

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN112818\
 Data File : VN052525.D
 Acq On : 28 Nov 2018 17:41
 Operator : MD\SY
 Sample : J6064-02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 21 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :
 OILY-SOIL

Manual Integrations
 APPROVED

MMDadoda
 11/29/2018 9:34:37 AM

Quant Time: Nov 29 01:30:30 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N112718W.M
 Quant Title : SW846 8260
 QLast Update : Wed Nov 28 01:11:38 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	1477402	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	2227948	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	1899099	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	863521	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.03	65	726906	45.19	ug/l	0.00
Spiked Amount	50.000		Recovery	=	90.38%	
35) Dibromofluoromethane	7.59	113	655804	47.75	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.50%	
50) Toluene-d8	10.09	98	2717701	50.83	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.66%	
62) 4-Bromofluorobenzene	12.40	95	1201174	66.86	ug/l	0.00
Spiked Amount	50.000		Recovery	=	133.72%	

Target Compounds

						Qvalue
11) Tert butyl alcohol	4.78	59	12086	15.008	ug/l	# 73
16) Acetone	3.82	43	568235	133.926	ug/l	99
20) Methylene Chloride	4.55	84	1552062	93.477	ug/l	99
25) 2-Butanone	6.83	43	908275	151.030	ug/l	97
31) Cyclohexane	7.65	56	1105246	39.843	ug/l	97
39) Methylcyclohexane	9.08	83	680078	26.594	ug/l	99
40) Benzene	8.02	78	32593209m	519.822	ug/l	
42) 1,2-Dichloroethane	8.13	62	1744448	91.886	ug/l	99
51) 4-Methyl-2-Pentanone	9.99	43	1169126	95.896	ug/l	97
52) Toluene	10.14	92	32578807m	874.525	ug/l	
59) 2-Hexanone	10.75	43	2969318	362.890	ug/l	87
61) 1,2-Dibromoethane	11.01	107	55517	4.266	ug/l	93
67) Ethyl Benzene	11.50	91	20441233m	298.087	ug/l	
68) m/p-Xylenes	11.61	106	27694725m	1084.847	ug/l	
69) o-Xylene	11.94	106	21872803m	882.304	ug/l	
73) Isopropylbenzene	12.25	105	1070943	15.808	ug/l	99
78) n-propylbenzene	12.59	91	2958450	38.439	ug/l	99
80) 1,3,5-Trimethylbenzene	12.73	105	8593086	159.036	ug/l	99
84) 1,2,4-Trimethylbenzene	13.03	105	21013313m	388.062	ug/l	
85) sec-Butylbenzene	13.17	105	145935m	2.224	ug/l	
86) p-Isopropyltoluene	13.29	119	98857m	1.769	ug/l	
89) n-Butylbenzene	13.61	91	182006m	3.916	ug/l	
95) Naphthalene	15.13	128	19257229m	555.140	ug/l	

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

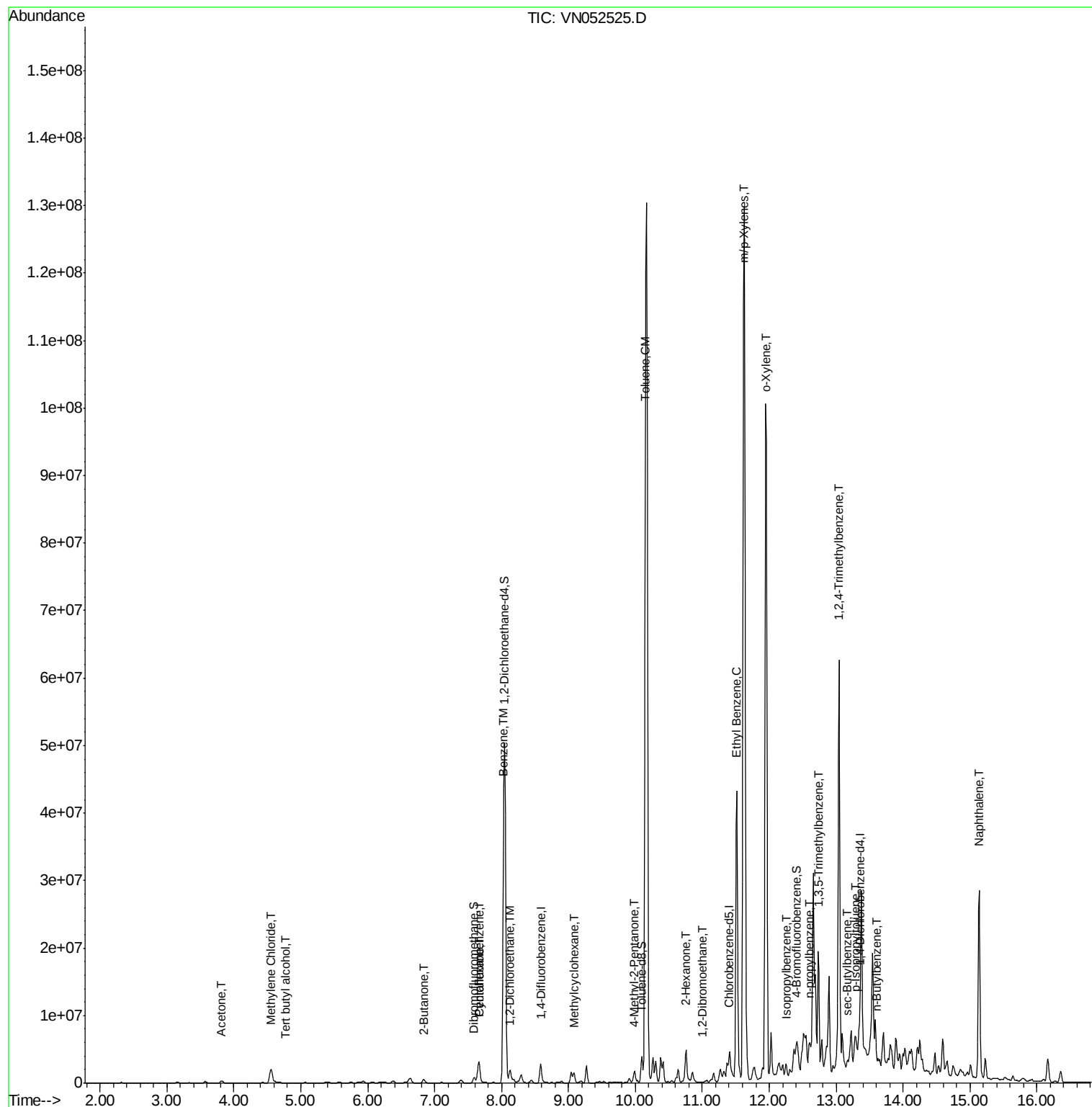
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN112818\
Data File : VN052525.D
Acq On : 28 Nov 2018 17:41
Operator : MD\SY
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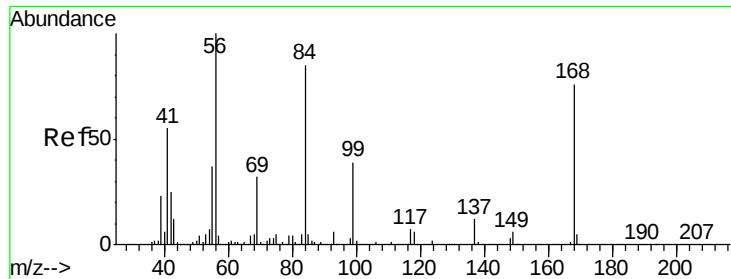
Instrument :
MSVOA_N
ClientSampleId :
OILY-SOIL

Manual Integrations
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11/29/2018 9:34:37 AM

Quant Time: Nov 29 01:30:30 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_N\METHODS\82N112718W.M
Quant Title : SW846 8260
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Response via : Initial Calibration





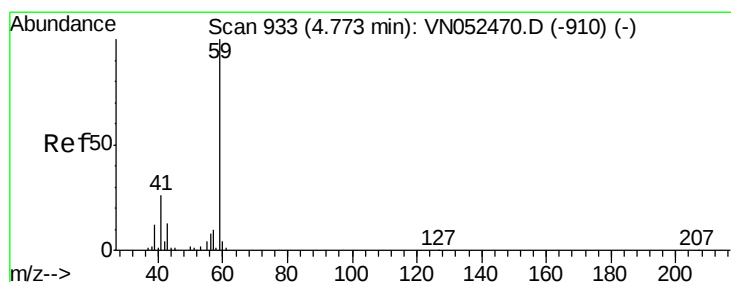
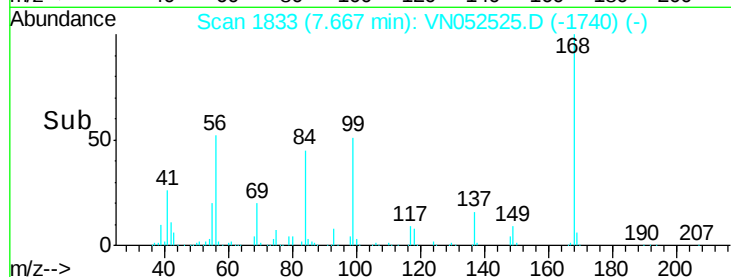
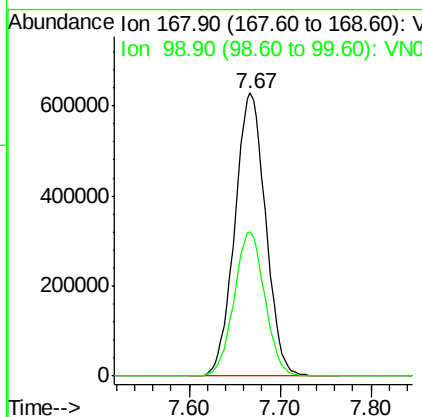
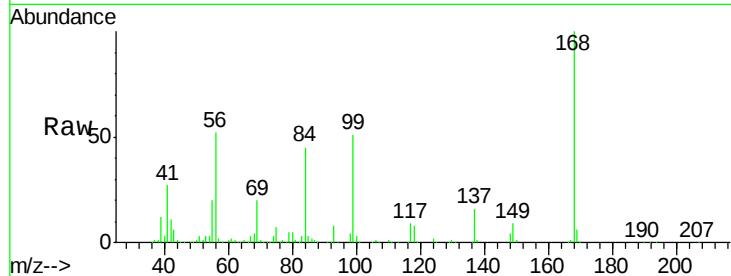
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.67 min Scan# 1833
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Instrument :
MSVOA_N
ClientSampleId :
OILY-SOIL

