

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY101619\
 Data File : VY000326.D
 Acq On : 16 Oct 2019 13:48
 Operator : SY/MD
 Sample : K5111-03 4PPBMDL
 Misc : 5.00G/5ML/MSVOA Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

MMDadoda
 10/18/2019 12:50:40 AM

Quant Time: Oct 17 02:03:33 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_Y\METHODS\82Y101119S.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 17 01:56:06 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.80	168	291826	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.70	114	492846	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.49	117	431928	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.42	152	206241	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.15	65	169387	55.03	ug/l	0.00
Spiked Amount	50.000		Recovery	=	110.06%	
35) Dibromofluoromethane	7.73	113	151595	50.99	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.98%	
50) Toluene-d8	10.19	98	606207	53.01	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.02%	
62) 4-Bromofluorobenzene	12.48	95	213927	49.24	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.48%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.90	85	12624	4.852	ug/l	94
3) Chloromethane	2.11	50	18227	5.111	ug/l	93
4) Vinyl Chloride	2.25	62	16228	4.509	ug/l	98
5) Bromomethane	2.65	94	13367	5.012	ug/l	96
6) Chloroethane	2.80	64	10867	4.680	ug/l	94
7) Trichlorofluoromethane	3.13	101	23042	4.681	ug/l	89
8) Diethyl Ether	3.53	74	8415	4.839	ug/l	89
9) 1,1,2-Trichlorotrifluoroet	3.91	101	13578	4.548	ug/l	97
10) Methyl Iodide	4.09	142	14056	3.607	ug/l	98
11) Tert butyl alcohol	4.97	59	7960	24.709	ug/l	98
12) 1,1-Dichloroethene	3.87	96	13676	4.640	ug/l	85
13) Acrolein	3.73	56	7070	18.719	ug/l	100
14) Allyl chloride	4.48	41	22451m	4.597	ug/l	
15) Acrylonitrile	5.17	53	21664	22.256	ug/l	98
16) Acetone	3.95	43	19262	19.322	ug/l	91
17) Carbon Disulfide	4.19	76	40083	4.319	ug/l	98
18) Methyl Acetate	4.49	43	13056	5.271	ug/l	98
19) Methyl tert-butyl Ether	5.23	73	37161	4.529	ug/l	95
20) Methylene Chloride	4.72	84	20511	5.017	ug/l	91
21) trans-1,2-Dichloroethene	5.24	96	15146	4.479	ug/l	93
22) Diisopropyl ether	6.13	45	47042	4.554	ug/l	97
23) Vinyl Acetate	6.08	43	139965	20.768	ug/l	99
24) 1,1-Dichloroethane	6.03	63	25633	4.546	ug/l	96
25) 2-Butanone	7.00	43	30848	21.967	ug/l	95
26) 2,2-Dichloropropane	6.99	77	26713	5.141	ug/l	94
27) cis-1,2-Dichloroethene	7.00	96	16328	4.462	ug/l	87
28) Bromochloromethane	7.34	49	11182	4.619	ug/l	99
29) Tetrahydrofuran	7.36	42	18644	21.907	ug/l	97
30) Chloroform	7.52	83	26970	4.749	ug/l	98
31) Cyclohexane	7.80	56	30764	5.224	ug/l #	74
32) 1,1,1-Trichloroethane	7.72	97	23705	4.695	ug/l	98
36) 1,1-Dichloropropene	7.93	75	21338	4.422	ug/l	98
37) Ethyl Acetate	7.10	43	12426	4.349	ug/l #	91
38) Carbon Tetrachloride	7.91	117	19424	4.158	ug/l	86

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.19	83	27394	4.338	ug/l	95
40) Benzene	8.17	78	59859	4.293	ug/l	94
41) Methacrylonitrile	7.33	41	7560	5.559	ug/l #	34
42) 1,2-Dichloroethane	8.24	62	18088	4.541	ug/l	99
43) Isopropyl Acetate	8.28	43	23409	4.309	ug/l	97
44) Trichloroethene	8.95	130	17072	4.363	ug/l	89
45) 1,2-Dichloropropane	9.23	63	15094	4.411	ug/l	96
46) Dibromomethane	9.32	93	8381	4.381	ug/l	96
47) Bromodichloromethane	9.50	83	18908	4.194	ug/l	99
48) Methyl methacrylate	9.30	41	9548	4.010	ug/l	95
49) 1,4-Dioxane	9.30	88	2549	88.869	ug/l #	79
51) 4-Methyl-2-Pentanone	10.08	43	60176	21.476	ug/l	98
52) Toluene	10.25	92	38457	4.344	ug/l	95
53) t-1,3-Dichloropropene	10.47	75	21361	4.421	ug/l	92
54) cis-1,3-Dichloropropene	9.94	75	23608	4.303	ug/l	91
55) 1,1,2-Trichloroethane	10.65	97	11619	4.177	ug/l #	87
56) Ethyl methacrylate	10.52	69	17068	4.305	ug/l	98
57) 1,3-Dichloropropane	10.80	76	20419	4.275	ug/l	97
58) 2-Chloroethyl Vinyl ether	9.79	63	43919	27.774	ug/l	99
59) 2-Hexanone	10.83	43	43617	22.177	ug/l	97
60) Dibromochloromethane	10.99	129	13314	4.319	ug/l	90
61) 1,2-Dibromoethane	11.10	107	11402	4.269	ug/l	99
64) Tetrachloroethene	10.72	164	17416	4.235	ug/l	92
65) Chlorobenzene	11.52	112	41383	4.540	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.60	131	13701	4.279	ug/l	95
67) Ethyl Benzene	11.60	91	71364	4.223	ug/l	100
68) m/p-Xylenes	11.70	106	55047	8.521	ug/l	98
69) o-Xylene	12.03	106	26219	4.255	ug/l	98
70) Styrene	12.05	104	43622	4.197	ug/l	99
71) Bromoform	12.20	173	7262	3.945	ug/l #	93
73) Isopropylbenzene	12.33	105	69041	4.293	ug/l	99
74) N-amyl acetate	12.14	43	18691	4.734	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.58	83	12886	4.268	ug/l	99
76) 1,2,3-Trichloropropane	12.64	75	9535m	3.760	ug/l	
77) Bromobenzene	12.61	156	15898	4.443	ug/l	95
78) n-propylbenzene	12.67	91	84675	4.385	ug/l	98
79) 2-Chlorotoluene	12.75	91	48256	4.526	ug/l	98
80) 1,3,5-Trimethylbenzene	12.81	105	58115	4.310	ug/l	100
81) trans-1,4-Dichloro-2-buten	12.38	75	4849	4.183	ug/l	93
82) 4-Chlorotoluene	12.86	91	49572	4.398	ug/l	99
83) tert-Butylbenzene	13.08	119	50383	4.412	ug/l	99
84) 1,2,4-Trimethylbenzene	13.12	105	57622	4.330	ug/l	96
85) sec-Butylbenzene	13.25	105	70858	4.289	ug/l	99
86) p-Isopropyltoluene	13.37	119	61795	4.291	ug/l	98
87) 1,3-Dichlorobenzene	13.36	146	31095	4.410	ug/l	99
88) 1,4-Dichlorobenzene	13.44	146	32284	4.581	ug/l	94
89) n-Butylbenzene	13.70	91	59996	4.216	ug/l	99
90) Hexachloroethane	13.96	117	11669	4.376	ug/l	97
91) 1,2-Dichlorobenzene	13.74	146	29724	4.658	ug/l	98
92) 1,2-Dibromo-3-Chloropropan	14.36	75	2840	4.959	ug/l	86

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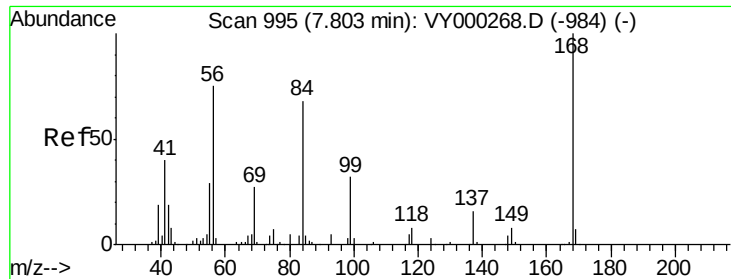
Manual Integrations
APPROVED

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.00	180	19945	4.490	ug/l	99
94) Hexachlorobutadiene	15.11	225	10431	4.339	ug/l	97
95) Naphthalene	15.23	128	45884	4.628	ug/l	97
96) 1,2,3-Trichlorobenzene	15.42	180	17754	4.434	ug/l	96

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.80 min Scan# 995

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion:168 Resp: 291826

Ion Ratio Lower Upper

168 100

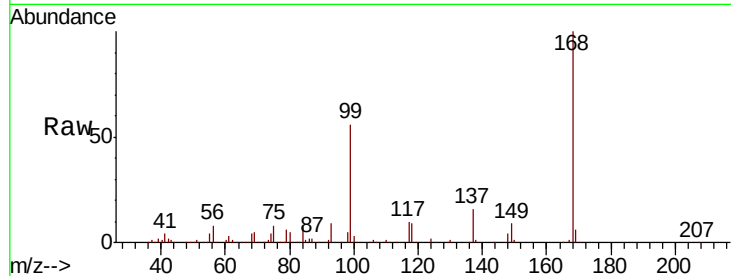
99 55.7 46.6 69.8

Manual Integrations

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10/18/2019 12:50:40 AM



Abundance Ion 167.90 (167.60 to 168.60): VY000326.D (-946) (-)

Ion 98.90 (98.60 to 99.60): VY000326.D (-946) (-)

7.80

150000

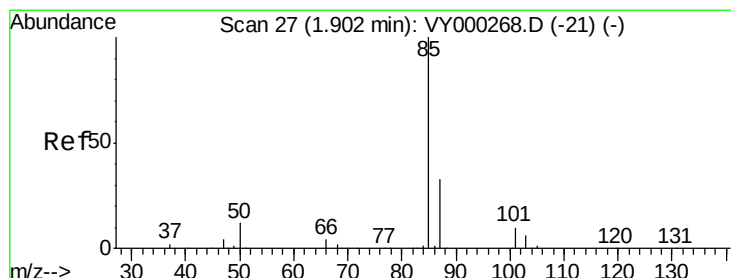
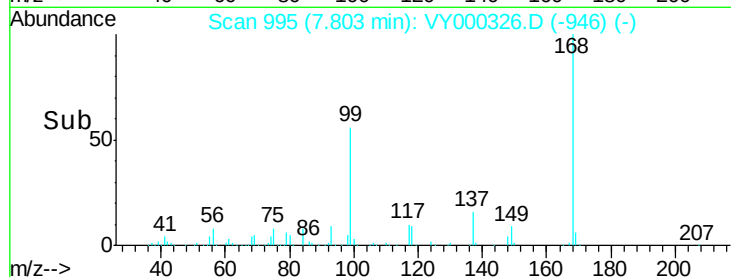
100000

50000

0

7.70 7.80 7.90

Time-->



#2

Dichlorodifluoromethane

Concen: 4.852 ug/l

RT: 1.90 min Scan# 27

Delta R.T. 0.00 min

Lab File: VY000326.D

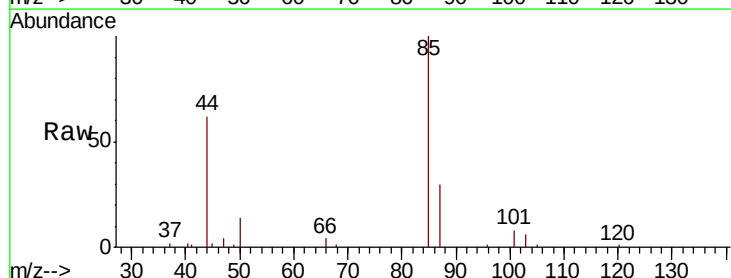
Acq: 16 Oct 2019 13:48

Tgt Ion: 85 Resp: 12624

Ion Ratio Lower Upper

85 100

87 29.7 16.6 49.8



Abundance Ion 84.90 (84.60 to 85.60): VY000326.D (-1) (-)

Ion 86.90 (86.60 to 87.60): VY000326.D (-1) (-)

1.90

8000

6000

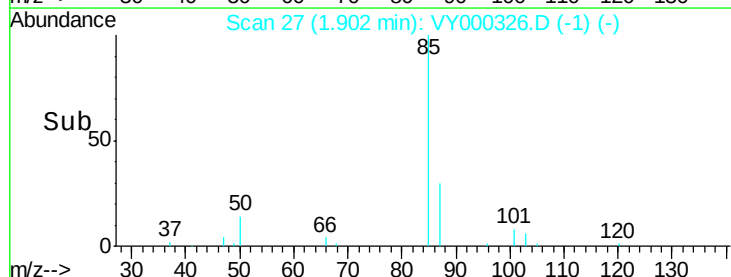
4000

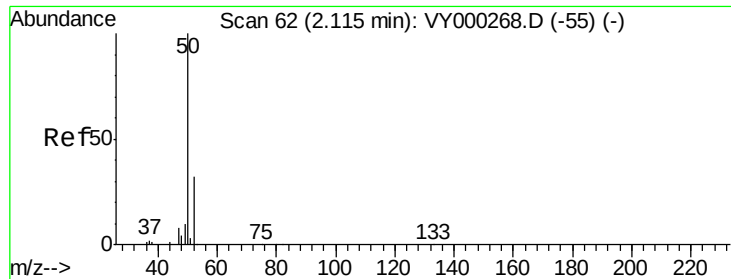
2000

0

1.85 1.90 1.95 2.00

Time-->





#3

Chloromethane

Concen: 5.111 ug/l

RT: 2.11 min Scan# 61

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion: 50 Resp: 18227

Ion Ratio Lower Upper

50 100

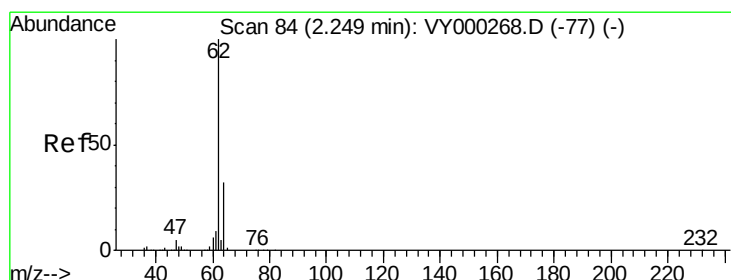
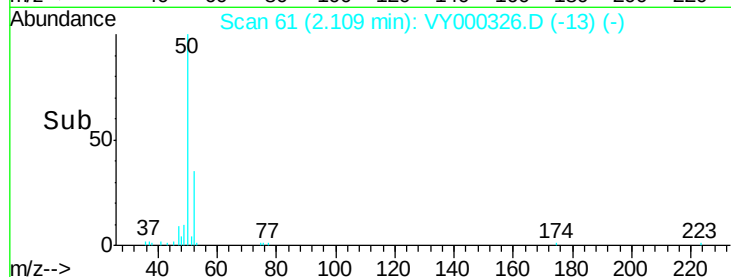
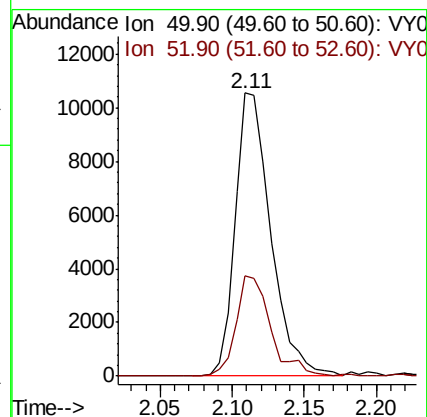
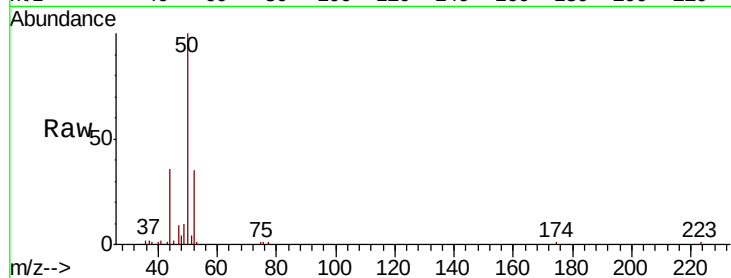
52 35.3 25.3 37.9

Manual Integrations

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#4

Vinyl Chloride

Concen: 4.509 ug/l

RT: 2.25 min Scan# 84

Delta R.T. 0.00 min

Lab File: VY000326.D

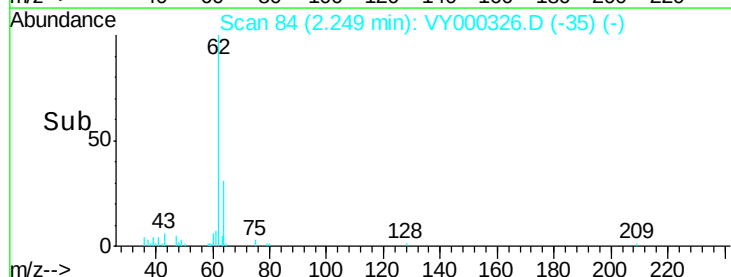
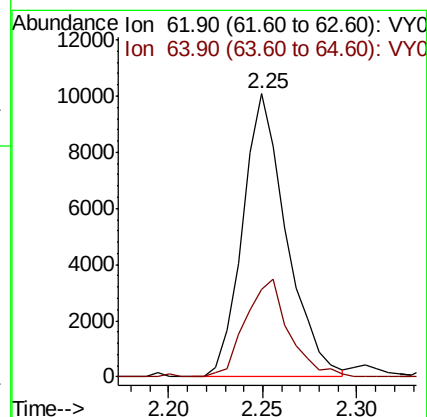
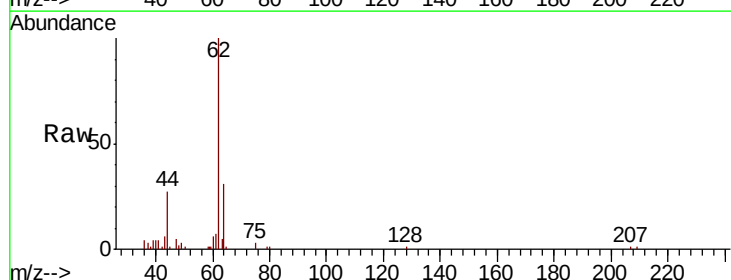
Acq: 16 Oct 2019 13:48

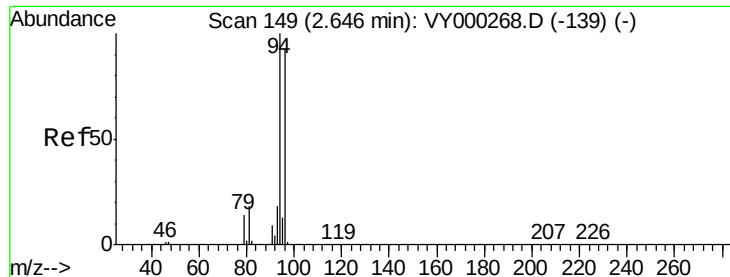
Tgt Ion: 62 Resp: 16228

Ion Ratio Lower Upper

62 100

64 30.9 25.6 38.4





#5

Bromomethane

Concen: 5.012 ug/l

RT: 2.65 min Scan# 149

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

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ClientSampleId :

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Tot Ion: 94 Resp: 13367

Ion Ratio Lower Upper

94 100

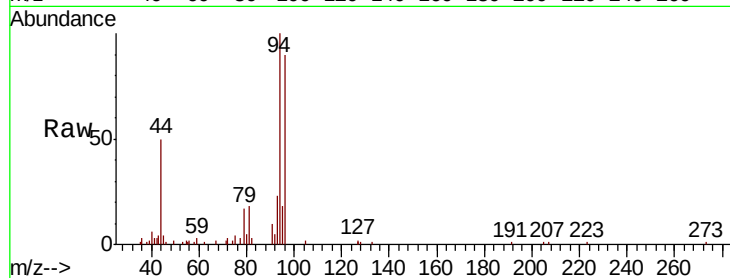
96 88.7 74.2 111.2

Manual Integrations

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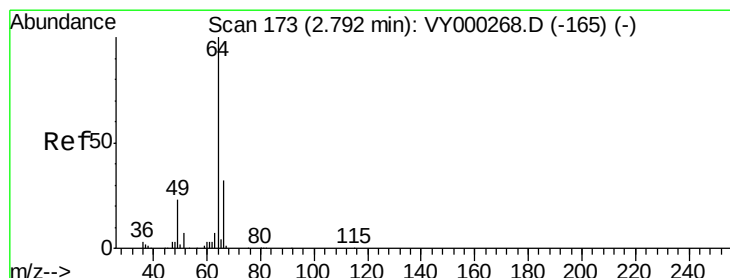
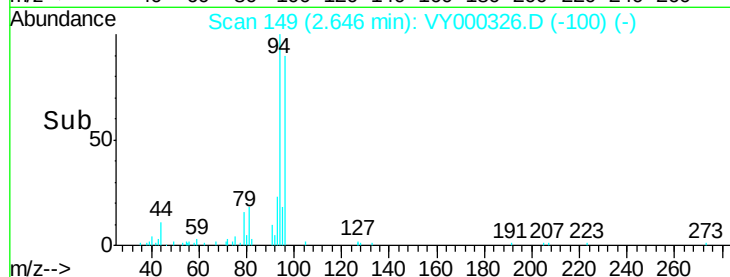
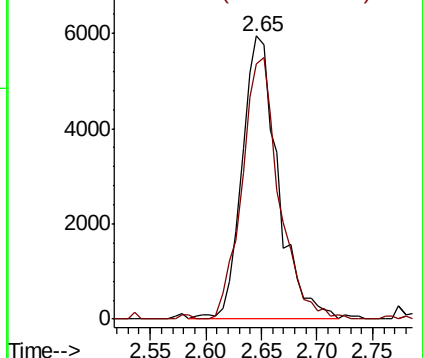
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10/18/2019 12:50:40 AM



Abundance Ion 93.90 (93.60 to 94.60): VY0

Ion 95.90 (95.60 to 96.60): VY0



#6

Chloroethane

Concen: 4.680 ug/l

RT: 2.80 min Scan# 174

Delta R.T. 0.01 min

Lab File: VY000326.D

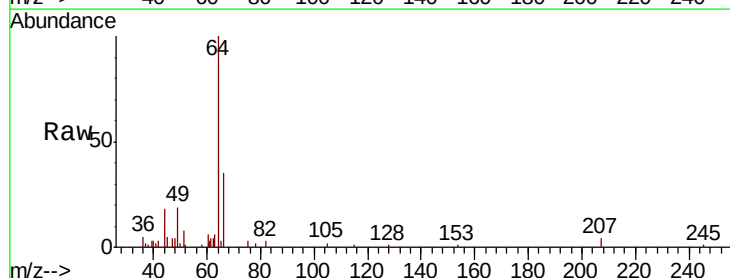
Acq: 16 Oct 2019 13:48

Tgt Ion: 64 Resp: 10867

Ion Ratio Lower Upper

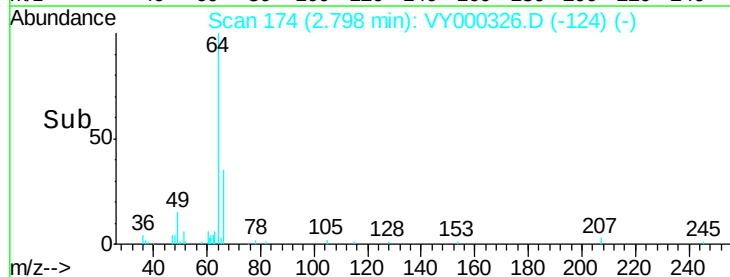
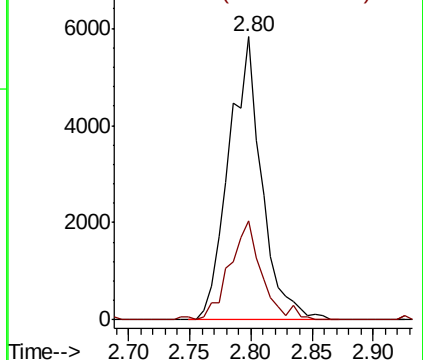
64 100

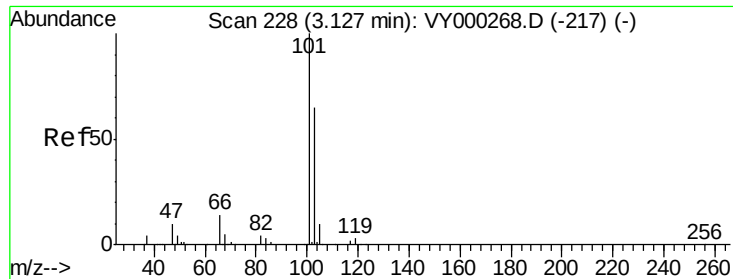
66 35.1 25.6 38.4



Abundance Ion 63.90 (63.60 to 64.60): VY0

Ion 65.90 (65.60 to 66.60): VY0





#7

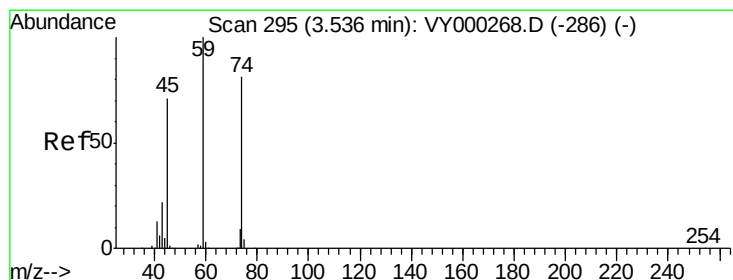
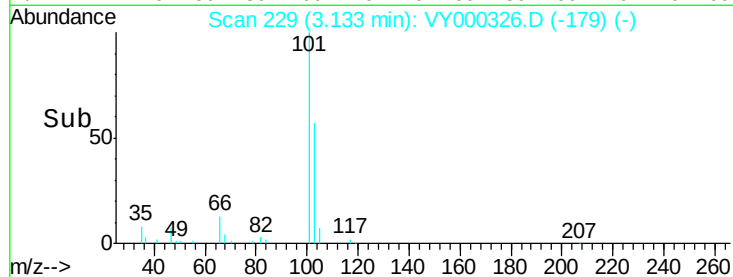
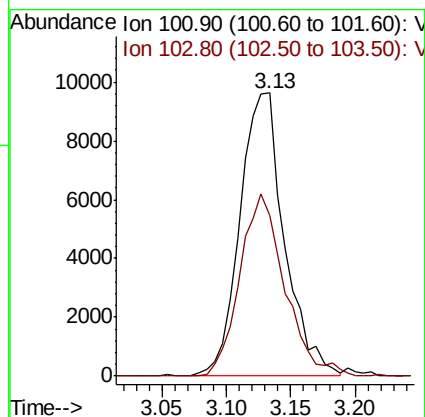
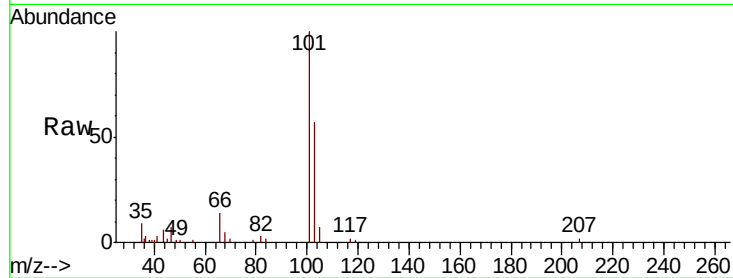
Trichlorofluoromethane
 Concen: 4.681 ug/l
 RT: 3.13 min Scan# 229
 Delta R.T. 0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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Tot Ion	Ratio	Lower	Upper
101	100		
103	56.9	52.2	78.4

Manual Integrations
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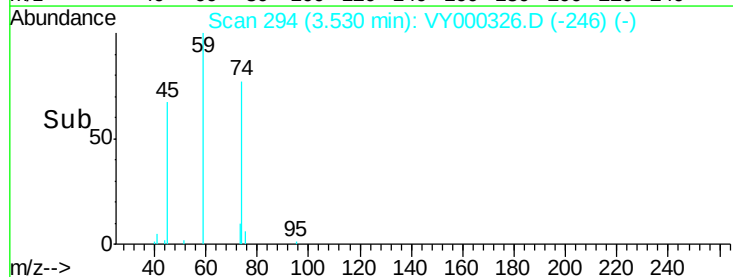
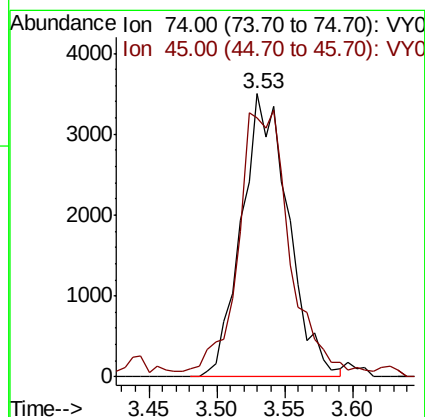
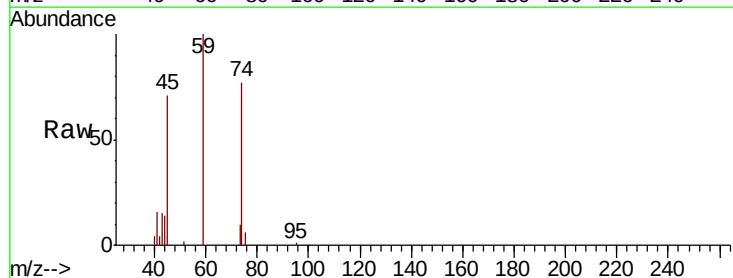
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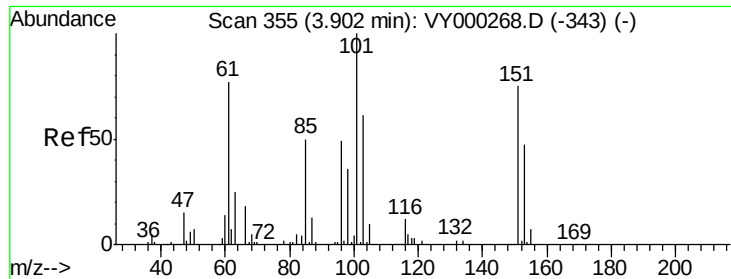


#8

Diethyl Ether
 Concen: 4.839 ug/l
 RT: 3.53 min Scan# 294
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
74	100		
45	105.3	47.1	141.4





#9

1,1,2-Trichlorotrifluoroethane

Concen: 4.548 ug/l

RT: 3.91 min Scan# 356

Delta R.T. 0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

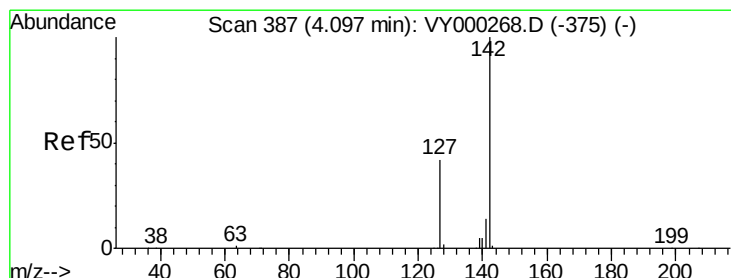
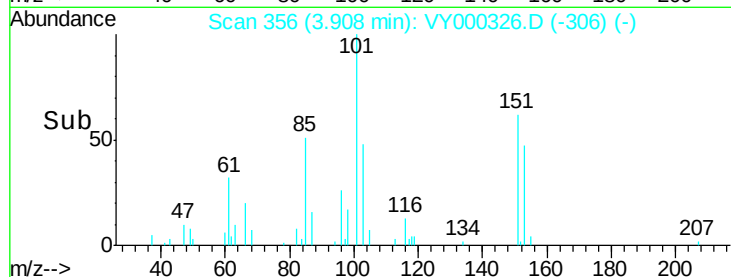
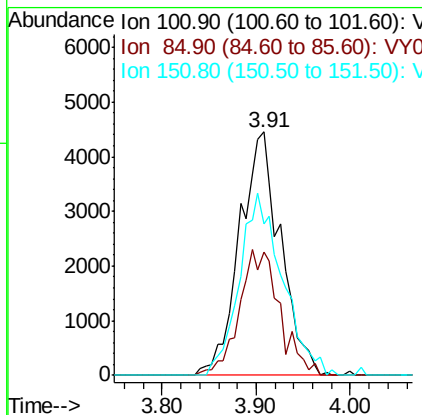
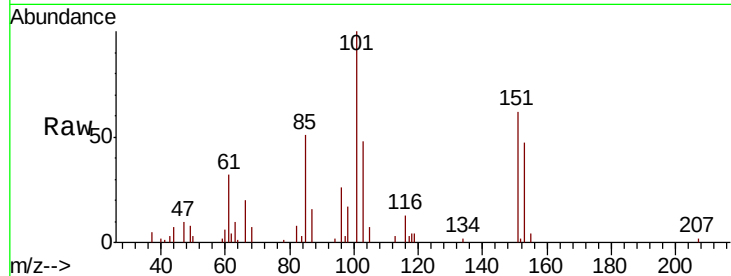
ClientSampleId :

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

Tot Ion:	101	Resp:	13578
Ion Ratio	Lower	Upper	
101	100		
85	50.6	36.6	55.0
151	78.3	63.1	94.7

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#10

Methyl Iodide

Concen: 3.607 ug/l

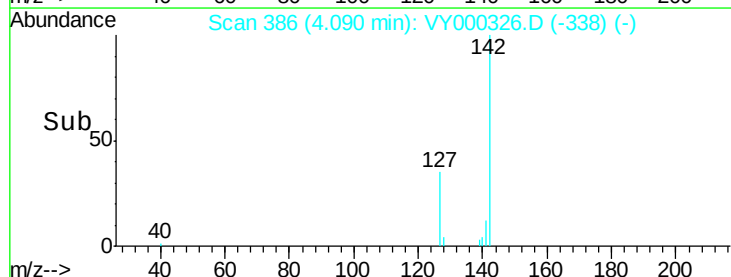
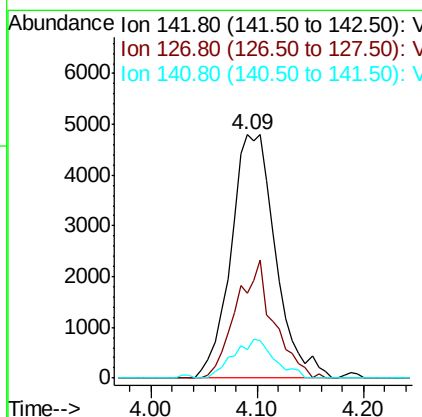
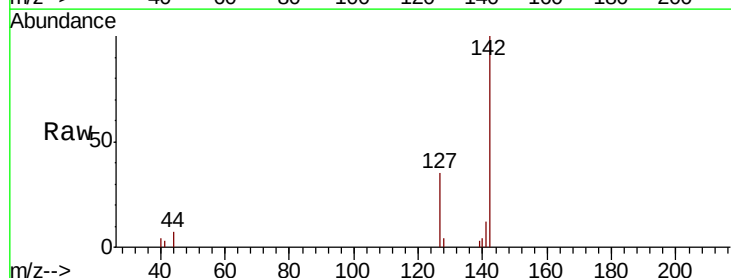
RT: 4.09 min Scan# 386

