

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN090919\
 Data File : VN057795.D
 Acq On : 9 Sep 2019 12:30
 Operator : JC/SP
 Sample : K4723-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 FRAC-A32780T

Quant Time: Sep 09 13:08:27 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N090919W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Mon Sep 09 12:14:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.18	128	59482	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.58	114	342136	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	289467	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.01	65	158329	30.09	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	100.30%
60) 4-Bromofluorobenzene	12.40	95	133288	26.91	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	89.70%
63) Toluene-d8	10.09	98	431223	31.04	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	103.47%

Target Compounds

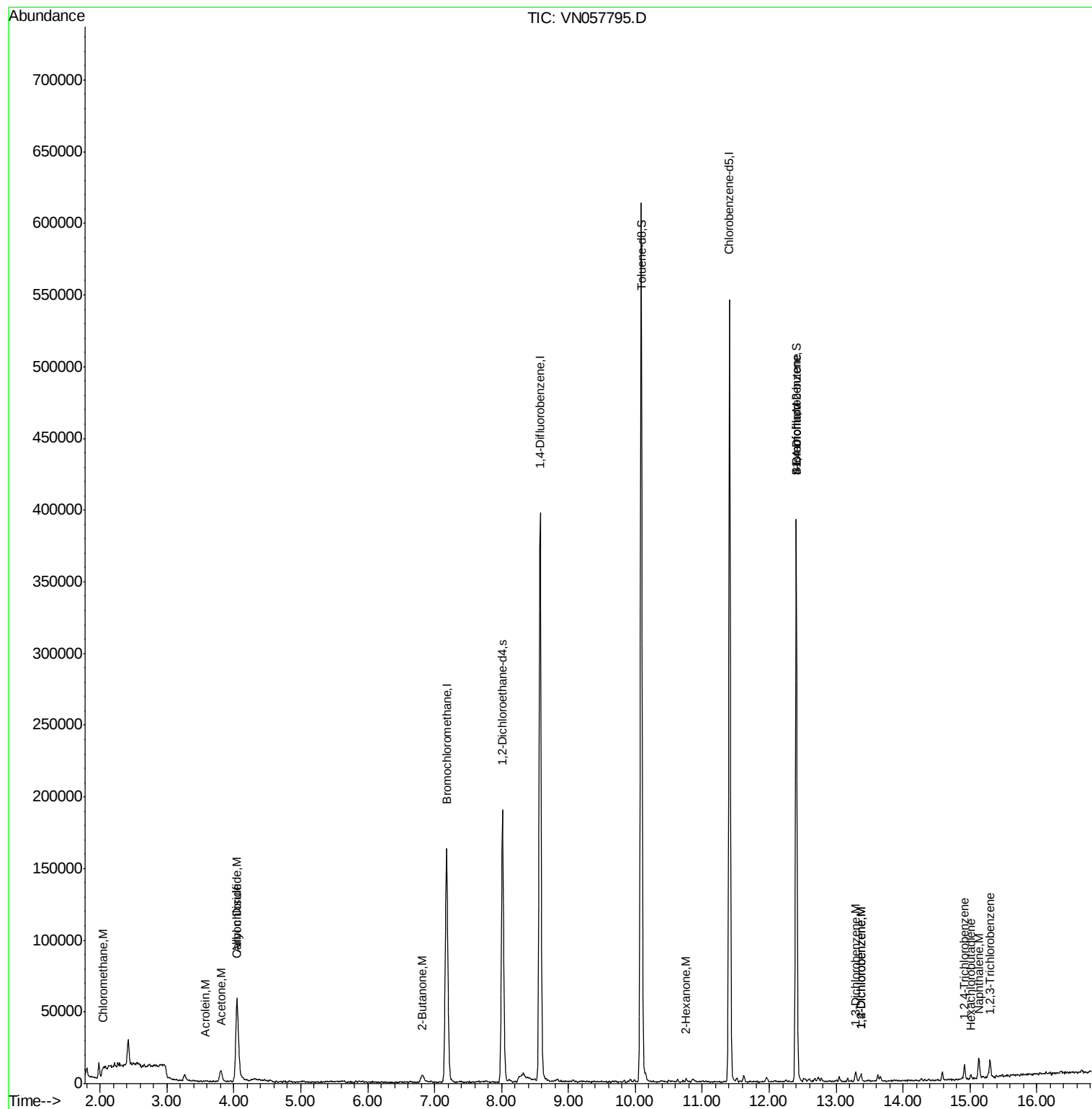
					Ovalue
3) Chloromethane	2.04	50	1048	0.234 ug/l	89
13) Acrolein	3.57	56	63	0.269 ug/l #	13
15) Acetone	3.80	58	2129	4.262 ug/l	75
16) Carbon Disulfide	4.03	76	2402	0.328 ug/l #	75
17) Allyl chloride	4.05	41	9728	1.688 ug/l	90
30) 2-Butanone	6.81	43	736	0.303 ug/l #	90
56) Bromoform	12.41	173	898	0.371 ug/l #	1
59) 2-Hexanone	10.76	43	1899	0.564 ug/l #	83
77) t-1,4-Dichloro-2-butene	12.40	75	71973	50.577 ug/l #	1
83) 1,3-Dichlorobenzene	13.29	146	1756	0.228 ug/l	96
84) 1,4-Dichlorobenzene	13.37	146	2128	0.281 ug/l	96
87) 1,2-Dichlorobenzene	13.37	146	2128	0.285 ug/l	94
89) 1,2,4-Trichlorobenzene	14.92	180	3001	0.658 ug/l	92
90) Hexachlorobutadiene	15.01	225	551	0.263 ug/l	63
91) Naphthalene	15.13	128	12214	0.973 ug/l #	93
92) 1,2,3-Trichlorobenzene	15.30	180	3462	0.796 ug/l	97

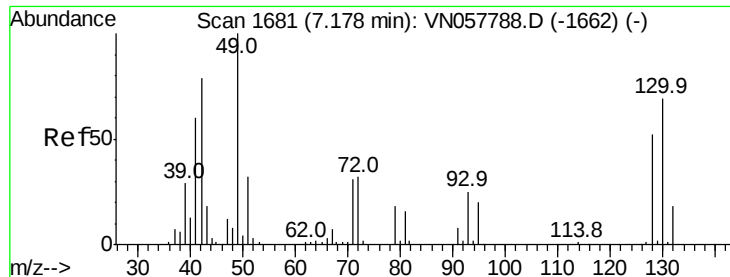
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N090919W.M
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QLast Update : Mon Sep 09 12:14:07 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.18 min Scan# 1682

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :
MSVOA_N
ClientSampleId :
FRAC-A32780T

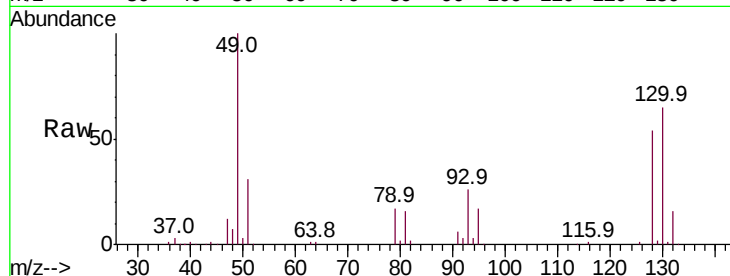
Tot Ion:128 Resp: 59482

Ion Ratio Lower Upper

128 100

49 186.2 0.0 486.5

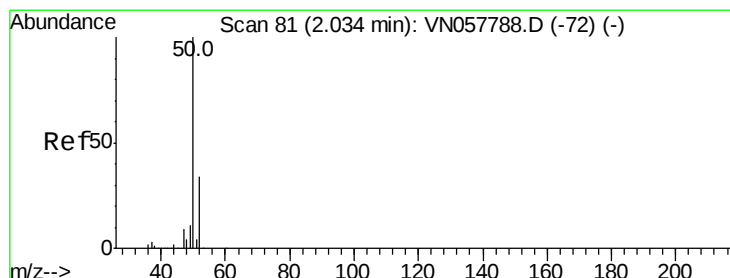
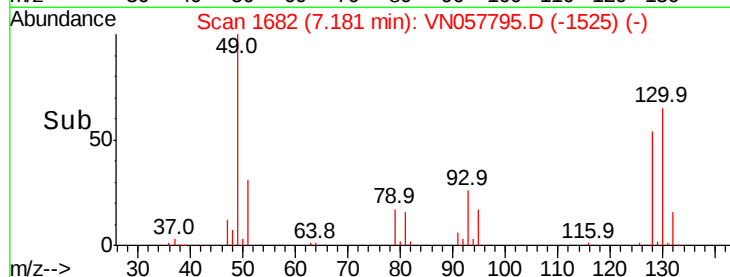
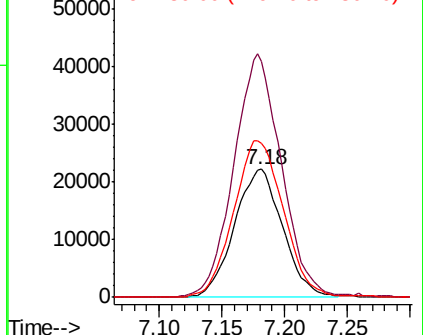
130 125.8 0.0 324.5