Tot Ion:168 Resp: 1477402
Ion Ratio Lower Upper
168 100
99 51.0 41.7 62.5

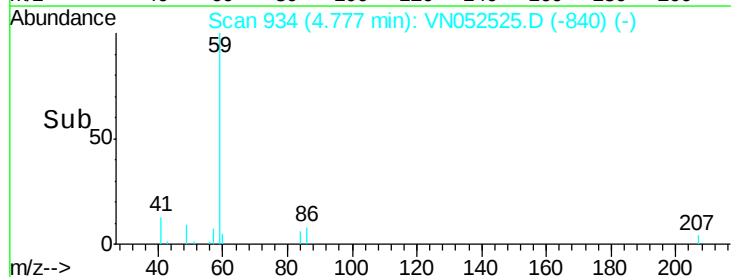
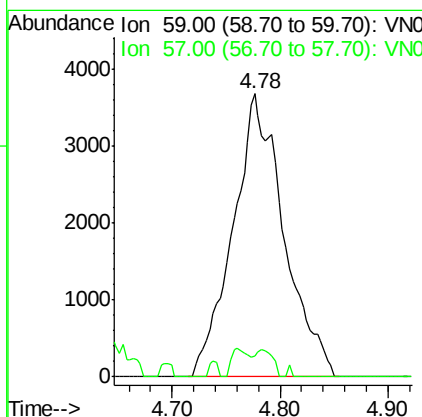
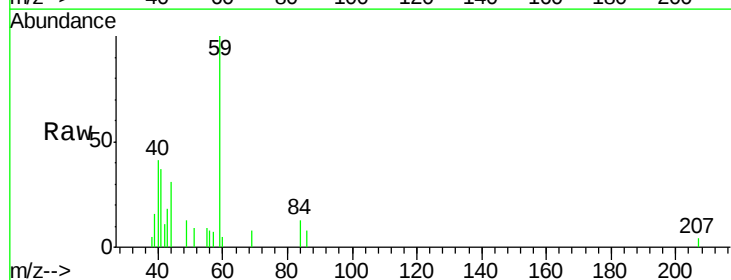
Manual Integrations
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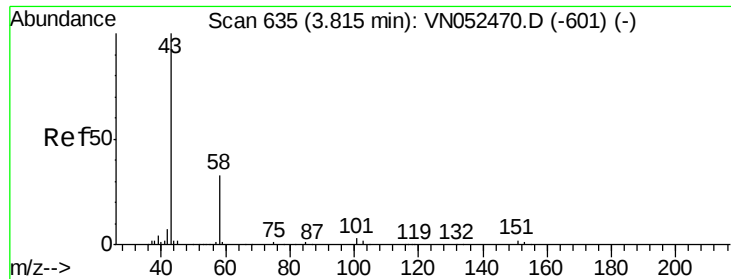
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#11
Tert butyl alcohol
Concen: 15.008 ug/l
RT: 4.78 min Scan# 934
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Tgt Ion: 59 Resp: 12086
Ion Ratio Lower Upper
59 100
57 0.0 7.9 11.9#





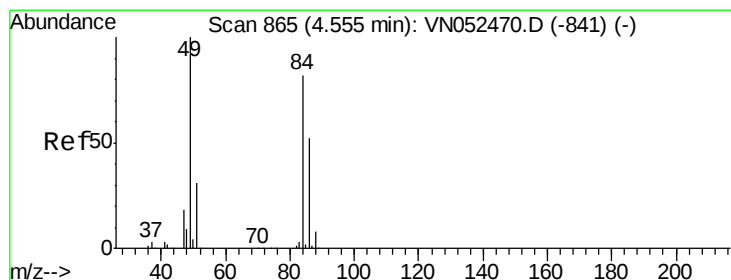
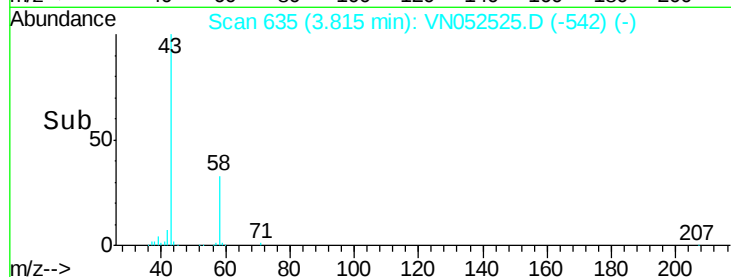
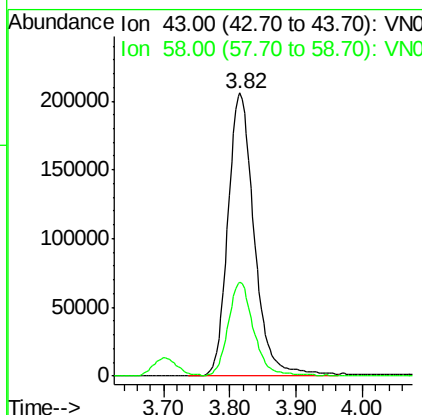
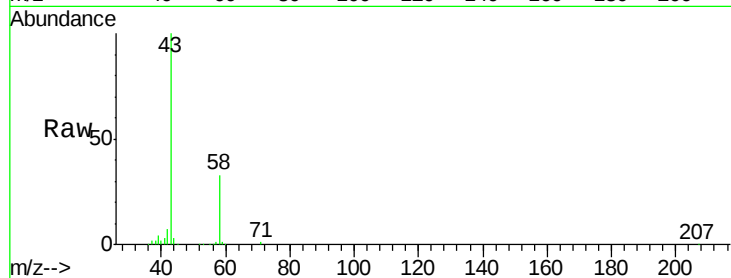
#16
Acetone
Concen: 133.926 ug/l
RT: 3.82 min Scan# 635
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Instrument :
MSVOA_N
ClientSampleId :
OILY-SOIL

Tot Ion: 43 Resp: 568235
Ion Ratio Lower Upper
43 100
58 32.8 26.0 39.0

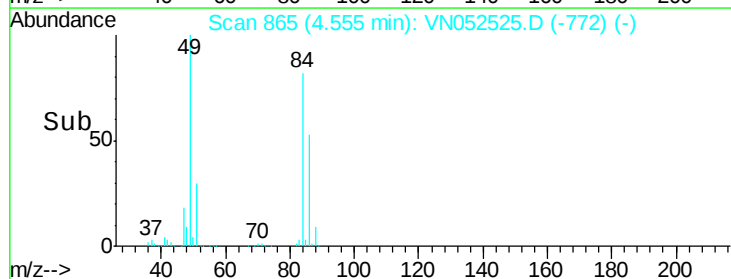
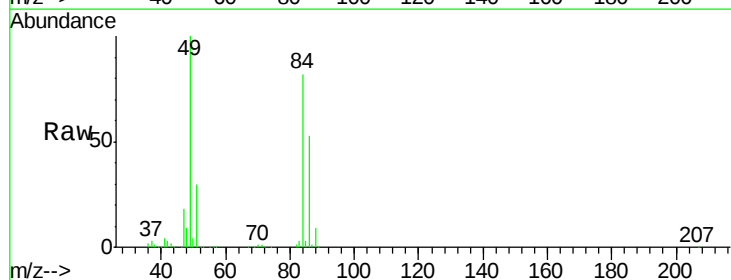
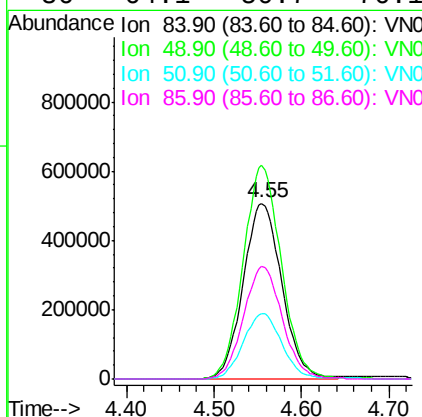
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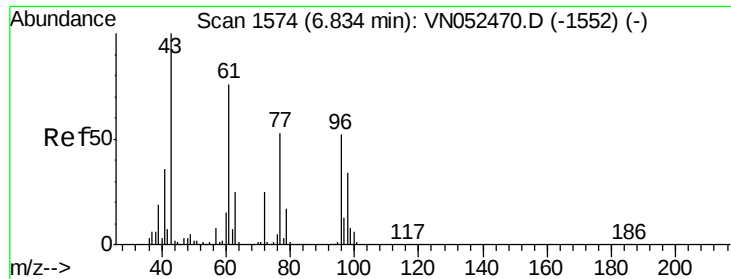
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#20
Methylene Chloride
Concen: 93.477 ug/l
RT: 4.55 min Scan# 865
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Tgt Ion: 84 Resp: 1552062
Ion Ratio Lower Upper
84 100
49 121.6 98.0 147.0
51 36.9 30.1 45.1
86 64.1 50.7 76.1





#25

2-Butanone

Concen: 151.030 ug/l

RT: 6.83 min Scan# 1574

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampled :

OILY-SOIL

Tot Ion: 43 Resp: 908275

Ion Ratio Lower Upper

43 100

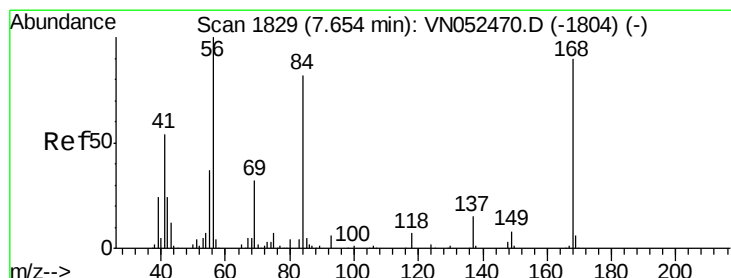
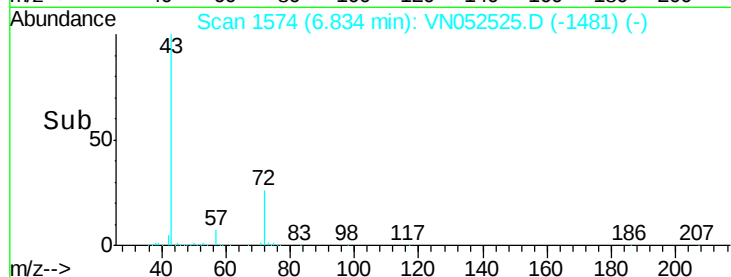
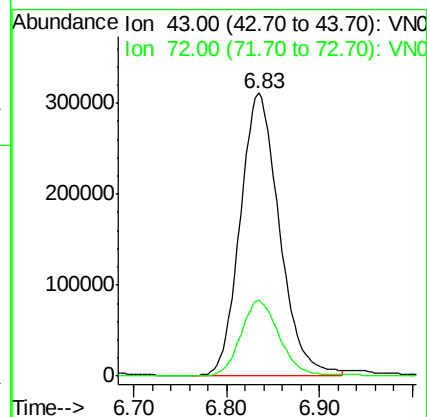
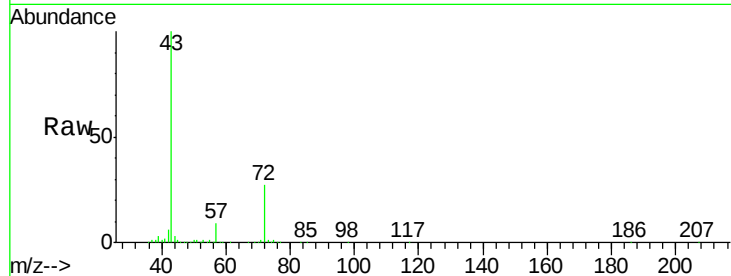
72 26.8 20.1 30.1

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#31

Cyclohexane

Concen: 39.843 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

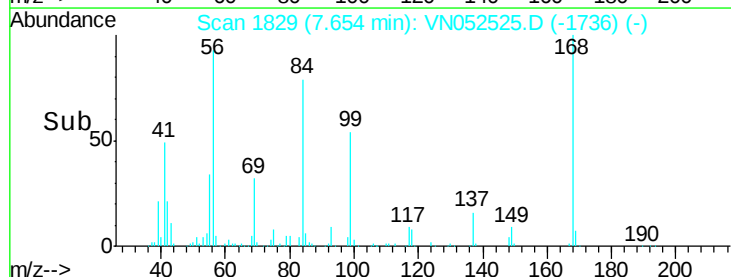
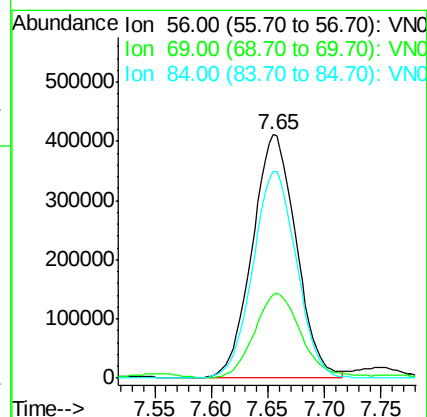
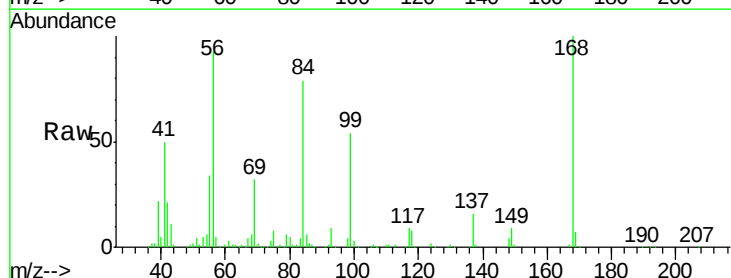
Tgt Ion: 56 Resp: 1105246