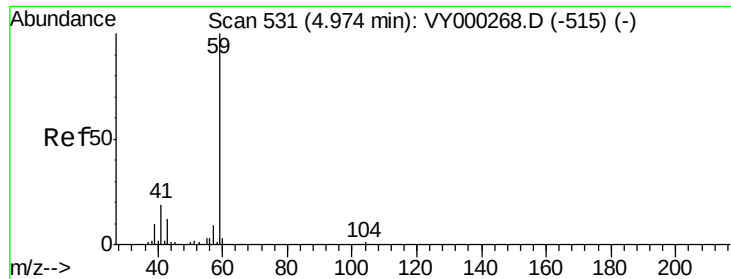
Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion:	142	Resp:	14056
Ion Ratio	Lower	Upper	
142	100		
127	40.9	33.9	50.9
141	14.7	11.2	16.8





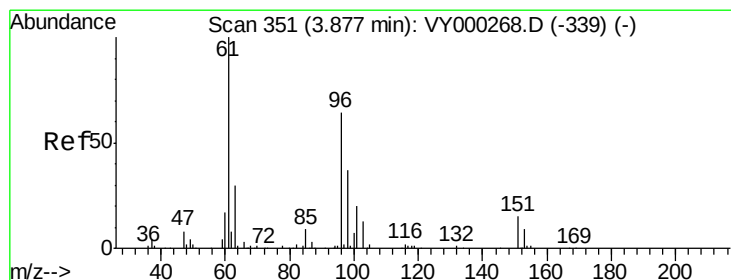
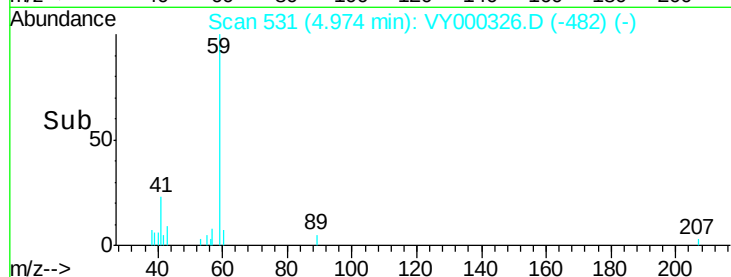
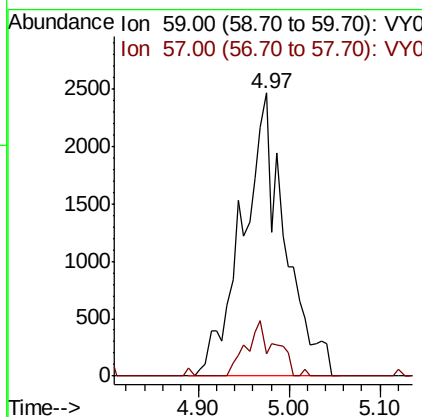
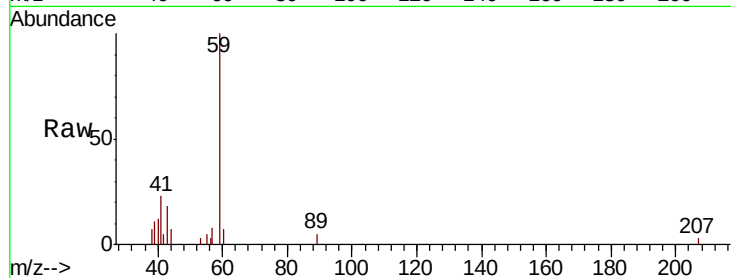
#11
Tert butyl alcohol
Concen: 24.709 ug/l
RT: 4.97 min Scan# 531
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 59 Resp: 7960
Ion Ratio Lower Upper
59 100
57 11.0 8.2 12.2

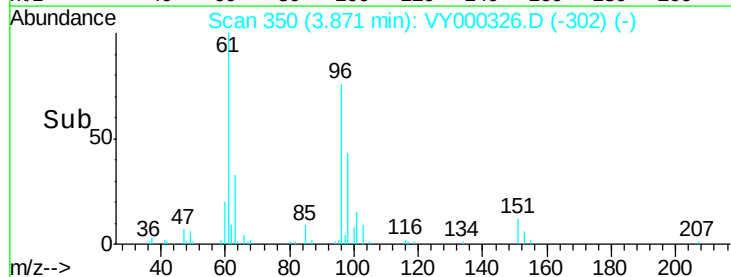
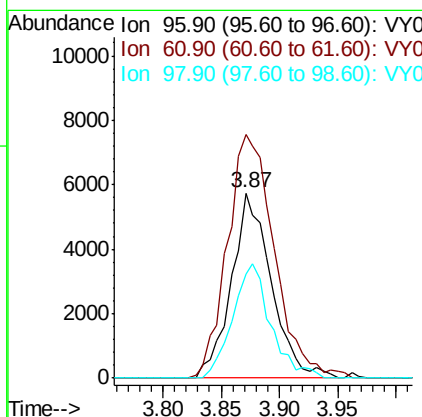
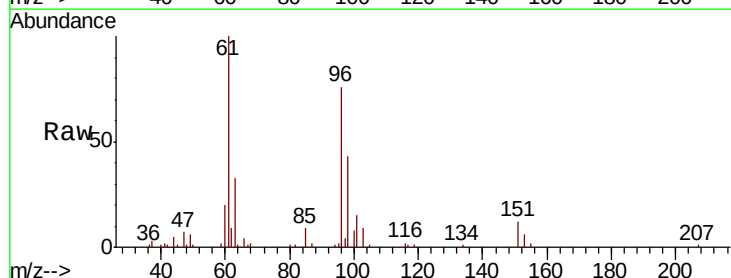
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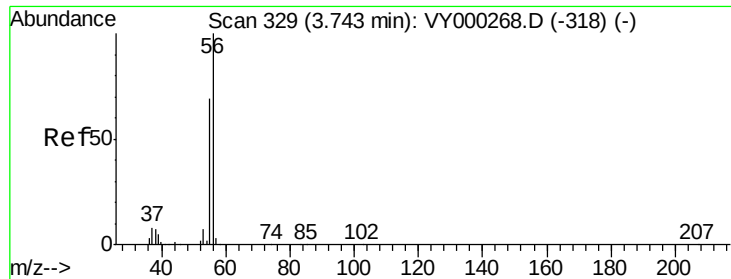
MMDadoda
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#12
1,1-Dichloroethene
Concen: 4.640 ug/l
RT: 3.87 min Scan# 350
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 96 Resp: 13676
Ion Ratio Lower Upper
96 100
61 131.7 125.8 188.6
98 56.0 46.2 69.2





#13

Acrolein

Concen: 18.719 ug/l

RT: 3.73 min Scan# 327

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion: 56 Resp: 7070

Ion Ratio Lower Upper

56 100

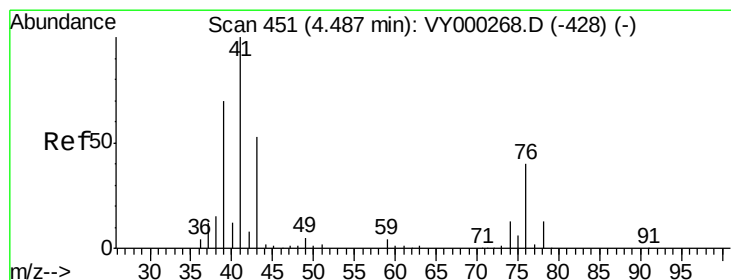
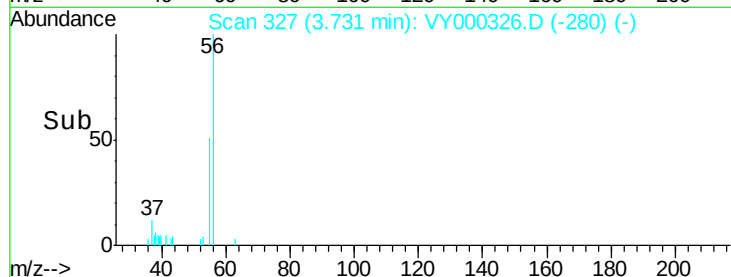
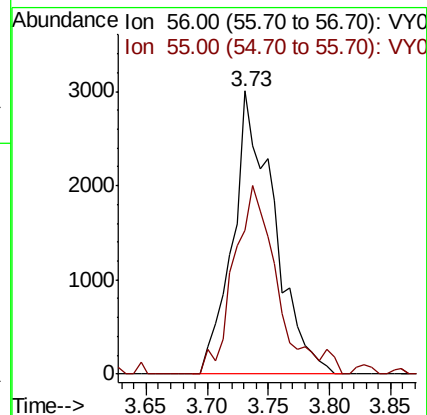
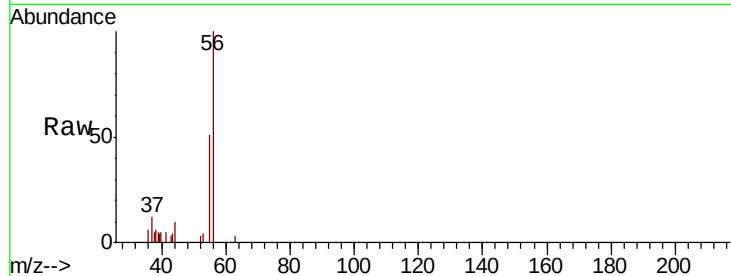
55 69.8 55.7 83.5

Manual Integrations

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#14

Allyl chloride

Concen: 4.597 ug/l m

RT: 4.48 min Scan# 450

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

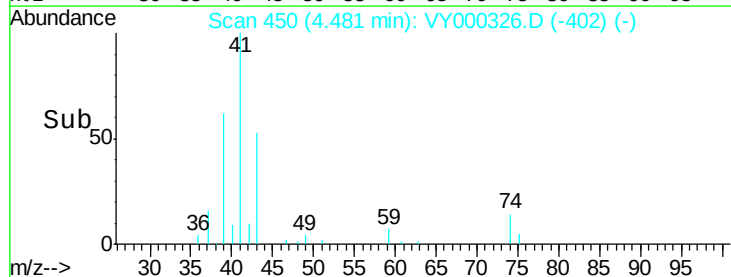
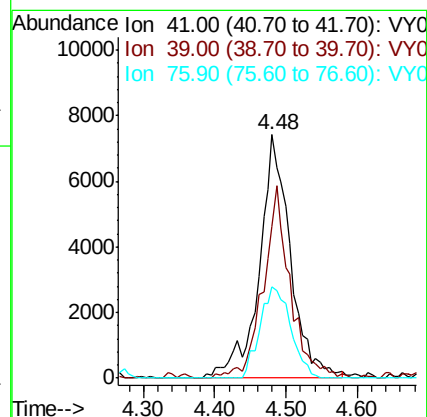
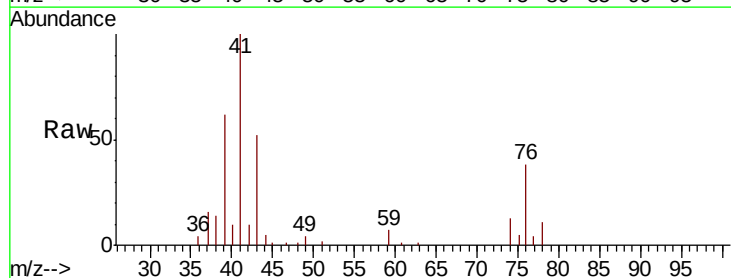
Tgt Ion: 41 Resp: 22451

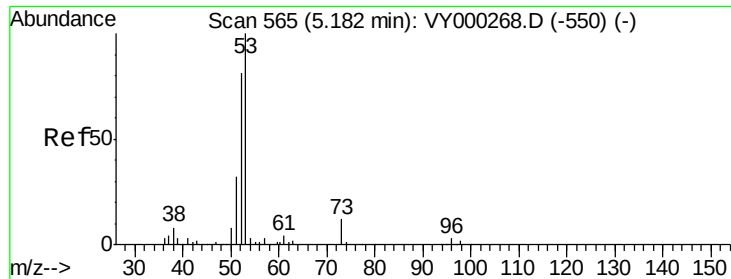
Ion Ratio Lower Upper

41 100

39 68.6 54.0 81.0

76 37.1 30.7 46.1





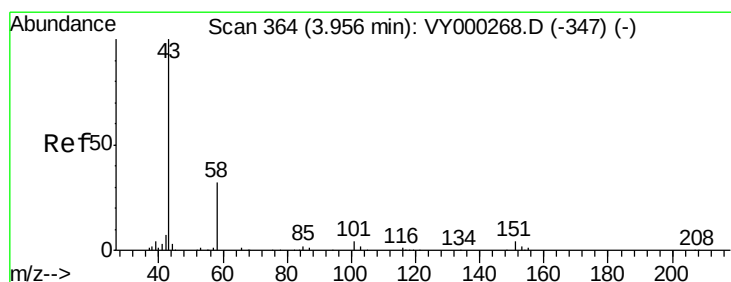
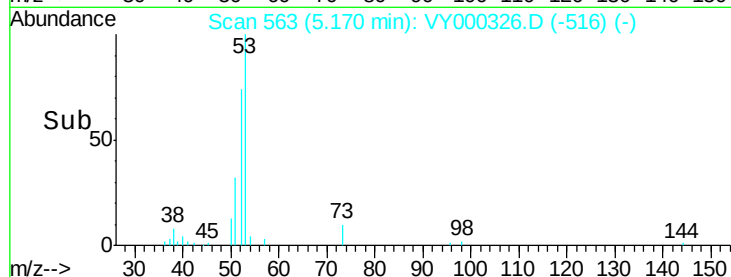
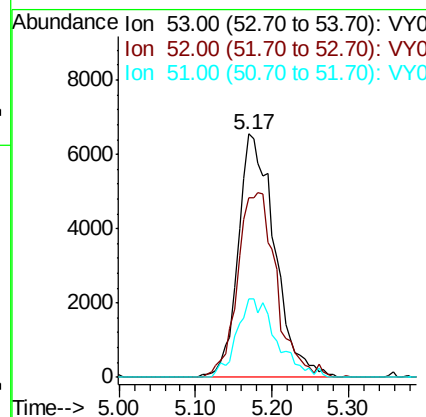
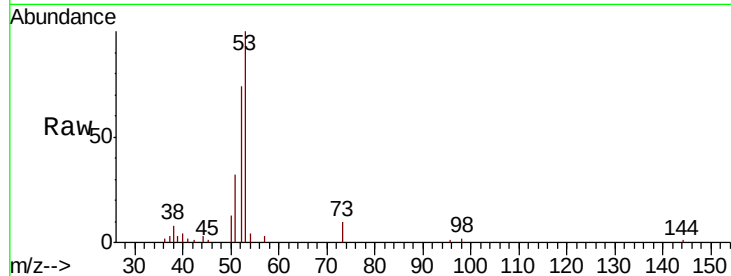
#15
Acrylonitrile
Concen: 22.256 ug/l
RT: 5.17 min Scan# 563
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion:	53	Resp:	21664
Ion	Ratio	Lower	Upper
53	100		
52	79.5	62.9	94.3
51	35.3	26.9	40.3

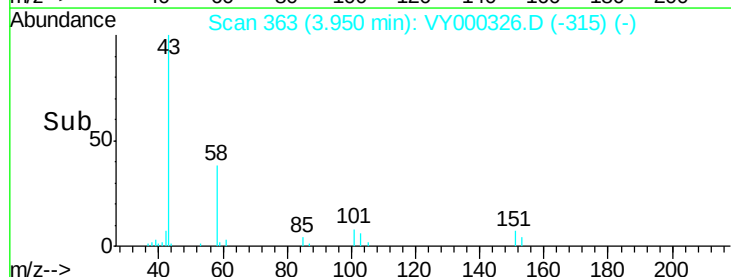
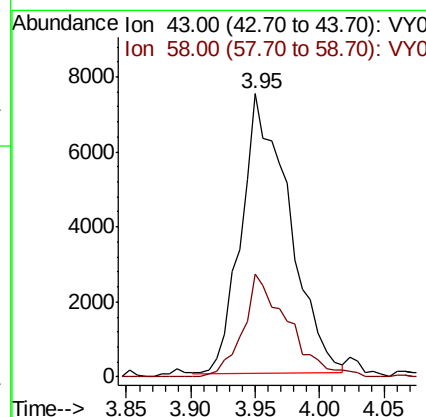
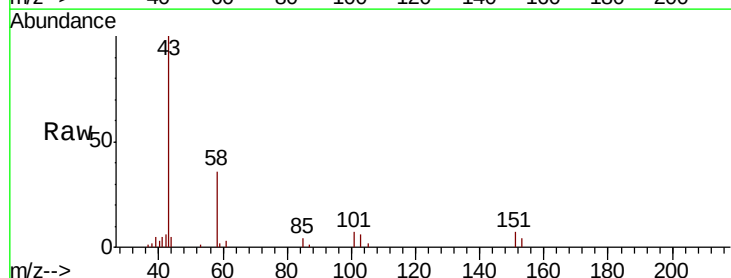
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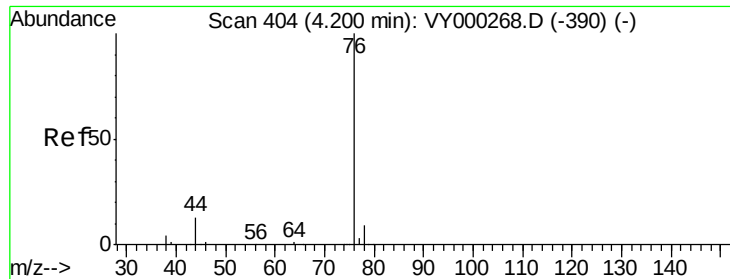
MMDadoda
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#16
Acetone
Concen: 19.322 ug/l
RT: 3.95 min Scan# 363
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion:	43	Resp:	19262
Ion	Ratio	Lower	Upper
43	100		
58	37.1	25.8	38.6





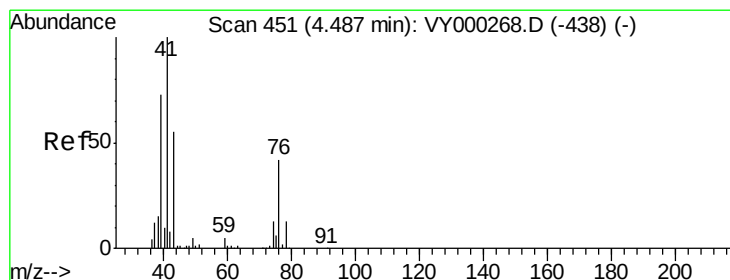
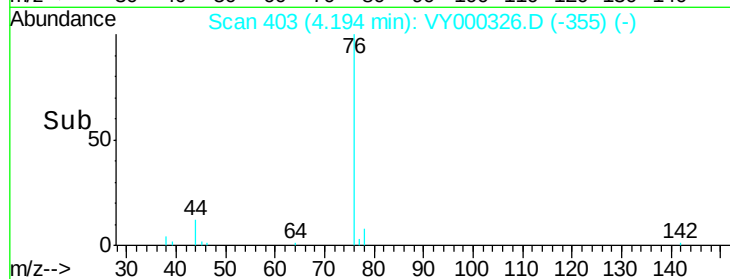
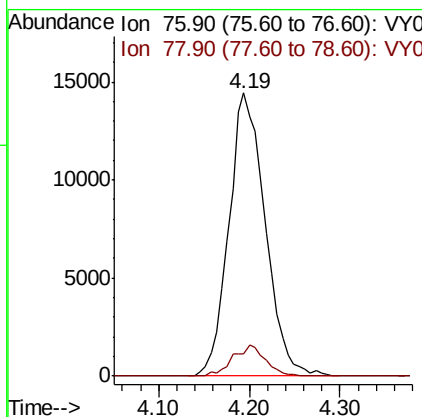
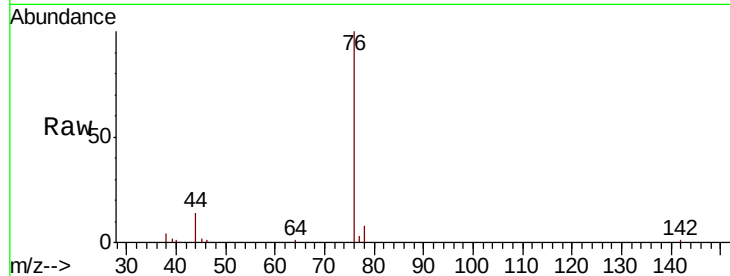
#17
Carbon Disulfide
Concen: 4.319 ug/l
RT: 4.19 min Scan# 403
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 76 Resp: 40083
Ion Ratio Lower Upper
76 100
78 8.1 7.0 10.4

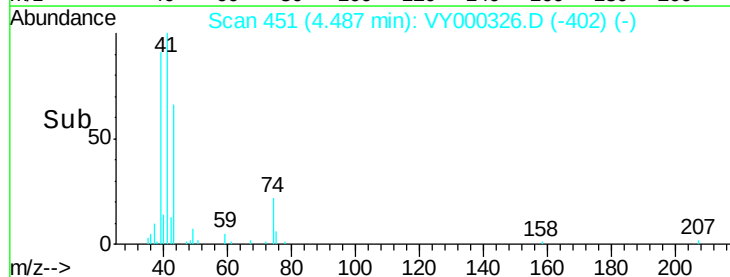
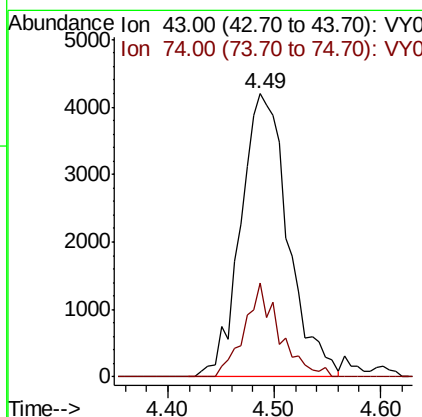
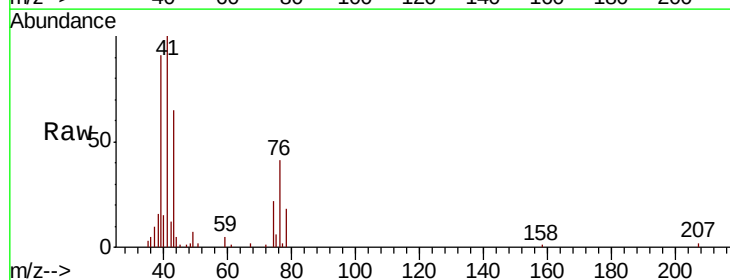
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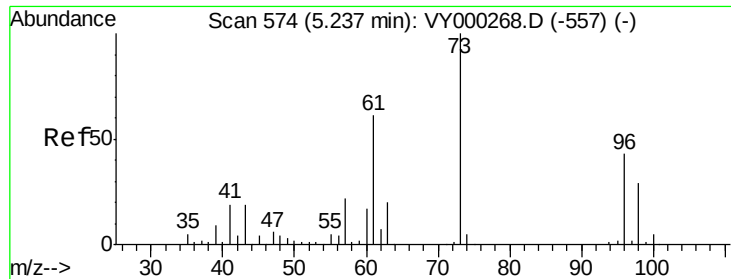
MMDadoda
10/18/2019 12:50:40 AM



#18
Methyl Acetate
Concen: 5.271 ug/l
RT: 4.49 min Scan# 451
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 43 Resp: 13056
Ion Ratio Lower Upper
43 100
74 24.6 20.4 30.6





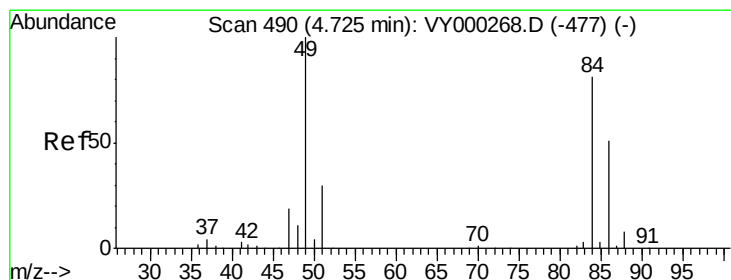
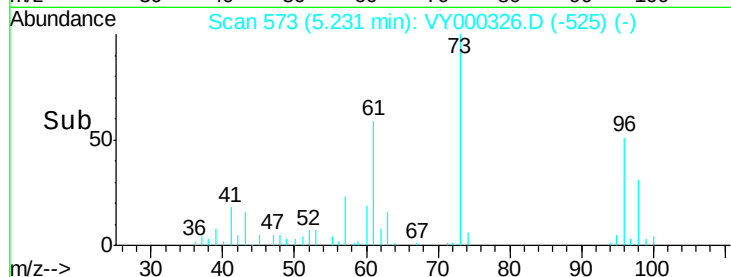
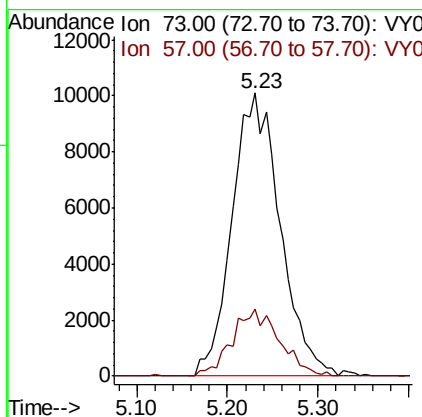
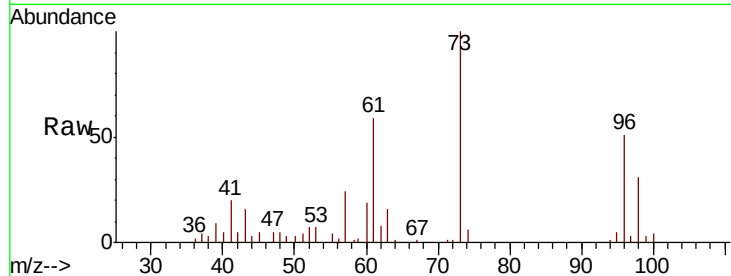
#19
Methyl tert-butyl Ether
Concen: 4.529 ug/l
RT: 5.23 min Scan# 573
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 73 Resp: 37161
Ion Ratio Lower Upper
73 100
57 23.9 17.4 26.0

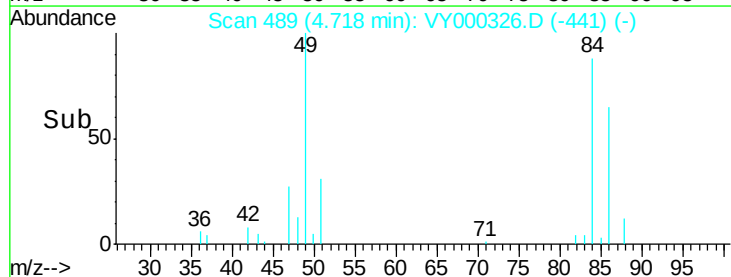
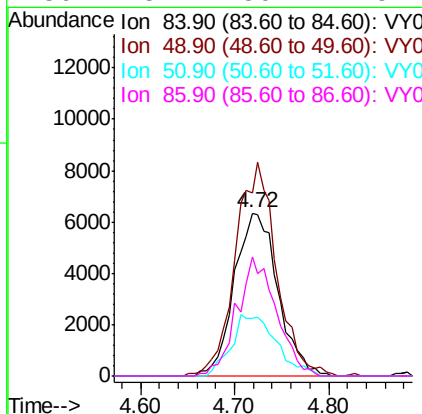
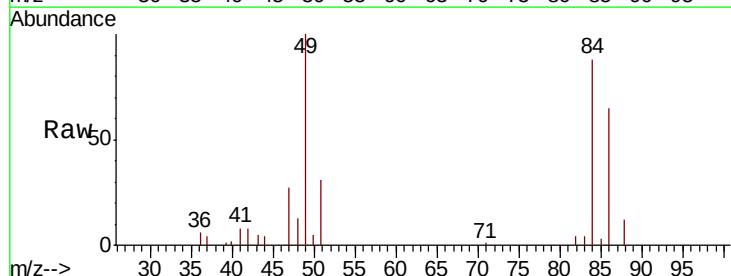
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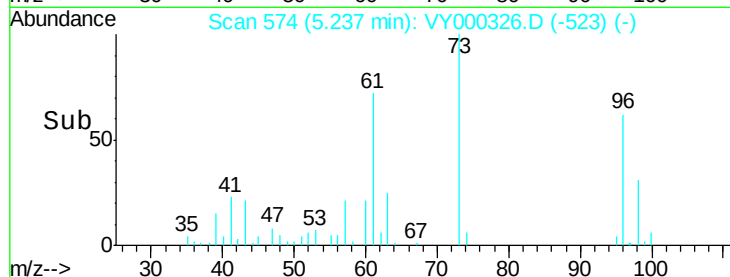
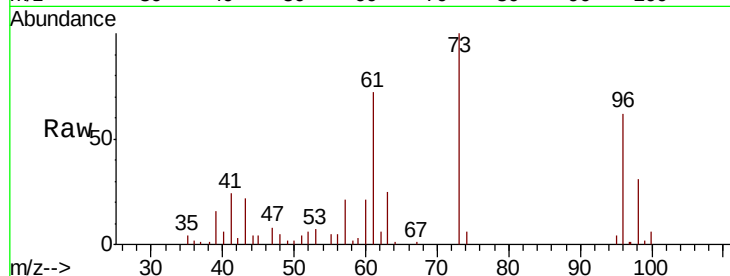
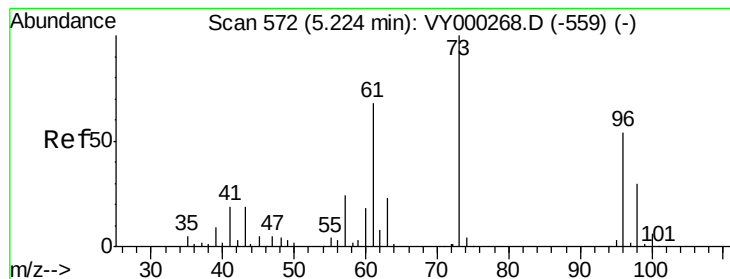
MMDadoda
10/18/2019 12:50:40 AM



#20
Methylene Chloride
Concen: 5.017 ug/l
RT: 4.72 min Scan# 489
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 84 Resp: 20511
Ion Ratio Lower Upper
84 100
49 113.0 99.0 148.4
51 35.3 29.3 43.9
86 73.4 50.2 75.4





#21

trans-1,2-Dichloroethene

Concen: 4.479 ug/l

RT: 5.24 min Scan# 574

Delta R.T. 0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tot Ion:	96	Resp:	15146
Ion	Ratio	Lower	Upper
96	100		
61	117.0	100.4	150.6
98	50.4	44.6	66.8

Instrument :

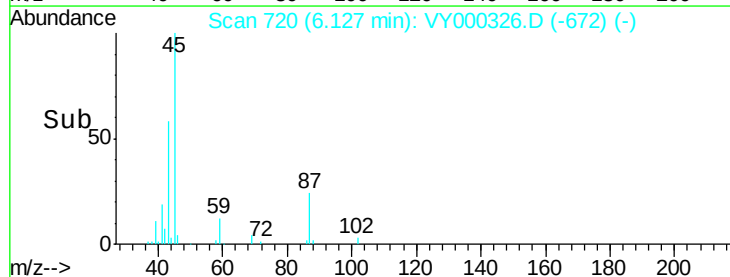
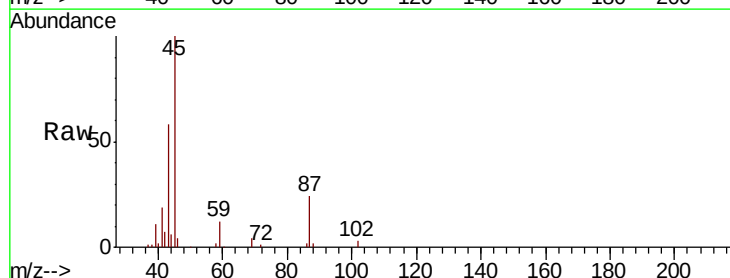
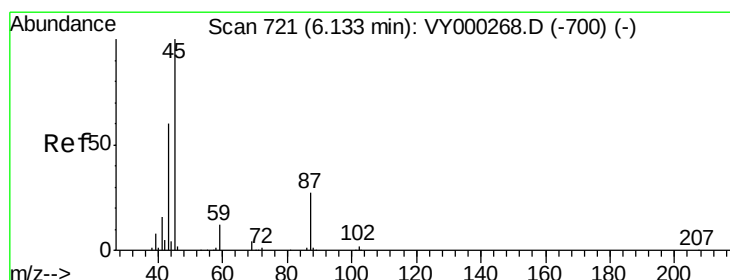
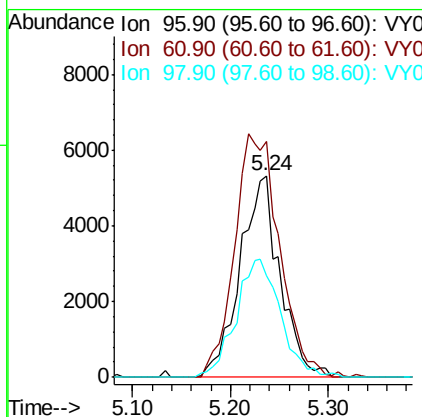
MSVOA_Y

ClientSampleId :

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

Manual Integrations
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10/18/2019 12:50:40 AM