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VN0

Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 0.234 ug/l

RT: 2.04 min Scan# 83

Delta R.T. 0.01 min

Lab File: VN057795.D

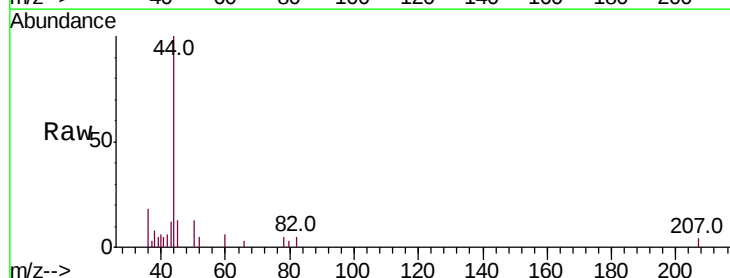
Acq: 9 Sep 2019 12:30

Tgt Ion: 50 Resp: 1048

Ion Ratio Lower Upper

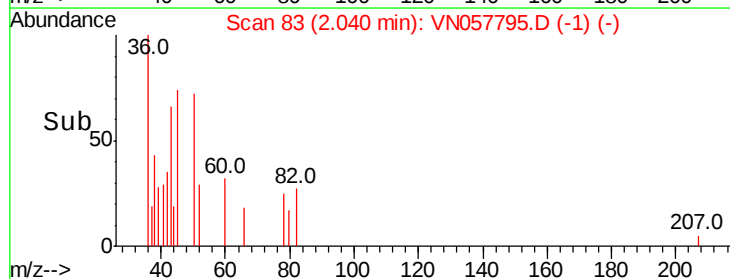
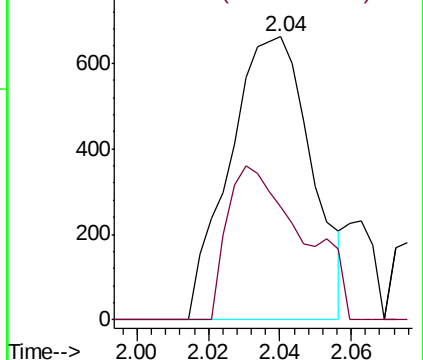
50 100

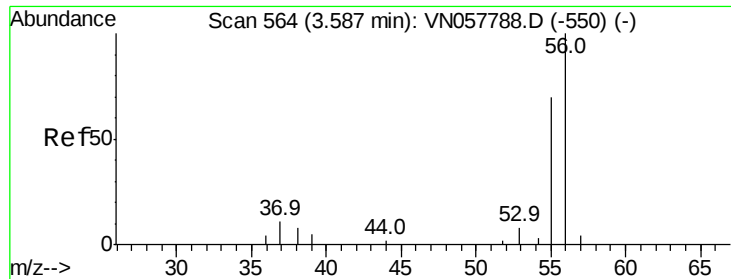
52 39.7 26.9 40.3



Abundance Ion 50.00 (49.70 to 50.70): VN0

Ion 52.00 (51.70 to 52.70): VN0





#13

Acrolein

Concen: 0.269 ug/l

RT: 3.57 min Scan# 560

Delta R.T. -0.01 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :

MSVOA_N

ClientSampleId :

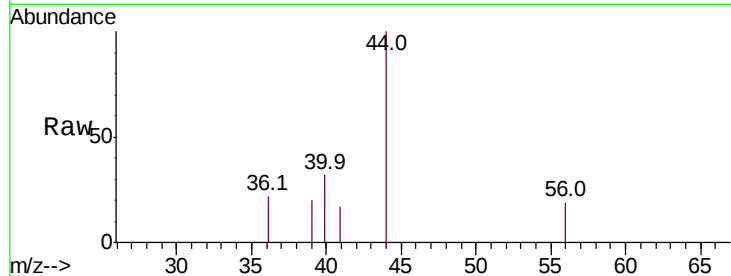
FRAC-A32780T

Tot Ion: 56 Resp: 63

Ion Ratio Lower Upper

56 100

55 0.0 59.0 88.4#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

3.57

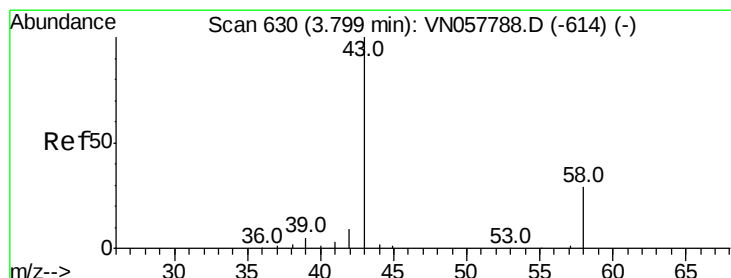
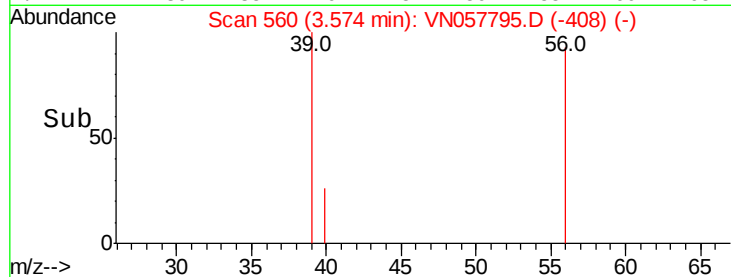
150

100

50

0

Time-->



#15

Acetone

Concen: 4.262 ug/l

RT: 3.80 min Scan# 631

Delta R.T. 0.00 min

Lab File: VN057795.D

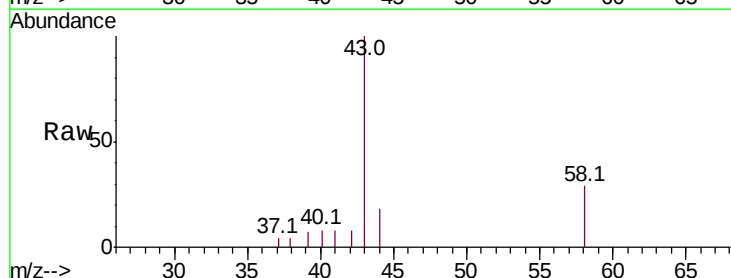
Acq: 9 Sep 2019 12:30

Tgt Ion: 58 Resp: 2129

Ion Ratio Lower Upper

58 100

43 294.0 277.7 416.5



Abundance Ion 58.00 (57.70 to 58.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

5000

4000

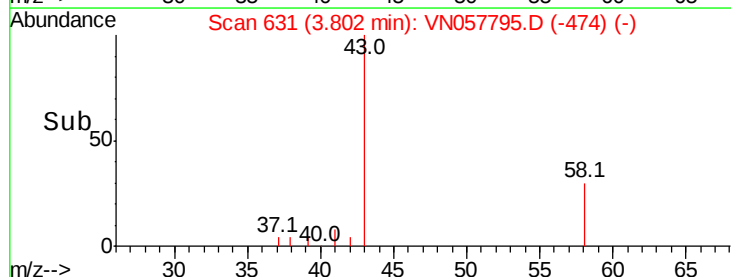
3000

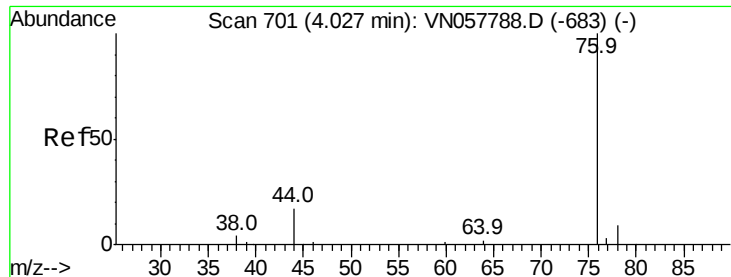
2000

1000

0

Time-->





#16

Carbon Disulfide

Concen: 0.328 ug/l

RT: 4.03 min Scan# 702

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :

