

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF100918\
 Data File : VF060503.D
 Acq On : 9 Oct 2018 21:58
 Operator : VA/AP
 Sample : J5164-03MDL
 Misc : 5.00/5mL/MSVOA F/SOIL
 ALS Vial : 46 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Manual Integrations
 APPROVED

apatel
 10/10/2018 2:04:23 PM

Quant Time: Oct 10 12:43:41 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F100918S.M
 Quant Title : SW846 8260
 QLast Update : Wed Oct 10 02:28:46 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.00	168	219625	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.73	114	365306	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.89	117	307984	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.61	152	176748	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	4.98	65	189524	56.90	ug/l	0.00
Spiked Amount 50.000			Recovery	=	113.80%	
35) Dibromofluoromethane	4.25	113	203482	60.51	ug/l	0.00
Spiked Amount 50.000			Recovery	=	121.02%	
50) Toluene-d8	7.67	98	381606	47.21	ug/l	0.00
Spiked Amount 50.000			Recovery	=	94.42%	
62) 4-Bromofluorobenzene	11.49	95	178402	50.31	ug/l	0.00
Spiked Amount 50.000			Recovery	=	100.62%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	0.99	85	12312	Below Cal		81
3) Chloromethane	1.12	50	8113m	3.039	ug/l	
4) Vinyl Chloride	1.18	62	6650	2.296	ug/l	93
5) Bromomethane	1.35	94	9947	4.367	ug/l #	63
6) Chloroethane	1.41	64	4558	2.977	ug/l #	79
7) Trichlorofluoromethane	1.53	101	18479	2.847	ug/l #	76
9) 1,1,2-Trichlorotrifluoroet	1.88	101	9607	2.959	ug/l #	81
10) Methyl Iodide	1.95	142	13936m	2.707	ug/l	
11) Tert butyl alcohol	2.68	59	3602	20.639	ug/l #	32
12) 1,1-Dichloroethene	1.85	96	8251	3.042	ug/l	94
13) Acrolein	2.07	56	2437	Below Cal		94
14) Allyl chloride	2.16	41	10354	2.590	ug/l	89
15) Acrylonitrile	3.04	53	6666	18.143	ug/l #	85
16) Acetone	2.31	43	12500	Below Cal		93
17) Carbon Disulfide	1.88	76	18049	2.393	ug/l #	87
18) Methyl Acetate	2.42	43	6466	3.092	ug/l #	92
19) Methyl tert-butyl Ether	2.52	73	17879	2.928	ug/l	99
20) Methylene Chloride	2.30	84	16943m	6.687	ug/l	
21) trans-1,2-Dichloroethene	2.39	96	9584	3.786	ug/l #	83
22) Diisopropyl ether	2.90	45	23760	2.891	ug/l	93
23) Vinyl Acetate	3.30	43	35284	12.264	ug/l	98
24) 1,1-Dichloroethane	2.97	63	16468	2.986	ug/l #	90
25) 2-Butanone	4.49	43	12616	15.880	ug/l	95
26) 2,2-Dichloropropane	3.73	77	6882	2.393	ug/l	98
27) cis-1,2-Dichloroethene	3.59	96	8148	2.757	ug/l	94
28) Bromochloromethane	3.85	49	6450	3.367	ug/l #	86
29) Tetrahydrofuran	4.22	42	6410	19.140	ug/l #	86
30) Chloroform	3.99	83	17561	2.751	ug/l	98
31) Cyclohexane	3.83	56	9079m	2.573	ug/l	
32) 1,1,1-Trichloroethane	4.23	97	12016	2.390	ug/l	95
36) 1,1-Dichloropropene	4.42	75	10436	2.456	ug/l	90
37) Ethyl Acetate	4.25	43	6040	4.024	ug/l #	52
38) Carbon Tetrachloride	4.12	117	13462	3.154	ug/l	97
39) Methylcyclohexane	5.58	83	10357	2.589	ug/l #	79

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF100918\
 Data File : VF060503.D
 Acq On : 9 Oct 2018 21:58
 Operator : VA/AP
 Sample : J5164-03MDL
 Misc : 5.00/5mL/MSVOA F/SOIL
 ALS Vial : 46 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Manual Integrations
 APPROVED

apatel
 10/10/2018 2:04:23 PM

Quant Time: Oct 10 12:43:41 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F100918S.M
 Quant Title : SW846 8260
 QLast Update : Wed Oct 10 02:28:46 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Benzene	4.77	78	21204	2.430	ug/l	99
41) Methacrylonitrile	4.87	41	3152	3.696	ug/l #	71
42) 1,2-Dichloroethane	5.08	62	10671	2.696	ug/l	81
43) Isopropyl Acetate	7.08	43	6994	3.739	ug/l #	89
44) Trichloroethene	5.64	130	6628	2.439	ug/l	94
45) 1,2-Dichloropropane	6.37	63	5520	2.585	ug/l #	86
46) Dibromomethane	6.21	93	3957	2.310	ug/l #	86
47) Bromodichloromethane	6.50	83	9647	2.230	ug/l #	85
49) 1,4-Dioxane	6.84	88	710	18.661	ug/l #	29
51) 4-Methyl-2-Pentanone	8.37	43	22961	17.596	ug/l	92
52) Toluene	7.75	92	10878	1.980	ug/l	92
53) t-1,3-Dichloropropene	8.39	75	8330	2.479	ug/l	99
54) cis-1,3-Dichloropropene	7.43	75	8668	2.215	ug/l #	85
55) 1,1,2-Trichloroethane	8.61	97	4458	2.640	ug/l #	77
56) Ethyl methacrylate	8.73	69	6626	3.391	ug/l #	87
57) 1,3-Dichloropropane	8.96	76	6456	2.220	ug/l #	78
58) 2-Chloroethyl Vinyl ether	7.73	63	2851	14.360	ug/l	100
59) 2-Hexanone	9.61	43	19017	20.147	ug/l	92
60) Dibromochloromethane	8.83	129	6988	2.636	ug/l	92
61) 1,2-Dibromoethane	9.11	107	4812	2.522	ug/l #	79
64) Tetrachloroethene	8.26	164	6605	2.706	ug/l #	78
65) Chlorobenzene	9.91	112	13998	2.340	ug/l #	86
66) 1,1,1,2-Tetrachloroethane	10.05	131	6181	2.294	ug/l	73
67) Ethyl Benzene	10.01	91	28811	2.553	ug/l	93
68) m/p-Xylenes	10.25	106	19527	5.069	ug/l	91
69) o-Xylene	10.81	106	11574	2.763	ug/l	79
70) Styrene	10.88	104	15594	2.586	ug/l	93
71) Bromoform	10.86	173	3203	2.345	ug/l #	94
73) Isopropylbenzene	11.20	105	32210	2.452	ug/l	96
74) N-amyl acetate	11.44	43	12551	4.389	ug/l	96
75) 1,1,2,2-Tetrachloroethane	11.76	83	7206	3.263	ug/l	71
76) 1,2,3-Trichloropropane	11.86	75	5147	3.015	ug/l	82
77) Bromobenzene	11.58	156	6475	2.218	ug/l	95
78) n-propylbenzene	11.67	91	39230	2.507	ug/l	90
79) 2-Chlorotoluene	11.79	91	25149	2.745	ug/l	93
80) 1,3,5-Trimethylbenzene	11.89	105	27811	2.523	ug/l	97
81) trans-1,4-Dichloro-2-buten	11.94	75	1916m	2.574	ug/l	
82) 4-Chlorotoluene	11.97	91	26249	2.777	ug/l	97
83) tert-Butylbenzene	12.20	119	29117	2.628	ug/l	96
84) 1,2,4-Trimethylbenzene	12.27	105	28502	2.547	ug/l	98
85) sec-Butylbenzene	12.37	105	39787	2.648	ug/l	94
86) p-Isopropyltoluene	12.52	119	31260	2.534	ug/l	97
87) 1,3-Dichlorobenzene	12.54	146	15877	2.855	ug/l	92
88) 1,4-Dichlorobenzene	12.63	146	14350	2.661	ug/l	86
89) n-Butylbenzene	12.91	91	35505	2.750	ug/l	88
90) Hexachloroethane	12.98	117	7608	2.579	ug/l	91
91) 1,2-Dichlorobenzene	13.01	146	15233	2.845	ug/l	91
92) 1,2-Dibromo-3-Chloropropan	13.70	75	1298	2.769	ug/l	87
93) 1,2,4-Trichlorobenzene	14.25	180	12008	2.904	ug/l	94
94) Hexachlorobutadiene	14.24	225	7632	2.715	ug/l #	48

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF100918\
Data File : VF060503.D
Acq On : 9 Oct 2018 21:58
Operator : VA/AP
Sample : J5164-03MDL
Misc : 5.00/5mL/MSVOA F/SOIL
ALS Vial : 46 Sample Multiplier: 1

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

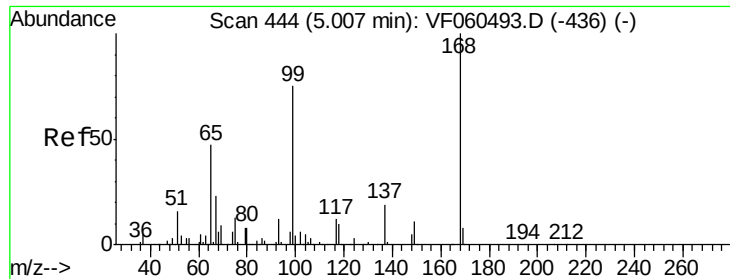
Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM

Quant Time: Oct 10 12:43:41 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_F\METHODS\82F100918S.M
Quant Title : SW846 8260
QLast Update : Wed Oct 10 02:28:46 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Naphthalene	14.51	128	24414	3.435	ug/l	94
96) 1,2,3-Trichlorobenzene	14.65	180	11418	2.964	ug/l	75

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.00 min Scan# 443

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:168 Resp: 219625

Ion Ratio Lower Upper

168 100

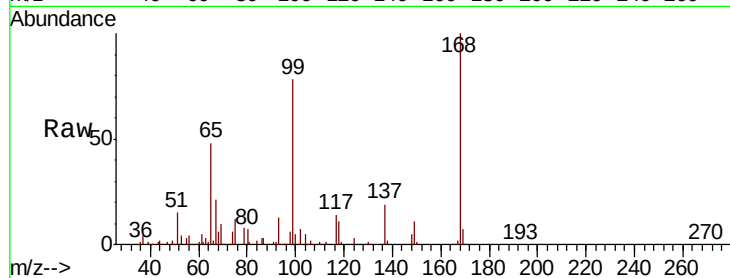
99 78.1 60.3 90.5

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.00

80000

60000

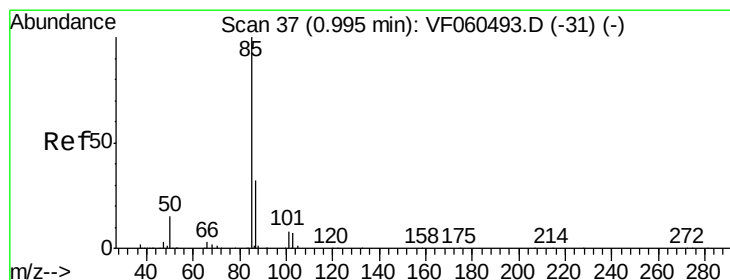
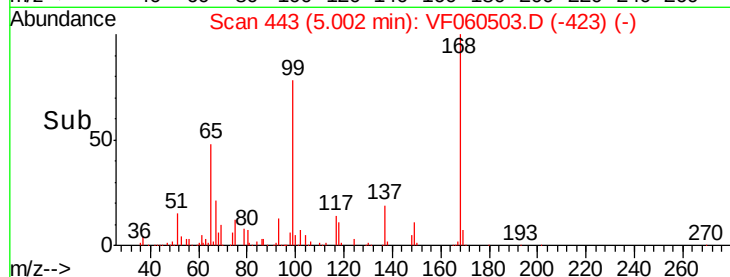
40000

20000

0

4.90 5.00 5.10 5.20

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 0.99 min Scan# 36

Delta R.T. -0.00 min

Lab File: VF060503.D

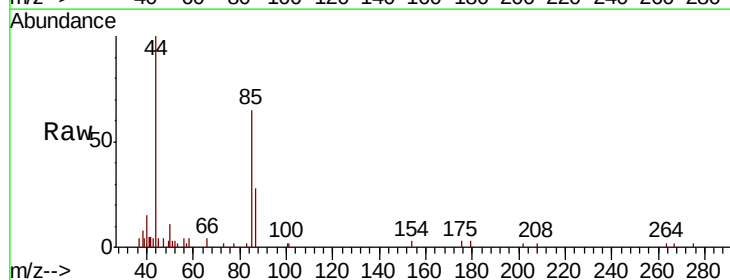
Acq: 9 Oct 2018 21:58

Tgt Ion: 85 Resp: 12312

Ion Ratio Lower Upper

85 100

87 42.9 16.2 48.5



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.99

4000

3000

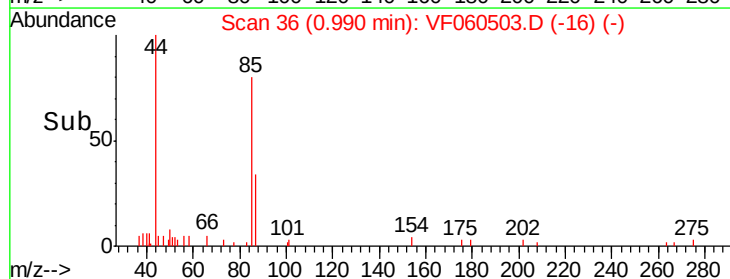
2000

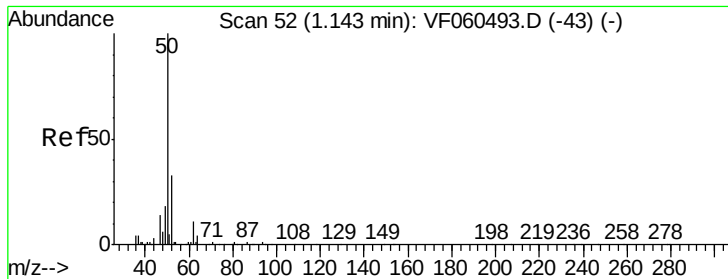
1000

0

0.90 1.00 1.10

Time-->





#3

Chloromethane

Concen: 3.039 ug/l m

RT: 1.12 min Scan# 49

Delta R.T. -0.02 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 50 Resp: 8113

Ion Ratio Lower Upper

50 100

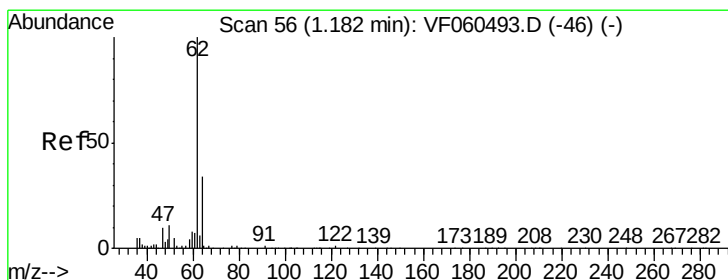
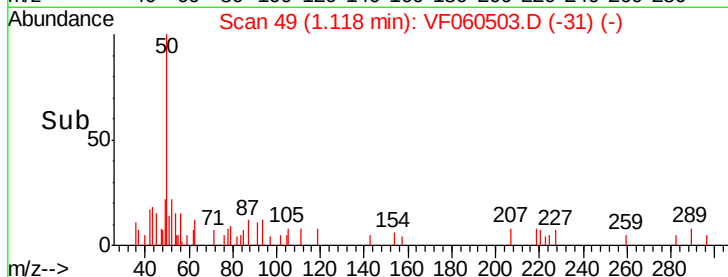
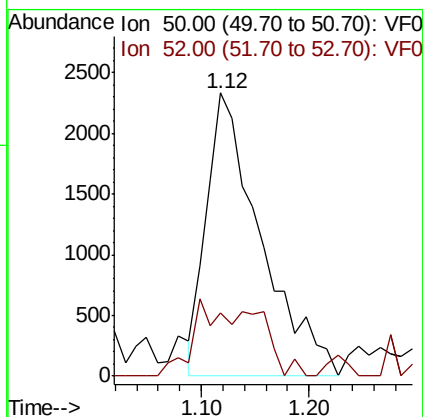
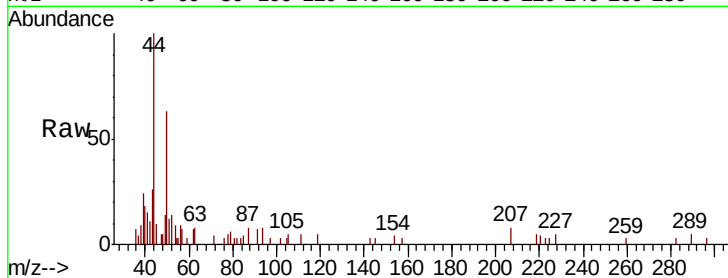
52 22.4 25.0 37.4#

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#4

Vinyl Chloride

Concen: 2.296 ug/l

RT: 1.18 min Scan# 55

Delta R.T. -0.00 min

Lab File: VF060503.D

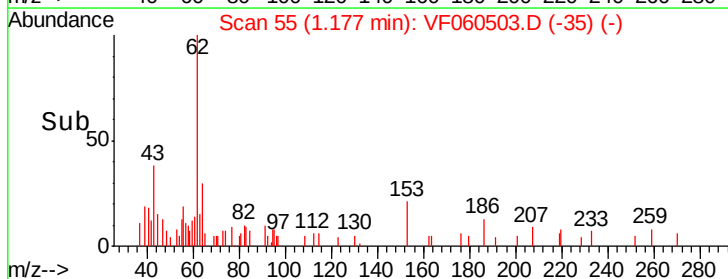
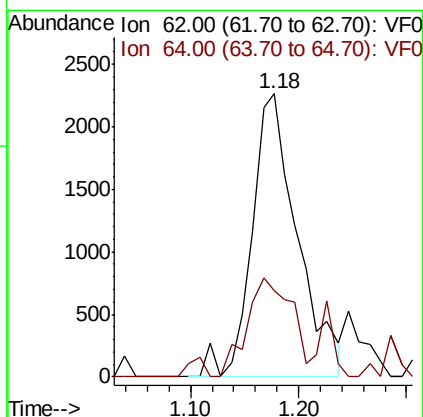
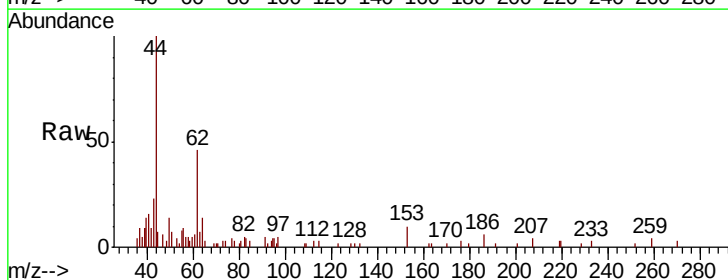
Acq: 9 Oct 2018 21:58

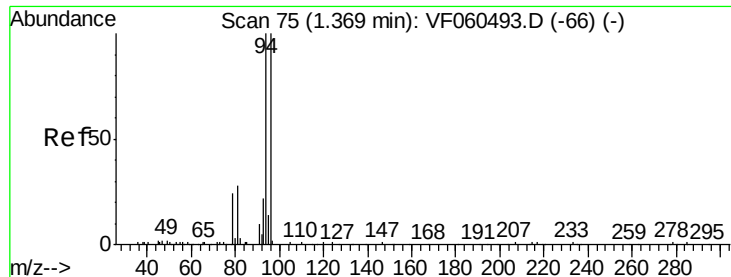
Tgt Ion: 62 Resp: 6650

Ion Ratio Lower Upper

62 100

64 30.5 27.5 41.3





#5

Bromomethane

Concen: 4.367 ug/l

RT: 1.35 min Scan# 73

Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 94 Resp: 9947

Ion Ratio Lower Upper

94 100

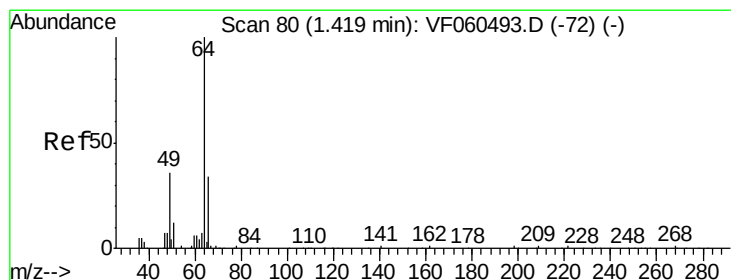
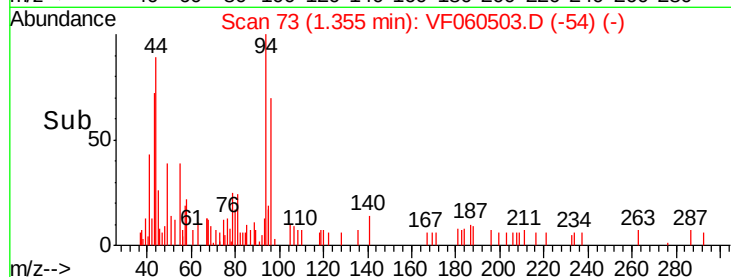
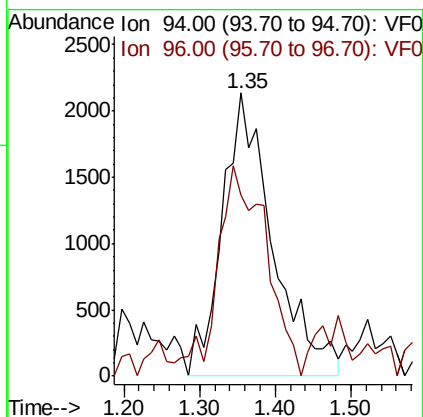
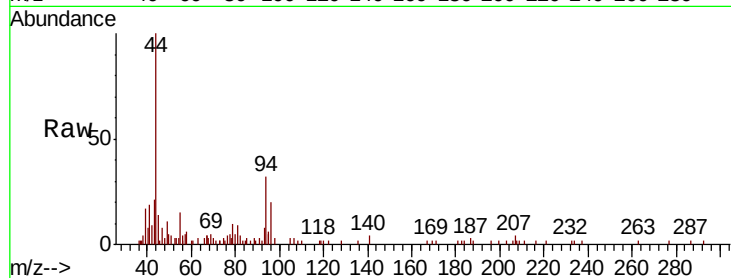
96 63.8 80.6 120.8#

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#6

Chloroethane

Concen: 2.977 ug/l

RT: 1.41 min Scan# 79

Delta R.T. -0.00 min

Lab File: VF060503.D

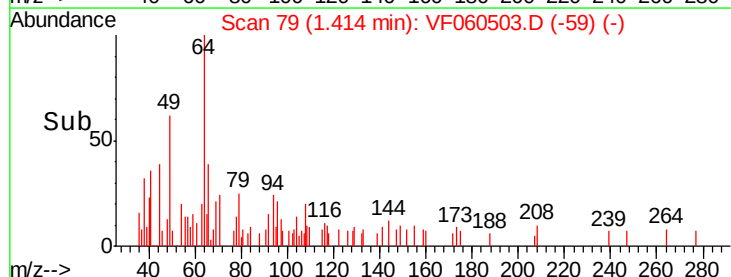
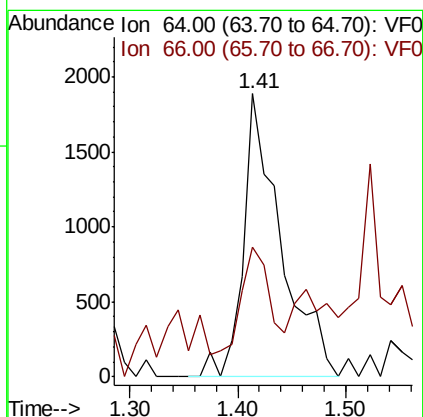
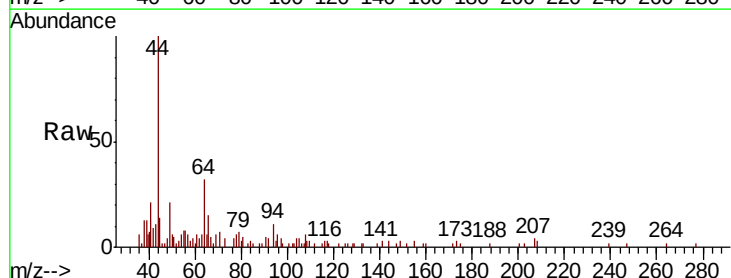
Acq: 9 Oct 2018 21:58

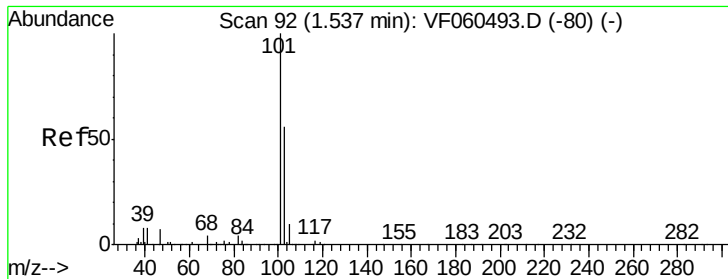
Tgt Ion: 64 Resp: 4558

Ion Ratio Lower Upper

64 100

66 45.8 27.0 40.6#





#7

Trichlorofluoromethane

Concen: 2.847 ug/l

RT: 1.53 min Scan# 91

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:101 Resp: 18479

Ion Ratio Lower Upper

101 100

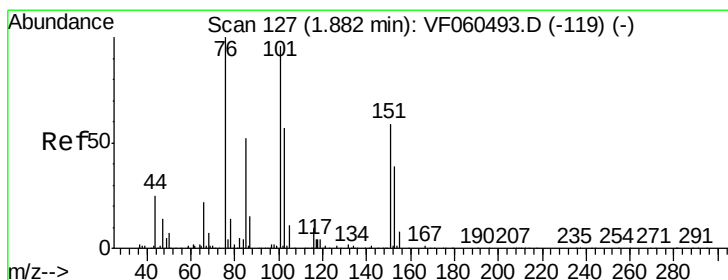
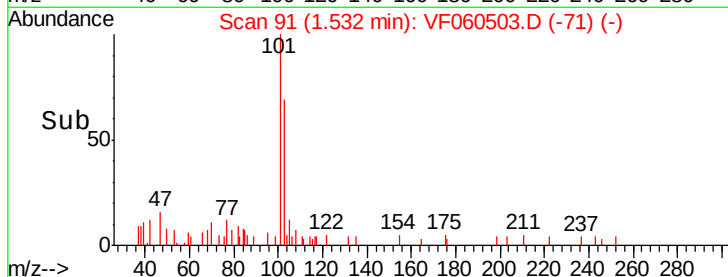
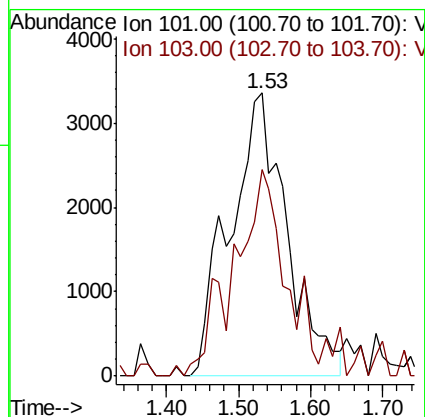
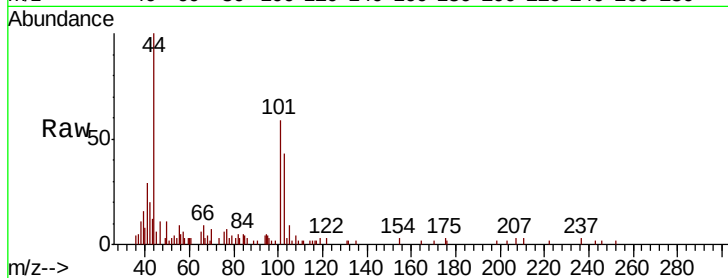
103 73.2 44.6 66.8#

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.959 ug/l

RT: 1.88 min Scan# 126

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

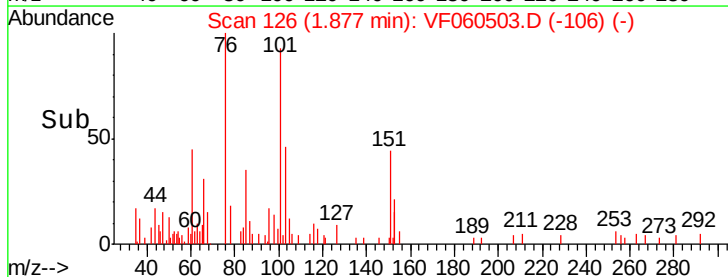
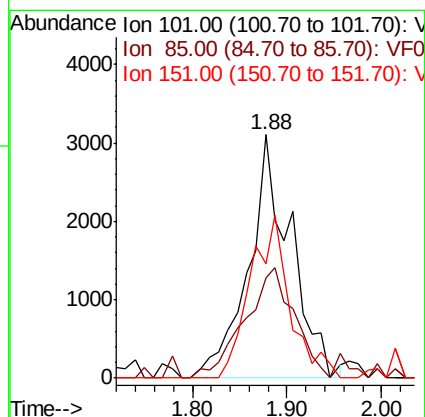
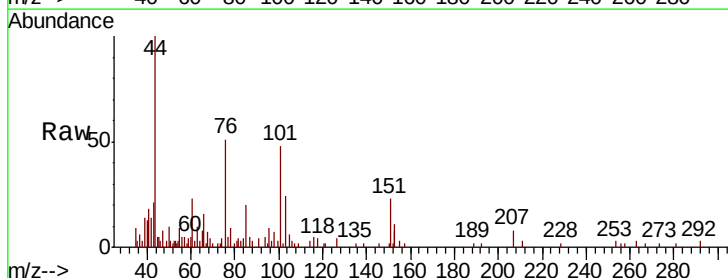
Tgt Ion:101 Resp: 9607

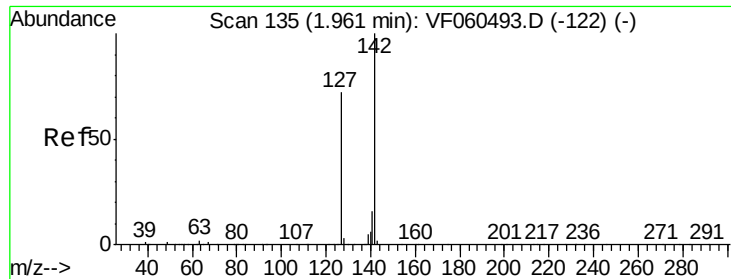
Ion Ratio Lower Upper

101 100

85 39.6 41.8 62.6#

151 44.9 47.4 71.0#





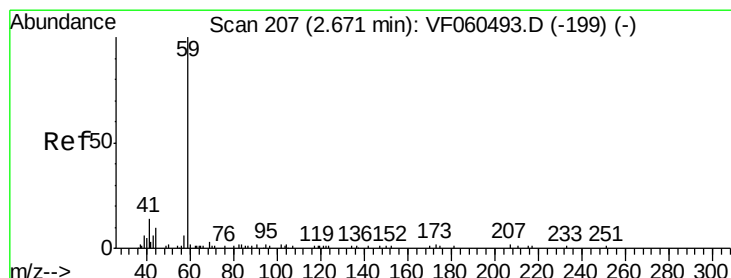
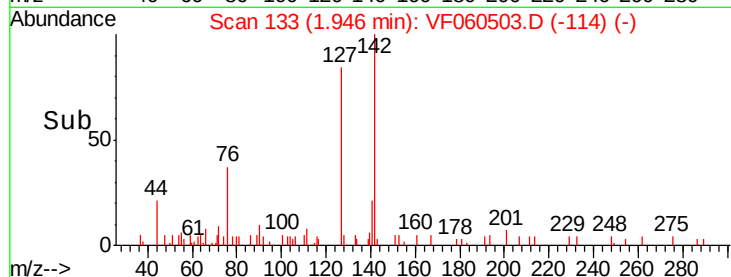
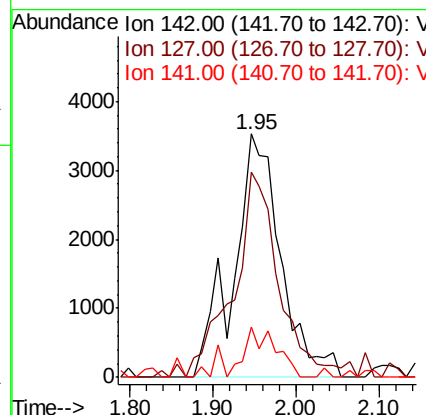
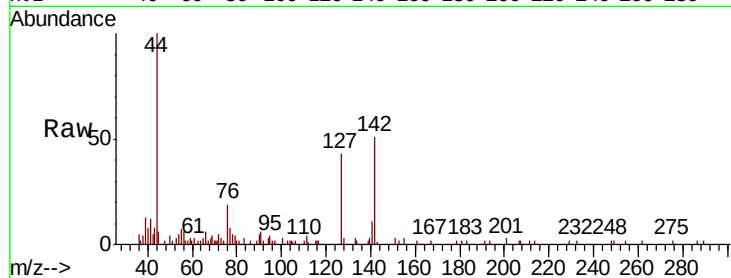
#10
Methvl Iodide
Concen: 2.707 ug/l m
RT: 1.95 min Scan# 133
Delta R.T. -0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
142	100		
127	84.1	57.9	86.9
141	20.8	12.7	19.1#