#22

Diisopropyl ether

Concen: 4.554 ug/l

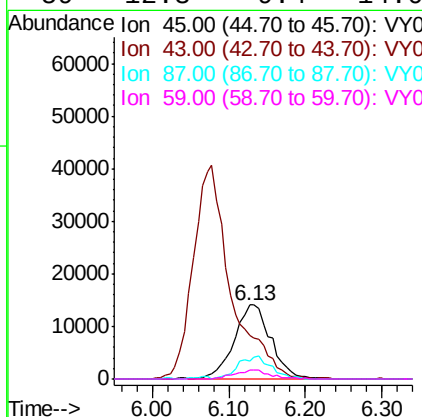
RT: 6.13 min Scan# 720

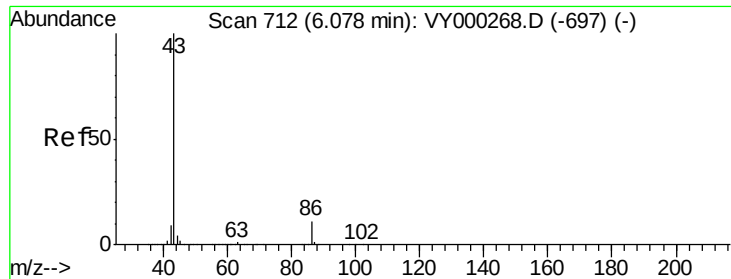
Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion:	45	Resp:	47042
Ion	Ratio	Lower	Upper
45	100		
43	58.4	48.5	72.7
87	24.3	21.5	32.3
59	12.3	9.4	14.0





#23

Vinyl Acetate

Concen: 20.768 ug/l

RT: 6.08 min Scan# 712

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion: 43 Resp: 139965

Ion Ratio Lower Upper

43 100

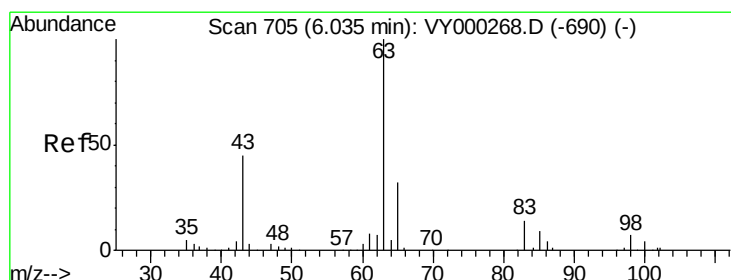
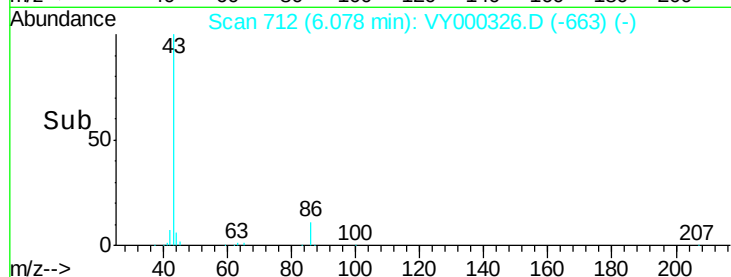
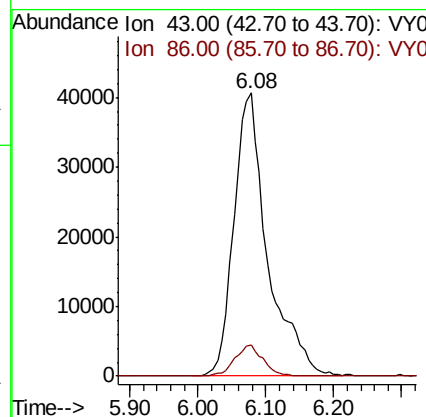
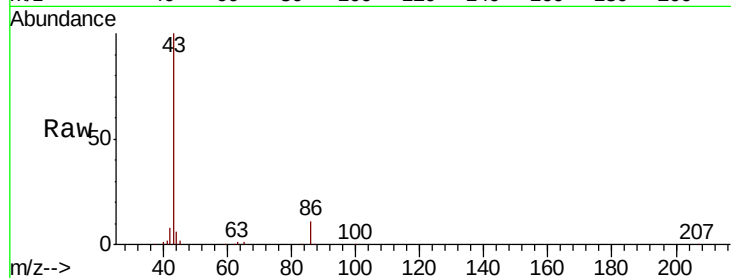
86 11.0 8.6 13.0

Manual Integrations

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MMDadoda

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#24

1,1-Dichloroethane

Concen: 4.546 ug/l

RT: 6.03 min Scan# 704

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

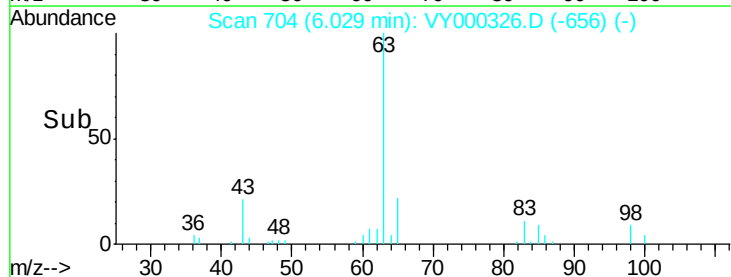
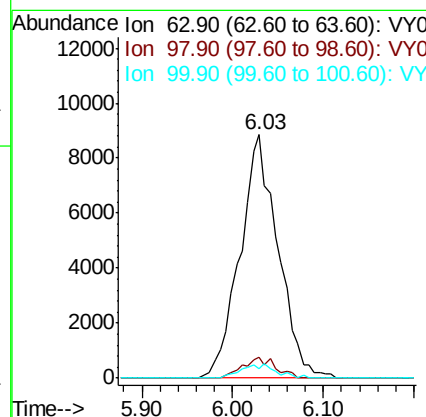
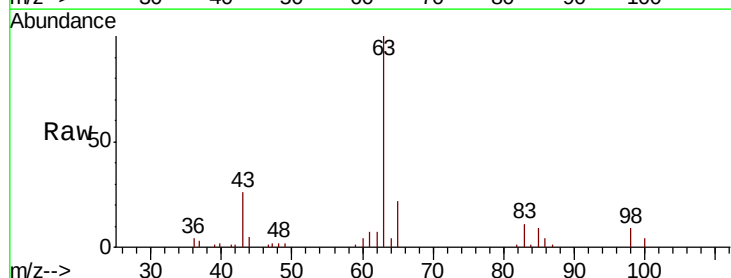
Tgt Ion: 63 Resp: 25633

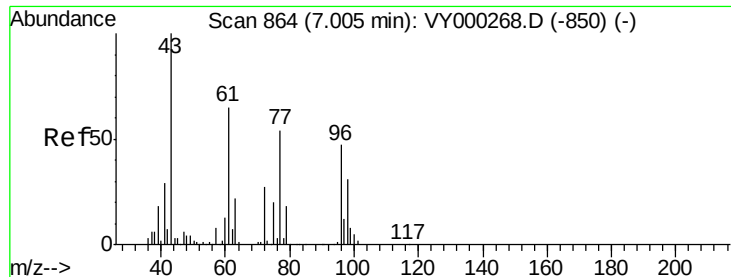
Ion Ratio Lower Upper

63 100

98 8.6 3.5 10.4

100 3.6 2.1 6.2





#25

2-Butanone

Concen: 21.967 ug/l

RT: 7.00 min Scan# 864

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion: 43 Resp: 30848

Ion Ratio Lower Upper

43 100

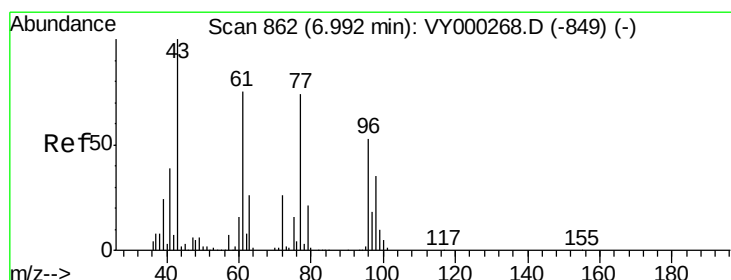
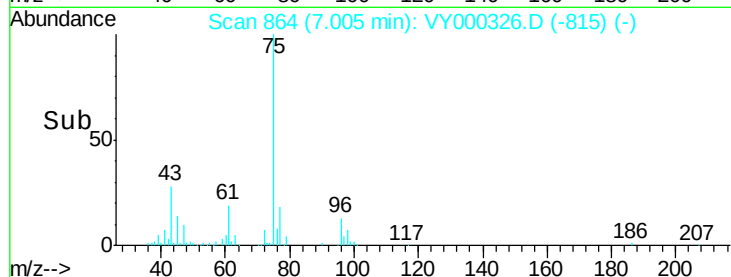
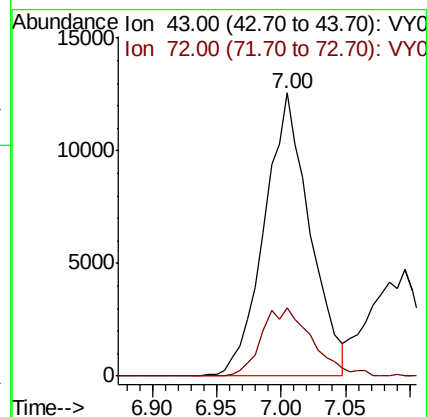
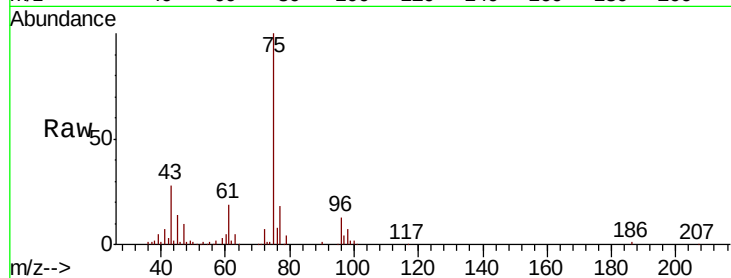
72 24.1 21.4 32.2

Manual Integrations

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10/18/2019 12:50:40 AM



#26

2,2-Dichloropropane

Concen: 5.141 ug/l

RT: 6.99 min Scan# 862

Delta R.T. 0.00 min

Lab File: VY000326.D

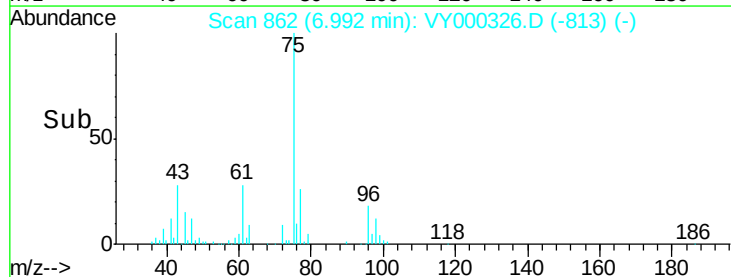
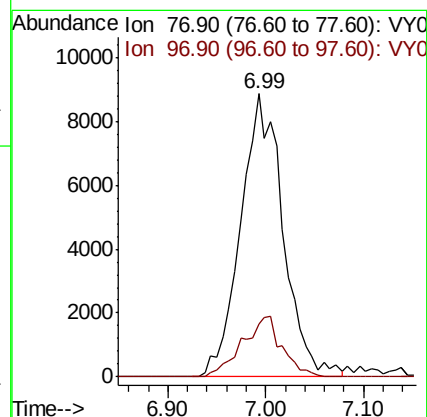
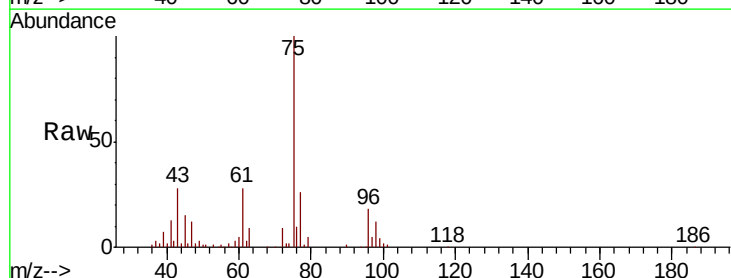
Acq: 16 Oct 2019 13:48

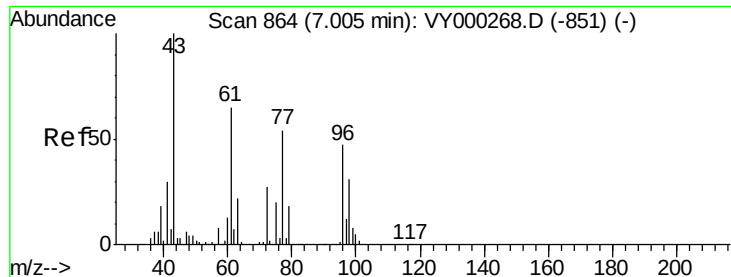
Tgt Ion: 77 Resp: 26713

Ion Ratio Lower Upper

77 100

97 20.0 11.6 34.7





#27

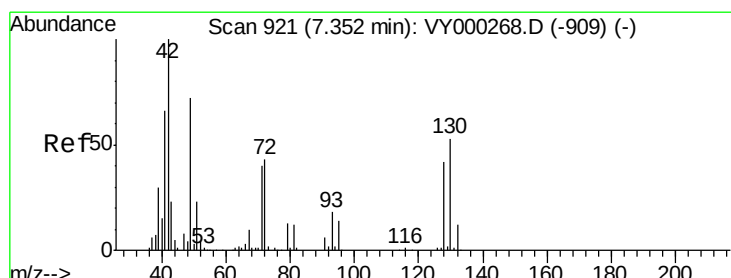
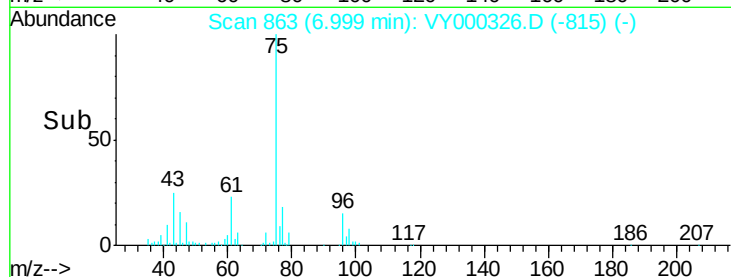
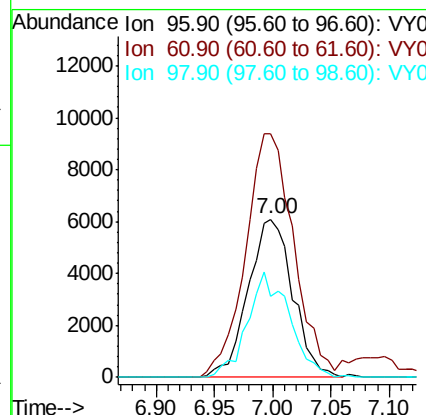
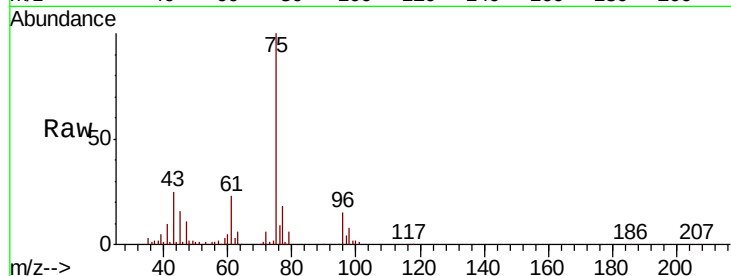
cis-1,2-Dichloroethene
Concen: 4.462 ug/l
RT: 7.00 min Scan# 863
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
96	100		
61	165.5	0.0	289.8
98	62.5	0.0	131.8

Manual Integrations
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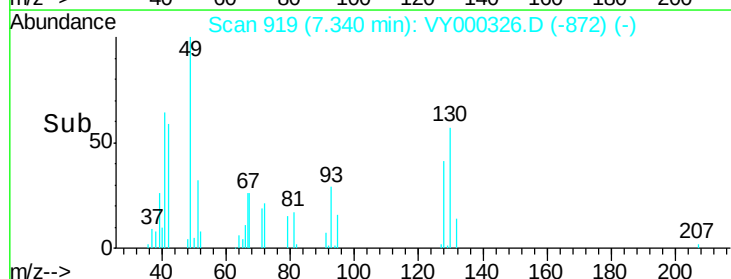
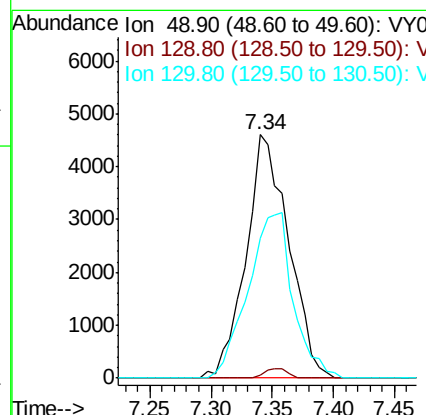
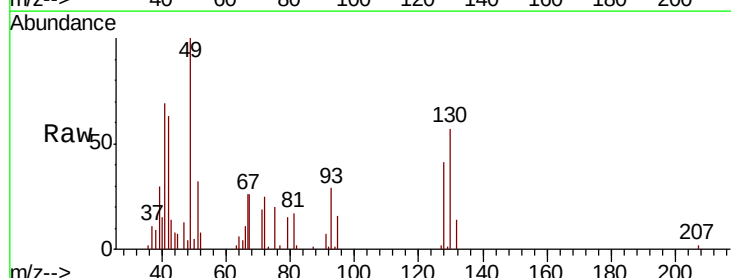
MMDadoda
10/18/2019 12:50:40 AM

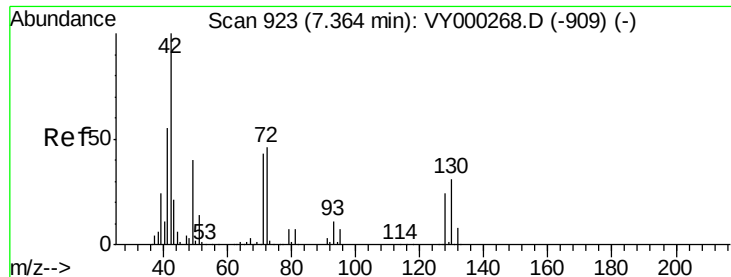


#28

Bromochloromethane
Concen: 4.619 ug/l
RT: 7.34 min Scan# 919
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
49	100		
129	2.1	0.0	4.0
130	71.7	58.2	87.2





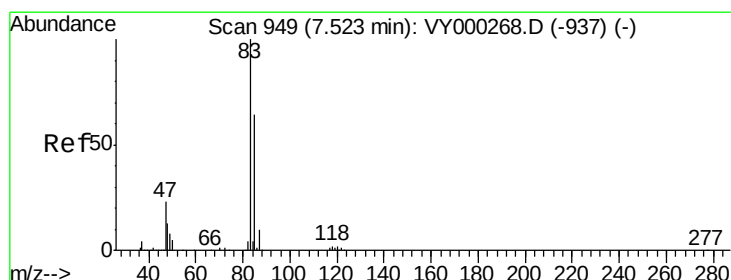
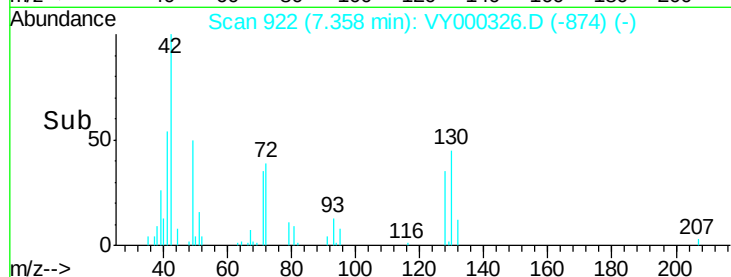
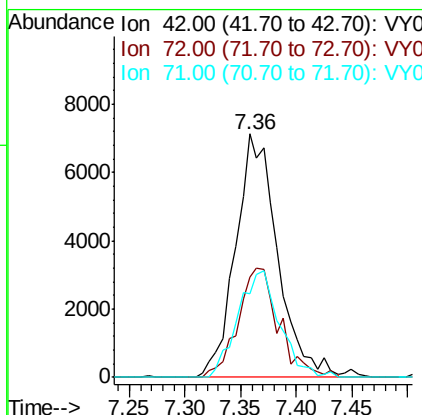
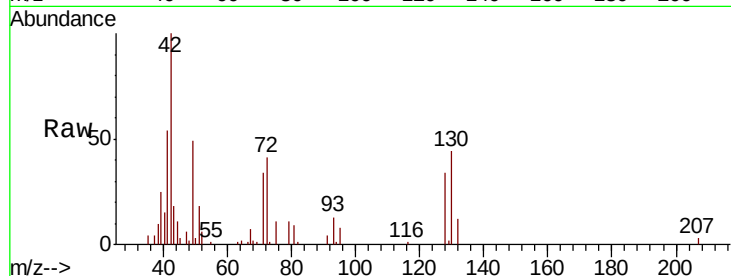
#29
Tetrahydrofuran
Concen: 21.907 ug/l
RT: 7.36 min Scan# 922
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	43.9	34.5	51.7
71	43.6	32.7	49.1

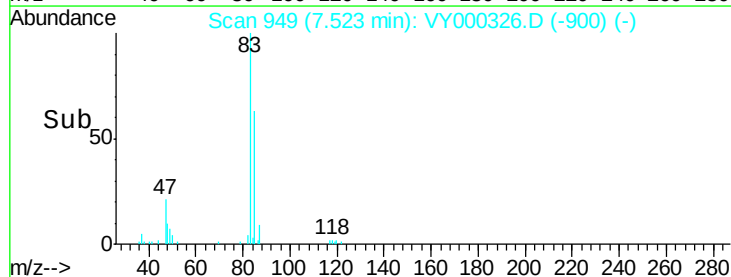
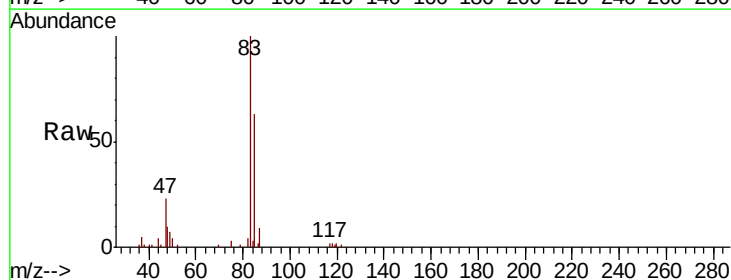
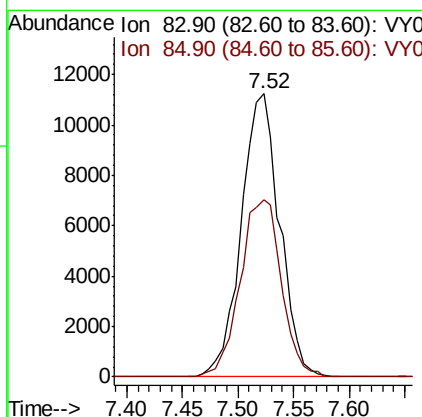
Manual Integrations
APPROVED

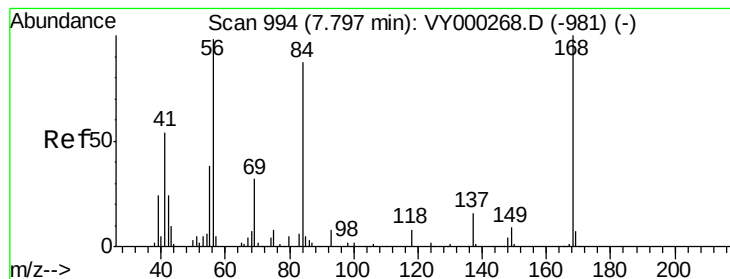
MMDadoda
10/18/2019 12:50:40 AM



#30
Chloroform
Concen: 4.749 ug/l
RT: 7.52 min Scan# 949
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.5	51.4	77.2





#31

Cyclohexane

Concen: 5.224 ug/l

RT: 7.80 min Scan# 994

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

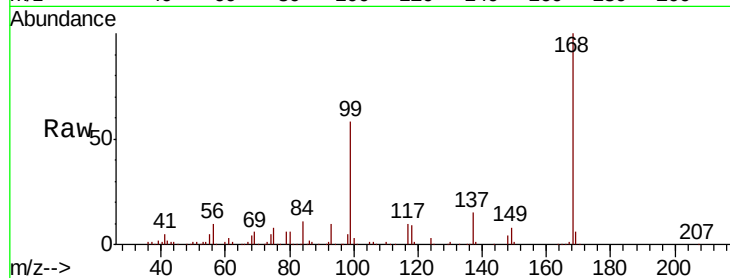
ClientSampleId :

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

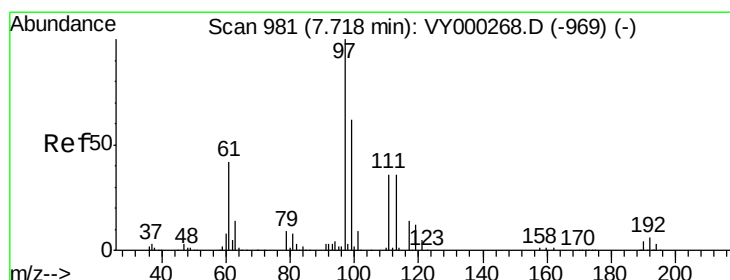
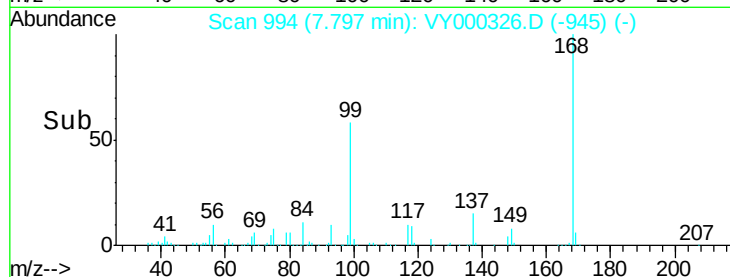
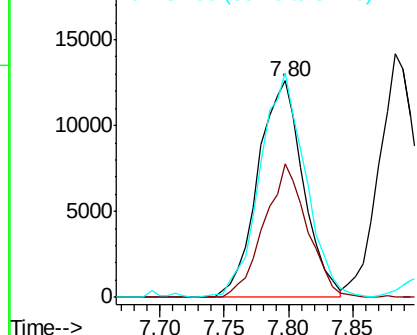
Tot Ion	Ratio	Lower	Upper
56	100		
69	61.9	26.3	39.5#
84	103.9	70.8	106.2

Manual Integrations
APPROVED

MMDadoda
10/18/2019 12:50:40 AM



Abundance Ion 56.00 (55.70 to 56.70): VY0
Ion 69.00 (68.70 to 69.70): VY0
Ion 84.00 (83.70 to 84.70): VY0



#32

1,1,1-Trichloroethane

Concen: 4.695 ug/l

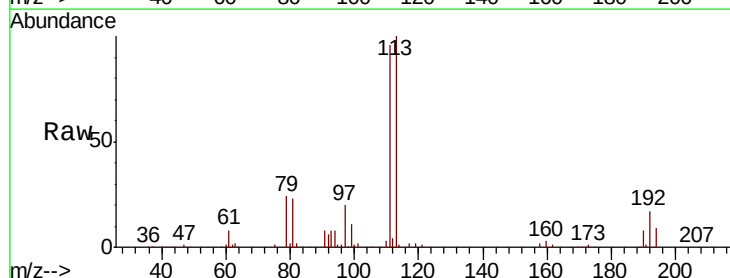
RT: 7.72 min Scan# 981

Delta R.T. 0.00 min

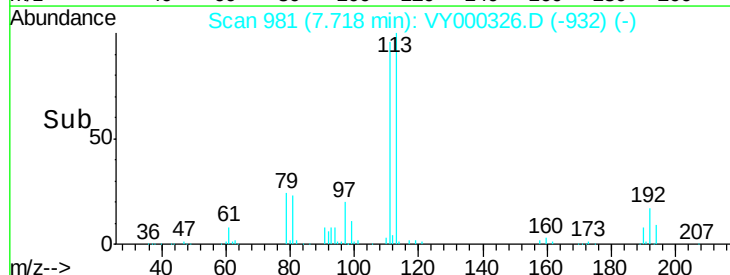
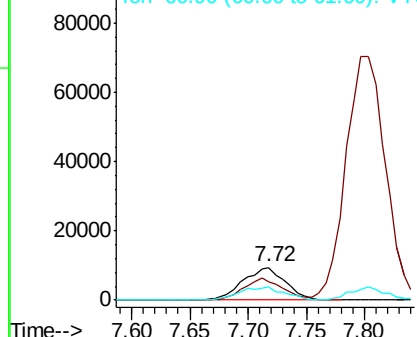
Lab File: VY000326.D

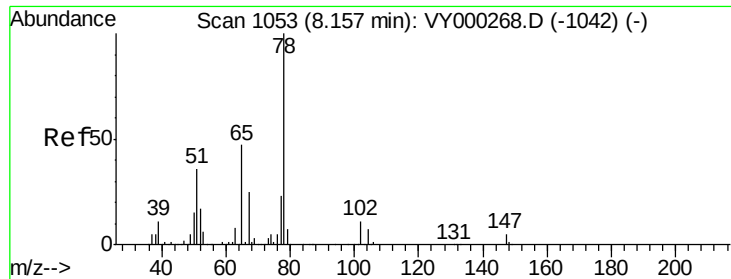
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
97	100		
99	62.9	51.7	77.5
61	41.8	34.5	51.7



Abundance Ion 96.90 (96.60 to 97.60): VY0
Ion 98.90 (98.60 to 99.60): VY0
Ion 60.90 (60.60 to 61.60): VY0





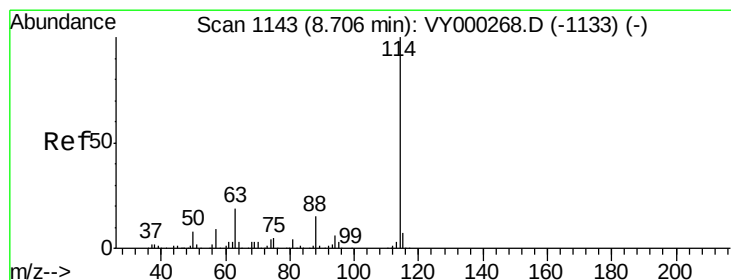
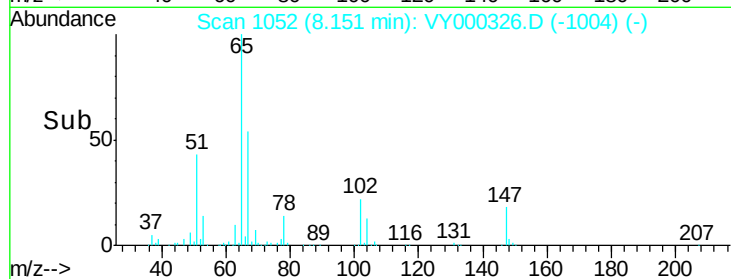
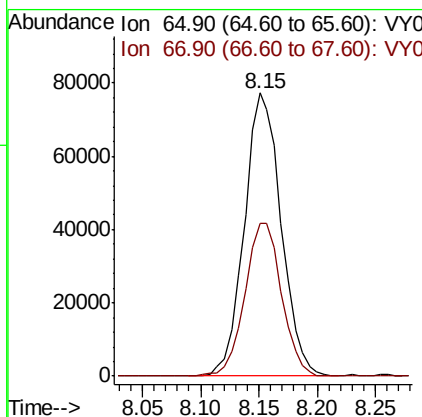
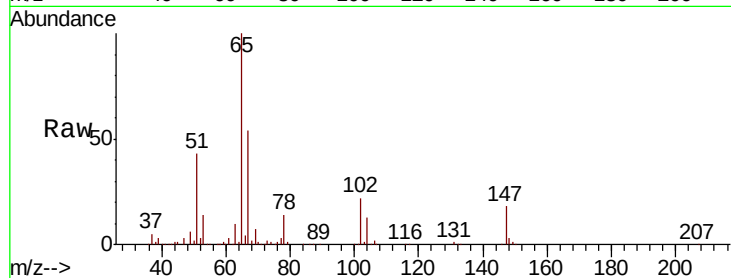
#33
 1,2-Dichloroethane-d4
 Concen: 55.026 ug/l
 RT: 8.15 min Scan# 1052
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
65	100		
67	54.2	0.0	109.4

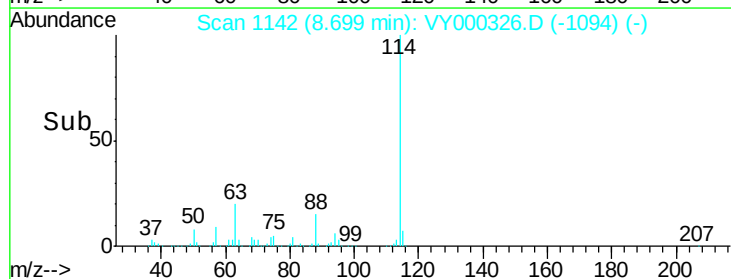
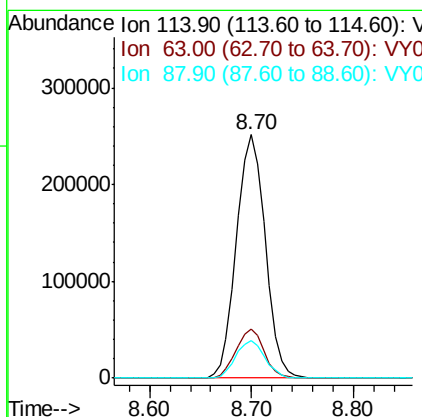
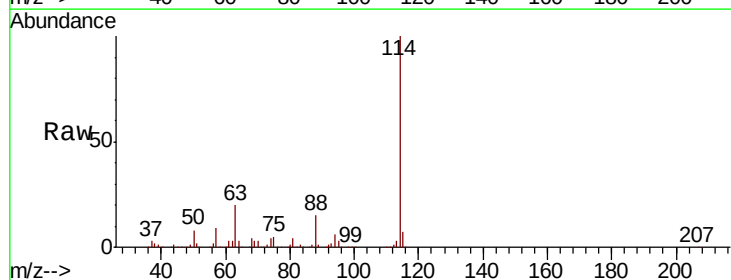
Manual Integrations
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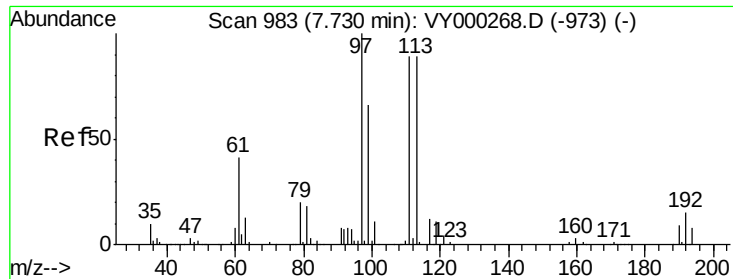
MMDadoda
 10/18/2019 12:50:40 AM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.70 min Scan# 1142
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
114	100		
63	20.1	0.0	37.2
88	15.2	0.0	30.2