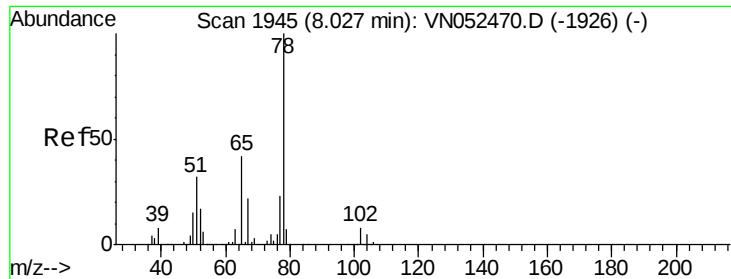
Ion Ratio Lower Upper

56 100

69 33.8 25.8 38.6

84 84.9 65.3 97.9





#33

1,2-Dichloroethane-d4

Concen: Below ug/l

RT: 8.03 min Scan# 1946

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampleId :

OILY-SOIL

Tot Ion: 65 Resp: 726906

Ion Ratio Lower Upper

65 100

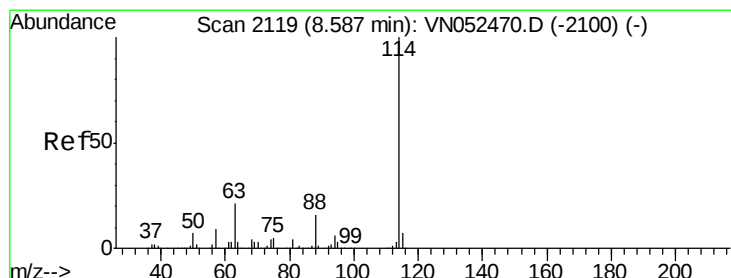
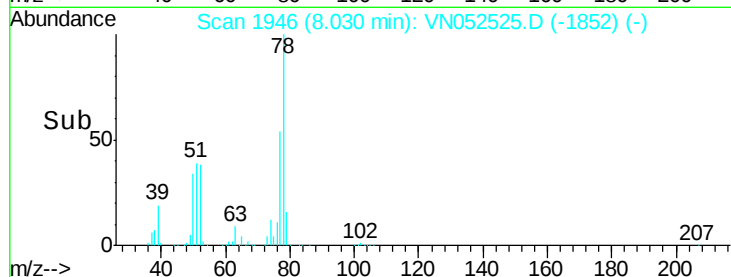
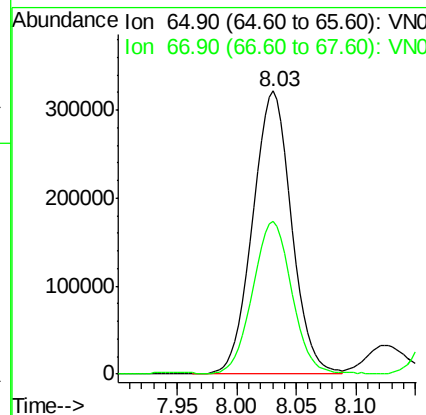
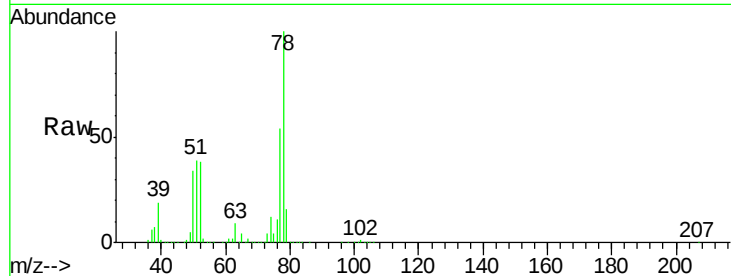
67 53.9 0.0 109.8

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#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

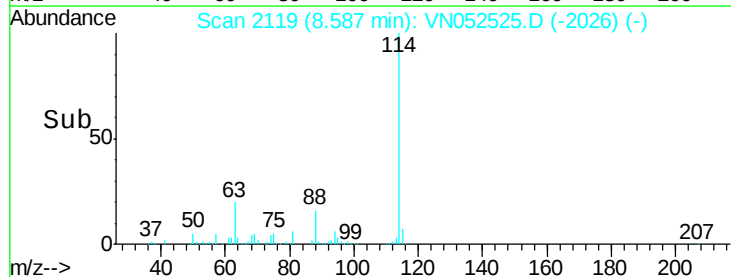
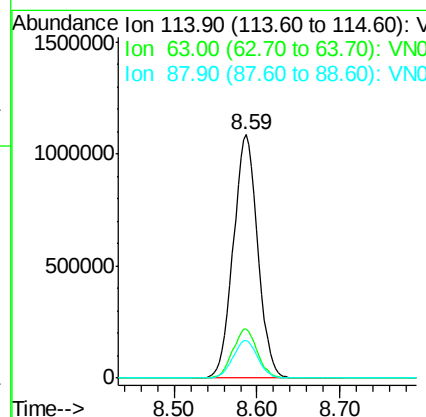
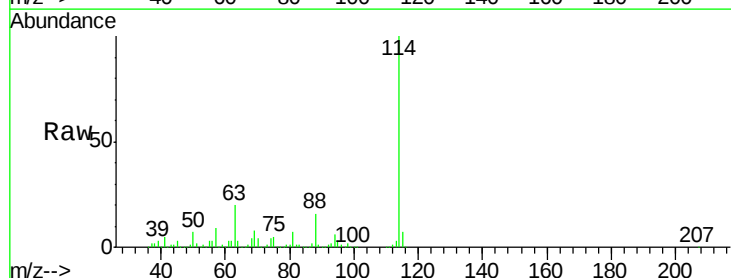
Tgt Ion: 114 Resp: 2227948

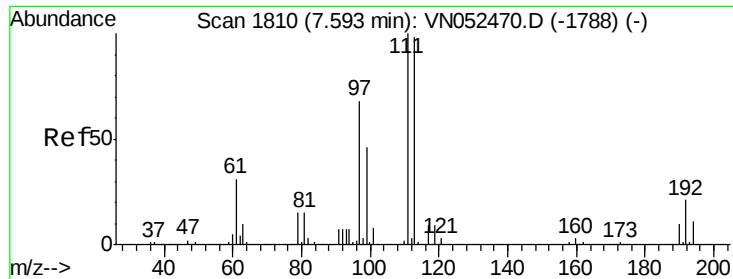
Ion Ratio Lower Upper

114 100

63 20.2 0.0 41.8

88 15.5 0.0 31.6





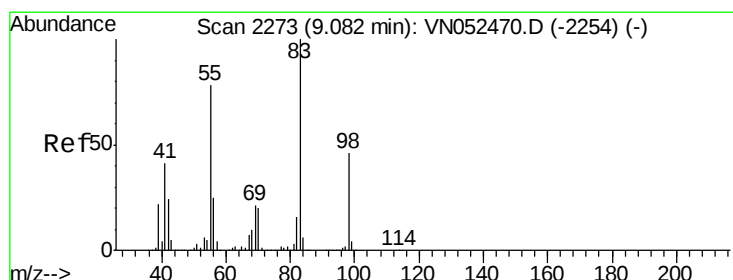
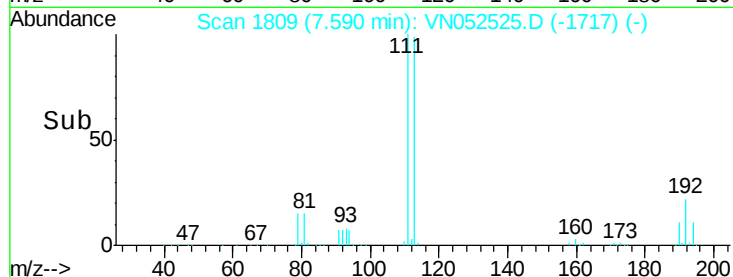
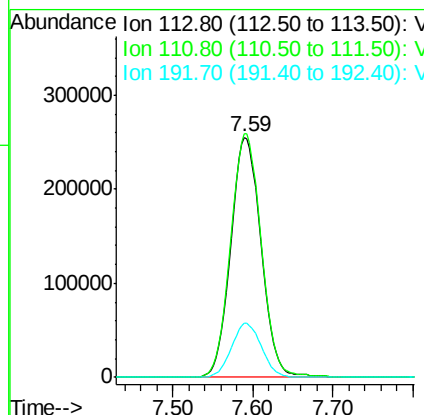
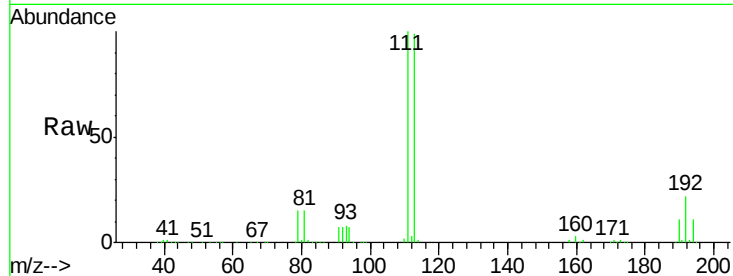
#35
Dibromofluoromethane
Concen: 50.000 ug/l
RT: 7.59 min Scan# 1809
Delta R.T. -0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Instrument :
MSVOA_N
ClientSampleId :
OILY-SOIL

Tot Ion	Ratio	Resp	Lower	Upper
113	100	655804		
111	102.4	82.0	123.0	
192	22.1	17.0	25.6	

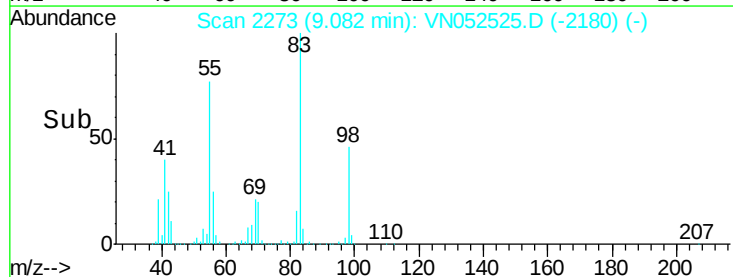
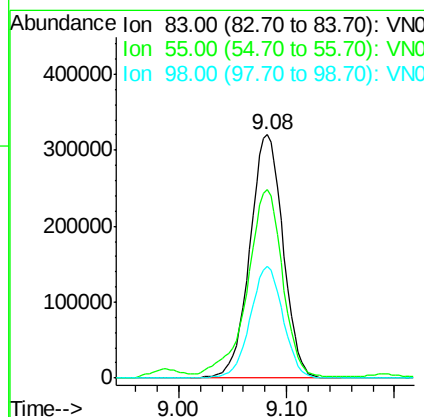
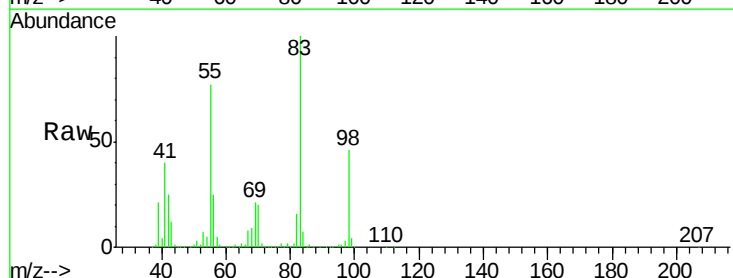
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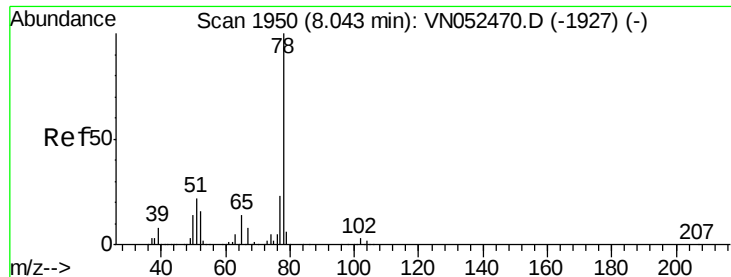
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#39
Methylcyclohexane
Concen: 26.594 ug/l
RT: 9.08 min Scan# 2273
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Tgt Ion	Ratio	Resp	Lower	Upper
83	100	680078		
55	76.8	62.2	93.2	
98	45.8	36.4	54.6	