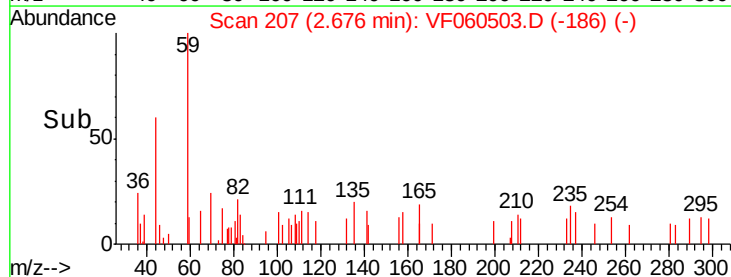
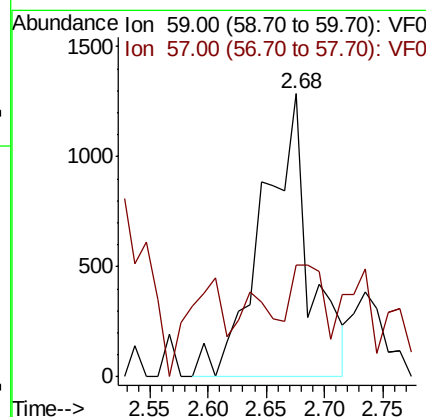
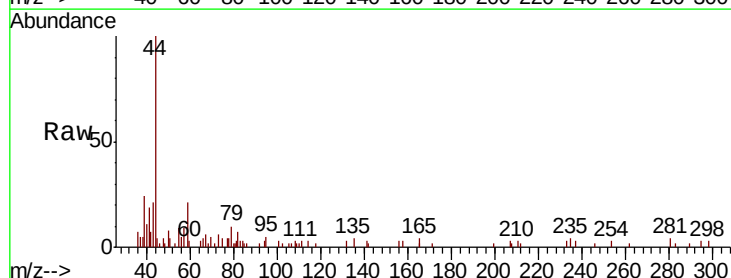
Manual Integrations
APPROVED

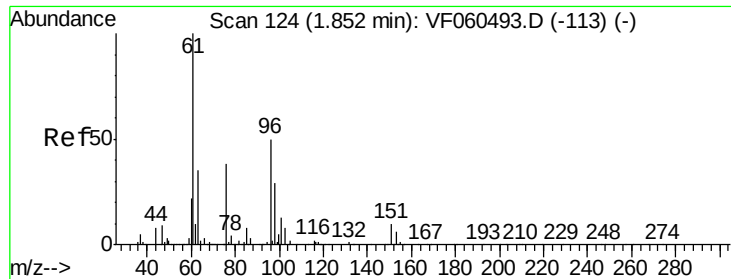
apatel
10/10/2018 2:04:23 PM



#11
Tert butyl alcohol
Concen: 20.639 ug/l
RT: 2.68 min Scan# 207
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
59	100		
57	39.5	10.2	15.2#





#12

1,1-Dichloroethene

Concen: 3.042 ug/l

RT: 1.85 min Scan# 123

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

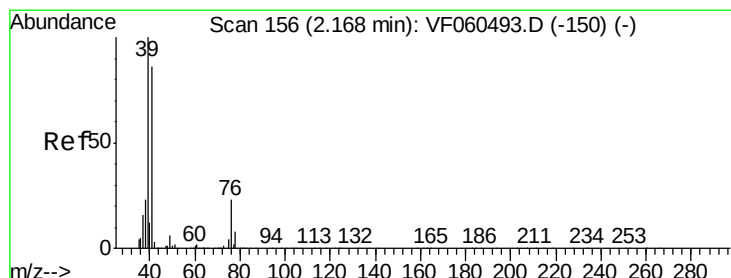
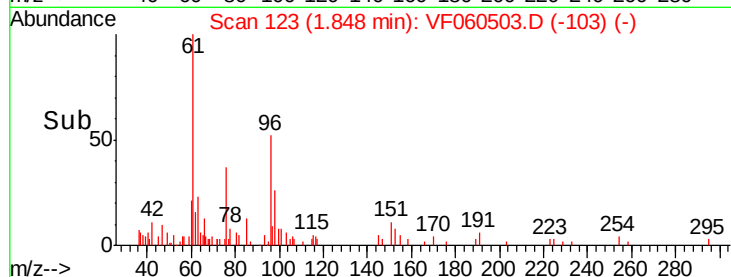
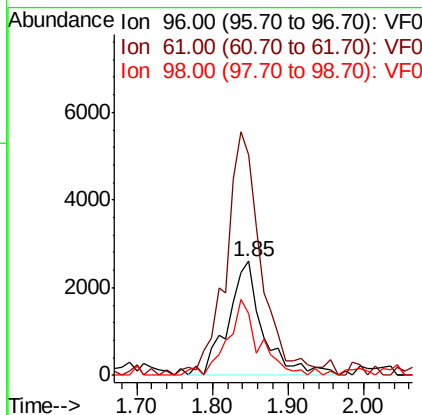
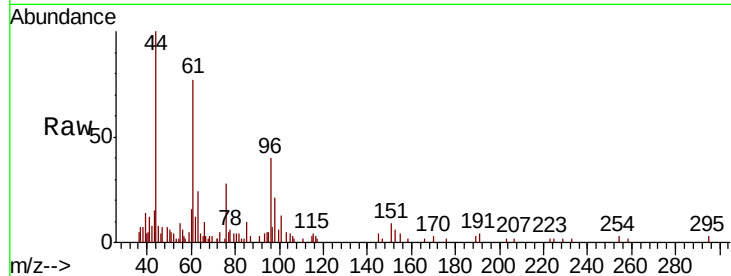
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	96	Resp:	8251
Ion Ratio	Lower	Upper	
96	100		
61	192.7	161.9	242.9
98	54.0	47.4	71.2

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#14

Allyl chloride

Concen: 2.590 ug/l

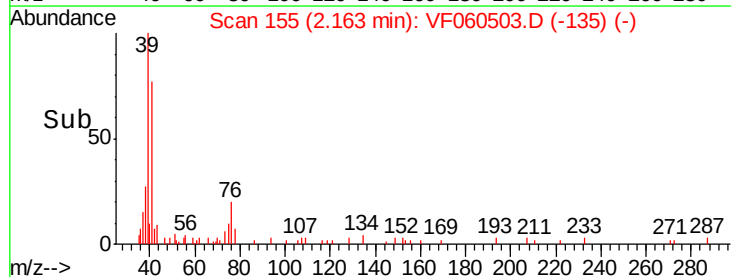
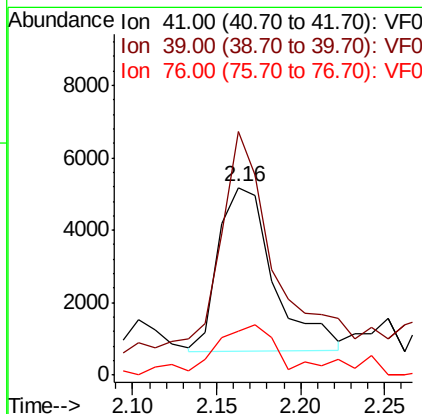
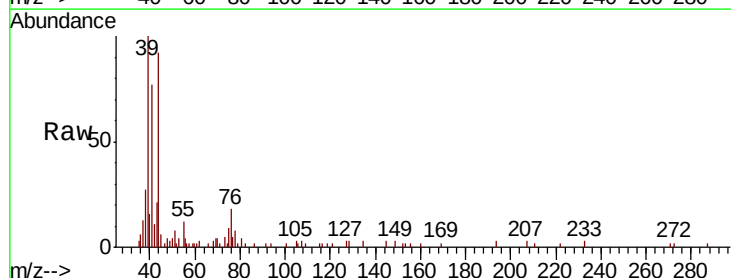
RT: 2.16 min Scan# 155

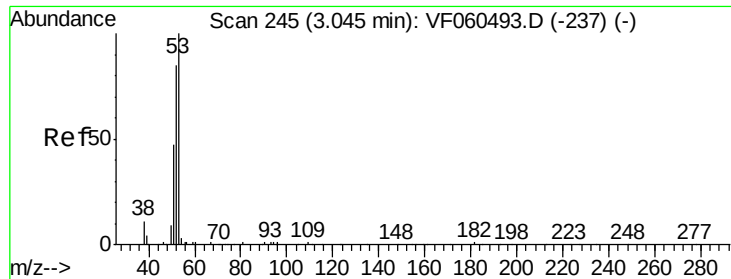
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	41	Resp:	10354
Ion Ratio	Lower	Upper	
41	100		
39	129.9	93.1	139.7
76	23.1	21.6	32.4





#15

Acrylonitrile

Concen: 18.143 ug/l

RT: 3.04 min Scan# 244

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

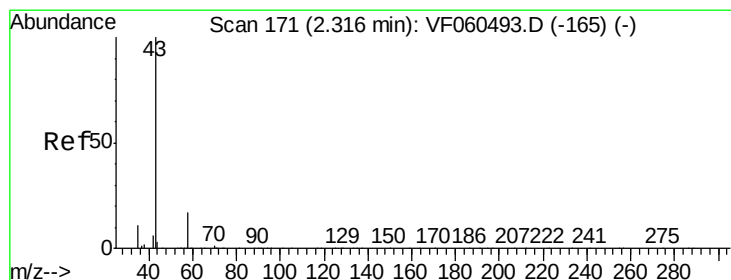
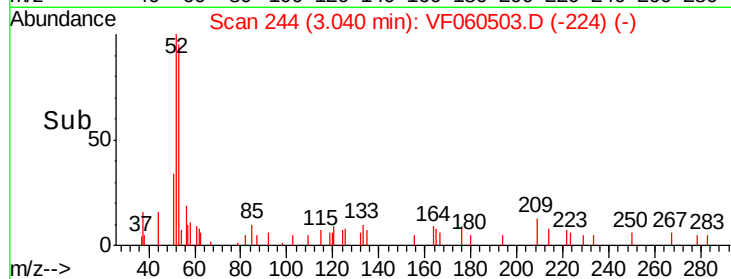
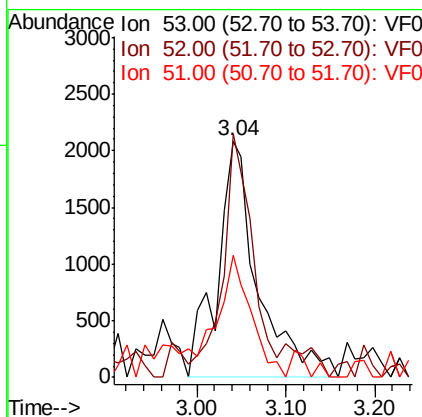
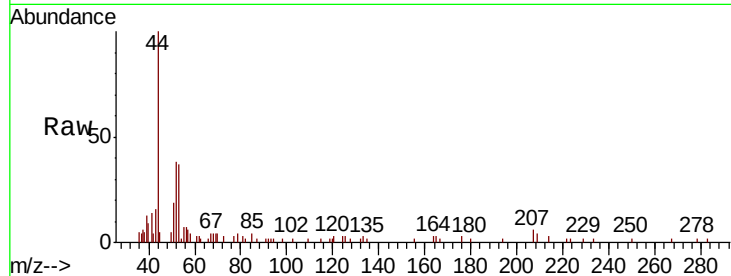
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	53	Resp:	6666
Ion	Ratio	Lower	Upper
53	100		
52	103.2	67.5	101.3#
51	51.7	38.2	57.4

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#16

Acetone

Concen: Below Cal

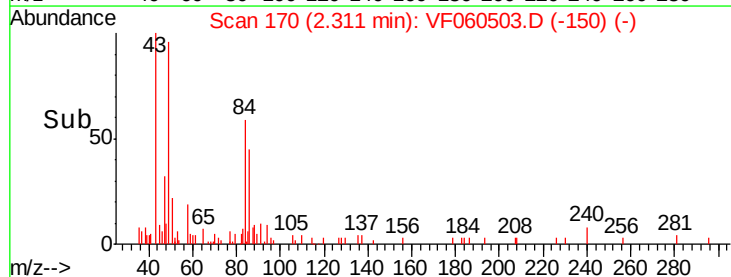
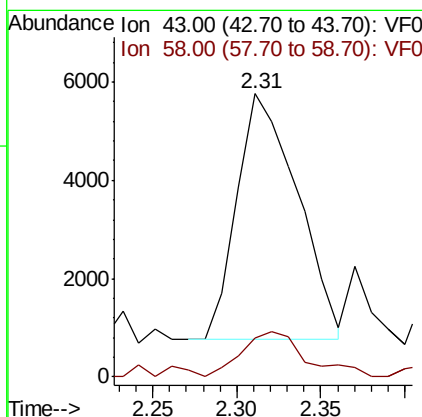
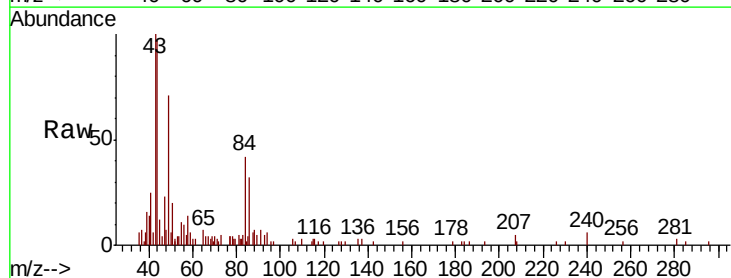
RT: 2.31 min Scan# 170

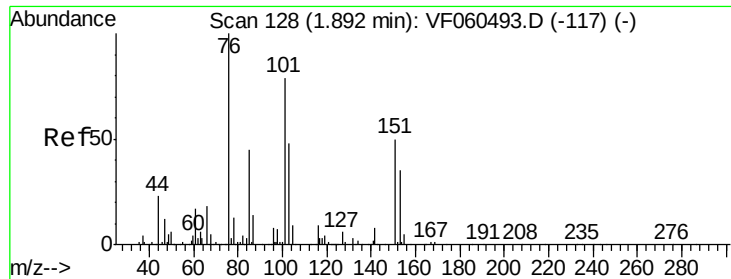
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	43	Resp:	12500
Ion	Ratio	Lower	Upper
43	100		
58	13.6	13.2	19.8





#17

Carbon Disulfide

Concen: 2.393 ug/l

RT: 1.88 min Scan# 126

Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 76 Resp: 18049

Ion Ratio Lower Upper

76 100

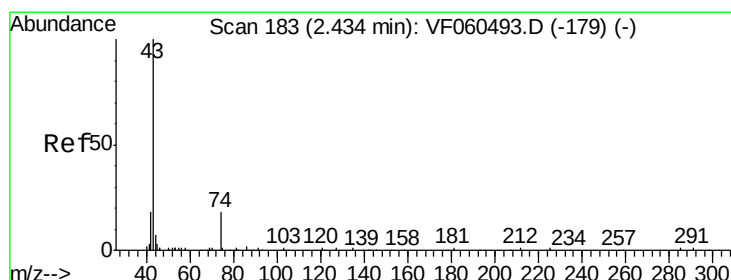
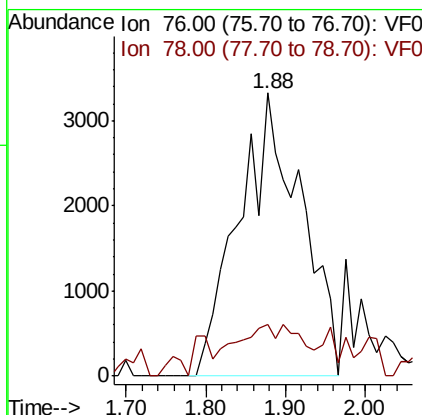
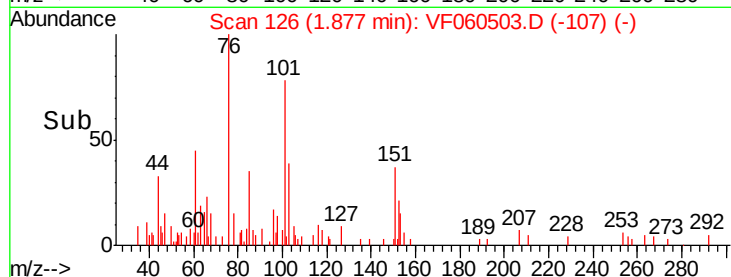
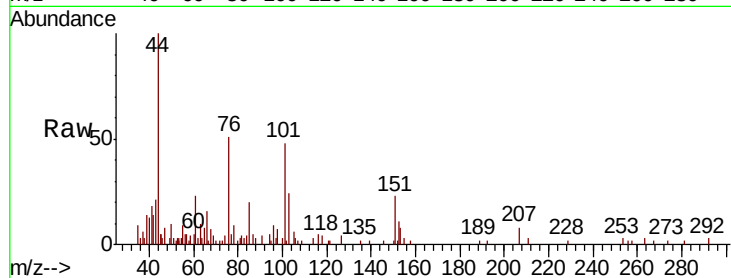
78 18.4 10.5 15.7#

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#18

Methyl Acetate

Concen: 3.092 ug/l

RT: 2.42 min Scan# 181

Delta R.T. -0.01 min

Lab File: VF060503.D

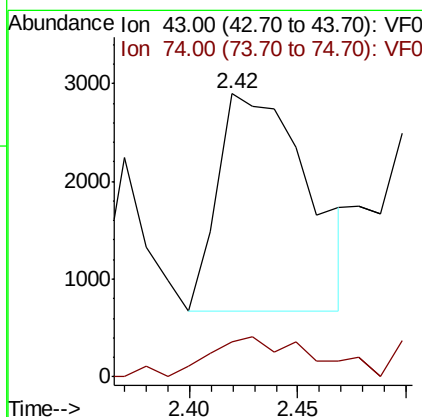
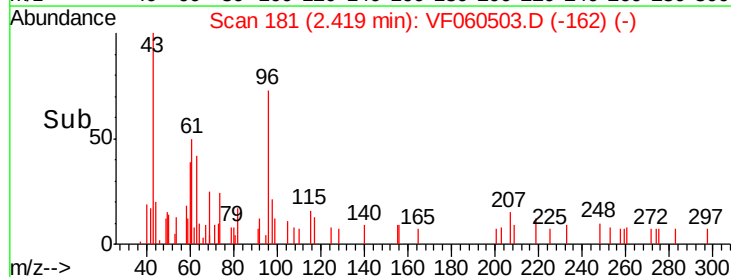
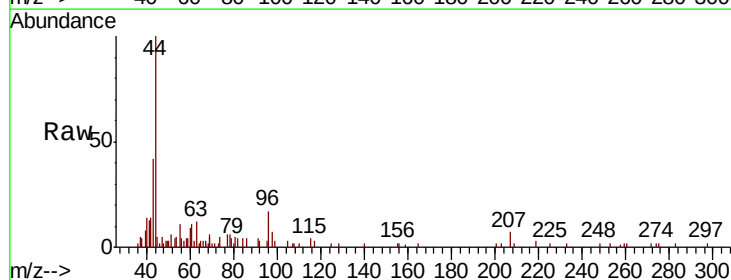
Acq: 9 Oct 2018 21:58

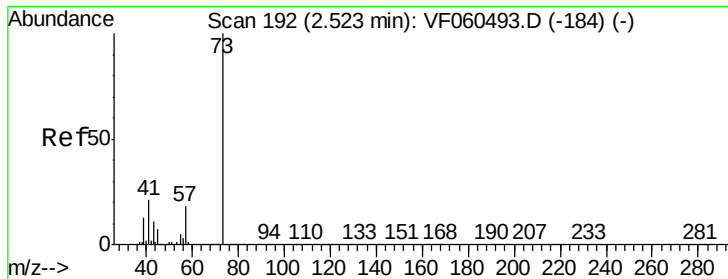
Tgt Ion: 43 Resp: 6466

Ion Ratio Lower Upper

43 100

74 12.6 12.9 19.3#





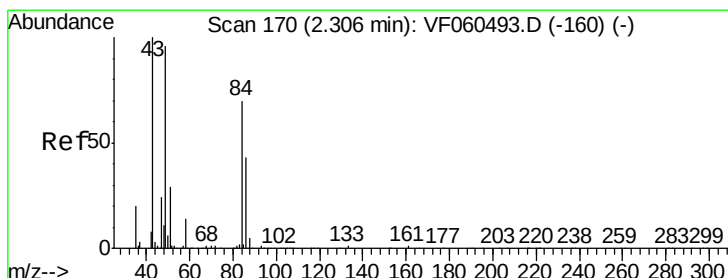
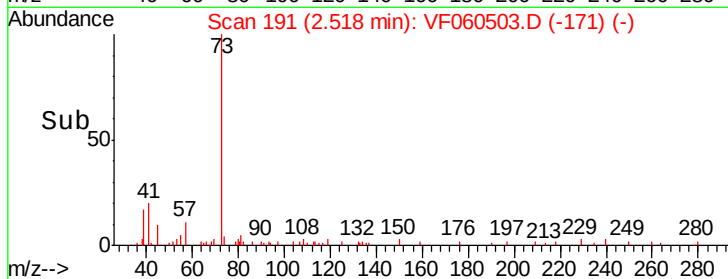
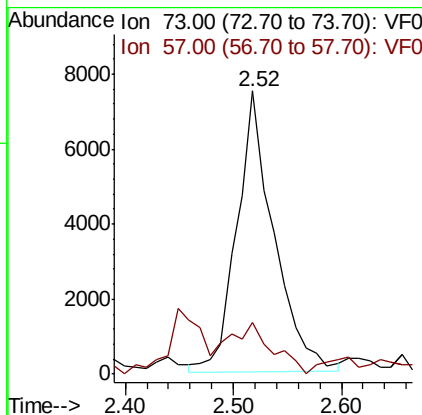
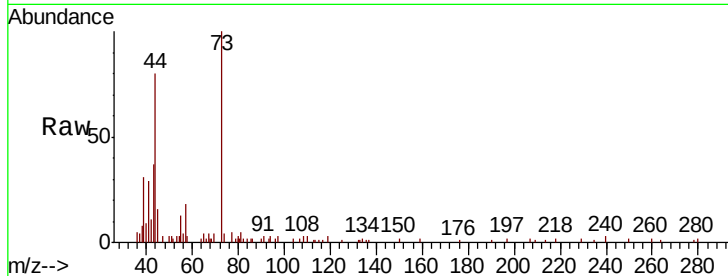
#19
Methyl tert-butyl Ether
Concen: 2.928 ug/l
RT: 2.52 min Scan# 191
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
73	100		
57	18.2	15.0	22.6

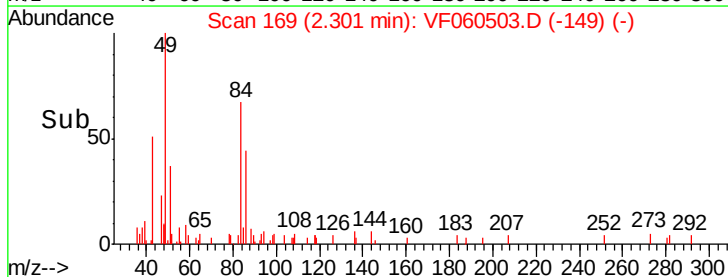
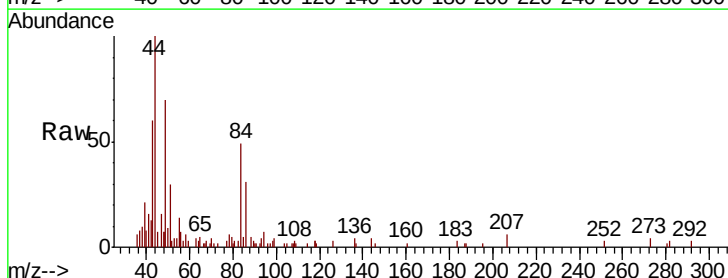
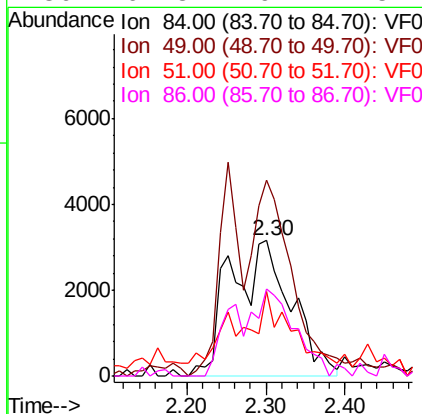
Manual Integrations
APPROVED

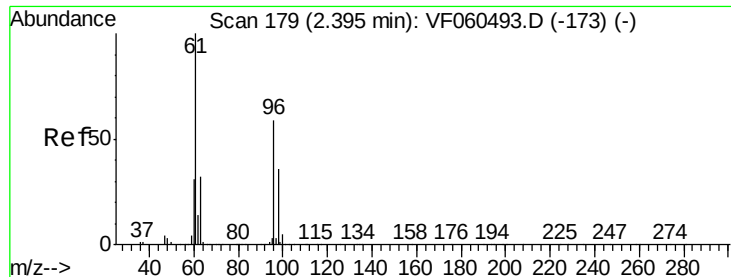
apatel
10/10/2018 2:04:23 PM



#20
Methylene Chloride
Concen: 6.687 ug/l m
RT: 2.30 min Scan# 169
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
84	100		
49	144.7	111.5	167.3
51	62.6	34.6	52.0#
86	64.3	49.1	73.7





#21

trans-1,2-Dichloroethene

Concen: 3.786 ug/l

RT: 2.39 min Scan# 178

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

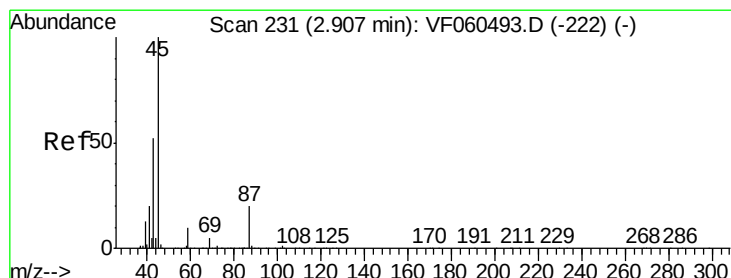
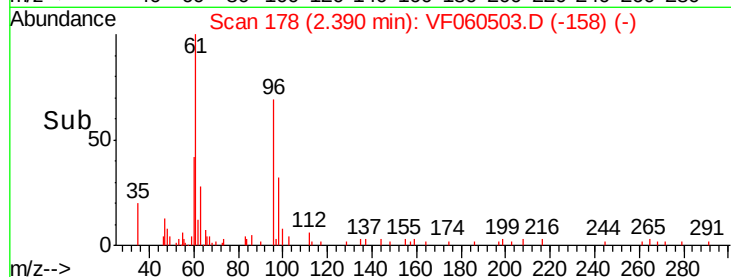
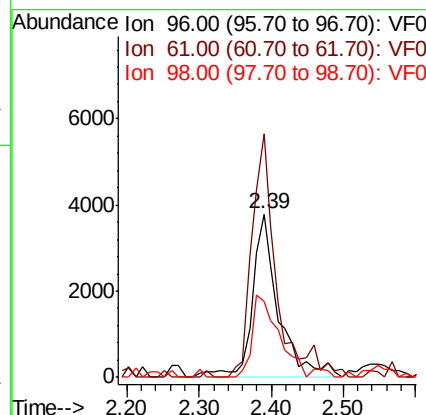
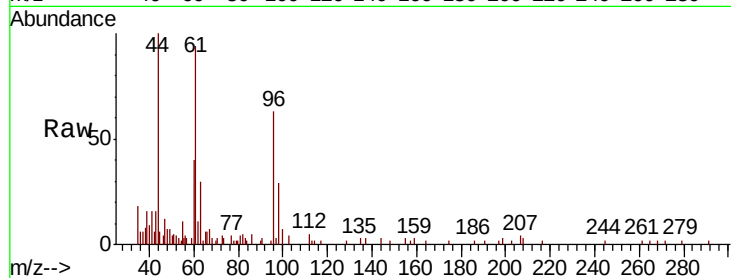
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	96	Resp:	9584
Ion	Ratio	Lower	Upper
96	100		
61	149.2	136.2	204.4
98	46.2	49.7	74.5#

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#22

Diisopropyl ether

Concen: 2.891 ug/l

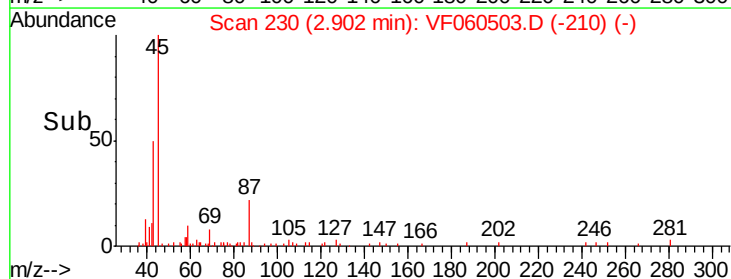
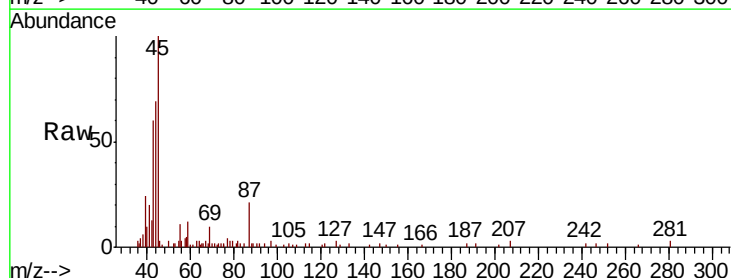
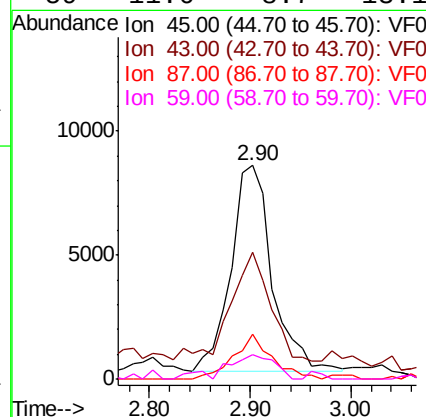
RT: 2.90 min Scan# 230

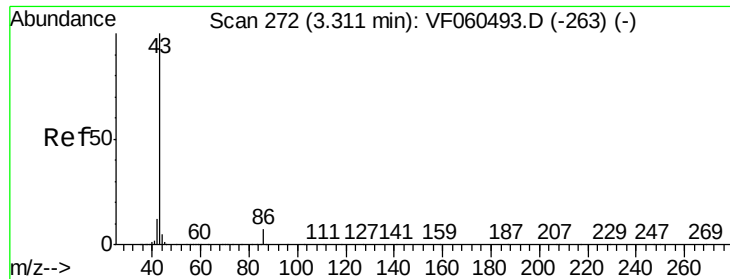
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	45	Resp:	23760
Ion	Ratio	Lower	Upper
45	100		
43	59.5	41.8	62.8
87	20.9	15.7	23.5
59	11.6	8.7	13.1





#23

Vinyl Acetate

Concen: 12.264 ug/l

RT: 3.30 min Scan# 270

Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

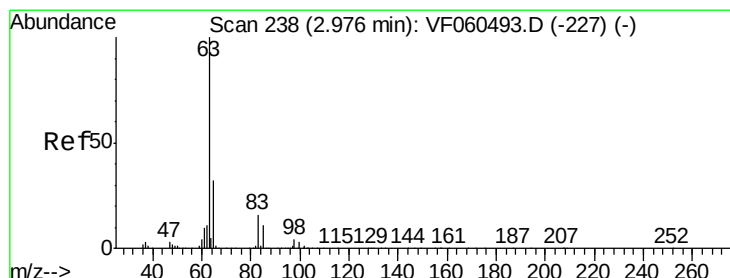
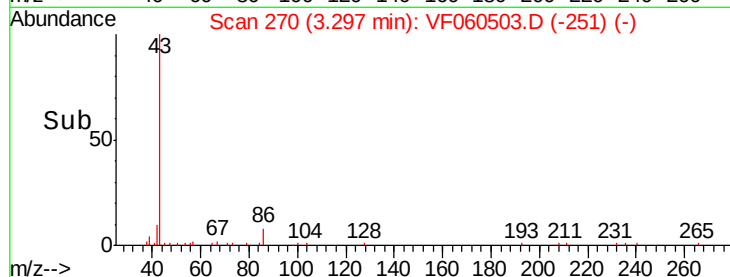
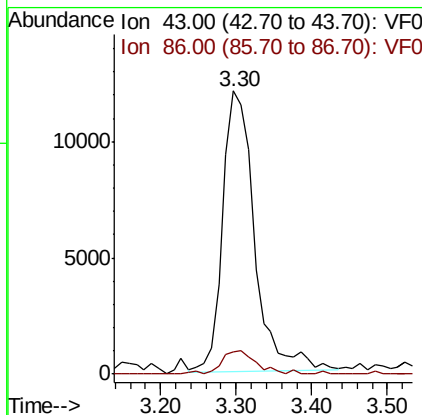
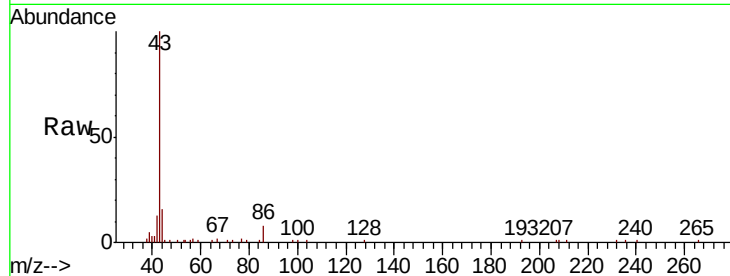
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	43	Resp:	35284
Ion Ratio	Lower	Upper	
43	100		
86	8.1	5.8	8.8