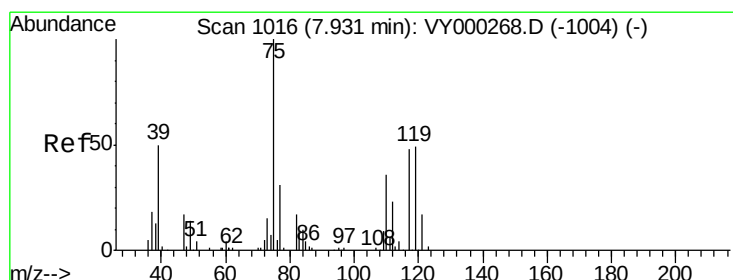
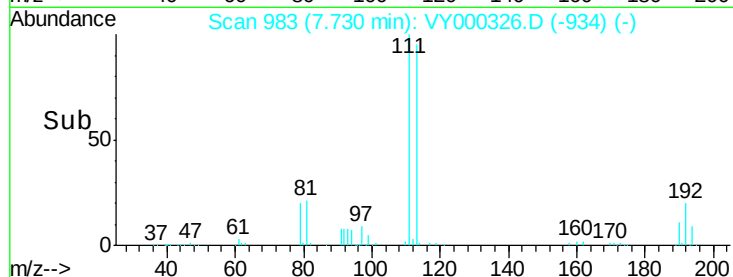
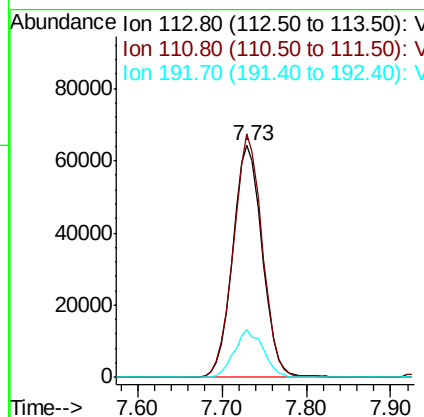
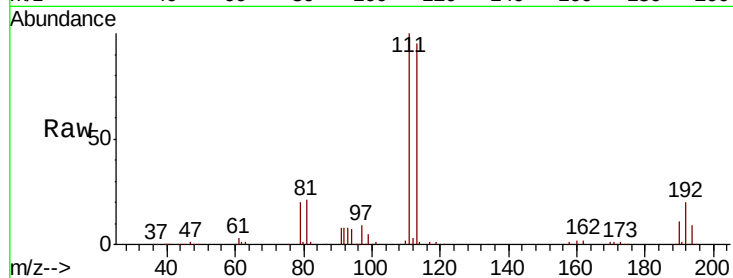
#35
Dibromofluoromethane
Concen: 50.992 ug/l
RT: 7.73 min Scan# 983
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Resp	Lower	Upper
113	100	151595		
111	102.5	81.6	122.4	
192	20.2	15.3	22.9	

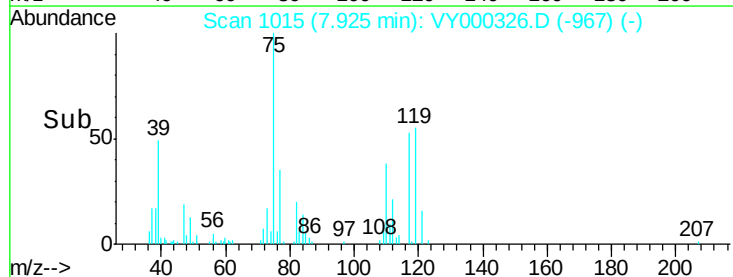
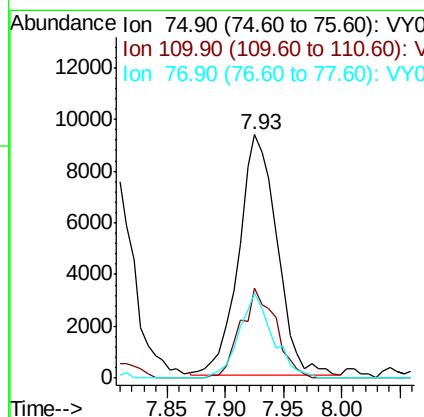
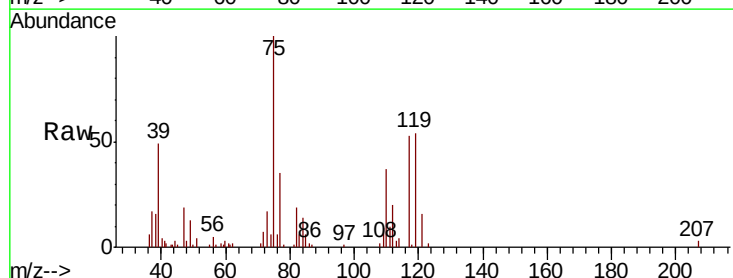
Manual Integrations
APPROVED

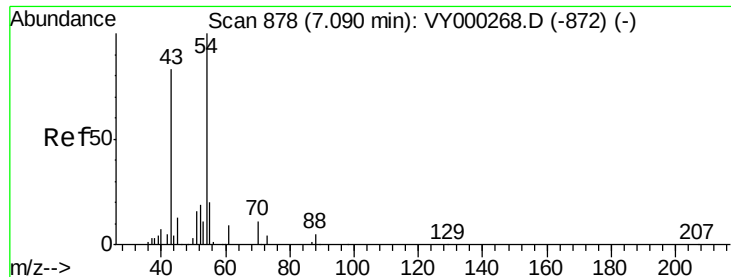
MMDadoda
10/18/2019 12:50:40 AM



#36
1,1-Dichloropropene
Concen: 4.422 ug/l
RT: 7.93 min Scan# 1015
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	21338		
110	34.6	18.4	55.4	
77	31.2	25.0	37.6	





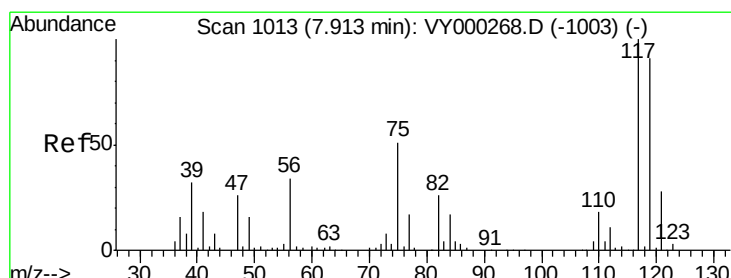
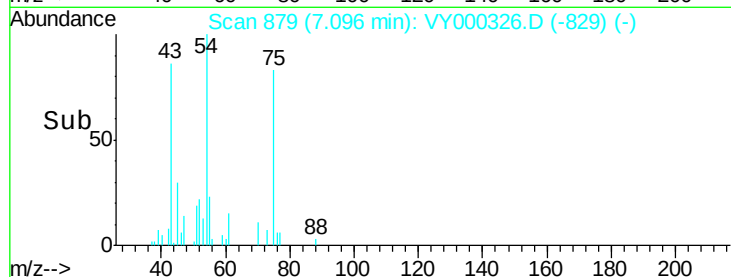
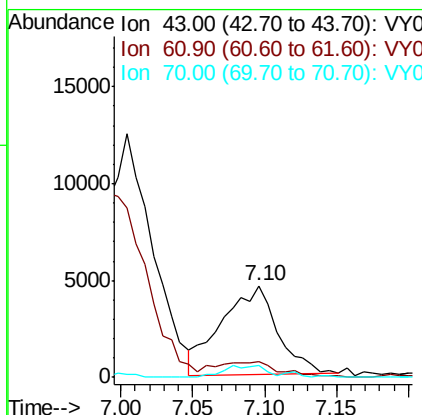
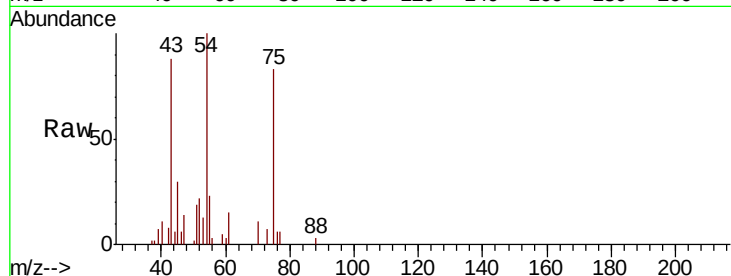
#37
Ethyl Acetate
Concen: 4.349 ug/l
RT: 7.10 min Scan# 879
Delta R.T. 0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	20.9	12.1	18.1#
70	9.7	8.7	13.1

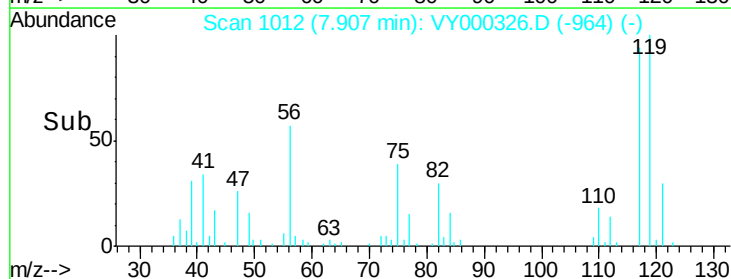
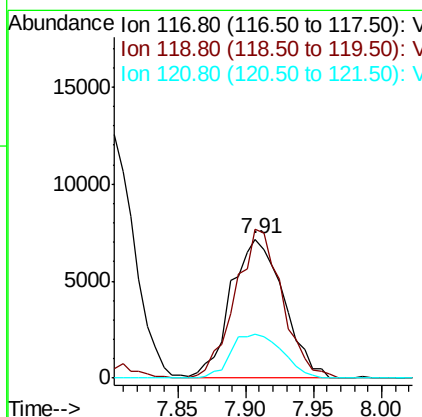
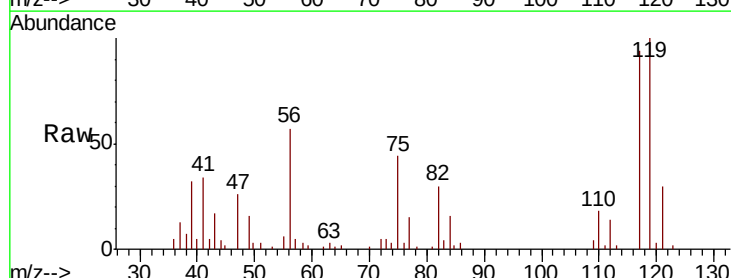
Manual Integrations
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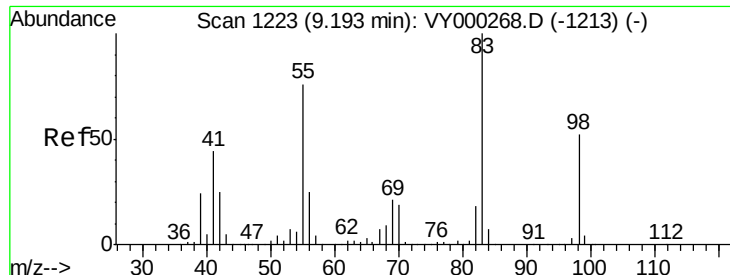
MMDadoda
10/18/2019 12:50:40 AM



#38
Carbon Tetrachloride
Concen: 4.158 ug/l
RT: 7.91 min Scan# 1012
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
117	100		
119	106.6	72.8	109.2
121	31.9	22.2	33.2





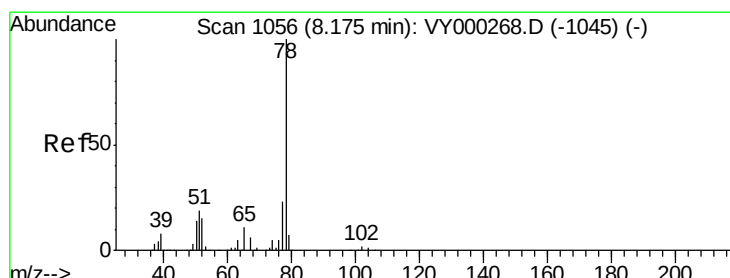
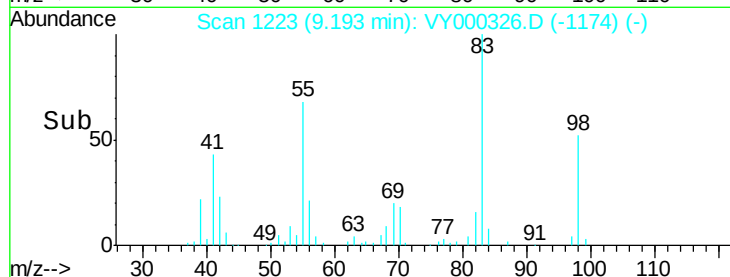
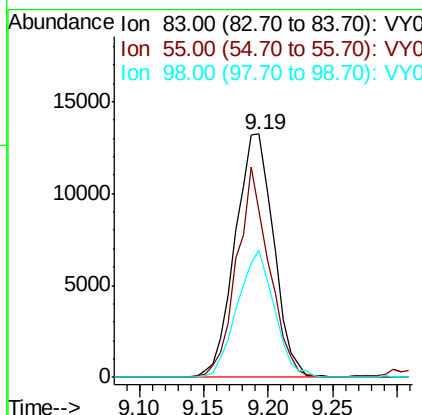
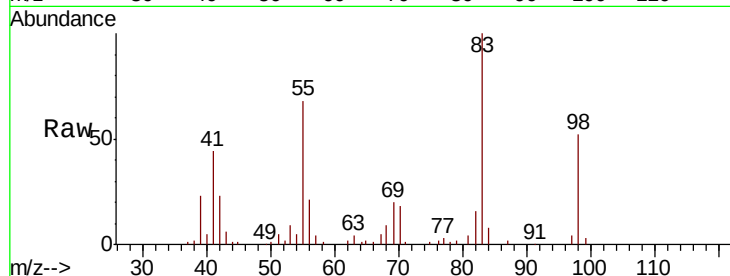
#39
Methylvlcyclohexane
Concen: 4.338 ug/l
RT: 9.19 min Scan# 1223
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	83.00	Resp	27394
Ion	Ratio	Lower	Upper
83	100		
55	68.4	60.9	91.3
98	52.2	41.8	62.6

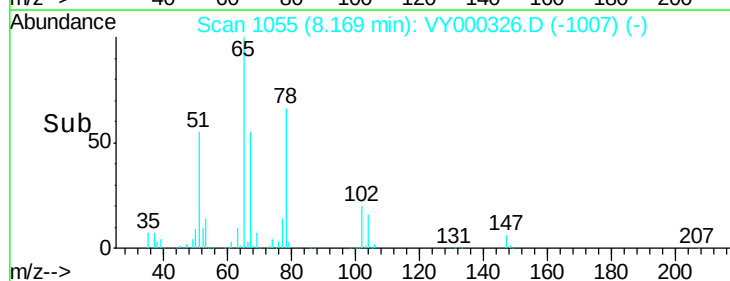
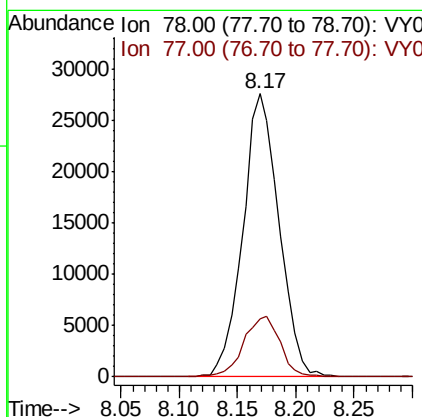
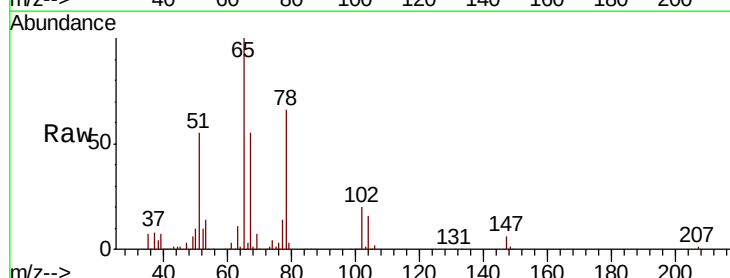
Manual Integrations
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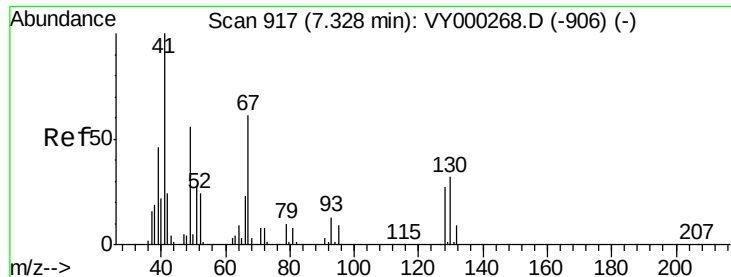
MMDadoda
10/18/2019 12:50:40 AM



#40
Benzene
Concen: 4.293 ug/l
RT: 8.17 min Scan# 1055
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	78.00	Resp	59859
Ion	Ratio	Lower	Upper
78	100		
77	20.5	18.8	28.2





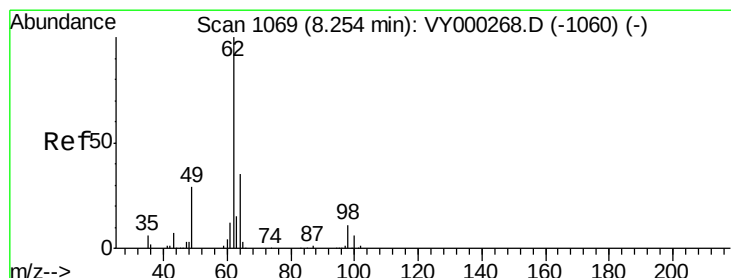
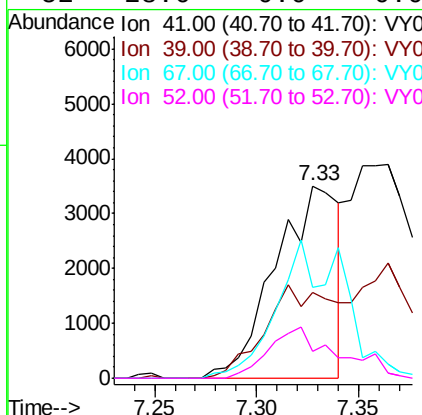
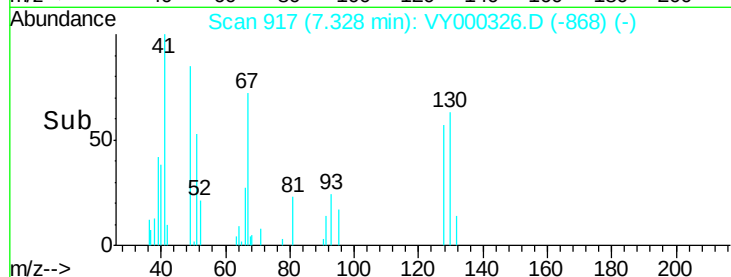
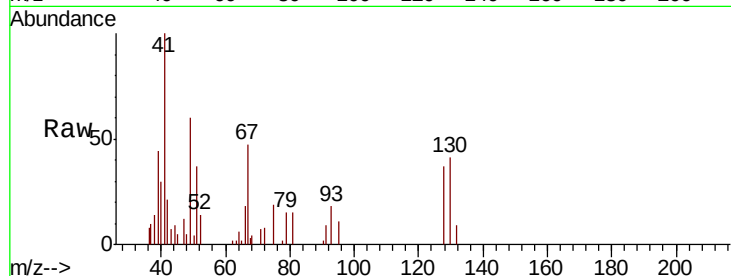
#41
Methacrylonitrile
Concen: 5.559 ug/l
RT: 7.33 min Scan# 917
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ion	Ratio	Lower	Upper
41	100			
39	57.8	110.2	165.2#	
67	76.3	0.0	0.0#	
52	28.6	0.0	0.0#	

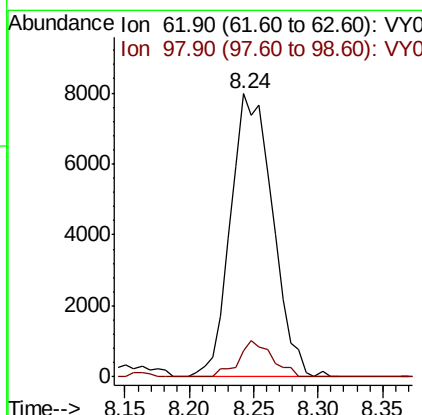
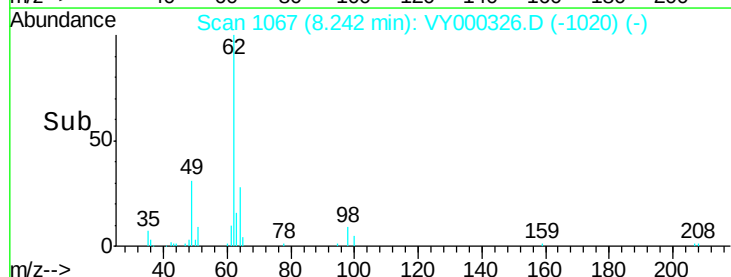
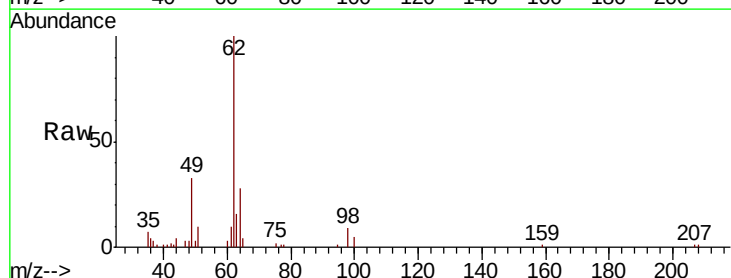
Manual Integrations
APPROVED

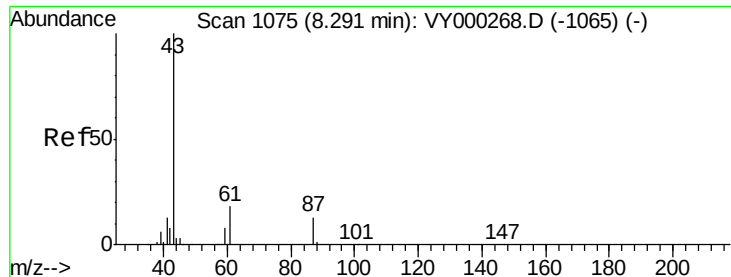
MMDadoda
10/18/2019 12:50:40 AM



#42
1,2-Dichloroethane
Concen: 4.541 ug/l
RT: 8.24 min Scan# 1067
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ion	Ratio	Lower	Upper
62	100			
98	10.1	0.0	20.6	





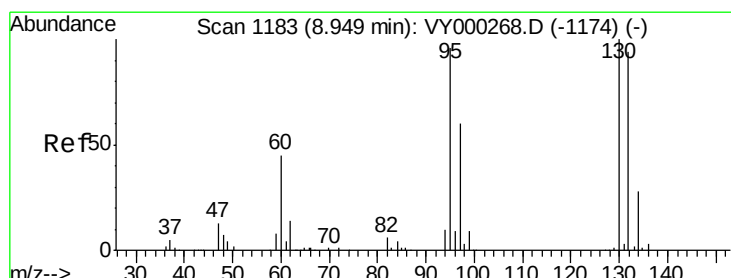
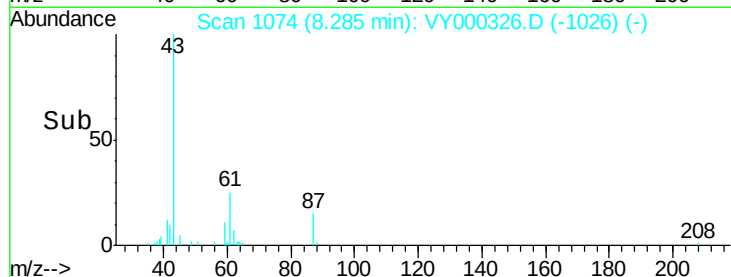
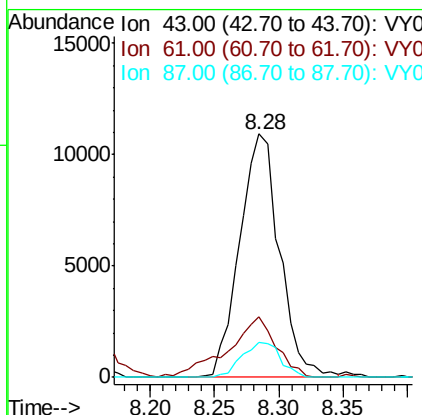
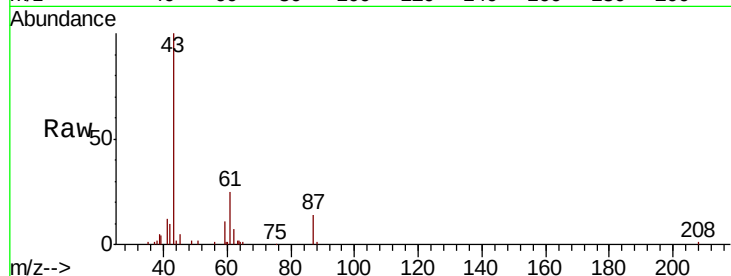
#43
Isopropyl Acetate
Concen: 4.309 ug/l
RT: 8.28 min Scan# 1074
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
43	100		
61	30.0	22.3	33.5
87	13.8	10.9	16.3

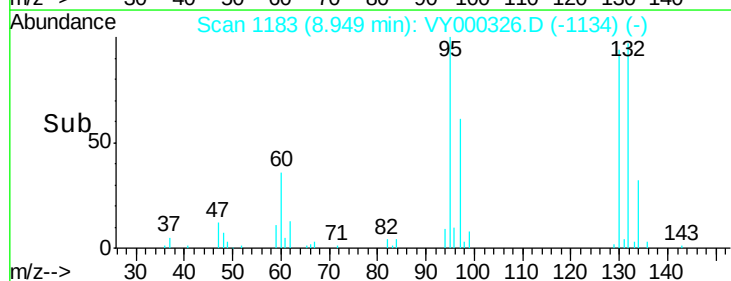
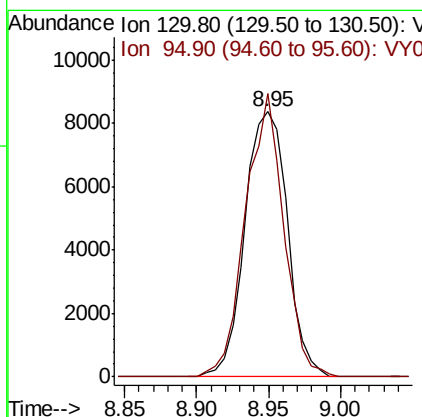
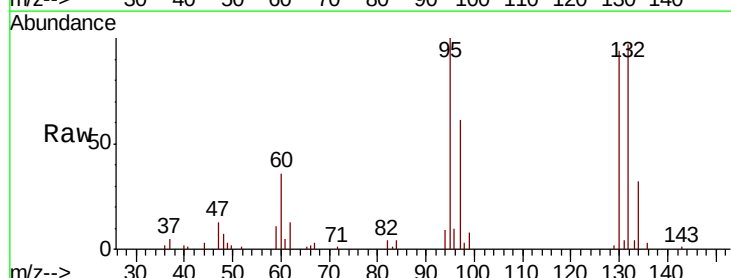
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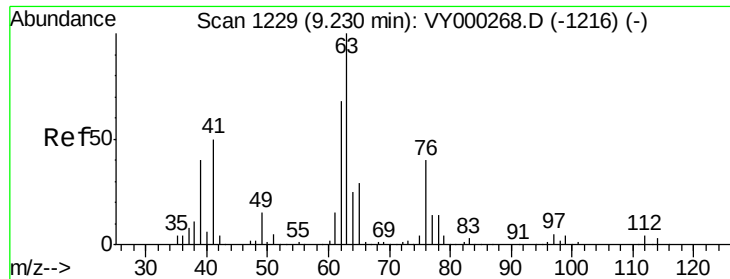
MMDadoda
10/18/2019 12:50:40 AM



#44
Trichloroethene
Concen: 4.363 ug/l
RT: 8.95 min Scan# 1183
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
130	100		
95	106.7	0.0	191.4





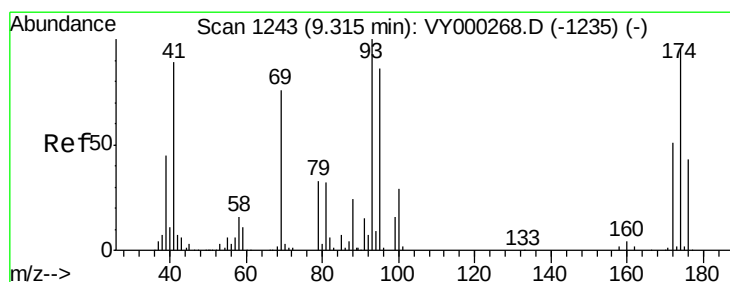
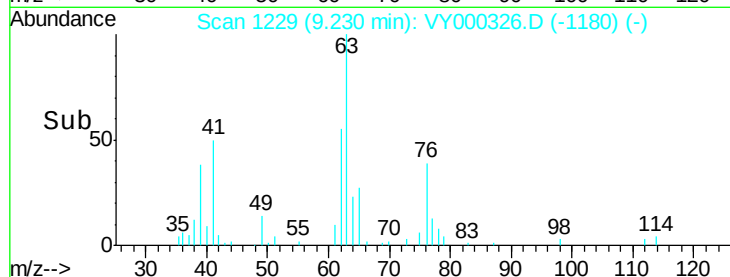
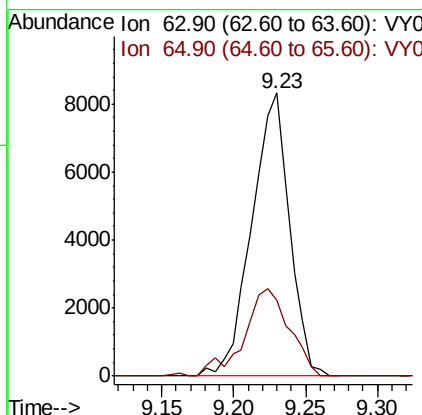
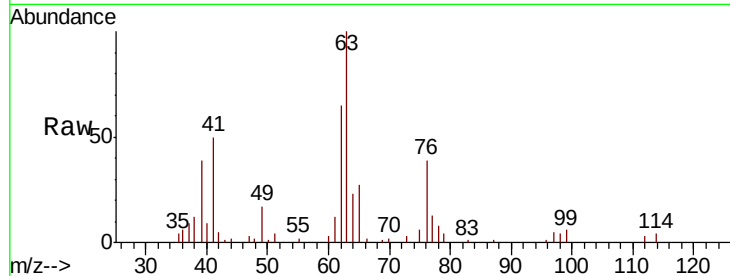
#45
 1,2-Dichloropropane
 Concen: 4.411 ug/l
 RT: 9.23 min Scan# 1229
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion: 63 Resp: 15094
 Ion Ratio Lower Upper
 63 100
 65 26.9 23.2 34.8

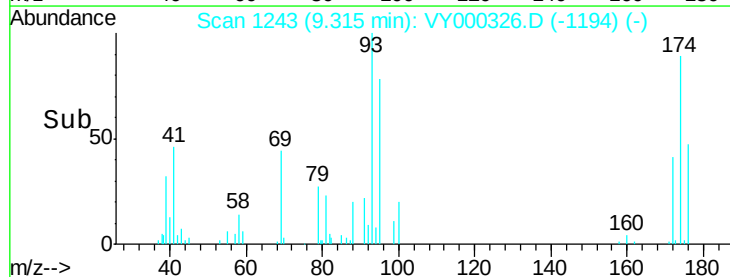
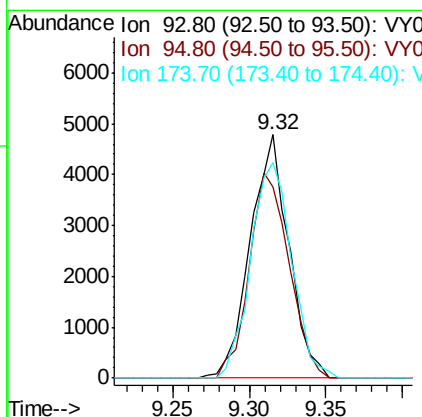
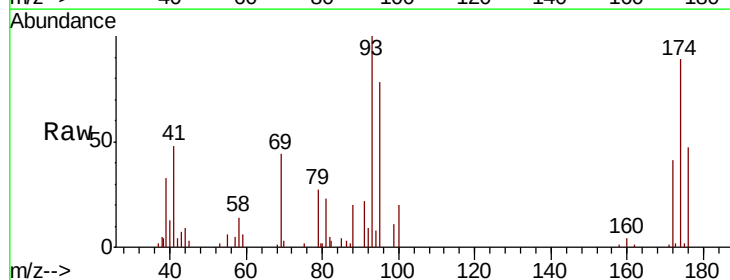
Manual Integrations
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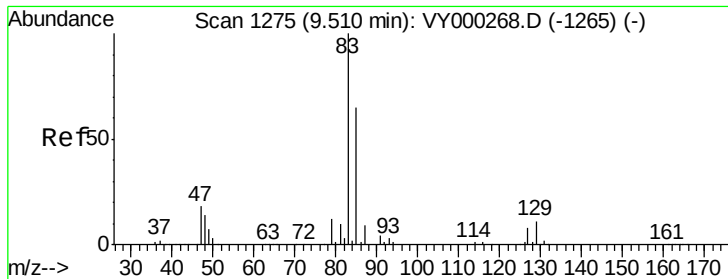
MMDadoda
 10/18/2019 12:50:40 AM



#46
 Dibromomethane
 Concen: 4.381 ug/l
 RT: 9.32 min Scan# 1243
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion: 93 Resp: 8381
 Ion Ratio Lower Upper
 93 100
 95 87.1 68.2 102.2
 174 94.3 79.8 119.6