#40

Benzene

Concen: 519.822 ug/l m

RT: 8.02 min Scan# 1943

Delta R.T. -0.02 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampleId :

OILY-SOIL

Tot Ion: 78 Resp:32593209

Ion Ratio Lower Upper

78 100

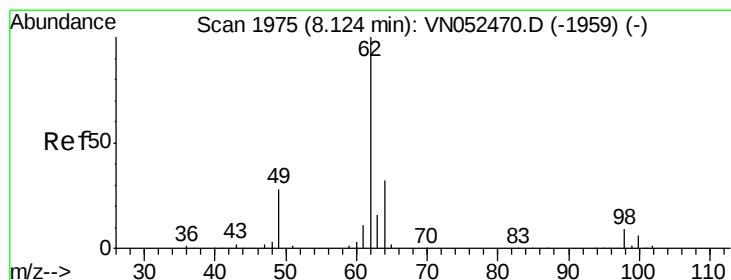
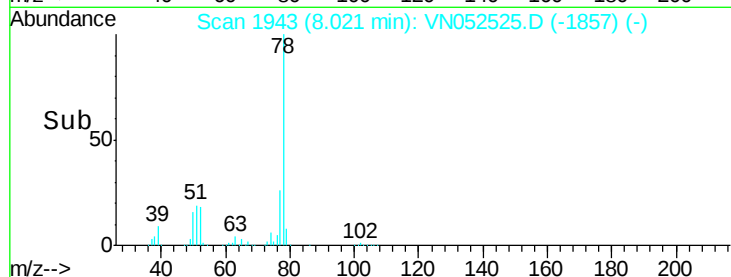
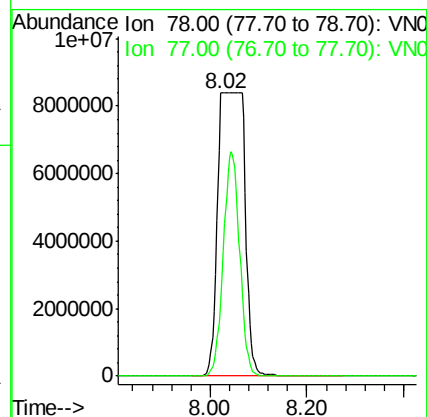
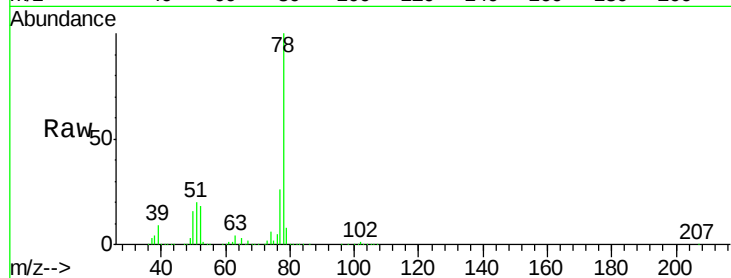
77 26.0 18.8 28.2

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#42

1,2-Dichloroethane

Concen: 91.886 ug/l

RT: 8.13 min Scan# 1976

Delta R.T. 0.00 min

Lab File: VN052525.D

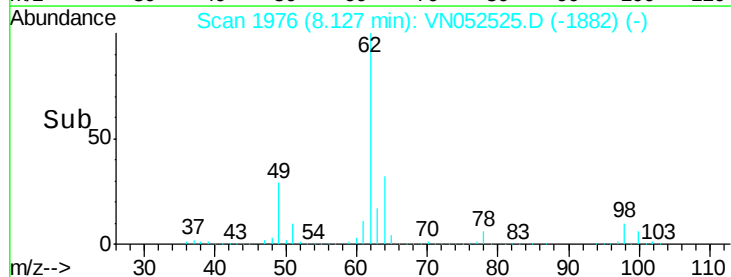
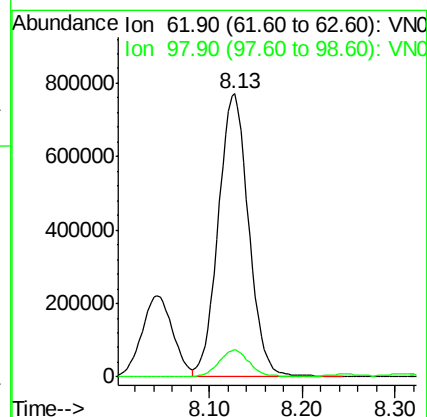
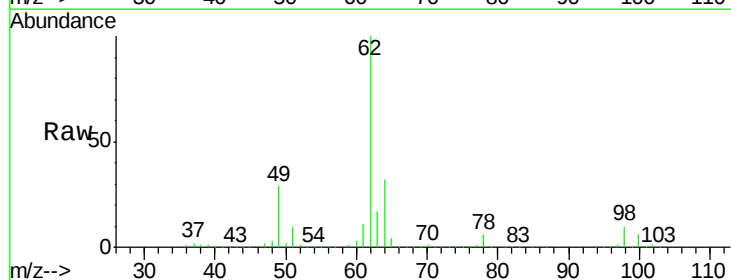
Acq: 28 Nov 2018 17:41

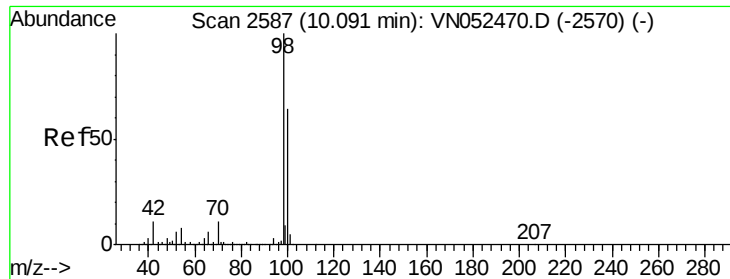
Tgt Ion: 62 Resp: 1744448

Ion Ratio Lower Upper

62 100

98 9.7 0.0 18.6





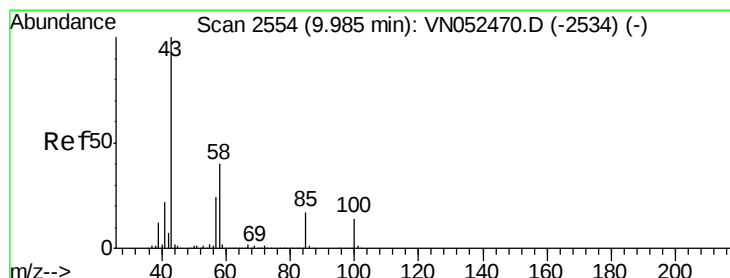
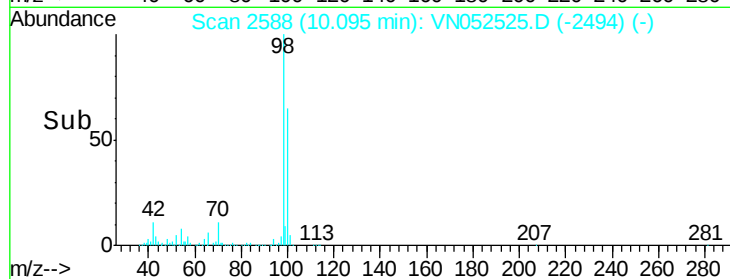
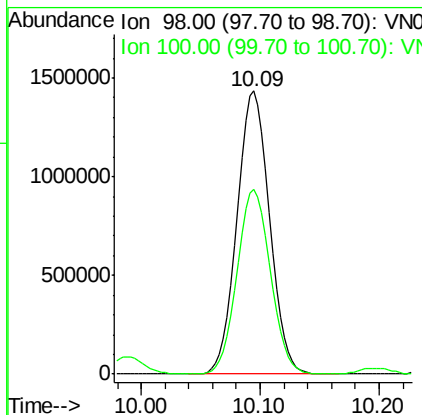
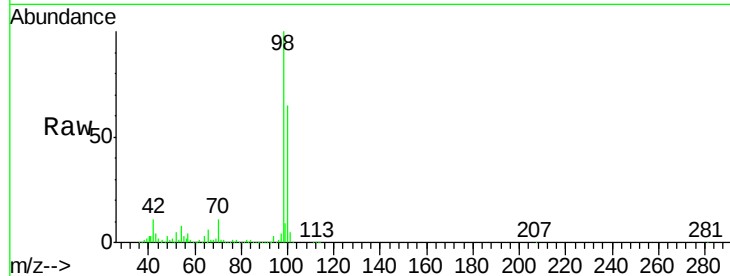
#50
Toluene-d8
Concen: N.D. ug/l
RT: 10.09 min Scan# 2588
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Instrument :
MSVOA_N
ClientSampleId :
OILY-SOIL

Tot Ion: 98 Resp: 2717701
Ion Ratio Lower Upper
98 100
100 66.8 51.3 76.9

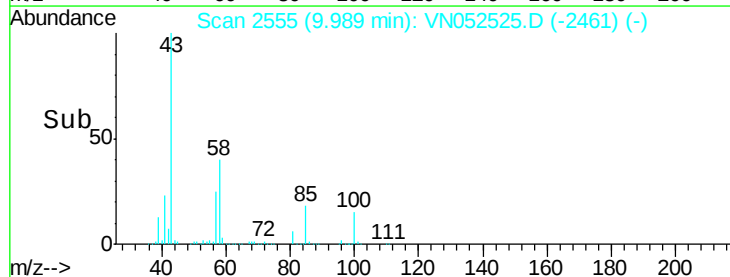
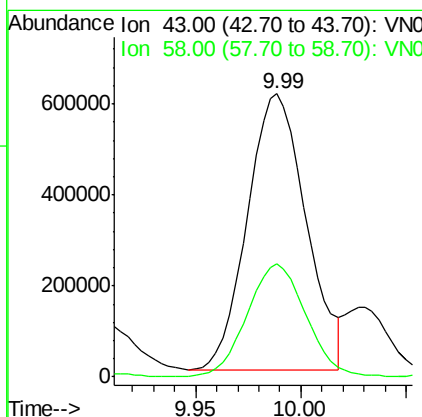
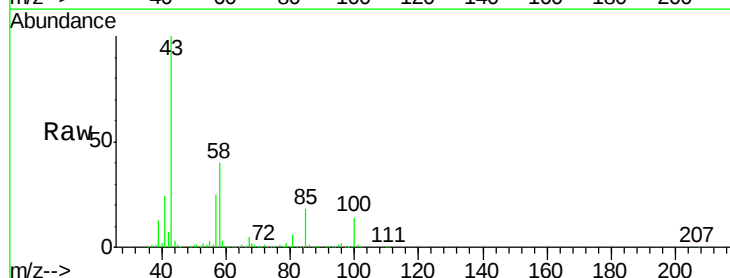
Manual Integrations
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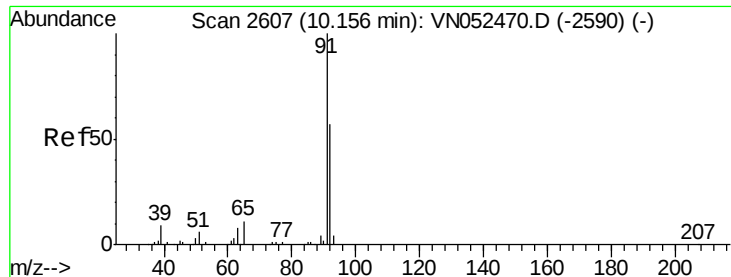
MMDadoda
11/29/2018 9:34:37 AM