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#24

1,1-Dichloroethane

Concen: 2.986 ug/l

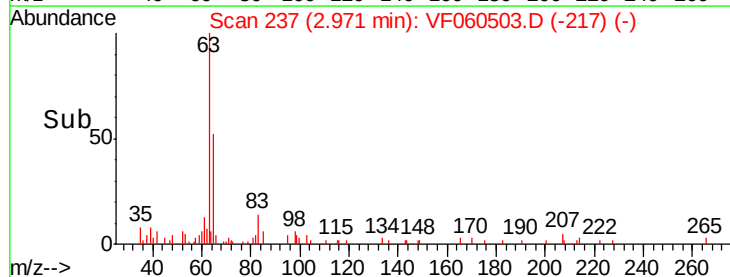
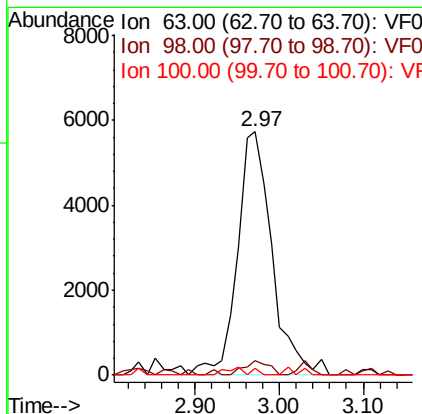
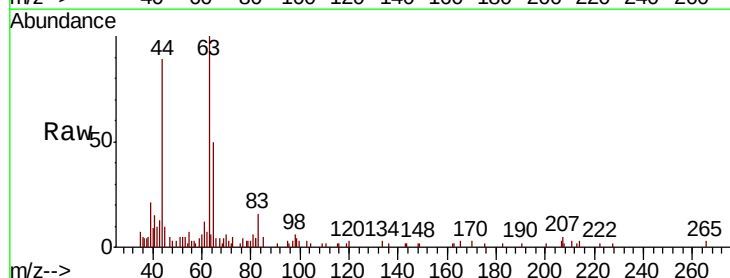
RT: 2.97 min Scan# 237

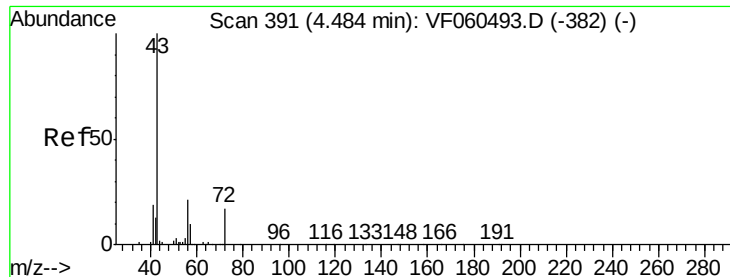
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	63	Resp:	16468
Ion Ratio	Lower	Upper	
63	100		
98	9.7	2.2	6.6#
100	2.7	1.5	4.4





#25

2-Butanone

Concen: 15.880 ug/l

RT: 4.49 min Scan# 391

Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 43 Resp: 12616

Ion Ratio Lower Upper

43 100

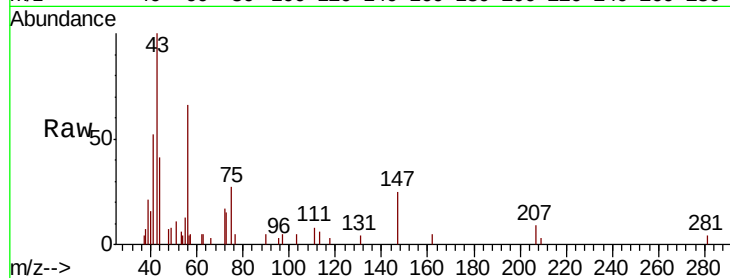
72 16.6 15.0 22.6

Manual Integrations

APPROVED

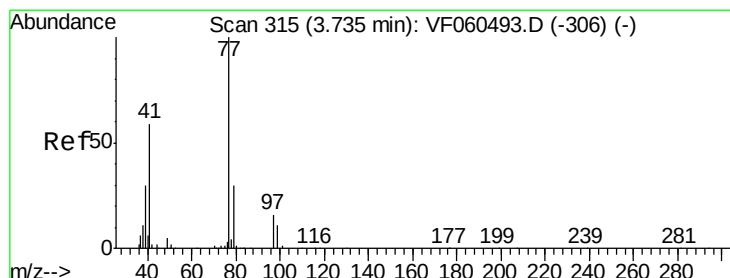
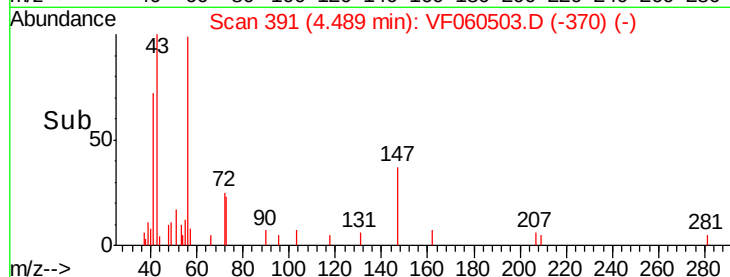
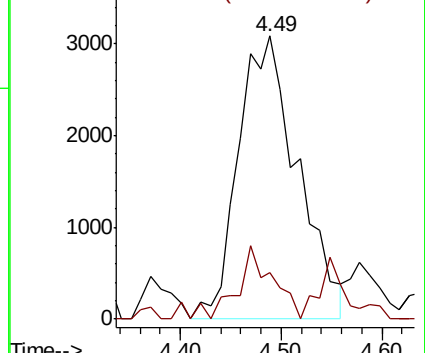
apatel

10/10/2018 2:04:23 PM



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



#26

2,2-Dichloropropane

Concen: 2.393 ug/l

RT: 3.73 min Scan# 314

Delta R.T. -0.00 min

Lab File: VF060503.D

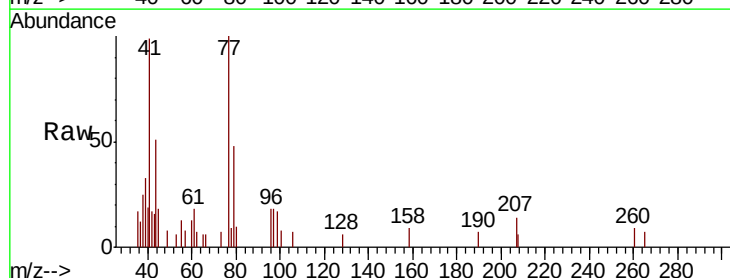
Acq: 9 Oct 2018 21:58

Tgt Ion: 77 Resp: 6882

Ion Ratio Lower Upper

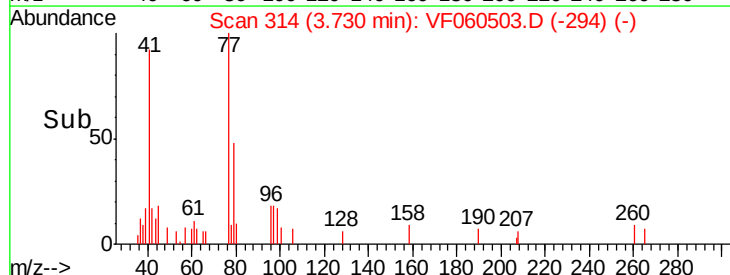
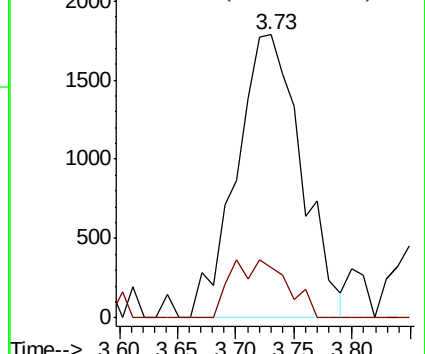
77 100

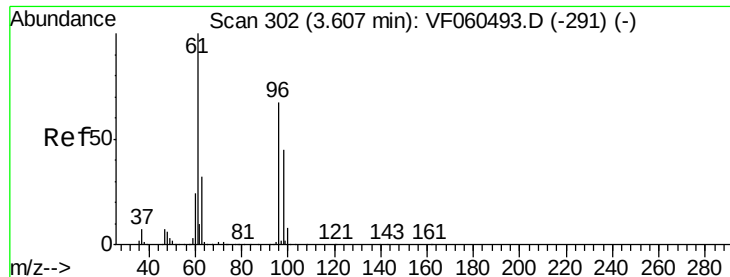
97 17.8 8.6 25.7



Abundance Ion 77.00 (76.70 to 77.70): VF0

Ion 97.00 (96.70 to 97.70): VF0





#27

cis-1,2-Dichloroethene

Concen: 2.757 ug/l

RT: 3.59 min Scan# 300

Delta R.T. -0.01 min

Lab File: VF060503.D

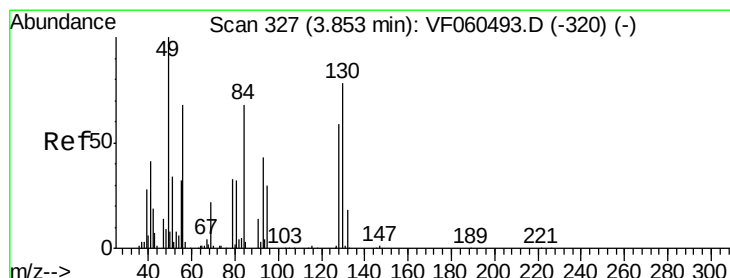
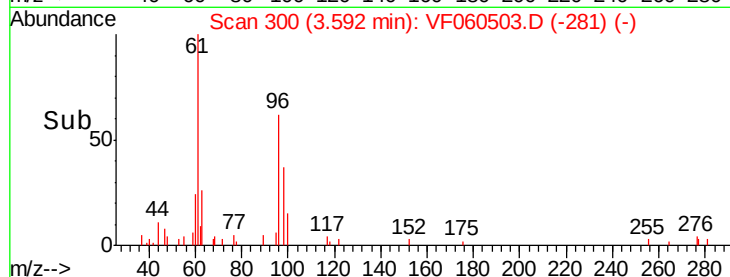
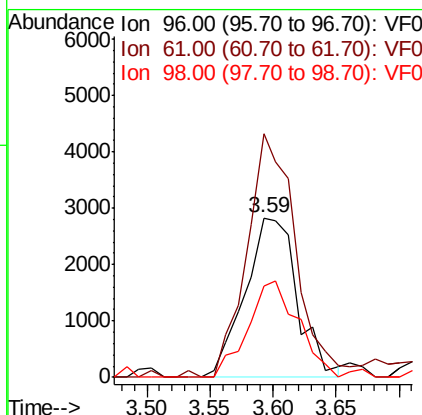
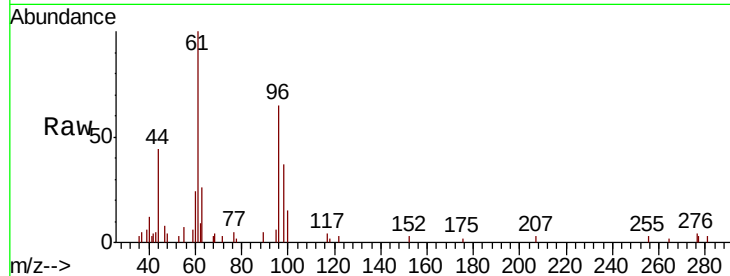
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Resp	Lower	Upper
96	100	8148		
61	152.9	0.0	298.0	
98	57.0	0.0	135.0	

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#28

Bromochloromethane

Concen: 3.367 ug/l

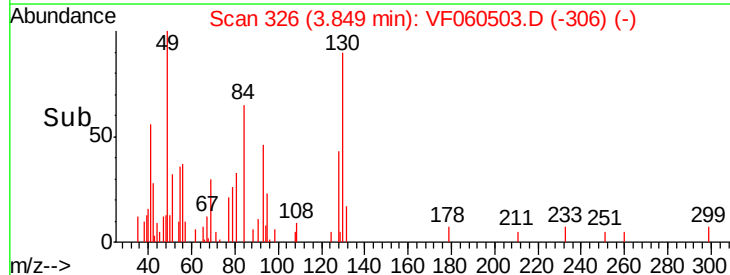
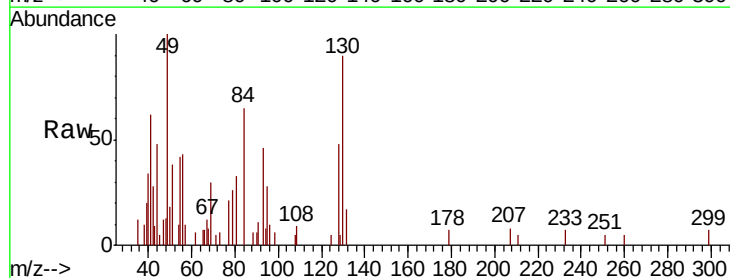
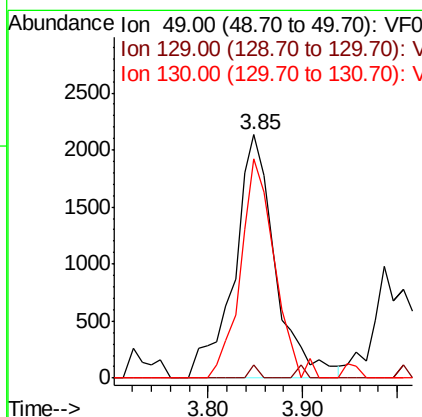
RT: 3.85 min Scan# 326

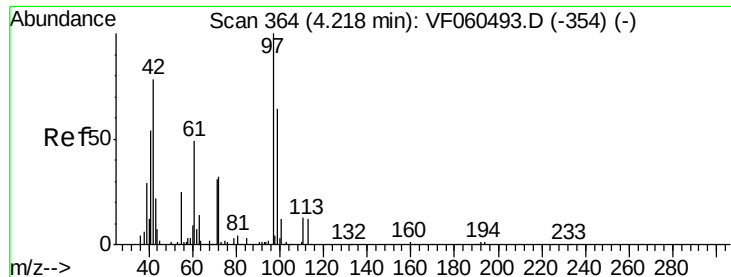
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Resp	Lower	Upper
49	100	6450		
129	5.4	0.0	0.0#	
130	89.8	62.2	93.2	





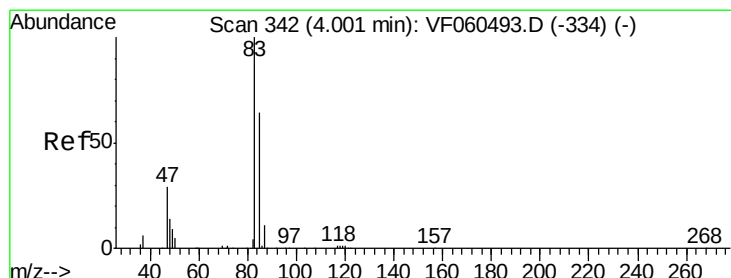
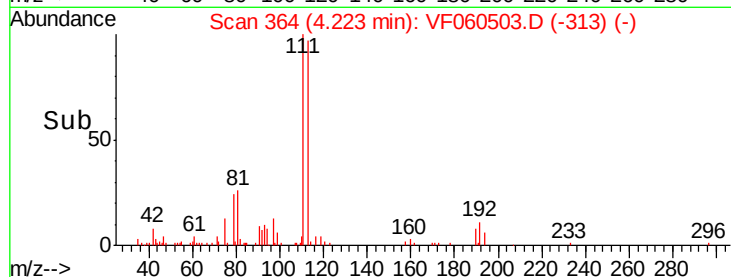
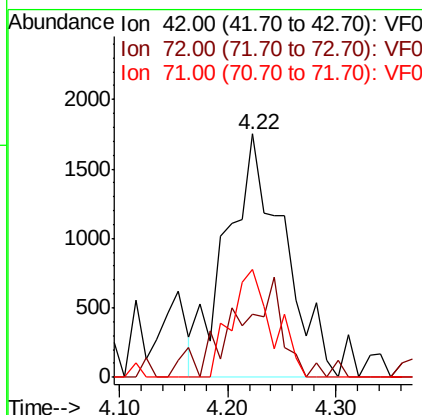
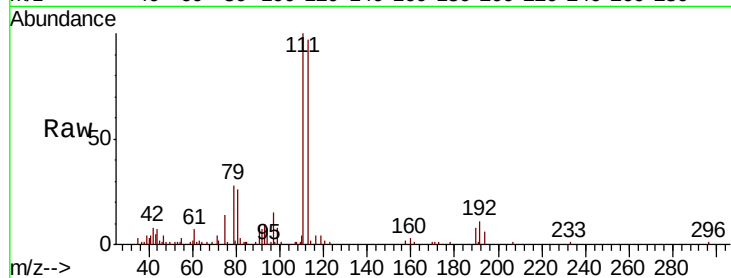
#29
Tetrahydrofuran
Concen: 19.140 ug/l
RT: 4.22 min Scan# 364
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
42	100		
72	31.7	31.9	47.9#
71	32.3	33.4	50.0#

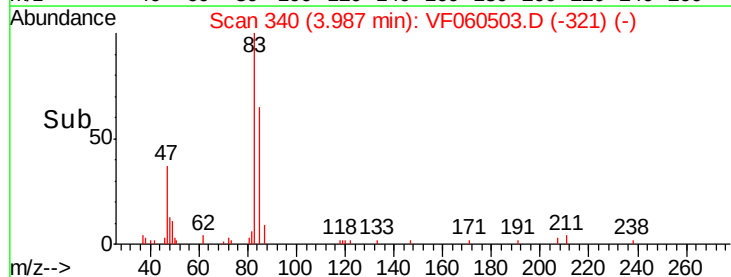
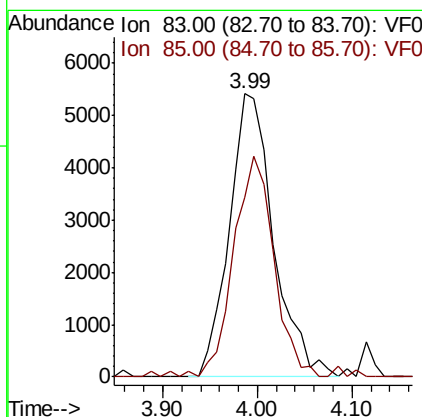
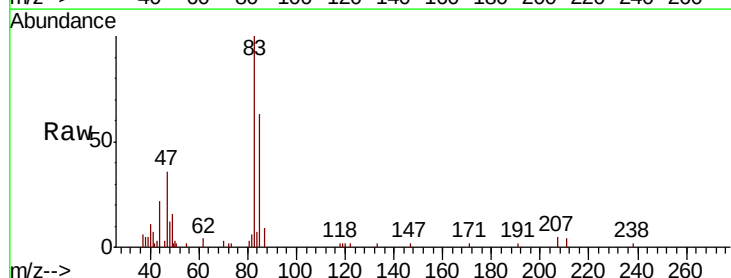
Manual Integrations
APPROVED

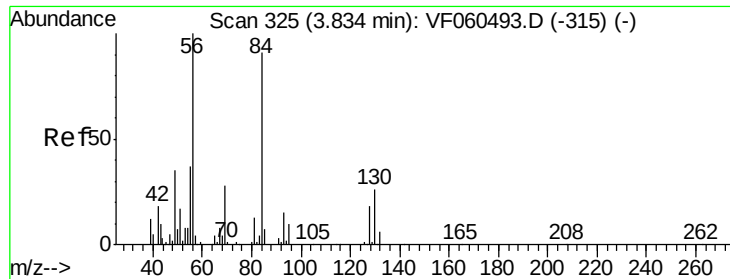
apatel
10/10/2018 2:04:23 PM



#30
Chloroform
Concen: 2.751 ug/l
RT: 3.99 min Scan# 340
Delta R.T. -0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.3	51.7	77.5





#31

Cyclohexane

Concen: 2.573 ug/l m

RT: 3.83 min Scan# 324

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

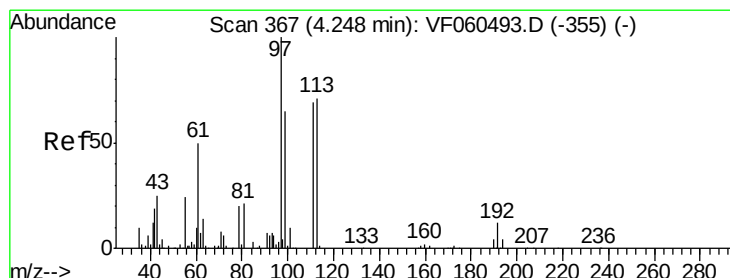
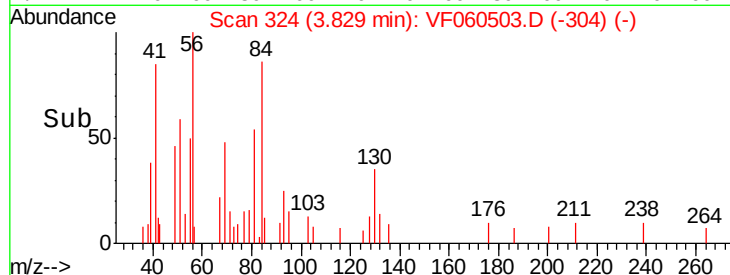
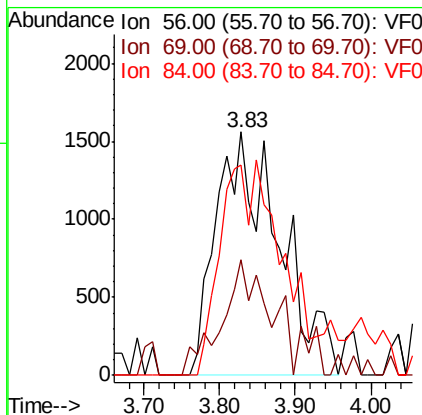
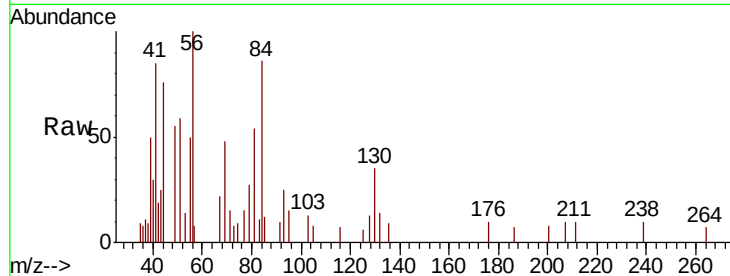
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	56	Resp:	9079
Ion	Ratio	Lower	Upper
56	100		
69	47.6	22.7	34.1#
84	86.4	73.1	109.7

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#32

1,1,1-Trichloroethane

Concen: 2.390 ug/l

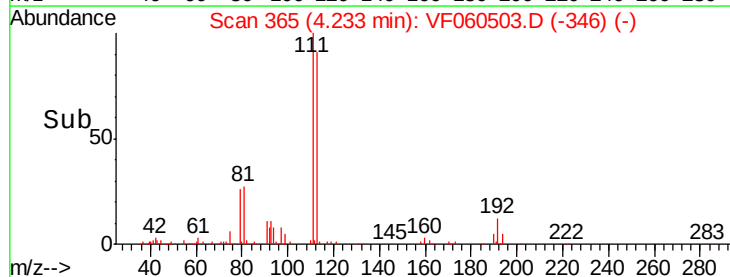
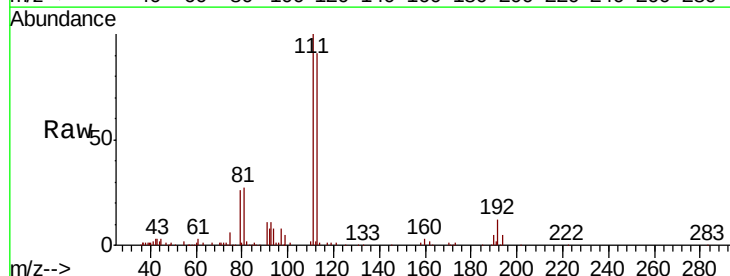
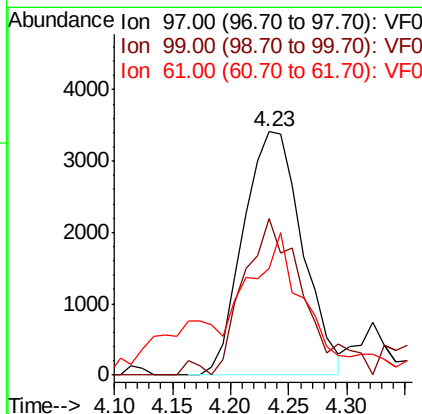
RT: 4.23 min Scan# 365

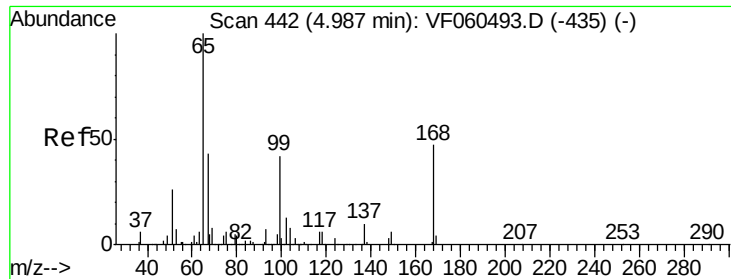
Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	97	Resp:	12016
Ion	Ratio	Lower	Upper
97	100		
99	64.3	52.3	78.5
61	43.8	39.8	59.8





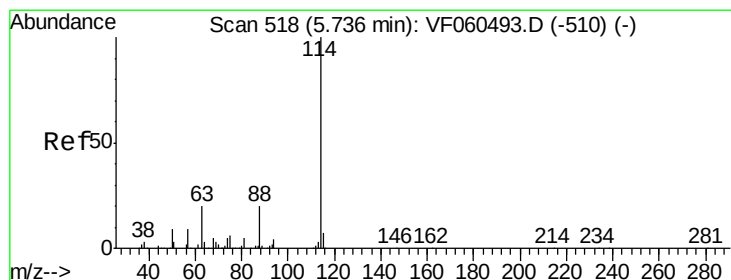
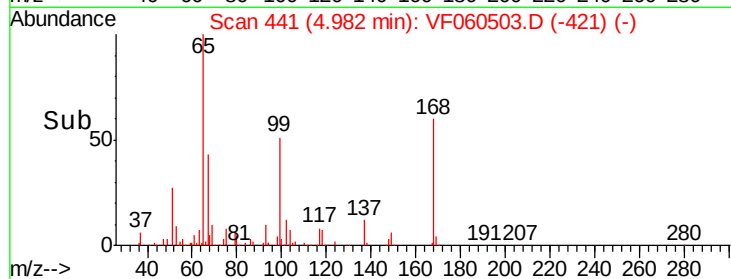
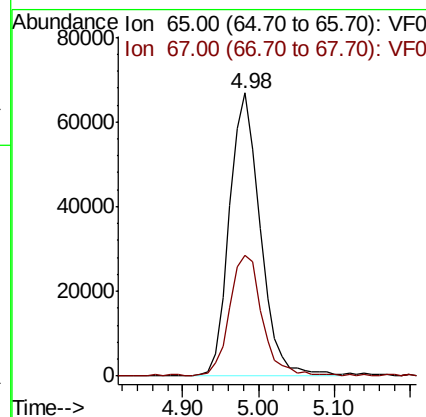
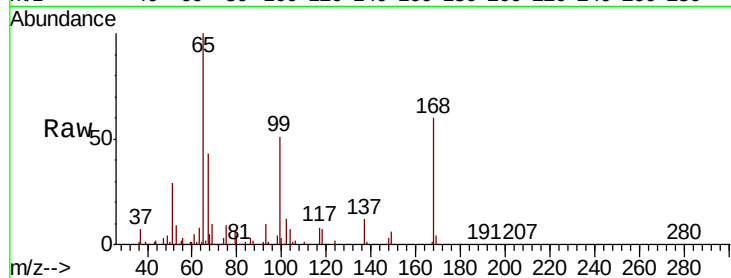
#33
 1,2-Dichloroethane-d4
 Concen: 56.902 ug/l
 RT: 4.98 min Scan# 441
 Delta R.T. -0.00 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Resp	Lower	Upper
65	100	189524		
67	42.8	0.0	94.6	

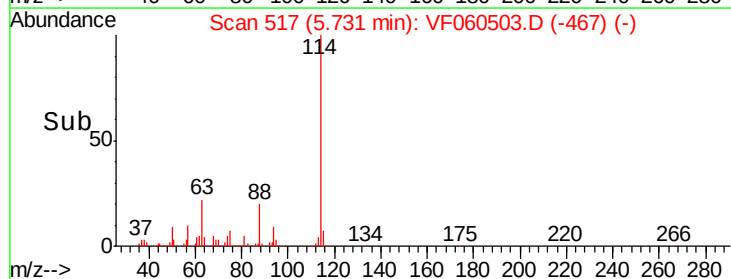
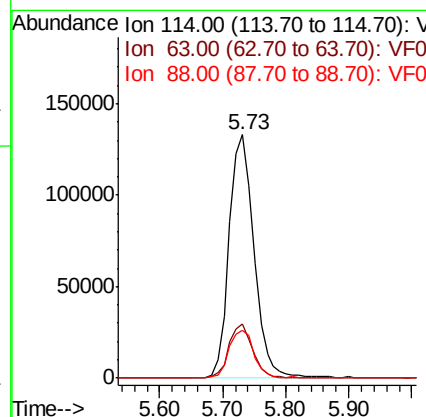
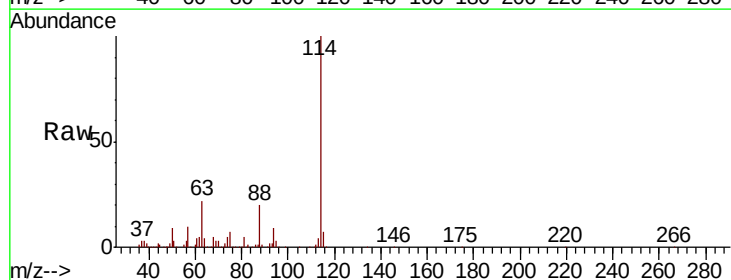
Manual Integrations
 APPROVED

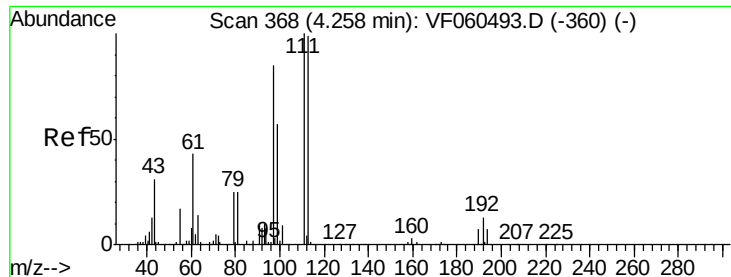
apatel
 10/10/2018 2:04:23 PM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.73 min Scan# 517
 Delta R.T. -0.00 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	365306		
63	22.1	0.0	40.2	
88	19.5	0.0	40.2	





#35

Dibromofluoromethane

Concen: 60.513 ug/l

RT: 4.25 min Scan# 367

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

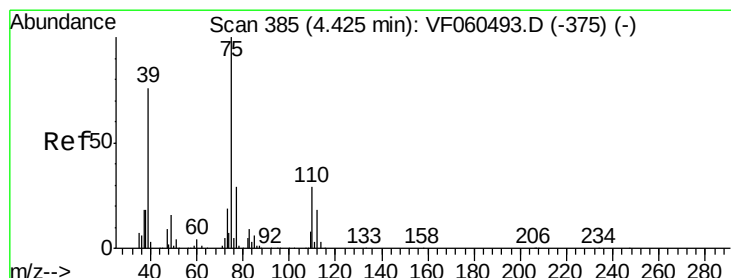
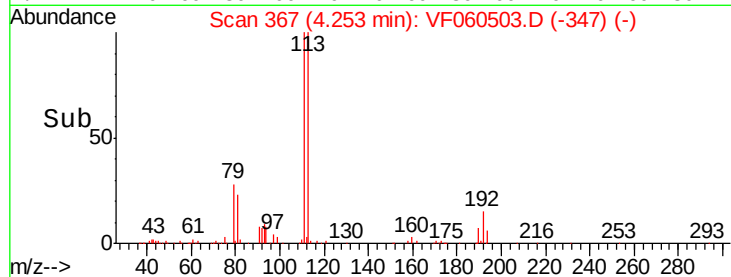
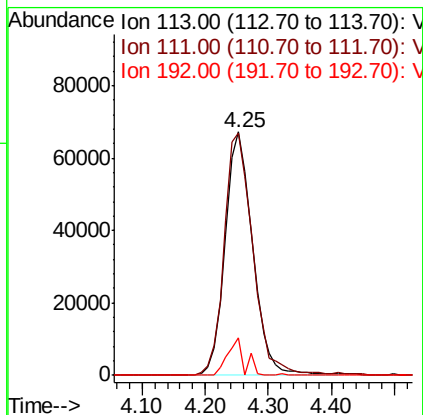
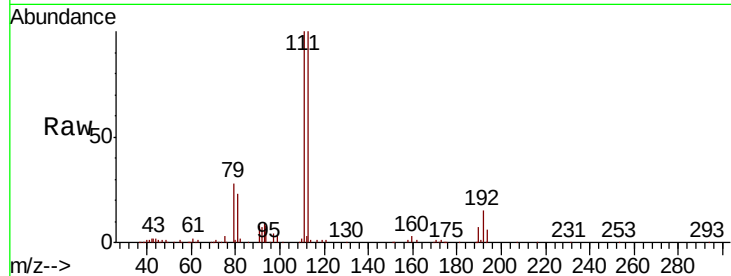
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	113	Resp:	203482
Ion Ratio	Lower	Upper	
113	100		
111	99.7	81.0	121.6
192	15.5	10.7	16.1