#47

Bromodichloromethane

Concen: 4.194 ug/l

RT: 9.50 min Scan# 1274

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

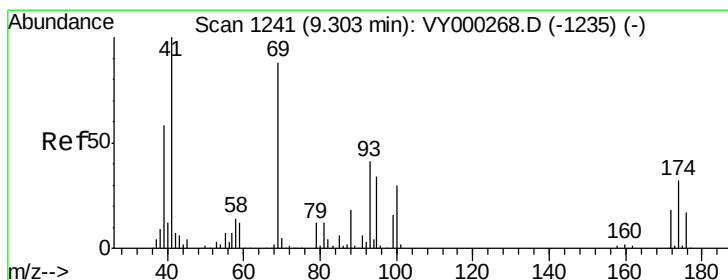
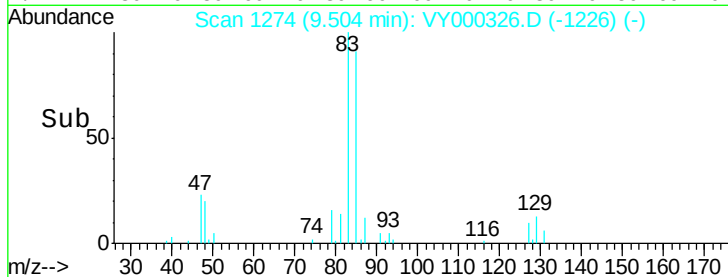
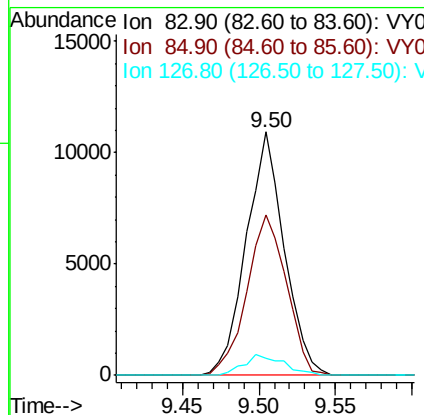
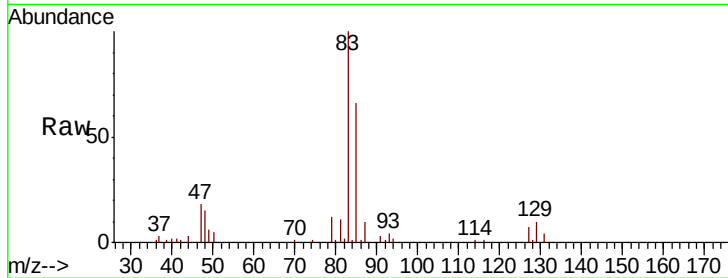
ClientSampleId :

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

Tot Ion:	83	Resp:	18908
Ion	Ratio	Lower	Upper
83	100		
85	65.8	52.2	78.2
127	7.2	6.3	9.5

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MMDadoda
10/18/2019 12:50:40 AM



#48

Methyl methacrylate

Concen: 4.010 ug/l

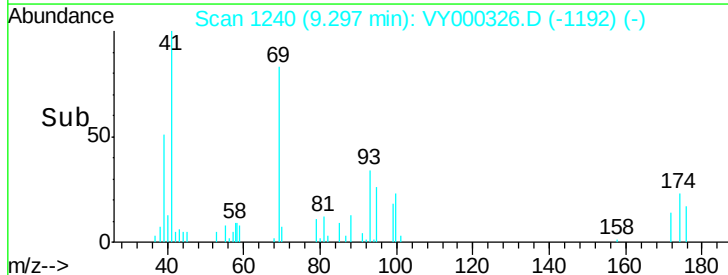
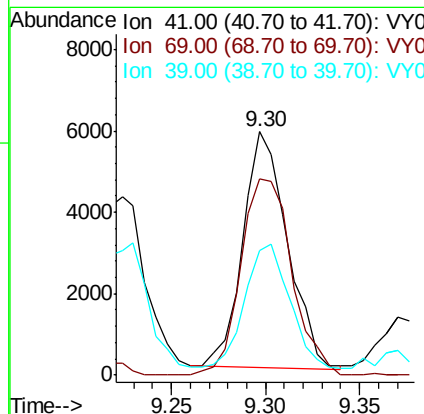
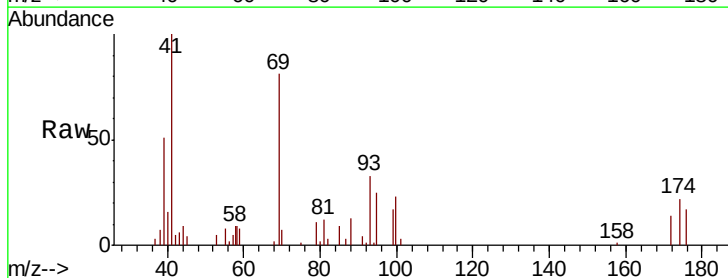
RT: 9.30 min Scan# 1240

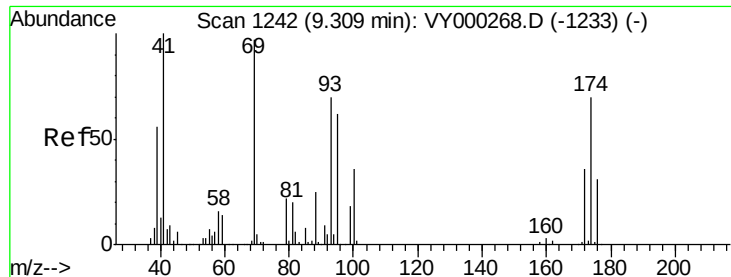
Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion:	41	Resp:	9548
Ion	Ratio	Lower	Upper
41	100		
69	94.6	70.0	105.0
39	60.0	47.7	71.5





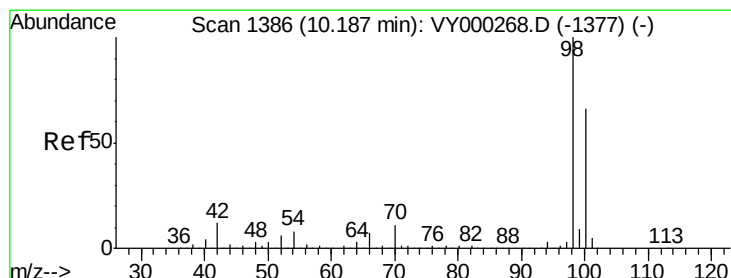
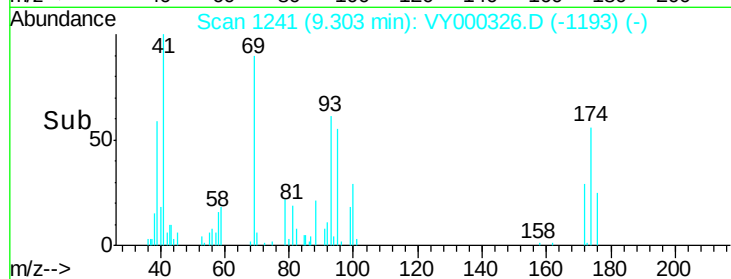
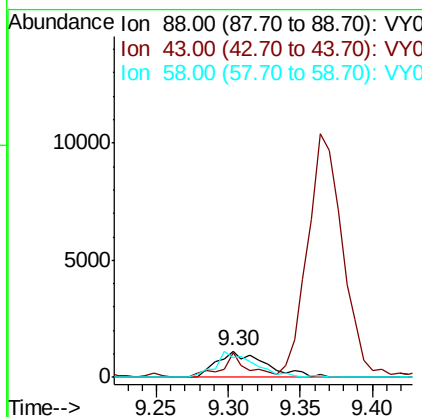
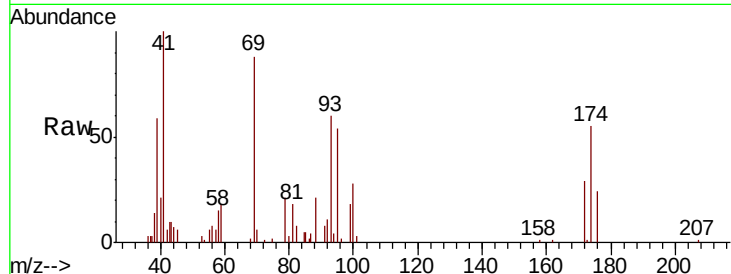
#49
1,4-Dioxane
Concen: 88.869 ug/l
RT: 9.30 min Scan# 1241
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
88	100		
43	53.4	25.6	38.4#
58	78.6	54.6	81.8

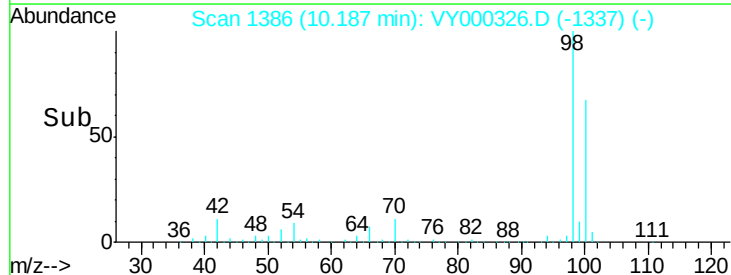
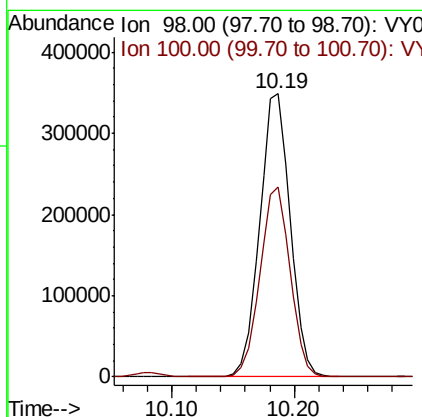
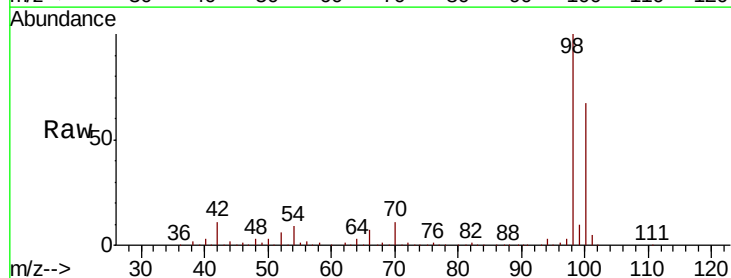
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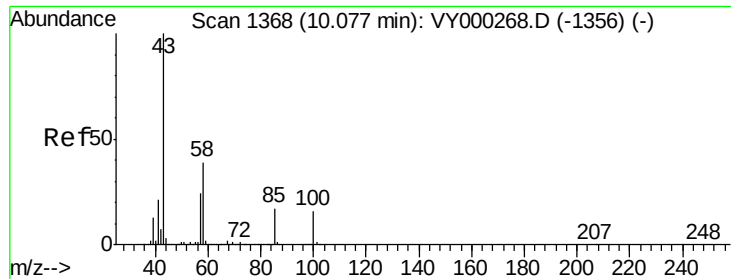
MMDadoda
10/18/2019 12:50:40 AM



#50
Toluene-d8
Concen: 53.009 ug/l
RT: 10.19 min Scan# 1386
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
98	100		
100	66.2	52.8	79.2





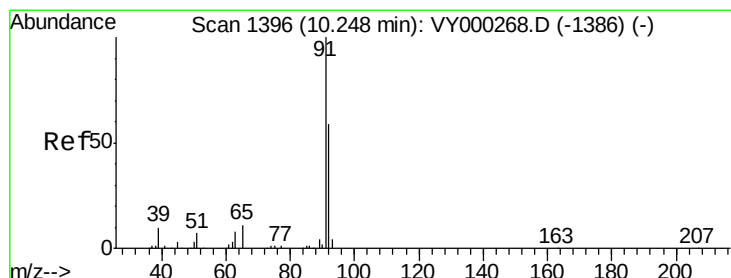
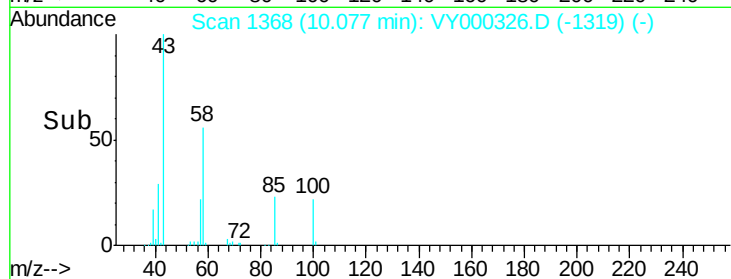
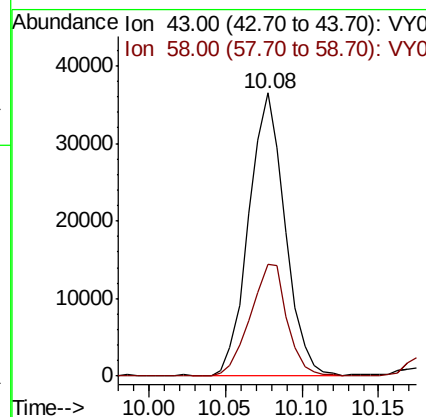
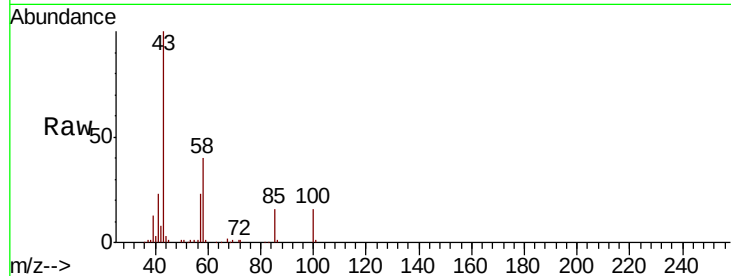
#51
4-Methyl-2-Pentanone
Concen: 21.476 ug/l
RT: 10.08 min Scan# 1368
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 43 Resp: 60176
Ion Ratio Lower Upper
43 100
58 40.1 31.0 46.6

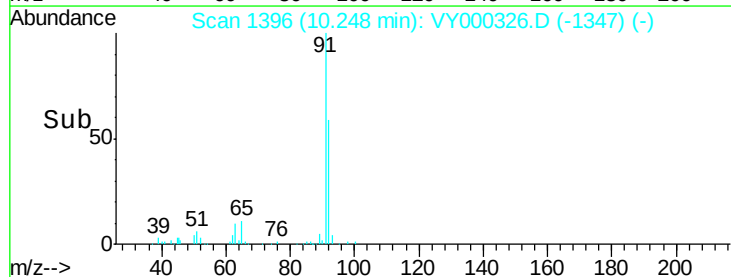
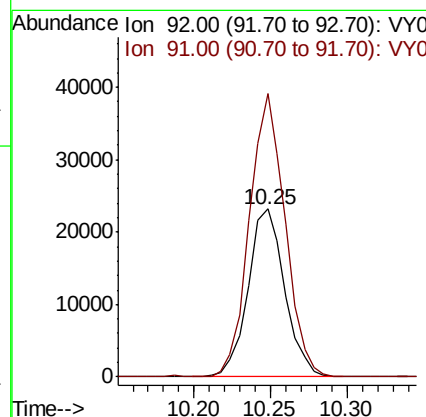
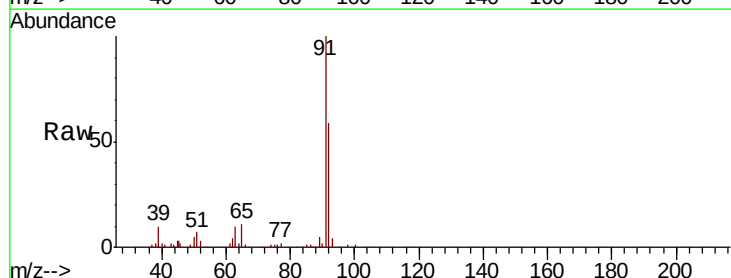
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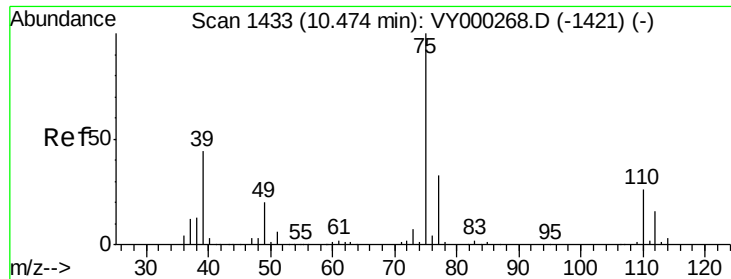
MMDadoda
10/18/2019 12:50:40 AM



#52
Toluene
Concen: 4.344 ug/l
RT: 10.25 min Scan# 1396
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 92 Resp: 38457
Ion Ratio Lower Upper
92 100
91 164.4 136.6 205.0





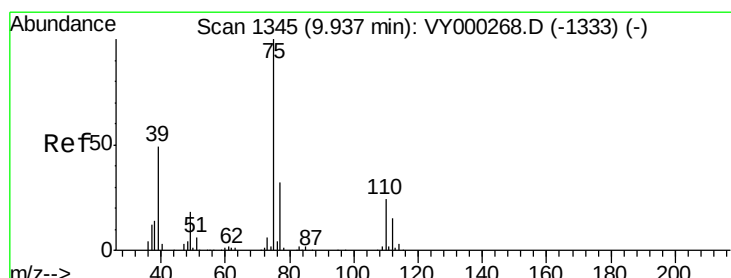
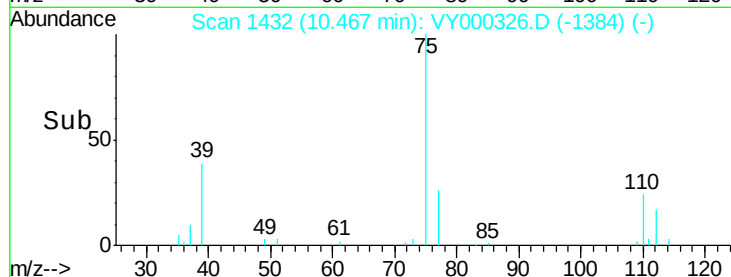
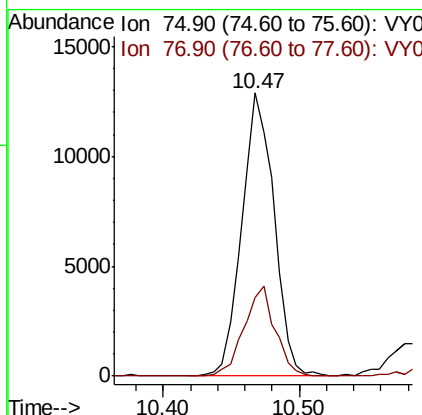
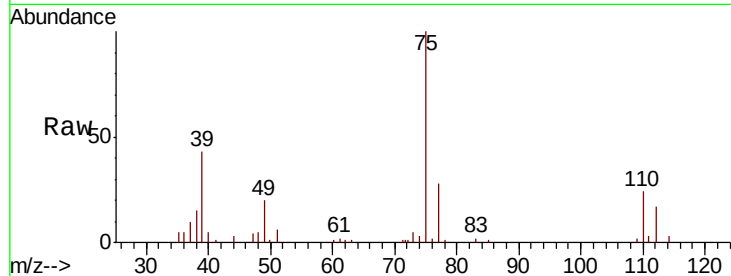
#53
t-1,3-Dichloropropene
Concen: 4.421 ug/l
RT: 10.47 min Scan# 1432
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 75 Resp: 21361
Ion Ratio Lower Upper
75 100
77 27.9 26.0 39.0

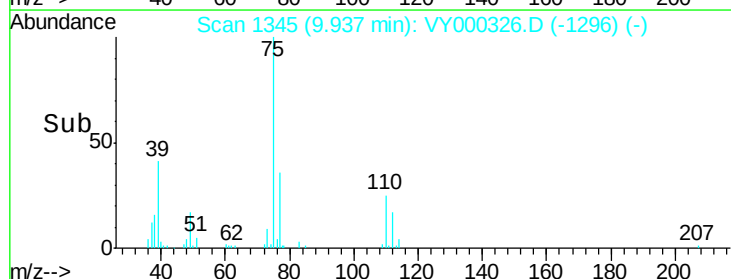
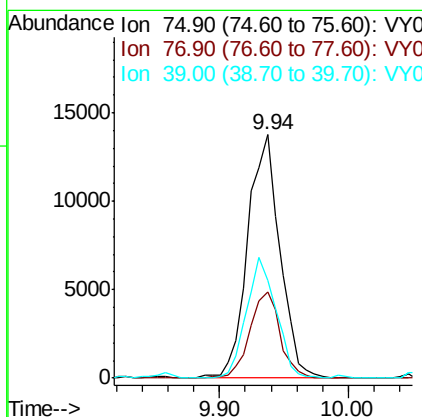
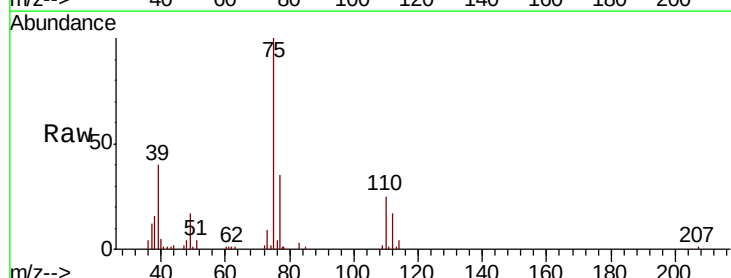
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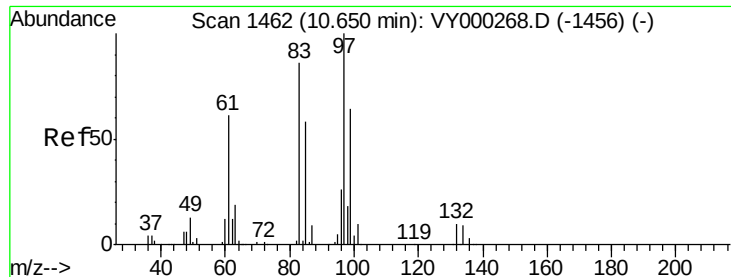
MMDadoda
10/18/2019 12:50:40 AM



#54
cis-1,3-Dichloropropene
Concen: 4.303 ug/l
RT: 9.94 min Scan# 1345
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 75 Resp: 23608
Ion Ratio Lower Upper
75 100
77 35.5 26.0 39.0
39 40.2 38.8 58.2





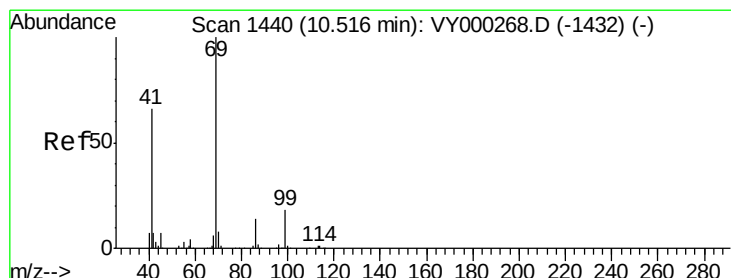
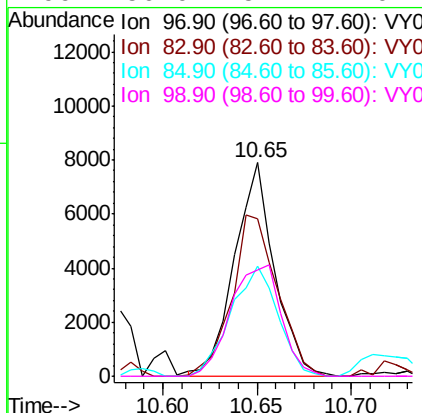
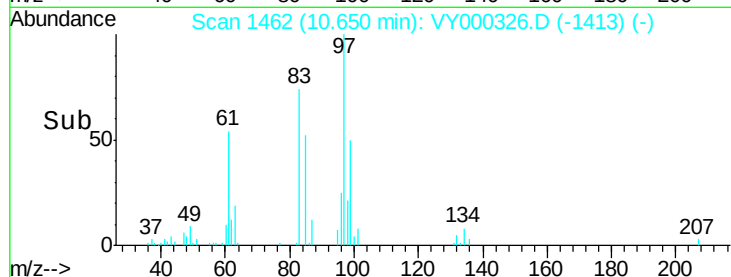
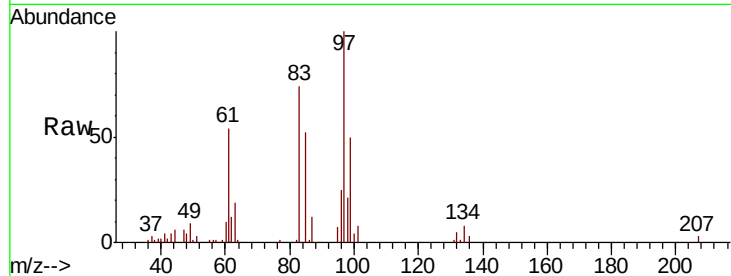
#55
 1,1,2-Trichloroethane
 Concen: 4.177 ug/l
 RT: 10.65 min Scan# 1462
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion:	97	Resp:	11619
Ion	Ratio	Lower	Upper
97	100		
83	73.9	69.0	103.6
85	51.5	46.2	69.4
99	50.0	51.1	76.7#

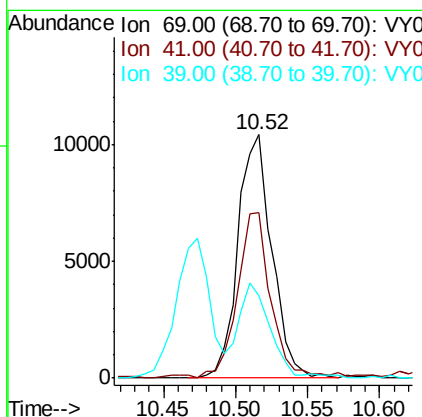
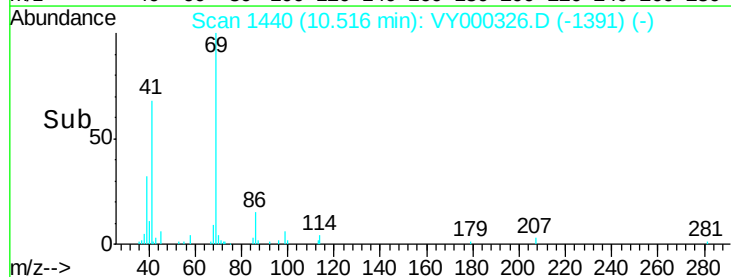
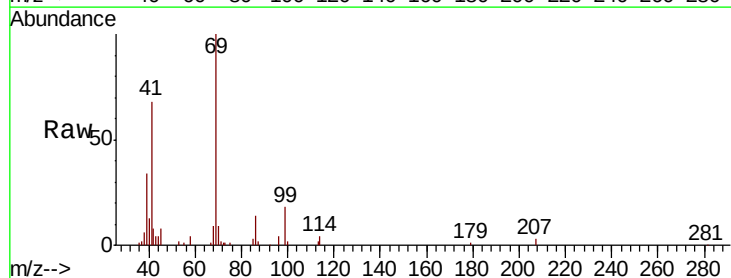
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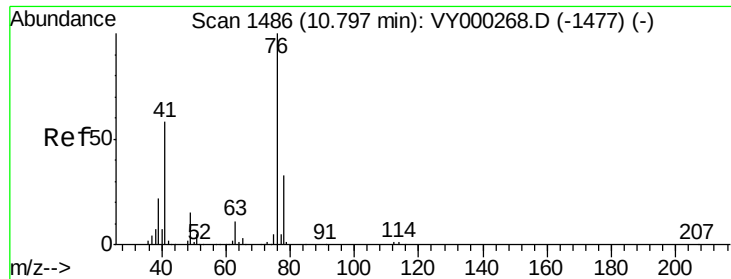
MMDadoda
 10/18/2019 12:50:40 AM



#56
 Ethyl methacrylate
 Concen: 4.305 ug/l
 RT: 10.52 min Scan# 1440
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion:	69	Resp:	17068
Ion	Ratio	Lower	Upper
69	100		
41	67.6	52.5	78.7
39	33.5	26.7	40.1





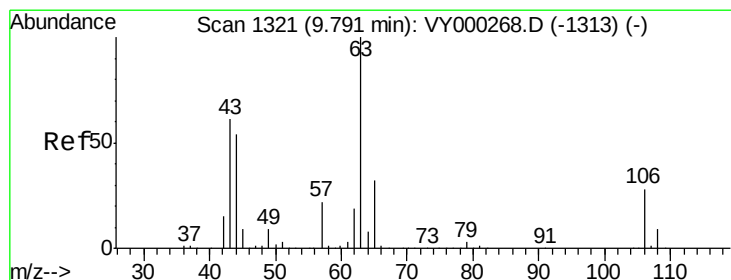
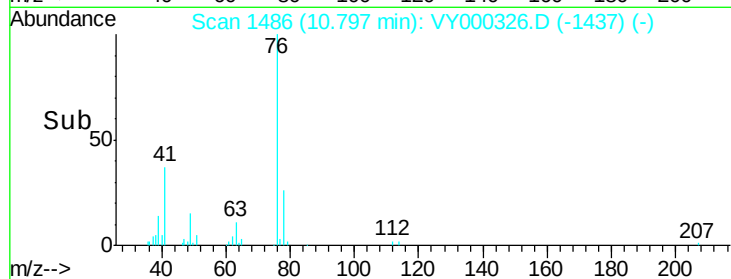
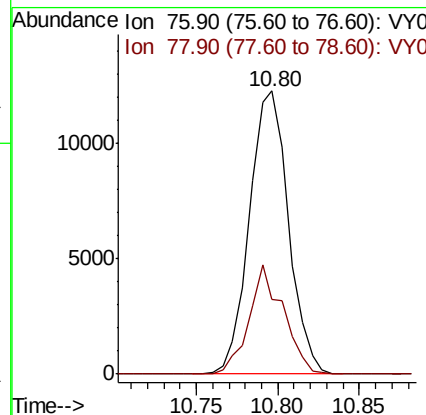
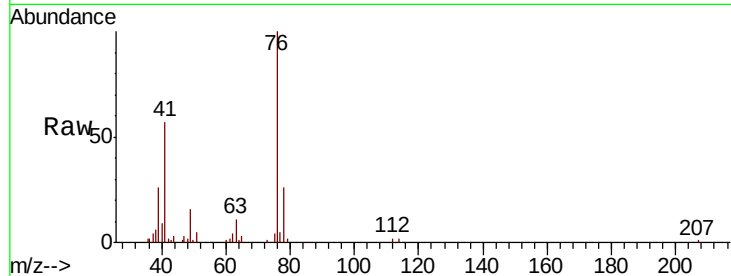
#57
 1,3-Dichloropropane
 Concen: 4.275 ug/l
 RT: 10.80 min Scan# 1486
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion: 76 Resp: 20419
 Ion Ratio Lower Upper
 76 100
 78 34.2 26.2 39.2

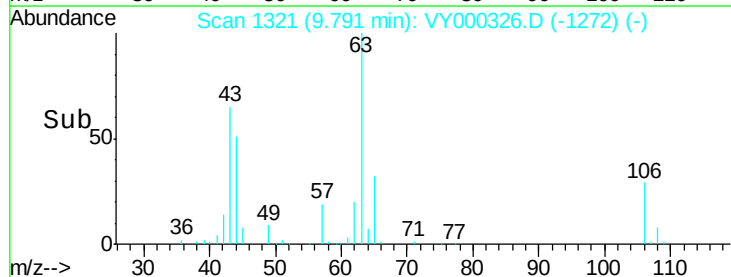
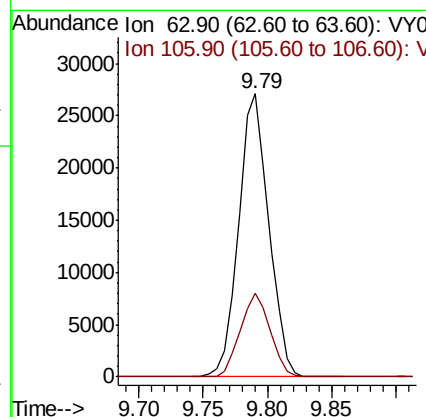
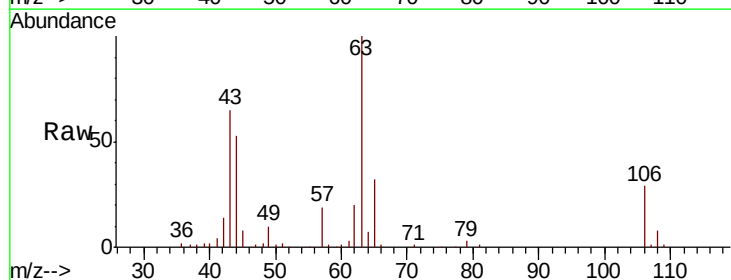
Manual Integrations
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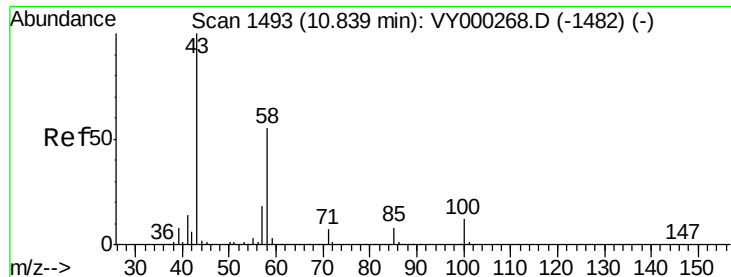
MMDadoda
 10/18/2019 12:50:40 AM



#58
 2-Chloroethyl Vinyl ether
 Concen: 27.774 ug/l
 RT: 9.79 min Scan# 1321
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion: 63 Resp: 43919
 Ion Ratio Lower Upper
 63 100
 106 29.1 23.0 34.4