MSVOA_N

ClientSampleId :

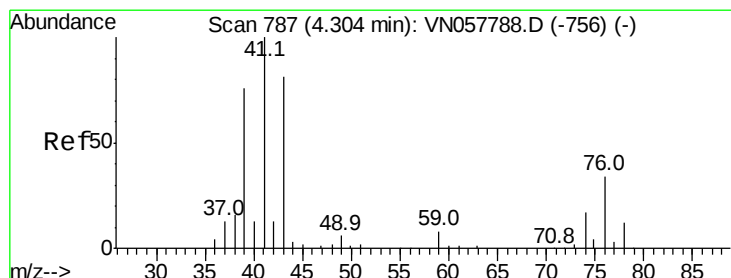
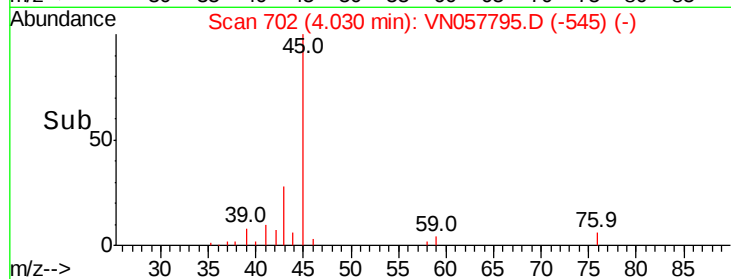
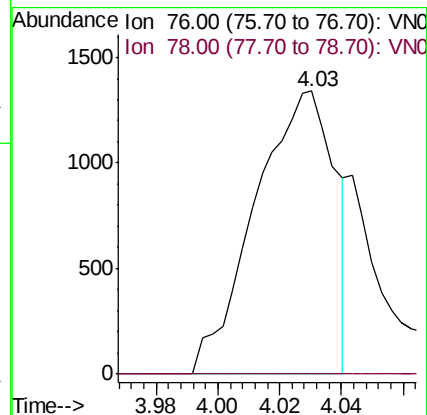
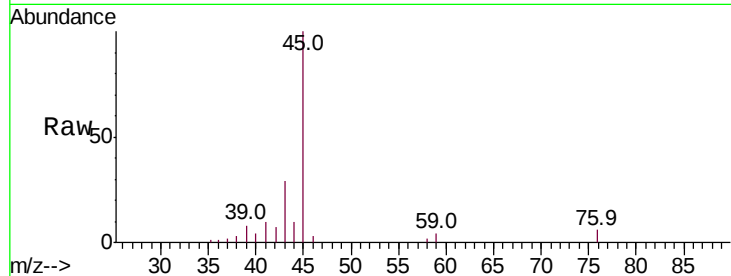
FRAC-A32780T

Tot Ion: 76 Resp: 2402

Ion Ratio Lower Upper

76 100

78 0.0 7.4 11.0#



#17

Allyl chloride

Concen: 1.688 ug/l

RT: 4.05 min Scan# 707

Delta R.T. -0.26 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

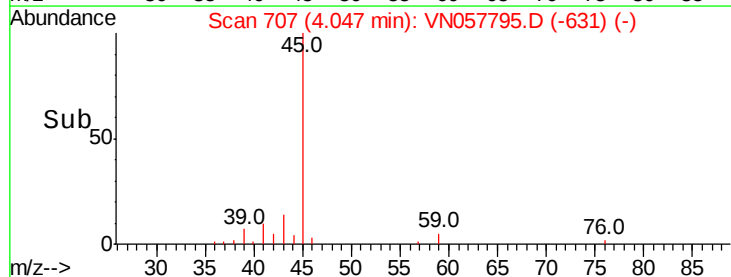
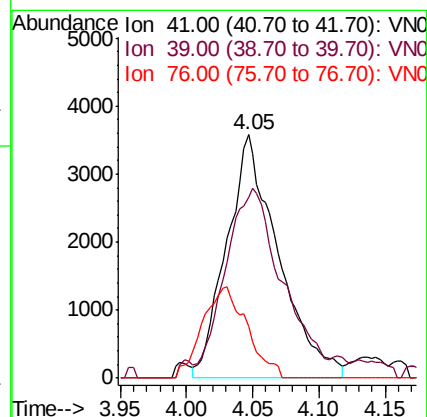
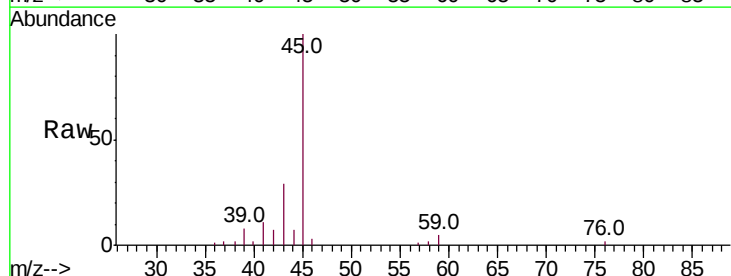
Tgt Ion: 41 Resp: 9728

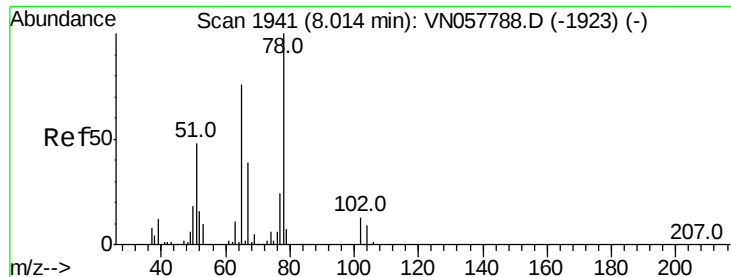
Ion Ratio Lower Upper

41 100

39 72.3 38.5 115.3

76 22.3 17.2 51.6





#27

1,2-Dichloroethane-d4

Concen: 30.092 ug/l

RT: 8.01 min Scan# 1941

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :

MSVOA_N

ClientSampleId :

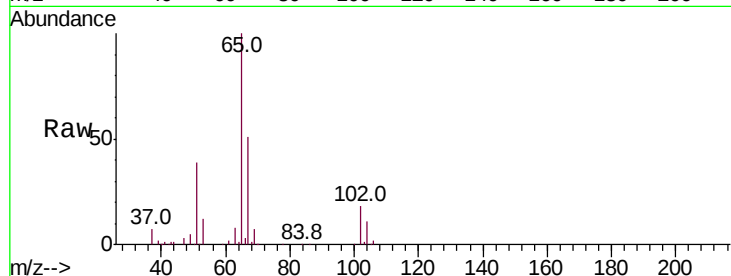
FRAC-A32780T

Tot Ion: 65 Resp: 158329

Ion Ratio Lower Upper

65 100

67 51.8 40.9 61.3



Abundance Ion 65.00 (64.70 to 65.70): VN057788.D (-1923) (-)

Ion 67.00 (66.70 to 67.70): VN057788.D (-1923) (-)

8.01

60000

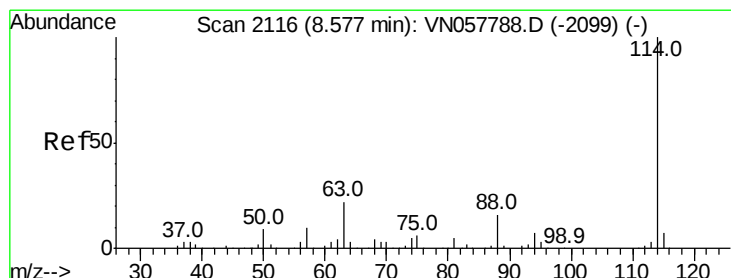
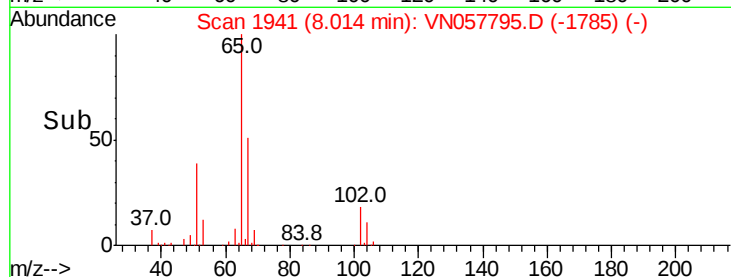
40000