#51
4-Methyl-2-Pentanone
Concen: 95.896 ug/l
RT: 9.99 min Scan# 2555
Delta R.T. 0.00 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Tgt Ion: 43 Resp: 1169126
Ion Ratio Lower Upper
43 100
58 41.1 31.5 47.3





#52

Toluene

Concen: 874.525 ug/l m

RT: 10.14 min Scan# 2602

Delta R.T. -0.02 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampleId :

OILY-SOIL

Tot Ion: 92 Resp:32578807

Ion Ratio Lower Upper

92 100

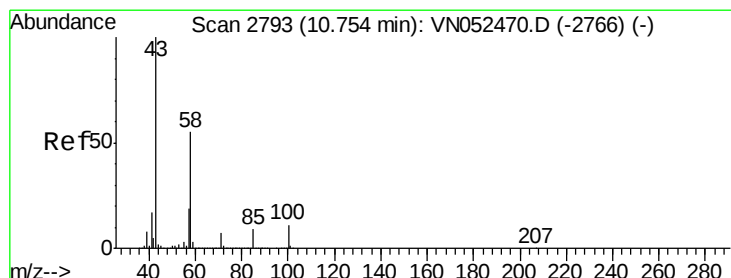
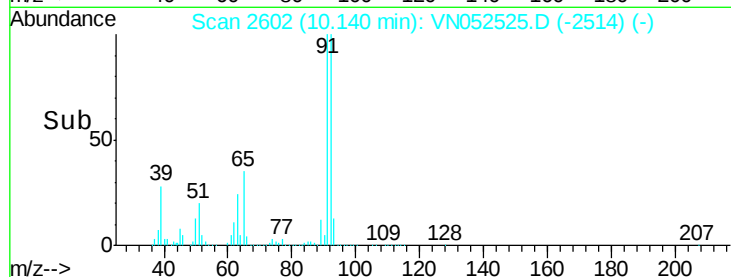
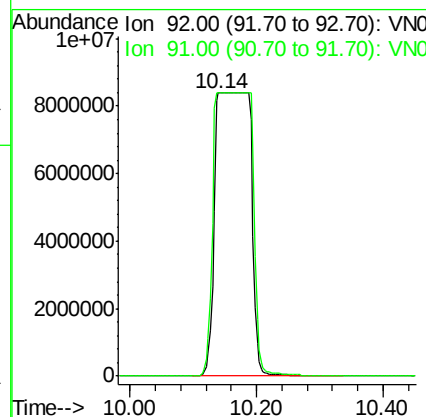
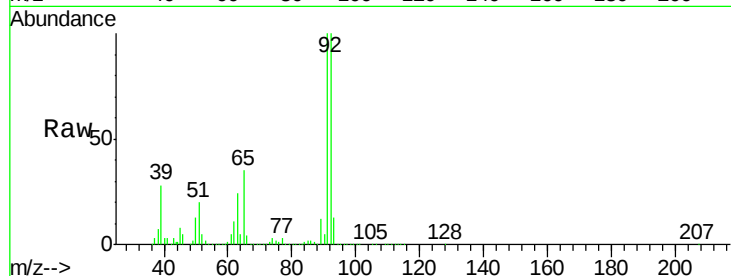
91 0.0 141.0 211.4#

Manual Integrations

APPROVED

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11/29/2018 9:34:37 AM



#59

2-Hexanone

Concen: 362.890 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.00 min

Lab File: VN052525.D

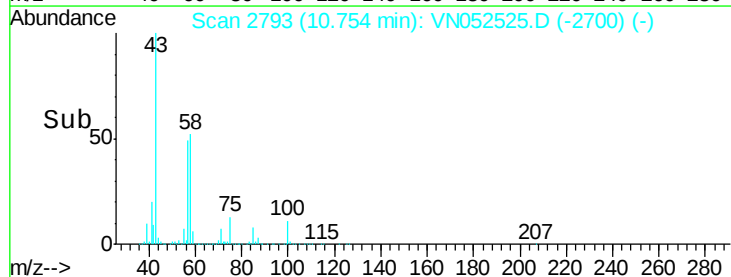
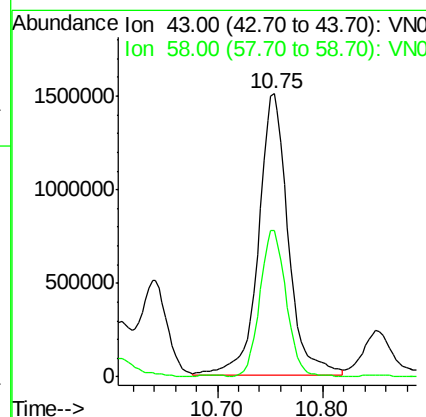
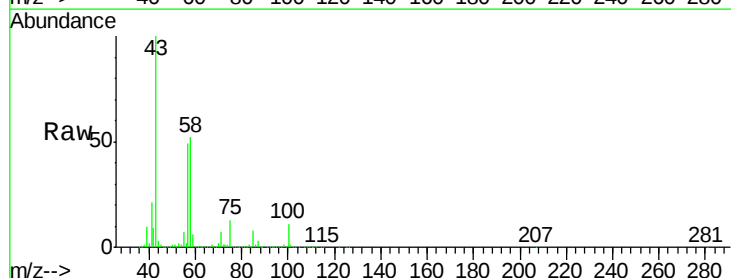
Acq: 28 Nov 2018 17:41

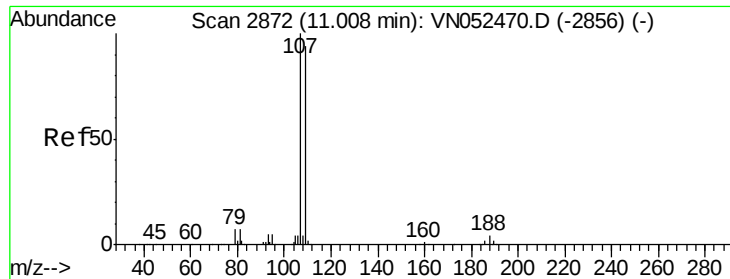
Tgt Ion: 43 Resp: 2969318

Ion Ratio Lower Upper

43 100

58 45.3 27.4 82.0





#61

1,2-Dibromoethane

Concen: 4.266 ug/l

RT: 11.01 min Scan# 2872

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampleId :

OILY-SOIL

Tot Ion:107 Resp: 55517

Ion Ratio Lower Upper

107 100

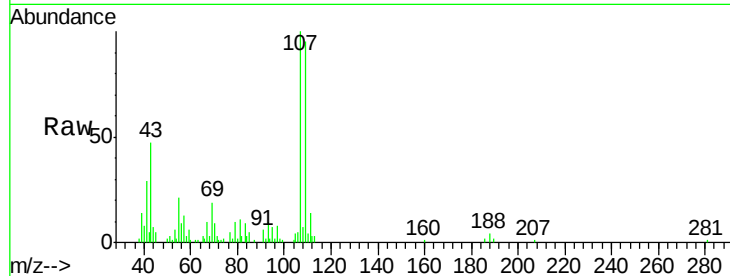
109 100.8 75.6 113.4

Manual Integrations

APPROVED

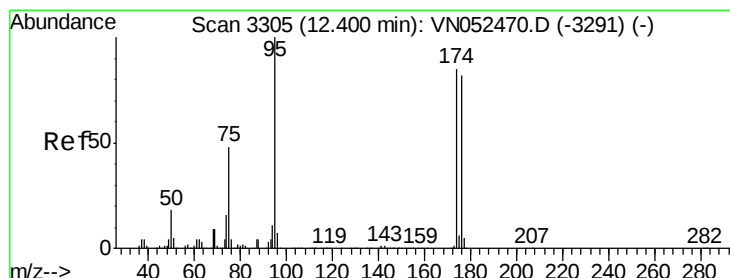
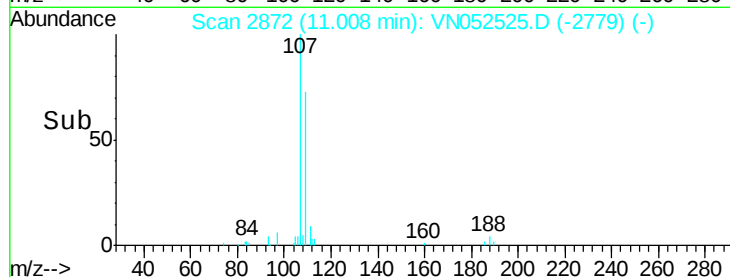
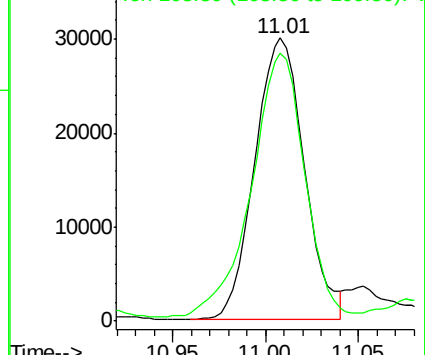
MMDadoda

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Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V



#62

4-Bromofluorobenzene

Concen: 4.266 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

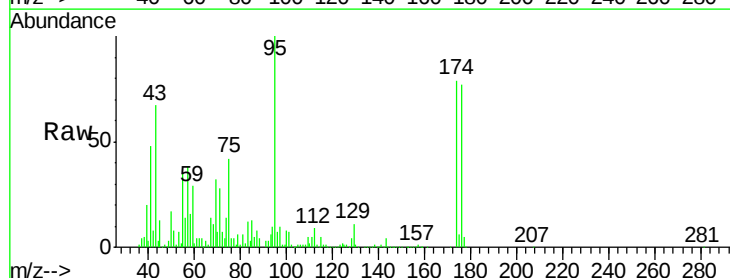
Tgt Ion: 95 Resp: 1201174

Ion Ratio Lower Upper

95 100

174 63.0 0.0 173.0

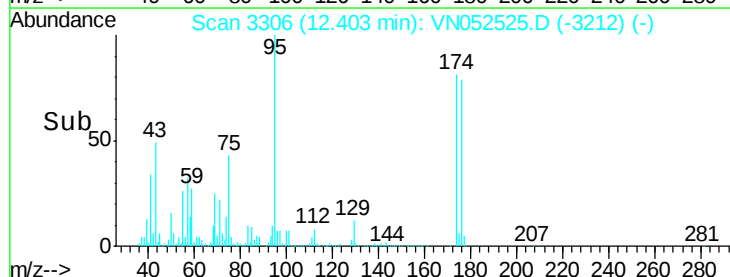
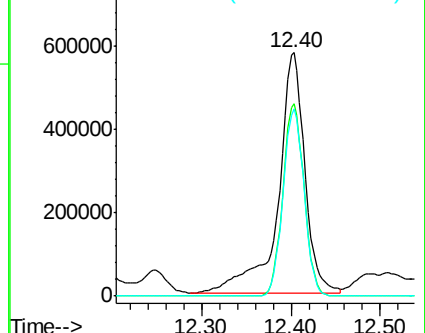
176 61.0 0.0 166.2

