

Data Path : W:\HPCHEM1\MSVOA_L\Data\VL072715\
 Data File : VL025780.D
 Acq On : 28 Jul 2015 9:20
 Operator : SY/MD
 Sample : G3040-06 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ERD45-EFFLUENT-072215

Quant Time: Jul 28 10:15:16 2015
 Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL070715AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 08 02:22:55 2015
 QLast Update : Wed Jul 08 02:22:55 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	6.65	49	600590	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	8.32	114	1538218	10.00	ppbv	0.00
55) Chlorobenzene-d5	13.74	117	1879717	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	16.28	95	1644732	10.37	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.70%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.64	85	8677	0.06	ppbv #	88
3) Chlorodifluoromethane	3.57	51	6841	0.08	ppbv	93
4) Chloromethane	3.75	50	6719	0.17	ppbv	92
5) Vinyl Chloride	3.89	62	7063331	169.41	ppbv #	79
7) Chloroethane	3.89	64	2670472	137.58	ppbv #	45
8) Dichlorotetrafluoroethane	3.64	85	8677	0.06	ppbv #	17
9) Propene	3.59	41	113403	4.03	ppbv	90
11) Trichlorofluoromethane	4.69	101	9143	0.05	ppbv	89
13) Ethanol	4.32	45	61839	14.14	ppbv	99
15) Acetone	4.60	43	252108	2.38	ppbv #	84
16) 1,3-Butadiene	3.94	39	255505	6.05	ppbv #	18
17) tert-Butyl alcohol	5.15	59	45570	0.51	ppbv	99
18) 1,1-Dichloroethene	5.08	96	286679	6.47	ppbv	100
19) Isopropyl Alcohol	4.76	45	7526	0.18	ppbv #	58
20) Methylene Chloride	5.14	84	7002	0.16	ppbv #	94
21) Allyl Chloride	4.99	41	11730	0.18	ppbv	95
22) trans-1,2-Dichloroethene	5.76	96	21607	0.48	ppbv	96
23) Vinyl Acetate	5.99	43	6300	0.04	ppbv #	34
24) 1,1-Dichloroethane	5.91	63	55880	0.52	ppbv	95
27) Carbon Disulfide	5.39	76	125827	1.03	ppbv #	92
31) cis-1,2-Dichloroethene	6.51	61	998184	13.29	ppbv	97
34) 2-Butanone	6.21	43	41511	0.48	ppbv	91
36) Benzene	8.02	78	6529	0.04	ppbv #	94
38) Trichloroethene	9.06	130	107351	1.57	ppbv	98
53) Toluene	11.23	91	10609	0.05	ppbv	97
62) Isopropylbenzene	16.54	105	12762	0.03	ppbv	95

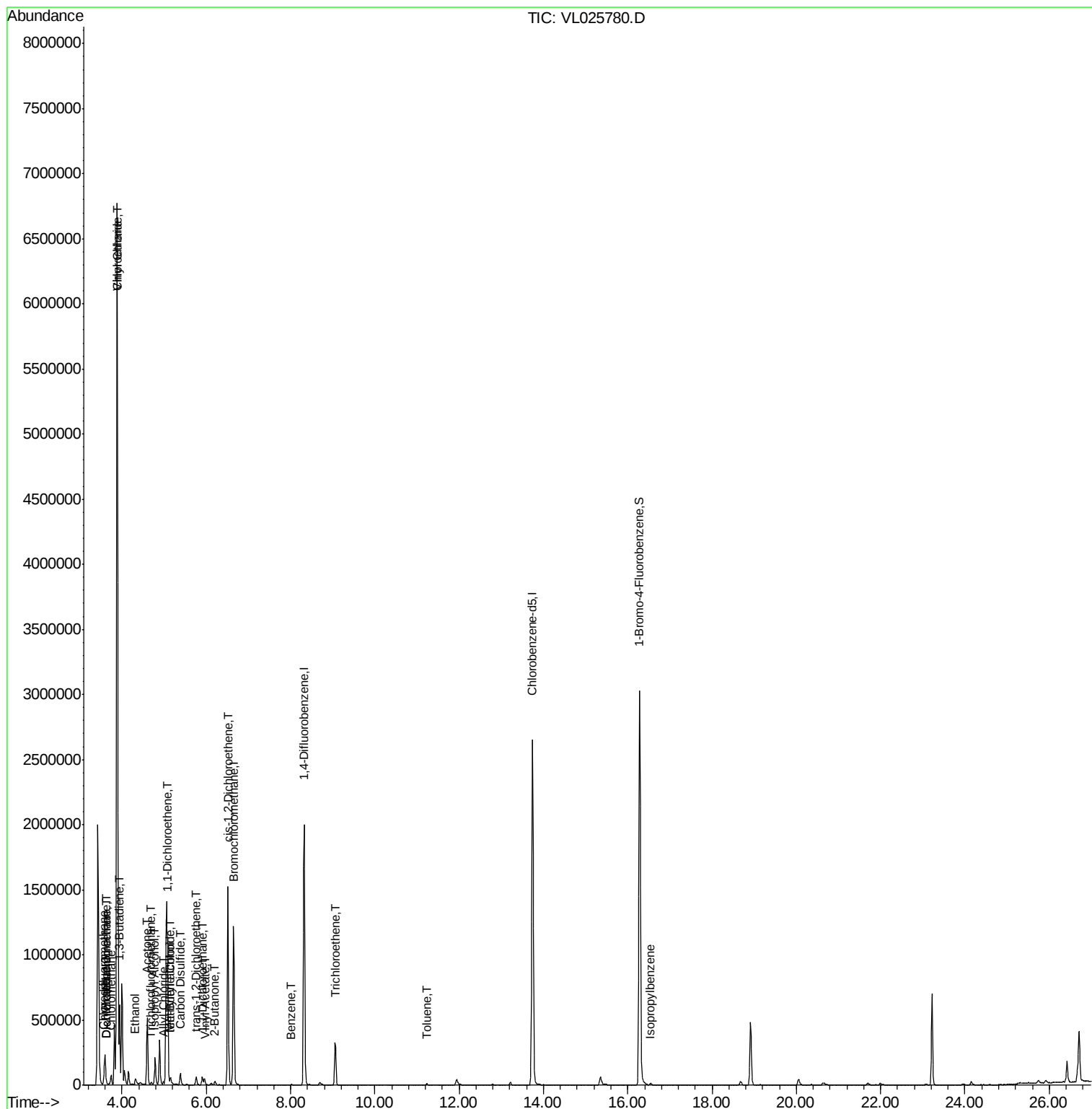
(#) = qualifier out of range (m) = manual integration (+) = signals summed

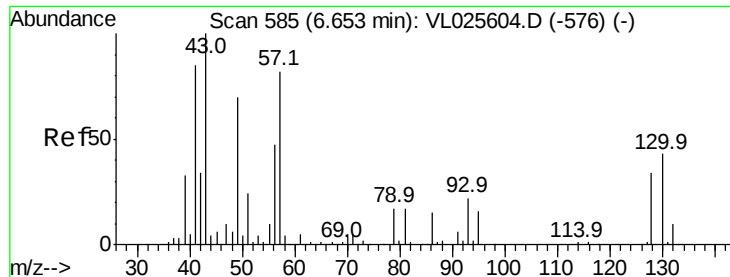
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QLast Update : Wed Jul 08 02:22:55 2015
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 6.65 min Scan# 584

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

ERD45-EFFLUENT-072215

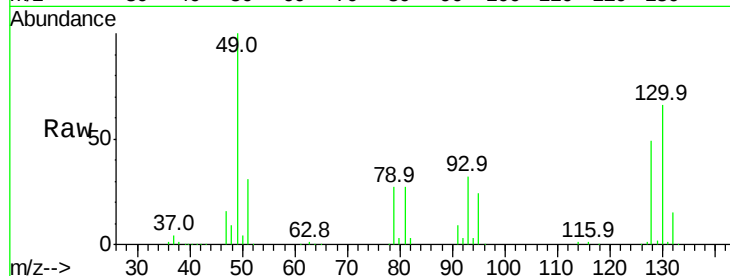
Tgt Ion: 49 Resp: 600590

Ion Ratio Lower Upper

49 100

128 50.8 25.4 76.0

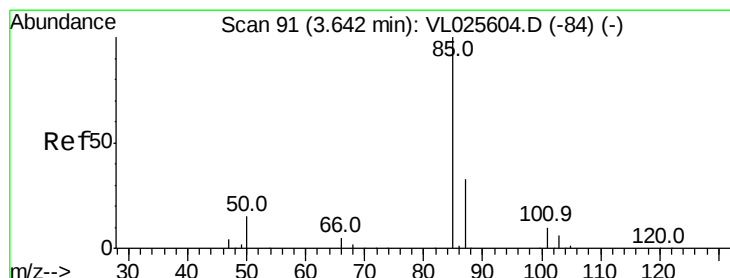
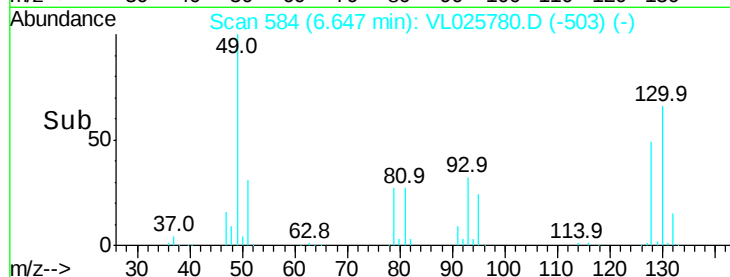
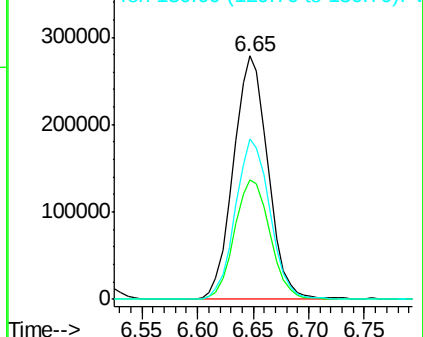
130 66.5 31.9 95.9



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.06 ppbv

RT: 3.64 min Scan# 91

Delta R.T. -0.00 min

Lab File: VL025780.D

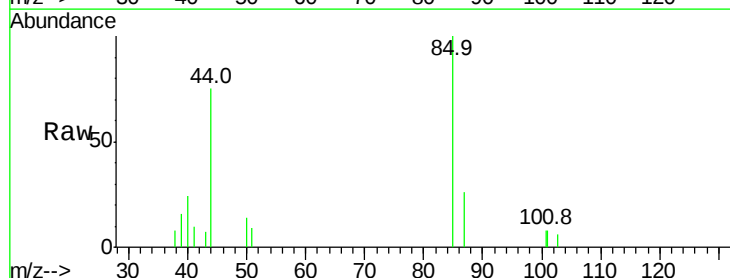
Acq: 28 Jul 2015 9:20

Tgt Ion: 85 Resp: 8677

Ion Ratio Lower Upper

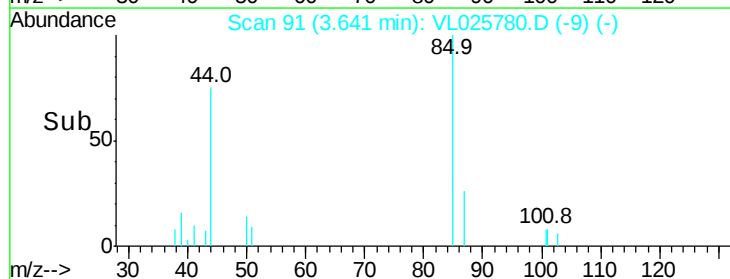
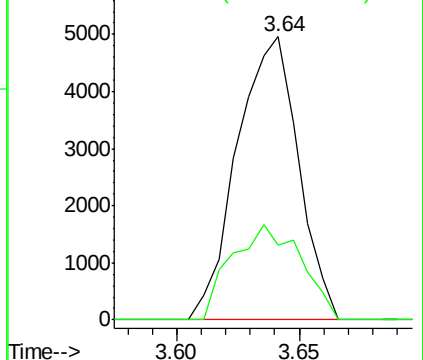
85 100