20000

0

7.95 8.00 8.05 8.10

Time-->



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.58 min Scan# 2116

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

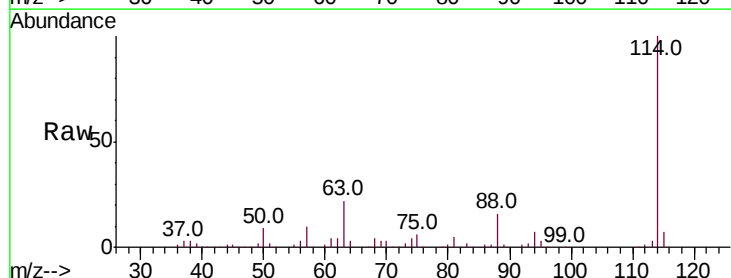
Tgt Ion: 114 Resp: 342136

Ion Ratio Lower Upper

114 100

63 22.4 18.0 27.0

88 16.1 12.6 19.0



Abundance Ion 114.00 (113.70 to 114.70): VN057788.D (-2099) (-)

Ion 63.00 (62.70 to 63.70): VN057788.D (-2099) (-)

Ion 88.00 (87.70 to 88.70): VN057788.D (-2099) (-)

200000

150000

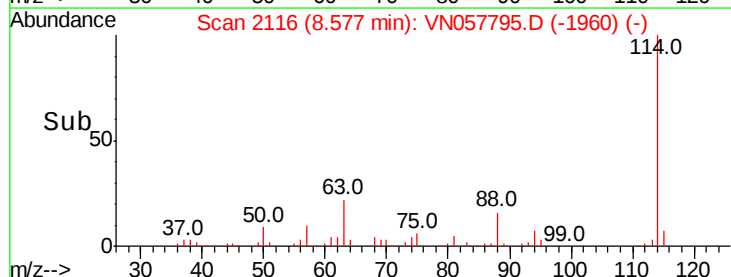
100000

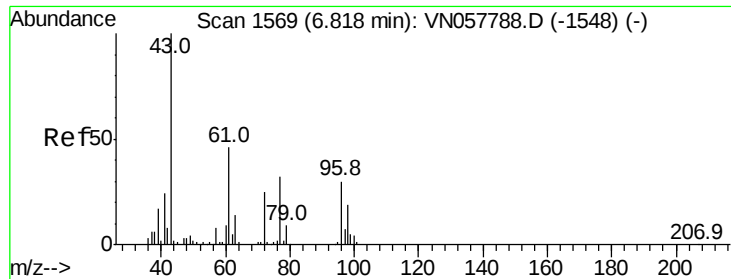
50000

0

8.50 8.55 8.60 8.65 8.70

Time-->

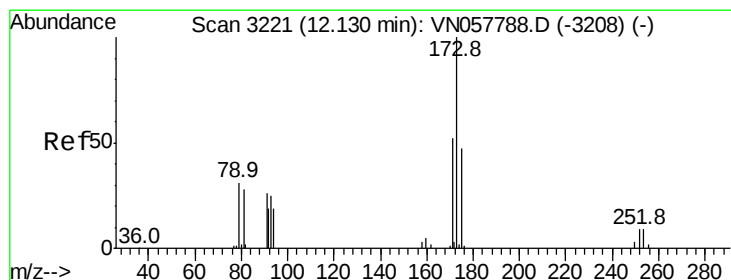
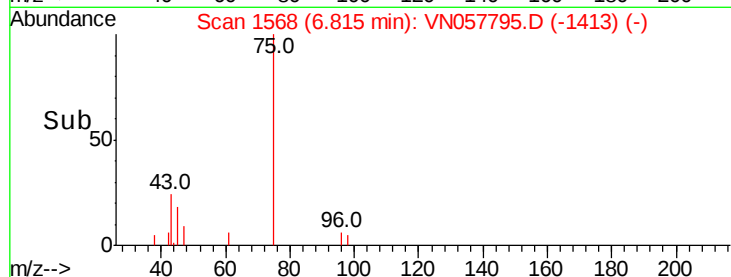
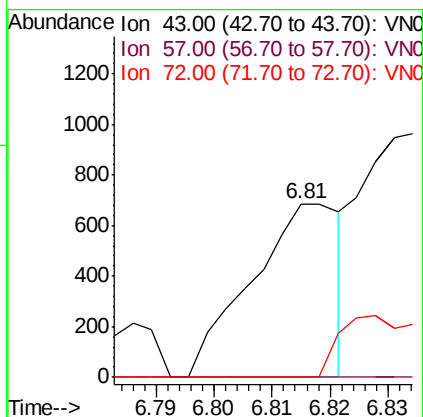
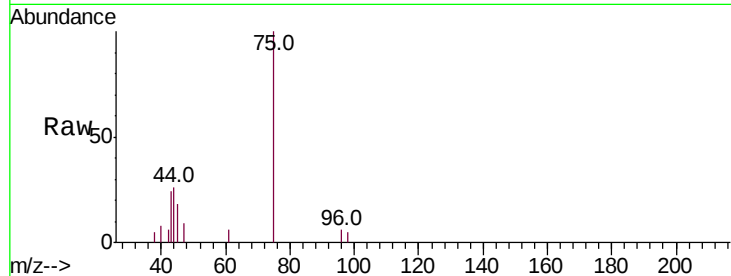




#30
 2-Butanone
 Concen: 0.303 ug/l
 RT: 6.81 min Scan# 1568
 Delta R.T. -0.00 min
 Lab File: VN057795.D
 Acq: 9 Sep 2019 12:30

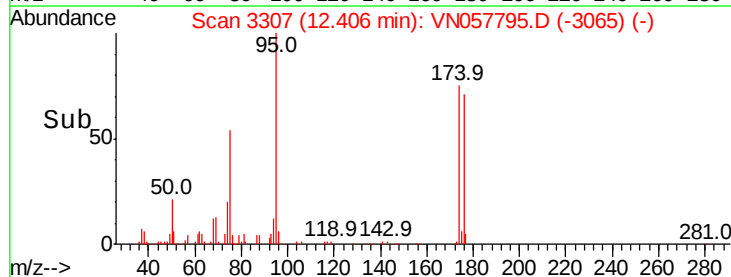
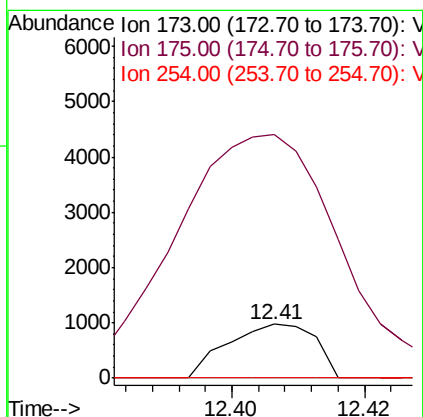
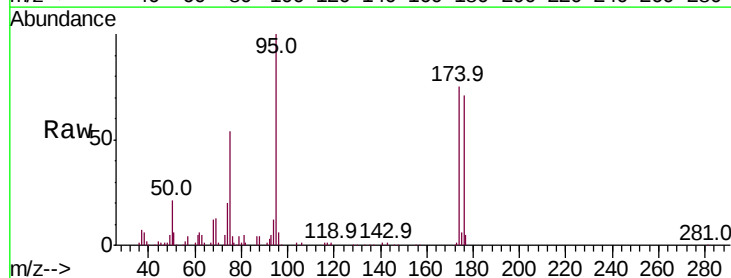
Instrument :
 MSVOA_N
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 FRAC-A32780T

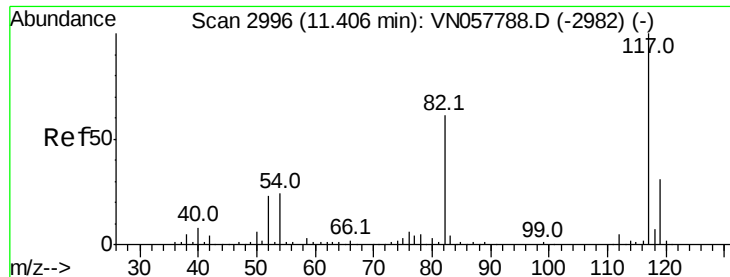
Tot Ion: 43 Resp: 736
 Ion Ratio Lower Upper
 43 100
 57 0.0 6.4 9.6#
 72 22.3 20.3 30.5