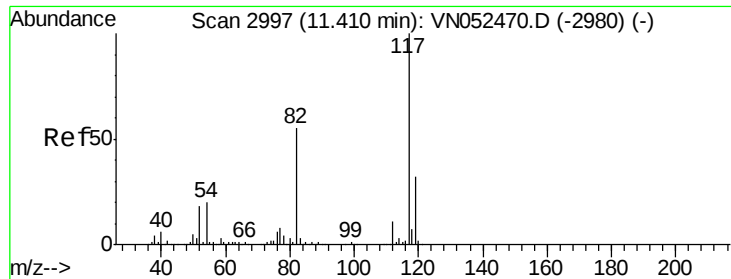


Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampled :

OILY-SOIL

Tot Ion:117 Resp: 1899099

Ion Ratio Lower Upper

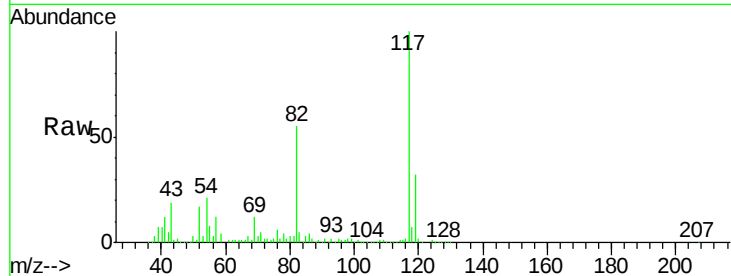
117 100

82 54.7 43.6 65.4

119 31.9 25.4 38.2

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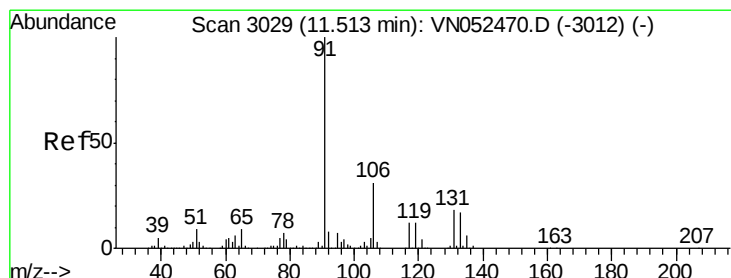
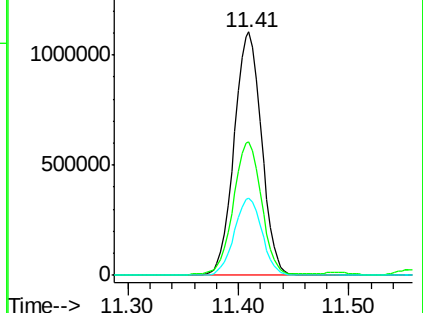
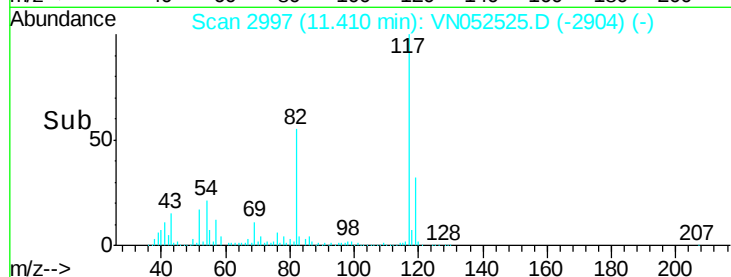
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Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VN0

Ion 118.90 (118.60 to 119.60): V



#67

Ethyl Benzene

Concen: 298.087 ug/l m

RT: 11.50 min Scan# 3025

Delta R.T. -0.01 min

Lab File: VN052525.D

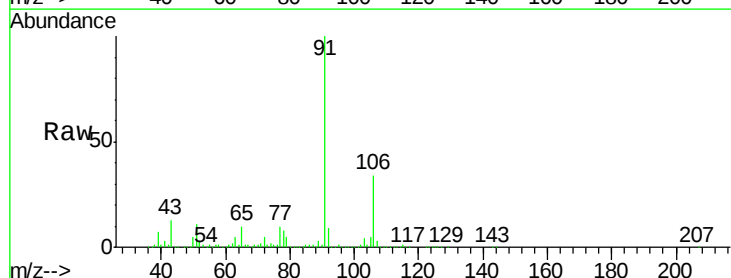
Acq: 28 Nov 2018 17:41

Tgt Ion: 91 Resp:20441233

Ion Ratio Lower Upper

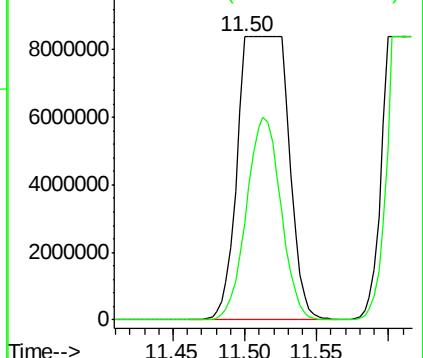
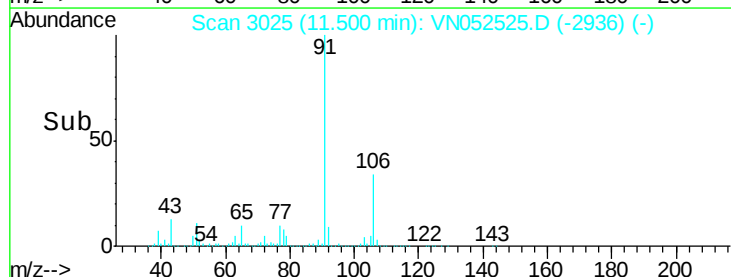
91 100

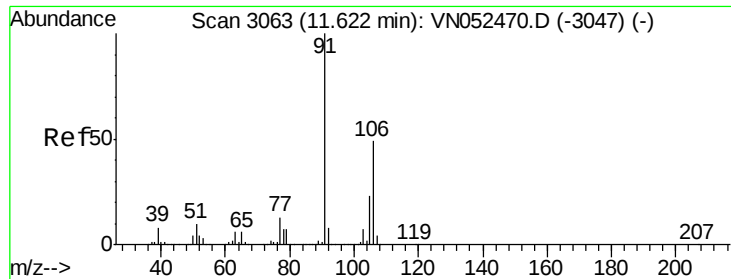
106 34.1 24.9 37.3



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 106.00 (105.70 to 106.70): V





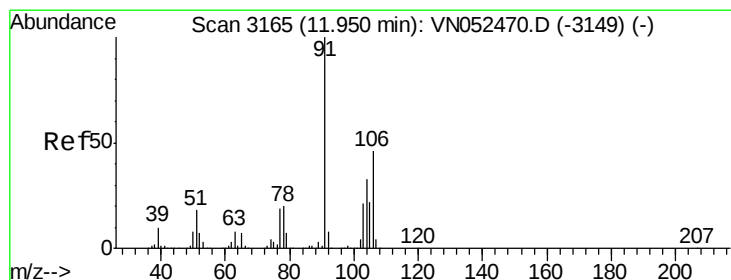
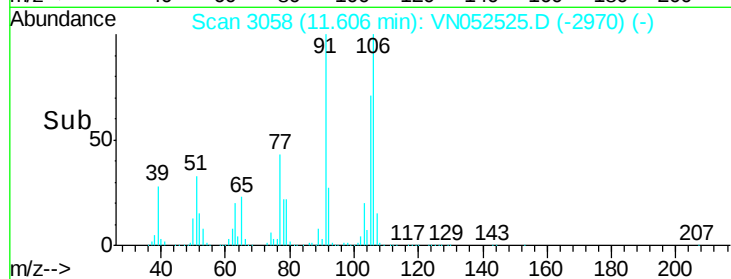
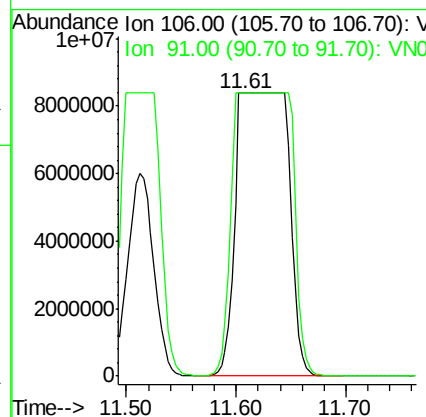
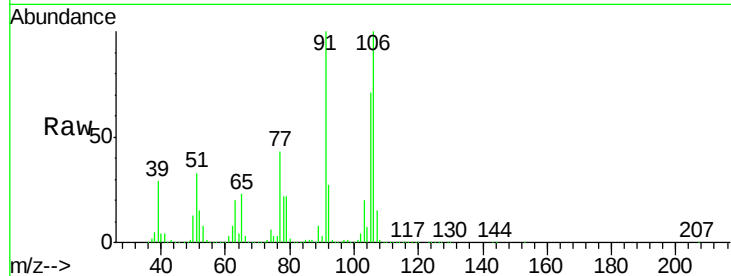
#68
m/p-Xylenes
Concen: 1084.847 ug/l m
RT: 11.61 min Scan# 3058
Delta R.T. -0.02 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Instrument :
MSVOA_N
ClientSampled :
OILY-SOIL

Tot Ion:106 Resp:27694725
Ion Ratio Lower Upper
106 100
91 0.0 163.2 244.8#

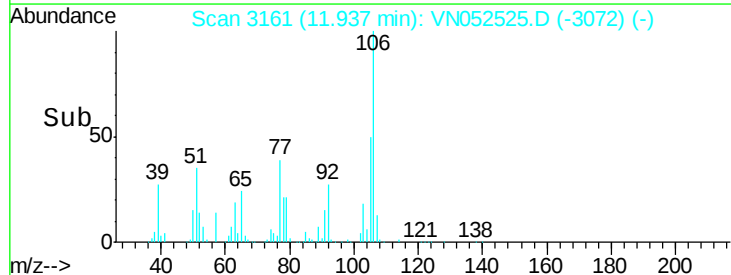
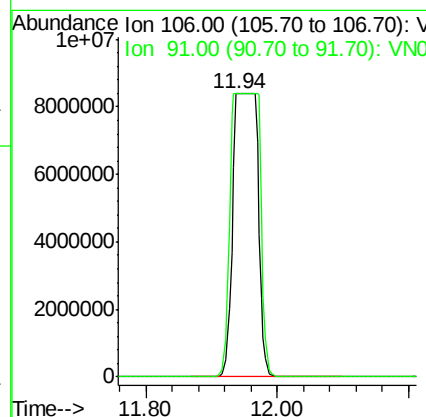
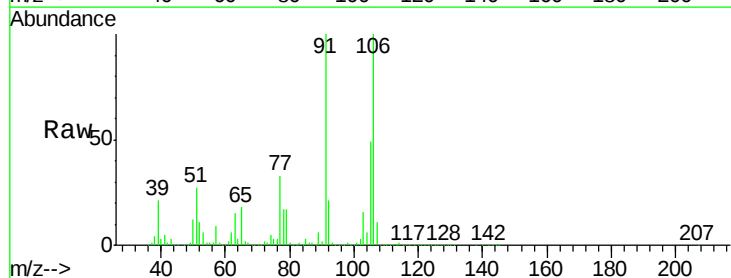
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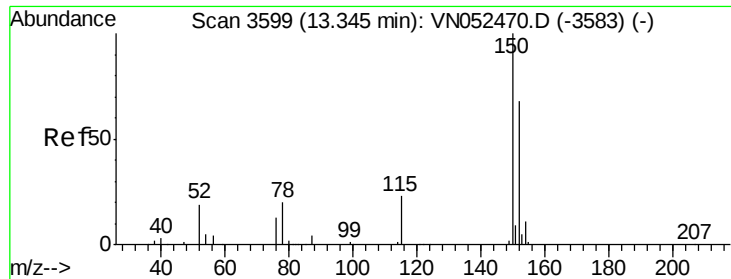
MMDadoda
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#69
o-Xylene
Concen: 882.304 ug/l m
RT: 11.94 min Scan# 3161
Delta R.T. -0.01 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Tgt Ion:106 Resp:21872803
Ion Ratio Lower Upper
106 100
91 0.0 107.7 323.1#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampleId :