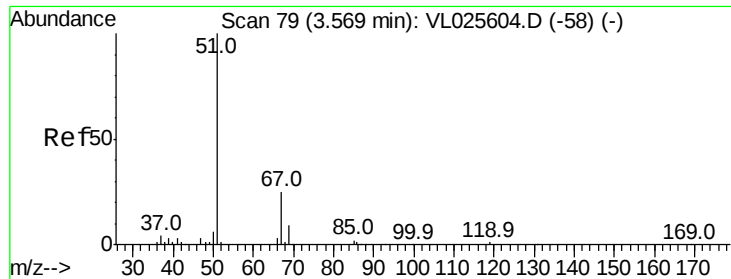
87 26.4 26.5 39.7#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

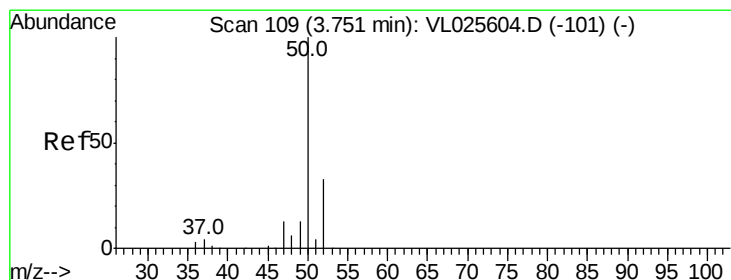
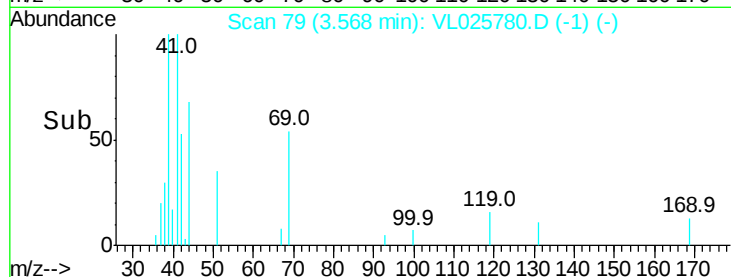
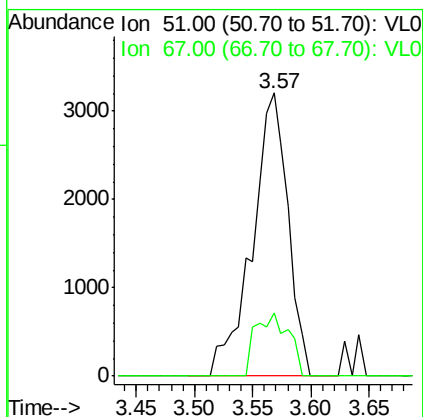
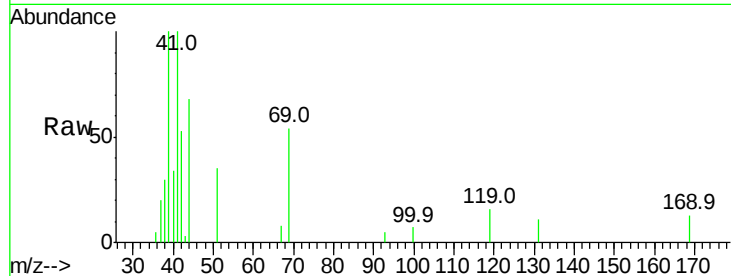




#3
 Chlorodifluoromethane
 Concen: 0.08 ppbv
 RT: 3.57 min Scan# 79
 Delta R.T. -0.00 min
 Lab File: VL025780.D
 Acq: 28 Jul 2015 9:20

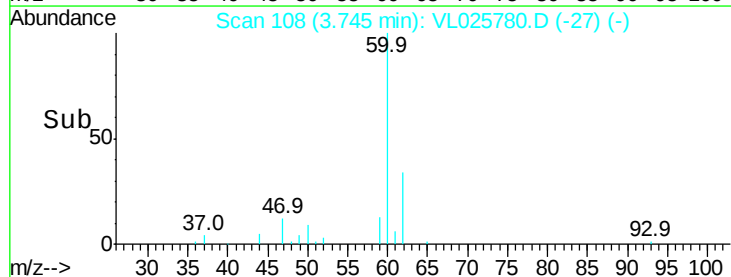
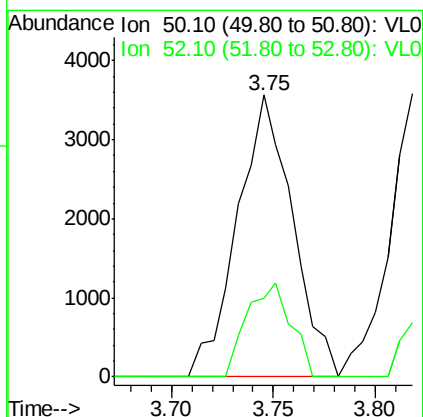
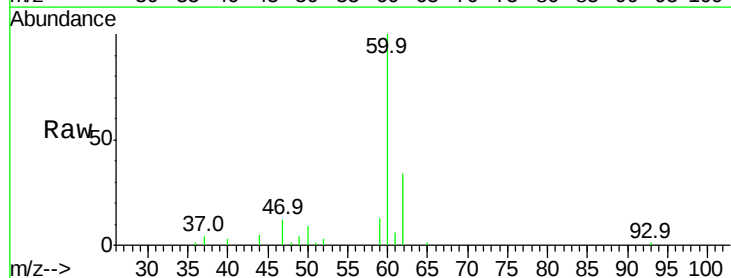
Instrument :
 MSVOA_L
 ClientSampleId :
 ERD45-EFFLUENT-072215

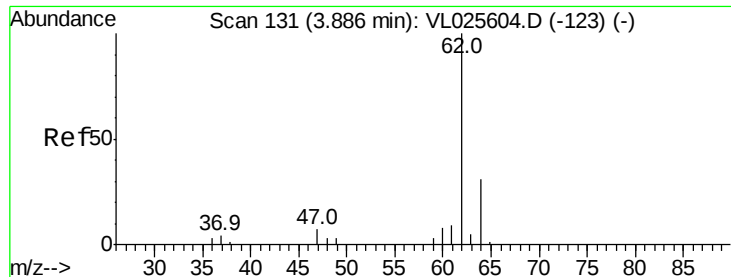
Tgt Ion: 51 Resp: 6841
 Ion Ratio Lower Upper
 51 100
 67 20.7 19.5 29.3



#4
 Chloromethane
 Concen: 0.17 ppbv
 RT: 3.75 min Scan# 108
 Delta R.T. -0.01 min
 Lab File: VL025780.D
 Acq: 28 Jul 2015 9:20

Tgt Ion: 50 Resp: 6719
 Ion Ratio Lower Upper
 50 100
 52 27.9 26.2 39.2





#5

Vinyl Chloride

Concen: 169.41 ppbv

RT: 3.89 min Scan# 131

Delta R.T. -0.00 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

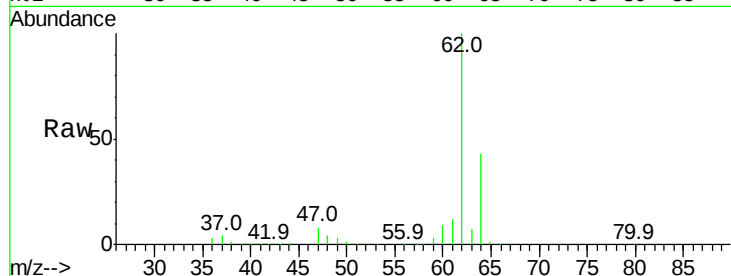
ERD45-EFFLUENT-072215

Tgt Ion: 62 Resp: 7063331

Ion Ratio Lower Upper

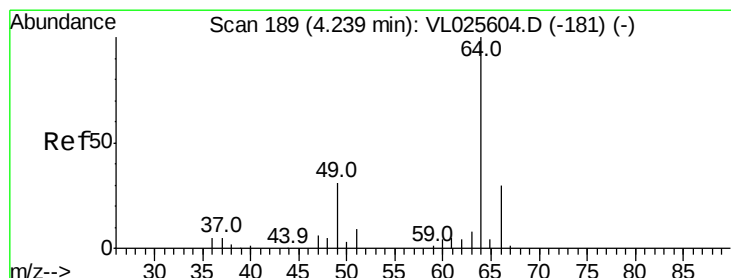
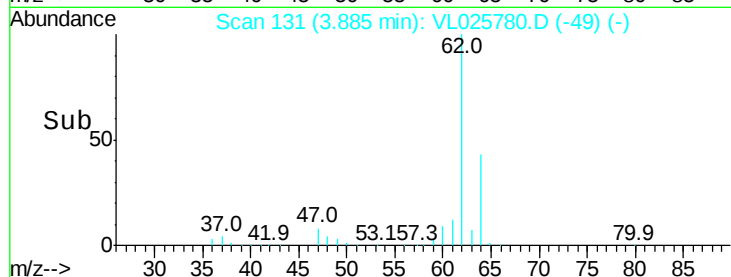
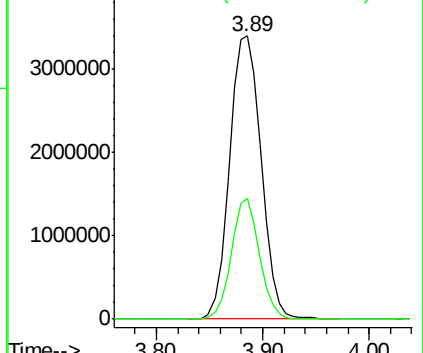
62 100