#56
 Bromoform
 Concen: 0.371 ug/l
 RT: 12.41 min Scan# 3307
 Delta R.T. 0.28 min
 Lab File: VN057795.D
 Acq: 9 Sep 2019 12:30

Tgt Ion: 173 Resp: 898
 Ion Ratio Lower Upper
 173 100
 175 864.5 38.4 57.6#
 254 0.0 6.9 10.3#

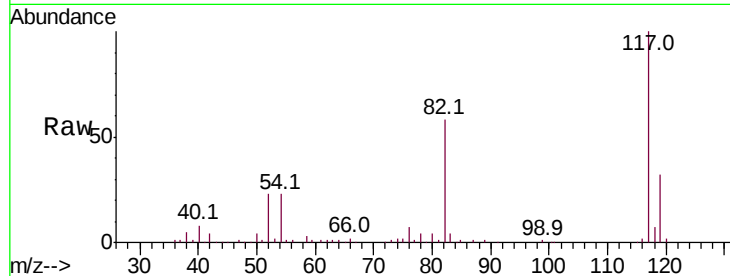




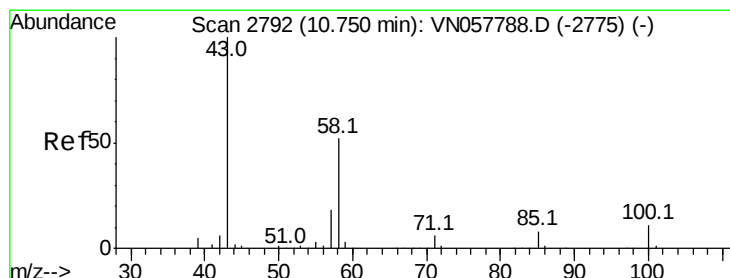
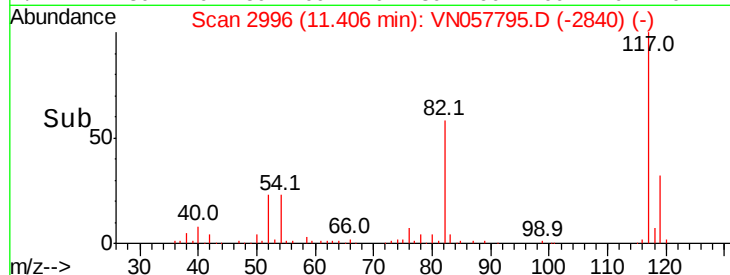
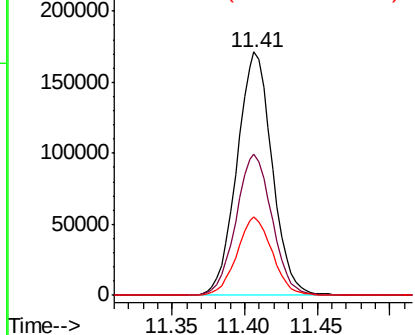
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN057795.D
Acq: 9 Sep 2019 12:30

Instrument :
MSVOA_N
ClientSampleId :
FRAC-A32780T

Tot Ion:117 Resp: 289467
Ion Ratio Lower Upper
117 100
82 59.4 47.6 71.4
119 32.1 25.4 38.2

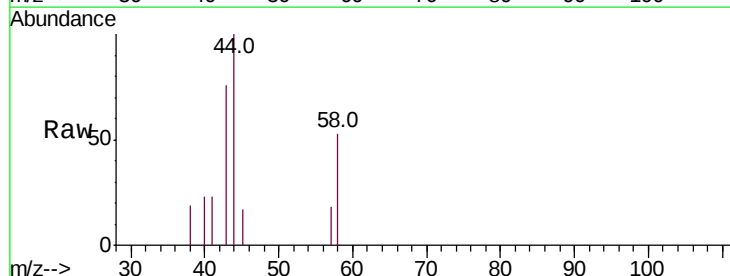


Abundance Ion 117.00 (116.70 to 117.70): V
Ion 82.00 (81.70 to 82.70): V
Ion 119.00 (118.70 to 119.70): V

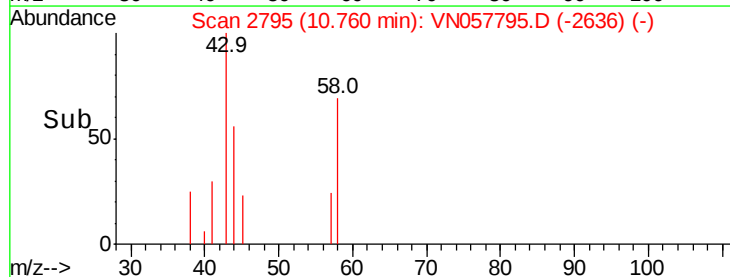
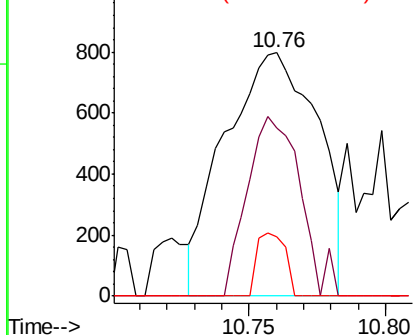


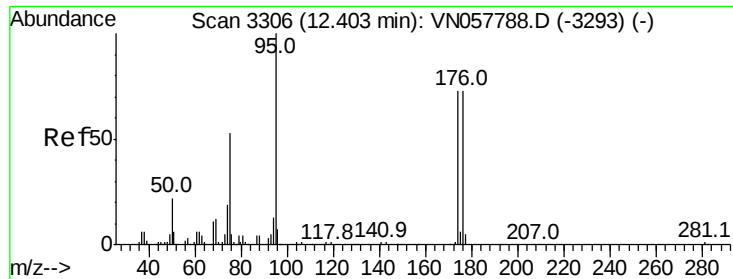
#59
2-Hexanone
Concen: 0.564 ug/l
RT: 10.76 min Scan# 2795
Delta R.T. 0.01 min
Lab File: VN057795.D
Acq: 9 Sep 2019 12:30

Tgt Ion: 43 Resp: 1899
Ion Ratio Lower Upper
43 100
58 40.3 40.6 61.0#
57 7.6 14.5 21.7#



Abundance Ion 43.00 (42.70 to 43.70): V
Ion 58.00 (57.70 to 58.70): V
Ion 57.00 (56.70 to 57.70): V





#60

4-Bromofluorobenzene

Concen: 26.909 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :

MSVOA_N

ClientSampleId :

FRAC-A32780T

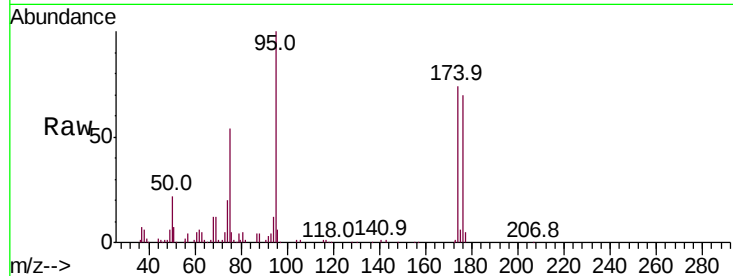
Tot Ion: 95 Resp: 133288

Ion Ratio Lower Upper

95 100

174 73.8 59.4 89.0

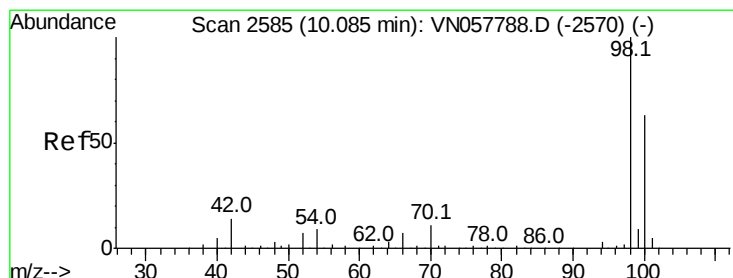
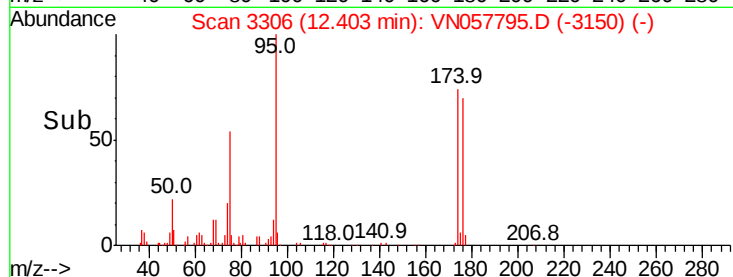
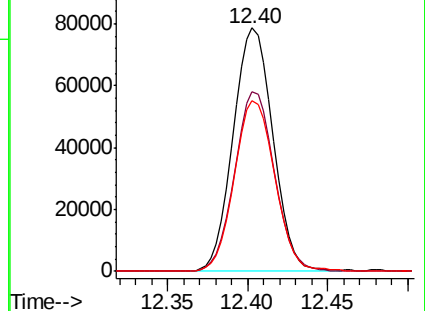
176 71.6 57.4 86.0