OILY-SOIL

Tot Ion:152 Resp: 863521

Ion Ratio Lower Upper

152 100

115 58.3 28.4 85.2

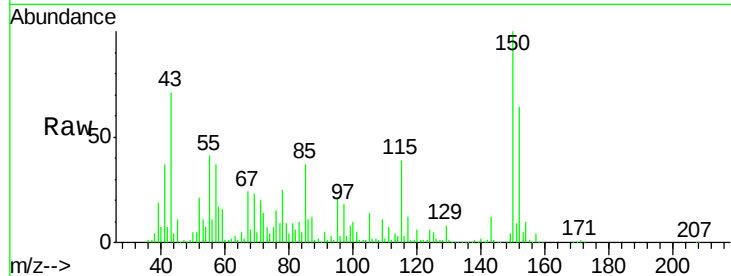
150 154.1 0.0 346.0

Manual Integrations

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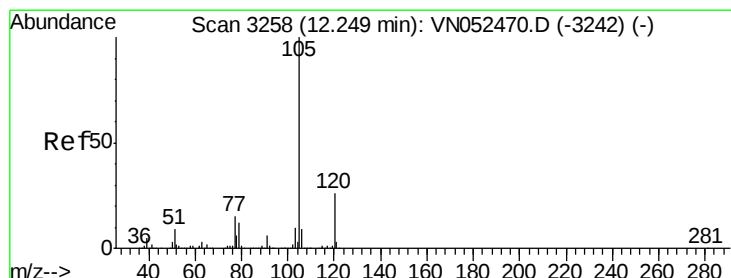
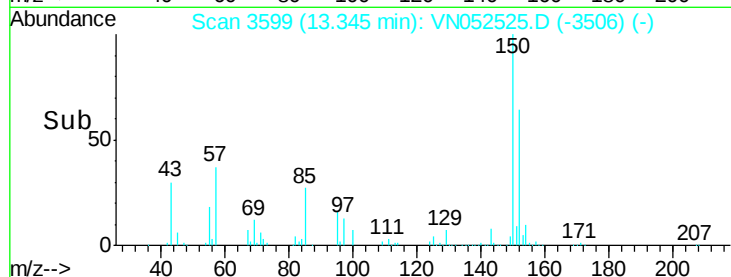
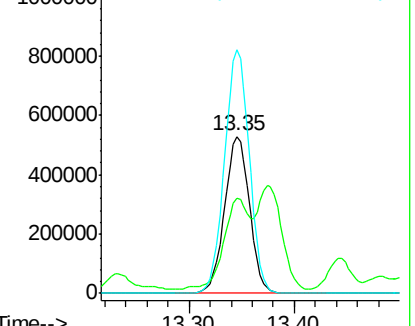
11/29/2018 9:34:37 AM



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#73

Isopropylbenzene

Concen: 15.808 ug/l

RT: 12.25 min Scan# 3258

Delta R.T. 0.00 min

Lab File: VN052525.D

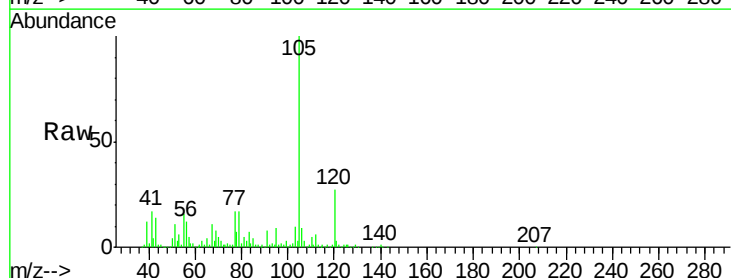
Acq: 28 Nov 2018 17:41

Tgt Ion:105 Resp: 1070943

Ion Ratio Lower Upper

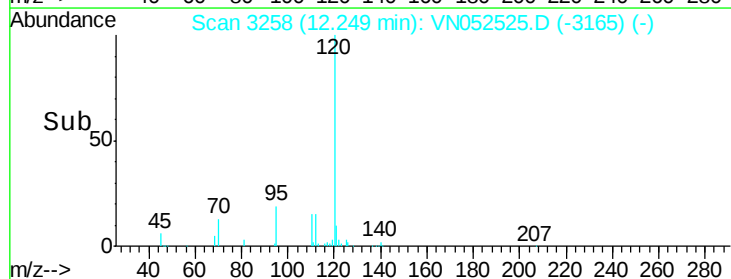
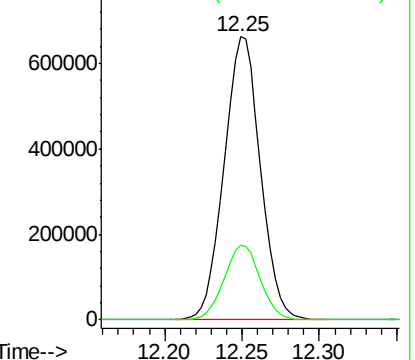
105 100

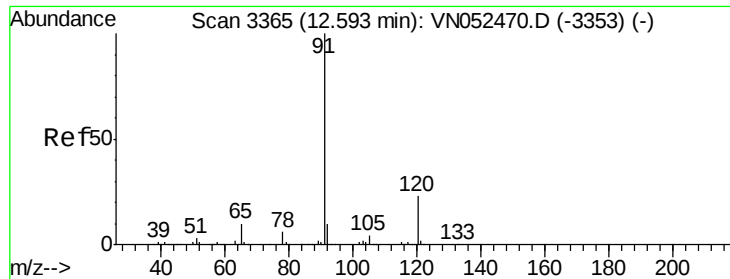
120 26.5 13.1 39.3



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#78

n-propylbenzene

Concen: 38.439 ug/l

RT: 12.59 min Scan# 3365

Delta R.T. 0.00 min

Lab File: VN052525.D

Acq: 28 Nov 2018 17:41

Instrument :

MSVOA_N

ClientSampleId :

OILY-SOIL

Tot Ion: 91 Resp: 2958450

Ion Ratio Lower Upper

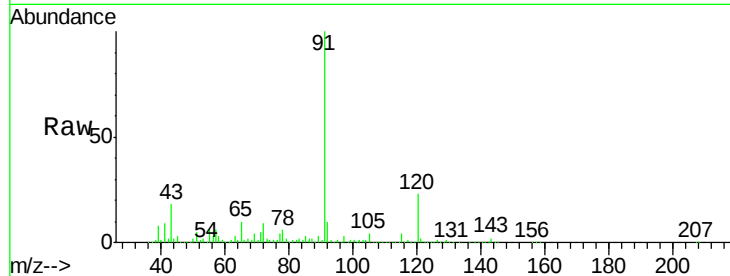
91 100

120 23.2 11.3 33.9

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Abundance Ion 91.00 (90.70 to 91.70): VN052470.D (-3353) (-)

Ion 120.00 (119.70 to 120.70): VN052470.D (-3353) (-)

4000000

3000000

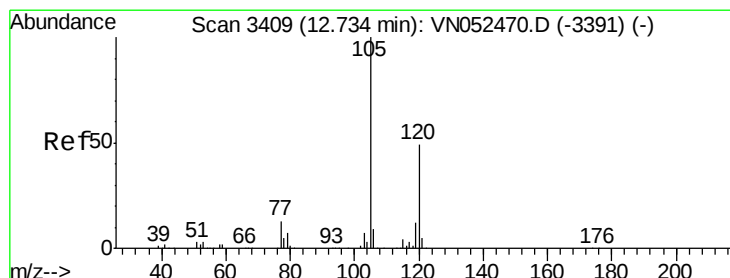
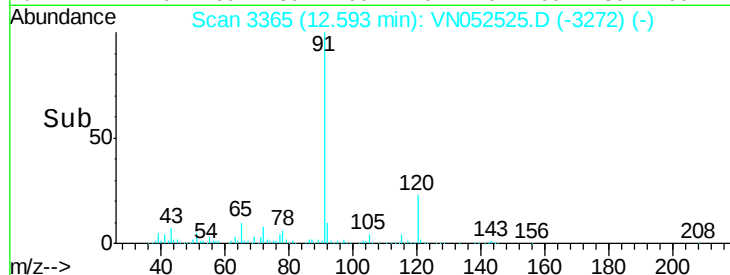
2000000

1000000

0

12.55 12.60 12.65

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 159.036 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. 0.00 min

Lab File: VN052525.D

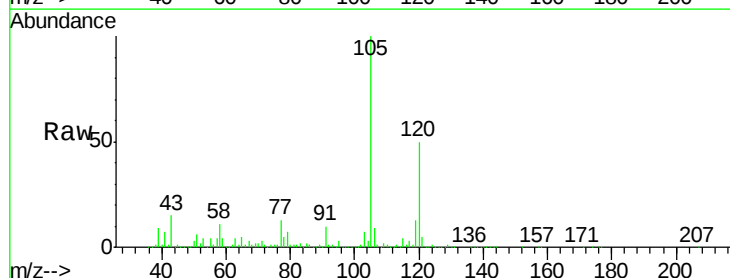
Acq: 28 Nov 2018 17:41

Tgt Ion: 105 Resp: 8593086

Ion Ratio Lower Upper

105 100

120 49.2 24.3 73.0



Abundance Ion 105.00 (104.70 to 105.70): VN052470.D (-3391) (-)

Ion 120.00 (119.70 to 120.70): VN052470.D (-3391) (-)