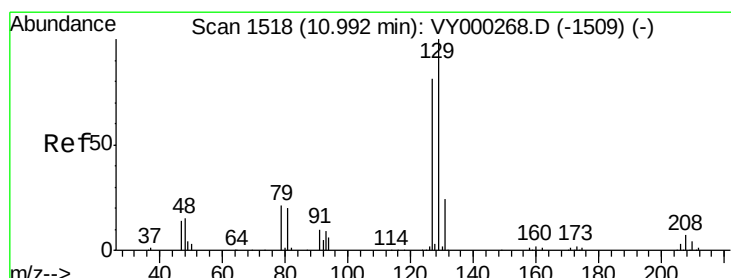
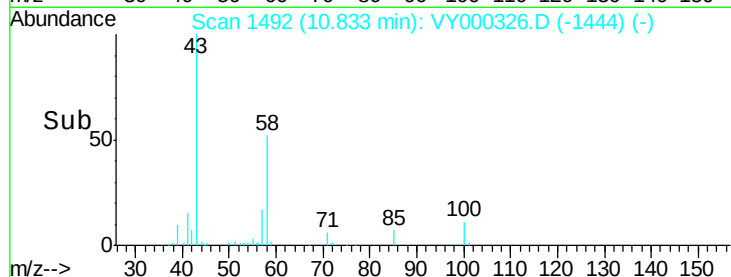
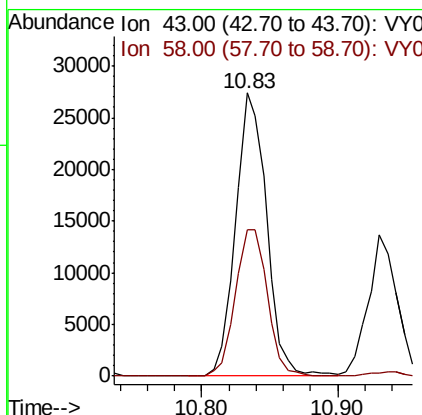
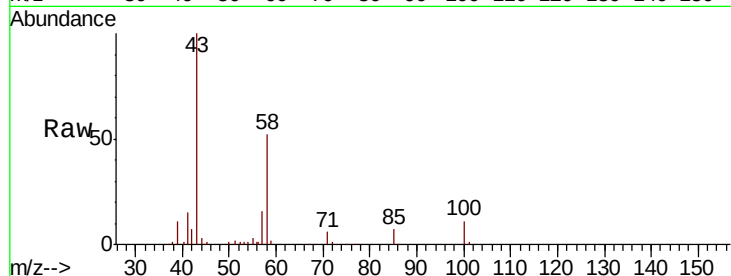
#59
2-Hexanone
Concen: 22.177 ug/l
RT: 10.83 min Scan# 1492
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 43 Resp: 43617
Ion Ratio Lower Upper
43 100
58 53.5 27.7 83.1

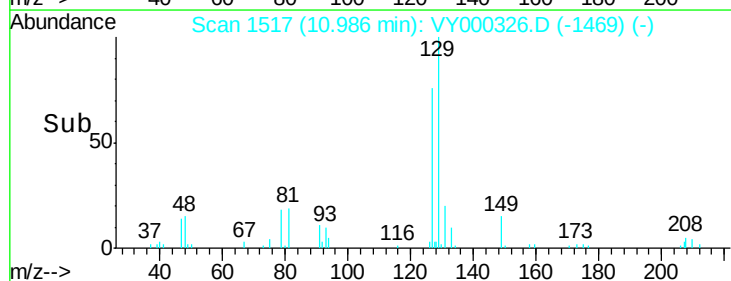
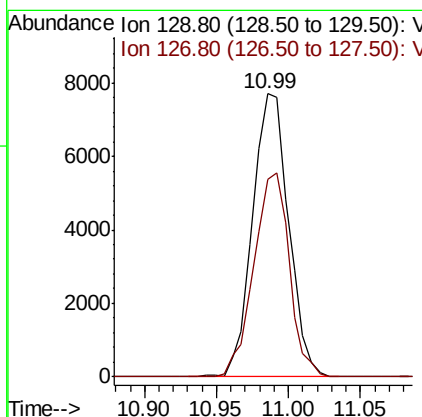
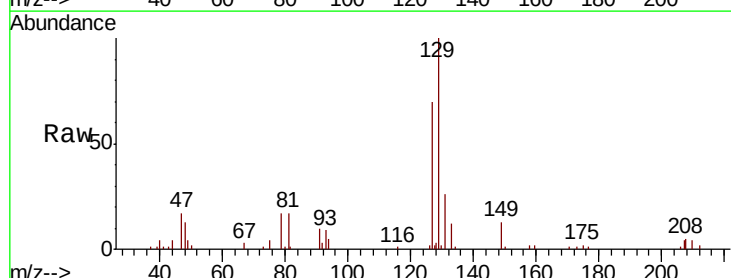
Manual Integrations
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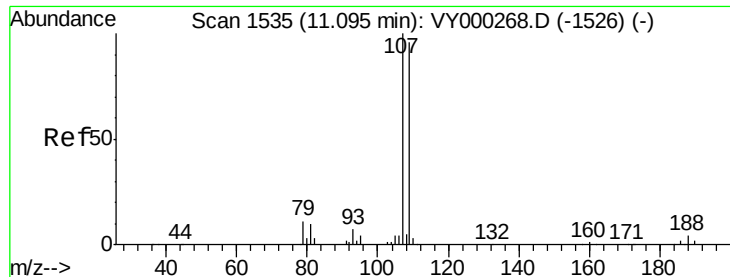
MMDadoda
10/18/2019 12:50:40 AM



#60
Dibromochloromethane
Concen: 4.319 ug/l
RT: 10.99 min Scan# 1517
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 129 Resp: 13314
Ion Ratio Lower Upper
129 100
127 70.8 39.9 119.7





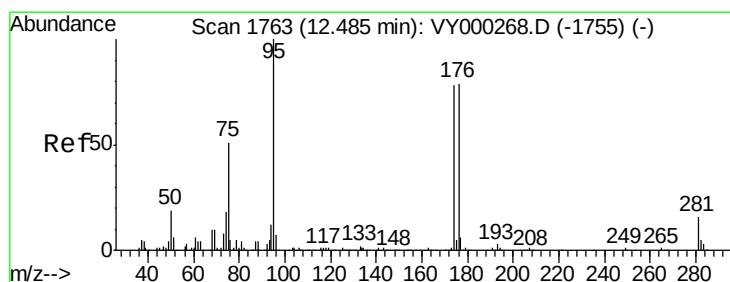
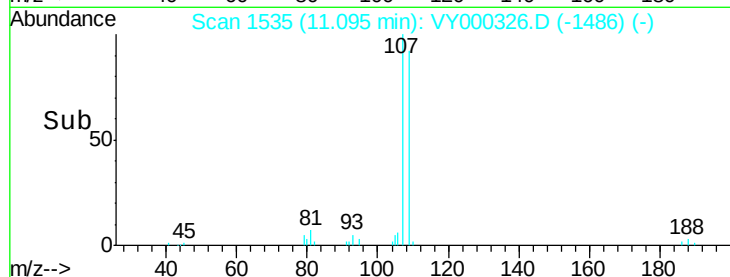
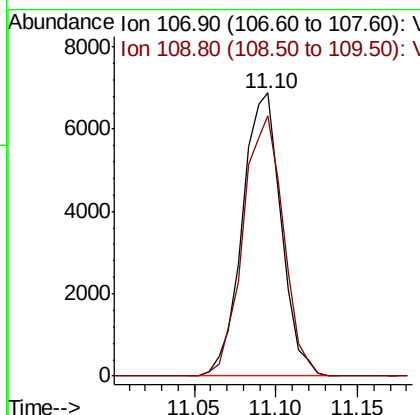
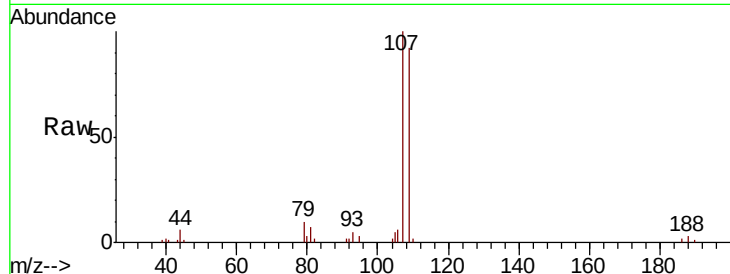
#61
 1,2-Dibromoethane
 Concen: 4.269 ug/l
 RT: 11.10 min Scan# 1535
 Delta R.T. 0.00 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
107	100		
109	94.8	75.1	112.7

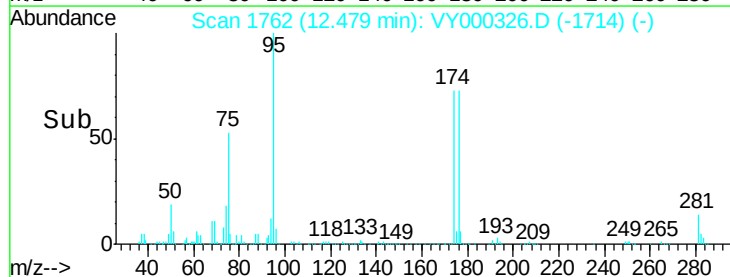
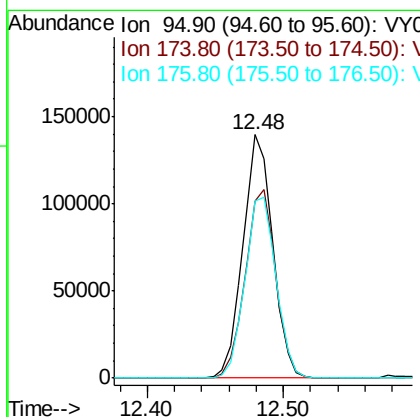
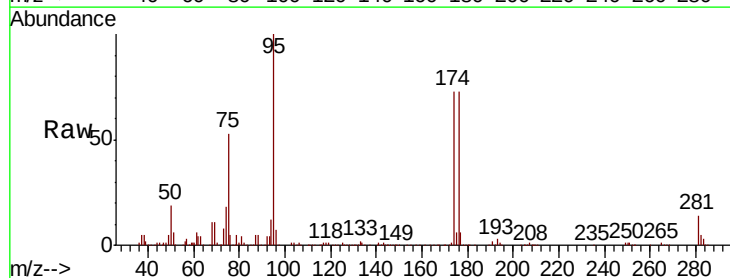
Manual Integrations
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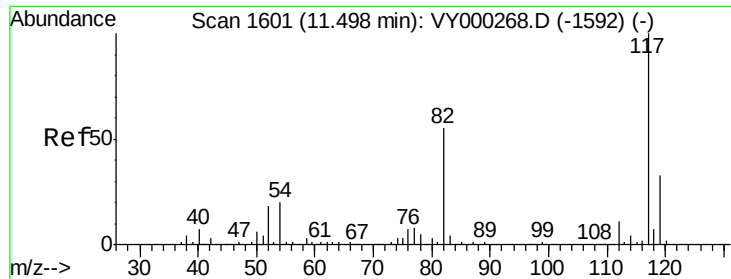
MMDadoda
 10/18/2019 12:50:40 AM



#62
 4-Bromofluorobenzene
 Concen: 49.239 ug/l
 RT: 12.48 min Scan# 1762
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
95	100		
174	79.5	0.0	159.6
176	77.9	0.0	153.8





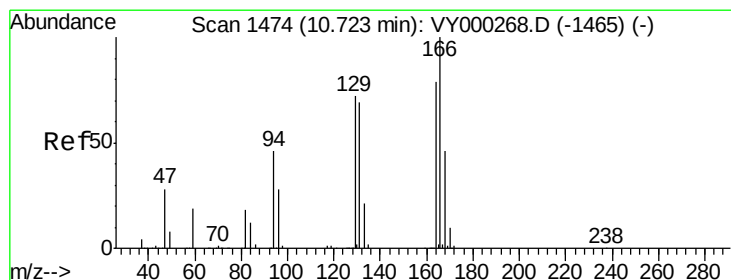
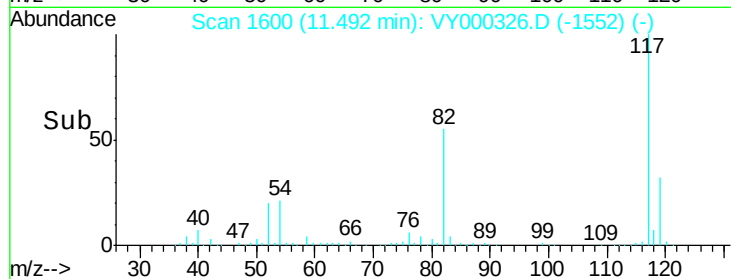
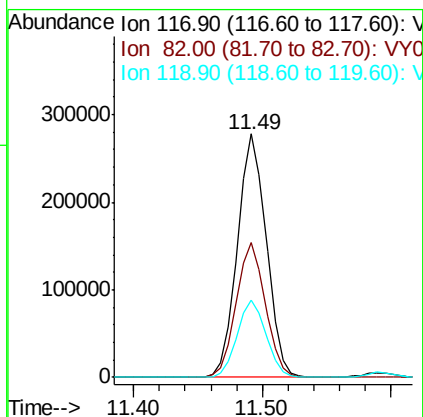
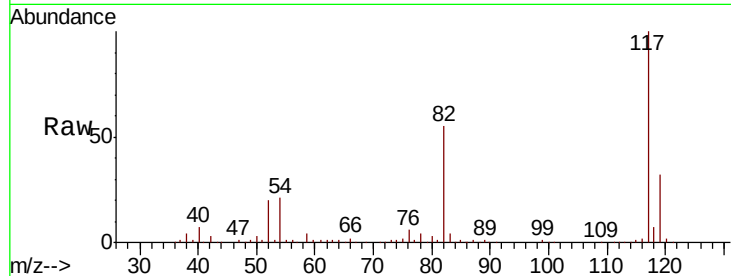
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.49 min Scan# 1600
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
117	100		
82	55.5	43.7	65.5
119	31.9	26.6	39.8

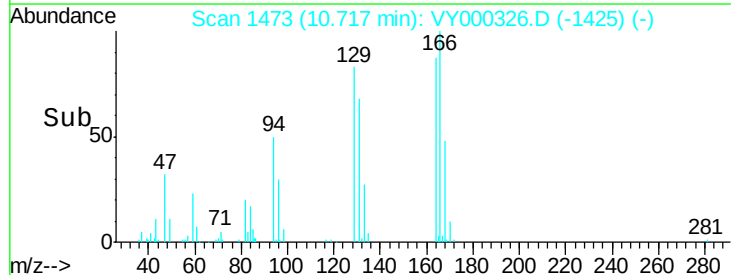
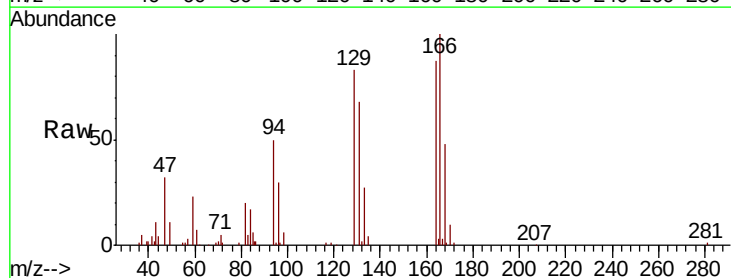
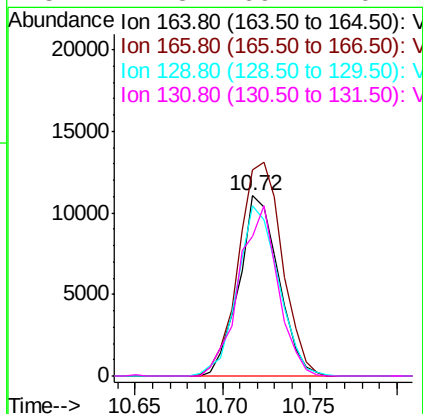
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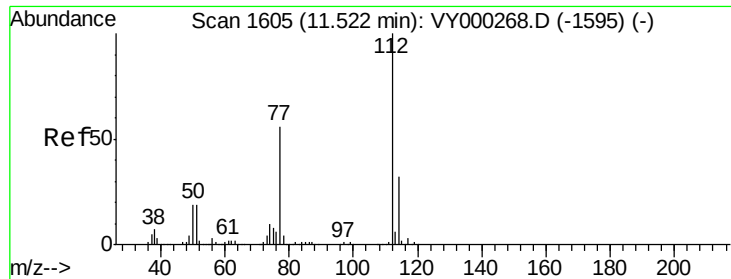
MMDadoda
10/18/2019 12:50:40 AM



#64
Tetrachloroethene
Concen: 4.235 ug/l
RT: 10.72 min Scan# 1473
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
164	100		
166	114.3	100.6	151.0
129	94.5	72.8	109.2
131	77.3	69.4	104.2





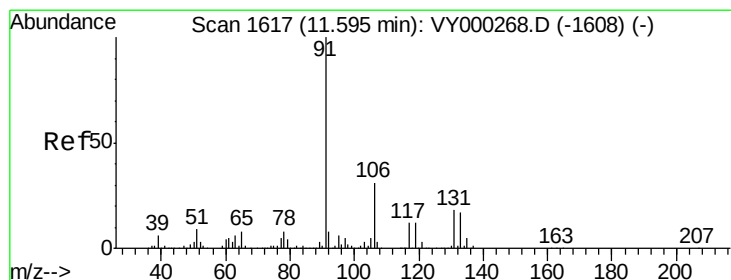
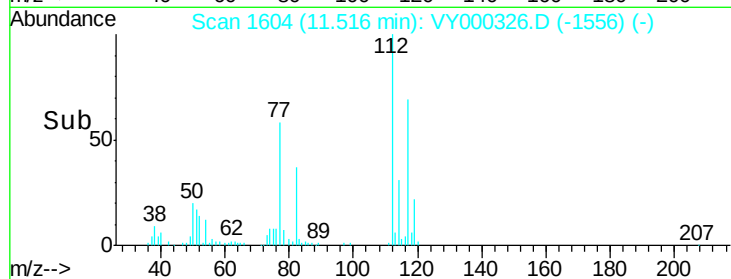
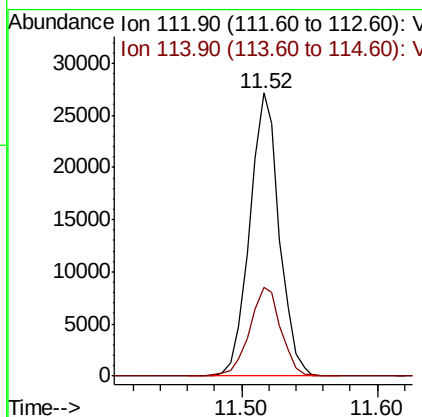
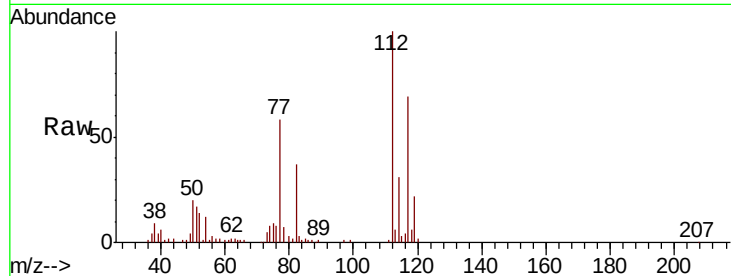
#65
Chlorobenzene
Concen: 4.540 ug/l
RT: 11.52 min Scan# 1604
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion:112 Resp: 41383
Ion Ratio Lower Upper
112 100
114 31.2 25.7 38.5

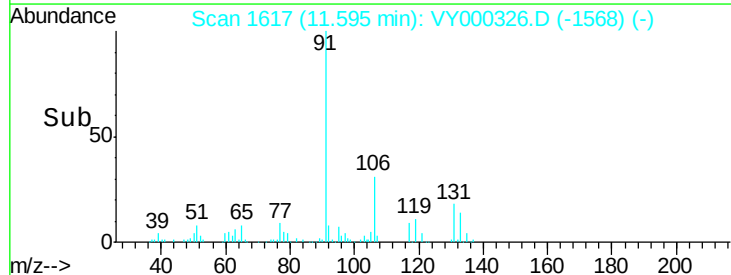
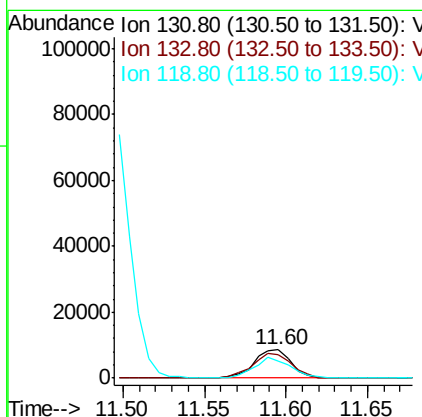
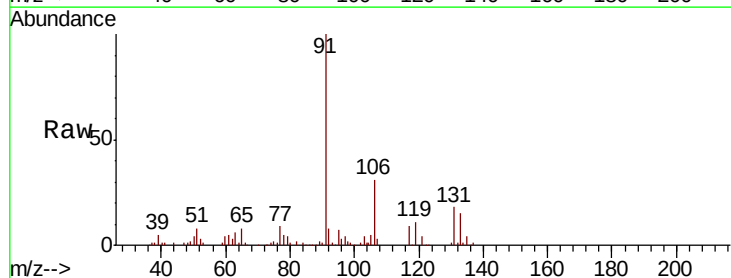
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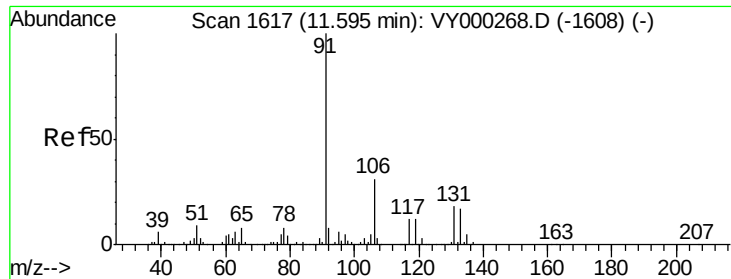
MMDadoda
10/18/2019 12:50:40 AM



#66
1,1,1,2-Tetrachloroethane
Concen: 4.279 ug/l
RT: 11.60 min Scan# 1617
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion:131 Resp: 13701
Ion Ratio Lower Upper
131 100
133 91.4 47.2 141.6
119 71.3 32.6 98.0





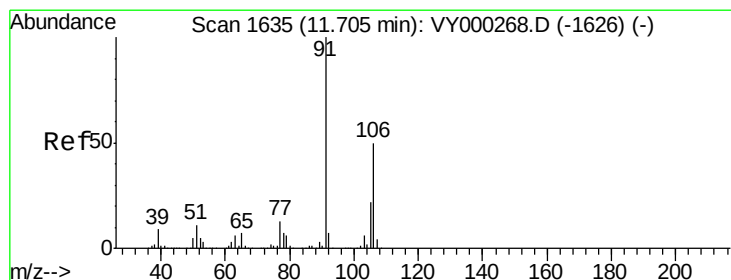
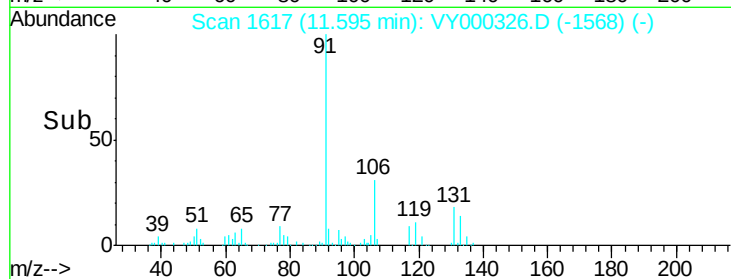
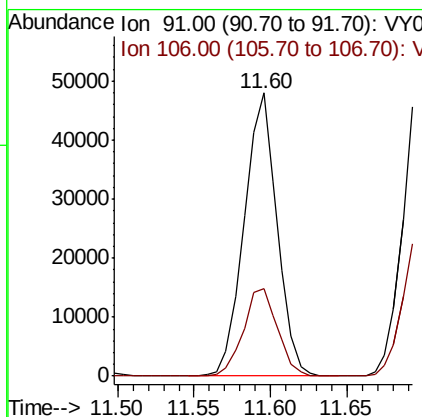
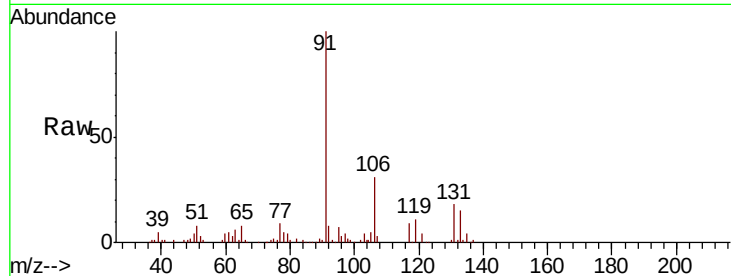
#67
Ethyl Benzene
Concen: 4.223 ug/l
RT: 11.60 min Scan# 1617
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion: 91 Resp: 71364
Ion Ratio Lower Upper
91 100
106 31.1 25.0 37.6

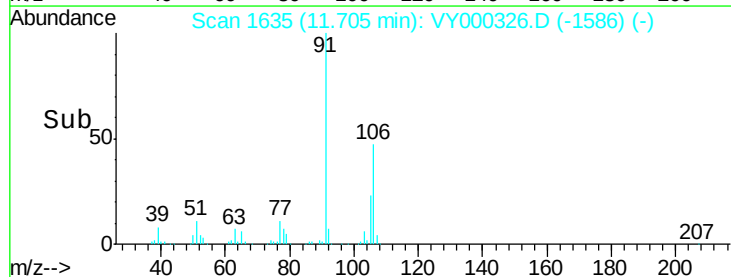
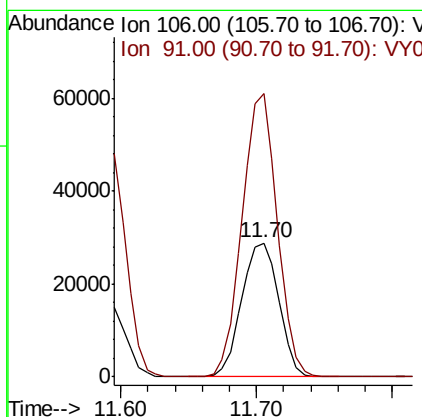
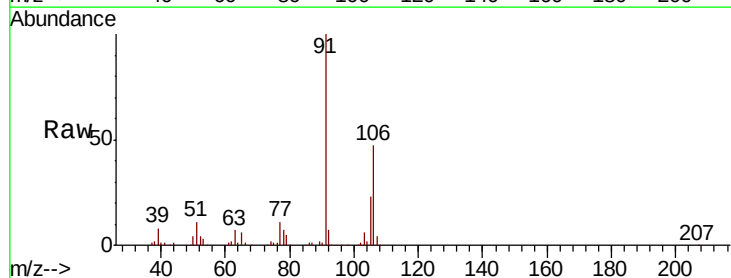
Manual Integrations
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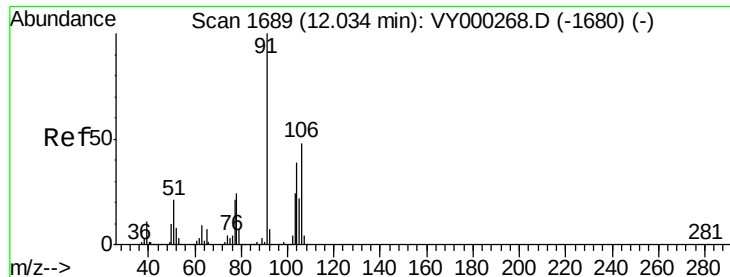
MMDadoda
10/18/2019 12:50:40 AM



#68
m/p-Xylenes
Concen: 8.521 ug/l
RT: 11.70 min Scan# 1635
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion: 106 Resp: 55047
Ion Ratio Lower Upper
106 100
91 200.2 157.5 236.3





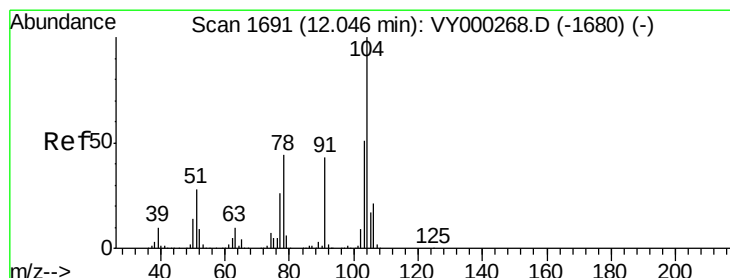
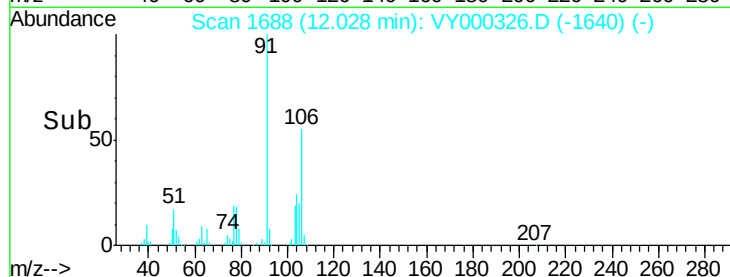
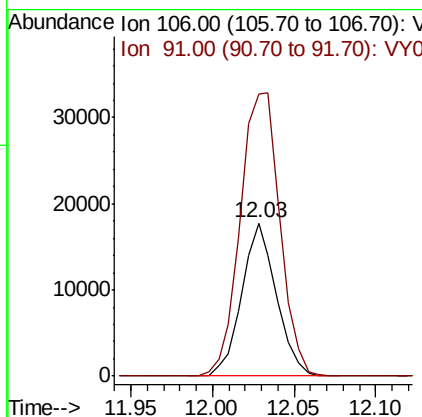
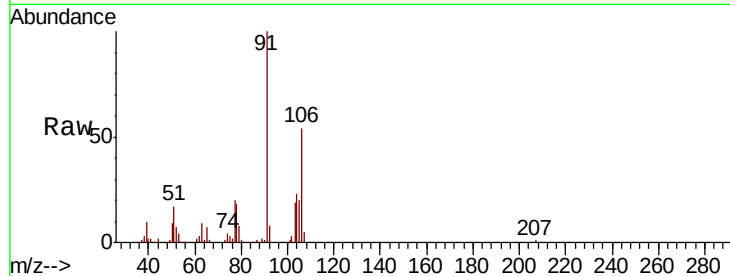
#69
o-Xylene
Concen: 4.255 ug/l
RT: 12.03 min Scan# 1688
Delta R.T. -0.01 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
106	100		
91	212.5	104.7	313.9

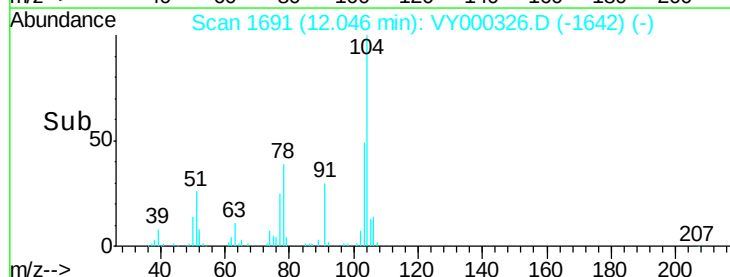
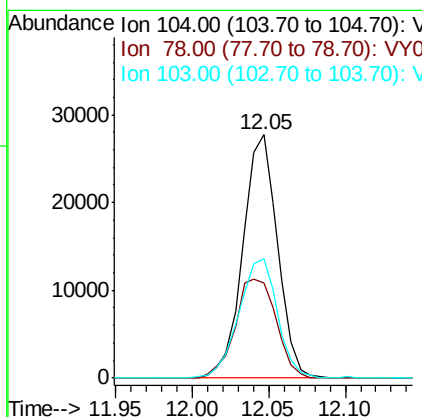
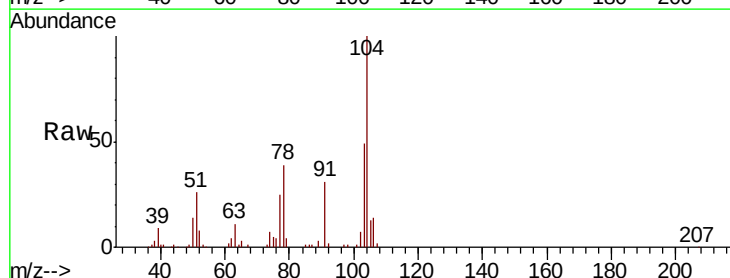
Manual Integrations
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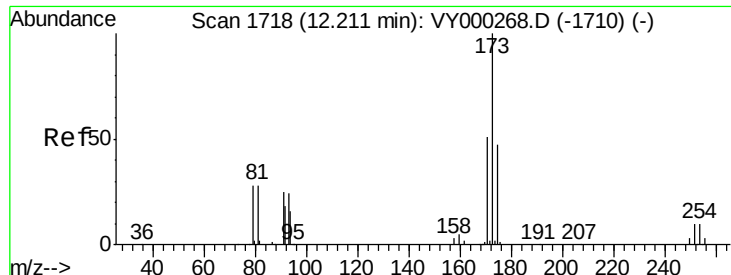
MMDadoda
10/18/2019 12:50:40 AM



#70
Styrene
Concen: 4.197 ug/l
RT: 12.05 min Scan# 1691
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
104	100		
78	48.5	39.0	58.6
103	54.4	43.1	64.7





#71

Bromoform

Concen: 3.945 ug/l

RT: 12.20 min Scan# 1717

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

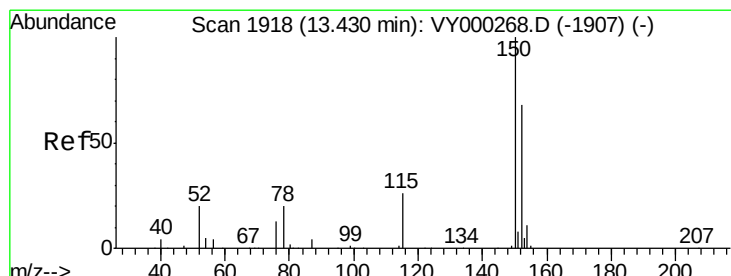
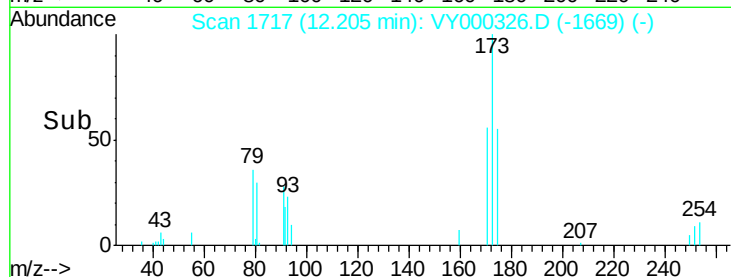
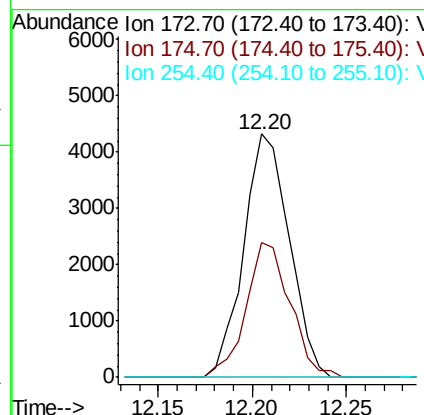
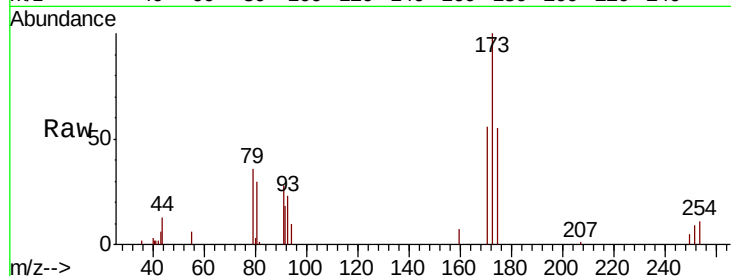
ClientSampleId :