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#36

1,1-Dichloropropene

Concen: 2.456 ug/l

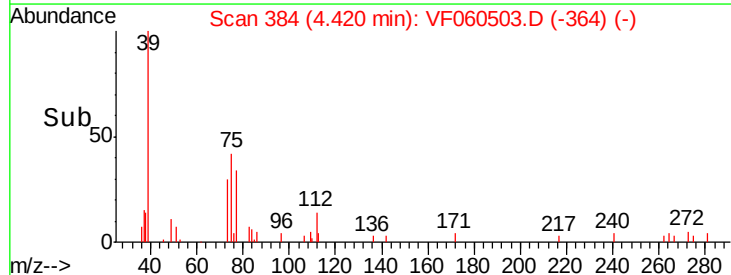
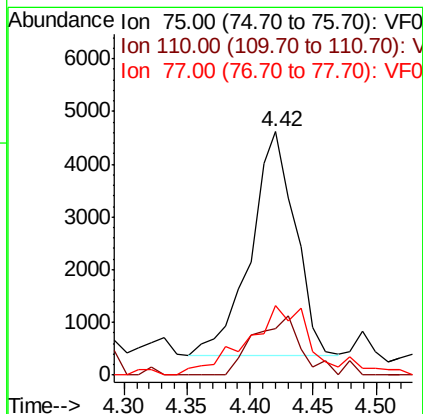
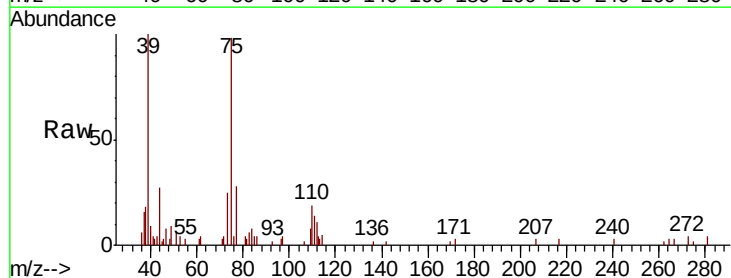
RT: 4.42 min Scan# 384

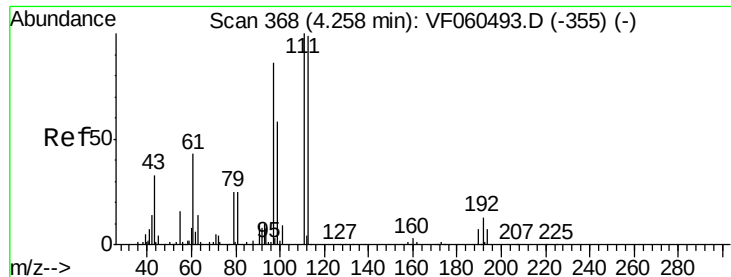
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	75	Resp:	10436
Ion Ratio	Lower	Upper	
75	100		
110	18.9	14.4	43.2
77	28.8	23.5	35.3





#37

Ethyl Acetate

Concen: 4.024 ug/l

RT: 4.25 min Scan# 367

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

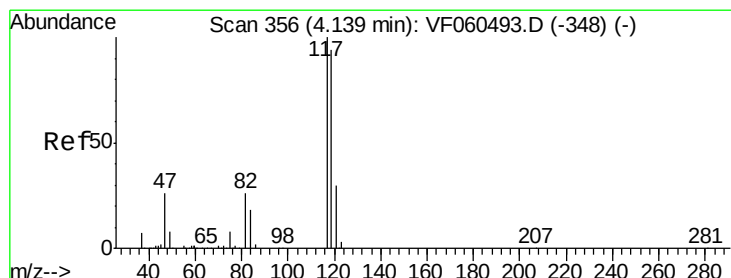
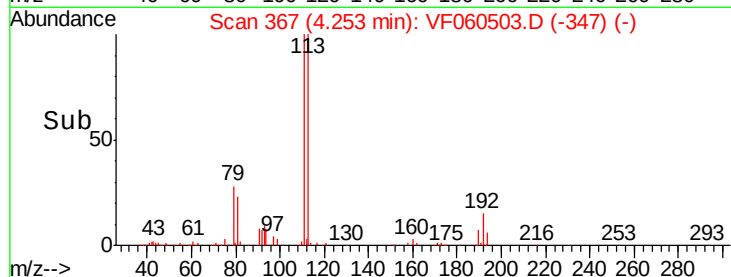
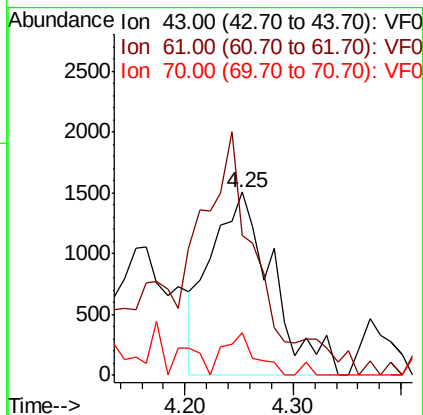
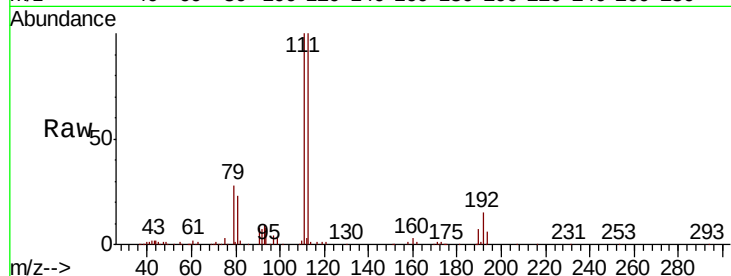
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	43	Resp:	6040
Ion	Ratio	Lower	Upper
43	100		
61	76.3	106.5	159.7#
70	23.4	6.5	9.7#

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#38

Carbon Tetrachloride

Concen: 3.154 ug/l

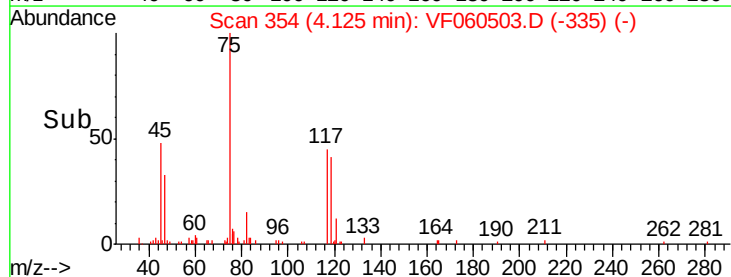
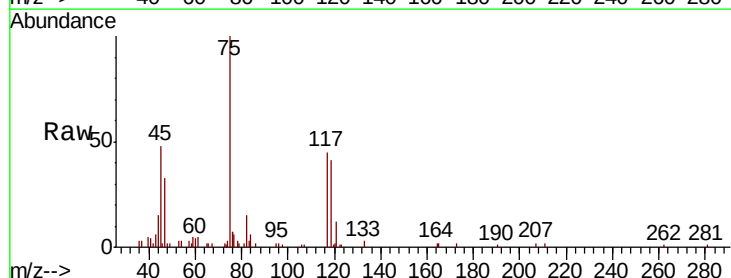
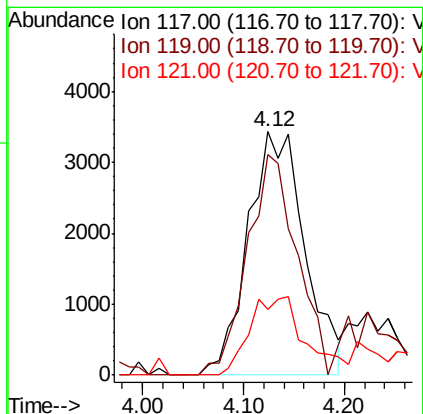
RT: 4.12 min Scan# 354

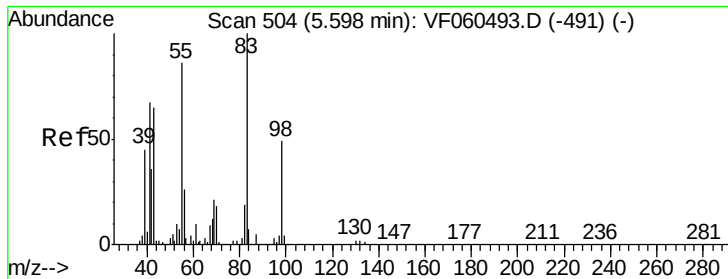
Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	117	Resp:	13462
Ion	Ratio	Lower	Upper
117	100		
119	90.8	75.0	112.4
121	27.2	23.8	35.6





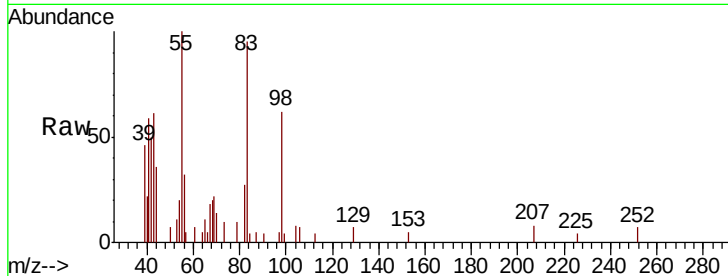
#39
Methylvlcyclohexane
Concen: 2.589 ug/l
RT: 5.58 min Scan# 502
Delta R.T. -0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

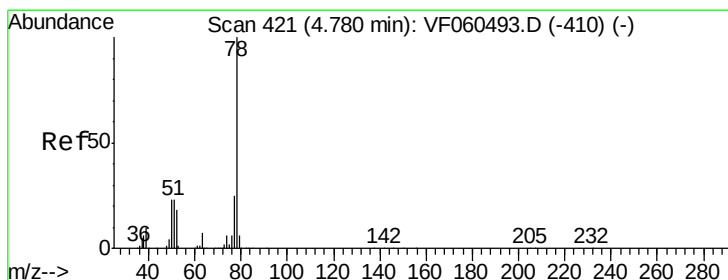
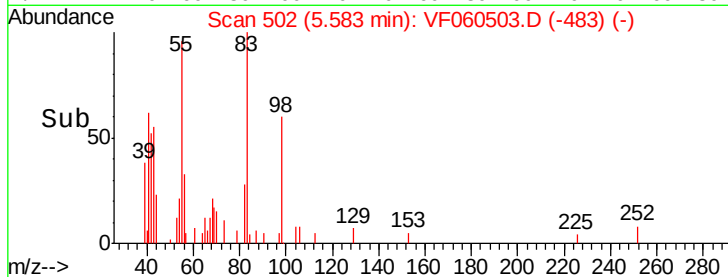
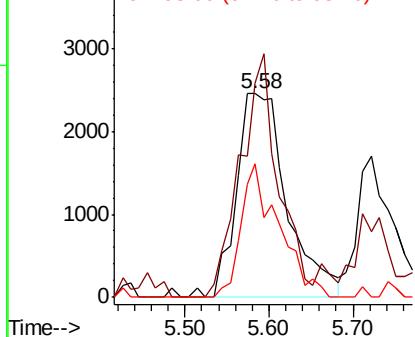
Tot Ion	Ratio	Lower	Upper
83	100		
55	104.8	69.2	103.8#
98	65.4	39.6	59.4#

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM

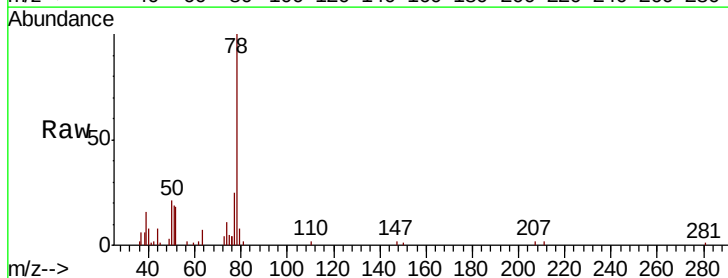


Abundance Ion 83.00 (82.70 to 83.70): VF0
Ion 55.00 (54.70 to 55.70): VF0
Ion 98.00 (97.70 to 98.70): VF0

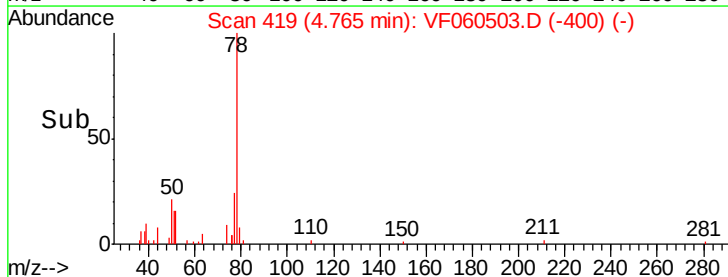
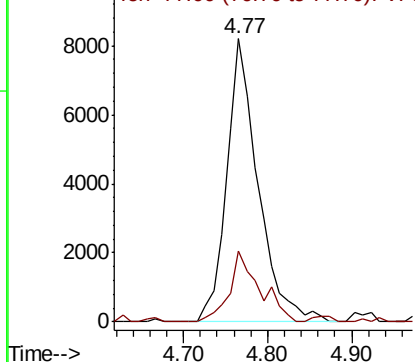


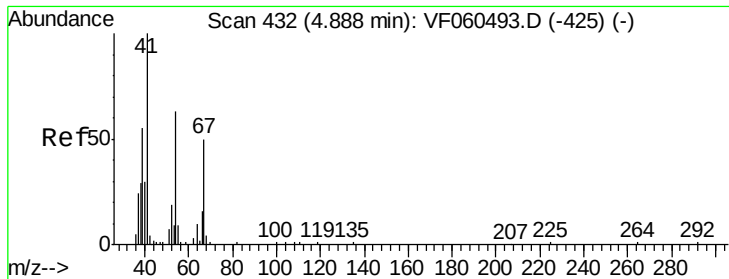
#40
Benzene
Concen: 2.430 ug/l
RT: 4.77 min Scan# 419
Delta R.T. -0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.1	19.8	29.8



Abundance Ion 78.10 (77.80 to 78.80): VF0
Ion 77.00 (76.70 to 77.70): VF0





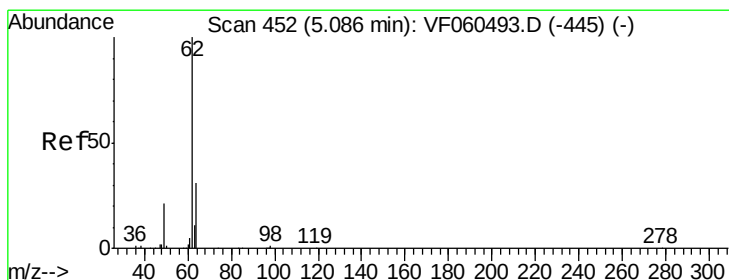
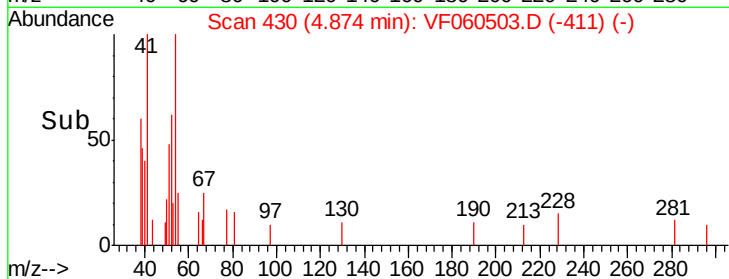
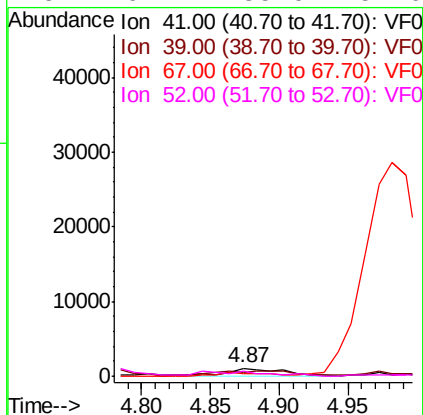
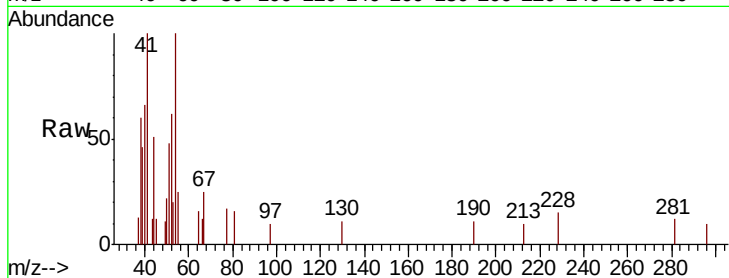
#41
Methacrylonitrile
Concen: 3.696 ug/l
RT: 4.87 min Scan# 430
Delta R.T. -0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ion	Ratio	Resp	Lower	Upper
41	100		3152		
39	46.4	53.1	79.7#		
67	25.1	39.4	59.0#		
52	62.1	35.0	52.6#		

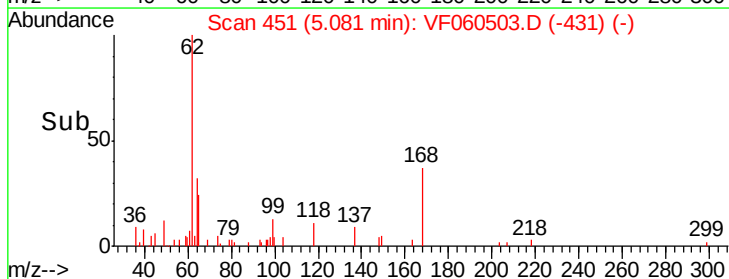
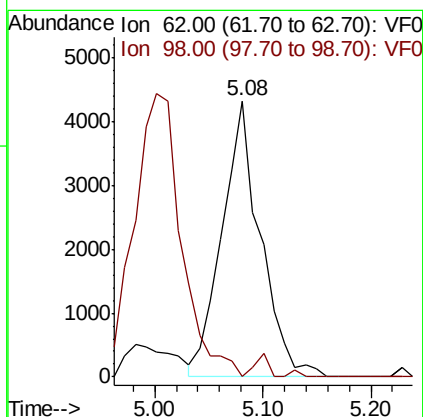
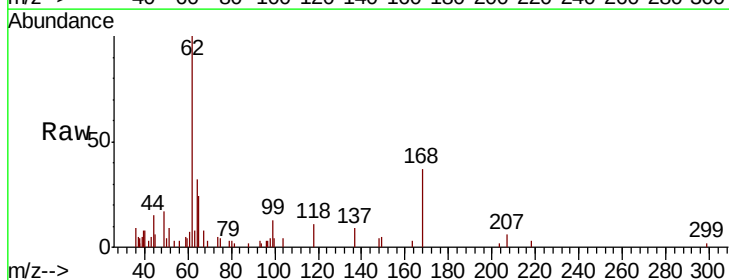
Manual Integrations
APPROVED

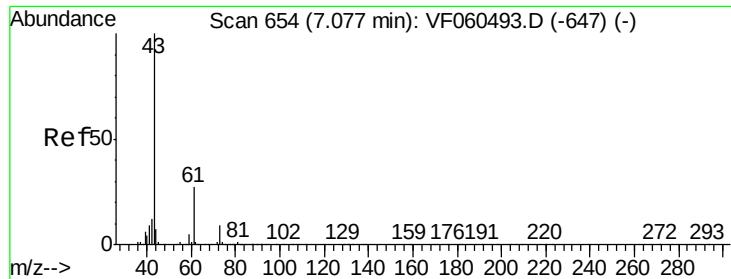
apatel
10/10/2018 2:04:23 PM



#42
1,2-Dichloroethane
Concen: 2.696 ug/l
RT: 5.08 min Scan# 451
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
62	100		10671		
98	0.0	0.0	12.8		





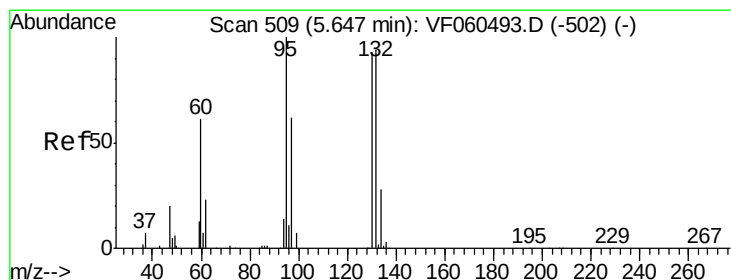
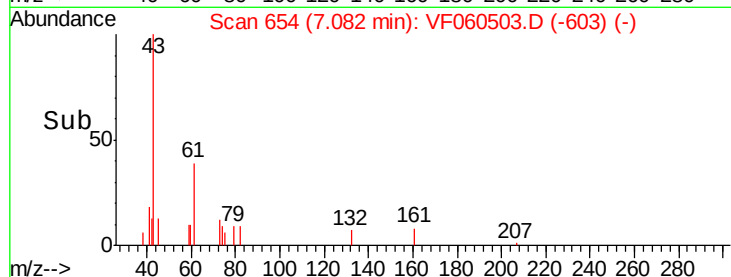
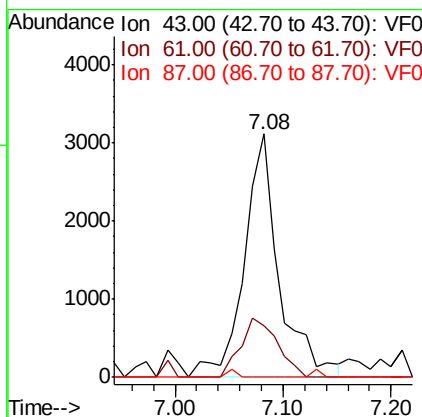
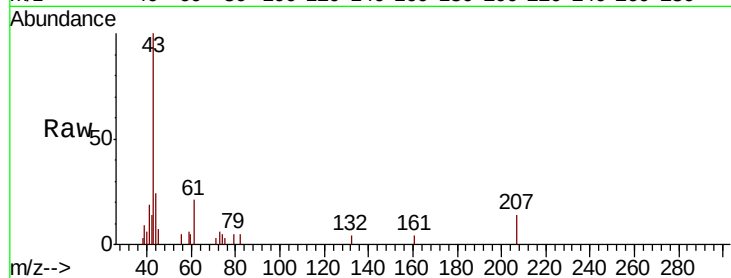
#43
Isopropyl Acetate
Concen: 3.739 ug/l
RT: 7.08 min Scan# 654
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
43	100		
61	21.0	21.6	32.4#
87	0.0	0.6	0.8#

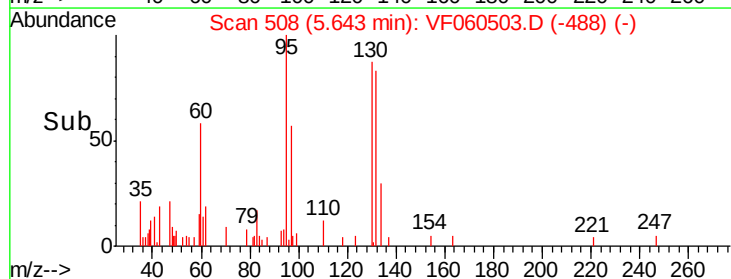
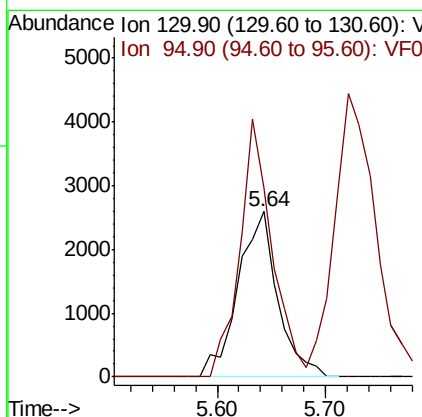
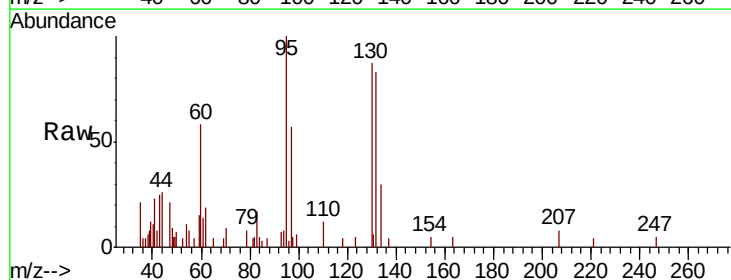
Manual Integrations
APPROVED

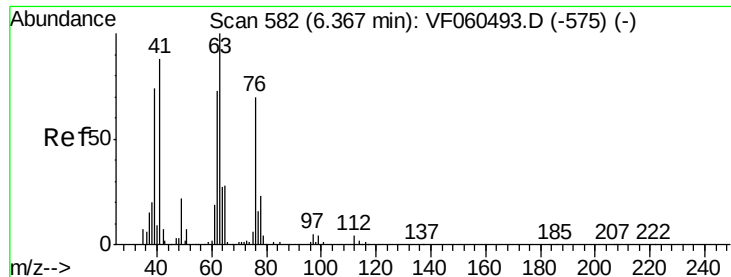
apatel
10/10/2018 2:04:23 PM



#44
Trichloroethene
Concen: 2.439 ug/l
RT: 5.64 min Scan# 508
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
130	100		
95	114.4	0.0	216.0





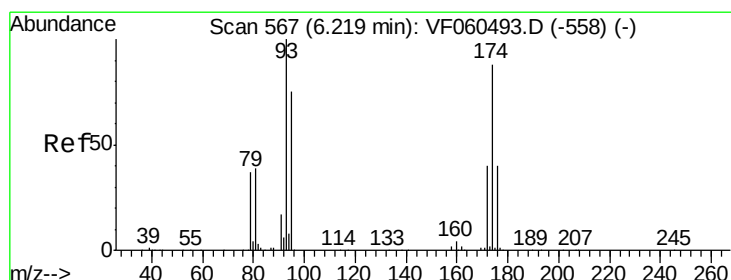
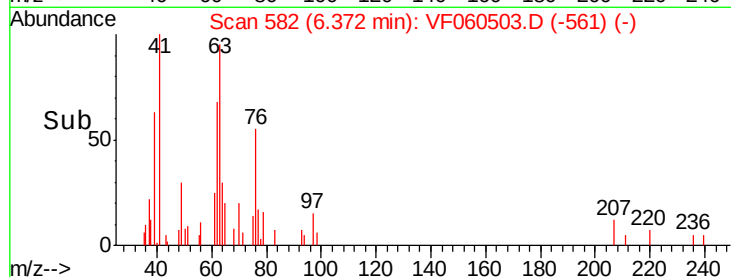
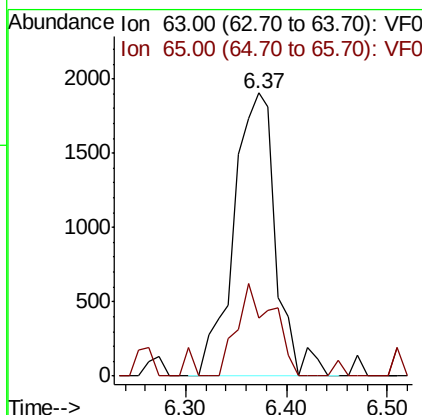
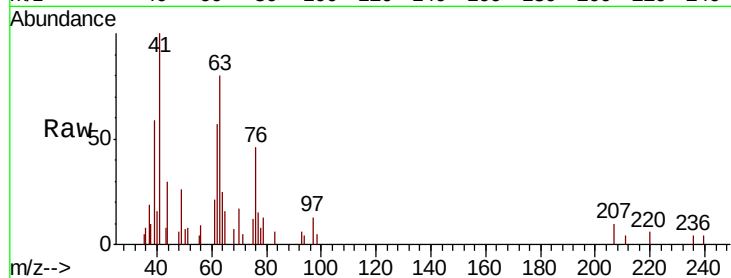
#45
 1,2-Dichloropropane
 Concen: 2.585 ug/l
 RT: 6.37 min Scan# 582
 Delta R.T. 0.01 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 63 Resp: 5520
 Ion Ratio Lower Upper
 63 100
 65 20.5 22.2 33.2#

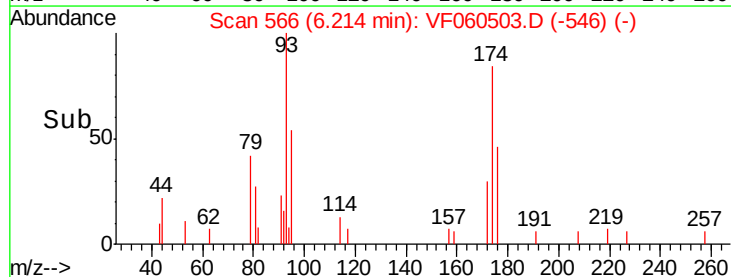
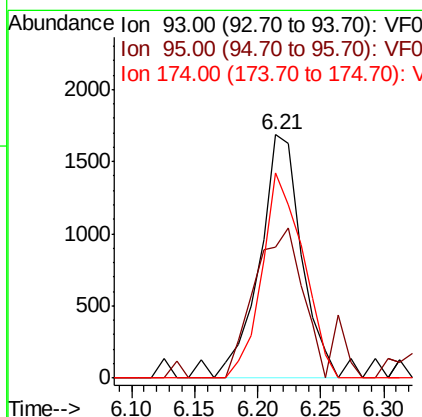
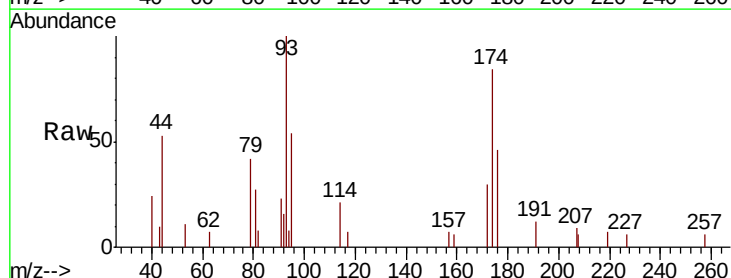
Manual Integrations
 APPROVED

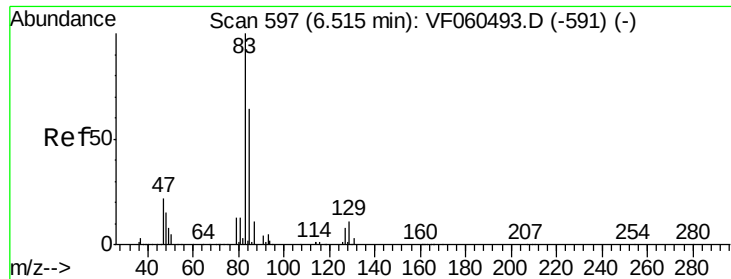
apatel
 10/10/2018 2:04:23 PM



#46
 Dibromomethane
 Concen: 2.310 ug/l
 RT: 6.21 min Scan# 566
 Delta R.T. -0.00 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Tgt Ion: 93 Resp: 3957
 Ion Ratio Lower Upper
 93 100
 95 53.9 60.0 90.0#
 174 84.4 71.0 106.6





#47

Bromodichloromethane

Concen: 2.230 ug/l

RT: 6.50 min Scan# 595

Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

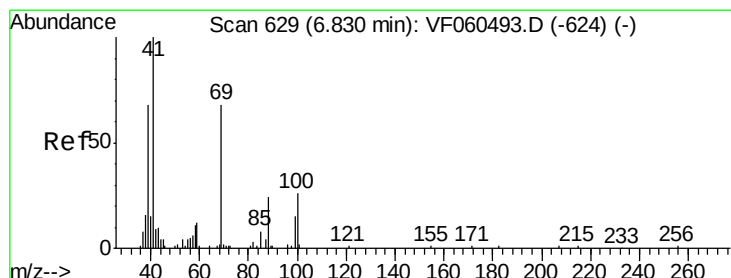
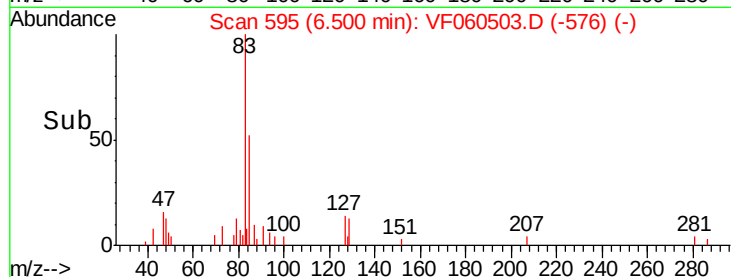
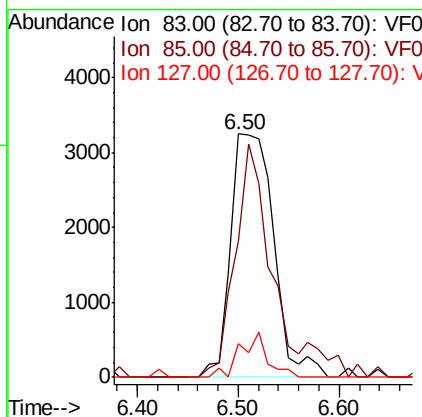
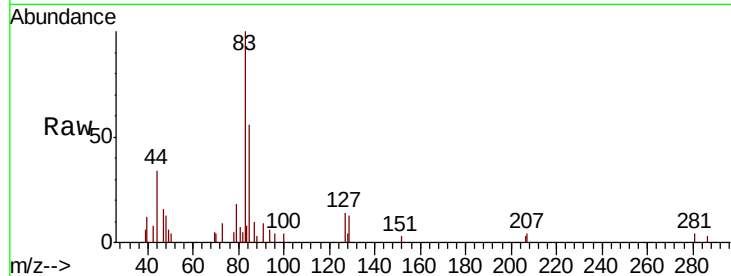
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	83	Resp:	9647
Ion Ratio	Lower	Upper	
83	100		
85	52.0	51.2	76.8
127	12.9	6.5	9.7#

