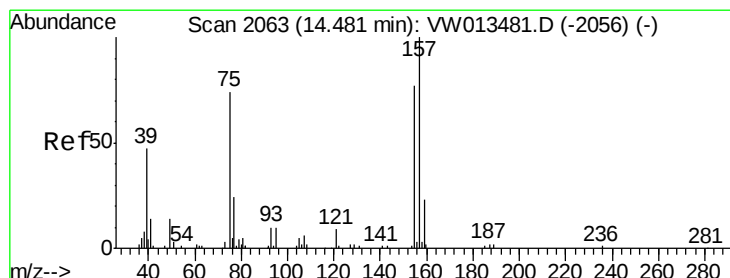
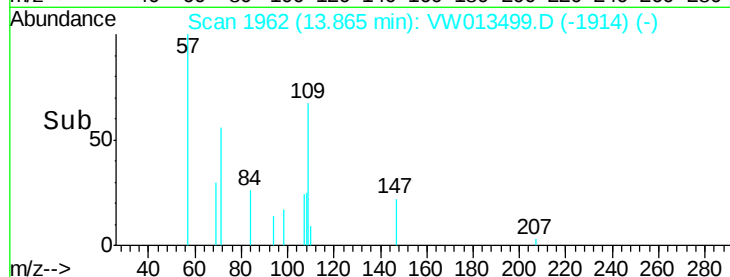
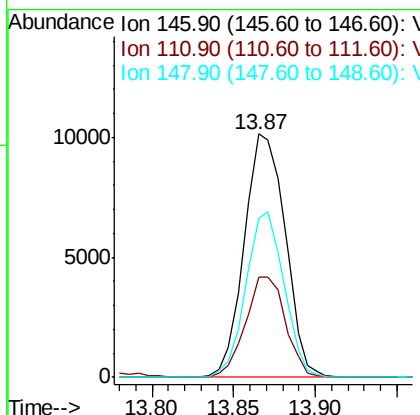
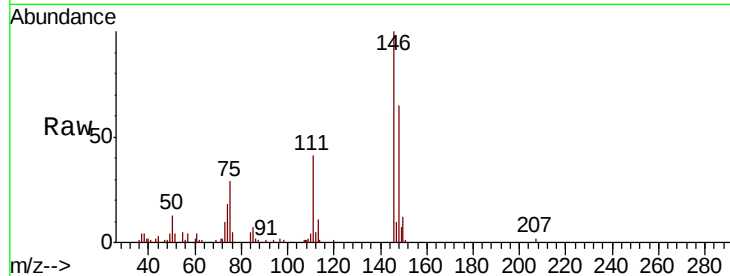
#91
 1,2-Dichlorobenzene
 Concen: 2.864 ug/l
 RT: 13.87 min Scan# 1962
 Delta R.T. -0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	40.6	19.4	58.2
148	63.6	31.8	95.3

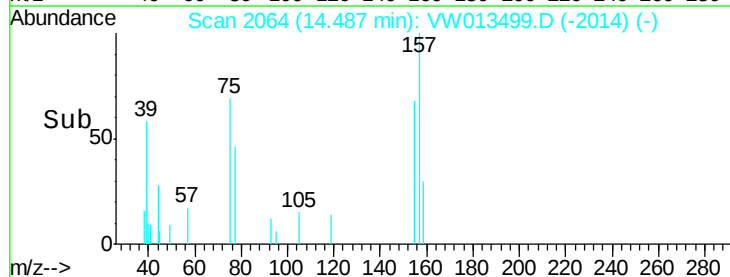
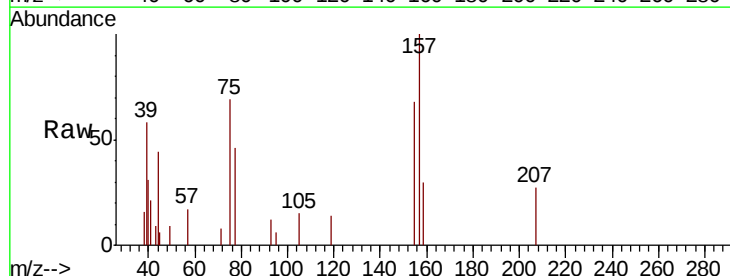
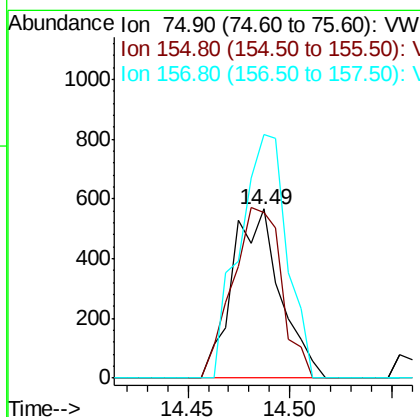
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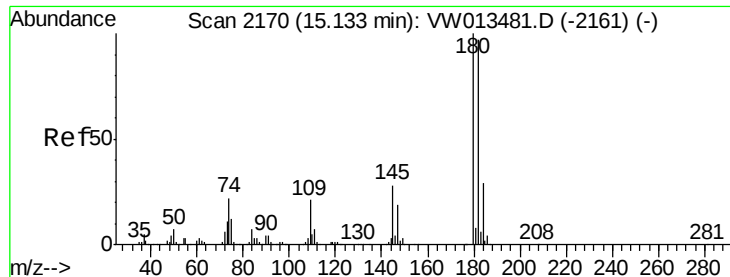
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#92
 1,2-Dibromo-3-Chloropropane
 Concen: 2.185 ug/l
 RT: 14.49 min Scan# 2064
 Delta R.T. 0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
75	100		
155	102.6	51.0	153.1
157	142.9	65.9	197.7