64 42.6 25.0 37.6#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#7

Chloroethane

Concen: 137.58 ppbv

RT: 3.89 min Scan# 131

Delta R.T. -0.35 min

Lab File: VL025780.D

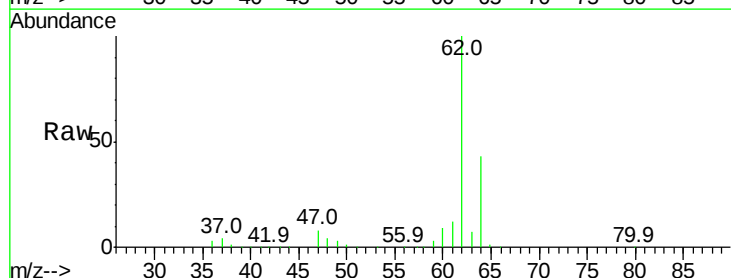
Acq: 28 Jul 2015 9:20

Tgt Ion: 64 Resp: 2670472

Ion Ratio Lower Upper

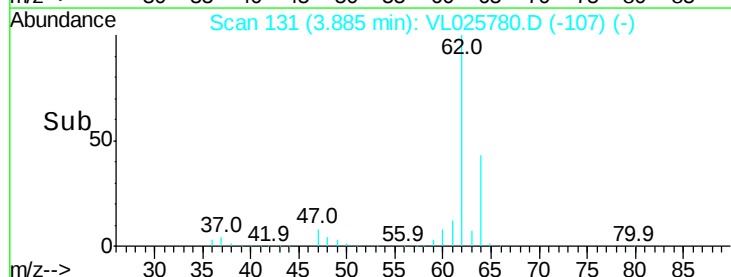
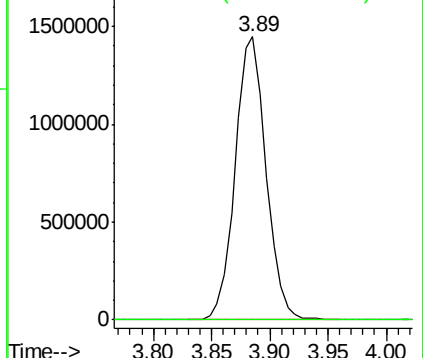
64 100

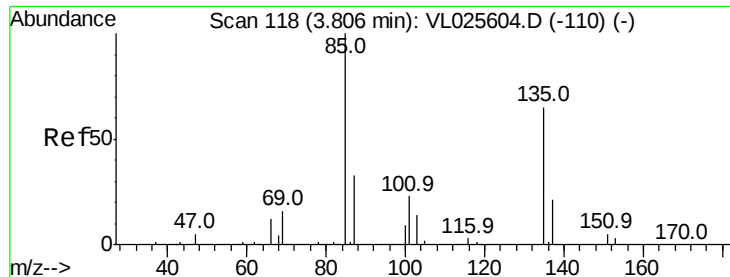
66 0.0 23.8 35.8#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#8

Dichlorotetrafluoroethane

Concen: 0.06 ppbv

RT: 3.64 min Scan# 91

Delta R.T. -0.16 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

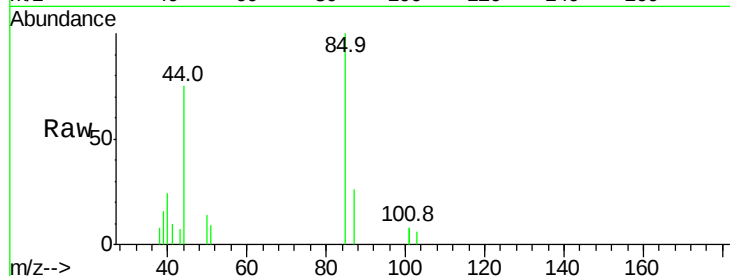
ERD45-EFFLUENT-072215

Tgt Ion: 85 Resp: 8677

Ion Ratio Lower Upper

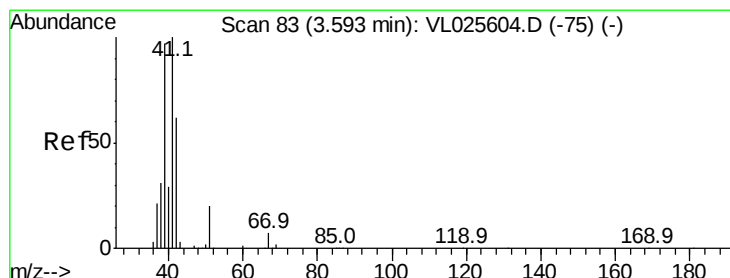
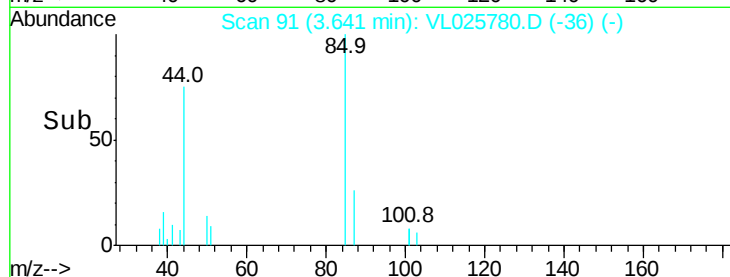
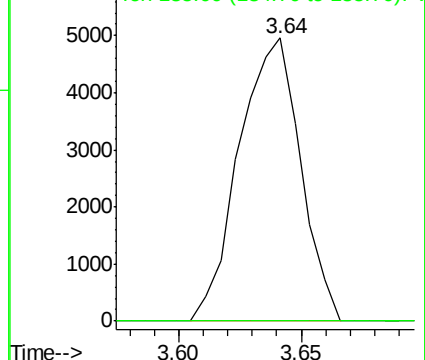
85 100

135 0.0 52.2 78.4#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#9

Propene

Concen: 4.03 ppbv

RT: 3.59 min Scan# 83

Delta R.T. -0.00 min

Lab File: VL025780.D

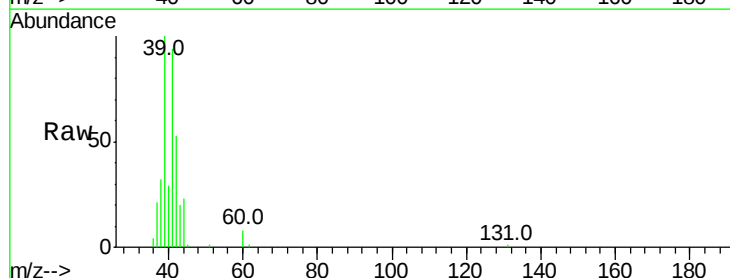
Acq: 28 Jul 2015 9:20

Tgt Ion: 41 Resp: 113403

Ion Ratio Lower Upper

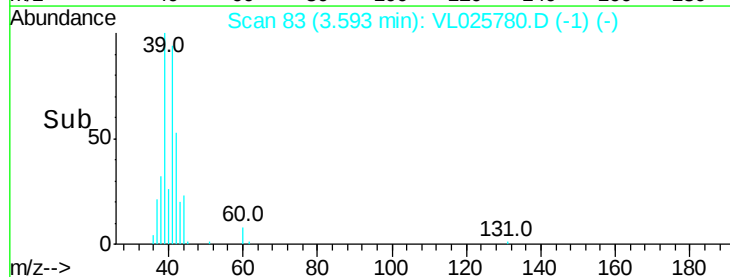
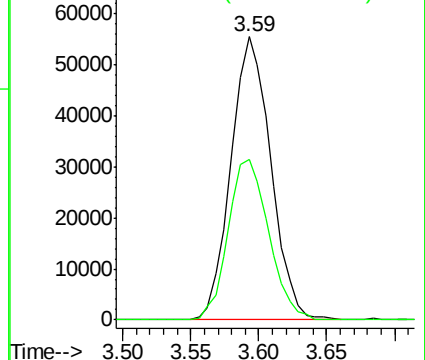
41 100

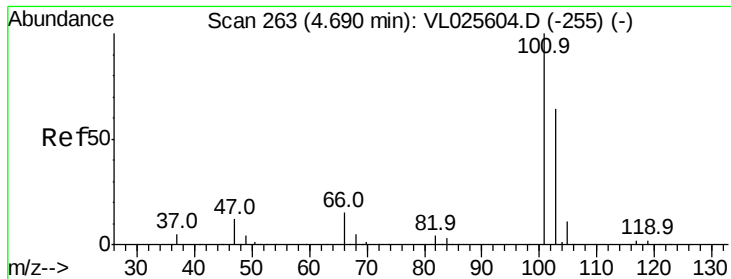
42 57.6 52.4 78.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#11

Trichlorofluoromethane

Concen: 0.05 ppbv

RT: 4.69 min Scan# 263

Delta R.T. -0.00 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

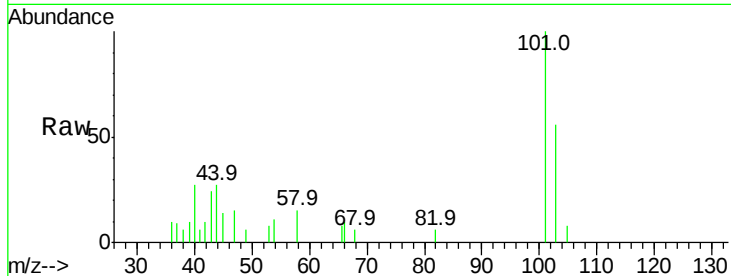
ERD45-EFFLUENT-072215

Tgt Ion:101 Resp: 9143

Ion Ratio Lower Upper

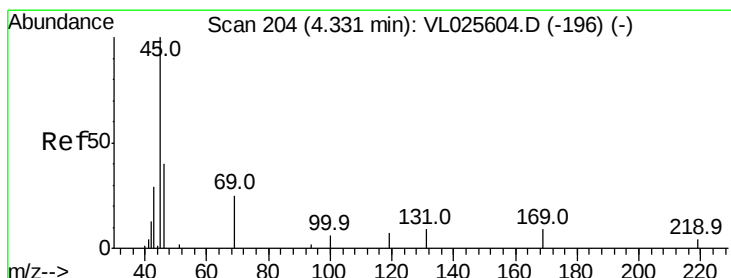
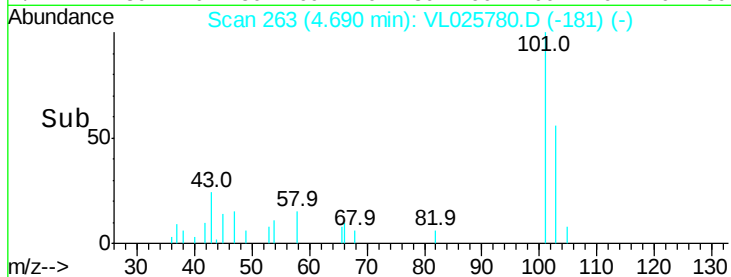
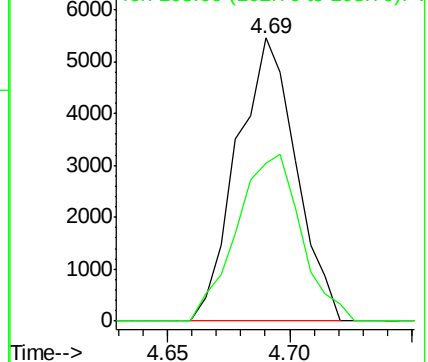
101 100

103 55.9 51.4 77.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 14.14 ppbv