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#49

1,4-Dioxane

Concen: 18.661 ug/l

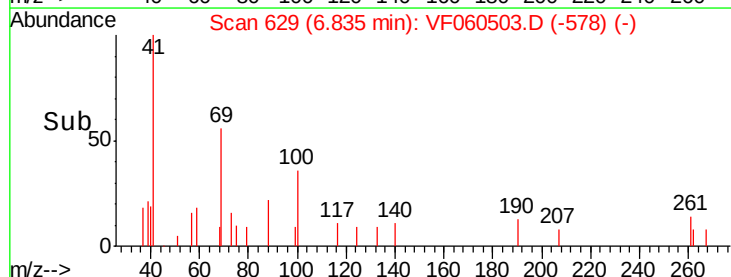
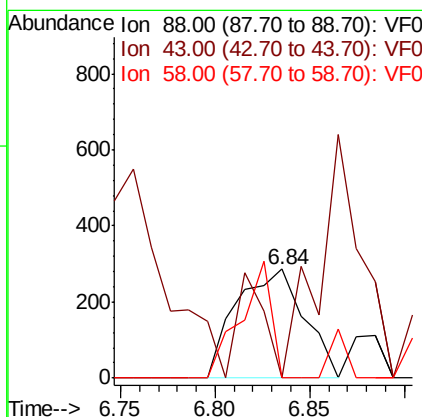
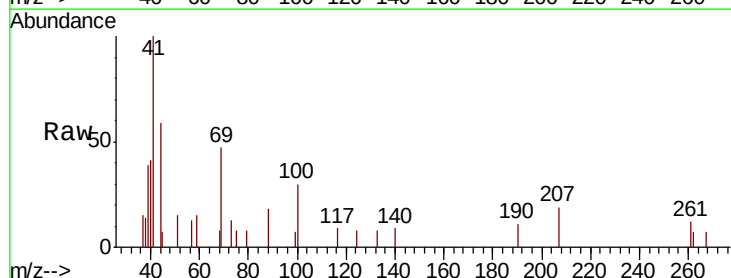
RT: 6.84 min Scan# 629

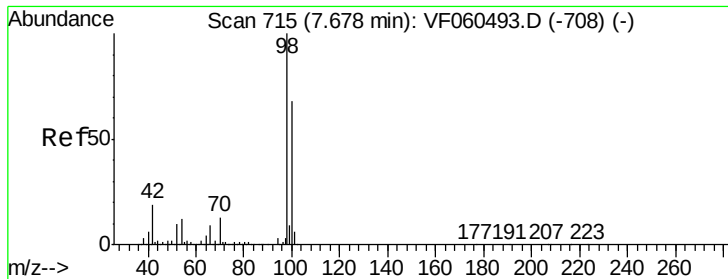
Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	88	Resp:	710
Ion Ratio	Lower	Upper	
88	100		
43	0.0	40.2	60.2#
58	0.0	36.3	54.5#





#50

Toluene-d8

Concen: 47.215 ug/l

RT: 7.67 min Scan# 714

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 98 Resp: 381606

Ion Ratio Lower Upper

98 100

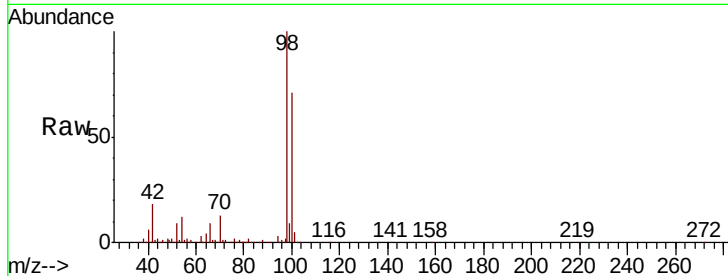
100 71.4 54.4 81.6

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF

7.67

150000

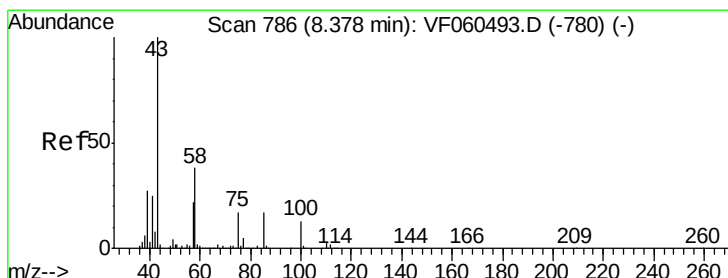
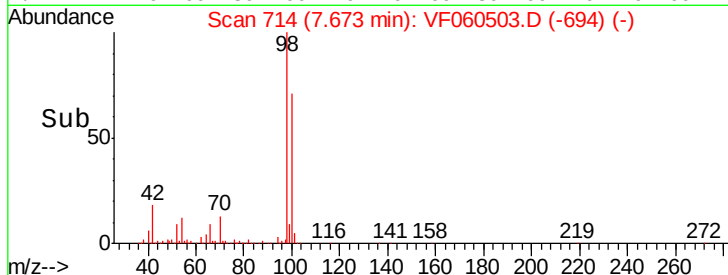
100000

50000

0

7.60 7.70 7.80

Time-->



#51

4-Methyl-2-Pentanone

Concen: 17.596 ug/l

RT: 8.37 min Scan# 785

Delta R.T. -0.00 min

Lab File: VF060503.D

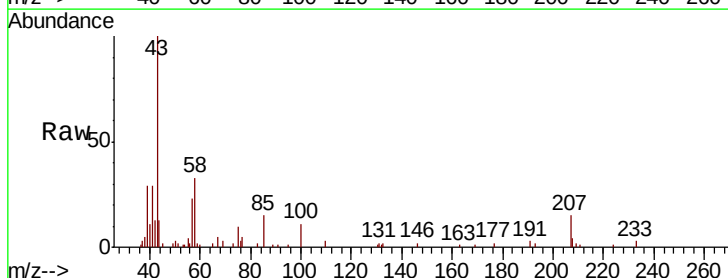
Acq: 9 Oct 2018 21:58

Tgt Ion: 43 Resp: 22961

Ion Ratio Lower Upper

43 100

58 33.4 30.4 45.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

8.37

10000

8000

6000

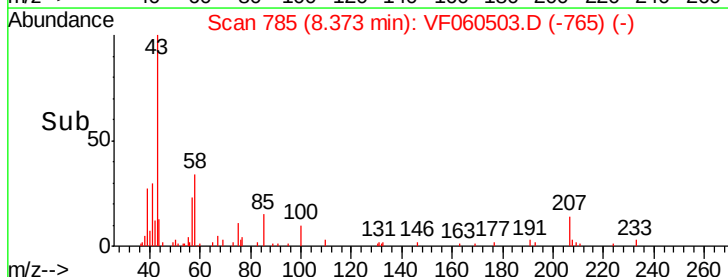
4000

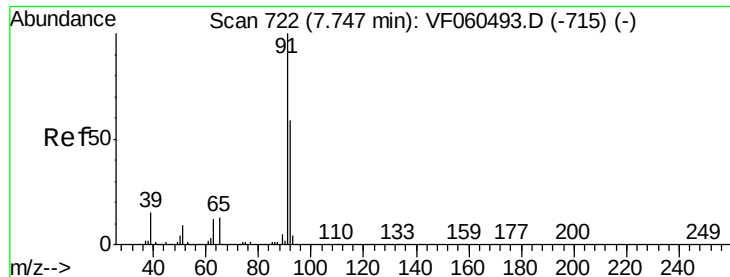
2000

0

8.30 8.40 8.50

Time-->





#52

Toluene

Concen: 1.980 ug/l

RT: 7.75 min Scan# 722

Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 92 Resp: 10878

Ion Ratio Lower Upper

92 100

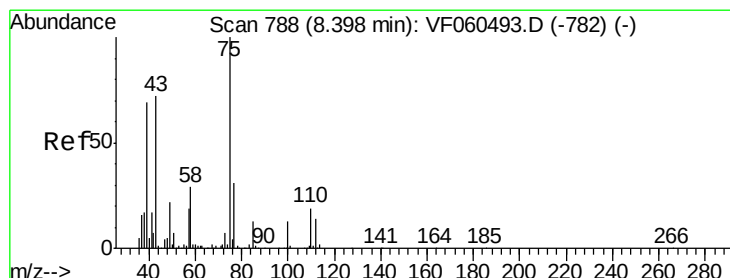
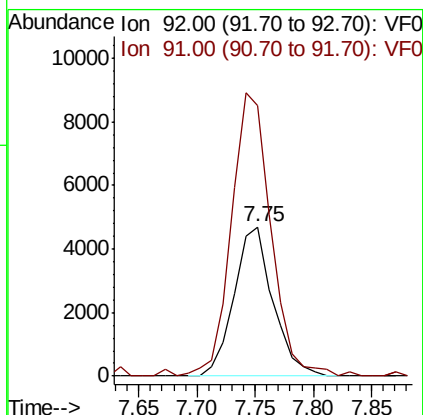
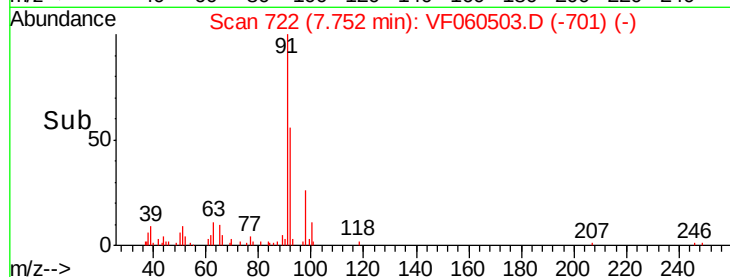
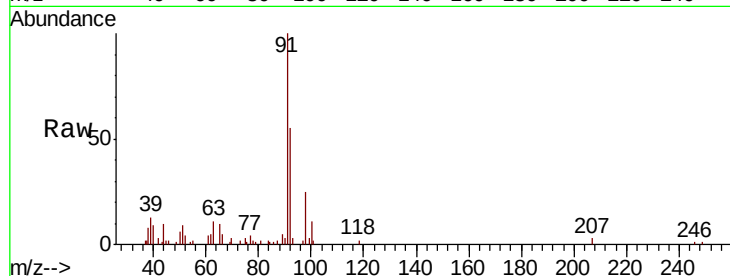
91 181.8 136.6 205.0

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#53

t-1,3-Dichloropropene

Concen: 2.479 ug/l

RT: 8.39 min Scan# 787

Delta R.T. -0.00 min

Lab File: VF060503.D

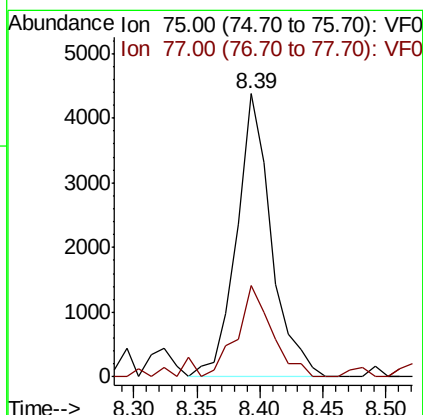
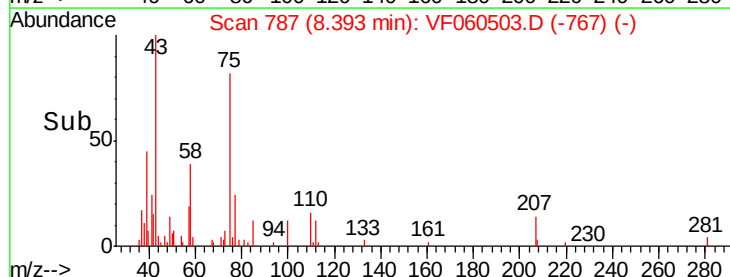
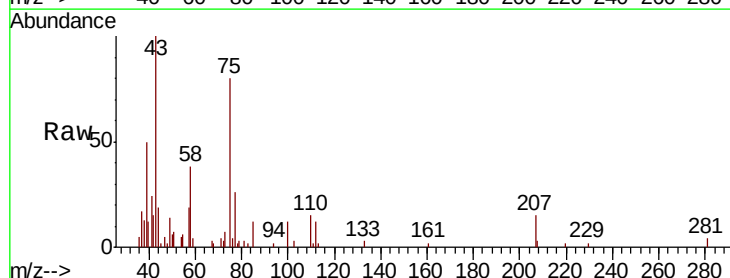
Acq: 9 Oct 2018 21:58

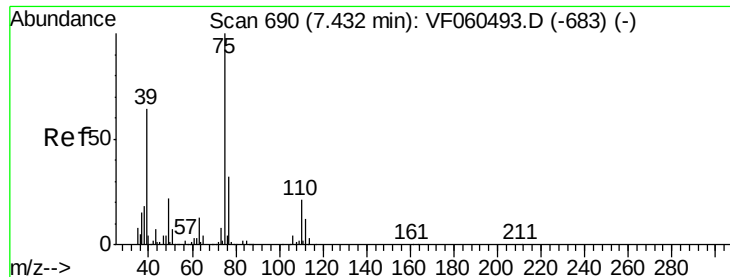
Tgt Ion: 75 Resp: 8330

Ion Ratio Lower Upper

75 100

77 32.3 25.2 37.8





#54

cis-1,3-Dichloropropene

Concen: 2.215 ug/l

RT: 7.43 min Scan# 689

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

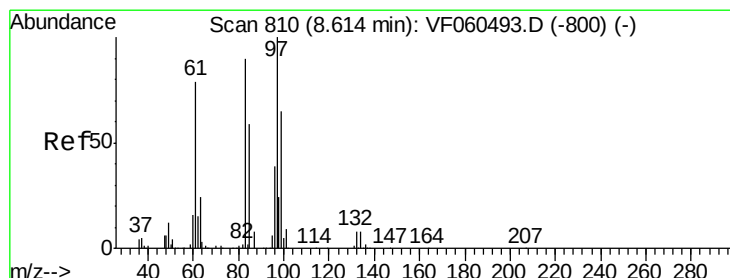
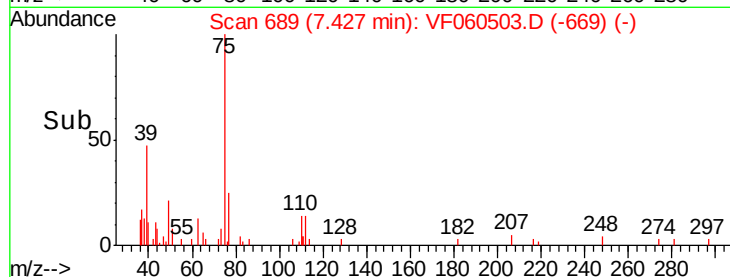
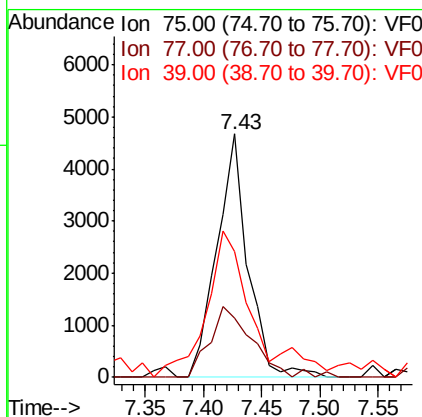
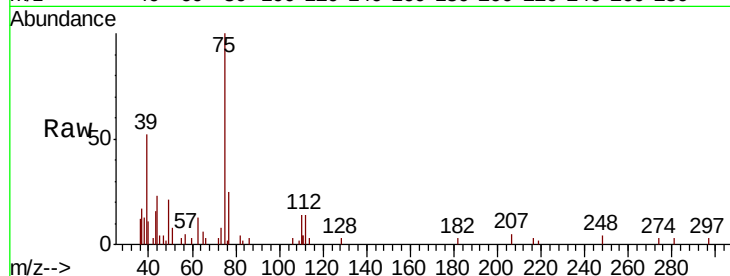
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	75	Resp:	8668
Ion Ratio		Lower	Upper
75	100		
77	24.5	26.0	39.0#
39	51.7	51.2	76.8

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#55

1,1,2-Trichloroethane

Concen: 2.640 ug/l

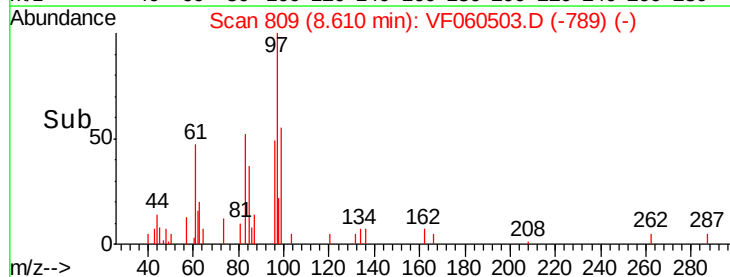
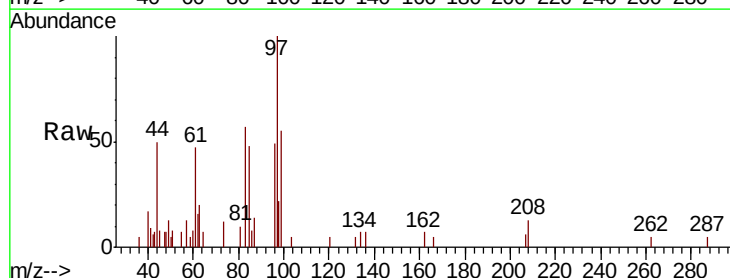
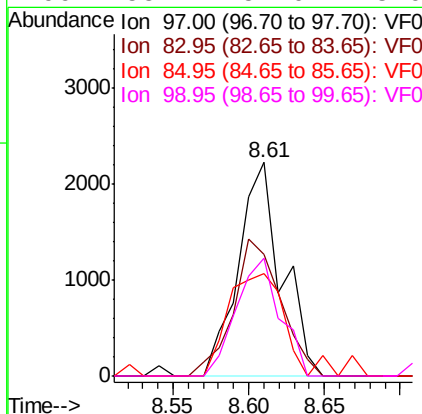
RT: 8.61 min Scan# 809

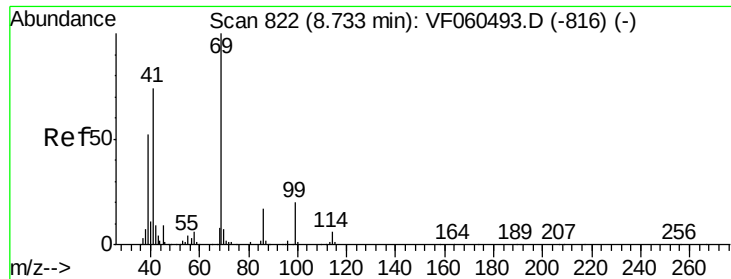
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	97	Resp:	4458
Ion Ratio		Lower	Upper
97	100		
83	56.9	71.9	107.9#
85	47.7	47.8	71.8#
99	55.1	52.0	78.0





#56

Ethyl methacrylate

Concen: 3.391 ug/l

RT: 8.73 min Scan# 821

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

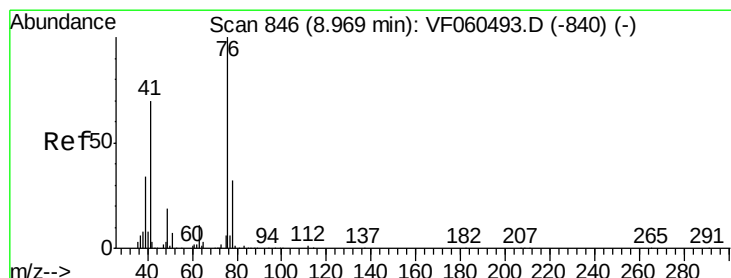
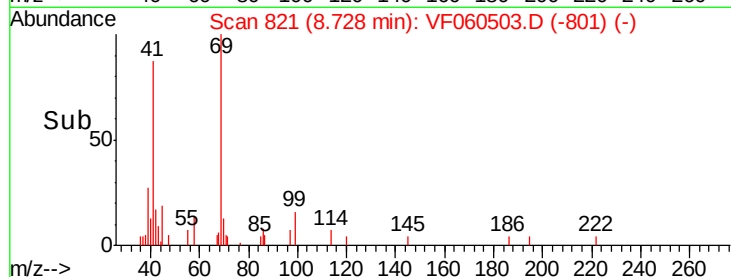
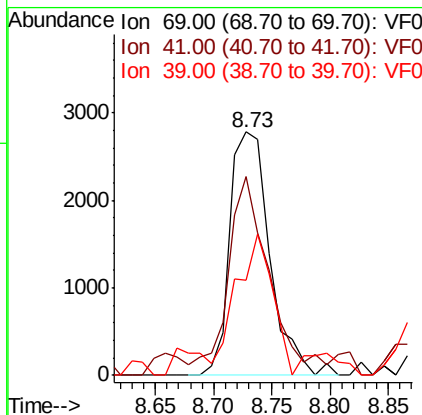
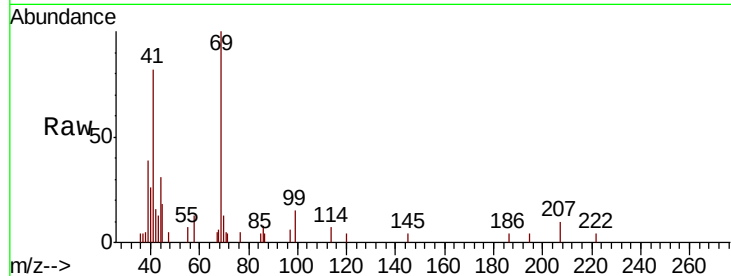
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	69	Resp:	6626
Ion Ratio	Lower	Upper	
69	100		
41	81.5	59.3	88.9
39	39.1	41.8	62.6#

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#57

1,3-Dichloropropane

Concen: 2.220 ug/l

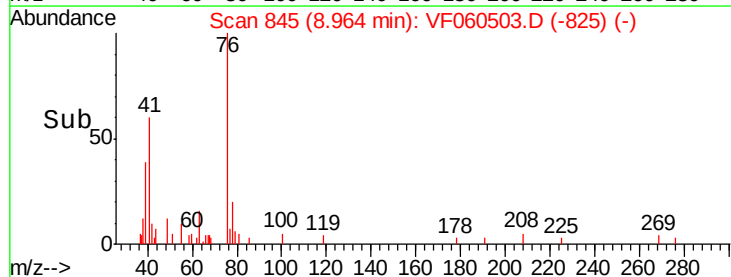
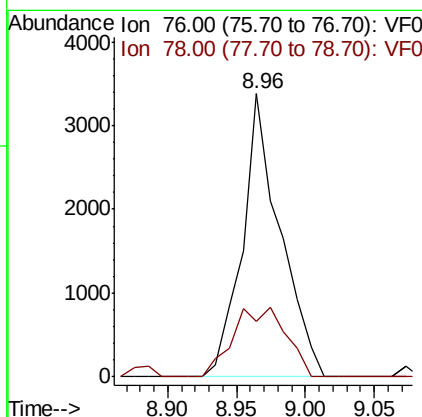
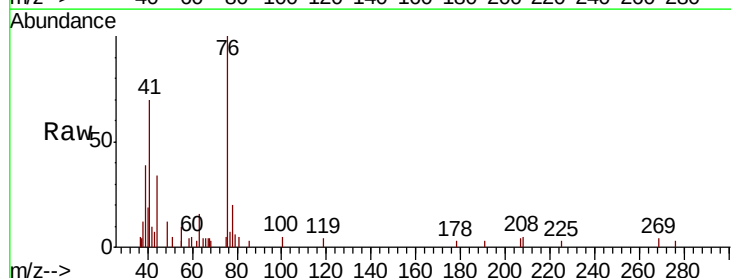
RT: 8.96 min Scan# 845

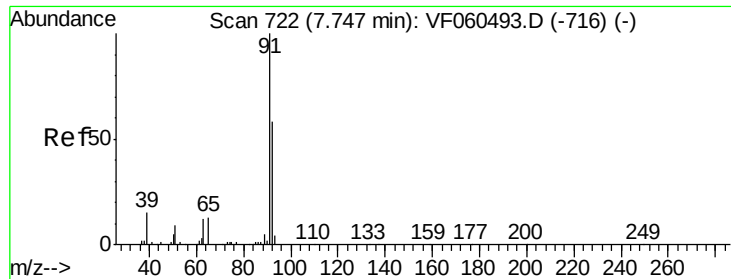
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	76	Resp:	6456
Ion Ratio	Lower	Upper	
76	100		
78	19.6	25.3	37.9#





#58

2-Chloroethyl Vinyl ether

Concen: 14.360 ug/l

RT: 7.73 min Scan# 720

Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 63 Resp: 2851

Ion Ratio Lower Upper

63 100

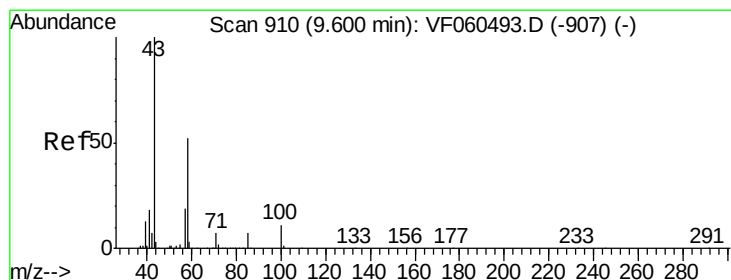
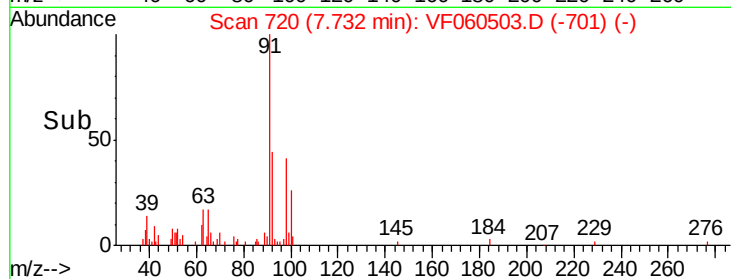
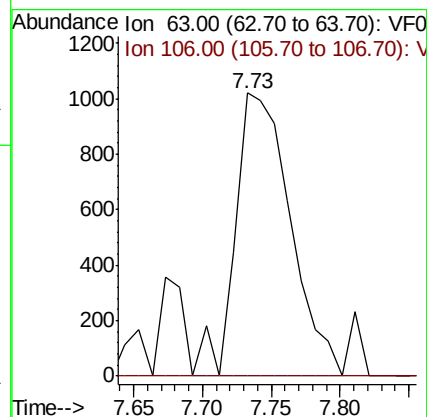
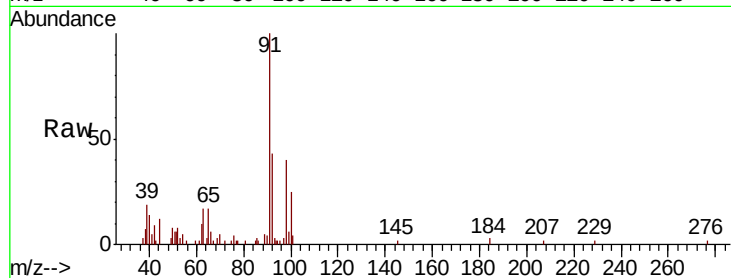
106 0.0 0.0 0.0

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#59

2-Hexanone

Concen: 20.147 ug/l

RT: 9.61 min Scan# 910

Delta R.T. 0.01 min

Lab File: VF060503.D

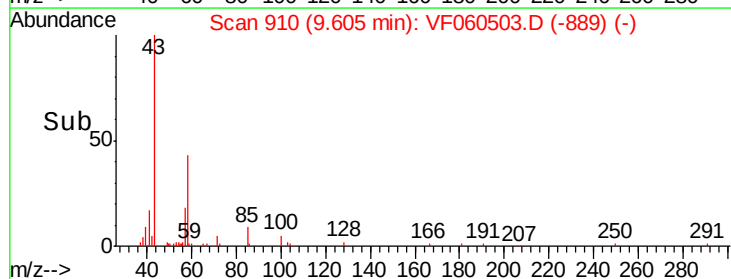
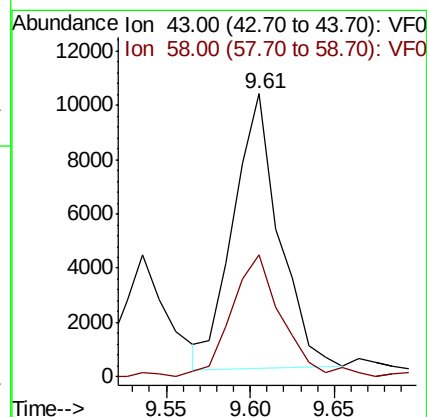
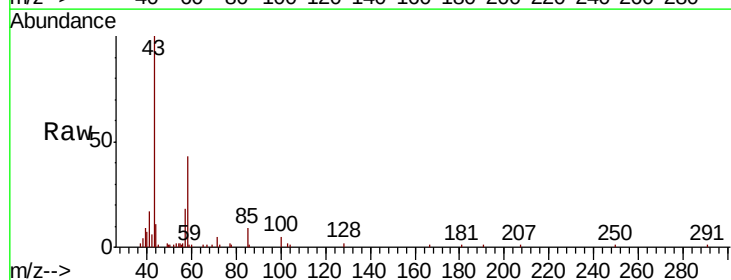
Acq: 9 Oct 2018 21:58

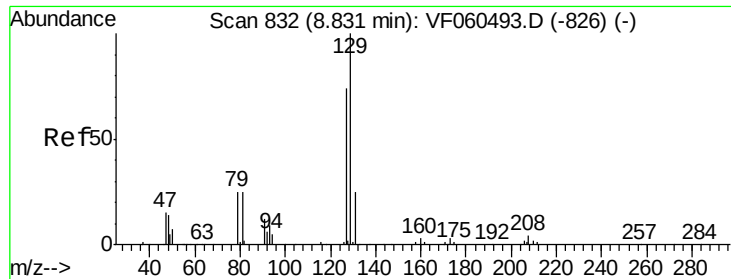
Tgt Ion: 43 Resp: 19017

Ion Ratio Lower Upper

43 100

58 43.2 24.2 72.6





#60

Dibromochloromethane

Concen: 2.636 ug/l

RT: 8.83 min Scan# 831

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:129 Resp: 6988

Ion Ratio Lower Upper

129 100

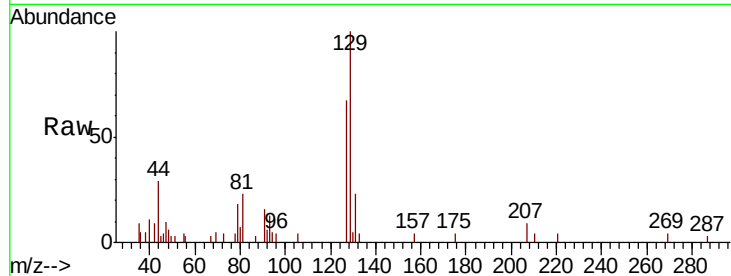
127 67.4 37.0 110.9

Manual Integrations

APPROVED

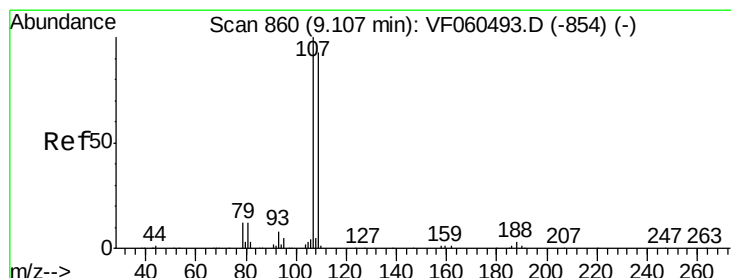
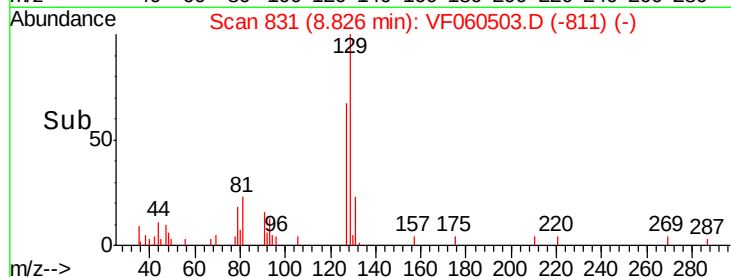
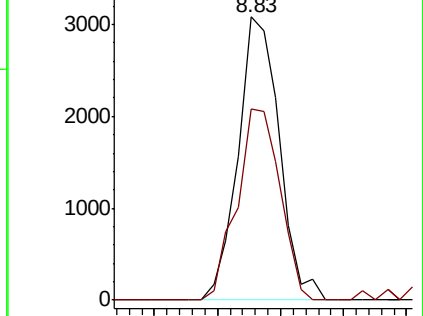
apatel