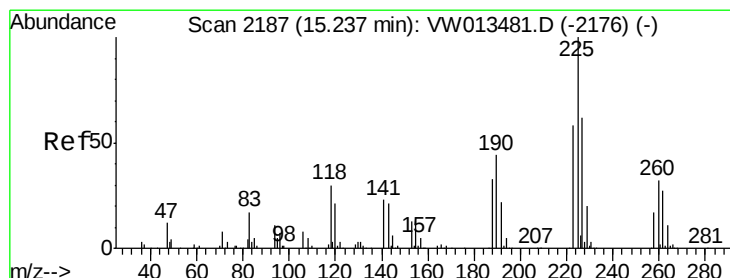
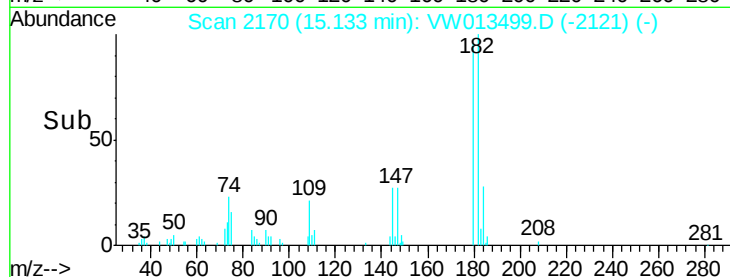
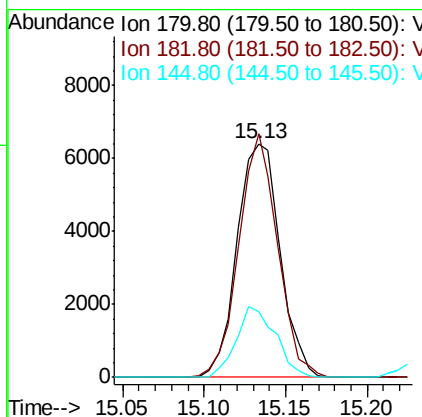
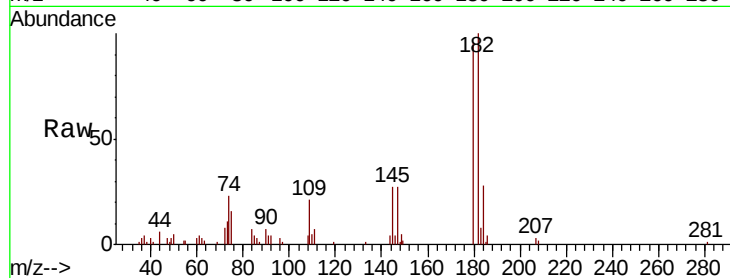
#93
 1,2,4-Trichlorobenzene
 Concen: 2.679 ug/l
 RT: 15.13 min Scan# 2170
 Delta R.T. 0.00 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Resp	Lower	Upper
180	100			
182	94.0	47.7	143.1	
145	27.6	14.0	41.9	