RT: 4.32 min Scan# 203

Delta R.T. -0.01 min

Lab File: VL025780.D

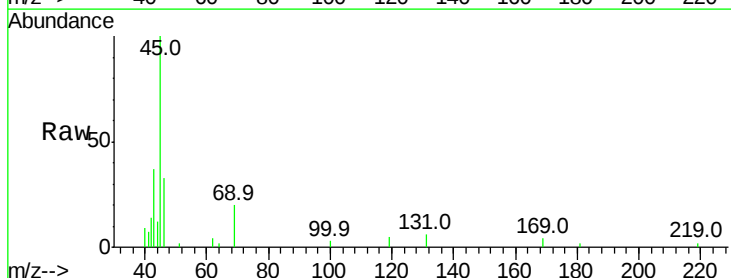
Acq: 28 Jul 2015 9:20

Tgt Ion: 45 Resp: 61839

Ion Ratio Lower Upper

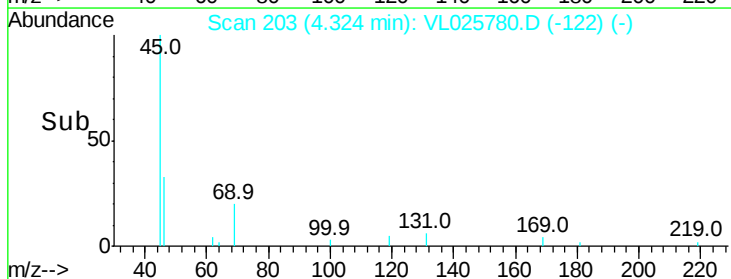
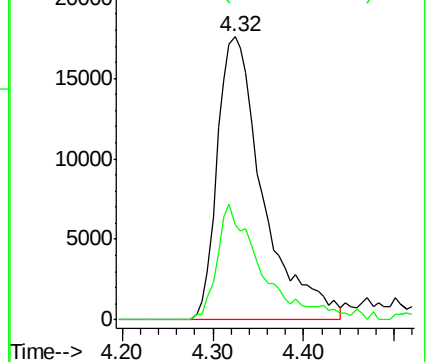
45 100

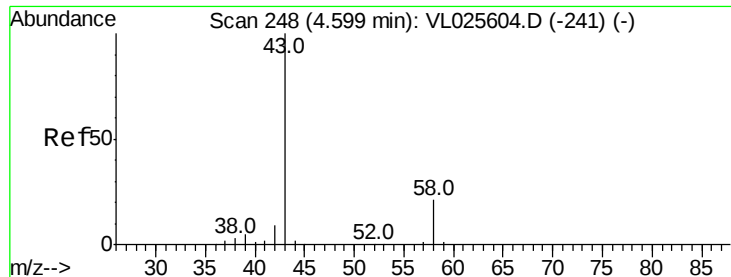
46 40.5 16.0 64.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 2.38 ppbv

RT: 4.60 min Scan# 248

Delta R.T. -0.00 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

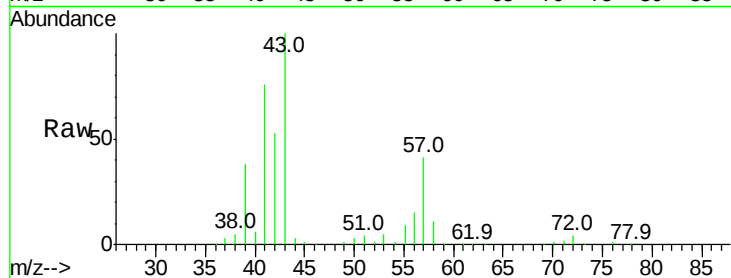
ERD45-EFFLUENT-072215

Tgt Ion: 43 Resp: 252108

Ion Ratio Lower Upper

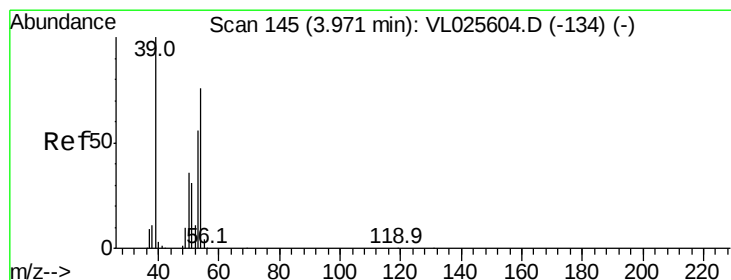
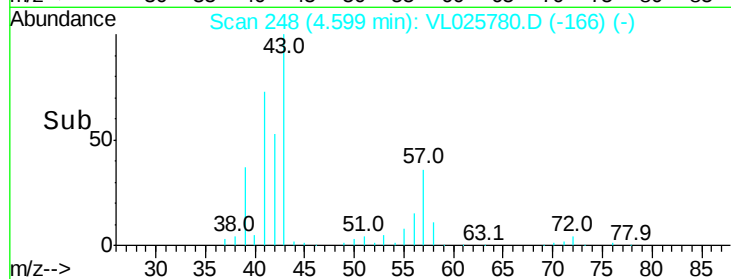
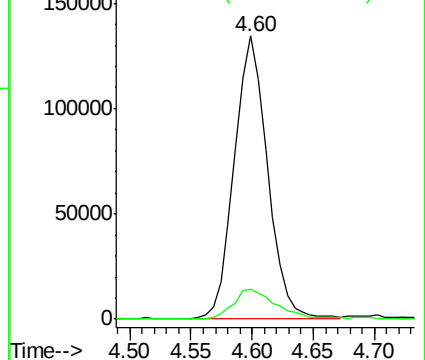
43 100

58 14.1 17.2 25.8#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 6.05 ppbv

RT: 3.94 min Scan# 140

Delta R.T. -0.03 min

Lab File: VL025780.D

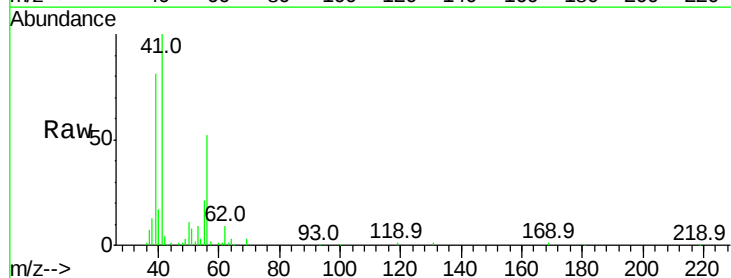
Acq: 28 Jul 2015 9:20

Tgt Ion: 39 Resp: 255505

Ion Ratio Lower Upper

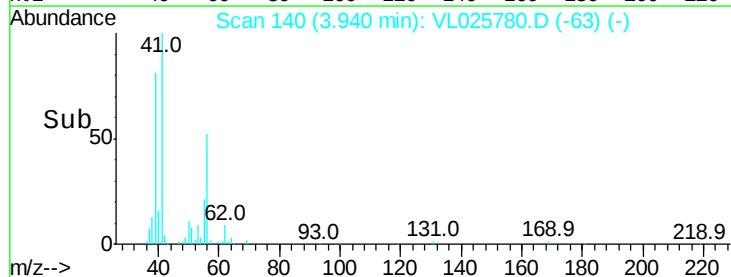
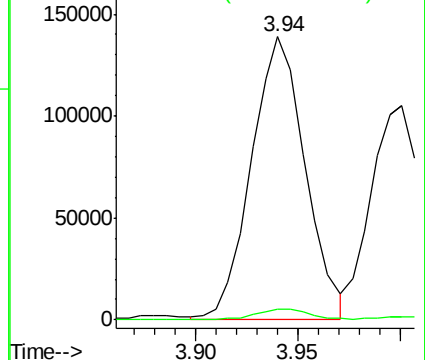
39 100

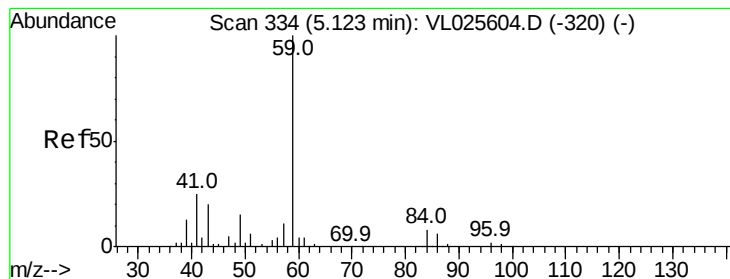
54 5.0 59.3 88.9#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 0.51 ppbv

RT: 5.15 min Scan# 338

Delta R.T. 0.02 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

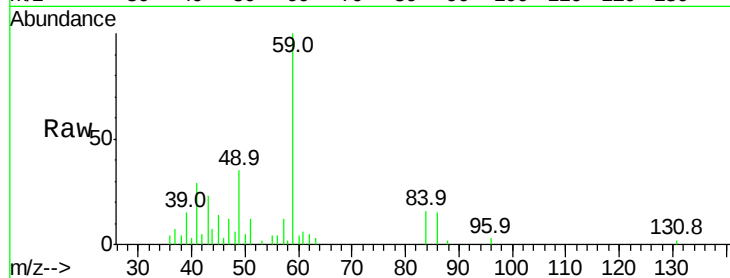
ERD45-EFFLUENT-072215

Tgt Ion: 59 Resp: 45570

Ion Ratio Lower Upper

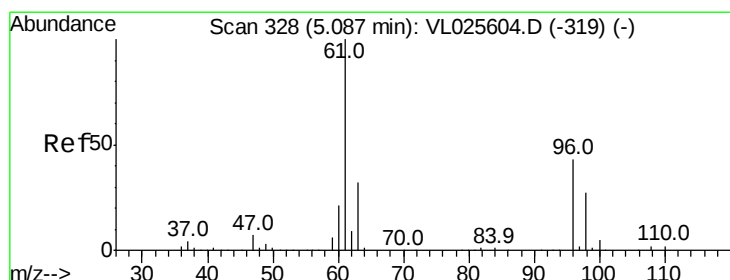
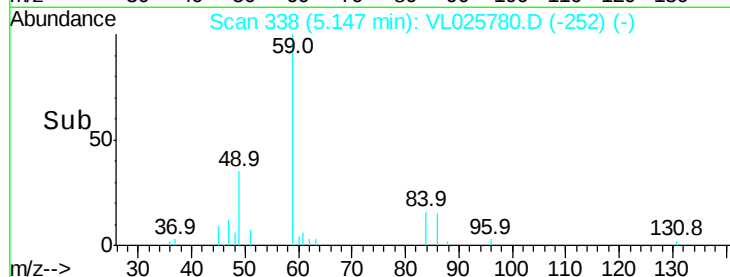
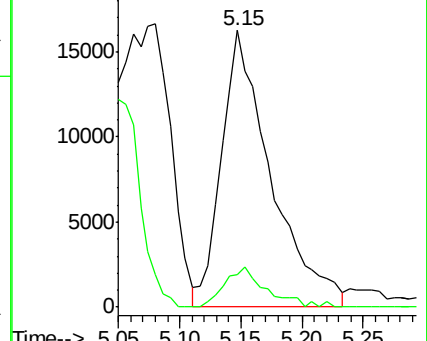
59 100

57 12.3 9.4 14.2



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#18

1,1-Dichloroethene

Concen: 6.47 ppbv

RT: 5.08 min Scan# 327

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

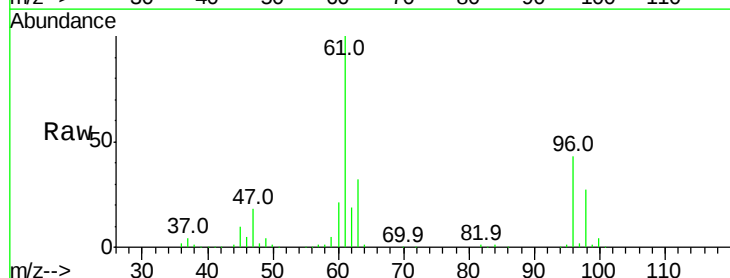
Tgt Ion: 96 Resp: 286679

Ion Ratio Lower Upper

96 100

61 230.1 184.1 276.1

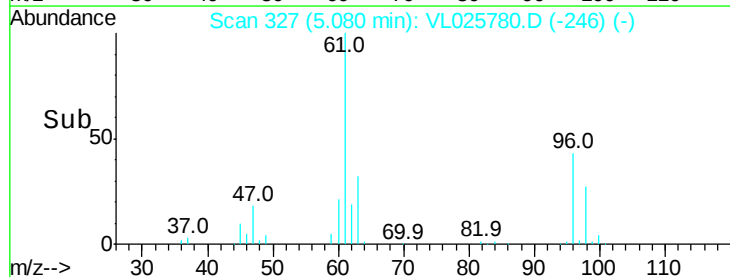
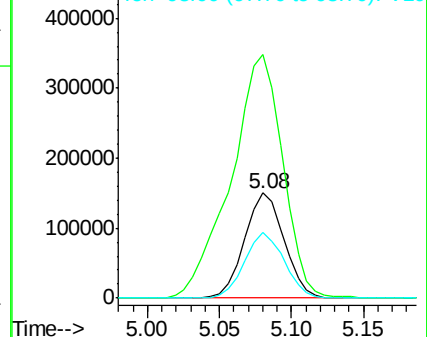
98 62.0 50.0 75.0