Abundance Ion 95.00 (94.70 to 95.70): VN057788.D (-3293) (-)

Ion 174.00 (173.70 to 174.70): VN057788.D (-3293) (-)

Ion 176.00 (175.70 to 176.70): VN057788.D (-3293) (-)



#63

Toluene-d8

Concen: 31.037 ug/l

RT: 10.09 min Scan# 2586

Delta R.T. 0.00 min

Lab File: VN057795.D

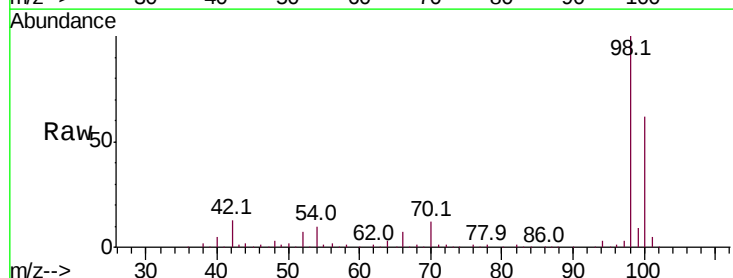
Acq: 9 Sep 2019 12:30

Tgt Ion: 98 Resp: 431223

Ion Ratio Lower Upper

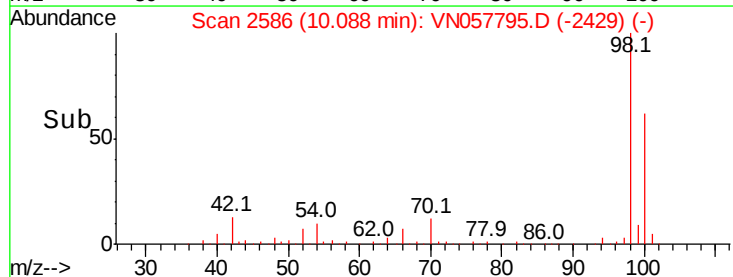
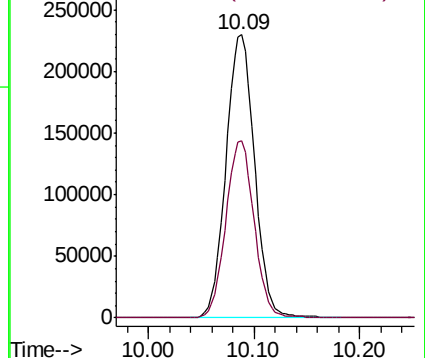
98 100

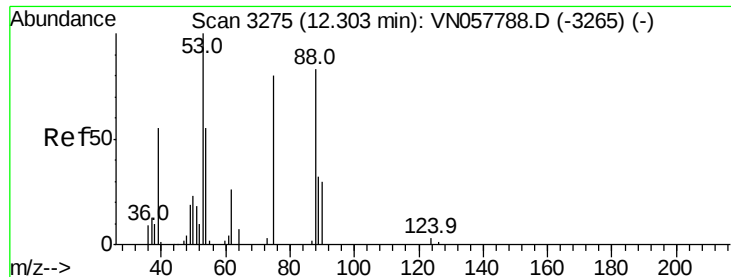
100 61.9 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VN057788.D (-2570) (-)

Ion 100.00 (99.70 to 100.70): VN057788.D (-2570) (-)

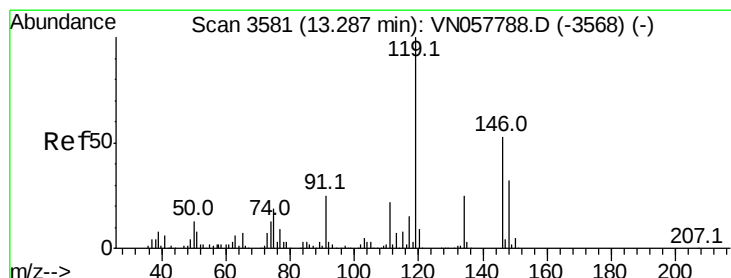
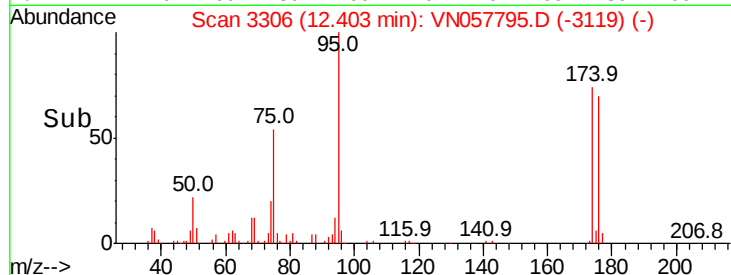
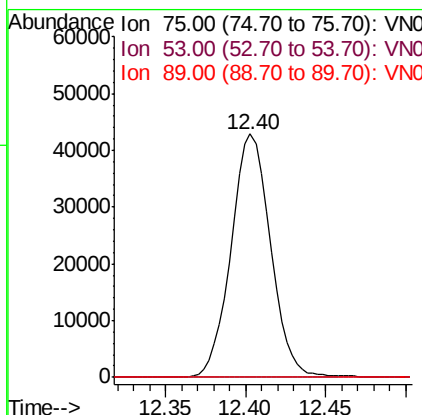
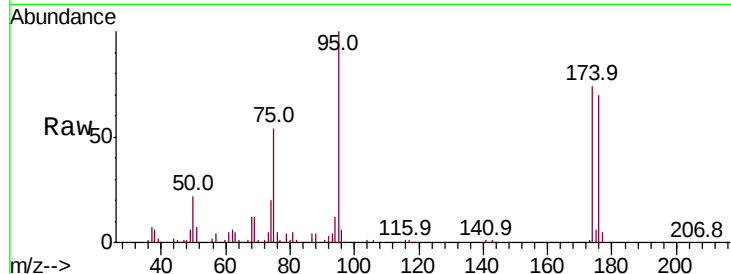




#77
 t-1,4-Dichloro-2-butene
 Concen: 50.577 ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. 0.10 min
 Lab File: VN057795.D
 Acq: 9 Sep 2019 12:30

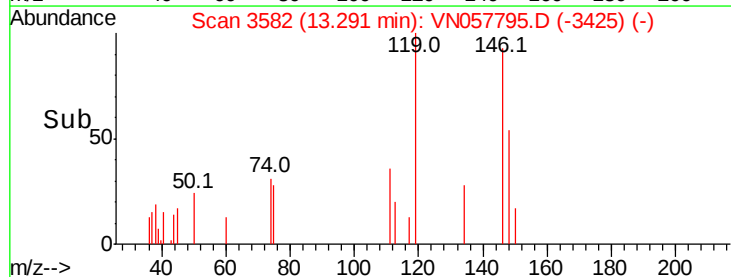
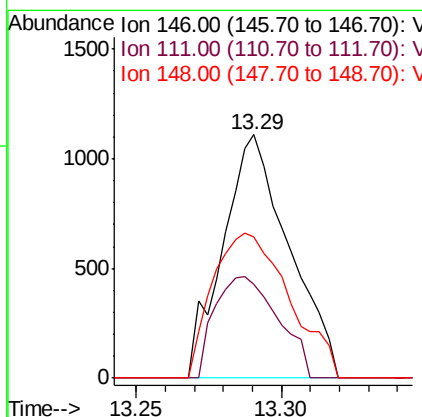
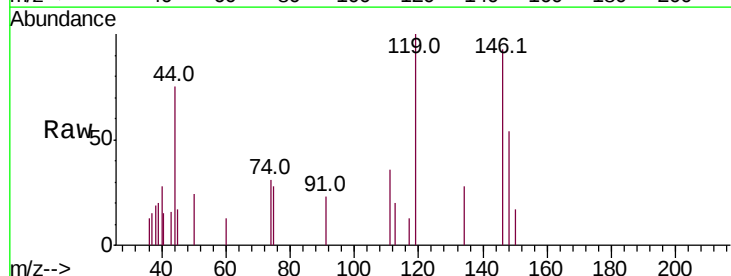
Instrument :
 MSVOA_N
 ClientSampleId :
 FRAC-A32780T