10/10/2018 2:04:23 PM



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#61

1,2-Dibromoethane

Concen: 2.522 ug/l

RT: 9.11 min Scan# 860

Delta R.T. 0.01 min

Lab File: VF060503.D

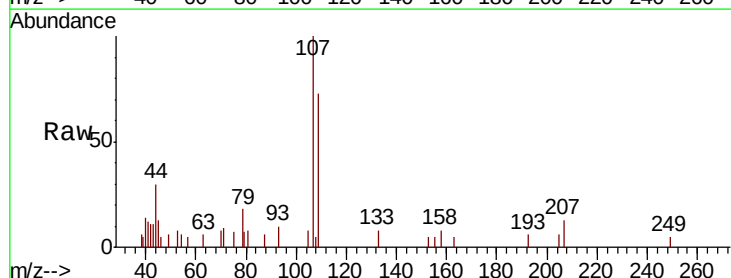
Acq: 9 Oct 2018 21:58

Tgt Ion:107 Resp: 4812

Ion Ratio Lower Upper

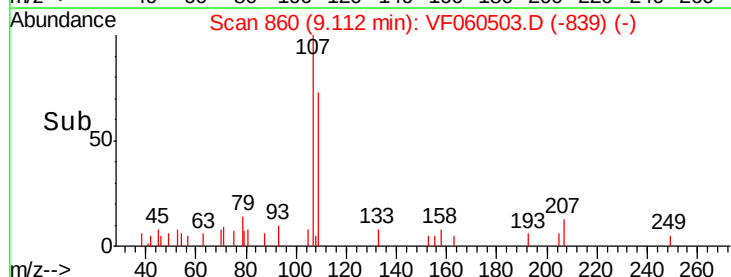
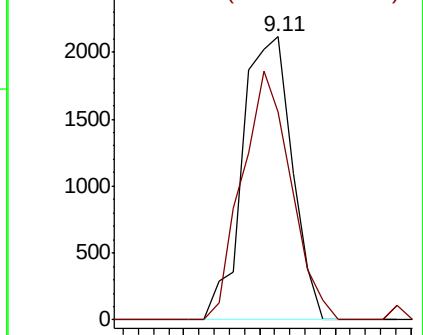
107 100

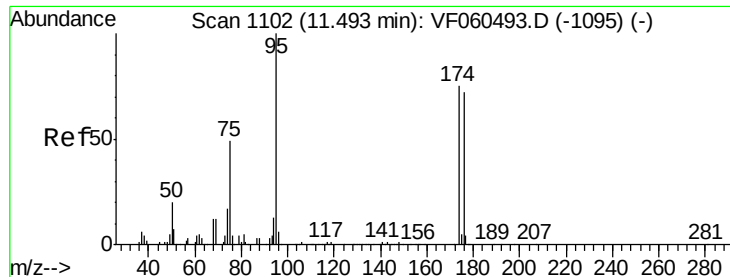
109 73.3 74.6 112.0#



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





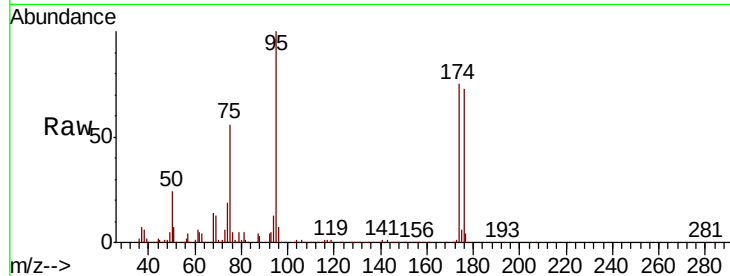
#62
4-Bromofluorobenzene
Concen: 50.309 ug/l
RT: 11.49 min Scan# 1101
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

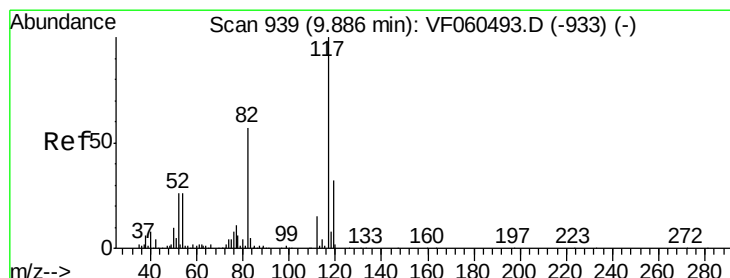
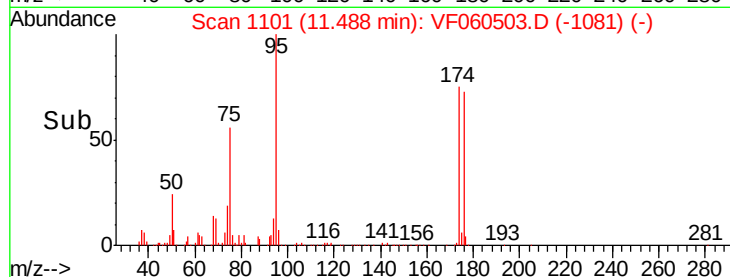
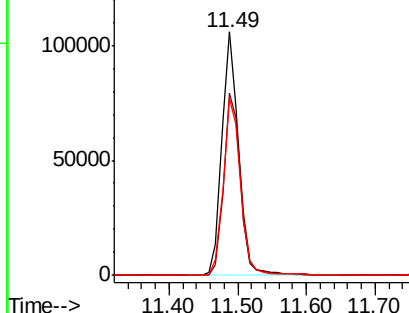
Tot Ion	Ratio	Resp	Lower	Upper
95	100	178402		
174	74.9	0.0	150.4	
176	72.6	0.0	144.6	

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



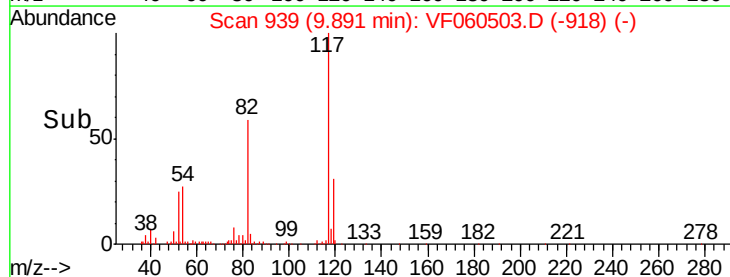
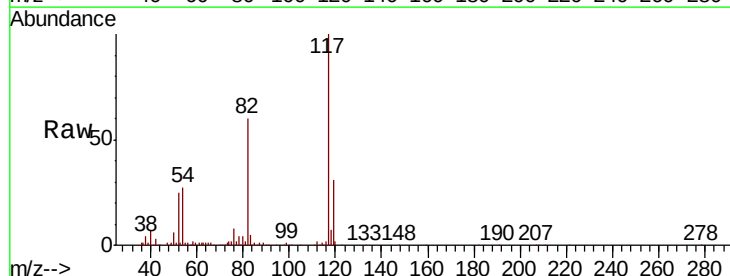
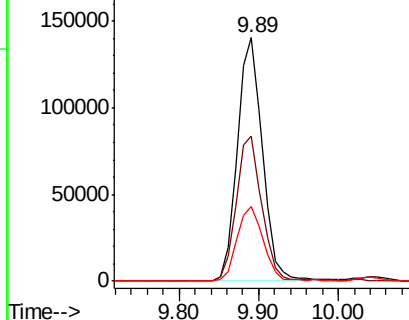
Abundance Ion 95.00 (94.70 to 95.70): VF0
Ion 174.00 (173.70 to 174.70): V
Ion 176.00 (175.70 to 176.70): V

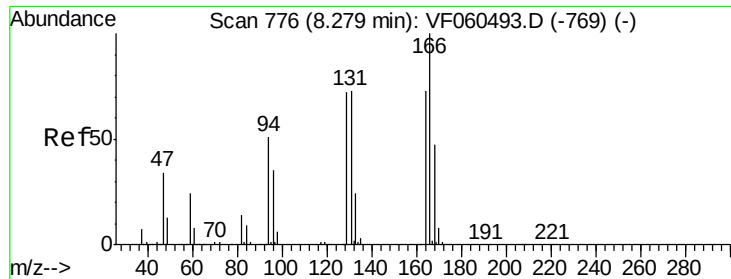


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.89 min Scan# 939
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Resp	Lower	Upper
117	100	307984		
82	59.5	45.6	68.4	
119	30.7	25.3	37.9	

Abundance Ion 117.00 (116.70 to 117.70): V
Ion 82.00 (81.70 to 82.70): VF0
Ion 119.00 (118.70 to 119.70): V





#64

Tetrachloroethene

Concen: 2.706 ug/l

RT: 8.26 min Scan# 774

Delta R.T. -0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

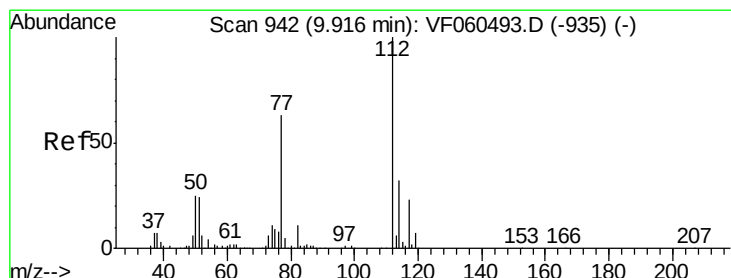
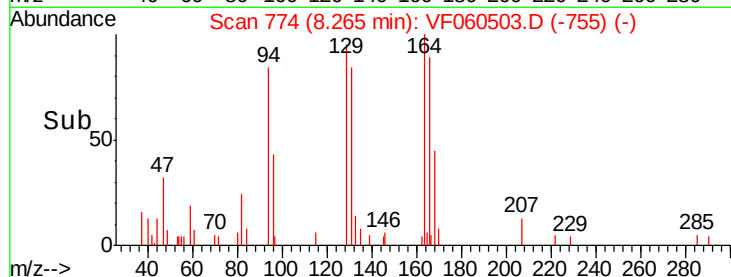
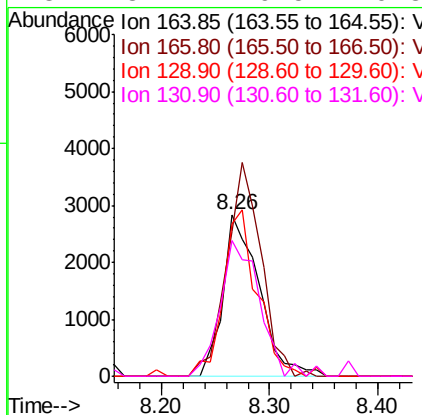
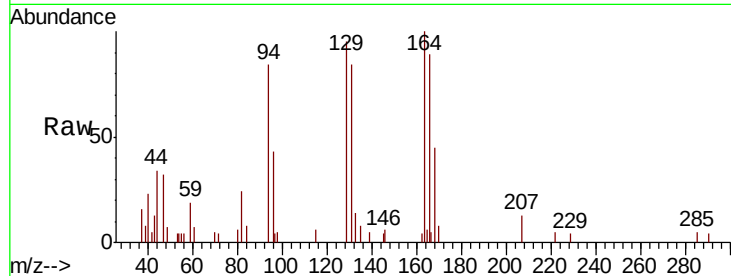
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	164	Resp:	6605
Ion Ratio	Lower	Upper	
164	100		
166	89.4	109.4	164.0#
129	94.5	78.9	118.3
131	84.1	79.5	119.3

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#65

Chlorobenzene

Concen: 2.340 ug/l

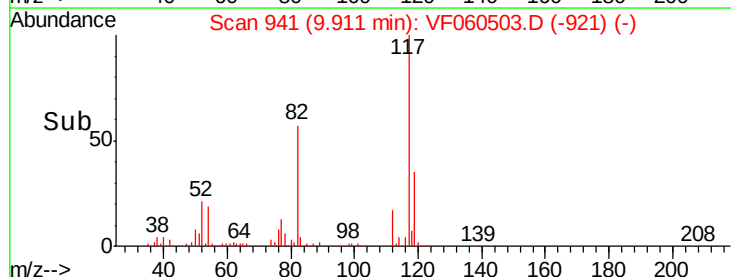
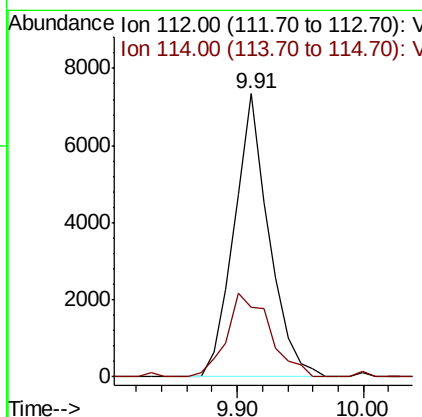
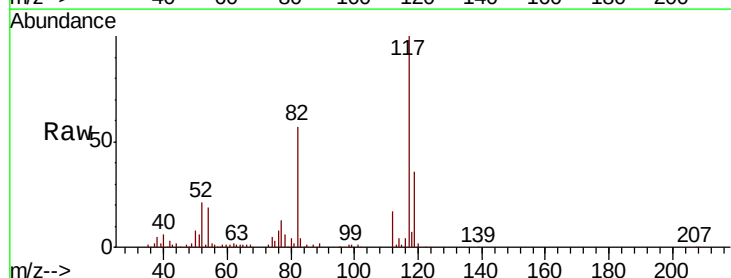
RT: 9.91 min Scan# 941

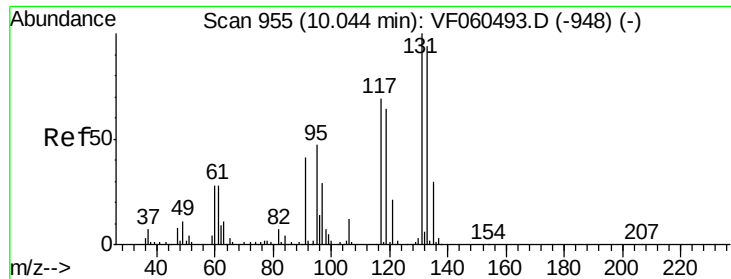
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	112	Resp:	13998
Ion Ratio	Lower	Upper	
112	100		
114	24.6	25.9	38.9#





#66

1,1,1,2-Tetrachloroethane

Concen: 2.294 ug/l

RT: 10.05 min Scan# 955

Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

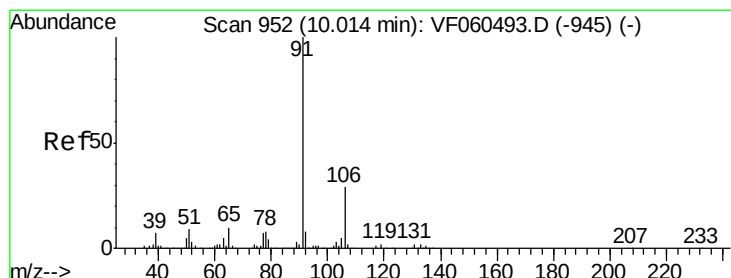
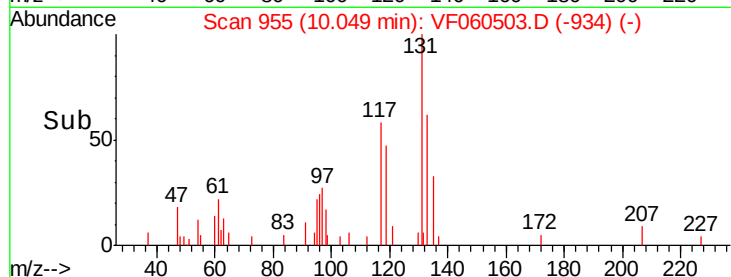
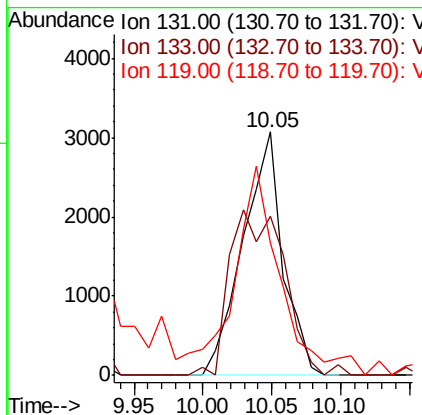
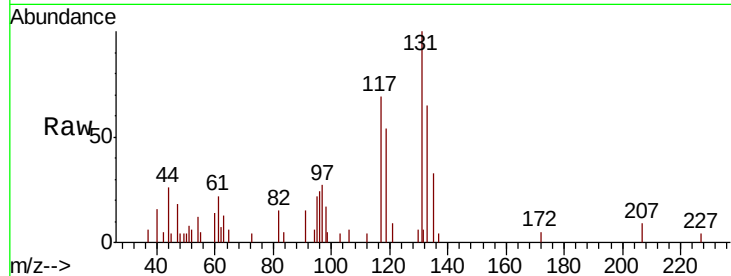
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	131	Resp:	6181
Ion Ratio	Lower	Upper	
131	100		
133	61.6	47.1	141.4
119	51.0	32.0	96.2

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#67

Ethyl Benzene

Concen: 2.553 ug/l

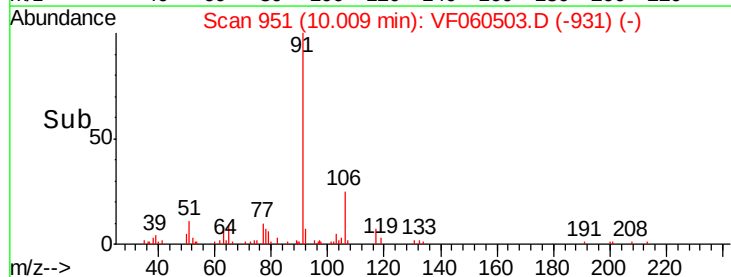
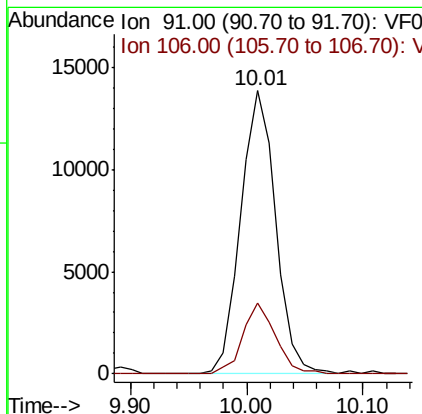
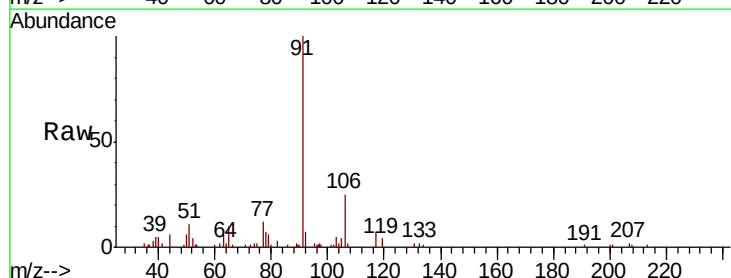
RT: 10.01 min Scan# 951

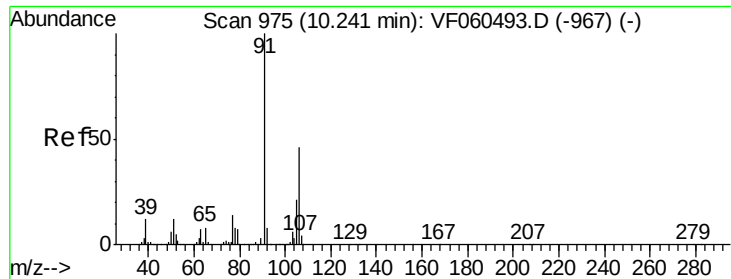
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	91	Resp:	28811
Ion Ratio	Lower	Upper	
91	100		
106	25.1	23.3	34.9





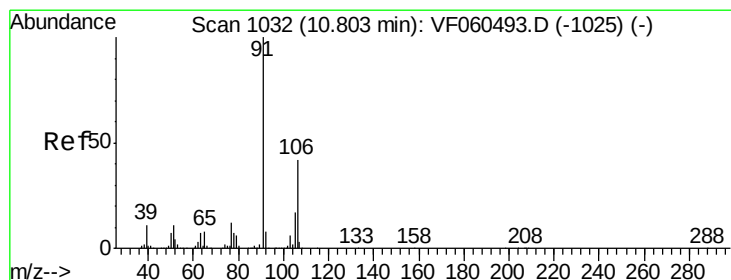
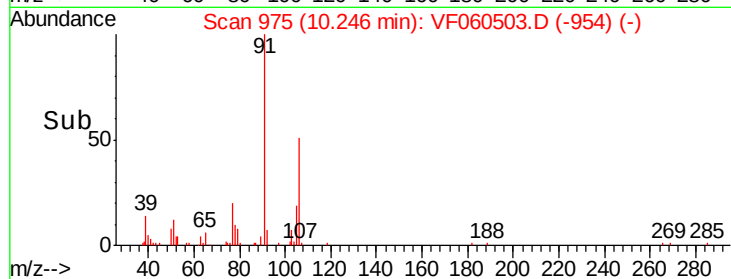
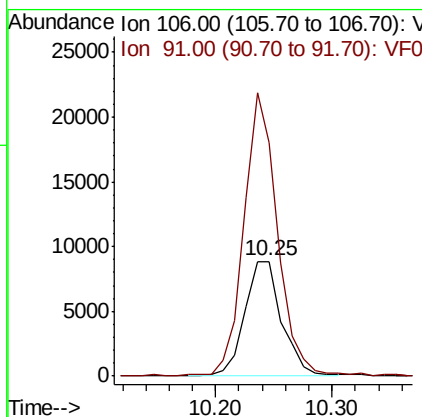
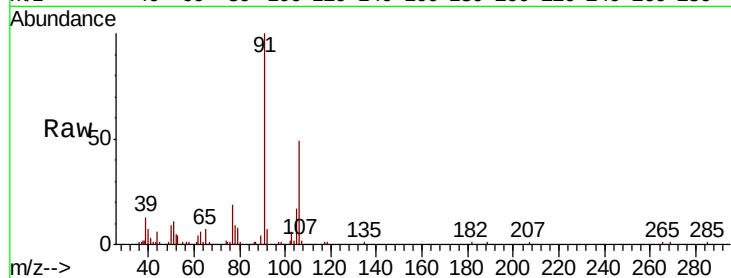
#68
m/p-Xylenes
Concen: 5.069 ug/l
RT: 10.25 min Scan# 975
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
106	100		
91	203.7	174.6	262.0

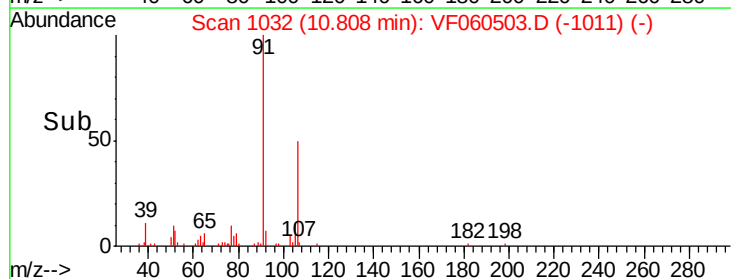
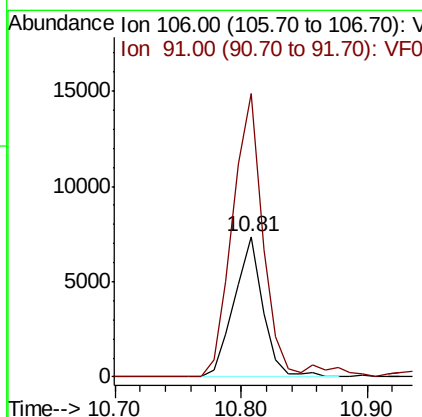
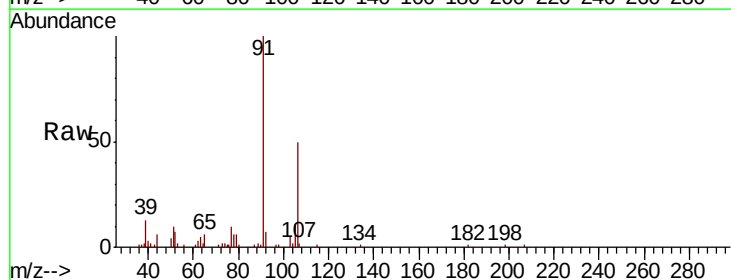
Manual Integrations
APPROVED

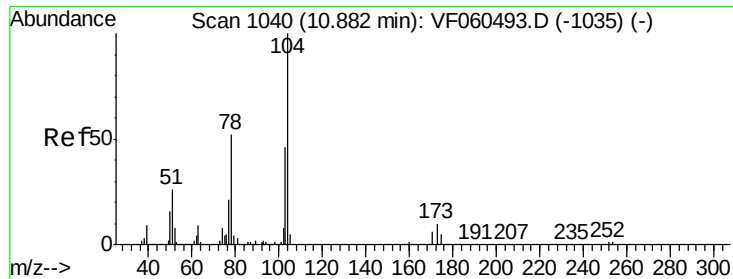
apatel
10/10/2018 2:04:23 PM



#69
o-Xylene
Concen: 2.763 ug/l
RT: 10.81 min Scan# 1032
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
106	100		
91	201.6	118.8	356.3





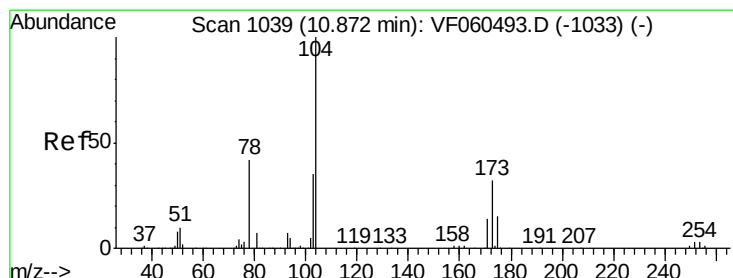
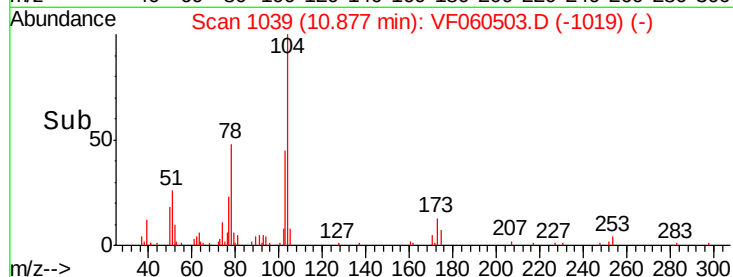
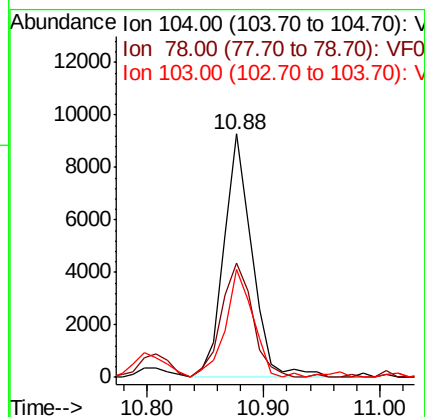
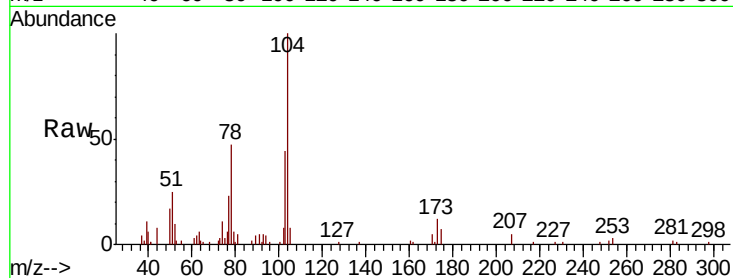
#70
Stvrene
Concen: 2.586 ug/l
RT: 10.88 min Scan# 1039
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	104	Resp:	15594
Ion Ratio	Lower	Upper	
104	100		
78	47.1	42.7	64.1
103	44.2	37.6	56.4

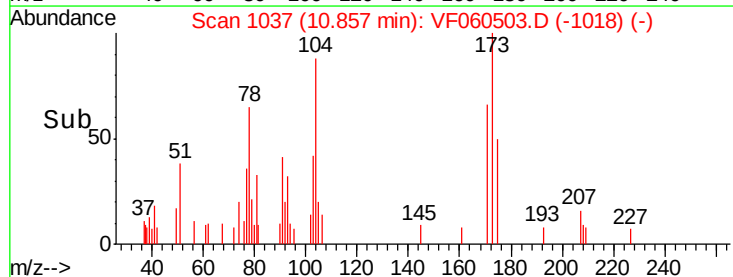
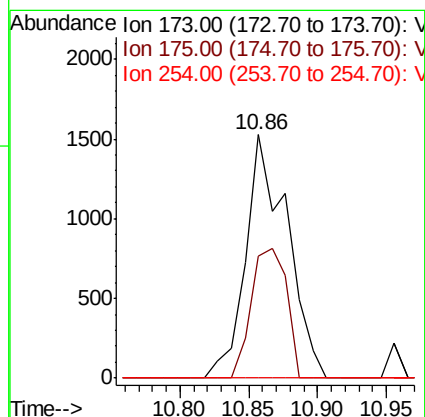
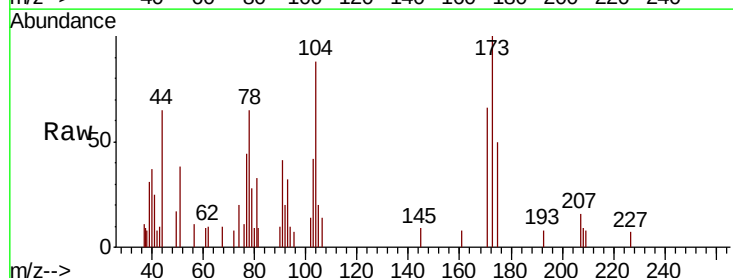
Manual Integrations
APPROVED

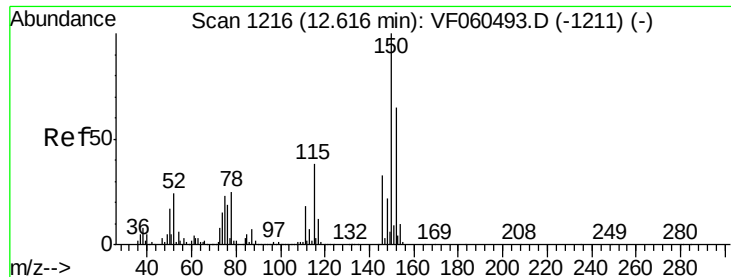
apatel
10/10/2018 2:04:23 PM



#71
Bromoform
Concen: 2.345 ug/l
RT: 10.86 min Scan# 1037
Delta R.T. -0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion:	173	Resp:	3203
Ion Ratio	Lower	Upper	
173	100		
175	50.3	23.2	69.6
254	0.0	0.2	0.2#





#72

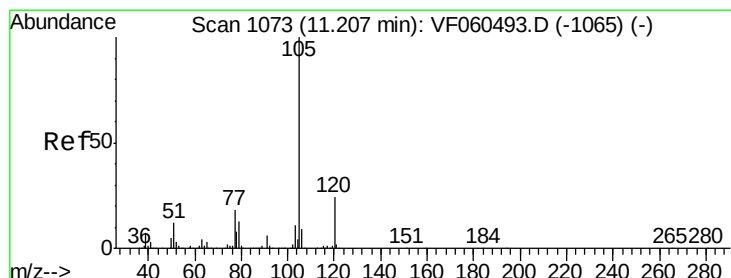
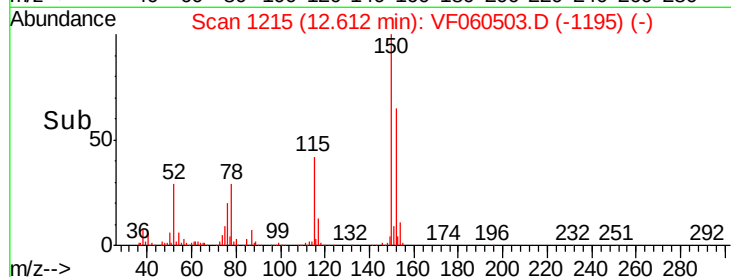
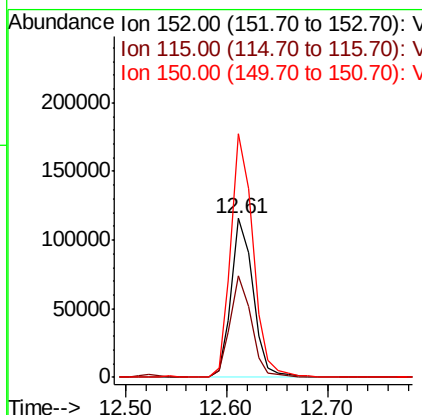
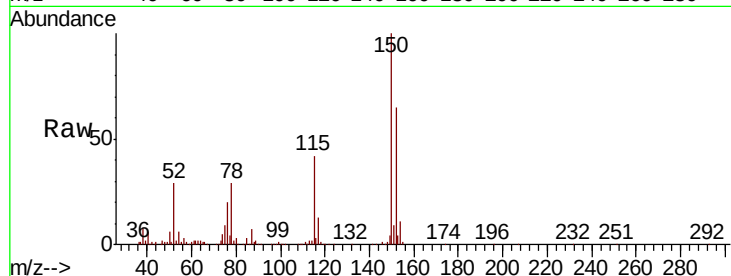
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.61 min Scan# 1215
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
152	100		
115	64.0	29.5	88.5
150	153.0	0.0	310.0