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

Tot Ion	Ratio	Lower	Upper
173	100		
175	53.6	24.6	73.6
254	0.0	0.1	0.1#

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10/18/2019 12:50:40 AM



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

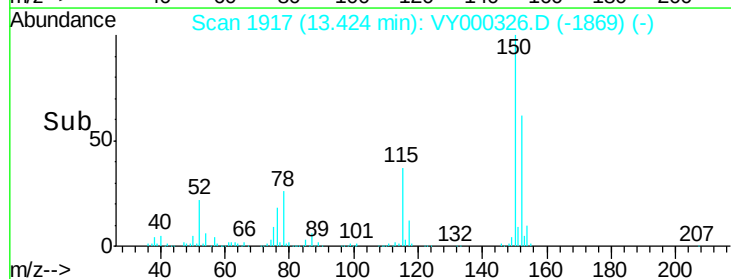
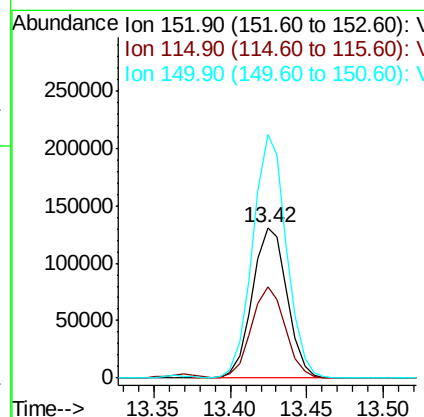
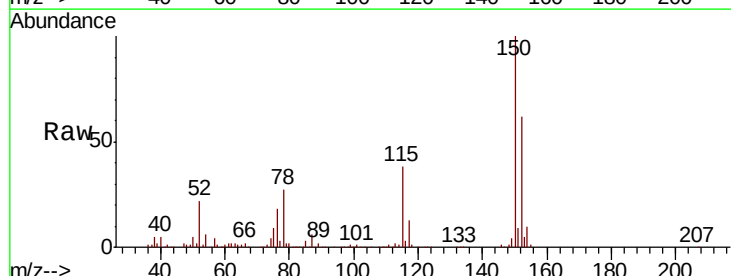
RT: 13.42 min Scan# 1917

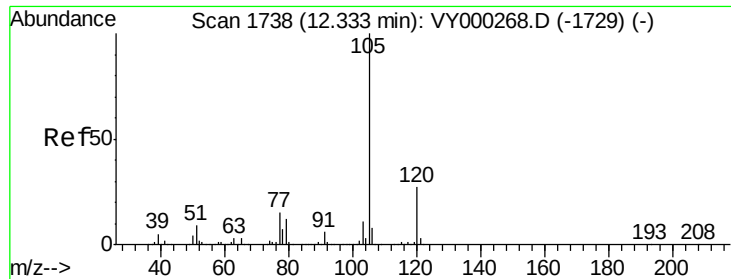
Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
152	100		
115	59.1	29.3	88.0
150	157.6	0.0	348.4





#73

Isopropylbenzene

Concen: 4.293 ug/l

RT: 12.33 min Scan# 1737

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion:105 Resp: 69041

Ion Ratio Lower Upper

105 100

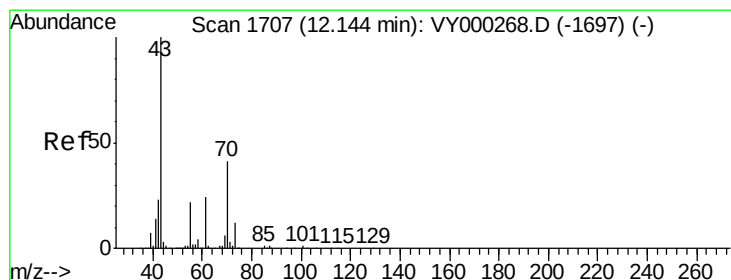
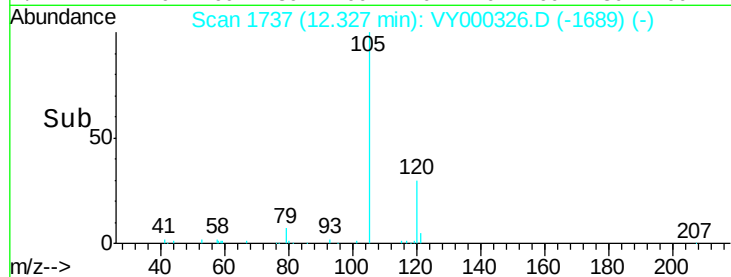
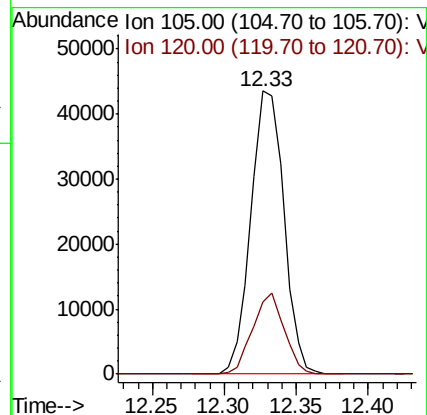
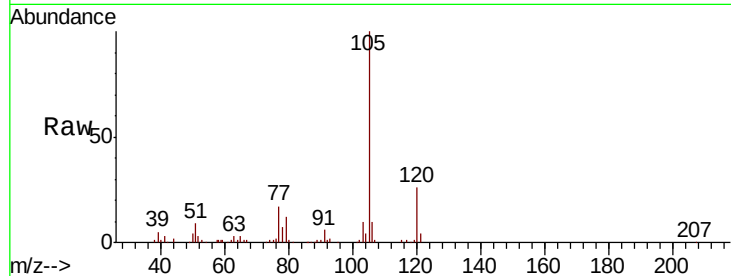
120 27.1 13.4 40.2

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10/18/2019 12:50:40 AM



#74

N-ethyl acetate

Concen: 4.734 ug/l

RT: 12.14 min Scan# 1707

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion: 43 Resp: 18691

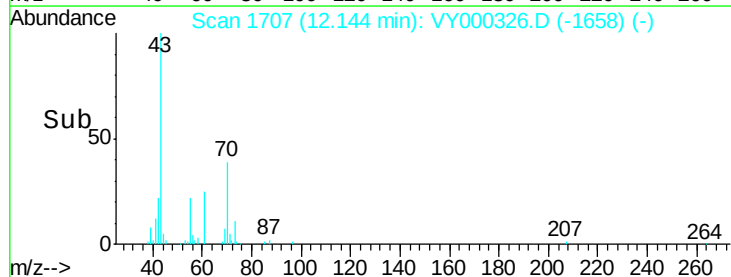
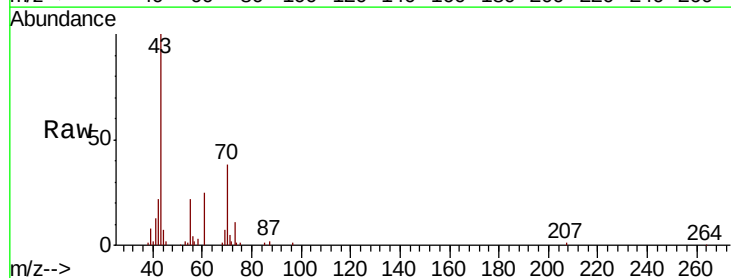
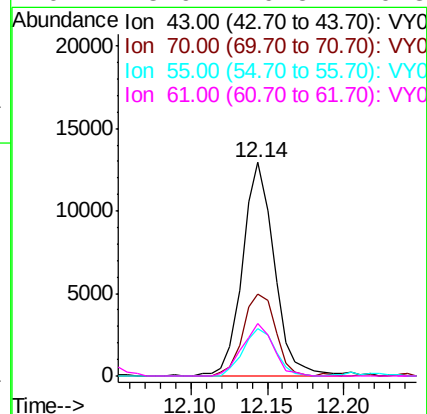
Ion Ratio Lower Upper

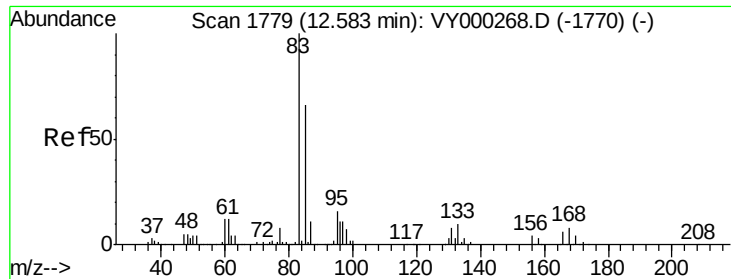
43 100

70 39.0 32.9 49.3

55 22.3 17.8 26.6

61 23.9 19.5 29.3





#75

1,1,2,2-Tetrachloroethane

Concen: 4.268 ug/l

RT: 12.58 min Scan# 1779

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

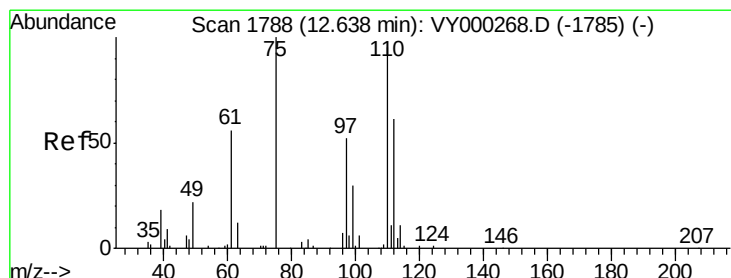
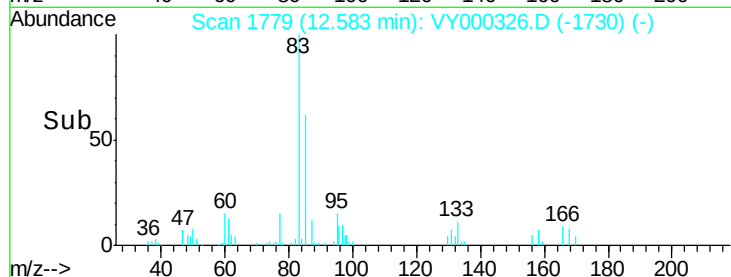
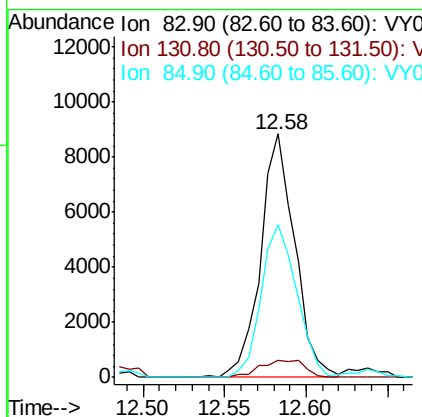
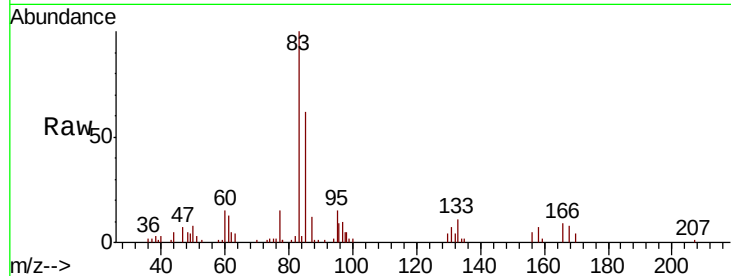
ClientSampleId :

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

Tot Ion:	83	Resp:	12886
Ion Ratio	Lower	Upper	
83	100		
131	9.3	5.3	16.1
85	65.4	32.9	98.7

Manual Integrations
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MMDadoda
10/18/2019 12:50:40 AM



#76

1,2,3-Trichloropropane

Concen: 3.760 ug/l m

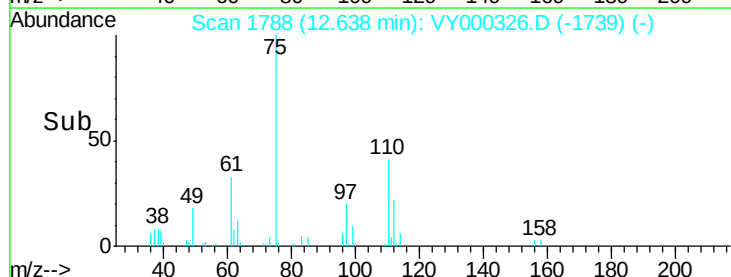
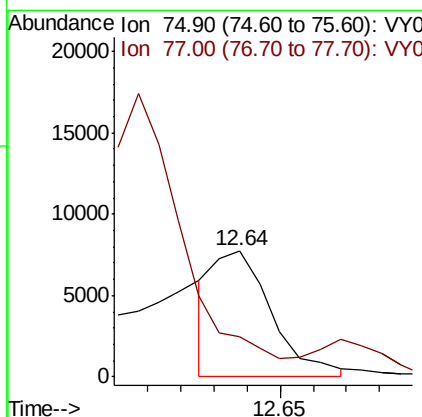
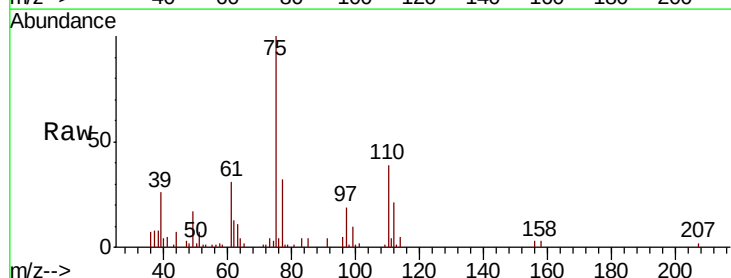
RT: 12.64 min Scan# 1788

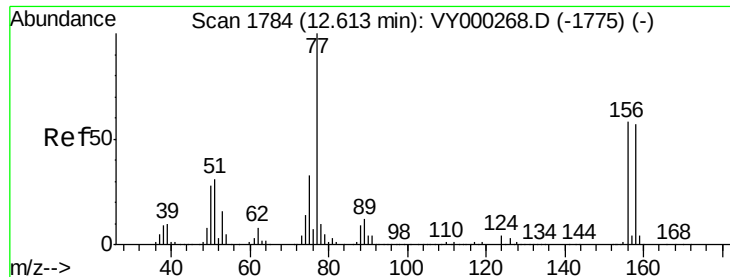
Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion:	75	Resp:	9535
Ion Ratio	Lower	Upper	
75	100		
77	0.0	0.0	0.0





#77

Bromobenzene

Concen: 4.443 ug/l

RT: 12.61 min Scan# 1783

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion:156 Resp: 15898

Ion Ratio Lower Upper

156 100

77 192.0 101.0 302.9

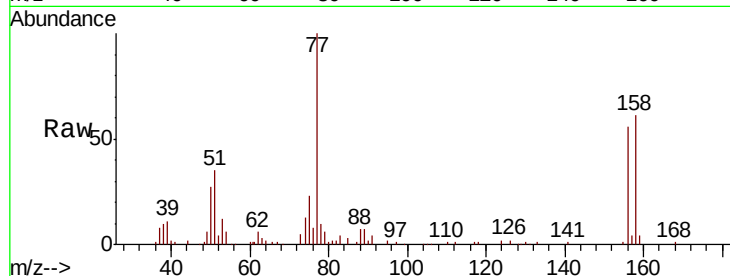
158 101.3 49.7 149.1

Manual Integrations

APPROVED

MMDadoda

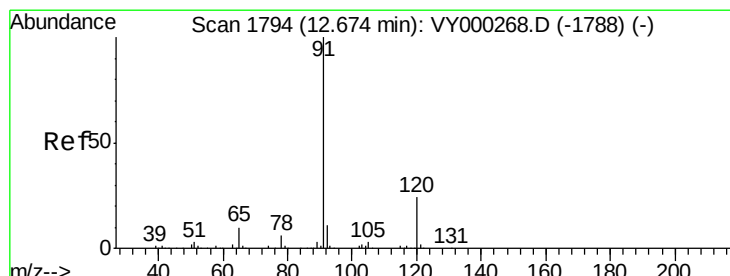
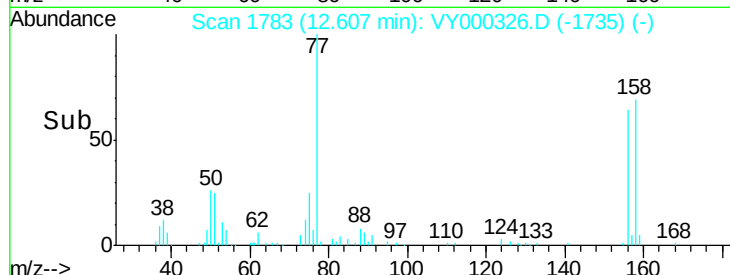
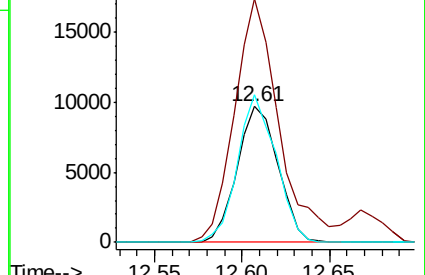
10/18/2019 12:50:40 AM



Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VY0

Ion 157.80 (157.50 to 158.50): V



#78

n-propylbenzene

Concen: 4.385 ug/l

RT: 12.67 min Scan# 1794

Delta R.T. 0.00 min

Lab File: VY000326.D

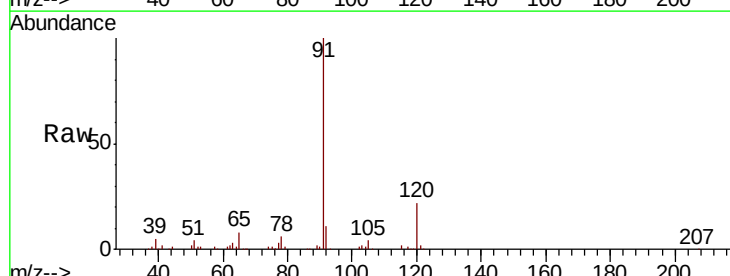
Acq: 16 Oct 2019 13:48

Tgt Ion: 91 Resp: 84675

Ion Ratio Lower Upper

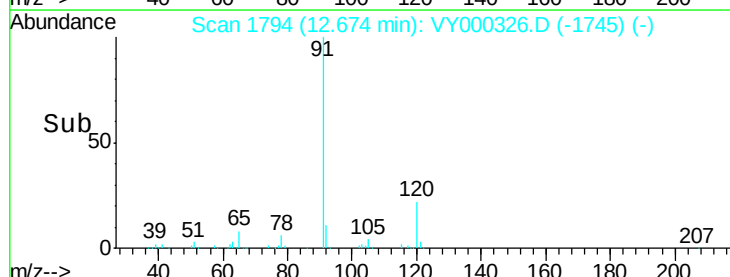
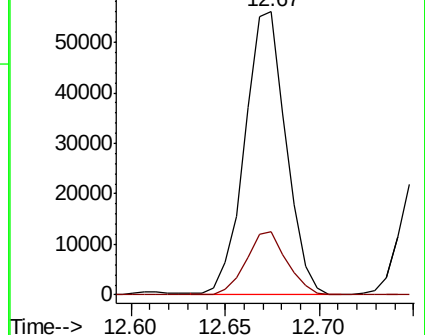
91 100

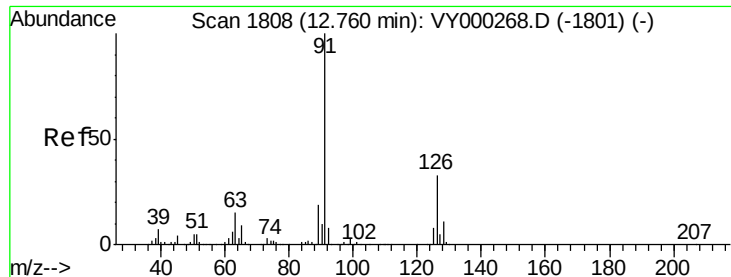
120 22.1 11.5 34.5



Abundance Ion 91.00 (90.70 to 91.70): VY0

Ion 120.00 (119.70 to 120.70): V





#79

2-Chlorotoluene

Concen: 4.526 ug/l

RT: 12.75 min Scan# 1807

Delta R.T. -0.01 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion: 91 Resp: 48256

Ion Ratio Lower Upper

91 100

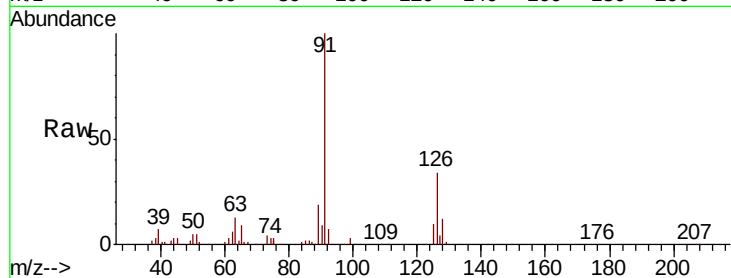
126 33.1 17.1 51.3

Manual Integrations

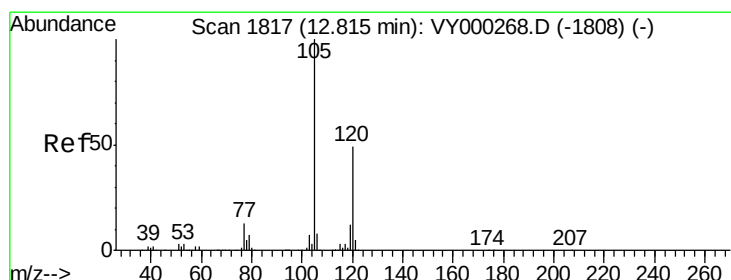
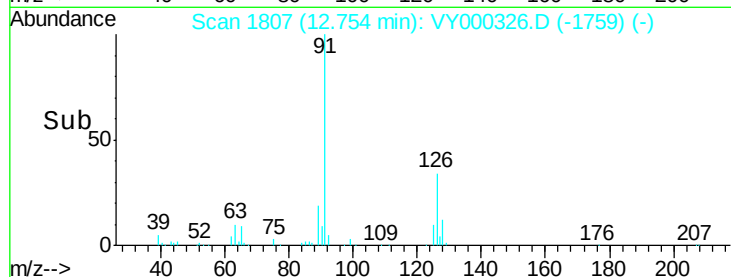
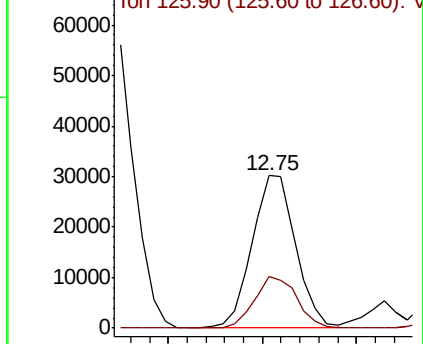
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10/18/2019 12:50:40 AM



Abundance Ion 91.00 (90.70 to 91.70): VY000326.D (-1759) (-)



#80

1,3,5-Trimethylbenzene

Concen: 4.310 ug/l

RT: 12.81 min Scan# 1817

Delta R.T. 0.00 min

Lab File: VY000326.D

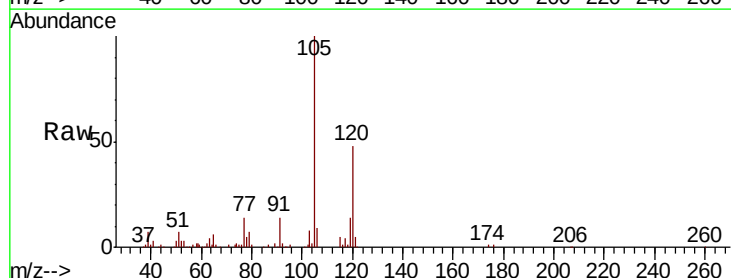
Acq: 16 Oct 2019 13:48

Tgt Ion:105 Resp: 58115

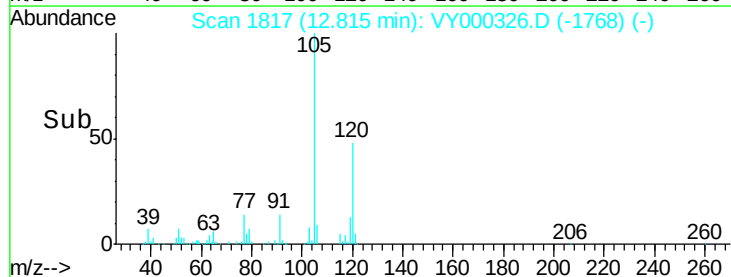
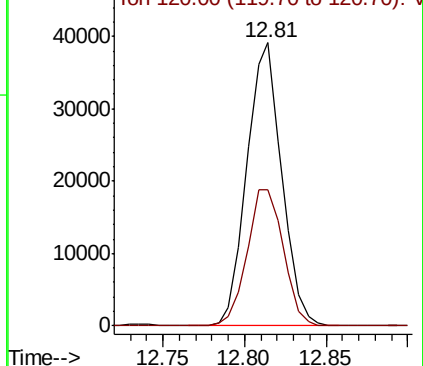
Ion Ratio Lower Upper

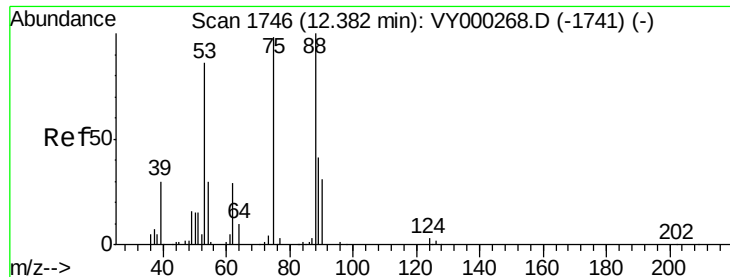
105 100

120 50.1 24.9 74.8



Abundance Ion 105.00 (104.70 to 105.70): VY000326.D (-1768) (-)





#81

trans-1,4-Dichloro-2-butene

Concen: 4.183 ug/l

RT: 12.38 min Scan# 1746

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

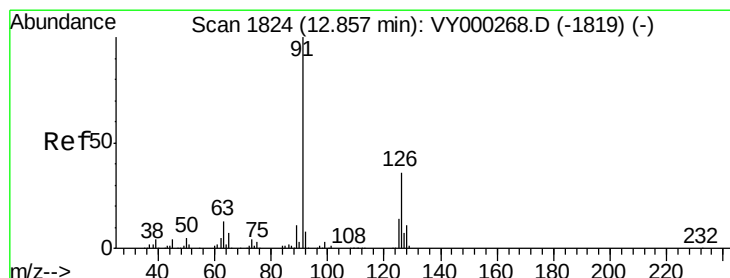
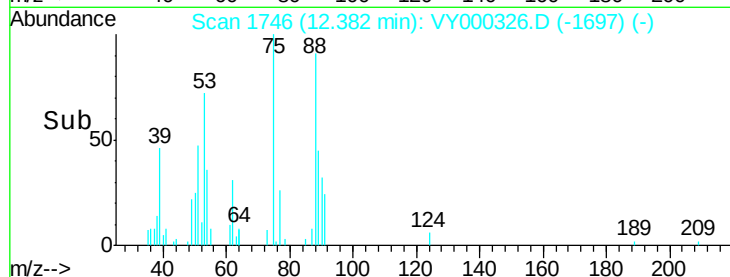
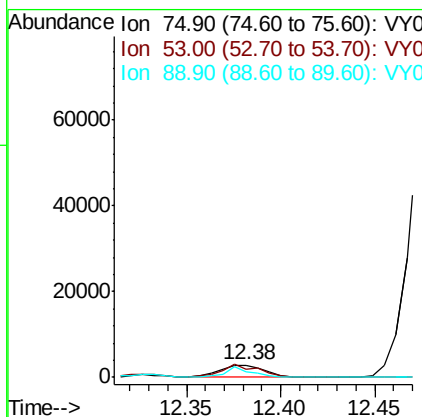
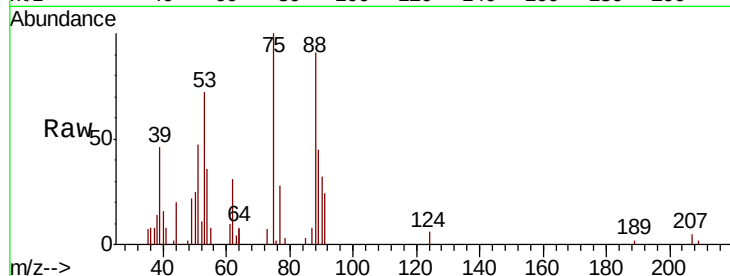
ClientSampleId :

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

Tot Ion:	75	Resp:	4849
Ion	Ratio	Lower	Upper
75	100		
53	83.9	71.3	106.9
89	49.3	35.1	52.7

Manual Integrations
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#82

4-Chlorotoluene

Concen: 4.398 ug/l

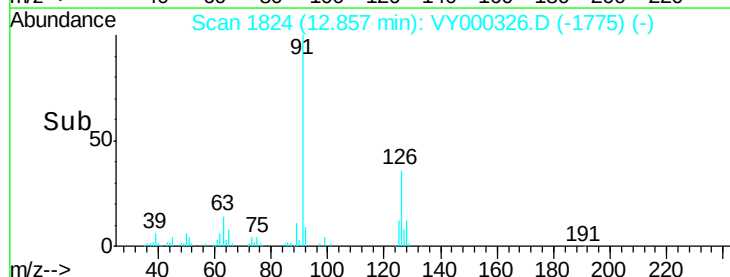
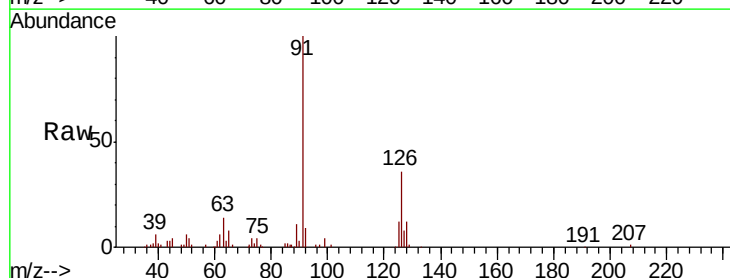
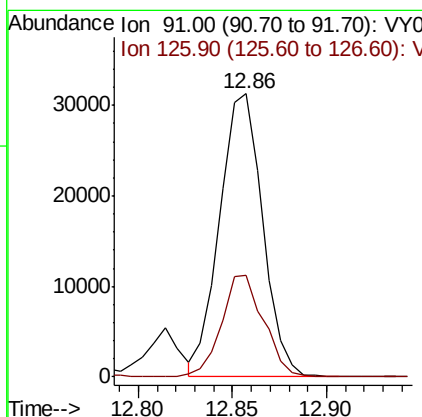
RT: 12.86 min Scan# 1824

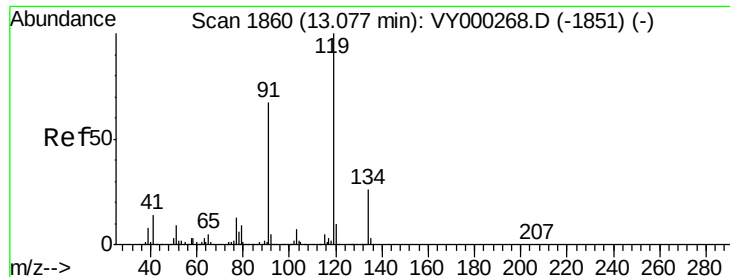
Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion:	91	Resp:	49572
Ion	Ratio	Lower	Upper
91	100		
126	35.0	17.2	51.5





#83

tert-Butylbenzene

Concen: 4.412 ug/l

RT: 13.08 min Scan# 1860

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

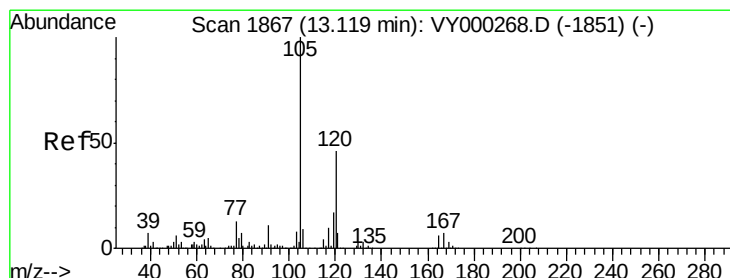
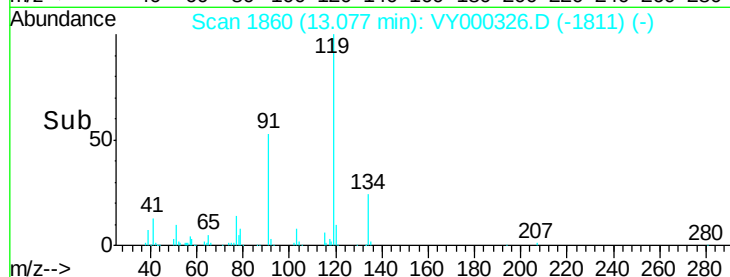
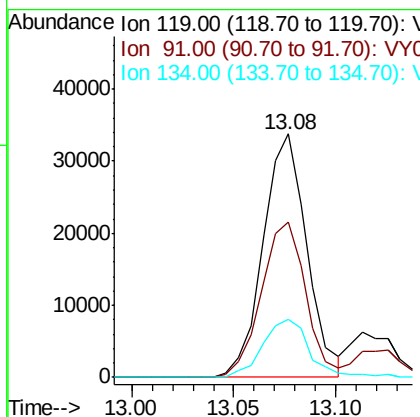
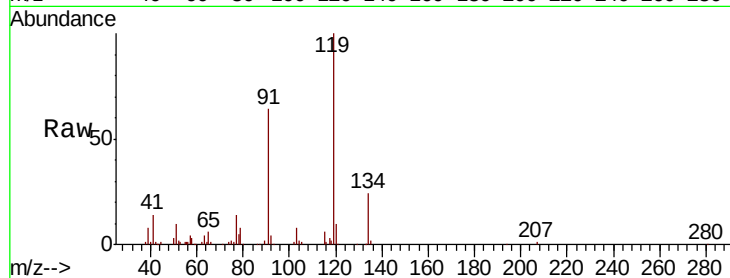
ClientSampleId :