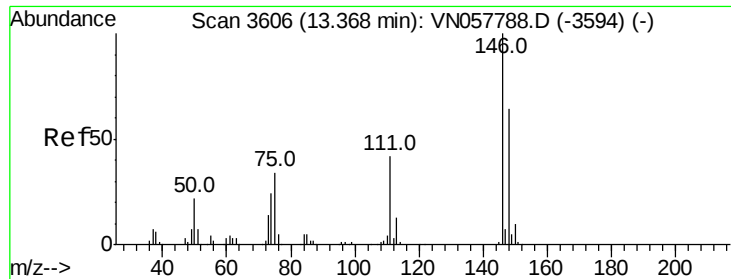
Tot Ion: 75 Resp: 71973
 Ion Ratio Lower Upper
 75 100
 53 0.0 62.7 188.2#
 89 0.0 22.8 68.3#



#83
 1,3-Dichlorobenzene
 Concen: 0.228 ug/l
 RT: 13.29 min Scan# 3582
 Delta R.T. 0.00 min
 Lab File: VN057795.D
 Acq: 9 Sep 2019 12:30

Tgt Ion: 146 Resp: 1756
 Ion Ratio Lower Upper
 146 100
 111 40.0 20.7 62.1
 148 65.1 30.9 92.5





#84

1,4-Dichlorobenzene

Concen: 0.281 ug/l

RT: 13.37 min Scan# 3606

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :

MSVOA_N

ClientSampleId :

FRAC-A32780T

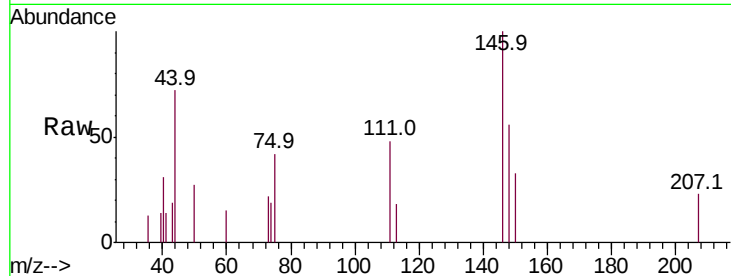
Tot Ion:146 Resp: 2128

Ion Ratio Lower Upper

146 100

111 37.0 21.1 63.4

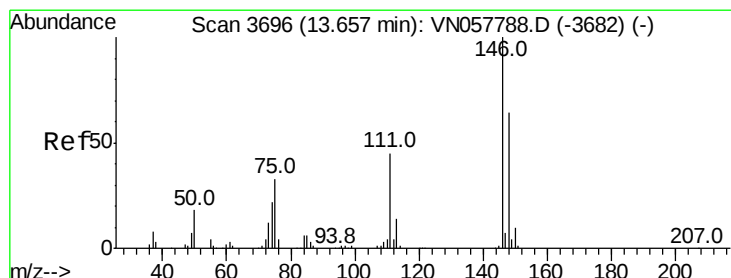
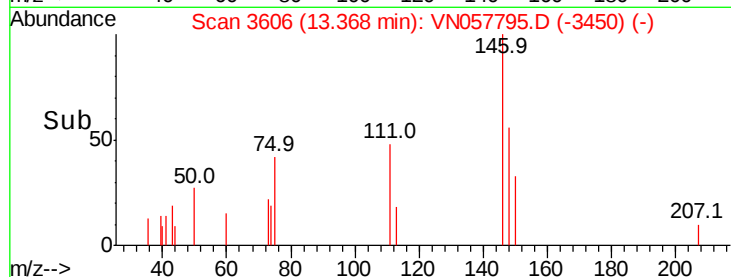
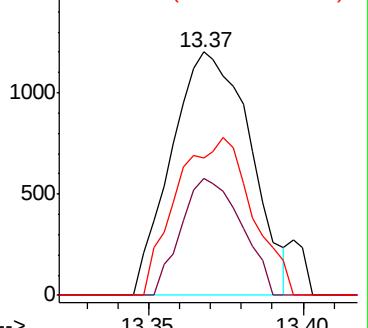
148 62.2 31.7 95.1



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#87

1,2-Dichlorobenzene

Concen: 0.285 ug/l

RT: 13.37 min Scan# 3606

Delta R.T. -0.29 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

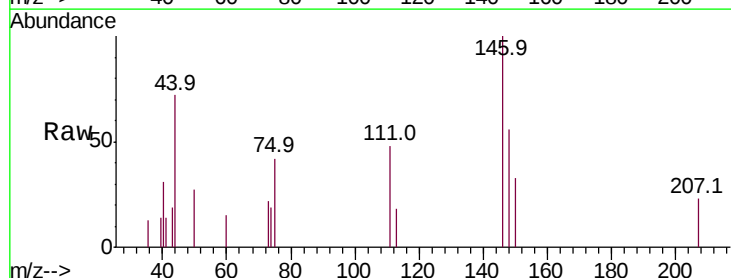
Tgt Ion:146 Resp: 2128

Ion Ratio Lower Upper

146 100

111 37.0 22.2 66.6

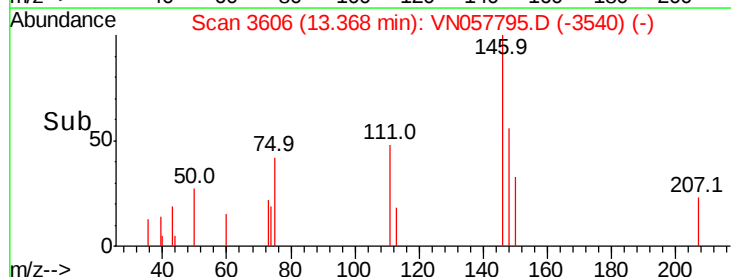
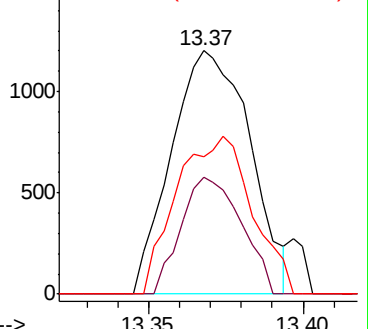
148 62.2 32.1 96.3

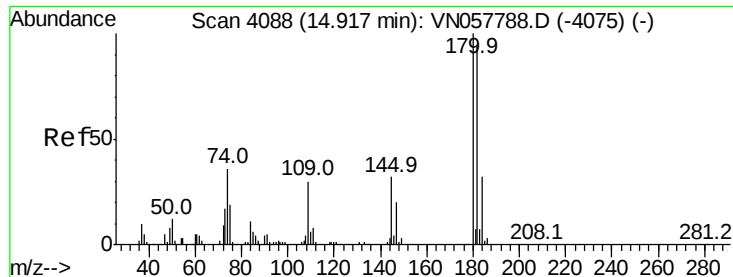


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

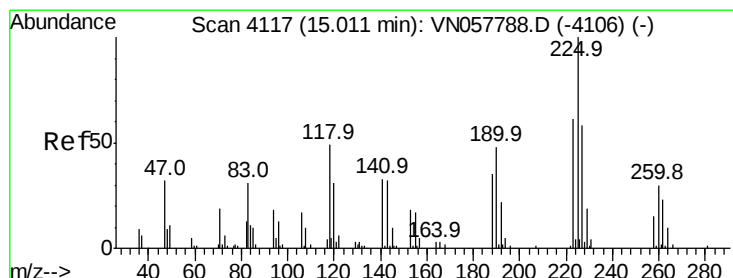
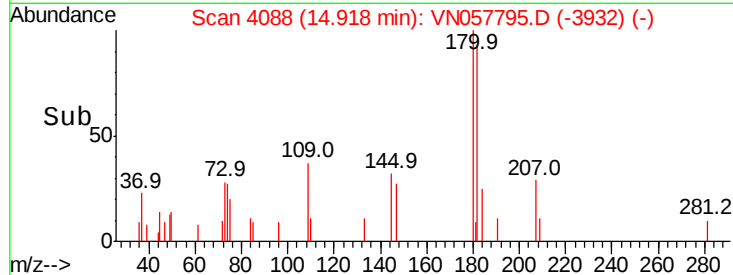
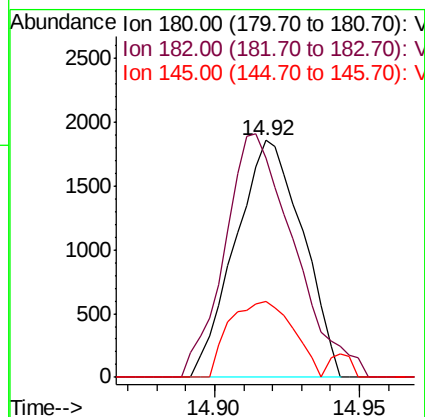
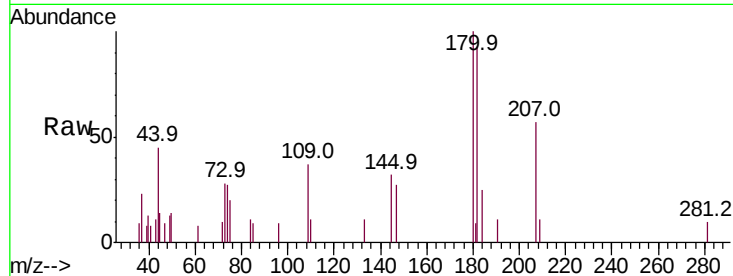