Manual Integrations
APPROVED

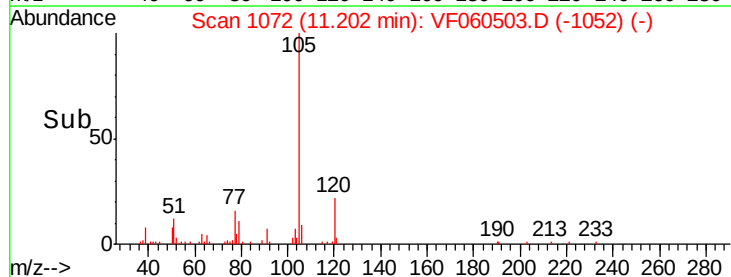
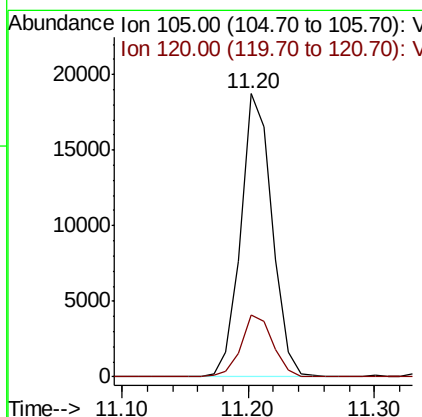
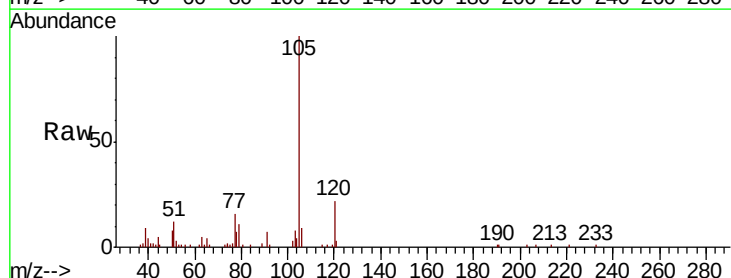
apatel
10/10/2018 2:04:23 PM

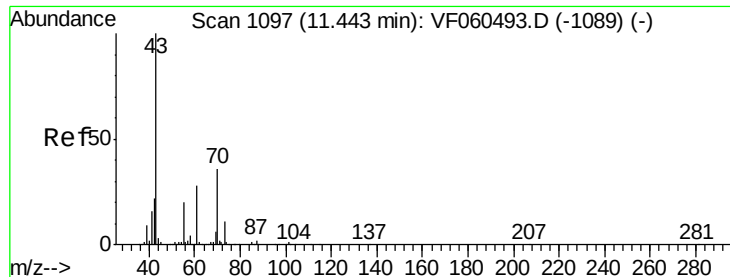


#73

Isopropylbenzene
Concen: 2.452 ug/l
RT: 11.20 min Scan# 1072
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
105	100		
120	21.9	11.9	35.9





#74

N-amvl acetate

Concen: 4.389 ug/l

RT: 11.44 min Scan# 1096

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

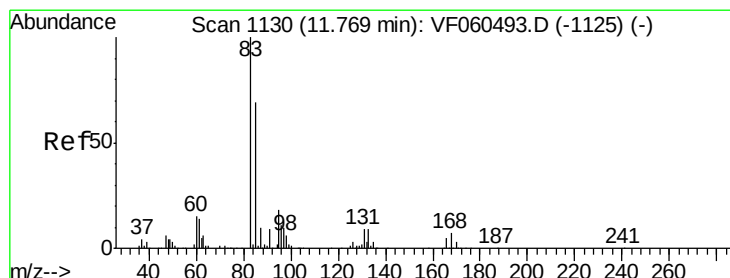
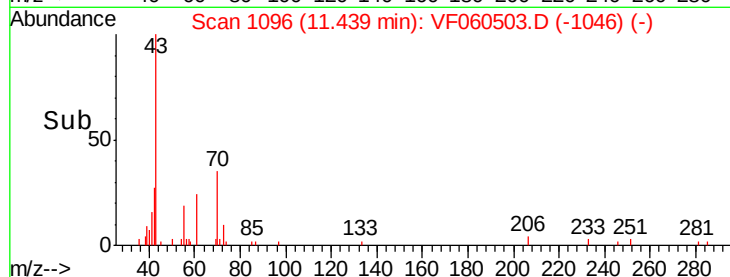
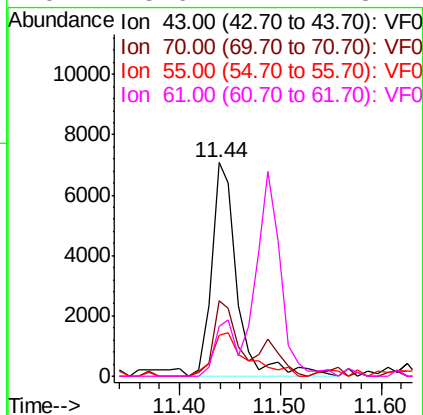
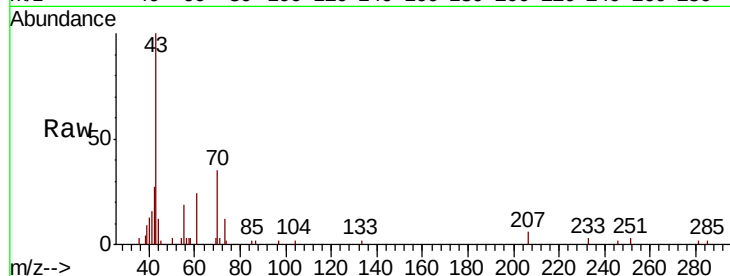
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
43	100		
70	35.4	28.7	43.1
55	19.0	16.1	24.1
61	23.6	22.7	34.1

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#75

1,1,2,2-Tetrachloroethane

Concen: 3.263 ug/l

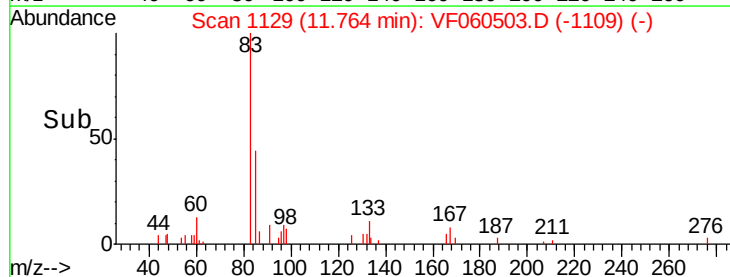
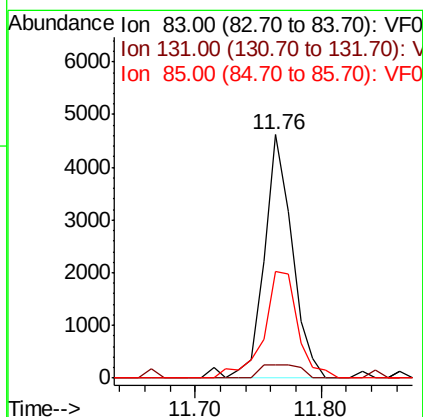
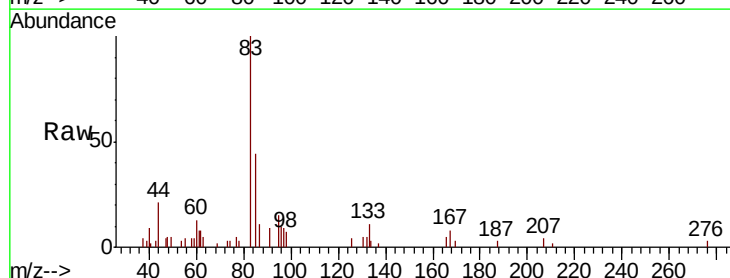
RT: 11.76 min Scan# 1129

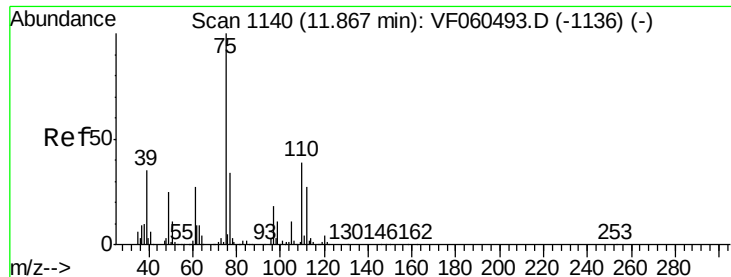
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
83	100		
131	5.4	4.5	13.4
85	43.7	34.8	104.4





#76

1,2,3-Trichloropropane

Concen: 3.015 ug/l

RT: 11.86 min Scan# 1139

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 75 Resp: 5147

Ion Ratio Lower Upper

75 100

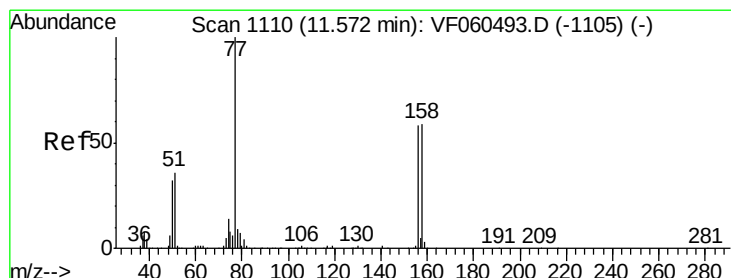
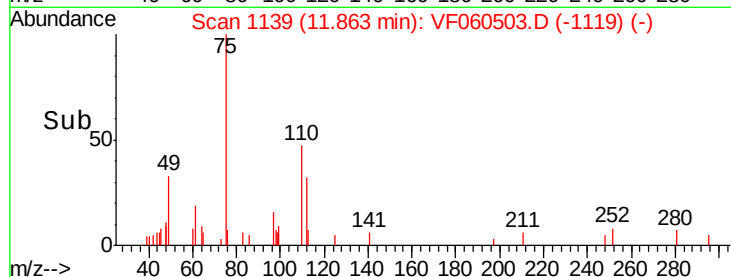
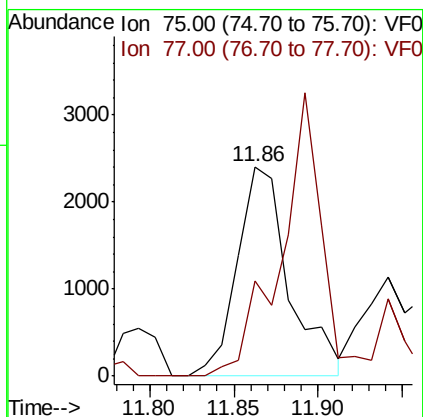
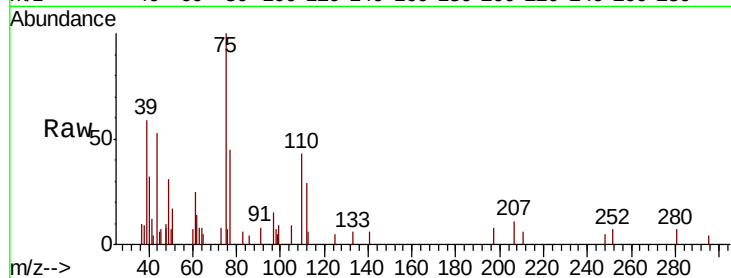
77 45.3 17.4 52.2

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#77

Bromobenzene

Concen: 2.218 ug/l

RT: 11.58 min Scan# 1110

Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

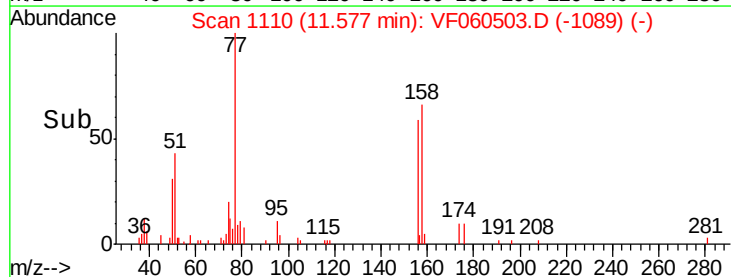
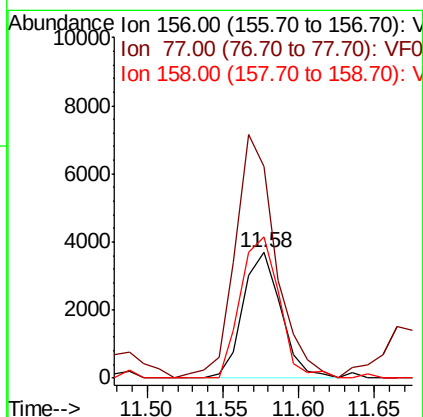
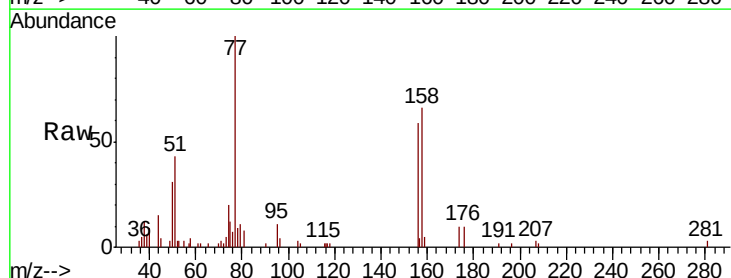
Tgt Ion: 156 Resp: 6475

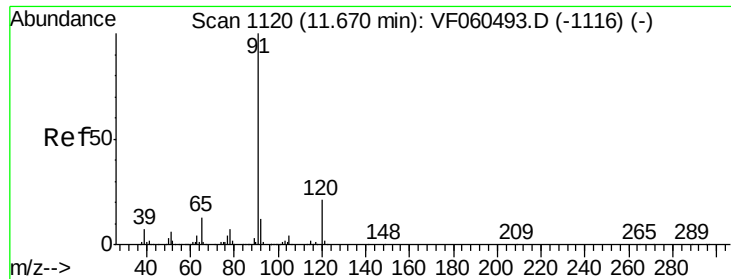
Ion Ratio Lower Upper

156 100

77 168.9 86.3 258.8

158 112.3 51.1 153.3





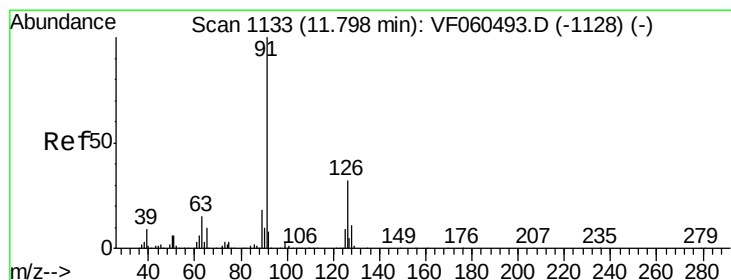
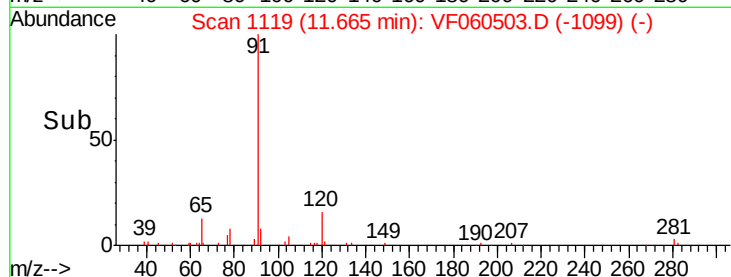
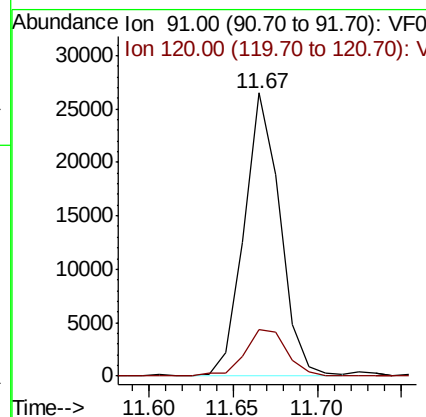
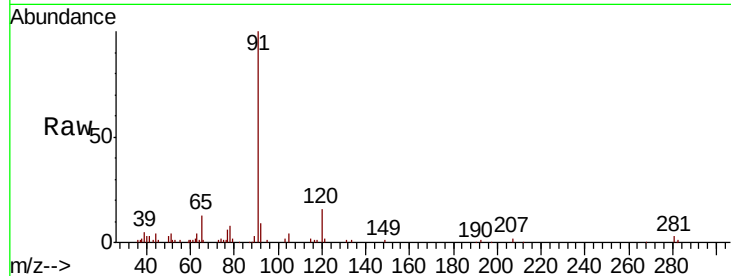
#78
n-propylbenzene
Concen: 2.507 ug/l
RT: 11.67 min Scan# 1119
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ion	Ratio	Resp	Lower	Upper
91	91	100	39230		
120	120	16.4		10.5	31.6

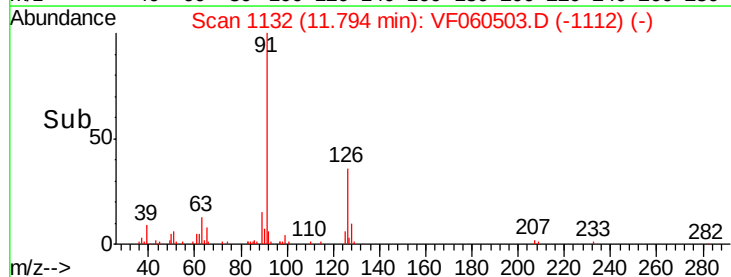
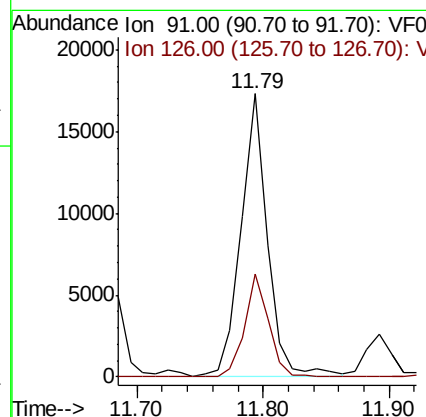
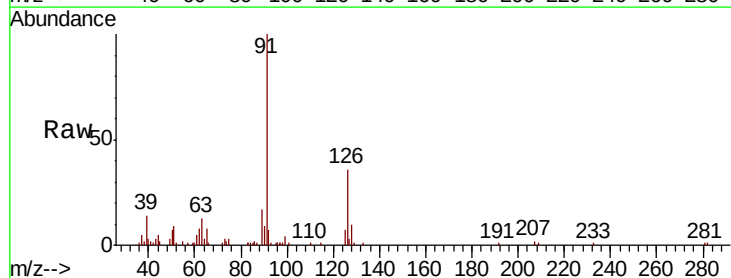
Manual Integrations
APPROVED

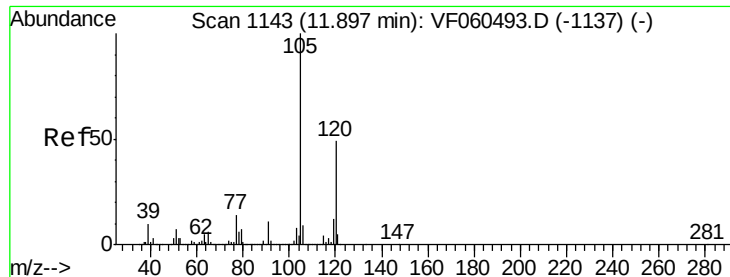
apatel
10/10/2018 2:04:23 PM



#79
2-Chlorotoluene
Concen: 2.745 ug/l
RT: 11.79 min Scan# 1132
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
91	91	100	25149		
126	126	36.1		16.1	48.3





#80

1,3,5-Trimethylbenzene

Concen: 2.523 ug/l

RT: 11.89 min Scan# 1142

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:105 Resp: 27811

Ion Ratio Lower Upper

105 100

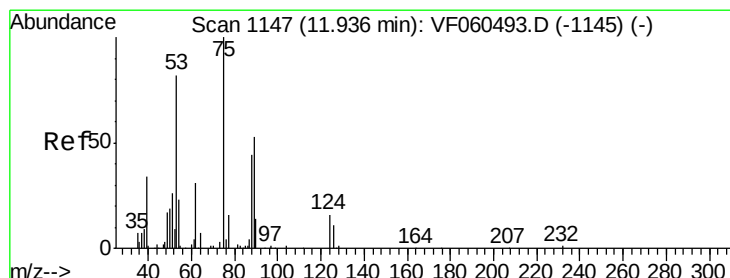
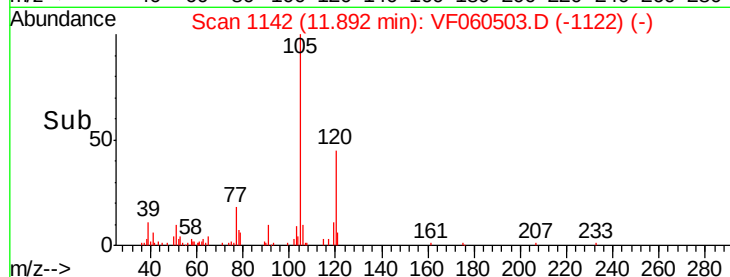
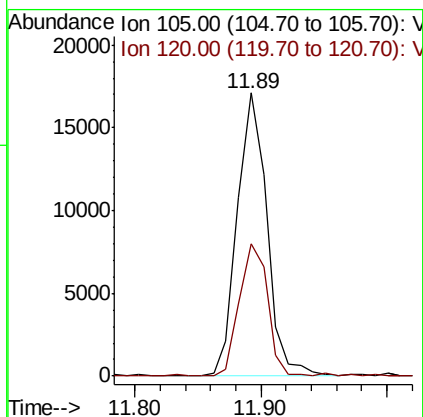
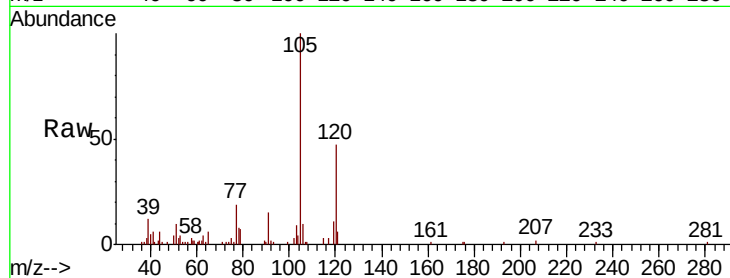
120 46.8 24.4 73.2

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#81

trans-1,4-Dichloro-2-butene

Concen: 2.574 ug/l m

RT: 11.94 min Scan# 1147

Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

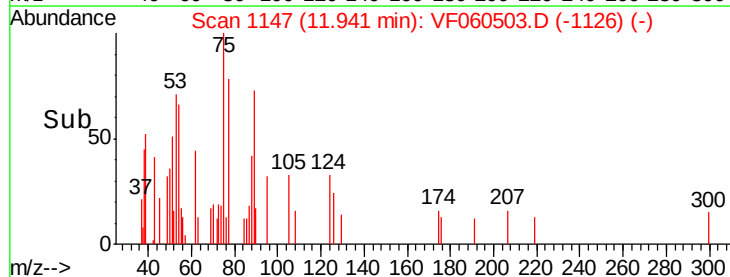
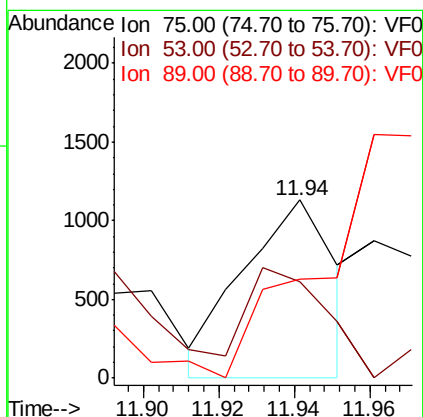
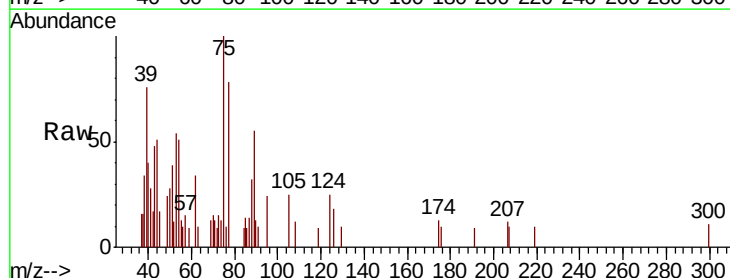
Tgt Ion: 75 Resp: 1916

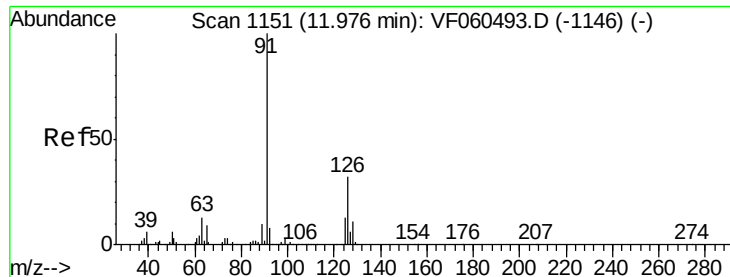
Ion Ratio Lower Upper

75 100

53 54.0 71.0 106.6#

89 55.4 43.1 64.7





#82

4-Chlorotoluene

Concen: 2.777 ug/l

RT: 11.97 min Scan# 1150

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion: 91 Resp: 26249

Ion Ratio Lower Upper

91 100

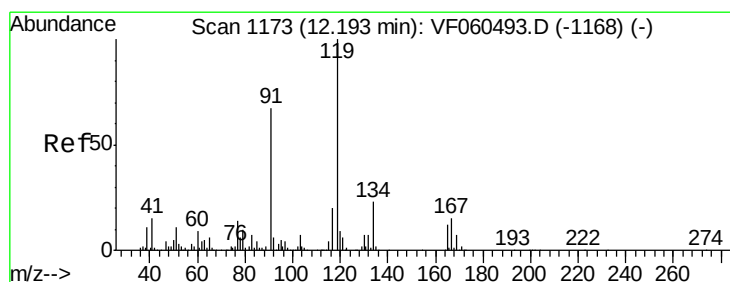
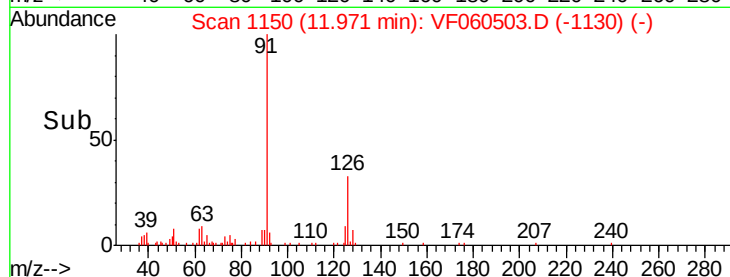
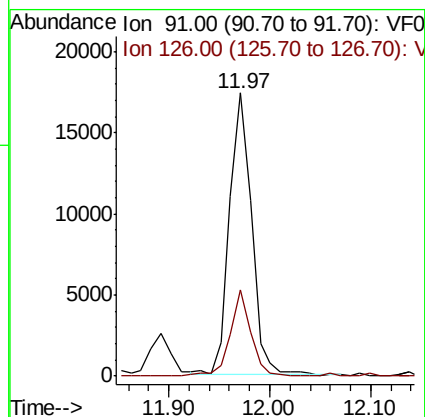
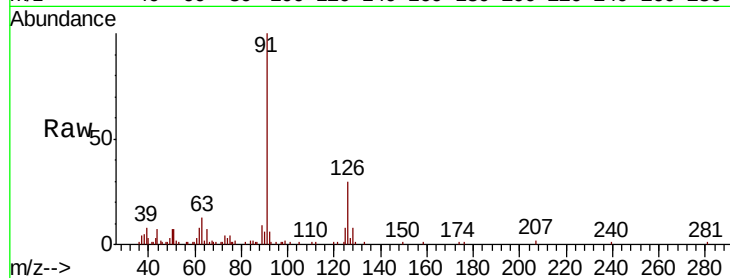
126 30.4 16.0 47.9

Manual Integrations

APPROVED

apatel

10/10/2018 2:04:23 PM



#83

tert-Butylbenzene

Concen: 2.628 ug/l

RT: 12.20 min Scan# 1173

Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

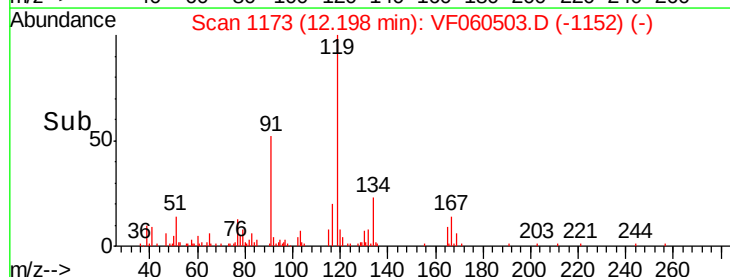
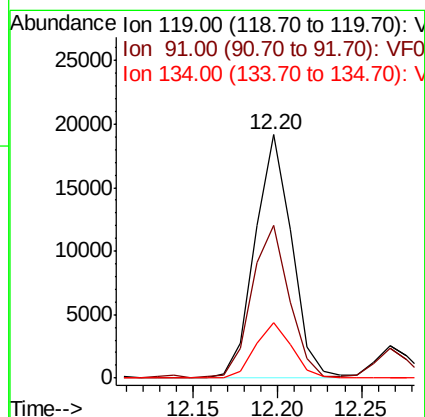
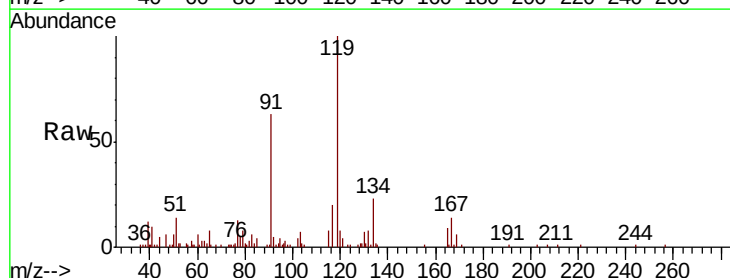
Tgt Ion: 119 Resp: 29117

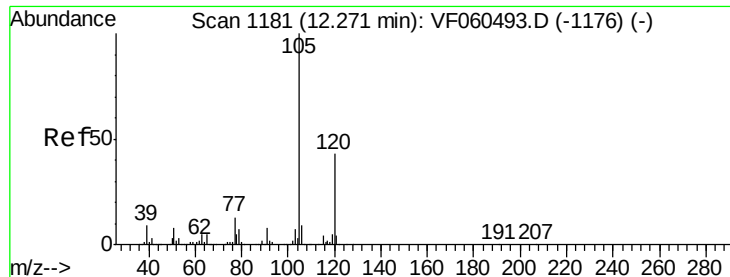
Ion Ratio Lower Upper

119 100

91 62.7 33.6 100.8

134 22.8 11.5 34.5





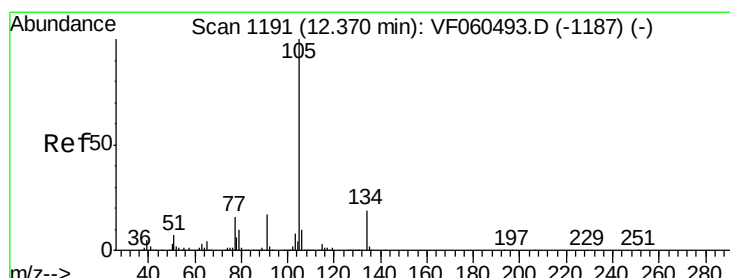
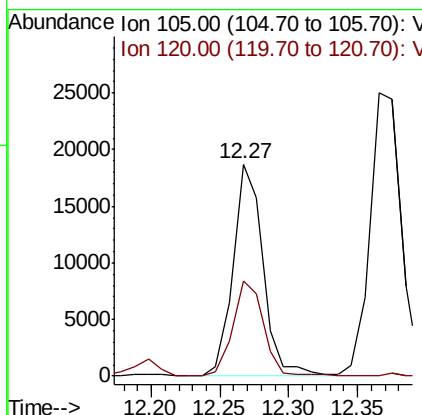
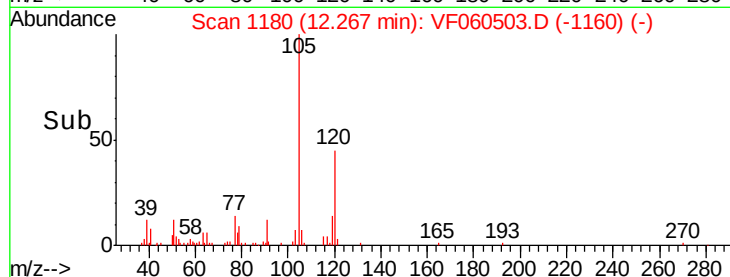
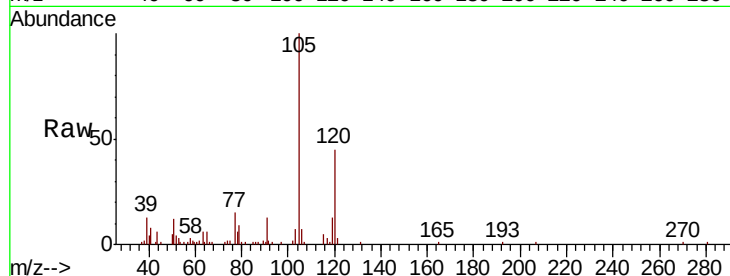
#84
 1,2,4-Trimethylbenzene
 Concen: 2.547 ug/l
 RT: 12.27 min Scan# 1180
 Delta R.T. -0.00 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:105 Resp: 28502
 Ion Ratio Lower Upper
 105 100
 120 44.7 21.7 65.1