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

Tot Ion:	119	Resp:	50383
Ion Ratio	Lower	Upper	
119	100		
91	64.9	32.9	98.7
134	25.8	13.3	39.8

Manual Integrations
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10/18/2019 12:50:40 AM



#84

1,2,4-Trimethylbenzene

Concen: 4.330 ug/l

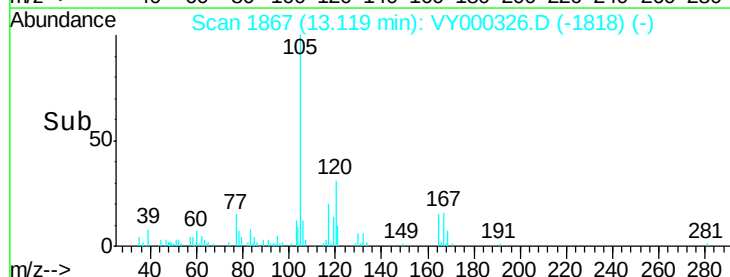
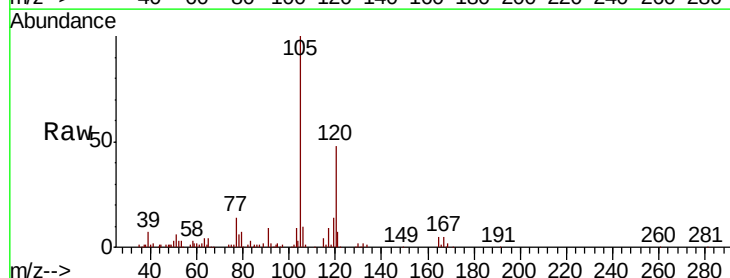
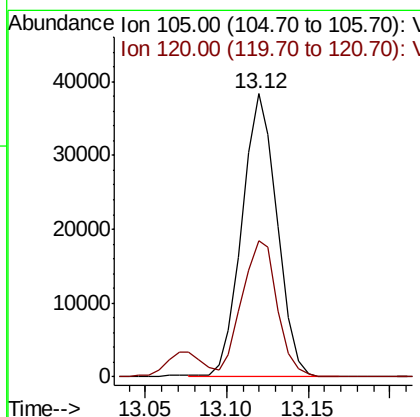
RT: 13.12 min Scan# 1867

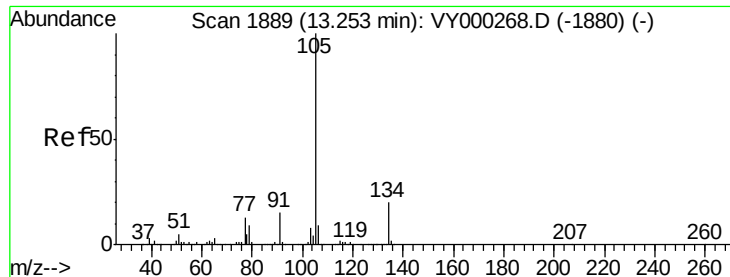
Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Tgt Ion:	105	Resp:	57622
Ion Ratio	Lower	Upper	
105	100		
120	48.3	22.9	68.8





#85

sec-Butylbenzene

Concen: 4.289 ug/l

RT: 13.25 min Scan# 1889

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

Instrument :

MSVOA_Y

ClientSampleId :

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

Tot Ion:105 Resp: 70858

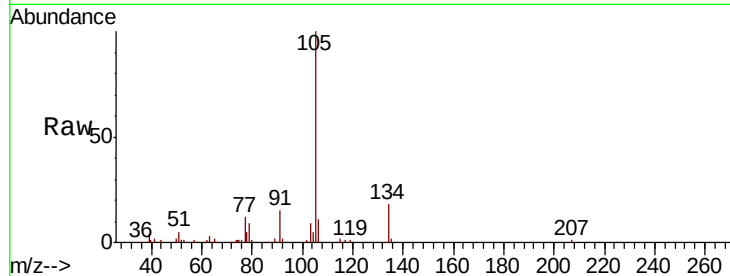
Ion Ratio Lower Upper

105 100

134 19.6 10.1 30.1

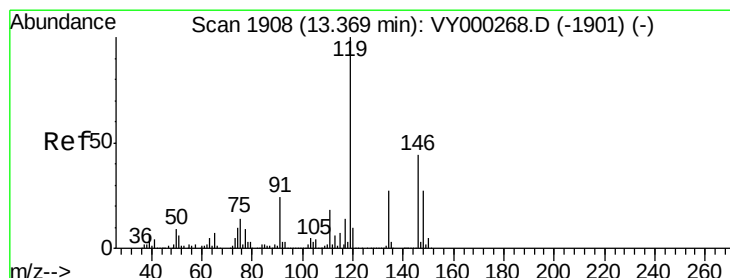
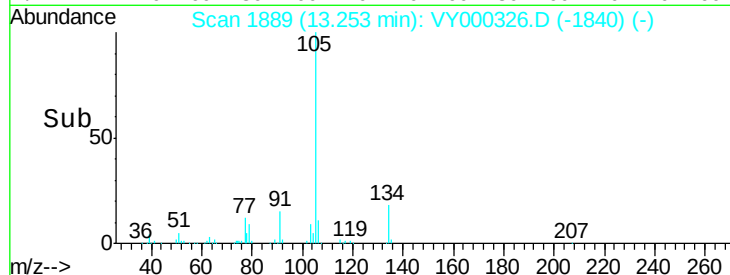
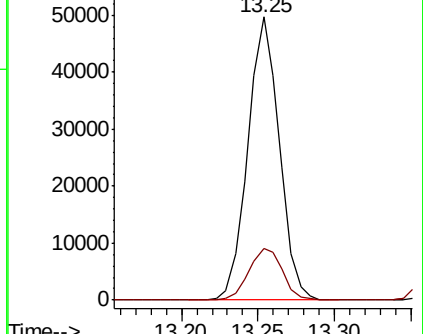
Manual Integrations
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 4.291 ug/l

RT: 13.37 min Scan# 1908

Delta R.T. 0.00 min

Lab File: VY000326.D

Acq: 16 Oct 2019 13:48

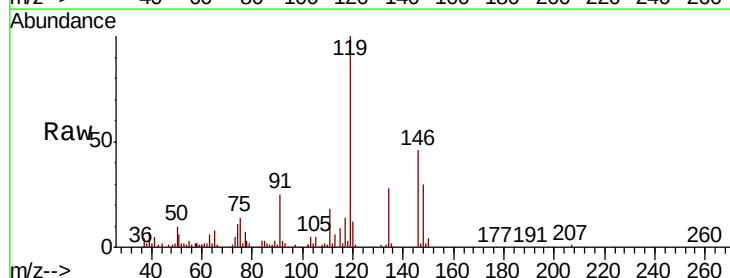
Tgt Ion:119 Resp: 61795

Ion Ratio Lower Upper

119 100

134 28.2 13.6 40.8

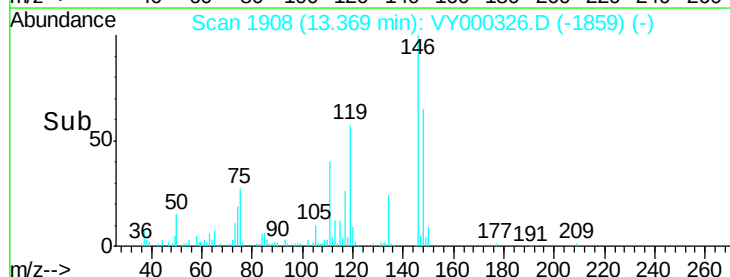
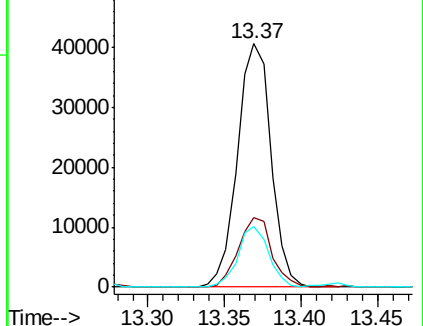
91 22.8 12.0 36.1

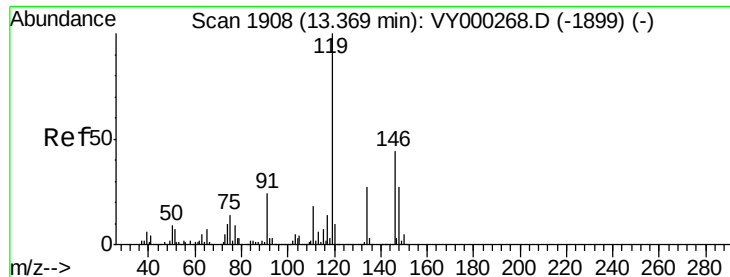


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): VY0





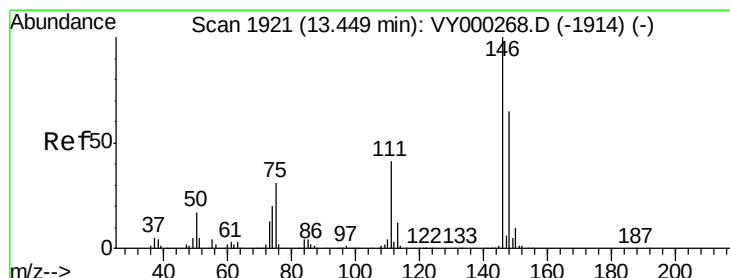
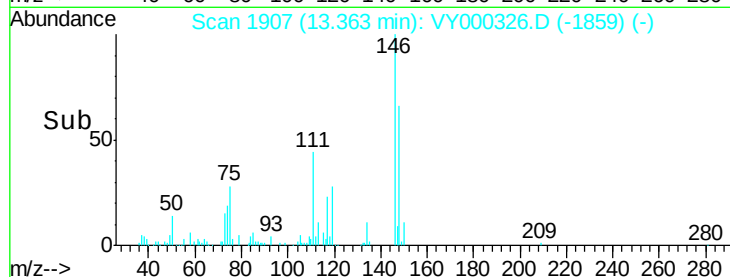
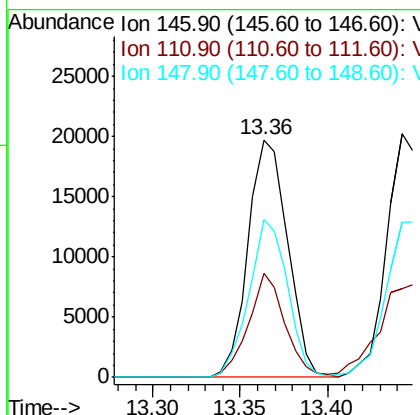
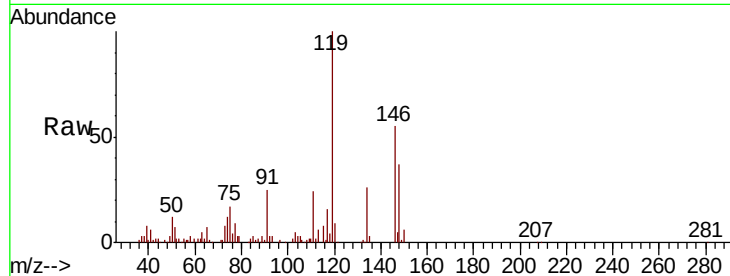
#87
 1,3-Dichlorobenzene
 Concen: 4.410 ug/l
 RT: 13.36 min Scan# 1907
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	40.3	20.6	61.8
148	64.7	31.9	95.5

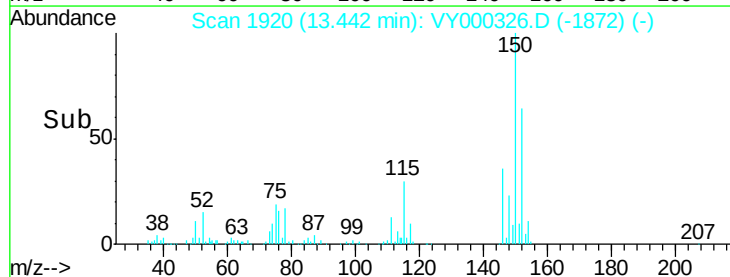
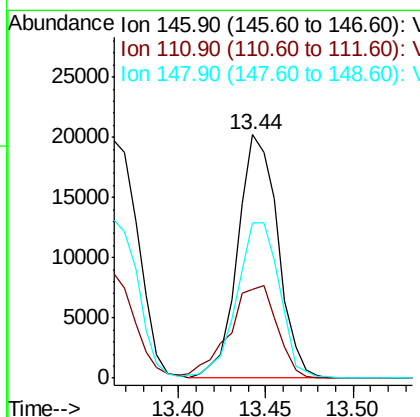
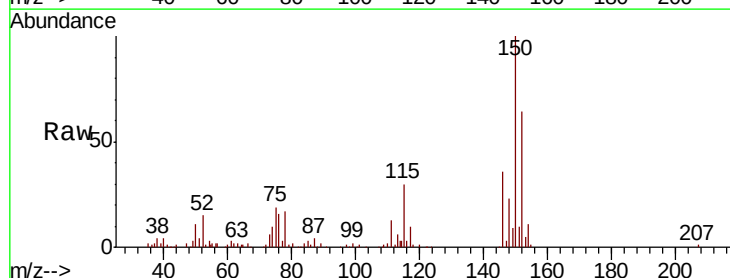
Manual Integrations
 APPROVED

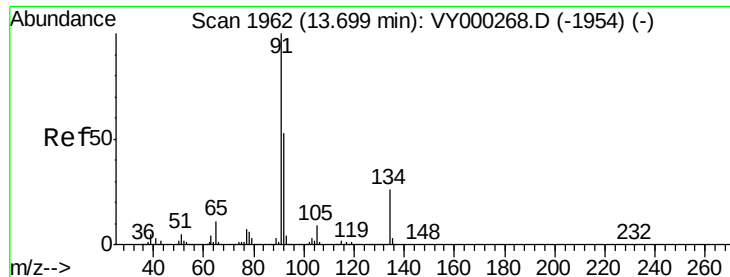
MMDadoda
 10/18/2019 12:50:40 AM



#88
 1,4-Dichlorobenzene
 Concen: 4.581 ug/l
 RT: 13.44 min Scan# 1920
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
146	100		
111	45.6	20.1	60.2
148	68.5	32.4	97.2





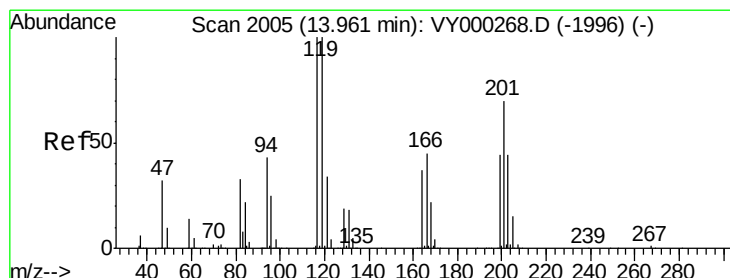
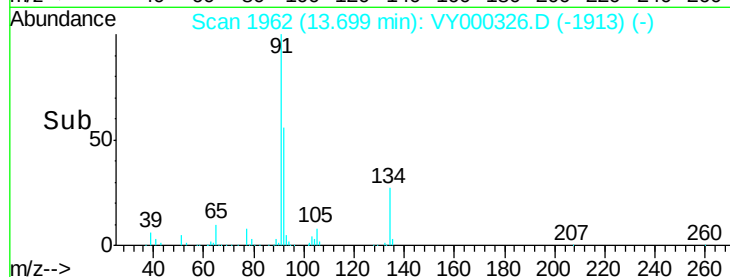
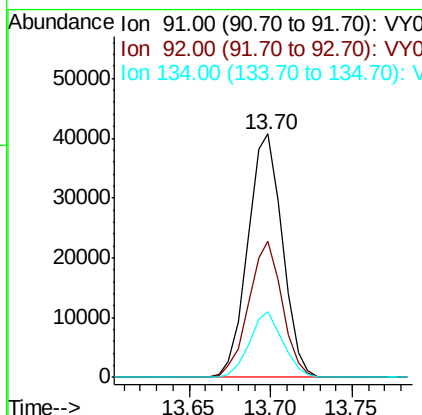
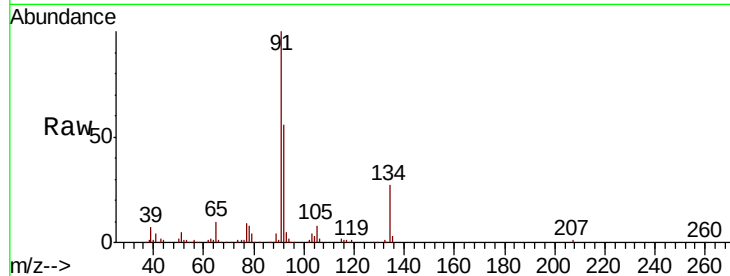
#89
n-Butylbenzene
Concen: 4.216 ug/l
RT: 13.70 min Scan# 1962
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
91	100		
92	54.2	26.7	80.1
134	26.0	13.0	38.9

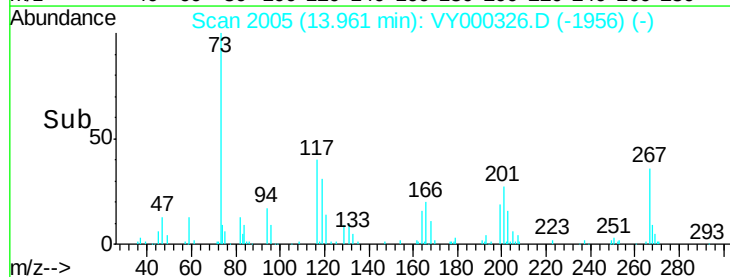
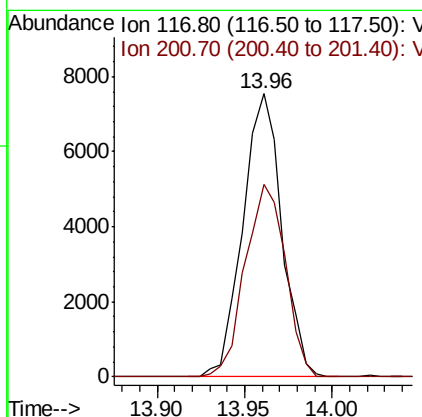
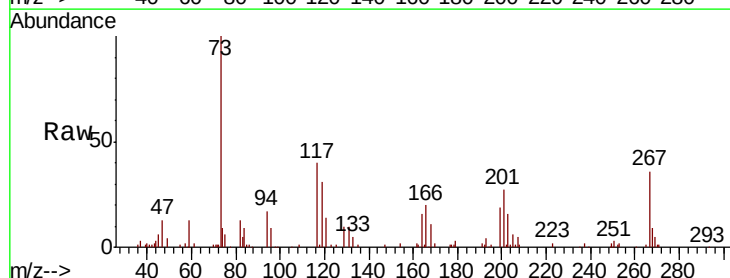
Manual Integrations
APPROVED

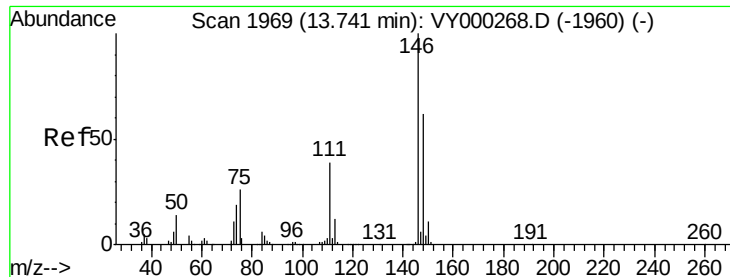
MMDadoda
10/18/2019 12:50:40 AM



#90
Hexachloroethane
Concen: 4.376 ug/l
RT: 13.96 min Scan# 2005
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
117	100		
201	70.2	36.3	108.7





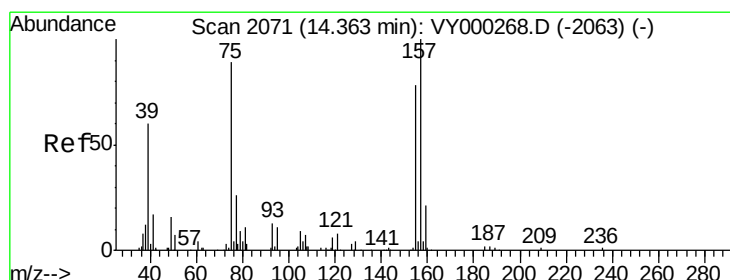
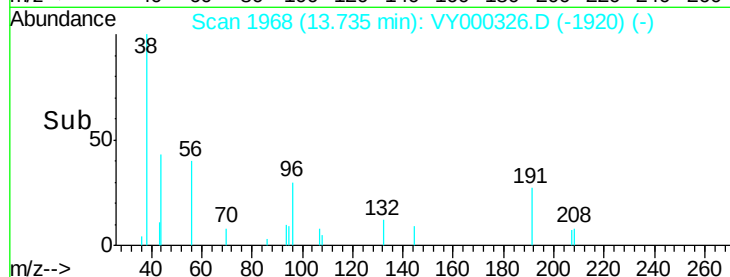
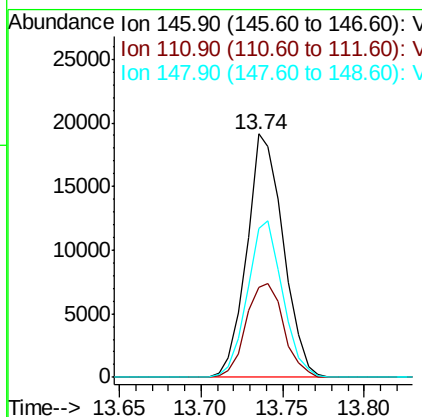
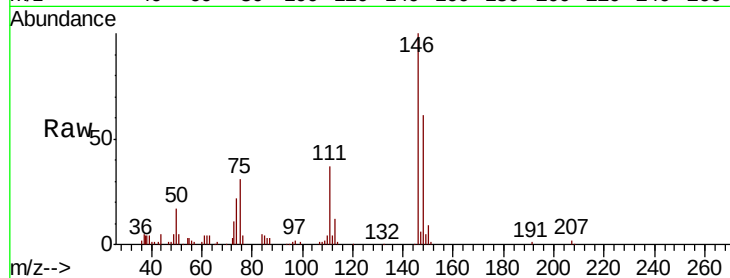
#91
 1,2-Dichlorobenzene
 Concen: 4.658 ug/l
 RT: 13.74 min Scan# 1968
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Lower	Upper
146	100		
111	39.9	20.5	61.5
148	62.3	31.6	95.0

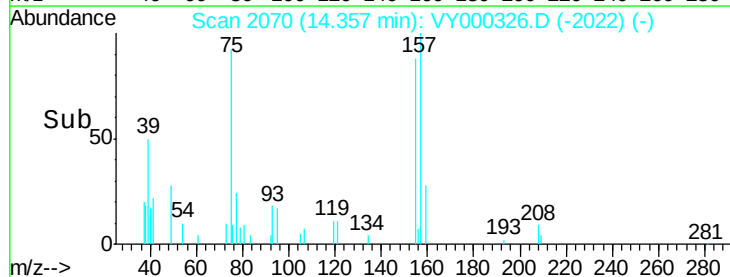
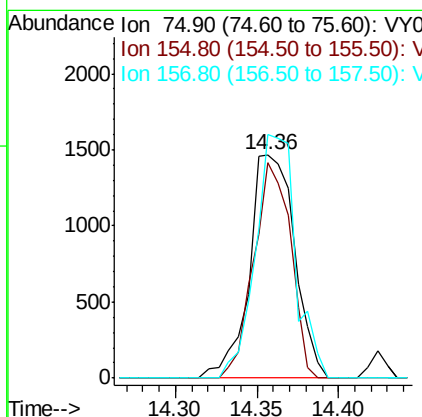
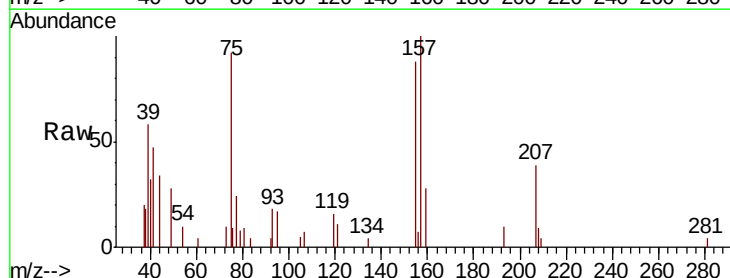
Manual Integrations
 APPROVED

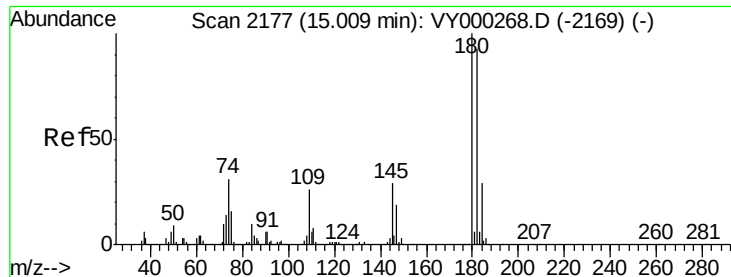
MMDadoda
 10/18/2019 12:50:40 AM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 4.959 ug/l
 RT: 14.36 min Scan# 2070
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Lower	Upper
75	100		
155	78.6	45.8	137.3
157	96.1	55.6	166.9





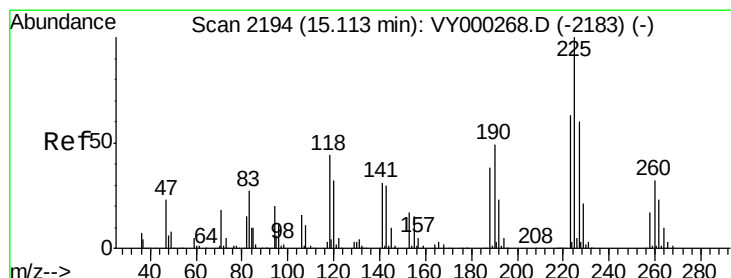
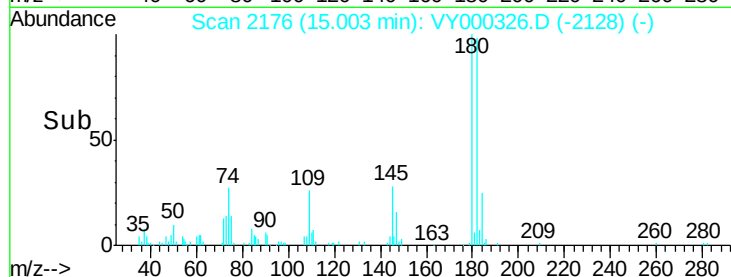
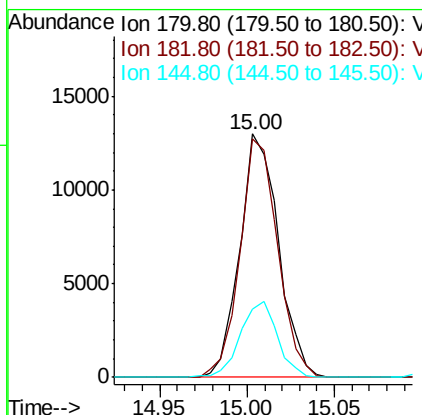
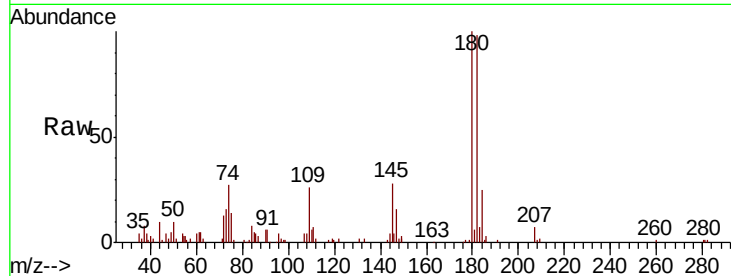
#93
 1,2,4-Trichlorobenzene
 Concen: 4.490 ug/l
 RT: 15.00 min Scan# 2176
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Resp	Lower	Upper
180	100	19945		
182	95.8	47.5	142.6	
145	29.8	15.4	46.1	

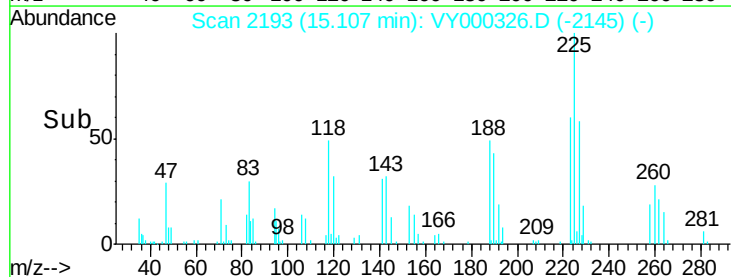
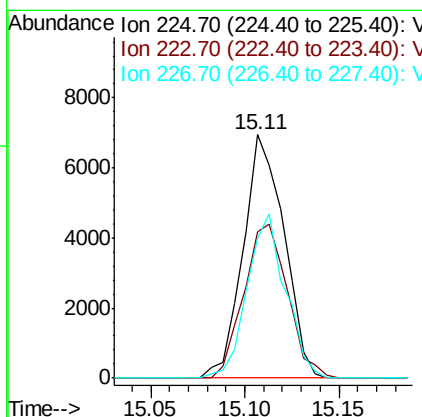
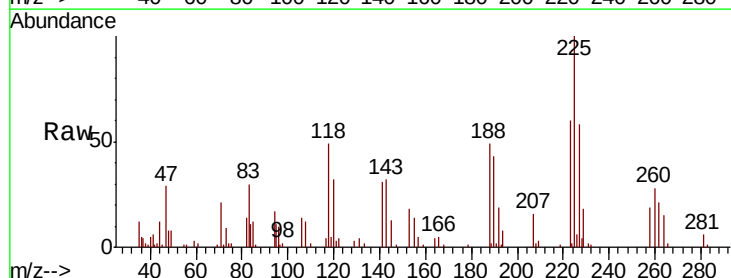
Manual Integrations
 APPROVED

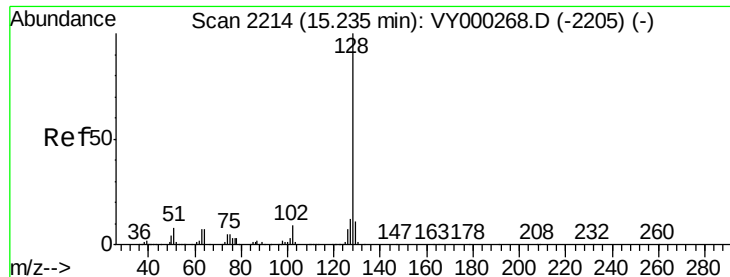
MMDadoda
 10/18/2019 12:50:40 AM



#94
 Hexachlorobutadiene
 Concen: 4.339 ug/l
 RT: 15.11 min Scan# 2193
 Delta R.T. -0.01 min
 Lab File: VY000326.D
 Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Resp	Lower	Upper
225	100	10431		
223	67.7	31.9	95.7	
227	63.4	31.4	94.2	





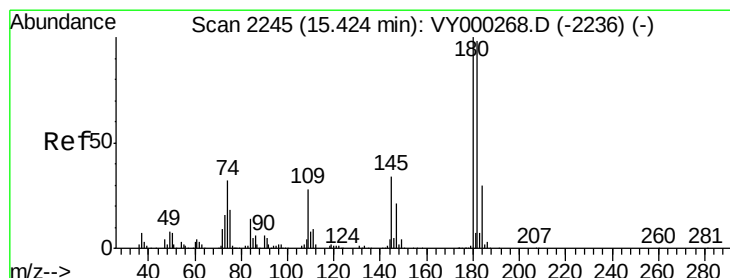
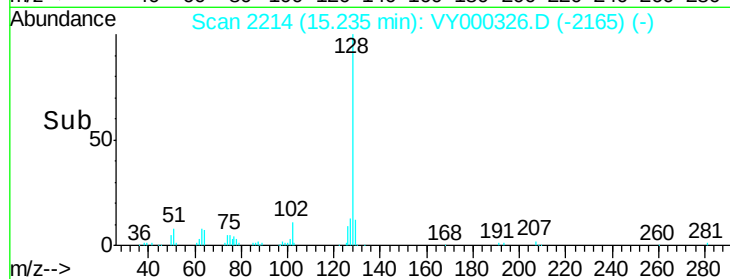
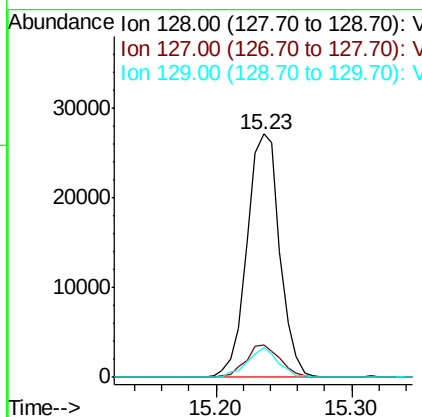
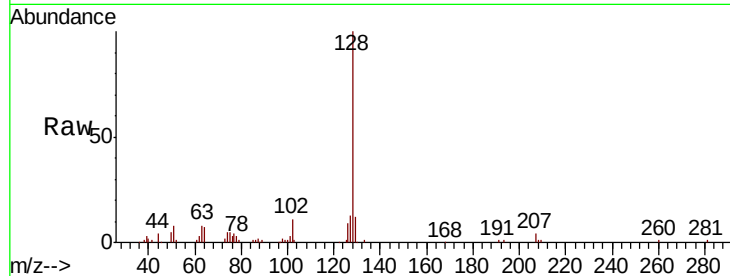
#95
Naphthalene
Concen: 4.628 ug/l
RT: 15.23 min Scan# 2214
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

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

Tot Ion	Ratio	Resp	Lower	Upper
128	100	45884		
127	13.8		9.6	14.4
129	11.5		8.7	13.1

Manual Integrations
APPROVED

MMDadoda
10/18/2019 12:50:40 AM



#96
1,2,3-Trichlorobenzene
Concen: 4.434 ug/l
RT: 15.42 min Scan# 2245
Delta R.T. 0.00 min
Lab File: VY000326.D
Acq: 16 Oct 2019 13:48

Tgt Ion	Ratio	Resp	Lower	Upper
180	100	17754		
182	94.5		46.5	139.5
145	39.0		16.2	48.5