#89
 1,2,4-Trichlorobenzene
 Concen: 0.658 ug/l
 RT: 14.92 min Scan# 4088
 Delta R.T. 0.00 min
 Lab File: VN057795.D
 Acq: 9 Sep 2019 12:30

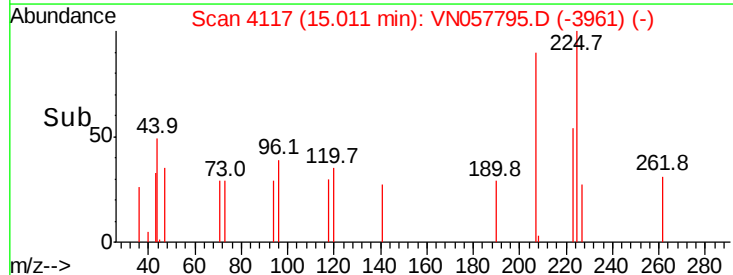
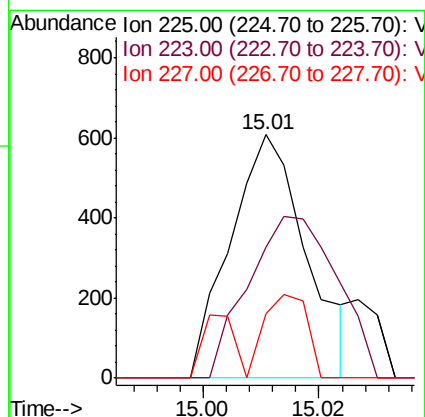
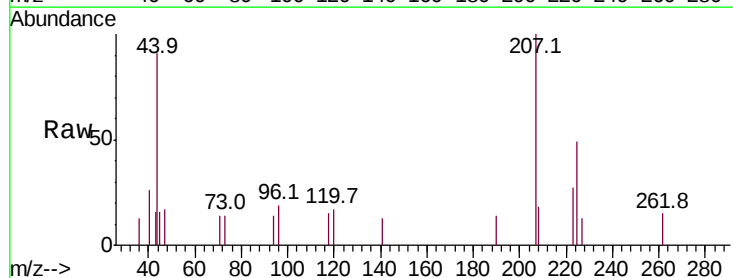
Instrument :
 MSVOA_N
 ClientSampleId :
 FRAC-A32780T

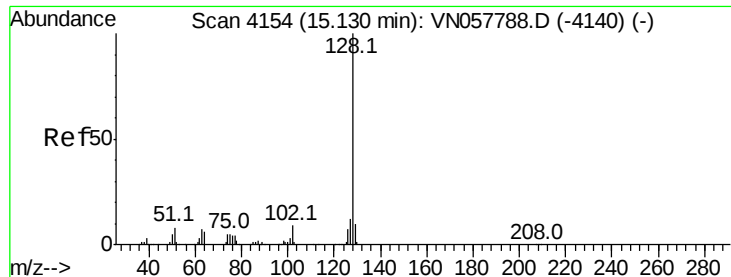
Tot Ion:180 Resp: 3001
 Ion Ratio Lower Upper
 180 100
 182 105.7 77.0 115.4
 145 30.5 26.1 39.1



#90
 Hexachlorobutadiene
 Concen: 0.263 ug/l
 RT: 15.01 min Scan# 4117
 Delta R.T. 0.00 min
 Lab File: VN057795.D
 Acq: 9 Sep 2019 12:30

Tgt Ion:225 Resp: 551
 Ion Ratio Lower Upper
 225 100
 223 78.2 0.0 125.0
 227 19.8 0.0 123.8





#91

Naphthalene

Concen: 0.973 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

Instrument :

MSVOA_N

ClientSampleId :

FRAC-A32780T

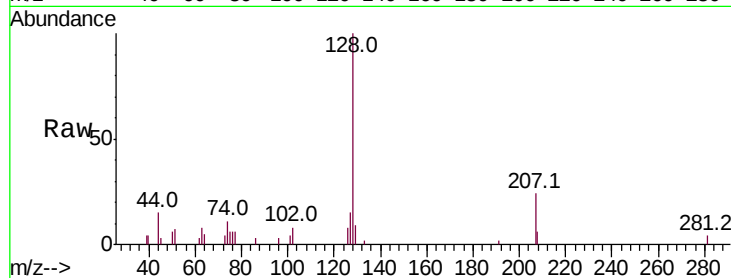
Tot Ion:128 Resp: 12214

Ion Ratio Lower Upper

128 100

127 13.5 9.9 14.9

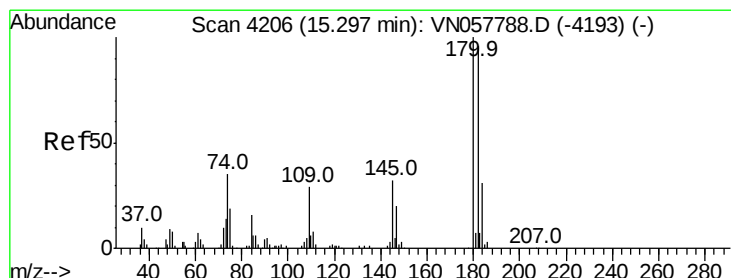
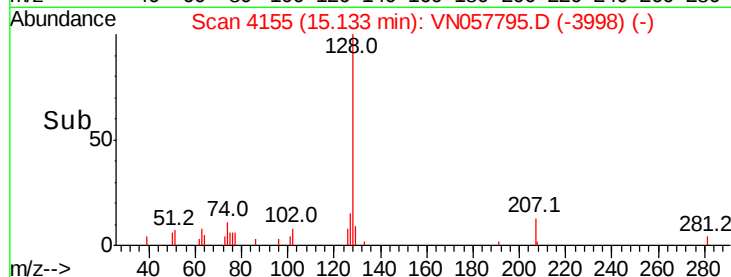
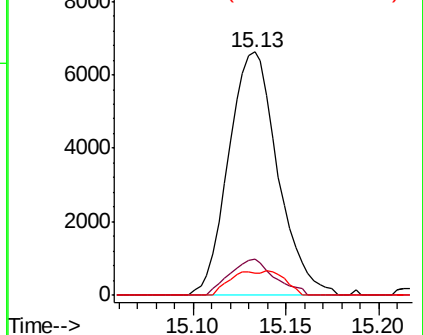
129 5.4 8.1 12.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#92

1,2,3-Trichlorobenzene

Concen: 0.796 ug/l

RT: 15.30 min Scan# 4207

Delta R.T. 0.00 min

Lab File: VN057795.D

Acq: 9 Sep 2019 12:30

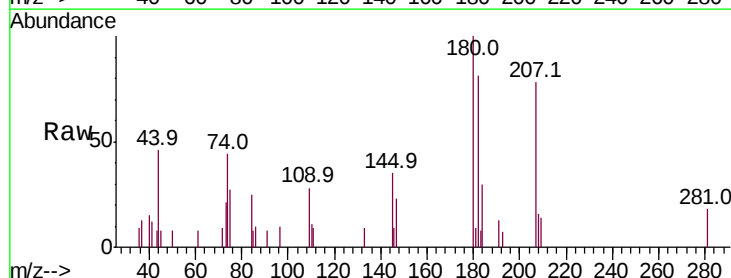
Tgt Ion:180 Resp: 3462

Ion Ratio Lower Upper

180 100

182 90.6 0.0 189.8

145 32.2 0.0 65.0



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