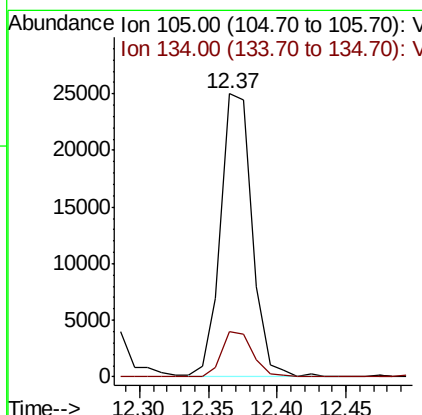
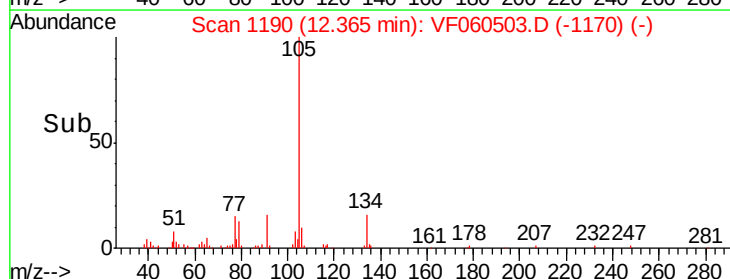
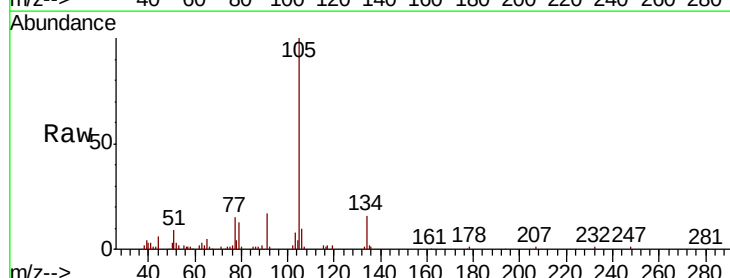
Manual Integrations
 APPROVED

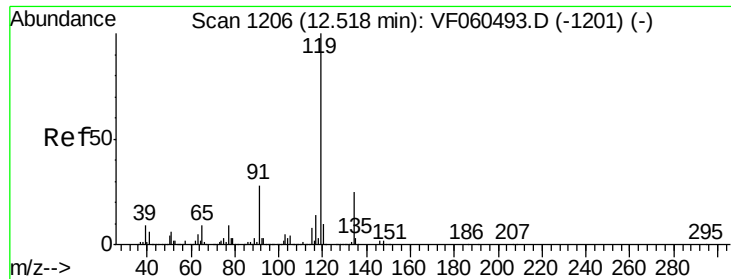
apatel
 10/10/2018 2:04:23 PM



#85
 sec-Butylbenzene
 Concen: 2.648 ug/l
 RT: 12.37 min Scan# 1190
 Delta R.T. -0.00 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Tgt Ion:105 Resp: 39787
 Ion Ratio Lower Upper
 105 100
 134 15.8 9.3 27.9





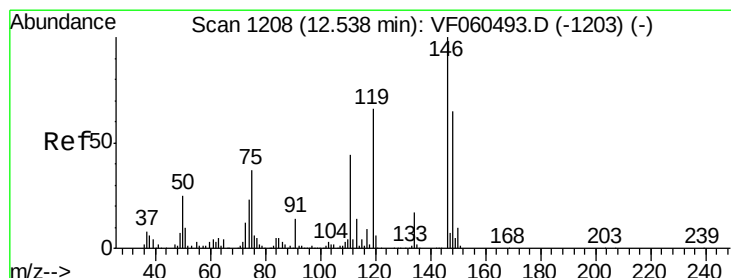
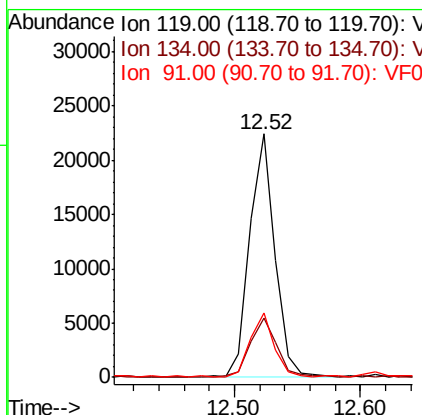
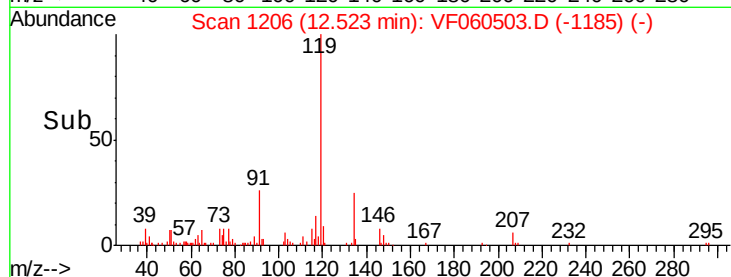
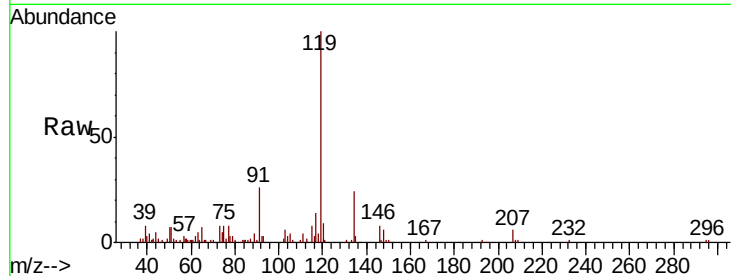
#86
 p-Isopropyltoluene
 Concen: 2.534 ug/l
 RT: 12.52 min Scan# 1206
 Delta R.T. 0.01 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
119	100		
134	24.4	12.6	37.6
91	26.2	14.1	42.4

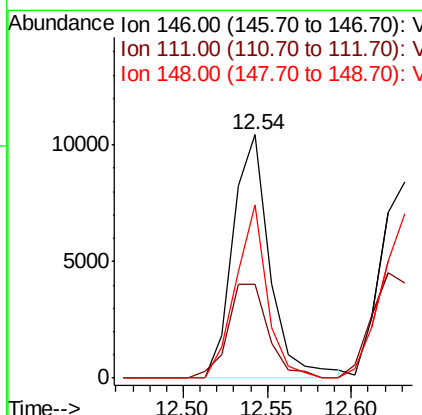
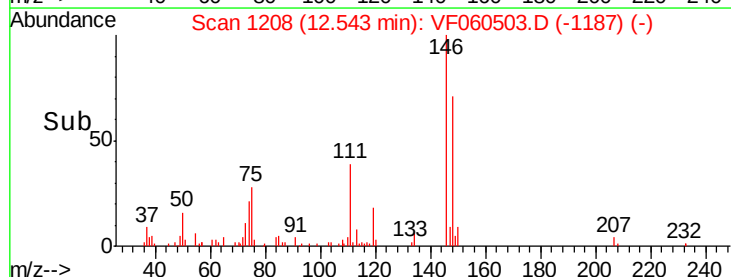
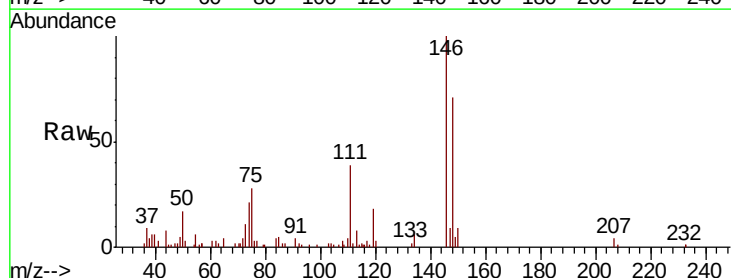
Manual Integrations
 APPROVED

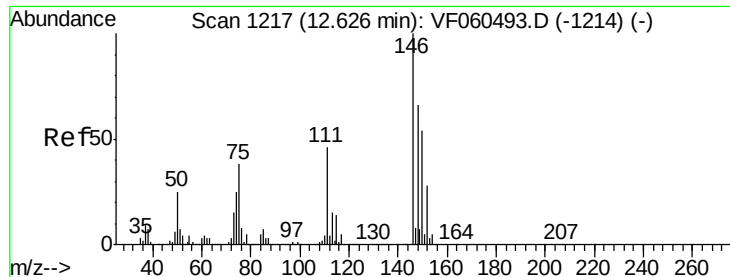
apatel
 10/10/2018 2:04:23 PM



#87
 1,3-Dichlorobenzene
 Concen: 2.855 ug/l
 RT: 12.54 min Scan# 1208
 Delta R.T. 0.01 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
146	100		
111	38.8	22.2	66.6
148	71.2	32.7	98.1





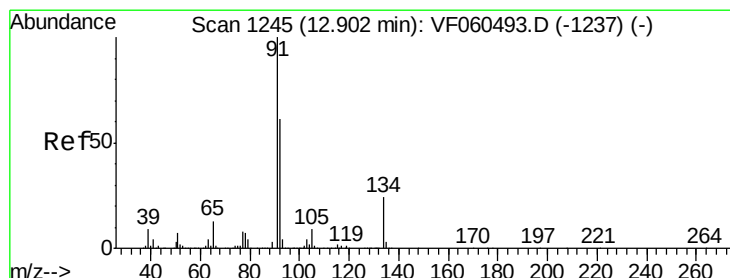
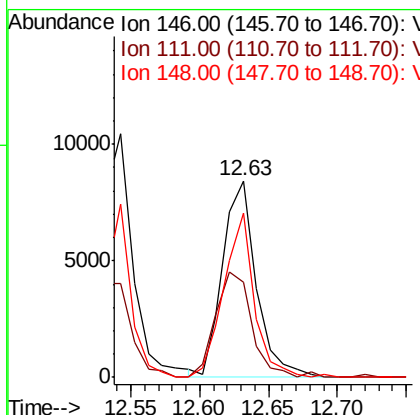
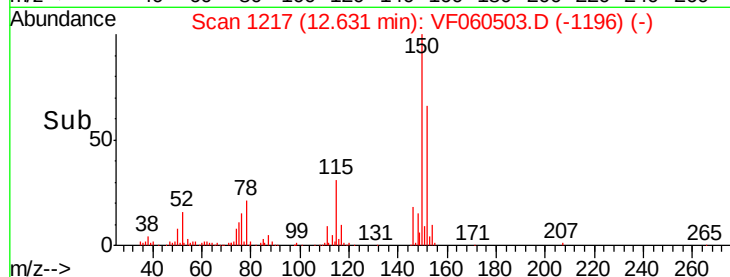
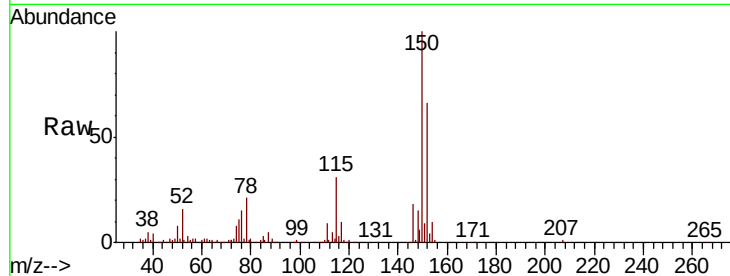
#88
 1,4-Dichlorobenzene
 Concen: 2.661 ug/l
 RT: 12.63 min Scan# 1217
 Delta R.T. 0.01 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Instrument :
 MSVOA_F
 ClientSampleID :
 MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Lower	Upper
146	100		
111	48.7	23.2	69.6
148	83.6	33.3	99.9

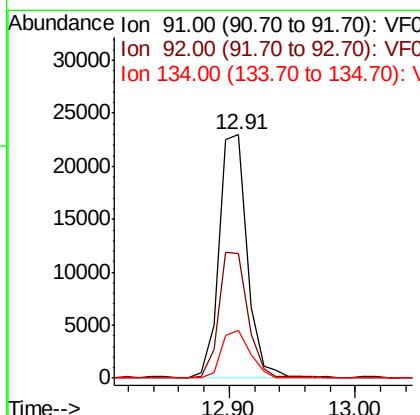
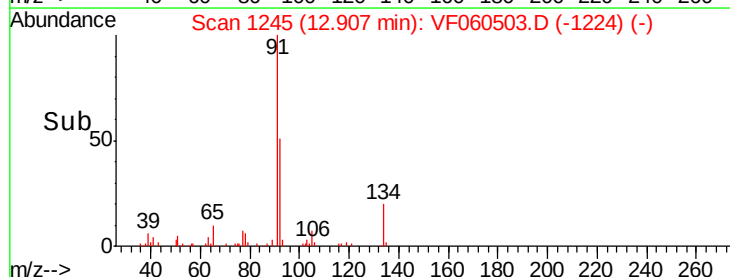
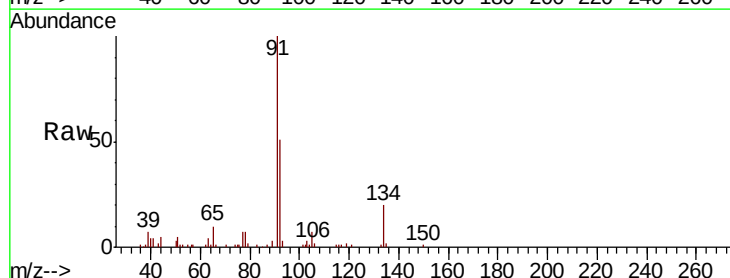
Manual Integrations
 APPROVED

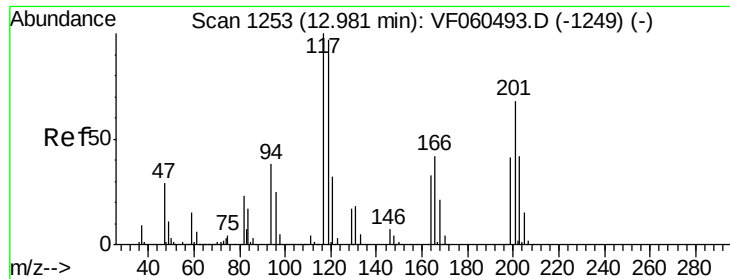
apatel
 10/10/2018 2:04:23 PM



#89
 n-Butylbenzene
 Concen: 2.750 ug/l
 RT: 12.91 min Scan# 1245
 Delta R.T. 0.01 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Tgt Ion	Ratio	Lower	Upper
91	100		
92	51.1	30.8	92.3
134	19.8	12.1	36.3





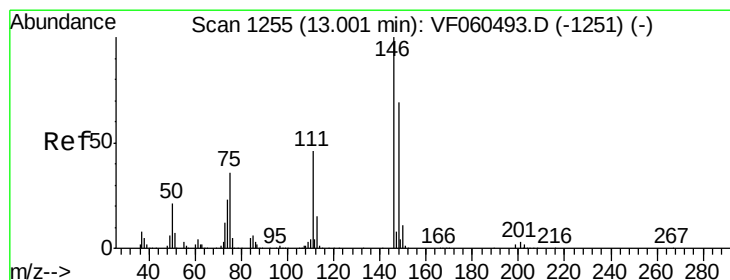
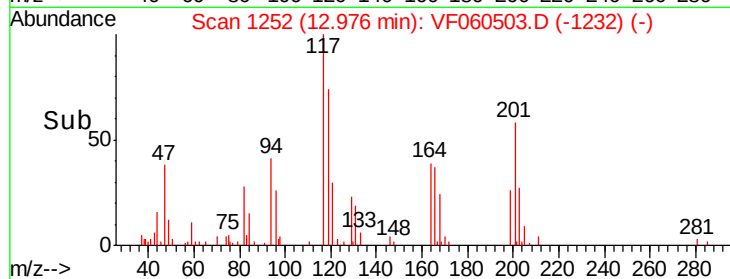
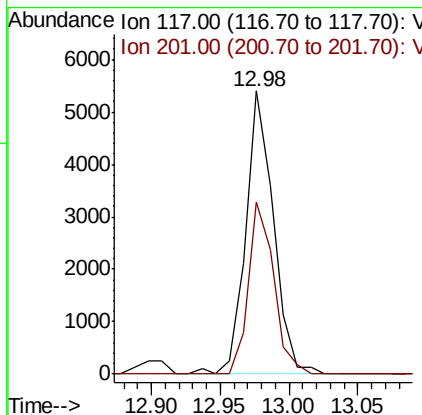
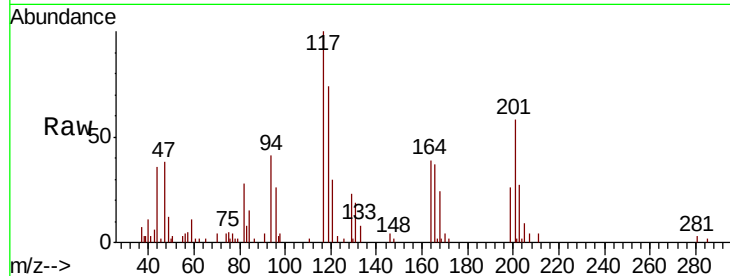
#90
Hexachloroethane
Concen: 2.579 ug/l
RT: 12.98 min Scan# 1252
Delta R.T. -0.00 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Instrument :
MSVOA_F
ClientSampleId :
MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:117 Resp: 7608
Ion Ratio Lower Upper
117 100
201 60.6 34.0 102.0

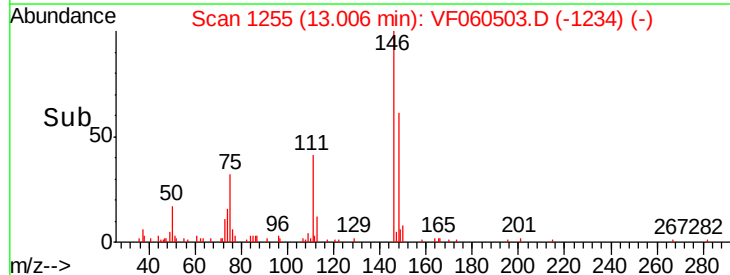
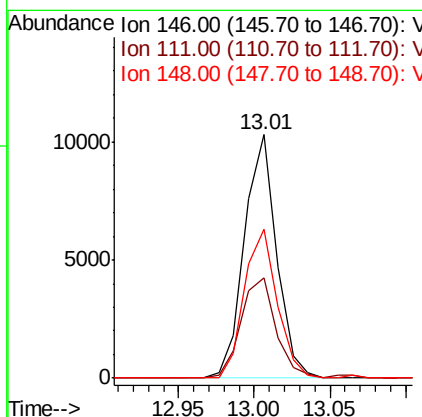
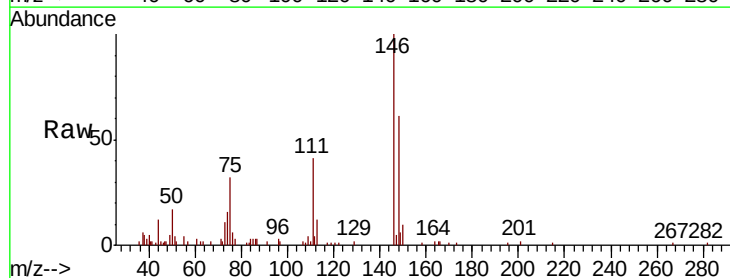
Manual Integrations
APPROVED

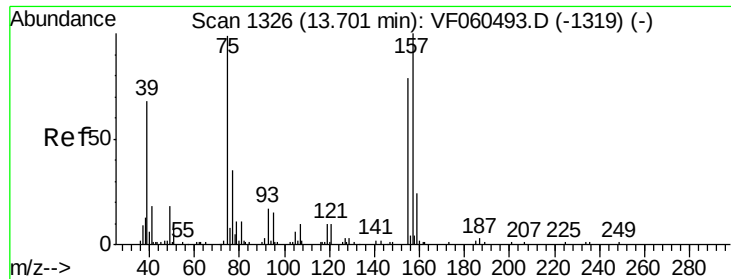
apatel
10/10/2018 2:04:23 PM



#91
1,2-Dichlorobenzene
Concen: 2.845 ug/l
RT: 13.01 min Scan# 1255
Delta R.T. 0.01 min
Lab File: VF060503.D
Acq: 9 Oct 2018 21:58

Tgt Ion:146 Resp: 15233
Ion Ratio Lower Upper
146 100
111 41.4 22.9 68.7
148 61.0 34.5 103.5





#92

1,2-Dibromo-3-Chloropropane

Concen: 2.769 ug/l

RT: 13.70 min Scan# 1325

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

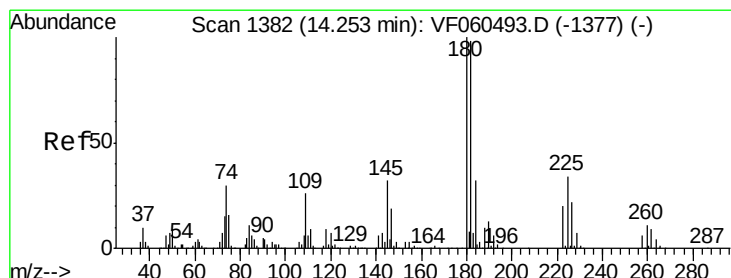
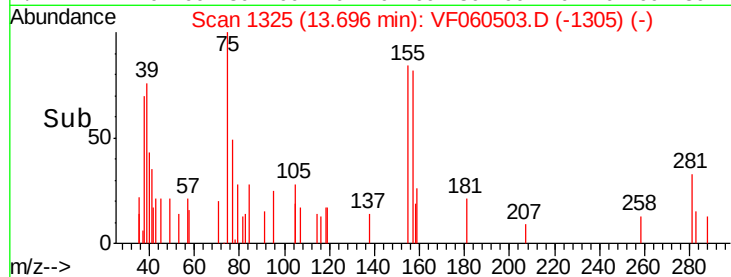
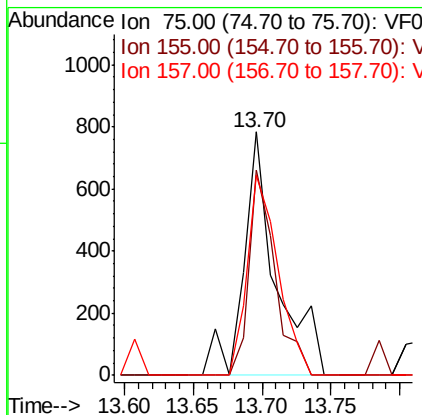
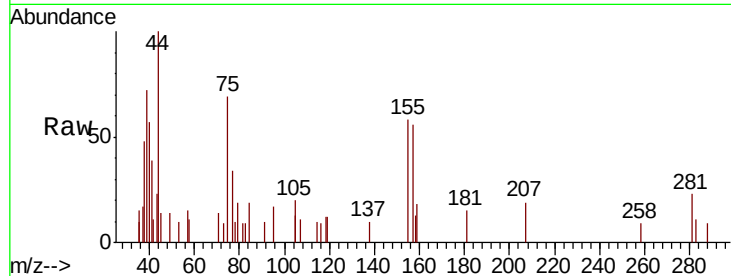
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	75	Resp:	1298
Ion Ratio	Lower	Upper	
75	100		
155	84.4	40.6	121.7
157	82.0	50.8	152.5

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#93

1,2,4-Trichlorobenzene

Concen: 2.904 ug/l

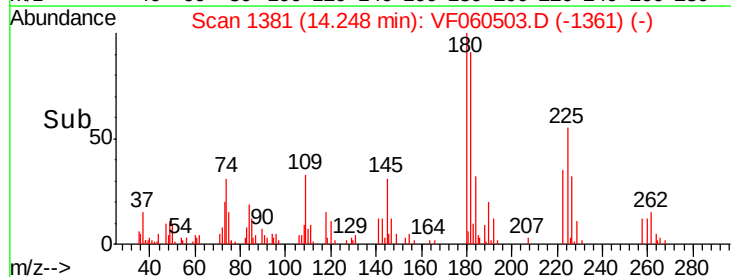
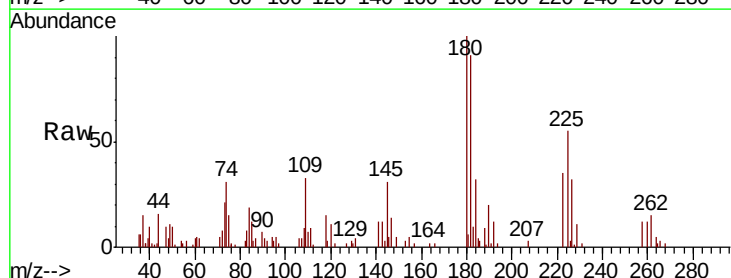
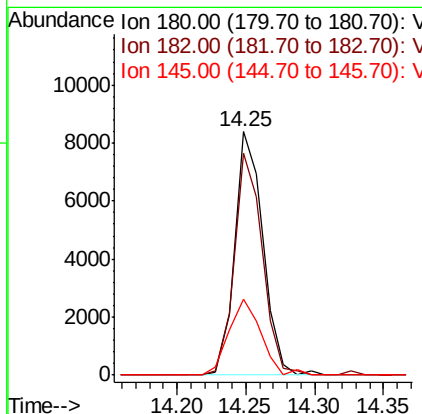
RT: 14.25 min Scan# 1381

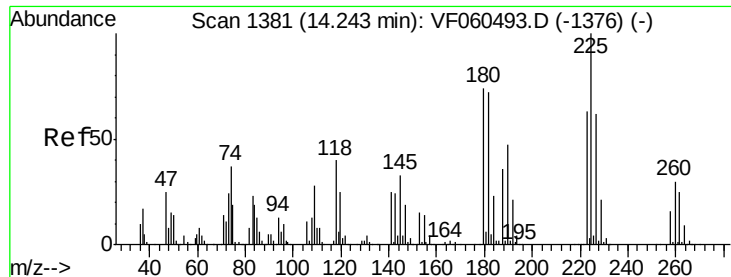
Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	180	Resp:	12008
Ion Ratio	Lower	Upper	
180	100		
182	91.2	48.9	146.8
145	31.2	16.2	48.5





#94

Hexachlorobutadiene

Concen: 2.715 ug/l

RT: 14.24 min Scan# 1380

Delta R.T. -0.00 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Instrument :

MSVOA_F

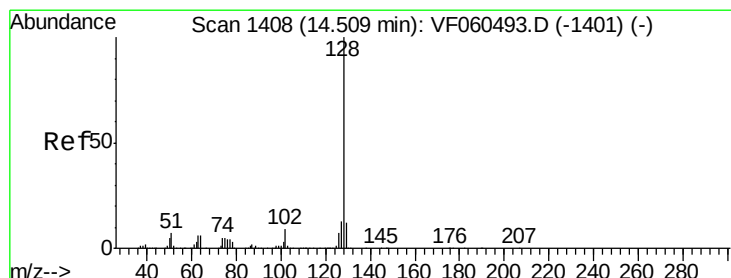
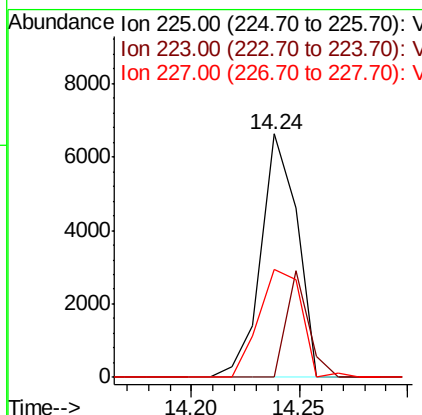
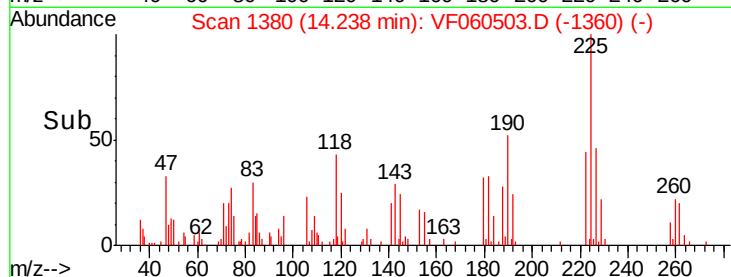
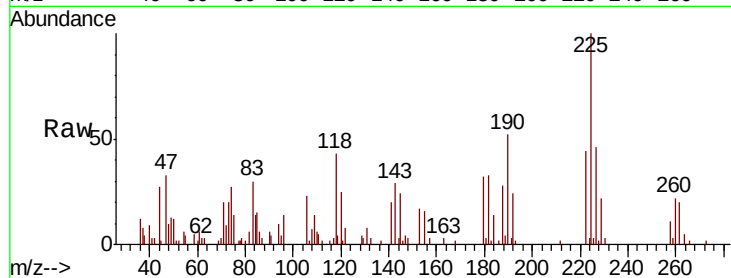
ClientSampleId :

MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion:	225	Resp:	7632
Ion Ratio	Lower	Upper	
225	100		
223	0.0	31.4	94.2#
227	44.3	30.9	92.7

Manual Integrations
APPROVED

apatel
10/10/2018 2:04:23 PM



#95

Naphthalene

Concen: 3.435 ug/l

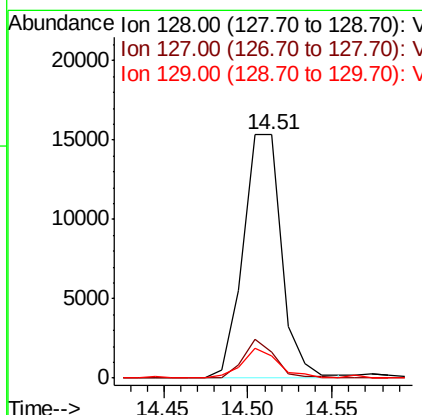
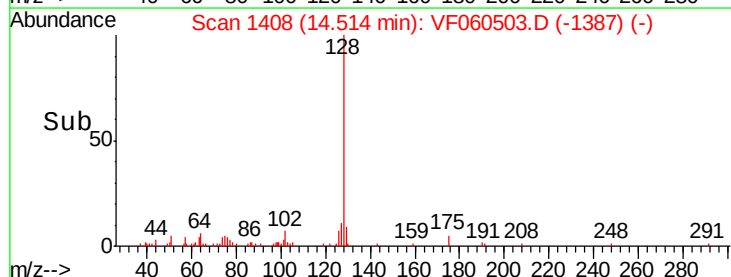
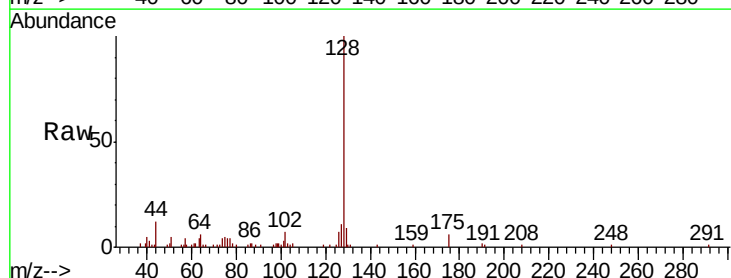
RT: 14.51 min Scan# 1408

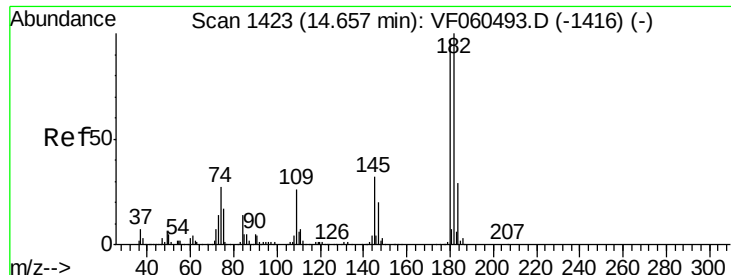
Delta R.T. 0.01 min

Lab File: VF060503.D

Acq: 9 Oct 2018 21:58

Tgt Ion:	128	Resp:	24414
Ion Ratio	Lower	Upper	
128	100		
127	10.6	10.2	15.2
129	9.3	9.2	13.8





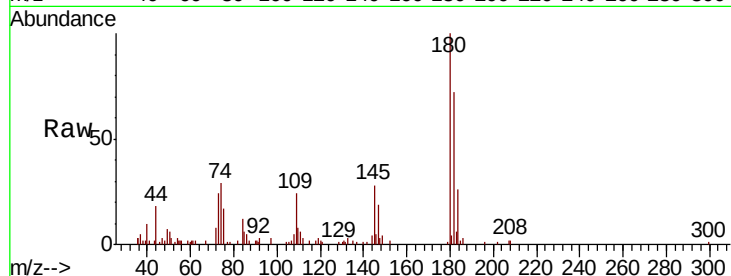
#96
 1,2,3-Trichlorobenzene
 Concen: 2.964 ug/l
 RT: 14.65 min Scan# 1422
 Delta R.T. -0.00 min
 Lab File: VF060503.D
 Acq: 9 Oct 2018 21:58

Instrument :
 MSVOA_F
 ClientSampleId :
 MDL-MDL-SOIL-03-QT4-2018DL

Tot Ion	Ratio	Resp	Lower	Upper
180	100			
182	71.8	51.3	153.9	
145	28.3	16.4	49.2	

Manual Integrations
 APPROVED

apatel
 10/10/2018 2:04:23 PM



Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