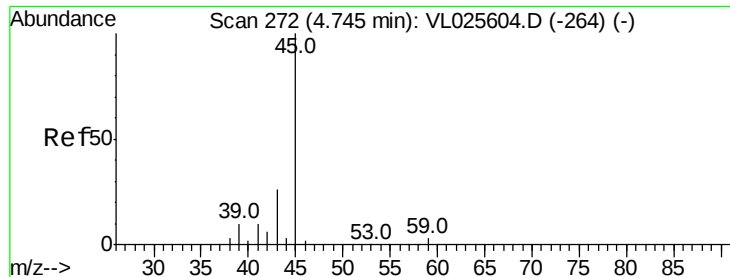


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#19

Isopropyl Alcohol

Concen: 0.18 ppbv

RT: 4.76 min Scan# 275

Delta R.T. 0.02 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

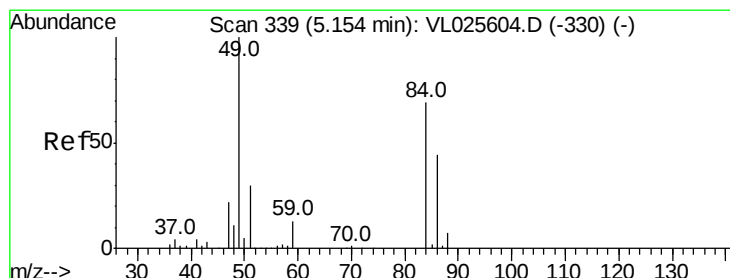
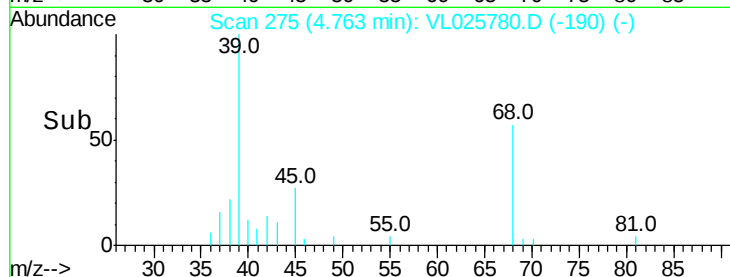
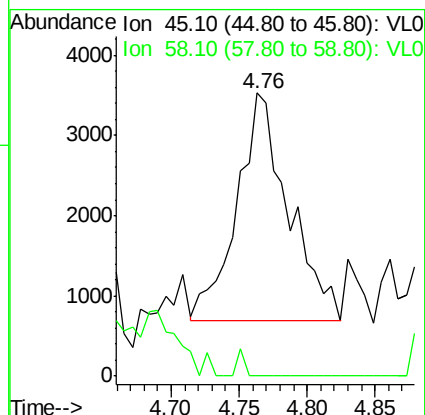
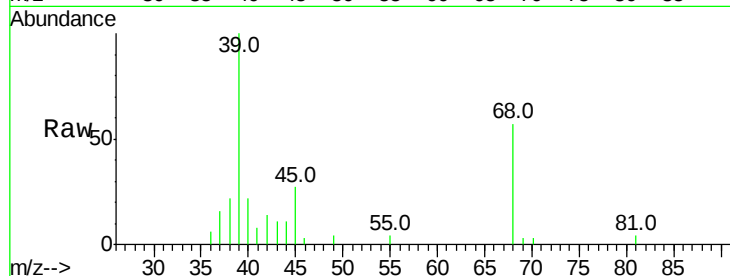
ERD45-EFFLUENT-072215

Tgt Ion: 45 Resp: 7526

Ion Ratio Lower Upper

45 100

58 17.7 1.1 1.7#



#20

Methylene Chloride

Concen: 0.16 ppbv

RT: 5.14 min Scan# 337

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Tgt Ion: 84 Resp: 7002

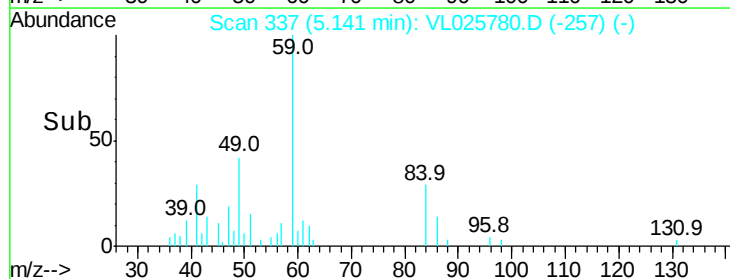
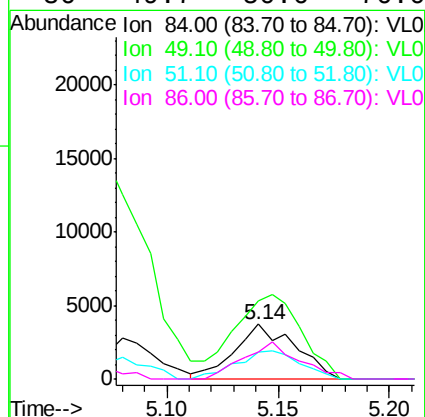
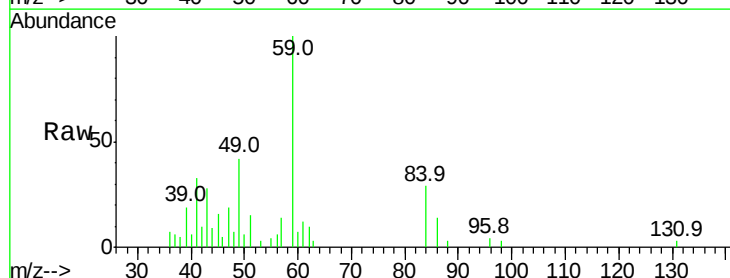
Ion Ratio Lower Upper

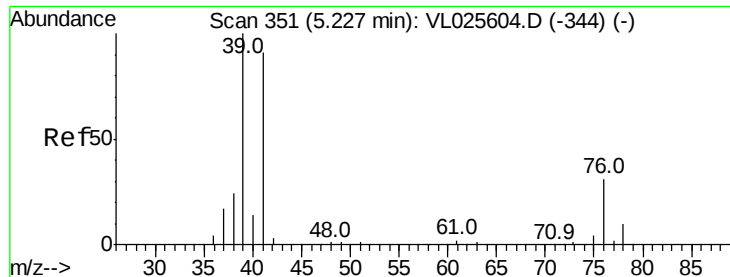
84 100

49 144.1 115.2 172.8

51 50.1 35.0 52.6

86 49.7 50.6 76.0#





#21

Allyl Chloride

Concen: 0.18 ppbv

RT: 4.99 min Scan# 312

Delta R.T. -0.24 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

ERD45-EFFLUENT-072215

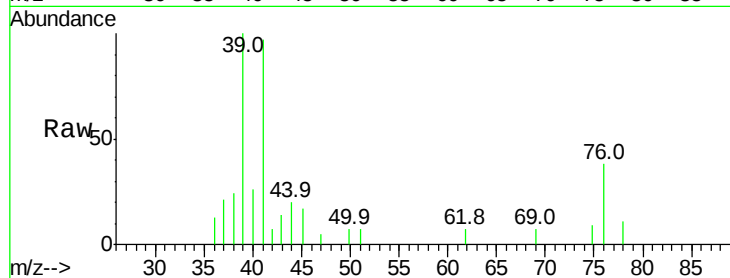
Tgt Ion: 41 Resp: 11730

Ion Ratio Lower Upper

41 100

76 38.5 26.6 40.0

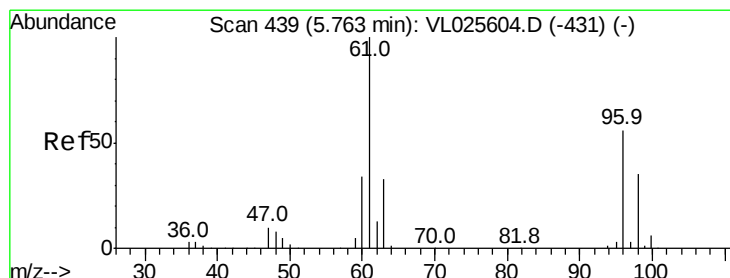
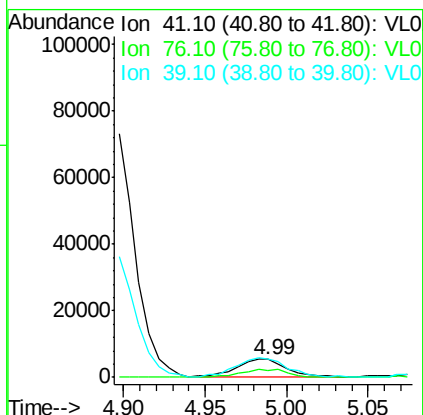
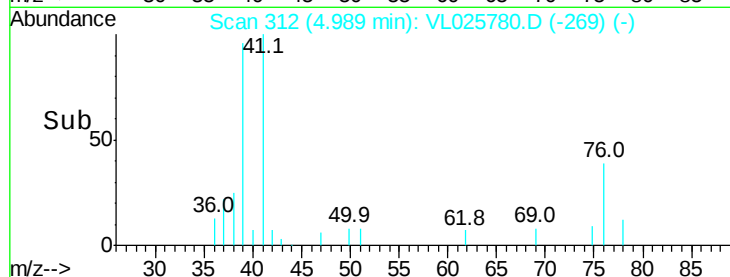
39 114.3 88.2 132.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0