8000000

6000000

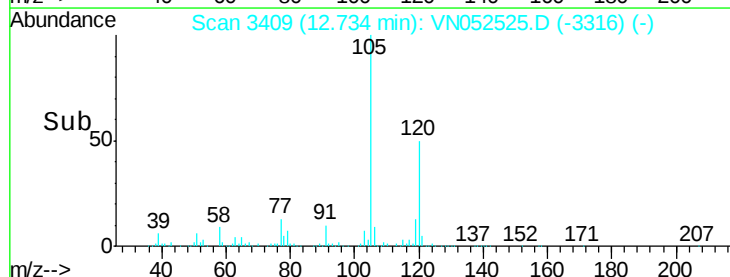
4000000

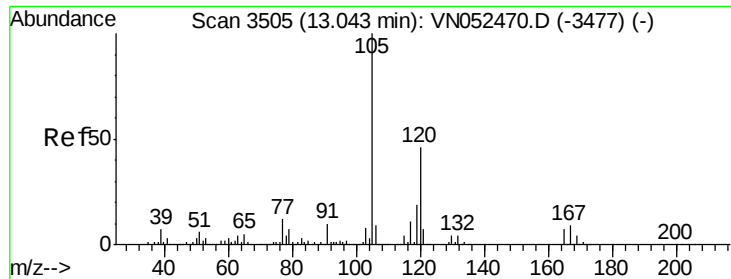
2000000

0

12.70 12.80

Time-->





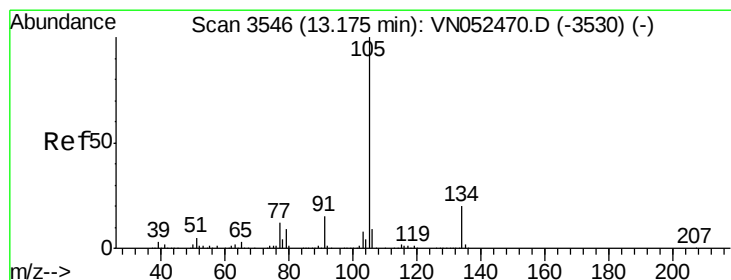
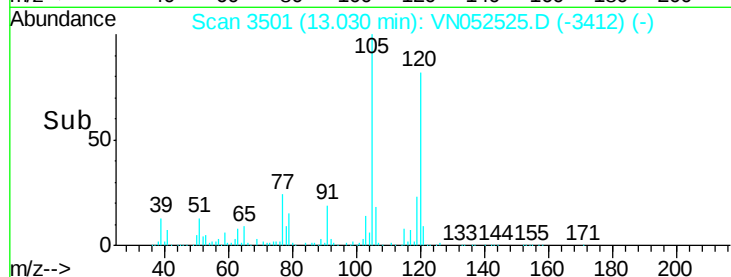
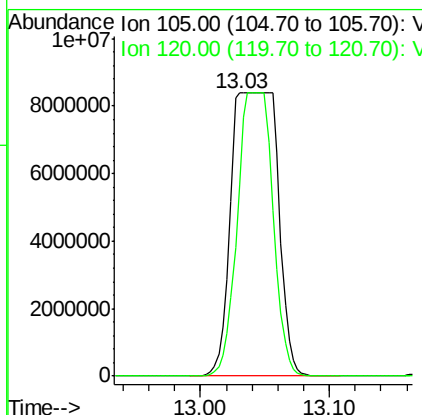
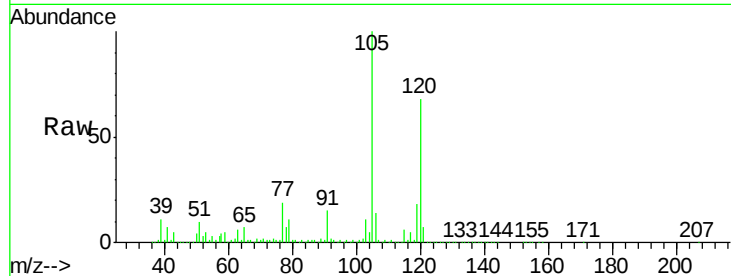
#84
 1,2,4-Trimethylbenzene
 Concen: 388.062 ug/l m
 RT: 13.03 min Scan# 3501
 Delta R.T. -0.01 min
 Lab File: VN052525.D
 Acq: 28 Nov 2018 17:41

Instrument :
 MSVOA_N
 ClientSampleId :
 OILY-SOIL

Tot Ion:105 Resp:21013313
 Ion Ratio Lower Upper
 105 100
 120 13.6 22.8 68.4#

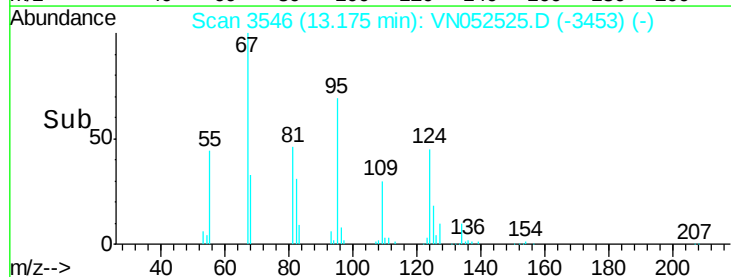
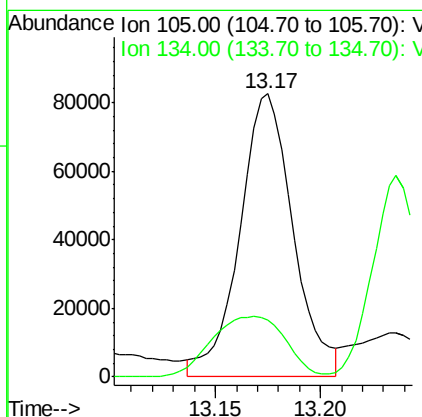
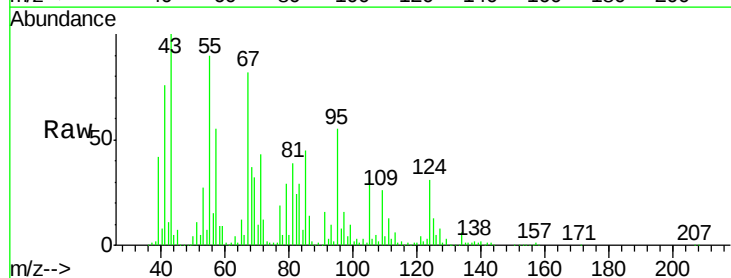
Manual Integrations
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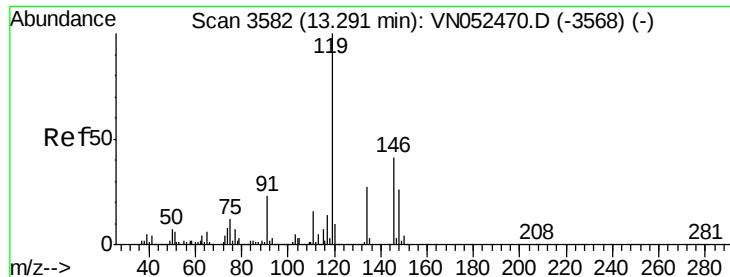
MMDadoda
 11/29/2018 9:34:37 AM



#85
 sec-Butylbenzene
 Concen: 2.224 ug/l m
 RT: 13.17 min Scan# 3546
 Delta R.T. 0.00 min
 Lab File: VN052525.D
 Acq: 28 Nov 2018 17:41

Tgt Ion:105 Resp: 145935
 Ion Ratio Lower Upper
 105 100
 134 0.0 9.9 29.7#





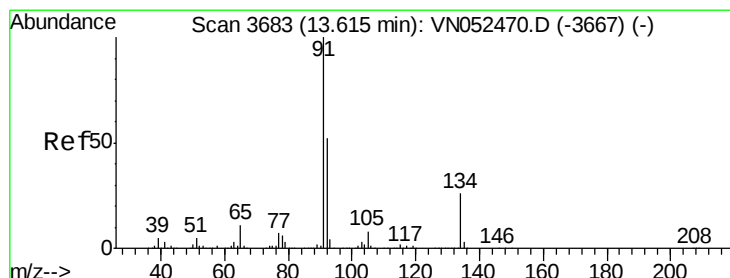
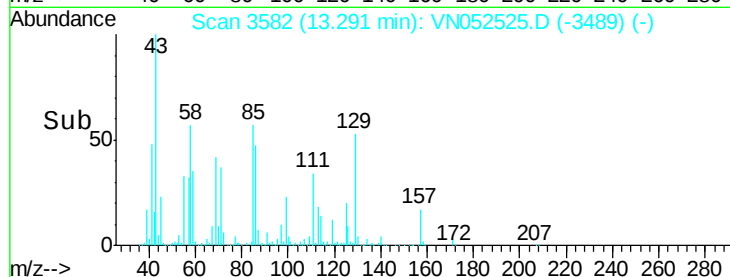
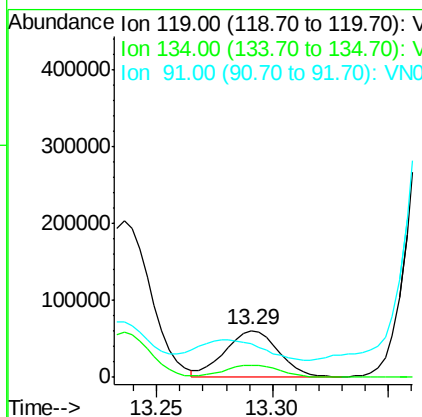
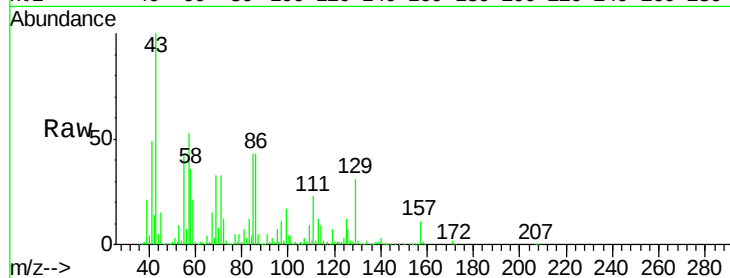
#86
 p-Isopropyltoluene
 Concen: 1.769 ug/l m
 RT: 13.29 min Scan# 3582
 Delta R.T. 0.00 min
 Lab File: VN052525.D
 Acq: 28 Nov 2018 17:41

Instrument :
 MSVOA_N
 ClientSampleId :
 OILY-SOIL

Tot Ion	Ratio	Lower	Upper
119	100		
134	90.5	13.4	40.2#
91	0.0	11.4	34.2#

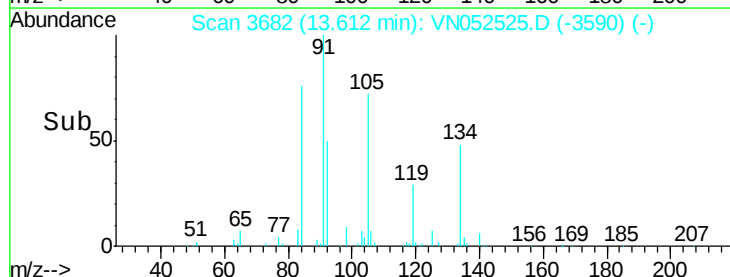
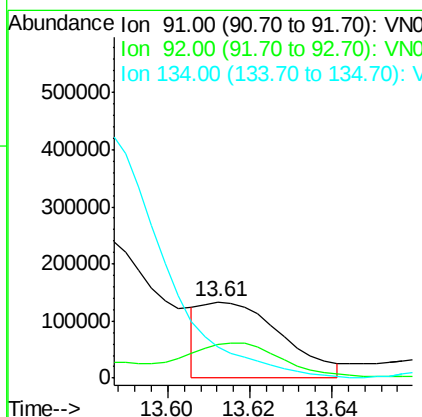
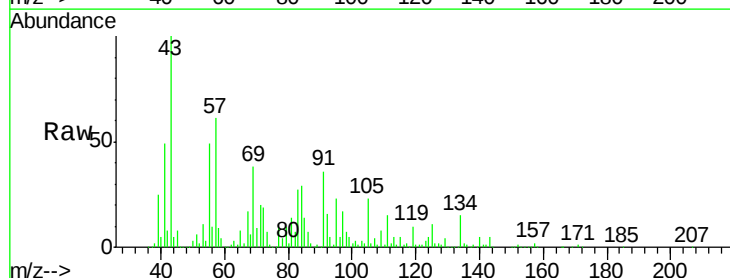
Manual Integrations
 APPROVED

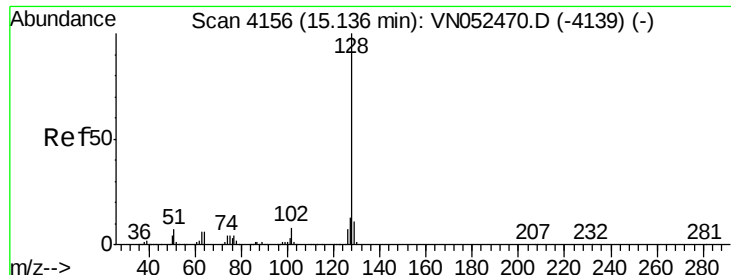
MMDadoda
 11/29/2018 9:34:37 AM



#89
 n-Butylbenzene
 Concen: 3.916 ug/l m
 RT: 13.61 min Scan# 3682
 Delta R.T. -0.00 min
 Lab File: VN052525.D
 Acq: 28 Nov 2018 17:41

Tgt Ion	Ratio	Lower	Upper
91	100		
92	16.2	26.1	78.3#
134	411.7	13.0	38.9#





#95
Naphthalene
Concen: 555.140 ug/l m
RT: 15.13 min Scan# 4153
Delta R.T. -0.01 min
Lab File: VN052525.D
Acq: 28 Nov 2018 17:41

Instrument :
MSVOA_N
ClientSampleId :
OILY-SOIL

Tot Ion:128 Resp:19257229
Ion Ratio Lower Upper
128 100
127 0.0 10.2 15.2#
129 0.0 8.7 13.1#

Manual Integrations
APPROVED

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11/29/2018 9:34:37 AM