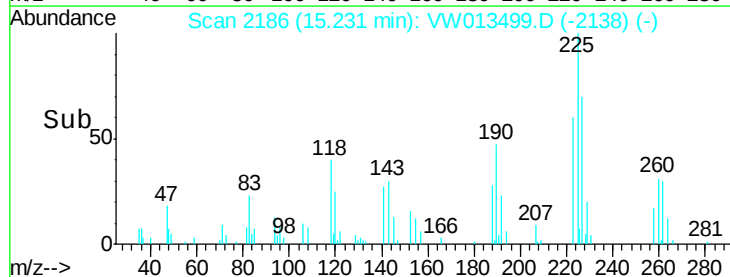
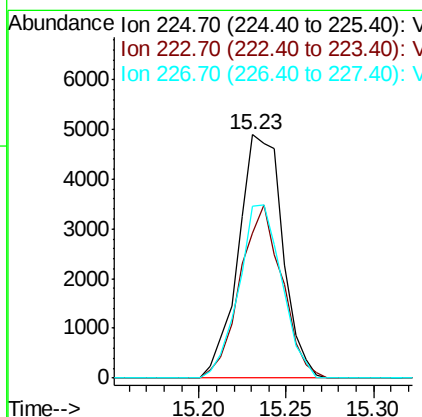
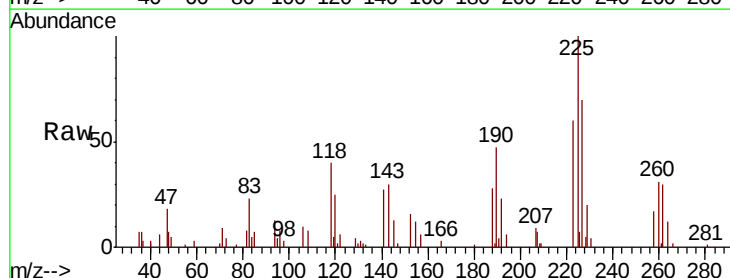
Manual Integrations
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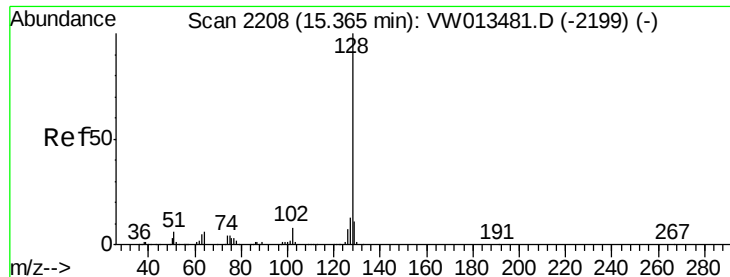
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#94
 Hexachlorobutadiene
 Concen: 2.964 ug/l
 RT: 15.23 min Scan# 2186
 Delta R.T. -0.01 min
 Lab File: VW013499.D
 Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Resp	Lower	Upper
225	100			
223	67.2	30.3	90.9	
227	68.9	32.0	96.0	





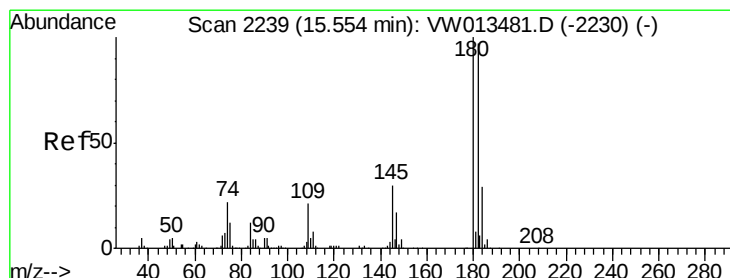
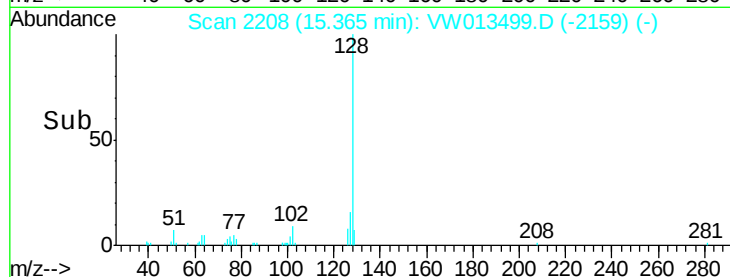
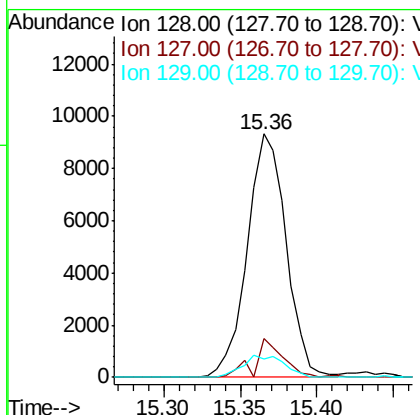
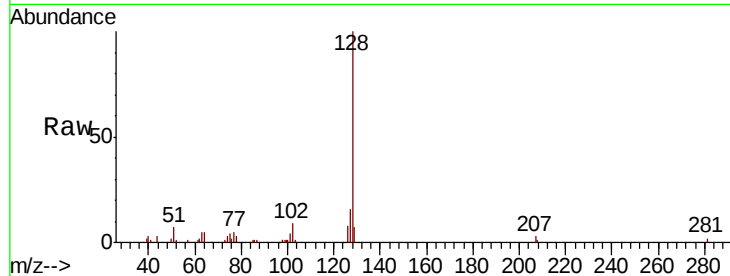
#95
Naphthalene
Concen: 2.181 ug/l
RT: 15.36 min Scan# 2208
Delta R.T. 0.00 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

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

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.1	10.6	16.0
129	9.7	8.8	13.2

Manual Integrations
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#96
1,2,3-Trichlorobenzene
Concen: 2.720 ug/l
RT: 15.56 min Scan# 2240
Delta R.T. 0.01 min
Lab File: VW013499.D
Acq: 09 Oct 2019 13:09

Tgt Ion	Ratio	Lower	Upper
180	100		
182	92.8	47.7	143.1
145	30.5	14.9	44.9