#22

trans-1,2-Dichloroethene

Concen: 0.48 ppbv

RT: 5.76 min Scan# 439

Delta R.T. -0.00 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

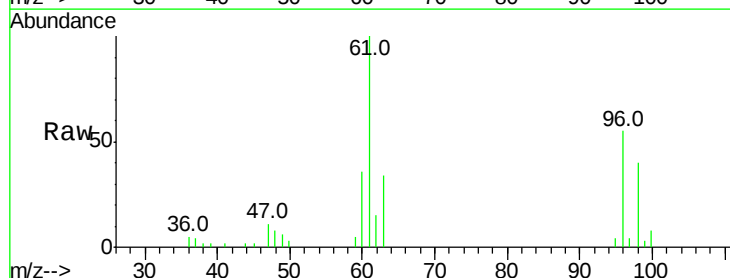
Tgt Ion: 96 Resp: 21607

Ion Ratio Lower Upper

96 100

61 177.1 141.8 212.6

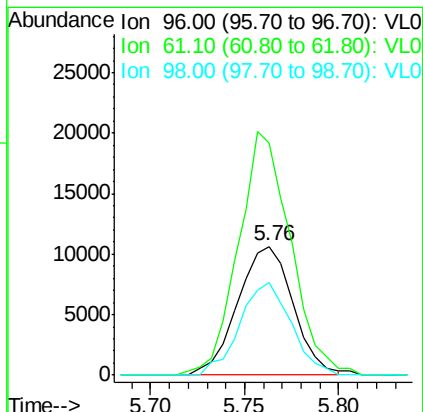
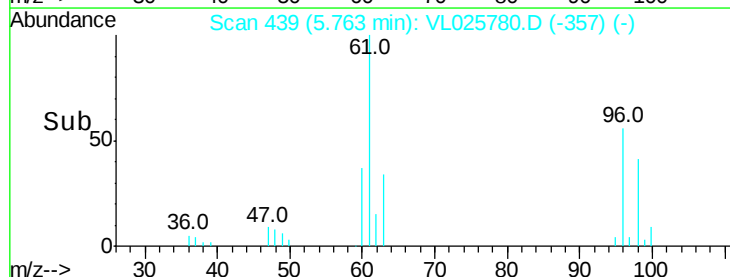
98 72.2 49.0 73.6

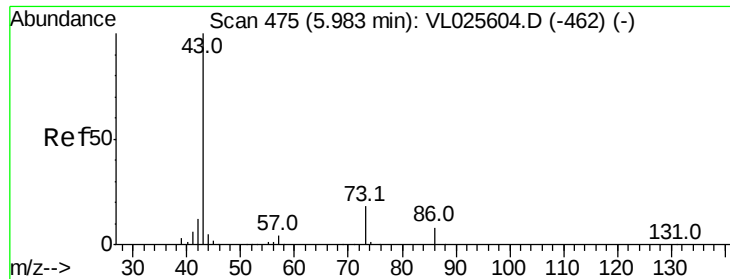


Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 0.04 ppbv

RT: 5.99 min Scan# 476

Delta R.T. 0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

ERD45-EFFLUENT-072215

Tgt Ion: 43 Resp: 6300

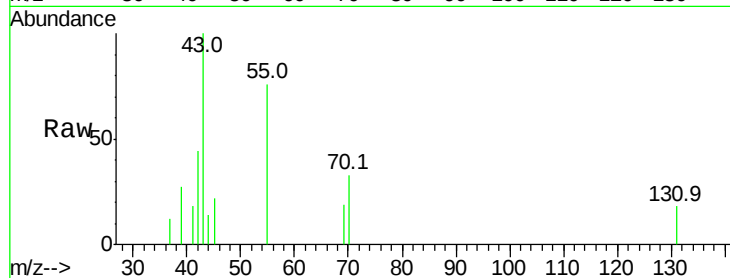
Ion Ratio Lower Upper

43 100

86 0.0 6.7 10.1#

42 54.3 9.8 14.6#

44 16.8 4.1 6.1#

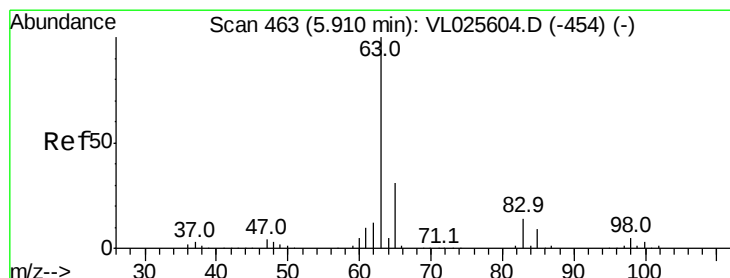
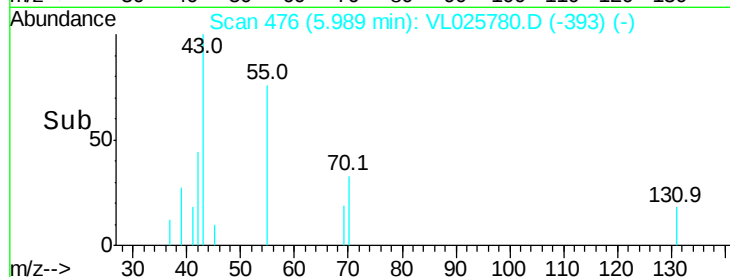
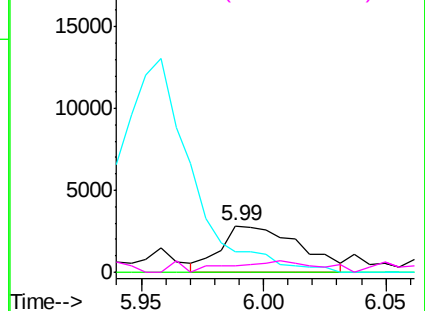


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 0.52 ppbv

RT: 5.91 min Scan# 463

Delta R.T. -0.00 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

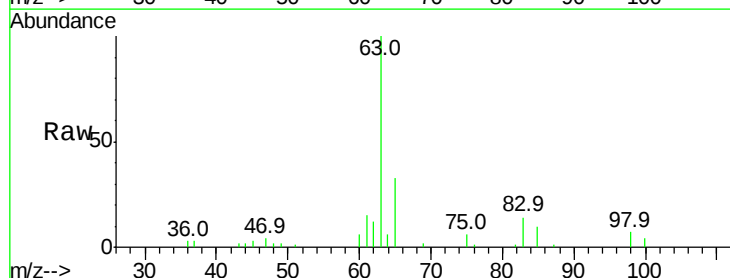
Tgt Ion: 63 Resp: 55880

Ion Ratio Lower Upper

63 100

98 7.1 2.6 8.0

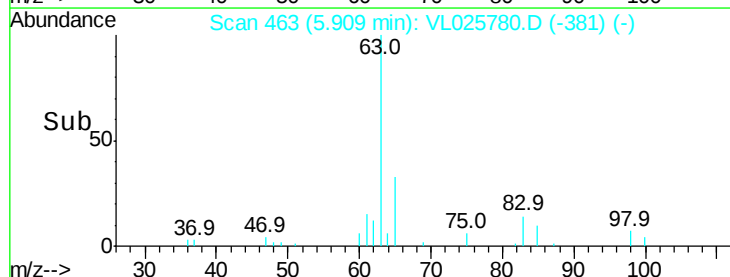
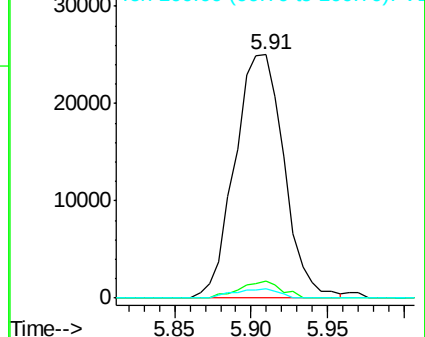
100 4.1 1.6 4.7

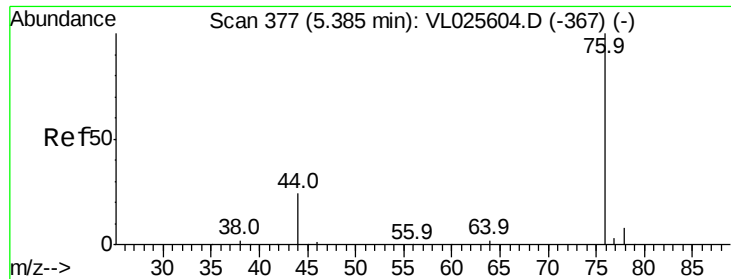


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#27

Carbon Disulfide

Concen: 1.03 ppbv

RT: 5.39 min Scan# 377

Delta R.T. -0.00 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

ERD45-EFFLUENT-072215

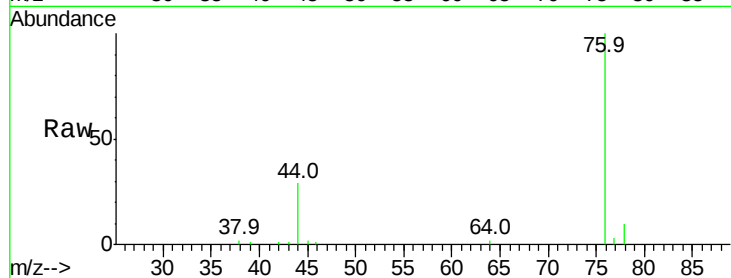
Tgt Ion: 76 Resp: 125827

Ion Ratio Lower Upper

76 100

44 30.7 20.2 30.4#

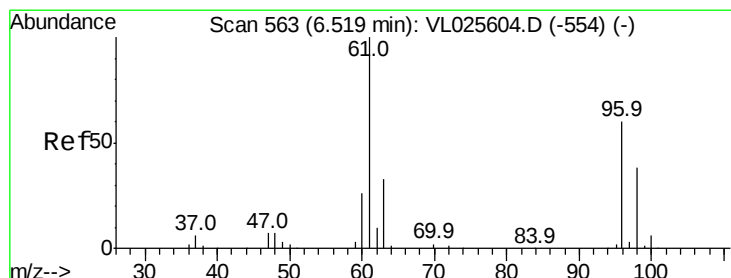
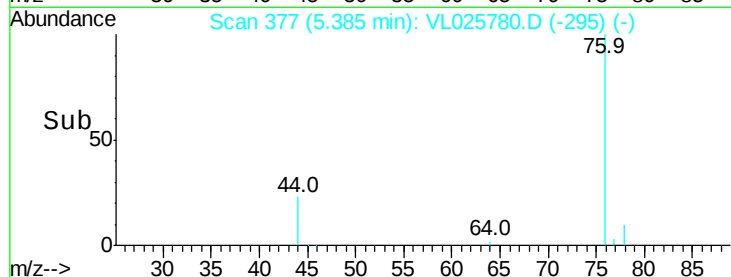
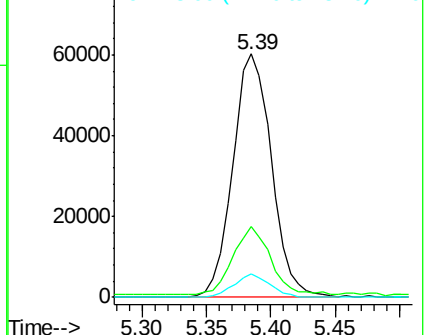
78 8.8 7.4 11.2



Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0



#31

cis-1,2-Dichloroethene

Concen: 13.29 ppbv

RT: 6.51 min Scan# 562

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

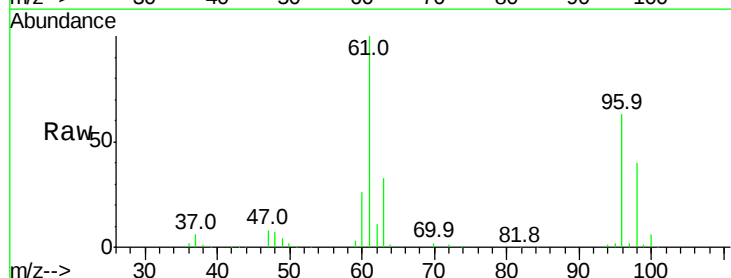
Tgt Ion: 61 Resp: 998184

Ion Ratio Lower Upper

61 100

96 62.6 48.1 72.1

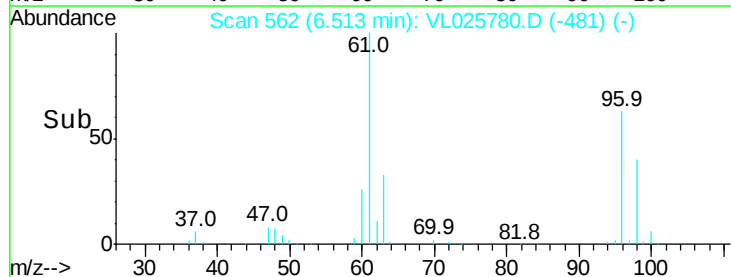
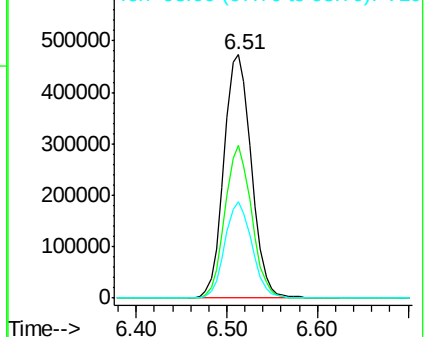
98 39.8 30.7 46.1

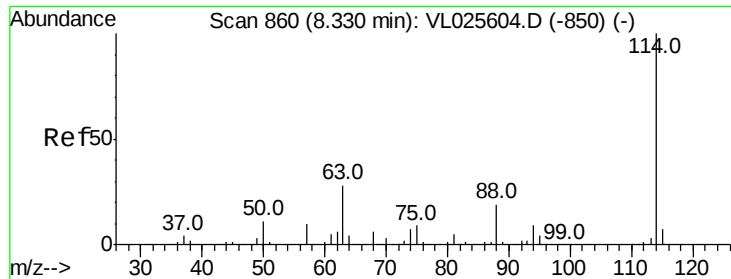


Abundance Ion 61.10 (60.80 to 61.80): VL0

Ion 96.00 (95.70 to 96.70): VL0

Ion 98.00 (97.70 to 98.70): VL0

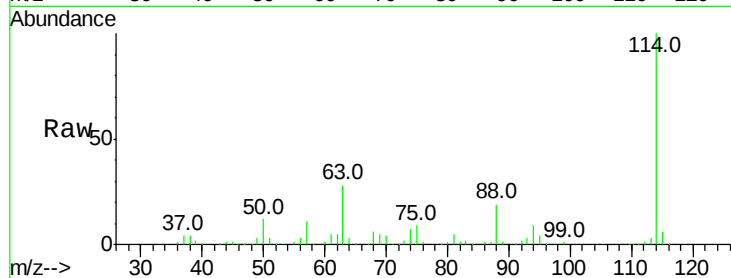




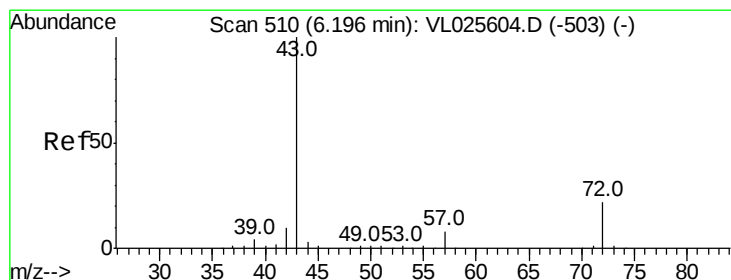
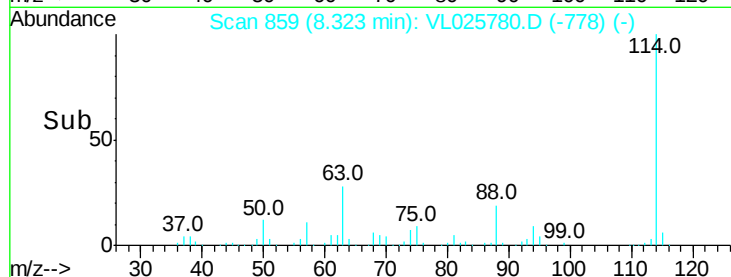
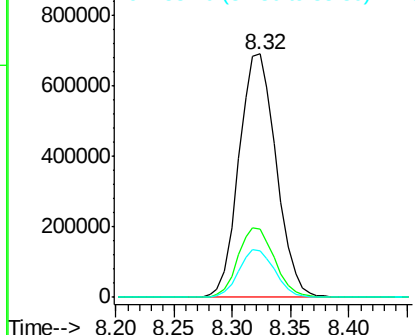
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 8.32 min Scan# 859
 Delta R.T. -0.01 min
 Lab File: VL025780.D
 Acq: 28 Jul 2015 9:20

Instrument :
 MSVOA_L
 ClientSampleId :
 ERD45-EFFLUENT-072215

Tgt Ion:114 Resp: 1538218
 Ion Ratio Lower Upper
 114 100
 63 27.9 22.4 33.6
 88 18.9 15.0 22.4

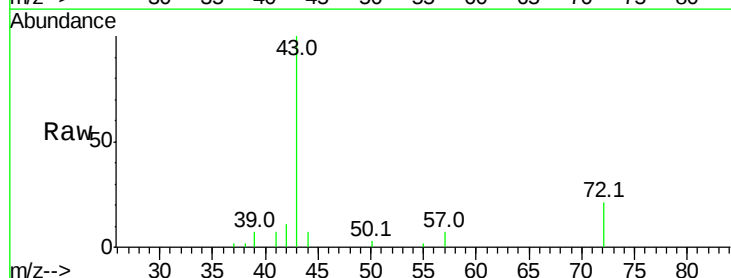


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

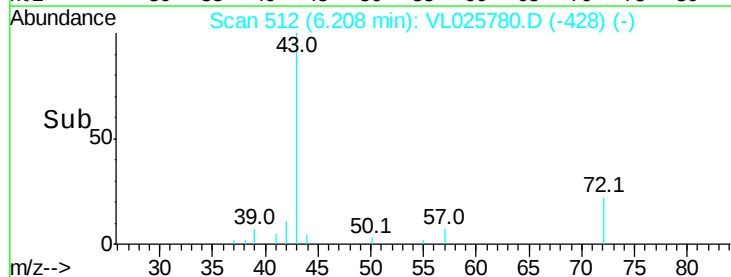
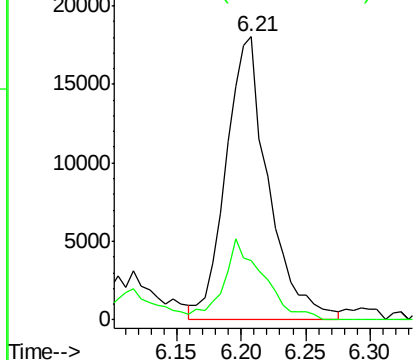


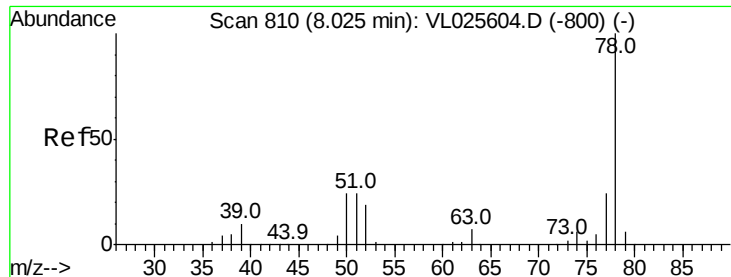
#34
 2-Butanone
 Concen: 0.48 ppbv
 RT: 6.21 min Scan# 512
 Delta R.T. 0.01 min
 Lab File: VL025780.D
 Acq: 28 Jul 2015 9:20

Tgt Ion: 43 Resp: 41511
 Ion Ratio Lower Upper
 43 100
 72 27.7 18.6 28.0



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0

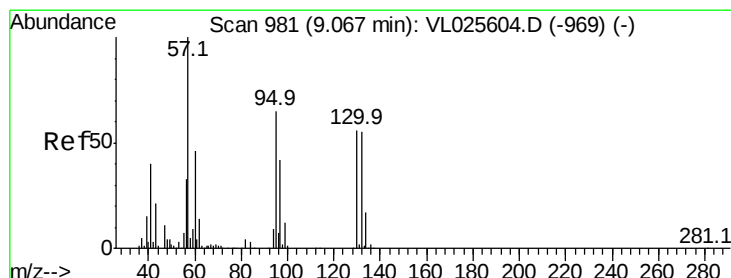
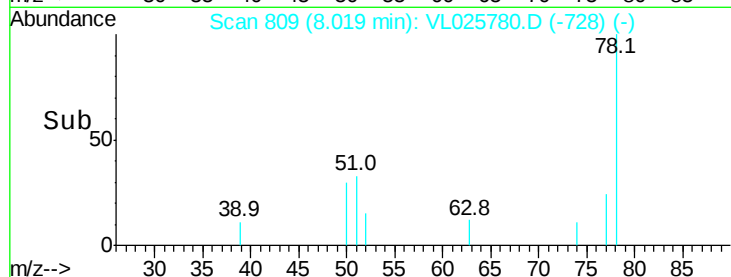
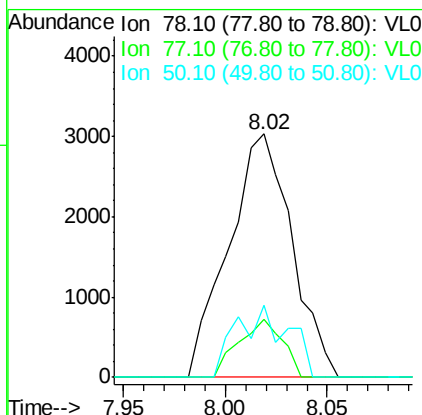
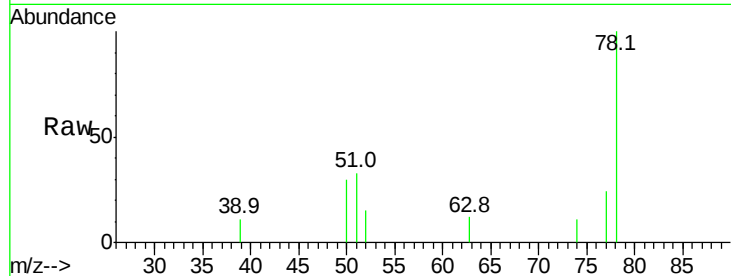




#36
Benzene
Concen: 0.04 ppbv
RT: 8.02 min Scan# 809
Delta R.T. -0.01 min
Lab File: VL025780.D
Acq: 28 Jul 2015 9:20

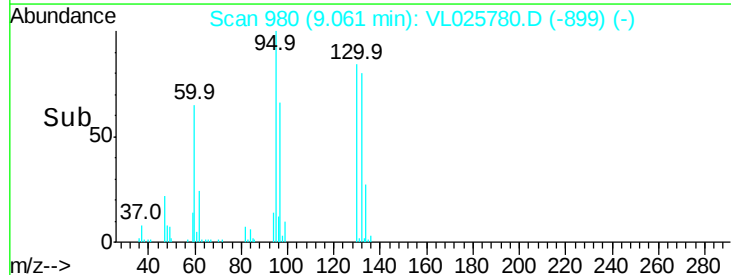
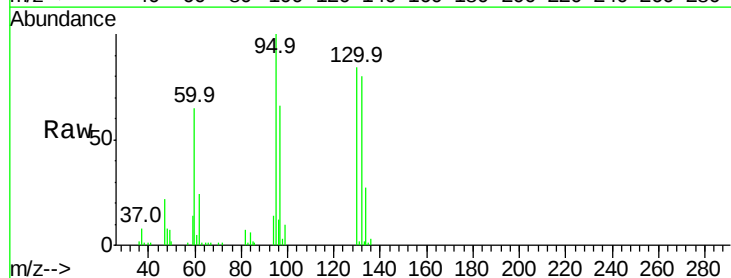
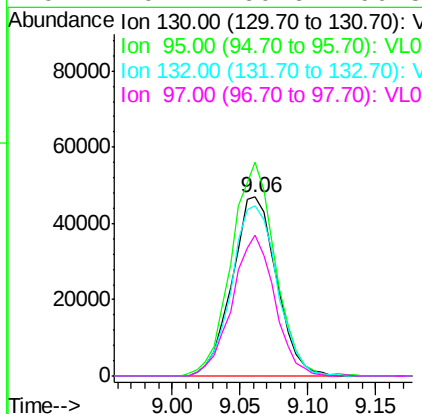
Instrument :
MSVOA_L
ClientSampleId :
ERD45-EFFLUENT-072215

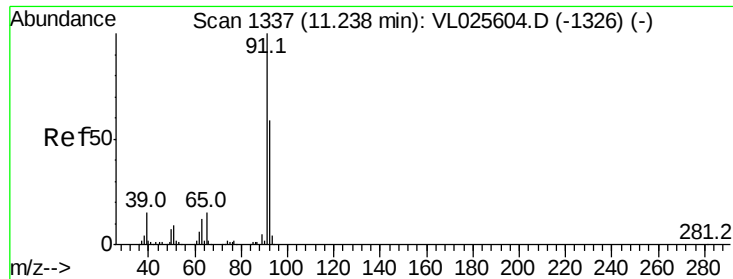
Tgt Ion: 78 Resp: 6529
Ion Ratio Lower Upper
78 100
77 23.6 19.0 28.4
50 29.8 19.2 28.8#



#38
Trichloroethene
Concen: 1.57 ppbv
RT: 9.06 min Scan# 980
Delta R.T. -0.01 min
Lab File: VL025780.D
Acq: 28 Jul 2015 9:20

Tgt Ion: 130 Resp: 107351
Ion Ratio Lower Upper
130 100
95 118.4 94.2 141.4
132 95.5 78.6 118.0
97 79.1 60.6 90.8





#53

Toluene

Concen: 0.05 ppbv

RT: 11.23 min Scan# 1336

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

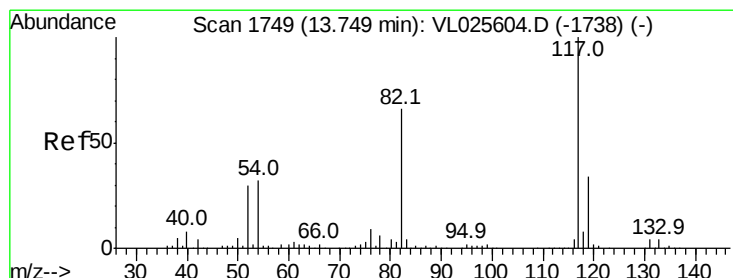
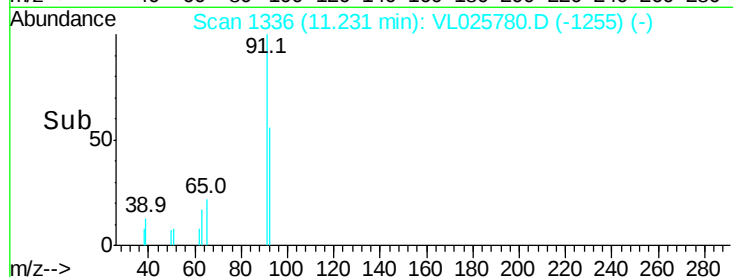
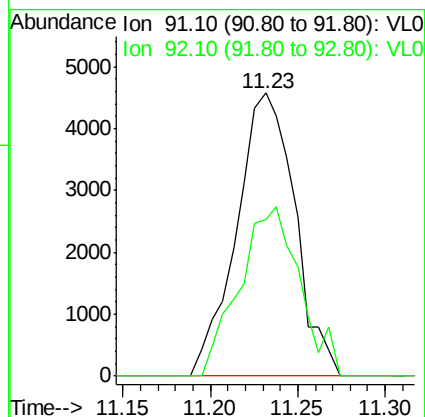
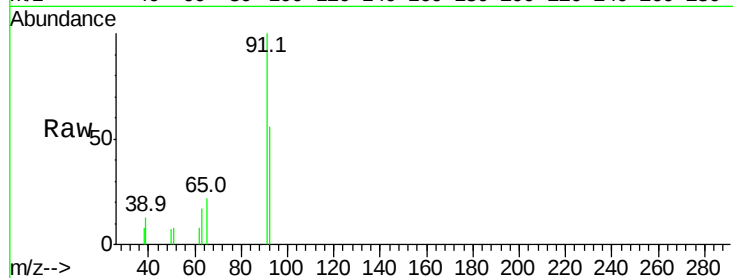
ERD45-EFFLUENT-072215

Tgt Ion: 91 Resp: 10609

Ion Ratio Lower Upper

91 100

92 62.1 48.2 72.2



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 13.74 min Scan# 1747

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

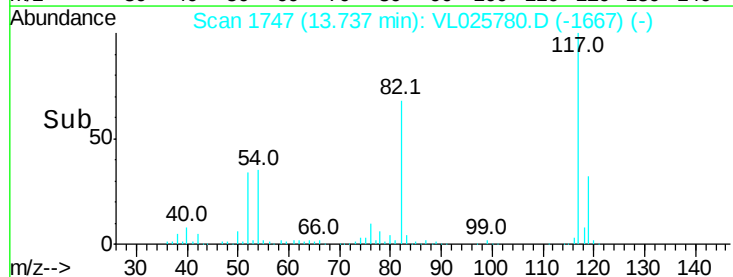
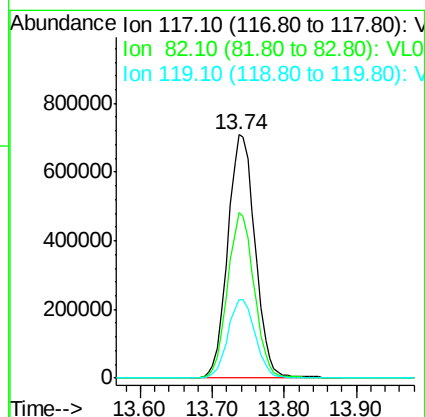
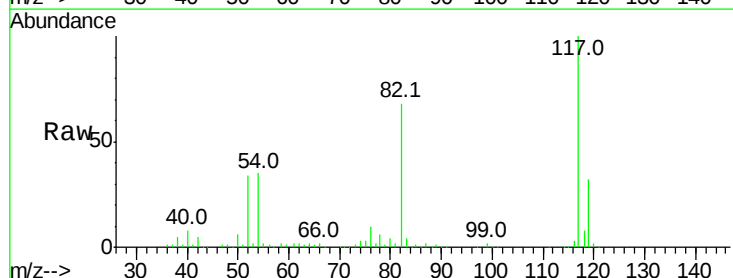
Tgt Ion: 117 Resp: 1879717

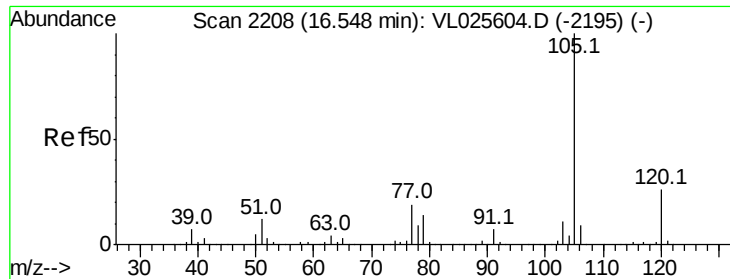
Ion Ratio Lower Upper

117 100

82 66.4 50.5 75.7

119 32.3 45.1 67.7#





#62

Isopropylbenzene

Concen: 0.03 ppbv

RT: 16.54 min Scan# 2207

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Instrument :

MSVOA_L

ClientSampleId :

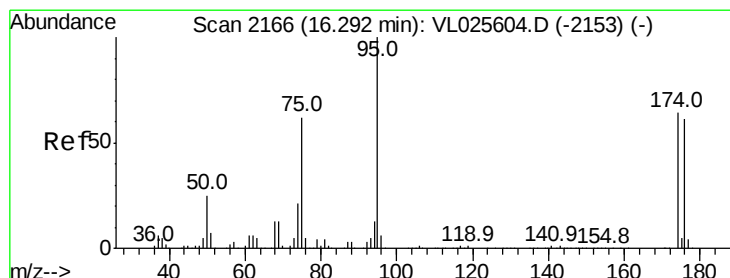
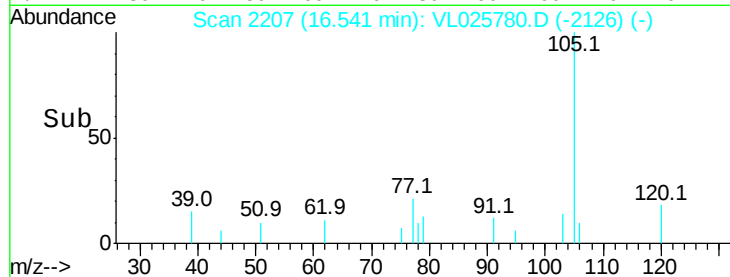
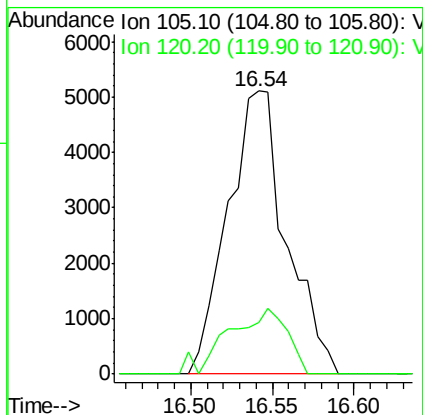
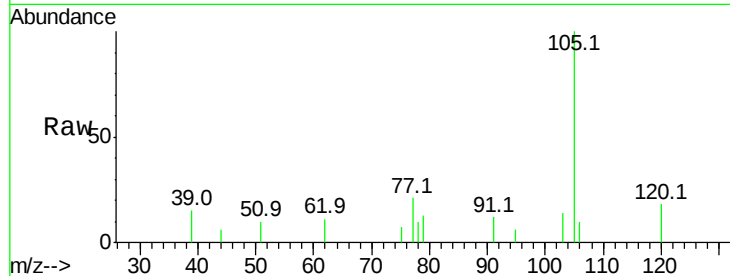
ERD45-EFFLUENT-072215

Tgt Ion: 105 Resp: 12762

Ion Ratio Lower Upper

105 100

120 23.5 20.6 31.0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.37 ppbv

RT: 16.28 min Scan# 2164

Delta R.T. -0.01 min

Lab File: VL025780.D

Acq: 28 Jul 2015 9:20

Tgt Ion: 95 Resp: 1644732

Ion Ratio Lower Upper

95 100

174 63.9 52.0 78.0

175 4.8 3.9 5.9

